

May 29, 2018

#### **VIA EMAIL**

Ms. Ferrell Jenne Lead Plan Administrator Foster & Foster, Inc. 2503 Del Prado Blvd. S., Suite 502 Cape Coral, FL 33904

Re: City of Edgewater Firefighters' Pension Fund

Section 112.664, Florida Statutes Compliance

Dear Ferrell:

Please find enclosed the annual disclosures that satisfy the October 1, 2017 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:

Douglas H. Lozen, EA, MAAA Enrolled Actuary #17-7778

DHL/lke Enclosures

cc via email: Ken Harrison, Board Attorney

### CITY OF EDGEWATER FIREFIGHTERS' PENSION FUND

## 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: 5/29/2018

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, 2017 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, 2017

|  | ACTUAL                           | HYPOTHETICAL                     |                                  |  |
|--|----------------------------------|----------------------------------|----------------------------------|--|
|  | 7.50%<br>RP-2000<br>Generational | 5.50%<br>RP-2000<br>Generational | 9.50%<br>RP-2000<br>Generational |  |
| Total Pension Liability  |                                  |                                  |                                  |  |
| Service Cost   | 358,456                          | 561,527                          | 237,088                          |  |
| Interest   | 825,460                          | 780,912                          | 842,588                          |  |
| Share Plan Allocation  | 92,260                           | 92,260                           | 92,260                           |  |
| Changes of Benefit Terms Differences Between Expected and Actual | -                                | -                                | -                                |  |
| Experience   | 473,491                          | 661,700                          | 337,098                          |  |
| Changes of Assumptions   | -                                | -                                | -                                |  |
| Contributions - Buy Back   | 8,544                            | 8,544                            | 8,544                            |  |
| Benefit Payments, Including Refunds of                           |                                  |                                  |                                  |  |
| Employee Contributions   | (362,003)                        | (362,003)                        | (362,003)                        |  |
| Net Change in Total Pension Liability                            | 1,396,208                        | 1,742,940                        | 1,155,575                        |  |
| Total Pension Liability - Beginning                              | 10,828,680                       | 13,817,875                       | 8,813,262                        |  |
| Total Pension Liability - Ending (a)                             | \$ 12,224,888                    | \$ 15,560,815                    | \$ 9,968,837                     |  |
| Plan Fiduciary Net Position                                      |                                  |                                  |                                  |  |
| Contributions - Employer   | 317,000                          | 317,000                          | 317,000                          |  |
| Contributions - State  | 147,551                          | 147,551                          | 147,551                          |  |
| Contributions - Employee   | 117,483                          | 117,483                          | 117,483                          |  |
| Contributions - Buy Back   | 8,544                            | 8,544                            | 8,544                            |  |
| Net Investment Income  | 1,734,571                        | 1,734,571                        | 1,734,571                        |  |
| Benefit Payments, Including Refunds of                           | (2.52.000)                       | (2.52.000)                       | (2.52.000)                       |  |
| Employee Contributions   | (362,003)                        | (362,003)                        | (362,003)                        |  |
| Administrative Expenses  | (44,046)                         | (44,046)                         | (44,046)                         |  |
| Net Change in Plan Fiduciary Net Position                        | 1,919,100                        | 1,919,100                        | 1,919,100                        |  |
| Plan Fiduciary Net Position - Beginning                          | 11,141,478                       | 11,141,478                       | 11,141,478                       |  |
| Plan Fiduciary Net Position - Ending (b)                         | \$ 13,060,578                    | \$ 13,060,578                    | \$ 13,060,578                    |  |
| Net Pension Liability - Ending (a) - (b)                         | \$ (835,690)                     | \$ 2,500,237                     | \$ (3,091,741)                   |  |

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

 $\label{eq:Table 1} Table \ 1$  Plan Assumptions: 7.50% and RP-2000 Generational Mortality

