# CITY OF SANFORD POLICE OFFICERS' RETIREMENT SYSTEM

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



April 8, 2020

#### VIA EMAIL

Ms. Susy Pita, Plan Administrator 21629 Stirling Pass Leesburg, FL 34748

Re: City of Sanford Police Officers' Retirement System

Section 112.664, Florida Statutes Compliance

Dear Susy:

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

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

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

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664(1), Florida Statutes, and Rule 60T-1.0035, Florida Administrative Code.

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

Respectfully submitted,

Foster & Foster, Inc.

Patrick T. Donlan, EA, ASA, MAAA

Enrolled Actuary #20-6595

**Enclosures** 

By:

cc via email: Pedro Herrera, Board Attorney

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

When reviewing the following schedules, please note the following:

- 1) The purpose of producing this report is solely to satisfy the requirements set forth by Section 112.664, Florida Statutes, and is mandatory for every Florida public pension fund, excluding the Florida Retirement System (FRS).
- 2) None of the schedules shown have any impact on the funding requirements of the Plan. These schedules are for statutory compliance purposes only.
- 3) In the schedules that follow, the columns labeled "ACTUAL" represent the final recorded GASB 67/68 results. The columns labeled "HYPOTHETICAL" illustrate what the results would have been if different assumptions were used.
- 4) It is our opinion that the Plan's actual assumptions utilized in the October 1, 2019 Actuarial Valuation Report, as adopted by the Board of Trustees, are reasonable individually and in the aggregate, and represent our best estimate of future Plan experience.
- 5) The "Number of Years Expected Benefit Payments Sustained" calculated in Section II: Asset Sustainability should <u>not</u> be interpreted as the number of years the Plan has left until it is insolvent. This calculation is required by 112.664, Florida Statutes, but the numeric result is irrelevant, since in its calculation we are to assume there will be no further contributions to the Fund. As long as the Actuarially Determined Contribution is made each year the Plan will never become insolvent.

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY FISCAL YEAR SEPTEMBER 30, 2019

|   | ACTUAL                           | HYPOTHETICAL                     |                                  |  |  |
|---|----------------------------------|----------------------------------|----------------------------------|--|--|
|   | 7.00%<br>RP-2000<br>Generational | 5.00%<br>RP-2000<br>Generational | 9.00%<br>RP-2000<br>Generational |  |  |
| Total Pension Liability                   |                                  |                                  |                                  |  |  |
| Service Cost                              | 794,900                          | 1,237,033                        | 534,123                          |  |  |
| Interest                                  | 3,248,998                        | 2,970,792                        | 3,371,172                        |  |  |
| Changes of Benefit Terms                  |                                  |                                  | -                                |  |  |
| Differences Between Expected and Actual   |                                  |                                  |                                  |  |  |
| Experience                                | 887,614                          | 1,283,150                        | 635,826                          |  |  |
| Changes of Assumptions                    | -                                | -                                | -                                |  |  |
| Benefit Payments, Including Refunds of    |                                  |                                  |                                  |  |  |
| Employee Contributions                    | (2,716,410)                      | (2,716,410)                      | (2,716,410)                      |  |  |
| Net Change in Total Pension Liability     | 2,215,102                        | 2,774,565                        | 1,824,711                        |  |  |
| Total Pension Liability - Beginning       | 46,977,557                       | 59,537,010                       | 38,281,545                       |  |  |
| Total Pension Liability - Ending (a)      | \$ 49,192,659                    | \$ 62,311,575                    | \$ 40,106,256                    |  |  |
| Plan Fiduciary Net Position               |                                  |                                  |                                  |  |  |
| Contributions - Employer                  | 1,189,748                        | 1,189,748                        | 1,189,748                        |  |  |
| Contributions - State                     | 450,032                          | 450,032                          | 450,032                          |  |  |
| Contributions - Employee                  | 246,351                          | 246,351                          | 246,351                          |  |  |
| Net Investment Income                     | 75,018                           | 75,018                           | 75,018                           |  |  |
| Benefit Payments, Including Refunds of    |                                  |                                  |                                  |  |  |
| Employee Contributions                    | (2,716,410)                      | (2,716,410)                      | (2,716,410)                      |  |  |
| Administrative Expenses                   | (61,337)                         | (61,337)                         | (61,337)                         |  |  |
| Net Change in Plan Fiduciary Net Position | (816,598)                        | (816,598)                        | (816,598)                        |  |  |
| Plan Fiduciary Net Position - Beginning   | 49,014,907                       | 49,014,907                       | 49,014,907                       |  |  |
| Plan Fiduciary Net Position - Ending (b)  | \$ 48,198,309                    | \$ 48,198,309                    | \$ 48,198,309                    |  |  |
| Net Pension Liability - Ending (a) - (b)  | \$ 994,350                       | \$ 14,113,266                    | \$ (8,092,053)                   |  |  |

