## ACTUARIAL VALUATION OF TOWN OF DAVIE POLICE PENSION PLAN AS OF OCTOBER 1, 2022

### March 2023

Determination of Contribution for the Plan Year ending September 30, 2023
Contribution to be
Paid in Fiscal Year October 1, 2022
through September 30, 2023

DuLaney and Company, Inc. Actuarial Services



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April 4, 2023

Board of Trustees Town of Davie Police Pension Plan c/o Mr. Greg Brillant Precision Pension Administration, Inc. 13790 NW 4<sup>th</sup> Street, Suite 105 Sunrise, FL 33325

#### Dear Board Members:

We are pleased to present the October 1, 2022 Actuarial Valuation for the Town of Davie Police Pension Plan. The purpose of this report is to indicate appropriate contribution levels and to satisfy State requirements. The report is prepared for and at the request of the Board of Trustees.

This report consists of this commentary, detail Tables I through XV and State Required Exhibit - Table XVI. The Tables contain basic Retirement Plan cost figures plus significant detail on the benefits, liabilities and experience of your Plan.

#### Costs for Fiscal Year Beginning October 1, 2022

This Actuarial Valuation develops the required minimum Retirement Plan payment for the fiscal year beginning October 1, 2022 and ending September 30, 2023 under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 185. The minimum payment consists of payment of annual normal cost plus amortization of the unfunded actuarial accrued liability over various periods, and interest, as prescribed by law. We anticipated that member pension contributions will be \$1,392,836 (9.0% of covered payroll).

The required funding amount for the plan/fiscal year ending September 30, 2023, to be met by the Town and State contributions under Chapter 185, is \$8,901,037 or 57.5% of the covered payroll. Please note that Chapter 185 states that employer contributions must be made at least quarterly, and these quarterly amounts must be at least \$1,964,323.

The anticipated State (Chapter 185) contribution is \$1,043,745. The resulting Town required contribution is \$7,857,292, or 50.8% of the covered payroll. If the actual Chapter 185 contribution is below the anticipated \$1,043,745, the difference must be made up by an additional Town contribution.

The Town contributed its entire contribution for the 10/1/2021 - 9/30/2022 plan year in a single payment of \$6,170,000 on 10/27/2021, rather than making contributions throughout the plan year. From the 10/1/2021 valuation report, the Town's Minimum Funding Requirement (MFR) was \$6,015,004, but the MFR as of 10/27/2021 was only \$5,796,331. Thus, the Town generated a prepaid contribution of \$373,669 (\$6,170,000 - \$5,796,331).

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## Changes in Plan Provisions, Actuarial Methods or Assumptions Recognized in this Valuation

The plan provisions remained the same as those recognized in our October 1, 2021 valuation. The plan provisions are outlined in Table X.

The method to determine the actuarial value of assets was changed. It is determined by smoothing the differences between actual investment earnings and assumed investment return over four (4) years instead of three (3) years. There were no other changes in actuarial assumptions and methods from those utilized in the last actuarial valuation. Table XI contains an outline of the assumptions and methods used.

#### Comparison of October 1, 2021 and October 1, 2022 Valuation Results

Table II of the report provides information of a comparative nature. Column I shows the results of the October 1, 2021 Actuarial Valuation while Column II shows the results as of October 1, 2022 prior to the change in actuarial asset method. A comparison of the two columns shows the effect of plan experience during the year. Covered payroll decreased by approximately 1.1% while the number of active participants decreased by 3.2%. The unfunded liability increased from \$26,393,571 to \$60,342,506. The actuarial loss experienced during the plan year was \$35,446,163. The Town's minimum funding requirement increased as a dollar amount and as a percentage of covered payroll.

Column III of the Table displays the results after the actuarial asset method change. A comparison of Columns II and III indicates that the changes decreased the unfunded actuarial accrued liability by \$16,511,589, from \$60,342,506 to \$43,830,917. The Town minimum funding requirement decreased from 60.5% to 50.8% of the covered payroll of \$15,475,959, assuming a Chapter 185 contribution of at least \$1,043,745 for 2022/2023.

The combined result of plan experience and actuarial asset method change is that the Town's funding requirement increased as a dollar amount from \$6,015,004 to \$7,857,292.

#### Plan Experience

Table XV provides a summary of certain plan experience during the plan year. The actuarial value of assets return was -2.4% for the 2021/2022 plan year, which was less than the assumed 6.95%. The market value rate of return was -15.8%. The actuarial value of assets return contributed mainly to the actuarial loss. Employee turnover was 22% lower than the expected turnover during the last plan year, and the most recent three (3) and five (5) year averages were 72% and 85% of the expected amounts, respectively. Average salary increase was 5.2%, as compared to the assumed 5.5%. Salary increase was a source of actuarial gain and employee turnover was a source of actuarial loss during the plan year.



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#### **Participant Census and Financial Data**

Census data for the fiscal year October 1, 2021 through September 30, 2022 was provided by the Town. Supplemental information was also received on retirees and terminations from the plan custodian and the plan administrator. The data was reviewed for consistency and is believed to be reliable.

Information on Plan assets was received from the Plan's auditors. We did not audit this information; however, we believe it to be reliable.

#### **Identification and Assessment of Risk**

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an estimate of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table XI. If any of the assumptions are changed, then the cost shown in this report will change accordingly. Likewise, there is always a risk that, should these assumptions not be realized, the liabilities of the plan, the contributions required to fund the plan, and the funded status of the plan may be significantly different than the amounts shown in this report.

Although a thorough analysis of the risk of not meeting the assumptions is beyond the scope of this report, this discussion is intended to identify the significant risks faced by the plan. In some cases, a more detailed review of the risks, including numerical analysis, may be appropriate to help the plan sponsor and other interested parties assess the specific impact of not realizing certain assumptions. Note that this report is not intended to provide advice on the management or reduction of the identified risks nor is this report intended to provide investment advice.

The most significant risk faced by most defined benefit pension plans is investment risk, i.e. the risk that long-term investment returns will be less than assumed, Other related risks include a risk that, if the investments of the plan decline dramatically over a short period of time (such as occurred with many pension plans in 2008), the plan's assets may not have sufficient time to recover before benefits become due. Even if the assets of the plan grow in accordance with the assumed investment return over time, if benefit payments are expected to be large in the short-term, the plan's assets may not be sufficient to support such a high level of benefit payments.

Another source of risk is demographic experience. This is the risk that participants will retire, become disabled, or terminate their employment at a rate that is different than assumed, and that participants will live longer than assumed, just to cite a few examples of the demographic risk faced by the plan. Although for most pension plans, the demographic risk is not as significant as the investment risk, particularly in light of the fact that the mortality assumption includes a component for future life expectancy increases; the demographic risk can nevertheless be

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significant contributing factor to liabilities and contribution rates that become higher than anticipated.

Finally, an actuarial funding method has been used to allocate the gap between projected liabilities and assets to each year in the future. The contribution rate under some funding methods is higher during the early years of the plan and then is lower during the later years of the plan. Other funding methods provide for lower contribution rates initially, with increasing contribution rate over time. The Trustees have adopted the entry age normal cost, level percent of pay funding method for this plan. Under this method, the contribution requirement is expected remain relatively constant as a percentage of covered payroll over the next 10 to 20 years absent investment or demographic experience.

#### Certification

To the best of our knowledge, this report fairly and accurately represents the liabilities of the fund as of October 1, 2022, based on the participant data and asset information provided by the plan administrator and the plan provisions and actuarial assumptions set forth herein. We believe that these assumptions are reasonable both individually and in the aggregate and represent our best estimate of anticipated experience. All calculations set forth herein conform to generally accepted actuarial principles and practices and comply with our understanding of the current requirements of the IRC.

**DuLaney and Company** 

Donald A. DuLaney, Jr. A.S.A., E.A.

Senior Consulting Actuary

Don Dufana, L

DAD/CP Attachments Corinne Paull, A.S.A Actuary



Table I

## TOWN OF DAVIE POLICE PENSION PLAN

## **Summary of Retirement Plan Costs as of October 1, 2022**

|    |               |  |    |             | % of           |
|----|---------------|--|----|-------------|----------------|
|    |               |  |    | Cost Data   | <u>Payroll</u> |
| ٨  |               | Destining at Data Communica                                      |    |             |                |
| A. | 1.            | Participant Data Summary Active ampleyees                        |    | 152         | N/A            |
|    | 2.            | Active employees Terminated vested                               |    | 6           | N/A<br>N/A     |
|    | 3.            | Receiving benefits   |    | 136         | N/A<br>N/A     |
|    | <i>3</i> . 4. | DROP participants  |    | 36          | N/A            |
|    | 5.            | Annual payroll of active employees                               | \$ | 15,475,959  | 100.0%         |
|    | ٥.            | Timidal payron of active employees                               | Ψ  | 15,175,555  | 100.070        |
| B. |               | Total Normal Costs   |    |             |                |
|    | 1.            | Age retirement benefits  | \$ | 4,420,768   | 28.6%          |
|    | 2.            | Termination benefits   |    | 256,996     | 1.7%           |
|    | 3.            | Death benefits   |    | 50,538      | 0.3%           |
|    | 4.            | Disability benefits  |    | 120,410     | 0.8%           |
|    | 5.            | Estimated expenses   |    | 212,769     | 1.4%           |
|    | 6.            | Total annual normal costs  | \$ | 5,061,481   | 32.7%          |
| C. |               | Total Actuarial Accrued Liability                                |    |             |                |
|    | 1.            | Age retirement benefits active employees                         | \$ | 70,095,787  | 452.9%         |
|    | 2.            | Termination benefits active employees                            |    | 1,817,305   | 11.7%          |
|    | 3.            | Death benefits active employees                                  |    | 123,355     | 0.8%           |
|    | 4.            | Disability benefits active employees                             |    | 554,208     | 3.6%           |
|    | 5.            | Retired or terminated vested participants                        |    | 105,648,127 | 682.7%         |
|    | 6.            | DROP participants benefits                                       |    | 50,427,298  | 325.8%         |
|    | 7.            | Terminated vested participants entitled to future benefits       |    | 1,527,327   | 9.9%           |
|    | 8.            | Deceased participants whose beneficiaries are receiving benefits |    | 4,849,554   | 31.3%          |
|    | 9.            | Disabled participants receiving benefits                         |    | 3,337,375   | 21.6%          |
|    | 10.           | Total actuarial accrued liability                                | \$ | 238,380,336 | 1,540.3%       |
| D. |               | Actuarial Value of Assets (Table VI)                             | \$ | 194,549,419 | 1,257.1%       |
| E. |               | <u>Unfunded Actuarial Accrued Liability (C. – D.)</u>            | \$ | 43,830,917  | 283.2%         |



# Table I (continued two)

| F. |    | Minimum Funding Requirements                             |    |             |          |
|----|----|--|----|-------------|----------|
|    | 1. | Total normal cost  | \$ | 5,061,481   | 32.7%    |
|    | 2. | Amortization of unfunded actuarial accrued liability     |    | 4,800,187   | 31.0%    |
|    | 3. | Interest adjustment                                      |    | 432,205     | 2.8%     |
|    | 4. | Total payment  | \$ | 10,293,873  | 66.5%    |
| G. |    | Contribution Sources                                     |    |             |          |
|    | 1. | a) Town  | \$ | 7,857,292   | 50.8%    |
|    |    | b) State   |    | 1,043,745   | 6.7%     |
|    |    | c) Total Town and State                                  | \$ | 8,901,037   | 57.5%    |
|    | 2. | Employees  | \$ | 1,392,836   | 9.0%     |
| Н. |    | Actuarial Present Value of Vested Accrued Benefits       |    |             |          |
|    | 1. | Retired, terminated vested, beneficiaries and            |    |             |          |
|    | 1. | disabled receiving benefits                              | \$ | 113,835,056 | 735.6%   |
|    | 2. | DROP participants  |    | 50,427,298  | 325.8%   |
|    | 3. | Terminated vested participants entitled to future        |    | 1 505 005   | 0.00/    |
|    | _  | benefits   |    | 1,527,327   | 9.9%     |
|    | 4. | Active participants entitled to future benefits          | _  | 49,594,675  | 320.5%   |
|    | 5. | Total actuarial present value of vested accrued benefits | \$ | 215,384,356 | 1,391.7% |
| I. |    | Market Value of Assets (Table V)                         | \$ | 170,550,085 | 1,102.0% |
| J. |    | Unfunded Actuarial Present Value of                      |    |             |          |
|    |    | Vested Accrued Benefits (H I., not less than \$0)        | \$ | 44,834,271  | 289.7%   |
| K. |    | Vested Benefit Security Ratio (I. ÷ H.)                  |    | 79.2%       | N/A      |



