



Actuarial Valuation Report

City of Panama City Beach Firefighters' Pension Plan

Funding Results for the Year Ending September 30, 2019

Accounting Results for the Year Ending September 30, 2018



Ms. Holly J. White
Finance Director
City of Panama City Beach
110 South Arnold Road
Panama City Beach, FL 32407

Re: *Panama City Beach Firefighters' Pension Plan*

Dear Ms. White:

In accordance with your request, we have performed an actuarial valuation for the captioned pension plan as of October 1, 2018. The purposes of this report are to provide the contribution requirements for the Plan Year beginning October 1, 2018, and ending September 30, 2019, measurements of the funded status of the plan, and disclosures for financial accounting.

This report is intended for the sole use of the City of Panama City Beach and the Pension Board, and is intended only to supply information for the City and Board to comply with the stated purposes of the report and may not be appropriate for other purposes. Reliance on information contained in this report by anyone for other than the intended purposes, puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report's conclusions. Accordingly, no person or entity, including the City of Panama City Beach and the Pension Board, should base any representations or warranties in any agreement on any statements or conclusions contained in this report, without the written consent of Aon.

This report includes a Summary of Major Plan Provisions and a description of the Actuarial Basis used in the valuation. We relied on employee and financial data provided by the City. The Actuarial Cost Method used is considered acceptable under the Rules of the Department of Administration, Division of Retirement, Chapter 60T-1, Local Retirement Systems' Actuarial Reports.

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation and/or cost determination was prepared and completed by the undersigned 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 provided for 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.

Respectfully submitted,

08/16/2019

Stephen Lambert-Oswald, F.S.A., E.A., M.A.A.A.
Enrollment No. 17-07225

Date

City of Panama City Beach Firefighters' Pension Plan

Discussion of Results

October 1, 2018

The results of the actuarial valuation of the Panama City Beach Firefighters' Pension Plan as of October 1, 2018, are contained in this report. The actuarial valuation is based upon census data and trust fund financial statements provided to us by the City. There have been no significant plan changes or changes in actuarial assumptions or methodology since the Actuarial Valuation as of October 1, 2017.

The major results of the actuarial valuation are discussed below.

Minimum Required Contribution

The State minimum required contribution to be deposited by the City is developed on pages 3 and 4. The minimum required contribution includes recognition of excess contributions made in prior years.

	Plan Year Ended	
	09/30/18	09/30/19
State Minimum Required Contribution	\$ 132,562	\$ 300,948
Percent of Participants' Compensation	9.24%	16.20%

Under a new state interpretation, the actual required contribution is not the dollar amount shown, which is based on estimated Participants' Compensation Below Normal Retirement Age. Rather it is to be based on the percentage shown here and actual Participants' Compensation Below Normal Retirement Age for the Plan Year.

Actuarial Experience

The approximate time-weighted rate of return on the Actuarial Value of Assets was 7.9% for the plan year ended September 30, 2018. Investment experience compounded over the last 5 years has been approximately 8.9% per year. This compares favorably to the 8.0% investment rate of return assumption used to determine the plan's funding requirements. Salary increase experience was observed to be 12.9%, higher than the assumed salary increase of 6.0%. Salary experience compounded over the last 5 years has been approximately 6.0% per year.

Funded Status

One of the best measures of the Funded Status of a defined benefit plan is considered to be the level of funding of the Accumulated Plan Benefits and Vested Benefits. Accumulated Plan Benefits are those future benefit payments that are attributable to employees' service rendered prior to the valuation date based on employees' actual pay histories (or estimates thereof). This measurement of benefits does not take into account the effect of potential future salary increases. Vested Benefits are those benefits which become nonforfeitable after 10 years of Credited Service or which are attributable to employee contributions.

City of Panama City Beach Firefighters' Pension Plan

Based on this measurement of Funded Status, using the Actuarial Value of Assets, the plan is underfunded as of October 1, 2018:

	10/01/17	10/01/18
NET ASSETS AVAILABLE FOR BENEFITS*	\$ 15,080,516	\$ 15,835,822
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
TOTAL VESTED BENEFITS	\$ 13,432,898	\$ 13,988,049
Percent Funded	112%	113%
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	\$ 14,363,567	\$ 15,014,794
Percent Funded	105%	105%

Another, more traditional measure of the Funded Status uses the Entry Age Normal Accrued Liability. This accrued liability equals the Present Value of Benefits less the Present Value of Future Entry Age Normal Costs. (See the description of the entry age normal method on the "Actuarial Cost Method" pages herein.) This accrued liability is independent of the actual plan assets and therefore may be a more reasonable "mile post" of how funded the Plan should be. It recognizes future compensation increases and is a measure of where the level of assets should be to date if all participants are proportionately funded over their individual careers as a level percentage of each participant's compensation:

	10/01/17	10/01/18
MARKET VALUE OF ASSETS	\$ 16,359,403	\$ 16,457,916
ENTRY AGE NORMAL ACCRUED LIABILITY	\$ 16,832,605	\$ 16,255,903
Funded Ratio	97.19%	101.24%

* Actuarial Value of Assets

City of Panama City Beach Firefighters' Pension Plan

Table of Contents

	PAGE
Discussion of Results	i
Valuation Results	
Development of Normal Cost for State Minimum Required Contribution	1
State Minimum Required Contribution	2
Unfunded Frozen Initial and Supplemental Liabilities.....	3
Schedule Illustrating the Amortization of Unfunded Liabilities Existing This Date.....	4
Past Excess Contributions (State Requirements).....	5
Pension Fund	
Market Value of Assets	6
Reconciliation of Assets (Market Value)	7
Investment Gain/(Loss).....	8
Actuarial Value of Assets	9
Allocation of Actuarial Value of Assets to the Reserve for Other Retirement Benefits (i.e., Excluding DROP)	10
Financial Accounting	
Net Pension Expense (GASB 68).....	11
Deferred Inflows and Outflows (GASB 68)	12
Reconciliation of Net Pension Liability (GASB 68)	14
Reconciliation of Net Pension Liability (GASB 67)	15
Sensitivity (GASB 67).....	16

City of Panama City Beach Firefighters' Pension Plan

Information Required by State

Funded Status (ASC 960).....	17
State Required Exhibit	19

Member Data

Participant Data Summary	24
Age and Service Distribution.....	25
Comparison of Actual vs. Assumed Salary Increases and Investment Returns.....	26
Reconciliation of DROP Participants and Assets	27
History of Excess Premium Tax Revenues.....	28

Basis for Valuation

Summary of Major Plan Provisions.....	30
Actuarial Basis	32
Actuarial Cost Method.....	34

Disclosure Notes

Notes to the Financial Statement.....	36
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City of Panama City Beach Firefighters' Pension Plan

Development of Normal Cost for State Minimum Required Contribution

October 1, 2018

	<u>10/1/2017</u>	<u>10/1/2018</u>
1. Number of Participants		
Active	29	36
Terminated with Vested Benefits	-	1
Retirees and Beneficiaries	16	15
Total	45	52
2. Participant's Compensation		
a. Below Normal Retirement Age	\$ 1,435,315	\$ 1,857,598
b. Beyond Normal Retirement Age	199,406	228,361
c. Total	\$ 1,634,721	\$ 2,085,959
3. Present Value of Benefits		
Active	\$ 8,692,897	\$ 10,314,666
Terminated with Vested Benefits	-	-
Retirees	9,671,890	9,693,862
Excess State Monies Reserve	148,116	134,160
Total	\$ 18,512,903	\$ 20,142,688
4. Unfunded Actuarial Accrued Liability	\$ 668,026	\$ 683,925
5. Actuarial Value of Assets	\$ 15,080,516	\$ 15,835,822
6. Past Excess Contributions	\$ 132,726	\$ 41,545
7. Present Value of Future Employee Contributions	\$ 519,206	\$ 630,462
8. Present Value of Future City Normal Costs = (3) – (4) – [(5) – (6)] – (7)	\$ 2,377,880	\$ 3,034,023
9. Present Value of Future Compensation	\$ 12,216,449	\$ 14,981,606
10. Normal Cost Rate = (8) ÷ (9)	19.46%	20.25%
11. Normal Cost = (2a) x (10)	\$ 279,312	\$ 376,164

City of Panama City Beach Firefighters' Pension Plan

State Minimum Required Contribution

October 1, 2018

	Plan Year Ended	
	<u>9/30/2018</u>	<u>9/30/2019</u>
1. Normal Cost	\$ 279,312	\$ 376,164
2. Amortization of Actuarial Accrued Liability	\$ 129,021	\$ 129,021
3. Interest Adjustment on (1) and (2) for Quarterly Payment	\$ 16,019	\$ 19,818
4. Expenses		
Current Year Estimate Equal to Prior Year's Actual	\$ 64,461	\$ 60,461
Make-up for Shortfall in Prior Year's Estimate	974	(4,000)
Total	\$ 65,435	\$ 56,461
5. Estimated State Premium Tax Refund (Equal to Prior Year's Actual Refund and Excluding Excess Premium Tax Revenues That Have Not Been Used to Provide Additional Benefits)	\$ 219,293	\$ 237,342
6. Past Excess Contributions plus Interest Adjusted for Quarterly Payment	\$ 137,932	\$ 43,174
7. Minimum Required Contribution by City for Fiscal Year = (1) + (2) + (3) + (4) – (5) – (6)	\$ 132,562	\$ 300,948
8. Percent of Participants' Compensation Below Normal Retirement Age*	9.24%	16.20%

* Under a new state interpretation, the actual required contribution is based on this percentage of actual, not estimated, Participants' Compensation Below Normal Retirement Age.

