



Actuarial Valuation Report

City of Panama City Beach General Employees' 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 General Municipal Employees' 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 General Municipal Employees' Pension Plan

Discussion of Results

October 1, 2018

The results of the actuarial valuation of the Panama City Beach General Municipal Employees' 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	\$ 529,652	\$ 370,992
Percent of Participants' Compensation	9.07%	6.02%

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 8.53% for the plan year ended September 30, 2018. Investment experience compounded over the last 5 years has been approximately 9.20% 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 4.9%, lower than the assumed salary increase of 6.0%. Salary experience compounded over the last 5 years has been approximately 3.5% 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 General Municipal Employees' Pension Plan

Based on this measurement of Funded Status, using the Actuarial Value of Assets, the plan is adequately funded as of October 1, 2017, although a higher level of excess funding would be desirable:

	10/01/17	10/01/18
NET ASSETS AVAILABLE FOR BENEFITS*	\$ 34,739,443	\$ 37,047,749
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
TOTAL VESTED BENEFITS	\$ 28,245,968	\$ 29,445,095
Percent Funded	123%	126%
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	\$ 30,148,171	\$ 31,394,305
Percent Funded	115%	118%

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	\$ 36,903,035	\$ 38,854,098
ENTRY AGE NORMAL ACCRUED LIABILITY	\$ 36,916,335	\$ 37,138,345
Funded Ratio	99.9%	104.62%

* Actuarial Value of Assets

**City of Panama City Beach
General Municipal Employees' Pension Plan**

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City of Panama City Beach General Municipal Employees' 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	147	165
Terminated with Vested Benefits	3	4
Retirees and Beneficiaries	73	81
Total	223	250
2. Participant's Compensation		
a. Below Normal Retirement Age	\$ 5,836,965	\$ 6,166,182
b. Beyond Normal Retirement Age	870,791	867,474
c. Total	\$ 6,707,756	\$ 7,033,655
3. Present Value of Benefits		
Active	\$ 25,371,504	\$ 24,624,264
Terminated with Vested Benefits	375,987	485,344
Retirees	15,546,904	17,271,135
Total	\$ 41,294,395	\$ 42,380,743
4. Unfunded Actuarial Accrued Liability	\$ 430,733	\$ 472,377
5. Actuarial Value of Assets	\$ 34,739,443	\$ 37,047,749
6. Past Excess Contributions	\$ 142,072	\$ 53,631
7. Present Value of Future Employee Contributions	\$ 3,101,675	\$ 3,267,972
8. Present Value of Future City Normal Costs = (3) – (4) – [(5) – (6)] – (7)	\$ 3,164,617	\$ 1,646,276
9. Present Value of Future Compensation	\$ 38,652,855	\$ 44,822,839
10. Normal Cost Rate = (8) ÷ (9)	8.19%	3.67%
11. Normal Cost = (2a) x (10)	\$ 478,047	\$ 226,299

City of Panama City Beach General Municipal Employees' 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	\$ 478,047	\$ 226,299
2. Amortization of Actuarial Accrued Liability	\$ 85,761	\$ 85,519
3. Interest Adjustment on (1) and (2) for Quarterly Payment	\$ 22,118	\$ 12,083
4. Expenses		
Current Year Estimate Equal to Prior Year's Actual	\$ 91,878	\$ 97,339
Make-up for Shortfall in Prior Year's Estimate	<u>(506)</u>	<u>5,461</u>
Total	\$ 91,372	\$ 102,800
5. Past Excess Contributions plus Interest Adjusted for Quarterly Payment	\$ 147,646	\$ 55,709
6. Minimum Required Contribution by City for Fiscal Year = (1) + (2) + (3) + (4) - (5)	\$ 529,652	\$ 370,992
7. Percent of Participants' Compensation Below Normal Retirement Age*	9.07%	6.02%

* 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
General Municipal Employees' 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
Assumption Change	130,339	10/1/1995	30	7	10,696	60,294
Plan Amendment	912,337	10/1/1996	30	8	74,823	465,714
					\$ 85,519	
						1. Unamortized Balance as of 10/1/2018 \$ 526,008
						2. Past Excess Contributions <u>53,631</u>
						3. Remaining Unfunded Liabilities = (1) - (2) \$ 472,377

City of Panama City Beach
General Municipal Employees' Pension Plan

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

October 1, 2018

October 1	Liability
2018	\$ 472,377
2019	417,420
2020	358,121
2021	294,138
2022	225,100
2023	150,608
2024	70,231
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 7.90% per annum.

