CITY OF BOYNTON BEACH MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND

Chapter 112.664, F.S. Compliance Report In Connection with the October 1, 2019 Funding Actuarial Valuation Report And the Plan's Financial Reporting for the Year Ending September 30, 2019







June 26, 2020

Board of Trustees City of Boynton Beach Municipal Firefighters Pension Fund Boynton Beach, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Boynton Beach Municipal Firefighters Pension Fund (System) to prepare a disclosure report to satisfy the requirements set forth in Ch. 112.664, F.S. and as further required pursuant to Ch. 60T-1.0035, F.A.C.

This report was prepared at the request of the Board and is intended for use by the Retirement Board and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purpose of the report is to provide the required information specified in Ch. 112.664, F.S. as well as supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

The findings in this report are based on data or other information through September 30, 2019. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the City and the Board concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the City.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the Board as described in our October 1, 2019 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2019 actuarial valuation report. Please refer to the October 1, 2019 actuarial valuation report, dated March 30, 2020, for summaries and descriptions of this information.

Board of Trustees City of Boynton Beach Municipal Firefighters' Pension Trust Fund June 26, 2020

The use of an investment return assumption that is 2% higher than the investment return assumption used to determine the funding requirements does not represent an estimate of future Plan experience nor does it reflect an observation of future return estimates inherent in financial market data. The use of this investment return assumption is provided as a counterpart to the Chapter 112.664, Florida Statutes requirement to utilize an investment return assumption that is 2% lower than the assumption used to determine the funding requirements. The inclusion of the additional exhibits showing the effect of using a 2% higher investment return assumption shows a more complete assessment of the range of possible results as opposed to showing a one-sided range as required by Florida Statutes.

Peter N. Strong and Jeffrey Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

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 complete by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate, and in our opinion, meet the requirements of Section 112.664(1), F.S. and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

Peter N. Strong, FSA MAAA, FCA

Enrolled Actuary No. 20-6975

Senior Consultant & Actuary

leffrey/Amrose, MAAA, FCA Enrolled Actuary No. 20-6599

Senior Consultant & Actuary



TABLE OF CONTENTS

| <u>Title</u> | | <u>Page</u> |
|---------------|---|-------------|
| Ch. 112.664 | F.S. Results | |
| Schedule of | Changes in Net Pension Liability | |
| 1. Usir | g financial reporting assumptions per GASB Statement No. 67 | 1 |
| 2. Usir | g assumptions prescribed in Section 112.664(1)(a), F.S. | 2 |
| 3. Usir | g assumptions prescribed in Section 112.664(1)(b), F.S. | 3 |
| 4. Usir | g the mandated mortality and funding interest rate +2% | 4 |
| Assets Versu | s Benefit Payments Projections | |
| 1. Usir | g assumptions from the Plan's latest actuarial valuation | 5 |
| 2. Usir | g assumptions prescribed in Section 112.664(1)(a), F.S. | 6 |
| 3. Usir | g assumptions prescribed in Section 112.664(1)(b), F.S. | 7 |
| 4. Usir | g the mandated mortality and funding interest rate +2% | 8 |
| Actuarially Γ | etermined Contribution | 9 |



CH. 112.664, FLORIDA STATUTES

RESULTS



Schedule of Changes in the Employers' Net Pension Liability Using Financial Reporting Assumptions per GASB Statement No. 67