City of Panama City Beach Firefighters' Pension Plan

Unfunded Frozen Initial and Supplemental Liabilities

October 1, 2018

	Initial Amount to be Amortized	Beginning Amortization Period	Original Amortization Period (Years)	Years Remaining	(BOY) Annual Amortization Amount	Unamortized Balance as of 10/1/2018
Redetermined Liability (Fresh Start)	\$ 1,271,134	10/1/2008	17	7	\$ 129,021	\$725,470
					\$ 129,021	
						1. Unamortized Balance as of 10/1/2018 \$ 725,470
						2. Past Excess Contributions <u>41,545</u>
						3. Remaining Unfunded Liabilities = (1) - (2) \$ 683,925

* Increase in Multiplier from 3.00% to 3.35% (\$790,399), plus unamortized balance (\$47,089) of prior benefit improvement (Supplemental Benefit of \$350 per month), less Cumulative Set Aside for Future Improvements (\$370,093)

City of Panama City Beach Firefighters' Pension Plan

Schedule Illustrating the Amortization of Unfunded Liabilities Existing This Date

October 1, 2018

October 1	Liability
2018	\$ 683,925
2019	599,297
2020	507,898
2021	409,187
2022	302,579
2023	187,443
2024	63,096
2025	-
2026	-
2027	-

The first figure is the Unfunded Frozen Initial and Supplemental Liabilities as of the current valuation date. For each year thereafter, the preceding year's Unfunded Liability is reduced by the annual amortization amount shown on the page titled History of Unfunded Frozen and Supplemental Liabilities and increased with interest at 8.00% per annum.

Thus the remaining amortization period as of the October 1, 2018, valuation is 2024 less 2018, or 6 years.

City of Panama City Beach Firefighters' Pension Plan

Past Excess Contributions (State Requirements)

October 1, 2018

	Plan Year Ended	
	<u>9/30/2017</u>	<u>9/30/2018</u>
Charges:		
Deficiency Brought Forward	\$ -	\$ -
Normal Cost	N/A	N/A
Expenses (Estimated and Make up)	N/A	N/A
Amortization of Frozen Initial and Supplemental Liabilities	N/A	N/A
Required City Contribution, per State* State (Estimated)	338,285	307,244
Interest	213,466	219,293
	<u>21,645</u>	<u>20,023</u>
Total Charges	\$ 573,396	\$ 546,560
Credits:		
Excess Contribution Brought Forward	\$ 166,493	\$ 132,726
City Contributions	266,409	190,555
State Contributions (Excluding Excess Premium Tax Revenues That Have Not Been Used to Provide Additional Benefits)	240,032	238,232
Interest	<u>33,187</u>	<u>26,592</u>
Total Credits	\$ 706,121	\$ 588,105
Balance:		
Excess Contribution Carried Forward	<u>\$ 132,726</u>	<u>\$ 41,545</u>
Deficiency Carried Forward	<u>\$ -</u>	<u>\$ -</u>

*Under a new state interpretation, the actual required contribution is based on the required contribution rate times actual Participants' Compensation Below Normal Retirement Age for the Plan Year. See the "State Required Exhibit" for this determination.

City of Panama City Beach Firefighters' Pension Plan

Market Value of Assets

October 1, 2018

	<u>10/1/2017</u>	<u>10/1/2018</u>
Assets:		
Cash	\$ 695,047.78	\$ 626,222.54
Certificates of Deposit	-	-
Government and Corporate Bond Funds	3,956,772.59	3,725,842.79
Real Estate and Equity Funds	11,705,263.98	12,101,430.18
Due from City Funds	-	-
Due from State of Florida	-	-
Accrued Interest	-	-
Miscellaneous Receivable	<u>8,765.46</u>	<u>9,297.18</u>
Total Assets	<u>\$ 16,365,849.81</u>	<u>\$ 16,462,792.69</u>
Liabilities and Fund Balance:		
Liabilities:		
Accounts Payable	\$ (5,976.09)	\$ (4,876.19)
Refunds or Benefits Payable	(470.79)	-
Due Other Funds	<u>-</u>	<u>-</u>
Total Liabilities	<u>\$ (6,446.88)</u>	<u>\$ (4,876.19)</u>
Pension Fund Balance:	<u><u>\$ 16,359,402.93</u></u>	<u><u>\$ 16,457,916.50</u></u>

City of Panama City Beach Firefighters' Pension Plan

Reconciliation of Assets (Market Value)

October 1, 2018

Plan Year Ended

	<u>9/30/2017</u>	<u>09/30/2018</u>
Revenues:		
City Contributions	\$ 266,408.58	\$ 190,554.78
Employee Contributions	80,109.85	96,797.96
State Contributions	176,633.14	174,833.18
Repayment of Contributions	-	-
Interest & Dividends	392,389.32	300,126.05
Unrealized/Realized Gains (Losses)	1,463,259.03	968,782.21
Commissions	-	-
	\$ 2,378,799.92	\$ 1,731,094.18
Expenses:		
Pension Payments	\$ 343,521.59	\$ 591,159.87
Contribution Refunds	-	43,366.31
DROP Payments	446,547.38	937,593.44
Investment Expenses	42,723.52	39,037.29
Other Expenses	21,737.68	21,423.70
	\$ 854,530.17	\$ 1,632,580.61
Net Income:	\$ 1,524,269.75	\$ 98,513.57
Fund Balance, Beginning of Year:	\$ 14,835,133.18	\$ 16,359,402.93
Fund Balance, End of Year:	\$ 16,359,402.93	\$ 16,457,916.50

**City of Panama City Beach
Firefighters' Pension Plan**

Investment Gain/(Loss)

October 1, 2018

	10/1/2018	10/1/2017	10/1/2016	10/1/2015
1. Date of Actuarial Value of Assets:	10/1/2018	10/1/2017	10/1/2016	10/1/2015
2. Market Value as of Prior Year (including receivable contributions)	\$ 16,359,403	\$ 14,835,133	\$ 13,673,096	\$ 13,683,340
3. Receivable Contribution included above	\$ -	\$ -	\$ -	\$ -
4. Market Value Excluding Receivable (2) - (3)	\$ 16,359,403	\$ 14,835,133	\$ 13,673,096	\$ 13,683,340
5. Employer, Employee & State Contributions (made for the year, i.e., excluding the receivable contribution, item (3), but including contributions made after the end of the year with no expected return thereon)	\$ 462,186	\$ 523,152	\$ 655,350	\$ 690,807
6. Benefit Distributions	\$ 1,572,120	\$ 790,069	\$ 596,757	\$ 461,582
7. Administrative Expenses	\$ 60,461	\$ 64,461	\$ 63,487	\$ 69,185
8. Expected Return %	8.00%	8.00%	8.00%	8.00%
a. Item (4) for 1 year	\$ 1,308,752	\$ 1,186,811	\$ 1,093,848	\$ 1,094,667
b. Item (3) for partial & (5) for 1/2 year	18,132	20,523	25,710	27,101
c. Item (6) for 1/2 year	(61,675)	(30,995)	(23,411)	(18,108)
d. Item (7) for 1/2 year	(2,372)	(2,529)	(2,491)	(2,714)
	<u>\$ 1,262,837</u>	<u>\$ 1,173,810</u>	<u>\$ 1,093,656</u>	<u>\$ 1,100,946</u>
9. Expected Market Value (2)+(5)-(6)-(7)+(8)	\$ 16,451,845	\$ 15,677,565	\$ 14,761,858	\$ 14,944,325
10. Actual Market Value this Year (including receivable contributions)	\$ 16,457,917	\$ 16,359,403	\$ 14,835,133	\$ 13,673,096
11. Investment Gain/(Loss) from Experience	\$ 6,071	\$ 681,838	\$ 73,275	\$ (1,271,229)

