## CITY OF BARTOW MUNICIPAL POLICE OFFICERS' RETIREMENT TRUST FUND

## SECTION 112.664, <u>FLORIDA STATUTES</u> 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: Date: 4/29/2015

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



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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, <u>Florida Statutes</u>, 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, 2014 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 <u>not</u> be interpreted as the number of years the Plan has left until it is insolvent. This calculation is required by 112.664, <u>Florida Statutes</u>, 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 AND RELATED RATIOS

	ACTUAL	HYPOTHETICAL			
	8.00% RP-2000 Static 9/30/2014	8.00% RP-2000 Generational 9/30/2014	6.00% RP-2000 Generational 9/30/2014	10.00% RP-2000 Generational 9/30/2014	
Total Pension Liability					
Service Cost	449,350	464,548	718,404	312,939	
Interest	1,386,713	1,430,414	1,374,746	1,443,181	
Change in Excess State Money	-	-	-	-	
Change in Funding Standard Account	-	-	-	-	
Share Plan Allocation	-	-	-	-	
Changes of Benefit Terms	=	-	-	=	
Differences Between Expected and Actual					
Experience	-	-	-	-	
Changes of Assumptions	-	-	-	-	
Contributions - Buy Back	-	-	-	-	
Benefit Payments, Including Refunds of					
Employee Contributions	(732,947)	(732,947)	(732,947)	(732,947)	
Net Change in Total Pension Liability	1,103,116	1,162,015	1,360,203	1,023,173	
Total Pension Liability - Beginning	17,310,187	17,841,258	22,619,659	14,544,497	
Total Pension Liability - Ending (a)	18,413,303	\$ 19,003,273	\$ 23,979,862	\$ 15,567,670	
Plan Fiduciary Net Position					
Contributions - Employer	826,291	826,291	826,291	826,291	
Contributions - State	118,257	118,257	118,257	118,257	
Contributions - Employee	71,421	71,421	71,421	71,421	
Contributions - Buy Back	-	71,721	-	71,121	
Net Investment Income	1,582,991	1,582,991	1,582,991	1,582,991	
Benefit Payments, Including Refunds of	1,502,551	1,302,771	1,502,771	1,302,771	
Employee Contributions	(732,947)	(732,947)	(732,947)	(732,947)	
Administrative Expense	(42,257)	(42,257)	(42,257)	(42,257)	
Other	-	(12,237)	-	(12,237)	
Net Change in Plan Fiduciary Net Position	1 922 757	1 922 757	1 922 757	1 922 757	
	1,823,757	1,823,757	1,823,757	1,823,757	
Plan Fiduciary Net Position - Beginning	14,034,743	14,034,743	14,034,743	14,034,743	
Plan Fiduciary Net Position - Ending (b)	\$ 15,858,500	\$ 15,858,500	\$ 15,858,500	\$ 15,858,500	
Net Pension Liability - Ending (a) - (b)	\$ 2,554,803	\$ 3,144,773	\$ 8,121,362	\$ (290,830)	