Thus the remaining amortization period as of the October 1, 2018, valuation is 2025 less 2018, or 7 years.

City of Panama City Beach General Municipal Employees' 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*	882,977	841,794
Interest	34,640	32,619
	<hr/>	<hr/>
Total Charges	\$ 917,617	\$ 874,413
 Credits:		
Excess Contribution Brought Forward	\$ 202,378	\$ 142,072
City Contributions	809,369	745,847
Interest	47,942	40,125
	<hr/>	<hr/>
Total Credits	\$ 1,059,689	\$ 928,044
 Balance:		
Excess Contribution Carried Forward	<u>\$ 142,072</u>	<u>\$ 53,631</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 General Municipal Employees' Pension Plan

Market Value of Assets

October 1, 2018

	<u>10/1/2017</u>	<u>10/1/2018</u>
Assets:		
Cash	\$ 1,613,313.66	\$ 1,228,651.99
Certificates of Deposit	-	-
Government and Corporate Bond	8,829,121.49	8,951,302.70
Real Estate and Equity Funds	26,463,641.77	28,668,731.80
Due from City Funds	-	-
Accrued Interest	-	-
Miscellaneous Receivable	<u>14,472.61</u>	<u>16,977.81</u>
Total Assets	<u>\$ 36,920,549.53</u>	<u>\$ 38,865,664.30</u>
Liabilities and Fund Balance:		
Liabilities:		
Accounts Payable	\$ (13,070.90)	\$ (11,544.45)
Refunds or Benefits Payable	(4,443.31)	(22.09)
Due Other Funds	<u>-</u>	<u>-</u>
Total Liabilities	<u>\$ (17,514.21)</u>	<u>\$ (11,566.54)</u>
Pension Fund Balance:	<u><u>\$ 36,903,035.32</u></u>	<u><u>\$ 38,854,097.76</u></u>

City of Panama City Beach General Municipal Employees' Pension Plan

Reconciliation of Assets (Market Value)

October 1, 2018

	Plan Year Ended	
	<u>9/30/2017</u>	<u>9/30/2018</u>
Revenues:		
City Contributions	\$ 809,369.17	\$745,846.54
Employee Contributions	571,937.36	631,150.46
Repayment of Contributions	-	6,433.00
Interest & Dividends	877,970.78	697,249.84
Unrealized/Realized Gains (Losses)	3,321,261.55	2,308,397.71
Commissions	-	-
	<hr/>	<hr/>
Total Revenues	\$ 5,580,538.86	\$ 4,389,077.55
	<hr/>	<hr/>
Expenses:		
Pension Payments	\$ 789,504.24	\$ 950,135.95
Contribution Refunds	99,370.50	121,320.72
DROP Payments	79,078.14	1,269,219.77
Investment Expenses	70,974.69	66,300.53
Other Expenses	20,902.82	31,038.14
	<hr/>	<hr/>
Total Expenses	\$ 1,059,830.39	\$ 2,438,015.11
	<hr/>	<hr/>
Net Income:	\$ 4,520,708.47	\$ 1,951,062.44
	<hr/>	<hr/>
Fund Balance, Beginning of Year:	\$ 32,382,326.85	\$ 36,903,035.32
	<hr/>	<hr/>
Fund Balance, End of Year:	\$ 36,903,035.32	\$ 38,854,097.76

City of Panama City Beach General Municipal Employees' 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:				
2. Market Value as of Prior Year (including receivable contributions)	\$ 36,903,035	\$ 32,382,327	\$ 29,492,670	\$ 29,793,381
3. Receivable Contribution included above	\$ -	\$ -	\$ -	\$ -
4. Market Value Excluding Receivable (2) - (3)	\$ 36,903,035	\$ 32,382,327	\$ 29,492,670	\$ 29,793,381
5. Employer & Employee 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)	\$ 1,376,997	\$ 1,381,307	\$ 1,456,197	\$ 1,534,395
6. Benefit Distributions	\$ 2,340,676	\$ 967,953	\$ 1,067,417	\$ 1,255,002
7. Administrative Expenses	\$ 97,339	\$ 91,878	\$ 92,384	\$ 103,110
8. Expected Return %	8.00%	8.00%	8.00%	8.00%
a. Item (4) for 1 year	\$ 2,952,243	\$ 2,590,586	\$ 2,359,414	\$ 2,383,470
b. Item (3) for partial & (5) for 1/2 year	55,080	54,189	57,127	60,195
c. Item (6) for 1/2 year	(93,627)	(37,973)	(41,875)	(49,234)
d. Item (7) for 1/2 year	(3,894)	(3,604)	(3,624)	(4,045)
	\$ 2,909,802	\$ 2,603,198	\$ 2,371,042	\$ 2,390,386
9. Expected Market Value (2)+(5)-(6)-(7)+(8)	\$ 38,751,819	\$ 35,307,001	\$ 32,160,108	\$ 32,360,050
10. Actual Market Value this Year (including receivable contributions)	\$ 38,854,098	\$ 36,903,035	\$ 32,382,327	\$ 29,492,670
11. Investment Gain/(Loss) from Experience	\$ 102,279	\$ 1,596,034	\$ 222,219	\$ (2,867,380)