City of Panama City Beach Firefighters' Pension Plan

Actuarial Value of Assets

October 1, 2018

5 -YEAR SMOOTHED MARKET VALUE WITHOUT PHASE-IN	10/1/2018
1. Market Value of Assets	\$ 16,457,917
2. Investment Gains/(Losses) for Four Prior Years	
a. Oct-17	\$ 6,071
b. Oct-16	681,838
c. Oct-15	73,275
d. Oct-14	(1,271,229)
3. Unrecognized Investment Gains/(Losses)	
a. Oct-17 80% of (2)(a)	\$ 4,857
b. Oct-16 60% of (2)(b)	409,103
c. Oct-15 40% of (2)(c)	29,310
d. Oct-14 20% of (2)(d)	<u>(254,246)</u>
e. Total: (a)+(b)+(c)+(d)	\$ 189,024
4. Preliminary Actuarial Value of Assets = (1) - (3)(e)	\$ 16,268,893
5. Adjustment to be within 20% of market value	\$ -
6. Actuarial Value of Assets = (4) + (5)	\$ 16,268,893

City of Panama City Beach Firefighters' Pension Plan

Allocation of Actuarial Value of Assets to the Reserve for Other Retirement Benefits (i.e., Excluding DROP)

October 1, 2018

	<u>Actuarial Value Allocated in Proportion to Market Value</u>	<u>Market Value</u>
Reserve for DROP	\$ 433,071	\$ 438,102
Reserve for Other Retirement Benefits	<u>15,835,822</u>	<u>16,019,815</u>
 Total Fund Balances	 \$ 16,268,893	 \$ 16,457,917

City of Panama City Beach Firefighters' Pension Plan

Development of GASB 68 Net Pension Expense

Calculation Details

The following table illustrates the Net Pension Liability under GASB 68, which is effective for September 30, 2015 fiscal year and later.

	Fiscal Year End 9/30/2017	Fiscal Year End 9/30/2018
(1) Total Pension Liability	\$ 16,832,605	\$ 16,255,903
(2) Plan Fiduciary Net Position	\$ (16,359,403)	\$ (16,457,917)
(3) Net Pension Liability	\$ 473,202	\$ (202,014)
(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	97.19%	101.24%

The following table illustrates the pension expense under GASB 68.

	Fiscal Year Ending 9/30/2017	Fiscal Year Ending 9/30/2018
(1) Service Cost	\$ 262,044	\$ 270,658
(2) Interest Cost	\$ 1,351,472	\$ 1,431,146
(3) Expected Investment Return	\$ (1,166,581)	\$ (1,254,594)
(4) Employee Contributions	\$ (80,110)	\$ (96,798)
(5) Admin Expense	\$ 64,461	\$ 60,461
(6) Plan Changes	\$ -	\$ -
(7) Amortization of Unrecognized		
(a) Liability (Gain)/Loss	\$ 14,872	\$ (111,228)
(b) Asset (Gain)/Loss	\$ 94,081	\$ 91,218
(c) Assumption Changes	\$ (13,558)	\$ (13,558)
(8) Total Expense	\$ 526,683	\$ 377,305

City of Panama City Beach Firefighters' Pension Plan

Deferred Outflows/Inflows

The following table illustrates the Deferred Inflows and Outflows at the end of the fiscal year under GASB 68.

	Deferred Outflows	Deferred Inflows
(1) Difference between actual and expected experience		
(a) Measurement Date September 30, 2015	\$ 140,922	\$ -
(b) Measurement Date September 30, 2016	\$ -	\$ (160,980)
(c) Measurement Date September 30, 2017	\$ -	\$ (96,288)
(d) Measurement Date September 30, 2018	\$ -	\$ (623,182)
(2) Net Difference Between Expected and Actual Earnings on Pension Plan Investments		
(a) Measurement Date September 30, 2015	\$ 248,086	\$ -
(b) Measurement Date September 30, 2016	\$ -	\$ (32,383)
(c) Measurement Date September 30, 2017	\$ -	\$ (413,441)
(d) Measurement Date September 30, 2018	\$ -	\$ (11,451)
(3) Total	\$ 389,008	\$ (1,337,725)

Amortization of Deferred Inflows/Outflows

The table below lists the amortization bases included in the deferred inflows/outflows as of September 30, 2018.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Remaining	Remaining	
10/1/2014	Liability (Gain)/Loss	5.19	1.19	\$614,708	\$140,922	118,447
10/1/2014	Asset (Gain)/Loss	5.00	1.00	\$1,240,432	\$248,086	248,086
10/1/2015	Liability (Gain)/Loss	5.20	2.20	(380,401)	(\$160,980)	(73,140)
10/1/2015	Asset (Gain)/Loss	5.00	2.00	(80,957)	(\$32,383)	(16,191)
10/1/2016	Liability (Gain)/Loss	5.16	3.16	(\$157,157)	(\$96,288)	(30,434)
10/1/2016	Asset (Gain)/Loss	5.00	3.00	(\$689,068)	(\$413,441)	(137,814)
10/1/2016	Assumption Change	5.16	3.16	(\$70,012)	(\$42,896)	(\$13,558)
10/1/2017	Liability (Gain)/Loss	5.60	4.60	(\$706,386)	(\$580,286)	(\$126,100)
10/1/2017	Asset (Gain)/Loss	5.00	4.00	(\$14,314)	(\$11,451)	<u>(2,863)</u>
Total Charges					(\$948,717)	(\$33,568)

Amounts Recognized in the deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the pension expense as follows:

Year Ended September 30:

2019	(33,568)
2020	(377,596)
2021	(325,468)
2022	(136,166)
2023	(75,884)
Thereafter	0

City of Panama City Beach Firefighters' Pension Plan

Reconciliation of Net Pension Liability

Shown below are details regarding the Total Pension Liability, Plan Fiduciary Net Position, and Net Pension Liability for the Measurement Period from September 30, 2017 to September 30, 2018:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) - (b)
Balance recognized at 10/1/2017	\$16,832,605	\$16,359,403	\$473,202
Changes recognized for the fiscal year:			
Service Cost	\$270,658	N/A	\$270,658
Interest on the total pension liability	\$1,431,146	N/A	\$1,431,146
Changes of benefit terms	\$0	N/A	\$0
Differences between expected and actual experience	(\$706,386)	N/A	(\$706,386)
Changes of assumptions	\$0	N/A	\$0
Contributions from the employer	N/A	\$190,555	(\$190,555)
Contributions from the employee	N/A	\$96,798	(\$96,798)
Contribution from the state	N/A	\$174,833	(\$174,833)
Net investment income	N/A	\$1,268,908	(\$1,268,908)
Benefit payments	(\$1,572,120)	(\$1,572,120)	\$0
Administrative expense	N/A	(\$60,461)	\$60,461
Other	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net Changes	<u>(\$576,702)</u>	<u>98,514</u>	<u>(\$675,215)</u>
Balance recognized at 9/30/2018	\$16,255,903	\$16,457,917	(\$202,014)

City of Panama City Beach Firefighters' Pension Plan

GASB 67 Requirements

GASB 67 is effective for fiscal year ending September 30, 2014. The follow exhibit is a 10 year history of change in Net Pension Liability.

Changes in the Net Pension Liability and Related Ratios – RP2000, 8.0% Interest

State Required Disclosure—Changes in the Net Pension Liability and Related Ratios

	Fiscal Year Ending									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Pension Liability										
Service Cost	N/A	N/A	N/A	N/A	N/A	\$264,424	\$239,906	\$261,853	\$262,044	\$270,658
Interest Cost	N/A	N/A	N/A	N/A	N/A	\$577,530	\$1,108,633	\$1,297,175	\$1,351,472	\$1,431,146
Changes of Benefit Terms	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0	\$0
Differences Between Expected and Actual Experiences	N/A	N/A	N/A	N/A	N/A	\$392,824	\$614,707	(\$380,401)	(\$157,157)	(\$706,386)
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	(\$70,012)	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	(\$428,064)	(\$461,582)	(\$596,757)	(\$790,069)	(\$1,572,120)
DROP Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	\$765,571	\$0	\$0	\$0
Net Change in Total Pension Liability	N/A	N/A	N/A	N/A	N/A	\$806,713	\$2,267,235	\$581,870	\$596,279	(\$576,702)
Total Pension Liability (Beginning)	N/A	N/A	N/A	N/A	N/A	\$12,580,508	\$13,387,221	\$15,654,457	\$16,236,326	\$16,832,605
Total Pension Liability (Ending)	N/A	N/A	N/A	N/A	\$12,580,508	\$13,387,221	\$15,654,457	\$16,236,326	\$16,832,605	\$16,255,903
Plan Fiduciary Net Position										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	\$501,112	\$416,807	\$383,158	\$266,409	\$190,555
Contributions—Member	N/A	N/A	N/A	N/A	N/A	\$146,638	\$86,266	\$78,955	\$80,110	\$96,798
Contributions—State	N/A	N/A	N/A	N/A	N/A	\$206,650	\$187,733	\$193,237	\$176,633	\$174,833
Net Investment Income	N/A	N/A	N/A	N/A	N/A	\$1,273,642	(\$170,283)	\$1,166,931	\$1,855,648	\$1,268,908
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	(\$428,064)	(\$461,582)	(\$596,757)	(\$790,069)	(\$1,572,120)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	(\$62,200)	(\$69,185)	(\$63,487)	(\$64,461)	(\$60,461)
Other	N/A	N/A	N/A	N/A	N/A	\$0	\$765,571	\$0	\$0	\$0
Net Change in Plan Fiduciary Net Position	N/A	N/A	N/A	N/A	N/A	\$1,637,777	\$755,328	\$1,162,037	\$1,524,270	\$98,514
Plan Fiduciary Net Position (Beginning)	N/A	N/A	N/A	N/A	N/A	\$11,279,992	\$12,917,769	\$13,673,096	\$14,835,133	\$16,359,403
Plan Fiduciary Net Position (Ending)	N/A	N/A	N/A	N/A	\$11,279,992	\$12,917,769	\$13,673,096	\$14,835,133	\$16,359,403	\$16,457,917
County's Net Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	\$469,453	\$1,981,360	\$1,401,193	\$473,202	(\$202,014)
Net Position as a % of Pension Liability	N/A	N/A	N/A	N/A	N/A	96.49%	87.34%	91.37%	97.19%	101.24%
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	\$1,285,641	\$1,460,571	\$1,524,460	\$1,584,980	\$1,857,598
Net Pension Liability as a % of Payroll	N/A	N/A	N/A	N/A	N/A	36.52%	135.66%	91.91%	29.86%	-10.87%

