CURRAN ACTUARIAL
CONSULTING, LTD.

Annual Funding Valuation
June 30, 2023

Municipal Employees' Retirement System

CURRAN ACTUARIAL
— CONSULTING, LTD. —

December 5, 2023

Board of Trustees
Municipal Employees' Retirement System
7937 Office Park Boulevard
Baton Rouge, Louisiana 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Municipal Employees' Retirement System for the fiscal year ending June 30, 2023. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrators and accountants. This report was prepared at the request of the Board of Trustees of the Municipal Employees' Retirement System of the State of Louisiana. The primary purpose of this report is to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2024, and to recommend the net direct employer contribution rate for Fiscal 2025. This report does not contain the information necessary for accounting disclosures as required by Governmental Accounting Standards Board (GASB) Statements 67 and 68; that information is included in a separate report. This report was prepared exclusively for the Municipal Employees' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

In our opinion, all of the assumptions on which this valuation is based are reasonable individually and in the aggregate. Both economic and demographic assumptions are based on our expectations for future experience for the system. This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief, fairly reflects the actuarial present values and costs stated herein. The undersigned actuary is a member of the American Academy of Actuaries, has met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and is available to provide further information or answer any questions with respect to this valuation.

Sincerely,

CURRAN ACTUARIAL CONSULTING, LTD.

By: Gregory M. Curran

Gregory Curran, F.C.A., M.A.A.A., A.S.A.
Senior Consulting Actuary

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SUMMARY OF VALUATION RESULTS
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM – PLAN A

		June 30, 2023	June 30, 2022
Census Summary:	Active Members (Including DROP participants)	4,484	4,513
	Retired Members and Survivors	3,790	3,732
	Terminated Due a Deferred Benefit	251	258
	Terminated Due a Refund	3,731	3,517
Payroll:		$ 199,312,291	$ 187,377,898
Benefits in Payment:		$ 78,886,254	$ 76,362,820
Present Value of Future Benefits:		$ 1,532,020,251	$ 1,483,893,934
Actuarial Accrued Liability (EAN):		$ 1,311,582,587	$ 1,277,206,406
Frozen Unfunded Actuarial Accrued Liability:		$ 48,847,862	$ 54,014,424
Funding Deposit Account Credit Balance:		$ 17,097,231	$ 8,002,037
Actuarial Value of Assets (AVA):		$ 1,003,608,550	$ 946,256,046
Market Value of Assets (MVA):		$ 961,610,161	$ 877,147,955
Ratio of AVA to Actuarial Accrued Liability (EAN):		76.52%	74.09%

	Fiscal 2023	Fiscal 2022
Market Rate of Return:	8.4%	-10.1%
Actuarial Rate of Return:	4.9%	5.4%

	Fiscal 2024	Fiscal 2023
Employers' Normal Cost (Mid-year):	$ 47,317,703	$ 48,434,237
Amortization Cost (Mid-year):	$ 8,942,182	$ 8,577,632
Estimated Administrative Cost:	$ 1,805,983	$ 1,778,003
Projected Ad Valorem Tax Contributions:	$ (7,708,238)	$ (7,135,592)
Projected Revenue Sharing Funds:	$ (112,045)	$ (112,496)
Net Direct Employer Actuarially Required Contributions:	$ 50,245,585	$ 51,541,784
Projected Payroll:	$ 199,411,751	$ 185,557,555
Actuarially Required Net Direct Employer Contribution Rate:	25.20%	27.78%
Board Approved Net Direct Employer Contribution Rate:	29.50%	29.50%
Board Approved Employee Contribution Rate:	10.00%	10.00%

	Fiscal 2025	Fiscal 2024
Minimum Recommended Net Direct Employer Contribution Rate:	25.25%	27.75%

SUMMARY OF VALUATION RESULTS
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM – PLAN B

		June 30, 2023	June 30, 2022
Census Summary:	Active Members (Including DROP participants)	2,055	1,997
	Retired Members and Survivors	1,198	1,159
	Terminated Due a Deferred Benefit	107	104
	Terminated Due a Refund	2,010	1,832
Payroll:		$ 86,043,818	$ 79,381,407
Benefits in Payment:		$ 15,428,909	$ 14,609,855
Present Value of Future Benefits:		$ 354,281,472	$ 338,678,422
Actuarial Accrued Liability (EAN):		$ 295,780,151	$ 284,474,338
Funding Deposit Account Credit Balance:		$ 4,297,012	$ 1,560,738
Actuarial Value of Assets (AVA):		$ 230,016,557	$ 216,737,373
Market Value of Assets (MVA):		$ 219,614,861	$ 200,590,478
Ratio of AVA to Actuarial Accrued Liability (EAN):		77.77%	76.19%

	Fiscal 2023	Fiscal 2022
Market Rate of Return:	7.9%	-9.6%
Actuarial Rate of Return:	4.7%	5.2%

	Fiscal 2024	Fiscal 2023
Employers' Normal Cost (Mid-year):	$ 13,635,353	$ 13,238,990
Estimated Administrative Cost:	$ 779,649	$ 753,239
Projected Ad Valorem Tax Contributions:	$ (3,327,673)	$ (3,022,946)
Projected Revenue Sharing Funds:	$ (48,370)	$ (47,658)
Net Direct Employer Actuarially Required Contributions:	$ 11,038,959	$ 10,921,625
Projected Payroll:	$ 88,076,018	$ 81,695,407
Actuarially Required Net Direct Employer Contribution Rate:	12.53%	13.37%
Board Approved Net Direct Employer Contribution Rate:	15.50%	15.50%
Board Approved Employee Contribution Rate:	5.00%	5.00%

	Fiscal 2025	Fiscal 2024
Minimum Recommended Net Direct Employer Contribution Rate:	12.50%	13.25%

GENERAL COMMENTS

The values and calculations in this report were determined by applying statistical analysis and projections to system data and the assumptions listed. There is sometimes a tendency for readers to either dismiss results as mere “guesses” or alternatively to ascribe a greater degree of accuracy to the results than is warranted. In fact, neither of these assessments is valid. Actuarial calculations by their very nature involve estimations. As such, it is likely that eventual results will differ from those presented. The degree to which such differences evolve will depend on several factors including the completeness and accuracy of the data utilized, the degree to which assumptions approximate future experience, and the extent to which the mathematical model accurately describes the plan’s design and future outcomes.

Data quality varies from system to system and year to year. The data inputs involve both asset information and census information of plan participants. In both cases, the actuary must rely on third parties; nevertheless, steps are taken to reduce the probability and degree of errors. The development of assumptions is primarily the task of the actuary; however, information and advice from plan administrators, staff, and other professionals may be factored into the formation of assumptions. The process of setting assumptions is based primarily on analysis of past trends, but modification of historical experience is often required when the actuary has reason to believe that future circumstances may vary significantly from the past. Setting assumptions includes but is not limited to collecting past plan experience and studying general population demographics and economic factors from the past. The actuary will also consider current and future macro-economic and financial expectations as well as factors that are likely to impact the group under consideration. Hence, assumptions will also reflect the actuary’s judgment regarding future changes in plan population and decrements in view of the particular factors which impact participants. Thus, the process of setting assumptions is not mere “guess work” but rather a process of mathematical analysis of past experience and of those factors likely to impact the future.

One area where an actuary has limited ability to develop accurate estimates is the projection of future investment earnings. The difficulties here are significant. First, the future is rarely like the past, and the data points available to develop stochastic trials are far fewer than the number required for statistical significance. In this area, some guess work is inevitable. However, there are tools available to lay a foundation for making estimates with an expectation of reliability. Although past data is limited, the available data is likely to provide some insight into the future. This data consists of general economic and financial values such as past rates of inflation, rates of return variance, and correlations of returns among various asset classes along with the actual asset experience of the plan. In addition, the actuary can review the current asset market environment as well as economic forecasts from governmental and investment research groups to form a reasonable opinion regarding probable future investment experience for the plan.

All of the above efforts would be in vain if the assumption process was static, and the plan would have to deal with the consequences of actual experience differing from assumptions after forty or fifty years of compounded errors. However, actuarial funding methods for pension plans all allow for periodic corrections of assumptions to conform with reality as it unfolds. This process of repeated correction of estimates produces results which although imperfect is nevertheless a reasonable approach to determine the contribution levels which will provide for the future benefits of plan participants.

Prior to the Fiscal 2021 valuation, the determination of projected payroll was based on the assumption of a stable population. The provisions of Act 298 of the 2020 Regular Session provides that certain employees of the Lafayette City-Parish Consolidated Government who are first employed on or after November 1, 2020 are to be enrolled in the Parochial Employees' Retirement System instead of Plan A of the Municipal Employees' Retirement System. Without new hires from Plan A's largest employer, this change in statute is expected to result in a consistent reduction in overall Plan A active population. For this reason and in recognition of reductions in plan membership prior to the change related to Lafayette, beginning with the Fiscal 2021 valuation we have computed the Plan A projected payroll based on a recognition of an expected reduction in overall membership. Plan B is unaffected by the change related to the Lafayette City-Parish Consolidated Government. Therefore, we have considered the recent changes in membership levels and have determined that maintaining the base assumption of membership stability is appropriate at this time.

COMMENTS ON DATA

For the valuation, the administrative director of the system furnished a census on electronic media derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit IX, there are 4,484 active members in Plan A, of whom, 1,998 members, including 183 participants in the Deferred Retirement Option Plan (DROP), have vested retirement benefits; 3,790 former Plan A members or their beneficiaries are receiving retirement benefits. An additional 3,982 former members of Plan A have contributions remaining on deposit with the system. This includes 251 former members who have vested rights or have filed reciprocal agreements for future retirement benefits. Census data on members of Plan B may be found in Exhibit XIX. There are 2,055 active members in Plan B, of whom, 863 members, including 58 DROP participants, have vested retirement benefits; 1,198 former members of Plan B or their beneficiaries are receiving retirement benefits. An additional 2,117 former members of Plan B have contributions remaining on deposit with the system. Of this number, 107 have vested rights for future retirement benefits. **Figures 1.1 and 1.2** provide membership levels over the last ten years.

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. To minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Changes in status, new records, and previous records which have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions, such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas, such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

Figure 1.1. Plan A | Membership Counts

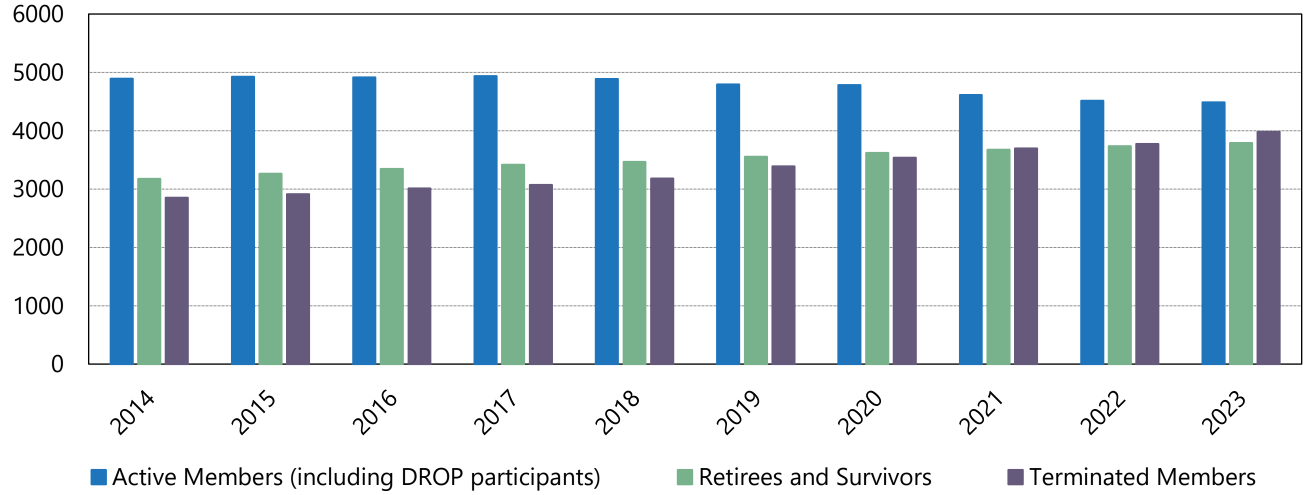
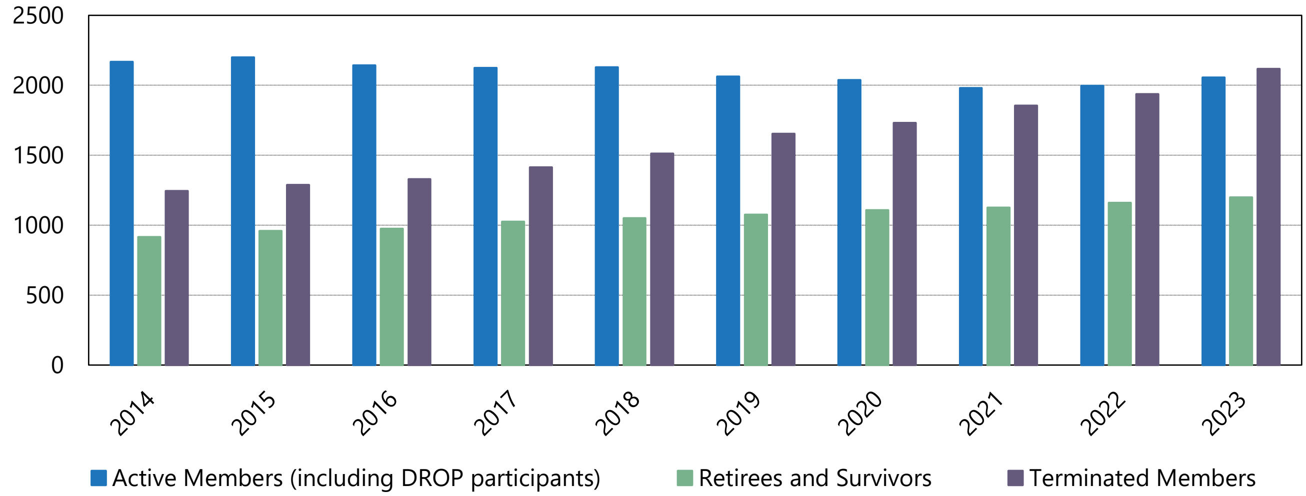


Figure 1.2. Plan B | Membership Counts



In addition to the statistical information provided on the system's participants, the system's administrative director furnished general information related to other aspects of the system's expenses, benefits and funding. Except as stated below, valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Hawthorn, Waymouth, and Carroll, L.L.P. As indicated in the system's audit report, the net market value of Plan A's assets was $961,610,161 as of June 30, 2023. For Plan A, the net investment income for Fiscal 2023 measured on a market value basis amounted to $73,810,226. Contributions to Plan A for the fiscal year totaled $101,676,267; benefits and expenses amounted to $91,024,287.

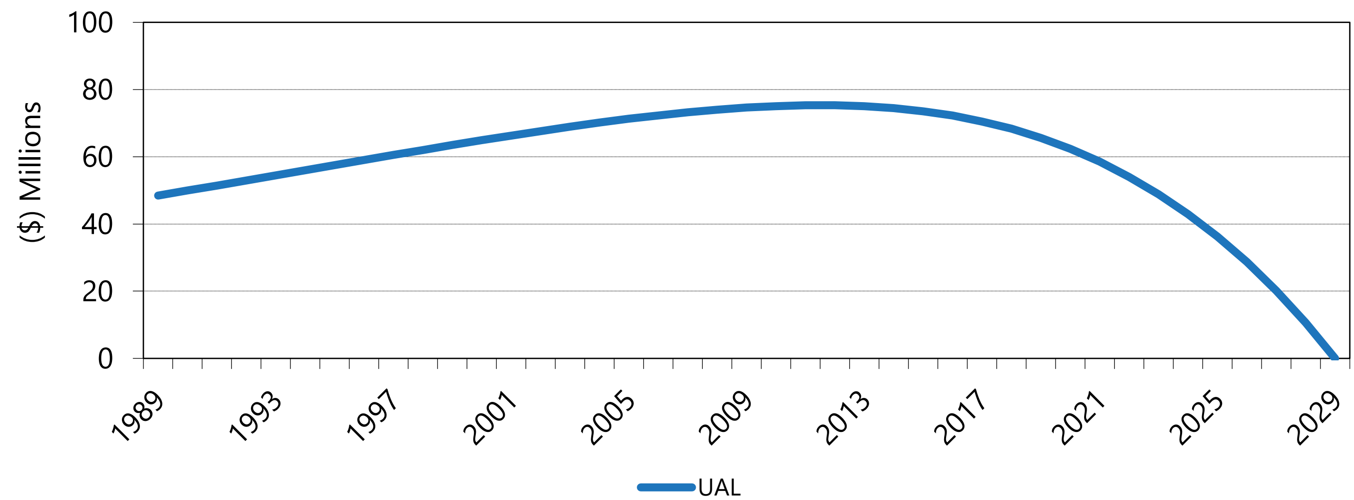
The net market value of Plan B's assets was $219,614,861 as of June 30, 2023. For Plan B, the net investment income for Fiscal 2023 measured on a market value basis amounted to $16,044,559. Contributions to Plan B for the fiscal year totaled $21,204,178; benefits and expenses amounted to $18,224,354.

Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information. Our review of submitted information is limited to validation of reasonableness and consistency. Verification of submitted data to source information is beyond the scope of our efforts.

COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

Prior to Fiscal 2018 both plans' valuations were based on the Frozen Attained Age Normal actuarial cost method with the unfunded actuarial accrued liability frozen as of June 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability for Plan A, which was determined to be $48,466,297 as of June 30, 1989, was amortized over forty years with payments increasing at 4.25% per year. The unfunded accrued liability for Plan B, which was determined to be $9,853,175 as of June 30, 1989, was amortized over forty years with payments decreasing at 2% per year. In Plan A, payroll growth of less than 4.25% per year will increase future amortization payments as a percent of payroll (See **Figure 2**). In Plan B, prior to the early payoff of the unfunded accrued liability, any payroll growth or payroll decline of less than 2% per year would reduce future amortization payments as a percentage of payroll. As of June 30, 2018, the remaining balance of the frozen unfunded accrued liability for Plan B was completely offset by a portion of the credit balance in the plan's Funding Deposit Account. With the unfunded accrued liability fully amortized, the actuarial funding method for Plan B has been converted to the Aggregate Funding Method in accordance with R.S. 11:22(D). Under both the Frozen Attained Age Normal Cost Method and the Aggregate Funding Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs.

Figure 2. Plan A | Frozen Unfunded Actuarial Accrued Liability



Prior to the June 30, 2009 valuation, in any year in which the net direct employer contribution was set above the actuarially required employer contribution rate, excess funds collected, if any, were used to reduce the frozen unfunded actuarial accrued liability. Effective with the June 30, 2009 valuation, any excess funds collected as a result of a freeze in employer contributions are credited to the Funding Deposit Account. Funds deposited into the Funding Deposit Account can be used to reduce the unfunded accrued liability, reduce future normal costs, fund cost of living increases to retirees, or offset net direct employer contributions as determined by the Board of Trustees. A history of the Funding Deposit Account that shows contributions, interest, and withdrawals is contained in **Figures 3.1 and 3.2**.