Table II **TOWN OF DAVIE POLICE PENSION PLAN** 

### Comparison of Cost Data of October 1, 2021 and October 1, 2022 Actuarial Valuations

|  | October  | 1, 2021                     | October 1, 2022<br>Prior Assumptions              |                                 | October<br>Current Ass                            |                             |  |
|--|--|-----------------------------|---|---------------------------------|---|-----------------------------|--|
|  | Cost Data  | % of Annual<br>Compensation | Cost Data   | % of Annual<br>Compensatio<br>n | Cost Data   | % of Annual<br>Compensation |  |
| <ul> <li>A. Participants</li> <li>1. Active employees     Tier One + Tier Two = Total</li> <li>2. Terminated vested</li> <li>3. Receiving benefits</li> <li>4. DROP participants</li> <li>5. Annual payroll of active     Employees<sup>1</sup></li> </ul> | 61 + 96 = 157<br>4<br>129<br>34<br>\$ 15,654,087 | N/A<br>N/A<br>N/A<br>N/A    | 52 + 100 = 152<br>6<br>136<br>36<br>\$ 15,475,959 | N/A<br>N/A<br>N/A<br>N/A        | 52 + 100 = 152<br>6<br>136<br>36<br>\$ 15,475,959 | N/A<br>N/A<br>N/A<br>N/A    |  |
| B. Total Normal Costs  | \$ 4,997,748                                     | 31.9%                       | \$ 5,061,481                                      | 32.7%                           | \$ 5,061,481                                      | 32.7%                       |  |
| C. Total Actuarial Accrued Liability   | \$ 228,333,556                                   | 1458.6%                     | \$ 238,380,336                                    | 1540.3%                         | \$ 238,380,336                                    | 1540.3%                     |  |
| D. Actuarial Value of Assets   | \$ 201,939,985                                   | 1290.0%                     | \$ 178,037,830                                    | 1150.4%                         | \$ 194,549,419                                    | 1257.1%                     |  |
| E. Unfunded Actuarial Accrued Liability  | \$ 26,393,571                                    | 168.6%                      | \$ 60,342,506                                     | 389.9%                          | \$ 43,830,917                                     | 283.2%                      |  |
| F. Town Minimum Funding<br>Requirement   | \$ 6,015,004                                     | 38.4%                       | \$ 9,370,384                                      | 60.5%                           | \$ 7,857,292                                      | 50.8%                       |  |
| G. Unfunded Actuarial Present Value of Vested Accrued Benefits <sup>2</sup>  | \$ 0   | 0%                          | \$ 44,834,271                                     | 289.7%                          | \$ 44,834,271                                     | 289.7%                      |  |
| H. Vested Benefit Security Ratio <sup>2</sup>  | 100.8%   | N/A                         | 79.2%   | N/A                             | 79.2%   | N/A                         |  |

 $<sup>^{1}</sup>$  Covered payroll includes up to 300 hours of overtime pay per year.  $^{2}$  Calculated based on market value of assets.

#### Table III

## **TOWN OF DAVIE POLICE PENSION PLAN**

## <u>Characteristics of Participants in</u> <u>Actuarial Valuation as of October 1, 2022</u>

## A. Characteristic of Active Participants

| 1.  | Active participants as of beginning of prior year |          | 157         |
|-----|---|----------|-------------|
| 2.  | New entrants during prior year                    |          | 8           |
| 3.  | Exits during prior year                           | <u> </u> | (13)        |
| 4.  | Active participants as of beginning of year       |          | 152         |
| 5.  | Active participants fully vested                  |          | 63          |
| 6.  | Active participants partially vested              |          | 0           |
| 7.  | Active participants non-vested                    |          | 89          |
| 8.  | Annual payroll of active participants             | \$       | 15,475,959  |
| 9.  | Average pay                                       | \$       | 101,816     |
| 10. | Average attained age                              |          | 37.20 years |
| 11. | Percent female                                    |          | 16.45%      |

### B. Characteristics of Inactive Participants

| 1.  | Inactives as of beginning of prior year                 | 167             |
|-----|---|-----------------|
| 2.  | Newly inactive during prior year                        | 11              |
| 3.  | Exits during prior year                                 | <br>(0)         |
| 4.  | Inactives as of beginning of year                       | 178             |
| 5.  | Age retirees  | 117             |
| 6.  | Annual benefit for age retirees                         | \$<br>8,364,944 |
| 7.  | DROP participants                                       | 36              |
| 8.  | Annual benefit for DROP participants                    | \$<br>3,484,003 |
| 9.  | Beneficiaries receiving benefits                        | 13              |
| 10. | Annual benefits for beneficiaries receiving benefits    | \$<br>429,532   |
| 11. | Beneficiaries due deferred benefits                     | 0               |
| 12. | Annual benefits for beneficiaries due deferred benefits | \$<br>0         |
| 13. | Disabled participants receiving benefits                | 6               |
| 14. | Annual benefits for disabled participants               | \$<br>280,780   |
| 15. | Terminated vested due deferred benefits                 | 6               |
| 16. | Annual benefits for terminated vested participants      | \$<br>163,806   |



## **Table IV**

## TOWN OF DAVIE POLICE PENSION PLAN

## Statement of Assets as of October 1, 2022

|    |                                      |    | Market<br>Value |
|----|--------------------------------------|----|-----------------|
|    |                                      | _  | , arac          |
| A. | <u>Assets</u>                        |    |                 |
|    | 1. Cash and Cash Equivalents         | \$ | 3,007,506       |
|    | 2. Corporate Bonds                   |    | 6,855,397       |
|    | 3. U. S. Government Securities       |    | 22,300,406      |
|    | 4. Domestic Stocks                   |    | 115,528,686     |
|    | 5. Mortgages                         |    | 0               |
|    | 6. Receivables                       |    | 804,089         |
|    | 7. Domestic Equity Fund              |    | 0               |
|    | 8. International Equity Fund         |    | 0               |
|    | 9. Real Estate Fund                  |    | 40,582,850      |
|    | 10. Prepaid Expenses                 |    | 776,062         |
|    | 11. Self-Directed DROP               |    | 1,768,081       |
|    | 12. Total Assets                     | \$ | 191,623,077     |
| B. | Liabilities                          |    |                 |
|    | 1. Prepaid Town Contributions        |    | 5,480,073       |
|    | 2. Self-Directed DROP                |    | 1,768,081       |
|    | 3. DROP Benefits Payable             |    | 13,059,474      |
|    | 4. Unused Chapter 185 Funds          |    | 0               |
|    | 5. Accounts Payable                  |    | 765,364         |
|    | 6. Total Liabilities                 | \$ | 21,072,992      |
| C. | Grand Total (Item A.12. – Item B.6.) | \$ | 170,550,085     |

 $\mathbf{D}$ 

<sup>&</sup>lt;sup>1</sup> As reported by Plan's Auditors.

## Table V

## TOWN OF DAVIE POLICE PENSION PLAN

## **Reconciliation of Plan Assets**

| A. | Ma        | arket Value of Assets as of October 1, 2021          |      |              | \$<br>207,462,311  |
|----|-----------|--|------|--------------|--------------------|
| B. | <u>Re</u> | ceipts During Period                                 |      |              |                    |
|    | 1.        | Contributions  |      |              |                    |
|    |           | a. Town  | \$   | 5,753,551    |                    |
|    |           | b. Employee  |      | 2,157,867    |                    |
|    |           | c. State (not limited by 99-1)                       |      | 1,043,745    |                    |
|    |           | d. Total   |      |              | \$<br>8,955,163    |
|    | 2.        | Investment income                                    |      |              |                    |
|    |           | a. Interest, dividends and                           |      |              |                    |
|    |           | Miscellaneous income                                 | \$   | 3,638,934    |                    |
|    |           | b. Investment expenses                               |      | (1,254,099)  |                    |
|    |           | c. Net   |      |              | \$<br>2,384,835    |
|    | 3.        | Net gains (losses)                                   |      |              |                    |
|    |           | a. Realized gains (losses)                           | \$   | 0            |                    |
|    |           | b. Unrealized gains (losses)                         |      | (36,816,476) |                    |
|    |           | c. Total gains (losses)                              |      |              | <br>(36,816,476)   |
|    | 4.        | Total receipts during period (1.d. + 2.c. + 3.c.)    |      |              | \$<br>(25,476,478) |
| C. | Dia       | sbursements During Period                            |      |              |                    |
|    | 1.        | Pension payments                                     |      |              | \$<br>8,607,597    |
|    | 2.        | DROP payments  |      |              | 2,530,595          |
|    | 3.        | Contribution refunds                                 |      |              | 84,787             |
|    | 4.        | Administrative expenses                              |      |              | 212,769            |
|    | 5.        | Increase / (decrease) in COLA reserve                |      |              | 0                  |
|    | 6.        | Increase / (decrease) in State contribution reserve  |      |              | <br>0              |
|    | 7.        | Total disbursements during period                    |      |              | \$<br>11,435,748   |
| D. | Ma        | arket Value of Assets as of October 1, 2022 (A. + B. | .4 C | <u>.7.)</u>  | \$<br>170,550,085  |
| E. | Re        | econciliation of DROP Accounts Balance               |      |              |                    |
|    | 1.        | DROP accounts balance as of October 1, 2021          |      |              | \$<br>15,455,631   |
|    | 2.        | Benefit payments into DROP accounts during year      | ır   |              | 2,530,595          |
|    | 3.        | Unused Leave Pay Transfer during year                |      |              | 342,099            |
|    | 4.        | Disbursements from DROP accounts during year         |      |              | (2,770,999)        |
|    | 5.        | Expenses deducted from DROP accounts                 |      |              | (5,520)            |
|    | 6.        | Investment gains/(losses) during year                |      |              | <br>(2,492,332)    |
|    | 7.        | DROP accounts balance as of September 30, 2022       | 2    |              | \$<br>13,059,474   |
|    |           | •  |      |              |                    |

Table VI

TOWN OF DAVIE POLICE PENSION PLAN

## **Development of Actuarial Value of Assets**

|  | _  | 10/1/2021 –<br>9/30/2022                              |    | 10/1/2020 –<br>9/30/2021                         | 0/1/2019 –<br>9/30/2020                          |
|--|----|---|----|--|--|
| A. Market value of assets as of beginning of year  | \$ | 207,462,311   | \$ | 172,609,209                                      | \$<br>159,333,621                                |
| B. Contributions   |    | 8,955,163   |    | 8,955,936  | 8,924,398  |
| C. Benefit payments and expenses   |    | 11,435,748  |    | 10,801,664                                       | 9,870,161  |
| D. Expected investment income (A. x .0695 + (BC.) x .03475)  |    | 14,332,430  |    | 12,704,790                                       | 11,914,555                                       |
| E. Expected assets at end of year (A. + B. – C. + D.)  |    | 219,314,156   |    | 183,468,271                                      | 170,302,413                                      |
| F. Actual market value at end of year  |    | 170,550,085   |    | 207,462,311                                      | 172,609,209                                      |
| <ul> <li>G. Excess/(shortfall) of actual over expected assets (F. – E.)</li> <li>1. From previous plan year</li> <li>2. From two plan years ago</li> <li>3. From three plan years ago</li> </ul>                     |    | (48,764,071)<br>23,994,040<br>2,306,796               |    | 23,994,040<br>2,306,796<br>(9,733,858)           | 2,306,796<br>(9,733,858)<br>2,807,493            |
| <ul> <li>H. Deferred recognized amounts of excess/(shortfall)</li> <li>1. 75% from previous plan year</li> <li>2. 50% from two plan years ago</li> <li>3. 25% from three plan years ago</li> <li>4. Total</li> </ul> |    | (36,573,053)<br>11,997,020<br>576,699<br>(23,999,334) | _  | 7,998,013<br>768,932<br>(3,244,619)<br>5,522,326 | 768,932<br>(3,244,619)<br>935,831<br>(1,539,856) |
| I. Preliminary actuarial value of assets at end of year $(F H.4.)$   | \$ | 194,549,419   | \$ | 201,939,985                                      | \$<br>174,149,065                                |
| J. 80% of end of year market value of assets   |    | 136,440,068   |    | 165,969,849                                      | 138,087,367                                      |
| K. 120% of end of year market value of assets  |    | 204,660,102   |    | 248,954,773                                      | 207,131,051                                      |
| L. Actuarial value of assets (I., but not less than J. and not more than K.)   | \$ | 194,549,419   | \$ | 201,939,985                                      | \$<br>174,149,065                                |



