CITY OF MOBILE, ALABAMA Police and Firefighters Retirement Plan

ACTUARIAL VALUATION AS OF OCTOBER 1, 2018

DETERMINES THE CONTRIBUTION FOR THE 2018/19 FISCAL YEAR



TABLE OF CONTENTS

| | | Page |
|---|--|--|
| Discussion | | 1 |
| Funding Res | ults | |
| Table I-A Table I-B Table I-C Table I-D Table I-E Table I-F Table I-G Table I-H Table I-I | Minimum Required Contribution Sensitivity Analysis Gain and Loss Analysis Present Value of Future Benefits Present Value of Accrued Benefits Present Value of Vested Benefits Projected Unit Credit Accrued Liability Projected Unit Credit Normal Cost Unfunded Liability Bases | I-1 I-2 I-3 I-4 I-5 I-6 I-7 I-8 |
| Accounting GASB 67/68 | Results Supplement as of September 30, 2018 | |
| Assets Table II-A Table II-B Table II-C Table II-D Table II-E Table II-F | Actuarial Value of Assets Market Value of Assets Investment Return Asset Reconciliation Historical Trust Fund Detail Other Reconciliations | -1 -2 -3 -4 -5 |
| Data Table III-A Table III-B Table III-C Table III-D Table III-E Table III-F Table III-G | Summary of Participant Data Data Reconciliation Active Participant Data Active Age-Service Distribution Active Age-Service-Salary Table Inactive Participant Data Projected Benefit Payments | -1 -2 -3 -4 -5 -6 |
| Methods & A | | |
| Table IV-A Table IV-B | Summary of Actuarial Methods and Assumptions Changes in Actuarial Methods and Assumptions | IV-1 IV-3 |
| Plan Provisi | The state of the s | |
| Table V-A | Summary of Plan Amendments | V-1 |



July 17, 2019

Introduction

This report presents the results of the October 1, 2018 actuarial valuation of the City of Mobile, Alabama Police and Firefighters Retirement Plan. The report is based on the participant data and asset information provided by the pension plan administrator and, except for a cursory review for reasonableness including a comparison to the data provided for the previous valuation, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2018 and to determine the minimum required contribution under Section 7, Act No. 97-689 of the Alabama State Legislature for the 2018/19 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an <u>estimate</u> of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the minimum required contribution rate.

Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2018/19 plan year. The minimum required contribution is \$24,083,125, which represents an increase of \$2,086,157 from the prior valuation. The corresponding contribution rates as a percentage of covered payroll are 54.00% and 60.27% for the 2017/18 and 2018/19 plan years, respectively. The City is expected to be required to contribute \$20,267,668 of the minimum required contribution, with the remainder of the required contribution being covered by employee contributions, fire insurance premium taxes, and municipal court receipts. The actual required contribution from the City will depend on the level of contribution from the other sources such that the total funding requirement is met each year.



Table I-C provides a breakdown of the sources of change in the contribution rate. Significantly, the rate increased by 2.56% of payroll due to a scheduled increase in the amortization payments, increased by 0.13% of payroll due to investment losses, and increased by another 3.58% of payroll due to demographic experience. Although the market value of assets earned 8.47% during the 2017/18 plan year, the actuarial value of assets is based on a five-year phase-in of the net investment gains and losses. On this basis, the actuarial value of assets only earned 6.86% during the 2017/18 plan year, whereas a 7.00% annual investment return was required to maintain a stable contribution rate.

Section 7, Act No. 97-689 of the Alabama State Legislature (the "Act") sets forth the rules concerning the minimum required contribution for the plan. Essentially, the City must contribute an amount equal to the annual normal cost of the plan plus an amortization payment towards the unfunded liability, where the amortization period varies between five and 30 years depending on the source of the change in the unfunded liability. This plan uses the projected unit credit cost method to develop an unfunded liability each year. Changes in the unfunded liability from the prior year are then amortized or "paid off" over a period of time. The period over which the unfunded liability is amortized is often referred to as the "funding period" of the plan. Under the Act, plan amendments are amortized over 30 years, changes in actuarial methods and assumptions are amortized over 10 years, and experience gains and losses are amortized over five years. Table I-I shows the various components of the unfunded liability and the respective funding period for each component.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$348,460,548, including estimated future administrative expenses. As illustrated in Table I-A, current assets are sufficient to cover \$176,660,269 of this amount, the 2018/19 contribution will cover \$24,083,125 of this amount, and future employee contributions are expected to cover \$27,550,648 of this amount, leaving \$120,166,506 to be covered by future employer funding beyond the 2018/19 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

Identification and Assessment of Risk

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

Although a thorough analysis of the risk of not meeting the assumptions is beyond the scope of this report, this discussion is intended to identify the significant risks faced by the plan. In some cases, a more detailed review of the risks, including numerical analysis, may be appropriate to help the plan sponsor and other interested parties assess the specific impact of not realizing certain assumptions. For example, Table I-B illustrates the impact that alternative



long-term investment returns would have on the contribution rate. Note that this report is not intended to provide advice on the management or reduction of the identified risks nor is this report intended to provide investment advice.

The most significant risk faced by most defined benefit pension plans is investment risk, i.e. the risk that long-term investment returns will be less than assumed. Other related risks include a risk that, if the investments of the plan decline dramatically over a short period of time (such as occurred with many pension plans in 2008), the plan's assets may not have sufficient time to recover before benefits become due. Even if the assets of the plan grow in accordance with the assumed investment return over time, if benefit payments are expected to be large in the short-term (for example, if the plan provides an actuarial equivalent lump sum payment option and a large number of participants are expected to become entitled to such a lump sum in the near future), the plan's assets may not be sufficient to support such a high level of benefit payments. We have provided a 10-year projection of the expected benefit payments in Table III-G to help the Trustees in formulating an investment policy that is expected to provide an investment return that meets both the short- and long-term cash flow needs of the pension plan.

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

A third source of risk is the risk that the plan sponsor (or other contributing entities) will not make, or will not have the ability to make, the contributions that are required to keep the plan funded at a sufficient level. Material changes in the number of covered employees, covered payroll, and, in some cases, hours worked by active participants can also significantly impact the plan's liabilities and the level of contributions received by the plan.

Finally, an actuarial funding method has been used to allocate the gap between projected liablities and assets to each year in the future. The contribution rate under some funding methods is higher during the early years of the plan and then is lower during the later years of the plan. Other funding methods provide for lower contribution rates initially, with increasing contribution rates over time. The Trustees have adopted the projected unit credit funding method for this plan. Under this method, the contribution requirement is expected to increase over time as the active participants age.

A brief description of the actuarial funding method and related amortization period is provided in Table IV-A.

Contents of the Report

Tables I-D through I-H provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Specifically, Table II-A shows the development of the actuarial value of assets, which is based on a five-year phase-in of the net investment gains and losses in order to provide a more stable and predictable contribution rate for the employer. Tables III-A through III-G provide statistical information concerning the plan's participant population. In particular, Table III-G gives



a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables IV-A through V-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits and of the relevant plan provisions as of October 1, 2018, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

Certification

This actuarial valuation was prepared by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate and, in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of the Act. 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 change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm,

Charles V. Care/ 99.

Charles T. Carr Consulting Actuary Southern Actuarial Services Company, Inc.

