

May 21, 2019

VIA EMAIL

Ms. Ferrell Jenne, Plan Administrator  
West Manatee Fire and Rescue District  
Foster & Foster, Inc.  
2503 Del Prado Blvd. S., Suite 502  
Cape Coral, FL 33904

Re: West Manatee Fire and Rescue District Firefighters' Retirement Plan  
Section 112.664, Florida Statutes Compliance

Dear Ferrell:

Please find enclosed the annual disclosures that satisfy the October 1, 2018 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.

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: 

Patrick T. Donlan, EA, ASA, MAAA  
Enrolled Actuary #17-6595

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Enclosures

cc via email: Scott Christiansen, Board Attorney

WEST MANATEE FIRE AND RESCUE DISTRICT  
FIREFIGHTERS' 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: Patrick T. Donlan Date: 5/21/2019

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	
	7.70% RP-2000 Generational	5.70% RP-2000 Generational	9.70% RP-2000 Generational
<u>Total Pension Liability</u>			
Service Cost	923,439	1,481,376	606,843
Interest	1,236,466	1,324,278	1,128,987
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	51,654	216,034	(52,156)
Changes of Assumptions	143,229	234,587	92,014
Benefit Payments, Including Refunds of Employee Contributions	(66,096)	(66,096)	(66,096)
Net Change in Total Pension Liability	2,288,692	3,190,179	1,709,592
Total Pension Liability - Beginning	15,064,009	21,582,592	11,005,557
Total Pension Liability - Ending (a)	<u>\$ 17,352,701</u>	<u>\$ 24,772,771</u>	<u>\$ 12,715,149</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - Employer	737,268	737,268	737,268
Contributions - State	268,167	268,167	268,167
Contributions - Employee	80,255	80,255	80,255
Net Investment Income	1,139,517	1,139,517	1,139,517
Benefit Payments, Including Refunds of Employee Contributions	(66,096)	(66,096)	(66,096)
Administrative Expenses	(35,403)	(35,403)	(35,403)
Net Change in Plan Fiduciary Net Position	2,123,708	2,123,708	2,123,708
Plan Fiduciary Net Position - Beginning	14,802,186	14,802,186	14,802,186
Plan Fiduciary Net Position - Ending (b)	<u>\$ 16,925,894</u>	<u>\$ 16,925,894</u>	<u>\$ 16,925,894</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 426,807</u>	<u>\$ 7,846,877</u>	<u>\$ (4,210,745)</u>

