

January 11, 2016

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, 2015 financial reporting requirements made under Section 112.664.

Our office will submit this information electronically to the Department of Management Services by the January 11, 2016 deadline. 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 #14-6595

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: 1/11/2016

Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #14-6595



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, 2015 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.

	ACTUAL	HYPOTHETICAL		
	8.00% RP-2000 Static 9/30/2015	8.00% RP-2000 Generational 9/30/2015	6.00% RP-2000 Generational 9/30/2015	10.00% RP-2000 Generational 9/30/2015
<u>GASB 67: Schedule of Changes in Net Pension Liability</u>				
<u>Total Pension Liability</u>				
Service Cost	255,726	268,944	428,005	173,703
Interest	767,473	798,859	773,188	798,047
Change in Excess State Money	18,674	18,674	18,674	18,674
Change in Funding Standard Account	-	-	-	-
Share Plan Allocation	-	-	-	-
Changes of Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	(206,235)	(220,083)	(287,448)	(174,638)
Changes of Assumptions	-	-	-	-
Contributions - Buy Back	-	-	-	-
Benefit Payments, Including Refunds of Employee Contributions	(401,380)	(401,380)	(401,380)	(401,380)
Net Change in Total Pension Liability	434,258	465,014	531,039	414,406
Total Pension Liability - Beginning	9,689,846	10,068,955	12,810,618	8,158,929
Total Pension Liability - Ending (a)	<u>\$ 10,124,104</u>	<u>\$ 10,533,969</u>	<u>\$ 13,341,657</u>	<u>\$ 8,573,335</u>
<u>Plan Fiduciary Net Position</u>				
Contributions - Employer	433,274	433,274	433,274	433,274
Contributions - State	104,779	104,779	104,779	104,779
Contributions - Employee	20,448	20,448	20,448	20,448
Contributions - Buy Back	-	-	-	-
Net Investment Income	(100,004)	(100,004)	(100,004)	(100,004)
Benefit Payments, Including Refunds of Employee Contributions	(401,380)	(401,380)	(401,380)	(401,380)
Administrative Expenses	(51,598)	(51,598)	(51,598)	(51,598)
Other	-	-	-	-
Net Change in Plan Fiduciary Net Position	5,519	5,519	5,519	5,519
Plan Fiduciary Net Position - Beginning	8,009,400	8,009,400	8,009,400	8,009,400
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,014,919</u>	<u>\$ 8,014,919</u>	<u>\$ 8,014,919</u>	<u>\$ 8,014,919</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,109,185</u>	<u>\$ 2,519,050</u>	<u>\$ 5,326,738</u>	<u>\$ 558,416</u>
<u>GASB 68: Pension Expense for Fiscal Year Ending September 30, 2015</u>				
Pension Expense	<u>\$ 297,743</u>	<u>\$ 339,030</u>	<u>\$ 590,790</u>	<u>\$ 126,044</u>

PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 1
Plan Assumptions: 8.00% and RP-2000 Static 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
2015	8,014,919	-	472,722	-	622,285	8,164,482
2016	8,164,482	-	513,003	-	632,638	8,284,117
2017	8,284,117	-	611,480	-	638,270	8,310,907
2018	8,310,907	-	616,641	-	640,207	8,334,473
2019	8,334,473	-	698,422	-	638,821	8,274,872
2020	8,274,872	-	702,916	-	633,873	8,205,829
2021	8,205,829	-	738,579	-	626,923	8,094,173
2022	8,094,173	-	766,661	-	616,867	7,944,379
2023	7,944,379	-	799,292	-	603,579	7,748,666
2024	7,748,666	-	828,894	-	586,738	7,506,510
2025	7,506,510	-	826,770	-	567,450	7,247,190
2026	7,247,190	-	832,984	-	546,456	6,960,662
2027	6,960,662	-	831,740	-	523,583	6,652,505
2028	6,652,505	-	829,521	-	499,020	6,322,004
2029	6,322,004	-	825,206	-	472,752	5,969,550
2030	5,969,550	-	866,677	-	442,897	5,545,770
2031	5,545,770	-	859,867	-	409,267	5,095,170
2032	5,095,170	-	848,457	-	373,675	4,620,388
2033	4,620,388	-	844,361	-	335,857	4,111,884
2034	4,111,884	-	833,301	-	295,619	3,574,202
2035	3,574,202	-	820,826	-	253,103	3,006,479
2036	3,006,479	-	807,107	-	208,234	2,407,606
2037	2,407,606	-	796,015	-	160,768	1,772,359
2038	1,772,359	-	777,107	-	110,704	1,105,956
2039	1,105,956	-	754,522	-	58,296	409,730
2040	409,730	-	728,509	-	-	-

