



**DELAND MUNICIPAL POLICE OFFICERS' RETIREMENT PLAN**

*CHAPTER 112.664, F.S. COMPLIANCE REPORT*

In Connection with the October 1, 2014 Funding Actuarial Valuation Report  
and the Plan's Financial Reporting for the Year Ended September 30, 2014



August 26, 2015

Mr. Chris Jaques  
Chairman, Board of Trustees  
City of DeLand Municipal Police Officers'  
Retirement Plan  
219 West Howry  
DeLand, Florida 32720-5483

**Re: October 1, 2014 Chapter 112.664 Compliance Report**

Dear Mr. Jaques:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Board of Trustees (Board) of the DeLand Municipal Police Officers' Retirement Plan (Plan) to prepare a disclosure report to satisfy the requirements set forth in Chapter 112.664, F.S. and as further required pursuant to Chapter 60T-1.0035, F.A.C.

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

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

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

This report was based upon information furnished by the City and the Board concerning Plan benefits, Plan provisions and Plan members as used in the corresponding Actuarial Valuation Reports for the Valuation Dates indicated. Financial information was provided by the City and Board as of September 30, 2014. We reviewed the information provided for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City and Board.

Except where specific assumptions are required by Chapter 112.664, F.S, this report was prepared using actuarial assumptions adopted by the Board as described in Section C. The Board's assumptions are based on the results of an actuarial Experience Study for the period

October 1, 2005 – September 30, 2013 and represent an estimate of future Plan experience. The investment return assumption of 2% higher than the investment return assumption utilized in the Actuarial Valuation Report does not represent an estimate of future Plan experience nor observation of the estimates inherent in market data. This assumption is provided as a counterpart to the Chapter 112.664, F.S. requirement to utilize an investment return assumption of 2% lower than the investment return assumption utilized in the Actuarial Valuation Report. Inclusion of an investment return 2% higher than the investment return assumption utilized in the Actuarial Valuation Report shows a more complete assessment of the range of results as opposed to the one-sided range required by statute.

If all actuarial assumptions are met and if all current and future minimum required contributions are paid Plan assets will be sufficient to pay all Plan benefits. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and Police Officers Retirement Chapter 185 with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using an initial amortization period of 30 years.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the Plan sponsor.

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

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

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By   
Lawrence F. Wilson, M.A.A.A  
Enrolled Actuary No. 14-02802  
Senior Consultant & Actuary  
Date: August 26, 2015

By   
Jennifer M. Borregard  
Enrolled Actuary No. 14-07624  
Consultant & Actuary

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**SECTION A**  
**CHAPTER 112.664, F.S. RESULTS**

**Net Pension Liability**  
**Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68**

| Measurement Date  | 9/30/2014     |
|---|---------------|
| <b>A. <u>Total Pension Liability (TPL)</u></b>                              |               |
| Service Cost  | \$ 518,327    |
| Interest  | 1,988,374     |
| Benefit Changes   | 0             |
| Difference Between Actual and Expected Experience                           | (563,009)     |
| Assumption Changes  | 0             |
| Benefit Payments  | (1,332,841)   |
| Contribution Refunds  | (29,568)      |
| Other   | 0             |
| Net Change in Total Pension Liability                                       | 581,283       |
| Total Pension Liability - (beginning of year)                               | 27,233,274    |
| Total Pension Liability - (end of year)                                     | \$ 27,814,557 |
| <br><b>B. <u>Plan Fiduciary Net Position</u></b>                            |               |
| Contributions - Employer  | \$ 1,061,626  |
| Contributions - State   | 167,254       |
| Contributions - Member  | 209,027       |
| Net Investment Income   | 2,079,946     |
| Benefit Payments  | (1,332,841)   |
| Contribution Refunds  | (29,568)      |
| Administrative Expenses   | (74,437)      |
| Other   | 0             |
| Net Change in Plan Fiduciary Net Position                                   | 2,081,007     |
| Plan Fiduciary Net Position - (beginning of year)                           | 19,380,883    |
| Plan Fiduciary Net Position - (end of year)                                 | \$ 21,461,890 |
| <br><b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b> |               |
|   | \$ 6,352,667  |
| <br>Valuation Date  | <br>10/1/2013 |

**Certain Key Assumptions**

Investment Return Assumption 7.5%

Mortality Table:

Healthy Members: RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with Blue Collar Adjustment and fully generational mortality improvements projected to each future payment date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Net Pension Liability**  
**Using Assumptions Required Under 112.664(1)(a), F.S.**

| Measurement Date  | 9/30/2014        |
|---|------------------|
| <b>A. <u>Total Pension Liability (TPL)</u></b>                              |                  |
| Service Cost  | \$ 530,367       |
| Interest  | 2,021,296        |
| Benefit Changes   | 0                |
| Difference Between Actual and Expected Experience                           | (604,357)        |
| Assumption Changes  | 0                |
| Benefit Payments  | (1,332,841)      |
| Contribution Refunds  | (29,568)         |
| Other   | 0                |
| Net Change in Total Pension Liability                                       | 584,897          |
| Total Pension Liability - (beginning of year)                               | 27,701,547       |
| Total Pension Liability - (end of year)                                     | \$ 28,286,444    |
| <br><b>B. <u>Plan Fiduciary Net Position</u></b>                            |                  |
| Contributions - Employer  | \$ 1,061,626     |
| Contributions - State   | 167,254          |
| Contributions - Member  | 209,027          |
| Net Investment Income   | 2,079,946        |
| Benefit Payments  | (1,332,841)      |
| Contribution Refunds  | (29,568)         |
| Administrative Expenses   | (74,437)         |
| Other   | 0                |
| Net Change in Plan Fiduciary Net Position                                   | 2,081,007        |
| Plan Fiduciary Net Position - (beginning of year)                           | 19,380,883       |
| Plan Fiduciary Net Position - (end of year)                                 | \$ 21,461,890    |
| <br><b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b> | <br>\$ 6,824,554 |
| <br>Valuation Date  | <br>10/1/2013    |

