# City of Gainesville General Employees Pension Plan 

## Actuarial Valuation Report

 As of October 1, 2017July 2018

July 3, 2018

Board of Trustees
City of Gainesville
General Employees Pension Plan
200 East University Avenue
Gainesville, FL 32601
Dear Board Members:
Conduent HR Consulting, LLC, was retained to prepare this report on the results of an actuarial valuation of the City of Gainesville General Employees Pension Plan ("Plan") as of October 1, 2017. The purpose of this report is to provide a summary of the funded status of the Plan as of October 1, 2017, to determine the contribution requirement in accordance with Chapter 112 of the Florida Statutes for the fiscal year ending September 30, 2019, and to satisfy State reporting requirements. In addition, this report provides a record of any plan amendments or other plan changes affecting the financial status of the Plan.

This report is prepared for the Board of Trustees for use in its review of the operations of the Plan. It is expected that the Board will use the results of this report for the purpose of determining contributions to be made to the Plan, as well as the funding status of Plan benefits. The use of this report by other parties and/or for other purposes may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Conduent should be asked to review any statement to be made on the basis of the results contained in this report. Conduent will not accept any liability for any such statement made without prior review by Conduent.

## Summary of Valuation Results

Currently, the Plan receives contributions from the City of Gainesville and active members. The amount of the City contribution varies from year to year, while the member contributions are equal to a fixed percentage of $5.00 \%$ of payroll. After taking into account expected member contributions, the total required contribution from the City for the fiscal year ending September 30, 2019 is $18.40 \%$ of projected payroll. For comparative purposes, the total required contribution from the City for the fiscal year ending September 30, 2018 was $18.41 \%$ of projected payroll.

## Discussion of Valuation Results

The contributions received by the Plan are used to pay for the normal cost of the Plan plus a payment toward the unfunded actuarial accrued liability. As of October 1, 2017, the Plan had $\$ 538,735,346$ in actuarial accrued liability and $\$ 372,844,666$ in assets (actuarial value), resulting in an unfunded actuarial accrued liability of $\$ 165,890,680$. The funded percentage (on an actuarial value of assets basis) increased from $66.89 \%$ as of October 1, 2016 to $69.21 \%$ as of October 1, 2017. This increase in funded percentage was primarily due to better-than-expected investment performance and lower-than-expected pay increases, partially offset by the impact of the decrease in the investment return assumption (from $8.10 \%$ to $8.00 \%$ ).

The funded percentage is a snapshot measure of the funding of the Plan as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. The funded percentage can differ depending on whether the market value of assets is used or the actuarial value of assets. Also, the funded percentages provided in this report are appropriate for evaluating the need and level of future contributions, but make no assessment of the funded status of the Plan if the Plan were to settle (i.e., purchase annuities to cover) a portion or all of its liabilities.

The City's contribution requirement in accordance with Chapter 112 of the Florida Statutes for the fiscal year ending September 30,2019 is $\$ 16,558,820$. This is comprised of the normal cost (including administrative expenses) of $\$ 8,975,668$, plus an amortization amount of the unfunded actuarial accrued liability of $\$ 10,400,178$, plus the interest adjustment of $\$ 1,681,823$, reduced for expected member contributions $\$ 4,498,849$.

## Actuarial Experience

The Plan's unfunded actuarial accrued liability as of October 1,2017 is $\$ 11,869,684$ less than expected. This is due to an experience gain on liabilities of $\$ 4,840,750$ (mostly due to salary increases less than expected) and an actuarial asset gain of $\$ 12,634,010$ (the return on actuarial value of assets for the plan year ending September 30,2017 was $11.79 \%$ vs. the assumed return of $8.10 \%$ ). These gains were partially offset by an increase in the Plan's actuarial accrued liability of $\$ 5,605,076$ due to the change in investment return assumption (from $8.10 \%$ to $8.00 \%$ ). A reconciliation of the actuarial experience can be found in Table II.

## Changes in Plan Provisions

In preparing the actuarial valuation as of October 1, 2017, we have used the same plan provisions as were reflected in the valuation of October 1, 2016. A summary of the plan provisions can be found in Table XI.

## Prescribed Assumptions under Chapter 112

The mortality assumption was established in accordance with the changes that were enacted in the 2015 legislative session to sections 112.63 and 112.664 , Florida Statutes, which require local government pension plans to use the mortality tables used in either of the two most recently published actuarial valuation reports of the Florida Retirement System (FRS), including the projection scale for mortality improvement, and appropriate risk and collar adjustments based on plan demographics. The mortality assumptions used in this valuation are the same as those used in the 2016 actuarial valuation of the FRS for "other than special risk" participants.

## Changes in Actuarial Assumptions and Methods as of October 1, 2017

The investment rate of return assumption was decreased from $8.10 \%$ to $8.00 \%$ to better reflect expectations of future investment returns.

The effect of the assumption changes are summarized as follows:

| Event | Entry Age Normal <br> Accrued Liability | Entry Age Normal Cost | City Contribution |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2016 Valuation Assumptions | $\$ 533,130,270$ | $\$ 8,196,544$ | $\$ 16,476,359$ |  |  |
| Change in Investment Rate <br> of Return | $538,735,346$ |  | $8,370,763$ |  | $16,558,820$ |

A summary of the actuarial methods and assumptions used in the valuation can be found in Table X .

## Basis for the Actuarial Assumptions

The economic and demographic assumptions used in the valuation were adopted by the Board in consultation with Conduent. Conduent recommends a thorough experience review be performed in conjunction with the October 1, 2018 valuation.

In my opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are reasonably related to the experience of the Plan and to reasonable long-term expectations.

## Financial and Member Data

This valuation was performed using employee and financial data supplied by the City of Gainesville. The census data was collected as of October 1, 2017. Conduent did not audit this data, but it was reviewed for reasonableness and consistency with the prior year's information. The accuracy of the results of the valuation are dependent on the accuracy of the data. Tables VIII through VIIId provide a summary of the data used in the valuation.

## Estimated Impact of Pension Obligation Bond

As requested, we have estimated what the City's contribution rate would be without reflecting the pension obligation bond contribution that occurred in 2003. For this purpose we have excluded from the Plan's assets the special contribution of $\$ 38,634,133$ and investment earnings of $\$ 97,333,043$ as reported by the Plan. On this basis, the City's contribution rate would have been $27.37 \%$ of projected payroll for the fiscal year ending September 30, 2019. In Table la we present a comparison of the contribution rates with and without the pension obligation bond contribution.

## Certification

This actuarial valuation was prepared 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.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, changes expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions, applicable law or regulations. An analysis of the potential range of such future differences is beyond the scope of this report.

This valuation was prepared in accordance with the standards of practice prescribed by the Actuarial Standards Board, based on the current provisions of the Plan and on actuarial assumptions that are reasonable reflecting long-term expectations of future experience of the Plan. I am a Member of the American Academy of Actuaries and I meet the Academy's Qualification Standards to issue this Statement of Actuarial opinion. I am available to answer questions regarding any of the content within this report. I can be reached at (602) 803-6174.

