



# Actuarial Valuation Report

*City of Panama City Beach Police Officers' Pension Plan*

*Funding Results for the Year Ending September 30, 2017*

*Accounting Results for the Year Ending September 30, 2016*



Ms. Holly J. White  
Assistant to City Manager for Finance  
City of Panama City Beach  
110 South Arnold Road  
Panama City Beach, FL 32407

Re: *Panama City Beach Police Officers' 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, 2016. The purposes of this report are to provide the contribution requirements for the Plan Year beginning October 1, 2016, and ending September 30, 2017, 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 Hewitt.

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,

07/14/17

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

\_\_\_\_\_  
Date

# City of Panama City Beach Police Officers' Pension Plan

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## Discussion of Results

October 1, 2016

The results of the actuarial valuation of the Panama City Beach Police Officers' Pension Plan as of October 1, 2016, 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, 2015.

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	
	09/30/16	09/30/17
State Minimum Required Contribution	\$ 550,638	\$ 547,820
Percent of Participants' Compensation	18.55%	17.13%

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 8.74% for the plan year ended September 30, 2016. Investment experience compounded over the last 5 years has been approximately 8.40% per year. This compares unfavorably to the 8.0% investment rate of return assumption used to determine the plan's funding requirements. Salary increase experience was observed to be 3.3%, lower than the assumed salary increase of 6.0%. Salary experience compounded over the last 5 years has been approximately 4.7% 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 Police Officers' Pension Plan

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Based on this measurement of Funded Status, using the Actuarial Value of Assets, the plan is adequately funded as of October 1, 2016, although a higher level of excess funding would be desirable:

	10/01/15	10/01/16
<b>NET ASSETS AVAILABLE FOR BENEFITS*</b>	\$ 16,808,417	\$ 18,338,158
<b>ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS</b>		
TOTAL VESTED BENEFITS	\$ 15,184,291	\$ 16,433,101
Percent Funded	111%	112%
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	\$ 16,087,087	\$ 17,449,634
Percent Funded	104%	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:

	10/01/15	10/01/16
MARKET VALUE OF ASSETS	\$ 16,344,206	\$ 17,843,082
ENTRY AGE NORMAL ACCRUED LIABILITY	\$ 19,016,272	\$ 20,504,730
Funded Ratio	86.0%	87.02%

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\* Actuarial Value of Assets

**City of Panama City Beach  
Police Officers' Pension Plan**

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## Development of Normal Cost for State Minimum Required Contribution

October 1, 2016

	<u>10/1/2015</u>	<u>10/1/2016</u>
1. Number of Participants		
Active	56	57
Terminated with Vested Benefits	3	2
Retirees and Beneficiaries	24	25
Total	83	84
2. Participant's Compensation		
a. Below Normal Retirement Age	\$ 2,969,177	\$ 3,197,448
b. Beyond Normal Retirement Age	-	-
c. Total	\$ 2,969,177	\$ 3,197,448
3. Present Value of Benefits		
Active	\$ 13,427,491	\$ 14,579,003
Terminated with Vested Benefits	891,656	444,094
Retirees	9,572,240	10,152,705
Excess State Monies Reserve	58,474	101,933
Total	\$ 23,949,861	\$ 25,277,735
4. Unfunded Actuarial Accrued Liability	\$ 332,748	\$ 296,504
5. Actuarial Value of Assets	\$ 16,808,417	\$ 18,338,158
6. Past Excess Contributions	\$ 40,746	\$ 47,081
7. Present Value of Future Employee Contributions	\$ 2,478,410	\$ 2,464,943
8. Present Value of Future City Normal Costs = (3) – (4) – [(5) – (6)] – (7)	\$ 4,371,032	\$ 4,225,210
9. Present Value of Future Compensation	\$ 24,697,974	\$ 24,574,024
10. Normal Cost Rate = (8) ÷ (9)	17.70%	17.19%
11. Normal Cost = (2a) x (10)	\$ 525,544	\$ 549,641

# City of Panama City Beach Police Officers' Pension Plan

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## State Minimum Required Contribution

October 1, 2016

	Plan Year Ended	
	<u>9/30/2016</u>	<u>9/30/2017</u>
1. Normal Cost	\$ 525,544	\$ 549,641
2. Amortization of Actuarial Accrued Liability	\$ 55,360	\$ 55,360
3. Interest Adjustment on (1) and (2) for Quarterly Payment	\$ 22,789	\$ 23,734
4. Expenses		
Current Year Estimate Equal to Prior Year's Actual	\$ 67,958	\$ 64,805
Make-up for Shortfall in Prior Year's Estimate	<u>14,970</u>	<u>(3,153)</u>
Total	\$ 82,928	\$ 61,652
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)	\$ 93,639	\$ 93,639
6. Past Excess Contributions plus Interest Adjusted for Quarterly Payment	\$ 42,344	\$ 48,928
7. Minimum Required Contribution by City for Fiscal Year = (1) + (2) + (3) + (4) – (5) – (6)	\$ 550,638	\$ 547,820
8. Percent of Participants' Compensation Below Normal Retirement Age*	18.55%	17.13%

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



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**Unfunded Frozen Initial and Supplemental Liabilities**

