

BONITA SPRINGS FIRE CONTROL AND RESCUE DISTRICT  
GENERAL EMPLOYEES' RETIREMENT SYSTEM

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: Christine M. O'Neal Date: 1/22/2018

Christine M. O'Neal, EA, FSA, MAAA  
Enrolled Actuary #17-7916



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	
	7.60% RP-2000 Generational	5.60% RP-2000 Generational	9.60% RP-2000 Generational
<u>Total Pension Liability</u>			
Service Cost	96,000	146,735	66,010
Interest	274,131	261,543	277,600
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	170,358	171,901	160,908
Changes of Assumptions	43,486	64,240	30,753
Benefit Payments, Including Refunds of Employee Contributions	(225,134)	(225,134)	(225,134)
Net Change in Total Pension Liability	358,841	419,285	310,137
Total Pension Liability - Beginning	3,576,704	4,554,299	2,908,417
Total Pension Liability - Ending (a)	<u>\$ 3,935,545</u>	<u>\$ 4,973,584</u>	<u>\$ 3,218,554</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - Employer	165,512	165,512	165,512
Contributions - Employee	55,701	55,701	55,701
Net Investment Income	255,322	255,322	255,322
Benefit Payments, Including Refunds of Employee Contributions	(225,134)	(225,134)	(225,134)
Administrative Expenses	(12,933)	(12,933)	(12,933)
Net Change in Plan Fiduciary Net Position	238,468	238,468	238,468
Plan Fiduciary Net Position - Beginning	3,280,117	3,280,117	3,280,117
Plan Fiduciary Net Position - Ending (b)	<u>\$ 3,518,585</u>	<u>\$ 3,518,585</u>	<u>\$ 3,518,585</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 416,960</u>	<u>\$ 1,454,999</u>	<u>\$ (300,031)</u>

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

Table 1  
Plan Assumptions: 7.60% 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	3,511,424	-	255,962	-	257,142	3,512,604
2019	3,512,604	-	232,735	-	258,114	3,537,983
2020	3,537,983	-	239,444	-	259,788	3,558,327
2021	3,558,327	-	250,019	-	260,932	3,569,240
2022	3,569,240	-	274,890	-	260,816	3,555,166
2023	3,555,166	-	280,389	-	259,538	3,534,315
2024	3,534,315	-	288,924	-	257,629	3,503,020
2025	3,503,020	-	294,748	-	255,029	3,463,301
2026	3,463,301	-	299,214	-	251,841	3,415,928
2027	3,415,928	-	302,743	-	248,106	3,361,291
2028	3,361,291	-	292,806	-	244,331	3,312,816
2029	3,312,816	-	291,788	-	240,686	3,261,714
2030	3,261,714	-	293,105	-	236,752	3,205,361
2031	3,205,361	-	308,051	-	231,901	3,129,211
2032	3,129,211	-	303,976	-	226,269	3,051,504
2033	3,051,504	-	300,189	-	220,507	2,971,822
2034	2,971,822	-	295,730	-	214,621	2,890,713
2035	2,890,713	-	291,215	-	208,628	2,808,126
2036	2,808,126	-	287,395	-	202,497	2,723,228
2037	2,723,228	-	282,450	-	196,232	2,637,010
2038	2,637,010	-	276,683	-	189,899	2,550,226
2039	2,550,226	-	270,266	-	183,547	2,463,507
2040	2,463,507	-	263,176	-	177,226	2,377,557
2041	2,377,557	-	255,103	-	171,000	2,293,454
2042	2,293,454	-	247,169	-	164,910	2,211,195
2043	2,211,195	-	238,833	-	158,975	2,131,337
2044	2,131,337	-	230,204	-	153,234	2,054,367
2045	2,054,367	-	221,333	-	147,721	1,980,755
2046	1,980,755	-	212,119	-	142,477	1,911,113
2047	1,911,113	-	202,880	-	137,535	1,845,768
2048	1,845,768	-	193,537	-	132,924	1,785,155
2049	1,785,155	-	184,101	-	128,676	1,729,730
2050	1,729,730	-	174,725	-	124,820	1,679,825
2051	1,679,825	-	165,492	-	121,378	1,635,711
2052	1,635,711	-	156,456	-	118,369	1,597,624
2053	1,597,624	-	147,690	-	115,807	1,565,741
2054	1,565,741	-	139,265	-	113,704	1,540,180
2055	1,540,180	-	131,192	-	112,068	1,521,056
2056	1,521,056	-	123,516	-	110,907	1,508,447
2057	1,508,447	-	116,269	-	110,224	1,502,402
2058	1,502,402	-	109,377	-	110,026	1,503,051
2059	1,503,051	-	102,823	-	110,325	1,510,553
2060	1,510,553	-	96,546	-	111,133	1,525,140
2061	1,525,140	-	90,456	-	112,473	1,547,157
2062	1,547,157	-	84,422	-	114,376	1,577,111
2063	1,577,111	-	78,449	-	116,879	1,615,541
2064	1,615,541	-	72,528	-	120,025	1,663,038
2065	1,663,038	-	66,698	-	123,856	1,720,196
2066	1,720,196	-	61,046	-	128,415	1,787,565
2067	1,787,565	-	55,554	-	133,744	1,865,755
2068	1,865,755	-	50,242	-	139,888	1,955,401
2069	1,955,401	-	45,355	-	146,887	2,056,933