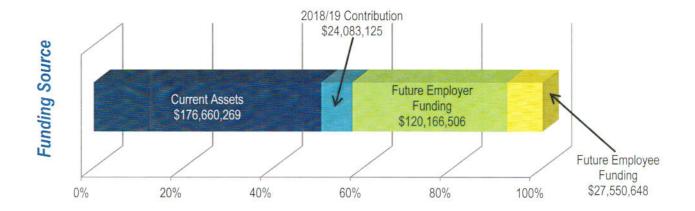
Enrolled Actuary No. 17-04927

The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Minimum Required Contribution

Table I-A



For the 2018/19 Plan Year

| Projected Unit Credit Normal Cost | \$5,995,886 |
|---|--------------|
| Unfunded Liability Amortization Payment | \$17,987,343 |
| Expense Allowance | \$99,896 |

| Minimum Required Contribution | \$24,083,125 |
|-------------------------------|--------------|
|-------------------------------|--------------|

| Expected Payroll for the 2018/19 Plan Year | ÷ \$39.958.343 |
|--|----------------|
|--|----------------|

| Contribution by Source (Estimated) | | % of Payroll |
|------------------------------------|--------------|--------------|
| City of Mobile | \$20,267,668 | 50.72% |
| Fire insurance premium tax | \$799,167 | 2.00% |
| Municipal court receipts | \$39,958 | 0.10% |
| Employees | \$2,976,332 | 7.45% |
| Minimum required contribution | \$24,083,125 | 60.27% |

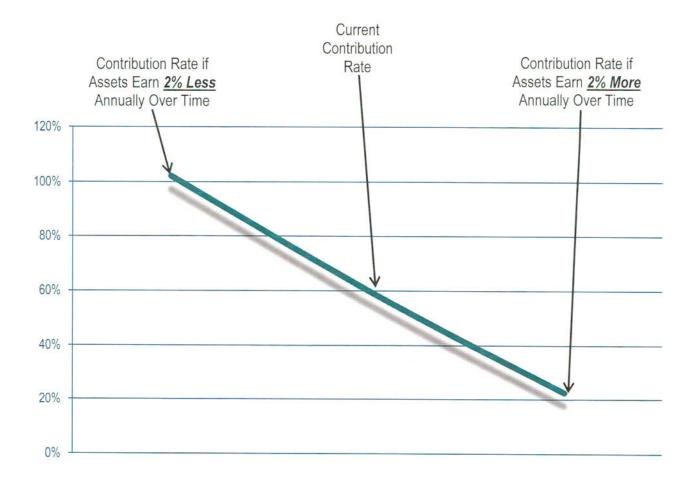
Additional Disclosures

| Present Value of Future Compensation | \$369,877,558 |
|--|---------------|
| Present Value of Future Employer Contributions | \$120,166,506 |
| Present Value of Future Employee Contributions | \$27,550,648 |



Sensitivity Analysis

Table I-B



The line above illustrates the sensitivity of the contribution rate to changes in the long-term investment return.



Gain and Loss Analysis

Table I-C

Source of Change in the Contribution Rate

| Previous minimum required contribution rate | 54.00% |
|--|-------------------------|
| Expected increase (decrease) due to amortization schedule Increase (decrease) due to investment gains and losses Increase (decrease) due to demographic experience | 2.56% 0.13% 3.58% |
| Increase (decrease) due to plan amendments Increase (decrease) due to actuarial assumption changes Increase (decrease) due to actuarial method changes | 0.00% 0.00% 0.00% |
| Current minimum required contribution rate | 60.27% |
| Source of Change in the Unfunded Liebility | |

Source of Change in the Unfunded Liability

| Previous unfunded liability | \$115,441,280 |
|--|--|
| Increase due to interest Decrease due to amortization payments Increase (decrease) due to plan experience | \$6,975,299 (\$15,794,161) \$3,762,389 |
| Increase (decrease) due to plan amendments Increase (decrease) due to actuarial assumption changes Increase (decrease) due to actuarial method changes | \$0 \$0 \$0 |
| Current unfunded liability | \$110,384,807 |



Funding Results

Present Value of Future Benefits

Table I-D

| | Old Assumptions w/o Amendment | Old Assumptions w/ Amendment | New Assumptions w/ Amendment |
|----------------------------------|-------------------------------|------------------------------|------------------------------|
| Actively Employed Participants | | | |
| Retirement benefits | \$149,669,383 | \$149,669,383 | \$149,669,383 |
| Termination benefits | \$846,689 | \$846,689 | \$846,689 |
| Disability benefits | \$12,452,597 | \$12,452,597 | \$12,452,597 |
| Death benefits | \$2,552,760 | \$2,552,760 | \$2,552,760 |
| Refund of employee contributions | \$2,181,042 | \$2,181,042 | \$2,181,042 |
| Sub-total | \$167,702,471 | \$167,702,471 | \$167,702,471 |
| Deferred Vested Participants | | | |
| Retirement benefits | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Termination benefits | \$0 | \$0 | \$0 |
| Disability benefits | \$0 \$0 | \$0 | \$0 |
| Death benefits | \$0 | \$0 | \$0 |
| Refund of employee contributions | \$0 | \$0 | \$0 |
| Sub-total | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Due a Datum d of Contributions | ** | *** | ** |
| Due a Refund of Contributions | \$0 | \$0 | \$0 |
| <u>Deferred Beneficiaries</u> | \$0 | \$0 | \$0 |
| Retired Participants | | | |
| Service retirements | \$144,809,999 | \$144,809,999 | \$144,809,999 |
| Disability retirements | \$10,251,616 | \$10,251,616 | \$10,251,616 |
| Beneficiaries receiving | \$13,128,531 | \$13,128,531 | \$13,128,531 |
| DROP participants | \$10,628,136 | \$10,628,136 | \$10,628,136 |
| Sub-total | \$178,818,282 | \$178,818,282 | \$178,818,282 |
| Grand Total | \$347,535,854 | <u>\$347,535,854</u> | \$347,535,854 |



Present Value of Accrued Benefits

Table I-E

| | Old Assumptions w/o Amendment | Old Assumptions w/ Amendment | New Assumptions w/ Amendment |
|--------------------------------------|-------------------------------|------------------------------|------------------------------|
| Actively Employed Participants | | | |
| Retirement benefits | \$79,778,045 | \$79,778,045 | \$79,778,045 |
| Termination benefits | \$403,915 | \$403,915 | \$403,915 |
| Disability benefits | \$9,697,254 | \$9,697,254 | \$9,697,254 |
| Death benefits | \$1,318,088 | \$1,318,088 | \$1,318,088 |
| Refund of employee contributions | \$1,182,221 | \$1,182,221 | \$1,182,221 |
| Sub-total | \$92,379,523 | \$92,379,523 | \$92,379,523 |
| Deferred Vested Participants | | | |
| Retirement benefits | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Termination benefits | \$0 | \$0 | \$0 |
| Disability benefits | \$0 | \$0 | \$0 |
| Death benefits | \$0 | \$0 | \$0 |
| Refund of employee contributions | \$0 | \$0 | \$0 |
| Sub-total | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| <u>Due a Refund of Contributions</u> | \$0 | \$0 | \$0 |
| <u>Deferred Beneficiaries</u> | \$0 | \$0 | \$0 |
| Retired Participants | | | |
| Service retirements | \$144,809,999 | \$144,809,999 | \$144,809,999 |
| Disability retirements | \$10,251,616 | \$10,251,616 | \$10,251,616 |
| Beneficiaries receiving | \$13,128,531 | \$13,128,531 | \$13,128,531 |
| DROP participants | \$10,628,136 | \$10,628,136 | \$10,628,136 |
| Sub-total | \$178,818,282 | \$178,818,282 | \$178,818,282 |
| Grand Total | \$272,212,906 | \$272,212,906 | \$272,212,906 |
| <u>Funded Status</u> | 73.83% | 73.83% | 73.83% |

(Note: Funded percentage is equal to the ratio of the usable portion of the market value of assets divided by the present value of accrued benefits.)



