

CITY OF COCOA  
GENERAL EMPLOYEES' RETIREMENT PLAN

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:  Date: 4/18/2019  
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, 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	
	7.00% RP-2000 Generational	5.00% RP-2000 Generational	9.00% RP-2000 Generational
<u>Total Pension Liability</u>			
Service Cost	16,218	29,971	9,101
Interest	1,180,886	1,039,162	1,269,888
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	(353,443)	(379,493)	(331,502)
Changes of Assumptions	-	-	-
Benefit Payments, Including Refunds of Employee Contributions	(1,194,075)	(1,194,075)	(1,194,075)
Net Change in Total Pension Liability	(350,414)	(504,435)	(246,588)
Total Pension Liability - Beginning	17,450,618	21,350,300	14,697,807
Total Pension Liability - Ending (a)	<u>\$ 17,100,204</u>	<u>\$ 20,845,865</u>	<u>\$ 14,451,219</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - Employer	585,825	585,825	585,825
Contributions - Employee	3,954	3,954	3,954
Net Investment Income	1,525,741	1,525,741	1,525,741
Benefit Payments, Including Refunds of Employee Contributions	(1,194,075)	(1,194,075)	(1,194,075)
Administrative Expenses	(65,202)	(65,202)	(65,202)
Net Change in Plan Fiduciary Net Position	856,243	856,243	856,243
Plan Fiduciary Net Position - Beginning	13,731,230	13,731,230	13,731,230
Plan Fiduciary Net Position - Ending (b)	<u>\$ 14,587,473</u>	<u>\$ 14,587,473</u>	<u>\$ 14,587,473</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,512,731</u>	<u>\$ 6,258,392</u>	<u>\$ (136,254)</u>

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

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
2018	14,587,473	-	1,764,023	-	959,382	13,782,832
2019	13,782,832	-	1,340,329	-	917,887	13,360,390
2020	13,360,390	-	1,333,677	-	888,549	12,915,262
2021	12,915,262	-	1,328,051	-	857,587	12,444,798
2022	12,444,798	-	1,320,247	-	824,927	11,949,478
2023	11,949,478	-	1,313,010	-	790,508	11,426,976
2024	11,426,976	-	1,305,043	-	754,212	10,876,145
2025	10,876,145	-	1,294,844	-	716,011	10,297,312
2026	10,297,312	-	1,277,182	-	676,110	9,696,240
2027	9,696,240	-	1,261,712	-	634,577	9,069,105
2028	9,069,105	-	1,244,006	-	591,297	8,416,396
2029	8,416,396	-	1,224,353	-	546,295	7,738,338
2030	7,738,338	-	1,204,397	-	499,530	7,033,471
2031	7,033,471	-	1,183,726	-	450,913	6,300,658
2032	6,300,658	-	1,163,491	-	400,324	5,537,491
2033	5,537,491	-	1,142,102	-	347,651	4,743,040
2034	4,743,040	-	1,119,585	-	292,827	3,916,282
2035	3,916,282	-	1,096,033	-	235,779	3,056,028
2036	3,056,028	-	1,071,579	-	176,417	2,160,866
2037	2,160,866	-	1,046,349	-	114,638	1,229,155
2038	1,229,155	-	1,020,288	-	50,331	259,198
2039	259,198	-	993,336	-	-	-

\*All DROP Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 21.26

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.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

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
2018	14,587,473	-	1,764,023	-	685,273	13,508,723
2019	13,508,723	-	1,340,329	-	641,928	12,810,322
2020	12,810,322	-	1,333,677	-	607,174	12,083,819
2021	12,083,819	-	1,328,051	-	570,990	11,326,758
2022	11,326,758	-	1,320,247	-	533,332	10,539,843
2023	10,539,843	-	1,313,010	-	494,167	9,721,000
2024	9,721,000	-	1,305,043	-	453,424	8,869,381
2025	8,869,381	-	1,294,844	-	411,098	7,985,635
2026	7,985,635	-	1,277,182	-	367,352	7,075,805
2027	7,075,805	-	1,261,712	-	322,247	6,136,340
2028	6,136,340	-	1,244,006	-	275,717	5,168,051
2029	5,168,051	-	1,224,353	-	227,794	4,171,492
2030	4,171,492	-	1,204,397	-	178,465	3,145,560
2031	3,145,560	-	1,183,726	-	127,685	2,089,519
2032	2,089,519	-	1,163,491	-	75,389	1,001,417
2033	1,001,417	-	1,142,102	-	-	-

\*All DROP Balances paid in 2018.