| Fiscal year ending September 30, | 2019 | |
|--|------------|--------------------|
| 1. Total pension liability | | |
| a. Service Cost | \$ | 3,403,511 |
| b. Interest | | 11,904,771 |
| c. Benefit Changes | | (1,384,791) |
| d. Difference between actual & expected experience & Other | | (1,144,808) |
| e. Assumption Changes | | - |
| f. Benefit Payments | | (7,597,186) |
| g. Contribution Refunds | | (26,917) |
| h. Net Change in Total Pension Liability | | 5,154,580 |
| i. Total Pension Liability - Beginning | | 158,841,491 |
| j. Total Pension Liability - Ending | \$ | 163,996,071 |
| | | |
| 2. Plan Fiduciary Net Position | | |
| a. Contributions - Employer (From City) | \$ | 5,627,597 |
| b. Contributions - Employer (From State) | | 830,904 |
| c. Contributions - Member | | 1,524,397 |
| d. Net Investment Income | | 6,835,550 |
| e. Benefit Payments | | (7,597,186) |
| f. Contribution Refunds | | (26,917) |
| g. Administrative Expense | | (184,750) |
| h. Other | | 379,375 |
| i. Net Change in Plan Fiduciary Net Position | | 7,388,970 |
| j. Plan Fiduciary Net Position - Beginning | | 115,403,386 |
| k. Plan Fiduciary Net Position - Ending | \$ | 122,792,356 |
| 2. Net Densien Liebility. //Accet | | 44 202 745 |
| 3. Net Pension Liability / (Asset) | | 41,203,715 |
| Certain Key Assumptions | | |
| Valuation Date | | 10/01/2018 |
| Measurement Date | | 09/30/2019 |
| Investment Return Assumption | | 7.50% |
| Mortality Table | 2018 FRS M | ortality - Special |
| | | Risk |



Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(a), F.S.

| Fiscal year ending September 30, | 2019 | |
|--|-------------|--------------------|
| 1. Total pension liability | | |
| a. Service Cost | \$ | 3,403,511 |
| b. Interest | | 11,904,771 |
| c. Benefit Changes | | (1,384,791) |
| d. Difference between actual & expected experience & Other | | (1,144,808) |
| e. Assumption Changes | | - |
| f. Benefit Payments | | (7,597,186) |
| g. Contribution Refunds | | (26,917) |
| h. Net Change in Total Pension Liability | | 5,154,580 |
| i. Total Pension Liability - Beginning | | 158,841,491 |
| j. Total Pension Liability - Ending | \$ | 163,996,071 |
| | | |
| 2. Plan Fiduciary Net Position | | |
| a. Contributions - Employer (From City) | \$ | 5,627,597 |
| b. Contributions - Employer (From State) | | 830,904 |
| c. Contributions - Member | | 1,524,397 |
| d. Net Investment Income | | 6,835,550 |
| e. Benefit Payments | | (7,597,186) |
| f. Contribution Refunds | | (26,917) |
| g. Administrative Expense | | (184,750) |
| h. Other | | 379,375 |
| i. Net Change in Plan Fiduciary Net Position | | 7,388,970 |
| j. Plan Fiduciary Net Position - Beginning | | 115,403,386 |
| k. Plan Fiduciary Net Position - Ending | \$ | 122,792,356 |
| | | _ |
| 3. Net Pension Liability / (Asset) | | 41,203,715 |
| | | |
| Certain Key Assumptions | | |
| Valuation Date | | 10/01/2018 |
| Measurement Date | | 09/30/2019 |
| Investment Return Assumption | | 7.50% |
| Mortality Table | 2018 FRS Mo | ortality - Special |
| | | Risk |



Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(b), F.S.