Present Value of Vested Benefits

Table I-F

| | Old Assumptions w/o Amendment | Old Assumptions w/ Amendment | New Assumptions w/ Amendment |
|---|--------------------------------|------------------------------|------------------------------|
| Actively Employed Participants | | | |
| Retirement benefits | \$56,119,057 | \$56,119,057 | \$56,119,057 |
| Termination benefits | \$7,374,189 | \$7,374,189 | \$7,374,189 |
| Disability benefits | \$8,942,051 | \$8,942,051 | \$8,942,051 |
| Death benefits | \$1,021,630 | \$1,021,630 | \$1,021,630 |
| Refund of employee contributions | \$1,617,878 | \$1,617,878 | \$1,617,878 |
| Sub-total | \$75,074,805 | \$75,074,805 | \$75,074,805 |
| Defermed Vested Dedicionate | | | |
| <u>Deferred Vested Participants</u> Retirement benefits | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| | Note that exception is needed. | | CONTROL SEASON SOLVED CHAIR |
| Termination benefits | \$0 | \$0 | \$0 |
| Disability benefits | \$0 | \$0 | \$0 \$0 |
| Death benefits | \$0 \$0 | \$0 \$0 | \$0 |
| Refund of employee contributions Sub-total | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Sub-total | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Due a Refund of Contributions | \$0 | \$0 | \$0 |
| <u>Deferred Beneficiaries</u> | \$0 | \$0 | \$0 |
| Retired Participants | | | |
| Service retirements | \$144,809,999 | \$144,809,999 | \$144,809,999 |
| Disability retirements | \$10,251,616 | \$10,251,616 | \$10,251,616 |
| Beneficiaries receiving | \$13,128,531 | \$13,128,531 | \$13,128,531 |
| DROP participants | \$10,628,136 | \$10,628,136 | \$10,628,136 |
| Sub-total | \$178,818,282 | \$178,818,282 | \$178,818,282 |
| Grand Total | \$254,908,188 | \$254,908,188 | \$254,908,188 |



Funding Results

Projected Unit Credit Accrued Liability

Table I-G

| | Old Assumptions w/o Amendment | Old Assumptions w/ Amendment | New Assumptions w/ Amendment |
|----------------------------------|-------------------------------|------------------------------|------------------------------|
| Actively Employed Participants | | | |
| Retirement benefits | \$98,084,235 | \$98,084,235 | \$98,084,235 |
| Termination benefits | \$476,162 | \$476,162 | \$476,162 |
| Disability benefits | \$5,883,836 | \$5,883,836 | \$5,883,836 |
| Death benefits | \$1,585,239 | \$1,585,239 | \$1,585,239 |
| Refund of employee contributions | \$1,182,221 | \$1,182,221 | \$1,182,221 |
| Sub-total | \$107,211,693 | \$107,211,693 | \$107,211,693 |
| Deferred Vested Participants | | | |
| Retirement benefits | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Termination benefits | \$0 | \$0 | \$0 |
| Disability benefits | \$0 | \$0 | \$0 |
| Death benefits | \$0 | \$0 | \$0 |
| Refund of employee contributions | \$0 | \$0 | \$0 |
| Sub-total | \$1,015,101 | \$1,015,101 | \$1,015,101 |
| Due a Refund of Contributions | \$0 | \$0 | \$0 |
| <u>Deferred Beneficiaries</u> | \$0 | \$0 | \$0 |
| Retired Participants | | | |
| Service retirements | \$144,809,999 | \$144,809,999 | \$144,809,999 |
| Disability retirements | \$10,251,616 | \$10,251,616 | \$10,251,616 |
| Beneficiaries receiving | \$13,128,531 | \$13,128,531 | \$13,128,531 |
| DROP participants | \$10,628,136 | \$10,628,136 | \$10,628,136 |
| Sub-total | \$178,818,282 | \$178,818,282 | \$178,818,282 |
| Grand Total | \$287,045,076 | \$287,045,076 | \$287,045,076 |
| less Actuarial Value of Assets | (\$176,660,269) | (\$176,660,269) | (\$176,660,269) |
| Unfunded Accrued Liability | <u>\$110,384,807</u> | <u>\$110,384,807</u> | \$110,384,807 |



Projected Unit Credit Normal Cost

Table I-H

| | Old Assumptions w/o Amendment | Old Assumptions w/ Amendment | New Assumptions w/ Amendment |
|----------------------------------|-------------------------------|------------------------------|------------------------------|
| Actively Employed Participants | | | |
| Retirement benefits | \$5,094,970 | \$5,094,970 | \$5,094,970 |
| Termination benefits | \$42,526 | \$42,526 | \$42,526 |
| Disability benefits | \$450,044 | \$450,044 | \$450,044 |
| Death benefits | \$104,697 | \$104,697 | \$104,697 |
| Refund of employee contributions | \$303,649 | \$303,649 | \$303,649 |
| Sub-total | \$5,995,886 | \$5,995,886 | \$5,995,886 |
| Deferred Vested Participants | | | |
| Retirement benefits | \$0 | \$0 | \$0 |
| Termination benefits | \$0 | \$0 | \$0 |
| Disability benefits | \$0 | \$0 | \$0 |
| Death benefits | \$0 | \$0 | \$0 |
| Refund of employee contributions | \$0 | \$0 | \$0 |
| Sub-total | \$0 | \$0 | \$0 |
| Due a Refund of Contributions | \$0 | \$0 | \$0 |
| Deferred Beneficiaries | \$0 | \$0 | \$0 |
| Retired Participants | | | |
| Service retirements | \$0 | \$0 | \$0 |
| Disability retirements | \$0 | \$0 | \$0 |
| Beneficiaries receiving | \$0 | \$0 | \$0 |
| DROP participants | \$0 | \$0 | \$0 |
| Sub-total | \$0 | \$0 | \$0 |
| Grand Total | \$5,995,886 | \$5,995,886 | \$5,995,886 |



Funding Results

Unfunded Liability Bases

Table I-I

| Description | Original <u>Amount</u> | Outstanding <u>Balance</u> | Amortization <u>Payment</u> | Years Rem. |
|----------------------------------|---------------------------|-------------------------------|--------------------------------|---------------|
| | Total | \$110,384,807 | \$17,987,343 | |
| 10/1/1996 Initial Unf. Liability | \$85,097,273 | \$77,011,406 | \$10,611,336 | 8 |
| 10/1/1997 Amendment | \$9,984,153 | \$5,446,975 | \$781,343 | 9 |
| 10/1/1998 Amendment | \$1,282,237 | \$751,796 | \$100,037 | 10 |
| 10/1/1999 Amendment | \$63,319 | \$39,513 | \$4,925 | 11 |
| 10/1/2000 Amendment | \$3,603,937 | \$2,440,771 | \$287,194 | 12 |
| 10/1/2005 Amendment | \$4,761,492 | \$3,808,135 | \$364,531 | 17 |
| 10/1/2008 Amendment | \$1,250,981 | \$1,078,346 | \$95,129 | 20 |
| 10/1/2009 Method Change | (\$5,898,660) | (\$796,803) | (\$796,803) | 1 |
| 10/1/2009 Assumption Change | (\$1,131,538) | (\$152,850) | (\$152,850) | 1 |
| 10/1/2013 Method Change | (\$19,733,813) | (\$11,520,125) | (\$2,625,842) | 5 |
| 10/1/2013 Assumption Change | \$24,640,529 | \$14,384,545 | \$3,278,745 | 5 |
| 2013/14 Experience Loss | \$7,743,594 | \$1,765,037 | \$1,765,037 | 1 |
| 2014/15 Experience Gain | (\$1,355,045) | (\$597,521) | (\$308,862) | 2 |
| 2015/16 Experience Loss | \$13,310,549 | \$8,519,367 | \$3,033,943 | 3 |
| 2016/17 Experience Loss | \$497,588 | \$411,062 | \$113,418 | 4 |
| 10/1/2017 Assumption Change | \$4,347,419 | \$4,032,764 | \$578,481 | 9 |
| 2017/18 Experience Gain | \$3,762,389 | \$3,762,389 | \$857,581 | 5 |



Actuarial Value of Assets

Table II-A

| Net Inves | stment Gain (Loss) | Unreco | ognized Gain (Loss) |
|---------------------------|--------------------|--------|---------------------|
| For the 2014/15 plan year | (\$8,033,122) | x 20% | (\$1,606,624) |
| For the 2015/16 plan year | \$10,806,909 | x 40% | \$4,322,764 |
| For the 2016/17 plan year | \$18,361,515 | x 60% | \$11,016,909 |
| For the 2017/18 plan year | \$13,224,677 | x 80% | \$10,579,742 |
| | | | \$24,312,791 |

| Market Value of Assets as of October 1, 2018 | \$202,411,170 |
|--|---------------|
|--|---------------|