City of Panama City Beach General Municipal Employees' 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	\$ 38,854,098
2. Investment Gains/(Losses) for Four Prior Years	
a. Oct-17	\$ 102,279
b. Oct-16	1,596,034
c. Oct-15	222,219
d. Oct-14	(2,867,380)
3. Unrecognized Investment Gains/(Losses)	
a. Oct-17 80% of (2)(a)	\$ 81,823
b. Oct-16 60% of (2)(b)	957,621
c. Oct-15 40% of (2)(c)	88,888
d. Oct-14 20% of (2)(d)	<u>(573,476)</u>
e. Total: (a)+(b)+(c)+(d)	\$ 554,856
4. Preliminary Actuarial Value of Assets = (1) - (3)(e)	\$ 38,299,242
5. Adjustment to be within 20% of market value	\$ -
6. Actuarial Value of Assets = (4) + (5)	\$ 38,299,242

City of Panama City Beach General Municipal Employees' 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	\$ 1,251,493	\$ 1,269,624
Reserve for Other Retirement Benefits	<u>37,047,749</u>	<u>37,584,474</u>
Total Fund Balances	\$ 38,299,242	\$ 38,854,098

City of Panama City Beach

General Municipal Employees' 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	\$ 36,916,335	\$ 37,138,345
(2) Plan Fiduciary Net Position	<u>\$ 36,903,035</u>	<u>\$ 38,854,098</u>
(3) Net Pension Liability	\$ 13,300	\$ (1,715,753)
(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	99.96%	104.62%

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	\$ 1,081,152	\$ 1,098,482
(2) Interest Cost	\$ 2,878,833	\$ 3,134,812
(3) Expected Investment Return	\$ (2,604,168)	\$ (2,909,802)
(4) Employee Contributions	\$ (571,937)	\$ (631,150)
(5) Admin Expense	\$ 91,678	\$ 97,339
(6) Plan Changes	\$ -	\$ -
(7) Amortization of Unrecognized		
(a) Liability (Gain)/Loss	\$ (326,127)	\$ (678,654)
(b) Asset (Gain)/Loss	\$ 204,498	\$ 184,043
(c) Assumption Changes	\$ 106,568	\$ 106,568
(8) Total Expense	\$ 860,697	\$ 401,637

City of Panama City Beach

General Municipal Employees' 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	\$ 20,618	\$ -
(b)	Measurement Date September 30, 2016		\$ (207,161)
(c)	Measurement Date September 30, 2017	\$ 380,175	\$ (552,405)
(d)	Measurement Date September 30, 2018	\$ -	\$ (1,185,501)
(2)	Net Difference Between Expected and Actual Earnings		
(a)	Measurement Date September 30, 2015	\$ 567,705	\$ -
(b)	Measurement Date September 30, 2016	\$ -	\$ (88,387)
(c)	Measurement Date September 30, 2017	\$ -	\$ (957,039)
(d)	Measurement Date September 30, 2018		\$ (81,823)
(3)	Total	\$ 968,498	\$ (3,072,316)

Amortization of Deferred Inflows/Outflows

The table below lists the amortization bases included in the deferred inflows/outflows as of September 30, 2017.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Original	Remaining	
10/1/2014	Liability (Gain)/Loss	4.60	0.60	\$157,575	\$20,618	\$34,239
10/1/2014	Asset (Gain)/Loss	5	1	\$2,838,527	\$567,705	\$567,705
10/1/2015	Liability (Gain)/Loss	4.43	1.43	(\$642,786)	(\$207,161)	(\$145,208)
10/1/2015	Asset (Gain)/Loss	5	2	(\$220,968)	(\$88,387)	(\$44,194)
10/1/2016	Liability (Gain)/Loss	4.57	2.57	(\$982,721)	(\$552,405)	(215,158)
10/1/2016	Asset (Gain)/Loss	5	3	(\$1,595,064)	(\$957,039)	(319,013)
10/1/2016	Assumption change	4.57	2.57	\$486,743	\$380,175	106,568
10/1/2017	Liability (Gain)/Loss	4.36	3.36	(\$1,538,028)	(\$1,185,501)	(352,527)
10/1/2017	Asset (Gain)/Loss	5	4	(\$102,279)	<u>(\$81,823)</u>	<u>(20,456)</u>
	Total Charges				(\$2,103,818)	(388,043)