| Fiscal Year<br>Beginning 10/1 | Projected Beginning<br>Fiduciary Net Position | Projected Total<br>Contributions | Projected Benefit Payments* | Projected<br>Administrative<br>Expense | Projected Investment<br>Earnings | Projected Ending<br>Fiduciary Net Position |
|-------------------------------|---|----------------------------------|-----------------------------|--|----------------------------------|--|
| 2017                          | 13,051,251                                    | <u>-</u>                         | 1,392,305                   | -                                      | 926,632                          | 12,585,578                                 |
| 2018                          | 12,585,578                                    | _                                | 503,535                     | _                                      | 925,036                          | 13,007,079                                 |
| 2019                          | 13,007,079                                    | _                                | 526,021                     | _                                      | 955,805                          | 13,436,863                                 |
| 2020                          | 13,436,863                                    | _                                | 535,849                     | _                                      | 987,670                          | 13,888,684                                 |
| 2021                          | 13,888,684                                    | _                                | 603,310                     | _                                      | 1,019,027                        | 14,304,401                                 |
| 2022                          | 14,304,401                                    | _                                | 696,489                     | _                                      | 1,046,712                        | 14,654,624                                 |
| 2023                          | 14,654,624                                    | _                                | 728,688                     | _                                      | 1,071,771                        | 14,997,707                                 |
| 2024                          | 14,997,707                                    | _                                | 748,454                     | _                                      | 1,096,761                        | 15,346,014                                 |
| 2025                          | 15,346,014                                    | _                                | 770,314                     | _                                      | 1,122,064                        | 15,697,764                                 |
| 2026                          | 15,697,764                                    |                                  | 783,548                     |  | 1,147,949                        | 16,062,165                                 |
| 2027                          | 16,062,165                                    | _                                | 809,980                     | _                                      | 1,174,288                        | 16,426,473                                 |
| 2028                          | 16,426,473                                    | _                                | 829,673                     | _                                      | 1,200,873                        | 16,797,673                                 |
| 2028                          | 16,797,673                                    | -                                | 870,213                     | -                                      | 1,227,192                        | 17,154,652                                 |
| 2030                          | 17,154,652                                    | -                                | 878,632                     | -                                      | 1,253,650                        | 17,134,032                                 |
| 2030                          | 17,134,032                                    | -                                | 874,843                     | -                                      | 1,281,919                        | 17,936,746                                 |
| 2031                          | 17,936,746                                    | -                                |                             | -                                      |                                  |  |
|                               |   | -                                | 873,382                     | -                                      | 1,312,504                        | 18,375,868                                 |
| 2033                          | 18,375,868                                    | -                                | 880,626                     | -                                      | 1,345,167                        | 18,840,409                                 |
| 2034                          | 18,840,409                                    | -                                | 886,449                     | -                                      | 1,379,789                        | 19,333,749                                 |
| 2035                          | 19,333,749                                    | -                                | 879,621                     | -                                      | 1,417,045                        | 19,871,173                                 |
| 2036                          | 19,871,173                                    | -                                | 876,820                     | -                                      | 1,457,457                        | 20,451,810                                 |
| 2037                          | 20,451,810                                    | -                                | 870,791                     | -                                      | 1,501,231                        | 21,082,250                                 |
| 2038                          | 21,082,250                                    | -                                | 863,663                     | -                                      | 1,548,781                        | 21,767,368                                 |
| 2039                          | 21,767,368                                    | -                                | 853,677                     | -                                      | 1,600,540                        | 22,514,231                                 |
| 2040                          | 22,514,231                                    | -                                | 846,446                     | -                                      | 1,656,826                        | 23,324,611                                 |
| 2041                          | 23,324,611                                    | -                                | 838,434                     | -                                      | 1,717,905                        | 24,204,082                                 |
| 2042                          | 24,204,082                                    | -                                | 827,088                     | -                                      | 1,784,290                        | 25,161,284                                 |
| 2043                          | 25,161,284                                    | -                                | 814,371                     | -                                      | 1,856,557                        | 26,203,470                                 |
| 2044                          | 26,203,470                                    | -                                | 802,235                     | -                                      | 1,935,176                        | 27,336,411                                 |
| 2045                          | 27,336,411                                    | -                                | 788,981                     | -                                      | 2,020,644                        | 28,568,074                                 |
| 2046                          | 28,568,074                                    | -                                | 774,687                     | -                                      | 2,113,555                        | 29,906,942                                 |
| 2047                          | 29,906,942                                    | -                                | 759,666                     | -                                      | 2,214,533                        | 31,361,809                                 |
| 2048                          | 31,361,809                                    | -                                | 743,384                     | -                                      | 2,324,259                        | 32,942,684                                 |
| 2049                          | 32,942,684                                    | -                                | 726,030                     | -                                      | 2,443,475                        | 34,660,129                                 |
| 2050                          | 34,660,129                                    | -                                | 707,276                     | -                                      | 2,572,987                        | 36,525,840                                 |
| 2051                          | 36,525,840                                    | -                                | 687,450                     | -                                      | 2,713,659                        | 38,552,049                                 |
| 2052                          | 38,552,049                                    | -                                | 666,543                     | -                                      | 2,866,408                        | 40,751,914                                 |
| 2053                          | 40,751,914                                    | -                                | 644,330                     | -                                      | 3,032,231                        | 43,139,815                                 |
| 2054                          | 43,139,815                                    | -                                | 620,545                     | -                                      | 3,212,216                        | 45,731,486                                 |
| 2055                          | 45,731,486                                    | -                                | 595,290                     | -                                      | 3,407,538                        | 48,543,734                                 |
| 2056                          | 48,543,734                                    | -                                | 568,435                     | -                                      | 3,619,464                        | 51,594,763                                 |
| 2057                          | 51,594,763                                    | -                                | 540,009                     | -                                      | 3,849,357                        | 54,904,111                                 |
| 2058                          | 54,904,111                                    | -                                | 510,103                     | -                                      | 4,098,679                        | 58,492,687                                 |
| 2059                          | 58,492,687                                    | -                                | 478,783                     | -                                      | 4,368,997                        | 62,382,901                                 |
| 2060                          | 62,382,901                                    | -                                | 446,197                     | -                                      | 4,661,985                        | 66,598,689                                 |
| 2061                          | 66,598,689                                    | -                                | 412,726                     | -                                      | 4,979,424                        | 71,165,387                                 |
| 2062                          | 71,165,387                                    | -                                | 378,840                     | -                                      | 5,323,198                        | 76,109,745                                 |
| 2063                          | 76,109,745                                    | -                                | 345,079                     | -                                      | 5,695,290                        | 81,459,956                                 |
| 2064                          | 81,459,956                                    | -                                | 312,039                     | -                                      | 6,097,795                        | 87,245,712                                 |
| 2065                          | 87,245,712                                    | -                                | 280,043                     | -                                      | 6,532,927                        | 93,498,596                                 |
| 2066                          | 93,498,596                                    | -                                | 249,571                     | -                                      | 7,003,036                        | 100,252,061                                |