Figure 3.1. Plan A | Funding Deposit Account History

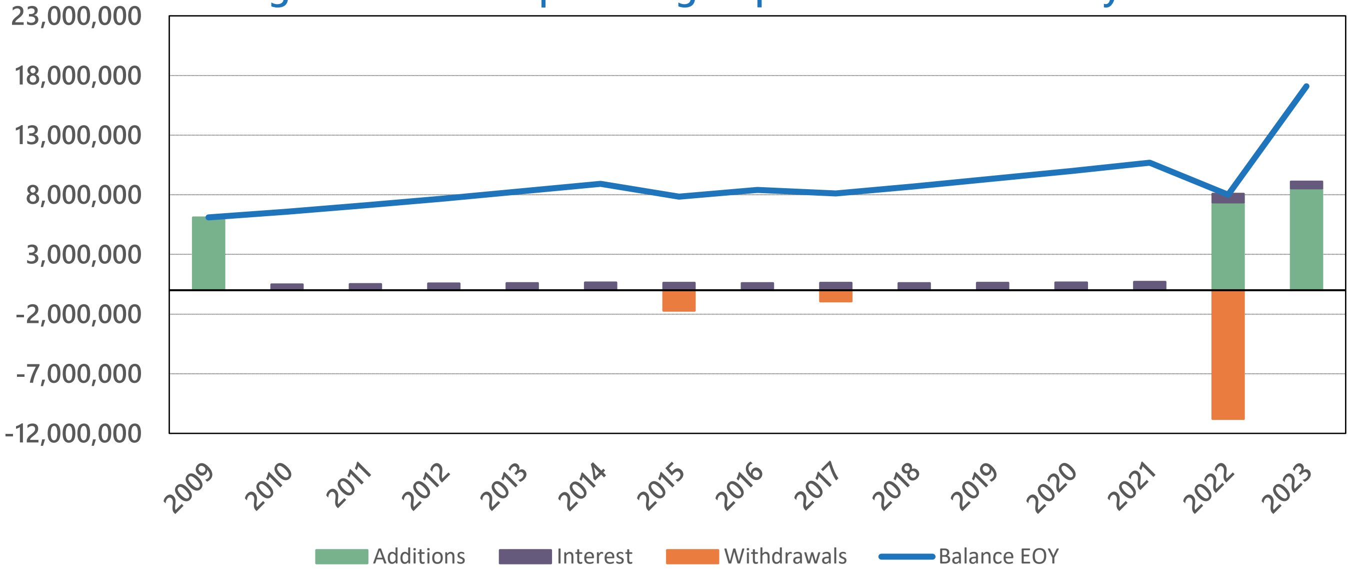
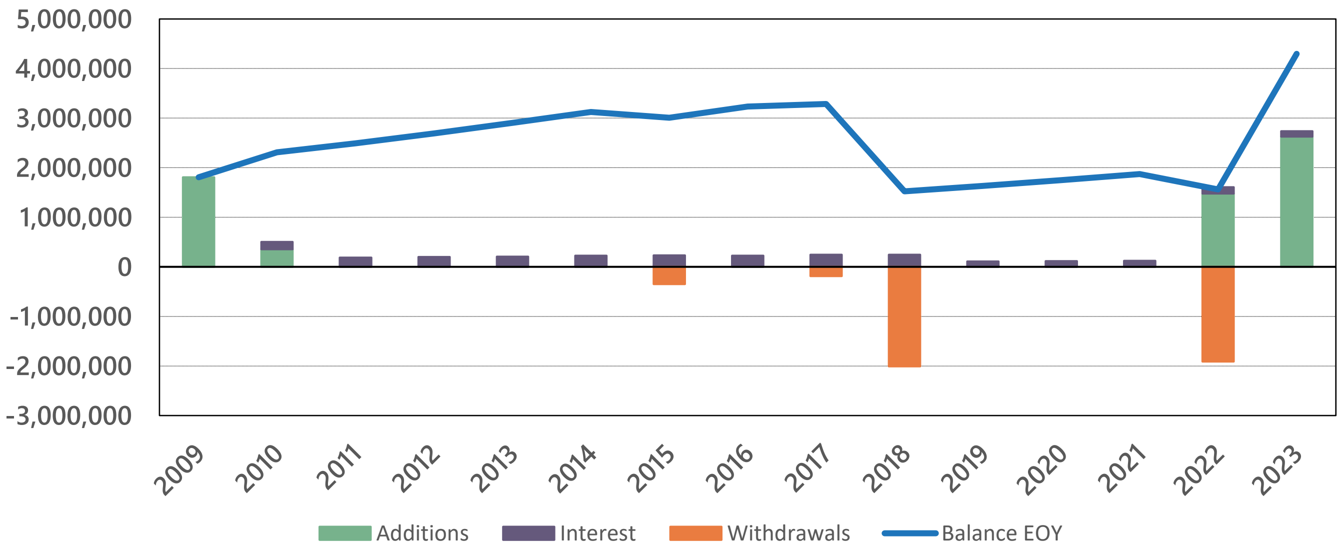


Figure 3.2. Plan B | Funding Deposit Account History



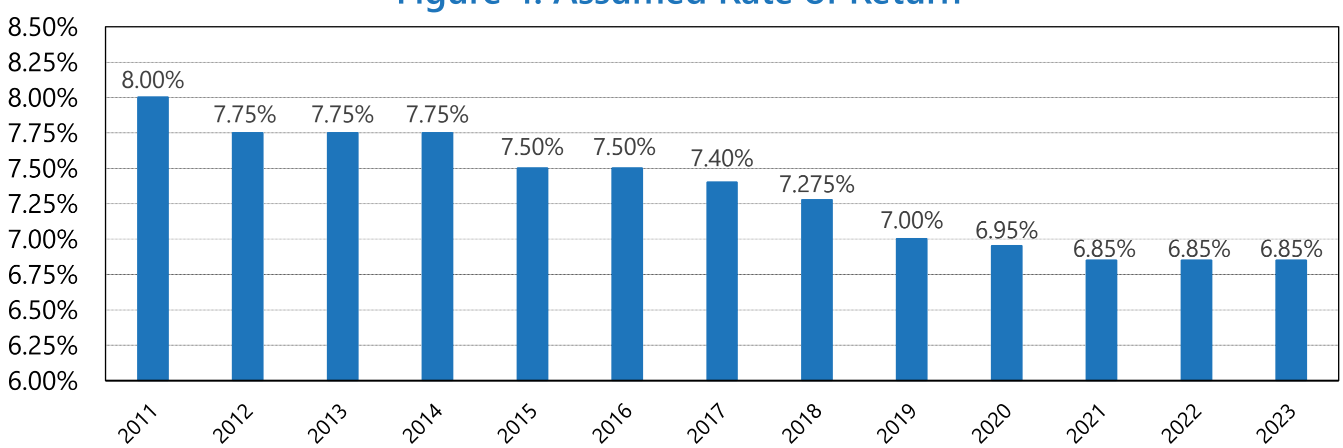
The current year actuarial assumptions utilized for this report are based on the results of an actuarial experience study for the period July 1, 2013 – June 30, 2018, unless otherwise specified in this report. This study included a review of all plan decrements in addition to salary scale experience and other demographic factors which impact plan costs. Details related to the study are contained within the 2019 Municipal Employees' Retirement System Experience Study Report.

One of the most important actuarial assumptions is the valuation interest rate. Based upon contractions in the capital market assumptions produced by investment consultants and investment market participants, a significant effort was made between 2012 and 2022 to reduce the long-term rate of return assumption. Given the significant investment gains experienced within Fiscal 2021, the Board elected to opportunistically lower the valuation interest rate by 0.10%, to 6.85%. Following interest rate increases and market declines in 2022, many consultants and investment firms increased their expected returns on risky assets and fixed income investments. This led to an increase in the actuary's reasonable range for the valuation interest rate.

In reviewing the valuation interest rate for Fiscal 2023, consideration was given to several factors. The Fund's target asset allocation was reviewed based upon the Curran Actuarial Consulting Consultant Average capital market assumption study for 2023. The study found that the 6.85% assumed rate of return used in the 2022 valuation remained within the actuary's reasonable range of 6.41% to 7.54%. The median value in the reasonable range was 6.98% and the study found that the 6.85% assumption has a 52.22% chance of being exceeded over a 30 year period. The reasonable range was set by developing 10,000 stochastic trials based on the expected long-term arithmetic return for the Fund's target allocation and the consultant average portfolio standard deviation. Since the valuation interest rate remains within the system's reasonable range and the projected capital market assumptions for many risky assets have increased, the system's actuary recommended that the Board of Trustees make no further change in the valuation interest rate for 2023. Therefore, the valuation interest rate used in the Fiscal 2023 valuation remains 6.85%. For 2023, an assumed rate of inflation of 2.5% was implicit in the assumed rate of return for Plans A and B.

A history of the valuation interest rate applicable to both plans is shown in **Figure 4**. Beginning in 2011, the system's Board of Trustees began the process of lowering the system's valuation interest rate.

Figure 4. Assumed Rate of Return



Although the Board of Trustees has authority to grant ad hoc Cost of Living Increases (COLAs) under limited circumstances, these COLAs have not been shown to have a historical pattern. This is evident in the length of time between the two most recent COLAs. The Board of Trustees was unable to provide COLAs to retirees during the period from April 1, 2009 until they approved a 1.6% of original benefit COLA effective July 1, 2022. In addition, the amounts of the COLAs granted in the past have not been relative to a defined cost-of-living or inflation index. We do not believe that there is sufficient evidence to conclude that COLAs will be granted on a predictable basis in the future. Furthermore, the Board of Trustees has the right to set aside funds in its Funding Deposit Account for a variety of purposes, including the prefunding of COLAs. In its April 2022 meeting, the Board of Trustees adopted a policy that formally states the Board's intention to limit future COLAs to years in which there are sufficient funds set aside to prefund such COLAs from the balance of the Funding Deposit Account. Therefore, for the purpose of determining the present value of future benefits, we do not believe that it is appropriate to include a provision for potential future COLAs.

The current year actuarial assumptions utilized for the report are outlined at the end of this report. All assumptions other than those mentioned above are based on estimates of future long-term experience for the system as described in the system's 2019 Experience Study report. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations.

RISK FACTORS

Defined benefit pension plans are subject to a number of risks. These risks can be related either to plan assets or liabilities. In order to pay benefits, the plan must have sufficient assets when benefits become due. Several factors can lead to asset levels which are below those required to pay promised benefits. The following categories describe a number of key risks and provide measurements related to a few.

Contribution Policy Risk

The first risk in this regard is the failure to contribute adequate funds to the plan. In some ways, this is the greatest risk since other risks can usually be addressed by adequate actuarial funding. Louisiana constitutional and statutory provisions greatly limit this risk by requiring that state and statewide plans maintain funding on an actuarial basis. The state constitution sets forth general requirements with specific funding parameters specified in the state statutes. This results in a funding policy that is expected to achieve a 100% funded status in time.

Funded Status

Beyond identifying risk categories, it is possible to quantify some risk factors. One fairly well-known risk metric is the funded ratio of the plan. The rate is given as plan assets divided by plan liabilities. However, the definition of each of these terms may vary. The two typical alternatives used for assets are the market and actuarial value of assets. There are several alternative measures of liability depending on the funding method employed. The Governmental Accounting Standards Board (GASB) specifies that for financial reporting purposes, the funded ratio is determined by using the market value of assets divided by the entry age normal accrued liability. This value is given in the system's financial report. Alternatively, we have calculated the ratio of the actuarial value of assets to the entry age normal accrued liability based on the funding methodology used to fund the plan. The ratio is 76.52% for Plan A and 77.77% for Plan B as of June 30, 2023.This value gives some indication of the financial strength of the plan; however, it does not guarantee the ability of the fund to pay benefits in the future or indicate that, in the future, contributions are likely to be less than or greater than current contributions. In addition, the ratio cannot be used in isolation to compare the relative strength of different retirement systems. However, the trend of this ratio over time can give some insight into the financial health of the plan. Even in this regard, caution is warranted since market fluctuations in asset values and changes in plan assumptions can distort underlying trends in this value.

Figures 5.1 and 5.2 give a history of this value for the last ten years. Note that the underlying trend is somewhat disguised since the system has significantly reduced the valuation interest rate over this period. Absent the reduction in the discount rate, the current ratio would be higher and would have shown a larger increase over time.

Figure 5.1. Plan A | Historical Funded Status

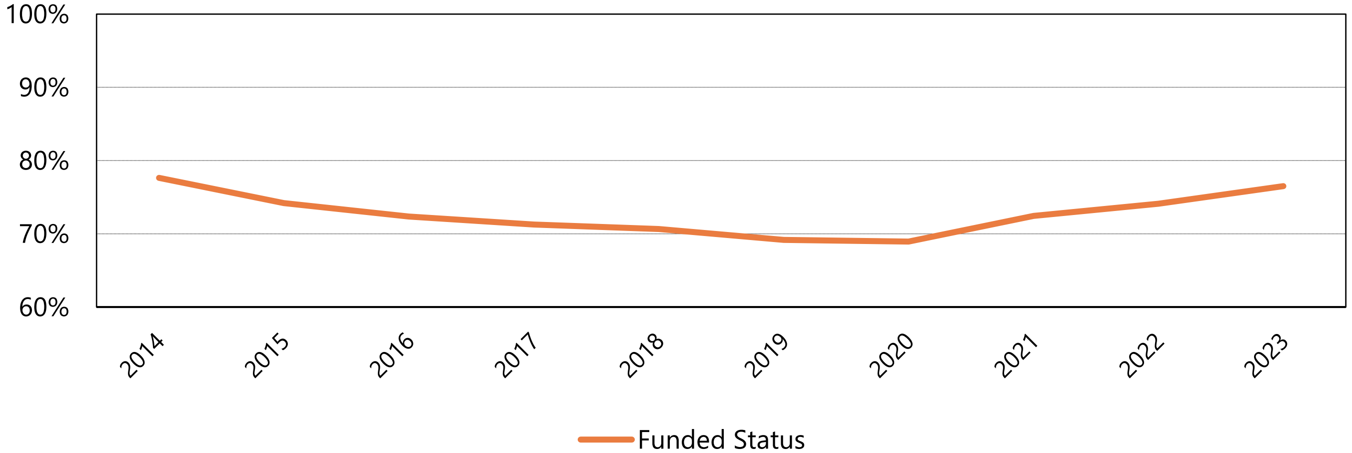
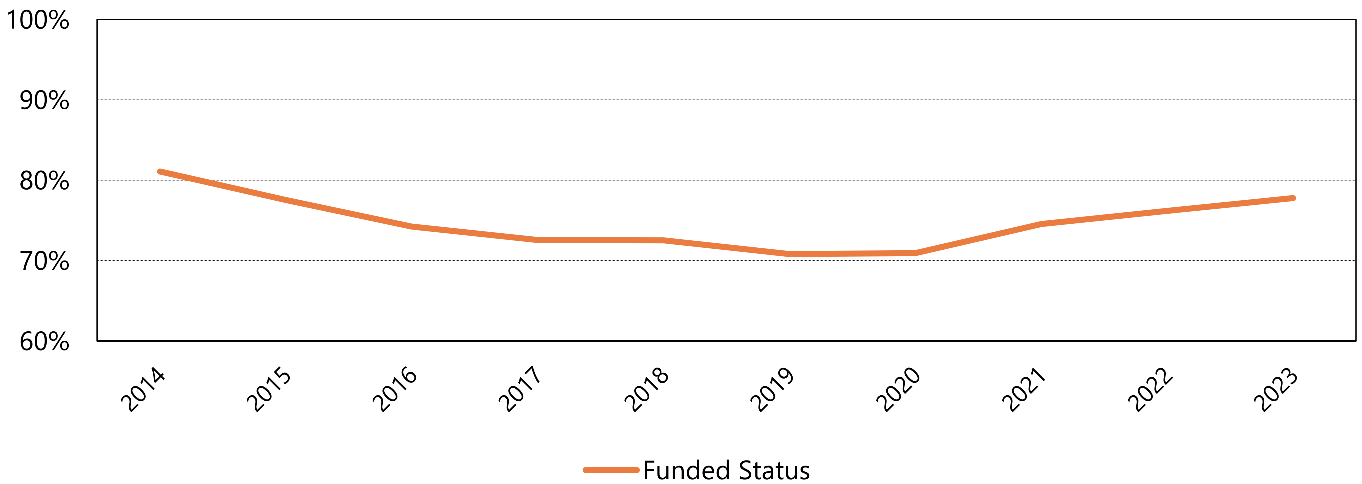


Figure 5.2. Plan B | Historical Funded Status



Following are a number of risks and risk measures related to system assets:

Inflation Risk

All pension plans are subject to the uncertainty of asset performance, of which inflation is a major component. The total nominal rate of return on assets is comprised of the real rates of return earned on the portfolio of investments plus the underlying inflation rate. High levels of inflation pose a risk to plan members in that they reduce the purchasing power of plan benefits. As the plan attempts to offset inflation by providing COLAs (often in the form of permanent benefit increases), minimum contribution rates will inevitably increase unless provisions are made to prefund such adjustments. Very low inflation typically reduces the nominal rate of return on assets; deflation can potentially reduce the capital value of trust assets. During the decade preceding 2020, inflation levels remained in a fairly narrow range. Since 2020, inflation has significantly increased. So far, Federal Reserve efforts to fight inflation have not had the desired effect. Forecasters seem to believe that although long-term average rates of future inflation may be higher than projected in recent years, the impact of near-term inflation will not be significant. There is always the possibility that high inflation will remain a problem in the future or that the country will experience a deflationary period; however, most expert opinion currently assesses these alternatives as unlikely in the near term.

Reinvestment Risk

Another element of asset risk is reinvestment risk. Interest rate declines can subject pension plans to an increase in this risk. As fixed income securities mature, investment managers may be forced to reinvest funds at decreasing rates of return. For the foreseeable future it is unlikely, though not impossible, that interest rates will steeply decline, which mitigates the reinvestment risk the plan currently faces. As the current cycle of increasing interest rates abates, the possibility of reinvestment risk will undoubtedly increase.

Asset Return Volatility Risk

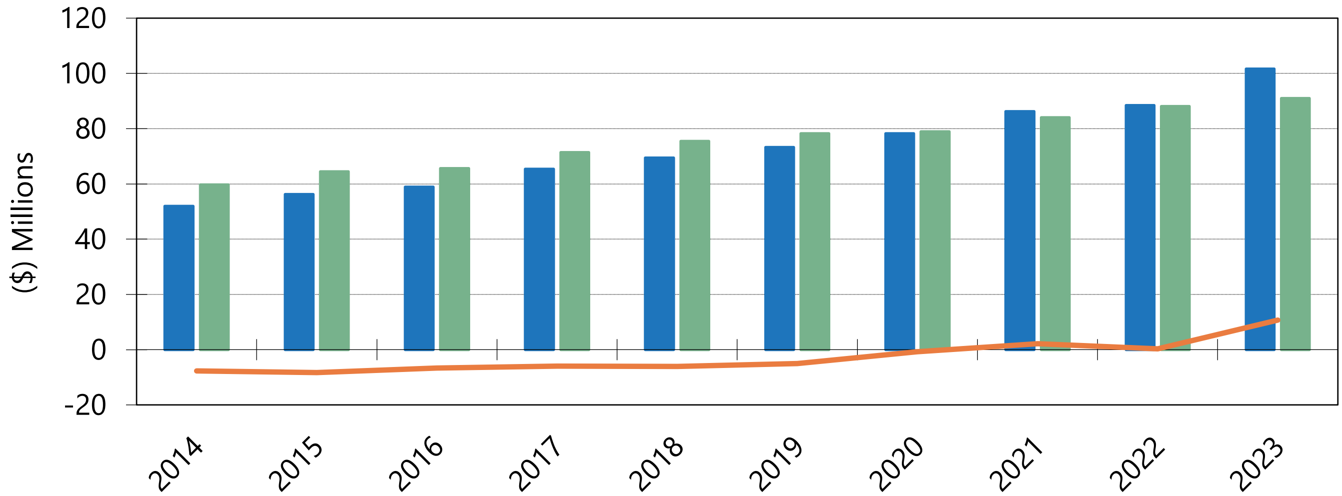
Long-term asset performance depends not only on average returns but also on the volatility of returns. Two portfolios of identical size with identical average rates of return will accumulate different levels of assets if the volatility of returns differs since increased volatility reduces the accumulation of assets. Volatility of returns will be determined by both market conditions and the asset allocation of the investment portfolio. If the system’s investment portfolio has a substantial allocation to assets that have low price stability, the risk of portfolio volatility will increase, although low correlations among asset classes can mitigate this risk.

Cash Flow Risk

The system is also exposed to risk related to cash flow. Where benefit payments exceed contributions to a plan, the plan will be required to use investment income or potentially investment capital to pay benefits. In cases where it is necessary to use investment income to pay retirement benefits, investment market downturns place additional stress on the portfolio and make the recovery from such downturns more difficult since funds available for reinvestment are reduced by benefit payments. The historical cash flow graphs and demonstrations given below in **Figures 6.1 and 6.2** compare the total contribution income to benefits and expenses to determine the noninvestment cash flow of the system over the last ten years. Currently, annual contributions exceed annual benefit payments in both Plan A and Plan B.

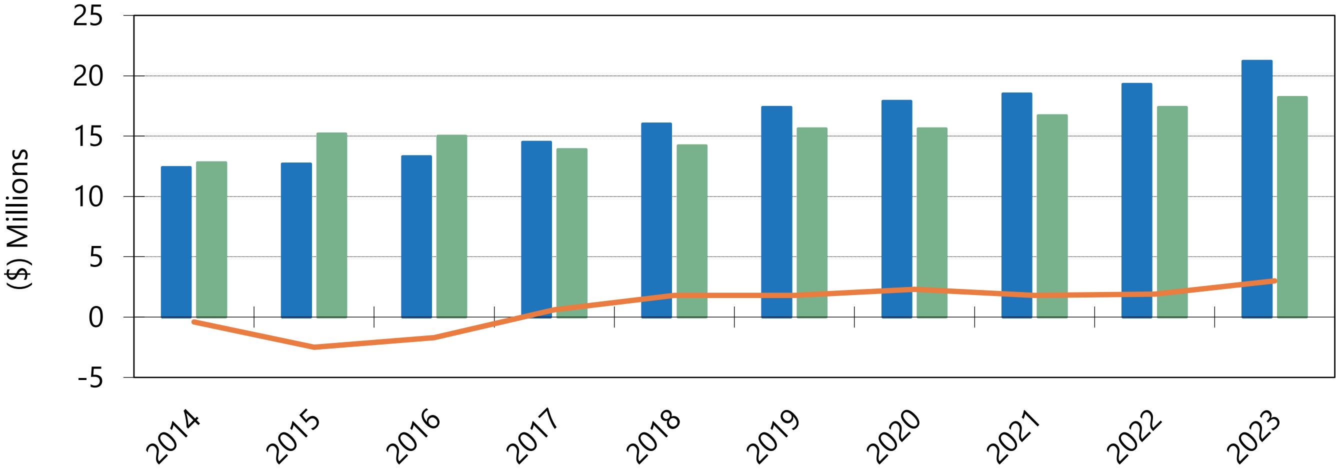
Future net noninvestment cash flows for each plan will be determined based upon both the plan's maturity and future contribution levels. Hence, increases in future contributions due to adverse actuarial experience will tend to mitigate the potential of negative cash flows arising from the natural maturation of the plan whereas reduced contribution levels resulting from positive experience could lead to negative cash flows. Recent experience includes years in which the system's benefit payments exceeded contribution income. Such negative noninvestment cash flows will likely occur again in the future given the expectation of a lower active population.

Figure 6.1. Plan A | Annual Net Non-Investment Cash Flows



Plan A		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Contribution Income ($Mil)		52.0	56.2	58.9	65.4	69.4	73.3	78.3	86.2	88.4	101.7
Benefits and Expenses ($Mil)		59.7	64.5	65.6	71.4	74.5	78.3	79.0	84.1	88.1	91.0
Net Non-Inv. Cash Flow ($Mil)		-7.7	-8.3	-6.7	-6.0	-5.1	-5.0	-0.7	2.1	0.3	10.7

Figure 6.2. Plan B | Annual Net Non-Investment Cash Flows



Plan B		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Contribution Income ($Mil)		12.4	12.7	13.3	14.5	16.0	17.4	17.9	18.5	19.3	21.2
Benefits and Expenses ($Mil)		12.8	15.2	15.0	13.9	14.2	15.6	15.6	16.7	17.4	18.2
Net Non-Inv. Cash Flow ($Mil)		-0.4	-2.5	-1.7	0.6	1.8	1.8	2.3	1.8	1.9	3.0

Sensitivity to Investment Gains/Losses

Every retirement system is subject to investment return risk. When the rate of return on the actuarial value of assets does not equal the assumed rate of return, the system experiences investment gains or losses. These can cause contribution rate requirements to be more volatile. For this plan, we have determined that based on current assets and demographics, for each percentage under the assumed rate of return on the actuarial value of assets, there will be a corresponding increase in the actuarially required contribution as a percentage of projected payroll of 0.69% for Plan A and 0.39% for Plan B.

Sensitivity to Changes in Valuation Interest Rate

With regard to the economic assumptions, we have determined that a reduction in the valuation interest rate by 1% (without any change to other collateral factors) would increase the actuarially required employer contribution rate for Fiscal 2024 by 10.04% of payroll for Plan A and 5.84% of payroll for Plan B. In the future, adjustments to the assumed rates of return may be required; however, the likelihood of such an event is difficult to gauge since it requires assigning probabilities to future capital market scenarios.

