

**THE POLICE AND FIRE RETIREMENT SYSTEM OF THE
CITY OF DETROIT**
GASB STATEMENT NO. 67 PLAN REPORTING AND
ACCOUNTING SCHEDULES OF COMPONENT II
JUNE 30, 2015



February 11, 2016

Board of Trustees
The Police and Fire Retirement System of the City of Detroit

Dear Board Members:

This report provides information required for the Police and Fire Retirement System of the City of Detroit in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 “Financial Reporting for Pension Plans.” These calculations have been made on a basis that is consistent with our understanding of this Statement. This information is subject to the System’s Auditor’s review. Please let us know if the System’s Auditor recommends any changes.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 67. The calculation of the plan’s liability for this report is not applicable for funding purposes of the plan. A calculation of the plan’s liability for purposes other than satisfying the requirements of GASB Statement No. 67 may produce significantly different results. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

This report is based upon information, furnished to us by System staff, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. This report is based on the valuation date of June 30, 2014. The total pension liability was rolled-forward from the valuation date to the plan year ending June 30, 2015 using generally accepted actuarial principles. The asset information as of June 30, 2015 was provided by the System. This information was checked for internal consistency, but it was not otherwise audited by GRS. A description of the adjustments made to the data is included in this report. GRS is not responsible for the accuracy of the member or financial data. This report is based upon estimates of frozen accrued benefits. Final calculations are not available. Future measurements based on final calculation of benefit amounts will differ.

At the direction of the System and with approval of the System’s Auditor, the long-term expected return on assets used to determine the discount rate is 7.47% as of June 30, 2015, up from 7.20% as of June 30, 2014. Due to time constraints, scope of project, and available data, we are unable to review this assumption for reasonableness.

The benefit provisions reflected in this valuation for the development of the end of year TPL are those in effect for Component II as of the end of the plan year on June 30, 2015 and reflect the changes adopted through the City’s Plan of Adjustment, including freezing benefits as of June 30, 2014 and reducing the post-retirement increases to 1.0125%. We understand that Component I is a separate plan for GASB No. 67 purposes and will, therefore, be treated in a separate report.

To the best of our knowledge, the information contained with this report is accurate and fairly represents the actuarial position of the System on the measurement date for purposes of GASB Statement No. 67 reporting. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

The signing individuals are independent of the plan sponsor.

David T. Kausch and Brian B. Murphy are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

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Senior Consultant and Chief Actuary

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TABLE OF CONTENTS

| | <u>Page</u> |
|------------------|---|
| Section A | Executive Summary |
| | Executive Summary 1 |
| | Discussion 2 |
| Section B | Financial Statements |
| | Statement of Fiduciary Net Position 7 |
| | Statement of Changes in Fiduciary Net Position 8 |
| Section C | Required Supplementary Information |
| | Schedule of Changes in Net Pension Liability and Related Ratios Multiyear..... 9 |
| | Schedule of Net Pension Liability Multiyear..... 10 |
| | Schedule of Contributions Multiyear 11 |
| | Notes to Schedule of Contributions 12 |
| Section D | Notes to Financial Statements |
| | Sensitivity of Net Pension Liability to the Single Discount Rate Assumption..... 13 |
| | Summary of Population Statistics 14 |
| Section E | Summary of Benefits 15 |
| Section F | Actuarial Cost Method and Actuarial Assumptions |
| | Actuarial Assumptions, Input to Discount Rates, Mortality Assumptions, and Experience Studies 18 |
| | Miscellaneous and Technical Assumptions 19 |
| Section G | Calculation of the Single Discount Rate |
| | Calculation of the Single Discount Rate at End of Year (EOY)..... 25 |
| | Projection of Contributions End of Year (EOY) 26 |
| | Projection of Plan Fiduciary Net Position End of Year (EOY) 27 |
| | Present Values of Projected Benefits End of Year (EOY)..... 28 |
| | Projection of Plan Net Position and Benefit Payments End of Year (EOY) 30 |
| Section H | Glossary of Terms..... 31 |

SECTION A
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

AS OF JUNE 30, 2015

| | |
|--|---------------|
| Actuarial Valuation Date | June 30, 2014 |
| Pension Plan's Fiscal Year Ending Date (Measurement Date & Reporting Date) | June 30, 2015 |

Membership

| | |
|----------------------------------|----------------|
| Number of | |
| - Retirees and Beneficiaries | 8,395 |
| - DROP Members | 625 |
| - Inactive, Nonretired Members | 272 |
| - Active Members | 2,608 |
| - Total | 11,900 |
| Covered Payroll (excluding DROP) | \$ 132,566,687 |

Net Pension Liability

| | |
|---|------------------|
| Total Pension Liability | \$ 3,689,500,271 |
| Plan Fiduciary Net Position | 3,194,754,441 |
| Net Pension Liability | \$ 494,745,830 |
| Plan Fiduciary Net Position as a Percentage of Total Pension Liability | 86.59% |
| Net Pension Liability as a Percentage of Covered Payroll | 373.21% |

Development of the Single Discount Rate as of June 30, 2015

| | |
|---|-------|
| Single Discount Rate | 7.47% |
| Long-Term Expected Rate of Return | 7.47% |
| Long-Term Municipal Bond Rate * | 3.80% |
| Last Year Ending June 30 in the 2016 to 2115 Projection Period for which Projected Benefit Payments are Fully Funded | 2115 |

*Source: "State & local bonds" rate from Federal Reserve statistical release (H.15) as of June 25, 2015. The statistical release describes this rate as "Bond Buyer Index, general obligation, 20 years to maturity, mixed quality." In describing this index, the Bond Buyer notes that the bonds' average credit quality is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.

DISCUSSION

Implementation of GASB Statement No. 67

The System first implemented GASB Statement No. 67 for the plan year ending June 30, 2014.

Changes to the Actuarial Assumptions

For purposes of determining the total pension liability as of June 30, 2015, the following actuarial assumptions were changed/modified from those used in the June 30, 2014 funding valuation:

- At the direction of the System and approval of the Systems' Auditor, the long-term expected return on assets was 7.47% as of June 30, 2015 (it was 6.75% in the June 30, 2014 funding valuation, as required by the Plan of Adjustment).
- All other actuarial assumptions were the same as those used in the June 30, 2014 actuarial valuation (the funding valuation).

The Single Discount Rate (SDR) changed to 7.47% from 7.20% when compared to the June 30, 2014 GASB 67 valuation.

Changes to the Benefit Provisions

The total pension liability as of the beginning of the year was based on the plan provisions and actuarial assumptions as of June 30, 2014 (including the plan freeze of benefit accruals but not the reduction of the COLA). Except for the long-term investment return assumption, the total pension liability as of the end of the year was based on the plan provisions and actuarial assumptions as used in the June 30, 2014 funding valuation (including the reduction of the COLA). The projection of contributions used to determine this Single Discount Rate assumed that plan member contributions ceased as of June 30, 2014 and that employer contributions will be made at rates equal to those set by the final Plan of Adjustment through June 30, 2023 and a 30-year closed level dollar amortization thereafter. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments of 7.47% was applied to all periods of projected benefit payments to determine the total pension liability. Note projections are shown on two investment return rates: 6.75% (the rate mandated in the POA) and 7.47% (the current long-term expected rate provided by the Retirement System).

The 30-year period, beginning July 1, 2023, was chosen to illustrate the projection of net plan position due to its use in the City's 40-year forecasting included in the Plan of adjustment and the State requirements under the Michigan Constitution and the Public Employees Retirement System Investment Act (PERSIA). There have been a number of changes resulting from the Bankruptcy and the Board has not yet determined if changes to the funding policy are warranted and what those changes might be. The amortization method used in the projections is unchanged from the June 30, 2014 GASB Statement No. 67 report. In the June 30, 2014 actuarial valuation of Component II, we recommended alternate funding policies.

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, “Financial Reporting for Pension Plans,” replaces the requirements of GASB Statement No. 25, “Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans,” and GASB Statement No. 50, “Pension Disclosures.” The GASB Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability of employers and non-employer contributing entities for benefits provided through the pension plan.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report, and your internal staff will be responsible for preparing that information to comply with this accounting standard.

Financial Statements

GASB Statement No. 67 requires defined benefit pension plans to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position.

The *statement of fiduciary net position* presents the following items as of the end of the pension plan’s reporting period, such as:

- assets;
- deferred inflows and outflows of resources;
- liabilities; and
- fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The *statement of changes in fiduciary net position* presents the following for the plan’s reporting period:

- additions, such as contributions and investment income;
- deductions, such as benefit payments and expenses; and
- net increase or decrease in the fiduciary net position (the difference between additions and deductions).

Notes to Financial Statements

GASB Statement No. 67 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

- a description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs;
- the number and classes of employees covered by the benefit terms;
- the composition of the pension plan's Board and the authority under which benefit terms may be amended;
- a description of the plan's funding policy, which includes member and employer contribution requirements;
- the pension plan's investment policies;
- a description of how fair value is determined;
- concentrations of investments greater than or equal to 5%;
- annual money-weighted rate of return on pension plan investments;
- the portion of the present value of benefits to be provided through the pension plan to current active and inactive plan members;
- the pension plan's fiduciary net position;
- the net pension liability;
- the pension plan's fiduciary net position as a percentage of the total pension liability;
- significant assumptions and methods used to calculate the total pension liability;
- inputs to the discount rates;
- certain information about mortality assumptions and the dates of experience studies; and
- A description of the terms of the plan's deferred retirement option program (DROP) and the total DROP balance for those members currently participating in the DROP. ***Current DROP balances for members of this plan are not available and are not included. These balances are also excluded from the reported assets.***

Required Supplementary Information

GASB Statement No. 67 requires a 10-year fiscal history of:

- sources of changes in the net pension liability;
- information about the components of the net pension liability and related ratios, including the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll;
- comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy; and
- the annual money-weighted rate of return on pension plan investments for each year.

While the first two tables may be built prospectively as the information becomes available, sufficient information may currently be available for the third and fourth tables from prior financial statements.

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability is required to be rolled-forward from the actuarial valuation date to the pension plan's fiscal year end.

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2014 rolled to the plan year end of June 30, 2015.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.47%; the municipal bond rate is 3.80% (based on the weekly rate closest to but not later than the plan year end of the "state & local bonds" rate from Federal Reserve statistical release (H.15)); and the resulting Single Discount Rate is 7.47% as of June 30, 2015.

Limitation of Assets as a Percent of Total Pension Liability Measurements

This report includes a measure of the plan fiduciary net position as a percent of total pension liability (86.59% as of June 30, 2015). Unless otherwise indicated, with regard to any such measurements in this report:

- (1) This measurement is not intended to be a funded ratio or a measure of funded progress.
- (2) This measurement is inappropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations.
- (3) The measurement is inappropriate for assessing the need for or amount of future employer contribution.

Limitations of Project Scope

Actuarial Standards do not require the actuary to evaluate the ability of the Plan sponsor or other contributing entities to make required contributions when due. Such an evaluation was not within the scope of this project and is not within our area of expertise. Consequently, we have not made such an evaluation.

Plan

The Police and Fire Retirement System has two components. It is our understanding that Component I and Component II are separate plans and that the assets from one plan cannot be used to satisfy the liabilities of the other, even though assets may be pooled for investment purposes. Therefore, this report only includes the liabilities and reported assets of Component II. The liabilities and reported assets of Component I will be detailed in a separate report.

SECTION B

FINANCIAL STATEMENTS

This information is subject to the System's Auditor's review. Please let us know if the System's Auditor recommends any changes.