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

 $\label{eq:Table 1} Table \ 1$  Plan Assumptions: 7.50% and RP-2000 Generational Mortality

| Fiscal Year<br>Beginning 10/1 | Projected Beginning<br>Fiduciary Net Position | Projected Total<br>Contributions | Projected Benefit<br>Payments* | Projected<br>Administrative<br>Expense | Projected Investment<br>Earnings | Projected Ending<br>Fiduciary Net Position |
|-------------------------------|---|----------------------------------|--------------------------------|--|----------------------------------|--|
| 2067                          | 100,252,061                                   | -                                | 221,198                        | -                                      | 7,510,610                        | 107,541,473                                |
| 2068                          | 107,541,473                                   | -                                | 195,267                        | -                                      | 8,058,288                        | 115,404,494                                |
| 2069                          | 115,404,494                                   | -                                | 171,926                        | -                                      | 8,648,890                        | 123,881,458                                |
| 2070                          | 123,881,458                                   | -                                | 150,955                        | -                                      | 9,285,449                        | 133,015,952                                |
| 2071                          | 133,015,952                                   | -                                | 132,117                        | -                                      | 9,971,242                        | 142,855,077                                |
| 2072                          | 142,855,077                                   | -                                | 115,189                        | -                                      | 10,709,811                       | 153,449,699                                |
| 2073                          | 153,449,699                                   | -                                | 100,017                        | -                                      | 11,504,977                       | 164,854,659                                |
| 2074                          | 164,854,659                                   | -                                | 86,495                         | -                                      | 12,360,856                       | 177,129,020                                |
| 2075                          | 177,129,020                                   | -                                | 74,540                         | -                                      | 13,281,881                       | 190,336,361                                |
| 2076                          | 190,336,361                                   | -                                | 64,003                         | =                                      | 14,272,827                       | 204,545,185                                |
| 2077                          | 204,545,185                                   | -                                | 54,666                         | -                                      | 15,338,839                       | 219,829,358                                |
| 2078                          | 219,829,358                                   | -                                | 46,369                         | -                                      | 16,485,463                       | 236,268,452                                |
| 2079                          | 236,268,452                                   | -                                | 38,966                         | -                                      | 17,718,673                       | 253,948,159                                |
| 2080                          | 253,948,159                                   | -                                | 32,412                         | -                                      | 19,044,896                       | 272,960,643                                |
| 2081                          | 272,960,643                                   | -                                | 26,749                         | =                                      | 20,471,045                       | 293,404,939                                |
| 2082                          | 293,404,939                                   | -                                | 21,910                         | -                                      | 22,004,549                       | 315,387,578                                |
| 2083                          | 315,387,578                                   | -                                | 17,805                         | -                                      | 23,653,401                       | 339,023,174                                |
| 2084<br>2085                  | 339,023,174                                   | -                                | 14,379                         | -                                      | 25,426,199                       | 364,434,994                                |
| 2086                          | 364,434,994                                   | -                                | 11,546<br>9,206                | -                                      | 27,332,192                       | 391,755,640                                |
| 2086                          | 391,755,640<br>421,127,762                    | -                                | 7,283                          | -                                      | 29,381,328<br>31,584,309         | 421,127,762<br>452,704,788                 |
| 2087                          | 452,704,788                                   | -                                | 5,711                          | -                                      | 33,952,645                       | 486,651,722                                |
| 2089                          | 486,651,722                                   | _                                | 4,441                          | _                                      | 36,498,713                       | 523,145,994                                |
| 2090                          | 523,145,994                                   | _                                | 3,414                          | _                                      | 39,235,822                       | 562,378,402                                |
| 2091                          | 562,378,402                                   | _                                | 2,588                          | _                                      | 42,178,283                       | 604,554,097                                |
| 2092                          | 604,554,097                                   | _                                | 1,927                          | _                                      | 45,341,485                       | 649,893,655                                |
| 2093                          | 649,893,655                                   | _                                | 1,415                          | _                                      | 48,741,971                       | 698,634,211                                |
| 2094                          | 698,634,211                                   | _                                | 1,018                          | -                                      | 52,397,528                       | 751,030,721                                |
| 2095                          | 751,030,721                                   | _                                | 719                            | -                                      | 56,327,277                       | 807,357,279                                |
| 2096                          | 807,357,279                                   | _                                | 496                            | -                                      | 60,551,777                       | 867,908,560                                |
| 2097                          | 867,908,560                                   | _                                | 335                            | -                                      | 65,093,129                       | 933,001,354                                |
| 2098                          | 933,001,354                                   | -                                | 221                            | -                                      | 69,975,093                       | 1,002,976,226                              |
| 2099                          | 1,002,976,226                                 | -                                | 143                            | -                                      | 75,223,212                       | 1,078,199,295                              |
| 2100                          | 1,078,199,295                                 | -                                | 91                             | -                                      | 80,864,944                       | 1,159,064,148                              |
| 2101                          | 1,159,064,148                                 | -                                | 56                             | -                                      | 86,929,809                       | 1,245,993,901                              |
| 2102                          | 1,245,993,901                                 | -                                | 35                             | -                                      | 93,449,541                       | 1,339,443,407                              |
| 2103                          | 1,339,443,407                                 | -                                | 21                             | -                                      | 100,458,255                      | 1,439,901,641                              |
| 2104                          | 1,439,901,641                                 | -                                | 12                             | -                                      | 107,992,623                      | 1,547,894,252                              |
| 2105                          | 1,547,894,252                                 | -                                | 7                              | -                                      | 116,092,069                      | 1,663,986,314                              |
| 2106                          | 1,663,986,314                                 | -                                | 4                              | -                                      | 124,798,973                      | 1,788,785,283                              |
| 2107                          | 1,788,785,283                                 | -                                | 2                              | -                                      | 134,158,896                      | 1,922,944,177                              |
| 2108                          | 1,922,944,177                                 | -                                | 1                              | -                                      | 144,220,813                      | 2,067,164,989                              |
| 2109                          | 2,067,164,989                                 | -                                | 1                              | -                                      | 155,037,374                      | 2,222,202,362                              |
| 2110                          | 2,222,202,362                                 | -                                | -                              | -                                      | 166,665,177                      | 2,388,867,539                              |