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

Table 1  
Plan Assumptions: 7.60% 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
2070	2,056,933	-	40,915	-	154,772	2,170,790
2071	2,170,790	-	36,880	-	163,579	2,297,489
2072	2,297,489	-	33,240	-	173,346	2,437,595
2073	2,437,595	-	29,920	-	184,120	2,591,795
2074	2,591,795	-	26,869	-	195,955	2,760,881
2075	2,760,881	-	23,999	-	208,915	2,945,797
2076	2,945,797	-	21,302	-	223,071	3,147,566
2077	3,147,566	-	18,734	-	238,503	3,367,335
2078	3,367,335	-	16,361	-	255,296	3,606,270
2079	3,606,270	-	14,164	-	273,538	3,865,644
2080	3,865,644	-	12,105	-	293,329	4,146,868
2081	4,146,868	-	10,172	-	314,775	4,451,471
2082	4,451,471	-	8,453	-	337,991	4,781,009
2083	4,781,009	-	6,953	-	363,092	5,137,148
2084	5,137,148	-	5,647	-	390,209	5,521,710
2085	5,521,710	-	4,526	-	419,478	5,936,662
2086	5,936,662	-	3,541	-	451,052	6,384,173
2087	6,384,173	-	2,718	-	485,094	6,866,549
2088	6,866,549	-	2,031	-	521,781	7,386,299
2089	7,386,299	-	1,477	-	561,303	7,946,125
2090	7,946,125	-	1,034	-	603,866	8,548,957
2091	8,548,957	-	708	-	649,694	9,197,943
2092	9,197,943	-	474	-	699,026	9,896,495
2093	9,896,495	-	312	-	752,122	10,648,305
2094	10,648,305	-	201	-	809,264	11,457,368
2095	11,457,368	-	127	-	870,755	12,327,996
2096	12,327,996	-	79	-	936,925	13,264,842
2097	13,264,842	-	48	-	1,008,126	14,272,920
2098	14,272,920	-	29	-	1,084,741	15,357,632
2099	15,357,632	-	18	-	1,167,179	16,524,793
2100	16,524,793	-	11	-	1,255,884	17,780,666
2101	17,780,666	-	6	-	1,351,330	19,131,990
2102	19,131,990	-	4	-	1,454,031	20,586,017
2103	20,586,017	-	2	-	1,564,537	22,150,552
2104	22,150,552	-	1	-	1,683,442	23,833,993
2105	23,833,993	-	-	-	1,811,383	25,645,376

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 7.60% 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: 5.60% 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	3,511,424	-	255,962	-	189,473	3,444,935
2019	3,444,935	-	232,735	-	186,400	3,398,600
2020	3,398,600	-	239,444	-	183,617	3,342,773
2021	3,342,773	-	250,019	-	180,195	3,272,949
2022	3,272,949	-	274,890	-	175,588	3,173,647
2023	3,173,647	-	280,389	-	169,873	3,063,131
2024	3,063,131	-	288,924	-	163,445	2,937,652
2025	2,937,652	-	294,748	-	156,256	2,799,160
2026	2,799,160	-	299,214	-	148,375	2,648,321
2027	2,648,321	-	302,743	-	139,829	2,485,407
2028	2,485,407	-	292,806	-	130,984	2,323,585
2029	2,323,585	-	291,788	-	121,951	2,153,748
2030	2,153,748	-	293,105	-	112,403	1,973,046
2031	1,973,046	-	308,051	-	101,865	1,766,860
2032	1,766,860	-	303,976	-	90,433	1,553,317
2033	1,553,317	-	300,189	-	78,580	1,331,708
2034	1,331,708	-	295,730	-	66,295	1,102,273
2035	1,102,273	-	291,215	-	53,573	864,631
2036	864,631	-	287,395	-	40,372	617,608
2037	617,608	-	282,450	-	26,677	361,835
2038	361,835	-	276,683	-	12,516	97,668
2039	97,668	-	270,266	-	-	-