| 1. Total pension liability \$ 5,284,800 b. Interest 10,881,960 c. Benefit Changes - d. Difference between actual & expected experience & Other 371,271 e. Assumption Changes - f. Benefit Payments (7,597,186) g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability \$ 9,913,964 i. Total Pension Liability - Beginning 196,84,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ 30,904 a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Ending 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 < | Fiscal year ending September 30, | 2019 | |
|--|--|------------|--------------------|
| b. Interest 10,881,996 c. Benefit Changes - d. Difference between actual & expected experience & Other 371,271 e. Assumption Changes - f. Benefit Payments (7,597,186) g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability 8,913,964 i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position 830,904 a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending 32,206,006 Certain Key Assumptions 10/01/2018 | 1. Total pension liability | | _ |
| c. Benefit Changes - d. Difference between actual & expected experience & Other 371,271 e. Assumption Changes - f. Benefit Payments (7,597,186) g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability 8,913,964 i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions Valuation Date 10/01/2018 < | a. Service Cost | \$ | 5,284,800 |
| d. Difference between actual & expected experience & Other 371,271 e. Assumption Changes - f. Benefit Payments (7,597,186) g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability 8,913,964 i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ 5,627,597 a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | b. Interest | | 10,881,996 |
| e. Assumption Changes 7,597,186 f. Benefit Payments (7,597,186) g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability 8,913,964 i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position S a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions 82,206,006 Certain Key Assumptions 90/30/2019 Investment Date 90/30/2019 Investment Return Assumption 5.50% | c. Benefit Changes | | - |
| f. Benefit Payments (7,597,186) g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability 8,913,964 i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions 82,206,006 Certain Key Assumptions 90/30/2019 Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | d. Difference between actual & expected experience & Other | | 371,271 |
| g. Contribution Refunds (26,917) h. Net Change in Total Pension Liability 8,913,964 i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ 5,627,597 a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions 82,206,006 Certain Key Assumptions 90/30/2019 Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | e. Assumption Changes | | - |
| h. Net Change in Total Pension Liability 8,913,964 8,913,964 i. Total Pension Liability - Beginning 196,084,398 1,96,084,398 j. Total Pension Liability - Ending 204,998,362 2. Plan Fiduciary Net Position \$ 204,998,362 a. Contributions - Employer (From City) \$ 5,627,597 \$ 5,627,597 b. Contributions - Employer (From State) 830,904 \$ 330,904 c. Contributions - Member 1,524,397 \$ 6,835,550 e. Benefit Payments (7,597,186) \$ (7,597,186) f. Contribution Refunds (26,917) \$ (26,917) g. Administrative Expense (184,750) \$ (184,750) h. Other 379,375 \$ (184,750) i. Net Change in Plan Fiduciary Net Position 37,388,970 \$ 115,403,386 k. Plan Fiduciary Net Position - Beginning 115,403,386 \$ 122,792,356 Certain Key Assumptions \$ 2,206,006 Certain Key Assumptions \$ 2,206,006 Valuation Date 10,001/2018 Measurement Date 09/30/2019 Investment Return Assumption 5,50% | f. Benefit Payments | | (7,597,186) |
| i. Total Pension Liability - Beginning 196,084,398 j. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ 5,627,597 a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions 82,206,006 Certain Key Assumptions 10/01/2018 Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | g. Contribution Refunds | | (26,917) |
| J. Total Pension Liability - Ending \$ 204,998,362 2. Plan Fiduciary Net Position \$ 5,627,597 a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions 82,206,006 Certain Key Assumptions 10/01/2018 Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | h. Net Change in Total Pension Liability | | 8,913,964 |