## Conduent Human Resource Services



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1. Number of Members
a. Active Members

|  | $\mathbf{1 , 5 1 9}$ | $\mathbf{1 , 5 1 4}$ |  |
| ---: | ---: | ---: | ---: |
|  | 428 |  | 441 |
|  |  |  |  |
|  | 1,122 |  | 1,163 |
|  | 39 |  | 40 |
|  | 105 |  | 113 |
|  | $\mathbf{1 , 2 6 6}$ |  | 3,316 |
|  | 3,213 |  | $86,102,369$ |
| \$ | $87,219,116$ | $\$$ | $89,976,976$ |
| \$ | $91,143,976$ | $\$$ | $32,618,910$ |

## 5. Annual Cost

| a. Present Value of Future Benefits | \$ | 590,253,827 | \$ | 602,287,596 |
| :---: | :---: | :---: | :---: | :---: |
| b. Present Value of Future Normal Cost |  | 63,927,290 |  | 63,552,250 |
| City Portion |  | 29,028,803 |  | 29,110,044 |
| Member Portion |  | 34,898,487 |  | 34,442,206 |
| c. Actuarial Accrued Liability (AAL) |  | 526,326,537 |  | 538,735,346 |
| d. Actuarial Value of Assets |  | $(352,075,915)$ |  | (372,844,666) |
| e. Unfunded AAL (UAAL) | \$ | 174,250,622 | \$ | 165,890,680 |
| f. Normal Cost | \$ | 8,361,885 | \$ | 8,370,763 |
| g. Payment to Amortize Unfunded Liability/(Surplus) |  | 10,588,425 |  | 10,400,178 |
| h. Administrative Expenses |  | 670,867 |  | 604,905 |
| i. Interest adjustment ${ }^{1}$ |  | 1,713,370 |  | 1,681,823 |
| j. Total | \$ | 21,334,547 | \$ | 21,057,669 |
| j. Expected Member Contributions | \$ | 4,557,199 | \$ | 4,498,849 |
| I. Estimated City Contributions |  | 16,777,348 |  | 16,558,820 |
| m. Total | \$ | 21,334,547 | \$ | 21,057,669 |
| Annual Cost (as a \% of Valuation Payroll) |  |  |  |  |
| a. Total Required Contributions |  | 23.41\% |  | 23.40\% |
| b. Expected Member Contributions |  | 5.00\% |  | 5.00\% |
| d. Estimated City Contributions |  | 18.41\% |  | 18.40\% |

## Valuation Results With and Without Pension Bond

1. Number of Members
a. Active Members
b. Deferred Vested Members
c. Retired Members:
i. Non-disabled
ii. Disabled
iii. Beneficiaries
iv. Sub-total
d. Total Members

## 2. Total Annual Compensation

3. Valuation Payroll
4. Total Retired Member Benefits
5. Annual Cost
a. Present Value of Future Benefits
b. Present Value of Future Normal Cost

## City Portion

Member Portion
c. Actuarial Accrued Liability (AAL)
d. Actuarial Value of Assets
e. Unfunded AAL (UAAL)
f. Normal Cost
g. Payment to Amortize Unfunded Liab/(Surpl)
h. Administrative Expenses
i. Interest adjustment*
j. Total
j. Expected Member Contributions
I. Estimated City Contributions
m. Total
6. Annual Cost (as a \% of Valuation Payroll)
a. Total Required Contributions
b. Expected Member Contributions
d. Estimated City Contributions

| $\mathbf{1 , 5 1 4}$ |
| ---: |
| 441 |
| 1,163 |
| 40 |
| 113 |
| $\mathbf{1 , 3 1 6}$ |
| 3,271 |

\$ 86,102,369
$\$ \quad 89,976,976$
\$
32,618,910
\$ 602,287,596
63,552,250
29,110,044
34,442,206
538,735,346

|  | $(372,844,666)$ |
| :--- | :---: |
| $\$$ | $\mathbf{1 6 5 , 8 9 0 , 6 8 0}$ |


| $\$$ | $8,370,763$ |
| :--- | ---: |
| $10,400,178$ |  |
|  | 604,905 |
|  | $1,681,823$ |
| $\$$ | $\mathbf{2 1 , 0 5 7 , 6 6 9}$ |


| $\$$ | $4,498,849$ |
| :--- | ---: |
|  | $16,558,820$ |
| $\$$ | $\mathbf{2 1 , 0 5 7 , 6 6 9}$ |

1,514
441

## Gain and Loss Analysis

## 1. Actual Unfunded Accrued Liability as of October 1, 2016

## 2. Expected Change in Unfunded Liability During the 2016/2017 Plan Year

a. Due to Employer Normal Cost and Administrative Expenses*
b. Due to Interest on the Unfunded Liability
c. City Contributions
\$ 174,250,622
d. Due to Interest on City Contributions
e. Total Expected Change
3. Expected Unfunded Accrued Liability as of October 1, 2017
4. Change in Unfunded Liability During the 2016/2017 Plan Year Due to:
a. Method Changes
$\$ \quad 0$
b. Assumption Changes

5,605,076
c. Plan Amendments
d. Experience (Gain)/Loss
e. Total Change
5. Actual Unfunded Accrued Liability as of October 1, 2017

| $\quad(17,474,760)$ |
| :--- |
| $\$ \quad(11,869,684)$ |

6. Development of Outstanding Amortization Obligations as of

October 1, 2017
a. Expected Outstanding Obligations as of October 1, 2017
\$ 176,918,836
b. Assumption Changes

5,605,076
c. Plan Amendments
d. Experience (Gain)/Loss
e. (Gain)/Loss due to Contribution Timing
f. Total Outstanding Obligations as of October 1, 2017
\$ 165,890,680
7. Items Affecting Calculation of Accrued Liability
a. Plan provisions reflected in the accrued liability (see Table XI on page 29)
b. Plan amendments reflected in item 4.c. above
c. Actuarial assumptions and methods used to determine accrued liability (see Table $X$ on page 24)
d. Changes in actuarial assumptions and methods reflected in items 4.a. and 4.b. above (see Table Xa on page 28)

* As requested by the State Actuary, the normal cost represents the employer portion only,
net of actual employee contributions and includes actual administrative expenses.


## Gain and Loss Analysis

8. Expected Unfunded Accrued Liability Contribution Rate as of ..... 11.62\%October 1, 2017
9. Net Actuarial (Gains)/Losses During the 2016/2017 Plan Year
a. Due to Salary/Service/Data ..... (0.27\%)
b. Due to Investment Performance ..... (0.72\%)
c. Due to Turnover/Mortality ..... (0.07\%)
d. Due to New Retirements ..... 0.07\%
e. Due to Difference and Timing in Contributions ..... 0.05\%
f. Due to New Members ..... 0.00\%g. Total
10. Change in Unfunded Accrued Liability Rate During the 2016/2017 Plan Year Due to:
a. Method changes $0.00 \%$
b. Assumption changes $0.32 \%$
c. Plan amendments
d. Total Change
0.32\%
11. Other Effects
0.56\%
12. Unfunded Accrued Liability Contribution Rate as of October 1, 2017
11.56\%

## 13. Comments on Change in Unfunded Accrued Liability Contribution Rate:

Salary/Service/Data: The average salary increase in 2017 was $3.42 \%$, compared to assumed increases of $5.50 \%$. Also, there were adjustments in the reported salary history data.