STATEMENT OF FIDUCIARY NET POSITION AS OF JUNE 30, 2015

Assets

| | | |
|---|-----------|----------------------|
| Cash and Deposits | \$ | 134,996,993 |
| Receivables | | |
| Accounts Receivable - Sale of Investments | \$ | 113,836,353 |
| Accrued Interest and Other Dividends | | - |
| Contributions | | - |
| Accounts Receivable - Other | | - |
| Total Receivables | <u>\$</u> | <u>113,836,353</u> |
| Investments | | |
| Fixed Income | \$ | 650,071,196 |
| Domestic Equities | | 1,011,781,651 |
| International Equities | | - |
| Real Estate | | 443,516,083 |
| Other | | 1,247,849,203 |
| Total Investments | <u>\$</u> | <u>3,353,218,133</u> |
| Total Assets | <u>\$</u> | <u>3,602,051,479</u> |

Liabilities

| | | |
|--|-----------|--------------------|
| Payables | | |
| Accounts Payable - Purchase of Investments | \$ | - |
| Accrued Expenses | | - |
| Accounts Payable - Other | | 407,297,038 |
| Total Liabilities | <u>\$</u> | <u>407,297,038</u> |

| | | |
|---|-----------|----------------------|
| Net Position Restricted for Pensions | <u>\$</u> | <u>3,194,754,441</u> |
|---|-----------|----------------------|

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR YEAR ENDED JUNE 30, 2015**

Additions

Contributions

| | |
|----------------------------|-----------------------|
| Employer | \$ 114,300,000 |
| Employee | 42,576 |
| Other | - |
| Total Contributions | <u>\$ 114,342,576</u> |

Investment Income

| | |
|---|-----------------------|
| Net Appreciation in Fair Value of Investments | \$ 122,736,820 |
| Interest and Dividends | - |
| Less Investment Expense | - |
| Net Investment Income | <u>\$ 122,736,820</u> |

Other

| | |
|------------------------|-----------------------|
| Total Additions | <u>\$ 239,998,750</u> |
|------------------------|-----------------------|

Deductions

| | |
|---|-----------------------|
| Benefit Payments, including Refunds of Employee Contributions | \$ 313,816,916 |
| Pension Plan Administrative Expense | 7,630,692 |
| Other | - |
| Total Deductions | <u>\$ 321,447,608</u> |

Net Increase in Net Position \$ (81,448,858)

Net Position Restricted for Pensions

| | |
|-------------------|-------------------------|
| Beginning of Year | <u>\$ 3,276,203,299</u> |
| End of Year | <u>\$ 3,194,754,441</u> |

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

This information is subject to the System's Auditor's review. Please let us know if the System's Auditor recommends any changes.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED
RATIOS MULTIYEAR

Ultimately 10 Fiscal Years will be Displayed

| Fiscal year ending June 30, | 2015 | 2014 |
|--|------------------|------------------|
| Total Pension Liability | | |
| Service Cost | \$ - | \$ 34,967,708 |
| Interest on the Total Pension Liability | 306,063,331 | 304,737,368 |
| Benefit Changes | (555,898,068) | (102,236,878) |
| Difference between Expected and Actual Experience | (59,621,651) | - |
| Assumption Changes | (95,014,469) | 540,356,835 |
| Benefit Payments | (313,816,916) | (285,512,629) |
| Refunds | - | (38,027,844) |
| Net Change in Total Pension Liability | (718,287,774) | 454,284,561 |
| Total Pension Liability - Beginning | 4,407,788,045 | 3,953,503,484 |
| Total Pension Liability - Ending (a) | \$ 3,689,500,271 | \$ 4,407,788,045 |
| Plan Fiduciary Net Position | | |
| Employer Contributions | \$ 114,300,000 | \$ - |
| Employee Contributions | 42,576 | 7,783,141 |
| Pension Plan Net Investment Income | 122,736,820 | 568,760,793 |
| Benefit Payments | (313,816,916) | (285,512,629) |
| Refunds | - | (38,027,844) |
| Pension Plan Administrative Expense | (7,630,692) | (11,373,226) |
| Other | 2,919,354 | - |
| Net Change in Plan Fiduciary Net Position | (81,448,858) | 241,630,235 |
| Plan Fiduciary Net Position - Beginning | 3,276,203,299 | 3,034,573,064 |
| Plan Fiduciary Net Position - Ending (b) | \$ 3,194,754,441 | \$ 3,276,203,299 |
| Net Pension Liability - Ending (a) - (b) | 494,745,830 | 1,131,584,746 |
| Plan Fiduciary Net Position as a Percentage | | |
| of Total Pension Liability | 86.59 % | 74.33 % |
| Covered Employee Payroll (excluding DROP) | \$ 132,566,687 | \$ 150,176,596 |
| Net Pension Liability as a Percentage | | |
| of Covered Employee Payroll | 373.21 % | 753.50 % |

Notes to Schedule:

N/A

A Special Funding Situation may occur if a non-city entity has a legal obligation to contribute directly to the retirement system. The Net Pension Liability shown here has not been adjusted for any potential special funding situation. Our understanding is that the City makes all the employer contributions into the fund, even though the City may receive monies from other entities as a result of the POA.

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF THE NET PENSION LIABILITY MULTIYEAR**

Ultimately 10 Fiscal Years will be Displayed

| FY Ending June 30, | Total Pension Liability | Plan Net Position | Net Pension Liability | Plan Net Position as a % of Total Pension Liability | Covered Payroll* | Net Pension Liability as a % of Covered Payroll |
|-------------------------------|--|------------------------------|----------------------------------|--|-----------------------------|--|
| 2014 | \$ 4,407,788,045 | \$ 3,276,203,299 | \$ 1,131,584,746 | 74.33% | \$ 150,176,596 | 753.50% |
| 2015 | 3,689,500,271 | 3,194,754,441 | 494,745,830 | 86.59% | 132,566,687 | 373.21% |

* Covered payroll shown is the reported payroll on the actuarial valuation date (census date). Actual covered payroll paid during the year was unavailable. Covered payroll for this purpose excludes DROP member payroll.

SCHEDULE OF CONTRIBUTIONS MULTIYEAR

| FY Ending June 30, | Actuarially Determined Contribution# | Actual Contribution | Contribution Deficiency (Excess) | Covered Payroll | Actual Contribution as a % of Covered Payroll |
|-------------------------------|---|--------------------------------|---|----------------------------|--|
| 2014 | \$ 62,954,305 | \$ - | \$ 62,954,305 | \$ 186,694,166 * | 0.00% |
| 2015 | N/A | 114,300,000 | N/A | 132,566,687 | 86.22% |

* Includes DROP members, consistent with Plan Funding.

Beginning with FY 2015, employer contributions are set forth in the POA through 2023 and are not actuarially determined. Employer contributions will again be actuarially determined in FY 2024 and beyond.

NOTES TO SCHEDULE OF CONTRIBUTIONS

Contribution Requirement: The employer contributions for Fiscal Years 2015 to 2023 are set by the POA and not actuarially determined. The schedule of POA mandated contributions are shown below:

| Fiscal Year | Contribution Source (Millions) | | Total |
|--------------|-----------------------------------|-----------------|-----------------|
| | State | DIA | |
| 2015 | \$ 96.0 | \$ 18.3 | \$ 114.3 |
| 2016 | - | 18.3 | 18.3 |
| 2017 | - | 18.3 | 18.3 |
| 2018 | - | 18.3 | 18.3 |
| 2019 | - | 18.3 | 18.3 |
| 2020 | - | 18.3 | 18.3 |
| 2021 | - | 18.3 | 18.3 |
| 2022 | - | 18.3 | 18.3 |
| 2023 | - | 18.3 | 18.3 |
| Total | \$ 96.0 | \$ 164.7 | \$ 260.7 |

Beginning with Fiscal Year 2024, employer contribution will be actuarially determined.

SCHEDULE OF INVESTMENT RETURNS

This information was not available to Gabriel, Roeder, Smith & Company for this report.

SECTION D

NOTES TO FINANCIAL STATEMENTS

This information is subject to the System's Auditor's review. Please let us know if the System's Auditor recommends any changes.

Single Discount Rate

A Single Discount Rate of 7.47% was used to measure the total pension liability as of June 30, 2015. This Single Discount Rate was based on the expected rate of return on pension plan investments of 7.47% as directed by the System and the System's Auditor. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will cease as of June 30, 2015 and that employer contributions will be made at rates equal to those set by the final Plan of Adjustment through June 30, 2023 and the System's funding policy thereafter. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.47%, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher.

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

| | Current Single Discount | | |
|--------------------------------------|-------------------------|--------------------------|----------------------|
| | 1% Decrease 6.47% | Rate Assumption 7.47% | 1% Increase 8.47% |
| Total Pension Liability (TPL) | \$4,065,716,645 | \$3,689,500,271 | \$3,373,672,115 |
| Net Position Restricted for Pensions | 3,194,754,441 | 3,194,754,441 | 3,194,754,441 |
| Net Pension Liability (NPL) | \$870,962,204 | \$494,745,830 | \$178,917,674 |

Expected Real Returns by Asset Class

This information was not available to Gabriel, Roeder, Smith & Company for this report.

Summary of Population Statistics

| | |
|---|--------|
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 8,395 |
| DROP Members | 625 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 272 |
| Active Plan Members | 2,608 |
| Total Plan Members | 11,900 |

Additional information regarding the plan population may be found in the June 30, 2014 actuarial valuation of the System.

Additional Note

The interest on the ASF was capped. If actual interest rate earned on the fund exceeds the cap, the excess (that would have been payable to the ASF if not for the cap) is transferred to Component I if needed to fund transition liabilities. We have assumed no future transfers of assets to Component I in this valuation. If future transfers to Component I are triggered, Component II liabilities and assets will be reduced in equal amounts.

Liabilities and reported assets for Component I are not included in this report and will be detailed in a separate report.

The June 30, 2014 GASB Statement No. 67 report included a note indicating that the POA mandated change in the post-retirement COLA (from 2.25% to 1.0125%) resulted in a reduction of \$540.2 million. That measurement was based on the 6/30/2013 census data (the most recent data available at the time). This valuation indicates the reduction is \$555.9 million based on the 6/30/2014 census data. The difference in these amounts is mostly due to the updating of the census data and the difference in measurement dates.

SECTION E

SUMMARY OF BENEFITS

SUMMARY OF BENEFIT PROVISIONS (JULY 1, 2014)

Component II Frozen Benefits

All Component II benefits are frozen as of June 30, 2014 based on service and average final compensation accrued as of that date and the provisions of the Detroit Police and Fire Retirement System as it existed on June 30, 2014 and all future cost-of-living adjustments (“COLA’s”) were reduced from 2.25% to 1.0125%. The benefits evaluated in this report are the frozen reduced benefits. Component II benefits are payable after separation from service, upon meeting the eligibility conditions of the plan as it existed on June 30, 2014, regardless of whether the individual is eligible to receive a Component I benefit at that time.

Our understanding of the June 30, 2014 plan provisions is provided below for completeness. The material below does not have legal standing and is not intended to cover all potential situations that could occur. If there are discrepancies between the description below, and appropriate legal documents, the latter necessarily govern.

Age and Service Retirement

Eligibility - 25 years of service regardless of age. 20 years of service regardless of age for eligible DPOA and DFFA members. DFFA members must retire by age 60.

Annual Amount - An annuity equal to the actuarial equivalent of the member’s accumulated contribution account plus a defined benefit, which, when added to the annuity will provide the following:

Pre-1969 Members - For all service earned up to April 5, 2011 for LSA and Fire equivalent members, and up to September 1, 2011 for DPOA and Fire equivalent members, 2.5% of AFC times the first 25 years of service, with a maximum allowance of 15/22 of a police officer’s or firefighter’s annual rate of compensation (actuarially reduced to reflect early payment).

For all service earned after April 5, 2011 for LSA and Fire equivalent members, and after September 1, 2011 for DPOA and Fire equivalent members, 2.1% of AFC times the first 25 years of service, with a maximum allowance of 15/22 of a police officer’s or firefighter’s annual rate of compensation.

1969 Plan Members - For all service earned up to April 5, 2011 for LSA and Fire equivalent members, and up to September 1, 2011 for DPOA and Fire equivalent members, 2.5% of AFC times the first 25 years of service plus 2.1% of AFC times each of the next 10 years of service.

For all service earned after April 5, 2011 for LSA and Fire equivalent members, and after September 1, 2011 for DPOA and Fire equivalent members, 2.1% of AFC times each year of service, up to 35 years of service.

Members may elect to receive their accumulated contribution account in a lump sum after 25 years of service (20 years of service for eligible DPOA and DFFA members). The defined benefit at retirement is then reduced by the actuarial equivalent of the amount of principal withdrawn. No reduction is made with regard to the interest portion of the withdrawal. Pre-1969 plan members may elect 1969 plan benefits at the time of retirement.

SUMMARY OF BENEFIT PROVISIONS (CONTINUED)

Type of Average Final Compensation (AFC) - Average of the current compensation for the ranks held in each of last 5 years (last 3 years for DPCOA, Executive Members and their Fire equivalents). Pension benefits for non-union employees may not be diminished due to a reduction in compensation because of fiscal emergency. AFC includes prior longevity distributions during the averaging period in accordance with the following schedule: 1% of compensation after 5 years of service, 2% after 11 years, 3% after 16 years and 4% after 21 years. A member may elect that upon retirement or upon death before retirement either (i) a lump sum payment equal to 85% (100% for DPOA and DPCOA members) of the amount of his or her unused accumulated sick leave bank, or (ii) to have the 3-year average of 25% of the value of the accumulated unused sick leave bank added to his or her AFC. Any member electing the AFC adjustment option will also be paid a lump sum equal to the remaining value of the sick leave bank as provided in (i) above. Lump sum payments are not paid by the retirement system.