 $\label{thm:continuous} Table~1$  Plan Assumptions: 7.00% 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 |
|-------------------------------|---|----------------------------------|----------------------------|--|----------------------------------|--|
| 2019                          | 48,198,309                                    | _                                | 2,839,084                  | -                                      | 3,274,514                        | 48,633,739                                 |
| 2020                          | 48,633,739                                    | _                                | 2,877,989                  | _                                      | 3,303,632                        | 49,059,382                                 |
| 2021                          | 49,059,382                                    | _                                | 3,109,103                  | _                                      | 3,325,338                        | 49,275,617                                 |
| 2022                          | 49,275,617                                    | _                                | 3,238,103                  | _                                      | 3,335,960                        | 49,373,474                                 |
| 2023                          | 49,373,474                                    | _                                | 3,322,750                  | _                                      | 3,339,847                        | 49,390,571                                 |
| 2024                          | 49,390,571                                    | _                                | 3,362,485                  | _                                      | 3,339,653                        | 49,367,739                                 |
| 2025                          | 49,367,739                                    | _                                | 3,418,300                  | _                                      | 3,336,101                        | 49,285,540                                 |
| 2026                          | 49,285,540                                    | _                                | 3,493,341                  | _                                      | 3,327,721                        | 49,119,920                                 |
| 2027                          | 49,119,920                                    | _                                | 3,536,323                  | _                                      | 3,314,623                        | 48,898,220                                 |
| 2028                          | 48,898,220                                    | -                                | 3,580,546                  | _                                      | 3,297,556                        | 48,615,230                                 |
| 2029                          | 48,615,230                                    | _                                | 3,609,766                  | _                                      | 3,276,724                        | 48,282,188                                 |
| 2030                          | 48,282,188                                    | _                                | 3,651,874                  | _                                      | 3,251,938                        | 47,882,252                                 |
| 2031                          | 47,882,252                                    | _                                | 3,703,888                  | _                                      | 3,222,122                        | 47,400,486                                 |
| 2032                          | 47,400,486                                    | _                                | 3,699,257                  | _                                      | 3,188,560                        | 46,889,789                                 |
| 2033                          | 46,889,789                                    | _                                | 3,701,081                  | _                                      | 3,152,747                        | 46,341,455                                 |
| 2034                          | 46,341,455                                    | _                                | 3,669,479                  | _                                      | 3,115,470                        | 45,787,446                                 |
| 2035                          | 45,787,446                                    | _                                | 3,616,574                  | _                                      | 3,078,541                        | 45,249,413                                 |
| 2036                          | 45,249,413                                    | _                                | 3,550,427                  | _                                      | 3,043,194                        | 44,742,180                                 |
| 2037                          | 44,742,180                                    | _                                | 3,489,913                  | _                                      | 3,009,806                        | 44,262,073                                 |
| 2038                          | 44,262,073                                    | _                                | 3,427,571                  | _                                      | 2,978,380                        | 43,812,882                                 |
| 2039                          | 43,812,882                                    | _                                | 3,354,507                  | _                                      | 2,949,494                        | 43,407,869                                 |
| 2040                          | 43,407,869                                    | _                                | 3,275,291                  | _                                      | 2,923,916                        | 43,056,494                                 |
| 2040                          | 43,056,494                                    | _<br>_                           | 3,184,690                  | _                                      | 2,902,490                        | 42,774,294                                 |
| 2042                          | 42,774,294                                    | _                                | 3,092,426                  | _                                      | 2,885,966                        | 42,567,834                                 |
| 2042                          | 42,567,834                                    | _                                | 2,995,827                  | _                                      | 2,874,894                        | 42,446,901                                 |
| 2044                          | 42,446,901                                    | _                                | 2,897,499                  | _                                      | 2,869,871                        | 42,419,273                                 |
| 2045                          | 42,419,273                                    | _                                | 2,797,630                  | _                                      | 2,871,432                        | 42,493,075                                 |
| 2046                          | 42,493,075                                    | _                                | 2,695,711                  | _                                      | 2,880,165                        | 42,677,529                                 |
| 2047                          | 42,677,529                                    | _                                | 2,590,981                  | _                                      | 2,896,743                        | 42,983,291                                 |
| 2048                          | 42,983,291                                    | _                                | 2,483,813                  | _                                      | 2,921,897                        | 43,421,375                                 |
| 2049                          | 43,421,375                                    | _                                | 2,375,423                  | _                                      | 2,956,356                        | 44,002,308                                 |
| 2050                          | 44,002,308                                    | _                                | 2,266,038                  | _                                      | 3,000,850                        | 44,737,120                                 |
| 2051                          | 44,737,120                                    | _                                | 2,156,194                  | _                                      | 3,056,132                        | 45,637,058                                 |
| 2052                          | 45,637,058                                    | _                                | 2,045,877                  | _                                      | 3,122,988                        | 46,714,169                                 |
| 2053                          | 46,714,169                                    | _                                | 1,935,390                  | _                                      | 3,202,253                        | 47,981,032                                 |
| 2054                          | 47,981,032                                    | _                                | 1,825,007                  | _                                      | 3,294,797                        | 49,450,822                                 |
| 2055                          | 49,450,822                                    | _                                | 1,715,172                  | _                                      | 3,401,527                        | 51,137,177                                 |
| 2056                          | 51,137,177                                    | _                                | 1,606,210                  | _                                      | 3,523,385                        | 53,054,352                                 |
| 2057                          | 53,054,352                                    | _                                | 1,498,565                  | _                                      | 3,661,355                        | 55,217,142                                 |
| 2058                          | 55,217,142                                    | -                                | 1,393,209                  | _                                      | 3,816,438                        | 57,640,371                                 |
| 2059                          | 57,640,371                                    | -                                | 1,290,872                  | _                                      | 3,989,645                        | 60,339,144                                 |
| 2060                          | 60,339,144                                    | _                                | 1,192,016                  | _                                      | 4,182,020                        | 63,329,148                                 |
| 2061                          | 63,329,148                                    | _                                | 1,096,938                  | _                                      | 4,394,648                        | 66,626,858                                 |
| 2062                          | 66,626,858                                    | _                                | 1,005,660                  | _                                      | 4,628,682                        | 70,249,880                                 |
| 2063                          | 70,249,880                                    | _                                | 918,374                    | _                                      | 4,885,349                        | 74,216,855                                 |
| 2064                          | 74,216,855                                    | _                                | 835,630                    | -                                      | 5,165,933                        | 78,547,158                                 |
| 2065                          | 78,547,158                                    | _                                | 757,559                    | -                                      | 5,471,786                        | 83,261,385                                 |
| 2066                          | 83,261,385                                    | _                                | 683,980                    | -                                      | 5,804,358                        | 88,381,763                                 |
| 2067                          | 88,381,763                                    | _                                | 614,930                    | -                                      | 6,165,201                        | 93,932,034                                 |
| 2068                          | 93,932,034                                    | _                                | 550,338                    | -                                      | 6,555,981                        | 99,937,677                                 |
| 2069                          | 99,937,677                                    | _                                | 490,136                    | -                                      | 6,978,483                        | 106,426,024                                |
| 2070                          | 106,426,024                                   | _                                | 434,047                    | _                                      | 7,434,630                        | 113,426,607                                |
| 2070                          | 100,120,021                                   |                                  | 15 1,0 17                  |  | 7, 13 1,030                      | 113,120,007                                |