Investment-Performance: The rate of return in 2017 on the actuarial value of assets was $11.79 \%$ compared to the $8.10 \%$ assumed rate of return.

Iurnover/Mortality: The figure shown here is the net effect on valuation liabilities of actual deaths, terminations of employment and disabilities to the extent they are different from what was anticipated on the basis of the assumptions related to those events.
New retirements: Net effect on the valuation liabilities of retirements (including DROP) and refund of employee contributions relative to the assumed rate of retirements.
New members: Liability created by new members entering the plan with past service credit.
Due to Differences and Timing_of Contributions: This entry arises from the one-year lag between the date as of which the contribution is determined and the time it is made.

Assumption changes: Please refer to Table Xa for a summary of changes.
Plan amendments: None.
Other effects: Overall payroll increases and adjustments in the amortization of the unfunded actuarial accrued liability.

## Present Value of Accrued Benefits ${ }^{1}$

## 1. Actuarial Present Value of Accrued Benefits

a. Vested Accrued Benefits:
i. Inactive members and beneficiaries
ii. Active members
iii. Sub-total
b. Non-vested Accrued Benefits
c. Total Benefits
d. Market Value of Assets
e. Percentage Funded

October 1, 2016
October 1, 2017
f. Interest Rate

| \$ | 382,997,223 | \$ | 392,320,327 |
| :---: | :---: | :---: | :---: |
|  | 83,025,364 |  | 87,950,869 |
| \$ | 466,022,587 | \$ | 480,271,196 |
|  | 20,838,435 |  | 21,717,320 |
| \$ | 486,861,022 | \$ | 501,988,516 |
| \$ | 357,298,271 | \$ | 396,313,562 |
|  | 73.4\% |  | 78.9\% |
|  | 8.10\% |  | 8.00\% |

2. Statement of Changes in Total Actuarial Present Value of All Accrued Benefits
a. Actuarial Present Value as of October 1, 2016
b. Increase (Decrease) During 2016/2017 Plan Year Attributable to:
i. Interest \$
ii. Benefits accumulated
iii. Benefits paid
iv. Plan amendments
v. Changes in actuarial assumptions
vi. Net increase (decrease)
c. Actuarial Present Value as of October 1, 2017
\$ 486,861,022
\$ 37,877,742
10,573,850
$(38,469,162)$
0

|  | $5,145,064$ |
| :--- | ---: |
| $\$ \quad \mathbf{1 5 , 1 2 7 , 4 9 4}$ |  |

\$ 501,988,516

## 3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits

a. Plan provisions reflected in the accrued benefits (see Table XI page 29)
b. Plan amendments reflected in item 2.b.iv. above
c. Actuarial assumptions and methods used to determine present values (see Table $X$ on page 24)
d. Changes in actuarial assumptions and methods reflected in item 2.b.v. above (see Table Xa on page 28)

[^0]
## Information Required by Florida Statute (Chap. 112)

## 1. Participant Data

a. Active members:
i. Number
1,519
1,514
ii. Total annual payroll
iii. Valuation annual payroll

| $\$$ | $87,219,116$ |
| :--- | :--- |
| $91,143,976$ |  |$\quad \$ \quad$| $86,102,369$ |
| :--- |
| $89,976,976$ |

b. Retired members and beneficiaries:
i. Number
ii. Total annualized benefit

|  | 1,227 | 1,276 |  |
| :--- | ---: | ---: | ---: |
| $\$$ | $31,152,882$ | $\$$ | $32,387,731$ |

c. Disabled members receiving benefits:
i. Number
ii. Total annualized benefit
\$ 225,879 \$ 231,179
d. Terminated vested members:
i. Number
428
441
ii. Total annualized benefit
\$ 2,668,659 \$ 2,807,245
2. Assets
a. Actuarial Value of Assets
b. Market Value of Assets

| \$ | 352,075,915 | \$ | 372,844,666 |
| :---: | :---: | :---: | :---: |
|  | 357,298,271 |  | 396,313,562 |

3. Liabilities
a. Present value of all future expected benefit payments:
i. Active members:

| Retirement benefits | \$ | 190,541,237 | \$ | 193,084,001 |
| :---: | :---: | :---: | :---: | :---: |
| Vesting benefits |  | 6,524,183 |  | 6,605,052 |
| Disability benefits |  | 6,044,582 |  | 6,068,065 |
| Death benefits |  | 2,890,938 |  | 2,891,844 |
| Return of member contributions |  | 1,255,664 |  | 1,318,307 |
| Sub-total | \$ | 207,256,604 | \$ | 209,967,269 |

ii. Terminated vested members
iii. Retired members and beneficiaries:

Retired (other than disabled) and beneficiaries
Disabled members
Sub-total
iv. Total present value of all prospective benefits

| \$ | 370,489,557 | \$ | 379,041,983 |
| :---: | :---: | :---: | :---: |
|  | 1,836,790 |  | 1,876,198 |
| \$ | 372,326,347 | \$ | 380,918,181 |
| \$ | 590,253,827 | \$ | 602,287,596 |

## Information Required by Florida Statute (Chap. 112)

## October 1, 2016

## October 1, 2017

b. Liabilities due and unpaid
c. Actuarial accrued liability
d. Unfunded actuarial accrued liability
4. Actuarial Present Value of Accrued Benefits
(refer toTable IV for further details)

## 5. Pension Cost

a. Normal cost
Retirement benefits
Vesting benefits
Disability benefits
Death benefits
Return of member contributions
Total normal cost
As a \% of valuation payroll
Administrative expenses
Total normal cost including admin expenses
b. Payment to amortize unfunded liability

As a \% of valuation payroll
d. Amount to be contributed by members

As a \% of valuation payroll
e. Expected City Contribution:

As a \% of valuation payroll
6. Prior Fiscal Year Contributions for year ending ${ }^{1}$
a. Required Employer contribution
b. Actual contribution made by:
i. Employer
iii. Members

1 All results prior to 2016 were developed by the prior actuary.

## Information Required by Florida Statute (Chap. 112)

## October 1, 2016 October 1, 2017

7. Net actuarial (gain)/loss
$\$ \quad(12,376,691) \quad \$ \quad(16,633,232)$
8. Other disclosures
a. Present value of active members':
i. Future salaries:
at attained age
at entry age
ii. Future contributions:
at attained age
at entry age
b. Present value of future contributions from City
c. Present value of future expected benefit payments for active members at entry age
d. Amount of active members' accumulated contributions
\$ 697,969,749 \$ 688,844,113
n/a n/a
\$ 34,898,487 \$ 34,442,206
n/a n/a
\$ 29,028,803 \$ 29,110,044
n/a n/a
\$ 33,520,452 \$ 34,695,119