| 2. Plan Fiduciary Net Position a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | i. Total Pension Liability - Beginning | | 196,084,398 |
| a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | j. Total Pension Liability - Ending | \$ | 204,998,362 |
| a. Contributions - Employer (From City) \$ 5,627,597 b. Contributions - Employer (From State) 830,904 c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | | | |
| b. Contributions - Employer (From State) c. Contributions - Member d. Net Investment Income e. Benefit Payments f. Contribution Refunds f. Contributio | 2. Plan Fiduciary Net Position | | |
| c. Contributions - Member 1,524,397 d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 3. Net Pension Liability / (Asset) 82,206,006 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | a. Contributions - Employer (From City) | \$ | 5,627,597 |
| d. Net Investment Income 6,835,550 e. Benefit Payments (7,597,186) f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$ 122,792,356 3. Net Pension Liability / (Asset) 82,206,006 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | b. Contributions - Employer (From State) | | 830,904 |
| e. Benefit Payments f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position j. Plan Fiduciary Net Position - Beginning k. Plan Fiduciary Net Position - Ending 3. Net Pension Liability / (Asset) Certain Key Assumptions Valuation Date Measurement Date Investment Return Assumption (7,597,186) (26,917) (184,750) (194,975) (194,97 | c. Contributions - Member | | 1,524,397 |
| f. Contribution Refunds (26,917) g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$122,792,356 3. Net Pension Liability / (Asset) 82,206,006 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | d. Net Investment Income | | 6,835,550 |
| g. Administrative Expense (184,750) h. Other 379,375 i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning 115,403,386 k. Plan Fiduciary Net Position - Ending \$122,792,356 3. Net Pension Liability / (Asset) 82,206,006 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | e. Benefit Payments | | (7,597,186) |
| h. Other i. Net Change in Plan Fiduciary Net Position 7,388,970 j. Plan Fiduciary Net Position - Beginning k. Plan Fiduciary Net Position - Ending 3. Net Pension Liability / (Asset) Certain Key Assumptions Valuation Date Measurement Date Investment Return Assumption 379,375 7,388,970 115,403,386 122,792,356 82,206,006 | f. Contribution Refunds | | (26,917) |
| i. Net Change in Plan Fiduciary Net Position j. Plan Fiduciary Net Position - Beginning k. Plan Fiduciary Net Position - Ending 3. Net Pension Liability / (Asset) Certain Key Assumptions Valuation Date Measurement Date Investment Return Assumption 7,388,970 115,403,386 \$ \$122,792,356 \$ 82,206,006 | g. Administrative Expense | | (184,750) |
| j. Plan Fiduciary Net Position - Beginning k. Plan Fiduciary Net Position - Ending 3. Net Pension Liability / (Asset) 82,206,006 Certain Key Assumptions Valuation Date Measurement Date Investment Return Assumption 115,403,386 \$ 122,792,356 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 | h. Other | | 379,375 |
| k. Plan Fiduciary Net Position - Ending \$ 122,792,356 3. Net Pension Liability / (Asset) 82,206,006 Certain Key Assumptions Valuation Date 10/01/2018 Measurement Date 09/30/2019 Investment Return Assumption 5.50% | i. Net Change in Plan Fiduciary Net Position | | 7,388,970 |
| 3. Net Pension Liability / (Asset) Certain Key Assumptions Valuation Date Measurement Date Investment Return Assumption 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 82,206,006 | j. Plan Fiduciary Net Position - Beginning | | 115,403,386 |
| Certain Key AssumptionsValuation Date10/01/2018Measurement Date09/30/2019Investment Return Assumption5.50% | k. Plan Fiduciary Net Position - Ending | \$ | 122,792,356 |
| Certain Key AssumptionsValuation Date10/01/2018Measurement Date09/30/2019Investment Return Assumption5.50% | | | |
| Valuation Date10/01/2018Measurement Date09/30/2019Investment Return Assumption5.50% | 3. Net Pension Liability / (Asset) | | 82,206,006 |
| Valuation Date10/01/2018Measurement Date09/30/2019Investment Return Assumption5.50% | Certain Key Assumptions | | |
| Investment Return Assumption 5.50% | | | 10/01/2018 |
| • | Measurement Date | | 09/30/2019 |
| | Investment Return Assumption | | 5.50% |
| | Mortality Table | 2018 FRS M | ortality - Special |
| Risk | | | Risk |