**Certain Key Assumptions**

Investment Return Assumption 7.5%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Net Pension Liability**  
**Using Assumptions Required Under 112.664(1)(b), F.S.**

| Measurement Date  | 9/30/2014     |
|---|---------------|
| <b>A. <u>Total Pension Liability (TPL)</u></b>                              |               |
| Service Cost  | \$ 846,509    |
| Interest  | 1,913,815     |
| Benefit Changes   | 0             |
| Difference Between Actual and Expected Experience                           | (732,538)     |
| Assumption Changes  | 0             |
| Benefit Payments  | (1,332,841)   |
| Contribution Refunds  | (29,568)      |
| Other   | 0             |
| Net Change in Total Pension Liability                                       | 665,377       |
| Total Pension Liability - (beginning of year)                               | 35,374,298    |
| Total Pension Liability - (end of year)                                     | \$ 36,039,675 |
| <br><b>B. <u>Plan Fiduciary Net Position</u></b>                            |               |
| Contributions - Employer  | \$ 1,061,626  |
| Contributions - State   | 167,254       |
| Contributions - Member  | 209,027       |
| Net Investment Income   | 2,079,946     |
| Benefit Payments  | (1,332,841)   |
| Contribution Refunds  | (29,568)      |
| Administrative Expenses   | (74,437)      |
| Other   | 0             |
| Net Change in Plan Fiduciary Net Position                                   | 2,081,007     |
| Plan Fiduciary Net Position - (beginning of year)                           | 19,380,883    |
| Plan Fiduciary Net Position - (end of year)                                 | \$ 21,461,890 |
| <br><b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b> |               |
|   | \$ 14,577,785 |
| <br>Valuation Date  | <br>10/1/2013 |

**Certain Key Assumptions**

Investment Return Assumption 5.5%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Net Pension Liability**  
**Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption**

| Measurement Date  | 9/30/2014        |
|---|------------------|
| <b>A. <u>Total Pension Liability (TPL)</u></b>                              |                  |
| Service Cost  | \$ 348,402       |
| Interest  | 2,061,265        |
| Benefit Changes   | 0                |
| Difference Between Actual and Expected Experience                           | (514,106)        |
| Assumption Changes  | 0                |
| Benefit Payments  | (1,332,841)      |
| Contribution Refunds  | (29,568)         |
| Other   | 0                |
| Net Change in Total Pension Liability                                       | 533,152          |
| Total Pension Liability - (beginning of year)                               | 22,525,461       |
| Total Pension Liability - (end of year)                                     | \$ 23,058,613    |
| <br><b>B. <u>Plan Fiduciary Net Position</u></b>                            |                  |
| Contributions - Employer  | \$ 1,061,626     |
| Contributions - State   | 167,254          |
| Contributions - Member  | 209,027          |
| Net Investment Income   | 2,079,946        |
| Benefit Payments  | (1,332,841)      |
| Contribution Refunds  | (29,568)         |
| Administrative Expenses   | (74,437)         |
| Other   | 0                |
| Net Change in Plan Fiduciary Net Position                                   | 2,081,007        |
| Plan Fiduciary Net Position - (beginning of year)                           | 19,380,883       |
| Plan Fiduciary Net Position - (end of year)                                 | \$ 21,461,890    |
| <br><b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b> | <br>\$ 1,596,723 |
| <br>Valuation Date  | <br>10/1/2013    |

**Certain Key Assumptions**

Investment Return Assumption 9.5%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Asset and Benefit Payment Projection**  
**Not Reflecting Any Future Contributions**  
**Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68**

| <b>FYE</b> | <b>Market Value of Assets (BOY)</b> | <b>Expected Investment Return</b> | <b>Projected Benefit Payments</b> | <b>Market Value of Assets (EOY)</b> |
|------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| 2015       | 20,608,105                          | 1,481,759                         | 1,589,223                         | 20,500,641                          |
| 2016       | 20,500,641                          | 1,471,481                         | 1,644,438                         | 20,327,684                          |
| 2017       | 20,327,684                          | 1,455,300                         | 1,724,319                         | 20,058,665                          |
| 2018       | 20,058,665                          | 1,432,705                         | 1,784,510                         | 19,706,860                          |
| 2019       | 19,706,860                          | 1,405,213                         | 1,812,045                         | 19,300,028                          |
| 2020       | 19,300,028                          | 1,373,010                         | 1,854,130                         | 18,818,908                          |
| 2021       | 18,818,908                          | 1,334,724                         | 1,908,955                         | 18,244,677                          |
| 2022       | 18,244,677                          | 1,290,246                         | 1,944,060                         | 17,590,863                          |
| 2023       | 17,590,863                          | 1,239,423                         | 1,988,536                         | 16,841,750                          |
| 2024       | 16,841,750                          | 1,182,234                         | 2,013,566                         | 16,010,418                          |
| 2025       | 16,010,418                          | 1,119,498                         | 2,023,169                         | 15,106,747                          |
| 2026       | 15,106,747                          | 1,050,929                         | 2,042,931                         | 14,114,745                          |
| 2027       | 14,114,745                          | 975,487                           | 2,068,872                         | 13,021,360                          |
| 2028       | 13,021,360                          | 892,809                           | 2,085,643                         | 11,828,526                          |
| 2029       | 11,828,526                          | 802,378                           | 2,109,756                         | 10,521,148                          |
| 2030       | 10,521,148                          | 704,142                           | 2,114,295                         | 9,110,995                           |
| 2031       | 9,110,995                           | 598,607                           | 2,108,659                         | 7,600,943                           |
| 2032       | 7,600,943                           | 485,504                           | 2,104,903                         | 5,981,544                           |
| 2033       | 5,981,544                           | 364,310                           | 2,098,412                         | 4,247,442                           |
| 2034       | 4,247,442                           | 234,484                           | 2,092,647                         | 2,389,279                           |
| 2035       | 2,389,279                           | 95,592                            | 2,080,941                         | 403,930                             |
| 2036       | 403,930                             | 1,773                             | 2,063,548                         | -                                   |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: 21.17