## **Table VII**

## TOWN OF DAVIE POLICE PENSION PLAN

## Actuarial Gains (Losses) for Plan Year Ended September 30, 2022

## Derivation of Actuarial Gain (Loss)

| 1. | Town  | n and State normal cost previous valuation   | \$<br>3,588,880 |           |                    |
|----|-------|--|-----------------|-----------|--------------------|
| 2. | Unfu  | nded actuarial accrued liability previous va | aluat           | ion       | 26,393,571         |
| 3. | Town  | n and State contributions previous year (lin | nited           | by 99-1)  | 6,797,296          |
| 4. | Inter | est on:                                      |                 |           |                    |
|    | (a)   | Town normal costs                            | \$              | 249,427   |                    |
|    | (b)   | Unfunded actuarial                           |                 |           |                    |
|    |       | accrued liability                            |                 | 1,834,353 |                    |
|    | (c)   | Town and State                               |                 |           |                    |
|    |       | contributions                                |                 | 372,592   |                    |
|    | (d)   | Net total: $(a) + (b) - (c)$                 |                 |           | \$<br>1,711,188    |
| 5. | Incre | ase (decrease) in unfunded actuarial accrue  | ed lia          | ability   |                    |
|    | from  | plan amendment                               |                 |           | 0                  |
| 6. | Incre | ase (decrease) in unfunded actuarial accrue  | ed lia          | ability   |                    |
|    | from  | assumptions changes                          |                 |           | (16,511,589)       |
| 7. | Expe  | ected unfunded actuarial accrued liability   |                 |           |                    |
|    | curre | ent year: $1. + 2 3. + 4. + 5. + 6.$         |                 |           | 8,384,754          |
| 8. | Actu  | al unfunded actuarial accrued liability curr | ent y           | ear       | <br>43,830,917     |
| 9. | Actu  | arial gain (loss): 7 8.                      | ·               |           | \$<br>(35,446,163) |



Table VIII

TOWN OF DAVIE POLICE PENSION PLAN

## **Amortization of Unfunded Liability**

| <u>Date</u> | <u>Total Ur</u> | nfunded Liability | <u>A</u> | mortization Payment |
|-------------|-----------------|-------------------|----------|---------------------|
| 10/1/2022   | \$              | 43,830,917        | \$       | 4,800,187           |
| 10/1/2023   | \$              | 41,743,366        | \$       | 4,800,187           |
| 10/1/2024   | \$              | 39,510,730        | \$       | 4,262,897           |
| 10/1/2025   | \$              | 37,697,557        | \$       | 4,262,897           |
| 10/1/2042   | \$              | 0                 | \$       | 0                   |



### Table IX

## TOWN OF DAVIE POLICE PENSION PLAN

## **Accounting Disclosure Exhibit**

| I.  | Number of Plan Participants |   |     | 10/1/2021   | <br>10/1/2022     |
|-----|-----------------------------|---|-----|-------------|-------------------|
|     | 1.                          | Retirees, disabled and beneficiaries receiving benefits                 |     | 129         | 136               |
|     | 2.                          | Terminated plan participants entitled to but not yet receiving benefits |     | 4           | 6                 |
|     | 3.                          | DROP participants   |     | 34          | 36                |
|     | 4.                          | Active plan participants  | _   | 157         | <br>152           |
|     | 5.                          | Total   |     | 324         | 330               |
| II. | Acc                         | eumulated Plan Benefits as of October 1, 2022                           |     |             |                   |
|     | A.                          | Statement of Accumulated Plan Benefits                                  |     |             |                   |
|     | 1.                          | Actuarial present value of accumulated vested                           | pla | n benefits  |                   |
|     |                             | a. Participants currently receiving benefits                            | \$  | 105,785,926 | \$<br>113,835,056 |
|     |                             | b. Beneficiaries due deferred benefits                                  |     | 0           | 0                 |
|     |                             | c. DROP participants  |     | 46,541,925  | 50,427,298        |
|     |                             | d. Others   |     | 53,581,399  | <br>51,122,002    |
|     |                             | e. Total  | \$  | 205,909,250 | \$<br>215,384,356 |
|     | 2.                          | Actuarial present value of accumulated non-vested plan benefits         |     | 6,255,879   | 6,855,097         |
|     | 3.                          | Total actuarial present value of accumulated plan benefits              | \$  | 212,165,129 | \$<br>222,239,453 |



# Table IX (continued two)

| B. | Statement of Change in Accumulated Plan Benefits     |    |              |
|----|--|----|--------------|
|    |  | _  | 10/1/2022    |
|    | 1. Actuarial present value of accumulated            |    |              |
|    | plan benefits as of October 1, 2021                  | \$ | 212,165,129  |
|    | 2. Increase (decrease) during year attributable to:  |    |              |
|    | a. Plan amendment                                    |    | 0            |
|    | b. Actuarial assumptions and method changes          |    | 0            |
|    | c. Benefits paid and contribution refunds            |    | (8,692,384)  |
|    | d. DROP benefits credited                            |    | (2,530,595)  |
|    | e. Other, including benefits accumulated             |    |              |
|    | and increase for interest due to decrease            |    |              |
|    | in the discount period                               |    | 21,297,303   |
|    | f. Net increase                                      | \$ | 10,074,324   |
|    | 3. Actuarial present value of accumulated plan       |    |              |
|    | benefits as of October 1, 2022                       | \$ | 222,239,453  |
| C. | Significant Matters Affecting Calculations           |    |              |
|    | 1. Assumed rate of return used in determining        |    |              |
|    | actuarial present values                             |    | 6.95%        |
|    | 2. Plan amendments                                   |    | None         |
|    | 3. Change in actuarial assumptions                   |    | See Table XI |
| D. | Required Disclosure of Accumulated Plan Benefits     |    |              |
|    | at Assumed Rate of Return Applied by the             |    |              |
|    | Florida Retirement System, Currently 6.95%           |    |              |
|    |  |    | 10/1/2022    |
|    | 1. Actuarial present value of accumulated vested     |    |              |
|    | plan benefits  |    |              |
|    | a. Participants currently receiving benefits         | \$ | 113,835,056  |
|    | b. DROP participants                                 |    | 50,427,298   |
|    | c. Others  |    | 51,122,002   |
|    | d. Total   |    | 215,384,356  |
|    | 2. Actuarial present value of accumulated non-vested |    |              |
|    | plan benefits  |    | 6,855,097    |
|    | 3. Total actuarial present value of accumulated      |    | <u> </u>     |
|    | -  | \$ | 222 220 452  |
|    | plan benefits  | •  | 222,239,453  |



Table IX (continued three)

## III. Schedule of Funding Progress (As required by GASB #25)

(4)

|                        |                     |                    |                  | _         | (4)           |                      |          |             |              |
|------------------------|---------------------|--------------------|------------------|-----------|---------------|----------------------|----------|-------------|--------------|
|                        |                     |                    | (3)              |           | Jnfunded      |                      |          |             | (7)          |
|                        | (2)                 | Actua <sup>r</sup> | rial Accrued     | Actua     | arial Accrued | (5)                  |          | (6)         | UAAL as % of |
| (1)                    | Actuarial Val       | lue Liabil         | lity (AAL) –     | Liabi     | ility (UAAL)  | Funded Ratio         | Annı     | ual Covered | Payroll      |
| Valuation Date         | of Assets (AV       |                    | ÉAN AAL          |           | (3) - (2)     | (2)/(3)              |          | Payroll     | (4)/(6)      |
| October 1, 1992        | \$ 8,697            | \$                 | 10,008           | \$        | 1,311         | 86.9%                | \$       | 4,146       | 31.6%        |
| October 1, 1993        | \$ 9,931            |                    | 11,163           | \$        | 1,232         | 89.0%                | \$       | 4,467       | 27.6%        |
| October 1, 1994        | \$ 10,866           |                    | 14,146           | \$        | 3,280         | 76.8%                | \$       | 4,195       | 78.2%        |
| October 1, 1995        | \$ 13,918           |                    | 17,163           | \$        | 3,245         | 81.1%                | \$       | 5,307       | 61.1%        |
| October 1, 1996        | \$ 17,055           |                    | 20,093           | \$        | 3,038         | 84.9%                | \$       | 5,637       | 53.9%        |
| October 1, 1997        | \$ 21,590           |                    | 23,994           | \$        | 2,404         | 90.0%                | \$       | 5,339       | 45.0%        |
| October 1, 1998        | \$ 24,945           |                    | 27,303           | \$        | 2,358         | 91.4%                | \$       | 6,360       | 37.1%        |
| October 1, 1999        | \$ 29,881           |                    | 28,994           | \$        | (887)         | 103.1%               | \$       | 6,070       | (14.6%)      |
| October 1, 2000        | \$ 32,886           |                    | 35,159           | \$        | 2,273         | 93.5%                | \$       | 6,309       | 36.0%        |
| October 1, 2001        | \$ 32,325           | \$                 | 34,530           | \$        | 2,205         | 93.6%                | \$       | 7,254       | 30.4%        |
| October 1, 2002        | \$ 31,302           | \$                 | 33,558           | \$        | 2,256         | 93.3%                | \$       | 7,975       | 28.3%        |
| (all figures above are | based on Frozen Ini | nitial Liability – | all figures belc | w are bas |               | Normal Actuarial Acc | crued Li |             |              |
| October 1, 2002        | \$ 31,302           |                    | 38,067           | \$        | 6,765         | 82.2%                | \$       | 7,975       | 84.8%        |
| October 1, 2003        | \$ 34,845           |                    | 44,993           | \$        | 10,148        | 77.4%                | \$       | 8,994       | 112.8%       |
| October 1, 2004        | \$ 39,267           | \$                 | 49,742           | \$        | 10,475        | 78.9%                | \$       | 9,105       | 115.0%       |
| October 1, 2005        | \$ 45,283           | \$                 | 58,779           | \$        | 13,496        | 77.0%                | \$       | 10,976      | 123.0%       |
| October 1, 2006        | \$ 50,714           |                    | 69,881           | \$        | 19,167        | 72.6%                | \$       | 11,999      | 159.7%       |
| October 1, 2007        | \$ 61,125           |                    | 77,471           | \$        | 16,346        | 78.9%                | \$       | 10,591      | 154.3%       |
| October 1, 2008        | \$ 59,817           |                    | 85,831           | \$        | 26,014        | 69.7%                | \$       | 11,177      | 232.7%       |
| October 1, 2009        | \$ 64,425           |                    | 95,058           | \$        | 30,633        | 67.8%                | \$       | 12,106      | 253.0%       |
| October 1, 2010        | \$ 73,793           |                    | 100,684          | \$        | 26,891        | 73.2%                | \$       | 11,618      | 231.5%       |
| October 1, 2011        | \$ 74,252           | \$                 | 109,037          | \$        | 34,785        | 68.1%                | \$       | 13,006      | 267.5%       |
| October 1, 2012        | \$ 86,546           |                    | 114,813          | \$        | 28,267        | 75.4%                | \$       | 13,014      | 217.2%       |
| October 1, 2013        | \$ 97,981           |                    | 123,723          | \$        | 25,742        | 79.2%                | \$       | 13,917      | 185.0%       |
| October 1, 2014        | \$ 106,975          | \$                 | 136,072          | \$        | 29,097        | 78.6%                | \$       | 13,412      | 216.9%       |
| October 1, 2015        | \$ 114,496          |                    | 144,947          | \$        | 30,451        | 79.0%                | \$       | 14,068      | 216.5%       |
| October 1, 2016        | \$ 127,106          | \$                 | 163,696          | \$        | 36,590        | 77.6%                | \$       | 15,279      | 239.5%       |
| October 1, 2017        | \$ 143,146          | \$                 | 177,190          | \$        | 34,044        | 80.8%                | \$       | 15,388      | 221.2%       |
| October 1, 2018        | \$ 154,169          |                    | 188,611          | \$        | 34,441        | 81.7%                | \$       | 15,236      | 226.0%       |
| October 1, 2019        | \$ 159,824          | \$                 | 194,401          | \$        | 34,577        | 82.2%                | \$       | 15,565      | 222.1%       |
| October 1, 2020        | \$ 174,149          |                    | 205,444          | \$        | 31,295        | 84.8%                | \$       | 15,491      | 202.0%       |
| October 1, 2021        | \$ 201,940          |                    | 228,334          | \$        | 26,394        | 88.4%                | \$       | 15,654      | 168.6%       |
| October 1, 2022        | \$ 194,549          |                    | 238,380          | \$        | 43,831        | 81.6%                | \$       | 15,476      | 283.2%       |
|                        |                     |                    |                  |           |               |                      |          |             |              |