| Psceal yeal Beginning | Active Members | Emergi | Ig Retirees | Retired Members |  | Total Retired |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Active Members | Number <br> of <br> Members | Projected Benefits | Number of Members | Projected Benefits | Number of Members | Projected Benefits |
| 2017 | 1514 | 0 | \$ 969,231 | 1757 | \$ 32,675,135 | 1757 | \$ 33,644,366 |
| 2018 | 1383 | 82 | \$ 2,250,525 | 1712 | \$ 32,683,595 | 1794 | \$ 34,934,120 |
| 2019 | 1272 | 169 | \$ 3,614,325 | 1695 | \$ 32,799,022 | 1864 | \$ 36,413,347 |
| 2020 | 1178 | 253 | \$ 4,958,486 | 1676 | \$ 32,881,809 | 1930 | \$ 37,840,295 |
| 2021 | 1097 | 335 | \$ 6,363,542 | 1656 | \$ 33,011,130 | 1992 | \$ 39,374,672 |
| 2022 | 1019 | 423 | \$ 8,053,364 | 1636 | \$ 33,097,035 | 2059 | \$ 41,150,399 |
| 2023 | 944 | 508 | \$ 9,842,303 | 1614 | \$ 33,232,069 | 2122 | \$ 43,074,372 |
| 2024 | 873 | 587 | \$ 11,531,947 | 1590 | \$ 33,345,597 | 2178 | \$ 44,877,544 |
| 2025 | 806 | 658 | \$ 13,329,024 | 1566 | \$ 33,456,837 | 2224 | \$ 46,785,861 |
| 2026 | 738 | 729 | \$ 15,131,054 | 1540 | \$ 33,443,959 | 2269 | \$ 48,575,013 |
| 2027 | 672 | 793 | \$ 17,005,569 | 1513 | \$ 33,499,224 | 2306 | \$ 50,504,793 |
| 2028 | 605 | 857 | \$ 18,736,830 | 1485 | \$ 33,478,890 | 2342 | \$ 52,215,720 |
| 2029 | 551 | 906 | \$ 20,304,055 | 1455 | \$ 33,347,310 | 2361 | \$ 53,651,365 |
| 2030 | 502 | 947 | \$ 21,820,290 | 1424 | \$ 33,161,234 | 2371 | \$ 54,981,524 |
| 2031 | 455 | 985 | \$ 23,281,415 | 1392 | \$ 32,932,780 | 2376 | \$ 56,214,195 |


|  |  | Outstanding | $2016 / 2017$ | Outstanding | 2017/2018 | Years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Original | Balance as of | Amortization | Balance as of | Amortization | Remaining |
|  | Amount | October 1, 2016 | Payment | October 1, 2017 | Payment | October 1, 2017 |

1. 10/1/2004 2004 Fresh Start
2. 10/1/2006 Actuarial Losses
3. 10/1/2007 Actuarial Gains
4. 10/1/2008 Actuarial Losses
5. 10/1/2009 Actuarial Losses
6. 10/1/2009 Assumption Change
7. 10/1/2010 Actuarial Losses
8. 10/1/2010 Assumption Change
9. 10/1/2011 Actuarial Losses
10. 10/1/2011 Assumption Change
11. 10/1/2012 Actuarial Losses
12. 10/1/2013 Actuarial Gains
13. 10/1/2013 Assumption Change
14. 10/1/2014 Actuarial Gains
15. 10/1/2014 Assumption Change
16. 10/1/2015 Actuarial Gains
17. 10/1/2015 Assumption Change
18. 10/1/2016 Actuarial Gains
19. 10/1/2016 Assumption Change
20. 10/1/2017 Actuarial Gains
21. 10/1/2017 Assumption Change

## Amount ${ }^{1}$

| N/A | $\$ 10,191,593$ | $\$$ | 743,559 | $\$$ | $10,213,325$ | $\$$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N/A | $7,401,983$ |  | 500,964 |  | $7,460,002$ | 51,856 |
| N/A | $(2,651,497)$ | $(173,488)$ | $(2,678,728)$ | $(179,893)$ | 17 |  |
| $\mathrm{~N} / \mathrm{A}$ | $20,316,676$ | $1,287,948$ | $20,570,055$ | $1,335,008$ | 20 |  |
| $\mathrm{~N} / \mathrm{A}$ | $42,378,325$ | $2,608,038$ | $42,991,680$ | $2,702,374$ | 21 |  |
| $\mathrm{~N} / \mathrm{A}$ | $33,747,171$ | $2,076,861$ | $34,235,605$ | $2,151,984$ | 22 |  |
| $\mathrm{~N} / \mathrm{A}$ | $1,289,428$ | 77,174 | $1,310,447$ | 79,938 | 23 |  |
| $\mathrm{~N} / \mathrm{A}$ | $(9,551,650)$ | $(571,682)$ | $(9,707,345)$ | $(592,154)$ | 23 |  |
| $\mathrm{~N} / \mathrm{A}$ | $40,635,211$ | $2,369,184$ | $41,365,575$ | $2,453,180$ | 24 |  |
| $\mathrm{~N} / \mathrm{A}$ | $(9,476,773)$ | $(552,531)$ | $(9,647,106)$ | $(572,120)$ | 24 |  |
| $\mathrm{~N} / \mathrm{A}$ | $24,922,055$ | $1,417,606$ | $25,408,309$ | $1,467,368$ | 25 |  |
| $\mathrm{~N} / \mathrm{A}$ | $(2,202,428)$ | $(122,392)$ | $(2,248,519)$ | $(126,646)$ | 26 |  |
| $\mathrm{~N} / \mathrm{A}$ | $4,785,225$ | 265,921 | $4,885,368$ | 275,164 | 26 |  |
| $\mathrm{~N} / \mathrm{A}$ | $(12,743,886)$ | $(692,767)$ | $(13,027,260)$ | $(716,609)$ | 27 |  |
| $\mathrm{~N} / \mathrm{A}$ | $17,611,179$ | 957,357 | $18,002,782$ | 990,304 | 27 |  |
| $(4,708,126)$ | $(4,825,321)$ | $(256,898)$ | $(4,938,465)$ | $(265,653)$ | 28 |  |
| $4,768,798$ | $4,887,503$ | 260,209 | $5,002,105$ | 269,076 | 28 |  |
| $(12,376,691)$ | $(12,376,691)$ | $(646,050)$ | $(12,680,823)$ | $(667,853)$ | 29 |  |
| $19,912,519$ | $19,912,519$ | $1,039,412$ | $20,401,829$ | $1,074,490$ | 29 |  |
| $(16,633,232)$ |  |  | $(16,633,232)$ | $(858,617)$ | 30 |  |
| $5,605,076$ |  |  |  | $5,605,076$ | 289,337 | 30 |

## Projected Unfunded Liability

| Date |  | Total |
| :---: | :---: | :---: |
| October 1, 2017 |  | $165,890,680$ |
| October 1, 2018 |  | $167,929,742$ |
| October 1, 2019 |  | $169,626,480$ |
| October 1, 2020 |  | 0 |

[^1]
## 1. Market Value of Assets*

a. Cash and cash equivalents (1\%)
b. U.S. government bonds \& notes (0\%)
c. Corporate bonds (0\%)
d. Equities (50\%)
e. Mutual funds (45\%)
f. Real Estate (1\%)
g. Mortgages/loans (0\%)
h. Other assets (4\%)
i. Accrued income receivable ( $0 \%$ )
j. Contributions receivable ( $0 \%$ )
k. Other receivables $(0 \%)$
\$
$5,845,458$
627,188
$4,471,702$
$299,369,535$
\$ 3,767,666
627,188
0
4,471,702
0
299,369,535
0
199,340,207
176,497,450
45,197,689
2,165,995
160,020
0
2,073,133
17,461,245
203,638
167,312
443,476
636,055
l. Benefits payable $(0 \%)$
m. Other payables (-1\%)
$(1,093,568)$
n. Other adjustments (0\%)
o. Market Value of Assets

$(3,722,368)$

|  |
| ---: |
| $\$ \quad 396,313,562$ |

* The percentages in parentheses indicate the proportion of assets committed to each type of investment as of October 1, 2017.


