

June 19, 2019

VIA EMAIL

Ms. Joan Wall  
Bal Harbour Village  
Police Officers' Pension Plan  
2955 Myrtle Oak Circle  
Davie, FL 33328-6739

Re: Bal Harbour Village Police Officers' Pension Plan  
Section 112.664, Florida Statutes Compliance

Dear Joan:

Please find enclosed the annual disclosures that satisfy the October 1, 2018 financial reporting requirements made under Section 112.664.


Our office will submit this information electronically to the Department of Management Services. However, it is important for you to be aware that this report must also be made available on the Plan or Plan Sponsor's website, if such website exists. A deadline for this website publication is not made clear in the law.

In addition to the enclosed report, the Plan or Plan Sponsor's website must provide a link to the Division of Retirement's Actuarial Summary Fact Sheet for the Plan, and also report the previous five years' assumed and actual rates of return, along with their respective asset allocations. The Board should contact its Investment Consultant for this information.

If there are any questions, concerns, or comments about any of the items contained in this report, please feel free to contact me.

Respectfully submitted,

Foster & Foster, Inc.

By: 

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

PTD/lke

Enclosures

cc via email: Robert Klausner, Board Attorney

BAL HARBOUR VILLAGE  
POLICE OFFICERS' PENSION PLAN

SECTION 112.664, FLORIDA STATUTES  
COMPLIANCE

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664(1), Florida Statutes, and Rule 60T-1.0035, Florida Administrative Code.

By: Patrick T. Donlan Date: 6/19/2019

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



When reviewing the following schedules, please note the following:

- 1) The purpose of producing this report is solely to satisfy the requirements set forth by Section 112.664, Florida Statutes, and is mandatory for every Florida public pension fund, excluding the Florida Retirement System (FRS).
- 2) None of the schedules shown have any impact on the funding requirements of the Plan. These schedules are for statutory compliance purposes only.
- 3) In the schedules that follow, the columns labeled “ACTUAL” represent the final recorded GASB 67/68 results. The columns labeled “HYPOTHETICAL” illustrate what the results would have been if different assumptions were used.
- 4) It is our opinion that the Plan’s actual assumptions utilized in the October 1, 2018 Actuarial Valuation Report, as adopted by the Board of Trustees, are reasonable individually and in the aggregate, and represent our best estimate of future Plan experience.
- 5) The “Number of Years Expected Benefit Payments Sustained” calculated in Section II: Asset Sustainability should not be interpreted as the number of years the Plan has left until it is insolvent. This calculation is required by 112.664, Florida Statutes, but the numeric result is irrelevant, since in its calculation we are to assume there will be no further contributions to the Fund. As long as the Actuarially Determined Contribution is made each year the Plan will never become insolvent.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY  
FISCAL YEAR SEPTEMBER 30, 2018

	ACTUAL	HYPOTHETICAL	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
<b><u>Total Pension Liability</u></b>			
Service Cost	613,120	905,195	432,985
Interest	2,097,099	2,029,726	2,108,593
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	864,085	1,015,584	745,408
Changes of Assumptions	801,021	1,208,685	556,115
Benefit Payments, Including Refunds of Employee Contributions	(2,402,714)	(2,402,714)	(2,402,714)
Net Change in Total Pension Liability	1,972,611	2,756,476	1,440,387
Total Pension Liability - Beginning	26,801,970	34,124,929	21,854,297
Total Pension Liability - Ending (a)	<u>\$ 28,774,581</u>	<u>\$ 36,881,405</u>	<u>\$ 23,294,684</u>
<b><u>Plan Fiduciary Net Position</u></b>			
Contributions - Employer	1,283,722	1,283,722	1,283,722
Contributions - State	105,199	105,199	105,199
Contributions - Employee	197,911	197,911	197,911
Net Investment Income	2,655,694	2,655,694	2,655,694
Benefit Payments, Including Refunds of Employee Contributions	(2,402,714)	(2,402,714)	(2,402,714)
Administrative Expenses	(76,694)	(76,694)	(76,694)
Net Change in Plan Fiduciary Net Position	1,763,118	1,763,118	1,763,118
Plan Fiduciary Net Position - Beginning	20,957,742	20,957,742	20,957,742
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,720,860</u>	<u>\$ 22,720,860</u>	<u>\$ 22,720,860</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 6,053,721</u>	<u>\$ 14,160,545</u>	<u>\$ 573,824</u>