 $Table \ 1$  Plan Assumptions: 8.00% and RP-2000 Static Mortality

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Year	Projected Beginning	Projected Total	Projected Benefit	Projected	Projected Investment	Projected Ending
	Fiduciary Net Position	Contributions	Payments*	Administrative Expense	Earnings	Fiduciary Net Position
2014	15,858,500	-	1,067,284	-	1,225,989	16,017,205
2015	16,017,205	-	1,127,190	-	1,236,289	16,126,304
2016	16,126,304	-	1,144,433	-	1,244,327	16,226,198
2017	16,226,198	-	1,235,927	=	1,248,659	16,238,930
2018	16,238,930	-	1,383,300	=	1,243,782	16,099,412
2019	16,099,412	-	1,439,660	-	1,230,367	15,890,119
2020	15,890,119	-	1,471,789	-	1,212,338	15,630,668
2021	15,630,668	-	1,527,863	-	1,189,339	15,292,144
2022	15,292,144	-	1,553,091	-	1,161,248	14,900,301
2023	14,900,301	-	1,558,419	-	1,129,687	14,471,569
2024	14,471,569	-	1,581,360	-	1,094,471	13,984,680
2025	13,984,680	-	1,582,170	-	1,055,488	13,457,998
2026	13,457,998	-	1,594,620	-	1,012,855	12,876,233
2027	12,876,233	-	1,603,403	-	965,963	12,238,793
2028	12,238,793	-	1,603,251	-	914,973	11,550,515
2029	11,550,515	-	1,601,763	-	859,971	10,808,723
2030	10,808,723	-	1,595,688	-	800,870	10,013,905
2031	10,013,905	-	1,588,342	-	737,579	9,163,142
2032	9,163,142	-	1,582,483	-	669,752	8,250,411
2033	8,250,411	-	1,568,967	-	597,274	7,278,718
2034	7,278,718	-	1,546,444	-	520,440	6,252,714
2035	6,252,714	-	1,520,822	-	439,384	5,171,276
2036	5,171,276	-	1,490,900	-	354,066	4,034,442
2037	4,034,442	-	1,457,678	-	264,448	2,841,212
2038	2,841,212	-	1,421,430	-	170,440	1,590,222
2039	1,590,222	-	1,379,688	-	72,030	282,564
2040	282,564	-	1,335,553	-	-	-
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<sup>\*</sup>All DROP Balances paid in 2014.

Number of Years Expected Benefit Payments Sustained: 26.21

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 8.00% interest.

 $Table\ 2$  Hypothetical Assumptions: 8.00% and RP-2000 Generational Mortality

Year	Projected Beginning	Projected Total	Projected Benefit	Projected	Projected Investment	Projected Ending
i ear	Fiduciary Net Position	Contributions	Payments*	Administrative Expense	Earnings	Fiduciary Net Position
2014	15,858,500	-	1,067,469	=	1,225,981	16,017,012
2015	16,017,012	-	1,128,026	-	1,236,240	16,125,226
2016	16,125,226	=	1,145,950	-	1,244,180	16,223,456
2017	16,223,456	=	1,238,675	-	1,248,329	16,233,110
2018	16,233,110	=	1,387,242	-	1,243,159	16,089,027
2019	16,089,027	=	1,445,015	-	1,229,322	15,873,334
2020	15,873,334	-	1,478,728	-	1,210,718	15,605,324
2021	15,605,324	=	1,536,581	-	1,186,963	15,255,706
2022	15,255,706	-	1,563,826	-	1,157,903	14,849,783
2023	14,849,783	-	1,572,291	-	1,125,091	14,402,583
2024	14,402,583	-	1,598,695	-	1,088,259	13,892,147
2025	13,892,147	-	1,605,123	-	1,047,167	13,334,191
2026	13,334,191	-	1,621,882	-	1,001,860	12,714,169
2027	12,714,169	-	1,636,177	-	951,686	12,029,678
2028	12,029,678	-	1,642,828	-	896,661	11,283,511
2029	11,283,511	-	1,648,138	-	836,755	10,472,128
2030	10,472,128	-	1,648,928	-	771,813	9,595,013
2031	9,595,013	-	1,649,095	-	701,637	8,647,555
2032	8,647,555	-	1,651,029	-	625,763	7,622,289
2033	7,622,289	-	1,645,517	-	543,962	6,520,734
2034	6,520,734	-	1,631,612	-	456,394	5,345,516
2035	5,345,516	-	1,614,782	-	363,050	4,093,784
2036	4,093,784	-	1,594,048	-	263,741	2,763,477
2037	2,763,477	-	1,570,389	-	158,263	1,351,351
2038	1,351,351	-	1,543,907	-	-	-

<sup>\*</sup>All DROP Balances paid in 2014.

Number of Years Expected Benefit Payments Sustained: 24.88

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 8.00% interest.