## 1. Market Value of Assets as of

 the beginning of the year2. Adjustments Due to:
a. Misclassification of DROP accounts
\$
0
\$
0
3. Increases Due to:
a. Contributions:
i. Employer
ii. Members
iii. Total
b. Investment income (interest and dividends)
c. Realized and unrealized gains/(losses)
d. Total increases
4. Decreases Due to:
a. Benefit payments

| $\$$ | $(26,862,768)$ |
| :--- | ---: |
|  | $(6,454,788)$ |
|  | $(429,621)$ |
|  | $(670,867)$ |
|  | $(1,729,175)$ |
| $\$$ | $(36,147,219)$ |

\$
$(29,028,436)$
b. DROP pension payments
c. Refund of member contributions
d. Administrative expenses
e. Investment expenses
f. Total decreases
5. Market Value of Assets as of the end of the year
\$
357,298,271
\$
396,313,562

## Year Ending

1. Market Value of Assets as of the beginning of the year
2. Increases Due to:
a. Contributions to DROP Accounts
b. Investment Return
c. Total increases

| \$ | $3,505,811$ |
| :--- | ---: |
|  | 530,078 |
| $\$$ | $4,035,889$ |


| $\$$ | $2,765,643$ |
| :--- | ---: |
| 299,283 |  |
| $\$$ | $3,064,926$ |

3. Decreases Due to:
a. Pension Payments
b. Expense Charges
c. Total decreases
4. Market Value of Assets as of the end of the year

| $\$$ | $(6,454,788)$ | $\$$ | $(9,075,750)$ |
| :--- | ---: | :---: | ---: |
|  | 0 |  | 0 |
|  | $(6,454,788)$ |  | $\$$ |

10,038,916
\$
4,028,092

## Year Ending

1. Market Value of Assets, beginning of year
a. Market Value including DROP Accounts

| \$ | $334,603,948$ <br> $(12,457,815)$ |
| :---: | :---: |
| $\$$ | $322,146,133$ |


| $\$$ | $357,298,271$ <br> $(10,038,916)$ |
| :---: | :---: |
| $\$$ | $347,259,355$ |

2. Net Cash Flow
(Contributions less Benefit Payments and
Administrative Expenses)
$\$ \quad(14,076,855)$
\$
$(13,579,187)$
3. Gain (Loss) on Investments
a. Actual Net Investment Earnings (Net of investment-related expenses

| \$ | $39,190,077$ <br> $25,850,202$ |
| :--- | :--- |
| $\$$ | $13,339,875$ |


| $\$$ | $58,605,302$ <br> $27,588,758$ |
| :--- | :--- |
| $\$$ | $31,016,544$ |

4. Deferral of Gain / (Loss) Recognition in Actuarial Value

| Year Ending | Total Gain / (Loss) |  |
| :---: | :---: | :---: |
| 2013 | $\$ 38,730,860$ |  |
| 2014 | $8,266,792$ |  |
| 2015 | $(27,504,055)$ |  |
| 2016 | $13,339,875$ |  |
| 2017 | $31,016,544$ |  |


|  | Amount Deferred |  | Amount Deferred |
| :---: | ---: | ---: | ---: |
| $\$$ | $7,746,172$ |  |  |
|  | $3,306,717$ | $\$$ | $1,653,358$ |
|  | $(16,502,433)$ |  | $(11,001,622)$ |
|  | $10,671,900$ |  | $8,003,925$ |
|  |  |  | $24,813,235$ |
|  | $5,222,356$ | $\$$ | $23,468,896$ |

5. End of Year Assets
a. Market Value (net of DROP Accounts)
\$ 347,259,355
b. Actuarial Value (prior to the application of the 80\%/120\% corridor)
(5.a. - 4.)
6. Adjustments to Actuarial Value of Assets
a. $80 \%$ of Market Value
b. $120 \%$ of Market Value
c. Actuarial Value of Assets net of DROP Accounts (5.b., not less than 6.a., nor greater than 6.b.)
d. DROP Accounts
e. Final Actuarial Value of Assets (6.c. plus 6.d.)
\$
277,807,484
\$
313,828,376
470,742,564

342,036,999
10,038,916
352,075,915
416,711,226

352,075,015

368,816,574
4,028,092
372,844,666
\$
392,285,470


[^2]



[^3]

## Active Data

| Historical Average Age and Service |  |  |
| :---: | :---: | :---: |
| Total |  |  |
|  | Average | Average |
| Date | Service | Age |
| $10 / 01 / 2008$ | 9.5 | 44.1 |
| $10 / 01 / 2009$ | 9.6 | 44.8 |
| $10 / 01 / 2010$ | 9.9 | 45.3 |
| $10 / 01 / 2011$ | 9.8 | 45.8 |
| $10 / 01 / 2012$ | 9.5 | 45.9 |
| $10 / 01 / 2013$ | 9.7 | 46.2 |
| $10 / 01 / 2014$ | 10.0 | 46.5 |
| $10 / 01 / 2015$ | 9.9 | 46.6 |
| $10 / 01 / 2016$ | 9.6 | 46.2 |
| $10 / 01 / 2017$ | 9.7 | 46.3 |


| Historical Salary Rate |  |  |
| :---: | :---: | :---: |
|  | Payroll for <br> Fiscal Year | Average <br> Salary |
| $10 / 01 / 2008$ | $76,546,090$ | 49,005 |
| $10 / 01 / 2009$ | $79,691,765$ | 50,502 |
| $10 / 01 / 2010$ | $76,544,772$ | 51,685 |
| $10 / 01 / 2011$ | $75,877,965$ | 50,619 |
| $10 / 01 / 2012$ | $74,750,454$ | 50,816 |
| $10 / 01 / 2013$ | $77,784,273$ | 52,771 |
| $10 / 01 / 2014$ | $76,239,783$ | 52,579 |
| $10 / 01 / 2015$ | $76,530,882$ | 52,240 |
| $10 / 01 / 2016$ | $87,219,116$ | 57,419 |
| $10 / 01 / 2017$ | $86,102,369$ | 56,871 |


| Historical Salary Increase |  |  |
| :---: | :---: | :---: |
|  | Assumed |  |
|  | Salary | Actual <br> Salary |
| Date | Increase | Increase |
| $10 / 01 / 2007$ | $5.61 \%$ | $7.91 \%$ |
| $10 / 01 / 2008$ | $5.63 \%$ | $6.14 \%$ |
| $10 / 01 / 2009$ | $5.68 \%$ | $4.40 \%$ |
| $10 / 01 / 2010$ | $5.77 \%$ | $3.00 \%$ |
| $10 / 01 / 2011$ | $5.73 \%$ | $3.01 \%$ |
| $10 / 01 / 2012$ | $5.74 \%$ | $3.45 \%$ |
| $10 / 01 / 2013$ | $5.66 \%$ | $2.65 \%$ |
| $10 / 01 / 2014$ | $5.64 \%$ | $2.74 \%$ |
| $10 / 01 / 2015$ | $5.56 \%$ | $2.74 \%$ |
| $10 / 01 / 2016$ | $5.32 \%$ | $12.39 \%$ |
| $10 / 01 / 2017$ | $5.50 \%$ | $3.42 \%$ |