**Certain Key Assumptions**

Investment return assumption 7.5%

Mortality Table:

Healthy Members: RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with Blue Collar Adjustment and fully generational mortality improvements projected to each future payment date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the Plan is expected to be able to pay all future benefit payments.**

**Asset and Benefit Payment Projection  
Not Reflecting Any Future Contributions  
Using Assumptions Required Under 112.664(1)(a), F.S.**

| <b>FYE</b> | <b>Market Value of Assets (BOY)</b> | <b>Expected Investment Return</b> | <b>Projected Benefit Payments</b> | <b>Market Value of Assets (EOY)</b> |
|------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| 2015       | 20,608,105                          | 1,481,733                         | 1,589,862                         | 20,499,976                          |
| 2016       | 20,499,976                          | 1,471,338                         | 1,646,749                         | 20,324,565                          |
| 2017       | 20,324,565                          | 1,454,902                         | 1,728,402                         | 20,051,065                          |
| 2018       | 20,051,065                          | 1,431,893                         | 1,790,539                         | 19,692,419                          |
| 2019       | 19,692,419                          | 1,403,799                         | 1,820,304                         | 19,275,914                          |
| 2020       | 19,275,914                          | 1,370,785                         | 1,864,503                         | 18,782,196                          |
| 2021       | 18,782,196                          | 1,331,392                         | 1,923,345                         | 18,190,243                          |
| 2022       | 18,190,243                          | 1,285,441                         | 1,962,048                         | 17,513,636                          |
| 2023       | 17,513,636                          | 1,232,792                         | 2,009,423                         | 16,737,005                          |
| 2024       | 16,737,005                          | 1,173,421                         | 2,037,390                         | 15,873,036                          |
| 2025       | 15,873,036                          | 1,108,094                         | 2,050,557                         | 14,930,573                          |
| 2026       | 14,930,573                          | 1,036,476                         | 2,073,802                         | 13,893,247                          |
| 2027       | 13,893,247                          | 957,492                           | 2,103,281                         | 12,747,458                          |
| 2028       | 12,747,458                          | 870,744                           | 2,123,528                         | 11,494,674                          |
| 2029       | 11,494,674                          | 775,674                           | 2,151,178                         | 10,119,170                          |
| 2030       | 10,119,170                          | 672,185                           | 2,159,309                         | 8,632,046                           |
| 2031       | 8,632,046                           | 560,733                           | 2,157,253                         | 7,035,526                           |
| 2032       | 7,035,526                           | 441,008                           | 2,156,915                         | 5,319,619                           |
| 2033       | 5,319,619                           | 312,441                           | 2,153,786                         | 3,478,274                           |
| 2034       | 3,478,274                           | 174,439                           | 2,151,314                         | 1,501,399                           |
| 2035       | 1,501,399                           | 34,748                            | 2,142,885                         | -                                   |
| 2036       | -                                   | -                                 | 2,128,649                         | -                                   |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: 20.67

**Certain Key Assumptions**

Investment return assumption 7.5%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the Plan is expected to be able to pay all future benefit payments.**

**Asset and Benefit Payment Projection**  
**Not Reflecting Any Future Contributions**  
Using Assumptions Required Under 112.664(1)(b), F.S.

| <b>FYE</b> | <b>Market Value of Assets (BOY)</b> | <b>Expected Investment Return</b> | <b>Projected Benefit Payments</b> | <b>Market Value of Assets (EOY)</b> |
|------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| 2015       | 20,608,105                          | 1,086,469                         | 1,589,862                         | 20,104,712                          |
| 2016       | 20,104,712                          | 1,057,101                         | 1,646,749                         | 19,515,064                          |
| 2017       | 19,515,064                          | 1,022,258                         | 1,728,402                         | 18,808,920                          |
| 2018       | 18,808,920                          | 981,584                           | 1,790,539                         | 17,999,965                          |
| 2019       | 17,999,965                          | 936,212                           | 1,820,304                         | 17,115,873                          |
| 2020       | 17,115,873                          | 886,281                           | 1,864,503                         | 16,137,651                          |
| 2021       | 16,137,651                          | 830,740                           | 1,923,345                         | 15,045,046                          |
| 2022       | 15,045,046                          | 769,503                           | 1,962,048                         | 13,852,501                          |
| 2023       | 13,852,501                          | 702,513                           | 2,009,423                         | 12,545,591                          |
| 2024       | 12,545,591                          | 629,807                           | 2,037,390                         | 11,138,008                          |
| 2025       | 11,138,008                          | 552,001                           | 2,050,557                         | 9,639,452                           |
| 2026       | 9,639,452                           | 468,893                           | 2,073,802                         | 8,034,543                           |
| 2027       | 8,034,543                           | 379,752                           | 2,103,281                         | 6,311,014                           |
| 2028       | 6,311,014                           | 284,360                           | 2,123,528                         | 4,471,846                           |
| 2029       | 4,471,846                           | 182,389                           | 2,151,178                         | 2,503,057                           |
| 2030       | 2,503,057                           | 73,865                            | 2,159,309                         | 417,613                             |
| 2031       | 417,613                             | 1,328                             | 2,157,253                         | -                                   |
| 2032       | -                                   | -                                 | 2,156,915                         | -                                   |
| 2033       | -                                   | -                                 | 2,153,786                         | -                                   |
| 2034       | -                                   | -                                 | 2,151,314                         | -                                   |
| 2035       | -                                   | -                                 | 2,142,885                         | -                                   |
| 2036       | -                                   | -                                 | 2,128,649                         | -                                   |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: 16.17