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

Table 1  
Plan Assumptions: 7.70% 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	16,731,146	-	119,051	-	1,283,715	17,895,810
2019	17,895,810	-	290,953	-	1,366,776	18,971,633
2020	18,971,633	-	326,010	-	1,448,264	20,093,887
2021	20,093,887	-	360,509	-	1,533,350	21,266,728
2022	21,266,728	-	393,771	-	1,622,378	22,495,335
2023	22,495,335	-	418,481	-	1,716,029	23,792,883
2024	23,792,883	-	524,678	-	1,811,852	25,080,057
2025	25,080,057	-	642,601	-	1,906,424	26,343,880
2026	26,343,880	-	892,869	-	1,994,103	27,445,114
2027	27,445,114	-	943,560	-	2,076,947	28,578,501
2028	28,578,501	-	1,026,317	-	2,161,031	29,713,215
2029	29,713,215	-	1,058,882	-	2,247,151	30,901,484
2030	30,901,484	-	1,163,130	-	2,334,634	32,072,988
2031	32,072,988	-	1,213,194	-	2,422,912	33,282,706
2032	33,282,706	-	1,254,934	-	2,514,453	34,542,225
2033	34,542,225	-	1,288,820	-	2,610,132	35,863,537
2034	35,863,537	-	1,340,605	-	2,709,879	37,232,811
2035	37,232,811	-	1,364,373	-	2,814,398	38,682,836
2036	38,682,836	-	1,381,803	-	2,925,379	40,226,412
2037	40,226,412	-	1,422,385	-	3,042,672	41,846,699
2038	41,846,699	-	1,446,217	-	3,166,516	43,566,998
2039	43,566,998	-	1,477,506	-	3,297,775	45,387,267
2040	45,387,267	-	1,499,401	-	3,437,093	47,324,959
2041	47,324,959	-	1,524,403	-	3,585,332	49,385,888
2042	49,385,888	-	1,547,817	-	3,743,122	51,581,193
2043	51,581,193	-	1,569,888	-	3,911,311	53,922,616
2044	53,922,616	-	1,587,879	-	4,090,908	56,425,645
2045	56,425,645	-	1,606,052	-	4,282,942	59,102,535
2046	59,102,535	-	1,621,183	-	4,488,480	61,969,832
2047	61,969,832	-	1,633,057	-	4,708,804	65,045,579
2048	65,045,579	-	1,643,057	-	4,945,252	68,347,774
2049	68,347,774	-	1,649,413	-	5,199,276	71,897,637
2050	71,897,637	-	1,652,794	-	5,472,485	75,717,328
2051	75,717,328	-	1,652,892	-	5,766,598	79,831,034
2052	79,831,034	-	1,649,730	-	6,083,475	84,264,779
2053	84,264,779	-	1,643,398	-	6,425,117	89,046,498
2054	89,046,498	-	1,634,137	-	6,793,666	94,206,027
2055	94,206,027	-	1,621,958	-	7,191,419	99,775,488
2056	99,775,488	-	1,606,578	-	7,620,859	105,789,769
2057	105,789,769	-	1,587,946	-	8,084,676	112,286,499
2058	112,286,499	-	1,565,958	-	8,585,771	119,306,312
2059	119,306,312	-	1,540,004	-	9,127,296	126,893,604
2060	126,893,604	-	1,509,530	-	9,712,691	135,096,765
2061	135,096,765	-	1,474,323	-	10,345,689	143,968,131
2062	143,968,131	-	1,433,644	-	11,030,351	153,564,838
2063	153,564,838	-	1,386,616	-	11,771,108	163,949,330
2064	163,949,330	-	1,332,921	-	12,572,781	175,189,190
2065	175,189,190	-	1,272,333	-	13,440,583	187,357,440
2066	187,357,440	-	1,205,200	-	14,380,123	200,532,363
2067	200,532,363	-	1,132,778	-	15,397,380	214,796,965

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

Table 1  
Plan Assumptions: 7.70% 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	214,796,965	-	1,056,227	-	16,498,702	230,239,440
2069	230,239,440	-	976,783	-	17,690,831	246,953,488
2070	246,953,488	-	895,825	-	18,980,929	265,038,592
2071	265,038,592	-	813,896	-	20,376,637	284,601,333
2072	284,601,333	-	731,814	-	21,886,128	305,755,647
2073	305,755,647	-	652,158	-	23,518,077	328,621,566
2074	328,621,566	-	576,240	-	25,281,675	353,327,001
2075	353,327,001	-	504,553	-	27,186,754	380,009,202
2076	380,009,202	-	437,972	-	29,243,847	408,815,077
2077	408,815,077	-	376,353	-	31,464,271	439,902,995
2078	439,902,995	-	320,137	-	33,860,205	473,443,063
2079	473,443,063	-	269,117	-	36,444,755	509,618,701
2080	509,618,701	-	223,537	-	39,232,034	548,627,198
2081	548,627,198	-	183,118	-	42,237,244	590,681,324
2082	590,681,324	-	147,496	-	45,476,783	636,010,611
2083	636,010,611	-	117,320	-	48,968,300	684,861,591
2084	684,861,591	-	92,082	-	52,730,797	737,500,306
2085	737,500,306	-	71,188	-	56,784,783	794,213,901
2086	794,213,901	-	54,203	-	61,152,384	855,312,082
2087	855,312,082	-	40,629	-	65,857,466	921,128,919
2088	921,128,919	-	30,056	-	70,925,770	992,024,633
2089	992,024,633	-	21,891	-	76,385,054	1,068,387,796
2090	1,068,387,796	-	15,807	-	82,265,252	1,150,637,241
2091	1,150,637,241	-	11,263	-	88,598,634	1,239,224,612
2092	1,239,224,612	-	8,013	-	95,419,987	1,334,636,586
2093	1,334,636,586	-	5,680	-	102,766,798	1,437,397,704
2094	1,437,397,704	-	4,004	-	110,679,469	1,548,073,169
2095	1,548,073,169	-	2,803	-	119,201,526	1,667,271,892
2096	1,667,271,892	-	1,956	-	128,379,860	1,795,649,796
2097	1,795,649,796	-	1,364	-	138,264,982	1,933,913,414
2098	1,933,913,414	-	945	-	148,911,296	2,082,823,765
2099	2,082,823,765	-	654	-	160,377,405	2,243,200,516
2100	2,243,200,516	-	452	-	172,726,422	2,415,926,486
2101	2,415,926,486	-	309	-	186,026,328	2,601,952,505
2102	2,601,952,505	-	210	-	200,350,335	2,802,302,630
2103	2,802,302,630	-	141	-	215,777,297	3,018,079,786
2104	3,018,079,786	-	94	-	232,392,140	3,250,471,832
2105	3,250,471,832	-	60	-	250,286,329	3,500,758,101
2106	3,500,758,101	-	37	-	269,558,372	3,770,316,436
2107	3,770,316,436	-	24	-	290,314,365	4,060,630,777
2108	4,060,630,777	-	15	-	312,668,569	4,373,299,331
2109	4,373,299,331	-	9	-	336,744,048	4,710,043,370
2110	4,710,043,370	-	6	-	362,673,339	5,072,716,703
2111	5,072,716,703	-	3	-	390,599,186	5,463,315,886
2112	5,463,315,886	-	2	-	420,675,323	5,883,991,207
2113	5,883,991,207	-	1	-	453,067,323	6,337,058,529

PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 1  
Plan Assumptions: 7.70% 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
2114	6,337,058,529	-	1	-	487,953,507	6,825,012,035
2115	6,825,012,035	-	-	-	525,525,927	7,350,537,962

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 7.70% 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: 5.70% 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	16,731,146	-	119,051	-	950,282	17,562,377
2019	17,562,377	-	290,953	-	992,763	18,264,187
2020	18,264,187	-	326,010	-	1,031,767	18,969,944
2021	18,969,944	-	360,509	-	1,071,012	19,680,447
2022	19,680,447	-	393,771	-	1,110,563	20,397,239
2023	20,397,239	-	418,481	-	1,150,716	21,129,474
2024	21,129,474	-	524,678	-	1,189,427	21,794,223
2025	21,794,223	-	642,601	-	1,223,957	22,375,579
2026	22,375,579	-	892,869	-	1,249,961	22,732,671
2027	22,732,671	-	943,560	-	1,268,871	23,057,982
2028	23,057,982	-	1,026,317	-	1,285,055	23,316,720
2029	23,316,720	-	1,058,882	-	1,298,875	23,556,713
2030	23,556,713	-	1,163,130	-	1,309,583	23,703,166
2031	23,703,166	-	1,213,194	-	1,316,504	23,806,476
2032	23,806,476	-	1,254,934	-	1,321,204	23,872,746
2033	23,872,746	-	1,288,820	-	1,324,015	23,907,941
2034	23,907,941	-	1,340,605	-	1,324,545	23,891,881
2035	23,891,881	-	1,364,373	-	1,322,953	23,850,461
2036	23,850,461	-	1,381,803	-	1,320,095	23,788,753
2037	23,788,753	-	1,422,385	-	1,315,421	23,681,789
2038	23,681,789	-	1,446,217	-	1,308,645	23,544,217
2039	23,544,217	-	1,477,506	-	1,299,911	23,366,622
2040	23,366,622	-	1,499,401	-	1,289,165	23,156,386
2041	23,156,386	-	1,524,403	-	1,276,469	22,908,452
2042	22,908,452	-	1,547,817	-	1,261,669	22,622,304
2043	22,622,304	-	1,569,888	-	1,244,730	22,297,146
2044	22,297,146	-	1,587,879	-	1,225,683	21,934,950
2045	21,934,950	-	1,606,052	-	1,204,520	21,533,418
2046	21,533,418	-	1,621,183	-	1,181,201	21,093,436
2047	21,093,436	-	1,633,057	-	1,155,784	20,616,163
2048	20,616,163	-	1,643,057	-	1,128,294	20,101,400
2049	20,101,400	-	1,649,413	-	1,098,772	19,550,759
2050	19,550,759	-	1,652,794	-	1,067,289	18,965,254
2051	18,965,254	-	1,652,892	-	1,033,912	18,346,274
2052	18,346,274	-	1,649,730	-	998,720	17,695,264
2053	17,695,264	-	1,643,398	-	961,793	17,013,659
2054	17,013,659	-	1,634,137	-	923,206	16,302,728
2055	16,302,728	-	1,621,958	-	883,030	15,563,800
2056	15,563,800	-	1,606,578	-	841,349	14,798,571
2057	14,798,571	-	1,587,946	-	798,262	14,008,887
2058	14,008,887	-	1,565,958	-	753,877	13,196,806
2059	13,196,806	-	1,540,004	-	708,328	12,365,130
2060	12,365,130	-	1,509,530	-	661,791	11,517,391
2061	11,517,391	-	1,474,323	-	614,473	10,657,541
2062	10,657,541	-	1,433,644	-	566,621	9,790,518
2063	9,790,518	-	1,386,616	-	518,541	8,922,443
2064	8,922,443	-	1,332,921	-	470,591	8,060,113
2065	8,060,113	-	1,272,333	-	423,165	7,210,945
2066	7,210,945	-	1,205,200	-	376,676	6,382,421
2067	6,382,421	-	1,132,778	-	331,514	5,581,157



