CITY OF PALM COAST VOLUNTEER FIREFIGHTERS' RETIREMENT TRUST FUND

SECTION 112.664, FLORIDA STATUTES COMPLIANCE DETERMINED AS OF THE OCTOBER 1, 2019 VALUATION DATE



May 12, 2020

VIA E-MAIL

Ms. Ginger Norberg Accounting Technician Lead City of Palm Coast 160 Lake Avenue Palm Coast, FL 32164

Re: City of Palm Coast Volunteer Firefighters' Retirement Trust Fund

Section 112.664, Florida Statutes Compliance

Dear Ginger:

Please find enclosed the annual disclosures that satisfy the October 1, 2019 financial reporting requirements made under Section 112.664.

Our office will submit this information electronically to the Department of Management Services. However, it is important for you to be aware that this report must also be made available on the Plan or Plan Sponsor's website, if such website exists. A deadline for this website publication is not made clear in the law.

In addition to the enclosed report, the Plan or Plan Sponsor's website must provide a link to the Division of Retirement's Actuarial Summary Fact Sheet for the Plan, and also report the previous five years' assumed and actual rates of return, along with their respective asset allocations. The Board should contact its Investment Consultant for this information.

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.

If there are any questions, concerns, or comments about any of the items contained in this report, please feel free to contact me.

Respectfully submitted,

Foster & Foster, Inc.

By:

Douglas H. Lozen, EA, MAAA Enrolled Actuary #20-7778

Enclosures

cc via email: Pedro Herrera, Board Attorney

cc via email: Jessica A. De la Torre Vila, Legal Assistant

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, 2019 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 <u>not</u> 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, 2019

	ACTUAL		. <u></u>	HYPOTHETICAL			
		7.00% RP-2000 enerational		5.00% RP-2000 generational		9.00% RP-2000 enerational	
Total Pension Liability							
Service Cost		83,162		126,535		57,741	
Interest		189,732		159,293		215,298	
Share Plan Allocation		47,471		47,471		47,471	
Changes of Benefit Terms		-		-		-	
Differences Between Expected and Actual							
Experience		(123,444)		(145,463)		(117,274)	
Changes of Assumptions		-		-		-	
Contributions - Buy Back		-		-		-	
Benefit Payments, Including Refunds of							
Employee Contributions		(250,668)		(250,668)		(250,668)	
Net Change in Total Pension Liability		(53,747)		(62,832)		(47,432)	
Total Pension Liability - Beginning		3,053,773		3,485,807		2,760,937	
Total Pension Liability - Ending (a)	\$	3,000,026	\$	3,422,975	\$	2,713,505	
Plan Fiduciary Net Position							
Contributions - State		247,471		247,471		247,471	
Net Investment Income		217,265		217,265		217,265	
Benefit Payments, Including Refunds of							
Employee Contributions		(250,668)		(250,668)		(250,668)	
Administrative Expenses		(29,343)		(29,343)		(29,343)	
Net Change in Plan Fiduciary Net Position		184,725		184,725		184,725	
Plan Fiduciary Net Position - Beginning		4,396,693		4,396,693		4,396,693	
Plan Fiduciary Net Position - Ending (b)	\$	4,581,418	\$	4,581,418	\$	4,581,418	
Net Pension Liability - Ending (a) - (b)	\$	(1,581,392)	\$	(1,158,443)	\$	(1,867,913)	