<sup>\*</sup>All Share Balances paid in 2017.

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 7.50% 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: 5.50% and RP-2000 Generational Mortality

| Fiscal Year<br>Beginning 10/1 | Projected Beginning<br>Fiduciary Net Position | Projected Total<br>Contributions | Projected Benefit<br>Payments* | Projected<br>Administrative<br>Expense | Projected Investment<br>Earnings | Projected Ending<br>Fiduciary Net Position |
|-------------------------------|---|----------------------------------|--------------------------------|--|----------------------------------|--|
| 2017                          | 13,051,251                                    | -                                | 1,392,305                      | -                                      | 679,530                          | 12,338,476                                 |
| 2018                          | 12,338,476                                    | -                                | 503,535                        | -                                      | 664,769                          | 12,499,710                                 |
| 2019                          | 12,499,710                                    | -                                | 526,021                        | -                                      | 673,018                          | 12,646,707                                 |
| 2020                          | 12,646,707                                    | -                                | 535,849                        | -                                      | 680,833                          | 12,791,691                                 |
| 2021                          | 12,791,691                                    | -                                | 603,310                        | -                                      | 686,952                          | 12,875,333                                 |
| 2022                          | 12,875,333                                    | -                                | 696,489                        | -                                      | 688,990                          | 12,867,834                                 |
| 2023                          | 12,867,834                                    | -                                | 728,688                        | =                                      | 687,692                          | 12,826,838                                 |
| 2024                          | 12,826,838                                    | -                                | 748,454                        | =                                      | 684,894                          | 12,763,278                                 |
| 2025                          | 12,763,278                                    | -                                | 770,314                        | -                                      | 680,797                          | 12,673,761                                 |
| 2026                          | 12,673,761                                    | -                                | 783,548                        | -                                      | 675,509                          | 12,565,722                                 |
| 2027                          | 12,565,722                                    | -                                | 809,980                        | -                                      | 668,840                          | 12,424,582                                 |
| 2028                          | 12,424,582                                    | -                                | 829,673                        | -                                      | 660,536                          | 12,255,445                                 |
| 2029                          | 12,255,445                                    | -                                | 870,213                        | -                                      | 650,119                          | 12,035,351                                 |
| 2030                          | 12,035,351                                    | -                                | 878,632                        | -                                      | 637,782                          | 11,794,501                                 |
| 2031                          | 11,794,501                                    | -                                | 874,843                        | -                                      | 624,639                          | 11,544,297                                 |
| 2032                          | 11,544,297                                    | -                                | 873,382                        | -                                      | 610,918<br>596,284               | 11,281,833                                 |
| 2033<br>2034                  | 11,281,833                                    | -                                | 880,626                        | -                                      | · ·                              | 10,997,491                                 |
| 2034                          | 10,997,491<br>10,691,527                      | -                                | 886,449<br>879,621             | -                                      | 580,485<br>563,844               | 10,691,527                                 |
| 2036                          | 10,375,750                                    | -                                | 876,820                        | -                                      | 546,554                          | 10,375,750<br>10,045,484                   |
| 2037                          | 10,045,484                                    | -                                | 870,791                        | -                                      | 528,555                          | 9,703,248                                  |
| 2037                          | 9,703,248                                     | _                                | 863,663                        | _                                      | 509,928                          | 9,349,513                                  |
| 2039                          | 9,349,513                                     | _                                | 853,677                        | _                                      | 490,747                          | 8,986,583                                  |
| 2040                          | 8,986,583                                     | _                                | 846,446                        | _                                      | 470,985                          | 8,611,122                                  |
| 2041                          | 8,611,122                                     | _                                | 838,434                        | -                                      | 450,555                          | 8,223,243                                  |
| 2042                          | 8,223,243                                     | _                                | 827,088                        | -                                      | 429,533                          | 7,825,688                                  |
| 2043                          | 7,825,688                                     | _                                | 814,371                        | -                                      | 408,018                          | 7,419,335                                  |
| 2044                          | 7,419,335                                     | -                                | 802,235                        | -                                      | 386,002                          | 7,003,102                                  |
| 2045                          | 7,003,102                                     | -                                | 788,981                        | -                                      | 363,474                          | 6,577,595                                  |
| 2046                          | 6,577,595                                     | -                                | 774,687                        | -                                      | 340,464                          | 6,143,372                                  |
| 2047                          | 6,143,372                                     | -                                | 759,666                        | -                                      | 316,995                          | 5,700,701                                  |
| 2048                          | 5,700,701                                     | -                                | 743,384                        | -                                      | 293,095                          | 5,250,412                                  |
| 2049                          | 5,250,412                                     | -                                | 726,030                        | -                                      | 268,807                          | 4,793,189                                  |
| 2050                          | 4,793,189                                     | -                                | 707,276                        | -                                      | 244,175                          | 4,330,088                                  |
| 2051                          | 4,330,088                                     | -                                | 687,450                        | -                                      | 219,250                          | 3,861,888                                  |
| 2052                          | 3,861,888                                     | -                                | 666,543                        | -                                      | 194,074                          | 3,389,419                                  |
| 2053                          | 3,389,419                                     | -                                | 644,330                        | -                                      | 168,699                          | 2,913,788                                  |
| 2054                          | 2,913,788                                     | -                                | 620,545                        | -                                      | 143,193                          | 2,436,436                                  |
| 2055                          | 2,436,436                                     | -                                | 595,290                        | -                                      | 117,634                          | 1,958,780                                  |
| 2056                          | 1,958,780                                     | -                                | 568,435                        | =                                      | 92,101                           | 1,482,446                                  |
| 2057                          | 1,482,446                                     | -                                | 540,009                        | -                                      | 66,684                           | 1,009,121                                  |
| 2058                          | 1,009,121                                     | -                                | 510,103                        | -                                      | 41,474                           | 540,492                                    |
| 2059                          | 540,492                                       | -                                | 478,783                        | -                                      | 16,561                           | 78,270                                     |
| 2060                          | 78,270  | -                                | 446,197                        | -                                      | -                                | -  |

