

June 19, 2017

VIA EMAIL

Ms. Carol Knapp, Administrator
City of Bartow
Municipal Firefighters' Retirement Trust Fund
2404 West Russ Road
Avon Park, FL 33825

Re: City of Bartow Municipal Firefighters' Retirement Trust Fund
Senate Bill 534 (Section 112.664, Florida Statutes) Compliance

Dear Carol:

Please find enclosed the annual disclosures that satisfy the October 1, 2016 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: H. Lee Dehner, Board Attorney

CITY OF BARTOW
MUNICIPAL FIREFIGHTERS' RETIREMENT TRUST FUND

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: 6/17/2017

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, 2016 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.

GASB 67: SCHEDULE OF CHANGES IN NET PENSION LIABILITY
FISCAL YEAR SEPTEMBER 30, 2016

	ACTUAL	HYPOTHETICAL	
	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
Total Pension Liability			
Service Cost	251,243	422,374	170,122
Interest	798,268	802,022	834,646
Change in Excess State Money	21,617	21,617	21,617
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	31,215	38,397	20,544
Changes of Assumptions	356,791	(93,318)	(85,207)
Benefit Payments, Including Refunds of Employee Contributions	(453,717)	(453,717)	(453,717)
Net Change in Total Pension Liability	1,005,417	737,375	508,005
Total Pension Liability - Beginning	10,124,104	13,341,657	8,573,335
Total Pension Liability - Ending (a)	<u>\$ 11,129,521</u>	<u>\$ 14,079,032</u>	<u>\$ 9,081,340</u>
Plan Fiduciary Net Position			
Contributions - Employer	429,610	429,610	429,610
Contributions - State	102,375	102,375	102,375
Contributions - Employee	21,035	21,035	21,035
Net Investment Income	551,097	551,097	551,097
Benefit Payments, Including Refunds of Employee Contributions	(453,717)	(453,717)	(453,717)
Administrative Expenses	(64,703)	(64,703)	(64,703)
Net Change in Plan Fiduciary Net Position	585,697	585,697	585,697
Plan Fiduciary Net Position - Beginning	8,014,919	8,014,919	8,014,919
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,600,616</u>	<u>\$ 8,600,616</u>	<u>\$ 8,600,616</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,528,905</u>	<u>\$ 5,478,416</u>	<u>\$ 480,724</u>

GASB 68: PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2016

	ACTUAL	HYPOTHETICAL	
	8.00%	6.00%	10.00%
Pension Expense	<u>\$ 500,713</u>	<u>\$ 765,488</u>	<u>\$ 354,209</u>

PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 1
Plan Assumptions: 8.00% 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
2016	8,589,820	-	479,161	-	668,019	8,778,678
2017	8,778,678	-	622,893	-	677,379	8,833,164
2018	8,833,164	-	628,615	-	681,509	8,886,058
2019	8,886,058	-	716,193	-	682,237	8,852,102
2020	8,852,102	-	721,410	-	679,312	8,810,004
2021	8,810,004	-	760,980	-	674,361	8,723,385
2022	8,723,385	-	792,460	-	666,172	8,597,097
2023	8,597,097	-	858,500	-	653,428	8,392,025
2024	8,392,025	-	862,776	-	636,851	8,166,100
2025	8,166,100	-	865,715	-	618,659	7,919,044
2026	7,919,044	-	872,380	-	598,628	7,645,292
2027	7,645,292	-	866,589	-	576,960	7,355,663
2028	7,355,663	-	867,332	-	553,760	7,042,091
2029	7,042,091	-	890,577	-	527,744	6,679,258
2030	6,679,258	-	915,166	-	497,734	6,261,826
2031	6,261,826	-	917,577	-	464,243	5,808,492
2032	5,808,492	-	910,363	-	428,265	5,326,394
2033	5,326,394	-	901,690	-	390,044	4,814,748
2034	4,814,748	-	899,345	-	349,206	4,264,609
2035	4,264,609	-	894,842	-	305,375	3,675,142
2036	3,675,142	-	894,809	-	258,219	3,038,552
2037	3,038,552	-	887,416	-	207,588	2,358,724
2038	2,358,724	-	877,434	-	153,601	1,634,891
2039	1,634,891	-	860,584	-	96,368	870,675
2040	870,675	-	844,235	-	35,885	62,325
2041	62,325	-	829,364	-	-	-

