

CITY OF SOUTH PASADENA
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: PT Donlan Date: 6/30/2016
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		
	7.75% RP-2000 Static 9/30/2015	7.75% RP-2000 Generational 9/30/2015	5.75% RP-2000 Generational 9/30/2015	9.75% RP-2000 Generational 9/30/2015
<u>GASB 67: Schedule of Changes in Net Pension Liability</u>				
<u>Total Pension Liability</u>				
Service Cost	121,564	127,373	197,564	84,682
Interest	634,381	657,336	597,556	694,209
Changes of Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	129,765	124,562	171,125	87,348
Changes of Assumptions	-	-	-	-
Benefit Payments, Including Refunds of Employee Contributions	(625,616)	(625,616)	(625,616)	(625,616)
Net Change in Total Pension Liability	260,094	283,655	340,629	240,623
Total Pension Liability - Beginning	8,392,248	8,682,639	10,522,969	7,363,663
Total Pension Liability - Ending (a)	<u>\$ 8,652,342</u>	<u>\$ 8,966,294</u>	<u>\$ 10,863,598</u>	<u>\$ 7,604,286</u>
<u>Plan Fiduciary Net Position</u>				
Contributions - Employer	286,491	286,491	286,491	286,491
Contributions - State	48,347	48,347	48,347	48,347
Contributions - Employee	42,620	42,620	42,620	42,620
Net Investment Income	(79,221)	(79,221)	(79,221)	(79,221)
Benefit Payments, Including Refunds of Employee Contributions	(625,616)	(625,616)	(625,616)	(625,616)
Administrative Expenses	(30,445)	(30,445)	(30,445)	(30,445)
Net Change in Plan Fiduciary Net Position	(357,824)	(357,824)	(357,824)	(357,824)
Plan Fiduciary Net Position - Beginning	6,598,999	6,598,999	6,598,999	6,598,999
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,241,175</u>	<u>\$ 6,241,175</u>	<u>\$ 6,241,175</u>	<u>\$ 6,241,175</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,411,167</u>	<u>\$ 2,725,119</u>	<u>\$ 4,622,423</u>	<u>\$ 1,363,111</u>

GASB 68: Pension Expense for Fiscal Year Ending September 30, 2015

Pension Expense	<u>\$ 213,727</u>	<u>\$ 239,761</u>	<u>\$ 343,455</u>	<u>\$ 137,796</u>
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PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 1
Plan Assumptions: 7.75% 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	6,234,794	-	1,273,369	-	433,853	5,395,278
2016	5,395,278	-	590,199	-	395,264	5,200,343
2017	5,200,343	-	587,278	-	380,270	4,993,335
2018	4,993,335	-	584,565	-	364,332	4,773,102
2019	4,773,102	-	607,647	-	346,369	4,511,824
2020	4,511,824	-	604,625	-	326,237	4,233,436
2021	4,233,436	-	601,046	-	304,801	3,937,191
2022	3,937,191	-	621,908	-	281,033	3,596,316
2023	3,596,316	-	613,911	-	254,925	3,237,330
2024	3,237,330	-	634,225	-	226,317	2,829,422
2025	2,829,422	-	624,353	-	195,087	2,400,156
2026	2,400,156	-	615,010	-	162,180	1,947,326
2027	1,947,326	-	628,209	-	126,575	1,445,692
2028	1,445,692	-	634,984	-	87,436	898,144
2029	898,144	-	619,674	-	45,594	324,064
2030	324,064	-	611,495	-	-	-

*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 15.53

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: 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
2015	6,234,794	-	1,273,619	-	433,844	5,395,019
2016	5,395,019	-	591,083	-	395,210	5,199,146
2017	5,199,146	-	588,861	-	380,115	4,990,400
2018	4,990,400	-	586,943	-	364,012	4,767,469
2019	4,767,469	-	610,884	-	345,807	4,502,392
2020	4,502,392	-	608,833	-	325,343	4,218,902
2021	4,218,902	-	606,340	-	303,469	3,916,031
2022	3,916,031	-	631,113	-	279,037	3,563,955
2023	3,563,955	-	624,997	-	251,988	3,190,946
2024	3,190,946	-	647,316	-	222,215	2,765,845
2025	2,765,845	-	639,790	-	189,561	2,315,616
2026	2,315,616	-	632,893	-	154,936	1,837,659
2027	1,837,659	-	648,731	-	117,280	1,306,208
2028	1,306,208	-	658,192	-	75,726	723,742
2029	723,742	-	646,331	-	31,045	108,456
2030	108,456	-	641,208	-	-	-