## Table IX (continued four)

#### IV. Schedule of Employer Contributions (As required by GASB #25)

| Plan<br>Year | Annual Required Contribution <sup>1</sup> | Percentage Contributed |
|--------------|---|------------------------|
|              |   | . (2)                  |
| (1)          | (2)                                       | (3)                    |
| 1999         | \$1,526,299                               | 105%                   |
| 2000         | \$1,382,000                               | 100%                   |
| 2001         | \$1,952,361                               | 100%                   |
| 2002         | \$2,365,267                               | 100%                   |
| 2003         | \$3,040,575                               | 100%                   |
| 2004         | \$3,090,663                               | 100%                   |
| 2005         | \$3,827,510                               | 100%                   |
| 2006         | \$4,542,018                               | 100%                   |
| 2007         | \$4,644,822                               | 100%                   |
| 2008         | \$5,594,422                               | 100%                   |
| 2009         | \$5,594,422                               | 100%                   |
| 2010         | \$6,109,706                               | 100%                   |
| 2011         | \$6,183,134                               | 100%                   |
| 2012         | \$6,847,346                               | 100%                   |
| 2013         | \$6,347,310                               | 100%                   |
| 2014         | \$6,430,0272                              | 100%                   |
| 2015         | \$6,361,2173                              | 100%                   |
| 2016         | \$6,418,6044                              | 100%                   |
| 2017         | \$7,272,1205                              | 100%                   |
| 2018         | \$7,170,6246                              | 100%                   |
| 2019         | \$7,174,869 <sup>7</sup>                  | 100%                   |
| 2020         | \$7,114,8368                              | 100%                   |
| 2021         | \$7,087,8339                              | 100%                   |
| 2022         | \$7,015,96910                             | 100%                   |

<sup>&</sup>lt;sup>1</sup> Determined by the prior year's actuarial valuation



<sup>&</sup>lt;sup>2</sup> Because the Town made the entire contribution for 2013/14 in one payment on 10/21/13, the Town's funding requirement was \$ 5,503,045, not \$ 5,742,964 as shown in prior year's report.

<sup>&</sup>lt;sup>3</sup> Because the Town made the entire contribution for 2014/15 in one payment on 10/22/14, the Town's funding requirement was \$ 5,389,887, not \$ 5,613,748 as shown in prior year's report.

<sup>&</sup>lt;sup>4</sup> Because the Town made the entire contribution for 2015/16 in one payment on 10/20/15, the Town's funding requirement was \$ 5,480,624, not \$ 5,713,188 as shown in prior year's report.

<sup>&</sup>lt;sup>5</sup> Because the Town made the entire contribution for 2016/17 in one payment on 11/3/16, the Town's funding requirement was \$ 6,317,120, not \$ 6,566,704 as shown in prior year's report.

<sup>&</sup>lt;sup>6</sup> Because the Town made the entire contribution for 2017/18 in one payment on 10/27/17, the Town's funding requirement was \$ 6,213,901, not \$ 6,465,208 as shown in prior year's report.

<sup>&</sup>lt;sup>7</sup> Because the Town made the entire contribution for 2018/19 in one payment on 10/31/18, the Town's funding requirement was \$ 5,998,562, not \$ 6,236,216 as shown in prior year's report.

<sup>&</sup>lt;sup>8</sup> Because the Town made the entire contribution for 2019/20 in one payment on 10/25/19, the Town's funding requirement was \$ 5,825,333, not \$ 6,063,328 as shown in prior year's report.

<sup>&</sup>lt;sup>9</sup> Because the Town made the entire contribution for 2020/21 in one payment on 11/3/20, the Town's funding requirement was \$ 5,808,873, not \$ 6,032,468 as shown in prior year's report.

<sup>&</sup>lt;sup>10</sup> Because the Town made the entire contribution for 2021/22 in one payment on 10/27/21, the Town's funding requirement was \$ 5,796,331, not \$ 6,015,004 as shown in prior year's report.

## Table IX (continued five)

#### V. Notes to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation:

Valuation Date October 1, 2022

Actuarial cost method Entry Age Normal Level Percent

Amortization method Layered amortization

Remaining amortization period 20 years

Asset valuation method See Table XI., Item 9.

Actuarial assumptions:

Investment rate of return\* 6.95% Projected salary increases\* 5.50%

Cost-of-living adjustments 2.0% per year with 130% cap

and 5-year delay



<sup>\*</sup> Includes inflation at 3.0%

Table IX (continued six)

## Accounting Disclosure Exhibit

## VI. Revenues by Source and Expenses by Type

| Plan                                 | Employee   | Town   | State  | Investment  |  |
|--------------------------------------|--|--|--|---|--|
| Year_                                | Contributions  | <b>Contributions</b>   | <b>Contributions</b>   | Income  | Total  |
| 2022<br>2021<br>2020<br>2019<br>2018 | \$ 2,157,867<br>\$ 1,744,971<br>\$ 1,502,033<br>\$ 1,455,642<br>\$ 2,026,436 | \$ 5,753,551<br>\$ 6,210,000<br>\$ 6,367,000<br>\$ 6,625,000<br>\$ 6,223,000 | \$ 1,043,745<br>\$ 1,000,965<br>\$ 1,055,365<br>\$ 1,051,508<br>\$ 938,653 | \$(33,177,542)<br>\$ 37,489,590<br>\$ 15,017,521<br>\$ 2,835,798<br>\$ 13,921,851 | \$(24,222,379)<br>\$ 46,445,526<br>\$ 23,941,919<br>\$ 11,967,948<br>\$ 23,109,940 |
| 2017<br>2016<br>2015<br>2014<br>2013 | \$ 2,104,437<br>\$ 1,724,745<br>\$ 1,385,542<br>\$ 1,670,986<br>\$ 1,008,385 | \$ 6,472,000<br>\$ 5,672,500<br>\$ 5,797,600<br>\$ 5,503,045<br>\$ 5,750,247 | \$ 905,664<br>\$ 858,749<br>\$ 784,261<br>\$ 747,469<br>\$ 687,063         | \$ 16,082,657<br>\$ 10,535,050<br>\$ 844,588<br>\$ 9,263,596<br>\$ 10,729,490     | \$25,564,758<br>\$18,791,044<br>\$ 8,811,991<br>\$17,185,096<br>\$18,175,185       |

| _           |               | Expenses by Type    |                     |
|-------------|---------------|---------------------|---------------------|
| Plan        | Benefits &    |                     |                     |
| <u>Year</u> | DROP Payments | <u>Expenses</u> Ref | funds Total         |
|             |               |                     |                     |
| 2022        | \$ 11,138,192 | \$1,466,868 \$ 8    | 4,787 \$ 12,689,847 |
| 2021        | \$ 10,569,676 | \$ 974,308 \$ 4     | 8,440 \$ 11,592,424 |
| 2020        | \$ 9,591,523  | \$ 986,993 \$ 8     | 7,815 \$ 10,666,331 |
| 2019        | \$ 8,887,203  | \$ 979,426 \$ 8     | 9,078 \$ 9,955,707  |
| 2018        | \$ 7,862,170  | \$ 916,489 \$ 10    | 6,404 \$ 8,885,063  |
| 2017        | \$ 6,867,328  | \$ 866,276 \$ 3     | 6,851 \$ 7,770,455  |
| 2016        | \$ 6,637,331  |                     | 3,243 \$ 6,680,574  |
| 2015        | \$ 5,883,266  |                     | 3,122 \$ 6,524,791  |
| 2014        | \$ 5,400,475  | \$ 746,285 \$ 3     | 1,616 \$ 6,178,376  |
| 2013        | \$ 4,850,525  | \$ 697,282 \$       | 9,457 \$ 5,557,264  |

Contributions were made in accordance with actuarially determined contribution requirements.



#### Table X

#### TOWN OF DAVIE POLICE PENSION PLAN

#### **Outline of Principal Provisions of the Plan**

#### 1. Effective Date:

May 1, 1976. The most recent plan amendments recognized was Ordinances 2011- 18 and 2011- 19. The ordinances were adopted on April 20, 2011.

#### 2. Eligibility Requirements:

Effective August 6, 1981, all Police employees in the regular full-time service of the Town are eligible upon the attainment of age 18. Part-time employees who work less than 20 hours per week or five (5) months per year are excluded from participation in the plan.

#### 3. <u>Tier One and Tier Two Participants:</u>

Police Officers hired prior to the creation of the Tier Two plan structure (April 20, 2011) are classified as Tier One Participants, otherwise, they are classified as Tier Two Participants.

#### 4. Benefit Service:

Service of a member from employment date as a certified police officer through termination date measured in years and completed months. A member may buy back up to a total of four (4) years of prior military and sworn police service by paying the true actuarial cost of the increase service.

#### 5. <u>Basic Compensation:</u>

Basic rate of salary paid to an employee including longevity pay and assignment pay but excluding overtime, bonuses and commissions. Payments for unused leave time (vacation, sick leave, etc.) are excluded. Effective October 1, 2001, basic compensation includes up to 70 hours of overtime pay per year. Effective October 1, 2003, basic compensation includes up to 120 hours of overtime pay per year. The limit on overtime hours increased to 150 hours effective October 1, 2006 and to 300 hours effective May 1, 2011.

#### 6. Final Average Earnings (FAE):

Final Average Earnings is defined as the higher of (i) average monthly rate of basic compensation during the final thirty-six (36) successive calendar months of Benefit Service, or (ii) average monthly rate of basic compensation of the best five (5) of the last ten (10) years of Benefit Service, preceding actual retirement or termination.

#### 7. Employee Contributions:

9.0% of basic compensation.

D

## Table X (continued two)

#### 8. Accrued Benefit

#### For Tier One Participants:

The monthly accrued benefit is equal to 3.0% times FAE multiplied by the years and months of Benefit Service for the first 10 years, plus 4.0% times FAE for the next five (5) years of Benefit Service, plus 5.0% times FAE for the next five (5) years of Benefit Service, plus 2.0% of FAE times the next 10 years of Benefit Service. The maximum benefit is limited to 95% of FAE. However, after 47½ years of Benefit Service, benefits shall recommence at a rate of 2.0% of FAE per year.

#### For Tier Two Participants:

The monthly accrued benefit is equal to 3.0% times FAE multiplied by the years and months of Benefit Service for the first 20 years, plus 2.0% times FAE for each subsequent year of Benefit Service, subject to a maximum benefit of 80% of FAE. However, after 40 years of Benefit Service, benefits shall recommence at a rate of 2.0% of FAE per year.