Table 3
Hypothetical Assumptions: 6.00% and RP-2000 Generational Mortality

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
	•	Contributions		Administrative Expense		·
2014	15,858,500	-	1,067,469	-	919,486	15,710,517
2015	15,710,517	-	1,128,026	-	908,790	15,491,281
2016	15,491,281	-	1,145,950	-	895,098	15,240,429
2017	15,240,429	-	1,238,675	-	877,265	14,879,019
2018	14,879,019	-	1,387,242	-	851,124	14,342,901
2019	14,342,901	-	1,445,015	-	817,224	13,715,110
2020	13,715,110	-	1,478,728	-	778,545	13,014,927
2021	13,014,927	-	1,536,581	-	734,798	12,213,144
2022	12,213,144	-	1,563,826	-	685,874	11,335,192
2023	11,335,192	-	1,572,291	-	632,943	10,395,844
2024	10,395,844	-	1,598,695	-	575,790	9,372,939
2025	9,372,939	-	1,605,123	-	514,223	8,282,039
2026	8,282,039	-	1,621,882	-	448,266	7,108,423
2027	7,108,423	-	1,636,177	-	377,420	5,849,666
2028	5,849,666	-	1,642,828	-	301,695	4,508,533
2029	4,508,533	-	1,648,138	-	221,068	3,081,463
2030	3,081,463	-	1,648,928	-	135,420	1,567,955
2031	1,567,955	-	1,649,095	-	-	-

<sup>\*</sup>All DROP Balances paid in 2014.

Number of Years Expected Benefit Payments Sustained: 17.95

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 6.00% interest.

 $\label{thm:condition} Table~4$  Hypothetical Assumptions: 10.00% and RP-2000 Generational Mortality

	Projected Beginning	Projected Total	Projected Benefit	Projected	Projected Investment	Projected Ending
Year	Fiduciary Net Position	Contributions	Payments*	Administrative Expense	Earnings	Fiduciary Net Position
2014	15,858,500	-	1,067,469	-	1,532,477	16,323,508
2015	16,323,508	_	1,128,026	-	1,575,950	16,771,432
2016	16,771,432	-	1,145,950	-	1,619,846	17,245,328
2017	17,245,328	_	1,238,675	_	1,662,599	17,669,252
2018	17,669,252	-	1,387,242	-	1,697,563	17,979,573
2019	17,979,573	-	1,445,015	-	1,725,707	18,260,265
2020	18,260,265	-	1,478,728	-	1,752,090	18,533,627
2021	18,533,627	-	1,536,581	-	1,776,534	18,773,580
2022	18,773,580	-	1,563,826	-	1,799,167	19,008,921
2023	19,008,921	-	1,572,291	-	1,822,278	19,258,908
2024	19,258,908	-	1,598,695	-	1,845,956	19,506,169
2025	19,506,169	-	1,605,123	-	1,870,361	19,771,407
2026	19,771,407	-	1,621,882	-	1,896,047	20,045,572
2027	20,045,572	-	1,636,177	-	1,922,748	20,332,143
2028	20,332,143	=	1,642,828	-	1,951,073	20,640,388
2029	20,640,388	=	1,648,138	-	1,981,632	20,973,882
2030	20,973,882	-	1,648,928	-	2,014,942	21,339,896
2031	21,339,896	=	1,649,095	-	2,051,535	21,742,336
2032	21,742,336	-	1,651,029	-	2,091,682	22,182,989
2033	22,182,989	-	1,645,517	-	2,136,023	22,673,495
2034	22,673,495	-	1,631,612	-	2,185,769	23,227,652
2035	23,227,652	-	1,614,782	-	2,242,026	23,854,896
2036	23,854,896	-	1,594,048	-	2,305,787	24,566,635
2037	24,566,635	-	1,570,389	-	2,378,144	25,374,390
2038	25,374,390	-	1,543,907	-	2,460,244	26,290,727
2039	26,290,727	-	1,511,692	-	2,553,488	27,332,523
2040	27,332,523	-	1,476,797	-	2,659,412	28,515,138
2041	28,515,138	-	1,435,494	-	2,779,739	29,859,383
2042	29,859,383	-	1,391,941	-	2,916,341	31,383,783
2043	31,383,783	-	1,344,732	-	3,071,142	33,110,193
2044	33,110,193	-	1,293,309	-	3,246,354	35,063,238
2045	35,063,238	-	1,239,916	-	3,444,328	37,267,650
2046	37,267,650	-	1,185,376	-	3,667,496	39,749,770
2047	39,749,770	-	1,129,561	-	3,918,499	42,538,708
2048	42,538,708	-	1,073,317	-	4,200,205	45,665,596
2049	45,665,596	-	1,016,998	-	4,515,710	49,164,308
2050	49,164,308	-	960,818	-	4,868,390	53,071,880
2051	53,071,880	-	905,242	-	5,261,926	57,428,564
2052	57,428,564	-	850,635	-	5,700,325	62,278,254
2053	62,278,254	-	796,893	-	6,187,981	67,669,342
2054	67,669,342	-	744,073	-	6,729,731	73,655,000
2055	73,655,000	-	692,195	-	7,330,890	80,293,695
2056	80,293,695	-	641,411	-	7,997,299	87,649,583
2057	87,649,583	-	591,818	-	8,735,367	95,793,132
2058	95,793,132	-	543,412	-	9,552,143	104,801,863
2059	104,801,863	-	496,297	-	10,455,371	114,760,937
2060	114,760,937	-	450,554	-	11,453,566	125,763,949
2061	125,763,949	-	406,469	=	12,556,071	137,913,551
2062	137,913,551	-	364,094	=	13,773,150	151,322,607
2063	151,322,607	-	323,716	=	15,116,075	166,114,966
2064	166,114,966	-	285,702	-	16,597,212	182,426,476
2065	182,426,476	-	249,949	=	18,230,150	200,406,677
2066	200,406,677	-	216,542	-	20,029,841	220,219,976
2067	220,219,976	-	185,875	-	22,012,704	242,046,805