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 1  
Plan Assumptions: 7.75% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2018	22,720,860	-	1,686,107	-	1,695,530	22,730,283
2019	22,730,283	-	1,743,332	-	1,694,043	22,680,994
2020	22,680,994	-	1,781,573	-	1,688,741	22,588,162
2021	22,588,162	-	1,852,751	-	1,678,788	22,414,199
2022	22,414,199	-	1,925,969	-	1,662,469	22,150,699
2023	22,150,699	-	2,002,872	-	1,639,068	21,786,895
2024	21,786,895	-	2,062,575	-	1,608,560	21,332,880
2025	21,332,880	-	2,188,791	-	1,568,483	20,712,572
2026	20,712,572	-	2,159,942	-	1,521,527	20,074,157
2027	20,074,157	-	2,215,452	-	1,469,898	19,328,603
2028	19,328,603	-	2,252,266	-	1,410,691	18,487,028
2029	18,487,028	-	2,279,053	-	1,344,431	17,552,406
2030	17,552,406	-	2,296,087	-	1,271,338	16,527,657
2031	16,527,657	-	2,321,138	-	1,190,949	15,397,468
2032	15,397,468	-	2,343,356	-	1,102,499	14,156,611
2033	14,156,611	-	2,352,756	-	1,005,968	12,809,823
2034	12,809,823	-	2,359,804	-	901,319	11,351,338
2035	11,351,338	-	2,364,739	-	788,095	9,774,694
2036	9,774,694	-	2,363,991	-	665,934	8,076,637
2037	8,076,637	-	2,359,674	-	534,502	6,251,465
2038	6,251,465	-	2,351,069	-	393,385	4,293,781
2039	4,293,781	-	2,339,156	-	242,126	2,196,751
2040	2,196,751	-	2,324,216	-	-	-

\*All DROP Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 22.95

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 7.75% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 2  
Hypothetical Assumptions: 5.75% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2018	22,720,860	-	1,686,107	-	1,257,974	22,292,727
2019	22,292,727	-	1,743,332	-	1,231,711	21,781,106
2020	21,781,106	-	1,781,573	-	1,201,193	21,200,726
2021	21,200,726	-	1,852,751	-	1,165,775	20,513,750
2022	20,513,750	-	1,925,969	-	1,124,169	19,711,950
2023	19,711,950	-	2,002,872	-	1,075,855	18,784,933
2024	18,784,933	-	2,062,575	-	1,020,835	17,743,193
2025	17,743,193	-	2,188,791	-	957,306	16,511,708
2026	16,511,708	-	2,159,942	-	887,325	15,239,091
2027	15,239,091	-	2,215,452	-	812,553	13,836,192
2028	13,836,192	-	2,252,266	-	730,828	12,314,754
2029	12,314,754	-	2,279,053	-	642,576	10,678,277
2030	10,678,277	-	2,296,087	-	547,988	8,930,178
2031	8,930,178	-	2,321,138	-	446,753	7,055,793
2032	7,055,793	-	2,343,356	-	338,337	5,050,774
2033	5,050,774	-	2,352,756	-	222,778	2,920,796
2034	2,920,796	-	2,359,804	-	100,101	661,093
2035	661,093	-	2,364,739	-	-	-