*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 15.17

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 3
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
2015	6,234,794	-	1,273,619	-	321,884	5,283,059
2016	5,283,059	-	591,083	-	286,782	4,978,758
2017	4,978,758	-	588,861	-	269,349	4,659,246
2018	4,659,246	-	586,943	-	251,032	4,323,335
2019	4,323,335	-	610,884	-	231,029	3,943,480
2020	3,943,480	-	608,833	-	209,246	3,543,893
2021	3,543,893	-	606,340	-	186,342	3,123,895
2022	3,123,895	-	631,113	-	161,479	2,654,261
2023	2,654,261	-	624,997	-	134,651	2,163,915
2024	2,163,915	-	647,316	-	105,815	1,622,414
2025	1,622,414	-	639,790	-	74,895	1,057,519
2026	1,057,519	-	632,893	-	42,612	467,238
2027	467,238	-	648,731	-	-	-

*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 12.72

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 4
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
2015	6,234,794	-	1,273,619	-	545,803	5,506,978
2016	5,506,978	-	591,083	-	508,115	5,424,010
2017	5,424,010	-	588,861	-	500,134	5,335,283
2018	5,335,283	-	586,943	-	491,577	5,239,917
2019	5,239,917	-	610,884	-	481,111	5,110,144
2020	5,110,144	-	608,833	-	468,558	4,969,869
2021	4,969,869	-	606,340	-	455,003	4,818,532
2022	4,818,532	-	631,113	-	439,040	4,626,459
2023	4,626,459	-	624,997	-	420,611	4,422,073
2024	4,422,073	-	647,316	-	399,595	4,174,352
2025	4,174,352	-	639,790	-	375,810	3,910,372
2026	3,910,372	-	632,893	-	350,408	3,627,887
2027	3,627,887	-	648,731	-	322,093	3,301,249
2028	3,301,249	-	658,192	-	289,785	2,932,842
2029	2,932,842	-	646,331	-	254,443	2,540,954
2030	2,540,954	-	641,208	-	216,484	2,116,230
2031	2,116,230	-	635,245	-	175,364	1,656,349
2032	1,656,349	-	617,749	-	131,379	1,169,979
2033	1,169,979	-	607,273	-	84,468	647,174
2034	647,174	-	591,881	-	34,245	89,538
2035	89,538	-	573,191	-	-	-

*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 20.16

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, 2017**

Valuation Date: 10/1/2015

	ACTUAL	HYPOTHETICAL		
	7.75% RP-2000 Static	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$391,545	\$425,495	\$613,053	\$267,137
Total Required Contribution (% of Payroll)	48.8%	53.0%	76.4%	33.3%
Expected Member Contribution	50,024	50,024	49,542	50,505
Expected State Money	48,347	48,347	48,347	48,347
Expected Sponsor Contribution (Fixed \$)	\$293,174	\$327,124	\$515,164	\$168,285
Expected Sponsor Contribution (% of Payroll)	36.5%	40.8%	64.2%	21.0%

ASSETS

Actuarial Value ¹	6,483,455	6,483,455	6,483,455	6,483,455
Market Value ¹	6,234,794	6,234,794	6,234,794	6,234,794

LIABILITIES

Present Value of Benefits				
Active Members				
Retirement Benefits	2,560,862	2,697,859	4,112,395	1,854,366
Disability Benefits	44,301	46,594	66,616	34,097
Death Benefits	23,737	15,910	21,708	11,920
Vested Benefits	295,317	311,451	504,556	201,331
Refund of Contributions	16,753	16,760	17,988	15,680
Service Retirees	2,460,849	2,551,990	3,007,635	2,208,461
DROP Retirees ¹	3,464,624	3,558,838	4,147,682	3,130,458
Beneficiaries	107,975	112,274	125,699	101,303
Disability Retirees	640,314	666,930	794,858	572,238
Terminated Vested	2,253	2,253	2,253	2,253
Excess State Monies Reserve	15,444	15,444	15,444	15,444
Total:	9,632,429	9,996,303	12,816,834	8,147,551
Present Value of Future Salaries	6,912,904	6,923,712	7,821,846	6,206,844
Present Value of Future Member Contributions	414,774	415,423	469,311	372,411
Total Normal Cost	131,258	137,877	216,185	90,433
Present Value of Future Normal Costs (Entry Age Normal)	1,129,175	1,191,469	2,132,719	693,389
Total Actuarial Accrued Liability ¹	8,503,254	8,804,834	10,684,115	7,454,162
Unfunded Actuarial Accrued Liability (UAAL)	2,019,799	2,321,379	4,200,660	970,707

ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR
ENDING SEPTEMBER 30, 2017

Valuation Date: 10/1/2015

	ACTUAL	HYPOTHETICAL		
	7.75% RP-2000 Static	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
<u>PENSION COST</u>				
Normal Cost ²	144,225	151,498	235,255	100,323
Administrative Expenses ²	33,453	33,453	33,131	33,775
Payment Required To Amortize UAAL ²	213,867	240,544	344,667	133,039
Total Required Contribution	\$391,545	\$425,495	\$613,053	\$267,137

¹ The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2015.

² Contributions developed as of 10/1/2015 displayed above have been adjusted to account for assumed salary increases and interest components.