#### 9. Normal Retirement Date:

The first of the month coincident with or next following the earlier of (i) completion of 20 years of Benefit Service or (ii) the attainment of age 55. For a vested terminated member with at least 15 years of Benefit Service, full deferred accrued benefit would be payable on the first of the month coincident with or next following the anniversary of the date that the member would have completed 20 years of Benefit Service.

#### 10. Amount of Normal Retirement Income:

The monthly amount of Accrued Benefit, payable in the normal form of payment to a participant on his or her Normal Retirement Date.

#### 11. Early Retirement Date:

Attainment of age 50 and completion of 10 years of Benefit Service.

#### 12. Amount of Early Retirement Income:

The monthly amount of Accrued Benefit, payable in the normal form of payment to a participant on his Early Retirement Date.

The benefit will be reduced for early payment so that it is actuarially equivalent to the normal retirement benefit. Effective May 1, 2011, the early retirement reduction will be 3.0% per year for each year prior to Normal Retirement Date.

The participant also has the option of deferring the commencement of his monthly benefit to his Normal Retirement Date, the earlier of the date he would have attained 20 years of Benefit Service (provided he has completed 15 years of actual Benefit Service) or age 55. In such case there would be no actuarial reduction to his monthly benefit.

## Table X (continued three)

#### 13. <u>Delayed Retirement Date:</u>

A member may continue to work beyond his Normal Retirement Date and retire on any subsequent first day of the month.

#### 14. Amount of Delayed Retirement Income:

The monthly amount of Accrued Benefit, payable in the normal form of payment to a participant who retires on his Delayed Retirement Date.

#### 15. Benefits on Termination of Service:

In the event of termination of service prior to Normal Retirement Date, for reasons other than death, early retirement or disability, a monthly benefit equal to Accrued Benefit times the vested percentage below will be payable commencing on Normal Retirement Date.

In lieu of this deferred benefit, a participant may elect to receive the return of his employee contributions.

| Years of        |            |
|-----------------|------------|
| Benefit Service | Vested     |
| With the Town   | Percentage |
| Less than 10    | 0%         |
| 10 or more      | 100%       |

#### 16. Permissive Service Credit Purchases:

- a. A vested active participant shall be permitted to purchase permissive service credit in the form of an increased benefit accrual factor, which may be purchased in one percent (1.0%) increments above the participant's accrued benefit percentage, in an amount not to exceed twenty percent (20%) of FAE. The maximum amount of benefit accrual will remain at ninety-five percent (95%) of FAE for Tier One participants and eighty percent (80%) for Tier Two participants. The purchase cost would be the <u>full</u> actuarial cost of the increased benefit accrual multiplier and must be paid in full prior to the granting of the increased benefits.
- b. A vested active participant shall be permitted to purchase permissive service credit expressed as an earlier normal retirement date. Under such proposal, a participant would be able to receive an unreduced normal retirement benefit as early as upon the completion of 15 years of Benefit Service (instead of 20), if a purchase of the maximum of five (5) years of permissive service credit were made. However, the participant would not accrue a higher multiplier, but would be permitted to begin receiving an unreduced retirement benefit with fewer years of actual service. The purchase cost would be the full actuarial cost of the earlier commencement of retirement benefits and must be paid in full prior to the granting of the increased benefits.

D

## Table X (continued four)

c. The cost of either purchase may be made either in one lump sum or made in payroll deductions installments for a period not to exceed five (5) years, with 7.0% per annum interest added, and must be completed prior to commencement of any enhanced benefit.

#### 17. Disability Retirement Benefits:

For a member totally and permanently disabled where the disability is service-connected, the monthly benefit shall be equal to the greater of (i) 66-2/3% of such member's base pay at time of disability, less any benefits payable by Federal Old Age, Survivors and Disability Insurance, Worker's Compensation benefits or other disability benefits payable from Broward County or the Town because of disability, age or unemployment. Effective May 1, 2011, the benefit after offset shall in no case be less than the member's Accrued Benefit at date of disability or (ii) forty-two percent (42%) of FAE payable as a ten year certain and life annuity. The monthly non-service connected benefit is the greater of \$100 or 1.5% times FAE multiplied by the number of years of Benefit Service, less any of the offset amounts described above. Effective May 1, 2011, the minimum non-service connected disability benefit shall be the greater of the Accrued Benefit or twenty-five percent (25%) of FAE, payable as a ten year certain and life annuity. In no event will the service-connected benefit be less than the non-service connected benefit. Benefits shall be payable starting six (6) months after termination of service for disability, and will be payable for life or until recovery.

#### 18. Death Benefits:

a. <u>Prior to retirement</u>: If death is non-service connected or member had no spouse to whom he had been married to for at least one (1) year prior to death, the death benefit shall be the return of accumulated employee contributions plus prior plan benefits, if any. However, if a member had at least 10 years of Benefit Service at the time of death, then his or her beneficiary will be entitled to the benefits otherwise payable to the member at Early or Normal Retirement Date.

If death is service-connected and member has an eligible spouse to whom he had been married for at least one (1) year prior to death, such spouse shall be entitled to a monthly annuity equal to the greater of (i) 50% of base pay at his date of death, or (ii) Accrued Benefit payable to the eligible spouse on the date of what would have been the member's Normal Retirement Date. Such pension shall continue to the spouse until the spouse's death, with a guarantee that such benefits will at least equal the accumulated contributions at his date of death. If a member had no eligible spouse but had at least 10 years of Benefit Service at the time of death, then his or her beneficiary will be entitled to the benefits otherwise payable to the member at Early or Normal Retirement Date.

b. <u>After retirement</u>: If a member had elected a joint and survivor or a 10 year certain and life optional form of payment, the adjusted monthly benefit will be continued to the beneficiary until the appropriate annuity ending date. Total benefits payable the member and his beneficiary will not be less than the amount of accumulated contributions at date of retirement.

D

## Table X (continued five)

#### 19. Normal Form of Retirement Income:

For a married participant, the normal form of retirement income will be monthly payments for life of the member, with benefit continuing to spouse after member's death for one (1) year and 60% of benefit payable to spouse thereafter. The benefit amount is not reduced due to this form of payment. The participant may also elect to receive the benefit as an unreduced ten year certain and life annuity.

For an unmarried participant, the normal form of payment will be an unreduced ten year certain and life annuity.

#### 20. Optional Forms of Retirement Income:

The following optional forms of retirement income may be elected by a member without presenting evidence of good health, if elected at least one year prior to his date of retirement:

- Option 1 A single life annuity payable during the lifetime of the participant only.
- Option 2 A retirement annuity payable to the member during the joint lifetime of the member and a joint pensioner designated by the member, and following the death of either of them, 50%, 66-2/3%, 75%, or 100% depending on the retiree's election, of such smaller monthly amount payable to the survivor for the lifetime of the survivor.
- Option 3 A monthly annuity payable to the member for ten years certain and life thereafter.

#### 21. Deferred Retirement Option Plan (DROP):

The DROP is available only if the member makes an irrevocable election to participate after meeting the eligibility for Normal Retirement Benefit. For members who entered the DROP before October 1, 2020, there is a five (5) year maximum participation period, after which the employee is deemed separated from the Town. For members who entered the DROP on or after October 1, 2020, there is a six (6) year maximum participation period, after which the employee is deemed separated from the Town. In no event can a member who enters the DROP exceed 30 years of total Benefit Service plus years of DROP participation. If the member dies or becomes disabled during the DROP period, the member will have presumed to have retired on a normal retirement on the day prior to disability or death.

#### 22. Cost of Living Adjustments (COLA):

An annual COLA will be provided to retirees and beneficiaries. The amount of the COLA will be 2.0% per year. For recipients who retired prior to October 1, 1997, the monthly benefit after the yearly COLA will not exceed 115% of the original monthly benefit prior to any COLA. For post October 1, 1997 retirees, the limit for future monthly benefits after COLA will be 130% of the original benefit amounts prior to any COLA. The first annual COLA will commence on the fifth anniversary of retirement, but no earlier than November 1, 2004.

#### 23. Changes from October 1, 2021 Valuation:

None.



#### **Table XI**

#### **TOWN OF DAVIE POLICE PENSION PLAN**

#### **Actuarial Assumptions and Actuarial Cost Methods**

#### 1. Mortality:

#### **Pre-Retirement:**

Female Non-Disabled: PUB-2010 Headcount Weighted Safety Employee Female Table, set forward 1

year, Scale MP-2018

Male Non-Disabled: PUB-2010 Headcount Weighted Safety Below Median Employee Male Table, set

forward 1 year, scale MP-2018

Post-Retirement:

Female Non-Disabled: PUB-2010 Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year, Scale MP-2018

Male Non-Disabled: PUB-2010 Headcount Weighted Safety Below Median Healthy Retiree Male

Table, set forward 1 year, Scale MP-2018

Pre-Retirement & Post-Retirement:

Female Disabled: 80% PUB-2010 Headcount Weighted General Disabled Retiree Female Table; 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Female Table, Scale MP-2018

Male Disabled: 80% PUB-2010 Headcount Weighted General Disabled Retiree Male Table; 20% PUB-

2010 Headcount Weighted Safety Disabled Retiree Male Table, Scale MP-2018

#### 2. Interest to be Earned by Fund:

6.95%, compounded annually, net of investment expenses.

#### 3. Allowances for Expenses or Contingencies:

Estimated by net of investment fees paid during previous year.

#### 4. <u>Employee Withdrawal Rates</u>:

Withdrawal rates were used in accordance with tables per the following illustrative example:

|           | Withdrawal Rates<br>Per 100 Employees |               |  |
|-----------|---------------------------------------|---------------|--|
| Age       | Male                                  | <u>Female</u> |  |
| 20        | 8.4                                   | 14.0          |  |
| 25        | 5.6                                   | 8.4           |  |
| 30        | 3.9                                   | 5.6           |  |
| 35        | 2.8                                   | 3.9           |  |
| 40        | 1.7                                   | 2.8           |  |
| 45        | 1.1                                   | 1.7           |  |
| 50        | 0.2                                   | 1.1           |  |
| 55 & over | 0.0                                   | 0.0           |  |



## Table XI (continued two)

#### 5. Assumptions on Pensionable Overtime Hours

Each member is assumed to continue to work the same number of overtime hours as in the most recent plan year, subject to the 300 hours maximum, for each future year.

#### 6. Disability Rates:

The 1985 Disability Study - Class 1 with separate male and female rates were used. 75% of disabilities assumed to be service incurred, 25% assumed to be non-service incurred.

#### 7. Salary Increase Factors:

Current salaries were assumed to increase at a rate of 5.5% per year until retirement.

#### 8. Rates of Retirement:

The following are the retirement rates assumed for the participants eligible for retirement:

| Participants with 20 or<br>more years of Credited<br>Service |                        | Participants who<br>attained age 55<br>with 10 or more<br>years of Credited<br>Service |
|--|------------------------|--|
| Years of   |                        |  |
| Credited<br>Service  | Percentage<br>Retiring |  |
| 20   | 65%                    | 100 % retiring upon eligibility  |
| 21-24  | 50%                    |  |
| 25 and over  | 100%                   |  |

However, active participants eligible for retirement that have less than 20 years of Benefit Service as of the valuation date are assumed to have a minimum of one year future service.

#### 9. Asset Valuation Method:

The actuarial value of assets is determined by smoothing the differences between actual investment earnings and assumed investment return over four (4) years. This method was adopted effective October 1, 2022 with no phase-in. The resulting value would then be limited to between 80% and 120% of market value.

#### 10. Actuarial Cost Method:

Normal Retirement, Termination, Disability and Pre-Retirement Death Benefits: Entry-Actuarial Cost Method.



## Table XI (continued three)

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his date of hire to his retirement age to fund his estimated benefits, assuming the plan had always been in effect. The normal cost for the plan is the sum of the individual normal costs for all active participants. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the actuarial value of assets of the plan.

#### 11. Marriage Assumptions:

100% of active participants were assumed married, with husbands three (3) years older than wives.

#### 12. Valuation of Normal Form of Payment:

The normal form of payment is valued as an unreduced joint and 60% survivor annuity benefit for married members. For unmarried members, the normal form of payment is valued as a ten year certain and life annuity.