<sup>\*</sup>All Share Balances paid in 2017.

Number of Years Expected Benefit Payments Sustained: 43.18

 $This \ projection \ assumes \ no \ further \ contributions, \ assumes \ no \ further \ benefit \ accruals, \ and \ assumes \ Market \ Value \ of \ Assets \ earn \ 5.50\% \ interest.$ 

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.

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

 $\label{thm:continuous} Table~3$  Hypothetical Assumptions: 9.50% and RP-2000 Generational Mortality

| Fiscal Year<br>Beginning 10/1 | Projected Beginning<br>Fiduciary Net Position | Projected Total<br>Contributions | Projected Benefit Payments* | Projected<br>Administrative<br>Expense | Projected Investment<br>Earnings | Projected Ending<br>Fiduciary Net Position |
|-------------------------------|---|----------------------------------|-----------------------------|--|----------------------------------|--|
| 2017                          | 13,051,251                                    | _                                | 1,392,305                   | -                                      | 1,173,734                        | 12,832,680                                 |
| 2018                          | 12,832,680                                    | _                                | 503,535                     | _                                      | 1,195,187                        | 13,524,332                                 |
| 2019                          | 13,524,332                                    | _                                | 526,021                     | _                                      | 1,259,826                        | 14,258,137                                 |
| 2020                          | 14,258,137                                    | _                                | 535,849                     | -                                      | 1,329,070                        | 15,051,358                                 |
| 2021                          | 15,051,358                                    | _                                | 603,310                     | -                                      | 1,401,222                        | 15,849,270                                 |
| 2022                          | 15,849,270                                    | _                                | 696,489                     | -                                      | 1,472,597                        | 16,625,378                                 |
| 2023                          | 16,625,378                                    | -                                | 728,688                     | -                                      | 1,544,798                        | 17,441,488                                 |
| 2024                          | 17,441,488                                    | -                                | 748,454                     | -                                      | 1,621,390                        | 18,314,424                                 |
| 2025                          | 18,314,424                                    | -                                | 770,314                     | -                                      | 1,703,280                        | 19,247,390                                 |
| 2026                          | 19,247,390                                    | _                                | 783,548                     | -                                      | 1,791,284                        | 20,255,126                                 |
| 2027                          | 20,255,126                                    | -                                | 809,980                     | -                                      | 1,885,763                        | 21,330,909                                 |
| 2028                          | 21,330,909                                    | -                                | 829,673                     | -                                      | 1,987,027                        | 22,488,263                                 |
| 2029                          | 22,488,263                                    | -                                | 870,213                     | -                                      | 2,095,050                        | 23,713,100                                 |
| 2030                          | 23,713,100                                    | -                                | 878,632                     | -                                      | 2,211,009                        | 25,045,477                                 |
| 2031                          | 25,045,477                                    | -                                | 874,843                     | -                                      | 2,337,765                        | 26,508,399                                 |
| 2032                          | 26,508,399                                    | -                                | 873,382                     | -                                      | 2,476,812                        | 28,111,829                                 |
| 2033                          | 28,111,829                                    | -                                | 880,626                     | -                                      | 2,628,794                        | 29,859,997                                 |
| 2034                          | 29,859,997                                    | -                                | 886,449                     | =                                      | 2,794,593                        | 31,768,141                                 |
| 2035                          | 31,768,141                                    | -                                | 879,621                     | -                                      | 2,976,191                        | 33,864,711                                 |
| 2036                          | 33,864,711                                    | -                                | 876,820                     | =                                      | 3,175,499                        | 36,163,390                                 |
| 2037                          | 36,163,390                                    | -                                | 870,791                     | =                                      | 3,394,159                        | 38,686,758                                 |
| 2038                          | 38,686,758                                    | -                                | 863,663                     | -                                      | 3,634,218                        | 41,457,313                                 |
| 2039                          | 41,457,313                                    | -                                | 853,677                     | -                                      | 3,897,895                        | 44,501,531                                 |