Deferred Retirement (vested benefit)

Eligibility - 10 years of service for DPOA and Fire equivalents, age 40 with 8 years of service for all others.

Annual Amount - Same as regular retirement but based on average final compensation and credited service at the time of termination.

Benefit Commencement - DPOA and Fire equivalent members hired after 6/30/85: Unreduced benefit begins at age 62. **All other members:** Unreduced benefit begins at the age when the member would have first been eligible for regular retirement had the member continued in City service. **All** members may elect a reduced benefit payable immediately.

Duty Disability Retirement

Eligibility - No age or service requirement.

Annual Amount - A basic benefit of 50% of final compensation and a supplemental benefit of 16-2/3% of final compensation is payable for 24 months. After 24 months, members disabled from any occupation continue to receive both benefits; otherwise, only the 50% benefit is then payable. Upon attaining 25 years of service, the disability benefit is 50% of final compensation. Members convert to regular retirement benefit at age 65. Worker's compensation payments are offset. Members who have already filed under the old duty disability plan will receive 66-2/3% of final compensation payable to eligibility date for regular retirement.

Non-Duty Disability Retirement

Eligibility - 5 years of service.

Annual Amount - Computed as a regular retirement benefit, but based on average final compensation and credited service at the time of disability. Minimum benefit is 20% of average final compensation.

Duty Death Before Retirement

Eligibility - No age or service requirement.

Annual Amount - Surviving spouse receives 5/11 of police officer's or firefighter's compensation and each child under age 18 receives 1/10 of such compensation with a maximum total of 7/33 of such compensation. If there is no surviving spouse, each child receives 1/4 of such compensation with a maximum total of 1/2 of such compensation. If there is no surviving spouse or children, each dependent parent receives 1/6 of such compensation. Worker's compensation payments are offset.

SUMMARY OF BENEFIT PROVISIONS (CONCLUDED)

Non-Duty Death Before Retirement

Eligibility - No age or service requirement.

Annual Amount - Same as a regular retirement benefit to a surviving spouse, but reduced in accordance with a 100% joint and survivor option election. Minimum benefit is 20% of average final compensation. Each child under 18 receives 1/7 of police officer's or firefighter's compensation with a maximum total of 2/7 of such compensation. If there is no spouse or children, each dependent parent receives 1/7 of such compensation.

Post-Retirement Cost-of-Living Adjustments

- Pre-1969 Members** - Allowances increase in proportion to active member compensation for the corresponding rank.
- 1969 Plan Members** - Police retired after July 1, 2001, certain Police classes retired after July 1, 1998 and all Fire members: For all service earned up to April 5, 2011 for LSA members (September 1, 2011 for DPOA members) pensions increase by 2.25% of the **current** pension amount each July 1. No cost-of-living adjustments for service earned after April 5, 2011 for LSA members (September 1, 2011 for DPOA members).

Member Contributions

5% of covered compensation payable until first eligible for regular retirement.

DROP plan

Members with 25 years (20 years for DPOA members) of service may elect to participate in the DROP. When a DROP election is made, the member ceases to accrue any further age and service retirement benefits. Seventy five percent (75%) of the member's benefit (accrued to their DROP date) is contributed to a DROP account (a defined contribution account). At retirement the member is entitled to the balance in the DROP account and a monthly benefit equal to 100% of their benefit accrued to their DROP date, increased by any post-retirement increases that the member would have received, had the member been retired. Fire members must retire from the DROP plan at age 60. Participation in the DROP is limited to 10 years for LSA members electing to DROP after April 5, 2011.

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

**SUMMARY OF ASSUMPTIONS USED FOR DPFRS ACTUARIAL
VALUATION
ASSUMPTIONS ADOPTED BY BOARD OF TRUSTEES**

ASSUMPTION REVIEW

All assumptions are estimates of future experience except as noted. The rationale for the assumptions is based on experience studies unless noted otherwise.

ECONOMIC ASSUMPTIONS

For the Determination of the June 30, 2015 TPL:

The investment return rate used in the valuation was 7.47% per year, compounded annually (net after investment expenses). This assumption was provided by the Retirement System. We were not able to evaluate it.

NON-ECONOMIC ASSUMPTIONS

The mortality table used to measure retired life mortality is the RP-2014 Blue Collar Annuitant Table for males and females. Tables were extended below age 50 with a cubic spline to the published Juvenile rates. Pre-retirement mortality is the RP-2014 Blue Collar Employee Tables for males and females. The tables are projected to be fully generational, based on the 2-dimensional, sex distinct mortality improvement scale MP-2014 (which was published and intended to be used with RP-2014). This table was first used as of June 30, 2014. The rationale for the mortality assumption is based on the 2008-2013 Mortality Experience Study issued February 13, 2015.

The probabilities of age/service retirement for members eligible to retire are shown on page 22. The rationale is based on the 2002-2007 Experience Study. However, probabilities were modified effective with the June 30, 2014 valuation to reflect a change in the modeling of the future DROP members, consistent with the plan closure. The revised probabilities were selected so that, when combined with the model change, the effect on the present value of benefits would be immaterial.

The probabilities of separation from service (including *death-in-service*) are shown for sample ages on page 23. These probabilities were first used for the June 30, 2008 valuation. The rationale (excluding death-in-service probabilities) is based on the 2002-2007 Experience Study. The rationale for the death-in-service probabilities is based on the 2008-2013 Mortality Experience Study.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

| | |
|------------------------------------|---|
| Marriage Assumption: | 100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. This assumption accounts for potential dependent children/dependent parent death benefits. No other assumption is made for surviving children/dependent parents. Male spouses are assumed to be three years older than female spouses. |
| Pay Increase Timing: | N/A |
| Decrement Timing: | Decrements are assumed to occur mid-year. |
| Eligibility Testing: | Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date of decrement. |
| Decrement Relativity: | Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects. |
| Decrement Operation: | Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility. |
| Incidence of Contributions: | Employer contributions are assumed to be received on the last day of the fiscal year. |
| Longevity in AFC: | Longevity payments were included directly in the AFC data provided by the System. No further adjustment was included. |
| Unused Sick Leave Payout: | Sick leave banks as of June 30, 2014 were included in data provided by the System. No further adjustment was included. |
| Administrative Expense: | 3.0% of payroll. 90% of the administrative expenses were allocated to Component II and 10% to Component I based on actual administrative expenses paid. |
| Post-Retirement COLA: | Active members are assumed to receive a 0.9% COLA rather than 1.0125% because the annuity portion is not subject to the COLA. Post retirement increases for retired members were based on the plan in effect at retirement. For the pre-69 plan members, future COLA's are assumed to be the same as wage inflation for active members. The COLA rate is prorated by the ratio of COLA eligible service to total service at retirement. |
| AFC Period: | AFC data was provided by the System. |
| Disability Change Age: | The duty disability benefit is assumed to change at normal retirement age. |

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS (CONCLUDED)

| | |
|-------------------------------------|--|
| DROP Assumption: | All active members not in the DROP are assumed to have a 40% chance of retiring or entering the DROP in their first five years of retirement eligibility with a 60% chance of entering the DROP. |
| Workers Compensation Offset: | No Workers Compensation offsets are assumed for duty disability benefits. |
| DROP Account: | DROP account balances are not reported. No liability is included for DROP account balances. |
| Class Codes: | For valuation purposes, members are categorized as DPOA, DFFA or LSA based on class codes provided by the Retirement System and are primarily used in the valuation to determine normal retirement eligibility (20 & Out versus 25 & Out). Therefore, counts in the valuation may not represent actual membership in the respective associations. |
| Retiree Benefit Estimate: | Reported retiree benefits as of June 30, 2014 were adjusted to include the effect of the COLA reduction from 2.25% to 1.0125%, effective March 2015 as administered. |
| Frozen Benefit Estimate: | Reported AFC as of June 30, 2014 was adjusted to include 25% of unused sick leave (to a maximum of 25 days per year of service) plus a load of 6% for data consistency with sample actual computations. |
| Form of Payment: | The actuarial equivalent basis for optional forms of payment and early retirement are based on the 1971 Group Annuity Mortality table projected to 1984, a 7.8% interest rate and a 0% COLA assumption. Annuity withdrawal factors use the same mortality and COLA assumptions with a 5% interest rate. No adjustment has been made for alternate forms of payment elections. Principle balances of accumulated member contributions were converted to life annuity offsets based on plan factors for the valuation. |

The rationale for the miscellaneous and technical assumptions is the 2002-2007 Experience Study, modified as necessary for changes in data or administration.

**SINGLE LIFE RETIREMENT VALUES
BASED ON RP-2014 BLUE COLLAR
FOR MALES AND FEMALES**

| Sample Attained Ages in 2014 | Future Life Expectancy (years) | |
|---------------------------------------|--------------------------------------|---------|
| | Males | Females |
| 45 | 39.15 | 42.53 |
| 50 | 34.17 | 37.47 |
| 55 | 29.40 | 32.57 |
| 60 | 24.86 | 27.80 |
| 65 | 20.53 | 23.20 |
| 70 | 16.49 | 18.83 |
| 75 | 12.79 | 14.82 |
| 80 | 9.53 | 11.24 |

PROBABILITIES OF SERVICE RETIREMENT

| Service | Percent of Eligible Active Members Retiring Within Next Year | | | |
|---------|---|---------|--------|---------|
| | Police | | Fire | |
| | 20&Out | 25 &Out | 20&Out | 25 &Out |
| 19 | 40% | | 40% | |
| 20 | 40% | | 40% | |
| 21 | 40% | | 40% | |
| 22 | 40% | | 40% | |
| 23 | 40% | | 40% | |
| 24 | 100% | 40% | 100% | 40% |
| 25 | 100% | 40% | 100% | 40% |
| 26 | 100% | 40% | 100% | 40% |
| 27 | 100% | 40% | 100% | 40% |
| 28 | 100% | 40% | 100% | 40% |
| 29 | 100% | 100% | 100% | 100% |
| 30 | 100% | 100% | 100% | 100% |
| 31 | 100% | 100% | 100% | 100% |
| 32 | 100% | 100% | 100% | 100% |
| 33 | 100% | 100% | 100% | 100% |
| 34 | 100% | 100% | 100% | 100% |
| 35 | 100% | 100% | 100% | 100% |
| 36 | 100% | 100% | 100% | 100% |
| 37 | 100% | 100% | 100% | 100% |
| 38 | 100% | 100% | 100% | 100% |
| 39 | 100% | 100% | 100% | 100% |
| 40 | 100% | 100% | 100% | 100% |
| Ref | 922 | 922 | 922 | 922 |

| Age | Percent of Eligible Active Members Retiring Within Next Year | |
|-----|---|------|
| | Police | Fire |
| | 60 | 40% |
| 61 | 40% | 100% |
| 62 | 40% | 100% |
| 63 | 40% | 100% |
| 64 | 40% | 100% |
| 65 | 100% | 100% |
| 66 | 100% | 100% |
| 67 | 100% | 100% |
| 68 | 100% | 100% |
| 69 | 100% | 100% |
| 70 | 100% | 100% |
| Ref | 922 | 1 |

Members eligible for 20 & Out are assumed to be first eligible for normal retirement after 19 years of service due to their ability to purchase service. Members eligible for 25 & Out are assumed to be eligible for normal retirement after 24 years of service due to their ability to purchase service. Members are also eligible to retire at age 60 with no service requirement. The rationale is based on the 2002-2007 Experience Study.

PROBABILITIES OF SEPARATION

| Sample Ages | Years of Service | % of Active Members Withdrawing | |
|-------------|------------------|---------------------------------|------------------|
| | | within Next Year | |
| | | Police | Fire |
| ALL | 0 | 8.50% | 5.00% |
| | 1 | 7.50% | 4.00% |
| | 2 | 6.00% | 3.00% |
| | 3 | 5.00% | 2.00% |
| | 4 | 4.50% | 2.00% |
| 25 | 5 & Over | 4.50% | 1.96% |
| 30 | | 3.30% | 1.62% |
| 35 | | 2.30% | 1.11% |
| 40 | | 1.70% | 0.77% |
| 45 | | 1.50% | 0.60% |
| 50 | | 1.10% | 0.51% |
| 55 | | 0.80% | 0.51% |
| 60 | | 0.80% | 0.51% |
| Ref | | 566 207 | 230 113 x .85 |

| Sample Ages | % of Active Members Becoming Disabled within Next Year | | | |
|-------------|--|-----------|------------|-----------|
| | Police | | Fire | |
| | Ordinary | Duty | Ordinary | Duty |
| 25 | 0.06% | 0.13% | 0.07% | 0.34% |
| 30 | 0.07% | 0.19% | 0.08% | 0.52% |
| 35 | 0.08% | 0.34% | 0.09% | 0.90% |
| 40 | 0.11% | 0.49% | 0.12% | 1.30% |
| 45 | 0.16% | 0.73% | 0.18% | 1.92% |
| 50 | 0.47% | 1.16% | 0.53% | 3.06% |
| 55 | 0.73% | 1.96% | 0.82% | 5.18% |
| 60 | 0.83% | 2.82% | 0.94% | 7.47% |
| Ref | 105 x 0.75 | 90 x 0.85 | 105 x 0.85 | 90 x 2.25 |

The rationale is based on the 2002-2007 Experience Study.