Number of Years Expected Benefit Payments Sustained: 21.36

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 5.60% 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: 9.60% 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	3,511,424	-	255,962	-	324,811	3,580,273
2019	3,580,273	-	232,735	-	332,535	3,680,073
2020	3,680,073	-	239,444	-	341,794	3,782,423
2021	3,782,423	-	250,019	-	351,112	3,883,516
2022	3,883,516	-	274,890	-	359,623	3,968,249
2023	3,968,249	-	280,389	-	367,493	4,055,353
2024	4,055,353	-	288,924	-	375,446	4,141,875
2025	4,141,875	-	294,748	-	383,472	4,230,599
2026	4,230,599	-	299,214	-	391,775	4,323,160
2027	4,323,160	-	302,743	-	400,492	4,420,909
2028	4,420,909	-	292,806	-	410,353	4,538,456
2029	4,538,456	-	291,788	-	421,686	4,668,354
2030	4,668,354	-	293,105	-	434,093	4,809,342
2031	4,809,342	-	308,051	-	446,910	4,948,201
2032	4,948,201	-	303,976	-	460,436	5,104,661
2033	5,104,661	-	300,189	-	475,638	5,280,110
2034	5,280,110	-	295,730	-	492,696	5,477,076
2035	5,477,076	-	291,215	-	511,821	5,697,682
2036	5,697,682	-	287,395	-	533,183	5,943,470
2037	5,943,470	-	282,450	-	557,016	6,218,036
2038	6,218,036	-	276,683	-	583,651	6,525,004
2039	6,525,004	-	270,266	-	613,428	6,868,166
2040	6,868,166	-	263,176	-	646,711	7,251,701
2041	7,251,701	-	255,103	-	683,918	7,680,516
2042	7,680,516	-	247,169	-	725,465	8,158,812
2043	8,158,812	-	238,833	-	771,782	8,691,761
2044	8,691,761	-	230,204	-	823,359	9,284,916
2045	9,284,916	-	221,333	-	880,728	9,944,311
2046	9,944,311	-	212,119	-	944,472	10,676,664
2047	10,676,664	-	202,880	-	1,015,222	11,489,006
2048	11,489,006	-	193,537	-	1,093,655	12,389,124
2049	12,389,124	-	184,101	-	1,180,519	13,385,542
2050	13,385,542	-	174,725	-	1,276,625	14,487,442
2051	14,487,442	-	165,492	-	1,382,851	15,704,801
2052	15,704,801	-	156,456	-	1,500,151	17,048,496
2053	17,048,496	-	147,690	-	1,629,566	18,530,372
2054	18,530,372	-	139,265	-	1,772,231	20,163,338
2055	20,163,338	-	131,192	-	1,929,383	21,961,529
2056	21,961,529	-	123,516	-	2,102,378	23,940,391
2057	23,940,391	-	116,269	-	2,292,697	26,116,819
2058	26,116,819	-	109,377	-	2,501,965	28,509,407
2059	28,509,407	-	102,823	-	2,731,968	31,138,552
2060	31,138,552	-	96,546	-	2,984,667	34,026,673
2061	34,026,673	-	90,456	-	3,262,219	37,198,436
2062	37,198,436	-	84,422	-	3,566,998	40,681,012
2063	40,681,012	-	78,449	-	3,901,612	44,504,175
2064	44,504,175	-	72,528	-	4,268,919	48,700,566
2065	48,700,566	-	66,698	-	4,672,053	53,305,921
2066	53,305,921	-	61,046	-	5,114,438	58,359,313
2067	58,359,313	-	55,554	-	5,599,827	63,903,586
2068	63,903,586	-	50,242	-	6,132,333	69,985,677
2069	69,985,677	-	45,355	-	6,716,448	76,656,770