Following are a number of risks and risk measures related to system liabilities:

Maturity Risk

The ability of a system to recover from adverse asset or liability performance is partly related to the maturity of the plan population. In general, plans with increasing active membership are less vulnerable to asset and liability gains and losses than mature plans since changes in plan costs can be partially allocated to new members. If the plan has a large number of active members compared to retirees, asset or liability losses can be more easily addressed. As more members retire, contributions can only be collected from a smaller segment of the overall plan population. Often, population ratios of actives to annuitants are used to measure the plan's ability to adjust or recover from adverse events since contributions are made by or on behalf of active members but not for retirees. Thus, if the plan suffers a mortality loss through increased longevity, this will affect both actives and retirees, but the system can only fund this loss with contributions related to active members. A measure of risk related to plan maturity is the ratio of total benefit payments to active payroll. For Fiscal 2023, this ratio is 40% for Plan A and 18% for Plan B. Ten years ago, this ratio was 29% for Plan A and 13% for Plan B.

Assumption Risk

One other area of exposure the plan faces is the possibility that plan assumptions will need to be revised to conform to changing actual or expected plan experience. Such assumption revisions may relate to economic or demographic factors. With regard to the economic assumptions, there is always the possibility that market expectations will require an adjustment to the assumed rate of return. Market expectations related to the assumed rate of return do not currently suggest that a further decrease in the assumption is warranted. We will continue to monitor capital market assumptions and the Board's decisions related to asset mix. We will advise the Board if the reasonable range changes in any material way in the future.

Noneconomic assumptions such as mortality or other rates of decrement such as withdrawal, retirement, or disability are also subject to change. In general, such changes tend to affect plan costs less than adjustments to the assumed rates of return. Quantifying the probability or magnitude of such changes is beyond the scope of this report.

In summary, there is a risk that future actuarial measurements may differ significantly from current measurements presented in this report due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, and changes in plan provisions or applicable law. Ordinarily, variations in these factors will offset to some extent. However, even with the expectation that not all variations in costs will likely travel in the same direction, factors such as those outlined above have the potential on their own accord to pose a significant risk to future cost levels and solvency of the system.

Data Error Risk

Liability risk also includes items such as data errors. No actuarial valuation can provide accurate figures without accurate data on plan members, former members, retirees, and survivors. Significant errors in plan data can distort or disguise plan liabilities. When data corrections are made, the plan may experience unexpected increases or decreases in liabilities.

Liability Duration Risk

Each pension plan has its own unique benefit structure and demographic profile. As a result, each plan will respond to changes in interest rates in a unique way. As the expected rate of return on investments changes and the interest rate used to discount plan liabilities is adjusted, the shift in plan liabilities will depend upon the duration of the liabilities (which can be understood as the plan's sensitivity to the change in the interest rate). A slightly different measure of the duration for the plan can also be understood as an indicator of the plan's maturity. When a pension plan is first established, all participants are active members; as members retire and the plan matures, the duration of the plan decreases. A determination of the liability duration gives some insight into the investment time horizon of the plan. Thus, the liability duration of a closed plan can be thought of as the weighted "center of gravity" of plan benefit cash flows with expected cash flows occurring both before and after the duration value. For open plans with a continuous flow of new entrants this measure is somewhat less informative since the duration horizon keeps changing as new members enter the plan. For this system, we have estimated the effective liability duration as 9.81 years for Plan A and 10.20 years for Plan B.

Other Liability Risks

In addition to asset risk, the plan is also subject to risks related to liabilities. These risks include such things as longevity risk (the risk that retirees will live longer than expected), termination risk (the risk that fewer than the anticipated number of members will terminate service prior to retirement), and other factors that may have an impact on the liability structure of the plan. In a general sense, the short-term effects of these risks on the cost structure of the plan are somewhat limited since changes in these factors tend to be gradual and follow long-term secular trends. Final average compensation plans are also vulnerable to unexpectedly large increases in salary for individual members near retirement. The effect of such events frequently relates to pay plan revisions where salaries catch up after a number of years of slow growth. Revisions of this type usually depend on general economic conditions and can result in liability losses. However, they generally are infrequent and are more of a short-term issue.

Even natural disasters and dislocations in the economy or other unforeseen events can present risks to the plan. These events can affect member payroll and plan demographics, both of which impact costs. The risk associated with either of these factors can vary depending upon the severity of the event and cannot be easily forecasted.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2023 Regular Session of the Louisiana Legislature:

HCR 67 urges the United States Congress to review and eliminate or reduce the Government Pension Offset and Windfall Elimination Provision, which can result in decreases to Social Security Benefits for certain retirees and beneficiaries.

HCR 70 urges and requests the state treasurer and the state and statewide retirement systems to:

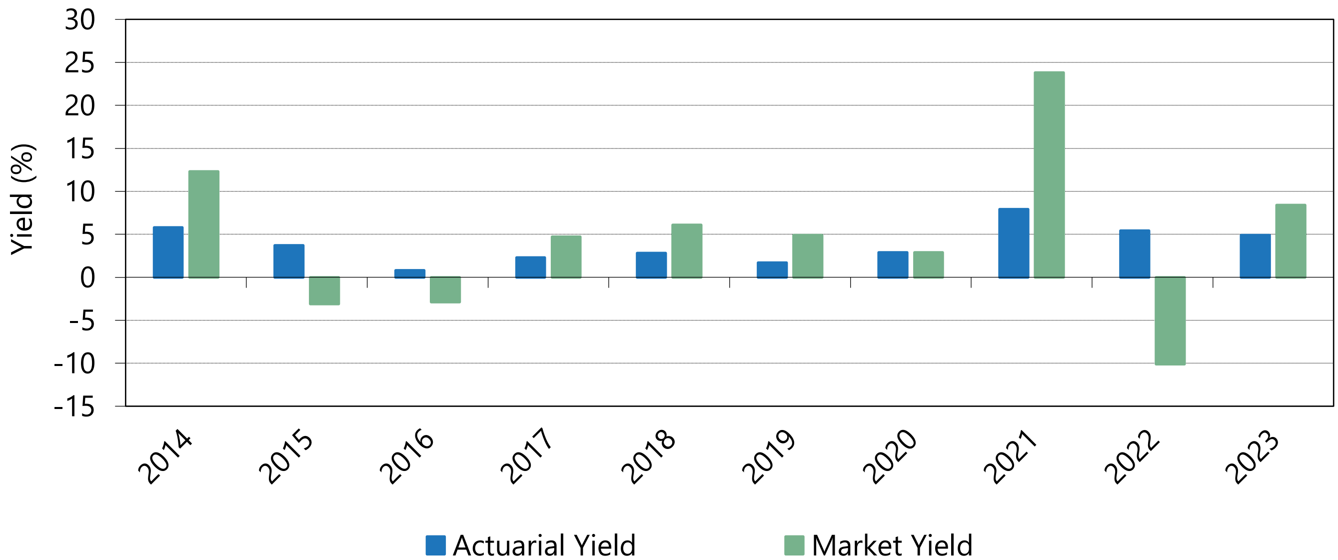
1. Report on investment advisors and companies used by the treasurer and the retirement systems that discriminate against the fossil fuel industry through environmental, social, and governance policies.
2. Report on investment of state and pension assets using nonpecuniary factors.
3. Report on the asset allocation of all of their investments.
4. Provide a report to the legislature including the name of any investment management company, investment advisor, mutual fund, or entity that uses nonpecuniary factors for investment purposes on behalf of the retirement system.
5. Provide a report to the legislature on any entity under contract that is known to boycott energy companies, including the aggregate amount that the listed entity has invested in Louisiana public companies and in U.S. and Louisiana oil and gas companies.
6. Provide a report to the legislature including specified information on investments and categorizing investments in Louisiana, within the United States, and outside the United States.

HCR 110 urges and requests that the state and statewide public retirement system boards of trustees uphold their fiduciary duty when making financial decisions and not allow Environmental, Social, and Governance policies to influence their investment decisions.

ASSET EXPERIENCE

The actuarial and market rates of return for the past ten years are given below in **Figures 7.1 and 7.2.** These rates of return on assets were determined by assuming a uniform distribution of income and expense throughout the fiscal year.

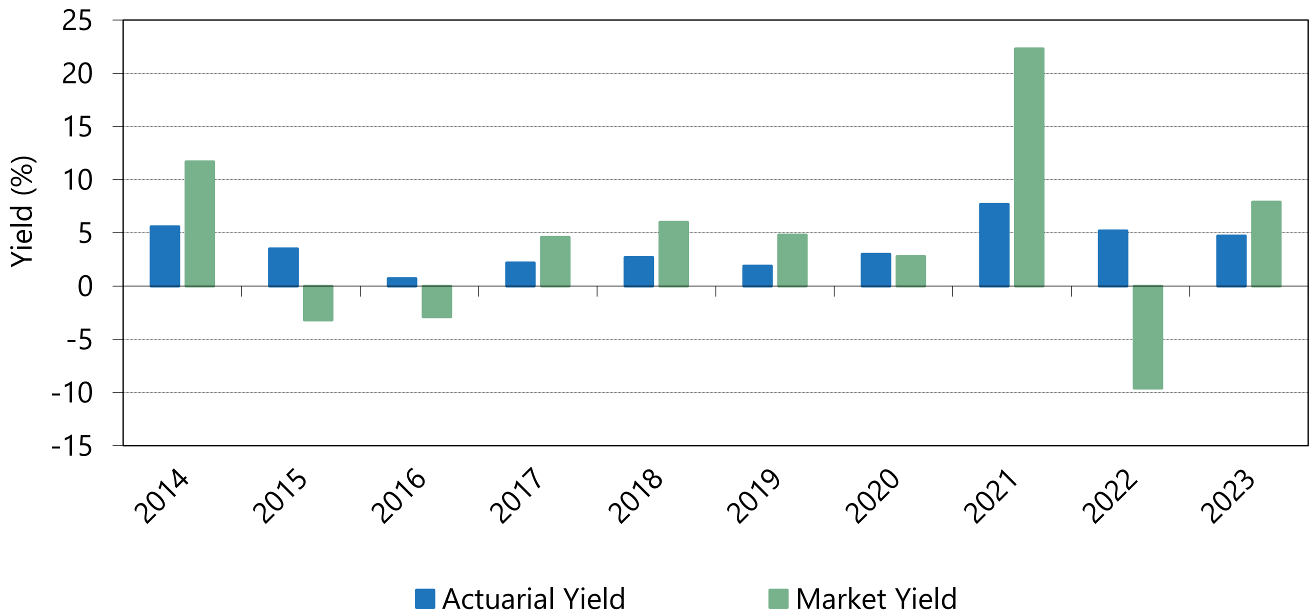
Figure 7.1. Plan A | Historical Asset Yields



Plan A	Market Yield	Actuarial Yield
2014	12.3%	5.8%
2015	-3.1%	3.7%
2016	-2.9%	0.8%
2017	4.7%	2.3%
2018	6.1%	2.8%
2019	4.9%	1.7%
2020	2.9%	2.9%
2021	23.8%	7.9%
2022	-10.1%	5.4%
2023	8.4%	4.9%

Plan A – Geometric Average Market Rates of Return	
5-year average (Fiscal 2019 – 2023)	5.4%
10-year average (Fiscal 2014 – 2023)	4.3%
15-year average (Fiscal 2009 – 2023)	3.2%
20-year average (Fiscal 2004 – 2023)	4.6%
25-year average (Fiscal 1999 – 2023)	4.3%
30-year average (Fiscal 1994 – 2023)	5.3%

Figure 7.2. Plan B | Historical Asset Yields



Plan B	Market Yield	Actuarial Yield
2014	11.7%	5.6%
2015	-3.2%	3.5%
2016	-2.9%	0.7%
2017	4.6%	2.2%
2018	6.0%	2.7%
2019	4.8%	1.9%
2020	2.8%	3.0%
2021	22.3%	7.7%
2022	-9.6%	5.2%
2023	7.9%	4.7%

Plan B – Geometric Average Market Rates of Return	
5-year average (Fiscal 2019 – 2023)	5.2%
10-year average (Fiscal 2014 – 2023)	4.1%
15-year average (Fiscal 2009 – 2023)	3.1%
20-year average (Fiscal 2004 – 2023)	4.4%
25-year average (Fiscal 1999 – 2023)	4.0%
30-year average (Fiscal 1994 – 2023)	5.1%

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income and dividends. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2023, Plan A earned $3,116,057 and Plan B earned $1,022,378 of dividends and interest income. In addition, Plan A had net realized and unrealized capital gains on investments of $72,181,471 while the total of such gains for Plan B amounted to $15,339,886. Investment expenses were $1,487,302 for Plan A and $317,705 for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 6.85% for Fiscal 2023. This rate is calculated based on the smoothed value of assets subject to constraints as given in Exhibit VI for Plan A and Exhibit XVI for Plan B. Investment income used to calculate this yield is based upon a smoothing of investment income above or below the valuation interest rate. The difference between rates of return on an actuarial and market value basis results from the smoothing utilized. In the future, yields in excess of the valuation interest rate assumption will reduce future costs; yields below the valuation interest rate assumption will increase future costs. For Plan A, the net actuarial investment earnings for Fiscal 2023 were $18,476,803 less than the actuarial assumed earnings rate of 6.850%, and were $4,647,519 less for Plan B. These actuarial losses increased the normal cost accrual rate by 1.2740% for Plan A and 0.7833% for Plan B.

At the end of each fiscal year, a review of the data is made to identify current members of Plan A and Plan B who have consecutive service credit in both plans that have not been addressed in previous transfers of assets and liabilities between the Plan A and Plan B trust funds pursuant to the provisions of R.S. 11:1862(F). In the course of reviewing data for the June 30, 2023 valuation we found 4 members of Plan A with Plan B service credit and 9 such members of Plan B with Plan A service for whom a transfer must be made. In addition, 8 former members of Plan B with Plan A service credit required a transfer of funds. Based upon a valuation of the liabilities for service in the previous plan, we recommend a transfer of $320,268 with accrued interest thereon from June 30, 2023 be made from the Plan A trust to the Plan B trust for Fiscal 2023.

DEMOGRAPHICS AND LIABILITY EXPERIENCE
PLAN A

A reconciliation of the census for the plan is given in Exhibit IX. The average active member is 48 years old with 9.09 years of service and an annual salary of $44,450. The plan's active membership, inclusive of DROP participants, decreased by 29 members during the fiscal year. The plan has experienced a decrease in the active plan population of 404 members over the last five years.

The average regular retiree is 72 years old with an annual benefit of $23,344. The average age at retirement for regular retirees is 60. The number of retirees and beneficiaries receiving benefits from the system increased by 58 during the fiscal year; over the last five years the number of retirees has increased by 322 and benefit payments have increased by $15,701,861.

Plan liability experience for Fiscal 2023 was slightly favorable. Withdrawals were significantly above expected levels, disabilities and DROP entries were below expected levels, and retiree deaths were above expected levels. These factors tend to decrease costs. Retirements and average salary increases above expected levels offset these savings. Overall, plan liability gains decreased the normal cost accrual rate by 1.2983%.

DEMOGRAPHICS AND LIABILITY EXPERIENCE
PLAN B

A reconciliation of the census for the plan is given in Exhibit XIX. The average active member is 49 years old with 8.73 years of service and an annual salary of $41,870. The plan's active membership, inclusive of DROP participants, increased by 58 members during the fiscal year. The plan has experienced a decrease in the active plan population of 73 members over the last five years.

The average regular retiree is 73 years old with an annual benefit of $14,157. The average age at retirement for regular retirees is 64. The number of retirees and beneficiaries receiving benefits from the system increased by 39 during the fiscal year; over the last five years the number of retirees has increased by 148 and benefit payments have increased by $3,906,416.

Plan liability experience for Fiscal 2023 was slightly favorable. Retiree deaths were above expected levels, disabilities were below expected levels, and DROP entries were below expected levels. These factors tend to decrease costs. Active member retirements and the retirements of former DROP participants who remained employed were slightly above projected levels, withdrawals were slightly below expectations, and average salary increases were above projected levels. These factors partially offset these savings. Overall, plan liability gains decreased the normal cost accrual rate by 0.2199%.

FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components plus administrative expenses. These two components are the normal cost and the amortization payment on the unfunded actuarial accrued liability. The normal cost refers to the portion of annual cost based on the salary of active participants. The term unfunded accrued liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. The funding method in use for Plan A includes both normal cost and amortization of an unfunded actuarial accrued liability. The funding method in use for Plan B accounts for the fact that there is no unfunded actuarial accrued liability and therefore no need to account for an amortization payment. Neither funding method accounts for changes in plan experience, benefits, or assumptions within the unfunded actuarial accrued liability. These items increase or decrease future normal costs.

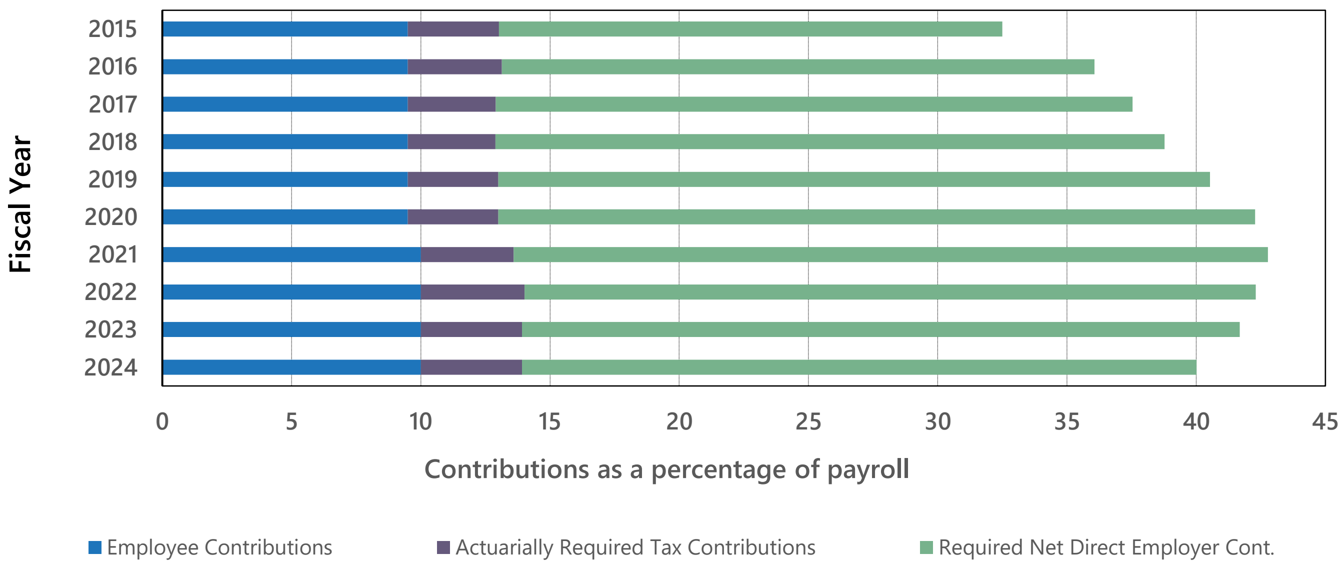
In order to establish the actuarially required contribution in any given year, it is necessary to define the assumptions, funding method, and method of amortizing the UAL (if any). Thus, the determination of what contribution is actuarially required depends upon the funding method and amortization schedules employed. Regardless of the method selected, the ultimate cost of providing benefits is dependent upon the benefits, expenses, and investment earnings. Only to the extent that some methods accumulate assets more rapidly and thus produce greater investment earnings does the funding method affect the ultimate cost.

Under the provisions of R.S. 11:103, excess or deficient contributions typically decrease or increase future normal costs. However, if the minimum net direct employer contribution is scheduled to decrease, the Board may maintain the contribution rate at some level above the minimum recommended rate. Pursuant to R. S. 11:105 and R. S. 11:107, such excess contributions are credited to the Funding Deposit Account. In addition, in accordance with R.S. 11:106, the Board may set the employer contribution rate up to 3% more than the minimum required contribution rate; any additional funds collected are credited to the Funding Deposit Account.

For Plan A, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The employer normal cost for Fiscal 2024 adjusted for mid-year payment is $47,317,703. The amortization payment on the plan’s frozen unfunded actuarial accrued liability adjusted for mid-year payment is $8,942,182. The total actuarially required contribution is determined by adding estimated administrative expenses to these two values. As given on line 16 of Exhibit I the gross actuarially required employer contribution for Fiscal 2024 is $58,065,868. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers’ minimum net direct actuarially required contribution for Fiscal 2024 is $50,245,585. This is 25.20% of the projected Plan A payroll for Fiscal 2024.

The cost of providing benefits to current and former members is borne by employees and employers and relies in part on dedicated ad valorem taxes and revenue sharing funds. **Figures 8.1** shows the breakdown of annual costs for Plan A as a percentage of payroll over the past ten years.

Figure 8.1. Plan A | Components of Actuarial Funding



Liability and asset experience as well as changes in assumptions and benefits can increase or decrease plan costs. In addition to these factors, any COLA granted in the prior fiscal year would increase required contributions (unless it is offset by a withdrawal from the Funding Deposit Account). New entrants to the system can also increase or decrease costs as a percentage of payroll depending upon their demographic distribution and other factors related to prior plan experience. Finally, contributions above or below requirements may reduce or increase future costs.