**Certain Key Assumptions**

Investment return assumption 5.5%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the Plan is expected to be able to pay all future benefit payments.**

**Asset and Benefit Payment Projection**  
**Not Reflecting Any Future Contributions**  
Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption

| FYE  | Market Value of Assets (BOY) | Expected Investment Return | Projected Benefit Payments | Market Value of Assets (EOY) |
|------|------------------------------|----------------------------|----------------------------|------------------------------|
| 2015 | 20,608,105                   | 1,877,093                  | 1,589,862                  | 20,895,336                   |
| 2016 | 20,895,336                   | 1,901,493                  | 1,646,749                  | 21,150,080                   |
| 2017 | 21,150,080                   | 1,921,550                  | 1,728,402                  | 21,343,228                   |
| 2018 | 21,343,228                   | 1,936,746                  | 1,790,539                  | 21,489,435                   |
| 2019 | 21,489,435                   | 1,949,125                  | 1,820,304                  | 21,618,256                   |
| 2020 | 21,618,256                   | 1,959,120                  | 1,864,503                  | 21,712,873                   |
| 2021 | 21,712,873                   | 1,965,123                  | 1,923,345                  | 21,754,651                   |
| 2022 | 21,754,651                   | 1,967,128                  | 1,962,048                  | 21,759,731                   |
| 2023 | 21,759,731                   | 1,965,206                  | 2,009,423                  | 21,715,514                   |
| 2024 | 21,715,514                   | 1,959,587                  | 2,037,390                  | 21,637,711                   |
| 2025 | 21,637,711                   | 1,951,527                  | 2,050,557                  | 21,538,681                   |
| 2026 | 21,538,681                   | 1,940,940                  | 2,073,802                  | 21,405,819                   |
| 2027 | 21,405,819                   | 1,926,822                  | 2,103,281                  | 21,229,360                   |
| 2028 | 21,229,360                   | 1,909,031                  | 2,123,528                  | 21,014,863                   |
| 2029 | 21,014,863                   | 1,887,251                  | 2,151,178                  | 20,750,936                   |
| 2030 | 20,750,936                   | 1,861,765                  | 2,159,309                  | 20,453,392                   |
| 2031 | 20,453,392                   | 1,833,603                  | 2,157,253                  | 20,129,742                   |
| 2032 | 20,129,742                   | 1,802,873                  | 2,156,915                  | 19,775,700                   |
| 2033 | 19,775,700                   | 1,769,398                  | 2,153,786                  | 19,391,312                   |
| 2034 | 19,391,312                   | 1,733,006                  | 2,151,314                  | 18,973,004                   |
| 2035 | 18,973,004                   | 1,693,695                  | 2,142,885                  | 18,523,814                   |
| 2036 | 18,523,814                   | 1,651,744                  | 2,128,649                  | 18,046,909                   |
| 2037 | 18,046,909                   | 1,607,346                  | 2,110,755                  | 17,543,500                   |
| 2038 | 17,543,500                   | 1,560,573                  | 2,090,043                  | 17,014,030                   |
| 2039 | 17,014,030                   | 1,511,466                  | 2,066,557                  | 16,458,939                   |
| 2040 | 16,458,939                   | 1,460,039                  | 2,040,789                  | 15,878,189                   |
| 2041 | 15,878,189                   | 1,406,303                  | 2,012,505                  | 15,271,987                   |
| 2042 | 15,271,987                   | 1,350,283                  | 1,981,592                  | 14,640,678                   |
| 2043 | 14,640,678                   | 1,292,015                  | 1,947,961                  | 13,984,732                   |
| 2044 | 13,984,732                   | 1,231,547                  | 1,911,564                  | 13,304,715                   |
| 2045 | 13,304,715                   | 1,168,939                  | 1,872,288                  | 12,601,366                   |
| 2046 | 12,601,366                   | 1,104,258                  | 1,830,171                  | 11,875,453                   |
| 2047 | 11,875,453                   | 1,037,578                  | 1,785,198                  | 11,127,833                   |
| 2048 | 11,127,833                   | 969,004                    | 1,736,926                  | 10,359,911                   |
| 2049 | 10,359,911                   | 898,678                    | 1,685,173                  | 9,573,416                    |
| 2050 | 9,573,416                    | 826,781                    | 1,629,598                  | 8,770,599                    |
| 2051 | 8,770,599                    | 753,555                    | 1,569,652                  | 7,954,502                    |
| 2052 | 7,954,502                    | 679,290                    | 1,505,319                  | 7,128,473                    |
| 2053 | 7,128,473                    | 604,298                    | 1,436,734                  | 6,296,037                    |
| 2054 | 6,296,037                    | 528,896                    | 1,364,234                  | 5,460,699                    |
| 2055 | 5,460,699                    | 453,409                    | 1,287,967                  | 4,626,141                    |
| 2056 | 4,626,141                    | 378,188                    | 1,207,913                  | 3,796,416                    |
| 2057 | 3,796,416                    | 303,565                    | 1,125,128                  | 2,974,853                    |
| 2058 | 2,974,853                    | 229,809                    | 1,040,546                  | 2,164,116                    |
| 2059 | 2,164,116                    | 157,120                    | 955,196                    | 1,366,040                    |
| 2060 | 1,366,040                    | 85,600                     | 870,505                    | 581,135                      |
| 2061 | 581,135                      | 18,048                     | 787,711                    | -                            |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: 46.75