Minus DROP account balances (\$1,438,110)
Minus advance employer contributions \$0

Adjustment for unrecognized gain or loss as shown above, but restricted to an amount that keeps the actuarial value of assets within an 80%-120% corridor of the market value

(\$24,312,791)

Actuarial Value of Assets as of October 1, 2018 \$176,660,269

| THE THE PARTY AND THE PARTY AN | al Value of Assets |
|--|--------------------|
| October 1, 2009 | \$98,525,321 |
| October 1, 2010 | \$102,393,499 |
| October 1, 2011 | \$103,134,597 |
| October 1, 2012 | \$107,359,212 |
| October 1, 2013 | \$138,907,354 |
| October 1, 2014 | \$141,623,629 |
| October 1, 2015 | \$144,009,987 |
| October 1, 2016 | \$151,598,741 |
| October 1, 2017 | \$163,509,526 |
| October 1, 2018 | \$176,660,269 |

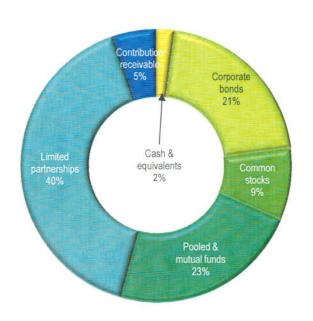


Market Value of Assets

Table II-B

As of October 1, 2018

| Market Value of Assets | \$202,411,170 |
|-------------------------|---------------|
| Cash & equivalents | \$4,284,212 |
| Corporate bonds | \$42,196,219 |
| Common stocks | \$17,552,347 |
| Pooled & mutual funds | \$46,244,684 |
| Limited partnerships | \$81,976,097 |
| Income receivable | \$307,222 |
| Contribution receivable | \$10,127,433 |
| Accounts payable | (\$277,044) |



Historical Market Value of Assets October 1, 2009 \$93,117,248 October 1, 2010 \$101,678,847 October 1, 2011 \$102,935,330 October 1, 2012 \$122,026,858 October 1, 2013 \$141,783,412 October 1, 2014 \$151,689,814 October 1, 2015 \$144,469,292 October 1, 2016 \$160,740,776 October 1, 2017 \$184,991,659

\$202,411,170

October 1, 2018

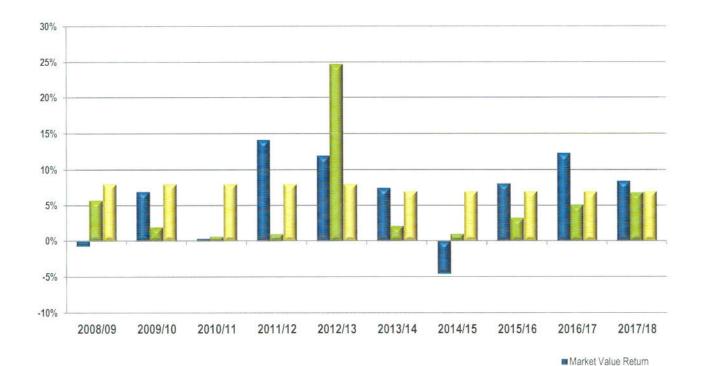


Investment Return

Table II-C

■ Actuarial Value Return

■ Assumed Return



Annual Investment Returns

| Plan | Market Value | Actuarial Value | Assumed |
|------------|-----------------|--------------------|---------|
| Year | Return | Return | Return |
| 2008/09 | -0.72% | 5.73% | 8.00% |
| 2009/10 | 6.94% | 1.96% | 8.00% |
| 2010/11 | 0.34% | 0.64% | 8.00% |
| 2011/12 | 14.15% | 1.02% | 8.00% |
| 2012/13 | 11.99% | 24.72% | 8.00% |
| 2013/14 | 7.47% | 2.13% | 7.00% |
| 2014/15 | -4.54% | 1.02% | 7.00% |
| 2015/16 | 8.13% | 3.27% | 7.00% |
| 2016/17 | 12.33% | 5.11% | 7.00% |
| 2017/18 | 8.47% | 6.86% | 7.00% |
| 10yr. Avg. | 6.29% | 5.04% | 7.50% |



Assets

| Asset Reconciliation | | Table II-D |
|--|--|--|
| | Market Value | Actuarial Value |
| As of October 1, 2017 | \$184,991,659 | \$163,509,526 |
| Increases Due To: | | |
| Employer Contributions | \$18,717,733 | \$18,717,733 |
| Employee Contributions Service Purchase Contributions Total Contributions | \$3,279,235 \$0 \$21,996,968 | \$3,279,235 \$0 \$21,996,968 |
| Interest and Dividends Realized Gains (Losses) Unrealized Gains (Losses) Total Investment Income | \$21,990,900 \$2,593,973 \$0 \$13,224,677 \$15,818,650 | \$11,280,752 |
| Other Income | \$342,665 | |
| Total Income | \$38,158,283 | \$33,277,720 |
| Decreases Due To: | | |
| Monthly Benefit Payments Refund of Employee Contributions DROP Credits Total Benefit Payments | (\$19,283,035) (\$1,016,632) (\$20,299,667) | (\$19,283,035) (\$1,016,632) \$181,808 (\$20,117,859) |
| Investment Expenses Administrative Expenses | (\$429,987) (\$9,118) | (\$9,118) |
| Advance Employer Contribution | | \$0 |
| Total Expenses | (\$20,738,772) | (\$20,126,977) |
| As of October 1, 2018 | \$202,411,170 | \$176,660,269 |



