

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: Patrick T. Donlan Date: 7/1/2019  
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, 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	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
<u>Total Pension Liability</u>			
Service Cost	202,965	311,975	136,393
Interest	663,963	611,053	692,633
Change in Excess State Money	-	-	-
Share Plan Allocation	-	-	-
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	120,334	148,070	93,932
Changes of Assumptions	-	-	-
Benefit Payments, Including Refunds of Employee Contributions	(1,068,711)	(1,068,711)	(1,068,711)
Net Change in Total Pension Liability	(81,449)	2,387	(145,753)
Total Pension Liability - Beginning	8,898,652	10,849,395	7,501,890
Total Pension Liability - Ending (a)	<u>\$ 8,817,203</u>	<u>\$ 10,851,782</u>	<u>\$ 7,356,137</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - Employer	340,140	340,140	340,140
Contributions - State	44,493	44,493	44,493
Contributions - Employee	68,864	68,864	68,864
Net Investment Income	405,725	405,725	405,725
Benefit Payments, Including Refunds of Employee Contributions	(1,068,711)	(1,068,711)	(1,068,711)
Administrative Expenses	(38,136)	(38,136)	(38,136)
Net Change in Plan Fiduciary Net Position	(247,625)	(247,625)	(247,625)
Plan Fiduciary Net Position - Beginning	6,696,875	6,696,875	6,696,875
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,449,250</u>	<u>\$ 6,449,250</u>	<u>\$ 6,449,250</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,367,953</u>	<u>\$ 4,402,532</u>	<u>\$ 906,887</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
2018	6,448,720	-	604,235	-	476,362	6,320,847
2019	6,320,847	-	632,939	-	465,339	6,153,247
2020	6,153,247	-	631,884	-	452,391	5,973,754
2021	5,973,754	-	630,474	-	438,535	5,781,815
2022	5,781,815	-	675,976	-	421,897	5,527,736
2023	5,527,736	-	670,435	-	402,420	5,259,721
2024	5,259,721	-	703,330	-	380,374	4,936,765
2025	4,936,765	-	696,525	-	355,609	4,595,849
2026	4,595,849	-	690,974	-	329,403	4,234,278
2027	4,234,278	-	716,897	-	300,377	3,817,758
2028	3,817,758	-	730,673	-	267,563	3,354,648
2029	3,354,648	-	718,406	-	232,147	2,868,389
2030	2,868,389	-	718,010	-	194,477	2,344,856
2031	2,344,856	-	716,062	-	153,979	1,782,773
2032	1,782,773	-	696,469	-	111,177	1,197,481
2033	1,197,481	-	691,948	-	65,992	571,525
2034	571,525	-	680,521	-	-	-

\*All Share Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 16.84

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
2018	6,448,720	-	604,235	-	353,430	6,197,915
2019	6,197,915	-	632,939	-	338,183	5,903,159
2020	5,903,159	-	631,884	-	321,265	5,592,540
2021	5,592,540	-	630,474	-	303,445	5,265,511
2022	5,265,511	-	675,976	-	283,333	4,872,868
2023	4,872,868	-	670,435	-	260,915	4,463,348
2024	4,463,348	-	703,330	-	236,422	3,996,440
2025	3,996,440	-	696,525	-	209,770	3,509,685
2026	3,509,685	-	690,974	-	181,941	3,000,652
2027	3,000,652	-	716,897	-	151,927	2,435,682
2028	2,435,682	-	730,673	-	119,045	1,824,054
2029	1,824,054	-	718,406	-	84,229	1,189,877
2030	1,189,877	-	718,010	-	47,775	519,642
2031	519,642	-	716,062	-	-	-