\*All DROP Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 17.28

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 5.75% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 3  
Hypothetical Assumptions: 9.75% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2018	22,720,860	-	1,686,107	-	2,133,086	23,167,839
2019	23,167,839	-	1,743,332	-	2,173,877	23,598,384
2020	23,598,384	-	1,781,573	-	2,213,991	24,030,802
2021	24,030,802	-	1,852,751	-	2,252,682	24,430,733
2022	24,430,733	-	1,925,969	-	2,288,105	24,792,869
2023	24,792,869	-	2,002,872	-	2,319,665	25,109,662
2024	25,109,662	-	2,062,575	-	2,347,642	25,394,729
2025	25,394,729	-	2,188,791	-	2,369,283	25,575,221
2026	25,575,221	-	2,159,942	-	2,388,287	25,803,566
2027	25,803,566	-	2,215,452	-	2,407,844	25,995,958
2028	25,995,958	-	2,252,266	-	2,424,808	26,168,500
2029	26,168,500	-	2,279,053	-	2,440,325	26,329,772
2030	26,329,772	-	2,296,087	-	2,455,219	26,488,904
2031	26,488,904	-	2,321,138	-	2,469,513	26,637,279
2032	26,637,279	-	2,343,356	-	2,482,896	26,776,819
2033	26,776,819	-	2,352,756	-	2,496,043	26,920,106
2034	26,920,106	-	2,359,804	-	2,509,670	27,069,972
2035	27,069,972	-	2,364,739	-	2,524,041	27,229,274
2036	27,229,274	-	2,363,991	-	2,539,610	27,404,893
2037	27,404,893	-	2,359,674	-	2,556,943	27,602,162
2038	27,602,162	-	2,351,069	-	2,576,596	27,827,689
2039	27,827,689	-	2,339,156	-	2,599,166	28,087,699
2040	28,087,699	-	2,324,216	-	2,625,245	28,388,728
2041	28,388,728	-	2,304,051	-	2,655,578	28,740,255
2042	28,740,255	-	2,279,045	-	2,691,071	29,152,281
2043	29,152,281	-	2,249,662	-	2,732,676	29,635,295
2044	29,635,295	-	2,215,354	-	2,781,443	30,201,384
2045	30,201,384	-	2,175,180	-	2,838,595	30,864,799
2046	30,864,799	-	2,129,284	-	2,905,515	31,641,030
2047	31,641,030	-	2,077,597	-	2,983,718	32,547,151
2048	32,547,151	-	2,020,177	-	3,074,864	33,601,838
2049	33,601,838	-	1,957,369	-	3,180,757	34,825,226
2050	34,825,226	-	1,889,405	-	3,303,351	36,239,172
2051	36,239,172	-	1,816,235	-	3,444,778	37,867,715
2052	37,867,715	-	1,737,967	-	3,607,376	39,737,124
2053	39,737,124	-	1,655,187	-	3,793,679	41,875,616
2054	41,875,616	-	1,568,515	-	4,006,407	44,313,508
2055	44,313,508	-	1,479,015	-	4,248,465	47,082,958
2056	47,082,958	-	1,388,057	-	4,522,921	50,217,822
2057	50,217,822	-	1,296,096	-	4,833,053	53,754,779
2058	53,754,779	-	1,203,242	-	5,182,433	57,733,970
2059	57,733,970	-	1,110,769	-	5,574,912	62,198,113
2060	62,198,113	-	1,020,239	-	6,014,579	67,192,453
2061	67,192,453	-	932,582	-	6,505,801	72,765,672
2062	72,765,672	-	848,358	-	7,053,296	78,970,610
2063	78,970,610	-	768,102	-	7,662,190	85,864,698
2064	85,864,698	-	691,486	-	8,338,098	93,511,310
2065	93,511,310	-	618,727	-	9,087,190	101,979,773
2066	101,979,773	-	549,829	-	9,916,224	111,346,168
2067	111,346,168	-	484,296	-	10,832,642	121,694,514