**Certain Key Assumptions**

Investment return assumption 9.5%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the Plan is expected to be able to pay all future benefit payments.**

**ACTUARIAL DETERMINED CONTRIBUTION**

|   | <u>Valuation Assumptions</u> | <u>112.664(1)(a), F.S.<br/>Assumptions</u> | <u>112.664(1)(b), F.S.<br/>Assumptions</u> | <u>112.664(1)(a), F.S.<br/>Assumptions Plus 2% on<br/>Investment Return<br/>Assumption</u> |
|---|------------------------------|--|--|--|
| A. Valuation Date   | October 1, 2014              | October 1, 2014                            | October 1, 2014                            | October 1, 2014  |
| B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending                   | 9/30/2016                    | 9/30/2016                                  | 9/30/2016                                  | 9/30/2016  |
| C. Annual Payroll of Active Employees   | \$ 2,558,622                 | \$ 2,558,622                               | \$ 2,558,622                               | \$ 2,558,622   |
| D. Total Minimum Funding Requirement  |                              |  |  |  |
| 1. Total Normal Cost  | \$ 653,569                   | \$ 667,903                                 | \$ 1,033,908                               | \$ 457,343   |
| 2. Annual Payment to Amortize Unfunded Actuarial Liability                                  | 673,378                      | 709,447                                    | 1,124,076                                  | 321,789  |
| 3. Interest Adjustment  | 33,013                       | 33,908                                     | 35,533                                     | 29,086   |
| 4. Total Minimum Funding Requirement  | \$ 1,359,960                 | \$ 1,411,258                               | \$ 2,193,517                               | \$ 808,218   |
| E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000) | \$ 2,558,622 100.00%         | \$ 2,558,622 100.00%                       | \$ 2,558,622 100.00%                       | \$ 2,558,622 100.00%   |
| F. Expected Contribution Sources (\$ / % of pay)  |                              |  |  |  |
| 1. City   | \$ 994,413 38.87%            | \$ 1,045,711 40.87%                        | \$ 1,827,970 71.44%                        | \$ 442,671 17.30%  |
| 2. Member   | 198,293 7.75%                | 198,293 7.75%                              | 198,293 7.75%                              | 198,293 7.75%  |
| 3. State  | 167,254 6.54%                | 167,254 6.54%                              | 167,254 6.54%                              | 167,254 6.54%  |
| 4. Total  | \$ 1,359,960 53.15%          | \$ 1,411,258 55.16%                        | \$ 2,193,517 85.73%                        | \$ 808,218 31.59%  |

**Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments**

| <u>Amortization Base</u>           | <u>Amortization Payment</u>         |                              |  |  |  | <u>Remaining Funding Period</u> |
|------------------------------------|-------------------------------------|------------------------------|--|--|--|---------------------------------|
|                                    | <u>Current Unfunded Liabilities</u> | <u>Valuation Assumptions</u> | <u>112.664(1)(a), F.S. Assumptions</u> | <u>112.664(1)(b), F.S. Assumptions</u> | <u>112.664(1)(a), F.S. Assumptions Plus 2%</u> |                                 |
| 10/01/2014 Combined Bases *        | \$ (25,726)                         | \$ (4,518)                   | \$ (4,518)                             | \$ (4,291)                             | \$ (4,747)                                     | 7.00 years                      |
| 01/01/1993 Actuarial Loss / (Gain) | (35,820)                            | (5,562)                      | (5,562)                                | (5,230)                                | (5,897)  | 8.25 years                      |
| 01/01/1993 Plan Amendment          | 43,432                              | 6,743                        | 6,743                                  | 6,341                                  | 7,150  | 8.25 years                      |
| 01/01/1994 Actuarial Loss / (Gain) | (94,523)                            | (13,520)                     | (13,520)                               | (12,616)                               | (14,436)                                       | 9.25 years                      |
| 01/01/1995 Actuarial Loss / (Gain) | 206,870                             | 27,570                       | 27,570                                 | 25,535                                 | 29,639   | 10.25 years                     |
| 01/01/1996 Actuarial Loss / (Gain) | (1,040,343)                         | (130,369)                    | (130,369)                              | (119,867)                              | (141,081)                                      | 11.25 years                     |
| 01/01/1996 Plan Amendment          | (17,422)                            | (2,183)                      | (2,183)                                | (2,007)                                | (2,363)  | 11.25 years                     |
| 01/01/1996 Assumption Change       | 120,413                             | 15,089                       | 15,089                                 | 13,874                                 | 16,329   | 11.25 years                     |
| 01/01/1997 Actuarial Loss / (Gain) | (306,912)                           | (36,436)                     | (36,436)                               | (33,264)                               | (39,682)                                       | 12.25 years                     |
| 01/01/1997 Assumption Change       | (11,698)                            | (1,389)                      | (1,389)                                | (1,268)                                | (1,512)  | 12.25 years                     |
| 01/01/1998 Actuarial Loss / (Gain) | (903,975)                           | (102,311)                    | (102,311)                              | (92,757)                               | (112,110)                                      | 13.25 years                     |
| 01/01/1998 Plan Amendment          | 29,930                              | 3,387                        | 3,387                                  | 3,071                                  | 3,712  | 13.25 years                     |
| 01/01/1999 Actuarial Loss / (Gain) | (418,262)                           | (45,369)                     | (45,369)                               | (40,855)                               | (50,009)                                       | 14.25 years                     |
| 01/01/2000 Actuarial Loss / (Gain) | 837,825                             | 87,493                       | 87,493                                 | 78,273                                 | 96,991   | 15.25 years                     |
| 01/01/2001 Actuarial Loss / (Gain) | 1,515,014                           | 152,910                      | 152,910                                | 135,926                                | 170,443  | 16.25 years                     |
| 01/01/2001 Plan Amendment          | 227,363                             | 22,948                       | 22,948                                 | 20,399                                 | 25,579   | 16.25 years                     |
| 01/01/2001 Assets Method Change    | (1,145,868)                         | (115,652)                    | (115,652)                              | (102,807)                              | (128,913)                                      | 16.25 years                     |
| 01/01/2001 Plan Amendment          | 9,251                               | 934                          | 934                                    | 830                                    | 1,041  | 16.25 years                     |
| 01/01/2002 Actuarial Loss / (Gain) | 546,956                             | 53,536                       | 53,536                                 | 47,295                                 | 59,989   | 17.25 years                     |
| 10/01/2002 Actuarial Loss / (Gain) | 1,986,382                           | 190,377                      | 190,377                                | 167,421                                | 214,141  | 18.00 years                     |
| 10/01/2003 Actuarial Loss / (Gain) | (305,561)                           | (28,541)                     | (28,541)                               | (24,952)                               | (32,262)                                       | 19.00 years                     |
| 10/01/2004 Actuarial Loss / (Gain) | 737,927                             | 67,335                       | 67,335                                 | 58,530                                 | 76,473   | 20.00 years                     |
| 10/01/2005 Actuarial Loss / (Gain) | 833,801                             | 74,483                       | 74,483                                 | 64,384                                 | 84,974   | 21.00 years                     |
| 10/01/2005 Plan Amendment          | 789,214                             | 70,500                       | 70,500                                 | 60,941                                 | 80,430   | 21.00 years                     |

**Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments**

|            | <u>Amortization Base</u>                                    | Current Unfunded<br><u>Liabilities</u> | Amortization Payment                   |   |   |   | Remaining<br>Funding<br>Period |
|------------|---|--|--|---|---|---|--------------------------------|
|            |   |  | <u>Valuation</u><br><u>Assumptions</u> | 112.664(1)(a), F.S.<br><u>Assumptions</u> | 112.664(1)(b), F.S.<br><u>Assumptions</u> | 112.664(1)(a), F.S.<br><u>Assumptions Plus 2%</u> |                                |
| 10/01/2006 | Actuarial Loss / (Gain)                                     | 437,073                                | 38,294                                 | 38,294                                    | 32,924                                    | 43,878  | 22.00 years                    |
| 10/01/2006 | Assumption Change   | 227,613                                | 19,942                                 | 19,942                                    | 17,146                                    | 22,850  | 22.00 years                    |
| 10/01/2007 | Actuarial Loss / (Gain)                                     | (474,498)                              | (40,844)                               | (40,844)                                  | (34,933)                                  | (46,995)  | 23.00 years                    |
| 10/01/2007 | Plan Amendment  | (16,737)                               | (1,441)                                | (1,441)                                   | (1,232)                                   | (1,658)   | 23.00 years                    |
| 10/01/2008 | Actuarial Loss / (Gain)                                     | 235,705                                | 19,964                                 | 19,964                                    | 16,988                                    | 23,061  | 24.00 years                    |
| 10/01/2009 | Actuarial Loss / (Gain)                                     | 540,155                                | 45,077                                 | 45,077                                    | 38,169                                    | 52,269  | 25.00 years                    |
| 10/01/2010 | Actuarial Loss / (Gain)                                     | 182,771                                | 15,047                                 | 15,047                                    | 12,680                                    | 17,511  | 26.00 years                    |
| 10/01/2011 | Plan Amendment  | 1,697,646                              | 138,026                                | 138,026                                   | 115,782                                   | 161,189   | 27.00 years                    |
| 10/01/2011 | Actuarial Loss / (Gain)                                     | 1,100,666                              | 89,489                                 | 89,489                                    | 75,067                                    | 104,506   | 27.00 years                    |
| 10/01/2012 | Actuarial Loss / (Gain)                                     | 851,443                                | 68,436                                 | 68,436                                    | 57,151                                    | 80,186  | 28.00 years                    |
| 10/01/2012 | Assumption Change   | 326,481                                | 26,242                                 | 26,242                                    | 21,914                                    | 30,747  | 28.00 years                    |
| 10/01/2013 | Actuarial Loss / (Gain)                                     | (628,852)                              | (50,015)                               | (50,015)                                  | (41,587)                                  | (58,787)  | 29.00 years                    |
| 10/01/2013 | Assumption Change   | 25,077                                 | 1,994                                  | 1,994                                     | 1,658                                     | 2,344   | 29.00 years                    |
| 10/01/2014 | Actuarial Loss / (Gain)                                     | 199,484                                | 15,712                                 | 15,712                                    | 13,010                                    | 18,524  | 30.00 years                    |
| 10/01/2014 | Assumption Change - 112.664(1)(a), F.S. Assumptions         | 457,944                                | N/A                                    | 36,069                                    | N/A                                       | N/A   | 30.00 years                    |
| 10/01/2014 | Assumption Change - 112.664(1)(b), F.S. Assumptions         | 8,531,836                              | N/A                                    | N/A                                       | 556,433                                   | N/A   | 30.00 years                    |
| 10/01/2014 | Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2% | (4,972,216)                            | N/A                                    | N/A                                       | N/A                                       | (461,715)   | 30.00 years                    |