October 1, 2016

	Initial Amount to be Amortized	Beginning Amortization Period	Original Amortization Period (Years)	Years Remaining	(BOY) Annual Amortization Amount	Unamortized Balance as of 10/1/2016
Initial Liability	\$ 369,135	10/1/1994	17	0	\$ -	\$ -
Benefit Improvement	407,851	10/1/1994	30	8	33,545	208,193
Plan/Assumption Change	265,236	10/1/1994	30	8	21,815	135,392
					\$ 55,360	
						1. Unamortized Balance as of 10/1/2016 \$ 343,585
						2. Past Excess Contributions <u>47,081</u>
						3. Remaining Unfunded Liabilities = (1) - (2) \$ 296,504

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**Schedule Illustrating the Amortization of  
Unfunded Liabilities Existing This Date**

October 1, 2016

October 1	Liability
2016	\$ 296,504
2017	210,922
2018	168,007
2019	121,659
2020	71,603
2021	53,771

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, 2016, valuation is 2022 less 2016, or 6 years.

## City of Panama City Beach Police Officers' Pension Plan

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### Past Excess Contributions (State Requirements)

October 1, 2016

	Plan Year Ended	
	<u>9/30/2015</u>	<u>9/30/2016</u>
<b>Charges:</b>		
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)	615,560	587,647
Interest	93,639	93,639
	<u>27,822</u>	<u>26,727</u>
Total Charges	\$ 737,021	\$ 708,013
<b>Credits:</b>		
Excess Contribution Brought Forward	\$ 62,506	\$ 40,746
City Contributions	589,810	590,606
State Contributions (Excluding Excess Premium Tax Revenues That Have Not Been Used to Provide Additional Benefits)	93,639	93,639
Interest	31,812	30,103
	<u>31,812</u>	<u>30,103</u>
Total Credits	\$ 777,767	\$ 755,094
<b>Balance:</b>		
Excess Contribution Carried Forward	<u>\$ 40,746</u>	<u>\$ 47,081</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 Police Officers' Pension Plan

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## Market Value of Assets

October 1, 2016

	<u>10/1/2015</u>	<u>10/1/2016</u>
<b>Assets:</b>		
Cash	\$ 1,284,356.72	\$ 631,320.53
Certificates of Deposit	-	-
Government and Corporate Bond	4,380,901.23	4,979,992.28
Real Estate and Equity Funds	10,237,566.60	12,243,114.20
Due from City Funds	359,893.76	-
Due from State of Florida	117,869.72	-
Accrued Interest	-	-
Miscellaneous Receivable	<u>21,583.68</u>	<u>6,939.66</u>
Total Assets	<u>\$ 16,402,171.71</u>	<u>\$ 17,861,366.67</u>
<b>Liabilities and Fund Balance:</b>		
Liabilities:		
Accounts Payable	\$ (15,076.85)	\$ (17,894.29)
Refunds or Benefits Payable	(390.27)	(390.27)
Due Other Funds	<u>(42,498.14)</u>	<u>-</u>
Total Liabilities	<u>\$ (57,965.26)</u>	<u>\$ (18,284.56)</u>
Pension Fund Balance:	<u><u>\$ 16,344,206.45</u></u>	<u><u>\$ 17,843,082.11</u></u>

# City of Panama City Beach Police Officers' Pension Plan

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## Reconciliation of Assets (Market Value)

October 1, 2016

### Plan Year Ended

	<u>9/30/2015</u>	<u>9/30/2016</u>
<b>Revenues:</b>		
City Contributions	589,810.48	590,606.15
Employee Contributions	325,235.28	338,560.84
State Contributions	117,869.72	137,096.72
Repayment of Contributions	-	-
Interest & Dividends	380,177.70	343,118.22
Unrealized/Realized Gains (Losses)	(613,462.95)	1,059,114.31
Commissions	-	-
	-	-
Total Revenues	\$ 799,630.23	\$ 2,468,496.24
<b>Expenses:</b>		
Pension Payments	826,245.48	849,305.04
Contribution Refunds	100,401.84	55,510.79
DROP Payments	-	-
Investment Expenses	47,486.59	46,669.80
Other Expenses	20,471.30	18,134.95
	20,471.30	18,134.95
Total Expenses	\$ 994,605.21	\$ 969,620.58
<b>Net Income:</b>	\$ (194,974.98)	\$ 1,498,875.66
<b>Fund Balance, Beginning of Year:</b>	16,539,181.42	\$ 16,344,206.44
<b>Fund Balance, End of Year:</b>	\$ 16,344,206.44	\$ 17,843,082.10