Schedule of Changes in the Employers' Net Pension Liability Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

| Fiscal year ending September 30, | 2019 | |
|--|------------|--------------------|
| 1. Total pension liability | | _ |
| a. Service Cost | \$ | 2,192,348 |
| b. Interest | | 12,170,960 |
| c. Benefit Changes | | - |
| d. Difference between actual & expected experience & Other | | 371,271 |
| e. Assumption Changes | | - |
| f. Benefit Payments | | (7,597,186) |
| g. Contribution Refunds | | (26,917) |
| h. Net Change in Total Pension Liability | | 7,110,476 |
| i. Total Pension Liability - Beginning | | 129,437,752 |
| j. Total Pension Liability - Ending | \$ | 136,548,228 |
| | | |
| 2. Plan Fiduciary Net Position | | |
| a. Contributions - Employer (From City) | \$ | 5,627,597 |
| b. Contributions - Employer (From State) | | 830,904 |
| c. Contributions - Member | | 1,524,397 |
| d. Net Investment Income | | 6,835,550 |
| e. Benefit Payments | | (7,597,186) |
| f. Contribution Refunds | | (26,917) |
| g. Administrative Expense | | (184,750) |
| h. Other | | 379,375 |
| i. Net Change in Plan Fiduciary Net Position | | 7,388,970 |
| j. Plan Fiduciary Net Position - Beginning | | 115,403,386 |
| k. Plan Fiduciary Net Position - Ending | \$ | 122,792,356 |
| | | _ |
| 3. Net Pension Liability / (Asset) | | 13,755,872 |
| | | |
| Certain Key Assumptions | | |
| Valuation Date | | 10/01/2018 |
| Measurement Date | | 09/30/2019 |
| Investment Return Assumption | | 9.50% |
| Mortality Table | 2018 FRS M | ortality - Special |
| | | Risk |



Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions from the Plan's Latest Actuarial Valuation

| | Market Value of | Expected | Projected Benefit | Market Value of |
|------|-----------------|--------------------------|--------------------------|-----------------|
| FYE | Assets (BOY) | Investment Return | Payments | Assets (EOY) |
| 2020 | 102,137,758 | 7,380,935 | 7,450,586 | 102,068,107 |
| 2021 | 102,068,107 | 7,357,768 | 7,929,080 | 101,496,795 |
| 2022 | 101,496,795 | 7,304,877 | 8,196,866 | 100,604,806 |
| 2023 | 100,604,806 | 7,218,138 | 8,725,940 | 99,097,004 |
| 2024 | 99,097,004 | 7,094,176 | 9,015,986 | 97,175,194 |
| 2025 | 97,175,194 | 6,930,140 | 9,546,650 | 94,558,684 |
| 2026 | 94,558,684 | 6,719,209 | 9,938,454 | 91,339,439 |
| 2027 | 91,339,439 | 6,459,874 | 10,415,573 | 87,383,740 |
| 2028 | 87,383,740 | 6,151,187 | 10,735,836 | 82,799,091 |
| 2029 | 82,799,091 | 5,800,659 | 10,913,946 | 77,685,804 |
| 2030 | 77,685,804 | 5,406,819 | 11,189,768 | 71,902,855 |
| 2031 | 71,902,855 | 4,969,369 | 11,289,202 | 65,583,022 |
| 2032 | 65,583,022 | 4,492,084 | 11,377,149 | 58,697,957 |
| 2033 | 58,697,957 | 3,974,255 | 11,415,775 | 51,256,437 |
| 2034 | 51,256,437 | 3,411,730 | 11,533,413 | 43,134,754 |
| 2035 | 43,134,754 | 2,800,349 | 11,593,523 | 34,341,580 |
| 2036 | 34,341,580 | 2,139,350 | 11,633,831 | 24,847,099 |
| 2037 | 24,847,099 | 1,426,857 | 11,644,687 | 14,629,269 |
| 2038 | 14,629,269 | 659,499 | 11,671,911 | 3,616,857 |
| 2039 | 3,616,857 | - | 11,675,543 | - |
| 2040 | - | - | 11,649,775 | - |
| 2041 | - | - | 11,612,549 | - |
| 2042 | - | - | 11,560,229 | - |
| 2043 | - | - | 11,488,507 | - |
| 2044 | - | - | 11,408,719 | - |
| 2045 | - | - | 11,308,886 | - |

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits, reflecting no contributions from the **Employer, Employee or State, contrary to Florida Statutes and Plan provisions**: 19.25

Certain Key Assumptions

Valuation Investment Return Assumption Valuation Mortality Table 2018 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



7.50%

Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(a), F.S.