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	(\$401,664)
2020	(\$906,732)
2021	(\$753,614)
2022	(\$148,377)
Thereafter	\$0

City of Panama City Beach

General Municipal Employees' 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	\$36,916,335	\$36,903,035	\$13,300
Changes recognized for the fiscal year:			
Service Cost	\$1,098,482	N/A	\$1,098,482
Interest on the total pension liability	\$3,134,812	N/A	\$3,134,812
Changes of benefit terms	\$0	N/A	\$0
Differences between expected and actual experience	(\$1,670,609)	N/A	(\$1,670,609)
Changes of assumptions	\$0	N/A	\$0
Contributions from the employer	N/A	\$745,847	(\$745,847)
Contributions from the employee	N/A	\$631,150	(\$631,150)
Contribution from the state	N/A	N/A	\$0
Net investment income	N/A	\$3,012,081	(\$3,012,081)
Benefit payments	(\$2,340,676)	(\$2,340,676)	\$0
Administrative expense	N/A	(\$97,339)	\$97,339
Other	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net Changes	<u>222,009</u>	<u>1,951,062</u>	<u>(\$1,729,053)</u>
Balance recognized at 9/30/2018	\$37,138,344	\$38,854,097	(\$1,715,753)

City of Panama City Beach

General Municipal Employees' 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	\$1,040,681	\$1,057,918	\$1,015,476	\$1,081,152	\$1,098,482
Interest Cost	N/A	N/A	N/A	N/A	N/A	\$864,624	\$2,488,143	\$2,715,866	\$2,878,833	\$3,134,812
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	\$1,874,051	\$157,575	(\$642,786)	(\$962,721)	(\$1,670,609)
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$486,743	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	(\$1,285,877)	(\$1,255,002)	(\$1,067,417)	(\$967,953)	(\$2,340,676)
DROP Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	534139	\$0	\$0	\$0
Net Change in Total Pension Liability	N/A	N/A	N/A	N/A	N/A	\$2,493,478	\$2,982,773	\$2,021,139	\$2,494,054	\$222,009
Total Pension Liability (Beginning)	N/A	N/A	N/A	N/A	N/A	\$26,922,891	\$29,416,370	\$32,399,143	\$34,420,281	\$36,916,335
Total Pension Liability (Ending)	N/A	N/A	N/A	N/A	26922891.46	\$29,416,370	\$32,399,143	\$34,420,281	\$36,916,335	\$37,138,345
Plan Fiduciary Net Position										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	\$1,095,319	\$995,644	\$892,284	\$809,369	\$745,847
Contributions—Member	N/A	N/A	N/A	N/A	N/A	548,921.44	538,750.92	563,913.20	\$571,937	\$631,150
Net Investment Income	N/A	N/A	N/A	N/A	N/A	\$2,943,006	(\$476,995)	\$2,592,981	\$4,199,232	\$3,012,081
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	(\$1,285,877)	(\$1,255,002)	(\$1,067,417)	(\$967,953)	(\$2,340,676)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	(\$73,809)	(\$103,110)	(\$92,103)	(\$91,878)	(\$97,339)
Other	N/A	N/A	N/A	N/A	N/A	\$0	\$534,139	\$0	\$0	\$0
Net Change in Plan Fiduciary Net Position	N/A	N/A	N/A	N/A	N/A	\$3,227,560	\$233,427	\$2,889,657	\$4,520,708	\$1,951,062
Plan Fiduciary Net Position (Beginning)	N/A	N/A	N/A	N/A	N/A	\$26,031,682	\$29,259,242	\$29,492,670	\$32,382,327	\$36,903,035
Plan Fiduciary Net Position (Ending)	N/A	N/A	N/A	N/A	26031682	\$29,259,242	\$29,492,669	\$32,382,327	\$36,903,035	\$38,854,098
County's Net Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	\$157,128	\$2,906,474	\$2,037,954	\$13,300	(\$1,715,753)
Net Position as a % of Pension Liability	N/A	N/A	N/A	N/A	N/A	99.47%	91.03%	94.08%	99.96%	104.62%
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	\$5,500,368	\$6,238,976	\$6,483,319	\$6,573,994	\$7,254,593
Net Pension Liability as a % of Payroll	N/A	N/A	N/A	N/A	N/A	2.86%	46.59%	31.43%	0.20%	-23.65%