Number of Years Expected Benefit Payments Sustained: 15.88

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.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

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
2018	14,587,473	-	1,764,023	-	1,233,492	14,056,942
2019	14,056,942	-	1,340,329	-	1,204,810	13,921,423
2020	13,921,423	-	1,333,677	-	1,192,913	13,780,659
2021	13,780,659	-	1,328,051	-	1,180,497	13,633,105
2022	13,633,105	-	1,320,247	-	1,167,568	13,480,426
2023	13,480,426	-	1,313,010	-	1,154,153	13,321,569
2024	13,321,569	-	1,305,043	-	1,140,214	13,156,740
2025	13,156,740	-	1,294,844	-	1,125,839	12,987,735
2026	12,987,735	-	1,277,182	-	1,111,423	12,821,976
2027	12,821,976	-	1,261,712	-	1,097,201	12,657,465
2028	12,657,465	-	1,244,006	-	1,083,192	12,496,651
2029	12,496,651	-	1,224,353	-	1,069,603	12,341,901
2030	12,341,901	-	1,204,397	-	1,056,573	12,194,077
2031	12,194,077	-	1,183,726	-	1,044,199	12,054,550
2032	12,054,550	-	1,163,491	-	1,032,552	11,923,611
2033	11,923,611	-	1,142,102	-	1,021,730	11,803,239
2034	11,803,239	-	1,119,585	-	1,011,910	11,695,564
2035	11,695,564	-	1,096,033	-	1,003,279	11,602,810
2036	11,602,810	-	1,071,579	-	996,032	11,527,263
2037	11,527,263	-	1,046,349	-	990,368	11,471,282
2038	11,471,282	-	1,020,288	-	986,502	11,437,496
2039	11,437,496	-	993,336	-	984,675	11,428,835
2040	11,428,835	-	965,640	-	985,141	11,448,336
2041	11,448,336	-	937,192	-	988,177	11,499,321
2042	11,499,321	-	907,825	-	994,087	11,585,583
2043	11,585,583	-	877,207	-	1,003,228	11,711,604
2044	11,711,604	-	845,006	-	1,016,019	11,882,617
2045	11,882,617	-	811,076	-	1,032,937	12,104,478
2046	12,104,478	-	775,229	-	1,054,518	12,383,767
2047	12,383,767	-	737,357	-	1,081,358	12,727,768
2048	12,727,768	-	697,506	-	1,114,111	13,144,373
2049	13,144,373	-	655,739	-	1,153,485	13,642,119
2050	13,642,119	-	612,116	-	1,200,245	14,230,248
2051	14,230,248	-	566,835	-	1,255,215	14,918,628
2052	14,918,628	-	520,726	-	1,319,244	15,717,146
2053	15,717,146	-	474,414	-	1,393,195	16,635,927
2054	16,635,927	-	428,359	-	1,477,957	17,685,525
2055	17,685,525	-	383,462	-	1,574,441	18,876,504
2056	18,876,504	-	340,274	-	1,683,573	20,219,803
2057	20,219,803	-	299,040	-	1,806,325	21,727,088
2058	21,727,088	-	260,226	-	1,943,728	23,410,590
2059	23,410,590	-	224,032	-	2,096,872	25,283,430
2060	25,283,430	-	190,327	-	2,266,944	27,360,047
2061	27,360,047	-	159,296	-	2,455,236	29,655,987
2062	29,655,987	-	131,389	-	2,663,126	32,187,724
2063	32,187,724	-	106,816	-	2,892,088	34,972,996
2064	34,972,996	-	85,778	-	3,143,710	38,030,928
2065	38,030,928	-	68,266	-	3,419,712	41,382,374
2066	41,382,374	-	53,768	-	3,721,994	45,050,600
2067	45,050,600	-	42,115	-	4,052,659	49,061,144

