# 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.<br>Actuarial Services

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Board of Trustees
Town of Davie Police Pension Plan
c/o Mr. Greg Brillant
Precision Pension Administration, Inc.
13790 NW $4^{\text {th }}$ 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 $\mathbf{\$ 8 , 9 0 1}, \mathbf{0 3 7}$ or $\mathbf{5 7 . 5 \%}$ 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 $\mathbf{\$ 1 , 9 6 4 , 3 2 3}$.

The anticipated State (Chapter 185) contribution is $\mathbf{\$ 1 , 0 4 3 , 7 4 5}$. The resulting Town required contribution is $\mathbf{\$ 7 , 8 5 7 , 2 9 2}$, 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 <br> 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 postemployment 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 shortterm, 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


Corinne Pail, A.S.A. Actuary

DAD/CP
Attachments

Table I

## TOWN OF DAVIE POLICE PENSION PLAN

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

| Cost Data $\quad$$\%$ of <br> Payroll |
| :--- |

## A. Participant Data Summary

1. Active employees
2. Terminated vested

152
3. Receiving benefits
4. DROP participants
5. Annual payroll of active employees
B. Total Normal Costs

1. Age retirement benefits
2. Termination benefits
\$ 4,420,768
3. Death benefits
4. Disability benefits
5. Estimated expenses
6. Total annual normal costs
C. Total Actuarial Accrued Liability
7. Age retirement benefits active employees
8. Termination benefits active employees
9. Death benefits active employees
10. Disability benefits active employees
11. Retired or terminated vested participants
\$ 70,095,787
452.9\%

1,817,305 11.7\%
6. DROP participants benefits
7. Terminated vested participants entitled to future
7. benefits
8. Deceased participants whose beneficiaries are receiving benefits

123,355
0.8\%

554,208

$$
3.6 \%
$$

105,648,127

$$
682.7 \%
$$

50,427,298
325.8\%

1,527,327
9.9\%
9. Disabled participants receiving benefits
10. Total actuarial accrued liability
D. $\quad$ Actuarial Value of Assets (Table VI)
E. Unfunded Actuarial Accrued Liability (C. - D.)

| $4,849,554$ | $31.3 \%$ |
| ---: | ---: |
| $3,337,375$ | $\frac{21.6 \%}{1,540.3 \%}$ |

## Table I

 (continued two)
## F. Minimum Funding Requirements

1. Total normal cost
2. Amortization of unfunded actuarial accrued liability
3. Interest adjustment
4. Total payment
G. Contribution Sources
5. a) Town
b) State
c) Total Town and State
6. Employees
H. Actuarial Present Value of Vested Accrued Benefits
7. Retired, terminated vested, beneficiaries and
8. disabled receiving benefits
9. DROP participants
10. Terminated vested participants entitled to future benefits
11. Active participants entitled to future benefits
\$ 7,857,292
1,043,745
\$ 8,901,037
\$ 1,392,836
50.8\%

| $\$$ | $5,061,481$ | $32.7 \%$ |
| :--- | ---: | ---: |
|  | $4,800,187$ | $31.0 \%$ |
|  | 432,205 | $2.8 \%$ |
| $\$$ | $10,293,873$ |  |
|  |  | $66.5 \%$ | 6.7\% 57.5\%

9.0\%
\$ 113,835,056
50,427,298
325.8\%

$$
1,527,327
$$

9.9\% 49,594,675 320.5\%
5. Total actuarial present value of vested accrued benefits
I. Market Value of Assets (Table V)
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. $\div$ H.)
\$ 215,384,356 1,391.7\%
\$ 170,550,085 1,102.0\%