Table 1 Plan Assumptions: 7.00% 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 |
|-------------------------------|---|----------------------------------|-------------------------------|--|----------------------------------|--|
| 2071                          | 113,426,607                                   | _                                | 382,005                       | -                                      | 7,926,492                        | 120,971,094                                |
| 2072                          | 120,971,094                                   | -                                | 334,063                       | _                                      | 8,456,284                        | 129,093,315                                |
| 2073                          | 129,093,315                                   | -                                | 290,164                       | -                                      | 9,026,376                        | 137,829,527                                |
| 2074                          | 137,829,527                                   | -                                | 250,163                       | -                                      | 9,639,311                        | 147,218,675                                |
| 2075                          | 147,218,675                                   | -                                | 213,840                       | _                                      | 10,297,823                       | 157,302,658                                |
| 2076                          | 157,302,658                                   | -                                | 181,013                       | -                                      | 11,004,851                       | 168,126,496                                |
| 2077                          | 168,126,496                                   | -                                | 151,684                       | -                                      | 11,763,546                       | 179,738,358                                |
| 2078                          | 179,738,358                                   | -                                | 125,650                       | -                                      | 12,577,287                       | 192,189,995                                |
| 2079                          | 192,189,995                                   | -                                | 102,688                       | -                                      | 13,449,706                       | 205,537,013                                |
| 2080                          | 205,537,013                                   | -                                | 82,728                        | -                                      | 14,384,695                       | 219,838,980                                |
| 2081                          | 219,838,980                                   | -                                | 65,643                        | -                                      | 15,386,431                       | 235,159,768                                |
| 2082                          | 235,159,768                                   | -                                | 51,249                        | -                                      | 16,459,390                       | 251,567,909                                |
| 2083                          | 251,567,909                                   | -                                | 39,366                        | -                                      | 17,608,376                       | 269,136,919                                |
| 2084                          | 269,136,919                                   | -                                | 29,745                        | -                                      | 18,838,543                       | 287,945,717                                |
| 2085                          | 287,945,717                                   | -                                | 22,102                        | -                                      | 20,155,427                       | 308,079,042                                |
| 2086                          | 308,079,042                                   | _                                | 16,119                        | -                                      | 21,564,969                       | 329,627,892                                |
| 2087                          | 329,627,892                                   | -                                | 11,557                        | -                                      | 23,073,548                       | 352,689,883                                |
| 2088                          | 352,689,883                                   | -                                | 8,111                         | -                                      | 24,688,008                       | 377,369,780                                |
| 2089                          | 377,369,780                                   | -                                | 5,596                         | -                                      | 26,415,689                       | 403,779,873                                |
| 2090                          | 403,779,873                                   | -                                | 3,783                         | -                                      | 28,264,459                       | 432,040,549                                |
| 2091                          | 432,040,549                                   | -                                | 2,517                         | -                                      | 30,242,750                       | 462,280,782                                |
| 2092                          | 462,280,782                                   | -                                | 1,645                         | -                                      | 32,359,597                       | 494,638,734                                |
| 2093                          | 494,638,734                                   | -                                | 1,062                         | -                                      | 34,624,674                       | 529,262,346                                |
| 2094                          | 529,262,346                                   | -                                | 674                           | -                                      | 37,048,341                       | 566,310,013                                |
| 2095                          | 566,310,013                                   | -                                | 421                           | -                                      | 39,641,686                       | 605,951,278                                |
| 2096                          | 605,951,278                                   | -                                | 261                           | -                                      | 42,416,580                       | 648,367,597                                |
| 2097                          | 648,367,597                                   | -                                | 159                           | -                                      | 45,385,726                       | 693,753,164                                |
| 2098                          | 693,753,164                                   | -                                | 97                            | -                                      | 48,562,718                       | 742,315,785                                |
| 2099                          | 742,315,785                                   | -                                | 58                            | -                                      | 51,962,103                       | 794,277,830                                |
| 2100                          | 794,277,830                                   | -                                | 35                            | -                                      | 55,599,447                       | 849,877,242                                |
| 2101                          | 849,877,242                                   | -                                | 21                            | -                                      | 59,491,406                       | 909,368,627                                |
| 2102                          | 909,368,627                                   | -                                | 12                            | -                                      | 63,655,803                       | 973,024,418                                |
| 2103                          | 973,024,418                                   | -                                | 7                             | -                                      | 68,111,709                       | 1,041,136,120                              |
| 2104                          | 1,041,136,120                                 | -                                | 4                             | -                                      | 72,879,528                       | 1,114,015,644                              |
| 2105                          | 1,114,015,644                                 | -                                | 2                             | -                                      | 77,981,095                       | 1,191,996,737                              |
| 2106                          | 1,191,996,737                                 | -                                | 1                             | -                                      | 83,439,772                       | 1,275,436,508                              |
| 2107                          | 1,275,436,508                                 | -                                | -                             | -                                      | 89,280,556                       | 1,364,717,064                              |