City of Panama City Beach Firefighters' Pension Plan

GASB 67 Requirements

GASB 67 is effective for fiscal year ending September 30, 2014. The follow exhibit is a 10 year history of contributions.

	Fiscal Year Ending									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Pension Liability										
Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	\$396,234	\$314,947	\$223,668	\$125,213	\$176,073
Contributions made in Relation to the Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	\$501,112	\$416,807	\$383,158	\$266,409	\$190,555
Contribution Deficiency (excess)	N/A	N/A	N/A	N/A	N/A	\$104,878	\$101,860	(\$159,490)	(\$141,196)	(\$14,482)
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	\$1,285,641	\$1,460,571	\$1,584,980	\$1,435,315	\$1,857,598
Contributions as a % of Payroll	N/A	N/A	N/A	N/A	N/A	38.98%	28.54%	14.67%	8.72%	9.48%

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method:	Entry age Normal with frozen Initial Liability
Asset Valuation Method:	Actuarial Value – 5-year smoothed market value.
IRS Limit Increases:	4.50%
Salary Increases:	6.00%
Investment Rate of Return:	8.00%, net of pension plan investment expense, including inflation.
Retirement Age:	Graded by age and Division – see assumption section for rates.

Mortality rates were based on the RP-2000 Fully Generational Scale BB Male - 50% Annuitant White Collar / 50% Annuitant Blue Collar. Female - 100% Annuitant Wh

City of Panama City Beach Firefighters' Pension Plan

GASB 67 Requirements

Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2017:

	1% Decrease (7.00%)	Current Rate (8.00%)	1% Increase (9.00%)
(1) Total Pension Liability	\$18,812,488	\$16,832,605	\$15,201,080
(2) Plan Fiduciary Net Position	\$16,359,403	\$16,359,403	\$16,359,403
(3) Net Pension Liability	\$2,453,085	\$473,202	(\$1,158,323)

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2018:

	1% Decrease (7.00%)	Current Rate (8.00%)	1% Increase (9.00%)
(1) Total Pension Liability	\$18,335,478	\$16,255,903	\$14,462,286
(2) Plan Fiduciary Net Position	\$16,457,917	\$16,457,917	\$16,457,917
(3) Net Pension Liability	\$1,877,562	(\$202,014)	(\$1,995,631)

City of Panama City Beach Firefighters' Pension Plan

Funded Status – Accrued Benefits (ASC 960)

October 1, 2018

Generally the best measures of the Funded Status of a defined benefit plan are considered to be the levels of funding of the Actuarial Present Values of Accumulated Plan Benefits and Vested Benefits. Accumulated Plan Benefits are those future benefit payments that are attributable under the plan's provisions to employees' service rendered prior to the valuation date. Accumulated Plan Benefits are based on employees' actual pay histories, or estimates thereof; possible future salary increases or changes in Social Security levels are not recognized. Vested Benefits are those benefits which are nonforfeitable under the plan's vesting provisions.

The Actuarial Present Value of Accumulated Plan Benefits is the amount resulting from the application of actuarial assumptions to the Accumulated Plan Benefits to reflect the time value of money and the probabilities of death, disability, withdrawal and retirement. Underlying these assumptions (described on the Actuarial Basis page) is an assumption of an ongoing plan. Since most Accumulated Plan Benefits are generally synonymous with "Accrued Benefits" as defined in the plan, the Actuarial Present Value of Accumulated Plan Benefits has also been called the Present Value of Accrued Benefits.

	<u>10/1/2017</u>	<u>10/1/2018</u>
NET ASSETS AVAILABLE FOR BENEFITS*	\$ 15,080,516	\$ 15,835,822
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
Vested Benefits		
Participants Currently Receiving Payments	\$ 9,671,890	\$ 9,693,862
All Other Participants	3,761,008	4,294,187
TOTAL VESTED BENEFITS	<u>\$ 13,432,898</u>	<u>\$ 13,988,049</u>
Percent Funded	112%	113%
NONVESTED BENEFITS	782,553	892,585
EXCESS STATE MONIES RESERVE	148,116	134,160
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	<u>\$ 14,363,567</u>	<u>\$ 15,014,794</u>
Percent Funded	105%	105%

* Actuarial Value of Assets

City of Panama City Beach Firefighters' Pension Plan

Funded Status – Accrued Benefits (ASC 960) (Continued)

October 1, 2018

	<u>10/1/2017</u>	<u>10/1/2018</u>
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF PRIOR VALUATION DATE	\$ 13,659,592	\$ 14,363,567
Increase (Decrease) During the Year Attributable to:		
Increase for Interest Due to the Decrease in the Discount Period	\$ 1,079,026	\$ 1,123,704
Benefits Paid	(343,522)	(634,526)
Benefits Accumulated, Turnover, Other Experience	(31,529)	334,904
Change in Actuarial Assumptions	-	(172,855)
Plan Amendment	-	-
Net Increase (Decrease)	\$ 703,975	\$ 651,227
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF CURRENT VALUATION DATE	\$ 14,363,567	\$ 15,014,794

City of Panama City Beach Firefighters' Pension Plan

State Required Exhibit

October 1, 2018

	<u>10/1/2017</u>	<u>10/1/2018</u>
A. <u>Member Data</u>		
1. Active Members	29	36
2. Retired Members and beneficiaries receiving benefits (including DROP)	15	14
3. Disabled Members receiving benefits	1	1
4. Terminated vested Members	0	1
5. Prior year active compensation	\$ 1,584,980	\$ 1,845,756
6. Annual benefits payable to retirees and beneficiaries (including DROP)	\$ 745,400	\$ 757,786
7. Annual benefits payable to disabled retirees	\$ 50,171	\$ 50,746
8. Annual benefits payable to terminated vested Members	\$ -	\$ -
B. <u>Assets</u>		
1. Actuarial value	\$ 15,080,516	\$ 15,835,822
2. Market value	15,219,074	16,019,815
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 7,511,423	\$ 8,911,844
b. Termination benefits	1,072,376	1,231,686
c. Death benefits	50,994	91,792
d. Disability benefits	58,104	79,344
e. Total	\$ 8,692,897	\$ 10,314,666
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ -	\$ -
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired, beneficiaries and DROP	\$ 9,195,850	\$ 9,209,270
b. Disability retired	476,040	484,592
c. Total	\$ 9,671,890	\$ 9,693,862
4. Excess State Monies Reserve	\$ 148,116	\$ 134,160
5. Total actuarial present value of future expected benefit payments	\$ 18,512,903	\$ 20,142,688
6. Entry age normal accrued liability	\$ 16,832,605	\$ 16,255,903
7. Unfunded entry age normal accrued liability	\$ 1,613,531	\$ 236,089

City of Panama City Beach Firefighters' Pension Plan

State Required Exhibit (Continued)

October 1, 2018

	<u>10/1/2017</u>	<u>10/1/2018</u>
D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested benefits		
a. Members currently receiving benefits (including DROP)	\$ 9,671,890	\$ 9,693,862
b. Other Members	3,761,008	4,294,187
c. Total	\$ 13,432,898	\$ 13,988,049
2. Actuarial present value of accumulated non-vested plan benefits	782,553	892,585
3. Excess State Monies Reserve	148,116	134,160
4. Total actuarial present value of accumulated plan benefits	\$ 14,363,567	\$ 15,014,794
E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date	\$ 13,659,592	\$ 14,363,567
2. Increase (decrease) during year attributable to:		
a. Plan amendment	0	0
b. Change in actuarial assumptions	0	(172,855)
c. Benefits paid	(343,522)	(634,526)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	1,047,497	1,458,608
e. Net increase	\$ 703,975	\$ 651,227
3. Actuarial present value of accumulated plan benefits as of Current Valuation Date	\$ 14,363,567	\$ 15,014,794