## TOWN OF DAVIE POLICE PENSION PLAN

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



Table III

## TOWN OF DAVIE POLICE PENSION PLAN

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

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 ..... (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 age37.20 years
11. Percent female ..... 16.45\%
B. Characteristics of Inactive Participants
12. Inactives as of beginning of prior year ..... 167
13. Newly inactive during prior year ..... 11
14. Exits during prior year ..... (0)
15. Inactives as of beginning of year ..... 178
16. Age retirees ..... 117
17. Annual benefit for age retirees ..... \$ 8,364,944
18. DROP participants ..... 36
19. Annual benefit for DROP participants ..... \$ 3,484,003
20. Beneficiaries receiving benefits ..... 13
21. Annual benefits for beneficiaries receiving benefits ..... \$ 429,532
22. Beneficiaries due deferred benefits ..... 0
23. Annual benefits for beneficiaries due deferred benefits ..... \$ ..... 0
24. Disabled participants receiving benefits ..... 6
25. Annual benefits for disabled participants ..... \$ 280,780
26. Terminated vested due deferred benefits ..... 6
27. Annual benefits for terminated vested participants ..... \$ 163,806

## Table IV

## TOWN OF DAVIE POLICE PENSION PLAN

Statement of Assets as of October 1, $2022^{1}$
$\qquad$
Market
Value
A. Assets

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. Mortgages0
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
12. Total Assets
B. Liabilities
13. Prepaid Town Contributions ..... 5,480,073
14. Self-Directed DROP ..... 1,768,081
15. DROP Benefits Payable ..... 13,059,474
16. Unused Chapter 185 Funds ..... 0
17. Accounts Payable ..... 765,364
18. Total Liabilities ..... \$ 21,072,992
C. Grand Total (Item A.12. - Item B.6.) ..... \$ 170,550,085
[^0]
## Table V

## TOWN OF DAVIE POLICE PENSION PLAN

## Reconciliation of Plan Assets



## Table VI

## TOWN OF DAVIE POLICE PENSION PLAN

## Development of Actuarial Value of Assets

|  | $\begin{gathered} 10 / 1 / 2021- \\ 9 / 30 / 2022 \end{gathered}$ |  | $\begin{gathered} 10 / 1 / 2020- \\ 9 / 30 / 2021 \end{gathered}$ |  | $\begin{gathered} 10 / 1 / 2019- \\ 9 / 30 / 2020 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Market value of assets as of beginning of year | \$ | 207,462,311 | \$ | 172,609,209 | \$ | 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 $\text { (A. x } .0695+(\text { B.-C.) x } .03475)$ |  | 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 |
| G. Excess/(shortfall) of actual over expected assets (F. - E.) |  |  |  |  |  |  |
| 1. From previous plan year |  | $(48,764,071)$ |  | 23,994,040 |  | 2,306,796 |
| 2. From two plan years ago |  | 23,994,040 |  | 2,306,796 |  | $(9,733,858)$ |
| 3. From three plan years ago |  | 2,306,796 |  | $(9,733,858)$ |  | 2,807,493 |
| H. Deferred recognized amounts of excess/(shortfall) |  |  |  |  |  |  |
| 1. $75 \%$ from previous plan year |  | $(36,573,053)$ |  | 7,998,013 |  | 768,932 |
| 2. 50\% from two plan years ago |  | 11,997,020 |  | 768,932 |  | $(3,244,619)$ |
| $3.25 \%$ from three plan years ago |  | 576,699 |  | $(3,244,619)$ |  | 935,831 |
| 4. Total |  | $(23,999,334)$ |  | 5,522,326 |  | $(1,539,856)$ |
| I. Preliminary actuarial value of assets at end of year (F. - H.4.) | \$ | 194,549,419 | \$ | 201,939,985 | \$ | 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 | \$ | 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 and State normal cost previous valuation \$ 3,588,880
2. Unfunded actuarial accrued liability previous valuation 26,393,571
3. Town and State contributions previous year (limited by 99-1) 6,797,296
4. Interest 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) \$ 1,711,188
5. Increase (decrease) in unfunded actuarial accrued liability from plan amendment
6. Increase (decrease) in unfunded actuarial accrued liability from assumptions changes
7. Expected unfunded actuarial accrued liability current year: 1. $+2 .-3 .+4 .+5 .+6$.
8. Actual unfunded actuarial accrued liability current year 43,830,917
9. Actuarial gain (loss): 7. - 8 .