Table 1 Plan Assumptions: 7.00% and RP-2000 Generational Mortality

2019	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
2020 3.885,863 146,810 266,872 4,005,925 2021 4,005,925 143,149 275,407 4,138,181 2022 4,138,181 155,136 284,243 4,267,288 2023 4,227,288 149,785 203,468 4,410,971 2024 4,410,971 144,332 303,716 4,570,355 2025 4,570,355 138,868 315,064 4,746,551 2026 4,746,551 133,755 327,777 4,940,373 2027 4,940,373 130,075 341,252 5,150,990 2028 5,150,950 132,947 355,913 5,373,916 2029 5,373,916 127,805 371,701 5,617,812 2030 5,617,812 131,829 388,633 5,874,616 2031 5,874,616 126,343 406,801 6,155,074 2032 6,155,074 119,077 426,687 6462,684 2033 6,462,684 118,204 448,251 6,792,731 2034 6,792,731 113,963 471,502 7,150,270 2035 7,150,270 110,350 496,657 7,536,577 2036 7,536,577 105,774 523,835 7,954,661 2037 7,934,661 101,024 533,290 8,406,927 2038 8,406,927 9,5970 585,126 8,896,683 2039 8,896,083 91,686 193,171 7,339,171 2041 9,993,101 8,82,46 696,603 10,066,458 2042 10,066,458 79,624 739,665 11,274,239 2044 11,477,411 71,038 835,932 12,742,391 2044 11,477,411 71,038 835,932 12,742,391 2045 12,742,305 75,263 12,23,259 18,690,752 2046 13,564,907 63,231 947,330 14,49,006 2047 14,49,006 60,289 10,93,201 13,98,037 2048 15,398,037 61,190 10,75,756 14,38,60 2049 14,476,005 13,564,907 20,41,410,40 2041 11,477,411 71,038 835,932 12,742,305 2045 12,742,305 57,263 12,23,259 18,690,752 2046 13,564,907 63,231 94,330 2049 16,416,604 75,366 14,45,737 2055 24,210,447 50,439 1,692,938 23,585,246 2050 17,503,756 57,263 1,223,259 18,690,752 2051 13,447,005 37,564 2,218,329 38,475,670 2066 25,855,546 44,105 44,105 44,105 2066 25,855,546 44,105 44,105 44,105 44,105 2066 50,281,666 28,361 3,518,7	2019	<u>4 581 418</u>	_	981 888		286 333	3 885 863
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2047 14,449,006 - 60,289 - 1,009,320 15,398,037 2048 15,398,037 - 60,190 - 1,075,756 16,413,603 2049 16,413,603 - 56,811 - 1,146,964 17,503,756 2050 17,503,756 - 57,263 - 1,223,259 18,669,752 2051 18,669,752 - 61,022 - 1,304,747 19,913,477 2052 19,913,477 - 58,084 - 1,391,910 21,247,303 2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 <td>2045</td> <td>12,742,305</td> <td>-</td> <td>67,014</td> <td>-</td> <td>889,616</td> <td>13,564,907</td>	2045	12,742,305	-	67,014	-	889,616	13,564,907
2048 15,398,037 - 60,190 - 1,075,756 16,413,603 2049 16,413,603 - 56,811 - 1,146,964 17,503,756 2050 17,503,756 - 57,263 - 1,223,259 18,669,752 2051 18,669,752 - 61,022 - 1,304,747 19,913,477 2052 19,913,477 - 58,084 - 1,391,910 21,247,303 2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 <td>2046</td> <td>13,564,907</td> <td>-</td> <td>63,231</td> <td>-</td> <td>947,330</td> <td>14,449,006</td>	2046	13,564,907	-	63,231	-	947,330	14,449,006
2049 16,413,603 - 56,811 - 1,146,964 17,503,756 2050 17,503,756 - 57,263 - 1,223,259 18,669,752 2051 18,669,752 - 61,022 - 1,304,747 19,913,477 2052 19,913,477 - 58,084 - 1,391,910 21,247,303 2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 <td>2047</td> <td>14,449,006</td> <td>-</td> <td>60,289</td> <td>-</td> <td>1,009,320</td> <td>15,398,037</td>	2047	14,449,006	-	60,289	-	1,009,320	15,398,037
2050 17,503,756 - 57,263 - 1,223,259 18,669,752 2051 18,669,752 - 61,022 - 1,304,747 19,913,477 2052 19,913,477 - 58,084 - 1,391,910 21,247,303 2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,518,329 38,475,670 <td>2048</td> <td>15,398,037</td> <td>-</td> <td>60,190</td> <td>-</td> <td>1,075,756</td> <td>16,413,603</td>	2048	15,398,037	-	60,190	-	1,075,756	16,413,603
2051 18,669,752 - 61,022 - 1,304,747 19,913,477 2052 19,913,477 - 58,084 - 1,391,910 21,247,303 2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 32,016 - 3,077,214	2049	16,413,603	-	56,811	-	1,146,964	17,503,756
2052 19,913,477 - 58,084 - 1,391,910 21,247,303 2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 <td>2050</td> <td>17,503,756</td> <td>-</td> <td>57,263</td> <td>-</td> <td>1,223,259</td> <td>18,669,752</td>	2050	17,503,756	-	57,263	-	1,223,259	18,669,752
2053 21,247,303 - 55,366 - 1,485,373 22,677,310 2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214	2051	18,669,752	-	61,022	-	1,304,747	19,913,477
2054 22,677,310 - 52,826 - 1,585,563 24,210,047 2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,518,329 38,475,670 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 30,186 - 3,290,442 50,281,666 2065 47,021,410 - 30,186 - 3,518,724	2052	19,913,477	-	58,084	-	1,391,910	21,247,303
2055 24,210,047 - 50,439 - 1,692,938 25,852,546 2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,763,114			-	55,366	-	1,485,373	22,677,310
2056 25,852,546 - 48,184 - 1,807,992 27,612,354 2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114	2054	22,677,310	-	52,826	-	1,585,563	24,210,047
2057 27,612,354 - 46,426 - 1,931,240 29,497,168 2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2069 61,508,693 - 22,885 - 4,304,808		24,210,047	-		-	1,692,938	25,852,546
2058 29,497,168 - 44,105 - 2,063,258 31,516,321 2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808	2056		-		-		27,612,354
2059 31,516,321 - 42,190 - 2,204,666 33,678,797 2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616	2057	27,612,354	-		-		
2060 33,678,797 - 40,008 - 2,356,116 35,994,905 2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616		29,497,168	-		-		
2061 35,994,905 - 37,564 - 2,518,329 38,475,670 2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616	2059	31,516,321	-		-	2,204,666	33,678,797
2062 38,475,670 - 35,705 - 2,692,047 41,132,012 2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
2063 41,132,012 - 33,856 - 2,878,056 43,976,212 2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616		35,994,905	-		-		
2064 43,976,212 - 32,016 - 3,077,214 47,021,410 2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
2065 47,021,410 - 30,186 - 3,290,442 50,281,666 2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
2066 50,281,666 - 28,361 - 3,518,724 53,772,029 2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
2067 53,772,029 - 26,504 - 3,763,114 57,508,639 2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
2068 57,508,639 - 24,687 - 4,024,741 61,508,693 2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
2069 61,508,693 - 22,885 - 4,304,808 65,790,616			-		-		
			-		-		
2070 65,790,616 - 21,123 - 4,604,604 70,374,097			-		-		
	2070	65,790,616	-	21,123	-	4,604,604	70,374,097

