

CITY OF AVON PARK
FIREFIGHTERS' 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: *Doug Lozen* Date: 7/3/2017

Douglas H. Lozen, EA, MAAA
Enrolled Actuary #17-7778



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	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
Total Pension Liability			
Service Cost	143,226	246,874	93,928
Interest	497,788	497,332	525,640
Change in Excess State Money	5,991	5,991	5,991
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	(60,536)	(66,051)	(79,783)
Changes of Assumptions	206,276	(119,546)	(75,496)
Benefit Payments, Including Refunds of Employee Contributions	(249,242)	(249,242)	(249,242)
Net Change in Total Pension Liability	543,503	315,358	221,038
Total Pension Liability - Beginning	6,480,133	8,602,664	5,497,529
Total Pension Liability - Ending (a)	<u>\$ 7,023,636</u>	<u>\$ 8,918,022</u>	<u>\$ 5,718,567</u>
Plan Fiduciary Net Position			
Contributions - Employer	372,661	372,661	372,661
Contributions - State	43,087	43,087	43,087
Contributions - Employee	29,590	29,590	29,590
Net Investment Income	327,142	327,142	327,142
Benefit Payments, Including Refunds of Employee Contributions	(249,242)	(249,242)	(249,242)
Administrative Expenses	(41,869)	(41,869)	(41,869)
Net Change in Plan Fiduciary Net Position	481,369	481,369	481,369
Plan Fiduciary Net Position - Beginning	4,820,917	4,820,917	4,820,917
Plan Fiduciary Net Position - Ending (b)	<u>\$ 5,302,286</u>	<u>\$ 5,302,286</u>	<u>\$ 5,302,286</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 1,721,350</u>	<u>\$ 3,615,736</u>	<u>\$ 416,281</u>

GASB 68: PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2016

	ACTUAL	HYPOTHETICAL	
	7.75%	5.75%	9.75%
Pension Expense	<u>\$ 338,419</u>	<u>\$ 505,171</u>	<u>\$ 250,460</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
2016	5,292,946	-	550,490	-	388,872	5,131,328
2017	5,131,328	-	436,713	-	380,755	5,075,370
2018	5,075,370	-	436,937	-	376,410	5,014,843
2019	5,014,843	-	437,197	-	371,709	4,949,355
2020	4,949,355	-	438,600	-	366,579	4,877,334
2021	4,877,334	-	440,069	-	360,941	4,798,206
2022	4,798,206	-	440,215	-	354,803	4,712,794
2023	4,712,794	-	437,280	-	348,297	4,623,811
2024	4,623,811	-	435,605	-	341,466	4,529,672
2025	4,529,672	-	439,603	-	334,015	4,424,084
2026	4,424,084	-	436,191	-	325,964	4,313,857
2027	4,313,857	-	453,935	-	316,734	4,176,656
2028	4,176,656	-	458,031	-	305,942	4,024,567
2029	4,024,567	-	452,989	-	294,351	3,865,929
2030	3,865,929	-	487,240	-	280,729	3,659,418
2031	3,659,418	-	481,104	-	264,962	3,443,276
2032	3,443,276	-	498,844	-	247,524	3,191,956
2033	3,191,956	-	495,833	-	228,163	2,924,286
2034	2,924,286	-	494,367	-	207,475	2,637,394
2035	2,637,394	-	494,397	-	185,240	2,328,237
2036	2,328,237	-	494,293	-	161,285	1,995,229
2037	1,995,229	-	499,291	-	135,283	1,631,221
2038	1,631,221	-	487,375	-	107,534	1,251,380
2039	1,251,380	-	476,443	-	78,520	853,457
2040	853,457	-	460,720	-	48,290	441,027
2041	441,027	-	448,411	-	-	-

*All DROP Balances paid in 2016.

Number of Years Expected Benefit Payments Sustained: 25.98

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
2016	5,292,946	-	550,490	-	288,518	5,030,974
2017	5,030,974	-	436,713	-	276,726	4,870,987
2018	4,870,987	-	436,937	-	267,520	4,701,570
2019	4,701,570	-	437,197	-	257,771	4,522,144
2020	4,522,144	-	438,600	-	247,414	4,330,958
2021	4,330,958	-	440,069	-	236,378	4,127,267
2022	4,127,267	-	440,215	-	224,662	3,911,714
2023	3,911,714	-	437,280	-	212,352	3,686,786
2024	3,686,786	-	435,605	-	199,467	3,450,648
2025	3,450,648	-	439,603	-	185,774	3,196,819
2026	3,196,819	-	436,191	-	171,277	2,931,905
2027	2,931,905	-	453,935	-	155,534	2,633,504
2028	2,633,504	-	458,031	-	138,258	2,313,731
2029	2,313,731	-	452,989	-	120,016	1,980,758
2030	1,980,758	-	487,240	-	99,885	1,593,403
2031	1,593,403	-	481,104	-	77,789	1,190,088
2032	1,190,088	-	498,844	-	54,088	745,332
2033	745,332	-	495,833	-	28,601	278,100
2034	278,100	-	494,367	-	-	-

*All DROP Balances paid in 2016.