SECTION G

CALCULATION OF THE SINGLE DISCOUNT RATE

CALCULATION OF THE SINGLE DISCOUNT RATE AT END OF YEAR

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.47%; the municipal bond rate is 3.80%; and the resulting SDR is 7.47% as of June 30, 2015.

The tables in this section provide background for the development of the SDR.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities). For purposes of determining the discount rate as of June 30, 2015, the employer contributions for the 10-year period ending June 30, 2023 were set by the 8th Amended Plan of Adjustment (POA). Subsequent employer contributions were determined by a closed 30-year level dollar amortization of any unfunded actuarial accrued liability using 7.47% interest, net of all expenses, consistent with the 100% funded target by 2053 in the POA and State Law.

We have illustrated the projection in two ways: using a 6.75% rate of return and using a 7.47% rate of return. Both show that the plan is expected to pay all benefits from the trust. While only the projection using the 7.47% rate of return is needed for the report, the second projection is provided for consistency with the Status/Funding valuation which must use the 6.75% interest rate as mandated in the POA.

Rates of Return: The 6.75% rate of return mandated by the POA is net after administrative expenses. We therefore do not show the administrative expenses in that projection. The 7.47% rate of return was before administrative expenses. Therefore, the projections assumed that any administration expenses incurred by the plan will directly increase employer contributions beginning with FY 2024. Both rates are net of investment expenses.

Administrative Expenses: For purposes of the projection using a 7.47% rate of return, administrative expenses were assumed to be related to payroll. Payroll was increased by an assumed wage inflation of 2.00% for 5 years, 2.50% for the next 5 years and 3.00% thereafter. Since benefits are frozen, the wage inflation assumption does not affect anything other than the administrative expenses.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR. For purposes of determining the discount rate as of June 30, 2015, the benefit payments reflect the plan provisions in force as of June 30, 2015.

Unfunded Actuarial Accrued Liabilities. Actual employer contributions through June 30, 2023 are set by the POA. The amortization period and method after 2023 has not yet been established by the Board.

**SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF CONTRIBUTIONS AT 7.47%
END OF YEAR**

| Fiscal Year Ending June 30, | Projected Contributions from Current Employees | Projected Service Cost | Administrative Expense Contributions# | Projected UAL Contributions | Projected Total Contributions |
|--------------------------------------|--|---------------------------|---|--------------------------------|----------------------------------|
| 2016 | \$ - | \$ - | \$ 3,121,688 | \$ 15,178,312 | \$ 18,300,000 |
| 2017 | - | - | 2,918,089 | 15,381,911 | 18,300,000 |
| 2018 | - | - | 2,734,397 | 15,565,603 | 18,300,000 |
| 2019 | - | - | 2,535,636 | 15,764,364 | 18,300,000 |
| 2020 | - | - | 2,335,879 | 15,964,121 | 18,300,000 |
| 2021 | - | - | 2,170,353 | 16,129,647 | 18,300,000 |
| 2022 | - | - | 2,037,716 | 16,262,284 | 18,300,000 |
| 2023 | - | - | 1,933,297 | 16,366,703 | 18,300,000 |
| 2024 | - | - | 1,829,971 | 57,812,507 | 59,642,478 |
| 2025 | - | - | 1,724,602 | 57,812,507 | 59,537,109 |
| 2026 | - | - | 1,619,682 | 57,812,507 | 59,432,189 |
| 2027 | - | - | 1,509,215 | 57,812,507 | 59,321,722 |
| 2028 | - | - | 1,395,959 | 57,812,507 | 59,208,466 |
| 2029 | - | - | 1,283,452 | 57,812,507 | 59,095,959 |
| 2030 | - | - | 1,177,523 | 57,812,507 | 58,990,030 |
| 2031 | - | - | 1,072,161 | 57,812,507 | 58,884,668 |
| 2032 | - | - | 964,295 | 57,812,507 | 58,776,802 |
| 2033 | - | - | 859,084 | 57,812,507 | 58,671,591 |
| 2034 | - | - | 751,394 | 57,812,507 | 58,563,901 |
| 2035 | - | - | 645,805 | 57,812,507 | 58,458,312 |
| 2036 | - | - | 558,398 | 57,812,507 | 58,370,905 |
| 2037 | - | - | 481,317 | 57,812,507 | 58,293,824 |
| 2038 | - | - | 414,209 | 57,812,507 | 58,226,716 |
| 2039 | - | - | 343,472 | 57,812,507 | 58,155,979 |
| 2040 | - | - | 269,064 | 57,812,507 | 58,081,571 |
| 2041 | - | - | 209,840 | 57,812,507 | 58,022,347 |
| 2042 | - | - | 161,351 | 57,812,507 | 57,973,858 |
| 2043 | - | - | 122,895 | 57,812,507 | 57,935,402 |
| 2044 | - | - | 94,637 | 57,812,507 | 57,907,144 |
| 2045 | - | - | 70,753 | 57,812,507 | 57,883,260 |
| 2046 | - | - | 51,291 | 57,812,507 | 57,863,798 |
| 2047 | - | - | 37,082 | 57,812,507 | 57,849,589 |
| 2048 | - | - | 26,116 | 57,812,507 | 57,838,623 |
| 2049 | - | - | 18,150 | 57,812,507 | 57,830,657 |
| 2050 | - | - | 12,322 | 57,812,507 | 57,824,829 |
| 2051 | - | - | 8,236 | 57,812,507 | 57,820,743 |
| 2052 | - | - | 5,252 | 57,812,507 | 57,817,759 |
| 2053 | - | - | 3,000 | 57,812,507 | 57,815,507 |
| 2054 | - | - | 1,687 | - | 1,687 |
| 2055 | - | - | 658 | - | 658 |
| 2056 | - | - | 149 | - | 149 |
| 2057 | - | - | - | - | - |
| 2058 | - | - | - | - | - |
| 2059 | - | - | - | - | - |
| 2060 | - | - | - | - | - |
| 2061 | - | - | - | - | - |
| 2062 | - | - | - | - | - |
| 2063 | - | - | - | - | - |
| 2064 | - | - | - | - | - |
| 2065 | - | - | - | - | - |

Expenses assumed to be paid by employer.

SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF PLAN FIDUCIARY NET POSITION AT 7.47% END OF YEAR

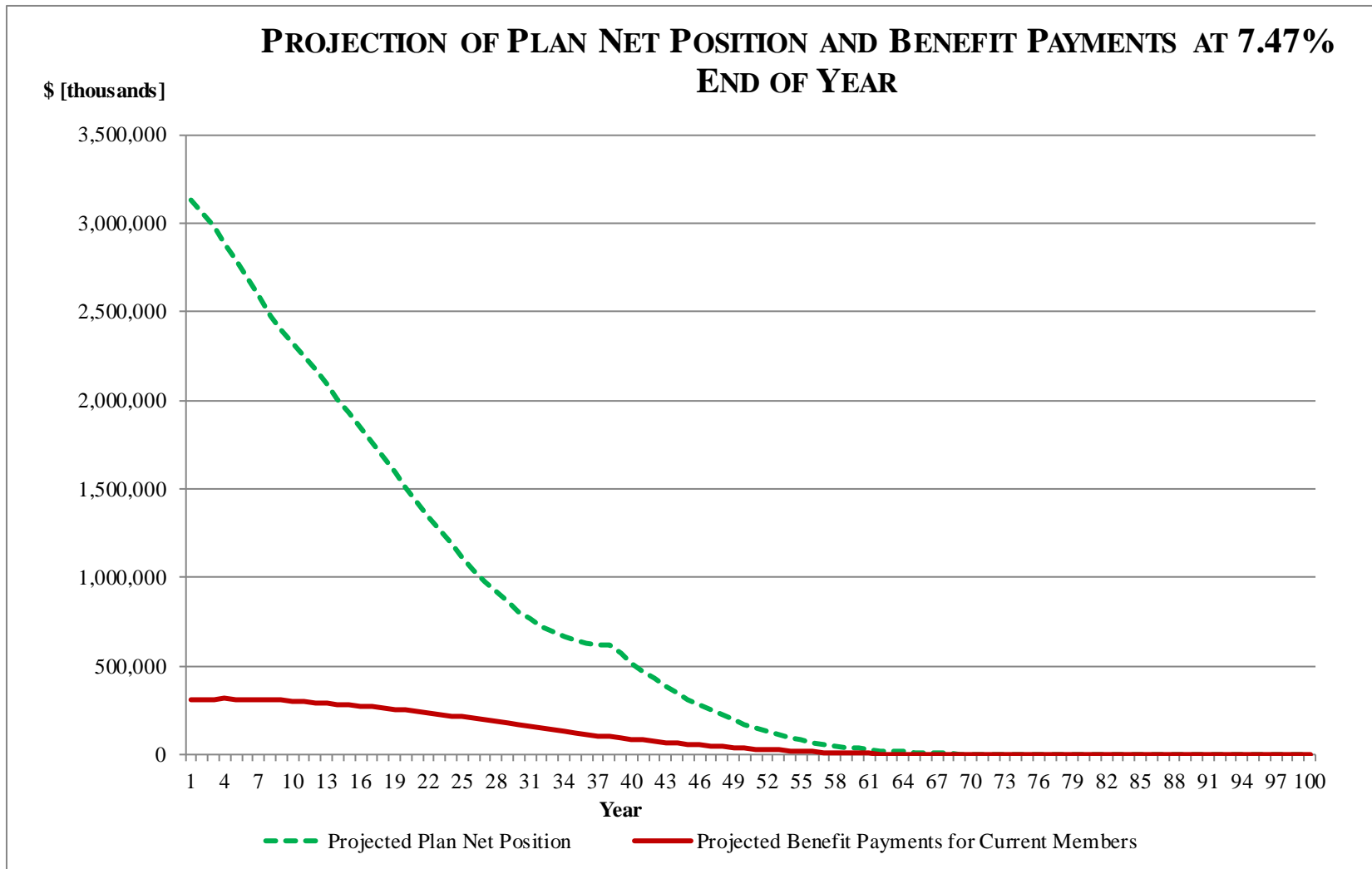
| Fiscal Year Ending June 30, | Projected Beginning Plan Net Position | Projected Total Contributions | Projected Benefit Payments | Projected Administrative Expenses | Projected Investment Earnings at 7.47% | Projected Ending Plan Net Position |
|--------------------------------------|--|----------------------------------|-------------------------------|---|--|---------------------------------------|
| | (a) | (b) | (c) | (d) | (e) | (f)=(a)+(b)-(c)-(d)+(e) |
| 2016 | \$ 3,194,754,441 | \$ 18,300,000 | \$ 309,149,750 | \$ 3,121,688 | \$ 227,866,053 | \$ 3,128,649,056 |
| 2017 | 3,128,649,056 | 18,300,000 | 309,429,965 | 2,918,089 | 222,925,171 | 3,057,526,173 |
| 2018 | 3,057,526,173 | 18,300,000 | 312,427,000 | 2,734,397 | 217,509,105 | 2,978,173,881 |
| 2019 | 2,978,173,881 | 18,300,000 | 316,715,172 | 2,535,636 | 211,431,500 | 2,888,654,574 |
| 2020 | 2,888,654,574 | 18,300,000 | 316,021,842 | 2,335,879 | 204,777,164 | 2,793,374,017 |
| 2021 | 2,793,374,017 | 18,300,000 | 314,431,468 | 2,170,353 | 197,724,108 | 2,692,796,304 |
| 2022 | 2,692,796,304 | 18,300,000 | 311,767,449 | 2,037,716 | 190,313,527 | 2,587,604,666 |
| 2023 | 2,587,604,666 | 18,300,000 | 309,437,495 | 1,933,297 | 182,544,998 | 2,477,078,873 |
| 2024 | 2,477,078,873 | 59,642,478 | 306,972,847 | 1,829,971 | 175,899,242 | 2,403,817,775 |
| 2025 | 2,403,817,775 | 59,537,109 | 303,489,377 | 1,724,602 | 170,554,403 | 2,328,695,307 |
| 2026 | 2,328,695,307 | 59,432,189 | 299,821,826 | 1,619,682 | 165,077,271 | 2,251,763,259 |
| 2027 | 2,251,763,259 | 59,321,722 | 296,071,982 | 1,509,215 | 159,467,981 | 2,172,971,765 |
| 2028 | 2,172,971,765 | 59,208,466 | 292,106,359 | 1,395,959 | 153,727,705 | 2,092,405,618 |
| 2029 | 2,092,405,618 | 59,095,959 | 287,709,676 | 1,283,452 | 147,870,673 | 2,010,379,122 |
| 2030 | 2,010,379,122 | 58,990,030 | 282,872,305 | 1,177,523 | 141,920,716 | 1,927,240,040 |
| 2031 | 1,927,240,040 | 58,884,668 | 277,672,562 | 1,072,161 | 135,900,939 | 1,843,280,924 |
| 2032 | 1,843,280,924 | 58,776,802 | 272,073,568 | 964,295 | 129,834,550 | 1,758,854,413 |
| 2033 | 1,758,854,413 | 58,671,591 | 266,121,000 | 859,084 | 123,746,214 | 1,674,292,133 |
| 2034 | 1,674,292,133 | 58,563,901 | 259,741,412 | 751,394 | 117,663,398 | 1,590,026,626 |
| 2035 | 1,590,026,626 | 58,458,312 | 252,995,394 | 645,805 | 111,616,191 | 1,506,459,930 |
| 2036 | 1,506,459,930 | 58,370,905 | 245,902,026 | 558,398 | 105,633,925 | 1,424,004,337 |
| 2037 | 1,424,004,337 | 58,293,824 | 238,359,045 | 481,317 | 99,751,149 | 1,343,208,947 |
| 2038 | 1,343,208,947 | 58,226,716 | 230,461,151 | 414,209 | 94,005,408 | 1,264,565,710 |
| 2039 | 1,264,565,710 | 58,155,979 | 222,331,580 | 343,472 | 88,428,929 | 1,188,475,567 |
| 2040 | 1,188,475,567 | 58,081,571 | 213,902,612 | 269,064 | 83,054,148 | 1,115,439,609 |
| 2041 | 1,115,439,609 | 58,022,347 | 205,273,255 | 209,840 | 77,914,864 | 1,045,893,725 |
| 2042 | 1,045,893,725 | 57,973,858 | 196,418,510 | 161,351 | 73,044,556 | 980,332,278 |
| 2043 | 980,332,278 | 57,935,402 | 187,416,982 | 122,895 | 68,477,268 | 919,205,071 |
| 2044 | 919,205,071 | 57,907,144 | 178,337,813 | 94,637 | 64,244,066 | 862,923,831 |
| 2045 | 862,923,831 | 57,883,260 | 169,260,361 | 70,753 | 60,372,794 | 811,848,771 |
| 2046 | 811,848,771 | 57,863,798 | 160,241,849 | 51,291 | 56,888,263 | 766,307,691 |
| 2047 | 766,307,691 | 57,849,589 | 151,347,541 | 37,082 | 53,812,564 | 726,585,221 |
| 2048 | 726,585,221 | 57,838,623 | 142,619,783 | 26,116 | 51,165,407 | 692,943,351 |
| 2049 | 692,943,351 | 57,830,657 | 134,106,619 | 18,150 | 48,964,600 | 665,613,839 |
| 2050 | 665,613,839 | 57,824,829 | 125,853,921 | 12,322 | 47,225,773 | 644,798,197 |
| 2051 | 644,798,197 | 57,820,743 | 117,880,272 | 8,236 | 45,963,297 | 630,693,729 |
| 2052 | 630,693,729 | 57,817,759 | 110,203,936 | 5,252 | 45,191,241 | 623,493,541 |
| 2053 | 623,493,541 | 57,815,507 | 102,836,422 | 3,000 | 44,923,608 | 623,393,233 |
| 2054 | 623,393,233 | 1,687 | 95,782,116 | 1,687 | 43,054,437 | 570,665,554 |
| 2055 | 570,665,554 | 658 | 89,041,495 | 658 | 39,362,908 | 520,986,968 |
| 2056 | 520,986,968 | 149 | 82,609,389 | 149 | 35,887,830 | 474,265,409 |
| 2057 | 474,265,409 | - | 76,477,434 | - | 32,622,634 | 430,410,608 |
| 2058 | 430,410,608 | - | 70,635,525 | - | 29,560,946 | 389,336,030 |
| 2059 | 389,336,030 | - | 65,073,323 | - | 26,696,682 | 350,959,389 |
| 2060 | 350,959,389 | - | 59,781,200 | - | 24,024,048 | 315,202,237 |
| 2061 | 315,202,237 | - | 54,750,410 | - | 21,537,505 | 281,989,332 |
| 2062 | 281,989,332 | - | 49,973,788 | - | 19,231,695 | 251,247,240 |
| 2063 | 251,247,240 | - | 45,446,337 | - | 17,101,316 | 222,902,219 |
| 2064 | 222,902,219 | - | 41,165,267 | - | 15,140,961 | 196,877,913 |
| 2065 | 196,877,913 | - | 37,129,692 | - | 13,344,960 | 173,093,181 |