City of Panama City Beach Firefighters' Pension Plan

State Required Exhibit (Continued)

October 1, 2018

Actuarial Valuation Date For Contribution Year	<u>10/1/2016</u> 2016-17	<u>10/1/2017</u> 2017-18
F. <u>Past Contributions</u>		
1. Total contribution required		
a. City		
i. Estimated Dollars, from Actuarial Valuation	\$ 103,347	\$ 132,562
ii. Percentage of Participants' Compensation	7.95%	9.24%
iii. Actual Compensation Under NRA	\$ 1,591,022	\$ 1,630,321
iv. Required, per new state interpretation = (ii.) x (iii.)	\$ 126,486	\$ 150,642
b. State (Estimated)	213,466	219,293
c. Member*	114,261	123,715
d. Total = (a.iv.) + (b.) + (c.)	\$ 454,213	\$ 493,650
2. Actual contributions made:		
a. City	\$ 266,409	\$ 190,555
b. State**	153,904	153,904
c. Member	80,110	96,798
d. Total	\$ 500,423	\$ 441,257
G. <u>Net Actuarial Gain (Loss)</u>	N/A	N/A
H. <u>Disclosure of Following Items:</u>	<u>10/1/2017</u>	<u>10/1/2018</u>
1. Actuarial present value of future salaries - attained age***	\$ 12,216,449	\$ 14,981,606
2. Actuarial present value of future employee contributions - attained age***	\$ 519,206	\$ 630,462
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 895,616	\$ 949,048
5. Actuarial present value of future salaries and future benefits at entry age	Not provided by system	
6. Actuarial present value of future employee contributions at entry age	Not provided by system	

* Determined by applying the required employee contribution rate (11.5% for members in the 25 & out tier, 8.1% for all others) to expected compensation for the year for participants under Normal Retirement Age (NRA)

** Excluding Excess Premium Tax Revenues that have not been used to provide Additional Benefits

*** Participants under Normal Retirement Age (NRA) only

City of Panama City Beach Firefighters' Pension Plan

FS 112.664 Requirements

State Required Disclosure—Changes in the Net Pension Liability and Related Ratios

Changes in the Net Pension Liability and Related Ratios – RP2000, 6.0% Interest

	Fiscal Year Ending										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Pension Liability											
Service Cost	N/A	N/A	N/A	N/A	N/A	N/A	\$426,055	\$424,619	\$426,983	\$439,869	\$483,320
Interest Cost	N/A	N/A	N/A	N/A	N/A	N/A	\$539,013	\$1,718,907	\$1,293,377	\$1,279,079	\$1,350,753
Changes of Benefit Terms	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0	\$0
Differences Between Expected and Actual Experiences	N/A	N/A	N/A	N/A	N/A	N/A	\$497,329	\$3,018,254	(\$1,471,448)	(\$98,790)	(\$557,588)
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	(\$70,012)	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	(\$428,064)	(\$461,582)	(\$596,757)	(\$790,069)	(\$1,572,120)
DROP Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$765,571	\$0	\$0	\$0
Net Change in Total Pension Liability	N/A	N/A	N/A	N/A	N/A	N/A	\$1,034,333	\$4,700,198	(\$347,844)	\$760,078	(\$295,635)
Total Pension Liability (Beginning)	N/A	N/A	N/A	N/A	N/A	N/A	\$16,130,732	\$16,130,732	\$20,830,930	\$20,483,085	\$21,243,163
Total Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	N/A	\$17,165,064	\$20,830,930	\$20,483,085	\$21,243,163	\$20,947,528
Plan Fiduciary Net Position											
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	N/A	\$501,112	\$416,807	\$383,158	\$266,409	\$190,555
Contributions—Member	N/A	N/A	N/A	N/A	N/A	N/A	\$146,638	\$86,266	\$78,955	\$80,110	\$96,798
Contributions—State							\$206,650	\$187,733	\$193,237	\$176,633	\$174,833
Net Investment Income	N/A	N/A	N/A	N/A	N/A	N/A	\$1,480,292	(\$170,283)	\$1,166,931	\$1,855,648	\$1,268,908
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	(\$428,064)	(\$461,582)	(\$596,757)	(\$790,069)	(\$1,572,120)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	N/A	(\$62,200)	(\$69,185)	(\$63,487)	(\$64,461)	(\$60,461)
Other	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$765,571	\$0	\$0	\$0
Net Change in Plan Fiduciary Net Position	N/A	N/A	N/A	N/A	N/A	N/A	\$1,637,777	\$755,328	\$1,162,037	\$1,524,270	\$98,514
Plan Fiduciary Net Position (Beginning)	N/A	N/A	N/A	N/A	N/A	N/A	\$11,279,992	\$12,917,769	\$13,673,096	\$14,835,133	\$16,359,403
Plan Fiduciary Net Position (Ending)	N/A	N/A	N/A	N/A	N/A	N/A	\$12,917,769	\$13,673,096	\$14,835,133	\$16,359,403	\$16,457,917
County's Net Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	N/A	\$4,247,296	\$7,157,834	\$5,647,952	\$4,883,760	\$4,489,612
Net Position as a % of Pension Liability	N/A	N/A	N/A	N/A	N/A	N/A	75.26%	65.64%	72.43%	77.01%	78.57%
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	N/A	\$1,285,641	\$1,308,805	\$1,299,830	\$1,435,315	\$1,857,598
Net Pension Liability as a % of Payroll	N/A	N/A	N/A	N/A	N/A	N/A	330.36%	546.90%	434.51%	340.26%	241.69%

City of Panama City Beach Firefighters' Pension Plan

FS 112.664 Requirements

Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2017:

	2% Decrease (6.00%)	Current Rate (8.00%)	2% Increase (10.00%)
(1) Total Pension Liability	\$21,243,163	\$16,832,605	\$12,606,783
(2) Plan Fiduciary Net Position	\$16,359,403	\$16,359,403	\$16,359,403
(3) Net Pension Liability	\$4,883,760	\$473,202	(\$3,752,620)

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2018:

	2% Decrease (6.00%)	Current Rate (8.00%)	2% Increase (10.00%)
(1) Total Pension Liability	\$20,947,528	\$16,255,903	\$11,550,373
(2) Plan Fiduciary Net Position	\$16,457,917	\$16,457,917	\$16,457,917
(3) Net Pension Liability	\$4,489,612	(\$202,014)	(\$4,907,544)

Adequacy of Assets

The following table illustrates the number of years and fractions for which the Market Value of Assets are adequate to sustain expected retirement benefits.

Assumptions	Years and Fractions
RP 2000 Mortality and 8.0% Interest	25.33
RP 2000 Mortality and 6.0% Interest	19.33

City of Panama City Beach Firefighters' Pension Plan

Participant Data Summary

October 1, 2018

	Active	Terminated			Beneficiaries	Total	
		DROP	Vested	Disabled			
October 1, 2017	29	5	-	1	10	-	45
New Entrants	10						10
Retirements		(3)			3		-
Disabilities							-
Terminations							
a) with refund	(3)						(3)
b) without refund							-
DROP enrollments		-					-
Deaths							
a) with beneficiaries							-
b) without beneficiaries					-		-
Benefits Expired							-
Other		-	1		(1)		-
October 1, 2018	36	2	1	1	12	-	52
Average Age	34.8	53.6	-	52.3	57.8		

Active Participants as of 10/01/2017

	Males	Females	Total
Number of Participants	28	1	29
Average Age Nearest Birthday	35.7	38.9	35.8
Average Completed Years of Service	9.6	1.8	9.3
Average Compensation for Prior Year	N/A*	N/A*	\$52,787

Active Participants as of 10/01/2018

	Males	Females	Total
Number of Participants	34	2	36
Average Age Nearest Birthday	34.8	34.4	34.8
Average Completed Years of Service	8.4	1.7	8.0
Average Compensation for Prior Year	N/A*	N/A*	\$51,271

* Not displayed due to privacy issue.