Number of Years Expected Benefit Payments Sustained: 18.56

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
2016	5,292,946	-	550,490	-	489,226	5,231,682
2017	5,231,682	-	436,713	-	488,799	5,283,768
2018	5,283,768	-	436,937	-	493,867	5,340,698
2019	5,340,698	-	437,197	-	499,405	5,402,906
2020	5,402,906	-	438,600	-	505,402	5,469,708
2021	5,469,708	-	440,069	-	511,843	5,541,482
2022	5,541,482	-	440,215	-	518,834	5,620,101
2023	5,620,101	-	437,280	-	526,642	5,709,463
2024	5,709,463	-	435,605	-	535,437	5,809,295
2025	5,809,295	-	439,603	-	544,976	5,914,668
2026	5,914,668	-	436,191	-	555,416	6,033,893
2027	6,033,893	-	453,935	-	566,175	6,146,133
2028	6,146,133	-	458,031	-	576,919	6,265,021
2029	6,265,021	-	452,989	-	588,756	6,400,788
2030	6,400,788	-	487,240	-	600,324	6,513,872
2031	6,513,872	-	481,104	-	611,649	6,644,417
2032	6,644,417	-	498,844	-	623,512	6,769,085
2033	6,769,085	-	495,833	-	635,814	6,909,066
2034	6,909,066	-	494,367	-	649,534	7,064,233
2035	7,064,233	-	494,397	-	664,661	7,234,497
2036	7,234,497	-	494,293	-	681,267	7,421,471
2037	7,421,471	-	499,291	-	699,253	7,621,433
2038	7,621,433	-	487,375	-	719,330	7,853,388
2039	7,853,388	-	476,443	-	742,479	8,119,424
2040	8,119,424	-	460,720	-	769,184	8,427,888
2041	8,427,888	-	448,411	-	799,859	8,779,336
2042	8,779,336	-	433,227	-	834,865	9,180,974
2043	9,180,974	-	418,738	-	874,731	9,636,967
2044	9,636,967	-	402,928	-	919,962	10,154,001
2045	10,154,001	-	387,155	-	971,141	10,737,987
2046	10,737,987	-	371,196	-	1,028,858	11,395,649
2047	11,395,649	-	354,103	-	1,093,813	12,135,359
2048	12,135,359	-	337,629	-	1,166,738	12,964,468
2049	12,964,468	-	320,949	-	1,248,389	13,891,908
2050	13,891,908	-	304,221	-	1,339,630	14,927,317
2051	14,927,317	-	287,624	-	1,441,392	16,081,085
2052	16,081,085	-	271,206	-	1,554,684	17,364,563
2053	17,364,563	-	255,030	-	1,680,612	18,790,145
2054	18,790,145	-	239,163	-	1,820,380	20,371,362
2055	20,371,362	-	223,673	-	1,975,304	22,122,993
2056	22,122,993	-	208,840	-	2,146,811	24,060,964
2057	24,060,964	-	194,940	-	2,336,441	26,202,465
2058	26,202,465	-	181,982	-	2,545,869	28,566,352
2059	28,566,352	-	169,957	-	2,776,934	31,173,329
2060	31,173,329	-	158,816	-	3,031,657	34,046,170
2061	34,046,170	-	148,426	-	3,312,266	37,210,010
2062	37,210,010	-	138,689	-	3,621,215	40,692,536
2063	40,692,536	-	129,545	-	3,961,207	44,524,198
2064	44,524,198	-	120,896	-	4,335,216	48,738,518
2065	48,738,518	-	112,604	-	4,746,516	53,372,430