\$342,665

Historical Trust Fund Detail

2017/18

\$18,717,733

Table II-E

\$0 \$13,224,677

| | | Service | | Realized | Unrealized | |
|--------------|---|---|--|---|--|---|
| Employer | Employee | Purchase | Interest / | Gains / | Gains I | Other |
| Contribs. | Contribs. | Contribs. | Dividends | Losses | Losses | Income |
| \$16,473,275 | \$3,117,345 | \$90,767 | \$1,651,095 | \$0 | -\$2,106,039 | \$0 |
| \$15,037,059 | \$3,034,919 | \$0 | \$1,586,612 | \$0 | \$5,234,255 | \$3,638 |
| \$13,852,639 | \$3,043,066 | \$43,288 | \$1,561,407 | \$0 | -\$855,263 | \$10,408 |
| \$17,508,284 | \$3,006,582 | \$0 | \$1,513,978 | \$0 | \$13,754,849 | \$3,919 |
| \$19,707,446 | \$3,108,945 | \$0 | \$1,971,260 | \$0 | \$13,470,198 | \$0 |
| \$14,950,855 | \$2,945,173 | \$0 | \$1,557,605 | \$0 | \$9,510,533 | \$0 |
| \$16,354,458 | \$2,969,379 | \$0 | \$1,494,247 | \$0 | -\$8,033,122 | \$23,131 |
| \$19,701,944 | \$2,995,750 | \$0 | \$1,564,101 | \$0 | \$10,806,909 | \$211 |
| \$19,977,104 | \$3,306,936 | \$0 | \$2,081,197 | \$0 | \$18,361,515 | \$85,521 |
| | Contribs. \$16,473,275 \$15,037,059 \$13,852,639 \$17,508,284 \$19,707,446 \$14,950,855 \$16,354,458 \$19,701,944 | Contribs. Contribs. \$16,473,275 \$3,117,345 \$15,037,059 \$3,034,919 \$13,852,639 \$3,043,066 \$17,508,284 \$3,006,582 \$19,707,446 \$3,108,945 \$14,950,855 \$2,945,173 \$16,354,458 \$2,969,379 \$19,701,944 \$2,995,750 | Employer Employee Purchase Contribs. Contribs. Contribs. \$16,473,275 \$3,117,345 \$90,767 \$15,037,059 \$3,034,919 \$0 \$13,852,639 \$3,043,066 \$43,288 \$17,508,284 \$3,006,582 \$0 \$19,707,446 \$3,108,945 \$0 \$14,950,855 \$2,945,173 \$0 \$16,354,458 \$2,969,379 \$0 \$19,701,944 \$2,995,750 \$0 | Employer Employee Purchase Interest / Contribs. Contribs. Dividends \$16,473,275 \$3,117,345 \$90,767 \$1,651,095 \$15,037,059 \$3,034,919 \$0 \$1,586,612 \$13,852,639 \$3,043,066 \$43,288 \$1,561,407 \$17,508,284 \$3,006,582 \$0 \$1,513,978 \$19,707,446 \$3,108,945 \$0 \$1,971,260 \$14,950,855 \$2,945,173 \$0 \$1,557,605 \$16,354,458 \$2,969,379 \$0 \$1,494,247 \$19,701,944 \$2,995,750 \$0 \$1,564,101 | Employer Employee Purchase Interest / Gains / Contribs. Contribs. Contribs. Dividends Losses \$16,473,275 \$3,117,345 \$90,767 \$1,651,095 \$0 \$15,037,059 \$3,034,919 \$0 \$1,586,612 \$0 \$13,852,639 \$3,043,066 \$43,288 \$1,561,407 \$0 \$17,508,284 \$3,006,582 \$0 \$1,513,978 \$0 \$19,707,446 \$3,108,945 \$0 \$1,971,260 \$0 \$14,950,855 \$2,945,173 \$0 \$1,557,605 \$0 \$16,354,458 \$2,969,379 \$0 \$1,494,247 \$0 \$19,701,944 \$2,995,750 \$0 \$1,564,101 \$0 | Employer Employee Purchase Interest / Gains / Gains / Contribs. Contribs. Dividends Losses Losses \$16,473,275 \$3,117,345 \$90,767 \$1,651,095 \$0 -\$2,106,039 \$15,037,059 \$3,034,919 \$0 \$1,586,612 \$0 \$5,234,255 \$13,852,639 \$3,043,066 \$43,288 \$1,561,407 \$0 -\$855,263 \$17,508,284 \$3,006,582 \$0 \$1,513,978 \$0 \$13,754,849 \$19,707,446 \$3,108,945 \$0 \$1,971,260 \$0 \$13,470,198 \$14,950,855 \$2,945,173 \$0 \$1,557,605 \$0 \$9,510,533 \$16,354,458 \$2,969,379 \$0 \$1,494,247 \$0 -\$8,033,122 \$19,701,944 \$2,995,750 \$0 \$1,564,101 \$0 \$10,806,909 |

\$0 \$2,593,973

\$3,279,235

| Expense | S | | | | Other Actuarial Adjustments |
|---------|-----------------|-------------|-----------|-----------|---------------------------------|
| | Monthly | | | | Advance |
| Plan | Benefit | Contrib. | Admin. | Invest. | DROP Employer |
| Year | Payments | Refunds | Expenses | Expenses | <u>Credits</u> <u>Contribs.</u> |
| 2008/09 | \$16,057,057 | \$307,772 | \$104,926 | \$209,543 | -\$660,965 \$0 |
| 2009/10 | \$15,214,998 | \$705,860 | \$120,727 | \$293,299 | \$111,351 \$0 |
| 2010/11 | \$15,250,117 | \$674,887 | \$104,354 | \$369,704 | \$825,603 \$0 |
| 2011/12 | \$15,417,437 | \$770,972 | \$96,478 | \$411,197 | \$1,076,890 \$0 |
| 2012/13 | \$17,224,253 | \$668,097 | \$94,268 | \$514,677 | \$371,627 \$0 |
| 2013/14 | \$18,091,958 | \$356,916 | \$110,549 | \$498,341 | -\$418,299 \$0 |
| 2014/15 | \$18,745,918 | \$911,730 | \$4,989 | \$365,978 | -\$1,278,276 \$0 |
| 2015/16 | \$17,458,315 | \$877,554 | \$18,061 | \$443,501 | \$1,512,168 \$0 |
| 2016/17 | \$18,133,237 | \$926,040 | \$49,685 | \$452,428 | \$107,750 \$0 |
| 2017/18 | \$19,283,035 | \$1,016,632 | \$9,118 | \$429,987 | -\$181,808 \$0 |

Note: Information was not available to separate the realized and unrealized gains and losses.



Other Reconciliations

Table II-F

Advance Employer Contribution

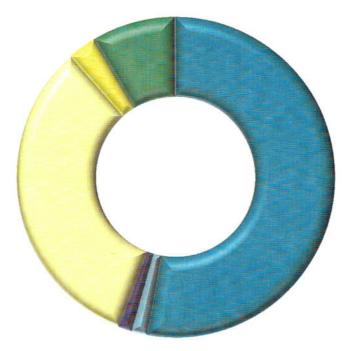
| Advance Employer Contribution as of October 1, 2017 | \$0 |
|--|---|
| Additional Employer Contribution Minimum Required Contribution Net Increase in Advance Employer Contribution | \$18,717,733 (\$18,717,733) \$0 |
| Advance Employer Contribution as of October 1, 2018 | \$0 |
| DROP Balance as of October 1, 2017 | \$1,619,918 |
| DROP Benefits Deposited DROP Benefits Paid Out DROP Investment Credits Net DROP Credit | \$1,002,521 (\$1,236,109) \$51,780 (\$181,808) |
| DROP Balance as of October 1, 2018 | \$1,438,110 |



Summary of Participant Data

Table III-A

As of October 1, 2018



Participant Distribution by Status

| Actively Employed Participants | |
|----------------------------------|-----|
| Active Participants | 876 |
| DROP Participants | 27 |
| Inactive Participants | |
| Deferred Vested Participants | 22 |
| Due a Refund of Contributions | 0 |
| Deferred Beneficiaries | 0 |
| Participants Receiving a Benefit | |
| Service Retirements | 543 |
| Disability Retirements | 48 |
| Beneficiaries Receiving | 140 |

Total Participants 1,656

Number of Participants Included in Prior Valuations Active DROP Inactive Retired Total October 1, 2009 1002 12 5 714 1,733 1,712 October 1, 2010 977 28 5 702 October 1, 2011 986 39 8 699 1,732 8 1,741 October 1, 2012 984 54 695 47 703 1,741 October 1, 2013 977 14 October 1, 2014 974 36 13 718 1,741 October 1, 2015 933 25 16 727 1,701 884 34 17 714 1,649 October 1, 2016 October 1, 2017 1,734 33 726 956 19 October 1, 2018 27 22 731 1,656 876



Data Reconciliation Table III-B

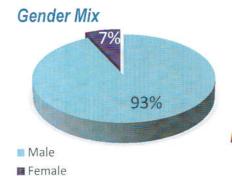
| | Active | DROP | Deferred Vested | Due a Refund | Def. Benef. | Service Retiree | Disabled Retiree | Benef. Rec'v. | Total |
|---|---------------|------|--------------------|-----------------|----------------|--------------------|---------------------|------------------|-------------|
| October 1, 2017 | 956 | 33 | 19 | 0 | 0 | 534 | 50 | 142 | 1,734 |
| Change in Status Re-employed Terminated Retired | (132) (22) | (14) | 7 | | | 31 | 5 | | (125) |
| Participation Ended Transferred Out Cashed Out Died | (8) | 8 | (4) | | | (22) | (7) | (7) | (4) (36) |
| Participation Began Newly Hired Transferred In New Beneficiary | 82 | | | | | | | 5 | 82 5 |
| Other Adjustment October 1, 2018 | 876 | 27 | 22 | 0 | 0 | 543 | 48 | 140 | 1,656 |