## Table VIII

## TOWN OF DAVIE POLICE PENSION PLAN

## Amortization of Unfunded Liability

| Date | Total Unfunded Liability |  | Amortization <br> $\underline{\text { Payment }}$ |
| :---: | :---: | :---: | :---: |
| $10 / 1 / 2022$ | $\$$ | $43,830,917$ | $\$$ |
| $10 / 1 / 2023$ | $\$$ | $41,743,366$ | $\$, 800,187$ |
| $10 / 1 / 2024$ | $\$$ | $39,510,730$ | $\$$ |
| $10 / 1 / 2025$ | $\$$ | $37,697,557$ | $4,800,187$ |
| $10 / 1 / 2042$ | $\$$ | 0 | $\$$ |

## Table IX

## TOWN OF DAVIE POLICE PENSION PLAN

## Accounting Disclosure Exhibit

I. Number of Plan Participants

10/1/2021
10/1/2022

1. Retirees, disabled and beneficiaries receiving benefits 129
2. Terminated plan participants entitled to but not yet receiving benefits $\quad 4 \quad 6$
3. DROP participants 34 36
4. Active plan participants $\quad 157$
5. Total

324
II. Accumulated Plan Benefits as of October 1, 2022
A. Statement of Accumulated Plan Benefits

1. Actuarial present value of accumulated vested plan benefits
a. Participants currently receiving benefits
\$ 105,785,926
\$ 113,835,056
b. Beneficiaries due deferred benefits
0 0
c. DROP participants
46,541,925
50,427,298
d. Others
e. Total
$\begin{array}{r}53,581,399 \\ \hline \$ 205,909,250\end{array}$
51,122,002
\$ 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
\$ 222,239,453

## Table IX <br> (continued two)

B. Statement of Change in Accumulated Plan Benefits

1. Actuarial present value of accumulated
plan benefits as of October 1,2021
2. Increase (decrease) during year attributable to:
a. Plan amendment 0
b. Actuarial assumptions and method changes 0
c. Benefits paid and contribution refunds
d. DROP benefits credited
e. Other, including benefits accumulated and increase for interest due to decrease in the discount period
f. Net increase
3. Actuarial present value of accumulated plan benefits as of October 1, 2022
C. Significant Matters Affecting Calculations
4. Assumed rate of return used in determining actuarial present values
5. Plan amendments
6. Change in actuarial assumptions

See Table XI
D. Required Disclosure of Accumulated Plan Benefits $\quad \begin{aligned} \text { at Assumed Rate of Return Applied by the } \\ \text { Florida Retirement System, Currently } 6.95 \%\end{aligned}$

21,297,303

1. Assurned rate or return used in determining
\$ 222,239,453
2. Actuarial present value of accumulated vested plan benefits
$\begin{array}{lrr}\text { a. Participants currently receiving benefits } & \$ \quad 113,835,056 \\ \text { b. DROP participants } & 50,427,298 \\ \text { c. Others } & 51,122,002 \\ \text { d. Total } & 215,384,356\end{array}$
3. Actuarial present value of accumulated non-vested
plan benefits
4. Total actuarial present value of accumulated plan benefits

Table IX

## (continued three)

III. Schedule of Funding Progress (As required by GASB \#25)
(4)

Unfunded Actuarial Accrued Actuarial Accrued Liability (AAL) - Liability (UAAL)

| FIL $/$ EAN AAL |  |
| :---: | :---: |
| $\$$ | 10,008 |
| $\$$ | 11,163 |
| $\$$ | 14,146 |
| $\$$ | 17,163 |
| $\$$ | 20,093 |
| $\$$ | 23,994 |
| $\$$ | 27,303 |
| $\$$ | 28,994 |
| $\$$ | 35,159 |
| $\$$ | 34,530 |
| $\$$ | 33,558 |