Number of Years Expected Benefit Payments Sustained: 25.56

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: 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
2015	8,014,919	-	472,847	-	622,280	8,164,352
2016	8,164,352	-	513,462	-	632,610	8,283,500
2017	8,283,500	-	612,482	-	638,181	8,309,199
2018	8,309,199	-	618,195	-	640,008	8,331,012
2019	8,331,012	-	700,673	-	638,454	8,268,793
2020	8,268,793	-	705,923	-	633,267	8,196,137
2021	8,196,137	-	742,446	-	625,993	8,079,684
2022	8,079,684	-	771,512	-	615,514	7,923,686
2023	7,923,686	-	805,073	-	601,692	7,720,305
2024	7,720,305	-	836,042	-	584,183	7,468,446
2025	7,468,446	-	836,363	-	564,021	7,196,104
2026	7,196,104	-	845,186	-	541,881	6,892,799
2027	6,892,799	-	847,664	-	517,517	6,562,652
2028	6,562,652	-	848,012	-	491,092	6,205,732
2029	6,205,732	-	848,428	-	462,521	5,819,825
2030	5,819,825	-	893,619	-	429,841	5,356,047
2031	5,356,047	-	891,434	-	392,826	4,857,439
2032	4,857,439	-	885,029	-	353,194	4,325,604
2033	4,325,604	-	886,687	-	310,581	3,749,498
2034	3,749,498	-	881,383	-	264,705	3,132,820
2035	3,132,820	-	874,409	-	215,649	2,474,060
2036	2,474,060	-	866,814	-	163,252	1,770,498
2037	1,770,498	-	862,136	-	107,154	1,015,516
2038	1,015,516	-	849,711	-	47,253	213,058
2039	213,058	-	833,956	-	-	-

Number of Years Expected Benefit Payments Sustained: 24.26

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 3
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
2015	8,014,919	-	472,847	-	466,710	8,008,782
2016	8,008,782	-	513,462	-	465,123	7,960,443
2017	7,960,443	-	612,482	-	459,252	7,807,213
2018	7,807,213	-	618,195	-	449,887	7,638,905
2019	7,638,905	-	700,673	-	437,314	7,375,546
2020	7,375,546	-	705,923	-	421,355	7,090,978
2021	7,090,978	-	742,446	-	403,185	6,751,717
2022	6,751,717	-	771,512	-	381,958	6,362,163
2023	6,362,163	-	805,073	-	357,578	5,914,668
2024	5,914,668	-	836,042	-	329,799	5,408,425
2025	5,408,425	-	836,363	-	299,415	4,871,477
2026	4,871,477	-	845,186	-	266,933	4,293,224
2027	4,293,224	-	847,664	-	232,164	3,677,724
2028	3,677,724	-	848,012	-	195,223	3,024,935
2029	3,024,935	-	848,428	-	156,043	2,332,550
2030	2,332,550	-	893,619	-	113,144	1,552,075
2031	1,552,075	-	891,434	-	66,381	727,022
2032	727,022	-	885,029	-	-	-