\* Combined per Internal Revenue Code Regulation 1.412(b)-1

**SECTION B**  
**SUMMARY OF PLAN PROVISIONS**

**DeLand Municipal Police Officers' Retirement Plan**  
**Outline of Principal Provisions of the Retirement Plan**  
**(as of October 1, 2014)**

**A. Effective Date:**

January 1, 1973, amended through Ordinance 2014-10, adopted March 17, 2014.

**B. Eligibility Requirements:**

Certified full time law enforcement officer in the service of the City of DeLand.

**C. Employee Contributions:**

7.75% of basic compensation. Effective September 29, 1990, employee contributions are *picked-up* by the City.

**D. Credited Service:**

Service computed in completed months from date of employment to actual retirement date (or date of termination, if earlier).

**E. Final Monthly Compensation (FMC):**

Average monthly rate of basic compensation during the best 5 years out of the last 10 years preceding date of retirement (or termination). Basic compensation includes overtime pay and employee contributions picked-up by the City but excludes commissions, bonuses and expense allowances. Accrued leave will be frozen as of September 30, 2013.

**F. Normal Retirement:**

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 10 years of credited service.
- (b) Completion of 20 years of credited service.

2. Benefit:

3% times FMC times credited service.

**DeLand Municipal Police Officers' Retirement Plan**  
**Outline of Principal Provisions of the Retirement Plan**  
**(as of October 1, 2014)**

**G. Early Retirement:**

1. Eligibility:

Attainment of age 50 with completion of 10 years of credited service.

2. Benefit:

Benefit accrued to date of retirement, actuarially reduced, but not more than 3% reduction for each year early retirement date precedes normal retirement date.

**H. Deferred Retirement:**

Computed the same as set forth under Normal Retirement, based upon FMC and credited service as of deferred retirement date.

**I. Disability Retirement:**

1. Eligibility:

Total and permanent disability.

2. Benefit:

Service Connected Disability:

Monthly Retirement Income:

A monthly retirement income determined as the greater of 60% of FMC as of date of disability or benefit accrued based upon FMC and credited service to date of disability.

Form of Payment:

Monthly retirement income payable until the earliest of recovery from disability, death or normal retirement date. If the participant remains disabled until normal retirement date, the same benefit will be payable for 10 years certain (measured from normal retirement date) and life thereafter.

Non-Service Connected Disability:

Monthly Retirement Income:

A monthly retirement income of 50% of FMC as of date of disability.

Form of Payment:

Monthly retirement income payable for 10 years certain and life thereafter, or until recovery from disability prior to normal retirement date.

**DeLand Municipal Police Officers' Retirement Plan**  
**Outline of Principal Provisions of the Retirement Plan**  
**(as of October 1, 2014)**

Death of Disabled Participant Prior to Normal Retirement Date:

Benefit to beneficiary (payable for ten (10) years certain and life thereafter) which can be supported by the greater of A or B, where A is the single-sum value of the accrued deferred benefit at date of death assuming continued credited service and assuming continued pay at last monthly rate to date of death and B is the smaller of (1) and (2), where (1) is 24 times FMC at date of death and (2) is 100 times the anticipated monthly normal retirement benefit.

**J. Death Benefit:**

Benefit to beneficiary (payable for ten (10) years certain and life thereafter) which can be supported by the greater of A or B, where A is the single-sum value of the accrued deferred benefit at date of death and B is the smaller of (1) and (2), where (1) is 24 times FMC at date of death and (2) is 100 times the anticipated monthly normal retirement benefit.

**K. Vested Benefit Upon Termination:**

1. Eligibility:

100% vesting upon the completion of 10 years of credited service. Employees who have not completed 10 years of credited service at date of termination of employment shall be entitled to the return of their employee contributions without interest.

2. Benefit at Normal Retirement Date:

Accrued benefit based upon credited service and FMC as of date of termination.

**L. Normal Form of Retirement Income:**

Monthly benefit payable for ten (10) years certain and life thereafter.

**M. Deferred Retirement Option Program (DROP)**

The DROP is available only if the participant makes an irrevocable election to participate within 60 days after having met normal retirement eligibility. The maximum participation period in the DROP is five (5) years, after which the participant must terminate employment from the City.

After each fiscal year quarter, the average daily balance in a participant's deferred retirement option account shall be credited at a rate of 6% per annum, compounded monthly.

**DeLand Municipal Police Officers' Retirement Plan**  
**Outline of Principal Provisions of the Retirement Plan**  
**(as of October 1, 2014)**

**N. Cost of Living Adjustment (COLA)**

All current retirees, disableds, beneficiaries, DROPs and terminated vested members, who retired before January 1, 2008 and who have been receiving benefits for a minimum of twelve (12) months, will be eligible for an automatic annual cost of living adjustment (COLA) in the amount of 0.5%, per annum commencing January 1, 2006.