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**Investment Gain/(Loss)**

October 1, 2016

1. Date of Actuarial Value of Assets:	10/1/2016	10/1/2014	10/1/2013	10/1/2012
2. Market Value as of Prior Year (including receivable contributions)	\$ 16,344,206	\$ 16,539,181	\$ 14,964,720	\$ 12,948,979
3. Receivable Contribution included above	\$ -	\$ -	\$ -	\$ -
4. Market Value Excluding Receivable (2) - (3)	\$ 16,344,206	\$ 16,539,181	\$ 14,964,720	\$ 12,948,979
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)	\$ 1,066,264	\$ 1,032,915	\$ 1,065,176	\$ 857,352
6. Benefit Distributions	\$ 904,816	\$ 926,647	\$ 989,233	\$ 607,431
7. Administrative Expenses	\$ 64,805	\$ 67,958	\$ 52,988	\$ 52,529
8. Expected Return %	8.00%	8.00%	8.00%	8.00%
a. Item (4) for 1 year	\$ 1,307,537	\$ 1,323,134	\$ 1,197,178	\$ 1,035,918
b. Item (3) for partial & (5) for 1/2 year	41,830	40,522	41,787	33,634
c. Item (6) for 1/2 year	(35,496)	(36,353)	(38,808)	(23,830)
d. Item (7) for 1/2 year	(2,542)	(2,666)	(2,079)	(2,061)
	<u>\$ 1,311,329</u>	<u>\$ 1,324,637</u>	<u>\$ 1,198,078</u>	<u>\$ 1,043,661</u>
9. Expected Market Value (2)+(5)-(6)-(7)+(8)	\$ 17,752,179	\$ 17,902,128	\$ 16,185,752	\$ 14,190,032
10. Actual Market Value this Year (including receivable contributions)	\$ 17,843,082	\$ 16,344,206	\$ 16,539,181	\$ 14,964,720
11. Investment Gain/(Loss) from Experience	\$ 90,904	\$ (1,557,922)	\$ 353,429	\$ 774,687

# City of Panama City Beach Police Officers' Pension Plan

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## Actuarial Value of Assets

October 1, 2016

5 -YEAR SMOOTHED MARKET VALUE WITHOUT PHASE-IN	<b>10/1/2016</b>
1. Market Value of Assets	\$ 17,843,082
2. Investment Gains/(Losses) for Four Prior Years	
a. Oct-15	\$ 90,904
b. Oct-14	(1,557,922)
c. Oct-13	353,429
d. Oct-12	774,687
3. Unrecognized Investment Gains/(Losses)	
a. Oct-15 80% of (2)(a)	\$ 72,723
b. Oct-14 60% of (2)(b)	(934,753)
c. Oct-13 40% of (2)(c)	141,372
d. Oct-12 20% of (2)(d)	<u>154,937</u>
e. Total: (a)+(b)+(c)+(d)	\$ (565,721)
4. Preliminary Actuarial Value of Assets = (1) - (3)(e)	\$ 18,408,803
5. Adjustment to be within 20% of market value	\$ -
6. Actuarial Value of Assets = (4) + (5)	\$ 18,408,803

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

October 1, 2016

	<u>Actuarial Value Allocated in Proportion to Market Value</u>	<u>Market Value</u>
Reserve for DROP	\$ 70,645	\$ 68,474
Reserve for Other Retirement Benefits	<u>18,338,158</u>	<u>17,774,608</u>
<b>Total Fund Balances</b>	<b>\$ 18,408,803</b>	<b>\$ 17,843,082</b>



# City of Panama City Beach Police Officers' Pension Plan

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## 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.

	<b>Fiscal Year End 9/30/2015</b>	<b>Fiscal Year End 9/30/2016</b>
(1) Total Pension Liability	\$ 19,016,272	\$ 20,504,730
(2) Plan Fiduciary Net Position	<u>\$ 16,344,206</u>	<u>\$ 17,843,082</u>
(3) Net Pension Liability	\$ 2,672,066	\$ 2,661,648
(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	85.95%	87.02%

The following table illustrates the pension expense under GASB 68.

	<b>Fiscal Year Ending 9/30/2015</b>	<b>Fiscal Year Ending 9/30/2016</b>
(1) Service Cost	\$ 520,894	\$ 546,734
(2) Interest Cost	\$ 1,525,052	\$ 1,528,848
(3) Expected Investment Return	\$ (1,445,850)	\$ (1,308,511)
(4) Employee Contributions	\$ (325,235)	\$ (338,561)
(5) Admin Expense	\$ 69,185	\$ 64,805
(6) Plan Changes	\$ -	\$ -
(7) Amortization of Unrecognized		
(a) Liability (Gain)/Loss	\$ (30,101)	\$ 22,492
(b) Asset (Gain)/Loss	\$ 335,582	\$ 316,838
(c) Assumption Changes	\$ -	\$ -
(8) Total Expense	<u>\$ 649,527</u>	<u>\$ 832,645</u>

# City of Panama City Beach Police Officers' Pension Plan

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## Deferred Outflows/Inflows

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

	<b>Deferred Outflows</b>	<b>Deferred Inflows</b>
(1) Difference between actual and expected experience		
(a) Measurement Date September 30, 2015	\$ -	\$ 121,754
(b) Measurement Date September 30, 2016	\$ 265,099	\$ -
(2) Net Difference Between Expected and Actual Earnings on Pension Plan Investments		
(a) Measurement Date September 30, 2015	\$ 1,006,745	\$ -
(b) Measurement Date September 30, 2016	\$ -	\$ 74,978
(3) Total	\$ 1,271,844	\$ 196,732

## Amortization of Deferred Inflows/Outflows

The table below lists the amortization bases included in the deferred inflows/outflows as of September 30, 2015.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Remaining		
10/1/2014	Liability (Gain)/Loss	6.04	4.04	(\$1,217,311)	(\$121,754)	(\$30,101)
10/1/2014	Asset (Gain)/Loss	5	3	\$1,679,346	\$1,006,745	\$335,582
10/1/2015	Liability (Gain)/Loss	6.04	5.04	\$317,692	\$265,099	\$52,593
10/1/2015	Asset (Gain)/Loss	5	4	(\$93,722)	(\$74,978)	(\$18,744)
	<b>Total Charges</b>			<b>\$</b>	<b>1,075,112</b>	<b>\$ 339,330</b>