SINGLE DISCOUNT RATE DEVELOPMENT PRESENT VALUES OF PROJECTED BENEFITS AT 7.47% END OF YEAR

| Fiscal Year Ending June 30, | Projected Beginning Plan Net Position | Projected Benefit Payments | Funded Portion of Benefit Payments | Unfunded Portion of Benefit Payments | Present Value of Funded Benefit Payments using Expected Return Rate (v) | Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf) | Present Value of Benefit Payments using Single Discount Rate (sdr) |
|-----------------------------|---------------------------------------|----------------------------|------------------------------------|--------------------------------------|---|---|--|
| (a) | (b) | (c) | (d) | (e) | (f)=(d)*v ⁿ ((a)-.5) | (g)=(e)*vf ⁿ ((a)-.5) | (h)=((c)/(1+sdr) ⁿ (a-.5) |
| 2016 | \$ 3,194,754,441 | \$ 309,149,750 | \$ 309,149,750 | \$ - | \$ 298,212,110 | \$ - | \$ 298,212,110 |
| 2017 | 3,128,649,056 | 309,429,965 | 309,429,965 | - | 277,735,564 | - | 277,735,564 |
| 2018 | 3,057,526,173 | 312,427,000 | 312,427,000 | - | 260,933,859 | - | 260,933,859 |
| 2019 | 2,978,173,881 | 316,715,172 | 316,715,172 | - | 246,129,403 | - | 246,129,403 |
| 2020 | 2,888,654,574 | 316,021,842 | 316,021,842 | - | 228,520,139 | - | 228,520,139 |
| 2021 | 2,793,374,017 | 314,431,468 | 314,431,468 | - | 211,566,127 | - | 211,566,127 |
| 2022 | 2,692,796,304 | 311,767,449 | 311,767,449 | - | 195,192,736 | - | 195,192,736 |
| 2023 | 2,587,604,666 | 309,437,495 | 309,437,495 | - | 180,267,971 | - | 180,267,971 |
| 2024 | 2,477,078,873 | 306,972,847 | 306,972,847 | - | 166,401,925 | - | 166,401,925 |
| 2025 | 2,403,817,775 | 303,489,377 | 303,489,377 | - | 153,078,652 | - | 153,078,652 |
| 2026 | 2,328,695,307 | 299,821,826 | 299,821,826 | - | 140,717,183 | - | 140,717,183 |
| 2027 | 2,251,763,259 | 296,071,982 | 296,071,982 | - | 129,298,637 | - | 129,298,637 |
| 2028 | 2,172,971,765 | 292,106,359 | 292,106,359 | - | 118,699,913 | - | 118,699,913 |
| 2029 | 2,092,405,618 | 287,709,676 | 287,709,676 | - | 108,786,902 | - | 108,786,902 |
| 2030 | 2,010,379,122 | 282,872,305 | 282,872,305 | - | 99,523,427 | - | 99,523,427 |
| 2031 | 1,927,240,040 | 277,672,562 | 277,672,562 | - | 90,903,501 | - | 90,903,501 |
| 2032 | 1,843,280,924 | 272,073,568 | 272,073,568 | - | 82,879,428 | - | 82,879,428 |
| 2033 | 1,758,854,413 | 266,121,000 | 266,121,000 | - | 75,431,421 | - | 75,431,421 |
| 2034 | 1,674,292,133 | 259,741,412 | 259,741,412 | - | 68,505,761 | - | 68,505,761 |
| 2035 | 1,590,026,626 | 252,995,394 | 252,995,394 | - | 62,088,513 | - | 62,088,513 |
| 2036 | 1,506,459,930 | 245,902,026 | 245,902,026 | - | 56,153,070 | - | 56,153,070 |
| 2037 | 1,424,004,337 | 238,359,045 | 238,359,045 | - | 50,647,240 | - | 50,647,240 |
| 2038 | 1,343,208,947 | 230,461,151 | 230,461,151 | - | 45,565,341 | - | 45,565,341 |
| 2039 | 1,264,565,710 | 222,331,580 | 222,331,580 | - | 40,902,590 | - | 40,902,590 |
| 2040 | 1,188,475,567 | 213,902,612 | 213,902,612 | - | 36,616,640 | - | 36,616,640 |
| 2041 | 1,115,439,609 | 205,273,255 | 205,273,255 | - | 32,696,971 | - | 32,696,971 |
| 2042 | 1,045,893,725 | 196,418,510 | 196,418,510 | - | 29,111,884 | - | 29,111,884 |
| 2043 | 980,332,278 | 187,416,982 | 187,416,982 | - | 25,846,967 | - | 25,846,967 |
| 2044 | 919,205,071 | 178,337,813 | 178,337,813 | - | 22,885,312 | - | 22,885,312 |
| 2045 | 862,923,831 | 169,260,361 | 169,260,361 | - | 20,210,703 | - | 20,210,703 |
| 2046 | 811,848,771 | 160,241,849 | 160,241,849 | - | 17,803,888 | - | 17,803,888 |
| 2047 | 766,307,691 | 151,347,541 | 151,347,541 | - | 15,646,854 | - | 15,646,854 |
| 2048 | 726,585,221 | 142,619,783 | 142,619,783 | - | 13,719,686 | - | 13,719,686 |
| 2049 | 692,943,351 | 134,106,619 | 134,106,619 | - | 12,004,038 | - | 12,004,038 |
| 2050 | 665,613,839 | 125,853,921 | 125,853,921 | - | 10,482,302 | - | 10,482,302 |
| 2051 | 644,798,197 | 117,880,272 | 117,880,272 | - | 9,135,741 | - | 9,135,741 |
| 2052 | 630,693,729 | 110,203,936 | 110,203,936 | - | 7,947,170 | - | 7,947,170 |
| 2053 | 623,493,541 | 102,836,422 | 102,836,422 | - | 6,900,414 | - | 6,900,414 |
| 2054 | 623,393,233 | 95,782,116 | 95,782,116 | - | 5,980,333 | - | 5,980,333 |
| 2055 | 570,665,554 | 89,041,495 | 89,041,495 | - | 5,173,043 | - | 5,173,043 |
| 2056 | 520,986,968 | 82,609,389 | 82,609,389 | - | 4,465,765 | - | 4,465,765 |
| 2057 | 474,265,409 | 76,477,434 | 76,477,434 | - | 3,846,914 | - | 3,846,914 |
| 2058 | 430,410,608 | 70,635,525 | 70,635,525 | - | 3,306,093 | - | 3,306,093 |
| 2059 | 389,336,030 | 65,073,323 | 65,073,323 | - | 2,834,051 | - | 2,834,051 |
| 2060 | 350,959,389 | 59,781,200 | 59,781,200 | - | 2,422,602 | - | 2,422,602 |
| 2061 | 315,202,237 | 54,750,410 | 54,750,410 | - | 2,064,513 | - | 2,064,513 |
| 2062 | 281,989,332 | 49,973,788 | 49,973,788 | - | 1,753,417 | - | 1,753,417 |
| 2063 | 251,247,240 | 45,446,337 | 45,446,337 | - | 1,483,729 | - | 1,483,729 |
| 2064 | 222,902,219 | 41,165,267 | 41,165,267 | - | 1,250,545 | - | 1,250,545 |
| 2065 | 196,877,913 | 37,129,692 | 37,129,692 | - | 1,049,549 | - | 1,049,549 |