Table 1 Plan Assumptions: 7.00% 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
2071	70,374,097	-	19,424	-	4,925,507	75,280,180
2072	75,280,180	-	17,798	-	5,268,990	80,531,372
2073	80,531,372	-	16,260	-	5,636,627	86,151,739
2074	86,151,739	-	14,809	-	6,030,103	92,167,033
2075	92,167,033	-	13,437	-	6,451,222	98,604,818
2076	98,604,818	-	12,157	-	6,901,912	105,494,573
2077	105,494,573	-	10,952	-	7,384,237	112,867,858
2078	112,867,858	-	9,814	-	7,900,407	120,758,451
2079	120,758,451	-	8,740	-	8,452,786	129,202,497
2080	129,202,497	-	7,723	-	9,043,904	138,238,678
2081	138,238,678	-	6,756	-	9,676,471	147,908,393
2082	147,908,393	-	5,834	-	10,353,383	158,255,942
2083	158,255,942	-	4,963	-	11,077,742	169,328,721
2084	169,328,721	-	4,150	-	11,852,865	181,177,436
2085	181,177,436	-	3,399	-	12,682,302	193,856,339
2086	193,856,339	-	2,722	-	13,569,848	207,423,465
2087	207,423,465	-	2,142	_	14,519,568	221,940,891
2088	221,940,891	-	1,655	-	15,535,804	237,475,040
2089	237,475,040	-	1,255	_	16,623,209	254,096,994
2090	254,096,994	-	933	_	17,786,757	271,882,818
2091	271,882,818	-	678	-	19,031,774	290,913,914
2092	290,913,914	-	482	_	20,363,957	311,277,389
2093	311,277,389	-	335	-	21,789,406	333,066,460
2094	333,066,460	-	230	-	23,314,644	356,380,874
2095	356,380,874	-	154	-	24,946,656	381,327,376
2096	381,327,376	-	103	-	26,692,913	408,020,186
2097	408,020,186	-	68	-	28,561,411	436,581,529
2098	436,581,529	-	44	-	30,560,705	467,142,190
2099	467,142,190	-	28	-	32,699,952	499,842,114
2100	499,842,114	-	17	_	34,988,947	534,831,044
2101	534,831,044	-	10	_	37,438,173	572,269,207
2102	572,269,207	-	6	-	40,058,844	612,328,045
2103	612,328,045	_	4	-	42,862,963	655,191,004
2104	655,191,004	_	2	-	45,863,370	701,054,372
2105	701,054,372	_	1	-	49,073,806	750,128,177
2106	750,128,177	-	1	-	52,508,972	802,637,148
2107	802,637,148	-	-	-	56,184,600	858,821,748