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:

	2017	\$339,330
	2018	\$339,330
	2019	\$339,330
	2020	\$32,498
	2021	\$52,593
Thereafter		\$2,135

# City of Panama City Beach Police Officers' Pension Plan

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## 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, 2014 to September 30, 2015:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) - (b)
Balance recognized at 10/1/2015	\$19,016,272	\$16,344,206	\$2,672,065
Changes recognized for the fiscal year:			
Service Cost	\$546,734	N/A	\$546,734
Interest on the total pension liability	\$1,528,848	N/A	\$1,528,848
Changes of benefit terms	\$0	N/A	\$0
Differences between expected and actual experience	\$317,692	N/A	\$317,692
Changes of assumptions	\$0	N/A	\$0
Contributions from the employer	N/A	\$590,606	(\$590,606)
Contributions from the employee	N/A	\$338,561	(\$338,561)
Contribution from the state	N/A	\$137,097	(\$137,097)
Net investment income	N/A	\$1,402,233	(\$1,402,233)
Benefit payments	(\$904,816)	(\$904,816)	\$0
Administrative expense	N/A	(\$64,805)	\$64,805
Other	<u>N/A</u>	<u>N/A</u>	<u>\$0</u>
Net Changes	<u>\$1,488,458</u>	<u>\$1,498,876</u>	<u>(\$10,418)</u>
Balance recognized at 9/30/2016	\$20,504,730	\$17,843,082	\$2,661,648

## City of Panama City Beach Police Officers' 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									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Pension Liability</b>										
Service Cost	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$479,598	\$520,894	\$546,734
Interest Cost	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$304,873	\$1,525,052	\$1,528,848
Changes of Benefit Terms	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
Differences Between Expected and Actual Experiences	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,536,515	(\$181,955)	\$317,692
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)
<b>Net Change in Total Pension Liability</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,283,782	\$937,344	\$1,488,458
<b>Total Pension Liability (Beginning)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$16,795,147	\$18,078,928	\$19,016,272
<b>Total Pension Liability (Ending)</b>	N/A	N/A	N/A	N/A	N/A	N/A	16795146.63	\$18,078,928	\$19,016,272	\$20,504,730
<b>Plan Fiduciary Net Position</b>										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$646,023	\$589,810	\$590,606
Contributions—Member	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$307,896	\$325,235	\$338,561
Contributions - State	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$111,257	\$117,870	\$137,097
Net Investment Income	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,757,729	(\$232,058)	\$1,402,233
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$52,988)	(\$69,185)	(\$64,805)
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
<b>Net Change in Plan Fiduciary Net Position</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,732,712	(\$194,975)	\$1,498,876
<b>Plan Fiduciary Net Position (Beginning)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206
<b>Plan Fiduciary Net Position (Ending)</b>	N/A	N/A	N/A	N/A	N/A	N/A	14806469	\$16,539,181	\$16,344,206	\$17,843,082
<b>County's Net Pension Liability (Ending)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,539,747	\$2,672,065	\$2,661,648
<b>Net Position as a % of Pension Liability</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	91.48%	85.95%	87.02%
<b>Covered-Employee Payroll</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$2,732,684	\$2,967,537	\$3,078,788
<b>Net Pension Liability as a % of Payroll</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	56.35%	90.04%	86.45%

## City of Panama City Beach Police Officers' 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.

	Fiscal Year Ending									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Pension Liability</b>										
Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$615,147	\$523,418	\$626,841
Contributions made in Relation to the Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$646,023	\$589,810	\$590,606
Contribution Deficiency (excess)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$30,876)	(\$66,392)	\$36,235
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$2,732,684	\$2,967,537	\$3,078,788
Contributions as a % of Payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23.64%	19.88%	20.36%

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 Healthy Annuitant Mortality Table with generational projection using scale AA

## City of Panama City Beach Police Officers' Pension Plan

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### 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, 2015:

	<b>1% Decrease (7.00%)</b>	<b>Current Rate (8.00%)</b>	<b>1% Increase (9.00%)</b>
(1) Total Pension Liability	\$22,319,672	\$19,016,272	\$17,707,226
(2) Plan Fiduciary Net Position	\$16,344,206	\$16,344,206	\$16,344,206
(3) Net Pension Liability	\$5,975,466	\$2,672,066	\$1,363,019

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2016:

	<b>1% Decrease (7.00%)</b>	<b>Current Rate (8.00%)</b>	<b>1% Increase (9.00%)</b>
(1) Total Pension Liability	\$23,050,164	\$20,504,730	\$18,262,630
(2) Plan Fiduciary Net Position	\$17,843,082	\$17,843,082	\$17,843,082
(3) Net Pension Liability	\$5,207,082	\$2,661,648	\$419,548

# City of Panama City Beach Police Officers' Pension Plan

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## Funded Status – Accrued Benefits (ASC 960)