Number of Years Expected Benefit Payments Sustained: 17.82

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 4
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
2015	8,014,919	-	472,847	-	777,850	8,319,922
2016	8,319,922	-	513,462	-	806,319	8,612,779
2017	8,612,779	-	612,482	-	830,654	8,830,951
2018	8,830,951	-	618,195	-	852,185	9,064,941
2019	9,064,941	-	700,673	-	871,460	9,235,728
2020	9,235,728	-	705,923	-	888,277	9,418,082
2021	9,418,082	-	742,446	-	904,686	9,580,322
2022	9,580,322	-	771,512	-	919,457	9,728,267
2023	9,728,267	-	805,073	-	932,573	9,855,767
2024	9,855,767	-	836,042	-	943,775	9,963,500
2025	9,963,500	-	836,363	-	954,532	10,081,669
2026	10,081,669	-	845,186	-	965,908	10,202,391
2027	10,202,391	-	847,664	-	977,856	10,332,583
2028	10,332,583	-	848,012	-	990,858	10,475,429
2029	10,475,429	-	848,428	-	1,005,122	10,632,123
2030	10,632,123	-	893,619	-	1,018,531	10,757,035
2031	10,757,035	-	891,434	-	1,031,132	10,896,733
2032	10,896,733	-	885,029	-	1,045,422	11,057,126
2033	11,057,126	-	886,687	-	1,061,378	11,231,817
2034	11,231,817	-	881,383	-	1,079,113	11,429,547
2035	11,429,547	-	874,409	-	1,099,234	11,654,372
2036	11,654,372	-	866,814	-	1,122,097	11,909,655
2037	11,909,655	-	862,136	-	1,147,859	12,195,378
2038	12,195,378	-	849,711	-	1,177,052	12,522,719
2039	12,522,719	-	833,956	-	1,210,574	12,899,337
2040	12,899,337	-	815,726	-	1,249,147	13,332,758
2041	13,332,758	-	798,442	-	1,293,354	13,827,670
2042	13,827,670	-	778,072	-	1,343,863	14,393,461
2043	14,393,461	-	755,596	-	1,401,566	15,039,431
2044	15,039,431	-	731,675	-	1,467,359	15,775,115
2045	15,775,115	-	706,108	-	1,542,206	16,611,213
2046	16,611,213	-	678,912	-	1,627,176	17,559,477
2047	17,559,477	-	650,082	-	1,723,444	18,632,839
2048	18,632,839	-	619,768	-	1,832,296	19,845,367
2049	19,845,367	-	587,830	-	1,955,145	21,212,682
2050	21,212,682	-	554,503	-	2,093,543	22,751,722
2051	22,751,722	-	520,025	-	2,249,171	24,480,868
2052	24,480,868	-	484,752	-	2,423,849	26,419,965
2053	26,419,965	-	449,318	-	2,619,531	28,590,178
2054	28,590,178	-	413,970	-	2,838,319	31,014,527
2055	31,014,527	-	378,766	-	3,082,514	33,718,275
2056	33,718,275	-	344,565	-	3,354,599	36,728,309
2057	36,728,309	-	311,729	-	3,657,244	40,073,824
2058	40,073,824	-	280,449	-	3,993,360	43,786,735
2059	43,786,735	-	251,045	-	4,366,121	47,901,811
2060	47,901,811	-	223,887	-	4,778,987	52,456,911
2061	52,456,911	-	199,388	-	5,235,722	57,493,245
2062	57,493,245	-	177,247	-	5,740,462	63,056,460
2063	63,056,460	-	157,289	-	6,297,782	69,196,953
2064	69,196,953	-	139,824	-	6,912,704	75,969,833
2065	75,969,833	-	124,338	-	7,590,766	83,436,261
2066	83,436,261	-	110,339	-	8,338,109	91,664,031

PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 4
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
2067	91,664,031	-	97,810	-	9,161,513	100,727,734
2068	100,727,734	-	86,477	-	10,068,450	110,709,707
2069	110,709,707	-	76,079	-	11,067,167	121,700,795
2070	121,700,795	-	66,613	-	12,166,749	133,800,931
2071	133,800,931	-	58,000	-	13,377,193	147,120,124
2072	147,120,124	-	50,162	-	14,709,504	161,779,466
2073	161,779,466	-	43,029	-	16,175,795	177,912,232
2074	177,912,232	-	36,566	-	17,789,395	195,665,061
2075	195,665,061	-	30,817	-	19,564,965	215,199,209
2076	215,199,209	-	25,683	-	21,518,637	236,692,163
2077	236,692,163	-	21,120	-	23,668,160	260,339,203
2078	260,339,203	-	17,180	-	26,033,061	286,355,084
2079	286,355,084	-	13,808	-	28,634,818	314,976,094
2080	314,976,094	-	10,918	-	31,497,064	346,462,240
2081	346,462,240	-	8,507	-	34,645,799	381,099,532
2082	381,099,532	-	6,555	-	38,109,625	419,202,602
2083	419,202,602	-	4,965	-	41,920,012	461,117,649
2084	461,117,649	-	3,687	-	46,111,581	507,225,543
2085	507,225,543	-	2,697	-	50,722,419	557,945,265
2086	557,945,265	-	1,930	-	55,794,430	613,737,765
2087	613,737,765	-	1,342	-	61,373,709	675,110,132
2088	675,110,132	-	916	-	67,510,967	742,620,183
2089	742,620,183	-	611	-	74,261,988	816,881,560
2090	816,881,560	-	395	-	81,688,136	898,569,301
2091	898,569,301	-	249	-	89,856,918	988,425,970
2092	988,425,970	-	155	-	98,842,589	1,087,268,404
2093	1,087,268,404	-	95	-	108,726,836	1,195,995,145
2094	1,195,995,145	-	58	-	119,599,512	1,315,594,599
2095	1,315,594,599	-	35	-	131,559,458	1,447,154,022
2096	1,447,154,022	-	22	-	144,715,401	1,591,869,401
2097	1,591,869,401	-	13	-	159,186,939	1,751,056,327
2098	1,751,056,327	-	8	-	175,105,632	1,926,161,951
2099	1,926,161,951	-	5	-	192,616,195	2,118,778,141
2100	2,118,778,141	-	3	-	211,877,814	2,330,655,952
2101	2,330,655,952	-	2	-	233,065,595	2,563,721,545
2102	2,563,721,545	-	1	-	256,372,154	2,820,093,698
2103	2,820,093,698	-	1	-	282,009,370	3,102,103,067
2104	3,102,103,067	-	-	-	310,210,307	3,412,313,374

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, 2017

Valuation Date: 10/1/2015

	ACTUAL	HYPOTHETICAL		
	8.00% RP-2000 Static	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$511,813	\$614,960	\$1,271,941	\$82,774
Total Required Contribution (% of Payroll)	49.5%	59.5%	123.1%	8.0%
Expected Member Contribution	20,658	20,658	20,658	20,658
Expected State Money	86,105	86,105	86,105	86,105
Expected Sponsor Contribution (Fixed \$)	\$405,050	\$508,197	\$1,165,178	\$0
Expected Sponsor Contribution (% of Payroll)	39.2%	49.2%	112.8%	0.0%

ASSETS

Actuarial Value	8,450,594	8,450,594	8,450,594	8,450,594
Market Value	8,014,919	8,014,919	8,014,919	8,014,919

LIABILITIES

Present Value of Benefits

Active Members

Retirement Benefits	6,118,499	6,448,554	9,420,393	4,641,633
Disability Benefits	63,280	66,938	93,997	49,906
Death Benefits	34,260	23,975	31,290	18,722
Vested Benefits	214,231	225,871	385,693	138,744
Refund of Contributions	980	980	1,002	960
Service Retirees	4,208,396	4,351,431	5,247,949	3,699,300
Beneficiaries	339,189	347,284	411,617	299,222
Disability Retirees	156,608	162,028	194,153	138,335
Terminated Vested	592,330	608,442	781,390	490,897
Excess State Monies Reserve	170,142	170,142	170,142	170,142
Total:	11,897,915	12,405,645	16,737,626	9,647,861

Present Value of Future Salaries	7,565,848	7,575,638	8,463,617	6,858,008
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Present Value of Future Member Contributions	151,317	151,513	169,272	137,160
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Total Normal Cost	378,630	447,365	929,091	78,832
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Present Value of Future Normal Costs (Entry Age Normal)	1,675,025	1,771,992	3,235,916	1,010,154
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Total Actuarial Accrued Liability	9,124,436	9,124,436	9,124,436	9,124,436
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Unfunded Actuarial Accrued Liability (UAAL)	673,842	1,084,604	3,952,659	(911,342)
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ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR
ENDING SEPTEMBER 30, 2017

Valuation Date: 10/1/2015

	ACTUAL	HYPOTHETICAL		
	8.00% RP-2000 Static	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
<u>PENSION COST</u>				
Normal Cost (with interest)	393,775	465,260	956,964	82,774
Administrative Expenses (with interest)	53,662	53,662	53,146	54,178
Payment Required To Amortize UAAL (with interest)	64,376	96,038	261,831	(73,037)
Total Required Contribution	\$511,813	\$614,960	\$1,271,941	\$82,774 ¹

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