(5)

Funded Ratio
(6)

Annual Covered

| $(2) /(3)$ |
| :---: |
| $86.9 \%$ |
| $89.0 \%$ |
| $76.8 \%$ |
| $81.1 \%$ |
| $84.9 \%$ |
| $90.0 \%$ |
| $91.4 \%$ |
| $103.1 \%$ |
| $93.5 \%$ |
| $93.6 \%$ |
| $93.3 \%$ |


| \$ |  |
| :--- | ---: |
| $\$$ | 4,146 |
| $\$$ | 4,467 |
| $\$$ | 4,195 |

\(\left.\begin{array}{c}Payroll <br>

(4) /(6)\end{array}\right]\)| $31.6 \%$ |
| :---: |
| $27.6 \%$ |
| $78.2 \%$ |
| $61.1 \%$ |
| $53.9 \%$ |
| $45.0 \%$ |
| $37.1 \%$ |
| $(14.6 \%)$ |
| $36.0 \%$ |
| $30.4 \%$ |
| $28.3 \%$ |

(all figures above are based on Frozen Initial Liability - all figures below are based on Entry Age Normal Actuarial Accrued Liability)

| 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 <br> (continued four)

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

| Plan <br> Year | Annual Required <br> Contribution | Percentage Contributed |
| :---: | :---: | :---: |
| $(1)$ | $(2)$ |  |
| 1999 | $\$ 1,526,299$ | $(3)$ |
| 2000 | $\$ 1,382,000$ | $105 \%$ |
| 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 | $\$ 6,430,027^{2}$ | $100 \%$ |
| 2015 | $\$ 6,361,217^{3}$ | $100 \%$ |
| 2016 | $\$ 6,418,604^{4}$ | $100 \%$ |
| 2017 | $\$ 7,272,120^{5}$ | $100 \%$ |
| 2018 | $\$ 7,170,624^{6}$ | $100 \%$ |
| 2019 | $\$ 7,174,869^{7}$ | $100 \%$ |
| 2020 | $\$ 7,114,836^{8}$ | $100 \%$ |
| 2021 | $\$ 7,087,833^{9}$ | $100 \%$ |
| 2022 | $\$ 7,015,969^{10}$ | $100 \%$ |
|  |  | $100 \%$ |

[^1]
## 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
Actuarial cost method
Amortization method
Remaining amortization period
Asset valuation method
Actuarial assumptions:
Investment rate of return*
Projected salary increases*
Cost-of-living adjustments

October 1, 2022
Entry Age Normal Level Percent
Layered amortization
20 years
See Table XI., Item 9.
6.95\%
5.50\%
$2.0 \%$ per year with $130 \%$ cap and 5-year delay

[^2]
## Table IX

(continued six)

## Accounting Disclosure Exhibit

VI. Revenues by Source and Expenses by Type

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

Expenses by Type

| Plan |
| :--- |
| Year |


| Benefits \& DROP Payments | Expenses |  | Refunds | Total |
| :---: | :---: | :---: | :---: | :---: |
| \$ 11,138,192 | \$1,466,868 | \$ | 84,787 | \$ 12,689,847 |
| \$ 10,569,676 | \$ 974,308 | \$ | 48,440 | \$ 11,592,424 |
| \$ 9,591,523 | \$ 986,993 | \$ | 87,815 | \$ 10,666,331 |
| \$ 8,887,203 | \$ 979,426 | \$ | 89,078 | \$ 9,955,707 |
| \$ 7,862,170 | \$ 916,489 | \$ | 106,404 | \$ 8,885,063 |
| \$ 6,867,328 | \$ 866,276 | \$ | 36,851 | \$ 7,770,455 |
| \$ 6,637,331 | \$ 653,395 | \$ | 43,243 | \$ 6,680,574 |
| \$ 5,883,266 | \$ 628,403 | \$ | 13,122 | \$ 6,524,791 |
| \$ 5,400,475 | \$ 746,285 | \$ | 31,616 | \$ 6,178,376 |
| \$ 4,850,525 | \$ 697,282 | \$ | 9,457 | \$ 5,557,264 |

Contributions were made in accordance with actuarially determined contribution requirements.