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

Table 2  
Hypothetical Assumptions: 5.70% 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	5,581,157	-	1,056,227	-	288,023	4,812,953
2069	4,812,953	-	976,783	-	246,500	4,082,670
2070	4,082,670	-	895,825	-	207,181	3,394,026
2071	3,394,026	-	813,896	-	170,263	2,750,393
2072	2,750,393	-	731,814	-	135,916	2,154,495
2073	2,154,495	-	652,158	-	104,220	1,606,557
2074	1,606,557	-	576,240	-	75,151	1,105,468
2075	1,105,468	-	504,553	-	48,632	649,547
2076	649,547	-	437,972	-	24,542	236,117
2077	236,117	-	376,353	-	-	-

Number of Years Expected Benefit Payments Sustained: 59.63

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 5.70% 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: 9.70% 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	16,731,146	-	119,051	-	1,617,147	18,229,242
2019	18,229,242	-	290,953	-	1,754,125	19,692,414
2020	19,692,414	-	326,010	-	1,894,353	21,260,757
2021	21,260,757	-	360,509	-	2,044,809	22,945,057
2022	22,945,057	-	393,771	-	2,206,573	24,757,859
2023	24,757,859	-	418,481	-	2,381,216	26,720,594
2024	26,720,594	-	524,678	-	2,566,451	28,762,367
2025	28,762,367	-	642,601	-	2,758,783	30,878,549
2026	30,878,549	-	892,869	-	2,951,915	32,937,595
2027	32,937,595	-	943,560	-	3,149,184	35,143,219
2028	35,143,219	-	1,026,317	-	3,359,116	37,476,018
2029	37,476,018	-	1,058,882	-	3,583,818	40,000,954
2030	40,000,954	-	1,163,130	-	3,823,681	42,661,505
2031	42,661,505	-	1,213,194	-	4,079,326	45,527,637
2032	45,527,637	-	1,254,934	-	4,355,316	48,628,019
2033	48,628,019	-	1,288,820	-	4,654,410	51,993,609
2034	51,993,609	-	1,340,605	-	4,978,361	55,631,365
2035	55,631,365	-	1,364,373	-	5,330,070	59,597,062
2036	59,597,062	-	1,381,803	-	5,713,898	63,929,157
2037	63,929,157	-	1,422,385	-	6,132,143	68,638,915
2038	68,638,915	-	1,446,217	-	6,587,833	73,780,531
2039	73,780,531	-	1,477,506	-	7,085,052	79,388,077
2040	79,388,077	-	1,499,401	-	7,627,923	85,516,599
2041	85,516,599	-	1,524,403	-	8,221,177	92,213,373
2042	92,213,373	-	1,547,817	-	8,869,628	99,535,184
2043	99,535,184	-	1,569,888	-	9,578,773	107,544,069
2044	107,544,069	-	1,587,879	-	10,354,763	116,310,953
2045	116,310,953	-	1,606,052	-	11,204,269	125,909,170
2046	125,909,170	-	1,621,183	-	12,134,562	136,422,549
2047	136,422,549	-	1,633,057	-	13,153,784	147,943,276
2048	147,943,276	-	1,643,057	-	14,270,810	160,571,029
2049	160,571,029	-	1,649,413	-	15,495,393	174,417,009
2050	174,417,009	-	1,652,794	-	16,838,289	189,602,504
2051	189,602,504	-	1,652,892	-	18,311,278	206,260,890
2052	206,260,890	-	1,649,730	-	19,927,294	224,538,454
2053	224,538,454	-	1,643,398	-	21,700,525	244,595,581
2054	244,595,581	-	1,634,137	-	23,646,516	266,607,960
2055	266,607,960	-	1,621,958	-	25,782,307	290,768,309
2056	290,768,309	-	1,606,578	-	28,126,607	317,288,338
2057	317,288,338	-	1,587,946	-	30,699,953	346,400,345
2058	346,400,345	-	1,565,958	-	33,524,885	378,359,272
2059	378,359,272	-	1,540,004	-	36,626,159	413,445,427
2060	413,445,427	-	1,509,530	-	40,030,994	451,966,891
2061	451,966,891	-	1,474,323	-	43,769,284	494,261,852
2062	494,261,852	-	1,433,644	-	47,873,868	540,702,076
2063	540,702,076	-	1,386,616	-	52,380,850	591,696,310
2064	591,696,310	-	1,332,921	-	57,329,895	647,693,284
2065	647,693,284	-	1,272,333	-	62,764,540	709,185,491
2066	709,185,491	-	1,205,200	-	68,732,540	776,712,831
2067	776,712,831	-	1,132,778	-	75,286,205	850,866,258