City of Panama City Beach Firefighters' Pension Plan

Age and Service Distribution

October 1, 2018

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
Under 25	6	0	0	0	0	0	-	6
25-29	7	0	0	0	0	0	-	7
30-34	3	1	2	0	0	0	-	6
35-39	2	1	5	1	0	0	-	9
40-44	1	0	0	1	0	0	-	2
45-49	0	0	1	2	1	1	1	6
50-54	0	0	0	0	0	0	-	0
55-59	0	0	0	0	0	0	-	0
60-64	-	-	-	-	-	-	-	0
65 and over	-	-	-	-	-	-	-	0
Total	19	2	8	4	1	1	1	36

**City of Panama City Beach
Firefighters' Pension Plan**

**Comparison of Actual vs. Assumed Salary
Increases and Investment Returns**

October 1, 2018

Salary Increases

Year Ended September 30,	Actual	Assumed
1989	6.00% *	6.0%
1990	11.3%	6.0%
1991	8.1%	6.0%
1992	19.9%	6.0%
1993	8.0%	6.0%
1994	5.5%	6.0%
1995	6.5%	6.0%
1996	5.9%	6.0%
1997	5.7%	6.0%
1998	15.5%	6.0%
1999	10.1%	6.0%
2000	1.3%	6.0%
2001	9.5%	6.0%
2002	9.3%	6.0%
2003	3.7%	6.0%
2004	5.8%	6.0%
2005	3.9%	6.0%
2006	8.6%	6.0%
2007	4.2%	6.0%
2008	9.7%	6.0%
2009	13.2%	6.0%
2010	0.6%	6.0%
2011	8.8%	6.0%
2012	4.1%	6.0%
2013	6.5%	6.0%
2014	2.1%	6.0%
2015	7.1%	6.0%
2016	5.2%	6.0%
2017	5.4%	6.0%
2018	12.9%	6.0%
Last 5 Years, Compounded	6.5%	6.0%

Each figure is the rate of increase in weighted average compensation from the prior year, as reported for the actuarial valuations. The average includes only continuing active employees who have a full year of compensation in both the current and prior years, based on their reported dates of employment. Prior to September 30, 2001, employees with less than a full year of compensation in the prior year were also included by annualizing their compensation on a pro rata basis.

* Reflects change in the definition of Compensation for benefit purposes

City of Panama City Beach Firefighters' Pension Plan

Comparison of Actual vs. Assumed Salary Increases and Investment Returns (Continued)

October 1, 2018

Investment Return

Year Ended September 30,	Actual	Assumed
1989	6.18%	8.0%
1990	2.42%	8.0%
1991	2.98%	8.0%
1992	26.77%	8.0%
1993	11.52%	8.0%
1994	0.18%	8.0%
1995	16.21%	8.0%
1996	13.29%	8.0%
1997	24.15%	8.0%
1998	7.01%	8.0%
1999	12.22%	8.0%
2000	10.58%	8.0%
2001	(5.13%)	8.0%
2002	(4.07%)	8.0%
2003	3.63%	8.0%
2004	3.88%	8.0%
2005	4.84%	8.0%
2006	7.85%	8.0%
2007	10.19%	8.0%
2008	6.24%	8.0%
2009	4.24%	8.0%
2010	4.80%	8.0%
2011	3.74%	8.0%
2012	5.13%	8.0%
2013	9.84%	8.0%
2014	11.11%	8.0%
2015	8.46%	8.0%
2016	8.73%	8.0%
2017	8.40%	8.0%
2018	7.86%	8.0%
Last 5 Years, Compounded	8.91%	8.0%

The actual experience figures are the approximate time-weighted rates of return for the particular year. Through September 30, 2002, the return shown is from market value to market value; thereafter the return is from smoothed value to smoothed value. Income includes dividends, interest, and realized and unrealized gains (losses), based upon statements of Fund Balances provided by the City. The time-weighted rates reflect estimated transaction dates for income, employer, employee and state contributions, expenses, and disbursements.

City of Panama City Beach Firefighters' Pension Plan

Reconciliation of DROP Participants and Assets

October 1, 2018

Participants as of 10/1/2017	5
New DROP Members	0
New DROP's, Withdrew during PY	(3)
All Other Withdrawals	0
Corrections	0
Participants as of 10/1/2018	2

	Total
Assets as of 10/1/2017	\$1,140,329.11
Payments into DROP	222,972.18
Earnings	12,394.19
Distributions	(937,593.44)
Expenses	0.00
Adjustments	0.00
Assets as of 10/1/2018	\$438,102.04

**City of Panama City Beach
Firefighters' Pension Plan**

History of Excess Premium Tax Revenues

October 1, 2018

	<u>Regular</u>			<u>Supplemental Compensation Fund</u>			<u>Total</u>			
	<u>Cash Received</u>	<u>Applicable "Frozen" Amount</u>	<u>Excess Over Frozen Amount</u>	<u>Cash Received</u>	<u>Applicable "Frozen" Amount</u>	<u>Excess Over Frozen Amount</u>	<u>Total Excess = Additional Premium Tax Revenue</u>	<u>Current Year Benefit Improve- ments</u>	<u>Set Aside for Future Improve- ments</u>	<u>Cumulative Set Aside for Future Improve- ments</u>
9/30/1998	\$ 48,873.25	\$ 48,873.25	\$ 0.00	\$ 21,907.17	\$ 21,907.17	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
9/30/1999	44,211.49	48,873.25	0.00	24,139.40	21,907.17	2,232.23	2,232.23	0.00	2,232.23	2,232.23
9/30/2000	70,881.88	48,873.25	22,008.63	40,444.30	21,907.17	18,537.13	40,545.76	0.00	40,545.76	42,777.99
9/30/2001	48,577.26	48,873.25	0.00	25,381.58	21,907.17	3,474.41	3,474.41	46,252.40 (1)	0.00	0.00
9/30/2002	54,888.30	48,873.25	6,015.05	28,691.11	21,907.17	6,783.94	12,798.99	41,181.00 (2)	0.00	0.00
9/30/2003	61,580.73	48,873.25	12,707.48	34,312.47	21,907.17	12,405.30	25,112.78	41,181.00	0.00	0.00
9/30/2004	66,676.24	48,873.25	17,802.99	40,043.17	21,907.17	18,136.00	35,938.99	41,181.00	0.00	0.00
9/30/2005	73,517.87	48,873.25	24,644.62	42,460.12	21,907.17	20,552.95	45,197.57	41,181.00	4,016.57	4,016.57
9/30/2006	87,444.59	48,873.25	38,571.34	52,473.25	21,907.17	30,566.08	69,137.42	41,181.00	27,956.42	31,972.99
9/30/2007	127,251.63	48,873.25	78,378.38	108,377.15	21,907.17	86,469.98	164,848.36	41,181.00	123,667.36	155,640.35
9/30/2008	182,873.74	48,873.25	134,000.49	143,540.37	21,907.17	121,633.20	255,633.69	370,093.00 (3)	0.00	0.00
9/30/2009	116,306.62	48,873.25	67,433.37	42,616.18	21,907.17	20,709.01	88,142.38	83,124.00 (4)	5,018.38	5,018.38
9/30/2010	136,553.57	48,873.25	87,680.32	48,163.22	21,907.17	26,256.05	113,936.37	83,124.00	30,812.37	35,830.75
9/30/2011	137,445.52	48,873.25	88,572.27	41,843.68	21,907.17	19,936.51	108,508.78	83,124.00	25,384.78	61,215.53
9/30/2012	150,652.54	48,873.25	101,779.29	53,112.15	21,907.17	31,204.98	132,984.27	83,124.00	49,860.27	111,075.80
9/30/2013	150,729.03	48,873.25	101,855.78	48,217.29	21,907.17	26,310.12	128,165.90	83,124.00	45,041.90	156,117.70
9/30/2014	148,749.67	48,873.25	99,876.42	57,900.59	21,907.17	35,993.42	135,869.84	83,124.00	52,745.84	208,863.54
9/30/2015	160,239.82	48,873.25	111,366.57	27,493.57	21,907.17	5,586.40	116,952.97	145,422.88 (5)	0.00	180,393.63
9/30/2016	180,727.63	48,873.25	131,854.38	12,509.09	21,907.17	0.00	131,854.38	142,915.84 (6)	0.00	169,332.17
9/30/2017	174,180.73	48,873.25	125,307.48	2,452.81	21,907.17	0.00	125,307.48	146,523.18 (6)	0.00	148,116.47
9/30/2018	172,297.52	48,873.25	123,424.27	2,535.66	21,907.17	0.00	123,424.27	137,380.44 (6)	0.00	134,160.30

Notes:

- (1) Additional Benefits adopted (\$350 per month Supplemental Benefit) with a lump sum cost in excess of the available \$46,252.40.
- (2) Additional Benefits adopted (\$350 per month Supplemental Benefit) with an annual cost initially valued as \$41,181.
- (3) Additional Benefits adopted (3.00% Multiplier changed to 3.35%) with a lump sum cost in excess of the available \$370,093.
- (4) Additional Benefits adopted (3.00% Multiplier changed to 3.35%) with an annual cost initially valued as \$83,124.

City of Panama City Beach Firefighters' Pension Plan

Summary of Major Plan Provisions

October 1, 2018

Effective Date: August 25, 1971.

Plan Year: October 1 to September 30.

Last Amendment: Restatement (Ordinance 670) effective June 8, 2000. First Amendment (Ordinance 723) effective June 14, 2001 (adding Early Retirement and \$350 per month supplement). Second Amendment (Ordinance 792) effective April 10, 2003 (for various law and other changes). Third Amendment (Ordinance 889) effective July 22, 2004 (changing investment policy). Fourth Amendment (Ordinance 984) effective November 1, 2005 (adding 25 & Out Tier). Fifth Amendment (Ordinance 1030) effective May 11, 2006 (changing various provisions as required by new IRS rules). Sixth Amendment (Ordinance 1085) effective July 26, 2007 (adding 5% fixed investment return option for DROP). Seventh Amendment (Ordinance 1127) effective October 1, 2008 (increasing multiplier from 3.00% to 3.35%). Restatement (Ordinance 1157) adopted August 17, 2009. First Amendment (Ordinance 1220) effective February 9, 2012 (adding 300 hours of overtime cap).