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 3  
Hypothetical Assumptions: 9.75% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2068	121,694,514	-	422,367	-	11,844,625	133,116,772
2069	133,116,772	-	364,349	-	12,961,123	145,713,546
2070	145,713,546	-	310,462	-	14,191,936	159,595,020
2071	159,595,020	-	261,557	-	15,547,764	174,881,227
2072	174,881,227	-	218,421	-	17,040,272	191,703,078
2073	191,703,078	-	180,910	-	18,682,231	210,204,399
2074	210,204,399	-	149,020	-	20,487,664	230,543,043
2075	230,543,043	-	121,848	-	22,472,007	252,893,202
2076	252,893,202	-	98,999	-	24,652,261	277,446,464
2077	277,446,464	-	79,670	-	27,047,146	304,413,940
2078	304,413,940	-	63,572	-	29,677,260	334,027,628
2079	334,027,628	-	50,030	-	32,565,255	366,542,853
2080	366,542,853	-	38,917	-	35,736,031	402,239,967
2081	402,239,967	-	29,942	-	39,216,937	441,426,962
2082	441,426,962	-	22,765	-	43,038,019	484,442,216
2083	484,442,216	-	17,072	-	47,232,284	531,657,428
2084	531,657,428	-	12,632	-	51,835,983	583,480,779
2085	583,480,779	-	9,152	-	56,888,930	640,360,557
2086	640,360,557	-	6,501	-	62,434,837	702,788,893
2087	702,788,893	-	4,509	-	68,521,697	771,306,081
2088	771,306,081	-	3,070	-	75,202,193	846,505,204
2089	846,505,204	-	2,040	-	82,534,158	929,037,322
2090	929,037,322	-	1,341	-	90,581,074	1,019,617,055
2091	1,019,617,055	-	863	-	99,412,621	1,119,028,813
2092	1,119,028,813	-	550	-	109,105,282	1,228,133,545
2093	1,228,133,545	-	337	-	119,743,004	1,347,876,212
2094	1,347,876,212	-	199	-	131,417,921	1,479,293,934
2095	1,479,293,934	-	120	-	144,231,153	1,623,524,967
2096	1,623,524,967	-	72	-	158,293,681	1,781,818,576
2097	1,781,818,576	-	43	-	173,727,309	1,955,545,842
2098	1,955,545,842	-	26	-	190,665,718	2,146,211,534
2099	2,146,211,534	-	16	-	209,255,624	2,355,467,142
2100	2,355,467,142	-	10	-	229,658,046	2,585,125,178
2101	2,585,125,178	-	6	-	252,049,705	2,837,174,877
2102	2,837,174,877	-	3	-	276,624,550	3,113,799,424
2103	3,113,799,424	-	2	-	303,595,444	3,417,394,866
2104	3,417,394,866	-	1	-	333,195,999	3,750,590,864
2105	3,750,590,864	-	1	-	365,682,609	4,116,273,472
2106	4,116,273,472	-	-	-	401,336,664	4,517,610,136

\*All DROP Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 999.99

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 9.75% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**



ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR  
ENDING SEPTEMBER 30, 2020

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
Minimum Required Contribution (Fixed \$)	\$1,766,968	\$2,523,872	\$1,126,835
Minimum Required Contribution (% of Payroll)	81.4%	116.3%	52.0%
Expected Member Contribution	225,352	223,183	227,522
Expected State Money	57,142	57,142	57,142
Expected Sponsor Contribution (Fixed \$)	\$1,484,474	\$2,243,547	\$842,171
Expected Sponsor Contribution (% of Payroll)	68.8%	103.7%	39.4%
<b><u>ASSETS</u></b>			
Actuarial Value <sup>1</sup>	21,004,204	21,004,204	21,004,204
Market Value <sup>1</sup>	22,720,860	22,720,860	22,720,860
<b><u>LIABILITIES</u></b>			
Present Value of Benefits			
Active Members			
Retirement Benefits	8,419,329	11,892,292	6,225,952
Disability Benefits	317,697	407,301	254,813
Death Benefits	71,046	82,721	61,574
Vested Benefits	683,912	1,012,692	482,164
Refund of Contributions	0	0	0
Service Retirees	19,658,592	24,863,595	16,111,912
DROP Retirees <sup>1</sup>	1,177,946	1,441,819	993,963
Beneficiaries	693,190	745,178	646,973
Disability Retirees	117,069	133,014	104,394
Terminated Vested	9,616	9,616	9,616
Total:	31,148,397	40,588,228	24,891,361
Present Value of Future Salaries	10,282,890	10,995,415	9,663,152
Present Value of Future Member Contributions	1,028,289	1,099,542	966,315
Total Normal Cost	570,164	829,675	407,497
Present Value of Future Normal Costs (Entry Age Normal)	2,779,356	4,445,938	1,814,367
Total Actuarial Accrued Liability <sup>1</sup>	28,369,041	36,142,290	23,076,994
Unfunded Actuarial Accrued Liability (UAAL)	7,364,837	15,138,086	2,072,790

ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR  
ENDING SEPTEMBER 30, 2020

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
<b><u>PENSION COST</u></b>			
Normal Cost <sup>2</sup>	633,716	913,275	457,278
Administrative Expenses <sup>2</sup>	85,243	84,422	86,063
Payment Required To Amortize UAAL <sup>2</sup>	1,048,009	1,526,175	583,494
Minimum Required Contribution	\$1,766,968	\$2,523,872	\$1,126,835

<sup>1</sup> The asset values and liabilities include accumulated DROP Balances as of 9/30/2018.

<sup>2</sup> Contributions developed as of 10/01/2018 displayed above have been adjusted to account for assumed salary increase and interest components.