SINGLE DISCOUNT RATE DEVELOPMENT PRESENT VALUES OF PROJECTED BENEFITS AT 7.47% (CONCLUDED) END OF YEAR

| Fiscal Year Ending June 30, | Projected Beginning Plan Net Position | Projected Benefit Payments | Funded Portion of Benefit Payments | Unfunded Portion of Benefit Payments | Present Value of Funded Benefit Payments using Expected Return Rate (v) | Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf) | Present Value of Benefit Payments using Single Discount Rate (sdr) |
|-----------------------------|---------------------------------------|----------------------------|------------------------------------|--------------------------------------|---|---|--|
| (a) | (b) | (c) | (d) | (e) | (f)=(d)*v ⁿ ((a)-.5) | (g)=(e)*vf ⁿ ((a)-.5) | (h)=((c)/(1+sdr) ⁿ (a)-.5) |
| 2066 | \$ 173,093,181 | \$ 33,339,584 | \$ 33,339,584 | \$ - | \$ 876,908 | \$ - | \$ 876,908 |
| 2067 | 151,460,849 | 29,794,379 | 29,794,379 | - | 729,191 | - | 729,191 |
| 2068 | 131,887,816 | 26,493,159 | 26,493,159 | - | 603,328 | - | 603,328 |
| 2069 | 114,274,976 | 23,434,711 | 23,434,711 | - | 496,583 | - | 496,583 |
| 2070 | 98,517,082 | 20,616,929 | 20,616,929 | - | 406,508 | - | 406,508 |
| 2071 | 84,503,204 | 18,036,599 | 18,036,599 | - | 330,912 | - | 330,912 |
| 2072 | 72,117,459 | 15,688,425 | 15,688,425 | - | 267,824 | - | 267,824 |
| 2073 | 61,240,798 | 13,565,590 | 13,565,590 | - | 215,487 | - | 215,487 |
| 2074 | 51,752,345 | 11,660,053 | 11,660,053 | - | 172,344 | - | 172,344 |
| 2075 | 43,530,532 | 9,962,123 | 9,962,123 | - | 137,013 | - | 137,013 |
| 2076 | 36,454,755 | 8,460,609 | 8,460,609 | - | 108,274 | - | 108,274 |
| 2077 | 30,407,002 | 7,142,993 | 7,142,993 | - | 85,058 | - | 85,058 |
| 2078 | 25,273,427 | 5,995,426 | 5,995,426 | - | 66,430 | - | 66,430 |
| 2079 | 20,946,029 | 5,003,970 | 5,003,970 | - | 51,591 | - | 51,591 |
| 2080 | 17,323,195 | 4,154,923 | 4,154,923 | - | 39,860 | - | 39,860 |
| 2081 | 14,309,922 | 3,433,814 | 3,433,814 | - | 30,652 | - | 30,652 |
| 2082 | 11,819,116 | 2,826,591 | 2,826,591 | - | 23,478 | - | 23,478 |
| 2083 | 9,771,741 | 2,320,003 | 2,320,003 | - | 17,931 | - | 17,931 |
| 2084 | 8,096,595 | 1,901,185 | 1,901,185 | - | 13,672 | - | 13,672 |
| 2085 | 6,730,495 | 1,557,712 | 1,557,712 | - | 10,424 | - | 10,424 |
| 2086 | 5,618,419 | 1,278,106 | 1,278,106 | - | 7,958 | - | 7,958 |
| 2087 | 4,713,132 | 1,051,929 | 1,051,929 | - | 6,095 | - | 6,095 |
| 2088 | 3,974,691 | 869,724 | 869,724 | - | 4,689 | - | 4,689 |
| 2089 | 3,369,977 | 723,205 | 723,205 | - | 3,628 | - | 3,628 |
| 2090 | 2,871,984 | 605,240 | 605,240 | - | 2,825 | - | 2,825 |
| 2091 | 2,459,083 | 509,877 | 509,877 | - | 2,215 | - | 2,215 |
| 2092 | 2,114,199 | 432,334 | 432,334 | - | 1,747 | - | 1,747 |
| 2093 | 1,823,939 | 368,786 | 368,786 | - | 1,387 | - | 1,387 |
| 2094 | 1,577,876 | 316,235 | 316,235 | - | 1,107 | - | 1,107 |
| 2095 | 1,367,909 | 272,403 | 272,403 | - | 887 | - | 887 |
| 2096 | 1,187,699 | 235,586 | 235,586 | - | 714 | - | 714 |
| 2097 | 1,032,193 | 204,521 | 204,521 | - | 577 | - | 577 |
| 2098 | 897,275 | 178,207 | 178,207 | - | 467 | - | 467 |
| 2099 | 779,559 | 155,826 | 155,826 | - | 380 | - | 380 |
| 2100 | 676,251 | 136,662 | 136,662 | - | 310 | - | 310 |
| 2101 | 585,093 | 120,133 | 120,133 | - | 254 | - | 254 |
| 2102 | 504,261 | 105,747 | 105,747 | - | 208 | - | 208 |
| 2103 | 432,303 | 93,089 | 93,089 | - | 170 | - | 170 |
| 2104 | 368,093 | 81,855 | 81,855 | - | 139 | - | 139 |
| 2105 | 310,732 | 71,805 | 71,805 | - | 114 | - | 114 |
| 2106 | 259,505 | 62,746 | 62,746 | - | 92 | - | 92 |
| 2107 | 213,843 | 54,557 | 54,557 | - | 75 | - | 75 |
| 2108 | 173,259 | 47,150 | 47,150 | - | 60 | - | 60 |
| 2109 | 137,322 | 40,433 | 40,433 | - | 48 | - | 48 |
| 2110 | 105,664 | 34,337 | 34,337 | - | 38 | - | 38 |
| 2111 | 77,960 | 28,838 | 28,838 | - | 30 | - | 30 |
| 2112 | 53,888 | 23,934 | 23,934 | - | 23 | - | 23 |
| 2113 | 33,102 | 19,604 | 19,604 | - | 17 | - | 17 |
| 2114 | 15,252 | 15,812 | 15,812 | - | 13 | - | 13 |
| 2115 | 0 | - | - | - | - | - | - |
| Totals | \$ 3,689,500,271 | \$ - | \$ - | \$ - | \$ 3,689,500,271 | \$ - | \$ 3,689,500,271 |



**SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF CONTRIBUTIONS AT 6.75%
END OF YEAR**

| Fiscal Year Ending June 30, | Projected Contributions from Current Employees | Projected Service Cost | Administrative Expense Contributions# | Projected UAL Contributions | Projected Total Contributions |
|-----------------------------|--|------------------------|---------------------------------------|-----------------------------|-------------------------------|
| 2016 | \$ - | \$ - | \$ - | \$ 18,300,000 | \$ 18,300,000 |
| 2017 | - | - | - | 18,300,000 | 18,300,000 |
| 2018 | - | - | - | 18,300,000 | 18,300,000 |
| 2019 | - | - | - | 18,300,000 | 18,300,000 |
| 2020 | - | - | - | 18,300,000 | 18,300,000 |
| 2021 | - | - | - | 18,300,000 | 18,300,000 |
| 2022 | - | - | - | 18,300,000 | 18,300,000 |
| 2023 | - | - | - | 18,300,000 | 18,300,000 |
| 2024 | - | - | - | 82,975,787 | 82,975,787 |
| 2025 | - | - | - | 82,975,787 | 82,975,787 |
| 2026 | - | - | - | 82,975,787 | 82,975,787 |
| 2027 | - | - | - | 82,975,787 | 82,975,787 |
| 2028 | - | - | - | 82,975,787 | 82,975,787 |
| 2029 | - | - | - | 82,975,787 | 82,975,787 |
| 2030 | - | - | - | 82,975,787 | 82,975,787 |
| 2031 | - | - | - | 82,975,787 | 82,975,787 |
| 2032 | - | - | - | 82,975,787 | 82,975,787 |
| 2033 | - | - | - | 82,975,787 | 82,975,787 |
| 2034 | - | - | - | 82,975,787 | 82,975,787 |
| 2035 | - | - | - | 82,975,787 | 82,975,787 |
| 2036 | - | - | - | 82,975,787 | 82,975,787 |
| 2037 | - | - | - | 82,975,787 | 82,975,787 |
| 2038 | - | - | - | 82,975,787 | 82,975,787 |
| 2039 | - | - | - | 82,975,787 | 82,975,787 |
| 2040 | - | - | - | 82,975,787 | 82,975,787 |
| 2041 | - | - | - | 82,975,787 | 82,975,787 |
| 2042 | - | - | - | 82,975,787 | 82,975,787 |
| 2043 | - | - | - | 82,975,787 | 82,975,787 |
| 2044 | - | - | - | 82,975,787 | 82,975,787 |
| 2045 | - | - | - | 82,975,787 | 82,975,787 |
| 2046 | - | - | - | 82,975,787 | 82,975,787 |
| 2047 | - | - | - | 82,975,787 | 82,975,787 |
| 2048 | - | - | - | 82,975,787 | 82,975,787 |
| 2049 | - | - | - | 82,975,787 | 82,975,787 |
| 2050 | - | - | - | 82,975,787 | 82,975,787 |
| 2051 | - | - | - | 82,975,787 | 82,975,787 |
| 2052 | - | - | - | 82,975,787 | 82,975,787 |
| 2053 | - | - | - | 82,975,787 | 82,975,787 |
| 2054 | - | - | - | - | - |
| 2055 | - | - | - | - | - |
| 2056 | - | - | - | - | - |
| 2057 | - | - | - | - | - |
| 2058 | - | - | - | - | - |
| 2059 | - | - | - | - | - |
| 2060 | - | - | - | - | - |
| 2061 | - | - | - | - | - |
| 2062 | - | - | - | - | - |
| 2063 | - | - | - | - | - |
| 2064 | - | - | - | - | - |
| 2065 | - | - | - | - | - |

Investment return is assumed to be net of expenses.

SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF PLAN FIDUCIARY NET POSITION AT 6.75% END OF YEAR

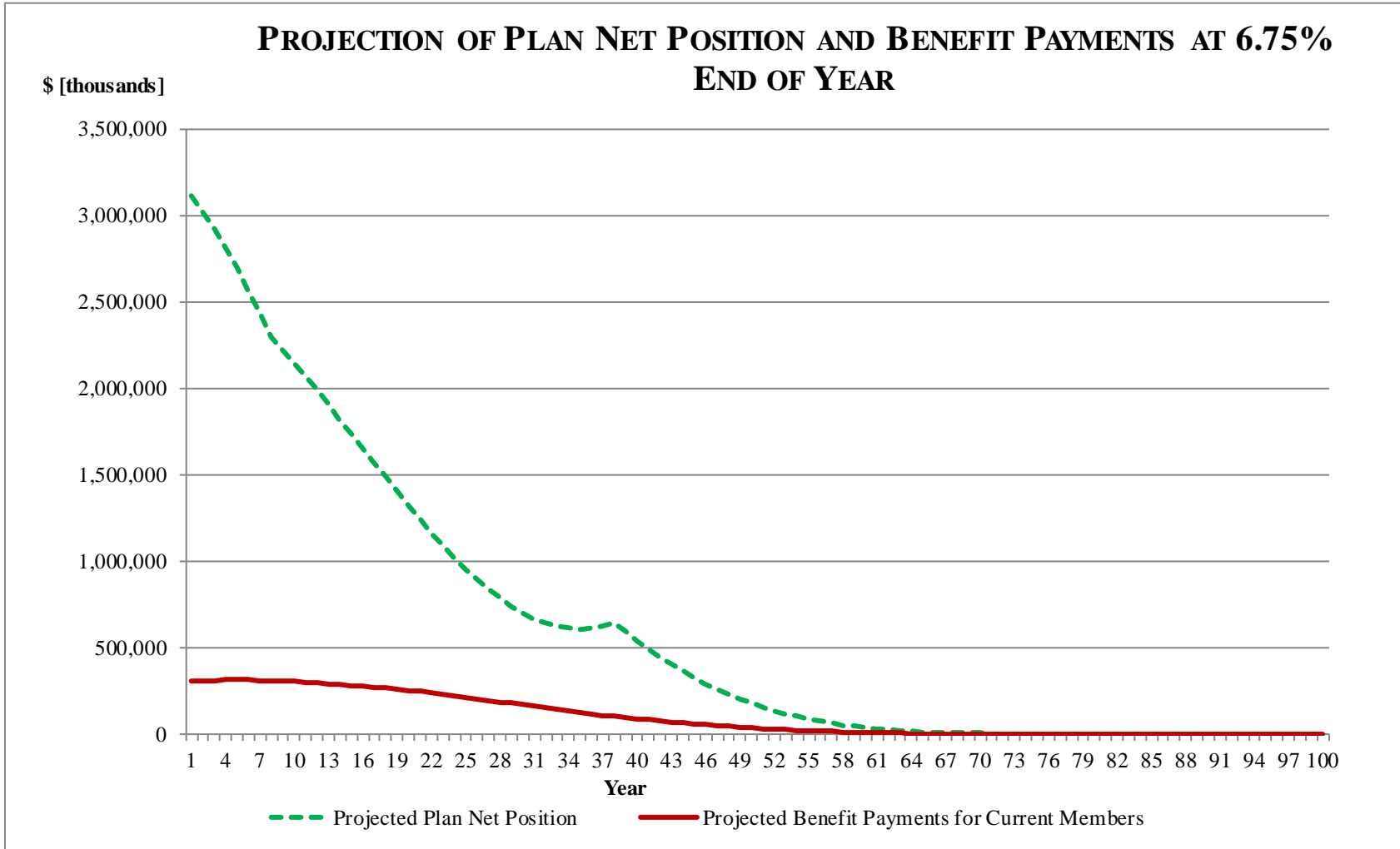
| Fiscal Year Ending June 30, | Projected Beginning Plan Net Position | Projected Total Contributions | Projected Benefit Payments | Projected Administrative Expenses | Projected Investment Earnings at 6.75% | Projected Ending Plan Net Position |
|--------------------------------------|--|----------------------------------|-------------------------------|---|--|---------------------------------------|
| | (a) | (b) | (c) | (d) | (e) | (f)=(a)+(b)-(c)-(d)+(e) |
| 2016 | \$ 3,194,754,441 | \$ 18,300,000 | \$ 309,149,750 | \$ - | \$ 205,990,028 | \$ 3,109,894,719 |
| 2017 | 3,109,894,719 | 18,300,000 | 309,429,965 | - | 200,252,694 | 3,019,017,449 |
| 2018 | 3,019,017,449 | 18,300,000 | 312,427,000 | - | 194,018,980 | 2,918,909,429 |
| 2019 | 2,918,909,429 | 18,300,000 | 316,715,172 | - | 187,119,326 | 2,807,613,583 |
| 2020 | 2,807,613,583 | 18,300,000 | 316,021,842 | - | 179,629,874 | 2,689,521,615 |
| 2021 | 2,689,521,615 | 18,300,000 | 314,431,468 | - | 171,711,465 | 2,565,101,612 |
| 2022 | 2,565,101,612 | 18,300,000 | 311,767,449 | - | 163,401,558 | 2,435,035,721 |
| 2023 | 2,435,035,721 | 18,300,000 | 309,437,495 | - | 154,699,462 | 2,298,597,688 |
| 2024 | 2,298,597,688 | 82,975,787 | 306,972,847 | - | 147,718,884 | 2,222,319,513 |
| 2025 | 2,222,319,513 | 82,975,787 | 303,489,377 | - | 142,685,755 | 2,144,491,678 |
| 2026 | 2,144,491,678 | 82,975,787 | 299,821,826 | - | 137,554,135 | 2,065,199,775 |
| 2027 | 2,065,199,775 | 82,975,787 | 296,071,982 | - | 132,326,422 | 1,984,430,003 |
| 2028 | 1,984,430,003 | 82,975,787 | 292,106,359 | - | 127,006,117 | 1,902,305,548 |
| 2029 | 1,902,305,548 | 82,975,787 | 287,709,676 | - | 121,608,681 | 1,819,180,342 |
| 2030 | 1,819,180,342 | 82,975,787 | 282,872,305 | - | 116,158,325 | 1,735,442,149 |
| 2031 | 1,735,442,149 | 82,975,787 | 277,672,562 | - | 110,678,623 | 1,651,423,999 |
| 2032 | 1,651,423,999 | 82,975,787 | 272,073,568 | - | 105,193,279 | 1,567,519,497 |
| 2033 | 1,567,519,497 | 82,975,787 | 266,121,000 | - | 99,727,344 | 1,484,101,628 |
| 2034 | 1,484,101,628 | 82,975,787 | 259,741,412 | - | 94,308,433 | 1,401,644,436 |
| 2035 | 1,401,644,436 | 82,975,787 | 252,995,394 | - | 88,966,533 | 1,320,591,362 |
| 2036 | 1,320,591,362 | 82,975,787 | 245,902,026 | - | 83,730,942 | 1,241,396,066 |
| 2037 | 1,241,396,066 | 82,975,787 | 238,359,045 | - | 78,635,679 | 1,164,648,487 |
| 2038 | 1,164,648,487 | 82,975,787 | 230,461,151 | - | 73,717,419 | 1,090,880,542 |
| 2039 | 1,090,880,542 | 82,975,787 | 222,331,580 | - | 69,007,975 | 1,020,532,725 |
| 2040 | 1,020,532,725 | 82,975,787 | 213,902,612 | - | 64,539,330 | 954,145,231 |
| 2041 | 954,145,231 | 82,975,787 | 205,273,255 | - | 60,344,660 | 892,192,423 |
| 2042 | 892,192,423 | 82,975,787 | 196,418,510 | - | 56,456,813 | 835,206,514 |
| 2043 | 835,206,514 | 82,975,787 | 187,416,982 | - | 52,909,105 | 783,674,425 |
| 2044 | 783,674,425 | 82,975,787 | 178,337,813 | - | 49,732,108 | 738,044,507 |
| 2045 | 738,044,507 | 82,975,787 | 169,260,361 | - | 46,953,450 | 698,713,384 |
| 2046 | 698,713,384 | 82,975,787 | 160,241,849 | - | 44,598,004 | 666,045,326 |
| 2047 | 666,045,326 | 82,975,787 | 151,347,541 | - | 42,688,191 | 640,361,763 |
| 2048 | 640,361,763 | 82,975,787 | 142,619,783 | - | 41,244,303 | 621,962,070 |
| 2049 | 621,962,070 | 82,975,787 | 134,106,619 | - | 40,284,952 | 611,116,190 |
| 2050 | 611,116,190 | 82,975,787 | 125,853,921 | - | 39,826,835 | 608,064,892 |
| 2051 | 608,064,892 | 82,975,787 | 117,880,272 | - | 39,885,589 | 613,045,997 |
| 2052 | 613,045,997 | 82,975,787 | 110,203,936 | - | 40,476,660 | 626,294,508 |
| 2053 | 626,294,508 | 82,975,787 | 102,836,422 | - | 41,615,528 | 648,049,401 |
| 2054 | 648,049,401 | - | 95,782,116 | - | 40,563,472 | 592,830,757 |
| 2055 | 592,830,757 | - | 89,041,495 | - | 37,059,995 | 540,849,258 |
| 2056 | 540,849,258 | - | 82,609,389 | - | 33,764,783 | 492,004,651 |
| 2057 | 492,004,651 | - | 76,477,434 | - | 30,671,346 | 446,198,564 |
| 2058 | 446,198,564 | - | 70,635,525 | - | 27,773,380 | 403,336,419 |
| 2059 | 403,336,419 | - | 65,073,323 | - | 25,064,844 | 363,327,940 |
| 2060 | 363,327,940 | - | 59,781,200 | - | 22,539,965 | 326,086,705 |
| 2061 | 326,086,705 | - | 54,750,410 | - | 20,193,198 | 291,529,493 |
| 2062 | 291,529,493 | - | 49,973,788 | - | 18,019,165 | 259,574,871 |
| 2063 | 259,574,871 | - | 45,446,337 | - | 16,012,535 | 230,141,069 |
| 2064 | 230,141,069 | - | 41,165,267 | - | 14,167,880 | 203,143,682 |
| 2065 | 203,143,682 | - | 37,129,692 | - | 12,479,533 | 178,493,522 |

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFITS AT 6.75%
END OF YEAR

| Fiscal Year Ending June 30, | Projected Beginning Plan Net Position | Projected Benefit Payments | Funded Portion of Benefit Payments | Unfunded Portion of Benefit Payments | Present Value of Funded Benefit Payments using Expected Return Rate (v) | Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf) | Present Value of Benefit Payments using Single Discount Rate (sdr) |
|-----------------------------|---------------------------------------|----------------------------|------------------------------------|--------------------------------------|---|---|--|
| (a) | (b) | (c) | (d) | (e) | (f)=(d)*v ⁿ ((a)-.5) | (g)=(e)*vf ⁿ ((a)-.5) | (h)=((c)/(1+sdr) ⁿ (a)-.5) |
| 2016 | \$ 3,194,754,441 | \$ 309,149,750 | \$ 309,149,750 | \$ - | \$ 299,216,100 | \$ - | \$ 299,216,100 |
| 2017 | 3,109,894,719 | 309,429,965 | 309,429,965 | - | 280,550,174 | - | 280,550,174 |
| 2018 | 3,019,017,449 | 312,427,000 | 312,427,000 | - | 265,355,962 | - | 265,355,962 |
| 2019 | 2,918,909,429 | 316,715,172 | 316,715,172 | - | 251,988,822 | - | 251,988,822 |
| 2020 | 2,807,613,583 | 316,021,842 | 316,021,842 | - | 235,538,347 | - | 235,538,347 |
| 2021 | 2,689,521,615 | 314,431,468 | 314,431,468 | - | 219,534,431 | - | 219,534,431 |
| 2022 | 2,565,101,612 | 311,767,449 | 311,767,449 | - | 203,910,470 | - | 203,910,470 |
| 2023 | 2,435,035,721 | 309,437,495 | 309,437,495 | - | 189,589,294 | - | 189,589,294 |
| 2024 | 2,298,597,688 | 306,972,847 | 306,972,847 | - | 176,186,631 | - | 176,186,631 |
| 2025 | 2,222,319,513 | 303,489,377 | 303,489,377 | - | 163,173,113 | - | 163,173,113 |
| 2026 | 2,144,491,678 | 299,821,826 | 299,821,826 | - | 151,008,177 | - | 151,008,177 |
| 2027 | 2,065,199,775 | 296,071,982 | 296,071,982 | - | 139,690,428 | - | 139,690,428 |
| 2028 | 1,984,430,003 | 292,106,359 | 292,106,359 | - | 129,104,823 | - | 129,104,823 |
| 2029 | 1,902,305,548 | 287,709,676 | 287,709,676 | - | 119,120,920 | - | 119,120,920 |
| 2030 | 1,819,180,342 | 282,872,305 | 282,872,305 | - | 109,712,501 | - | 109,712,501 |
| 2031 | 1,735,442,149 | 277,672,562 | 277,672,562 | - | 100,885,969 | - | 100,885,969 |
| 2032 | 1,651,423,999 | 272,073,568 | 272,073,568 | - | 92,601,127 | - | 92,601,127 |
| 2033 | 1,567,519,497 | 266,121,000 | 266,121,000 | - | 84,847,917 | - | 84,847,917 |
| 2034 | 1,484,101,628 | 259,741,412 | 259,741,412 | - | 77,577,423 | - | 77,577,423 |
| 2035 | 1,401,644,436 | 252,995,394 | 252,995,394 | - | 70,784,616 | - | 70,784,616 |
| 2036 | 1,320,591,362 | 245,902,026 | 245,902,026 | - | 64,449,639 | - | 64,449,639 |
| 2037 | 1,241,396,066 | 238,359,045 | 238,359,045 | - | 58,522,401 | - | 58,522,401 |
| 2038 | 1,164,648,487 | 230,461,151 | 230,461,151 | - | 53,005,428 | - | 53,005,428 |
| 2039 | 1,090,880,542 | 222,331,580 | 222,331,580 | - | 47,902,247 | - | 47,902,247 |
| 2040 | 1,020,532,725 | 213,902,612 | 213,902,612 | - | 43,172,077 | - | 43,172,077 |
| 2041 | 954,145,231 | 205,273,255 | 205,273,255 | - | 38,810,687 | - | 38,810,687 |
| 2042 | 892,192,423 | 196,418,510 | 196,418,510 | - | 34,788,323 | - | 34,788,323 |
| 2043 | 835,206,514 | 187,416,982 | 187,416,982 | - | 31,095,113 | - | 31,095,113 |
| 2044 | 783,674,425 | 178,337,813 | 178,337,813 | - | 27,717,800 | - | 27,717,800 |
| 2045 | 738,044,507 | 169,260,361 | 169,260,361 | - | 24,643,517 | - | 24,643,517 |
| 2046 | 698,713,384 | 160,241,849 | 160,241,849 | - | 21,855,236 | - | 21,855,236 |
| 2047 | 666,045,326 | 151,347,541 | 151,347,541 | - | 19,336,908 | - | 19,336,908 |
| 2048 | 640,361,763 | 142,619,783 | 142,619,783 | - | 17,069,608 | - | 17,069,608 |
| 2049 | 621,962,070 | 134,106,619 | 134,106,619 | - | 15,035,785 | - | 15,035,785 |
| 2050 | 611,116,190 | 125,853,921 | 125,853,921 | - | 13,218,274 | - | 13,218,274 |
| 2051 | 608,064,892 | 117,880,272 | 117,880,272 | - | 11,597,951 | - | 11,597,951 |
| 2052 | 613,045,997 | 110,203,936 | 110,203,936 | - | 10,157,091 | - | 10,157,091 |
| 2053 | 626,294,508 | 102,836,422 | 102,836,422 | - | 8,878,740 | - | 8,878,740 |
| 2054 | 648,049,401 | 95,782,116 | 95,782,116 | - | 7,746,774 | - | 7,746,774 |
| 2055 | 592,830,757 | 89,041,495 | 89,041,495 | - | 6,746,228 | - | 6,746,228 |
| 2056 | 540,849,258 | 82,609,389 | 82,609,389 | - | 5,863,138 | - | 5,863,138 |
| 2057 | 492,004,651 | 76,477,434 | 76,477,434 | - | 5,084,709 | - | 5,084,709 |
| 2058 | 446,198,564 | 70,635,525 | 70,635,525 | - | 4,399,346 | - | 4,399,346 |
| 2059 | 403,336,419 | 65,073,323 | 65,073,323 | - | 3,796,645 | - | 3,796,645 |
| 2060 | 363,327,940 | 59,781,200 | 59,781,200 | - | 3,267,336 | - | 3,267,336 |
| 2061 | 326,086,705 | 54,750,410 | 54,750,410 | - | 2,803,165 | - | 2,803,165 |
| 2062 | 291,529,493 | 49,973,788 | 49,973,788 | - | 2,396,821 | - | 2,396,821 |
| 2063 | 259,574,871 | 45,446,337 | 45,446,337 | - | 2,041,853 | - | 2,041,853 |
| 2064 | 230,141,069 | 41,165,267 | 41,165,267 | - | 1,732,561 | - | 1,732,561 |
| 2065 | 203,143,682 | 37,129,692 | 37,129,692 | - | 1,463,899 | - | 1,463,899 |