\*All Share Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 13.73

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
2018	6,448,720	-	604,235	-	599,294	6,443,779
2019	6,443,779	-	632,939	-	597,413	6,408,253
2020	6,408,253	-	631,884	-	594,000	6,370,369
2021	6,370,369	-	630,474	-	590,375	6,330,270
2022	6,330,270	-	675,976	-	584,247	6,238,541
2023	6,238,541	-	670,435	-	575,574	6,143,680
2024	6,143,680	-	703,330	-	564,721	6,005,071
2025	6,005,071	-	696,525	-	551,539	5,860,085
2026	5,860,085	-	690,974	-	537,673	5,706,784
2027	5,706,784	-	716,897	-	521,463	5,511,350
2028	5,511,350	-	730,673	-	501,736	5,282,413
2029	5,282,413	-	718,406	-	480,013	5,044,020
2030	5,044,020	-	718,010	-	456,789	4,782,799
2031	4,782,799	-	716,062	-	431,415	4,498,152
2032	4,498,152	-	696,469	-	404,617	4,206,300
2033	4,206,300	-	691,948	-	376,382	3,890,734
2034	3,890,734	-	680,521	-	346,171	3,556,384
2035	3,556,384	-	662,503	-	314,450	3,208,331
2036	3,208,331	-	643,734	-	281,430	2,846,027
2037	2,846,027	-	621,517	-	247,189	2,471,699
2038	2,471,699	-	599,332	-	211,773	2,084,140
2039	2,084,140	-	581,979	-	174,832	1,676,993
2040	1,676,993	-	561,831	-	136,118	1,251,280
2041	1,251,280	-	542,953	-	95,531	803,858
2042	803,858	-	522,690	-	52,895	334,063
2043	334,063	-	499,578	-	-	-

\*All Share Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 25.67

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, 2020**

Valuation Date: 10/1/2018

	<u>ACTUAL</u>	<u>HYPOTHETICAL</u>	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
Minimum Required Contribution (Fixed \$)	\$592,709	\$852,237	\$385,961
Minimum Required Contribution (% of Payroll)	40.9%	58.8%	26.6%
Expected Member Contribution	90,413	89,543	91,284
Expected State Money	44,492	44,492	44,492
Expected Sponsor Contribution (Fixed \$)	\$457,804	\$718,202	\$250,185
Expected Sponsor Contribution (% of Payroll)	31.8%	49.7%	17.5%
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<b><u>ASSETS</u></b>			
Actuarial Value <sup>1</sup>	6,305,764	6,305,764	6,305,764
Market Value <sup>1</sup>	6,448,720	6,448,720	6,448,720
<b><u>LIABILITIES</u></b>			
Present Value of Benefits			
Active Members			
Retirement Benefits	4,467,315	6,795,034	3,109,634
Disability Benefits	65,919	93,696	48,494
Death Benefits	36,892	51,639	27,222
Vested Benefits	426,229	721,215	266,512
Refund of Contributions	38,592	42,224	35,407
Service Retirees	5,247,107	6,228,678	4,518,356
DROP Retirees <sup>1</sup>	0	0	0
Beneficiaries	108,229	120,721	97,966
Disability Retirees	626,138	742,312	539,911
Terminated Vested	0	0	0
Share Plan Balances <sup>1</sup>	7,722	7,722	7,722
Total:	<u>11,024,143</u>	<u>14,803,241</u>	<u>8,651,224</u>
Present Value of Future Salaries	12,486,467	14,308,993	11,064,281
Present Value of Future Member Contributions	749,188	858,540	663,857
Total Normal Cost	241,682	376,538	159,950
Present Value of Future Normal Costs (Entry Age Normal)	2,112,427	3,821,126	1,225,365
Total Actuarial Accrued Liability <sup>1</sup>	8,911,716	10,982,115	7,425,859
Unfunded Actuarial Accrued Liability (UAAL)	2,605,952	4,676,351	1,120,095

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

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.75% RP-2000 Generational	5.75% RP-2000 Generational	9.75% RP-2000 Generational
<b><u>PENSION COST</u></b>			
Normal Cost <sup>2</sup>	266,863	411,767	178,316
Administrative Expenses <sup>2</sup>	42,109	41,704	42,515
Payment Required To Amortize UAAL <sup>2</sup>	283,737	398,766	165,130
Minimum Required Contribution	\$592,709	\$852,237	\$385,961

<sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2018.

<sup>2</sup> Contributions developed as of 10/01/2018 displayed above have been adjusted to account for assumed salary increase and interest components.