City of Panama City Beach General Municipal Employees' 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	\$1,013,264	\$766,892	\$672,608	\$642,937	\$657,992
Contributions made in Relation to the Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	\$1,095,319	\$995,644	\$892,284	\$809,369	\$745,847
Contribution Deficiency (excess)	N/A	N/A	N/A	N/A	N/A	(\$82,055)	(\$228,752)	(\$219,676)	(\$166,433)	(\$87,855)
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	\$5,500,368	\$6,238,976	\$6,483,319	\$6,573,994	\$7,254,593
Contributions as a % of Payroll	N/A	N/A	N/A	N/A	N/A	19.91%	15.96%	13.76%	12.31%	10.28%

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

General Municipal Employees' Pension Plan

GASB 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	\$41,014,889	\$36,916,335	\$33,522,701
(2) Plan Fiduciary Net Position	\$36,903,035	\$36,903,035	\$36,903,035
(3) Net Pension Liability	\$4,111,854	\$13,300	(\$3,380,334)

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	\$40,911,683	\$37,138,345	\$33,397,076
(2) Plan Fiduciary Net Position	\$38,854,098	\$38,854,098	\$38,854,098
(3) Net Pension Liability	\$2,057,585	(\$1,715,753)	(\$5,457,022)

City of Panama City Beach General Municipal Employees' 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*	\$ 34,739,443	\$ 37,047,749
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
Vested Benefits		
Participants Currently Receiving Payments	\$ 15,546,904	\$ 17,271,135
All Other Participants	12,699,064	12,173,960
TOTAL VESTED BENEFITS	\$ 28,245,968	\$ 29,445,095
Percent Funded	123%	126%
NONVESTED BENEFITS	1,902,203	1,949,210
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	\$ 30,148,171	\$ 31,394,305
Percent Funded	115%	118%

* Actuarial Value of Assets

City of Panama City Beach General Municipal Employees' 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	\$ 28,359,862	\$ 30,148,171
Increase (Decrease) During the Year Attributable to:		
Increase for Interest Due to the Decrease in the Discount Period	\$ 2,233,234	\$ 2,368,995
Benefits Paid	(888,875)	(1,071,457)
Benefits Accumulated, Turnover, Other Experience	443,950	600,304
Change in Actuarial Assumptions	-	(651,708)
Plan Amendment	-	-
Net Increase (Decrease)	\$ 1,788,309	\$ 1,246,134
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF CURRENT VALUATION DATE	\$ 30,148,171	\$ 31,394,305

City of Panama City Beach General Municipal Employees' 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	147	165
2. Retired Members and beneficiaries receiving benefits (including DROP)	71	79
3. Disabled Members receiving benefits	2	2
4. Terminated vested Members	3	4
5. Prior year active compensation	\$ 6,586,018	\$ 6,730,771
6. Annual benefits payable to retirees and beneficiaries (including DROP)	\$ 1,513,000	\$ 1,669,648
7. Annual benefits payable to disabled retirees	\$ 19,637	\$ 19,637
8. Annual benefits payable to terminated vested Members	\$ 38,700	\$ 20,573
B. <u>Assets</u>		
1. Actuarial value	\$ 34,739,443	\$ 37,047,749
2. Market value	35,121,332	37,584,474
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 22,474,536	\$ 21,123,309
b. Termination benefits	2,426,899	2,784,950
c. Death benefits	183,186	267,193
d. Disability benefits	286,883	448,812
e. Total	\$ 25,371,504	\$ 24,624,264
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 375,987	\$ 485,344
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired, beneficiaries and DROP	\$ 15,373,988	\$ 17,099,751
b. Disability retired	172,916	171,384
c. Total	\$ 15,546,904	\$ 17,271,135
4. Total actuarial present value of future expected benefit payments	\$ 41,294,395	\$ 42,380,743
5. Entry age normal accrued liability	\$ 36,916,335	\$ 37,138,345
6. Unfunded entry age normal accrued liability	\$ 1,795,004	\$ (446,129)