 $\label{thm:pothetical} Table \, 4$  Hypothetical Assumptions: 10.00% and RP-2000 Generational Mortality

Year	Projected Beginning	Projected Total	Projected Benefit	Projected	Projected Investment	Projected Ending
1 eai	Fiduciary Net Position	Contributions	Payments*	Administrative Expense	Earnings	Fiduciary Net Position
2068	242,046,805	-	158,095	-	24,196,776	266,085,486
2069	266,085,486	-	133,099	-	26,601,894	292,554,281
2070	292,554,281	-	111,003	-	29,249,878	321,693,156
2071	321,693,156	-	91,786	-	32,164,726	353,766,096
2072	353,766,096	-	75,258	-	35,372,847	389,063,685
2073	389,063,685	-	61,114	-	38,903,313	427,905,884
2074	427,905,884	-	49,224	-	42,788,127	470,644,787
2075	470,644,787	-	39,351	-	47,062,511	517,667,947
2076	517,667,947	-	31,182	-	51,765,236	569,402,001
2077	569,402,001	-	24,469	-	56,938,977	626,316,509
2078	626,316,509	-	19,070	-	62,630,697	688,928,136
2079	688,928,136	-	14,763	-	68,892,075	757,805,448
2080	757,805,448	-	11,339	-	75,779,978	833,574,087
2081	833,574,087	-	8,605	-	83,356,978	916,922,460
2082	916,922,460	-	6,466	-	91,691,923	1,008,607,917
2083	1,008,607,917	-	4,823	-	100,860,551	1,109,463,645
2084	1,109,463,645	-	3,550	-	110,946,187	1,220,406,282
2085	1,220,406,282	-	2,570	-	122,040,500	1,342,444,212
2086	1,342,444,212	-	1,839	-	134,244,329	1,476,686,702
2087	1,476,686,702	-	1,297	-	147,668,605	1,624,354,010
2088	1,624,354,010	-	900	-	162,435,356	1,786,788,466
2089	1,786,788,466	-	616	-	178,678,816	1,965,466,666
2090	1,965,466,666	-	417	-	196,546,646	2,162,012,895
2091	2,162,012,895	-	281	-	216,201,275	2,378,213,889
2092	2,378,213,889	-	188	-	237,821,380	2,616,035,081
2093	2,616,035,081	-	124	-	261,603,502	2,877,638,459
2094	2,877,638,459	-	81	-	287,763,842	3,165,402,220
2095	3,165,402,220	-	53	-	316,540,219	3,481,942,386
2096	3,481,942,386	-	35	-	348,194,237	3,830,136,588
2097	3,830,136,588	-	23	-	383,013,658	4,213,150,223
2098	4,213,150,223	-	15	-	421,315,022	4,634,465,230
2099	4,634,465,230	-	9	-	463,446,523	5,097,911,744
2100	5,097,911,744	-	5	-	509,791,174	5,607,702,913
2101	5,607,702,913	-	3	-	560,770,291	6,168,473,201
2102	6,168,473,201	-	2	=	616,847,320	6,785,320,519
2103	6,785,320,519	-	1	-	678,532,052	7,463,852,570
2104	7,463,852,570	-	1	=	746,385,257	8,210,237,826
2105	8,210,237,826	-	-	-	821,023,783	9,031,261,609