| | Market Value of | Expected | Projected Benefit | Market Value of |
|------|-----------------|--------------------------|--------------------------|-----------------|
| FYE | Assets (BOY) | Investment Return | Payments | Assets (EOY) |
| 2020 | 102,137,758 | 7,380,935 | 7,450,586 | 102,068,107 |
| 2021 | 102,068,107 | 7,357,768 | 7,929,080 | 101,496,795 |
| 2022 | 101,496,795 | 7,304,877 | 8,196,866 | 100,604,806 |
| 2023 | 100,604,806 | 7,218,138 | 8,725,940 | 99,097,004 |
| 2024 | 99,097,004 | 7,094,176 | 9,015,986 | 97,175,194 |
| 2025 | 97,175,194 | 6,930,140 | 9,546,650 | 94,558,684 |
| 2026 | 94,558,684 | 6,719,209 | 9,938,454 | 91,339,439 |
| 2027 | 91,339,439 | 6,459,874 | 10,415,573 | 87,383,740 |
| 2028 | 87,383,740 | 6,151,187 | 10,735,836 | 82,799,091 |
| 2029 | 82,799,091 | 5,800,659 | 10,913,946 | 77,685,804 |
| 2030 | 77,685,804 | 5,406,819 | 11,189,768 | 71,902,855 |
| 2031 | 71,902,855 | 4,969,369 | 11,289,202 | 65,583,022 |
| 2032 | 65,583,022 | 4,492,084 | 11,377,149 | 58,697,957 |
| 2033 | 58,697,957 | 3,974,255 | 11,415,775 | 51,256,437 |
| 2034 | 51,256,437 | 3,411,730 | 11,533,413 | 43,134,754 |
| 2035 | 43,134,754 | 2,800,349 | 11,593,523 | 34,341,580 |
| 2036 | 34,341,580 | 2,139,350 | 11,633,831 | 24,847,099 |
| 2037 | 24,847,099 | 1,426,857 | 11,644,687 | 14,629,269 |
| 2038 | 14,629,269 | 659,499 | 11,671,911 | 3,616,857 |
| 2039 | 3,616,857 | - | 11,675,543 | - |
| 2040 | - | - | 11,649,775 | - |
| 2041 | - | - | 11,612,549 | - |
| 2042 | - | - | 11,560,229 | - |
| 2043 | - | - | 11,488,507 | - |
| 2044 | - | - | 11,408,719 | - |
| 2045 | - | - | 11,308,886 | - |

Number of years for which current market value of assets is adequate to sustain
the payment of expected retirement benefits, <u>reflecting no contributions from the</u>
<u>Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>: 19.25

Certain Key Assumptions

Valuation Investment Return Assumption 7.50%
Valuation Mortality Table 2018 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions</u>. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(b), F.S.

| | Market Value of | Expected | Projected Benefit | Market Value of |
|------|-----------------|--------------------------|-------------------|-----------------|
| FYE | Assets (BOY) | Investment Return | Payments | Assets (EOY) |
| 2020 | 102,137,758 | 5,412,686 | 7,450,586 | 100,099,858 |
| 2021 | 100,099,858 | 5,287,442 | 7,929,080 | 97,458,220 |
| 2022 | 97,458,220 | 5,134,788 | 8,196,866 | 94,396,142 |
| 2023 | 94,396,142 | 4,951,824 | 8,725,940 | 90,622,026 |
| 2024 | 90,622,026 | 4,736,272 | 9,015,986 | 86,342,312 |
| 2025 | 86,342,312 | 4,486,294 | 9,546,650 | 81,281,956 |
| 2026 | 81,281,956 | 4,197,200 | 9,938,454 | 75,540,702 |
| 2027 | 75,540,702 | 3,868,310 | 10,415,573 | 68,993,439 |
| 2028 | 68,993,439 | 3,499,404 | 10,735,836 | 61,757,007 |
| 2029 | 61,757,007 | 3,096,502 | 10,913,946 | 53,939,563 |
| 2030 | 53,939,563 | 2,658,957 | 11,189,768 | 45,408,752 |
| 2031 | 45,408,752 | 2,187,028 | 11,289,202 | 36,306,578 |
| 2032 | 36,306,578 | 1,683,990 | 11,377,149 | 26,613,419 |
| 2033 | 26,613,419 | 1,149,804 | 11,415,775 | 16,347,448 |
| 2034 | 16,347,448 | 581,941 | 11,533,413 | 5,395,976 |
| 2035 | 5,395,976 | - | 11,593,523 | - |
| 2036 | - | - | 11,633,831 | - |
| 2037 | - | - | 11,644,687 | - |
| 2038 | - | - | 11,671,911 | - |
| 2039 | - | - | 11,675,543 | - |
| 2040 | - | - | 11,649,775 | - |
| 2041 | - | - | 11,612,549 | - |
| 2042 | - | - | 11,560,229 | - |
| 2043 | - | - | 11,488,507 | - |
| 2044 | - | - | 11,408,719 | - |
| 2045 | - | - | 11,308,886 | - |