| 2040                          | 44,501,531                                    | -                                | 846,446                     | =                                      | 4,187,439                        | 47,842,524                                 |
| 2041                          | 47,842,524                                    | -                                | 838,434                     | -                                      | 4,505,214                        | 51,509,304                                 |
| 2042                          | 51,509,304                                    | -                                | 827,088                     | -                                      | 4,854,097                        | 55,536,313                                 |
| 2043                          | 55,536,313                                    | -                                | 814,371                     | -                                      | 5,237,267                        | 59,959,209                                 |
| 2044                          | 59,959,209                                    | -                                | 802,235                     | -                                      | 5,658,019                        | 64,814,993                                 |
| 2045                          | 64,814,993                                    | -                                | 788,981                     | -                                      | 6,119,948                        | 70,145,960                                 |
| 2046                          | 70,145,960                                    | -                                | 774,687                     | -                                      | 6,627,069                        | 75,998,342                                 |
| 2047                          | 75,998,342                                    | -                                | 759,666                     | -                                      | 7,183,758                        | 82,422,434                                 |
| 2048                          | 82,422,434                                    | -                                | 743,384                     | -                                      | 7,794,820                        | 89,473,870                                 |
| 2049                          | 89,473,870                                    | -                                | 726,030                     | -                                      | 8,465,531                        | 97,213,371                                 |
| 2050                          | 97,213,371                                    | -                                | 707,276                     | =                                      | 9,201,675                        | 105,707,770                                |
| 2051                          | 105,707,770                                   | -                                | 687,450                     | -                                      | 10,009,584                       | 115,029,904                                |
| 2052                          | 115,029,904                                   | -                                | 666,543                     | =                                      | 10,896,180                       | 125,259,541                                |
| 2053                          | 125,259,541                                   | -                                | 644,330                     | -                                      | 11,869,051                       | 136,484,262                                |
| 2054                          | 136,484,262                                   | -                                | 620,545                     | -                                      | 12,936,529                       | 148,800,246                                |
| 2055                          | 148,800,246                                   | -                                | 595,290                     | =                                      | 14,107,747                       | 162,312,703                                |
| 2056                          | 162,312,703                                   | -                                | 568,435                     | =                                      | 15,392,706                       | 177,136,974                                |
| 2057                          | 177,136,974                                   | -                                | 540,009                     | -                                      | 16,802,362                       | 193,399,327                                |
| 2058                          | 193,399,327                                   | -                                | 510,103                     | -                                      | 18,348,706                       | 211,237,930                                |
| 2059                          | 211,237,930                                   | -                                | 478,783                     | -                                      | 20,044,861                       | 230,804,008                                |
| 2060                          | 230,804,008                                   | -                                | 446,197                     | -                                      | 21,905,186                       | 252,262,997                                |
| 2061                          | 252,262,997                                   | -                                | 412,726                     | -                                      | 23,945,380                       | 275,795,651                                |
| 2062                          | 275,795,651                                   | -                                | 378,840                     | -                                      | 26,182,592                       | 301,599,403                                |
| 2063                          | 301,599,403                                   | -                                | 345,079                     | -                                      | 28,635,552                       | 329,889,876                                |
| 2064                          | 329,889,876                                   | -                                | 312,039                     | -                                      | 31,324,716                       | 360,902,553                                |
| 2065                          | 360,902,553                                   | -                                | 280,043                     | -                                      | 34,272,440                       | 394,894,950                                |
| 2066                          | 394,894,950                                   | -                                | 249,571                     | -                                      | 37,503,166                       | 432,148,545                                |