Number of Years Expected Benefit Payments Sustained: 999.99

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 7.00% interest.

It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.

Table 2
Hypothetical Assumptions: 5.00% 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 |
|-------------------------------|---|----------------------------------|-------------------------------|--|----------------------------------|--|
| 2019                          | 48,198,309                                    | -                                | 2,839,084                     | -                                      | 2,338,938                        | 47,698,163                                 |
| 2020                          | 47,698,163                                    | -                                | 2,877,989                     | -                                      | 2,312,958                        | 47,133,132                                 |
| 2021                          | 47,133,132                                    | -                                | 3,109,103                     | -                                      | 2,278,929                        | 46,302,958                                 |
| 2022                          | 46,302,958                                    | -                                | 3,238,103                     | -                                      | 2,234,195                        | 45,299,050                                 |
| 2023                          | 45,299,050                                    | -                                | 3,322,750                     | -                                      | 2,181,884                        | 44,158,184                                 |
| 2024                          | 44,158,184                                    | -                                | 3,362,485                     | -                                      | 2,123,847                        | 42,919,546                                 |
| 2025                          | 42,919,546                                    | -                                | 3,418,300                     | -                                      | 2,060,520                        | 41,561,766                                 |
| 2026                          | 41,561,766                                    | -                                | 3,493,341                     | -                                      | 1,990,755                        | 40,059,180                                 |
| 2027                          | 40,059,180                                    | -                                | 3,536,323                     | -                                      | 1,914,551                        | 38,437,408                                 |
| 2028                          | 38,437,408                                    | -                                | 3,580,546                     | -                                      | 1,832,357                        | 36,689,219                                 |
| 2029                          | 36,689,219                                    | -                                | 3,609,766                     | -                                      | 1,744,217                        | 34,823,670                                 |
| 2030                          | 34,823,670                                    | -                                | 3,651,874                     | -                                      | 1,649,887                        | 32,821,683                                 |
| 2031                          | 32,821,683                                    | -                                | 3,703,888                     | -                                      | 1,548,487                        | 30,666,282                                 |
| 2032                          | 30,666,282                                    | -                                | 3,699,257                     | -                                      | 1,440,833                        | 28,407,858                                 |
| 2033                          | 28,407,858                                    | -                                | 3,701,081                     | -                                      | 1,327,866                        | 26,034,643                                 |
| 2034                          | 26,034,643                                    | -                                | 3,669,479                     | -                                      | 1,209,995                        | 23,575,159                                 |
| 2035                          | 23,575,159                                    | -                                | 3,616,574                     | -                                      | 1,088,344                        | 21,046,929                                 |
| 2036                          | 21,046,929                                    | -                                | 3,550,427                     | -                                      | 963,586                          | 18,460,088                                 |
| 2037                          | 18,460,088                                    | -                                | 3,489,913                     | -                                      | 835,757                          | 15,805,932                                 |
| 2038                          | 15,805,932                                    | -                                | 3,427,571                     | -                                      | 704,607                          | 13,082,968                                 |
| 2039                          | 13,082,968                                    | -                                | 3,354,507                     | -                                      | 570,286                          | 10,298,747                                 |
| 2040                          | 10,298,747                                    | -                                | 3,275,291                     | -                                      | 433,055                          | 7,456,511                                  |
| 2041                          | 7,456,511                                     | -                                | 3,184,690                     | -                                      | 293,208                          | 4,565,029                                  |
| 2042                          | 4,565,029                                     | -                                | 3,092,426                     | -                                      | 150,941                          | 1,623,544                                  |
| 2043                          | 1,623,544                                     | -                                | 2,995,827                     | -                                      | -                                | -  |