## Table $\mathbf{X}$

## 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 201119. 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. Tier One and Tier Two Participants:

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. Basic Compensation:

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.

## 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 $471 / 2$ 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 raca there would be no actuarial reduction to his monthly benefit.


## Table X

## (continued three)

## 13. Delayed Retirement Date:

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

With the Town $\quad$|  |  |
| :---: | :---: |
|  |  |
| Less than 10 |  |
| Percentage |  |

## 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 full 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.

## 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. Prior to retirement: 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. After retirement: 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.

## 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\% PUB2010 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. Employee Withdrawal Rates:

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

| Age | Withdrawal Rates Per 100 Employees |  |
| :---: | :---: | :---: |
|  | Male | Female |
| 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 <br> (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 more years of Credited Service |  | Participants who attained age 55 with 10 or more years of Credited |
| :---: | :---: | :---: |
| Years of |  |  |
| Credited Service | Percentage 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- $t$ Actuarial Cost Method.

## Table XI <br> (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.

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Table XII

## TOWN OF DAVIE POLICE PENSION PLAN

## Distribution of Active Participants by Age and Service Groups

## as of October 1,2022

Years of Credited Service

| Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 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 | , | 3 | . | . | . | 6 |
| 55-59 | 1 | 2 | . | 2 | . | . | . | 5 |
| 60-64 |  |  |  | . | . | . | . | 0 |
| 65 \& Over |  |  |  |  |  | . | . | 0 |
| TOTAL | 49 | 40 | 23 | 35 | 5 | . | . | 152 |
|  |  |  | $\underline{10 / 01 / 2021}$ |  | 10/01/2022 |  |  |  |
|  |  | ned Age | 37.41 years |  | 37.20 years |  |  |  |
|  |  |  | \$99,708 |  | \$101,816 |  |  |  |
|  |  |  | 17.20\% |  | 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
3. Entered DROP during year
4. Died during year
5. Disabled during year
6. Terminated vested during year
7. Terminated non-vested during period
8. New active participants 8

9 Rehired $\quad \begin{array}{r}0 \\ -\quad 152\end{array}$
10. Active participants current year $\quad 152$
B. Participants Receiving Benefits

1. Participants receiving benefits previous year 129
2. New retired participants 1
3. New terminated vested receiving benefits 0
4. New disabled receiving benefits 0
5. New beneficiaries receiving benefits 1
6. DROP participants exited and retired 6
7. Died or ceased payment during year (1)
8. Retired or terminated vested receiving benefits current year $\quad 136$
C. Terminated Participants Entitled to Future Benefits
9. Terminated participants entitled to future benefits previous year 4
10. Died during year 0
11. Rehired 0
12. Commenced receiving benefits during year 0
13. New terminated participants $\quad 2$
14. Terminated participants entitled to future benefits current year $\quad 6$
D. DROP Participants
15. DROP participants previous year 34
16. New entrants during year 8
17. Died during year 0
18. Exited and retired during year (6)
19. DROP participants current year 36

Table XIV

## TOWN OF DAVIE POLICE PENSION PLAN

## Statistics for Participants Entitled to Deferred Vested Benefits

 and Participants Receiving PaymentsA. Entitled to Deferred Benefits

| Current Age Group | Count | Total <br> Annual <br> Benefit | Average Annual 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 | 6 | \$ 163,806 | \$ 27,301 |

B. Receiving Benefits (includes DROP participants)

| $\begin{gathered} \text { Current Age } \\ \text { Group } \\ \hline \end{gathered}$ | Count |  | 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. Investment Return