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

 $Table\ 3$  Hypothetical Assumptions: 9.50% and RP-2000 Generational Mortality

| Fiscal Year<br>Beginning 10/1 | Projected Beginning<br>Fiduciary Net Position | Projected Total<br>Contributions | Projected Benefit<br>Payments* | Projected<br>Administrative<br>Expense | Projected Investment<br>Earnings | Projected Ending<br>Fiduciary Net Position |
|-------------------------------|---|----------------------------------|--------------------------------|--|----------------------------------|--|
| 2067                          | 432,148,545                                   | -                                | 221,198                        | -                                      | 41,043,605                       | 472,970,952                                |
| 2068                          | 472,970,952                                   | -                                | 195,267                        | -                                      | 44,922,965                       | 517,698,650                                |
| 2069                          | 517,698,650                                   | -                                | 171,926                        | -                                      | 49,173,205                       | 566,699,929                                |
| 2070                          | 566,699,929                                   | -                                | 150,955                        | =                                      | 53,829,323                       | 620,378,297                                |
| 2071                          | 620,378,297                                   | -                                | 132,117                        | -                                      | 58,929,663                       | 679,175,843                                |
| 2072                          | 679,175,843                                   | -                                | 115,189                        | =                                      | 64,516,234                       | 743,576,888                                |
| 2073                          | 743,576,888                                   | -                                | 100,017                        | -                                      | 70,635,054                       | 814,111,925                                |
| 2074                          | 814,111,925                                   | -                                | 86,495                         | -                                      | 77,336,524                       | 891,361,954                                |
| 2075                          | 891,361,954                                   | -                                | 74,540                         | -                                      | 84,675,845                       | 975,963,259                                |
| 2076                          | 975,963,259                                   | -                                | 64,003                         | -                                      | 92,713,469                       | 1,068,612,725                              |
| 2077                          | 1,068,612,725                                 | -                                | 54,666                         | -                                      | 101,515,612                      | 1,170,073,671                              |
| 2078                          | 1,170,073,671                                 | -                                | 46,369                         | -                                      | 111,154,796                      | 1,281,182,098                              |
| 2079                          | 1,281,182,098                                 | -                                | 38,966                         | -                                      | 121,710,448                      | 1,402,853,580                              |
| 2080                          | 1,402,853,580                                 | -                                | 32,412                         | -                                      | 133,269,551                      | 1,536,090,719                              |
| 2081                          | 1,536,090,719                                 | -                                | 26,749                         | -                                      | 145,927,348                      | 1,681,991,318                              |
| 2082                          | 1,681,991,318                                 | -                                | 21,910                         | -                                      | 159,788,134                      | 1,841,757,542                              |
| 2083                          | 1,841,757,542                                 | -                                | 17,805                         | -                                      | 174,966,121                      | 2,016,705,858                              |
| 2084                          | 2,016,705,858                                 | -                                | 14,379                         | -                                      | 191,586,374                      | 2,208,277,853                              |
| 2085                          | 2,208,277,853                                 | -                                | 11,546                         | -                                      | 209,785,848                      | 2,418,052,155                              |
| 2086                          | 2,418,052,155                                 | -                                | 9,206                          | -                                      | 229,714,517                      | 2,647,757,466                              |
| 2087                          | 2,647,757,466                                 | -                                | 7,283                          | -                                      | 251,536,613                      | 2,899,286,796                              |
| 2088                          | 2,899,286,796                                 | -                                | 5,711                          | -                                      | 275,431,974                      | 3,174,713,059                              |
| 2089                          | 3,174,713,059                                 | -                                | 4,441                          | -                                      | 301,597,530                      | 3,476,306,148                              |
| 2090                          | 3,476,306,148                                 | -                                | 3,414                          | -                                      | 330,248,922                      | 3,806,551,656                              |
| 2091                          | 3,806,551,656                                 | -                                | 2,588                          | -                                      | 361,622,284                      | 4,168,171,352                              |
| 2092                          | 4,168,171,352                                 | -                                | 1,927                          | -                                      | 395,976,187                      | 4,564,145,612                              |
| 2093                          | 4,564,145,612                                 | -                                | 1,415                          | -                                      | 433,593,766                      | 4,997,737,963                              |
| 2094                          | 4,997,737,963                                 | -                                | 1,018                          | -                                      | 474,785,058                      | 5,472,522,003                              |
| 2095                          | 5,472,522,003                                 | -                                | 719                            | -                                      | 519,889,556                      | 5,992,410,840                              |
| 2096                          | 5,992,410,840                                 | -                                | 496                            | -                                      | 569,279,006                      | 6,561,689,350                              |
| 2097                          | 6,561,689,350                                 | -                                | 335                            | -                                      | 623,360,472                      | 7,185,049,487                              |
| 2098                          | 7,185,049,487                                 | -                                | 221                            | -                                      | 682,579,691                      | 7,867,628,957                              |
| 2099                          | 7,867,628,957                                 | -                                | 143                            | -                                      | 747,424,744                      | 8,615,053,558                              |
| 2100                          | 8,615,053,558                                 | -                                | 91                             | -                                      | 818,430,084                      | 9,433,483,551                              |
| 2101                          | 9,433,483,551                                 | -                                | 56                             | -                                      | 896,180,935                      | 10,329,664,430                             |
| 2102                          | 10,329,664,430                                | -                                | 35                             | -                                      | 981,318,119                      | 11,310,982,514                             |
| 2103                          | 11,310,982,514                                | -                                | 21                             | -                                      | 1,074,543,338                    | 12,385,525,831                             |
| 2104                          | 12,385,525,831                                | -                                | 12                             | -                                      | 1,176,624,953                    | 13,562,150,772                             |
| 2105                          | 13,562,150,772                                | -                                | 7                              | -                                      | 1,288,404,323                    | 14,850,555,088                             |
| 2106                          | 14,850,555,088                                | -                                | 4                              | -                                      | 1,410,802,733                    | 16,261,357,817                             |
| 2107                          | 16,261,357,817                                | -                                | 2                              | -                                      | 1,544,828,993                    | 17,806,186,808                             |
| 2108                          | 17,806,186,808                                | -                                | 1                              | -                                      | 1,691,587,747                    | 19,497,774,554                             |
| 2109                          | 19,497,774,554                                | -                                | 1                              | -                                      | 1,852,288,583                    | 21,350,063,136                             |
| 2110                          | 21,350,063,136                                | -                                | -                              | -                                      | 2,028,255,998                    | 23,378,319,134                             |

<sup>\*</sup>All Share Balances paid in 2017.