Active Participant Data

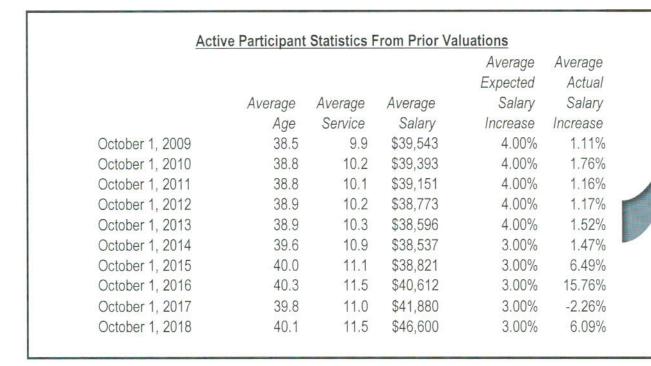
Table III-C

As of October 1, 2018

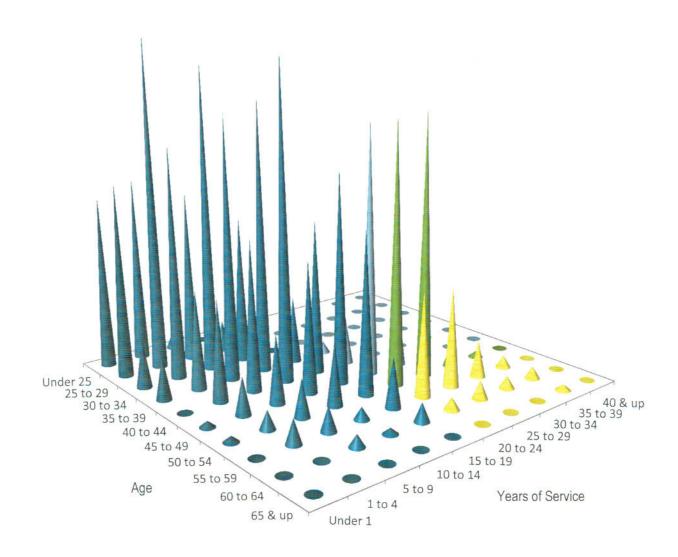


| Average Age | 40.1 years |
|--|--------------|
| Average Service | 11.5 years |
| Total Annualized Compensation for the Prior Year | \$40,821,583 |
| Total Expected Compensation for the Current Year | \$39,958,343 |
| Average Increase in Compensation for the Prior Year | 6.09% |
| Expected Increase in Compensation for the Current Year | 3.00% |
| | |

Actual vs. Expected Salary Increases









▲ May be eligible to retire

▲ Not eligible to retire



Active Age-Service-Salary Table

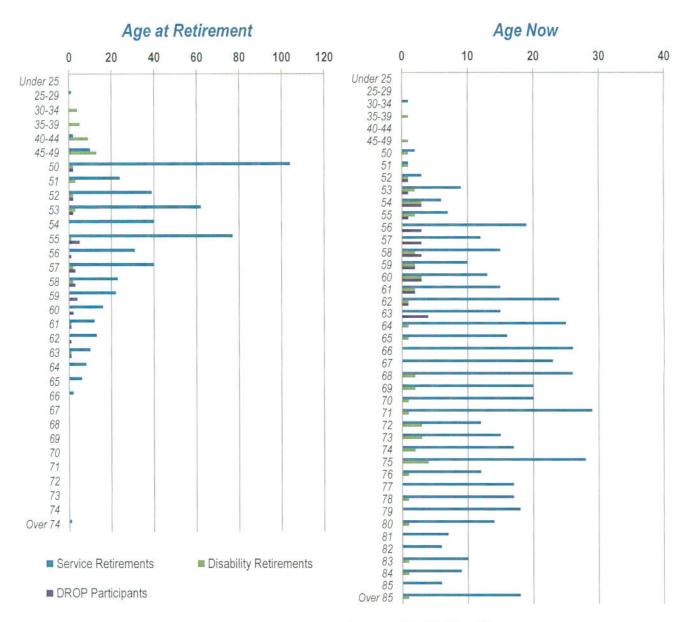
Table III-E

| Attained | | | | | Complet | ed Years o | f Service | | | | |
|----------|---------|--------|------------------|--------------|----------|-----------------|-----------|----------|---------------|---------------|--------|
| Age | 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 |
| | | 0.000 | | | | | | 594 | 320 | | |
| Under 25 | 28 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| Avg.Pay | 34,022 | 38,637 | 37,088 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36,443 |
| 25 to 29 | 31 | 53 | 28 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| Avg.Pay | 35,105 | 42,631 | 40,747 | 48,135 | 0 | 0 | 0 | 0 | 0 | 0 | 40,421 |
| 30 to 34 | 8 | 37 | 49 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 118 |
| Avg.Pay | 35,575 | 46,407 | 40,729 | 45,634 | 0 | 0 | 0 | 0 | 0 | 0 | 43,158 |
| 35 to 39 | 7 | 16 | 42 | 44 | 11 | 2 | 0 | 0 | 0 | 0 | 122 |
| Avg.Pay | 34,612 | 45,850 | 42,603 | 47,004 | 53,273 | 51,801 | 0 | 0 | 0 | 0 | 45,270 |
| 401.44 | | 40 | 0.4 | F4 | 0.5 | | , | | | | 404 |
| 40 to 44 | 0 | 16 | 24 43,798 | 51 47 104 | 25 | 8 58,793 | 0 | 0 | 0 0 | 0 0 | 124 |
| Avg.Pay | 0 | 44,154 | 43,790 | 47,104 | 54,840 | 00,793 | U | U | 0 | U | 48,397 |
| 45 to 49 | 1 | 6 | 11 | 21 | 34 | 41 | 11 | 0 | 0 | 0 | 125 |
| Avg.Pay | 38,605 | 37,187 | 41,230 | 44,009 | 50,071 | 55,642 | 55,034 | 0 | 0 | 0 | 49,829 |
| 50 to 54 | 1 | 3 | 6 | 10 | 26 | 42 | 42 | 3 | 1 | 0 | 134 |
| Avg.Pay | 40,560 | 44,706 | 41,235 | 41,730 | 51,105 | 53,438 | 56,726 | 41,854 | 106,230 | 0 | 52,439 |
| 55 to 59 | 0 | 4 | 4 | 2 | 8 | 17 | 16 | 6 | 2 | 0 | 59 |
| Avg.Pay | 0 | 58,771 | 42,175 | 43,854 | 46,679 | 51,088 | 59,783 | 61,779 | 65,009 | 0 | 54,079 |
| | | | | | | | | | | | |
| 60 to 64 | 0 | 0 | 2 | 1 | 3 | 2 | 3 | 2 | 2 | 0 | 15 |
| Avg.Pay | 0 | 0 | 38,884 | 40,349 | 44,870 | 53,639 | 54,418 | 33,211 | 70,785 | 0 | 48,750 |
| 65 & up | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75,192 | 0 | 75,192 |
| Total | 76 | 165 | 169 | 158 | 107 | 112 | 72 | 11 | 6 | 0 | 876 |
| Avg.Pay | 34,828 | 43,442 | 41,632 | 46,050 | 51,366 | 54,245 | 57,051 | 51,151 | 75,502 | 0 | 46,600 |
| | | | | | | | | | | | |



Inactive Participant Data

Table III-F



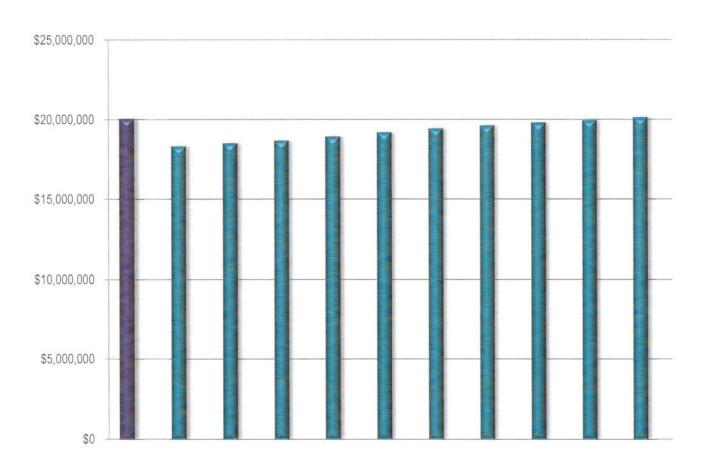
Average Monthly Benefit

| Service Retirements | \$2,160.89 |
|------------------------------|----------------|
| Disability Retirements | \$1,674.62 |
| Beneficiaries Receiving | \$879.78 |
| DROP Participants | \$2,581.73 |
| Deferred Vested Participants | \$465.42 |
| Deferred Beneficiaries | Not applicable |