Number of Years Expected Benefit Payments Sustained: 24.54

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 5.00% interest.

It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.

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

| Fiscal Year<br>Beginning 10/1 | Projected Beginning Fiduciary Net Position | Projected Total<br>Contributions | Projected Benefit Payments | Projected<br>Administrative | Projected Investment<br>Earnings | Projected Ending Fiduciary Net Position |
|-------------------------------|--|----------------------------------|----------------------------|-----------------------------|----------------------------------|---|
| Deginning 10/1                | i iduciai y inet FOSITIOII                 | Conditionis                      | 1 ayments                  | Expense                     | Lainings                         | 1 Iducial y INEL FOSITIOII              |
| 2019                          | 48,198,309                                 | -                                | 2,839,084                  | -                           | 4,210,089                        | 49,569,314                              |
| 2020                          | 49,569,314                                 | -                                | 2,877,989                  | -                           | 4,331,729                        | 51,023,054                              |
| 2021                          | 51,023,054                                 | -                                | 3,109,103                  | -                           | 4,452,165                        | 52,366,116                              |
| 2022                          | 52,366,116                                 | -                                | 3,238,103                  | -                           | 4,567,236                        | 53,695,249                              |
| 2023                          | 53,695,249                                 | -                                | 3,322,750                  | -                           | 4,683,049                        | 55,055,548                              |
| 2024                          | 55,055,548                                 | -                                | 3,362,485                  | -                           | 4,803,687                        | 56,496,750                              |
| 2025                          | 56,496,750                                 | -                                | 3,418,300                  | -                           | 4,930,884                        | 58,009,334                              |
| 2026                          | 58,009,334                                 | -                                | 3,493,341                  | -                           | 5,063,640                        | 59,579,633                              |
| 2027                          | 59,579,633                                 | -                                | 3,536,323                  | -                           | 5,203,032                        | 61,246,342                              |
| 2028                          | 61,246,342                                 | -                                | 3,580,546                  | -                           | 5,351,046                        | 63,016,842                              |
| 2029                          | 63,016,842                                 | -                                | 3,609,766                  | -                           | 5,509,076                        | 64,916,152                              |
| 2030                          | 64,916,152                                 | -                                | 3,651,874                  | -                           | 5,678,119                        | 66,942,397                              |
| 2031                          | 66,942,397                                 | -                                | 3,703,888                  | -                           | 5,858,141                        | 69,096,650                              |
| 2032                          | 69,096,650                                 | _                                | 3,699,257                  | _                           | 6,052,232                        | 71,449,625                              |
| 2033                          | 71,449,625                                 | _                                | 3,701,081                  | _                           | 6,263,918                        | 74,012,462                              |
| 2034                          | 74,012,462                                 | _                                | 3,669,479                  | _                           | 6,495,995                        | 76,838,978                              |
| 2035                          | 76,838,978                                 | -                                | 3,616,574                  | _                           | 6,752,762                        | 79,975,166                              |
| 2036                          | 79,975,166                                 | -                                | 3,550,427                  | _                           | 7,037,996                        | 83,462,735                              |
| 2037                          | 83,462,735                                 | -                                | 3,489,913                  | _                           | 7,354,600                        | 87,327,422                              |
| 2038                          | 87,327,422                                 | -                                | 3,427,571                  | _                           | 7,705,227                        | 91,605,078                              |
| 2039                          | 91,605,078                                 | =                                | 3,354,507                  | -                           | 8,093,504                        | 96,344,075                              |
| 2040                          | 96,344,075                                 | -                                | 3,275,291                  | _                           | 8,523,579                        | 101,592,363                             |
| 2041                          | 101,592,363                                | -                                | 3,184,690                  | _                           | 9,000,002                        | 107,407,675                             |
| 2042                          | 107,407,675                                | -                                | 3,092,426                  | -                           | 9,527,532                        | 113,842,781                             |