^{*}All Share Balances paid in 2019.

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 7.00% 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.

 $\label{thm:continuous} Table~2$ Hypothetical Assumptions: 5.00% 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
2019	4,581,418	-	981,888	F	204,524	3,804,054
2020	3,804,054	_	146,810	_	186,532	3,843,776
2021	3,843,776	_	143,149	_	188,610	3,889,237
2022	3,889,237	_	155,136	_	190,583	3,924,684
2023	3,924,684	_	149,785	<u>-</u>	192,490	3,967,389
2024	3,967,389	_	144,332	_	194,761	4,017,818
2025	4,017,818	_	138,868	<u>-</u>	197,419	4,076,369
2026	4,076,369	_	133,755	_	200,475	4,143,089
2027	4,143,089	_	130,675	_	203,888	4,216,302
2028	4,216,302	_	132,947	_	207,491	4,290,846
2029	4,290,846	_	127,805	_	211,347	4,374,388
2030	4,374,388	_	131,829	_	215,424	4,457,983
2031	4,457,983	_	126,343	_	219,741	4,551,381
2032	4,551,381	_	119,077	_	224,592	4,656,896
2033	4,656,896	_	118,204	_	229,890	4,768,582
2034	4,768,582	_	113,963	<u>-</u>	235,580	4,890,199
2035	4,890,199	_	110,350	<u>-</u>	241,751	5,021,600
2036	5,021,600	_	105,774	<u>-</u>	248,436	5,164,262
2037	5,164,262	_	101,024	_	255,688	5,318,926
2038	5,318,926	_	95,970	-	263,547	5,486,503
2039	5,486,503	_	91,686	_	272,033	5,666,850
2040	5,666,850	_	87,427	-	281,157	5,860,580
2041	5,860,580	_	83,246	_	290,948	6,068,282
2042	6,068,282	_	79,624	_	301,424	6,290,082
2043	6,290,082	_	75,114	_	312,626	6,527,594
2044	6,527,594	_	71,038	_	324,604	6,781,160
2045	6,781,160	_	67,014	_	337,383	7,051,529
2046	7,051,529	_	63,231	_	350,996	7,339,294
2047	7,339,294	_	60,289	_	365,457	7,644,462
2048	7,644,462	_	60,190	-	380,718	7,964,990
2049	7,964,990	_	56,811	-	396,829	8,305,008
2050	8,305,008	_	57,263	-	413,819	8,661,564
2051	8,661,564	_	61,022	-	431,553	9,032,095
2052	9,032,095	_	58,084	_	450,153	9,424,164
2053	9,424,164	_	55,366	<u>-</u>	469,824	9,838,622
2054	9,838,622	_	52,826	_	490,610	10,276,406
2055	10,276,406	_	50,439	_	512,559	10,738,526
2056	10,738,526	_	48,184	_	535,722	11,226,064
2057	11,226,064	_	46,426	_	560,143	11,739,781
2058	11,739,781	_	44,105	_	585,886	12,281,562
2059	12,281,562	_	42,190	_	613,023	12,852,395
2060	12,852,395	_	40,008	_	641,620	13,454,007
2061	13,454,007	_	37,564	_	671,761	14,088,204
2062	14,088,204	_	35,705	_	703,518	14,756,017
2063	14,756,017	_	33,856	_	736,954	15,459,115
2064	15,459,115	_	32,016	-	772,155	16,199,254
2065	16,199,254	_	30,186	-	809,208	16,978,276
2066	16,978,276	_	28,361	-	848,205	17,798,120
2067	17,798,120	_	26,504	-	889,243	18,660,859
2068	18,660,859	_	24,687	-	932,426	19,568,598
2069	19,568,598	_	22,885	-	977,858	20,523,571
2070	20,523,571	-	21,123	-	1,025,650	21,528,098