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 9.50% 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, 2019

Valuation Date: 10/1/2017

|  | ACTUAL                           | НҮРОТН                           | HYPOTHETICAL                     |  |  |
|--|----------------------------------|----------------------------------|----------------------------------|--|--|
|  | 7.50%<br>RP-2000<br>Generational | 5.50%<br>RP-2000<br>Generational | 9.50%<br>RP-2000<br>Generational |  |  |
| Total Required Contribution (Fixed \$)       | \$504,083                        | \$894,536                        | \$236,844                        |  |  |
| Total Required Contribution (% of Payroll)   | 30.1%                            | 53.3%                            | 14.1%                            |  |  |
| Expected Member Contribution                 | 100,603                          | 100,603                          | 100,603                          |  |  |
| Expected State Money                         | 55,292                           | 55,292                           | 55,292                           |  |  |
| Expected Sponsor Contribution (Fixed \$)     | \$348,188                        | \$738,641                        | \$80,949                         |  |  |
| Expected Sponsor Contribution (% of Payroll) | 20.8%                            | 44.0%                            | 4.8%                             |  |  |
| ASSETS                                       |                                  |                                  |                                  |  |  |
| Actuarial Value <sup>1</sup>                 | 12,303,744                       | 12,303,744                       | 12,303,744                       |  |  |
| Market Value <sup>1</sup>                    | 13,051,251                       | 13,051,251                       | 13,051,251                       |  |  |
| <u>LIABILITIES</u>                           |                                  |                                  |                                  |  |  |
| Present Value of Benefits Active Members     |                                  |                                  |                                  |  |  |
| Retirement Benefits                          | 8,499,074                        | 12,220,488                       | 6,219,319                        |  |  |
| Disability Benefits                          | 128,571                          | 173,536                          | 98,935                           |  |  |
| Death Benefits                               | 37,442                           | 48,810                           | 29,363                           |  |  |
| Vested Benefits                              | 664,494                          | 1,058,057                        | 440,823                          |  |  |
| Refund of Contributions                      | 11,974                           | 12,286                           | 11,682                           |  |  |
| Service Retirees                             | 4,304,366                        | 5,420,037                        | 3,549,688                        |  |  |
| Beneficiaries Disability Retirees            | 0<br>153,760                     | 0<br>197,870                     | 0<br>125,106                     |  |  |
| Terminated Vested                            | 881                              | 881                              | 881                              |  |  |
| Share Plan Balances <sup>1</sup>             | 946,898                          | 946,898                          | 946,898                          |  |  |
| Total:                                       | 14,747,460                       | 20,078,863                       | 11,422,695                       |  |  |
| Present Value of Future Salaries             | 12,574,574                       | 13,951,324                       | 11,448,734                       |  |  |
| Present Value of Future                      |                                  |                                  |                                  |  |  |
| Member Contributions                         | 754,474                          | 837,079                          | 686,924                          |  |  |
| Total Normal Cost                            | 346,794                          | 550,035                          | 226,104                          |  |  |
| Present Value of Future                      |                                  |                                  |                                  |  |  |
| Normal Costs (Entry Age Normal)              | 2,466,887                        | 4,383,315                        | 1,449,596                        |  |  |
| Total Actuarial Accrued Liability 1          | 12,280,573                       | 15,695,548                       | 9,973,099                        |  |  |
| Unfunded Actuarial Accrued Liability (UAAL)  | (23,171)                         | 3,391,804                        | (2,330,645)                      |  |  |

## ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR ENDING SEPTEMBER 30, 2019

Valuation Date: 10/1/2017

|   | ACTUAL                           | НҮРОТН                           | HETICAL                          |
|---|----------------------------------|----------------------------------|----------------------------------|
|   | 7.50%<br>RP-2000<br>Generational | 5.50%<br>RP-2000<br>Generational | 9.50%<br>RP-2000<br>Generational |
| PENSION COST                                      |                                  |                                  |                                  |
| Normal Cost (with interest)                       | 359,799                          | 565,161                          | 236,844                          |
| Administrative Expenses (with interest)           | 45,698                           | 45,257                           | 46,138                           |
| Payment Required To Amortize UAAL (with interest) | 98,586                           | 284,118                          | (91,712)                         |
| Total Required Contribution                       | \$504,083                        | \$894,536                        | \$236,844 2                      |

<sup>&</sup>lt;sup>1</sup> The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2017.

<sup>&</sup>lt;sup>2</sup> Per Florida Statutes, the Minimum Required Contribution may be no less than the Normal Cost.