#### 13. Changes from October 1, 2021 Actuarial Valuation

The actuarial value of assets is determined by smoothing the differences between actual investment earnings and assumed investment return over four (4) years, instead of three (3) years.



Table XII

## **TOWN OF DAVIE POLICE PENSION PLAN**

### <u>Distribution of Active Participants by Age and Service Groups</u> <u>as of October 1, 2022</u>

### Years of Credited Service

| <u>Age</u> | <u>0 - 4</u>                  | 5 - 9    | <u>10 - 14</u> | <u>15 - 19</u>           | <u>20 - 24</u>                     | <u>25 - 29</u> | 30 & Over | Total_ |
|------------|-------------------------------|----------|----------------|--------------------------|------------------------------------|----------------|-----------|--------|
| Under 25   | 5                             |          |                |                          |                                    |                |           | 5      |
| 25 - 29    | 24                            | 5        |                |                          |                                    |                |           | 29     |
| 30 - 34    | 9                             | 21       | 4              |                          |                                    |                |           | 34     |
| 35 - 39    | 5                             | 6        | 14             | 3                        |                                    |                |           | 28     |
| 40 - 44    | 4                             | 5        | 2              | 13                       | 2                                  |                |           | 26     |
| 45 - 49    |                               |          | 2              | 14                       | 3                                  |                |           | 19     |
| 50 - 54    | 1                             | 1        | 1              | 3                        |                                    |                |           | 6      |
| 55 - 59    | 1                             | 2        |                | 2                        |                                    |                |           | 5      |
| 60 - 64    |                               |          |                |                          |                                    |                |           | 0      |
| 65 & Over  |                               | <u>·</u> |                | <u> </u>                 | <u>.</u>                           | <u>.</u>       |           | 0      |
| TOTAL      | 49                            | 40       | 23             | 35                       | 5                                  |                |           | 152    |
|            |                               |          | 10/0           | 1/2021                   | 10/01/2022                         |                |           |        |
|            | Average<br>Average<br>Percent |          | \$9            | 1 years<br>9,708<br>.20% | 37.20 years<br>\$101,816<br>16.45% |                |           |        |



## **Table XIII**

## TOWN OF DAVIE POLICE PENSION PLAN

## **Reconciliation of Participant Data**

## A. Active Participants

| 1.           | Active participants previous year                                 | 157 |
|--------------|---|-----|
| 2.           | Retired during year   | (1) |
| 3.           | Entered DROP during year  | (8) |
| 4.           | Died during year  | 0   |
| 5.           | Disabled during year  | (0) |
|              | Terminated vested during year                                     | (2) |
| 7.           | Terminated non-vested during period                               | (2) |
| 8.           | New active participants   | 8   |
| 9            | Rehired   | 0   |
| 10.          | Active participants current year                                  | 152 |
| В. <u>Ра</u> | rticipants Receiving Benefits                                     |     |
| 1.           | Participants receiving benefits previous year                     | 129 |
|              | New retired participants  | 1   |
|              | New terminated vested receiving benefits                          | 0   |
|              | New disabled receiving benefits                                   | 0   |
|              | New beneficiaries receiving benefits                              | 1   |
|              | DROP participants exited and retired                              | 6   |
| 7.           | Died or ceased payment during year                                | (1) |
| 8.           | Retired or terminated vested receiving benefits current year      | 136 |
| C. <u>Te</u> | erminated Participants Entitled to Future Benefits                |     |
| 1.           | Terminated participants entitled to future benefits previous year | 4   |
| 2.           | Died during year  | 0   |
| 3.           | Rehired   | 0   |
| 4.           | Commenced receiving benefits during year                          | 0   |
| 5.           | New terminated participants                                       | 2   |
| 6.           | Terminated participants entitled to future benefits current year  | 6   |
| D. <u>DI</u> | ROP Participants  |     |
| 1.           | DROP participants previous year                                   | 34  |
| 2.           | New entrants during year  | 8   |
|              | Died during year  | 0   |
|              | Exited and retired during year                                    | (6) |
| 5.           | DROP participants current year                                    | 36  |



#### **Table XIV**

#### TOWN OF DAVIE POLICE PENSION PLAN

## Statistics for Participants Entitled to Deferred Vested Benefits and Participants Receiving Payments

#### A. Entitled to Deferred Benefits

|              |                | Total          | Average   |
|--------------|----------------|----------------|-----------|
| Current Age  |                | Annual         | Annual    |
| <u>Group</u> | <u>Count</u>   | <u>Benefit</u> | Benefit   |
|              |                |                |           |
| Less than 40 | 2              | \$ 38,952      | \$ 19,476 |
| 40 - 44      | 0              | 0              | 0         |
| 45 - 49      | 3              | 88,414         | 29,471    |
| 50 - 54      | 1              | 36,440         | 36,440    |
| 55 - 59      | 0              | 0              | 0         |
| 60 - 64      | 0              | 0              | 0         |
| 65 & over    | _0             | 0              | 0         |
| TOTAL        | <del>-</del> 6 | \$ 163,806     | \$ 27,301 |

### B. Receiving Benefits (includes DROP participants)

| Current Age Group | <u>Count</u> | Total<br>Annual<br>Benefit | Average<br>Annual<br>Benefit |
|-------------------|--------------|----------------------------|------------------------------|
|                   |              |                            |                              |
| Less than 40      | 4            | \$ 56,007                  | \$ 14,002                    |
| 40 - 44           | 5            | 462,955                    | 92,591                       |
| 45 - 49           | 19           | 1,772,005                  | 93,263                       |
| 50 - 54           | 29           | 2,672,111                  | 92,142                       |
| 55 - 59           | 46           | 3,592,001                  | 78,087                       |
| 60 - 64           | 30           | 1,921,632                  | 64,054                       |
| 65 & over         | _39          | 2,082,548                  | 53,399                       |
| TOTAL             | 163          | \$12 559 259               | \$ 73.019                    |



Table XV

TOWN OF DAVIE POLICE PENSION PLAN

## Recent Investment, Salary Increase, and Turnover Experience

### A. <u>Investment Return</u>

Comparison of actual to assumed investment return for the last five years:

|             | Rate of Return |           |         |  |
|-------------|----------------|-----------|---------|--|
| _           | Market         | Actuarial |         |  |
| Year Ended  | Value          | Value     | Assumed |  |
|             |                |           |         |  |
| 09/30/2022  | (15.8%)        | (2.4%)    | 6.95%   |  |
| 09/30/2021  | 20.3%          | 17.1%     | 7.40%   |  |
| 09/30/2020  | 9.1%           | 9.6%      | 7.50%   |  |
| 09/30/2019  | 2.3%           | 3.7%      | 7.50%   |  |
| 09/30/2018  | 8.9%           | 7.4%      | 7.50%   |  |
|             |                |           |         |  |
|             |                |           |         |  |
|             |                |           |         |  |
| Last 3 Yrs. | 3.4%           | 7.8%      | 7.28%   |  |
| Last 5 Yrs. | 4.2%           | 6.9%      | 7.37%   |  |

## B. Recent Salary Increase and Turnover Experience

|             | Salary Increase |         |                                      |
|-------------|-----------------|---------|--------------------------------------|
| Year Ended  | Actual          | Assumed | Ratio of Actual Turnover to Expected |
| 09/30/2022  | 5.2%            | 5.50%   | 0.78                                 |
| 09/30/2021  | 5.6%            | 5.50%   | 0.23                                 |
| 09/30/2020  | 3.5%            | 5.50%   | 1.16                                 |
| 09/30/2019  | 7.7%            | 5.50%   | 1.09                                 |
| 09/30/2018  | 3.9%            | 5.50%   | 0.97                                 |
|             |                 |         |                                      |
| Last 3 Yrs. | 4.8%            | 5.50%   | 0.72                                 |
| Last 5 Yrs. | 5.2%            | 5.50%   | 0.85                                 |



## Table XVI

## TOWN OF DAVIE POLICE PENSION PLAN

## **State Required Exhibit**

|    |             |   |    | 10/1/2021   | <br>10/1/2022     |
|----|-------------|---|----|-------------|-------------------|
| A. | Parti       | icipant Data  |    |             |                   |
|    | 1.          | Active participants   |    | 157         | 152               |
|    | 2.          | Retired participants and beneficiaries receiving benefits   |    | 123         | 130               |
|    | 3.          | Beneficiaries due deferred benefits   |    | 0           | 0                 |
|    | 4.          | DROP participants   |    | 34          | 36                |
|    | 5.          | Disabled participants receiving benefits  |    | 6           | 6                 |
|    | 6.          | Terminated vested participants  |    | 4           | 6                 |
|    | 7.          | Total participants  |    | 324         | 330               |
|    | 8.          | Annual payroll of active participants   | \$ | 15,654,087  | \$<br>15,475,959  |
|    | 9.          | Annual benefits payable to those currently receiving benefits                                       |    | 8,341,617   | 9,075,256         |
|    | 10.         | Annual benefits payable to beneficiaries due deferred benefits                                      |    | 0           | 0                 |
|    | 11.         | Annual benefits payable to terminated deferred benefits   |    | 124,854     | 163,806           |
|    | 12.         | Annual benefits payable to DROP participants  | \$ | 3,233,095   | \$<br>3,484,003   |
| B. | <u>Valu</u> | ne of Assets  |    |             |                   |
|    | 1.          | Actuarial value   | \$ | 201,939,985 | \$<br>194,549,419 |
|    | 2.          | Market value  | \$ | 207,462,311 | \$<br>170,550,085 |
| C. | Liab        | <u>vilities</u>   |    |             |                   |
|    | 1.          | Actuarial present value of future expected benefit payments for active members                      |    |             |                   |
|    |             | a. Retirement benefits  | \$ | 109,151,936 | \$<br>106,517,349 |
|    |             | b. Vesting benefits   |    | 3,243,045   | 3,459,736         |
|    |             | c. Death benefits   |    | 562,673     | 562,416           |
|    |             | d. Disability benefits  |    | 1,569,322   | <br>1,538,358     |
|    |             | e.Total   | \$ | 114,526,976 | \$<br>112,077,859 |
|    | 2.          | Actuarial present value of future expected benefit payments for terminated vested members           | \$ | 1,113,617   | \$<br>1,527,327   |
|    | 3.          | Actuarial present value of future expected benefit payments for beneficiaries due deferred benefits |    | 0           | 0                 |
|    | 4.          | Actuarial present value of future expected benefit payments for those receiving benefits            |    | 0           |                   |
|    |             | a. Service retired  | \$ | 98,095,937  | \$<br>105,648,127 |
|    |             | b. DROP participants  |    | 46,541,925  | 50,427,298        |
|    |             | c. Disability retired   |    | 3,364,636   | 3,337,375         |
|    |             | d. Beneficiaries  | _  | 4,325,353   | 4,849,554         |
|    |             | e. Total  | \$ | 152,327,851 | \$<br>164,262,354 |