The effects of various factors on the cost structure for Plan A are outlined below:

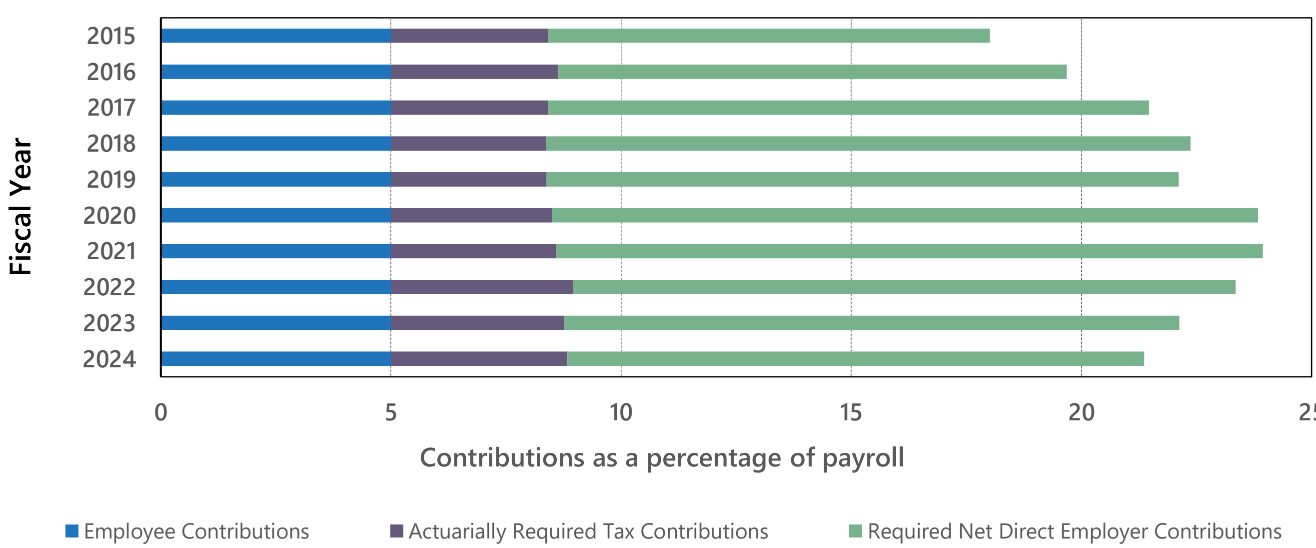
PLAN A - RECONCILIATION OF THE NORMAL COST ACCRUAL RATE	
Employer's Normal Cost Accrual Rate – Fiscal 2023	27.2976%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	1.2740%
Factors Decreasing the Normal Cost Accrual Rate:	
New Members	2.0930%
Plan Liability Experience Gain	1.2983%
Employer's Normal Cost Accrual Rate – Fiscal 2024	25.1803%

Required net direct employer contributions are also affected by the available ad valorem taxes and revenue sharing funds which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that for Plan A these funds collected in Fiscal 2024 will increase by 0.01% of payroll. We also estimate the amortization payment on the fund's UAL will decrease by 0.14% of projected payroll. The net effect of the above changes in the cost structure of the system resulted in a minimum actuarially required net direct employer contribution rate for Fiscal 2024 for Plan A of 25.20%; the board approved employer contribution rate for Fiscal 2024 is 29.50% of payroll. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%; hence, we are recommending a minimum net direct employer contribution rate for Plan A of 25.25% for Fiscal 2025.

For Plan B, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit XI. The normal cost for Fiscal 2024 adjusted for mid-year payment is $13,635,353. Based upon the Board of Trustees' decision to use a portion of the credit balance in the plan's Funding Deposit Account to pay off the remaining balance on the frozen unfunded accrued liability in Fiscal 2018, there is no projected amortization payment in the calculation of the minimum recommended net direct employer contribution rate for Fiscal 2025. The total actuarially required contribution is determined by adding estimated administrative expenses to the normal cost accrual rate. As given on line 12 of Exhibit XI the gross actuarially required employer contribution for Fiscal 2024 is $14,415,002. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' minimum net direct actuarially required contribution for Fiscal 2024 is $11,038,959. This is 12.53% of the projected Plan B payroll for Fiscal 2024.

The cost of providing benefits to current and former members is borne by employees and employers and relies in part on dedicated ad valorem taxes and revenue sharing funds. **Figures 8.2** shows the breakdown of annual costs for Plan B as a percentage of payroll over the past ten years.

Figure 8.2. Plan B | Components of Actuarial Funding



Liability and asset experience as well as changes in assumptions and benefits can increase or decrease plan costs. In addition to these factors, any COLA granted in the prior fiscal year would increase required contributions (unless it is offset by a withdrawal from the Funding Deposit Account). New entrants to the system can also increase or decrease costs as a percentage of payroll depending upon their demographic distribution and other factors related to prior plan experience. Finally, contributions above or below requirements may reduce or increase future costs.

The effects of various factors on the cost structure for Plan B are outlined below:

PLAN B - RECONCILIATION OF THE NORMAL COST ACCRUAL RATE	
Employer's Normal Cost Accrual Rate – Fiscal 2023	17.9439%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	0.7833%
Factors Decreasing the Normal Cost Accrual Rate:	
New Members	1.3855%
Plan Liability Experience Gain	0.2199%
Employer's Normal Cost Accrual Rate – Fiscal 2024	17.1218%

We estimate that for Plan B, the funds collected from ad valorem taxes and revenue sharing funds in Fiscal 2024 will increase by 0.07% of payroll. The net effect of the above changes in the cost structure of the system resulted in a minimum actuarially required net direct employer contribution rate for Fiscal 2024 for Plan B of 12.53%; the actual employer contribution rate for Fiscal 2024 is 15.50% of payroll. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%; hence, we are recommending a minimum net direct employer contribution rate for Plan B of 12.50% for Fiscal 2025.

For Plan A, the Board may set the net direct employer contribution at any rate between 25.25% and 29.50%. For Plan B, the board may set the rate at any rate between 12.50% and 15.50%. If the net direct employer contribution rate for either or both plans is set at a level above the minimum rate and the plan or plans experience a contribution gain for the year, that gain is added to the appropriate plan's Funding Deposit Account.

Both Plan A and Plan B have Funding Deposit Account Credit Balances. Both plans experienced a contribution gain due to a net direct employer contribution rate set above the minimum recommended employer contribution rate during Fiscal 2023. Therefore, surplus contributions were credited to the Funding Deposit Account ($8,547,054 for Plan A and $2,629,363 for Plan B) during the year. In accordance with R.S. 11:107.1(D), the balances were adjusted for the accrual of interest at the valuation interest rate. The remaining funds in these accounts may be used to reduce the outstanding unfunded accrued liability, reduce the future normal costs, fund cost of living increases to retirees, or reduce contributions for specified fiscal years.

LOW-DEFAULT RISK OBLIGATION MEASURE (LDROM)

The retirement system's annual actuarial funding valuation determines the employer's minimum contribution rate based upon a set of actuarial assumptions found to be reasonable individually and in the aggregate for the purpose of the measurement. For a system like the Municipal Employees' Retirement System that is open to new members and expected to exist in perpetuity, boards of trustees generally elect to invest system assets in a basket of asset classes that subject the system to a number of investment risks, including the risk of default. Such risks are generally mitigated through diversification among the asset classes and through portfolio construction within each asset class. When considering expert opinions about expectations of future returns, generally called capital market assumptions, and when considering historical evidence, it is found that a portfolio composed of a combination of asset classes (including risky assets such as equities, fixed income assets, real estate investments, and other alternative investments) earns a larger return than risk-free or low-default-risk fixed income assets provide. The larger expected return is often referred to as a risk premium as investors generally require a larger return to accept the added risk. It is precisely this exchange of return for added risk that is at the heart of the low-default-risk obligation measure (LDROM) defined within Actuarial Standard of Practice #4. Were the system to simply invest in low-default-risk fixed income securities, the system would be expected to earn less from investment markets but would also expect less portfolio return volatility and less chance of investment default. Since investment income directly offsets the contributions owed by the system's employers, building a portfolio that includes risky assets can be a strategy to lower the long-term requirement for employer contributions, but in doing so, employers accept certain investment risks.

The LDROM can help to quantify both the impact of investing in a portfolio that includes risky assets and using a long-term expected rate of return from such a portfolio to discount liabilities. In addition, the LDROM can help stakeholders understand how much liabilities would increase if the system was measured using a discount rate that did not include the risk premium for assets with higher default risk. The standard of practice requires the following when determining the LDROM:

- The actuary should use an immediate gain actuarial cost method.
- The actuary should select a discount rate or rates derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future.
- Other than the discount rate or rates, the actuary may use the same assumptions used in the funding valuation for this measure.

The biggest decision in making LDROM calculations is the discount rate or rates to use. The standard discusses several possibilities. We have elected to base our LDROM calculations on discount rates derived from high-quality corporate bonds, which we believe best represent low-default-risk fixed income investments. For the purpose of these calculations, we intend to use the U.S. Department of the Treasury's High-Quality Market (HQM) Corporate Bond Yield Curve weighted according to the closed fund cash flows developed for the most recently completed system specific GASB 67 analyses. The LDROM calculations have been performed based on the Entry Age Normal funding method.

The U.S. Treasury HQM Corporate Bond Yield Curve is developed using regression variables, projects yield curves beyond the longest maturity date, and makes use of bond market characteristics to help generate a stable curve. It represents spot yields of corporate bonds rated AAA, AA, or A and is available monthly on the IRS website. When the June 2023 HQM Corporate Bond Yield Curve is weighted based on the GASB 67 cash flows, the effective single discount rate derived from the analysis is 5.20% for both Plan A and Plan B.

In the following section, we will disclose an LDROM-based actuarial accrued liability, which can be compared to the entry age normal actuarial accrued liability, and an LDROM-based funded ratio, which can be compared to the system's funded ratio determined based on the entry age normal actuarial accrued liability. Our calculations are based on the effective single discount rate derived from the U.S. Treasury HQM Corporate Bond Yield Curve of 5.20%. All other assumptions match those used to determine funding liabilities.

Plan A - LDROM Comparison	Funding Valuation	LDROM Valuation
Discount Rate	6.85%	5.20%
Accrued Liability for Active Members	$ 491,820,489	$ 612,644,399
Accrued Liability for Terminated Members	$ 35,859,046	$ 43,133,848
Accrued Liability for Retired Members	$ 783,903,052	$ 895,556,087
Total Actuarial Accrued Liability (AAL)	$ 1,311,582,587	$ 1,551,334,334
Funded Ratio (AVA/AAL)	76.52%	64.69%

Plan B - LDROM Comparison	Funding Valuation	LDROM Valuation
Discount Rate	6.85%	5.20%
Accrued Liability for Active Members	$ 137,272,995	$ 171,072,479
Accrued Liability for Terminated Members	$ 10,698,346	$ 12,989,400
Accrued Liability for Retired Members	$ 147,808,810	$ 167,571,187
Total Actuarial Accrued Liability (AAL)	$ 295,780,151	$ 351,633,066
Funded Ratio (AVA/AAL)	77.77%	65.41%

The differences in the measures shown above can be viewed within the risk/return framework. By accepting added investment risk, the system is expected to significantly reduce the employer's responsibility to fund system liabilities over the long run, but that decision will likely result in greater variability in employer contributions over time as risky assets typically experience greater return volatility.

COST OF LIVING ADJUSTMENTS

During Fiscal 2023 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 3.0%.

RELEVANT COLA STATUTES	
Statute	**Description**
R.S. 11:1761	Provides cost-of-living increases of up to 2% of each retiree's original benefit. Applies to those retired for at least one year.
R.S. 11:246	Provides supplemental cost-of-living increases to retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. Applies to those retired for at least one year.
R.S. 11:241	Provides for cost-of-living benefits payable based on a formula equal to up to $1 times the total of the number of years of credited service accrued at retirement or at death of the member or retiree plus the number of years since retirement or since death of the member or retiree to the system's fiscal year end preceding the payment of the benefit increase. Applies to those retired for at least one year.

In addition, Act 113 of the 2008 Regular Legislation Session provides for a COLA of 3% of the normal monthly benefit but not less than $20 per month. Although this COLA is permanent, it may only be granted once. This one-time cost of living increase may only be paid from excess interest earnings.

Based upon the irrevocable election of the Board of Trustees to accept the alternative method for determining eligibility to authorize cost of living increases under Act 170 of the 2013 Legislative Session, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:243. Under this section, the system is only be authorized to grant a cost-of-living adjustment under R.S. 11:241, R.S. 11:246, or R. S. 11: 1761 in fiscal years in which the rate of return on an actuarial basis exceeds the valuation interest rate and one of the following applies:

1. The system has a funded ratio of 90% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the most recent fiscal year.
2. The system has a funded ratio of 80% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the two most recent fiscal years.
3. The system has a funded ratio of 70% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the three most recent fiscal years.

Based on the frequency rules within R.S. 11:243 and since neither plan had excess interest earnings during fiscal 2023, the Board of Trustees is not authorized to grant a cost-of-living increase.

The following is a history of COLAs provided since January 1, 2000:

COLA HISTORY SINCE 2000	
July 1, 2022	COLA paying 1.6% of original benefit to all retirees and survivors who had received benefits for at least one year.
April 1, 2009	COLA paying 1.5% of original benefit to all retirees and survivors who had received benefits for at least one year.
January 1, 2008	COLA paying 2.0% of original benefit to all retirees and survivors in addition to a supplemental COLA of 2% of original benefit payable to retirees and survivors over age 65 (for retirees and survivors who had received benefits for at least one year).
January 1, 2001	COLA paying 2.0% of original benefit to all retirees and survivors who had received benefits for at least one year.
January 1, 2000	COLA paying 2.0% of original benefit to all retirees and survivors in addition to a supplemental COLA of 2% of original benefit payable to retirees and survivors over age 65 (for retirees and survivors who had received benefits for at least one year).

EXHIBITS

EXHIBIT I
PLAN A: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	$	1,532,020,251
2.	Frozen Unfunded Actuarial Accrued Liability	$	48,847,862
3.	Actuarial Value of Assets	$	1,003,608,550
4.	Funding Deposit Account Credit Balance	$	17,097,231
5.	Present Value of Future Employee Contributions	$	131,465,069
6.	Present Value of Future Employer Normal Costs (1 - 2 – (3 – 4) – 5)	$	365,196,001
7.	Present Value of Future Salaries	$	1,450,326,377
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)		25.180263%
9.	Projected Fiscal 2024 Salary for Current Membership	$	181,792,571
10.	Employer Normal Cost as of July 1, 2023 (8 × 9)	$	45,775,847
11.	Employer Normal Cost Interest Adjusted for Mid-year Payment	$	47,317,703
12.	Amortization Payment on Frozen Unfunded Accrued Liability with Payments Increasing at 4.25% per year	$	8,650,799
13.	Amortization Payment Interest Adjust for Mid-year Payment	$	8,942,182
14.	TOTAL Employer Normal Cost & Amortization Payment (11 + 13)	$	56,259,885
15.	Estimated Administrative Cost for Fiscal 2024	$	1,805,983
16.	Gross Employer Actuarially Required Contribution for Fiscal 2024 (14 + 15)	$	58,065,868
17.	Projected Ad Valorem Tax Contributions for Fiscal 2024	$	(7,708,238)
18.	Projected Revenue Sharing Funds for Fiscal 2024	$	(112,045)
19.	Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2024 (16 + 17 + 18)	$	50,245,585
20.	Projected Payroll for Fiscal 2024	$	199,411,751
21.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2024 (19 ÷ 20)		25.20%
22.	Board Approved Employer Contribution Rate for 2024		29.50%
23.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2025 (21, Rounded to the nearest 0.25%)		25.25%

EXHIBIT II
PLAN A: PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	$ 601,615,296		
Survivor Benefits	14,308,773		
Disability Benefits	14,910,679		
Vested Termination Benefits	55,227,533		
Refunds of Contributions	26,195,872		
TOTAL Present Value of Future Benefits for Active Members			$ 712,258,153

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	$ 27,610,650		
Terminated Members with Reciprocals Due Benefits at Retirement	784,974		
Terminated Members Due a Refund	7,463,422		
TOTAL Present Value of Future Benefits for Terminated Members			$ 35,859,046

PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees			
Maximum	$ 280,339,543		
Option 2	305,383,380		
Option 3	92,201,695		
Option 4	3,001,368		
TOTAL Regular Retirees		$ 680,925,986	
Disability Retirees		13,649,824	
Survivors		76,016,761	
Reserve for Accrued Retiree DROP Account Balances		13,310,481	
TOTAL Present Value of Future Benefits for Retirees & Survivors			$ 783,903,052
TOTAL Present Value of Future Benefits			$ 1,532,020,251

EXHIBIT III – SCHEDULE A
PLAN A: MARKET VALUE OF ASSETS

CURRENT ASSETS:

Cash in Banks	$	10,803,055		
Contributions and Taxes Receivable		20,714,700		
Accrued Interest and Dividends		22,511		
Investments Receivable		6,899,398		
Due (to) from Other Funds		379,475		
Other Current Assets		95,698		
TOTAL CURRENT ASSETS			$	38,914,837
Property, Plant & Equipment			$	1,598,733

INVESTMENTS:

Cash Equivalents	$	5,050,738		
Equities		520,424,948		
Fixed Income		267,818,627		
Real Estate		70,961,618		
Alternative Investments		31,320,778		
Self-Directed Investments		26,722,970		
TOTAL INVESTMENTS			$	922,299,679
TOTAL ASSETS			$	962,813,249

CURRENT LIABILITIES:

Accounts Payable	$	114,052		
Refunds Payable		505,237		
Investments Payable		29,541		
Due to/(from) Plan B		320,268		
Other Post-Employment Benefits		179,862		
Other Current Liabilities		54,128		
TOTAL CURRENT LIABILITIES			$	1,203,088
MARKET VALUE OF ASSETS			$	961,610,161

EXHIBIT III – SCHEDULE B
PLAN A – ACTUARIAL VALUE OF ASSETS

Excess (Shortfall) of Invested Income
For Current and Previous 4 Years:

Fiscal year 2023	$	13,366,803
Fiscal year 2022		(165,706,954)
Fiscal year 2021		132,640,795
Fiscal year 2020		(31,619,883)
Fiscal year 2019		(17,395,262)
Total for Five Years	$	(68,714,501)

Deferral of Excess (Shortfall) of Invested Income:

Fiscal year 2023 (80%)	$	10,693,442
Fiscal year 2022 (60%)		(99,424,172)
Fiscal year 2021 (40%)		53,056,318
Fiscal year 2020 (20%)		(6,323,977)
Fiscal year 2019 (0%)		0
Total Deferred for Year	$	(41,998,389)

Market Value of Plan Net Assets, End of Year	$	961,610,161
Preliminary Actuarial Value of Plan Assets, End of Year	$	1,003,608,550

Actuarial Value of Assets Corridor

85% of Market Value, End of Year	$	817,368,637
115% of Market Value, End of Year	$	1,105,851,685

Final Actuarial Value of Plan Net Assets, End of Year	$	1,003,608,550

EXHIBIT IV
PLAN A: PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	$	131,465,069
Employer Normal Contributions to the Pension Accumulation Fund		365,196,001
Employer Amortization Payments to the Pension Accumulation Fund		48,847,862
Funding Deposit Account Credit Balance		(17,097,231)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	$	528,411,701

EXHIBIT V
PLAN A: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability			$	54,014,424
Interest on Frozen Unfunded Accrued Liability	$	3,699,988		
TOTAL Interest Adjusted Cost Elements			$	3,699,988
Amortization Payment on the Unfunded Accrued Liability	$	8,298,128		
Interest on Amortization Payment		568,422		
Credited Withdrawals from Funding Deposit Account		0		
TOTAL Interest Adjusted Employer Contributions			$	8,866,550
NET Change in Frozen Unfunded Accrued Liability			$	(5,166,562)
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY			$	48,847,862

EXHIBIT VI
PLAN A: ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (June 30, 2022)			$	946,256,046
INCOME:				
Member Contributions	$	19,060,352		
Employer Contributions		59,437,701		
Lafayette Dissolution Payments		13,708,000		
Irregular Contributions		237,932		
Ad Valorem Taxes and Revenue Sharing		7,522,754		
Transfers from Other Plan/Systems		1,709,528		
Total Contributions			$	101,676,267
Net Appreciation in Fair Value of Investments	$	72,181,471		
Interest & Dividend Income		3,116,057		
Investment Expense		(1,487,302)		
Net Investment Income			$	73,810,226
TOTAL Income			$	175,486,493
EXPENSES:				
Retirement Benefits	$	77,679,727		
DROP Disbursements		5,030,957		
Refunds of Contributions		5,173,218		
Funds Transferred to another System		1,140,078		
Transfer to/(from) Plan B		320,268		
Administrative Expenses		1,680,039		
TOTAL Expenses			$	91,024,287
Net Market Value Income for Fiscal 2023 (Income – Expenses)			$	84,462,206
Unadjusted Fund Balance as of June 30, 2023 (Fund Balance Previous Year + Net Income)			$	1,030,718,252
Adjustment for Actuarial Smoothing			$	(27,109,702)
Actuarial Value of Assets: (June 30, 2023)			$	1,003,608,550

EXHIBIT VII
PLAN A: FUNDING DEPOSIT ACCOUNT

Funding Deposit Account Balance as of June 30, 2022	$	8,002,037
Interest on Opening Balance at 6.850%		548,140
Contributions to the Funding Deposit Account		8,547,054
Withdrawals from the Funding Deposit Account		0
Funding Deposit Account Balance as of June 30, 2023	$	17,097,231

EXHIBIT VIII – SCHEDULE A
PLAN A: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	$	470,272,330
Present Value of Benefits Payable to Terminated Employees		35,859,046
Present Value of Benefits Payable to Current Retirees and Beneficiaries		783,903,052
TOTAL PENSION BENEFIT OBLIGATION	$	1,290,034,428
NET ACTUARIAL VALUE OF ASSETS	$	1,003,608,550
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation		77.80%

EXHIBIT VIII – SCHEDULE B
PLAN A: ENTRY AGE NORMAL ACCRUED LIABILITIES

Accrued Liability for Active Employees	$	491,820,489
Accrued Liability for Terminated Employees		35,859,046
Accrued Liability for Current Retirees and Beneficiaries		783,903,052
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	$	1,311,582,587
ACTUARIAL VALUE OF ASSETS	$	1,003,608,550
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability		76.52%

EXHIBIT IX
CENSUS DATA – PLAN A

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2022	4,306	3,775	207	3,732	12,020
Additions to Census					
Initial membership	657	146			803
Omitted in error last year					
Death of another member				52	52
Adjustment for multiple records		5			5
Change in Status during Year					
Actives terminating service	(302)	302			
Actives who retired	(99)			99	
Actives entering DROP	(55)		55		
Term. members rehired	37	(37)			
Term. members who retire		(48)		48	
Retirees who are rehired	11			(11)	
Refunded who are rehired	15				15
DROP participants retiring			(46)	46	
DROP returned to work	31		(31)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(287)	(154)			(441)
Deaths	(13)	(7)	(2)	(165)	(187)
Included in error last year				(2)	(2)
Adjustment for multiple records				(9)	(9)
Number of members as of June 30, 2023	4,301	3,982	183	3,790	12,256

Plan A | Actives Census by Age:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	47	8	55	27,114	1,491,278
21 - 25	164	46	210	30,796	6,467,174
26 - 30	192	104	296	35,954	10,642,530
31 - 35	244	130	374	40,749	15,240,044
36 - 40	282	149	431	45,335	19,539,499
41 - 45	287	188	475	46,205	21,947,339
46 - 50	280	186	466	44,495	20,734,654
51 - 55	387	224	611	47,685	29,135,280
56 - 60	433	205	638	47,409	30,246,820
61 - 65	359	198	557	46,957	26,154,873
66 - 70	162	88	250	48,710	12,177,491
71 - 75	50	25	75	47,697	3,577,277
76 - 80	24	11	35	47,002	1,645,060
81 - 85	9	2	11	28,452	312,972
Total	2,920	1,564	4,484	44,450	199,312,291

Includes 1,998 actives with vested benefits, including 183 DROP participants and 162 active former DROP participants.