Average

|  |  | Average |  |
| :--- | ---: | :--- | ---: |
|  | Avg. | Monthly |  |
|  | $\underline{\text { Age }}$ |  | $\underline{\text { Benefit }}$ |

1. Number of members as of

October 1, 2016
2. Change in status during the plan year:
a. Actives who became inactive
(59)

59
b. Actives who retired
(45)

428
1,266
3,213
c. Inactives who became active

1
d. Inactives who retired
e. Retirees who became active
3. No longer members due to:
a. Death
b. Permanent break-in-service
c. Receipt of lump sum payment
(4)
(5)
(28)
(37)
(88)
d. Expiration of certain period
e. Included in error last year
4. New member due to:

| a. | Initial membership | 169 |  |  | 169 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b. | Death of another member |  | 1 | 14 | 15 |
| c. | Excluded in error last year |  | 8 |  | 8 |
| d. | Reinstatement |  |  |  |  |

5. Number of members as of October 1, 2017

1,514
441
1,316
3,271

| Attained Age | Completed Years of Service |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 1 | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 \& up | Total |
| Under 25 | 17 | 12 | 1 |  |  |  |  |  |  |  | 30 |
| Avg. Pay | 33,208 | 37,637 |  |  |  |  |  |  |  |  | 34,856 |
| 25 to 29 | 27 | 60 | 13 |  |  |  |  |  |  |  | 100 |
| Avg. Pay | 36,201 | 42,197 | 43,908 |  |  |  |  |  |  |  | 40,800 |
| 30 to 34 | 28 | 62 | 36 | 21 |  |  |  |  |  |  | 147 |
| Avg. Pay | 37,511 | 43,892 | 55,095 | 66,313 |  |  |  |  |  |  | 48,623 |
| 35 to 39 | 14 | 56 | 48 | 46 | 27 |  |  |  |  |  | 191 |
| Avg. Pay | 43,613 | 45,723 | 59,754 | 63,636 | 66,177 |  |  |  |  |  | 56,300 |
| 40 to 44 | 12 | 47 | 41 | 44 | 32 | 14 |  |  |  |  | 190 |
| Avg. Pay | 42,076 | 51,597 | 55,114 | 65,677 | 63,867 | 67,898 |  |  |  |  | 58,283 |
| 45 to 49 | 18 | 43 | 42 | 50 | 57 | 23 | 9 |  |  |  | 242 |
| Avg. Pay | 38,842 | 51,872 | 55,200 | 65,131 | 68,467 | 79,001 |  |  |  |  | 61,603 |
| 50 to 54 | 16 | 45 | 48 | 48 | 46 | 23 | 19 | 2 |  |  | 247 |
| Avg. Pay | 49,128 | 46,576 | 56,373 | 61,032 | 67,840 | 71,272 | 77,575 |  |  |  | 60,135 |
| 55 to 59 | 15 | 26 | 31 | 45 | 35 | 23 | 16 | 2 |  |  | 193 |
| Avg. Pay | 51,149 | 44,367 | 57,085 | 65,399 | 62,062 | 78,322 | 79,843 |  |  |  | 62,268 |
| 60 to 64 | 11 | 19 | 20 | 37 | 27 | 9 | 6 | 1 |  |  | 130 |
| Avg. Pay | 47,546 | 50,822 | 59,795 | 65,633 | 66,074 |  |  |  |  |  | 60,297 |
| 65 to 69 <br> Avg. Pay | 2 | 6 | 6 | 8 | $\begin{array}{r} 12 \\ 60,964 \end{array}$ | 2 | 2 |  |  | 1 | 39 57,641 |
| 70 \& up <br> Avg. Pay |  |  |  | 3 | 2 |  |  |  |  |  | 5 |
| Total | 160 | 376 | 286 | 302 | 238 | 94 | 52 | 5 |  | 1 | 1,514 |
| Avg. Pay | 40,840 | 46,448 | 55,969 | 63,959 | 65,867 | 72,654 | 76,296 |  |  |  | 56,934 |

The average pay shown is the average of the annual rate of pay including any overtime pay and other special compensation.


## Table X: Actuarial Assumptions and Methods

## Basis for Assumptions

The mortality assumption was set in accordance with the changes that were enacted in the 2015 legislative session to sections 112.63 and 112.664 , Florida Statutes, which require local government pension plans to use the mortality tables used in either of the two most recently published actuarial valuation reports of the Florida Retirement System (FRS), including the projection scale for mortality improvement, and appropriate risk and collar adjustments based on plan demographics. The mortality assumption used in this valuation is the same assumption used in the 2016 FRS valuation as it applies to "other than special risk" participants.

All other assumptions were adopted by the Board in consultation with Conduent.

## Actuarial Cost Method

The method used to determine Normal Cost and Accrued Actuarial Liability is the Entry Age Normal Cost Method.

## Decrements

## Healthy Inactive Mortality

Female: RP-2000 Annuitant Table with White Collar Adjustment projected generationally with Mortality Improvement Scale BB.
Male: RP-2000 Annuitant Table with 50\% White Collar and 50\% Blue Collar Adjustment projected generationally with Mortality Improvement Scale BB.
Healthy Active Mortality
Female: RP-2000 Combined Healthy Table with White Collar Adjustment projected generationally with Mortality Improvement Scale BB.
Male: RP-2000 Combined Healthy Table with 50\% White Collar and 50\% Blue Collar Adjustment projected generationally with Mortality Improvement Scale BB.

## Disabled Mortality

Female: RP-2000 Disabled Female Retiree Table set forward two years.
Male: RP-2000 Disabled Male Retiree Table set back four years.

Table X: Actuarial Assumptions and Methods (continued)
Retirement
Members with Hire Dates On or Before October 1, 2007

| Members with Hire Dates On or Before October 1, 2007 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Years of Service |  |  |  |  |  |
|  | 10-14 | 15-19 | $\underline{20}$ | 21-24 | 25-26 | $\underline{27+}$ |
| 56 \& Under | 0.0\% | 7.5\% | 20.0\% | 5.0\% | 10.0\% | 25.0\% |
| 57-59 | 0.0 | 7.5 | 30.0 | 7.5 | 10.0 | 25.0 |
| 60-64 | 0.0 | 7.5 | 30.0 | 30.0 | 10.0 | 25.0 |
| 65 \& Over | 33.0 | 33.0 | 50.0 | 30.0 | 20.0 | 100.0 |

Years of Service

| $\frac{\text { Age }}{56 ~ \& ~ U n d e r ~}$ | $\frac{10-14}{0.0 \%}$ | $\frac{15-19}{5.0 \%}$ | $\frac{20-24}{5.0 \%}$ | $\frac{25}{20.0 \%}$ | $\frac{26-29}{10.0 \%}$ | $\frac{30+}{25.0 \%}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $57-59$ | 0.0 | 5.0 | 5.0 | 30.0 | 10.0 | 25.0 |
| $60-64$ | 0.0 | 5.0 | 5.0 | 30.0 | 10.0 | 25.0 |
| 65 \& Over | 33.0 | 33.0 | 33.0 | 50.0 | 20.0 | 100.0 |