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

Table 3  
Hypothetical Assumptions: 9.60% 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
2070	76,656,770	-	40,915	-	7,357,086	83,972,941
2071	83,972,941	-	36,880	-	8,059,632	91,995,693
2072	91,995,693	-	33,240	-	8,829,991	100,792,444
2073	100,792,444	-	29,920	-	9,674,638	110,437,162
2074	110,437,162	-	26,869	-	10,600,678	121,010,971
2075	121,010,971	-	23,999	-	11,615,901	132,602,873
2076	132,602,873	-	21,302	-	12,728,853	145,310,424
2077	145,310,424	-	18,734	-	13,948,901	159,240,591
2078	159,240,591	-	16,361	-	15,286,311	174,510,541
2079	174,510,541	-	14,164	-	16,752,332	191,248,709
2080	191,248,709	-	12,105	-	18,359,295	209,595,899
2081	209,595,899	-	10,172	-	20,120,718	229,706,445
2082	229,706,445	-	8,453	-	22,051,413	251,749,405
2083	251,749,405	-	6,953	-	24,167,609	275,910,061
2084	275,910,061	-	5,647	-	26,487,095	302,391,509
2085	302,391,509	-	4,526	-	29,029,368	331,416,351
2086	331,416,351	-	3,541	-	31,815,800	363,228,610
2087	363,228,610	-	2,718	-	34,869,816	398,095,708
2088	398,095,708	-	2,031	-	38,217,090	436,310,767
2089	436,310,767	-	1,477	-	41,885,763	478,195,053
2090	478,195,053	-	1,034	-	45,906,675	524,100,694
2091	524,100,694	-	708	-	50,313,633	574,413,619
2092	574,413,619	-	474	-	55,143,685	629,556,830
2093	629,556,830	-	312	-	60,437,441	689,993,959
2094	689,993,959	-	201	-	66,239,410	756,233,168
2095	756,233,168	-	127	-	72,598,378	828,831,419
2096	828,831,419	-	79	-	79,567,812	908,399,152
2097	908,399,152	-	48	-	87,206,316	995,605,420
2098	995,605,420	-	29	-	95,578,119	1,091,183,510
2099	1,091,183,510	-	18	-	104,753,616	1,195,937,108
2100	1,195,937,108	-	11	-	114,809,962	1,310,747,059
2101	1,310,747,059	-	6	-	125,831,717	1,436,578,770
2102	1,436,578,770	-	4	-	137,911,562	1,574,490,328
2103	1,574,490,328	-	2	-	151,151,071	1,725,641,397
2104	1,725,641,397	-	1	-	165,661,574	1,891,302,970
2105	1,891,302,970	-	-	-	181,565,085	2,072,868,055

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 9.60% 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	
	7.60% RP-2000 Generational	5.60% RP-2000 Generational	9.60% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$184,242	\$297,773	\$91,290
Total Required Contribution (% of Payroll)	32.1%	51.9%	15.9%
Expected Member Contribution	40,134	40,134	40,134
Expected Sponsor Contribution (Fixed \$)	\$144,108	\$257,639	\$51,156
Expected Sponsor Contribution (% of Payroll)	25.1%	44.9%	8.9%

**ASSETS**

Actuarial Value	3,316,379	3,316,379	3,316,379
Market Value	3,511,424	3,511,424	3,511,424

**LIABILITIES**

Present Value of Benefits			
Active Members			
Retirement Benefits	2,402,748	3,390,766	1,791,842
Disability Benefits	38,414	51,055	29,857
Death Benefits	8,803	11,210	7,055
Vested Benefits	128,724	194,958	89,076
Refund of Contributions	10,944	11,298	10,614
Service Retirees	1,703,512	2,056,561	1,446,105
DROP Retirees	0	0	0
Beneficiaries	0	0	0
Disability Retirees	280,091	332,771	241,211
Terminated Vested	32,669	32,669	32,669
Total:	4,605,905	6,081,288	3,648,429
Present Value of Future Salaries	3,677,452	4,025,725	3,386,911
Present Value of Future Member Contributions	257,422	281,801	237,084
Total Normal Cost	97,177	147,449	66,938
Present Value of Future Normal Costs (Entry Age Normal)	627,042	1,049,883	394,477
Total Actuarial Accrued Liability	3,978,863	5,031,405	3,253,952
Unfunded Actuarial Accrued Liability (UAAL)	662,484	1,715,026	(62,427)

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

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.60% RP-2000 Generational	5.60% RP-2000 Generational	9.60% RP-2000 Generational
<b><u>PENSION COST</u></b>			
Normal Cost (with interest)	100,870	151,578	70,151
Administrative Expenses (with interest)	13,424	13,295	13,554
Payment Required To Amortize UAAL (with interest)	<b><u>69,948</u></b>	<b><u>132,900</u></b>	<b><u>7,585</u></b>
Total Required Contribution	\$184,242	\$297,773	\$91,290