

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: PA: Dh Date: 6/20/2017
Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #17-6595



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, 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
<u>Total Pension Liability</u>			
Service Cost	131,806	215,608	91,484
Interest	659,566	621,321	723,660
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual			
Experience	(203,988)	(253,764)	(198,575)
Changes of Assumptions	305,372	(3,002)	(31,691)
Benefit Payments, Including Refunds of			
Employee Contributions	(516,349)	(516,349)	(516,349)
Net Change in Total Pension Liability	376,407	63,814	68,529
Total Pension Liability - Beginning	8,652,342	10,863,598	7,604,286
Total Pension Liability - Ending (a)	<u>\$ 9,028,749</u>	<u>\$ 10,927,412</u>	<u>\$ 7,672,815</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - Employer	303,240	303,240	303,240
Contributions - State	50,450	50,450	50,450
Contributions - Employee	45,265	45,265	45,265
Net Investment Income	466,375	466,375	466,375
Benefit Payments, Including Refunds of			
Employee Contributions	(516,349)	(516,349)	(516,349)
Administrative Expenses	(40,775)	(40,775)	(40,775)
Net Change in Plan Fiduciary Net Position	308,206	308,206	308,206
Plan Fiduciary Net Position - Beginning	6,241,175	6,241,175	6,241,175
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,549,381</u>	<u>\$ 6,549,381</u>	<u>\$ 6,549,381</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,479,368</u>	<u>\$ 4,378,031</u>	<u>\$ 1,123,434</u>

GASB 68: PENSION EXPENSE

FISCAL YEAR SEPTEMBER 30, 2016

	ACTUAL	HYPOTHETICAL	
	7.75%	5.75%	9.75%
Pension Expense	<u>\$ 358,882</u>	<u>\$ 487,338</u>	<u>\$ 292,284</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	6,541,514	-	1,395,917	-	452,876	5,598,473
2017	5,598,473	-	590,810	-	410,988	5,418,651
2018	5,418,651	-	588,361	-	397,146	5,227,436
2019	5,227,436	-	615,737	-	381,266	4,992,965
2020	4,992,965	-	613,638	-	363,176	4,742,503
2021	4,742,503	-	611,178	-	343,861	4,475,186
2022	4,475,186	-	641,039	-	321,987	4,156,134
2023	4,156,134	-	634,746	-	297,504	3,818,892
2024	3,818,892	-	660,957	-	270,352	3,428,287
2025	3,428,287	-	653,590	-	240,366	3,015,063
2026	3,015,063	-	647,183	-	208,589	2,576,469
2027	2,576,469	-	665,830	-	173,875	2,084,514
2028	2,084,514	-	677,422	-	135,300	1,542,392
2029	1,542,392	-	664,947	-	93,769	971,214
2030	971,214	-	661,415	-	49,639	359,438
2031	359,438	-	656,979	-	-	-

*All DROP Balances paid in 2016.

Number of Years Expected Benefit Payments Sustained: 15.55

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	6,541,514	-	1,395,917	-	336,004	5,481,601
2017	5,481,601	-	590,810	-	298,206	5,188,997
2018	5,188,997	-	588,361	-	281,452	4,882,088
2019	4,882,088	-	615,737	-	263,018	4,529,369
2020	4,529,369	-	613,638	-	242,797	4,158,528
2021	4,158,528	-	611,178	-	221,544	3,768,894
2022	3,768,894	-	641,039	-	198,282	3,326,137
2023	3,326,137	-	634,746	-	173,004	2,864,395
2024	2,864,395	-	660,957	-	145,700	2,349,138
2025	2,349,138	-	653,590	-	116,285	1,811,833
2026	1,811,833	-	647,183	-	85,574	1,250,224
2027	1,250,224	-	665,830	-	52,745	637,139
2028	637,139	-	677,422	-	-	-

*All DROP Balances paid in 2016.

Number of Years Expected Benefit Payments Sustained: 12.94

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	6,541,514	-	1,395,917	-	569,747	5,715,344
2017	5,715,344	-	590,810	-	528,444	5,652,978
2018	5,652,978	-	588,361	-	522,483	5,587,100
2019	5,587,100	-	615,737	-	514,725	5,486,088
2020	5,486,088	-	613,638	-	504,979	5,377,429
2021	5,377,429	-	611,178	-	494,504	5,260,755
2022	5,260,755	-	641,039	-	481,673	5,101,389
2023	5,101,389	-	634,746	-	466,442	4,933,085
2024	4,933,085	-	660,957	-	448,754	4,720,882
2025	4,720,882	-	653,590	-	428,423	4,495,715
2026	4,495,715	-	647,183	-	406,782	4,255,314
2027	4,255,314	-	665,830	-	382,434	3,971,918
2028	3,971,918	-	677,422	-	354,238	3,648,734
2029	3,648,734	-	664,947	-	323,335	3,307,122
2030	3,307,122	-	661,415	-	290,200	2,935,907
2031	2,935,907	-	656,979	-	254,223	2,533,151
2032	2,533,151	-	637,927	-	215,883	2,111,107
2033	2,111,107	-	630,232	-	175,109	1,655,984
2034	1,655,984	-	614,865	-	131,484	1,172,603
2035	1,172,603	-	597,564	-	85,198	660,237
2036	660,237	-	579,548	-	36,120	116,809
2037	116,809	-	557,973	-	-	-

*All DROP Balances paid in 2016.

Number of Years Expected Benefit Payments Sustained: 21.21

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

	<u>ACTUAL</u>	<u>HYPOTHETICAL</u>	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$443,803	\$634,375	\$282,970
Total Required Contribution (% of Payroll)	53.4%	76.3%	34.0%
Expected Member Contribution	51,834	51,335	52,333
Expected State Money	50,450	50,450	50,450
Expected Sponsor Contribution (Fixed \$)	\$341,519	\$532,590	\$180,187
Expected Sponsor Contribution (% of Payroll)	41.1%	64.0%	21.7%
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<u>ASSETS</u>			
Actuarial Value ¹	6,744,861	6,744,861	6,744,861
Market Value ¹	6,541,514	6,541,514	6,541,514
<u>LIABILITIES</u>			
Present Value of Benefits			
Active Members			
Retirement Benefits	2,842,079	4,247,792	1,993,634
Disability Benefits	42,332	58,265	31,970
Death Benefits	56,796	77,089	42,779
Vested Benefits	302,209	483,216	198,166
Refund of Contributions	15,339	16,371	14,423
Service Retirees	3,241,745	3,861,236	2,783,776
DROP Retirees ¹	2,961,849	3,393,399	2,647,372
Beneficiaries	115,417	129,748	103,781
Disability Retirees	641,876	765,548	550,998
Terminated Vested	2,253	2,253	2,253
Excess State Monies Reserve	15,444	15,444	15,444
Total:	10,237,339	13,050,361	8,384,596
Present Value of Future Salaries	6,709,004	7,530,850	6,047,988
Present Value of Future Member Contributions	402,540	451,851	362,879
Total Normal Cost	137,714	216,098	90,340
Present Value of Future Normal Costs (Entry Age Normal)	1,101,293	1,962,453	644,115
Total Actuarial Accrued Liability ¹	9,136,046	11,087,908	7,740,481
Unfunded Actuarial Accrued Liability (UAAL)	2,391,185	4,343,047	995,620

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	150,260	233,515	99,519
Administrative Expenses ²	44,490	44,061	44,918
Payment Required To Amortize UAAL ²	249,053	356,799	138,533
Total Required Contribution	\$443,803	\$634,375	\$282,970

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 increase and interest components.