Plan A | DROP Participants

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	4	0	4	37,458	149,830
51 - 55	20	6	26	44,301	1,151,832
56 - 60	31	10	41	42,541	1,744,180
61 - 65	38	37	75	24,970	1,872,766
66 - 70	15	12	27	19,995	539,858
71 - 75	6	3	9	23,681	213,126
76 - 80	1	0	1	34,032	34,032
Total	115	68	183	31,178	5,705,624

Plan A | Terminated Members Due a Deferred Retirement Benefit:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26 - 30	1	0	1	8,276	8,276
31 - 35	6	6	12	11,605	139,260
36 - 40	13	5	18	14,400	259,202
41 - 45	18	7	25	16,567	414,167
46 - 50	13	17	30	18,125	543,741
51 - 55	34	17	51	18,097	922,967
56 - 60	40	37	77	16,085	1,238,563
61 - 65	12	6	18	11,670	210,066
66 - 70	12	6	18	13,143	236,580
76 - 80	0	1	1	3,806	3,806
Total	149	102	251	15,843	3,976,628

Plan A | Terminated Members Due a Refund of Contributions:

Contributions Ranging From		To	Number	Total Contributions
0	-	99	* 1,908	101,817
100	-	499	567	148,797
500	-	999	274	194,035
1,000	-	1,999	267	383,437
2,000	-	4,999	323	1,038,453
5,000	-	9,999	182	1,324,268
10,000	-	19,999	146	2,053,153
20,000	-	99,999	64	1,875,116
Total			* 3,731	7,119,076

* Includes 1,539 members due a refund who were not included in the data. Excludes $348,041 due to deceased members.

Plan A | Regular Retirees:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41	-	45	1	0	1	27,708	27,708
46	-	50	10	6	16	31,837	509,390
51	-	55	45	16	61	32,010	1,952,617
56	-	60	110	59	169	33,963	5,739,727
61	-	65	304	193	497	28,650	14,239,053
66	-	70	482	220	702	24,999	17,549,474
71	-	75	377	204	581	22,487	13,064,863
76	-	80	292	123	415	17,648	7,324,017
81	-	85	185	85	270	17,930	4,841,144
86	-	90	85	51	136	15,020	2,042,749
91	-	95	41	24	65	14,240	925,603
96	-	100	8	7	15	10,915	163,729
101	-	105	1	1	2	9,177	18,354
Total			1,941	989	2,930	23,344	68,398,428

Plan A | Disability Retirees:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36	-	40	1	0	1	25,596	25,596
41	-	45	0	1	1	13,644	13,644
46	-	50	5	1	6	18,380	110,281
51	-	55	10	2	12	14,601	175,216
56	-	60	18	5	23	14,962	344,127
61	-	65	16	9	25	12,631	315,766
66	-	70	12	5	17	8,369	142,268
71	-	75	8	4	12	8,664	103,963
76	-	80	4	1	5	6,274	31,369
81	-	85	2	3	5	6,407	32,037
86	-	90	1	0	1	4,951	4,951
91	-	95	1	0	1	6,069	6,069
Total			78	31	109	11,975	1,305,287

Plan A | Survivors:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0	-	20	4	5	9	12,626	113,635
31	-	35	1	2	3	10,186	30,559
36	-	40	0	4	4	12,529	50,116
41	-	45	2	4	6	6,302	37,813
46	-	50	3	7	10	13,272	132,723
51	-	55	3	18	21	12,602	264,647
56	-	60	4	42	46	11,235	516,809
61	-	65	11	65	76	13,229	1,005,401
66	-	70	6	85	91	16,187	1,472,991
71	-	75	10	92	102	13,864	1,414,173
76	-	80	7	121	128	11,833	1,514,649
81	-	85	9	108	117	10,741	1,256,710
86	-	90	3	80	83	10,156	842,913
91	-	95	1	43	44	10,044	441,949
96	-	100	0	9	9	8,453	76,078
101	-	105	0	2	2	5,687	11,373
Total			64	687	751	12,227	9,182,539

Plan A | Active Members:

Attained Ages	Completed Years of Service 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 20	47	8	-	-	-	-	-	-	55
21 - 25	91	109	10	-	-	-	-	-	210
26 - 30	91	150	52	3	-	-	-	-	296
31 - 35	62	159	107	44	2	-	-	-	374
36 - 40	74	138	113	74	32	-	-	-	431
41 - 45	68	148	106	71	42	40	-	-	475
46 - 50	68	132	86	53	53	47	27	-	466
51 - 55	59	168	127	67	52	43	60	35	611
56 - 60	67	155	133	69	58	51	54	51	638
61 - 65	45	113	127	84	59	44	44	41	557
66 - 70	20	41	59	37	34	16	18	25	250
71 & Over	2	26	21	12	15	21	10	14	121
Total	694	1,347	941	514	347	262	213	166	4,484

Plan A | Average Annual Salary of Active Members:

Attained Ages	Completed Years of Service 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 20	27,161	26,841	-	-	-	-	-	-	27,114
21 - 25	29,317	31,484	36,756	-	-	-	-	-	30,796
26 - 30	31,588	35,763	42,435	65,630	-	-	-	-	35,954
31 - 35	31,601	39,233	45,954	46,174	46,996	-	-	-	40,749
36 - 40	33,013	41,677	48,687	54,959	55,512	-	-	-	45,335
41 - 45	35,290	43,515	46,002	51,946	57,309	53,400	-	-	46,205
46 - 50	37,212	39,240	44,963	48,685	48,782	54,110	53,661	-	44,495
51 - 55	36,728	41,091	45,123	43,961	48,893	56,074	67,182	68,697	47,685
56 - 60	35,214	38,864	48,383	48,673	47,801	53,957	57,857	67,090	47,409
61 - 65	35,412	43,113	46,157	45,888	50,752	57,130	49,615	55,656	46,957
66 - 70	47,223	41,954	43,481	46,926	52,920	47,002	50,695	69,900	48,710
71 & Over	84,772	35,996	44,684	49,159	42,596	48,218	37,096	62,794	45,746
Total	33,696	39,403	45,980	48,733	50,750	53,895	56,669	64,666	44,450

Plan A | Terminated Members Due a Deferred Retirement Benefit:

Attained Ages	Years until Retirement Eligibility 0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	Total
0 - 30	-	-	-	-	-	-	-	1	1
31 - 35	-	-	-	-	-	-	-	12	12
36 - 40	-	-	-	-	-	-	-	18	18
41 - 45	-	-	-	-	-	2	19	4	25
46 - 50	2	-	-	-	2	23	2	1	30
51 - 55	3	-	-	5	41	2	-	-	51
56 - 60	23	14	11	20	7	2	-	-	77
61 - 65	14	-	-	3	1	-	-	-	18
66 - 70	16	2	-	-	-	-	-	-	18
71 & Over	1	-	-	-	-	-	-	-	1
Total	59	16	11	28	51	29	21	36	251

Plan A | Average Annual Benefits of Terminated Members Due a Deferred Retirement Benefit:

Attained Ages	Years until Retirement Eligibility 0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	Total
0 - 30	-	-	-	-	-	-	-	8,276	8,276
31 - 35	-	-	-	-	-	-	-	11,605	11,605
36 - 40	-	-	-	-	-	-	-	14,400	14,400
41 - 45	-	-	-	-	-	16,350	18,177	9,025	16,567
46 - 50	25,334	-	-	-	20,074	18,298	13,069	5,925	18,125
51 - 55	30,456	-	-	16,355	17,836	9,275	-	-	18,097
56 - 60	15,545	16,069	21,331	17,077	9,300	7,402	-	-	16,085
61 - 65	11,603	-	-	12,515	10,083	-	-	-	11,670
66 - 70	13,910	7,009	-	-	-	-	-	-	13,143
71 & Over	3,806	-	-	-	-	-	-	-	3,806
Total	15,057	14,936	21,331	16,459	16,600	16,790	17,691	12,466	15,843

Plan A | Service Retirees:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	Total
0 - 50	2	4	3	4	4	-	-	-	**17**
51 - 55	6	15	8	15	15	2	-	-	**61**
56 - 60	25	22	16	23	55	25	3	-	**169**
61 - 65	70	50	54	73	113	78	50	9	**497**
66 - 70	44	45	51	101	248	91	92	30	**702**
71 - 75	16	12	29	50	158	185	70	61	**581**
76 - 80	7	7	4	19	63	115	141	59	**415**
81 - 85	2	2	7	9	20	44	62	124	**270**
86 - 90	-	2	1	1	4	17	24	87	**136**
91 & Over	-	-	-	1	3	3	5	70	**82**
Total	**172**	**159**	**173**	**296**	**683**	**560**	**447**	**440**	**2,930**

Plan A | Average Annual Benefits Payable to Service Retirees:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	Total
0 - 50	20,752	40,088	36,848	36,941	19,234	-	-	-	**31,594**
51 - 55	40,561	32,408	29,503	32,223	30,128	25,925	-	-	**32,010**
56 - 60	33,936	43,504	41,550	35,015	33,366	23,213	16,211	-	**33,963**
61 - 65	25,676	23,156	28,285	32,169	35,103	28,843	21,473	13,132	**28,650**
66 - 70	19,225	19,580	28,009	24,113	25,772	30,578	24,285	18,351	**24,999**
71 - 75	24,390	20,180	26,944	19,327	22,200	23,735	22,138	20,272	**22,487**
76 - 80	12,118	13,776	21,933	22,032	18,424	16,145	16,588	21,697	**17,648**
81 - 85	38,336	30,555	21,380	33,394	13,825	15,876	14,478	19,197	**17,930**
86 - 90	-	28,692	21,964	8,534	18,856	16,948	13,017	14,700	**15,020**
91 & Over	-	-	-	33,825	30,481	10,012	11,905	12,755	**13,508**
Total	**25,164**	**25,783**	**28,947**	**26,852**	**26,111**	**23,087**	**19,048**	**17,586**	**23,344**

Plan A | Disability Retirees:

Attained Ages	Completed Years Since Retirement								
	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	-	-
36 - 40	1	-	-	-	-	-	-	-	1
41 - 45	-	1	-	-	-	-	-	-	1
46 - 50	-	4	2	-	-	-	-	-	6
51 - 55	2	4	2	1	1	1	1	-	12
56 - 60	2	8	6	2	3	1	-	1	23
61 - 65	2	4	6	5	3	4	1	-	25
66 - 70	-	6	3	2	2	2	2	-	17
71 - 75	-	-	1	4	3	2	1	1	12
76 - 80	-	-	-	-	-	3	-	2	5
81 & Over	-	-	-	1	1	2	2	1	7
Total	7	27	20	15	13	15	7	5	109

Plan A | Average Annual Benefits Payable To Disability Retirees:

Attained Ages	Completed Years Since Retirement								
	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	-	-
36 - 40	25,596	-	-	-	-	-	-	-	25,596
41 - 45	-	13,644	-	-	-	-	-	-	13,644
46 - 50	-	21,123	12,894	-	-	-	-	-	18,380
51 - 55	13,429	17,482	14,340	16,910	11,687	8,496	12,660	-	14,601
56 - 60	9,278	16,127	14,778	13,893	18,987	14,870	-	8,271	14,962
61 - 65	6,774	12,308	11,937	16,464	16,767	9,785	9,608	-	12,631
66 - 70	-	8,999	6,483	12,991	7,938	7,637	5,848	-	8,369
71 - 75	-	-	7,704	9,074	5,823	6,444	10,105	19,500	8,664
76 - 80	-	-	-	-	-	8,326	-	3,196	6,274
81 & Over	-	-	-	8,502	5,406	5,217	6,098	6,521	6,151
Total	12,080	14,826	12,095	13,187	12,131	8,405	8,038	8,137	11,975

Plan A | Surviving Beneficiaries of Former Members:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	3	5	1	-	-	-	-	9
31 - 35	-	1	1	1	-	-	-	-	3
36 - 40	-	1	1	-	1	1	-	-	4
41 - 45	1	1	2	2	-	-	-	-	6
46 - 50	-	1	2	3	2	1	-	1	10
51 - 55	-	7	4	4	2	4	-	-	21
56 - 60	3	5	6	9	9	6	3	5	46
61 - 65	3	10	20	13	14	7	3	6	76
66 - 70	2	7	15	19	19	10	12	7	91
71 - 75	-	7	13	16	26	17	12	11	102
76 - 80	-	8	12	15	37	26	22	8	128
81 & Over	-	3	5	9	31	54	57	96	255
Total	9	54	86	92	141	126	109	134	751

Plan A | Average Annual Benefits Payable to Survivors of Former Members:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	9,059	16,042	6,250	-	-	-	-	12,626
31 - 35	-	4,685	18,176	7,698	-	-	-	-	10,186
36 - 40	-	22,551	7,988	-	9,623	9,954	-	-	12,529
41 - 45	6,568	8,398	4,462	6,962	-	-	-	-	6,302
46 - 50	-	40,640	19,445	6,172	12,697	1,932	-	7,353	13,272
51 - 55	-	12,428	10,488	5,813	30,832	12,696	-	-	12,602
56 - 60	17,171	11,276	17,123	10,946	16,009	5,218	7,347	2,048	11,235
61 - 65	14,733	14,813	19,604	13,809	9,545	7,999	7,636	4,825	13,229
66 - 70	13,214	15,378	25,407	22,314	15,919	9,273	7,999	6,095	16,187
71 - 75	-	18,589	25,712	17,202	11,112	13,680	8,744	4,377	13,864
76 - 80	-	10,938	12,272	13,684	12,834	10,612	12,066	7,302	11,833
81 & Over	-	12,817	9,152	8,217	9,926	10,214	11,411	10,012	10,310
Total	14,301	14,050	18,597	14,414	12,400	10,339	10,658	8,634	12,227

EXHIBIT X
PLAN A: YEAR-TO-YEAR COMPARISON

	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Number of Active Members	4,484	4,513	4,611	4,783
Number of Retirees & Survivors	3,790	3,732	3,673	3,618
Number of Terminated Due Deferred	251	258	243	213
Number Terminated Due Refunds	3,731	3,517	3,455	3,322
Active Lives Payroll	$ 199,312,291	$ 187,377,898	$ 185,740,910	$ 188,745,713
Retiree Benefits in Payment	$ 78,886,254	$ 76,362,820	$ 72,508,123	$ 69,264,254
Market Value of Assets (MVA)	$ 961,610,161	$ 877,147,955	$ 975,735,673	$ 786,276,078
Actuarial Value of Assets (AVA)	$ 1,003,608,550	$ 946,256,046	$ 897,366,504	$ 829,419,184
Entry Age Normal Accrued Liability	$ 1,311,582,587	$ 1,277,206,406	$ 1,238,502,345	$ 1,203,027,922
Ratio of AVA to EAN Accrued Liability	76.52%	74.09%	72.46%	68.94%
Frozen Unfunded Actuarial Accrued Liability	$ 48,847,862	$ 54,014,424	$ 58,511,472	$ 62,368,613
Present Value of Future Employer Normal	$ 365,196,001	$ 369,496,960	$ 377,569,940	$ 401,841,036
Present Value of Future Employee Contrib.	$ 131,465,069	$ 122,128,541	$ 119,944,886	$ 119,736,262
Funding Deposit Account Balance	$ 17,097,231	$ 8,002,037	$ 10,695,893	$ 10,000,835
Present Value of Future Benefits	$ 1,532,020,251	$ 1,483,893,934	$ 1,442,696,909	$ 1,403,364,260

	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021
Employee Contribution Rate	10.00%	10.00%	10.00%	10.00%
Estimated Tax Contribution as a % of Payroll	3.92%	3.91%	4.02%	3.59%
Actuarially Required Net Direct Employer Contribution Rate	25.20%	27.78%	28.29%	29.18%
Actual Employer Contribution Rate	29.50%	29.50%	29.50%	29.50%

Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014
4,795	4,888	4,937	4,912	4,926	4,894
3,552	3,468	3,417	3,345	3,262	3,177
199	185	184	186	182	184
3,191	2,994	2,885	2,826	2,731	2,667
$ 183,483,655	$ 181,786,660	$ 182,044,919	$ 177,777,678	$ 172,033,158	$ 167,852,836
$ 66,516,732	$ 63,184,393	$ 60,663,715	$ 57,895,282	$ 54,791,332	$ 51,636,071
$ 765,059,686	$ 734,226,194	$ 697,057,939	$ 671,876,210	$ 698,984,365	$ 730,072,543
$ 806,503,031	$ 797,679,469	$ 781,417,434	$ 769,849,744	$ 770,402,847	$ 751,235,484
$ 1,165,954,887	$ 1,129,080,666	$ 1,096,616,918	$ 1,063,558,257	$ 1,038,155,304	$ 967,584,136
69.17%	70.65%	71.26%	72.38%	74.21%	77.64%
$ 65,648,756	$ 68,334,864	$ 70,511,316	$ 72,227,730	$ 73,553,869	$ 74,454,702
$ 385,947,438	$ 367,352,092	$ 344,034,117	$ 315,256,488	$ 287,312,026	$ 235,357,990
$ 109,888,429	$ 110,664,765	$ 109,901,879	$ 105,774,692	$ 101,854,569	$ 97,716,362
$ 9,346,575	$ 8,712,724	$ 8,112,406	$ 8,421,235	$ 7,833,707	$ 8,930,139
$ 1,358,641,079	$ 1,335,318,466	$ 1,297,752,340	$ 1,254,687,419	$ 1,225,289,604	$ 1,149,834,399

Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015
9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
3.50%	3.50%	3.39%	3.40%	3.64%	3.52%
29.28%	27.53%	25.88%	24.64%	22.92%	19.48%
27.75%	26.00%	24.75%	23.25% *	19.75%	20.75% †

* Includes 0.5% from the Funding Deposit Account
† Includes 1.0% from the Funding Deposit Account

EXHIBIT XI
PLAN B: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	$	354,281,472
2.	Actuarial Value of Assets	$	230,016,557
3.	Funding Deposit Account Credit Balance	$	4,297,012
4.	Present Value of Future Employee Contributions	$	26,969,715
5.	Present Value of Future Employer Normal Costs (1 – (2 – 3) – 4)	$	101,592,212
6.	Present Value of Future Salaries	$	593,349,260
7.	Employer Normal Cost Accrual Rate (5 ÷ 6)		17.121823%
8.	Projected Fiscal 2024 Salary for Current Membership	$	77,042,281
9.	Employer Normal Cost as of July 1, 2023 (7 × 8)	$	13,191,043
10.	Employer Normal Cost Interest Adjusted for Mid-year Payment	$	13,635,353
11.	Estimated Administrative Cost for Fiscal 2024	$	779,649
12.	Gross Employer Actuarially Required Contribution for Fiscal 2024 (10 + 11)	$	14,415,002
13.	Projected Ad Valorem Tax Contributions for Fiscal 2024	$	(3,327,673)
14.	Projected Revenue Sharing Funds for Fiscal 2024	$	(48,370)
15.	Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2024 (12 + 13 + 14)	$	11,038,959
16.	Projected Payroll for Fiscal 2024	$	88,076,018
17.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2024 (15 ÷ 16)		12.53%
18.	Board Approved Employer Contribution Rate for 2024		15.50%
19.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2025 (17, Rounded to the nearest 0.25%)		12.50%

EXHIBIT XII
PLAN B: PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	$	166,639,923		
Survivor Benefits		3,758,049		
Disability Benefits		7,575,619		
Vested Termination Benefits		12,669,740		
Refunds of Contributions		5,130,985		
TOTAL Present Value of Future Benefits for Active Members			$	195,774,316

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	$	8,082,130		
Terminated Members with Reciprocals Due Benefits at Retirement		755,126		
Terminated Members Due a Refund		1,861,090		
TOTAL Present Value of Future Benefits for Terminated Members			$	10,698,346

PRESENT VALUE OF FUTURE BENEFITS FOR PENSIONERS:

Regular Retirees by Option Selected:

Maximum	$	54,016,330
Option 2		51,540,837
Option 3		15,381,020

TOTAL Regular Retirees	$	120,938,187		
TOTAL Disability Retirees	$	3,968,532		
TOTAL Survivors	$	19,495,421		
Reserve for Accrued Retiree DROP Account Balances	$	3,406,670		
TOTAL Present Value of Future Benefits for Retirees & Survivors			$	147,808,810
TOTAL Present Value of Future Benefits			$	354,281,472

EXHIBIT XIII – SCHEDULE A
PLAN B: MARKET VALUE OF ASSETS

CURRENT ASSETS:

Cash in Banks	$	18,362,695		
Contributions and Taxes Receivable		1,514,005		
Accrued Interest and Dividends		13,705		
Investments Receivable		1,463,509		
Due (to) from Other Funds		(379,475)		
Other Current Assets		145		
TOTAL CURRENT ASSETS			$	20,974,584
Property Plant & Equipment			$	677,293

INVESTMENTS:

Cash Equivalents	$	1,638,179		
Equities		110,393,170		
Fixed Income		56,810,012		
Real Estate		15,052,464		
Alternative Investments		6,647,206		
Self-Directed Investments		7,358,058		
TOTAL INVESTMENTS			$	197,899,089
TOTAL ASSETS			$	219,550,966

CURRENT LIABILITIES:

Accounts Payable	$	27,438		
Refunds Payable		116,805		
Investments Payable		6,266		
Due to/(from) Plan A		(320,268)		
Other Post-Employment Benefits		76,198		
Other Current Liabilities		29,666		
TOTAL CURRENT LIABILITIES			$	(63,895)
MARKET VALUE OF ASSETS			$	219,614,861

EXHIBIT XIII – SCHEDULE B
PLAN B – ACTUARIAL VALUE OF ASSETS

Excess (Shortfall) of Invested Income
For Current and Previous 4 Years:

Fiscal year 2023	$	2,203,743
Fiscal year 2022		(36,210,804)
Fiscal year 2021		27,507,064
Fiscal year 2020		(7,205,168)
Fiscal year 2019		(4,002,113)
Total for Five Years	$	(17,707,278)

Deferral of Excess (Shortfall) of Invested Income:

Fiscal year 2023 (80%)	$	1,762,994
Fiscal year 2022 (60%)		(21,726,482)
Fiscal year 2021 (40%)		11,002,826
Fiscal year 2020 (20%)		(1,441,034)
Fiscal year 2019 (0%)		0
Total Deferred for Year	$	(10,401,696)