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

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
2068	49,061,144	-	32,801	-	4,414,027	53,442,370
2069	53,442,370	-	25,566	-	4,808,663	58,225,467
2070	58,225,467	-	19,983	-	5,239,393	63,444,877
2071	63,444,877	-	15,870	-	5,709,325	69,138,332
2072	69,138,332	-	12,873	-	6,221,871	75,347,330
2073	75,347,330	-	10,770	-	6,780,775	82,117,335
2074	82,117,335	-	9,302	-	7,390,142	89,498,175
2075	89,498,175	-	8,287	-	8,054,463	97,544,351
2076	97,544,351	-	7,589	-	8,778,650	106,315,412
2077	106,315,412	-	7,106	-	9,568,067	115,876,373
2078	115,876,373	-	6,766	-	10,428,569	126,298,176
2079	126,298,176	-	6,523	-	11,366,542	137,658,195
2080	137,658,195	-	6,338	-	12,388,952	150,040,809
2081	150,040,809	-	6,188	-	13,503,394	163,538,015
2082	163,538,015	-	6,060	-	14,718,149	178,250,104
2083	178,250,104	-	5,941	-	16,042,242	194,286,405
2084	194,286,405	-	5,820	-	17,485,515	211,766,100
2085	211,766,100	-	5,697	-	19,058,693	230,819,096
2086	230,819,096	-	5,573	-	20,773,468	251,586,991
2087	251,586,991	-	5,442	-	22,642,584	274,224,133
2088	274,224,133	-	5,306	-	24,679,933	298,898,760
2089	298,898,760	-	5,161	-	26,900,656	325,794,255
2090	325,794,255	-	5,007	-	29,321,258	355,110,506
2091	355,110,506	-	4,837	-	31,959,728	387,065,397
2092	387,065,397	-	4,641	-	34,835,677	421,896,433
2093	421,896,433	-	4,416	-	37,970,480	459,862,497
2094	459,862,497	-	4,161	-	41,387,437	501,245,773
2095	501,245,773	-	3,875	-	45,111,945	546,353,843
2096	546,353,843	-	3,560	-	49,171,686	595,521,969
2097	595,521,969	-	3,218	-	53,596,832	649,115,583
2098	649,115,583	-	2,856	-	58,420,274	707,533,001
2099	707,533,001	-	2,479	-	63,677,859	771,208,381
2100	771,208,381	-	2,093	-	69,408,660	840,614,948
2101	840,614,948	-	1,709	-	75,655,268	916,268,507
2102	916,268,507	-	1,360	-	82,464,104	998,731,251
2103	998,731,251	-	1,058	-	89,885,765	1,088,615,958
2104	1,088,615,958	-	797	-	97,975,400	1,186,590,561
2105	1,186,590,561	-	584	-	106,793,124	1,293,383,101
2106	1,293,383,101	-	412	-	116,404,461	1,409,787,150
2107	1,409,787,150	-	282	-	126,880,831	1,536,667,699
2108	1,536,667,699	-	184	-	138,300,085	1,674,967,600
2109	1,674,967,600	-	116	-	150,747,079	1,825,714,563
2110	1,825,714,563	-	70	-	164,314,308	1,990,028,801
2111	1,990,028,801	-	42	-	179,102,590	2,169,131,349
2112	2,169,131,349	-	25	-	195,221,820	2,364,353,144
2113	2,364,353,144	-	15	-	212,791,782	2,577,144,911
2114	2,577,144,911	-	9	-	231,943,042	2,809,087,944
2115	2,809,087,944	-	5	-	252,817,915	3,061,905,854
2116	3,061,905,854	-	3	-	275,571,527	3,337,477,378
2117	3,337,477,378	-	2	-	300,372,964	3,637,850,340

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

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
2118	3,637,850,340	-	1	-	327,406,531	3,965,256,870
2119	3,965,256,870	-	1	-	356,873,118	4,322,129,987
2120	4,322,129,987	-	-	-	388,991,699	4,711,121,686

\*All DROP Balances paid in 2018.

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, 2020

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.00% RP-2000 Generational	5.00% RP-2000 Generational	9.00% RP-2000 Generational
Minimum Required Contribution (Fixed \$)	\$345,907	\$556,526	\$127,035
Minimum Required Contribution (% of Payroll)	499.3%	803.4%	183.3%
Expected Member Contribution	3,706	3,637	3,775
Expected Sponsor Contribution (Fixed \$)	\$342,201	\$552,889	\$123,260
Expected Sponsor Contribution (% of Payroll)	494.3%	798.4%	178.3%

**ASSETS**

Actuarial Value <sup>1</sup>	14,331,345	14,331,345	14,331,345
Market Value <sup>1</sup>	14,587,473	14,587,473	14,587,473

**LIABILITIES**

Present Value of Benefits			
Active Members			
Retirement Benefits	846,296	1,110,729	672,467
Disability Benefits	1,764	2,105	1,515
Death Benefits	765	832	706
Vested Benefits	0	0	0
Refund of Contributions	0	0	0
Service Retirees	13,255,179	16,186,936	11,171,059
DROP Retirees <sup>1</sup>	1,647,454	1,975,760	1,427,090
Beneficiaries	885,457	1,071,117	749,236
Disability Retirees	51,428	61,601	44,052
Terminated Vested	0	0	0
Total:	16,688,343	20,409,080	14,066,125
Present Value of Future Salaries	69,273	69,273	69,273
Present Value of Future Member Contributions	3,464	3,464	3,464
Total Normal Cost	4,477	9,011	2,318
Present Value of Future Normal Costs (Entry Age Normal)	4,477	9,011	2,318
Total Actuarial Accrued Liability <sup>1</sup>	16,683,866	20,400,069	14,063,807
Unfunded Actuarial Accrued Liability (UAAL)	2,352,521	6,068,724	(267,538)

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

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.00% RP-2000 Generational	5.00% RP-2000 Generational	9.00% RP-2000 Generational
<b><u>PENSION COST</u></b>			
Normal Cost <sup>2</sup>	4,790	9,462	2,527
Administrative Expenses <sup>2</sup>	69,766	68,462	71,070
Payment Required To Amortize UAAL <sup>2</sup>	271,351	478,602	53,438
Minimum Required Contribution	\$345,907	\$556,526	\$127,035

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

<sup>2</sup> Contributions developed as of 10/1/2018 displayed above have been adjusted to account for assumed salary increase and interest components.