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

| Year Ended | Rate of Return |  |  |
| :---: | :---: | :---: | :---: |
|  | Market Value | Actuarial 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

| Year Ended | Salary Increase |  | Ratio of Actual Turnover to Expected |
| :---: | :---: | :---: | :---: |
|  | Actual | Assumed |  |
| 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

$\qquad$

## A. Participant Data

1. Active participants 157
2. Retired participants and beneficiaries receiving benefits 123
3. Beneficiaries due deferred benefits 0
4. DROP participants 34
5. Disabled participants receiving benefits 6
6. Terminated vested participants 4
7. Total participants 324
8. Annual payroll of active participants \$ 15,654,087
9. Annual benefits payable to those currently receiving benefits
10. Annual benefits payable to beneficiaries due deferred benefits
11. Annual benefits payable to terminated deferred benefits
12. Annual benefits payable to DROP participants
B. Value of Assets
13. Actuarial value
14. Market value
C. Liabilities
15. Actuarial present value of future expected benefit payments for active members
a. Retirement benefits
b. Vesting benefits
c. Death benefits
d. Disability benefits
e.Total
16. Actuarial present value of future expected benefit payments for terminated vested members
\$ 109,151,936
17. Actuarial present value of future expected benefit payments for those receiving benefits

| a. Service retired | $\$$ | $98,095,937$ | $\$ 105,648,127$ |  |
| :--- | ---: | ---: | ---: | ---: |
| b. DROP participants |  | $46,541,925$ | $50,427,298$ |  |
| c. Disability retired |  | $3,364,636$ |  | $3,337,375$ |
| d. Beneficiaries | $\boxed{4,325,353}$ |  | $4,849,554$ |  |
| e. Total | $\$ 152,327,851$ | $\$$ | $164,262,354$ |  |

a. Service retired
$\begin{array}{rr}\$ & 98,095,937 \\ 46,541,925\end{array}$
\$ 105,648,127
50,427,298
3,337,375
\$ 164,262,354
\$ 201,939,985
\$ 194,549,419
\$ 207,462,311
\$ 170,550,085

Table XVI (continued two)
5. Miscellaneous (refund unpaid)
6. Total actuarial present value of future expected benefit payments
7. Actuarial accrued liabilities
8. Unfunded actuarial accrued liabilities
D. Statement of Accumulated Plan Benefits

1. Actuarial present value of accumulated vested plan benefits
a. Participants currently receiving benefits
b. Beneficiaries due deferred benefits
b. DROP participants
c. Other participants
d. Total

Actuarial present value of accumulated nonvested plan benefits

| $\$ 105,785,926$ | $\$ 113,835,056$ |  |
| ---: | ---: | ---: | ---: |
| 0 |  | 0 |
| $46,541,925$ |  | $50,427,298$ |
|  | $53,581,399$ |  |
|  |  | $51,122,002$ |
| $\$ 205,909,250$ |  | $\$ 215,384,356$ |

Total actuarial present value of accumulated plan benefits

## E. Statement of Change in Accumulated Plan Benefits

\$ 212,165,129
\$ 222,239,453

1. Actuarial present value of accumulated plan benefits as of October 1, 2021
2. Increase (decrease) during year attributable to:
a. Plan amendment
b. Actuarial assumptions and methods changes
c. Benefits paid and contribution refunds
d. DROP benefits credited
e. Other, including benefits accumulated and increase for interest due to decrease in the discount period
f. Net increase (decrease)

## 3. Actuarial present value of accumulated plan

benefits as of October 1, 2022
10/1/2021

10/1/2022

| $\$$ | 0 | $\$$ | 0 |
| :--- | ---: | :--- | ---: |
| $\$ 2267,968,444$ | $\$ 277,867,540$ |  |  |
| $\$ 228,333,556$ | $\$ 238,380,336$ |  |  |
| $\$ 26,393,571$ | \$ 43,830,917 |  |  |