Eligibility: All permanent Firefighters who have passed the medical examination.

Employee Contributions: 7.5% of Compensation for Firefighters who elect the 25 & Out Tier, else 4.1% of Compensation (5.0% prior to June 8, 2000). Employee Contributions are excluded from taxable income under IRC Section 414(h). The election of the 25 & Out Tier is irrevocable. Starting October 1, 2014, contributions will be reduced by 4.0% annually, to the extent that an additional offset is available from premium tax revenues.

Compensation: Total compensation paid by the City for services rendered as reported on Form W-2, plus all tax deferred, tax sheltered or tax exempt amounts derived from elective employee contributions or salary reductions. Compensation includes regular pay, overtime (up to 300 hours) and other cash incentives. Payments of leave amounts (vacation, sick, etc.) upon termination of employment shall not be included. Auto allowance and mileage reimbursements shall not be included. Compensation in excess of the IRC Section 401(a)(17) limit is disregarded.

Average Final Compensation: The Compensation received during the 5 years out of the last 10 years of Credited Service divided by 60, which produces the highest average, or the career average as a full-time Firefighter, if greater.

Credited Service: Years and fractional parts of years of service as a Firefighter with the City and while making Employee Contributions.

Accrued Benefit: The benefit using the formula for the Normal Retirement Benefit, based upon the Average Final Compensation and Credited Service as of the date of the calculation. The Accrued Benefit is payable at the Normal Retirement Date in the Normal Form of Benefit.

Accumulated Contributions: A participant's contributions with interest compounded annually at 5.25% through June 3, 2000; after that date interest is no longer accrued.

Normal Retirement Date: The first day of the month coincident with or next following the earlier of (1) the date a participant attains age 50 and has completed at least 20 years of Credited Service or (2) the date he attains age 55 and has completed at least 10 years of Credited Service, or (3) if he has elected the 25 & Out Tier, the date he has completed at least 25 years of Credited Service regardless of age.

City of Panama City Beach Firefighters' Pension Plan

Early Retirement Date: The first day of the month coincident with or next following the date a participant attains age 50 and has completed at least 10 years of Credited Service.

Normal Form of Benefit: A monthly annuity for life with 10 years certain.

Optional Forms of Benefit: Benefits Actuarially Equivalent to the benefit provided under the Normal Form of Benefit; optional forms:

- a. Life annuity (with no modified cash refund feature),
- b. Joint and survivor annuity (100%, 75%, 66 2/3% or 50%; reducing upon death of participant only),
- c. Level income option,
- d. Any of the above forms, increasing 3% per year on each January 1 (the Actuarially Equivalent adjustment recognizes that the regular retirement benefit includes a 1% COLA and that the \$350 Per Month Supplemental Benefit does not), or
- e. Lump Sum if under \$5,000, or less than \$100 per month.

Normal Retirement Benefit: A monthly benefit commencing at the Normal Retirement Date equal to 3.35% of Average Final Compensation multiplied by years of Credited Service, but not more than 100% of Average Final Compensation (excluding COLA's).

Late Retirement Benefit: Additional benefits will accrue after the Normal Retirement Date.

Early Retirement Benefit: A participant who elects to retire on or after his Early Retirement Date may receive an Early Retirement Benefit commencing at his Normal Retirement Date equal to his Accrued Benefit. If he further elects to have such benefit commence prior to his Normal Retirement Date, it shall be reduced 3% per year (.25% per month) for each period by which the benefit commencement date precedes his Normal Retirement Date. For this purpose Normal Retirement Date is determined based on the participant's actual years of Credited Service as a Firefighter at his termination date.

Death Benefit: The beneficiary of a participant who dies (1) during employment or after termination with a vested benefit and (2) with respect to whom benefit payments have not commenced shall be entitled to a Death Benefit equal to 100 times his monthly Accrued Benefit based on his Credited Service and Average Final Compensation as of the time of death. This benefit is payable in a lump sum unless the Firefighter elected that it be paid in an Actuarially Equivalent annuity or installments. The Plan also provides minimum Death Benefits based upon the vested, 10-year-certain portion of the Normal Form of Benefit or the refund of Accumulated Contributions.

Termination of Employment Benefit: A participant who terminates his employment after completing ten years of Credited Service for reason other than death, disability or retirement shall be entitled to a vested deferred monthly benefit commencing at his Normal Retirement Date equal to his Accrued Benefit. Any participant may withdraw his Accumulated Contributions; a vested participant who withdraws his Accumulated Contributions forfeits his rights to his vested Accrued Benefit or Death Benefit.

If a participant terminates after completing 10 years but prior to being eligible for retirement:

- With less than 20 years of Credited Service, his annuity can begin unreduced at age 55 or reduced (3% per year) between ages 50 and 55, or
- With 20 or more years of Credited Service, his annuity can begin unreduced at age 50.

City of Panama City Beach Firefighters' Pension Plan

Disability Benefit: A Participant who becomes totally and permanently disabled shall be eligible to receive a Disability Benefit in the form of an immediate monthly annuity for life with ten years certain as follows:

Job-Related Disability: Without regard to years of Credited Service, a benefit equal to the greater of his Accrued Benefit or 42% of Average Final Compensation as of the date of disability.

Non-Job-Related Disability: With ten or more years of Credited Service, a benefit equal to his Accrued Benefit as of the date of disability.

The Disability Benefit together with worker's compensation benefits may not exceed 100% of pay, as provided in the Plan. Optional Forms of Benefit may be elected.

Actuarial Equivalent: A benefit or amount of equal value, based upon the 1983 Group Annuity Mortality Table for Males and an interest rate of 8% per annum. In practice, in accordance with the prior document, the Table for Males is used for all Firefighters, regardless of sex, and the same table with ages set back 6 years is used for all beneficiaries and survivor annuitants, regardless of sex.

Cost-of-Living Adjustment: All retirees, including disabled retirees, who retired on or after June 8, 2000, (including Firefighters who terminate with a deferred benefit after such date, once they retire) and their survivor annuitants shall receive on the first January 1 following one full year of retirement, and on each January 1 thereafter, a 1% cost-of-living adjustment on their regular retirement benefit; the \$350 Per Month Supplemental Benefit does not receive a COLA.

Maximum Benefits: IRC Section 415 limits apply as modified for governmental plans and for police and fire plans.

Deferred Retirement Option Program (DROP):

- a. **Eligibility:** Normal Retirement.
- b. **Benefit Amount:** The participant's Accrued Benefit calculated as of the beginning of the DROP period, accumulated quarterly with interest at a rate equal to either the Pension Plan's net investment performance during the quarter or a fixed guaranteed rate of 5% annually, plus cost-of-living adjustments, if any, during the DROP period. The participant elects which interest basis he wants upon his entry into the DROP, and may change such election only once during the DROP period.
- c. **Form of Benefit:** When the DROP period ends (maximum 5 years), the employee must terminate employment. At that time, the accumulated DROP benefits will be distributed in the form of a lump sum, a rollover, or a nonforfeitable fixed annuity to the participant, or if deceased, such participant's designated beneficiary. In addition, the monthly annuity, including any COLA adjustments, will continue to the participant as otherwise provided in the Plan.
- d. **Other Provisions:** A participant in DROP is no longer eligible for Death or Disability Benefits. Employee Contributions are no longer collected, and Credited Service and Average Final Compensation are frozen as of the date of entry into DROP.

\$350 Per Month Supplemental Benefit: Firefighters who retire from active service only receive a supplemental monthly benefit of \$350 payable for life only, without any COLA. This benefit is not provided for firefighters who terminate prior to being eligible for early, normal or disability retirement, nor is it provided for beneficiaries of deceased firefighters, nor their joint annuitants. However, when he retires a firefighter may elect to have the \$350 benefit paid in one of the reduced, Actuarially Equivalent Optional Forms of Benefit; this includes having it paid as a reduced, Actuarially Equivalent, increasing annuity under the 3% increasing annuity option.

City of Panama City Beach Firefighters' Pension Plan

Actuarial Basis

October 1, 2018

ACTUARIAL COST METHOD

Entry Age Normal with Frozen Initial Liability. Changes in actuarial assumptions are reflected in Normal Cost. Since at least 1999, all changes in plan benefits have been funded either by increases in the employee contribution rate or by increased Premium Tax Revenues.

ACTUARIAL ASSUMPTIONS

Investment Yield: The investment rate of earnings is assumed to be 7.75% per annum.

Interest on Employee Contributions: No interest is credited beyond June 8, 2000.