October 1, 2016

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>10/1/2015</u>	<u>10/1/2016</u>
<b>NET ASSETS AVAILABLE FOR BENEFITS*</b>	\$ 16,808,417	\$ 18,338,158
<b>ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS</b>		
Vested Benefits		
Participants Currently Receiving Payments	\$ 9,572,240	\$ 10,152,705
All Other Participants	5,612,051	6,280,396
<b>TOTAL VESTED BENEFITS</b>	<b>\$ 15,184,291</b>	<b>\$ 16,433,101</b>
Percent Funded	111%	112%
<b>NONVESTED BENEFITS</b>	844,322	914,600
<b>EXCESS STATE MONIES RESERVE</b>	58,474	101,933
<b>TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS</b>	<b>\$ 16,087,087</b>	<b>\$ 17,449,634</b>
Percent Funded	104%	105%

\* Actuarial Value of Assets

## City of Panama City Beach Police Officers' Pension Plan

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

October 1, 2016

	<u>10/1/2015</u>	<u>10/1/2016</u>
<b>ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF PRIOR VALUATION DATE</b>	\$ 15,088,316	\$ 16,087,087
Increase (Decrease) During the Year Attributable to:		
Increase for Interest Due to the Decrease in the Discount Period	\$ 1,169,999	\$ 1,250,774
Benefits Paid	(926,647)	(904,816)
Benefits Accumulated, Turnover, Other Experience	755,419	1,016,588
Change in Actuarial Assumptions	-	-
Plan Amendment	-	-
Net Increase (Decrease)	\$ 998,771	\$ 1,362,546
<b>ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF CURRENT VALUATION DATE</b>	<b>\$ 16,087,087</b>	<b>\$ 17,449,634</b>



# City of Panama City Beach Police Officers' Pension Plan

## State Required Exhibit

October 1, 2016

	<u>10/1/2015</u>	<u>10/1/2016</u>
<b>A. <u>Member Data</u></b>		
1. Active Members	56	57
2. Retired Members and beneficiaries receiving benefits (including DROP)	24	25
3. Disabled Members receiving benefits	0	0
4. Terminated vested Members	3	2
5. Prior year active compensation	\$ 2,858,939	\$ 2,942,463
6. Annual benefits payable to retirees and beneficiaries (including DROP)	\$ 847,166	\$ 889,375
7. Annual benefits payable to disabled retirees	\$ -	\$ -
8. Annual benefits payable to terminated vested Members	\$ 93,594	\$ 54,238
<b>B. <u>Assets</u></b>		
1. Actuarial value	\$ 16,808,417	\$ 18,338,158
2. Market value	16,317,483	17,774,608
<b>C. <u>Liabilities</u></b>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 10,970,964	\$ 12,059,921
b. Termination benefits	2,242,216	2,298,602
c. Death benefits	81,768	107,998
d. Disability benefits	132,543	112,482
e. Total	\$ 13,427,491	\$ 14,579,003
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 891,656	\$ 444,094
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired, beneficiaries and DROP	\$ 9,572,240	\$ 10,152,705
b. Disability retired	-	-
c. Total	\$ 9,572,240	\$ 10,152,705
4. Excess State Monies Reserve	\$ 58,474	\$ 101,933
5. Total actuarial present value of future expected benefit payments	\$ 23,949,861	\$ 25,277,735
6. Entry age normal accrued liability	\$ 18,078,928	\$ 19,016,272
7. Unfunded entry age normal accrued liability	\$ 1,761,445	\$ 1,241,664
8. Liabilities at FRS discount rate		
a. Discount rate	7.65%	7.60%
b. Entry age normal accrued liability	\$ 18,718,027	\$ 21,522,904
c. Unfunded entry age normal accrued liability	\$ 1,909,610	\$ 3,184,746

## City of Panama City Beach Police Officers' Pension Plan

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### State Required Exhibit (Continued)

October 1, 2016

	<u>10/1/2015</u>	<u>10/1/2016</u>
<b>D. <u>Statement of Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated vested benefits		
a. Members currently receiving benefits (including DROP)	\$ 9,572,240	\$ 10,152,705
b. Other Members	5,612,051	6,280,396
c. Total	\$ 15,184,291	\$ 16,433,101
2. Actuarial present value of accumulated non-vested plan benefits	844,322	914,600
3. Excess State Monies Reserve	58,474	101,933
4. Total actuarial present value of accumulated plan benefits	\$ 16,087,087	\$ 17,449,634
5. Liabilities at FRS discount rate		
a. Discount rate	7.65%	7.65%
b. Actuarial present value of accumulated vested benefits	\$ 14,595,408	\$ 14,595,408
c. Total actuarial present value of accumulated plan benefits	\$ 15,746,337	\$ 15,789,796
<b>E. <u>Statement of Change in Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date	\$ 15,088,316	\$ 16,087,087
2. Increase (decrease) during year attributable to:		
a. Plan amendment	0	0
b. Change in actuarial assumptions	0	0
c. Benefits paid	(926,647)	(904,816)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	1,925,418	2,267,362
e. Net increase	\$ 998,771	\$ 1,362,546
3. Actuarial present value of accumulated plan benefits as of Current Valuation Date	\$ 16,087,087	\$ 17,449,634