<sup>\*</sup>All DROP Balances paid in 2014.

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.

# ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR ENDING SEPTEMBER 30, 2016

Valuation Date: 10/1/2014

_	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	\$944,264	\$1,009,312	\$1,549,033	\$568,711	
Expected Member Contribution	72,226	72,226	72,226	72,226	
Expected State Money	118,257	118,257	118,257	118,257	
Expected Sponsor Contribution (Fixed \$)	\$753,781	\$818,829	\$1,358,550	\$378,228	
Expected Sponsor Contribution (% of Payroll)	41.8%	45.3%	75.3%	21.1%	
ASSETS					
Actuarial Value <sup>1</sup>	15,023,098	15,023,098	15,023,098	15,023,098	
Market Value <sup>1</sup>	15,858,500	15,858,500	15,858,500	15,858,500	
<u>LIABILITIES</u>					
Present Value of Benefits					
Active Members Retirement Benefits	8,220,030	8,509,601	11,941,635	6,357,314	
Disability Benefits	499,542	521,828	708,609	401,263	
Death Benefits	28,094	21,812	27,472	17,677	
Vested Benefits	781,627	801,317	1,184,182	569,798	
Refund of Contributions	16,840	16,842	17,467	16,263	
Service Retirees	7,451,405	7,673,580	9,353,750	6,471,766	
Beneficiaries	161,526	166,951	191,220	147,801	
Terminated Vested	524,951	543,634	702,146	434,956	
Disability Retirees	711,097	738,237	901,953	621,587	
DROP Retirees <sup>1</sup>	2,228,028	2,293,693	2,822,145	1,923,452	
Excess State Monies Reserve	59,155	59,155	59,155	59,155	
Total:	20,682,295	21,346,650	27,909,734	17,021,032	
Present Value of Future Salaries	9,555,606	9,564,148	10,377,417	8,882,247	
Present Value of Future					
Member Contributions	382,224	382,566	415,097	355,290	
Total Normal Cost (Entry Age Normal)	421,319	436,632	669,488	296,898	
Present Value of Future					
Normal Costs (Entry Age Normal)	2,233,661	2,323,723	3,851,089	1,470,611	
Total Actuarial Accrued Liability <sup>1</sup>	18,448,634	19,022,927	24,058,645	15,550,421	
Unfunded Actuarial Accrued Liability (Entry Age Normal)	3,425,536	3,999,829	9,035,547	527,323	

# ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR ENDING SEPTEMBER 30, 2016

Valuation Date: 10/1/2014

	ACTUAL			
	8.00% RP-2000 Static	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
PENSION COST				
Normal Cost (with interest)	438,172	454,097	689,573	311,743
Administrative Expenses (with interest)	43,947	43,947	43,525	44,370
Payment Required To Amortize UAAL (with interest)	462,145	511,268	815,935	212,598
Total Required Contribution	\$944,264	\$1,009,312	\$1,549,033	\$568,711

<sup>&</sup>lt;sup>1</sup> The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2014.