# Table XVI (continued two)

|    |      |   | 10/1/      | <u>′2021</u>  | 1      | 0/1/2022  |
|----|------|---|------------|---------------|--------|-----------|
|    | 5.   | Miscellaneous (refund unpaid)   | \$         | 0             | \$     | 0         |
|    | 6.   | Total actuarial present value of future expected benefit payments   | \$ 267,968 | 8,444         | \$ 277 | ,867,540  |
|    | 7.   | Actuarial accrued liabilities   | \$ 228,333 | 3,556         | \$ 238 | 3,380,336 |
|    | 8.   | Unfunded actuarial accrued liabilities  | \$ 26,393  | 3,571         | \$ 43  | 3,830,917 |
| D. | Stat | tement of Accumulated Plan Benefits   |            |               |        |           |
|    | 1.   | Actuarial present value of accumulated vested plan benefits   |            |               |        |           |
|    |      | a. Participants currently receiving benefits  | \$ 105,785 | 5,926         | \$ 113 | 3,835,056 |
|    |      | b. Beneficiaries due deferred benefits  |            | 0             |        | 0         |
|    |      | b. DROP participants  | 46,54      | 1,925         | 50     | ,427,298  |
|    |      | c. Other participants   | 53,58      | 1,399         | 51     | ,122,002  |
|    |      | d. Total  | \$ 205,909 | 9,250         | \$ 215 | 5,384,356 |
|    | 2.   | Actuarial present value of accumulated non-vested plan benefits   | 6,25       | 5,87 <u>9</u> | 6      | 5,855,097 |
|    | 3.   | Total actuarial present value of accumulated plan benefits  | \$ 212,163 | 5,129         | \$ 222 | 2,239,453 |
| E. | Stat | tement of Change in Accumulated Plan Benefits   |            |               |        | ,         |
|    | 1.   | Actuarial present value of accumulated plan benefits as of October 1, 2021                                | \$ 212,165 | 5,129         |        |           |
|    | 2.   | Increase (decrease) during year attributable to:  |            |               |        |           |
|    |      | a. Plan amendment   |            | 0             |        |           |
|    |      | b. Actuarial assumptions and methods changes  |            | 0             |        |           |
|    |      | c. Benefits paid and contribution refunds   | ,          | 2,384)        |        |           |
|    |      | d. DROP benefits credited   | (2,530     | 0,595)        |        |           |
|    |      | e. Other, including benefits accumulated and increase for interest due to decrease in the discount period | 21,29      | 7,303         |        |           |
|    |      | f. Net increase (decrease)  | 10,074     | 4,324         |        |           |
|    | 3.   | Actuarial present value of accumulated plan benefits as of October 1, 2022                                | \$ 222,239 | 9,453         |        |           |



# Table XVI (continued three)

|    |   | 10/1/2021 1              | 0/1/2022  |
|----|---|--------------------------|-----------|
| F. | Pension Cost                                      |                          |           |
|    | 1. Total normal cost including expenses           | \$ 4,997,748 \$ 5        | ,061,481  |
|    | 2. Expected member contribution                   | 1,408,868                | ,392,836  |
|    | 3. Item 2. as percentage of payroll               | 9.0%                     | 9.0%      |
|    | 4. Net employer normal cost                       | \$ 3,588,880 \$ 3        | ,668,645  |
|    | 5. Payment required to amortize                   |                          |           |
|    | unfunded liability                                | 3,071,967                | ,800,187  |
|    | Total employer required contribution              |                          |           |
|    | 6. (including interest)                           | \$ 7,015,969 \$ 8        | ,901,037  |
|    | 7. Item 6. as a percentage of payroll             | 44.8%                    | 57.5%     |
|    | 8. State contributions                            | \$ 1,000,965 \$ 1        | ,043,745  |
|    | 9. Item 8. as a percentage of payroll             | 6.4%                     | 6.7%      |
|    | 10. Net amount payable by Town                    | \$ 6,015,004 \$ 7        | ,857,292  |
|    | 11. Item 10. as a percentage of payroll           | 38.4%                    | 50.8%     |
|    |   |                          |           |
| G. | Past Contributions                                |                          |           |
|    | 1. Total contribution required                    | \$ 8,424,837 \$ 10       | ,293,873  |
|    | 2. Actual contributions made:                     |                          |           |
|    | a. Employees                                      | \$ 2,157,867             | N/A       |
|    | b. Town   | 5,753,551*               | N/A       |
|    | c. State  | 1,043,745                | N/A       |
|    | d. Total  | \$ 8,955,163             | N/A       |
|    |   |                          |           |
| H. | Net Actuarial Gain (Loss)                         | \$ 14,496,949 \$ (35)    | ,446,163) |
|    |   |                          |           |
| I. | Disclosure of Following Items:                    |                          |           |
|    | Actuarial present value of future salaries -      |                          |           |
|    | attained age                                      | \$ 126,886,350 \$ 127    | ,870,609  |
|    | 2. Actuarial present value of future employee     |                          |           |
|    | contributions - attained age                      | \$ 11,419,772 \$ 11      | ,508,355  |
|    | Actuarial present value of future contributions   | S                        |           |
|    | from other sources                                | N/A                      | N/A       |
|    | 4. Amount of active members' accumulated          |                          |           |
|    | 4. contributions                                  | \$ 10,119,665 \$ 10      | ,455,229  |
|    | 5. Actuarial present value of future salaries and |                          |           |
|    | future benefits at entry age                      | Not provided by software |           |
|    | 6. Actuarial present value of future employee     |                          |           |
|    | contributions at entry age                        | Not provided by software |           |
|    |   |                          |           |

<sup>\*</sup> Because the Town made the entire contribution for 2021/22 in one payment on 10/27/21, the Town's funding requirement was \$ 5,796,331, not \$ 6,015,004 as shown in prior year's report.