Table 2
Hypothetical Assumptions: 5.00% 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
2071	21,528,098	-	19,424	-	1,075,919	22,584,593
2072	22,584,593	-	17,798	-	1,128,785	23,695,580
2073	23,695,580	-	16,260	-	1,184,373	24,863,693
2074	24,863,693	-	14,809	-	1,242,814	26,091,698
2075	26,091,698	-	13,437	-	1,304,249	27,382,510
2076	27,382,510	-	12,157	-	1,368,822	28,739,175
2077	28,739,175	-	10,952	-	1,436,685	30,164,908
2078	30,164,908	-	9,814	-	1,508,000	31,663,094
2079	31,663,094	-	8,740	-	1,582,936	33,237,290
2080	33,237,290	-	7,723	-	1,661,671	34,891,238
2081	34,891,238	-	6,756	-	1,744,393	36,628,875
2082	36,628,875	-	5,834	-	1,831,298	38,454,339
2083	38,454,339	-	4,963	-	1,922,593	40,371,969
2084	40,371,969	-	4,150	-	2,018,495	42,386,314
2085	42,386,314	-	3,399	-	2,119,231	44,502,146
2086	44,502,146	-	2,722	-	2,225,039	46,724,463
2087	46,724,463	-	2,142	-	2,336,170	49,058,491
2088	49,058,491	-	1,655	-	2,452,883	51,509,719
2089	51,509,719	-	1,255	-	2,575,455	54,083,919
2090	54,083,919	-	933	-	2,704,173	56,787,159
2091	56,787,159	-	678	-	2,839,341	59,625,822
2092	59,625,822	-	482	-	2,981,279	62,606,619
2093	62,606,619	-	335	-	3,130,323	65,736,607
2094	65,736,607	-	230	_	3,286,825	69,023,202
2095	69,023,202	-	154	_	3,451,156	72,474,204
2096	72,474,204	-	103	_	3,623,708	76,097,809
2097	76,097,809	-	68	-	3,804,889	79,902,630
2098	79,902,630	-	44	_	3,995,130	83,897,716
2099	83,897,716	-	28	_	4,194,885	88,092,573
2100	88,092,573	-	17	-	4,404,628	92,497,184
2101	92,497,184	-	10	-	4,624,859	97,122,033
2102	97,122,033	-	6	-	4,856,102	101,978,129
2103	101,978,129	-	4	-	5,098,906	107,077,031
2104	107,077,031	-	2	-	5,353,852	112,430,881
2105	112,430,881	_	1	-	5,621,544	118,052,424
2106	118,052,424	-	1	-	5,902,621	123,955,044
2107	123,955,044	-	-	-	6,197,752	130,152,796

^{*}All Share Balances paid in 2019.

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 5.00% 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.