Projected Benefit Payments

Table III-G



| Actual For the period October 1, 2017 through September 30, 2018 | \$20,066,079 |
|--|--------------|
| | |
| <u>Projected</u> | |
| For the period October 1, 2018 through September 30, 2019 | \$18,350,790 |
| For the period October 1, 2019 through September 30, 2020 | \$18,551,303 |
| For the period October 1, 2020 through September 30, 2021 | \$18,708,422 |
| For the period October 1, 2021 through September 30, 2022 | \$18,943,153 |
| For the period October 1, 2022 through September 30, 2023 | \$19,205,417 |
| For the period October 1, 2023 through September 30, 2024 | \$19,447,528 |
| For the period October 1, 2024 through September 30, 2025 | \$19,641,225 |
| For the period October 1, 2025 through September 30, 2026 | \$19,810,945 |
| For the period October 1, 2026 through September 30, 2027 | \$19,963,427 |
| For the period October 1, 2027 through September 30, 2028 | \$20,136,453 |
| | |



Summary of Actuarial Methods and Assumptions

Table IV-A

NOTE: The following assumptions and methods have been selected and approved by the Board of Trustees based in part on the advice of the plan's enrolled actuary in accordance with the authority granted to the Board under State law.

Actuarial Cost Method

Projected unit credit cost method. Under this actuarial cost method, the actuarial accrued liability is equal to the accumulated benefits earned to the valuation date for all participants, but adjusted to reflect expected increases in each participant's final average compensation. The normal cost is equal to one additional year's benefit accrual for all active participants on the same basis.

2. Amortization Method

The unfunded actuarial accrued liability is amortized as a level dollar amount over a period of up to 30 years, except that the initial unfunded liability as of October 1, 1996 is amortized as a level percentage of payroll using a 4.00% assumed annual increase in total covered payroll.

3. Asset Method

The actuarial value of assets is equal to the market value of assets, adjusted to reflect a five-year phase-in of the net investment appreciation (both realized and unrealized).

4. Interest (or Discount) Rate

7.00% per annum

Salary Increases

Plan compensation is assumed to increase at the rate of 3.00% per annum.

6. Decrements

Pre-retirement mortality: Sex-distinct rates set forth in the RP-2000 Blue Collar Mortality Table, with

full generational improvements in mortality using Scale AA

Post-retirement mortality: Sex-distinct rates set forth in the RP-2000 Blue Collar Mortality Table, with

full generational improvements in mortality using Scale AA



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

Disability:

Rates of disability increase with age up to age 65; a 0.19% probability of disability is assumed at age 30, a 0.43% probability of disability is assumed at age 40, a 0.56% probability of disability is assumed at age 50, and a 0.67% probability of disability is assumed at age 65, and the probabilities for intervening ages are roughly proportional to these probabilities; 80% of future disabilities are assumed to be service-related and participants entitled to a disability benefit are assumed to receive 60% of their final salary.

Termination:

Employment termination rates decrease with age up to age 50; a 7.07% probability of termination is assumed at age 20, a 4.81% probability of termination is assumed at age 30, a 0.34% probability of termination is assumed at age 40, and a 0.00% probability of termination is assumed at age 50, and the probabilities for intervening ages are roughly proportional to these probabilities

Retirement:

25% of eligible participants assumed to retire at age 50, 20% are assumed to retire at each of ages 51 and 52, 22% are assumed to retire at age 53, 33% are assumed to retire at age 54, 35% are assumed to retire at age 55, 30% are assumed to retire at age 56, 25% are assumed to retire at age 57, 20% are assumed to retire at age 58, 15% are assumed to retire at age 59, 20% are assumed to retire at each of ages 60 and 61, and 100% are assumed to retire at age 62.

7. Marriage Assumption

100% of non-retired participants are assumed to be married, with husbands assumed to be three years older than wives.

8. Form of Payment

Future retirees have been assumed to select the single life annuity.

9. Cost-of-Living Adjustment

A 2.50% automatic cost-of-living adjustment has been assumed for those members (excluding their beneficiaries) who retired during the period October 1, 1977 to April 14, 1985.

10. Expenses

Administrative expenses are assumed to be 0.25% of covered payroll. In addition, the interest rate set forth in item 4. above is assumed to be net of investment expenses and commissions.



Changes in Actuarial Methods and Assumptions

Table IV-B

No assumptions or methods were changed since the completion of the previous valuation.

The following additional assumption and method changes were made during the past 10 years:

- (1) Effective October 1, 2018, the mortality basis was changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to the RP-2000 Blue Collar Mortality Table with full generational improvements in mortality using Scale AA.
- (2) Effective October 1, 2013, the phase-in period for investment gains and losses that is used to determine the actuarial value of assets was "fresh-started" as of October 1, 2013.
- (3) Effective October 1, 2013, the interest (or discount) rate was reduced from 8.00% per annum to 7.00% per annum.
- (4) Effective October 1, 2013, the assumed increase in future salaries was reduced from 4.00% per annum to 3.00% per annum.
- (5) Effective October 1, 2013, the mortality basis was changed from the RP-2000 Mortality Table, projected to 2007 by Scale AA, to the RP-2000 Mortality Table, projected to 2015 by Scale AA, both as published by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 430.
- (6) Effective October 1, 2009, the actuarial value of assets was changed from the unadjusted market value to the market value adjusted to reflect a five-year phase-in of the net gains and losses (both realized and unrealized).
- (7) Effective October 1, 2009, the administrative expense assumption was changed from a 0.50% loading of all costs and liabilities to 0.25% of covered payroll.



Table V-A

Monthly Accrued Benefit

For Members who became a Uniformed Officer prior to March 28, 1990: 2.50% of Final Average Salary multiplied by Service up to 30 years

For all other Members:

2.50% of Final Average Salary multiplied by Service up to 20 years, plus 2.25% of Final Average Salary multiplied by Service in excess of 20 years up to 30 years

2. Service Retirement Age and Benefit

Age

For Members who became a Uniformed Officer prior to March 28, 1990:

The later of age 50 and the attainment of 20 years of Service (the last 10 years of which must be without a Break in Service exceeding one year)

For all other Members:

The later of age 55 and the attainment of 20 years of Service (the last 10 years of which must be without a Break in Service exceeding one year)

Amount

Monthly Accrued Benefit

Form of Payment

Life annuity (normal form for unmarried Members; optional for married Members);

Actuarially reduced 50% joint and contingent annuity (normal form for married Members, with the Member's spouse as Beneficiary; optional for unmarried Members);

Actuarially reduced 100% joint and contingent annuity (optional);

Actuarially reduced 50% joint and contingent annuity with "pop-up" feature1 (optional); or

Actuarially reduced 100% joint and contingent annuity with "pop-up" feature¹ (optional)

¹ An annuity with a "pop-up" feature is one that increases to the amount of the unreduced accrued benefit upon the death of the contingent annuitant.



Table V-A

Disability Retirement Age and Benefit

Condition

The Member must become permanently physically or mentally disabled such that he is unable to perform any other job or service within his merit system classification. If his disability is non-service related, then the Member must also have earned at least 15 years of Service. In addition to disabilities incurred by the Member while performing his duties as a Uniformed Officer, the definition of service-related disability includes disabilities caused by hypertension, heart disease, respiratory disease, AIDS, hepatitis, and cancer, provided that: (a) the Member has completed at least three years of continuous Service as a Uniformed Officer and has successfully passed a physical examination upon entry into Service, (b) the AIDS, hepatitis, or cancer manifests itself no later than 10 years after the Member is no longer employed as a Uniformed Officer, and (c) the City fails to prove by a preponderance of the evidence that the hypertension, heart disease, respiratory disease, AIDS, hepatitis, or cancer was caused by some other means. The definition of non-service related disability includes any disability that is not found to be a service-related disability.