| 2043                          | 113,842,781                                | -                                | 2,995,827                  | _                           | 10,111,038                       | 120,957,992                             |
| 2044                          | 120,957,992                                | =                                | 2,897,499                  | -                           | 10,755,832                       | 128,816,325                             |
| 2045                          | 128,816,325                                | =                                | 2,797,630                  | -                           | 11,467,576                       | 137,486,271                             |
| 2046                          | 137,486,271                                | -                                | 2,695,711                  | _                           | 12,252,457                       | 147,043,017                             |
| 2047                          | 147,043,017                                | -                                | 2,590,981                  | _                           | 13,117,277                       | 157,569,313                             |
| 2048                          | 157,569,313                                | -                                | 2,483,813                  | _                           | 14,069,467                       | 169,154,967                             |
| 2049                          | 169,154,967                                | -                                | 2,375,423                  | _                           | 15,117,053                       | 181,896,597                             |
| 2050                          | 181,896,597                                | -                                | 2,266,038                  | _                           | 16,268,722                       | 195,899,281                             |
| 2051                          | 195,899,281                                | -                                | 2,156,194                  | _                           | 17,533,907                       | 211,276,994                             |
| 2052                          | 211,276,994                                | -                                | 2,045,877                  | _                           | 18,922,865                       | 228,153,982                             |
| 2053                          | 228,153,982                                | -                                | 1,935,390                  | -                           | 20,446,766                       | 246,665,358                             |
| 2054                          | 246,665,358                                | -                                | 1,825,007                  | -                           | 22,117,757                       | 266,958,108                             |
| 2055                          | 266,958,108                                | =                                | 1,715,172                  | -                           | 23,949,047                       | 289,191,983                             |
| 2056                          | 289,191,983                                | =                                | 1,606,210                  | -                           | 25,954,999                       | 313,540,772                             |
| 2057                          | 313,540,772                                | -                                | 1,498,565                  | -                           | 28,151,234                       | 340,193,441                             |
| 2058                          | 340,193,441                                | =                                | 1,393,209                  | -                           | 30,554,715                       | 369,354,947                             |
| 2059                          | 369,354,947                                | =                                | 1,290,872                  | -                           | 33,183,856                       | 401,247,931                             |
| 2060                          | 401,247,931                                | -                                | 1,192,016                  | _                           | 36,058,673                       | 436,114,588                             |
| 2061                          | 436,114,588                                | _                                | 1,096,938                  | _                           | 39,200,951                       | 474,218,601                             |
| 2062                          | 474,218,601                                | _                                | 1,005,660                  | _                           | 42,634,419                       | 515,847,360                             |
| 2063                          | 515,847,360                                | -                                | 918,374                    | _                           | 46,384,936                       | 561,313,922                             |
| 2064                          | 561,313,922                                | -                                | 835,630                    | _                           | 50,480,650                       | 610,958,942                             |
| 2065                          | 610,958,942                                | -                                | 757,559                    | -                           | 54,952,215                       | 665,153,598                             |
| 2066                          | 665,153,598                                | -                                | 683,980                    | -                           | 59,833,045                       | 724,302,663                             |
| 2067                          | 724,302,663                                | -                                | 614,930                    | -                           | 65,159,568                       | 788,847,301                             |
| 2068                          | 788,847,301                                | -                                | 550,338                    | -                           | 70,971,492                       | 859,268,455                             |
| 2069                          | 859,268,455                                | -                                | 490,136                    | -                           | 77,312,105                       | 936,090,424                             |
| 2070                          | 936,090,424                                | -                                | 434,047                    | -                           | 84,228,606                       | 1,019,884,983                           |