Years of Service

| Age | $\frac{10-14}{56 ~ \& ~ U n d e r ~}$ | $0.0 \%$ | $\frac{15-19}{5.0 \%}$ | $\frac{20-24}{5.0 \%}$ | $\frac{25}{5.0 \%}$ | $\frac{26-29}{5.0 \%}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $57-59$ | 0.0 | 5.0 | 5.0 | 5.0 | $\frac{30+}{25.0 \%}$ |  |
| $60-61$ | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 25.0 |
| 62 | 0.0 | 7.5 | 15.0 | 15.0 | 15.0 | 25.0 |
| $63-64$ | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 50.0 |
| $65 \&$ Over | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 100.0 |

Permanent Withdrawal from Active Status

|  | Males |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Years of Service |  |  |  |  |  |
| Age | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | $\underline{5+}$ |
| Under 30 | 14.0\% | 12.0\% | 8.0\% | 6.0\% | 5.0\% | 4.0\% |
| 30-34 | 14.0 | 12.0 | 8.0 | 6.0 | 5.0 | 3.0 |
| 35-39 | 14.0 | 12.0 | 8.0 | 6.0 | 5.0 | 2.5 |
| 40-64 | 14.0 | 12.0 | 8.0 | 6.0 | 5.0 | 2.0 |
| 65 \& Over | 14.0 | 12.0 | 8.0 | 6.0 | 5.0 | 0.0 |
|  | Years of Service |  |  |  |  |  |
| Age | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | $\underline{5+}$ |
| Under 30 | 22.0\% | 16.0\% | 13.0\% | 11.0\% | 10.0\% | 7.0\% |
| 30-34 | 22.0 | 16.0 | 13.0 | 11.0 | 10.0 | 5.0 |
| 35-39 | 22.0 | 16.0 | 13.0 | 11.0 | 10.0 | 4.0 |
| 40-64 | 22.0 | 16.0 | 13.0 | 11.0 | 10.0 | 3.0 |
| 65 \& Over | 22.0 | 16.0 | 13.0 | 11.0 | 10.0 | 0.0 |

## Table X: Actuarial Assumptions and Methods (continued)

## Disability

Representative values of the assumed annual rates of disability among members in active service are shown in the following table. Two-thirds of disabilities are assumed to be ordinary and one-third is assumed to be service-related. $30 \%$ of disabilities are assumed to qualify for Social Security benefits.

| Age | Males | Females |
| :---: | :---: | :---: |
| 25 | $0.0300 \%$ | $0.0100 \%$ |
| 30 | $0.0580 \%$ | $0.0250 \%$ |
| 35 | $0.0730 \%$ | $0.0480 \%$ |
| 40 | $0.1020 \%$ | $0.0750 \%$ |
| 45 | $0.1880 \%$ | $0.1650 \%$ |
| 50 | $0.3130 \%$ | $0.2850 \%$ |
| 55 | $0.5230 \%$ | $0.4780 \%$ |
| 60 | $0.6860 \%$ | $0.5990 \%$ |
| 65 | $0.2390 \%$ | $0.1500 \%$ |

## Interest Rates

## Used for Calculating All Liabilities

$8.00 \%$ per annum. This interest rate is assumed to be net of investment expenses and commissions.

## Underlying Long-term Inflation Rate

$3.75 \%$ per annum

## Marriage Assumption

## Percent Married

$100 \%$ of members are assumed to be married
Age Difference Between Spouses
Male spouses are assumed to be two years older than female spouses

## Salary Increases

Salaries are assumed to increase at the annual rates shown in the following table:

| Years of Service | Rate |
| :---: | :--- |
| 6 and Under | $5.00 \%$ |
| $7-11$ | 4.00 |
| Over 11 | 3.00 |

## Expenses

Annual administrative expenses, exclusive of investment expenses and commissions, are assumed to be equal to the actual administrative expenses incurred since the previous valuation.

## Table X: Actuarial Assumptions and Methods (continued)

## Assets

The actuarial value of assets is based on a method that fully recognizes benefit payments, expenses, contributions, interest and dividends for the year, and recognizes gains or losses in the fair market value of assets at the rate of $20 \%$ per year. The result cannot be greater than $120 \%$ of market value or less than $80 \%$ of market value.

## Unfunded Liability Bases and Funding Period (Pursuant to Chapter 112, Florida Statutes)

All unfunded liability bases which were established prior to October 1, 2004, as well as those bases established as of that date, were combined into a single, "fresh-start" base effective October 1, 2004. Prior to the October 1, 2016 valuation, this base and new bases established after October 1, 2004 were amortized over a period of 30 years, with a one-year delay in payment.

Effective with the October 1, 2016 valuation, outstanding bases as of October 1, 2015 were re-amortized over their remaining periods without regard to the one-year delay in payment. Those bases were then rolled forward to October 1, 2016. New based established at October 1, 2016 and later will be amortized over a period of 30 years, which is within the maximum amortization period allowed by Chapter 112.64, Florida Statutes. In addition, the annual payment towards the unfunded actuarial accrued liability has been determined as a level percentage of payroll. Total payroll has been assumed to increase at the rate of $4.50 \%$ per annum.

## Vacation Payout and Accumulated Sick Leave

Service credits were adjusted by 0.15 year for employees in the paid-time-off (PTO) program and 0.25 year for employees not in the PTO program for benefit determination to recognize any accumulated unused sick leave. Final year of earnings was increased by $10 \%$ if service greater than $24,8 \%$ if service greater than $17,6 \%$ if service greater than $12,4 \%$ if service greater than 7 and $2 \%$ if service 7 or less for benefit determination for non-PTO employees to recognize credits for special pay. No final earnings adjustment was made for PTO employees.

## Table Xa: Assumption and Method Changes

The following assumptions have been changed since the prior valuation:
Effective October 1, 2017:
The investment rate of return assumption was decreased from $8.10 \%$ to $8.00 \%$ to better reflect expectations of future investment returns.

## Table XI: Plan Provisions

## Ordinances

Original Ordinance: Chapter 2, Article VII, Division 5 (General Employees Pension Plan). Most Recent Ordinance No. 120218 effective September 10, 2012.

## Member

All full-time, permanent employees of the City of Gainesville (except police officers and firefighters) or the Gainesville Gas Company are eligible for membership in the Plan upon date of hire.

## Member Contributions

$5 \%$ of Earnings.

## Credited Service

Credited Service means the total number of months of service with the City, expressed in terms of full and fractional years. Credited Service will include unused sick leave credits and personal critical leave bank (PLCB) credits. For service earned on or after October 1, 2012, no service shall be credited for unused sick leave or PLCB credits earned on or after October 1, 2012.

Employees who previously chose to participate in the City's 457 plan or defined contribution plan and elect to transfer to this Plan may purchase Credited Service for periods of employment during which they participated in the previous plan.