Amount

2.50% of final salary multiplied by Service up to 24 years (for a non-service related disability);

45% of final salary (for a service-related disability); or

60% of final salary (for a Member who has incurred a service-related *total disability* which prevents the Member from working in any gainful employment).

Offset

Prior to age 50 (for Members who became a Uniformed Officer prior to March 28, 1990) or age 55 (for all other Members), the Disability Benefit will be reduced so that the total of the Member's Disability Benefit plus any other earnings as defined in Section 203(f)(5) of the Social Security Act will not exceed 150% of the Member's rate of salary as of the date he became disabled.

Form of Payment

Same as for Service Retirement



Table V-A

4. Withdrawal Retirement Age and Benefit

Age

Any age upon withdrawal from Service as a Uniformed Officer prior to eligibility for a Service Retirement Benefit.

Amount

For Members with at least 20 years of Service (the last 10 years of which must be without a Break in Service exceeding one year):

Monthly Accrued Benefit (payable at Service Retirement Age);

For Members with at least 15 but less than 20 years of Service (the last 10 years of which must be without a Break in Service exceeding one year):

Monthly Accrued Benefit (payable at age 65);

For all other Members, return of Member Contributions without interest.

Form of Payment

Same as for Service Retirement (for Members with at least 15 years of Service, the last 10 years of which are without a Break in Service exceeding one year);

Lump sum payment (for all other Members)

5. Pre-Retirement Death Benefits

For Members with at least 15 years of Service (the last 10 years of which are without a Break in Service exceeding one year) who have an eligible spouse or children:

The Member's eligible spouse or children receive 50% of the Monthly Accrued Benefit that would have been payable to the Member in the form of a 50% joint and contingent annuity had the Member been eligible for a Service Retirement Benefit and retired on his date of death. The monthly Death Benefit is payable either to the Member's spouse for life or to his dependent children until each child attains age 18. In lieu of the monthly Death Benefit, the Member's eligible spouse or children will receive a return of Member Contributions without interest plus a matching amount up to \$5,000 if this amount is greater than the actuarially equivalent value of the monthly Death Benefit described above.

For all other Members:

The Member's Beneficiary receives a return of Member Contributions without interest plus a matching amount up to \$5,000.

Final Average Salary

The average of the Member's salary for his final 60 months of Service (for Members who become a Uniformed Officer on or after March 28, 1990) and the average of the Member's salary for his final 36 months of Service (for all other Members); salary used for any purpose under the plan cannot exceed \$200,000 (as adjusted annually pursuant to Internal Revenue Code (IRC) §401(a)(17)(B)).



Table V-A

7. Service

A Member's Service is equal to his period of service as a Uniformed Officer as determined in accordance with the Mobile County Personnel Board Rules. In addition, military service will be recognized in accordance with the Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA), provided that the Member makes the required Member Contributions for such period of military service within the period of time specified by USERRA.

8. Restoration to Service after Retirement or Termination of Active Membership

If a Member is restored to Service as a Uniformed Officer after a Break in Service, then any benefit that he was receiving will cease and any benefit payment option previously elected will be void. If a Member who has received a distribution of his Member Contributions is restored to Service as a Uniformed Officer, the Member can repay the Member Contributions previously distributed to him plus interest computed at the rate of 10% per annum in order to "buy back" the Service earned prior to such distribution. The Member Contributions plus interest must be repaid within the same time period as that specified by USERRA for the payment of Member Contributions pursuant to military service.

If such a Member is restored to Service having incurred a Break in Service of one year or less, then, upon subsequent termination or retirement, the Member's benefit will be based on his Service and salary both before and after the Break in Service but reduced by the Actuarial Equivalent of any benefits paid to the Member prior to his restoration to Service.

If such a Member is restored to Service having incurred a Break in Service of more than one year, then, upon subsequent termination or retirement, the Member's benefit will be equal to his original benefit plus an additional benefit earned during his period of subsequent Service (if the Member has earned at least 10 consecutive years of additional Service after his Break in Service).

9. Membership

Membership is mandatory for all Uniformed Officers, where Uniformed Officers refers to any person employed by the City's police department or fire department who: (a) is certified as a police officer or firefighter by the State of Alabama, (b) is in training to be certified as a police officer or firefighter by the State of Alabama, (c) is in the police or fire cadet program, or (d) was a participant in the plan as of September 30, 1997.



Table V-A

10. Break in Service

A Break in Service is a period of absence which would constitute a break in the Member's Service under the Mobile County Personnel Board rules, except that periods of absence due to military service pursuant to USERRA and leaves of absence pursuant to the Family and Medical Leave Act of 1993 will not count towards a break in service.

11. Forfeiture of Benefits

If a Member is convicted of a Class A felony under the laws of the State of Alabama as in effect on October 1, 1997 or of an offense under any local, state, or federal law that would result in the conviction of a Class A felony in the State of Alabama, then any benefits that would otherwise be payable to the Member are forfeited and the Member will be treated under the plan as if he had died on the date immediately preceding his conviction.

12. Beneficiary

Each Member can designate a Beneficiary. If no Beneficiary designation is made, then the Member's spouse (if any) or estate will be the designated Beneficiary.

13. Definition of Actuarially Equivalent

Interest Rate

7.00% per annum

Mortality Table

1995 Buck Mortality Table (Male) is used for Members;

1995 Buck Mortality Table (Female) is used for Beneficiaries.

Cost-of-Living Adjustment

For Members who retired during the period October 1, 1977 to April 14, 1985 (excluding their beneficiaries), retirement benefits are increased annually by 50% of the blanket pay raise given to active Members for that year of the same class that the retiree held on his date of retirement.

15. Member Contributions

Members who have earned less than 30 years of Service are required to contribute 8% of salary per year; Member Contributions are deemed to be "picked-up" by the City pursuant to Internal Revenue Code (IRC) §414(h)(2).



Table V-A

16. City Contributions

The City is required to contribute an amount each plan year which, when added to the Member Contributions and Other Contributions for that plan year, is equal to the Minimum Required Contribution for that plan year. The City's contribution is determined as of each October 1 and the contribution must be made within 18 months following that October 1.

17. Other Contributions

The plan receives 5% of all fines and moneys paid as a result of prosecutions for violations of ordinances and laws of the City of Mobile. In addition, the plan receives 2% of the gross fire insurance premiums collected on policies which cover property within the City limits of Mobile and its police jurisdiction.

18. Minimum Required Contribution

The Minimum Required Contribution is the sum of the following amounts:

- (a) the normal cost for the plan year;
- (b) the increasing 30-year amortization payment required to amortize the initial unfunded actuarial accrued liability determined as of October 1, 1996, which amortization payment is scheduled to increase at the rate of 4% per annum;
- (c) the level-dollar 30-year amortization payment required to amortize changes in the unfunded actuarial accrued liability due to plan changes;
- (d) the level-dollar 10-year amortization payment required to amortize changes in the unfunded actuarial accrued liability due to assumption and method changes; and
- (e) the level-dollar five-year amortization payment required to amortize changes in the unfunded actuarial accrued liability due to experience.

19. Initial Plan Effective Date

September 2, 1964

20. Deferred Retirement Option Plan (DROP)

Members who are otherwise eligible for retirement may elect to continue their employment with the City for up to three years while their retirement benefit is accumulated on their behalf in a DROP account. The election to participate in the DROP is irrevocable and is available only once to each eligible plan Member. While participating in the DROP, Members do not accrue additional retirement benefits and do not make the 8% Member Contribution to the plan. DROP accounts earn a rate of interest that is based on the actual investment return of the fund for the prior plan year, less two percent if the return is at least equal to the assumed investment return.



Summary of Plan Amendments

Table V-B

No significant plan amendments were adopted since the completion of the previous valuation.