## City of Panama City Beach Police Officers' Pension Plan

### State Required Exhibit (Continued)

October 1, 2016

Actuarial Valuation Date For Contribution Year	<u>10/1/2014</u> 2014-15	<u>10/1/2015</u> 2015-16
<b>F. <u>Past Contributions</u></b>		
1. Total contribution required		
a. City		
i. Estimated Dollars, from Actuarial Valuation	\$ 523,418	\$ 550,638
ii. Percentage of Participants' Compensation	19.15%	18.55%
iii. Actual Compensation Under NRA	\$ 2,858,939	\$ 2,942,463
iv. Required, per new state interpretation = (ii.) x (iii.)	\$ 547,487	\$ 545,827
b. State (Estimated)	93,639	93,639
c. Member*	300,595	300,595
d. Total = (a.iv.) + (b.) + (c.)	\$ 924,567	\$ 940,061
2. Actual contributions made:		
a. City	\$ 589,810	\$ 590,606
b. State**	93,639	93,639
c. Member	325,235	338,561
d. Total	\$ 1,008,684	\$ 1,022,806
<b>G. <u>Net Actuarial Gain (Loss)</u></b>	N/A	N/A
<b>H. <u>Disclosure of Following Items:</u></b>	<b><u>10/1/2015</u></b>	<b><u>10/1/2016</u></b>
1. Actuarial present value of future salaries - attained age***	\$ 24,697,974	\$ 24,574,024
2. Actuarial present value of future employee contributions - attained age***	\$ 2,478,410	\$ 2,464,943
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 2,042,622	\$ 2,322,419
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 (11.0%) 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 Police Officers' Pension Plan

## FS112.664 Requirements

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

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

	Fiscal Year Ending									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Pension Liability</b>										
Service Cost	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$751,847	\$857,325	\$857,325
Interest Cost	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$255,200	\$1,884,505	\$1,988,660
Changes of Benefit Terms	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
Differences Between Expected and Actual Experiences	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,629,832	(\$524,160)	(\$101,512)
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)
<b>Net Change in Total Pension Liability</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,599,675	\$1,291,023	\$1,839,658
<b>Total Pension Liability (Beginning)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$21,562,637	\$23,162,312	\$24,453,335
<b>Total Pension Liability (Ending)</b>	N/A	N/A	N/A	N/A	N/A	N/A	\$21,562,637	\$23,162,312	\$24,453,335	\$26,292,993
<b>Plan Fiduciary Net Position</b>										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$646,023	\$589,810	\$590,606
Contributions—Member	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$307,896	\$325,235	\$338,561
Contributions - State	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$111,257	\$117,870	\$137,097
Net Investment Income	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,757,729	(\$232,058)	\$1,402,233
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(\$52,988)	(\$69,185)	(\$64,805)
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
<b>Net Change in Plan Fiduciary Net Position</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$1,732,712	(\$194,975)	\$1,498,876
<b>Plan Fiduciary Net Position (Beginning)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206
<b>Plan Fiduciary Net Position (Ending)</b>	N/A	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206	\$17,843,082
<b>County's Net Pension Liability (Ending)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$6,623,130	\$8,109,128	\$8,449,911
<b>Net Position as a % of Pension Liability</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	71.41%	85.95%	87.02%
<b>Covered-Employee Payroll</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$2,969,177	\$2,967,537	\$3,078,788
<b>Net Pension Liability as a % of Payroll</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	223.06%	273.26%	274.46%

# City of Panama City Beach Police Officers' Pension Plan

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## FS112.664 Requirements

### Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2015:

	<b>2% Decrease (6.00%)</b>	<b>Current Rate (8.00%)</b>	<b>2% Increase (10.00%)</b>
(1) Total Pension Liability	\$24,453,335	\$19,016,272	\$15,217,311
(2) Plan Fiduciary Net Position	\$16,344,206	\$16,344,206	\$16,344,206
(3) Net Pension Liability	\$8,109,128	\$2,672,066	(\$1,126,896)

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2016:

	<b>2% Decrease (6.00%)</b>	<b>Current Rate (8.00%)</b>	<b>2% Increase (10.00%)</b>
(1) Total Pension Liability	\$26,292,993	\$20,504,730	\$16,460,672
(2) Plan Fiduciary Net Position	\$17,843,082	\$17,843,082	\$17,843,082
(3) Net Pension Liability	\$8,449,911	\$2,661,648	(\$1,382,410)

### 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.

<b>Assumptions</b>	<b>Years and Fractions</b>
RP 2000 Mortality and 8.0% Interest	20.17
RP 2000 Mortality and 6.0% Interest	16.33

## City of Panama City Beach Police Officers' Pension Plan

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### Reconciliation of DROP Participants and Assets

October 1, 2016

Participants as of 10/1/2015	1
New DROP Members	0
New DROP's, Withdrew during PY	0
All Other Withdrawals	0
Corrections	0
Participants as of 10/1/2016	1

	<b>Total</b>
Assets as of 10/1/2015	\$26,723.11
Payments into DROP	39,356.52
Earnings	2,394.12
Distributions	0.00
Expenses	0.00
Adjustments	0.00
Assets as of 10/1/2016	\$68,473.75

## City of Panama City Beach Police Officers' Pension Plan

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### History of Excess Premium Tax Revenues