City of Panama City Beach General Municipal Employees' 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)	\$ 15,546,904	\$ 17,271,135
b. Other Members	12,699,064	12,173,960
c. Total	\$ 28,245,968	\$ 29,445,095
2. Actuarial present value of accumulated non-vested plan benefits	1,902,203	1,949,210
3. Total actuarial present value of accumulated plan benefits	\$ 30,148,171	\$ 31,394,305
 E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date	\$ 28,359,862	\$ 30,148,171
2. Increase (decrease) during year attributable to:		
a. Plan amendment	0	0
b. Change in actuarial assumptions	0	(651,708)
c. Benefits paid	(888,875)	(1,071,457)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	2,677,184	2,969,299
e. Net increase	\$ 1,788,309	\$ 1,246,134
3. Actuarial present value of accumulated plan benefits as of Current Valuation Date	\$ 30,148,171	\$ 31,394,305

City of Panama City Beach

General Municipal Employees' 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	\$ 567,228	\$ 529,652
ii. Percentage of Participants' Compensation	9.78%	9.07%
iii. Actual Compensation Under NRA	\$ 6,584,164	\$ 7,254,593
iv. Required, per new state interpretation = (ii.) x (iii.)	\$ 643,931	\$ 657,992
b. State (Estimated)	-	-
c. Member*	504,425	507,816
d. Total = (a.iv.) + (b.) + (c.)	\$ 1,148,356	\$ 1,165,808
2. Actual contributions made:		
a. City	\$ 809,369	\$ 745,847
b. State	-	-
c. Member	571,937	6,433
d. Total	\$ 1,381,306	\$ 752,280
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**	\$ 38,652,855	\$ 44,822,839
2. Actuarial present value of future employee contributions - attained age**	\$ 3,101,675	\$ 3,267,972
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 4,114,622	\$ 4,147,650
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 (8.7%) to expected compensation for the year for participants under Normal Retirement Age (NRA)

** Participants under Normal Retirement Age (NRA) only

City of Panama City Beach

General Municipal Employees' 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									
	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	\$1,518,031	\$1,485,885	\$1,429,137	\$1,587,947	\$1,607,250
Interest Cost	N/A	N/A	N/A	N/A	N/A	\$740,645	\$3,015,106	\$2,471,562	\$2,617,007	\$2,715,188
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	\$2,036,726	\$220,847	(\$617,750)	(\$653,329)	(\$1,727,940)
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$486,743	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	(\$1,285,877)	(\$1,255,002)	(\$1,067,417)	(\$967,953)	(\$2,340,676)
DROP Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	\$534,139	\$0	\$0	\$0
Net Change in Total Pension Liability	N/A	N/A	N/A	N/A	N/A	\$3,009,524	\$3,466,835	\$2,215,532	\$3,070,415	\$253,822
Total Pension Liability (Beginning)	N/A	N/A	N/A	N/A	N/A	\$33,820,920	\$36,830,444	\$40,297,279	\$42,512,811	\$45,583,226
Total Pension Liability (Ending)	N/A	N/A	N/A	N/A	\$33,820,920	\$36,830,444	\$40,297,279	\$42,512,811	\$45,583,226	\$45,837,048
Plan Fiduciary Net Position										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	\$1,095,319	\$995,644	\$892,284	\$809,369	\$745,847
Contributions—Member	N/A	N/A	N/A	N/A	N/A	\$548,921	\$538,751	\$563,913	\$571,937	\$631,150
Net Investment Income	N/A	N/A	N/A	N/A	N/A	\$2,943,006	(\$710,422)	\$2,592,981	\$4,199,232	\$3,012,081
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	(\$1,285,877)	(\$1,255,002)	(\$1,067,417)	(\$967,953)	(\$2,340,676)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	(\$73,809)	(\$103,110)	(\$92,103)	(\$91,878)	(\$97,339)
Other	N/A	N/A	N/A	N/A	N/A	\$0	\$534,139	\$0	\$0	\$0
Net Change in Plan Fiduciary Net Position	N/A	N/A	N/A	N/A	N/A	\$3,227,560	\$0	\$2,889,657	\$4,520,706	\$1,951,062
Plan Fiduciary Net Position (Beginning)	N/A	N/A	N/A	N/A	N/A	\$26,031,682	\$29,492,669	\$29,492,670	\$32,382,327	\$36,903,035
Plan Fiduciary Net Position (Ending)	N/A	N/A	N/A	N/A	\$29,259,242	\$29,259,242	\$29,492,669	\$32,382,327	\$36,903,035	\$38,854,098
County's Net Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	\$7,571,202	\$2,906,474	\$2,037,954	\$8,680,191	\$6,982,950
Net Position as a % of Pension Liability	N/A	N/A	N/A	N/A	N/A	79.44%	73.19%	76.17%	80.96%	84.77%
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	\$5,500,368	\$6,238,976	\$6,483,319	\$6,573,994	\$7,254,593
Net Pension Liability as a % of Payroll	N/A	N/A	N/A	N/A	N/A	137.65%	46.59%	31.43%	132.04%	96.26%

