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									
	2008_	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Pension Liability					_		-			
Service Cost	N/A	N/A	N/A	N/A	N/A	N/A	\$751,847	\$857,325	\$954,618	\$979,603
Interest Cost	N/A	N/A	N/A	N/A	N/A	N/A	\$255,200	\$1,884,505	\$1,497,333	\$1,607,333
Changes of Benefit Terms	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0
Differences Between Expected and Actual Experiences	N/A	N/A	N/A	N/A	N/A	N/A	\$1,629,832	(\$524,160)	\$292,523	\$224,790
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)	(\$967,438)
Net Change in Total Pension Liability	N/A	N/A	N/A	N/A	N/A	N/A	\$1,599,675	\$1,291,023	\$1,839,658	\$1,844,288
Total Pension Liability (Beginning)	N/A	N/A	N/A	N/A	N/A	N/A	\$21,562,637	\$23,162,312	\$24,453,335	\$26,292,993
Total Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	\$21,562,637	\$23,162,312	\$24,453,335	\$26,292,993	\$28,137,281
Plan Fiduciary Net Position										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	N/A	\$646,023	\$589,810	\$590,606	\$580,095
Contributions—Member	N/A	N/A	N/A	N/A	N/A	N/A	\$307,896	\$325,235	\$338,561	\$344,327
Contributions - State	N/A	N/A	N/A	N/A	N/A	N/A	\$111,257	\$117,870	\$137,097	\$142,663
Net Investment Income	N/A	N/A	N/A	N/A	N/A	N/A	\$1,757,729	(\$232,058)	\$1,402,233	\$2,274,231
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)	(\$967,438)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	N/A	(\$52,988)	(\$69,185)	(\$64,805)	(\$72,937)
Other	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0
Net Change in Plan Fiduciary Net Position	N/A	N/A	N/A	N/A	N/A	N/A	\$1,732,712	(\$194,975)	\$1,498,876	\$2,300,941
Plan Fiduciary Net Position (Beginning)	N/A	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206	\$17,843,082
Plan Fiduciary Net Position (Ending)	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206	\$17,843,082	\$20,144,023
County's Net Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	N/A	\$6,623,130	\$8,109,128	\$8,449,911	\$7,993,257
Net Position as a % of Pension Liability	N/A	N/A	N/A	N/A	N/A	N/A	71.41%	85.95%	85.95%	91.91%
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	N/A	\$2,969,177	\$2,967,537	\$2,967,537	\$3,145,402
Net Pension Liability as a ¼ of Payroll	N/A	N/A	N/A	N/A	N/A	N/A	223.06%	273.26%	273.26%	254.13%

City of Panama City Beach Police Officers' 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, 2016:

		2% Decrease	Current Rate	2% Increase
		(6.00%)	(8.00%)	(10.00%)
(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)

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

		2% Decrease	Current Rate	2% Increase
		(6.00%)	(8.00%)	(10.00%)
(1)	Total Pension Liability	\$28,137,281	\$21,918,136	\$16,459,207
(2)	Plan Fiduciary Net Position	\$20,144,023	\$20,144,023	\$20,144,023
(3)	Net Pension Liability	\$7,993,257	\$1,774,113	(\$3,684,816)

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	22.83
RP 2000 Mortality and 6.0% Interest	18.00