Market Value of Plan Net Assets, End of Year	$	219,614,861
Preliminary Actuarial Value of Plan Assets, End of Year	$	230,016,557

Actuarial Value of Assets Corridor

85% of Market Value, End of Year	$	186,672,632
115% of Market Value, End of Year	$	252,557,090

Final Actuarial Value of Plan Net Assets, End of Year	$	230,016,557

EXHIBIT XIV
PLAN B: PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	$	26,969,715
Employer Normal Contributions to the Pension Accumulation Fund		101,592,212
Employer Amortization Payments to the Pension Accumulation Fund		0
Funding Deposit Account Credit Balance		(4,297,012)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	$	124,264,915

EXHIBIT XV
PLAN B: RECONCILIATION OF CONTRIBUTIONS

Employer Normal Cost for Prior Year	$ 12,807,595		
Interest on Normal Cost	877,320		
Administrative Expenses	711,735		
Interest on Expenses	23,974		
TOTAL Interest Adjusted Actuarially Required Employer Contributions		$	14,420,624
Direct Employer Contributions	$ 13,309,035		
Interest on Employer Contributions	448,285		
Ad Valorem Taxes and Revenue Sharing Funds	3,185,375		
Interest on Taxes and Revenue Sharing Funds	107,292		
TOTAL Interest Adjusted Employer Contributions		$	17,049,987
CONTRIBUTION SURPLUS (DEFICIENCY)		$	2,629,363

EXHIBIT XVI
PLAN B: ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (June 30, 2022)			$	216,737,373
INCOME:				
Member Contributions	$	4,120,337		
Employer Contributions		13,309,035		
Irregular Contributions		71,745		
Ad Valorem Taxes and Revenue Sharing		3,185,375		
Transfers from Other Plan/Systems		517,686		
Total Contributions			$	21,204,178
Net Appreciation in Fair Value of Investments	$	15,339,886		
Interest & Dividend Income		1,022,378		
Investment Expense		(317,705)		
Net Investment Income			$	16,044,559
TOTAL Income			$	37,248,737
EXPENSES:				
Retirement Benefits	$	15,109,606		
DROP Disbursements		1,085,680		
Refunds of Contributions		1,004,506		
Funds Transferred to another System		633,095		
Transfer to/(from) Plan A		(320,268)		
Administrative Expenses		711,735		
TOTAL Expenses			$	18,224,354
Net Market Value Income for Fiscal 2023 (Income – Expenses)			$	19,024,383
Unadjusted Fund Balance as of June 30, 2023 (Fund Balance Previous Year + Net Income)			$	235,761,756
Adjustment for Actuarial Smoothing			$	(5,745,199)
Actuarial Value of Assets: (June 30, 2023)			$	230,016,557

EXHIBIT XVII
PLAN B: FUNDING DEPOSIT ACCOUNT

Funding Deposit Account Balance as of June 30, 2022	$	1,560,738
Interest on Opening Balance at 6.850%		106,911
Contributions to the Funding Deposit Account		2,629,363
Withdrawals from the Funding Deposit Account		0
Funding Deposit Account Balance as of June 30, 2023	$	4,297,012

EXHIBIT XVIII – SCHEDULE A
PLAN B: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	$	129,011,786
Present Value of Benefits Payable to Terminated Employees		10,698,346
Present Value of Benefits Payable to Current Retirees and Beneficiaries		147,808,810
TOTAL PENSION BENEFIT OBLIGATION	$	287,518,942
NET ACTUARIAL VALUE OF ASSETS	$	230,016,557
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation		80.00%

EXHIBIT XVIII – SCHEDULE B
PLAN B: ENTRY AGE NORMAL ACCRUED LIABILITIES

Accrued Liability for Active Employees	$	137,272,995
Accrued Liability for Terminated Employees		10,698,346
Accrued Liability for Current Retirees and Beneficiaries		147,808,810
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	$	295,780,151
ACTUARIAL VALUE OF ASSETS	$	230,016,557
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability		77.77%

EXHIBIT XIX
CENSUS DATA – PLAN B

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2022	1,917	1,936	80	1,159	5,092
Additions to Census					
Initial membership	382	107			489
Omitted in error last year					
Death of another member				17	17
Adjustment for multiple records		1		1	2
Change in Status during Year					
Actives terminating service	(156)	156			
Actives who retired	(45)			45	
Actives entering DROP	(17)		17		
Term. members rehired	15	(15)			
Term. members who retire		(9)		9	
Retirees who are rehired	2			(2)	
Refunded who are rehired	6	2			8
DROP participants retiring			(19)	19	
DROP returned to work	19		(19)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(120)	(59)			(179)
Deaths	(6)	(2)	(1)	(50)	(59)
Included in error last year					
Adjustment for multiple records					
Number of members as of June 30, 2023	1,997	2,117	58	1,198	5,370

Plan B | Actives Census by Age:

Age			Number Male	Number Female	Total Number	Average Salary	Total Salary
16	-	20	12	3	15	29,224	438,355
21	-	25	61	22	83	30,852	2,560,753
26	-	30	91	37	128	33,996	4,351,434
31	-	35	110	50	160	36,349	5,815,800
36	-	40	112	53	165	40,077	6,612,667
41	-	45	129	82	211	42,737	9,017,610
46	-	50	137	74	211	44,138	9,313,193
51	-	55	173	108	281	43,977	12,357,433
56	-	60	218	99	317	45,185	14,323,556
61	-	65	198	102	300	43,585	13,075,582
66	-	70	78	44	122	44,770	5,461,957
71	-	75	32	14	46	44,116	2,029,325
76	-	80	9	4	13	47,241	614,127
81	-	85	3	0	3	24,009	72,026
Total			1,363	692	2,055	41,870	86,043,818

Includes 863 actives with vested benefits, including 58 DROP participants and 72 active former DROP participants.

Plan B | DROP Participants

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51	-	55	7	2	9	24,552	220,968
56	-	60	7	0	7	27,387	191,707
61	-	65	19	9	28	17,517	490,462
66	-	70	4	5	9	15,389	138,504
71	-	75	3	2	5	13,163	65,816
Total			40	18	58	19,094	1,107,457

Plan B | Terminated Members Due a Deferred Retirement Benefit:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31	-	**35**	3	0	**3**	8,633	**25,899**
36	-	**40**	8	2	**10**	8,097	**80,968**
41	-	**45**	5	6	**11**	14,543	**159,976**
46	-	**50**	8	2	**10**	12,421	**124,210**
51	-	**55**	16	10	**26**	14,776	**384,164**
56	-	**60**	19	12	**31**	10,844	**336,151**
61	-	**65**	8	3	**11**	12,724	**139,963**
66	-	**70**	1	1	**2**	5,437	**10,873**
71	-	**75**	1	0	**1**	18,311	**18,311**
76	-	**80**	1	0	**1**	494	**494**
86	-	**90**	1	0	**1**	630	**630**
Total			**71**	**36**	**107**	**11,978**	**1,281,639**

Plan B | Terminated Members Due a Refund of Contributions:

Contributions Ranging From		To	Number	Total Contributions
0	-	99	* 878	28,597
100	-	499	507	125,327
500	-	999	229	166,523
1,000	-	1,999	159	221,544
2,000	-	4,999	151	492,045
5,000	-	9,999	54	379,519
10,000	-	19,999	28	347,983
20,000	-	99,999	4	94,486
Total			* 2,010	1,856,024

* Includes 525 members due a refund who were not included in the data. Excludes $ 5,066 due to deceased members.

Plan B | Regular Retirees:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51	-	55	1	0	1	32,632	32,632
56	-	60	8	3	11	26,167	287,840
61	-	65	90	48	138	18,283	2,523,088
66	-	70	163	79	242	14,788	3,578,586
71	-	75	140	62	202	14,289	2,886,399
76	-	80	94	38	132	12,017	1,586,178
81	-	85	59	29	88	10,103	889,046
86	-	90	40	24	64	11,937	763,964
91	-	95	12	6	18	8,910	160,386
96	-	100	2	2	4	8,399	33,595
Total			609	291	900	14,157	12,741,714

Plan B | Disability Retirees:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46	-	50	1	0	1	7,046	7,046
51	-	55	2	0	2	6,704	13,407
56	-	60	8	2	10	11,804	118,044
61	-	65	14	5	19	12,080	229,527
76	-	80	1	0	1	12,377	12,377
Total			26	7	33	11,527	380,401

Plan B | Survivors:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36	-	40	0	4	4	4,617	18,466
41	-	45	1	1	2	11,131	22,262
46	-	50	0	7	7	10,092	70,641
51	-	55	0	4	4	5,505	22,019
56	-	60	3	14	17	7,185	122,149
61	-	65	3	18	21	12,884	270,573
66	-	70	6	40	46	9,984	459,246
71	-	75	3	39	42	9,173	385,272
76	-	80	0	39	39	8,120	316,695
81	-	85	2	30	32	6,521	208,678
86	-	90	1	24	25	9,321	233,032
91	-	95	1	20	21	6,778	142,347
96	-	100	0	4	4	8,313	33,251
101	-	105	0	1	1	2,163	2,163
Total			20	245	265	8,705	2,306,794

Plan B | Active Members:

Attained Ages	Completed Years of Service								Total
	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	
0 - 20	12	3	-	-	-	-	-	-	15
21 - 25	38	42	3	-	-	-	-	-	83
26 - 30	52	58	18	-	-	-	-	-	128
31 - 35	51	63	36	9	1	-	-	-	160
36 - 40	44	52	30	23	15	1	-	-	165
41 - 45	44	63	42	23	23	14	2	-	211
46 - 50	29	71	38	17	28	14	13	1	211
51 - 55	33	76	52	27	38	23	17	15	281
56 - 60	40	72	57	46	39	32	18	13	317
61 - 65	29	67	66	43	27	25	11	32	300
66 - 70	11	21	33	14	16	9	6	12	122
71 & Over	7	10	15	11	8	4	2	5	62
Total	390	598	390	213	195	122	69	78	2,055

Plan B | Average Annual Salary of Active Members:

Attained Ages	Completed Years of Service								Total
	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	
0 - 20	28,842	30,749	-	-	-	-	-	-	29,224
21 - 25	28,456	32,219	42,078	-	-	-	-	-	30,852
26 - 30	29,717	35,951	40,055	-	-	-	-	-	33,996
31 - 35	31,873	36,120	42,920	37,744	29,893	-	-	-	36,349
36 - 40	30,725	43,693	42,429	42,245	44,956	69,916	-	-	40,077
41 - 45	29,782	40,822	43,756	48,884	58,353	52,510	48,044	-	42,737
46 - 50	34,706	37,578	41,252	50,249	56,250	65,175	52,302	49,472	44,138
51 - 55	32,603	39,039	43,849	48,787	48,773	52,499	50,088	53,658	43,977
56 - 60	35,731	40,099	41,835	44,553	55,100	51,341	50,227	67,484	45,185
61 - 65	32,212	36,539	44,489	43,916	53,258	48,093	40,956	55,559	43,585
66 - 70	42,884	34,183	42,544	36,498	50,581	44,698	59,998	65,491	44,770
71 & Over	28,763	37,665	40,405	48,500	59,599	54,237	59,917	36,869	43,798
Total	31,742	37,984	42,773	45,021	53,065	52,373	50,173	57,433	41,870

Plan B | Terminated Members Due a Deferred Retirement Benefit:

Attained Ages	Years until Retirement Eligibility								
	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	3	3
36 - 40	-	-	-	-	-	-	-	10	10
41 - 45	-	-	-	-	-	1	8	2	11
46 - 50	-	-	-	-	-	9	1	-	10
51 - 55	-	-	-	4	20	2	-	-	26
56 - 60	14	5	3	6	2	1	-	-	31
61 - 65	8	-	-	2	1	-	-	-	11
66 - 70	2	-	-	-	-	-	-	-	2
71 & Over	3	-	-	-	-	-	-	-	3
Total	27	5	3	12	23	13	9	15	107

Plan B | Average Annual Benefits of Terminated Members Due a Deferred Retirement Benefit:

Attained Ages	Years until Retirement Eligibility								
	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	8,633	8,633
36 - 40	-	-	-	-	-	-	-	8,097	8,097
41 - 45	-	-	-	-	-	9,823	13,902	19,470	14,543
46 - 50	-	-	-	-	-	13,297	4,536	-	12,421
51 - 55	-	-	-	14,987	14,584	16,271	-	-	14,776
56 - 60	13,043	9,807	8,519	9,833	4,880	10,201	-	-	10,844
61 - 65	14,960	-	-	6,996	6,291	-	-	-	12,724
66 - 70	5,437	-	-	-	-	-	-	-	5,437
71 & Over	6,478	-	-	-	-	-	-	-	6,478
Total	12,318	9,807	8,519	11,078	13,379	13,249	12,861	9,720	11,978

Plan B | Service Retirees:

Attained Ages	Completed Years Since Retirement								Total
	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	
0 - 50	-	-	-	-	-	-	-	-	-
51 - 55	-	1	-	-	-	-	-	-	1
56 - 60	4	2	1	2	2	-	-	-	11
61 - 65	23	33	32	25	17	7	1	-	138
66 - 70	31	17	19	54	85	27	5	4	242
71 - 75	8	9	14	20	79	57	9	6	202
76 - 80	5	3	1	7	28	43	38	7	132
81 - 85	1	1	1	7	14	14	26	24	88
86 - 90	-	1	1	2	4	4	12	40	64
91 & Over	-	-	-	-	-	3	1	18	22
Total	72	67	69	117	229	155	92	99	900

Plan B | Average Annual Benefits Payable to Service Retirees:

Attained Ages	Completed Years Since Retirement								Total
	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	20 & Over	
0 - 50	-	-	-	-	-	-	-	-	-
51 - 55	-	32,632	-	-	-	-	-	-	32,632
56 - 60	20,092	22,775	37,648	32,233	29,905	-	-	-	26,167
61 - 65	16,969	19,212	17,579	15,174	23,702	20,686	9,182	-	18,283
66 - 70	16,580	17,415	17,831	14,412	12,811	17,597	12,620	6,084	14,788
71 - 75	12,653	13,660	13,612	13,739	14,329	13,923	21,847	12,448	14,289
76 - 80	9,380	12,200	6,732	7,877	13,303	12,932	10,471	16,332	12,017
81 - 85	4,327	5,890	6,663	8,297	11,641	10,619	10,440	9,625	10,103
86 - 90	-	52,252	6,359	21,640	16,364	11,605	10,512	10,601	11,937
91 & Over	-	-	-	-	-	3,320	8,549	9,748	8,817
Total	15,793	18,297	16,657	14,131	14,343	14,030	11,663	10,544	14,157

Plan B | Disability Retirees:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	-	-
36 - 40	-	-	-	-	-	-	-	-	-
41 - 45	-	-	-	-	-	-	-	-	-
46 - 50	-	1	-	-	-	-	-	-	1
51 - 55	-	-	-	1	1	-	-	-	2
56 - 60	-	2	6	-	2	-	-	-	10
61 - 65	-	1	8	6	2	1	1	-	19
66 - 70	-	-	-	-	-	-	-	-	-
71 - 75	-	-	-	-	-	-	-	-	-
76 - 80	-	-	-	-	-	-	-	1	1
81 & Over	-	-	-	-	-	-	-	-	-
Total	-	4	14	7	5	1	1	1	33

Plan B | Average Annual Benefits Payable To Disability Retirees:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	-	-
36 - 40	-	-	-	-	-	-	-	-	-
41 - 45	-	-	-	-	-	-	-	-	-
46 - 50	-	7,046	-	-	-	-	-	-	7,046
51 - 55	-	-	-	6,426	6,981	-	-	-	6,704
56 - 60	-	16,761	10,880	-	9,623	-	-	-	11,804
61 - 65	-	14,201	13,798	12,722	7,510	8,760	4,834	-	12,080
66 - 70	-	-	-	-	-	-	-	-	-
71 - 75	-	-	-	-	-	-	-	-	-
76 - 80	-	-	-	-	-	-	-	12,377	12,377
81 & Over	-	-	-	-	-	-	-	-	-
Total	-	13,692	12,547	11,822	8,249	8,760	4,834	12,377	11,527

Plan B | Surviving Beneficiaries of Former Members:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	-	-
36 - 40	1	-	-	-	1	2	-	-	4
41 - 45	-	1	-	1	-	-	-	-	2
46 - 50	-	3	1	1	-	1	1	-	7
51 - 55	-	2	1	1	-	-	-	-	4
56 - 60	1	-	5	1	5	1	2	2	17
61 - 65	1	6	6	4	3	-	1	-	21
66 - 70	-	4	6	17	8	5	4	2	46
71 - 75	1	1	6	13	5	9	3	4	42
76 - 80	-	-	4	4	15	8	8	-	39
81 & Over	-	3	4	3	11	23	18	21	83
Total	4	20	33	45	48	49	37	29	265

Plan B | Average Annual Benefits Payable to Survivors of Former Members:

Attained Ages	Completed Years Since Retirement 0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	Total
0 - 30	-	-	-	-	-	-	-	-	-
31 - 35	-	-	-	-	-	-	-	-	-
36 - 40	6,798	-	-	-	3,877	3,896	-	-	4,617
41 - 45	-	12,059	-	10,203	-	-	-	-	11,131
46 - 50	-	11,493	25,056	3,118	-	3,646	4,342	-	10,092
51 - 55	-	3,389	7,019	8,223	-	-	-	-	5,505
56 - 60	5,982	-	9,596	20,101	6,405	9,760	1,991	1,160	7,185
61 - 65	8,244	23,782	12,289	5,490	6,609	-	4,121	-	12,884
66 - 70	-	10,349	14,517	11,419	9,268	4,583	7,429	4,927	9,984
71 - 75	14,070	8,084	8,235	10,692	10,757	8,985	6,304	5,288	9,173
76 - 80	-	-	7,575	9,789	9,403	6,948	6,328	-	8,120
81 & Over	-	8,979	9,951	6,210	7,744	7,850	6,687	7,048	7,464
Total	8,774	13,621	10,921	10,100	8,539	7,370	6,272	6,253	8,705

EXHIBIT XX
PLAN B: YEAR-TO-YEAR COMPARISON

	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Number of Active Members	2,055	1,997	1,980	2,037
Number of Retirees & Survivors	1,198	1,159	1,125	1,107
Number of Terminated Due Deferred Benefits	107	104	110	103
Number Terminated Due Refunds	2,010	1,832	1,745	1,629
Active Lives Payroll	$ 86,043,818	$ 79,381,407	$ 75,792,699	$ 76,799,634
Retiree Benefits in Payment	$ 15,428,909	$ 14,609,855	$ 13,509,829	$ 12,823,215
Market Value of Assets (MVA)	$ 219,614,861	$ 200,590,478	$ 219,732,397	$ 177,974,097
Actuarial Value of Assets (AVA)	$ 230,016,557	$ 216,737,373	$ 204,077,162	$ 187,812,515
Entry Age Normal Accrued Liability	$ 295,780,151	$ 284,474,338	$ 273,783,925	$ 264,774,249
Ratio of AVA to EAN Accrued Liability	77.77%	76.19%	74.54%	70.93%
Frozen Unfunded Actuarial Accrued Liability	$ 0	$ 0	$ 0	$ 0
Present Value of Future Employer Normal Cost	$ 101,592,212	$ 98,631,357	$ 99,767,305	$ 105,929,550
Present Value of Future Employee Contrib.	$ 26,969,715	$ 24,870,430	$ 23,943,614	$ 24,180,096
Funding Deposit Account Balance	$ 4,297,012	$ 1,560,738	$ 1,869,690	$ 1,748,191
Present Value of Future Benefits	$ 354,281,472	$ 338,678,422	$ 325,918,391	$ 316,173,970

	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021
Employee Contribution Rate	5.00%	5.00%	5.00%	5.00%
Estimated Tax Contribution as a % of Payroll	3.83%	3.76%	3.96%	3.60%
Actuarially Required Net Direct Employer Contribution Rate	12.53%	13.37%	14.39%	15.34%
Actual Employer Contribution Rate	15.50%	15.50%	15.50%	15.50%

Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014
2,063	2,128	2,125	2,142	2,200	2,168
1,076	1,050	1,025	975	959	916
97	92	82	71	71	74
1,556	1,419	1,331	1,258	1,218	1,170
$ 75,213,353	$ 74,696,846	$ 73,275,324	$ 71,918,938	$ 69,909,530	$ 67,939,158
$ 12,223,991	$ 11,522,493	$ 10,946,571	$ 10,254,964	$ 9,917,688	$ 9,141,803
$ 170,871,104	$ 161,284,802	$ 150,467,958	$ 143,201,586	$ 149,268,995	$ 156,659,396
$ 180,085,046	$ 175,032,415	$ 168,698,012	$ 164,516,476	$ 165,154,609	$ 161,992,280
$ 254,292,446	$ 241,302,909	$ 232,425,916	$ 221,633,353	$ 212,961,895	$ 199,762,726
70.82%	72.54%	72.58%	74.23%	77.55%	81.09%
$ 0	$ 0	$ 2,382,456	$ 2,742,698	$ 3,088,551	$ 3,421,001
$ 102,003,203	$ 95,920,724	$ 91,249,645	$ 82,911,008	$ 72,948,195	$ 60,613,662
$ 23,628,322	$ 24,253,572	$ 23,664,481	$ 23,119,585	$ 22,770,216	$ 21,982,912
$ 1,633,823	$ 1,523,023	$ 3,286,730	$ 3,233,725	$ 3,008,116	$ 3,126,521
$ 304,082,748	$ 293,683,688	$ 282,707,864	$ 270,056,042	$ 260,953,455	$ 244,883,334

Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015
5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
3.50%	3.38%	3.37%	3.41%	3.64%	3.41%
15.34%	13.73%	14.00%	13.06%	11.04%	9.60%
14.00%	14.00%	13.25%	11.25% *	9.50%	10.00% †

* Includes 0.25% from the Funding Deposit Account
† Includes 0.50% from the Funding Deposit Account

SUMMARY OF PRINCIPAL PLAN PROVISIONS

All members of the Municipal Employees' Retirement System are participants in either Plan A or B according to the provisions of the agreement entered into by their employer. All employees of a participating employer must participate in the same plan. The principal provisions of each plan are given below. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

MEMBERSHIP

All persons who are actively employed by a participating employer on a permanent, regularly scheduled basis of at least an average of thirty-five hours per week are members of this system. Excluded from membership are members of city councils, alderman, town councilmen, and constables; the exclusion does not apply to persons serving in excluded positions on January 1, 1997.