Table 3 Hypothetical Assumptions: 9.00% 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 |
|-------------------------------|---|----------------------------------|-------------------------------|--|----------------------------------|--|
| 2071                          | 1,019,884,983                                 | _                                | 382,005                       | -                                      | 91,772,458                       | 1,111,275,436                              |
| 2072                          | 1,111,275,436                                 | -                                | 334,063                       | _                                      | 99,999,756                       | 1,210,941,129                              |
| 2073                          | 1,210,941,129                                 | -                                | 290,164                       | -                                      | 108,971,644                      | 1,319,622,609                              |
| 2074                          | 1,319,622,609                                 | -                                | 250,163                       | -                                      | 118,754,777                      | 1,438,127,223                              |
| 2075                          | 1,438,127,223                                 | -                                | 213,840                       | _                                      | 129,421,827                      | 1,567,335,210                              |
| 2076                          | 1,567,335,210                                 | -                                | 181,013                       | -                                      | 141,052,023                      | 1,708,206,220                              |
| 2077                          | 1,708,206,220                                 | -                                | 151,684                       | -                                      | 153,731,734                      | 1,861,786,270                              |
| 2078                          | 1,861,786,270                                 | -                                | 125,650                       | -                                      | 167,555,110                      | 2,029,215,730                              |
| 2079                          | 2,029,215,730                                 | -                                | 102,688                       | _                                      | 182,624,795                      | 2,211,737,837                              |
| 2080                          | 2,211,737,837                                 | -                                | 82,728                        | -                                      | 199,052,683                      | 2,410,707,792                              |
| 2081                          | 2,410,707,792                                 | -                                | 65,643                        | -                                      | 216,960,747                      | 2,627,602,896                              |
| 2082                          | 2,627,602,896                                 | -                                | 51,249                        | -                                      | 236,481,954                      | 2,864,033,601                              |
| 2083                          | 2,864,033,601                                 | -                                | 39,366                        | -                                      | 257,761,253                      | 3,121,755,488                              |
| 2084                          | 3,121,755,488                                 | -                                | 29,745                        | -                                      | 280,956,655                      | 3,402,682,398                              |
| 2085                          | 3,402,682,398                                 | -                                | 22,102                        | -                                      | 306,240,421                      | 3,708,900,717                              |
| 2086                          | 3,708,900,717                                 | -                                | 16,119                        | _                                      | 333,800,339                      | 4,042,684,937                              |
| 2087                          | 4,042,684,937                                 | _                                | 11,557                        | -                                      | 363,841,124                      | 4,406,514,504                              |
| 2088                          | 4,406,514,504                                 | -                                | 8,111                         | -                                      | 396,585,940                      | 4,803,092,333                              |
| 2089                          | 4,803,092,333                                 | -                                | 5,596                         | -                                      | 432,278,058                      | 5,235,364,795                              |
| 2090                          | 5,235,364,795                                 | -                                | 3,783                         | -                                      | 471,182,661                      | 5,706,543,673                              |
| 2091                          | 5,706,543,673                                 | -                                | 2,517                         | _                                      | 513,588,817                      | 6,220,129,973                              |
| 2092                          | 6,220,129,973                                 | -                                | 1,645                         | -                                      | 559,811,624                      | 6,779,939,952                              |
| 2093                          | 6,779,939,952                                 | -                                | 1,062                         | _                                      | 610,194,548                      | 7,390,133,438                              |
| 2094                          | 7,390,133,438                                 | _                                | 674                           | -                                      | 665,111,979                      | 8,055,244,743                              |
| 2095                          | 8,055,244,743                                 | _                                | 421                           | -                                      | 724,972,008                      | 8,780,216,330                              |
| 2096                          | 8,780,216,330                                 | _                                | 261                           | -                                      | 790,219,458                      | 9,570,435,527                              |
| 2097                          | 9,570,435,527                                 | _                                | 159                           | -                                      | 861,339,190                      | 10,431,774,558                             |
| 2098                          | 10,431,774,558                                | _                                | 97                            | -                                      | 938,859,706                      | 11,370,634,167                             |
| 2099                          | 11,370,634,167                                | _                                | 58                            | -                                      | 1,023,357,072                    | 12,393,991,181                             |
| 2100                          | 12,393,991,181                                | -                                | 35                            | _                                      | 1,115,459,205                    | 13,509,450,351                             |
| 2101                          | 13,509,450,351                                | _                                | 21                            | -                                      | 1,215,850,531                    | 14,725,300,861                             |
| 2102                          | 14,725,300,861                                | -                                | 12                            | -                                      | 1,325,277,077                    | 16,050,577,926                             |
| 2103                          | 16,050,577,926                                | -                                | 7                             | -                                      | 1,444,552,013                    | 17,495,129,932                             |
| 2104                          | 17,495,129,932                                | -                                | 4                             | -                                      | 1,574,561,694                    | 19,069,691,622                             |
| 2105                          | 19,069,691,622                                | -                                | 2                             | -                                      | 1,716,272,246                    | 20,785,963,866                             |
| 2106                          | 20,785,963,866                                | -                                | 1                             | -                                      | 1,870,736,748                    | 22,656,700,613                             |
| 2107                          | 22,656,700,613                                | -                                | -                             | -                                      | 2,039,103,055                    | 24,695,803,668                             |

Number of Years Expected Benefit Payments Sustained: 999.99

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 9.00% interest.