City of Panama City Beach General Municipal Employees' Pension Plan

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, 2017:

	2% Decrease (6.00%)	Current Rate (8.00%)	2% Increase (10.00%)
(1) Total Pension Liability	\$45,583,226	\$36,916,335	\$31,742,505
(2) Plan Fiduciary Net Position	\$36,903,035	\$36,903,035	\$36,903,035
(3) Net Pension Liability	\$8,680,191	\$13,300	(\$5,160,530)

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 (10.0%)
(1) Total Pension Liability	\$45,837,048	\$37,138,345	\$32,950,675
(2) Plan Fiduciary Net Position	\$38,854,098	\$38,854,098	\$38,854,098
(3) Net Pension Liability	\$6,982,950	(\$1,715,753)	(\$5,903,423)

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	29.00
RP 2000 Mortality and 6.0% Interest	20.08

**City of Panama City Beach
General Municipal Employees' Pension Plan**

Participant Data Summary

October 1, 2018

	Active	DROP	Terminated		Retired	Beneficiaries	Total
			Vested	Disabled			
October 1, 2017	147	22	3	2	44	5	223
New Entrants	41						41
Retirements	(6)	(4)	(1)		12		1
Disabilities							-
Terminations							
a) with refund	(13)						(13)
b) without refund	(3)		3				-
DROP enrollments		2					2
Deaths							
a) with beneficiaries	(1)						(1)
b) without beneficiaries							-
Benefits Expired							-
Other	-	(3)	(1)		1		(3)
October 1, 2018	165	17	4	2	57	5	250
Average Age	43.3	60.1	52.2	79.1	69.1	69.3	

Active Participants as of 10/01/2017

	Males	Females	Total
Number of Participants	100	47	147
Average Age Nearest Birthday	44.3	46.4	45.0
Average Completed Years of Service	10.0	9.6	9.9
Average Compensation for Prior Year	\$42,578	\$39,258	\$41,516

Active Participants as of 10/01/2018

	Males	Females	Total
Number of Participants	114	54	168
Average Age Nearest Birthday	42.6	44.8	43.3
Average Completed Years of Service	8.6	7.6	9.9
Average Compensation for Prior Year	\$41,971	\$37,925	\$40,671

City of Panama City Beach General Municipal Employees' 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	13	0	0	0	0	0	0	13
25-29	15	4	0	0	0	0	0	19
30-34	6	3	9	0	0	0	0	18
35-39	5	4	5	2	1	0	0	17
40-44	6	2	4	4	2	3	1	22
45-49	7	2	5	1	1	0	1	17
50-54	7	6	5	5	0	0	0	23
55-59	9	1	5	3	3	0	0	21
60-64	3	5	2	1	0	0	0	11
65 and over	1	2	1	0	0	0	0	4
Total	72	29	36	16	7	3	2	165

City of Panama City Beach
General Municipal Employees' Pension Plan

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

October 1, 2018

Salary Increases

Year Ended September 30,	Actual	Assumed
1989	8.3% *	6.0%
1990	6.9%	6.0%
1991	8.2%	6.0%
1992	18.9%	6.0%
1993	6.8%	6.0%
1994	10.6%	6.0%
1995	5.9%	6.0%
1996	6.7%	6.0%
1997	4.1%	6.0%
1998	11.3%	6.0%
1999	11.1%	6.0%
2000	1.4%	6.0%
2001	9.8%	6.0%
2002	6.7%	6.0%
2003	8.4%	6.0%
2004	3.6%	6.0%
2005	7.4%	6.0%
2006	10.4%	6.0%
2007	4.9%	6.0%
2008	7.8%	6.0%
2009	6.8%	6.0%
2010	1.2%	6.0%
2011	7.5%	6.0%
2012	2.0%	6.0%
2013	6.6%	6.0%
2014	1.2%	6.0%
2015	4.4%	6.0%
2016	4.0%	6.0%
2017	3.1%	6.0%
2018	4.9%	4.5%
Last 5 Years, Compounded	3.5%	5.7%