PLAN A PROVISIONS

CONTRIBUTION RATES

The Board of Trustees may set the employee contribution rate not less than 9.25% nor more than 10.00%. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

RETIREMENT BENEFITS (TIER 1)

Members with ten years of creditable service may retire at age sixty; members with twenty-five years of service may retire regardless of age. The monthly retirement allowance is equal to three percent of the member's final compensation multiplied by his years of creditable service; elected officials receive an additional one-half percent of final compensation for each year of such elected service. However, the accrued retirement benefits for those employees who were members of only the supplemental plan prior to October 1, 1978, are based on one percent of final compensation plus two dollars per month for each year of service credited prior to October 1, 1978. The retirement allowance may not exceed the greater of final annual salary or one hundred percent of the member's final average compensation. Members with twenty years of service credit, not otherwise eligible for normal retirement, are eligible for a modified actuarially reduced early retirement.

RETIREMENT BENEFITS (TIER 2)

Employees whose first employment making them eligible for membership occurs on or after January 1, 2013 become members of Tier 2. Normal retirement eligibility in Tier 2 is at age 67 with seven years of service credit, at age 62 with ten years of service credit, or age 55 with thirty years of service credit. Members are eligible for an actuarially reduced early retirement at twenty-five years of service credit. Retirement benefits are based on a 3% accrual rate. Employee contributions are set by the Board of Trustees within a range of 8% to 10%.

DISABILITY BENEFITS

Five years of creditable service are required in order to be eligible for disability benefits. Twenty years of creditable service are required in order for a member to have a vested disability benefit. A disabled member receives a normal retirement allowance if eligible under regular retirement provisions; if he is not eligible for a normal retirement, he receives a disability benefit equal to the lesser of:

1. Forty-five percent of his final average compensation or three percent of his final average compensation multiplied by his years of creditable service, whichever is greater; or
2. 2) Three percent of his final average compensation multiplied by his years of creditable service projected to his earliest normal retirement age.

SURVIVOR BENEFITS

Five years of creditable service are required in order to be eligible for survivor benefits. If the member is eligible for normal retirement at the time of death, the surviving spouse receives an automatic option two benefit. If the member is not eligible for a normal retirement, the surviving spouse with minor children receives sixty percent of final compensation payable until no child in her care satisfies the definition of minor child. The surviving spouse with no minor children receives forty percent of final compensation payable upon attainment of age sixty by the spouse, or the actuarial equivalent of this amount payable immediately (such equivalent not to be less than 20% of final compensation). Minor children with no surviving unmarried parent receive thirty percent of final compensation each not to exceed a total of sixty percent of final compensation. Survivor benefits are also payable to the surviving spouses of former members who have not withdrawn their accumulated contributions and who have at least twenty years of creditable service. The benefits payable are the actuarial equivalent of the Option 2 benefits that would have become payable to the surviving spouse at the time the former member would have begun receiving deferred normal retirement benefits, had the member survived until that date, elected Option 2, and died at that time.

PLAN B PROVISIONS

CONTRIBUTION RATES

The Board of Trustees may set the employee contribution rate not less than 5.00% nor more than 6.00%. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans

Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

RETIREMENT BENEFITS (TIER 1)

Members with ten years of creditable service may retire at age sixty; members with thirty years of service may retire at any age. The monthly retirement allowance is equal to two percent of the member's final compensation multiplied by his years of creditable service; elected officials receive an additional one-half percent of final compensation for each year of such elected service.

RETIREMENT BENEFITS (TIER 2)

Employees whose first employment making them eligible for membership occurs on or after January 1, 2013 will become members of Tier 2. Normal retirement eligibility in Tier 2 is at age 67 with seven years of service credit, at age 62 with ten years of service credit, or age 55 with thirty years of service credit. Members are eligible for an actuarially reduced early retirement at twenty-five years of service credit. Retirement benefits are based on a 2% accrual rate. Employee contributions are set by the Board of Trustees within a range of 4% to 6%.

DISABILITY BENEFITS

Ten years of creditable service are required in order to be eligible for disability benefits. Twenty years of creditable service are required in order for a member to have a vested disability benefit. A disabled member receives a normal retirement allowance if eligible under regular retirement provisions; if he is not eligible for a normal retirement allowance, he receives a disability benefit equal to the lesser of:

1. Thirty percent of his final average compensation or two percent of his final average compensation multiplied by his years of creditable service, whichever is greater; and
2. Two percent of his final average compensation multiplied by his years of creditable service projected to his earliest normal retirement age.

SURVIVOR BENEFITS

The surviving spouse of a member who was eligible for normal retirement at the time of death receives an automatic option two benefit. The surviving spouse of a member with five or more years of creditable service and not eligible for normal retirement at the time of death receives either 30% of the member's final compensation payable to the spouse when they attain age 60 or an actuarial equivalent of 30% of the deceased member's final compensation, but not less than 15% of such final compensation. Survivor benefits are also payable to the surviving spouses of former members who have not withdrawn their accumulated contributions and who have at least twenty years of creditable service. The benefits payable are the actuarial equivalent of the Option 2 benefits that would have become payable to the surviving spouse at the time the former member would have begun receiving deferred normal retirement benefits, had the member survived until that date, elected Option 2, and died at that time.

PROVISIONS APPLICABLE TO BOTH PLAN A AND B

FINAL AVERAGE COMPENSATION

For a member whose first employment making him eligible for membership in the system began after June 30, 2006, final average compensation is based on the average monthly earnings during the highest sixty consecutive months or joined months if service was interrupted. The earnings to be considered for each twelve-month period within the sixty-month period may not exceed 115% of the preceding twelve month period.

Effective January 1, 2013, for a member whose first employment making him eligible for membership in the system began before July 1, 2006, final average compensation was redefined to be thirty-six months plus the number of whole months since January 1, 2013 not to exceed sixty months. However, the actual monthly final average compensation used to determine the member's benefit cannot be less than the thirty-six-month final average compensation as of January 1, 2013. The earnings to be considered for each twelve-month period within the final average compensation period may not exceed 115% of the preceding twelve-month period.

UNUSED SICK & ANNUAL LEAVE

All unused sick and annual leave is credited at the time of retirement to the member if the employer so elects for his employees. The actuarial cost of providing this conversion is borne solely by the employer and must be paid to the Board within thirty days of the member's retirement date.

OPTIONAL ALLOWANCES

Members may receive their benefits as a life annuity, or in lieu of such a reduced benefit according to the option selected which is the actuarial equivalent of the maximum benefit.

Option 2 – Upon retirement, the member receives a reduced benefit. Upon the member's death, the designated beneficiary will continue to receive the same reduced benefit.

Option 3 – Upon retirement, the member receives a reduced benefit. Upon the member's death, the designated beneficiary will receive one-half of the member's reduced benefit.

Option 4 – Upon retirement, the member elects to receive a Board-approved benefit which is actuarially equivalent to the maximum benefit.

A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2 ½% annual compound increase in monthly retirement benefits based on the reduced benefit and commencing on the later of age fifty-five or retirement anniversary; this COLA is in addition to any ad hoc COLAs which are payable.

DEFERRED RETIREMENT OPTION PLAN (DROP)

In lieu of terminating employment and accepting a service retirement allowance, any member of Plan A or B who is eligible for a normal retirement may elect to participate in the Deferred Retirement Option Plan (DROP) for up to three years and defer the receipt of benefits. Upon commencement of participation in the plan, membership in the system terminates. During participation in the plan, employer contributions are payable, but employee contributions cease. The monthly retirement benefits that would have been payable, had the person elected to cease employment and receive a service retirement allowance, are paid into the DROP account. After a member terminates his participation in DROP his account will earn interest at the actual rate of return earned on the funds left on deposit as certified by the custodian of the system's assets. This interest will be credited to the individual member's account balance on a daily basis beginning July 1, 2006. In addition, no cost-of-living increases are payable to participants until employment which made them eligible to become members of the system has been terminated for at least one full year.

Upon termination of employment prior to, or at the end of, the specified period of participation, a participant in the plan may receive, at his option, a lump sum payment from the account equal to the payments into the account, a true annuity based upon his account balance in that fund, or any other method of payment if approved by the Board of Trustees. The monthly benefits that were being paid into the DROP account will begin to be paid to the retiree. If a participant dies during the participation in the plan, a lump sum equal to his account balance in the plan fund shall be paid to his named beneficiary or, if none, to his estate. If employment is not terminated at the end of the three years, payments into the plan fund cease and the person resumes active contributing membership in the system. For any member hired prior to July 1, 2006, additional accrued benefits are based on final average compensation used to calculate the member's original benefit unless the additional period of service is at least thirty-six months. For any member hired on or after July 1, 2006, whose period of additional service after their DROP participation period ends is less than sixty months, the final compensation figure used to calculate the additional benefit will be that used to calculate the original benefit. If their period of additional service is sixty months or more, the final compensation figure used to calculate the additional benefit will be based on their compensation during the period of additional service.

COST OF LIVING ADJUSTMENTS

The Board of Trustees is authorized to grant retired members, and widows of members, who have been retired for at least one full year an annual cost of living increase of two percent of their original benefit and all retired members and widows who are sixty-five years of age and older a two percent increase in their original benefit (or their benefit as of October 1, 1977, if they retired prior to that time). In order for the Board to grant either of these increases the system must meet certain criteria detailed in the statute related to funding status and interest earnings on investments. In lieu of the prior provisions, R.S. 11:241 provides for cost-of-living benefits payable based on a formula equal to up to $1 times the total of the number of years of credited service accrued at retirement or at death of the member or retiree plus the number of years since retirement or since death of the member or retiree to the system's fiscal year end preceding the payment of the benefit increase. In order for the board to grant any of these increases, the system must meet certain criteria detailed in the statutes related to funding status and interest earnings.

ACTUARIAL ASSUMPTIONS

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors that have an impact on the cost of the plan. To the extent that future experience varies from the assumptions selected for valuation, future costs will be either higher or lower than anticipated. The effect of emerging experience on the fund is illustrated by the following chart.

Factor	Increase in Factor Results in
Investment Earnings Rate	Decrease in Cost
Annual Rate of Salary Increase	Increase in Cost
Rates of Retirement	Increase in Cost
Rates of Termination	Decrease in Cost
Rates of Disability	Increase in Cost
Rates of Mortality	Decrease in Cost

ACTUARIAL COST METHOD

Plan A: Frozen Attained Age Normal Actuarial Cost Method with allocation based on earnings. The frozen actuarial accrued liabilities were calculated on the projected unit credit cost method.

Plan B: The Aggregate Actuarial Cost Method with allocation based on earnings. The normal cost is interest adjusted for midyear payment.

ACTUARIAL ASSET VALUES

Invested assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.

VALUATION INTEREST RATE

6.85% (Net of Investment Expense)

ANNUAL SALARY INCREASE RATE

Salary increases include 2.5% inflation. The gross rates including inflation and merit increases are as follows:

PLAN A

Years of Service (less than or equal to)	Salary Increase (in the following year)
1-4	6.4%
Above 4	4.5%

PLAN B

Years of Service (less than or equal to)	Salary Increase (in the following year)
1-4	7.9%
Above 4	4.9%

ACTIVE MEMBER MORTALITY

120% of the PubG-2010(B) Employee Tables for males and females, each with each with the full generational MP2018 scale

ANNUITANT AND BENEFICIARY MORTALITY

120% of the PubG-2010(B) Healthy Retiree Tables for males and females, each with the full generational MP2018 scale

DISABLED LIVES MORTALITY

120% of the PubNS-2010(B) Disabled Retiree Tables for males and females, each with each with the full generational MP2018 scale

RETIREE COST OF LIVING ADJUSTMENTS

The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

RETIREMENT RATES

The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. Members are assumed to retire no earlier than normal retirement age.

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS

The table of these rates is included later in the report. These rates apply only to those active participants who were previously in DROP.

RETIREMENT LIMITATIONS

Projected retirement benefits are not subjected to IRS Section 415 limits.

DROP ENTRY RATES

The table of these rates is included later in the report. These rates apply only to those individuals eligible to participate in DROP.

DROP PARTICIPATION PERIOD

DROP participants are assumed to participate for 3 years. At the end of the DROP participation period, one half of participants are assumed to retire; the other half are assumed to work three additional years.

RATES OF DISABILITY

Plan A: 25% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

Plan B: 50% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

RATES OF WITHDRAWAL

The rates of withdrawal are applied based upon completed years of service according to the following table (continued on the following page):

Service Duration (≤)	Plan A (Tier 1)	Plan A (Tier 2)	Plan B (Tiers 1 & 2)
1	23.00%	23.00%	29.00%
2	20.00%	20.00%	24.00%
3	17.00%	17.00%	19.00%
4	14.00%	14.00%	15.00%
5	12.00%	12.00%	12.00%
6	10.00%	10.00%	10.00%
7	9.00%	9.00%	9.00%
8	9.00%	9.00%	8.00%
9	8.00%	8.00%	7.00%
10	7.00%	7.00%	7.00%
11	6.00%	6.00%	6.00%
12	5.00%	5.00%	6.00%
13	4.00%	4.00%	5.00%
14	4.00%	4.00%	5.00%
15	3.00%	3.00%	4.00%
16	3.00%	3.00%	4.00%
17	3.00%	3.00%	4.00%
18	3.00%	3.00%	4.00%
19	3.00%	3.00%	4.00%
20	3.00%	3.00%	4.00%

Service Duration (≤)	Plan A (Tier 1)	Plan A (Tier 2)	Plan B (Tiers 1 & 2)
21	3.00%	3.00%	4.00%
22	3.00%	3.00%	4.00%
23	4.00%	3.00%	3.00%
24	5.00%	3.00%	3.00%
25	8.00%	3.00%	2.00%
26	0.00%	3.00%	2.00%
27	0.00%	3.00%	1.00%
28	0.00%	3.00%	1.00%
29	0.00%	4.00%	1.00%
30	0.00%	5.00%	1.00%
31 and Over	0.00%	8.00%	1.00%

Note: The withdrawal rate for individuals eligible to retire is assumed to be zero.

VESTING ELECTING PERCENTAGE

Plan A: 50% of members with less than 20 years of service are assumed to elect a deferred benefit in lieu of a refund of contributions. 85% of members with 20 or more years of service are assumed to elect the deferred benefit.

Plan B: 66% of members with less than 25 years of service are assumed to elect a deferred benefit in lieu of a refund of contributions. 85% of members with 25 or more years of service are assumed to elect the deferred benefit.

MARRIAGE STATISTICS

70% of the members are assumed to be married; husbands are assumed to be three years older than wives.

FAMILY STATISTICS

Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2010 U. S. Census:

Member's Age	% With Children	Number of Children	Average Age	Remarriage Rates
25	70%	1.84	5	0.04566
35	86%	2.13	9	0.02636
45	75%	1.70	12	0.01355
55	22%	1.42	14	N/A
65	4%	1.45	15	N/A

PLAN A – ACTUARIAL TABLES AND RATES

Age	Retirement Rates Tier 1	Retirement Rates Tier 2	DROP Entry Rates Tier 1	DROP Entry Rates Tier 2	Post-DROP Retirement Tier 1	Post-DROP Retirement Tier 2	Disability Rates	Remarriage Rates
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.06124
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.06124
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.06124
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.05818
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.05524
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.05242
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.04971
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.04566
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.04335
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.04114
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.03902
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.03698
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.03502
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.03314
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.03134
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.02961
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00038	0.02795
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00043	0.02636
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00048	0.02483
37	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00053	0.02336
38	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00060	0.02195
39	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00068	0.02060
40	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00078	0.01930
41	0.20000	0.00000	0.17000	0.00000	0.04000	0.00000	0.00088	0.01805
42	0.20000	0.00000	0.17000	0.00000	0.04000	0.00000	0.00098	0.01686
43	0.20000	0.00000	0.17000	0.00000	0.04000	0.00000	0.00110	0.01571
44	0.13000	0.00000	0.17000	0.00000	0.04000	0.00000	0.00125	0.01461
45	0.08000	0.00000	0.17000	0.00000	0.04000	0.00000	0.00143	0.01355
46	0.05000	0.00000	0.16000	0.00000	0.04000	0.00000	0.00163	0.01253
47	0.04000	0.00000	0.15000	0.00000	0.04000	0.00000	0.00183	0.01156
48	0.04000	0.00000	0.14000	0.00000	0.04000	0.00000	0.00208	0.01063
49	0.05000	0.00000	0.14000	0.00000	0.04000	0.00000	0.00235	0.00973
50	0.06000	0.00000	0.14000	0.00000	0.07000	0.00000	0.00268	0.00887
51	0.07000	0.00000	0.14000	0.00000	0.10000	0.00000	0.00305	0.00804
52	0.07000	0.00000	0.16000	0.00000	0.12000	0.00000	0.00345	0.00725
53	0.08000	0.00000	0.18000	0.00000	0.14000	0.00000	0.00392	0.00649
54	0.07000	0.00000	0.20000	0.00000	0.16000	0.00000	0.00445	0.00576
55	0.07000	0.07000	0.23000	0.23000	0.18000	0.18000	0.00505	0.00000
56	0.07000	0.07000	0.24000	0.24000	0.19000	0.19000	0.00575	0.00000
57	0.06000	0.06000	0.25000	0.25000	0.19000	0.19000	0.00653	0.00000
58	0.06000	0.06000	0.24000	0.24000	0.20000	0.20000	0.00740	0.00000
59	0.07000	0.07000	0.23000	0.23000	0.21000	0.21000	0.00843	0.00000
60	0.07000	0.07000	0.21000	0.21000	0.21000	0.21000	0.01220	0.00000
61	0.08000	0.08000	0.19000	0.19000	0.22000	0.22000	0.01220	0.00000
62	0.09000	0.09000	0.17000	0.17000	0.22000	0.22000	0.01220	0.00000
63	0.10000	0.10000	0.15000	0.15000	0.22000	0.22000	0.01220	0.00000
64	0.12000	0.12000	0.13000	0.13000	0.22000	0.22000	0.01220	0.00000
65	0.14000	0.14000	0.13000	0.13000	0.21000	0.21000	0.01220	0.00000
66	0.16000	0.16000	0.12000	0.12000	0.20000	0.20000	0.01220	0.00000
67	0.18000	0.18000	0.12000	0.12000	0.18000	0.18000	0.01220	0.00000
68	0.19000	0.19000	0.12000	0.12000	0.17000	0.17000	0.01220	0.00000
69	0.20000	0.20000	0.12000	0.12000	0.15000	0.15000	0.01220	0.00000
70	0.21000	0.21000	0.12000	0.12000	0.14000	0.14000	0.01220	0.00000
71	0.21000	0.21000	0.12000	0.12000	0.13000	0.13000	0.01220	0.00000
72	0.20000	0.20000	0.12000	0.12000	0.13000	0.13000	0.01220	0.00000
73	0.19000	0.19000	0.11000	0.11000	0.13000	0.13000	0.01220	0.00000
74	0.17000	0.17000	0.11000	0.11000	0.13000	0.13000	0.01220	0.00000
75	0.16000	0.16000	0.09000	0.09000	0.13000	0.13000	0.01220	0.00000

PLAN B – ACTUARIAL TABLES AND RATES

Age	Retirement Rates Tier 1	Retirement Rates Tier 2	DROP Entry Rates Tier 1	DROP Entry Rates Tier 2	Post-DROP Retirement Tier 1	Post-DROP Retirement Tier 2	Disability Rates	Remarriage Rates
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.06124
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.06124
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.06124
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.05818
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.05524
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.05242
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.04971
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.04566
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.04335
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.04114
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.03902
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.03698
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.03502
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.03314
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.03134
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.02961
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00075	0.02795
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00085	0.02636
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00095	0.02483
37	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00105	0.02336
38	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00120	0.02195
39	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00135	0.02060
40	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00155	0.01930
41	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00175	0.01805
42	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00195	0.01686
43	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00220	0.01571
44	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00250	0.01461
45	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00285	0.01355
46	0.01000	0.00000	0.10000	0.00000	0.15000	0.00000	0.00325	0.01253
47	0.01000	0.00000	0.10000	0.00000	0.15000	0.00000	0.00365	0.01156
48	0.01000	0.00000	0.10000	0.00000	0.15000	0.00000	0.00415	0.01063
49	0.01000	0.00000	0.22000	0.00000	0.15000	0.00000	0.00470	0.00973
50	0.01000	0.00000	0.32000	0.00000	0.15000	0.00000	0.00535	0.00887
51	0.02000	0.00000	0.35000	0.00000	0.15000	0.00000	0.00610	0.00804
52	0.02000	0.00000	0.36000	0.00000	0.15000	0.00000	0.00690	0.00725
53	0.03000	0.00000	0.36000	0.00000	0.15000	0.00000	0.00785	0.00649
54	0.03000	0.00000	0.36000	0.00000	0.14000	0.00000	0.00890	0.00576
55	0.03000	0.03000	0.37000	0.37000	0.12000	0.12000	0.01010	0.00000
56	0.03000	0.03000	0.38000	0.38000	0.10000	0.10000	0.01150	0.00000
57	0.03000	0.03000	0.39000	0.39000	0.08000	0.08000	0.01305	0.00000
58	0.04000	0.04000	0.37000	0.37000	0.07000	0.07000	0.01480	0.00000
59	0.05000	0.05000	0.34000	0.34000	0.06000	0.06000	0.01685	0.00000
60	0.06000	0.06000	0.28000	0.28000	0.06000	0.06000	0.02440	0.00000
61	0.08000	0.08000	0.22000	0.22000	0.07000	0.07000	0.02440	0.00000
62	0.11000	0.11000	0.17000	0.17000	0.09000	0.09000	0.02440	0.00000
63	0.13000	0.13000	0.12000	0.12000	0.12000	0.12000	0.02440	0.00000
64	0.16000	0.16000	0.10000	0.10000	0.15000	0.15000	0.02440	0.00000
65	0.18000	0.18000	0.08000	0.08000	0.18000	0.18000	0.02440	0.00000
66	0.20000	0.20000	0.07000	0.07000	0.20000	0.20000	0.02440	0.00000
67	0.22000	0.22000	0.06000	0.06000	0.22000	0.22000	0.02440	0.00000
68	0.23000	0.23000	0.06000	0.06000	0.24000	0.24000	0.02440	0.00000
69	0.23000	0.23000	0.06000	0.06000	0.25000	0.25000	0.02440	0.00000
70	0.23000	0.23000	0.06000	0.06000	0.25000	0.25000	0.02440	0.00000
71	0.23000	0.23000	0.07000	0.07000	0.25000	0.25000	0.02440	0.00000
72	0.21000	0.21000	0.08000	0.08000	0.24000	0.24000	0.02440	0.00000
73	0.20000	0.20000	0.09000	0.09000	0.24000	0.24000	0.02440	0.00000
74	0.19000	0.19000	0.09000	0.09000	0.23000	0.23000	0.02440	0.00000
75	0.18000	0.18000	0.09000	0.09000	0.21000	0.21000	0.02440	0.00000

GLOSSARY

ACCRUED BENEFIT

The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

ACTUARIAL ACCRUED LIABILITY

The actuarial present value of benefits payable to members of the fund less the present value of future normal costs attributable to the members.