## Earnings

Pay received by a member as compensation for services to the City, including vacation termination pay, overtime pay, longevity pay and certain other specified pay. For members with hire dates on or before October 1, 2012, no more than 300 hours of overtime pay earned after October 1, 2012 will be included, nor will termination vacation pay. For members with hire dates on or after October 2, 2012, no more than 150 hours of overtime pay earned after October 1, 2012 will be included, nor will termination vacation pay.

## Final Average Earnings

Final Average Earnings mean average earnings over a consecutive-month period determined by the member's date of hire, according to the following:

For members with hire dates on or before October 1, 200736 months
For members with hire dates on or after October 2, 2007 but on or before October 1, 201248 months
For members with hire dates on or after October 2, 2012
60 months

## Table XI: Plan Provisions (continued)

## Monthly Accrued Benefit

A monthly benefit payable for life commencing at Normal Retirement Age equal to a percentage of Final Average Earnings multiplied by Credited Service, where the percentage is determined by the member's date of hire, according to the following:

For members with hire dates on or before October 1, 2012
2.00\%

For members with hire dates on or after October 2, 2012
1.80\%

For Gainesville Gas Company Employees, a monthly benefit payable for life starting at Normal Retirement Age, equal to:
(i) the accrued benefit earned under the Gainesville Gas Company Employees' Pension Plan ("predecessor plan") as of January 10, 1990; plus
(ii) $2 \%$ of Final Average Earnings times Credited Service earned after January 10, 1990; plus
(iii) for each year of service earned after January 10, 1990, an additional 2\% of Final Average Earnings will be credited, not to exceed the service years earned under the accrued benefit formula under the predecessor plan; less
(iv) for each year of predecessor plan service credited under (iii) above, the portion of the accrued benefit determined under (i) above based on such years.

## Normal Retirement Age and Benefit

## Eligibility

For members with hire dates on or before October 1, 2007, the eligibility date is the earlier of age 65 and 10 years of Credited Service or 20 years of Credited Service at any age.

For members with hire dates on or after October 2, 2007 and on or before October 1, 2012, the eligibility date is the earlier of age 65 and 10 years of Credited Service or 25 years of Credited Service at any age.

For members with hire dates on or after October 2, 2012, the eligibility date is the earlier of age 65 and 10 years of Credited Service or 30 years of Credited Service at any age.

## Amount

Monthly Accrued Benefit

## Form of Payment

Life annuity;
Actuarially reduced $66 \frac{2}{3} \%$ joint and contingent annuity (optional);
Actuarially reduced $66^{2} / 3 \%$ joint and last survivor annuity (optional);
Social Security option (optional)
(Note: All forms of payment guarantee at least the return of the Member Contributions.)

## Table XI: Plan Provisions (continued)

## Early Retirement Age and Benefit

## Eligibility

For members with hire dates on or before October 1, 2012, the eligibility date is the attainment of age 55 and 15 years of Credited Service.

For members with hire dates on or after October 2, 2012, the eligibility date is the attainment of age 60 and 20 years of Credited Service.

## Amount

Monthly Accrued Benefit reduced by 5\% per year for each year that age at retirement precedes age 65.
Form of Payment
Same as for Normal Retirement

## Deferred Retirement Option Program (DROP)

## Eligibility

A member is eligible for participation in the DROP after completing 27 years of Credited Service

## Benefit

Members of the DROP continue as active employees but no longer contribute or accrue benefits. The accrued benefit is calculated at entry into the DROP and is paid into an account within the Plan and is credited with a guaranteed rate of interest, compounded monthly. If a member enters DROP on or before October 1, 2012, the guaranteed interest rate is $6 \%$. For members entering DROP after October 1, 2012, the interest rate is $2.25 \%$.

The maximum period of participation is the earlier of 60 months or the attainment of 35 years of Credited Service. At termination of employment, participant is paid the balance of the account in a lump sum or rollover distribution.

## Disability Retirement Eligibility and Benefit

## Eligibility

Active members are eligible for a disability benefit provided that they either: (1) become totally and permanently disabled in the line of duty, or (2) have earned at least five consecutive years as a regular employee and become totally and permanently disabled not in the line of duty.

## Amount

A monthly benefit equal to Final Average Earnings multiplied by his basic disability percentage, which is a percentage equal to Credited Service multiplied $2.00 \%$, but not less than $42 \%$ for disabilities incurred in the line of duty, or $25 \%$ for all other disabilities; offset by his disability benefit percentage, up to a maximum of $50 \%$, multiplied by the initial monthly Social Security Primary Insurance Amount (whether or not in payment status) to which a member is entitled. The benefit is limited to $\$ 3,750$ per month or an amount equal to his maximum benefit percentage with the above reductions, payable beginning the month of disability or the month following the termination of sick leave payments.

## Form of Payment

Monthly benefit payable for life, but in no event will payments be made after the member's recovery from such disability.

## Table XI: Plan Provisions (continued)

## Termination Benefit

Eligibility

Five years of Credited Service.

## Amount

Monthly Accrued Benefit payable at age 65.
Form of Payment
Same as for Normal Retirement
(Note: Members with fewer than 5 years of Credited Service who terminate employment will receive a refund of their Member Contributions without interest.)

## Pre-Retirement Death Benefit

In the case of the death of a member prior to retirement, his beneficiary will receive the member's accumulated contributions without interest, or if such member had attained eligibility for normal or early retirement, then his beneficiary will receive the member's benefit accrued as of the date of death and payable in the form chosen by the beneficiary, reduced if paid at the deceased member's Early retirement date and unreduced if paid at the deceased member's normal retirement date.

## Cost-of-Living Adjustments

A retired member on or before October 1, 2000 will receive an annual $2 \%$ adjustment beginning at the later of October 1, 2000 and the October 1 following his $62^{\text {nd }}$ birthday.

For members with at least 25 years of Credited Service on or before October 1, 2012, a $2 \%$ per year increase for retired members and their beneficiaries, commencing at the later of October 1, 2000, or the October 1 following the member's age 60.

For members with at least 20 years of Credited Service (but less than 25) on or before October 1, 2012, a $2 \%$ per year increase for retired members and their beneficiaries, commencing at the later of October 1, 2000, or the October 1 following the member's age 62.

For members hired on or before October 1, 2012 who do not have 20 years of Credited Service on or before October 1, 2012, the eligibility date is attainment of age 65 and 25 years of Credited Service.

For new members hired after October 1, 2012, the eligibility date is attainment of age 65 and 30 years of Credited Service.

Cost-of-living increases do not apply during the DROP period.

## Actuarial Equivalence

Actuarial equivalence shall mean a benefit of equivalent value to the benefit which otherwise would have been provided to the member, based on the 1994 Group Annuity Mortality Basic Table-Unisex 50/50 and an interest rate of 9.5 percent, unless otherwise specified.


[^0]:    ${ }^{1}$ The information shown in this exhibit under ASC 960 is for informational purposes only. It is not intended to be used for financial reporting purposes (see separate GASB 67 and GASB 68 reports).

[^1]:    1 All bases established prior to 2016 were developed by the prior actuary. The original amounts of these bases were not available.

[^2]:    ${ }^{1}$ Asset values from plan years 2014 and later reflect the inclusion of DROP account balances.
    ${ }^{2}$ Includes contributions refunded and payments to DROP accounts.

[^3]:    * Please reference Table Vla for the historical benefit payments, expenses, and contributions.