It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.

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

Valuation Date: 10/1/2019

|  | ACTUAL                           | HYPOTHETICAL                     |                                  |  |
|--|----------------------------------|----------------------------------|----------------------------------|--|
|  | 7.00%<br>RP-2000<br>Generational | 5.00%<br>RP-2000<br>Generational | 9.00%<br>RP-2000<br>Generational |  |
| Minimum Required Contribution (Fixed \$)       | \$792,293                        | \$2,092,238                      | \$495,027                        |  |
| Minimum Required Contribution (% of Payroll)   | 21.5%                            | 56.9%                            | 13.5%                            |  |
| Expected Member Contribution                   | 224,439                          | 224,439                          | 224,439                          |  |
| Expected State Money                           | 176,349                          | 176,349                          | 176,349                          |  |
|  |                                  |                                  |                                  |  |
| Expected Sponsor Contribution (Fixed \$)       | \$391,505                        | \$1,691,450                      | \$94,239                         |  |
| Expected Sponsor Contribution (% of Payroll)   | 10.6%                            | 46.0%                            | 2.6%                             |  |
| <u>ASSETS</u>                                  |                                  |                                  |                                  |  |
| Actuarial Value <sup>1</sup>                   | 50,532,311                       | 50,532,311                       | 50,532,311                       |  |
| Market Value <sup>1</sup>                      | 48,198,309                       | 48,198,309                       | 48,198,309                       |  |
| <u>LIABILITIES</u>                             |                                  |                                  |                                  |  |
| Present Value of Benefits                      |                                  |                                  |                                  |  |
| Active Members                                 | 45 004 206                       | 26.120.515                       | 12.026.002                       |  |
| Retirement Benefits                            | 17,881,396                       | 26,138,517                       | 12,826,092                       |  |
| Disability Benefits                            | 2,802,139                        | 3,779,318                        | 2,152,313                        |  |
| Death Benefits                                 | 176,200                          | 217,336                          | 145,091                          |  |
| Vested Benefits                                | 1,223,826                        | 1,978,979                        | 792,342                          |  |
| Refund of Contributions Service Retirees       | 91,407                           | 95,183<br>32,157,926             | 87,922                           |  |
| DROP Retirees <sup>1</sup>                     | 26,438,847<br>388,888            | 32,137,926<br>477,386            | 22,352,717<br>326,243            |  |
| Beneficiaries                                  | 844,181                          | 1,025,919                        | 716,150                          |  |
| Disability Retirees                            | 3,377,988                        | 4,157,902                        | 2,836,620                        |  |
| Terminated Vested                              | 2,117,693                        | 2,850,050                        | 1,637,967                        |  |
| Share Plan Balances <sup>1</sup>               | 0                                | 0                                | 0                                |  |
| Total:   | 55,342,565                       | 72,878,516                       | 43,873,457                       |  |
| Present Value of Future Salaries               | 27,712,077                       | 30,624,809                       | 25,299,203                       |  |
| Present Value of Future                        |                                  |                                  |                                  |  |
| Member Contributions                           | 1,690,437                        | 1,868,113                        | 1,543,251                        |  |
| Total Normal Cost                              | 726,215                          | 1,156,896                        | 473,710                          |  |
| Present Value of Future                        |                                  |                                  |                                  |  |
| Normal Costs (Entry Age Normal)                | 5,162,384                        | 9,121,713                        | 3,060,911                        |  |
| Total Actuarial Accrued Liability <sup>1</sup> | 50,180,181                       | 63,756,803                       | 40,812,546                       |  |
| Unfunded Actuarial Accrued<br>Liability (UAAL) | (352,130)                        | 13,224,492                       | (9,719,765)                      |  |

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

Valuation Date: 10/1/2019

|   | ACTUAL                           | НҮРОТЬ                           | HETICAL                          |
|---|----------------------------------|----------------------------------|----------------------------------|
|   | 7.00%<br>RP-2000<br>Generational | 5.00%<br>RP-2000<br>Generational | 9.00%<br>RP-2000<br>Generational |
| PENSION COST                                      |                                  |                                  |                                  |
| Normal Cost (with interest)                       | 751,633                          | 1,185,818                        | 495,027                          |
| Administrative Expenses (with interest)           | 76,330                           | 75,593                           | 77,068                           |
| Payment Required To Amortize UAAL (with interest) | (35,670)                         | 830,827                          | (914,403)                        |
| Minimum Required Contribution                     | \$792,293                        | \$2,092,238                      | \$495,027 2                      |

<sup>&</sup>lt;sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2019.

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