 $\label{thm:continuous} Table~3$ Hypothetical Assumptions: 9.00% and RP-2000 Generational Mortality

Page Page	g tion
2020 3,967,673 - 146,810 - 350,484 4,171,3 2021 4,171,347 - 143,149 - 368,980 4,397,1 2022 4,397,178 - 155,136 - 388,765 4,630,87 2023 4,630,807 - 149,785 - 410,032 4,891,0 2024 4,891,054 - 144,332 - 433,700 5,180,4 2025 5,180,422 - 138,868 - 459,989 5,501,5 2026 5,501,543 - 133,755 - 489,120 5,856,99 2027 5,856,908 - 130,675 - 521,241 6,247,47 2028 6,247,474 - 132,947 - 556,290 6,670,8 2039 7,137,634 - 127,805 - 594,622 7,137,6 2031 7,642,260 - 126,343 - 682,118 8,198,0 2032 8,198,0	673
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2040 24,070,003 - 05,251 - 2,210,049 20,651,4	421
2047 26,831,421 - 60,289 - 2,412,115 29,183,2	247
2048 29,183,247 - 60,190 - 2,623,784 31,746,8	341
2049 31,746,841 - 56,811 - 2,854,659 34,544,6	589
2050 34,544,689 - 57,263 - 3,106,445 37,593,8	371
2051 37,593,871 - 61,022 - 3,380,702 40,913,5	551
2052 40,913,551 - 58,084 - 3,679,606 44,535,0)73
2053 44,535,073 - 55,366 - 4,005,665 48,485,3	372
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2055 52,793,852 - 50,439 - 4,749,177 57,492,5	
2056 57,492,590 - 48,184 - 5,172,165 62,616,5	
2057 62,616,571 - 46,426 - 5,633,402 68,203,5	
2058 68,203,547 - 44,105 - 6,136,335 74,295,7	
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2060 80,938,308 - 40,008 - 7,282,647 88,180,9	
2061 88,180,947 - 37,564 - 7,934,595 96,077,9	
2062 96,077,978 - 35,705 - 8,645,411 104,687,6	
2063 104,687,684 - 33,856 - 9,420,368 114,074,1	
2064 114,074,196 - 32,016 - 10,265,237 124,307,4	
2065 124,307,417 - 30,186 - 11,186,309 135,463,5	
2066 135,463,540 - 28,361 - 12,190,442 147,625,6	
2067 147,625,621 - 26,504 - 13,285,113 160,884,2	
2068 160,884,230 - 24,687 - 14,478,470 175,338,0	
2069 175,338,013 - 22,885 - 15,779,391 191,094,5	
2070 191,094,519 - 21,123 - 17,197,556 208,270,9	<i>1</i> 52

Table 3
Hypothetical Assumptions: 9.00% 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
2071	208,270,952	-	19,424	-	18,743,512	226,995,040
2072	226,995,040	-	17,798	-	20,428,753	247,405,995
2073	247,405,995	-	16,260	-	22,265,808	269,655,543
2074	269,655,543	-	14,809	-	24,268,332	293,909,066
2075	293,909,066	-	13,437	-	26,451,211	320,346,840
2076	320,346,840	-	12,157	-	28,830,669	349,165,352
2077	349,165,352	-	10,952	-	31,424,389	380,578,789
2078	380,578,789	-	9,814	-	34,251,649	414,820,624
2079	414,820,624	-	8,740	-	37,333,463	452,145,347
2080	452,145,347	-	7,723	-	40,692,734	492,830,358
2081	492,830,358	-	6,756	-	44,354,428	537,178,030
2082	537,178,030	-	5,834	-	48,345,760	585,517,956
2083	585,517,956	-	4,963	-	52,696,393	638,209,386
2084	638,209,386	-	4,150	-	57,438,658	695,643,894
2085	695,643,894	-	3,399	-	62,607,798	758,248,293
2086	758,248,293	-	2,722	_	68,242,224	826,487,795
2087	826,487,795	-	2,142	-	74,383,805	900,869,458
2088	900,869,458	-	1,655	-	81,078,177	981,945,980
2089	981,945,980	-	1,255	_	88,375,082	1,070,319,807
2090	1,070,319,807	-	933	-	96,328,741	1,166,647,615
2091	1,166,647,615	-	678	_	104,998,255	1,271,645,192
2092	1,271,645,192	-	482	_	114,448,046	1,386,092,756
2093	1,386,092,756	-	335	-	124,748,333	1,510,840,754
2094	1,510,840,754	-	230	_	135,975,658	1,646,816,182
2095	1,646,816,182	-	154	_	148,213,449	1,795,029,477
2096	1,795,029,477	-	103	-	161,552,648	1,956,582,022
2097	1,956,582,022	-	68	-	176,092,379	2,132,674,333
2098	2,132,674,333	-	44	-	191,940,688	2,324,614,977
2099	2,324,614,977	-	28	-	209,215,347	2,533,830,296
2100	2,533,830,296	-	17	-	228,044,726	2,761,875,005
2101	2,761,875,005	-	10	_	248,568,750	3,010,443,745
2102	3,010,443,745	-	6	-	270,939,937	3,281,383,676
2103	3,281,383,676	-	4	-	295,324,531	3,576,708,203
2104	3,576,708,203	-	2	-	321,903,738	3,898,611,939
2105	3,898,611,939	_	1	-	350,875,074	4,249,487,012
2106	4,249,487,012	-	1	-	382,453,831	4,631,940,842
2107	4,631,940,842	-	-	-	416,874,676	5,048,815,518