\$ 26,393,571
\$ 43,830,917
\$ 215,384,356

6,855,097

## Table XVI (continued three)

## F. Pension Cost

1. Total normal cost including expenses
2. Expected member contribution
3. Item 2. as percentage of payroll
4. Net employer normal cost
5. Payment required to amortize unfunded liability
6. Total employer required contribution
7. Item 6. as a percentage of payroll
8. State contributions
9. Item 8. as a percentage of payroll
10. Net amount payable by Town
11. Item 10. as a percentage of payroll
G. Past Contributions
12. Total contribution required
13. Actual contributions made:
a. Employees
b. Town
c. State
d. Total
H. Net Actuarial Gain (Loss)
I. Disclosure of Following Items:
14. Actuarial present value of future salaries -
attained age
\$ 126,886,350
\$ 127,870,609
15. Actuarial present value of future employee contributions - attained age
Actuarial present value of future contributions
16. from other sources
17. Amount of active members' accumulated contributions
18. Actuarial present value of future salaries and future benefits at entry age
Actuarial present value of future employee
19. Actuarial present value of
10/1/2021

| $\$$ | $4,997,748$ |  |  |
| ---: | ---: | ---: | ---: |
|  | $1,408,868$ |  |  |
|  | $9.0 \%$ |  |  |
|  |  |  | $5,061,481$ <br> $1,392,836$ |
|  | $3,588,880$ |  | $\$$ |
|  |  | $3,668,645$ |  |
|  | $3,071,967$ |  | $4,800,187$ |

\$ 7,015,969 \$ 8,901,037
44.8\%
\$ 1,000,965
\$ 1,043,745
6.4\%
\$ 6,015,004
38.4\%
\$ 8,424,837
$\$ 10,293,873$
\$ 2,157,867

| N/A |
| :--- |
| N/A |
| N/A |
| N/A |

\$ 14,496,949
\$ $(35,446,163)$
\$ 11,419,772
\$ 11,508,355

N/A
N/A
\$ 10,119,665
\$ 10,455,229

Not provided by software

Not provided by software

[^3]
## Table XVI (continued four)

## J. Unfunded Actuarial Accrued Liabilities

| Description and <br> Amount of <br> Original Liability | Remaining Amortization Period | Unamortized Amount as of Valuation Date | Amortization Payment |
| :---: | :---: | :---: | :---: |
| 10/01/1994 Plan Amendment | 2 years | 1,039,664 | 537,290 |
| 10/01/1996 Assumption Change | 4 years | $(13,699)$ | $(3,777)$ |
| 10/01/1997 Plan Amendment | 5 years | $(268,466)$ | $(61,140)$ |
| 10/01/1999 Assumption Change | 7 years | $(1,695,142)$ | $(293,587)$ |
| 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 |
| 10/01/2003 Plan Amendment | 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 Plan Amendment | 11 years | 675,738 | 84,049 |
| 10/01/2006 Actuarial Loss | 14 years | 2,023,683 | 215,713 |
| 10/01/2006 Plan Amendment | 14 years | 1,669,984 | 178,010 |
| 10/01/2006 Ch. 185 Plan Amendment | 14 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 | 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 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 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 | $(16,511,589)$ | $(1,451,637)$ |
| TOTAL: |  | \$ 43,830,917 | \$ 4,800,187 |

## 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


[^0]:    ${ }^{1}$ As reported by Plan's Auditors.

[^1]:    ${ }^{1}$ Determined by the prior year's actuarial valuation
    ${ }^{2}$ 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.
    ${ }^{3}$ 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.
    ${ }^{4}$ 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.
    ${ }^{5}$ 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.
    ${ }^{6}$ 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.
    ${ }^{7}$ 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.
    ${ }^{8}$ 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.
    ${ }^{9}$ 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.
    ${ }^{10}$ 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.

[^2]:    * Includes inflation at 3.0\%

[^3]:    * 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.