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									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Pension Liability										
Service Cost	N/A	N/A	N/A	N/A	N/A	N/A	\$479,598	\$520,894	\$546,734	\$609,635
Interest Cost	N/A	N/A	N/A	N/A	N/A	N/A	\$304,873	\$1,525,052	\$1,528,848	\$1,650,452
Changes of Benefit Terms	N/A	N/A	N/A	N/A	N/A	N/A	\$0	50	\$0	\$0
Differences Between Expected and Actual Experiences	N/A	N/A	N/A	N/A	N/A	NA	\$1,536,515	(\$181,955)	\$317,692	(\$53,433)
Changes of Assumptions	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$174,190
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)	(\$967,438)
DROP Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0
Net Change in Total Pension Liability	N/A	N/A	N/A	N/A	N/A	N/A	\$1,283,782	\$937,344	\$1,488,458	\$1,413,406
Total Pension Liability (Beginning)	N/A	N/A	N/A	N/A	N/A	N/A	\$16,795,147	\$18,078,928	\$19,016,272	\$20,504,730
Total Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	\$16,795,147	\$18,078,928	\$19,016,272	\$20,504,730	\$21,918,136
Plan Fiduciary Net Position										
Contributions—Employer	N/A	N/A	N/A	N/A	N/A	N/A	\$646,023	\$589,810	\$590,606	580,095
Contributions—Member	N/A	N/A	N/A	N/A	N/A	N/A	\$307,896	\$325,235	\$338,561	344,327
Contributions - State	N/A	N/A	N/A	N/A	N/A	N/A	\$111,257	\$117,870	\$137,097	142,663
Net investment income	N/A	N/A	N/A	N/A	N/A	N/A	\$1,757,729	(\$232,058)	\$1,402,233	2,274,231
Benefit Payments, Including Refunds of Member Contributions	N/A	N/A	N/A	N/A	N/A	N/A	(\$1,037,204)	(\$926,647)	(\$904,816)	(967,438)
Administrative Expense	N/A	N/A	N/A	N/A	N/A	N/A	(\$52,988)	(\$69,185)	(\$64,805)	(72,937)
Other	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0
Net Change in Plan Fiduciary Net Position	N/A	N/A	N/A	N/A	N/A	N/A	\$1,732,712	(\$194,975)	\$1,498,876	\$2,300,941
Plan Fiduciary Net Position (Beginning)	N/A	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206	\$17,843,082
Plan Fiduciary Net Position (Ending)	N/A	N/A	N/A	N/A	N/A	\$14,806,469	\$16,539,181	\$16,344,206	\$17,843,082	\$20,144,023
County's Net Pension Liability (Ending)	N/A	N/A	N/A	N/A	N/A	N/A	\$1,539,747	\$2,672,065	\$2,661,648	\$1,599,923
Net Position as a % of Pension Liability	N/A	N/A	N/A	N/A	N/A	N/A	91.48%	85.95%	87.02%	91.91%
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	N/A	\$2,732,684	\$2,967,537	\$3,078,788	\$3,145,402
Net Pension Liability as a % of Payroll	N/A	N/A	N/A	N/A	N/A	N/A	56.35%	90.04%	86.45%	50.87%

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									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Pension Liability		•	-							
Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	N/A	\$615,147	\$523,418	\$626,841	\$536,211
Contributions made in Relation to the Actuarially Determined Contribution	N/A	N/A	N/A	N/A	N/A	N/A	\$646,023	\$589,810	590,606.00	580,095.03
Contribution Deficiency (excess)	N/A	N/A	N/A	N/A	N/A	N/A	(\$30,876)	(\$66,392)	\$36,235	(\$43,884)
Covered-Employee Payroll	N/A	N/A	N/A	N/A	N/A	N/A	\$2,732,684	\$2,967,537	\$3,078,788	\$3,145,402
Contributions as a % of Payroll	N/A	N/A	N/A	N/A	N/A	N/A	23.64%	19.88%	20.36%	18.44%

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: Salary Increases:

4.50% 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

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, 2016:

	1% Decrease	Current Rate	1% Increase
	(7.00%)	(8.00%)	(9.00%)
(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

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

	1% Decrease	Current Rate	1% Increase
	(7.00%)	(8.00%)	(9.00%)
(1) Total Pension Liability	\$22,985,387	\$21,918,136	\$18,197,251
(2) Plan Fiduciary Net Position	\$20,144,023	\$20,144,023	\$20,144,023
(3) Net Pension Liability	\$2,841,364	\$1,774,113	(\$1,946,773)