Number of Years Expected Benefit Payments Sustained: 25.08

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 8.00% 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: 6.00% 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
2016	8,589,820	-	479,161	-	501,014	8,611,673
2017	8,611,673	-	622,893	-	498,014	8,486,794
2018	8,486,794	-	628,615	-	490,349	8,348,528
2019	8,348,528	-	716,193	-	479,426	8,111,761
2020	8,111,761	-	721,410	-	465,063	7,855,414
2021	7,855,414	-	760,980	-	448,495	7,542,929
2022	7,542,929	-	792,460	-	428,802	7,179,271
2023	7,179,271	-	858,500	-	405,001	6,725,772
2024	6,725,772	-	862,776	-	377,663	6,240,659
2025	6,240,659	-	865,715	-	348,468	5,723,412
2026	5,723,412	-	872,380	-	317,233	5,168,265
2027	5,168,265	-	866,589	-	284,098	4,585,774
2028	4,585,774	-	867,332	-	249,126	3,967,568
2029	3,967,568	-	890,577	-	211,337	3,288,328
2030	3,288,328	-	915,166	-	169,845	2,543,007
2031	2,543,007	-	917,577	-	125,053	1,750,483
2032	1,750,483	-	910,363	-	77,718	917,838
2033	917,838	-	901,690	-	28,020	44,168
2034	44,168	-	899,345	-	-	-

Number of Years Expected Benefit Payments Sustained: 18.05

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 6.00% 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: 10.00% 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
2016	8,589,820	-	479,161	-	835,024	8,945,683
2017	8,945,683	-	622,893	-	863,424	9,186,214
2018	9,186,214	-	628,615	-	887,191	9,444,790
2019	9,444,790	-	716,193	-	908,669	9,637,266
2020	9,637,266	-	721,410	-	927,656	9,843,512
2021	9,843,512	-	760,980	-	946,302	10,028,834
2022	10,028,834	-	792,460	-	963,260	10,199,634
2023	10,199,634	-	858,500	-	977,038	10,318,172
2024	10,318,172	-	862,776	-	988,678	10,444,074
2025	10,444,074	-	865,715	-	1,001,122	10,579,481
2026	10,579,481	-	872,380	-	1,014,329	10,721,430
2027	10,721,430	-	866,589	-	1,028,814	10,883,655
2028	10,883,655	-	867,332	-	1,044,999	11,061,322
2029	11,061,322	-	890,577	-	1,061,603	11,232,348
2030	11,232,348	-	915,166	-	1,077,477	11,394,659
2031	11,394,659	-	917,577	-	1,093,587	11,570,669
2032	11,570,669	-	910,363	-	1,111,549	11,771,855
2033	11,771,855	-	901,690	-	1,132,101	12,002,266
2034	12,002,266	-	899,345	-	1,155,259	12,258,180
2035	12,258,180	-	894,842	-	1,181,076	12,544,414
2036	12,544,414	-	894,809	-	1,209,701	12,859,306
2037	12,859,306	-	887,416	-	1,241,560	13,213,450
2038	13,213,450	-	877,434	-	1,277,473	13,613,489
2039	13,613,489	-	860,584	-	1,318,320	14,071,225
2040	14,071,225	-	844,235	-	1,364,911	14,591,901
2041	14,591,901	-	829,364	-	1,417,722	15,180,259
2042	15,180,259	-	811,632	-	1,477,444	15,846,071
2043	15,846,071	-	791,948	-	1,545,010	16,599,133
2044	16,599,133	-	771,068	-	1,621,360	17,449,425
2045	17,449,425	-	748,829	-	1,707,501	18,408,097
2046	18,408,097	-	725,286	-	1,804,545	19,487,356
2047	19,487,356	-	701,018	-	1,913,685	20,700,023
2048	20,700,023	-	675,539	-	2,036,225	22,060,709
2049	22,060,709	-	649,106	-	2,173,616	23,585,219
2050	23,585,219	-	621,512	-	2,327,446	25,291,153
2051	25,291,153	-	592,751	-	2,499,478	27,197,880
2052	27,197,880	-	562,977	-	2,691,639	29,326,542
2053	29,326,542	-	532,188	-	2,906,045	31,700,399
2054	31,700,399	-	500,537	-	3,145,013	34,344,875
2055	34,344,875	-	467,963	-	3,411,089	37,288,001
2056	37,288,001	-	434,568	-	3,707,072	40,560,505
2057	40,560,505	-	400,582	-	4,036,021	44,195,944
2058	44,195,944	-	366,495	-	4,401,270	48,230,719
2059	48,230,719	-	333,117	-	4,806,416	52,704,018
2060	52,704,018	-	300,887	-	5,255,357	57,658,488
2061	57,658,488	-	270,138	-	5,752,342	63,140,692
2062	63,140,692	-	241,361	-	6,302,001	69,201,332
2063	69,201,332	-	214,825	-	6,909,392	75,895,899
2064	75,895,899	-	190,634	-	7,580,058	83,285,323
2065	83,285,323	-	169,144	-	8,320,075	91,436,254

PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 3
Hypothetical Assumptions: 10.00% 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
2066	91,436,254	-	150,216	-	9,136,115	100,422,153
2067	100,422,153	-	133,529	-	10,035,539	110,324,163
2068	110,324,163	-	118,935	-	11,026,470	121,231,698
2069	121,231,698	-	106,088	-	12,117,865	133,243,475
2070	133,243,475	-	94,686	-	13,319,613	146,468,402
2071	146,468,402	-	84,461	-	14,642,617	161,026,558
2072	161,026,558	-	75,169	-	16,098,897	177,050,286
2073	177,050,286	-	66,589	-	17,701,699	194,685,396
2074	194,685,396	-	58,571	-	19,465,611	214,092,436
2075	214,092,436	-	51,069	-	21,406,690	235,448,057
2076	235,448,057	-	44,157	-	23,542,598	258,946,498
2077	258,946,498	-	37,887	-	25,892,755	284,801,366
2078	284,801,366	-	32,213	-	28,478,526	313,247,679
2079	313,247,679	-	27,132	-	31,323,411	344,543,958
2080	344,543,958	-	22,608	-	34,453,265	378,974,615
2081	378,974,615	-	18,584	-	37,896,532	416,852,563
2082	416,852,563	-	15,068	-	41,684,503	458,521,998
2083	458,521,998	-	12,057	-	45,851,597	504,361,538
2084	504,361,538	-	9,497	-	50,435,679	554,787,720
2085	554,787,720	-	7,328	-	55,478,406	610,258,798
2086	610,258,798	-	5,546	-	61,025,603	671,278,855
2087	671,278,855	-	4,117	-	67,127,680	738,402,418
2088	738,402,418	-	2,991	-	73,840,092	812,239,519
2089	812,239,519	-	2,121	-	81,223,846	893,461,244
2090	893,461,244	-	1,465	-	89,346,051	982,805,830
2091	982,805,830	-	984	-	98,280,534	1,081,085,380
2092	1,081,085,380	-	644	-	108,108,506	1,189,193,242
2093	1,189,193,242	-	410	-	118,919,304	1,308,112,136
2094	1,308,112,136	-	254	-	130,811,201	1,438,923,083
2095	1,438,923,083	-	154	-	143,892,301	1,582,815,230
2096	1,582,815,230	-	94	-	158,281,518	1,741,096,654
2097	1,741,096,654	-	57	-	174,109,663	1,915,206,260
2098	1,915,206,260	-	35	-	191,520,624	2,106,726,849
2099	2,106,726,849	-	21	-	210,672,684	2,317,399,512
2100	2,317,399,512	-	13	-	231,739,951	2,549,139,450
2101	2,549,139,450	-	8	-	254,913,945	2,804,053,387
2102	2,804,053,387	-	5	-	280,405,338	3,084,458,720
2103	3,084,458,720	-	3	-	308,445,872	3,392,904,589
2104	3,392,904,589	-	2	-	339,290,459	3,732,195,046
2105	3,732,195,046	-	1	-	373,219,505	4,105,414,550
2106	4,105,414,550	-	1	-	410,541,455	4,515,956,004
2107	4,515,956,004	-	-	-	451,595,600	4,967,551,604

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 10.00% 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, 2018

Valuation Date: 10/1/2016

	ACTUAL	HYPOTHETICAL	
	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$576,959	\$880,338	\$345,021
Total Required Contribution (% of Payroll)	55.9%	85.5%	33.5%
Expected Member Contribution	20,609	20,609	20,609
Expected State Money	80,758	80,758	80,758
Expected Sponsor Contribution (Fixed \$)	\$475,592	\$778,971	\$243,654
Expected Sponsor Contribution (% of Payroll)	46.1%	75.7%	23.7%

ASSETS

Actuarial Value	8,996,639	8,996,639	8,996,639
Market Value	8,589,820	8,589,820	8,589,820

LIABILITIES

Present Value of Benefits			
Active Members			
Retirement Benefits	6,498,988	9,295,734	4,783,739
Disability Benefits	52,483	71,116	40,339
Death Benefits	71,401	93,369	55,749
Vested Benefits	198,024	335,305	122,934
Refund of Contributions	913	945	884
Service Retirees	4,797,821	5,841,082	4,052,847
Beneficiaries	354,017	421,861	303,801
Disability Retirees	157,013	187,917	134,285
Terminated Vested	255,133	346,662	196,015
Excess State Monies Reserve	191,759	191,759	191,759
Total:	12,577,552	16,785,750	9,882,352
Present Value of Future Salaries	6,665,944	7,436,336	6,044,768
Present Value of Future Member Contributions	133,319	148,727	120,895
Total Normal Cost	396,746	526,905	328,591
Present Value of Future Normal Costs (Entry Age Normal)	1,472,992	2,708,916	834,022
Total Actuarial Accrued Liability	10,011,025	12,983,301	7,954,796
Unfunded Actuarial Accrued Liability (UAAL)	1,014,386	3,986,662	(1,041,843)

ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR
ENDING SEPTEMBER 30, 2018

Valuation Date: 10/1/2016

	ACTUAL	HYPOTHETICAL	
	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
<u>PENSION COST</u>			
Normal Cost (with interest)	412,616	542,712	345,021
Administrative Expenses (with interest)	67,291	66,644	67,938
Payment Required To Amortize UAAL (with interest)	97,052	270,982	(79,329)
Total Required Contribution	\$576,959	\$880,338	\$345,021 ¹

¹ Per Florida Statutes, the Minimum Required Contribution may be no less than the Normal Cost.