October 1, 2016

	<u>Regular</u>		<u>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>
	<u>Cash Received</u>	<u>Applicable "Frozen" Amount</u>				
9/30/1998	\$ 47,792.65	\$ 47,792.65	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
9/30/1999	46,261.19	47,792.65	0.00	0.00	0.00	0.00
9/30/2000	44,579.19	47,792.65	0.00	0.00	0.00	0.00
9/30/2001	48,325.16	47,792.65	532.51	0.00	532.51	532.51
9/30/2002	61,887.18	47,792.65	14,094.53	0.00	14,094.53	14,627.04
9/30/2003	62,368.77	47,792.65	14,576.12	0.00	14,576.12	29,203.16
9/30/2004	81,949.69	47,792.65	34,157.04	0.00	34,157.04	63,360.20
9/30/2005	89,105.73	47,792.65	41,313.08	0.00	41,313.08	104,673.28
9/30/2006	93,883.30	47,792.65	46,090.65	0.00	46,090.65	150,763.93
9/30/2007	89,105.73	47,792.65	41,313.08	192,077.01 (1)	0.00	0.00
9/30/2008	96,755.15	47,792.65	48,962.50	45,846.00 (2)	3,116.50	3,116.50
9/30/2009	92,821.89	47,792.65	45,029.24	45,846.00	0.00	3,116.50
9/30/2010	95,223.83	47,792.65	47,431.18	45,846.00	1,585.18	4,701.68
9/30/2011	94,730.77	47,792.65	46,938.12	45,846.00	1,092.12	5,793.80
9/30/2012	98,598.30	47,792.65	50,805.65	45,846.00	4,959.65	10,753.45
9/30/2013	99,510.28	47,792.65	51,717.63	45,846.00	5,871.63	16,625.08
9/30/2014	111,256.94	47,792.65	63,464.29	45,846.00	17,618.29	34,243.37
9/30/2015	117,869.72	47,792.65	70,077.07	45,846.00	24,231.07	58,474.44
9/30/2016	137,096.72	47,792.65	89,304.07	45,846.00	43,458.07	101,932.51

Notes:

- (1) Additional Benefits adopted (increasing multiplier to 3.42%) with a lump sum cost in excess of the available \$192,077.01.
- (2) Additional Benefits adopted (increasing multiplier to 3.42%) with an annual cost initially valued as \$45,846.

**City of Panama City Beach  
Police Officers' Pension Plan**

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**Participant Data Summary**

October 1, 2016

	Active	DROP	Terminated		Retired	Beneficiaries	Total
			Vested	Disabled			
<b>October 1, 2015</b>	<b>56</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>24</b>	<b>-</b>	<b>83</b>
New Entrants	5						5
Retirements							-
Disabilities							-
Terminations							
a) with refund	(4)						(4)
b) without refund							-
DROP enrollments							-
Deaths							
a) with beneficiaries							-
b) without beneficiaries							-
Benefits Expired							-
Other							-
<b>October 1, 2016</b>	<b>57</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>24</b>	<b>-</b>	<b>84</b>
<b>Average Age</b>	35.8	51.7	47.5		62.8		

**Active Participants as of 10/01/2015**

	Males	Females	Total
Number of Participants	50	6	56
Average Age Nearest Birthday	35.9	30.9	35.2
Average Completed Years of Service	8.3	4.3	7.9
Average Compensation for Prior Year	\$56,936	\$50,037	\$47,963

**Active Participants as of 10/01/2016**

	Males	Females	Total
Number of Participants	50	7	57
Average Age Nearest Birthday	36.4	31.3	35.8
Average Completed Years of Service	8.9	4.7	7.9
Average Compensation for Prior Year	\$54,808	\$48,461	\$54,029



# City of Panama City Beach Police Officers' Pension Plan

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## Age and Service Distribution

October 1, 2016

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
<b>Under 25</b>	5	0	0	0	0	0	-	5
<b>25-29</b>	13	1	0	0	0	0	-	14
<b>30-34</b>	5	4	1	0	0	0	-	10
<b>35-39</b>	2	2	4	1	0	0	-	9
<b>40-44</b>	0	1	1	2	1	0	-	5
<b>45-49</b>	2	1	1	0	4	1	-	9
<b>50-54</b>	0	0	3	1	0	0	-	4
<b>55-59</b>	0	0	1	0	0	0	-	1
<b>60-64</b>	0	0	0	0	0	0	-	0
<b>65 and over</b>	0	0	0	0	0	0	-	0
<b>Total</b>	27	9	11	4	5	1	0	57

**City of Panama City Beach  
Police Officers' Pension Plan**

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

October 1, 2016

**Salary Increases**

Year Ended September 30,	Actual	Assumed
1989	24.1% *	6.0%
1990	4.7%	6.0%
1991	1.5%	6.0%
1992	7.6%	6.0%
1993	7.1%	6.0%
1994	4.5%	6.0%
1995	7.0%	6.0%
1996	15.7%	6.0%
1997	-0.3%	6.0%
1998	11.5%	6.0%
1999	13.8%	6.0%
2000	1.7%	6.0%
2001	13.5%	6.0%
2002	3.9%	6.0%
2003	6.7%	6.0%
2004	4.0%	6.0%
2005	4.7%	6.0%
2006	7.1%	6.0%
2007	9.9%	6.0%
2008	11.2%	6.0%
2009	3.1%	6.0%
2010	2.0%	6.0%
2011	8.8%	6.0%
2012	4.4%	6.0%
2013	2.4%	6.0%
2014	5.0%	6.0%
2015	8.5%	6.0%
2016	3.3%	6.0%
Last 5 Years, Compounded	4.7%	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 Police Officers' Pension Plan