Number of years for which current market value of assets is adequate to sustain
the payment of expected retirement benefits, <u>reflecting no contributions from the</u>
<u>Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

15.42

Certain Key Assumptions

Valuation Investment Return Assumption
Valuation Mortality Table 20

2018 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do</u> not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes <u>and Plan provisions</u>. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



5.50%

Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

| | Market Value of | Expected | Projected Benefit | Market Value of |
|------|-----------------|--------------------------|--------------------------|-----------------|
| FYE | Assets (BOY) | Investment Return | Payments | Assets (EOY) |
| 2020 | 102,137,758 | 9,349,184 | 7,450,586 | 104,036,356 |
| 2021 | 104,036,356 | 9,506,823 | 7,929,080 | 105,614,099 |
| 2022 | 105,614,099 | 9,643,988 | 8,196,866 | 107,061,221 |
| 2023 | 107,061,221 | 9,756,334 | 8,725,940 | 108,091,615 |
| 2024 | 108,091,615 | 9,840,444 | 9,015,986 | 108,916,073 |
| 2025 | 108,916,073 | 9,893,561 | 9,546,650 | 109,262,984 |
| 2026 | 109,262,984 | 9,907,907 | 9,938,454 | 109,232,437 |
| 2027 | 109,232,437 | 9,882,342 | 10,415,573 | 108,699,206 |
| 2028 | 108,699,206 | 9,816,472 | 10,735,836 | 107,779,842 |
| 2029 | 107,779,842 | 9,720,673 | 10,913,946 | 106,586,569 |
| 2030 | 106,586,569 | 9,594,210 | 11,189,768 | 104,991,011 |
| 2031 | 104,991,011 | 9,437,909 | 11,289,202 | 103,139,718 |
| 2032 | 103,139,718 | 9,257,859 | 11,377,149 | 101,020,428 |
| 2033 | 101,020,428 | 9,054,691 | 11,415,775 | 98,659,344 |
| 2034 | 98,659,344 | 8,824,801 | 11,533,413 | 95,950,732 |
| 2035 | 95,950,732 | 8,564,627 | 11,593,523 | 92,921,836 |
| 2036 | 92,921,836 | 8,274,967 | 11,633,831 | 89,562,972 |
| 2037 | 89,562,972 | 7,955,360 | 11,644,687 | 85,873,645 |
| 2038 | 85,873,645 | 7,603,581 | 11,671,911 | 81,805,315 |
| 2039 | 81,805,315 | 7,216,917 | 11,675,543 | 77,346,689 |
| 2040 | 77,346,689 | 6,794,571 | 11,649,775 | 72,491,485 |
| 2041 | 72,491,485 | 6,335,095 | 11,612,549 | 67,214,031 |
| 2042 | 67,214,031 | 5,836,222 | 11,560,229 | 61,490,024 |
| 2043 | 61,490,024 | 5,295,848 | 11,488,507 | 55,297,365 |
| 2044 | 55,297,365 | 4,711,336 | 11,408,719 | 48,599,982 |
| 2045 | 48,599,982 | 4,079,826 | 11,308,886 | 41,370,922 |
| 2046 | 41,370,922 | 3,398,744 | 11,189,336 | 33,580,330 |
| 2047 | 33,580,330 | 2,664,982 | 11,055,770 | 25,189,542 |
| 2048 | 25,189,542 | 1,875,143 | 10,902,394 | 16,162,291 |
| 2049 | 16,162,291 | 1,025,510 | 10,734,908 | 6,452,893 |
| 2050 | 6,452,893 | 111,706 | 10,554,085 | - |