ACTUARIAL ASSUMPTIONS

Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of mortality, withdrawal, disablement, and retirement. Also included are rates of investment earnings, changes in compensation, as well as statistics related to marriage and family composition.

ACTUARIAL COST METHOD

A procedure for determining the portion of the cost of a pension plan to be allocated to each year. Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs. Once this allocation is made, a determination of the normal cost attributable to a specific year can be made along with the payment to amortize any unfunded actuarial accrued liability. To the extent that a particular funding method allocates a greater (lesser) portion of the actual present value of benefits to the actuarial accrued liability it will allocate less (more) to future normal costs.

ACTUARIAL EQUIVALENCE

Payments or receipts with equal actuarial value on a given date when valued using the same set of actuarial assumptions.

ACTUARIAL GAIN (LOSS)

The financial effect on the fund of the difference between the expected and actual experience of the fund. The experience may be related to investment earnings above (or below) those expected or changes in the liability structure due to fewer (or greater) than the expected numbers of retirements, deaths, disabilities, or withdrawals. In addition, other factors such as pay increases above (or below) those forecast can result in actuarial gains or losses. The effect of such gains (or losses) is to decrease (or increase) future costs.

ACTUARIAL PRESENT VALUE

The value, as of a specified date, of an amount or series of amounts payable or receivable thereafter, with each amount adjusted to reflect the time value of money (through accrual of interest) and the probability of payments. For example: if $600 invested today will be worth $1,000 in 10 years and there is a 50%

probability that a person will live 10 years, then the actuarial present value of $1,000 payable to that person if he should survive 10 years is $300.

ACTUARIAL VALUE OF ASSETS

The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to the book value, market value, or some modification involving either or both book and market value. Adjustments to market values are often made to reduce the volatility of asset values.

ASSET GAIN (LOSS)

That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

AMORTIZATION PAYMENT

That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

CONTRIBUTION SHORTFALL (EXCESS)

The difference between contributions recommended in the prior valuation and the actual amount received.

DECREMENTS

Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

EMPLOYER NORMAL COST

That portion of the normal cost not attributable to employee contributions. It includes both direct contributions made by the employer and contributions from other non-employee sources such as revenue sharing and revenues related to taxes.

FUNDED RATIO

A measure of the ratio of assets to liabilities of the system according to a specific definition of those two values. Typically, the assets used in the measure are the actuarial value of assets; the liabilities are defined by reference to some recognized actuarial funding method. Thus, the funded ratio of a plan depends not only on the financial strength of the plan but also on the funding method used to determine the liabilities and the asset valuation method used to determine the assets in the ratio.

NORMAL COST

That portion of the actuarial present value of pension plan benefits and expenses allocated to a valuation year by the actuarial cost method. This is analogous to one year's insurance premium.

PENSION BENEFIT OBLIGATION

The actuarial present value of benefits earned or credited to date based on the members expected final average compensation at retirement. For current retirees or terminated members this is equivalent to the actuarial present value of their accrued benefit.

PROJECTED BENEFITS

The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

UNFUNDED ACTUARIAL ACCRUED LIABILITY

The excess of the actuarial accrued liability over the actuarial value of assets.

VESTED BENEFITS

Benefits that the members are entitled to even if they withdraw from service.

Bookmarks – DO NOT EDIT!!

Plan A

valdate:	6/30/2023
valdate_PY:	6/30/2022
valdate_plus1:	6/30/2024
valdate_plus2:	6/30/2025
Valyear	2023
valrate_BOY:	0.0685
valrate_EOY:	0.0685
Summary	
active_CY:	4484
active_vested_CY:	1998
DROP_CY:	183
retired_CY:	3790
term_vested_CY:	251
term_ref_CY:	3731
total_term_CY:	3982
active_lives_payroll:	199312291
retiree_benefits_payment:	78886254
MVA:	961610161
AVA:	1003608550
amort_cost:	8942182
ratio_AVA_AL_total	0.7652
projected_tax_revenue:	6389026
EE_contr_rate:	0.1
Projected_tax_percentofpay:	0.0392
frozen_UAL	48847862
Summary Prior Year	
active_PY	4513
retired_PY	3732
term_vested_PY	258
term_ref_PY	3517
active_lives_payroll_PY	187377898
retired_benefits_PY	76362820
pvfb_total_PY	1483893934
EAN_AL_PY	1277206406
frozen_UAL_PY	54014424
FDA_PY	8002037
AVA_PY	946256046
MVA_PY	877147955
AVA_Ratio_PY	0.7409
ER_NC_PY	48434237
amort_cost_PY	8577632
projected_admin_PY	1778003

projected_advalorem_PY	7135592
projected_revsharing_PY	112496
ER_cont_req_PY	51541784
projected_payroll_PY	185557555
ror_market_PY	-0.101
ror_actuarial_PY	0.054
ER_rate_req_PY	0.2778
EE_contr_rate_PY	0.1
ER_rate_actual_PY	0.295
ER_rate_min_PY	0.2775
Comments	
FDA_opening_balance:	8002037
FDA_closing_balance:	17097231
Rate_of_return_market:	0.084
Rate_of_return_actuarial:	0.049
Recurring_income:	3116057
Capital_gains:	72181471
Invest_exp_inverted:	1487302
Actuarial_inv_gain_loss:	-18476803
Due_planB:	0
avg_svc	9.09
avg_sal	44450
avg_benefit	1945
NC_accrual_rate_PY:	0.272976
Assumption_gain_loss:	0
Benefit_gain_loss:	0
COLA_gain_loss:	0
Contribution_gain_loss:	0
New_hire_gain_loss:	0.02093
Merger_gain_loss:	0
Liability_gain_loss:	0.012983
Investment_gain_loss:	-0.01274
NC_accrual_rate_CY:	0.251803
Tax_rev_change:	0.0001
One_percent_change_AVA:	0.0069
ER_rate_minus1	0.1004
five_year_act_chg	-404
five_year_ret_chg	322
five_year_ben_chg	15701861
ben_sal_ratio	0.2926
payroll_effect	-0.0014
Exhibit I	
pvfb_total_ex1:	1532020251

FDA_ex1:	17097231
pvf_EE_cont_ex1:	131465069
pvf_ER_NC_ex1:	365196001
pvf_sal_ex1:	1450326377
ER_NC_rate_ex1:	0.25180263
projected_sal_ex1:	181792571
ER_NC_ex1:	45775847
UAL_pay_ex1:	8650799
UAL_pay_intadj_ex1	8942182
ER_NC_and_UAL_pay_ex1:	56259885
ER_NC_intadj_ex1:	47317703
projected_admin_ex1:	1805983
ER_NC_total_ex1:	58065868
projected_advalorem_ex1:	7708238
projected_revsharing_ex1:	112045
ER_cont_subtotal_ex1:	000
projected_ins_tax_ex1:	000
ER_cont_req_ex1:	50245585
projected_payroll_ex1:	199411751
ER_rate_req_ex1:	0.252
ER_rate_actual_ex1:	0.295
cont_YOY_ex1:	0
cont_YOY_delta_ex1:	0
ER_rate_min_ex1:	0.2525
Exhibit II	
pvfb_act_ret_ex2:	601615296
pvfb_act_surv_ex2:	14308773
pvfb_act_dis_ex2:	14910679
pvfb_act_vest_ex2:	55227533
pvfb_act_ref_ex2:	26195872
pvfb_act_total_ex2:	712258153
pvfb_term_vest_ex2:	27610650
pvfb_term_recp_ex2:	784974
pvfb_term_ref_ex2:	7463422
pvfb_term_total_ex2:	35859046
pvfb_ret_max_ex2:	280339543
pvfb_ret_opt1_ex2:	0
pvfb_ret_opt2_ex2:	305383380
pvfb_ret_opt2a_ex2:	000
pvfb_ret_opt3_ex2:	92201695
pvfb_ret_opt3a_ex2:	000
pvfb_ret_opt4_ex2:	3001368
pvfb_ret_opt5_ex2:	0
pvfb_ret_subtotal_ex2:	680925986
pvfb_ret_dis_ex2:	13649824
pvfb_ret_surv_ex2:	76016761

pvfb_ret_annuities_ex2:	000
pvfb_ret_DROP_ex2:	13310481
pvfb_ret_IBO_ex2:	000
pvfb_ret_total_ex2:	783903052
Exhibit III	
cash_ex3a:	10803055
rec_1_ex3a:	20714700
rec_2_ex3a:	22511
rec_3_ex3a:	6899398
rec_4_ex3a:	0
rec_5_ex3a:	379475
rec_6_ex3a:	95698
rec_7_ex3a:	000
rec_8_ex3a:	000
rec_9_ex3a:	000
rec_10_ex3a:	000
total_current_assets_ex3a:	38914837
property_plant_ex3a:	1598733
deposits_ex3a:	13
prepaid_exp_ex3a:	000
mitigation_costs_ex3a:	000
invest_1_ex3a:	5050738
invest_2_ex3a:	520424948
invest_3_ex3a:	267818627
invest_4_ex3a:	70961618
invest_5_ex3a:	31320778
invest_6_ex3a:	0
invest_7_ex3a:	0
invest_8_ex3a:	0
invest_9_ex3a:	26722970
invest_10_ex3a:	3215085
invest_11_ex3a:	000
invest_12_ex3a:	000
invest_13_ex3a:	000
invest_14_ex3a:	000
invest_15_ex3a:	000
invest_total_ex3a:	922299679
assets_total_ex3a:	962813249
liab_1_ex3a:	114052
liab_2_ex3a:	0
liab_3_ex3a:	505237
liab_4_ex3a:	29541
liab_5_ex3a:	320268
liab_6_ex3a:	0
liab_7_ex3a:	179862
liab_8_ex3a:	0

liab_9_ex3a:	54128
liab_10_ex3a:	000
other_int_ex3a:	000
liab_total_ex3a:	1203088
controlling_interest_ex3a:	0
actual_inc_1_ex3b:	13366803
actual_inc_2_ex3b:	-165706954
actual_inc_3_ex3b:	132640795
actual_inc_4_ex3b:	-31619883
actual_inc_5_ex3b:	-17395262
actual_inc_total_ex3b:	-68714501
defer_inc_1_ex3b:	10693442
defer_inc_2_ex3b:	-99424172
defer_inc_3_ex3b:	53056318
defer_inc_4_ex3b:	-6323977
defer_inc_5_ex3b:	0
defer_inc_total_ex3b:	-41998389
MVA_85_ex3b:	817368637
MVA_115_ex3b:	1105851685
exp_fund_ex3b:	354649
prelim_AVA_ex3b:	1003608550
Exhibit IV	
pvf_ER_cont_ex4	365196001
amort_payments_ex4	48847862
pvf_cont_total_ex4	528411701
Exhibit V	
UAL_PY_ex5	54014424
UAL_int_ex5	3699988
UAL_total_inc_ex5	3699988
amort_ex5	8298128
amort_int_ex5	568422
FDA_with_ex5	0
UAL_total_dec_ex5	8866550
UAL_change_ex5	-5166562
UAL_CY_ex5	48847862
Exhibit VI	
AVA_PY_ex6	946256046
cont_1_ex6	19060352
cont_2_ex6	59437701
cont_3_ex6	13945932
cont_4_ex6	7522754
cont_5_ex6	0
cont_6_ex6	0

cont_7_ex6	1709528
cont_subtotal_ex6	101676267
invest_1_ex6	72181471
invest_2_ex6	0
invest_3_ex6	3116057
invest_4_ex6	0
invest_5_ex6	0
invest_6_ex6	0
invest_7_ex6	000
invest_8_ex6	000
invest_exp_ex6	-1487302
invest_subtotal_ex6	73810226
total_inc_ex6	175486493
exp_1_ex6	77679727
exp_2_ex6	5030957
exp_3_ex6	5173218
exp_4_ex6	1140078
exp_5_ex6	320268
exp_6_ex6	1680039
exp_7_ex6	000
exp_8_ex6	000
exp_subtotal_ex6	91024287
net_income_ex6	84462206
unadjusted_fund_bal_ex6	1030718252
adj_exp_fund_ex6	000
adj_smoothing_ex6	-27109702
Exhibit VII	
FDA_contr	8547054
FDA_with	0
FDA_int	548140
FDA	17097231
Exhibit VIII	
PBO_actives_ex8a	470272330
PBO_terms_ex8a	35859046
PBO_retired_ex8a	783903052
PBO_total_ex8a	1290034428
PBO_ratio_ex8a	0.778
AL_active_ ex8b	491820489
AL_term_ ex8b	35859046
AL_retired_ ex8b	783903052
AL_total_ ex8b	1311582587
AL_ratio_ ex8b	0.7652

Plan B

Summary	
active_CY_b:	2055
active_vested_CY_b:	863
DROP_CY_b:	58
retired_CY_b:	1198
term_vested_CY_b:	107
term_ref_CY_b:	2010
total_term_CY_b:	2117
active_lives_payroll_b:	86043818
retired_benefits_payment_b:	15428909
amort_cost_b	0
frozen_UAL_b:	0
MVA_b:	219614861
AVA_b:	230016557
ratio_AVA_AL_total_b:	0.7777
projected_tax_revenue_b:	2613774
EE_contr_rate_b_b:	0.05
projected_tax_percentofpay_b:	0.0383
Summary Prior Year	
active_PY_B	1997
retired_PY_B	1159
term_vested_PY_B	104
term_ref_PY_B	1832
active_lives_payroll_PY_B	79381407
retired_benefits_PY_B	14609855
pvfb_total_PY_B	338678422
EAN_AL_PY_B	284474338
frozen_UAL_PY_B	0
FDA_PY_B	1560738
AVA_PY_B	216737373
MVA_PY_B	200590478
AVA_Ratio_PY_B	0.7619
ER_NC_PY_B	13238990
amort_cost_PY_B	0
projected_admin_PY_B	753239
projected_advalorem_PY_B	3022946
projected_revsharing_PY_B	47658
ER_cont_req_PY_B	10921625
projected_payroll_PY_B	81695407
ror_market_PY_B	-0.096
ror_actuarial_PY_B	0.052
ER_rate_req_PY_B	0.1337
EE_contr_rate_PY_B	0.05
ER_rate_actual_PY_B	0.155
ER_rate_min_PY_B	0.1325
Comments	
FDA_opening_balance_b:	1560738
FDA_closing_balance_b:	4297012
rate_of_return_market_b:	0.079
rate_of_return_actuarial_b:	0.047
recurring_income_b:	1022378
capital_gains_b:	15339886
invest_exp_inverted_b:	317705
actuarial_inv_gain_loss_b:	-4647519
avg_svc_b	8.73
avg_sal_b	41870
avg_benefit_b	1180
NC_accrual_rate_PY_b:	0.179439
assumption_gain_loss_b:	0
benefit_gain_loss_b:	0
COLA_gain_loss_b:	0
contribution_gain_loss_b:	0
new_hire_gain_loss_b:	0.013855
merger_gain_loss_b:	0
liability_gain_loss_b:	0.002199
investment_gain_loss_b:	-0.007833
NC_accrual_rate_CY_b:	0.171218
tax_rev_change_b:	0.0007
one_percent_change_AVA_b:	0.0039
ER_rate_minus1_b	0.0584
five_year_act_chg_b	-73
five_year_ret_chg_b	148
five_year_ben_chg_b	3906416
ben_sal_ratio_b	0.1334
payroll_effect_b	0
Exhibit I	
pvfb_total_ex1_b:	354281472
FDA_ex1_b:	4297012
pvf_EE_cont_ex1_b:	26969715
pvf_ER_NC_ex1_b:	101592212
pvf_sal_ex1_b:	593349260
ER_NC_rate_ex1_b:	0.17121823
projected_sal_ex1_b:	77042281
ER_NC_ex1_b:	13191043
UAL_pay_ex1_b:	0
UAL_pay_intadj_ex1_b	0
ER_NC_and_UAL_pay_ex1_b:	13718748

ER_NC_intadj_ex1_b:	13635353
projected_admin_ex1_b:	779649
ER_NC_total_ex1_b:	14415002
projected_advalorem_ex1_b:	3327673
projected_revsharing_ex1_b:	48370
ER_cont_subtotal_ex1_b:	000
projected_ins_tax_ex1_b:	000
ER_cont_req_ex1_b:	11038959
projected_payroll_ex1_b:	88076018
ER_rate_req_ex1_b:	0.1253
ER_rate_actual_ex1_b:	0.155
cont_YOY_ex1_b:	0
cont_YOY_delta_ex1_b:	0
ER_rate_min_ex1_b:	0.125
Exhibit II	
pvfb_act_ret_ex2_b	166639923
pvfb_act_surv_ex2_b	3758049
pvfb_act_dis_ex2_b	7575619
pvfb_act_vest_ex2_b	12669740
pvfb_act_ref_ex2_b	5130985
pvfb_act_total_ex2_b	195774316
pvfb_term_vest_ex2_b	8082130
pvfb_term_recp_ex2_b	755126
pvfb_term_ref_ex2_b	1861090
pvfb_term_total_ex2_b	10698346
pvfb_ret_max_ex2_b	54016330
pvfb_ret_opt1_ex2_b	0
pvfb_ret_opt2_ex2_b	51540837
pvfb_ret_opt3_ex2_b	15381020
pvfb_ret_opt4_ex2_b	0
pvfb_ret_opt5_ex2_b	0
pvfb_ret_subtotal_ex2_b	120938187
pvfb_ret_dis_ex2_b	3968532
pvfb_ret_surv_ex2_b	19495421
pvfb_ret_DROP_ex2_b	3406670
pvfb_ret_total_ex2_b	147808810
Exhibit III	
cash_ex3a_b	18362695
rec_1_ex3a_b	1514005
rec_2_ex3a_b	13705
rec_3_ex3a_b	1463509
rec_4_ex3a_b	0
rec_5_ex3a_b	-379475
rec_6_ex3a_b	145
rec_7_ex3a_b	0

rec_8_ex3a_b	0
total_current_assets_ex3a_b	20974584
property_plant_ex3a_b	677293
deposits_ex3a_b	2
invest_1_ex3a_b	1638179
invest_2_ex3a_b	110393170
invest_3_ex3a_b	56810012
invest_4_ex3a_b	15052464
invest_5_ex3a_b	6647206
invest_6_ex3a_b	0
invest_7_ex3a_b	0
invest_8_ex3a_b	0
invest_9_ex3a_b	7358058
invest_10_ex3a_b	237568
invest_total_ex3a_b	197899089
assets_total_ex3a_b	219550966
liab_1_ex3a_b	27438
liab_2_ex3a_b	0
liab_3_ex3a_b	116805
liab_4_ex3a_b	6266
liab_5_ex3a_b	-320268
liab_6_ex3a_b	0
liab_7_ex3a_b	76198
liab_8_ex3a_b	0
liab_9_ex3a_b	29666
liab_total_ex3a_b	-63895
controlling_interest_ex3a_b	0
actual_inc_1_ex3b_b	2203743
actual_inc_2_ex3b_b	-36210804
actual_inc_3_ex3b_b	27507064
actual_inc_4_ex3b_b	-7205168
actual_inc_5_ex3b_b	-4002113
actual_inc_total_ex3b_b	-17707278
defer_inc_1_ex3b_b	1762994
defer_inc_2_ex3b_b	-21726482
defer_inc_3_ex3b_b	11002826
defer_inc_4_ex3b_b	-1441034
defer_inc_5_ex3b_b	0
defer_inc_total_ex3b_b	-10401696
prelim_AVA_ex3b_b	230016557
MVA_85_ex3b_b	186672632
MVA_115_ex3b_b	252557090
Exhibit IV	
pvf_ER_cont_ex4_b	101592212
amort_payments_ex4_b	0
pvf_cont_total_ex4_b	124264915

Exhibit V	
ER_NC_PY_ex5_b	12807595
ER_NC_PY_int_ex5_b	877320
admin_exp_ex5_b	711735
admin_exp_int_ex5_b	23974
total_req_cont_ex5_b	14420624
direct_er_cont_ex5_b	13309035
ER_cont_int_ex5_b	448285
total_taxes_ex5_b	3185375
total_taxes_int_ex5_b	107292
total_er_cont_ex5_b	17049987
cont_shortfall_ex5_b	2629363
Exhibit VI	
AVA_PY_ex6_b	216737373
cont_1_ex6_b	4120337
cont_2_ex6_b	13309035
cont_3_ex6_b	71745
cont_4_ex6_b	3185375
cont_5_ex6_b	0
cont_6_ex6_b	0
cont_7_ex6_b	517686
cont_subtotal_ex6_b	21204178
invest_1_ex6_b	15339886
invest_2_ex6_b	0
invest_3_ex6_b	1022378
invest_4_ex6_b	0
invest_5_ex6_b	0
invest_6	0
invest_exp_ex6_b	-317705
invest_subtotal_ex6_b	16044559
total_inc_ex6_b	37248737
exp_1_ex6_b	15109606
exp_2_ex6_b	1085680
exp_3_ex6_b	1004506
exp_4_ex6_b	633095
exp_5_ex6_b	-320268
exp_6_ex6_b	711735
exp_7_ex6_b	4663
exp_8_ex6_b	
exp_subtotal_ex6_b	18224354
net_income_ex6_b	19024383
unadjusted_fund_bal_ex6_b	235761756
adj_smoothing_ex6_b	-5745199

Exhibit VII	
FDA_contr_b	2629363
FDA_with_b	0
FDA_int_b	106911
FDA_b	4297012
Exhibit VIII	
PBO_actives_ex8a_b	129011786
PBO_terms_ex8a_b	10698346
PBO_retired_ex8a_b	147808810
PBO_total_ex8a_b	287518942
PBO_ratio_ex8a_b	0.8
AL_active_ex8_b:	137272995
AL_term_ex8_b:	10698346
AL_retired_ex8_b:	147808810
AL_total_ex8_b:	295780151
AL_ratio_ex8_b:	0.7777