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFITS AT 6.75% (CONCLUDED)
END OF YEAR

| Fiscal Year Ending June 30, | Projected Beginning Plan Net Position | Projected Benefit Payments | Funded Portion of Benefit Payments | Unfunded Portion of Benefit Payments | Present Value of Funded Benefit Payments using Expected Return Rate (v) | Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf) | Present Value of Benefit Payments using Single Discount Rate (sdr) |
|-----------------------------|---------------------------------------|----------------------------|------------------------------------|--------------------------------------|---|---|--|
| (a) | (b) | (c) | (d) | (e) | (f)=(d)*v^(a)-.5) | (g)=(e)*vf^(a)-.5) | (h)=((c)/(1+sdr)^(a)-.5) |
| 2066 | \$ 178,493,522 | \$ 33,339,584 | \$ 33,339,584 | \$ - | \$ 1,231,352 | \$ - | \$ 1,231,352 |
| 2067 | 156,095,413 | 29,794,379 | 29,794,379 | - | 1,030,833 | - | 1,030,833 |
| 2068 | 135,848,333 | 26,493,159 | 26,493,159 | - | 858,657 | - | 858,657 |
| 2069 | 117,645,393 | 23,434,711 | 23,434,711 | - | 711,505 | - | 711,505 |
| 2070 | 101,373,738 | 20,616,929 | 20,616,929 | - | 586,373 | - | 586,373 |
| 2071 | 86,915,077 | 18,036,599 | 18,036,599 | - | 480,548 | - | 480,548 |
| 2072 | 74,146,450 | 15,688,425 | 15,688,425 | - | 391,556 | - | 391,556 |
| 2073 | 62,942,072 | 13,565,590 | 13,565,590 | - | 317,165 | - | 317,165 |
| 2074 | 53,174,709 | 11,660,053 | 11,660,053 | - | 255,376 | - | 255,376 |
| 2075 | 44,716,847 | 9,962,123 | 9,962,123 | - | 204,391 | - | 204,391 |
| 2076 | 37,442,380 | 8,460,609 | 8,460,609 | - | 162,609 | - | 162,609 |
| 2077 | 31,228,248 | 7,142,993 | 7,142,993 | - | 128,604 | - | 128,604 |
| 2078 | 25,956,022 | 5,995,426 | 5,995,426 | - | 101,118 | - | 101,118 |
| 2079 | 21,513,586 | 5,003,970 | 5,003,970 | - | 79,060 | - | 79,060 |
| 2080 | 17,795,657 | 4,154,923 | 4,154,923 | - | 61,494 | - | 61,494 |
| 2081 | 14,704,001 | 3,433,814 | 3,433,814 | - | 47,608 | - | 47,608 |
| 2082 | 12,148,708 | 2,826,591 | 2,826,591 | - | 36,711 | - | 36,711 |
| 2083 | 10,048,315 | 2,320,003 | 2,320,003 | - | 28,226 | - | 28,226 |
| 2084 | 8,329,552 | 1,901,185 | 1,901,185 | - | 21,668 | - | 21,668 |
| 2085 | 6,927,494 | 1,557,712 | 1,557,712 | - | 16,631 | - | 16,631 |
| 2086 | 5,785,674 | 1,278,106 | 1,278,106 | - | 12,783 | - | 12,783 |
| 2087 | 4,855,670 | 1,051,929 | 1,051,929 | - | 9,856 | - | 9,856 |
| 2088 | 4,096,575 | 869,724 | 869,724 | - | 7,633 | - | 7,633 |
| 2089 | 3,474,496 | 723,205 | 723,205 | - | 5,946 | - | 5,946 |
| 2090 | 2,961,809 | 605,240 | 605,240 | - | 4,661 | - | 4,661 |
| 2091 | 2,536,399 | 509,877 | 509,877 | - | 3,679 | - | 3,679 |
| 2092 | 2,180,802 | 432,334 | 432,334 | - | 2,922 | - | 2,922 |
| 2093 | 1,881,319 | 368,786 | 368,786 | - | 2,335 | - | 2,335 |
| 2094 | 1,627,279 | 316,235 | 316,235 | - | 1,876 | - | 1,876 |
| 2095 | 1,410,387 | 272,403 | 272,403 | - | 1,513 | - | 1,513 |
| 2096 | 1,224,142 | 235,586 | 235,586 | - | 1,226 | - | 1,226 |
| 2097 | 1,063,364 | 204,521 | 204,521 | - | 997 | - | 997 |
| 2098 | 923,831 | 178,207 | 178,207 | - | 814 | - | 814 |
| 2099 | 802,067 | 155,826 | 155,826 | - | 667 | - | 667 |
| 2100 | 695,207 | 136,662 | 136,662 | - | 548 | - | 548 |
| 2101 | 600,935 | 120,133 | 120,133 | - | 451 | - | 451 |
| 2102 | 517,377 | 105,747 | 105,747 | - | 372 | - | 372 |
| 2103 | 443,042 | 93,089 | 93,089 | - | 307 | - | 307 |
| 2104 | 376,767 | 81,855 | 81,855 | - | 253 | - | 253 |
| 2105 | 317,627 | 71,805 | 71,805 | - | 208 | - | 208 |
| 2106 | 264,878 | 62,746 | 62,746 | - | 170 | - | 170 |
| 2107 | 217,928 | 54,557 | 54,557 | - | 138 | - | 138 |
| 2108 | 176,270 | 47,150 | 47,150 | - | 112 | - | 112 |
| 2109 | 139,453 | 40,433 | 40,433 | - | 90 | - | 90 |
| 2110 | 107,091 | 34,337 | 34,337 | - | 72 | - | 72 |
| 2111 | 78,842 | 28,838 | 28,838 | - | 56 | - | 56 |
| 2112 | 54,368 | 23,934 | 23,934 | - | 44 | - | 44 |
| 2113 | 33,310 | 19,604 | 19,604 | - | 34 | - | 34 |
| 2114 | 15,303 | 15,812 | 15,812 | - | 25 | - | 25 |
| 2115 | 0 | - | - | - | - | - | - |
| Totals | \$ 3,955,787,818 | \$ - | \$ - | \$ - | \$ 3,955,787,818 | \$ - | \$ 3,955,787,818 |



SECTION H

GLOSSARY OF TERMS

GLOSSARY OF TERMS

| | |
|---|---|
| <i>Actuarial Accrued Liability (AAL)</i> | The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability." |
| <i>Actuarial Assumptions</i> | These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation. |
| <i>Accrued Service</i> | Service credited under the system which was rendered before the date of the actuarial valuation. |
| <i>Actuarial Equivalent</i> | A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions. |
| <i>Actuarial Cost Method</i> | A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method. |
| <i>Actuarial Gain (Loss)</i> | The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities. |
| <i>Actuarial Present Value (APV)</i> | The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment. |
| <i>Actuarial Valuation</i> | The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions. |
| <i>Actuarial Valuation Date</i> | The date as of which an actuarial valuation is performed. |
| <i>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</i> | A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment. |

GLOSSARY OF TERMS

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| <i>Amortization Payment</i> | The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal. |
| <i>Amortization Method</i> | The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be “open” (meaning, reset each year) or “closed” (the number of years remaining will decline each year). |
| <i>Cost-of-Living Adjustments (COLA)</i> | Postemployment benefit changes intended to adjust benefit payments for the effects of inflation. |
| <i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i> | A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan. |
| <i>Covered-Employee Payroll</i> | The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap. |
| <i>Deferred Retirement Option Program (DROP)</i> | A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report. |
| <i>Deferred Inflows and Outflows</i> | The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources. |
| <i>Discount Rate</i> | For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically: <ol style="list-style-type: none"> 1. The benefit payments to be made while the pension plans’ fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and 2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate. |

GLOSSARY OF TERMS

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| <i>Entry Age Actuarial Cost Method (EAN)</i> | The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits. |
| <i>GASB</i> | The Governmental Accounting Standards Board (GASB) is an organization that exists in order to promulgate accounting standards for governmental entities. |
| <i>Fiduciary Net Position</i> | The fiduciary net position is the value of the assets of the trust. |
| <i>Long-Term Expected Rate of Return</i> | The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio. |
| <i>Money-Weighted Rate of Return</i> | The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense. |
| <i>Multiple-Employer Defined Benefit Pension Plan</i> | A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer. |
| <i>Municipal Bond Rate</i> | The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted. |
| <i>Net Pension Liability (NPL)</i> | The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan. |
| <i>Non-Employer Contribution Entities</i> | Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting statement plan members are not considered non-employer contribution entities. |
| <i>Normal Cost</i> | The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method. Also known as service cost. |

GLOSSARY OF TERMS

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| <i>Other Postemployment Benefits (OPEB)</i> | All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits. |
| <i>PERSIA</i> | Public Employees Retirement System Investment Act (Michigan PA 314). |
| <i>POA</i> | The 8th Amended Plan for the Adjustment of the Debt of the City of Detroit. |
| <i>Real Rate of Return</i> | The real rate of return is the rate of return on an investment after adjustment to eliminate inflation. |
| <i>Service Cost</i> | The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year. Also known as normal cost. |
| <i>Total Pension Expense</i> | The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year: <ol style="list-style-type: none"> 1. Service Cost 2. Interest on the Total Pension Liability 3. Current-Period Benefit Changes 4. Employee Contributions (made negative for addition here) 5. Projected Earnings on Plan Investments (made negative for addition here) 6. Pension Plan Administrative Expense 7. Other Changes in Plan Fiduciary Net Position 8. Recognition of Outflow (Inflow) of Resources due to Liabilities 9. Recognition of Outflow (Inflow) of Resources due to Assets |
| <i>Total Pension Liability (TPL)</i> | The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service. |
| <i>Unfunded Actuarial Accrued Liability (UAAL)</i> | The UAAL is the difference between actuarial accrued liability and valuation assets. |
| <i>Valuation Assets</i> | The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of the GASB Statement No. 67, the valuation asset is equal to the market value of assets. |

February 11, 2016

Mr. David Cetlinski
Executive Secretary
The Police and Fire Retirement System of the
City of Detroit
One Detroit Center
500 Woodward Avenue, Suite 3000
Detroit, MI 48226-3534

Dear Dave:

Please find enclosed 20 copies of the GASB Statement No. 67 Plan Reporting Accounting Schedules of Component II report of the Police and Fire Retirement System of the City of Detroit.

Sincerely,



Kenneth G. Alberts

KGA:mr
Enclosures

cc: Cynthia A. Thomas, City of Detroit Retirement Systems
David T. Kausch, GRS
Judith A. Kermans, GRS
Brian B. Murphy, GRS