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

General Municipal Employees' 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	6.91%	8.0%
1990	2.39%	8.0%
1991	3.17%	8.0%
1992	27.97%	8.0%
1993	11.48%	8.0%
1994	0.07%	8.0%
1995	16.79%	8.0%
1996	12.66%	8.0%
1997	23.14%	8.0%
1998	8.50%	8.0%
1999	11.90%	8.0%
2000	10.62%	8.0%
2001	(5.05%)	8.0%
2002	3.88%	8.0%
2003	4.05%	8.0%
2004	4.47%	8.0%
2005	5.36%	8.0%
2006	8.12%	8.0%
2007	10.69%	8.0%
2008	6.20%	8.0%
2009	3.98%	8.0%
2010	4.39%	8.0%
2011	3.23%	8.0%
2012	4.49%	8.0%
2013	9.76%	8.0%
2014	11.11%	8.0%
2015	8.36%	8.0%
2016	8.83%	8.0%
2017	9.39%	8.0%
2018	8.53%	7.9%
Last 5 Years, Compounded	9.2%	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 and employee contributions, expenses, and disbursements.

City of Panama City Beach General Municipal Employees' Pension Plan

Reconciliation of DROP Participants and Assets

October 1, 2018

Participants as of 10/1/2017	22
New DROP Members	2
New DROP's, Withdrew during PY	(4)
All Other Withdrawals	0
Corrections	(3)
Participants as of 10/1/2018	17

	Total
Assets as of 10/1/2017	\$1,781,703.69
Payments into DROP	666,233.82
Earnings	90,905.26
Distributions	(1,269,219.77)
Expenses	0.00
Adjustments	0.00
Assets as of 10/1/2018	\$1,269,623.00

City of Panama City Beach General Municipal Employees' 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 703) effective February 22, 2001. First Amendment (Ordinance 793) effective April 10, 2003 (for various law and other changes). Second Amendment (Ordinance 882) effective July 22, 2004 (adding 3% increasing annuities as an Optional Form of Payment and changing investment policy). Third Amendment (Ordinance 937) effective October 1, 2005 (increasing multiplier to 3.0% for future service and Employee Contributions to 8.7%). Fourth Amendment (Ordinance 1028) effective May 11, 2006 (changing various provisions as required by new IRS rules). Fifth Amendment (Ordinance 1084) effective July 26, 2007 (adding 5% fixed investment return option for DROP). Sixth Amendment (Ordinance 1122) effective April 10, 2008 (changing the definition of a General Employee). Restatement (Ordinance 1158) adopted August 17, 2009. First Amendment (Ordinance 1221) effective February 9, 2012 (adding 300 hours of overtime cap).

Eligibility: Any regular full-time employee of the City, except for Firefighters and Police Officers, in a permanent (not temporary) position, including those in their initial probationary employment period.

Employee Contributions: 8.7% of Compensation (5.1% prior to October 1, 2005, and 4.5% prior to February 22, 2001) 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 General Employee, if greater.

Credited Service: Years and fractional parts of years of service as a General Employee with the City and while making Employee Contributions. (Credited Service with another City plan is recognized for purposes of vesting and retirement eligibility only.)

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 February 22, 2001; after that date interest shall no longer accrue.

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.

City of Panama City Beach General Municipal Employees' Pension Plan

Early Retirement Date: The first day of the month coincident with or next following the date a participant attains age 48 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 2.5% of Average Final Compensation multiplied by years of Credited Service prior to October 1, 2005, plus 3.0% of Average Final Compensation multiplied by years of Credited Service after September 30, 2005, but the total 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 1/15 per year for each of the first 5 years and 1/30 per year for each of the next 2 years 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 General Employee 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 General Employee 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 (1/15, 1/30 per year) between ages 48 and 55, or
- With 20 or more years of Credited Service, his annuity can begin unreduced at age 50 or reduced (1/30 per year) between ages 48 and 50.

City of Panama City Beach General Municipal Employees' 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 General Employees, 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.

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 General Municipal Employees' 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 by increases in the employee contribution rate.

ACTUARIAL ASSUMPTIONS

Investment Yield: The investment rate of earnings is assumed to be 7.90% per annum.

Interest on Employee Contributions: No interest is credited beyond February 22, 2001.

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 (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 4.5% per year.

City of Panama City Beach General Municipal Employees' Pension Plan

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

Retirement Rate: Active employees are expected to retire at a rate of 50% 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 65.

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, Salary Scale, 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 General Municipal Employees' 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 General Municipal Employees' 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 General Municipal Employees' Pension Plan

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

Summary of Significant Accounting Policies

Preserving the General Employees' 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 General Employees' 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, 2018, the most recent actuarial study shows a deficit of \$1.7 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

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%

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

City of Panama City Beach General Municipal Employees' 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 – Gov't / 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 8.3 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 31 of the actuarial valuation report.

City of Panama City Beach General Municipal Employees' 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.