^{*}All Share Balances paid in 2019.

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 9.00% 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, 2021

Valuation Date: 10/1/2019

	ACTUAL	HYPOTHETICAL		
	7.00% RP-2000 Generational	5.00% RP-2000 Generational	9.00% RP-2000 Generational	
Minimum Required Contribution (Fixed \$)	\$86,230	\$126,048	\$61,974	
Expected State Money	200,000	200,000	200,000 \$0	
Expected Sponsor Contribution (Fixed \$)	\$0	\$0		
ASSETS				
Actuarial Value ¹	4,567,621	4,567,621	4,567,621	
Market Value ¹	4,581,418	4,581,418	4,581,418	
<u>LIABILITIES</u>				
Present Value of Benefits				
Active Members				
Retirement Benefits	861,483	1,221,732	637,701	
Disability Benefits	16,714	21,779	13,302	
Death Benefits	7,930	10,184	6,344	
Vested Benefits	126,908	222,007	77,454	
Refund of Contributions	0	0	0	
Service Retirees	1,083,583	1,245,403	958,983	
Beneficiaries	0	0	0	
Disability Retirees	0	0	0	
Terminated Vested	55,049	87,790	37,905	
Share Plan Balances ¹	846,779	846,779	846,779	
City Reserve ¹	301,147	301,147	301,147	
Total:	3,299,593	3,956,821	2,879,615	
Present Value of Future Salaries	0	0	0	
Present Value of Future				
Member Contributions	0	0	0	
Total Normal Cost	78,036	117,254	54,603	
Present Value of Future				
Normal Costs (Entry Age Normal)	325,361	555,705	202,322	
Total Actuarial Accrued Liability ¹	2,974,232	3,401,116	2,677,293	
Unfunded Actuarial Accrued Liability (UAAL)	(1,593,389)	(1,166,505)	(1,890,328)	

ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR ENDING SEPTEMBER 30, 2021

Valuation Date: 10/1/2019

	ACTUAL	НҮРОТЬ	IETICAL
	7.00% RP-2000 Generational	5.00% RP-2000 Generational	9.00% RP-2000 Generational
PENSION COST			
Normal Cost ²	86,230	126,048	61,974
Administrative Expenses ²	32,246	31,371	33,122
Payment Required To Amortize UAAL ²	(142,683)	(89,002)	(200,242)
Minimum Required Contribution	\$86,230 ³	\$126,048 ³	\$61,974 ³

¹ The asset values and liabilities include accumulated Share Plan Balances and City Reserve as of 9/30/2019.

² Contributions developed as of 10/1/2019 displayed above have been adjusted to account for a year and a half interest load.

³ Per Florida Statutes, the Minimum Required Contribution may be no less than the Normal Cost.