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
2066	53,372,430	-	104,642	-	5,198,711	58,466,499
2067	58,466,499	-	96,893	-	5,695,760	64,065,366
2068	64,065,366	-	89,260	-	6,242,022	70,218,128
2069	70,218,128	-	81,696	-	6,842,285	76,978,717
2070	76,978,717	-	74,162	-	7,501,810	84,406,365
2071	84,406,365	-	66,631	-	8,226,372	92,566,106
2072	92,566,106	-	59,142	-	9,022,312	101,529,276
2073	101,529,276	-	51,848	-	9,896,577	111,374,005
2074	111,374,005	-	44,804	-	10,856,781	122,185,982
2075	122,185,982	-	38,086	-	11,911,277	134,059,173
2076	134,059,173	-	31,841	-	13,069,217	147,096,549
2077	147,096,549	-	26,119	-	14,340,640	161,411,070
2078	161,411,070	-	21,018	-	15,736,555	177,126,607
2079	177,126,607	-	16,554	-	17,269,037	194,379,090
2080	194,379,090	-	12,719	-	18,951,341	213,317,712
2081	213,317,712	-	9,544	-	20,798,012	234,106,180
2082	234,106,180	-	6,992	-	22,825,012	256,924,200
2083	256,924,200	-	5,010	-	25,049,865	281,969,055
2084	281,969,055	-	3,491	-	27,491,813	309,457,377
2085	309,457,377	-	2,375	-	30,171,978	339,626,980
2086	339,626,980	-	1,567	-	33,113,554	372,738,967
2087	372,738,967	-	1,010	-	36,342,000	409,079,957
2088	409,079,957	-	631	-	39,885,265	448,964,591
2089	448,964,591	-	386	-	43,774,029	492,738,234
2090	492,738,234	-	232	-	48,041,967	540,779,969
2091	540,779,969	-	139	-	52,726,040	593,505,870
2092	593,505,870	-	83	-	57,866,818	651,372,605
2093	651,372,605	-	50	-	63,508,827	714,881,382
2094	714,881,382	-	30	-	69,700,933	784,582,285
2095	784,582,285	-	18	-	76,496,772	861,079,039
2096	861,079,039	-	11	-	83,955,206	945,034,234
2097	945,034,234	-	6	-	92,140,838	1,037,175,066
2098	1,037,175,066	-	4	-	101,124,569	1,138,299,631
2099	1,138,299,631	-	2	-	110,984,214	1,249,283,843
2100	1,249,283,843	-	1	-	121,805,175	1,371,089,017
2101	1,371,089,017	-	1	-	133,681,179	1,504,770,195
2102	1,504,770,195	-	-	-	146,715,094	1,651,485,289

*All DROP Balances paid in 2016.

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, 2018**

Valuation Date: 10/1/2016

	ACTUAL	HYPOTHETICAL	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$395,718	\$587,763	\$239,674
Total Required Contribution (% of Payroll)	70.2%	104.2%	42.5%
Expected Member Contribution	28,193	28,193	28,193
Expected State Money	37,096	37,096	37,096
Expected Sponsor Contribution (Fixed \$)	\$330,429	\$522,474	\$174,385
Expected Sponsor Contribution (% of Payroll)	58.6%	92.7%	30.9%

ASSETS

Actuarial Value ¹	5,544,065	5,544,065	5,544,065
Market Value ¹	5,292,946	5,292,946	5,292,946

LIABILITIES

Present Value of Benefits			
Active Members			
Retirement Benefits	3,374,706	5,062,718	2,372,122
Disability Benefits	32,217	45,194	23,880
Death Benefits	45,360	61,805	33,860
Vested Benefits	240,485	384,784	156,571
Refund of Contributions	0	0	0
Service Retirees	2,544,732	3,022,282	2,190,082
DROP Retirees ¹	1,258,301	1,519,886	1,077,342
Beneficiaries	0	0	0
Disability Retirees	0	0	0
Terminated Vested	202,090	268,740	160,353
Excess State Monies Reserve	81,652	81,652	81,652
Total:	7,779,543	10,447,061	6,095,862
Present Value of Future Salaries	4,677,023	5,274,997	4,187,708
Present Value of Future Member Contributions	233,851	263,750	209,385
Total Normal Cost	101,319	172,740	60,546
Present Value of Future Normal Costs (Entry Age Normal)	887,966	1,712,379	474,853
Total Actuarial Accrued Liability ¹	6,891,577	8,734,682	5,621,009
Unfunded Actuarial Accrued Liability (UAAL)	1,347,512	3,190,617	76,944

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

Valuation Date: 10/1/2016

	ACTUAL	HYPOTHETICAL	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
<u>PENSION COST</u>			
Normal Cost ²	107,398	183,104	64,179
Administrative Expenses ²	44,381	44,381	44,381
Payment Required To Amortize UAAL ²	243,939	360,278	131,114
Total Required Contribution	\$395,718	\$587,763	\$239,674

¹ The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2016.

² Contributions developed as of 10/1/2016 displayed above have been adjusted to account for assumed salary increases only, assuming a beginning-of-year lump sum deposit by the City.