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

October 1, 2016

#### Investment Return

Year Ended September 30,	Actual	Assumed
1989	6.87%	8.0%
1990	2.72%	8.0%
1991	2.95%	8.0%
1992	27.46%	8.0%
1993	10.29%	8.0%
1994	(0.67%)	8.0%
1995	15.73%	8.0%
1996	12.57%	8.0%
1997	23.52%	8.0%
1998	5.93%	8.0%
1999	11.27%	8.0%
2000	10.72%	8.0%
2001	(5.35%)	8.0%
2002	(3.70%)	8.0%
2003	3.71%	8.0%
2004	4.11%	8.0%
2005	5.67%	8.0%
2006	7.80%	8.0%
2007	10.53%	8.0%
2008	6.10%	8.0%
2009	3.86%	8.0%
2010	4.24%	8.0%
2011	3.10%	8.0%
2012	4.27%	8.0%
2013	9.64%	8.0%
2014	11.01%	8.0%
2015	8.31%	8.0%
2016	8.74%	8.0%
Last 5 Years, Compounded	8.40%	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 Police Officers' Pension Plan

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## Summary of Major Plan Provisions

October 1, 2016

**Effective Date:** August 25, 1971.

**Plan Year:** October 1 to September 30.

**Last Amendment:** Restatement (Ordinance 669) effective June 8, 2000. First Amendment (Ordinance 715) effective March 8, 2001 (changing Employee Contributions from 7.0% to 9.7% and the multiplier from 3.00% to 3.25%). Second Amendment (Ordinance 794) effective April 10, 2003 (for various law and other changes). Third Amendment (Ordinance 811) effective July 10, 2003 (adding Early Retirement). Fourth Amendment (Ordinance 881) effective July 22, 2004 (adding 3% increasing annuities as an Optional Form of Payment and changing investment policy). Fifth Amendment (Ordinance 1029) effective May 11, 2006 (changing various provisions as required by new IRS rules). Sixth Amendment (Ordinance 1070) effective May 17, 2007 (changing Employee Contributions from 9.7% to 11.0% and the multiplier from 3.25% to 3.50%). Seventh Amendment (Ordinance 1083) effective July 26, 2007 (adding 5% fixed investment return option for DROP). Restatement (Ordinance 1159) adopted August 17, 2009. First Amendment (Ordinance 1222) effective February 9, 2012 (adding 300 hours of overtime cap).

**Eligibility:** All permanent Police Officers who have passed the medical examination.

**Employee Contributions:** 11% of Compensation (9.7% prior to May 17, 2007) and excluded from taxable income under IRC Section 414(h).

**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 Police Officer, if greater.

**Credited Service:** Years and fractional parts of years of service as a Police Officer 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 8, 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.

**Early Retirement Date:** The first day of the month coincident with or next following the date a participant

## City of Panama City Beach Police Officers' Pension Plan

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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, 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 3.5% 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 Police Officer 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 Police Officer 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 Police Officers' Pension Plan

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**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 Police Officers, regardless of sex, and the same table with ages set back 6 years is used for all beneficiaries and survivor annuitants, regardless of sex.

**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.

# City of Panama City Beach Police Officers' Pension Plan

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## Actuarial Basis

October 1, 2016

### 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 8.00% per annum.

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

**Mortality:** RP-2000 Fully Generational Scale BB. Male – 50% Annuitant White Collar/ 50% 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 (T-5). Sample rates are shown below:

Age	Probability of Withdrawal
20	7.9%
30	7.2%
40	5.2%
50	2.6%

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

## City of Panama City Beach Police Officers' Pension Plan

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

**Retirement Rate:** Each active participant is assumed to retire on the later of the actuarial valuation date or his Normal Retirement Date.

**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 \$260,000 projected to increase at the rate of 4% per annum.

**Maximum Benefits:** The \$210,000 maximum for years ending in 2014 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.

### 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:** The mortality was updated to mirror that used by the Florida Retirement System, per state statute.

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



# City of Panama City Beach Police Officers' Pension Plan

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

October 1, 2016

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 Police Officers' Pension Plan**

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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 Police Officers' Pension Plan

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## Disclosure Notes to the Financial Statements for Year Ended September 30, 2016

### Summary of Significant Accounting Policies

Preserving the Police Officers' 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 Police Officers' 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.

### 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, 2016, the most recent actuarial study shows a deficit of \$2.7 million on a GASB 67 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

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Asset Class	Target Allocation
	Total
Large Cap Equity	40%
Small Cap Equity	15%
International Equity	10%
Fixed Income	25%
Real Estate	5%
Cash	5%
Total	100%

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*No changes have been made to the pension plan investment policy over the past year.*

# City of Panama City Beach Police Officers' Pension Plan

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## 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, 2015 (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
<b>Equity</b>		
Large Cap U.S. Equity	7.00%	4.50%
Small Cap U.S. Equity	7.50%	5.00%
International (Non-U.S.) Equity (Developed)	7.50%	5.00%
Emerging Markets Equity	8.70%	6.20%
<b>Fixed Income</b>		
Long Duration Bonds – Gov't / Credit	4.30%	1.80%
<b>Alternative Investments</b>		
Real Estate (Broad Market)	7.30%	4.80%

## Rate of Return

For the year ended September 30, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.6 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 29 of the actuarial valuation report.

## **City of Panama City Beach Police Officers' Pension Plan**

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### **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.