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

30.58

Certain Key Assumptions

Valuation Investment Return Assumption
Valuation Mortality Table

9.50%

2018 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions</u>. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



| ACTUARIALLY DETERMINED CONTRIBUTION | | | | |
|--|--|--|--|---|
| | Plan's Latest Actuarial Valuation | 112.664(1)(a) F.S. Assumptions | 112.664(1)(b) F.S. Assumptions | 112.664(1)(b) F.S. except 2% higher investment return assumption |
| A. Valuation Date | October 1, 2019 | October 1, 2019 | October 1, 2019 | October 1, 2019 |
| B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending | 9/30/2021 | 9/30/2021 | 9/30/2021 | 9/30/2021 |
| C. Assumed Date(s) of Employer Contributions | 10/1/2020 | 10/1/2020 | 10/1/2020 | 10/1/2020 |
| D. Annual Payment to Amortize Unfunded Actuarial Liability | \$ 3,818,804 | \$ 3,818,804 | \$ 5,691,503 | \$ 2,070,876 |
| E. Employer Normal Cost | 2,426,234 | 2,426,234 | 4,569,566 | 1,177,692 |
| F. Employer ADC if Paid on Valuation Date: D + E | 6,245,038 | 6,245,038 | 10,261,069 | 3,248,568 |
| G. Employer ADC Adjusted for Frequency of Payments | 6,245,038 | 6,245,038 | 10,261,069 | 3,248,568 |
| H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll | 54.28 % | 54.28 % | 89.19 % | 28.24 % |
| I. Covered Payroll per Valuation | 11,504,436 | 11,504,436 | 11,504,436 | 11,504,436 |
| J. Assumed Rate of Increase in Covered Payroll to Contibution Year | 2.50 % | 2.50 % | 2.50 % | 2.50 % |
| K. Covered Payroll for Contribution Year | 11,792,047 | 11,792,047 | 11,792,047 | 11,792,047 |
| L. Employer ADC for Contribution Year: H x K | 6,400,723 | 6,400,723 | 10,517,327 | 3,330,074 |
| M. Estimated State Revenue in Contribution Year Including amounts from Excess Reserve | 1,062,385 | 1,062,385 | 1,062,385 | 1,062,385 |
| N. Net Employer ADC in Contribution Year | 5,338,338 | 5,338,338 | 9,454,942 | 2,267,689 |
| O. Net Employer ADC as % of Covered Payroll in Contribution Year: N ÷ K | 45.27 % | 45.27 % | 80.18 % | 19.23 % |
| P. Expected Member Contribution | 1,415,046 | 1,415,046 | 1,415,046 | 1,415,046 |
| Q. Total Contribution (Including Members) in Contribution Year | 7,815,769 | 7,815,769 | 11,932,373 | 4,745,120 |
| R. Total Contribution as % of Covered Payroll in Contribution Year: Q ÷ K | 66.28 % | 66.28 % | 101.19 % | 40.24 % |
| S. Certain Key Assumptions Investment Return Assumption Mortality Table | 7.50% 2018 FRS Mortality - Special Risk | 7.50% 2018 FRS Mortality - Special Risk | 5.50% 2018 FRS Mortality - Special Risk | 9.50% 2018 FRS Mortality - Special Risk |