All participants, or the beneficiaries of said participants, who retire on or after January 1, 2008, shall be required to have attained Normal Retirement Date to be eligible to receive the above stated annual COLA.

Effective October 1, 2012, all participants who were employed on or after March 21, 2011 and who retire pursuant to normal retirement eligibility conditions, including entry into the DROP, and active DROP participants employed as of March 21, 2011 with the City shall receive an automatic annual cost of living adjustment (COLA) of 1.5% in addition to the above stated annual COLA of 0.5% in the January following the earlier of (1) attainment of age 55 but not before a period of one (1) year has elapsed from date of retirement or DROP entry or (2) three (3) years following the date of retirement or DROP entry.

**O. Changes Since Previous Valuation**

None affecting calculations.

**SECTION C**  
**ACTUARIAL ASSUMPTIONS AND COST METHODS**  
**USED FOR FUNDING**

**DeLand Municipal Police Officers' Retirement Plan**

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation**  
**(as of October 1, 2014)**

**A. Mortality**

For healthy participants, RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with Blue Collar Adjustment and fully generational mortality improvements projected to each future payment date with Scale AA.

For disabled participants, RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**B. Interest to be Earned by Fund**

7.5%, compounded annually, net of investment expenses.

**C. Allowances for Expenses or Contingencies**

Estimated expenses are based on the average of actual expenses paid in the previous three years.

**D. Employee Withdrawal Rates**

Withdrawal rates for males and for females were used in accordance with the following illustrative example:

| <u>Years of Service</u> | <u>Withdrawal Rates Per 100 Employees</u> |
|-------------------------|---|
| 1                       | 20.0                                      |
| 2                       | 16.0                                      |
| 3                       | 14.0                                      |
| 4                       | 12.0                                      |
| 5                       | 10.0                                      |
| 6                       | 10.0                                      |
| 7                       | 4.0                                       |
| 8                       | 3.0                                       |
| 9                       | 2.0                                       |
| 10                      | 2.0                                       |
| 11 & Over               | 1.0                                       |

**DeLand Municipal Police Officers' Retirement Plan**

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation**  
**(as of October 1, 2014)**

**E. Disability Rates**

The 1985 Disability Study - Class 2 separate male and female rates were used.

**F. Salary Increase Factors**

Current salary is assumed to increase at a rate based on the table below per year until retirement.

| <u>Service</u> | <u>Salary Increase</u> |
|----------------|------------------------|
| 1 - 2          | 6.25%                  |
| 3              | 6.00%                  |
| 4              | 5.75%                  |
| 5 - 6          | 5.50%                  |
| 7 + years      | 4.75%                  |

**G. Assumed Retirement Age**

| <u>Age</u>  | <u>Retirement Rates</u> |
|---|-------------------------|
| <b>Early - Age 50 and 10 Years of Service Rule</b>  |                         |
| All Ages  | 5%                      |
| <b>Normal - 20 Years and Out Rule (Prior to 55)</b> |                         |
| 40 - 44   | 60%                     |
| 45 - 54   | 75%                     |
| <b>(Includes 20 Years and Out for age 55+)</b>      |                         |
| 55 - 59   | 75%                     |
| 60 and above  | 100%                    |

However, all active members on the valuation date are assumed to have a minimum of one year of future service.

**H. Loading**

Service retirement liabilities are increased by 2.5% to account for unused vacation and compensatory leave for members hired prior to October 1, 2013.

**I. Asset Valuation Method**

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to remain within the corridor whose lower and upper limits are 80% and 120%, respectively, of the fair market value of plan assets.

**DeLand Municipal Police Officers' Retirement Plan**

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation**  
**(as of October 1, 2014)**

**J. Cost Method**

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

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 entry age to his assumed 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 such amounts for all employees. 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 assets of the Plan.

**K. Change From Previous Valuation**

None.

## GLOSSARY

|   |   |
|---|---|
| <i>Actuarial Accrued Liability</i>                | The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.  |
| <i>Actuarial Assumptions</i>                      | Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members and other items.  |
| <i>Actuarial Cost Method</i>                      | A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.   |
| <i>Actuarial Equivalent</i>                       | Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.  |
| <i>Actuarial Present Value</i>                    | The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.  |
| <i>Actuarial Present Value of Future Benefits</i> | The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits and inactive, non-retired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due. |
| <i>Actuarial Valuation</i>                        | The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.   |
| <i>Actuarial Value of Assets</i>                  | The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution.   |

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| <b><i>Amortization Method</i></b>                   | A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.  |
| <b><i>Amortization Payment</i></b>                  | That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.  |
| <b><i>Amortization Period</i></b>                   | The period used in calculating the Amortization Payment.  |
| <b><i>Annual Required Contribution</i></b>          | The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.   |
| <b><i>Closed Amortization Period</i></b>            | A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.  |
| <b><i>Employer Normal Cost</i></b>                  | The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.   |
| <b><i>Equivalent Single Amortization Period</i></b> | For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.   |
| <b><i>Experience Gain/Loss</i></b>                  | A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected. |
| <b><i>Funded Ratio</i></b>                          | The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.  |
| <b><i>GASB</i></b>                                  | Governmental Accounting Standards Board.  |

***GASB No. 67 and  
GASB No. 68***

These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.

***Normal Cost***

The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

***Open Amortization Period***

An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

***Unfunded Actuarial Accrued Liability***

The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

***Valuation Date***

The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.