Mortality: : RP-2000 Fully Generational Scale BB. Male – 10% Annuitant White Collar/ 90% Annuitant Blue Collar. Female – 100% Annuitant White Collar

Disability: Preretirement disability is assumed to occur in accordance with a standard scale of disability rates (1955 UAW, male and female). Sample rates are shown below:

Age	Probability of Disablement	
	Male	Female
20	0.03%	0.04%
30	0.04%	0.06%
40	0.07%	0.10%
50	0.18%	0.26%
60	0.90%	1.21%

Twenty-five percent of disabilities are assumed to be non-job-related.

Withdrawal: Preretirement withdrawals are assumed to occur in accordance with a standard scale of turnover rates (Frees 2003). Sample rates are shown below:

Age	Years of Service			
	< 2	2-4	5-9	>10
20	18.0%	14.2%	15.0%	18.8%
30	18.6%	13.6%	8.4%	4.8%
40	15.9%	10.4%	6.0%	4.2%
50	15.6%	8.9%	5.3%	3.5%

Salary Scale: Future salaries are assumed to increase at the rate of 6% per year.

City of Panama City Beach Firefighters' Pension Plan

Actuarial Value of Assets: Assets are valued using a 5-year smoothed market value without phase-in.

Retirement Rates: Active employees are expected to retire at a rate of 60% at first eligibility. They are then assumed to retire at a rate of 50% for each year thereafter. 100% of eligible participants are assumed to retire at age 60.

Timing of Contribution: The contribution is assumed to be made quarterly throughout the plan year.

Employees Covered: All participants as of the actuarial valuation date.

Expenses: Expenses for the current year are assumed to equal actual expenses for the prior year. If actual expenses for the current year differ from this estimate, a make-up contribution or credit is included.

Maximum Compensation: Compensation is limited to \$275,000 projected to increase at the rate of 4% per annum.

Maximum Benefits: The \$220,000 maximum for years ending in 2018 and other applicable Benefit Limitations under Section 415 are projected to increase at the rate of 4% per annum.

Completeness of Assumptions: All benefits and expenses to be provided by the Plan are recognized in the valuation. All known events are taken into account; no current trends are assumed to discontinue in the future.

All assumptions, with the exception of the investment return and mortality, were selected in conjunction with guidance provided by Aon. The demographic assumptions were selected as a result of an experience study, and are reviewed annually for reasonableness.

The investment return was selected by the Pension Board in conjunction with the investment consultant.

The mortality used is based on the mortality assumption used by the Florida Retirement System, as mandated by Florida Statute.

COMPARABILITY WITH PRIOR VALUATION

Significant Events During the Year: None.

Significant Changes in the Summary of Major Plan Provisions: None

Significant Changes in the Actuarial Cost Method or Actuarial Assumptions:

Expected Rate of Return, Mortality, Termination, and Retirement rates were updated in accordance with the most recent experience study

Other Information Needed to Fully and Fairly Disclose the Actuarial Position of the Plan: None.

City of Panama City Beach Firefighters' Pension Plan

Actuarial Cost Method "Entry Age Normal with Frozen Initial Liability"

October 1, 2018

An actuarial valuation is a series of mathematical calculations which project future benefits under a pension plan and future contributions to fund those benefits. The true cost of a pension plan cannot be determined until the last benefit is paid, because the true cost is the actual benefits ultimately paid, plus the expense of maintaining the plan, less the actual income earned on invested funds. Since funding cannot wait until the last benefit is paid, however, actuarial assumptions are used to project ultimate benefit levels and the reserves needed to provide them. An actuarial cost method is then used to establish a reasonable pattern of contributions to accumulate those reserves. The assumptions and cost method themselves, therefore, only impact on the incidence of funding, not the true cost. Each new valuation automatically corrects for any differences between the assumptions and actual experience, and the correction is spread over the current and future years of funding.

The Entry Age Normal with Frozen Initial Liability cost method spreads the funding of a portion of the pension benefits over the future service of all active participants and the balance is funded in a separate amortization schedule.

The Frozen Initial Liability is determined and fixed in the first year the cost method is adopted, although it may be redetermined or a supplemental piece added when the Plan is amended. The Frozen Initial Liability is the excess of the Present Value of Benefits over the sum of (a) the Present Value of Future Entry Age Normal Costs, (b) the Present Value of Future Employee Contributions, and (c) the Actuarial Value of Assets in the Trust Fund. The Entry Age Normal Cost is the annual cost determined by assuming the current Plan was always in effect and calculating the amount needed to produce level funding of benefits for all current participants from the date they would have entered the Plan. The Frozen Initial Liability may be amortized over as many as 40 years.

In each subsequent year, the order of steps is reversed. The Present Value of Future Normal Costs is calculated as the excess of the Present Value of Benefits over the sum of (a) the unfunded portion of the Frozen Initial Liability, (b) the Actuarial Value of Assets and (c) the Present Value of Future Employee Contributions.

The Normal Cost is developed by spreading the Present Value of Future City Normal Costs over the future compensation of all participants as a level percentage of pay, i.e., by dividing it by the Present Value of Future Compensation to get the Normal Cost Rate. The Normal Cost is the product of the Normal Cost Rate and the current Participants' Compensation. Actuarial gains or losses are included in the Present Value of Future Normal Costs, and are reflected in the Normal Cost Rate and thereby spread over the remaining future service of the participants in the Normal Cost. The Frozen Initial Liability is not adjusted for actuarial gains or losses.

City of Panama City Beach Firefighters' Pension Plan

The state minimum required contribution in a particular year is equal to the Normal Cost, plus a level amount which will amortize the Frozen Initial Liability and supplemental bases over the applicable number of years, plus expected and "make-up" expenses, less the Past Excess Contributions.

In the event of either a negative Normal Cost or an unfunded liability that is zero or less, the Cost Method will operate temporarily as the Aggregate Cost Method, in effect, until a positive unfunded liability is established at the time of a plan amendment, when a new Frozen Initial Liability is established.

The calculation of the contribution has been made in a manner that assumes quarterly payment during the Plan Year. In order to meet the state minimum funding requirements, the state minimum required contribution must be made at least quarterly during the Plan Year.

City of Panama City Beach Firefighters' Pension Plan

Disclosure Notes to the Financial Statements for Year Ended September 30, 2018

Summary of Significant Accounting Policies

Preserving the Firefighters' Retirement Fund is a major objective of the City of Panama City Beach. The City funds a defined benefit pension plan for its employees. They are treated as fiduciary funds in the financial sections. It is the goal to invest all funds in a manner that provides the highest investment return using authorized instruments while meeting the City's acceptable risk level. The primary objectives, in priority order, in investment activities shall be safety, liquidity, and yield.

Method used to value investments. Investments are reported at fair value. All deposits are in various financial institutions and are carried at cost. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates.

Plan Description

Plan Administration

The Board of Trustees oversees the management of the Firefighters' Pension Plan for the City of Panama City Beach. The board has established procedures to ensure that idle funds are invested as authorized by Florida statute, to earn the maximum interest.

Benefits Provided

See pages 30-32 of the Actuarial Report.

Contributions

The City's annual contribution to the pension trust is determined through the budgetary process and with reference to actuarial determined contributions. As of September 30, 2018, the most recent actuarial study shows a surplus of \$0.2 million on a GASB 67/68 funding basis. The Board establishes rates based on an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. The contribution is designed to accumulate sufficient assets to pay benefits when due.

Investments

Asset Class	Target Allocation Total
Large Cap Equity	30%
Small Cap Equity	20%
International Equity	15%
Fixed Income	25%
Real Estate	5%
Cash	5%
Total	100%

City of Panama City Beach Firefighters' Pension Plan

Concentrations

The long-term expected rate of return on pension plan investments was confirmed appropriate using Aon's e-tool model assuming general inflation of 2.5%, which is a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. 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 arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of October 1, 2018 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset Class	Long-Term Expected Nominal Return	Long-Term Expected Real Rate of Return
Equity		
Large Cap U.S. Equity	6.50%	4.00%
Small Cap U.S. Equity	7.00%	4.50%
International (Non-U.S.) Equity (Developed)	7.50%	5.00%
Emerging Markets Equity	8.30%	5.80%
Fixed Income		
Long Duration Bonds – Credit	4.30%	1.80%
Alternative Investments		
Real Estate (Broad Market)	6.40%	3.90%

Rate of Return

For the year ended September 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.0 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Receivables

The pension plan does not have receivables from long-term contracts with the City for contributions.

Allocated Insurance Contracts

The pension plan has not allocated insurance contracts that are excluded from pension plan assets.

Reserves

The pension plan has no reserves that are required to be disclosed under paragraph 30e of Statement 67.

Deferred Retirement Option Program (DROP)

The City offers a DROP to all employees who meet retirement eligibility. A description of the DROP can be found on page 32 of the actuarial valuation report.

City of Panama City Beach Firefighters' Pension Plan

Discount Rate

The discount rate used to measure the total pension liability was 8.00 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 Board of Trustees 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.