# Table XVI (continued four)

### J. Unfunded Actuarial Accrued Liabilities

| Amount of Original Liability         Amortization Period         Valuation Date Payment           10/01/1994 Plan Amendment         2 years         1,039,664         537,290           10/01/1997 Plan Amendment         5 years         (13,699)         (3,777)           10/01/1997 Plan Amendment         5 years         (268,466)         (61,140)           10/01/2000 Plan Amendment         8 years         1,714,737         267,982           10/01/2002 Method Change         10 years         2,507,218         333,003           10/01/2003 Actuarial Loss         11 years         830,095         103,248           10/01/2004 Actuarial Loss         12 years         2,78,275         32,671           10/01/2005 Catuarial Loss         13 years         1,254,662         139,968           10/01/2005 Actuarial Loss         13 years         675,738         84,049           10/01/2006 Actuarial Loss         14 years         2,023,683         215,713           10/01/2006 Plan Amendment         11 years         675,738         84,049           10/01/2006 Plan Amendment         14 years         1,669,984         178,010           10/01/2007 Actuarial Cicain         15 years         (162,255)         (16,604)           10/01/2007 Actuarial Coss         17 years         5,23   | Description and                   | Remaining    | Unamortized    |              |
|--|-----------------------------------|--------------|----------------|--------------|
| 10/01/1994 Plan Amendment  | Amount of                         | Amortization | Amount as of   | Amortization |
| 1001/1996 Assumption Change  | Original Liability                | Period       | Valuation Date | Payment      |
| 1001/1997 Plan Amendment   | 10/01/1994 Plan Amendment         | 2 years      | 1,039,664      | 537,290      |
| 1001/1997 Plan Amendment   | 10/01/1996 Assumption Change      |              | (13,699)       |              |
| 10/01/2009 Plan Amendment  |                                   |              |                |              |
| 1001/2000 Plan Amendment   | 10/01/1999 Assumption Change      |              |                | (293,587)    |
| 10/01/2003 Actuarial Loss   11 years   1,172,860   145,881     10/01/2004 Actuarial Loss   12 years   278,275   32,671     10/01/2005 Actuarial Loss   13 years   1,254,662   139,968     10/01/2005 Actuarial Loss   13 years   1,254,662   139,968     10/01/2005 Actuarial Loss   14 years   2,023,683   215,713     10/01/2006 Plan Amendment   14 years   1,669,984   178,010     10/01/2006 Plan Amendment   14 years   1,669,984   178,010     10/01/2006 Plan Amendment   14 years   1,669,984   178,010     10/01/2007 Actuarial (Gain)   15 years   (162,255)   (16,604)     10/01/2007 Actuarial (Gain)   15 years   (1,645,625)   (168,406)     10/01/2007 Actuarial Loss   16 years   (1,645,625)   (168,406)     10/01/2008 Actuarial Loss   16 years   (1,645,625)   (168,406)     10/01/2009 Actuarial Loss   17 years   2,851,826   272,172     10/01/2009 Assumption Change   17 years   502,349   47,943     10/01/2010 Actuarial (Gain)   18 years   2,244,779   (207,905)     10/01/2010 Plan Amendment   18 years   2,56,751   23,780     10/01/2011 Actuarial (Gain)   19 years   5,913,878   532,998     10/01/2012 Actuarial (Gain)   19 years   5,913,878   532,998     10/01/2013 Actuarial (Gain)   19 years   (1,356,246)   (122,234)     10/01/2014 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2015 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2016 Assumption Change   14 years   4,171,256   444,631     10/01/2017 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2017 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2017 Actuarial Loss   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   1,301,386   117,290     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665 |                                   | 8 years      |                |              |
| 10/01/2003 Actuarial Loss   11 years   1,172,860   145,881     10/01/2004 Actuarial Loss   12 years   278,275   32,671     10/01/2005 Actuarial Loss   13 years   1,254,662   139,968     10/01/2005 Actuarial Loss   13 years   1,254,662   139,968     10/01/2005 Actuarial Loss   14 years   2,023,683   215,713     10/01/2006 Plan Amendment   14 years   1,669,984   178,010     10/01/2006 Plan Amendment   14 years   1,669,984   178,010     10/01/2006 Plan Amendment   14 years   1,669,984   178,010     10/01/2007 Actuarial (Gain)   15 years   (162,255)   (16,604)     10/01/2007 Actuarial (Gain)   15 years   (1,645,625)   (168,406)     10/01/2007 Actuarial Loss   16 years   (1,645,625)   (168,406)     10/01/2008 Actuarial Loss   16 years   (1,645,625)   (168,406)     10/01/2009 Actuarial Loss   17 years   2,851,826   272,172     10/01/2009 Assumption Change   17 years   502,349   47,943     10/01/2010 Actuarial (Gain)   18 years   2,244,779   (207,905)     10/01/2010 Plan Amendment   18 years   2,56,751   23,780     10/01/2011 Actuarial (Gain)   19 years   5,913,878   532,998     10/01/2012 Actuarial (Gain)   19 years   5,913,878   532,998     10/01/2013 Actuarial (Gain)   19 years   (1,356,246)   (122,234)     10/01/2014 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2015 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2016 Assumption Change   14 years   4,171,256   444,631     10/01/2017 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2017 Actuarial (Gain)   19 years   1,301,386   117,290     10/01/2017 Actuarial Loss   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   1,301,386   117,290     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665,925     10/01/2017 Actuarial Gain   19 years   7,388,759   665 | 10/01/2002 Method Change          | 10 years     | 2,507,218      | 333,003      |
| 10/01/2004 Actuarial Loss  |                                   |              |                | 103,248      |
| 1001/2005 Actuarial Loss   13 years   1,254,662   139,068   10/01/2006 Plan Amendment   11 years   675,738   84,049   10/01/2006 Actuarial Loss   14 years   2,023,683   2215,713   10/01/2006 Plan Amendment   14 years   1,669,984   178,010   10/01/2007 Actuarial (Gain)   15 years   179,939   19,180   10/01/2007 Actuarial (Gain)   15 years   (162,255)   (16,604)   10/01/2007 Asset Method Change   15 years   (1,645,625)   (168,406)   10/01/2008 Actuarial Loss   16 years   6,540,529   645,230   10/01/2009 Actuarial Loss   17 years   2,851,826   272,172   10/01/2009 Assumption Change   17 years   2,851,826   272,172   10/01/2009 Assumption Change   17 years   502,349   47,943   10/01/2010 Actuarial (Gain)   18 years   2,244,779   (207,905)   10/01/2010 Plan Amendment   18 years   2,244,779   (207,905)   10/01/2010 Plan Amendment   18 years   5,913,878   532,998   10/01/2012 Actuarial (Gain)   19 years   (4,278,153)   (385,576)   10/01/2013 Actuarial (Gain)   19 years   (4,278,153)   (385,576)   10/01/2014 Actuarial (Gain)   19 years   (3,2646)   (122,234)   10/01/2014 Actuarial (Gain)   19 years   3,343,311   416,009   10/01/2015 Actuarial (Gain)   19 years   1,806,666   162,829   10/01/2016 Actuarial (Gain)   19 years   1,806,666   162,829   10/01/2016 Assumption Change   14 years   4,171,256   444,631   10/01/2017 Actuarial (Gain)   19 years   1,301,386   117,290   10/01/2017 Actuarial (Gain)   19 years   3,997,614   (352,180)   10/01/2017 Actuarial (Gain)   19 years   1,57,026   104,279   10/01/2018 Actuarial Loss   19 years   1,57,026   104,279   10/01/2019 Assumption Change   17 years   5,666,824   (540,829)   10/01/2019 Assumption Change   17 years   5,666,824   (540,829)   10/01/2019 Assumption Change   18 years   2,347,129   260,665   10/01/2019 Assumption Change   19 years   1,387,5770   (1,250,578)   10/01/2020 Actuarial Gain   19 years   1,387,5770   (1,250,578)   10/01/2022 Actuarial Loss   20 years   3,3446,163   3,116,293   10/01/2022 AVA Method Change   20 years   3,3446,163   3,116,293   10/01/2022 | 10/01/2003 Plan Amendment         | 11 years     | 1,172,860      | 145,881      |
| 10/01/2005 Plan Amendment  | 10/01/2004 Actuarial Loss         | 12 years     | 278,275        | 32,671       |
| 10/01/2005 Plan Amendment  | 10/01/2005 Actuarial Loss         | 13 years     | 1,254,662      | 139,968      |
| 10/01/2006 Plan Amendment  | 10/01/2005 Plan Amendment         | 11 years     | 675,738        |              |
| 10/01/2006 Ch. 185 Plan Amendment  | 10/01/2006 Actuarial Loss         | 14 years     | 2,023,683      | 215,713      |
| 10/01/2007 Actuarial (Gain)  | 10/01/2006 Plan Amendment         | 14 years     | 1,669,984      | 178,010      |
| 10/01/2007 Asset Method Change   | 10/01/2006 Ch. 185 Plan Amendment | 14 years     | 179,939        | 19,180       |
| 10/01/2008 Actuarial Loss         16 years         6,540,529         645,230           10/01/2009 Actuarial Loss         17 years         2,851,826         272,172           10/01/2009 Assumption Change         17 years         502,349         47,943           10/01/2010 Actuarial (Gain)         18 years         (2,244,779)         (207,905)           10/01/2010 Plan Amendment         18 years         256,751         23,780           10/01/2011 Actuarial Loss         19 years         5,913,878         532,998           10/01/2012 Actuarial (Gain)         19 years         (4,278,153)         (385,576)           10/01/2013 Actuarial (Gain)         19 years         (892,314)         (80,421)           10/01/2014 Assumption Change         12 years         3,543,311         416,009           10/01/2015 Actuarial (Gain)         19 years         1,806,666         162,829           10/01/2016 Actuarial (Gain)         19 years         1,301,386         117,290           10/01/2016 Assumption Change         14 years         4,171,256         444,631           10/01/2017 Assumption Change         15 years         2,547,129         260,662           10/01/2017 Assumption Change         15 years         1,157,026         104,279           10/01/2019 Actuarial Loss  | 10/01/2007 Actuarial (Gain)       | 15 years     | (162,255)      | (16,604)     |
| 10/01/2008 Actuarial Loss         16 years         6,540,529         645,230           10/01/2009 Actuarial Loss         17 years         2,851,826         272,172           10/01/2009 Assumption Change         17 years         502,349         47,943           10/01/2010 Actuarial (Gain)         18 years         (2,244,779)         (207,905)           10/01/2010 Plan Amendment         18 years         256,751         23,780           10/01/2011 Actuarial Loss         19 years         5,913,878         532,998           10/01/2012 Actuarial (Gain)         19 years         (4,278,153)         (385,576)           10/01/2013 Actuarial (Gain)         19 years         (892,314)         (80,421)           10/01/2014 Assumption Change         12 years         3,543,311         416,009           10/01/2015 Actuarial (Gain)         19 years         1,806,666         162,829           10/01/2016 Actuarial (Gain)         19 years         1,301,386         117,290           10/01/2016 Assumption Change         14 years         4,171,256         444,631           10/01/2017 Assumption Change         15 years         2,547,129         260,662           10/01/2017 Assumption Change         15 years         1,157,026         104,279           10/01/2019 Actuarial Loss  | 10/01/2007 Asset Method Change    | 15 years     | (1,645,625)    | (168,406)    |
| 10/01/2009 Assumption Change         17 years         502,349         47,943           10/01/2010 Actuarial (Gain)         18 years         (2,244,779)         (207,905)           10/01/2010 Plan Amendment         18 years         256,751         23,780           10/01/2011 Actuarial Loss         19 years         5,913,878         532,998           10/01/2012 Actuarial (Gain)         19 years         (4,278,153)         (385,576)           10/01/2013 Actuarial (Gain)         19 years         (1,356,246)         (122,234)           10/01/2014 Assumption Change         12 years         3,543,311         416,009           10/01/2014 Assumption Change         12 years         3,543,311         416,009           10/01/2014 Assumption Change         19 years         1,806,666         162,829           10/01/2014 Assumption Change         19 years         1,301,386         117,290           10/01/2016 Actuarial (Gain)         19 years         1,301,386         117,290           10/01/2016 Assumption Change         14 years         4,171,256         444,631           10/01/2017 Assumption Change         15 years         2,547,129         260,662           10/01/2017 Assumption Change         15 years         2,547,129         260,662           10/01/2018 Actuarial Loss  |                                   | 16 years     | 6,540,529      | 645,230      |
| 10/01/2010 Actuarial (Gain)         18 years         (2,244,779)         (207,905)           10/01/2010 Plan Amendment         18 years         256,751         23,780           10/01/2011 Actuarial Loss         19 years         5,913,878         532,998           10/01/2012 Actuarial (Gain)         19 years         (4,278,153)         (385,576)           10/01/2013 Actuarial (Gain)         19 years         (1,356,246)         (122,234)           10/01/2014 Actuarial (Gain)         19 years         (892,314)         (80,421)           10/01/2014 Assumption Change         12 years         3,543,311         416,009           10/01/2015 Actuarial (Gain)         19 years         1,806,666         162,829           10/01/2016 Astuarial (Gain)         19 years         1,301,386         117,290           10/01/2016 Astuarial (Gain)         19 years         4,171,256         444,631           10/01/2017 Actuarial (Gain)         19 years         3,307,614         (352,180)           10/01/2017 Assumption Change         15 years         2,547,129         260,662           10/01/2018 Actuarial Loss         19 years         1,157,026         104,279           10/01/2019 Astuarial Loss         19 years         (5,666,824)         (540,829)           10/01/2020 Astuarial Gain  | 10/01/2009 Actuarial Loss         |              | 2,851,826      | 272,172      |
| 10/01/2010 Plan Amendment       18 years       256,751       23,780         10/01/2011 Actuarial Loss       19 years       5,913,878       532,998         10/01/2012 Actuarial (Gain)       19 years       (4,278,153)       (385,576)         10/01/2013 Actuarial (Gain)       19 years       (1,356,246)       (122,234)         10/01/2014 Actuarial (Gain)       19 years       (892,314)       (80,421)         10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Actuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Assumption Change       18 years       2,338,8759       665,925         10/01/2020 Assumption Change       18 years       2,33,884       (300,021)         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)   | 10/01/2009 Assumption Change      | 17 years     | 502,349        | 47,943       |
| 10/01/2011 Actuarial Loss       19 years       5,913,878       532,998         10/01/2012 Actuarial (Gain)       19 years       (4,278,153)       (385,576)         10/01/2013 Actuarial (Gain)       19 years       (1,356,246)       (122,234)         10/01/2014 Actuarial (Gain)       19 years       (892,314)       (80,421)         10/01/2014 Assumption Change       12 years       3,543,311       416,009         10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Astuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)  |                                   | 18 years     | (2,244,779)    | (207,905)    |
| 10/01/2012 Actuarial (Gain)       19 years       (4,278,153)       (385,576)         10/01/2013 Actuarial (Gain)       19 years       (1,356,246)       (122,234)         10/01/2014 Actuarial (Gain)       19 years       (892,314)       (80,421)         10/01/2014 Assumption Change       12 years       3,543,311       416,009         10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Actuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Assumption Change       19 years       (13,875,770)       (1,250,578)         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293  | 10/01/2010 Plan Amendment         | 18 years     | 256,751        | 23,780       |
| 10/01/2013 Actuarial (Gain)       19 years       (1,356,246)       (122,234)         10/01/2014 Actuarial (Gain)       19 years       (892,314)       (80,421)         10/01/2014 Assumption Change       12 years       3,543,311       416,009         10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Assumption Change       14 years       1,301,386       117,290         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 Ava Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2011 Actuarial Loss         | 19 years     | 5,913,878      | 532,998      |
| 10/01/2014 Actuarial (Gain)       19 years       (892,314)       (80,421)         10/01/2014 Assumption Change       12 years       3,543,311       416,009         10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Actuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2018 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2012 Actuarial (Gain)       | 19 years     | (4,278,153)    | (385,576)    |
| 10/01/2014 Assumption Change       12 years       3,543,311       416,009         10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Actuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2013 Actuarial (Gain)       | 19 years     | (1,356,246)    | (122,234)    |
| 10/01/2015 Actuarial (Gain)       19 years       1,806,666       162,829         10/01/2016 Actuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2021 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Assumption Change       19 years       (13,875,770)       (1,250,578)         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2014 Actuarial (Gain)       | 19 years     | (892,314)      | (80,421)     |
| 10/01/2016 Actuarial (Gain)       19 years       1,301,386       117,290         10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2021 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Assumption Change       19 years       (13,875,770)       (1,250,578)         10/01/2022 Actuarial Gain       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2014 Assumption Change      | 12 years     | 3,543,311      | 416,009      |
| 10/01/2016 Assumption Change       14 years       4,171,256       444,631         10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2021 Actuarial Gain       19 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2022 Actuarial Loss       19 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2015 Actuarial (Gain)       | 19 years     | 1,806,666      | 162,829      |
| 10/01/2017 Actuarial (Gain)       19 years       (3,907,614)       (352,180)         10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2021 Actuarial Gain       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2016 Actuarial (Gain)       | 19 years     | 1,301,386      | 117,290      |
| 10/01/2017 Assumption Change       15 years       2,547,129       260,662         10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2021 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2016 Assumption Change      | 14 years     | 4,171,256      | 444,631      |
| 10/01/2018 Actuarial Loss       19 years       1,157,026       104,279         10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2017 Actuarial (Gain)       | 19 years     | (3,907,614)    | (352,180)    |
| 10/01/2019 Actuarial Loss       19 years       7,388,759       665,925         10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2017 Assumption Change      | 15 years     | 2,547,129      | 260,662      |
| 10/01/2019 Assumption Change       17 years       (5,666,824)       (540,829)         10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2018 Actuarial Loss         | 19 years     | 1,157,026      | 104,279      |
| 10/01/2020 Actuarial Gain       19 years       (3,328,884)       (300,021)         10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2019 Actuarial Loss         | 19 years     | 7,388,759      | 665,925      |
| 10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2019 Assumption Change      | 17 years     | (5,666,824)    | (540,829)    |
| 10/01/2020 Assumption Change       18 years       2,013,815       186,514         10/01/2021 Actuarial Gain       19 years       (13,875,770)       (1,250,578)         10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2020 Actuarial Gain         | 19 years     | (3,328,884)    | (300,021)    |
| 10/01/2021 Assumption Change       19 years       10,890,578       981,532         10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)  | 10/01/2020 Assumption Change      | 18 years     |                | 186,514      |
| 10/01/2022 Actuarial Loss       20 years       35,446,163       3,116,293         10/01/2022 AVA Method Change       20 years       (16,511,589)       (1,451,637)   | 10/01/2021 Actuarial Gain         | 19 years     | (13,875,770)   | (1,250,578)  |
| 10/01/2022 AVA Method Change 20 years (16,511,589) (1,451,637)   | 10/01/2021 Assumption Change      |              | 10,890,578     | 981,532      |
|  | 10/01/2022 Actuarial Loss         |              |                |              |
|  | 10/01/2022 AVA Method Change      | 20 years     | (16,511,589)   | (1,451,637)  |
|  |                                   |              |                |              |

TOTAL: <u>\$ 43,830,917</u> <u>\$ 4,800,187</u>



## **Table XVI** (continued five)

This actuarial valuation and/or cost determination was 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, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Donald A. DuLaney, Jr. A.S.A., E.A. Senior Consulting Actuary

4/3/2023

Date

23-04191

**Enrollment Number**