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

Table 3  
Hypothetical Assumptions: 9.70% 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	850,866,258	-	1,056,227	-	82,482,800	932,292,831
2069	932,292,831	-	976,783	-	90,385,031	1,021,701,079
2070	1,021,701,079	-	895,825	-	99,061,557	1,119,866,811
2071	1,119,866,811	-	813,896	-	108,587,607	1,227,640,522
2072	1,227,640,522	-	731,814	-	119,045,638	1,345,954,346
2073	1,345,954,346	-	652,158	-	130,525,942	1,475,828,130
2074	1,475,828,130	-	576,240	-	143,127,381	1,618,379,271
2075	1,618,379,271	-	504,553	-	156,958,318	1,774,833,036
2076	1,774,833,036	-	437,972	-	172,137,563	1,946,532,627
2077	1,946,532,627	-	376,353	-	188,795,412	2,134,951,686
2078	2,134,951,686	-	320,137	-	207,074,787	2,341,706,336
2079	2,341,706,336	-	269,117	-	227,132,462	2,568,569,681
2080	2,568,569,681	-	223,537	-	249,140,418	2,817,486,562
2081	2,817,486,562	-	183,118	-	273,287,315	3,090,590,759
2082	3,090,590,759	-	147,496	-	299,780,150	3,390,223,413
2083	3,390,223,413	-	117,320	-	328,845,981	3,718,952,074
2084	3,718,952,074	-	92,082	-	360,733,885	4,079,593,877
2085	4,079,593,877	-	71,188	-	395,717,153	4,475,239,842
2086	4,475,239,842	-	54,203	-	434,095,636	4,909,281,275
2087	4,909,281,275	-	40,629	-	476,198,313	5,385,438,959
2088	5,385,438,959	-	30,056	-	522,386,121	5,907,795,024
2089	5,907,795,024	-	21,891	-	573,055,056	6,480,828,189
2090	6,480,828,189	-	15,807	-	628,639,568	7,109,451,950
2091	7,109,451,950	-	11,263	-	689,616,293	7,799,056,980
2092	7,799,056,980	-	8,013	-	756,508,138	8,555,557,105
2093	8,555,557,105	-	5,680	-	829,888,764	9,385,440,189
2094	9,385,440,189	-	4,004	-	910,387,504	10,295,823,689
2095	10,295,823,689	-	2,803	-	998,694,762	11,294,515,648
2096	11,294,515,648	-	1,956	-	1,095,567,923	12,390,081,615
2097	12,390,081,615	-	1,364	-	1,201,837,851	13,591,918,102
2098	13,591,918,102	-	945	-	1,318,416,010	14,910,333,167
2099	14,910,333,167	-	654	-	1,446,302,285	16,356,634,798
2100	16,356,634,798	-	452	-	1,586,593,553	17,943,227,899
2101	17,943,227,899	-	309	-	1,740,493,091	19,683,720,681
2102	19,683,720,681	-	210	-	1,909,320,896	21,593,041,367
2103	21,593,041,367	-	141	-	2,094,525,006	23,687,566,232
2104	23,687,566,232	-	94	-	2,297,693,920	25,985,260,058
2105	25,985,260,058	-	60	-	2,520,570,223	28,505,830,221
2106	28,505,830,221	-	37	-	2,765,065,530	31,270,895,714
2107	31,270,895,714	-	24	-	3,033,276,883	34,304,172,573
2108	34,304,172,573	-	15	-	3,327,504,739	37,631,677,297
2109	37,631,677,297	-	9	-	3,650,272,697	41,281,949,985
2110	41,281,949,985	-	6	-	4,004,349,148	45,286,299,127
2111	45,286,299,127	-	3	-	4,392,771,015	49,679,070,139
2112	49,679,070,139	-	2	-	4,818,869,803	54,497,939,940
2113	54,497,939,940	-	1	-	5,286,300,174	59,784,240,113

PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 3  
 Hypothetical Assumptions: 9.70% 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
2114	59,784,240,113	-	1	-	5,799,071,291	65,583,311,403
2115	65,583,311,403	-	-	-	6,361,581,206	71,944,892,609

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 9.70% 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	
	7.70% RP-2000 Generational	5.70% RP-2000 Generational	9.70% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$1,190,631	\$2,731,190	\$134,400
Total Required Contribution (% of Payroll)	39.9%	91.6%	4.5%
Expected Member Contribution	86,436	86,436	86,436
Expected State Money	268,167	268,167	268,167
Expected Sponsor Contribution (Fixed \$)	\$836,028	\$2,376,587	\$0
Expected Sponsor Contribution (% of Payroll)	28.0%	79.7%	0.0%

**ASSETS**

Actuarial Value <sup>1</sup>	16,131,259	16,131,259	16,131,259
Market Value <sup>1</sup>	16,731,146	16,731,146	16,731,146

**LIABILITIES**

Present Value of Benefits			
Active Members			
Retirement Benefits	17,605,795	27,780,063	11,816,206
Disability Benefits	999,330	1,416,191	737,403
Death Benefits	331,431	514,207	229,776
Vested Benefits	3,844,599	5,771,609	2,737,237
Refund of Contributions	12,229	12,603	11,882
Service Retirees	875,437	1,086,499	727,951
DROP Retirees <sup>1</sup>	0	0	0
Beneficiaries	0	0	0
Disability Retirees	0	0	0
Terminated Vested	698,451	1,029,250	498,320
Share Plan Balances <sup>1</sup>	0	0	0
Excess State Monies Reserve	0	0	0
Total:	24,367,272	37,610,422	16,758,775
Present Value of Future Salaries	22,093,618	24,434,147	20,158,942
Present Value of Future Member Contributions	640,715	708,590	584,609
Total Normal Cost	1,111,088	2,620,105	92,780
Present Value of Future Normal Costs (Entry Age Normal)	7,021,812	12,743,234	4,112,514
Total Actuarial Accrued Liability (Aggregate) <sup>1</sup>	16,131,259	16,131,259	16,131,259
Unfunded Actuarial Accrued Liability (UAAL)	0	0	0

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

Valuation Date: 10/1/2018

	ACTUAL	HYPOTHETICAL	
	7.70% RP-2000 Generational	5.70% RP-2000 Generational	9.70% RP-2000 Generational
<b><u>PENSION COST</u></b>			
Normal Cost (with interest)	1,153,865	2,694,778	97,280
Administrative Expenses (with interest)	36,766	36,412	37,120
Payment Required To Amortize UAAL (with interest)	0	0	0
Total Required Contribution	\$1,190,631	\$2,731,190	\$134,400

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