CURRAN ACTUARIAL
CONSULTING, LTD.

Annual Funding Valuation
December 31, 2023

Parochial Employees' Retirement System of Louisiana

CURRAN ACTUARIAL CONSULTING, LTD.

June 14, 2024

Board of Trustees
Parochial Employees' Retirement System
7905 Wrenwood Blvd.
Baton Rouge, LA 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Parochial Employees' Retirement System for the fiscal year ending December 31, 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 Parochial Employees' Retirement System. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending December 31, 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 Parochial 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 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 fund. These assumptions are based upon the December 31, 2023 Experience Study and described within that separate report.

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. C

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Senior Consulting Actuary

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

Valuation Date:		December 31, 2023	December 31, 2022
Census Summary:	Active Members	13,824	13,412
	Retired Members and Survivors	8,477	8,284
	Terminated Due a Deferred Benefit	948	956
	Terminated Due a Refund	9,780	9,376
Payroll:		$ 731,489,199	$ 675,490,286
Benefits in Payment:		$ 233,845,747	$ 225,184,598
Present Value of Future Benefits:		$ 5,953,094,917	$ 5,684,306,785
Actuarial Accrued Liability (EAN):		$ 4,767,104,224	$ 4,580,134,176
Funding Deposit Account Credit Balance:		$ 102,214,729	$ 65,263,833
Actuarial Asset Value (AVA):		$ 4,906,092,553	$ 4,680,374,638
Market Value of Assets (MVA):		$ 4,752,547,557	$ 4,274,065,818
Ratio of AVA to Actuarial Accrued Liability (EAN):		102.92%	102.19%

	Fiscal 2023	Fiscal 2022
Market Rate of Return:	13.8%	-12.1%
Actuarial Rate of Return:	7.1%	4.8%

	Fiscal 2024	Fiscal 2023
Employers' Normal Cost (Mid-year):	$ 62,999,074	$ 59,577,707
Estimated Administrative Cost:	$ 2,448,699	$ 2,042,137
Offset for Projected Ad Valorem Tax Contributions:	$ (10,519,083)	$ (9,745,516)
Offset for Projected Revenue Sharing Funds:	$ (135,931)	$ (135,632)
Net Direct Employer Actuarially Required Contributions:	$ 54,792,759	$ 51,738,696
Projected Payroll:	$ 746,919,608	$ 691,101,703
Actual Employee Contribution Rate:	9.50%	9.50%
Actual Net Direct Employer Contribution Rate:	11.50%	11.50%
Actuarially Required Net Direct Employer Contribution Rate:	7.34%	7.49%

	Fiscal 2025	Fiscal 2024
Minimum Recommended Net Direct Employer Cont. Rate:	7.25%	7.50%

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

Valuation Date:		December 31, 2023	December 31, 2022
Census Summary:	Active Members	2,384	2,314
	Retired Members and Survivors	1,116	1,074
	Terminated Due a Deferred Benefit	209	197
	Terminated Due a Refund	2,101	2,021
Payroll:		$ 125,605,540	$ 116,672,661
Benefits in Payment:		$ 16,993,868	$ 16,194,352
Present Value of Future Benefits:		$ 549,176,298	$ 522,456,080
Actuarial Accrued Liability (EAN):		$ 436,129,365	$ 408,897,511
Funding Deposit Account Credit Balance:		$ 9,187,912	$ 5,727,180
Actuarial Asset Value (AVA):		$ 454,789,737	$ 428,173,067
Market Value of Assets (MVA):		$ 441,183,016	$ 390,726,543
Ratio of AVA to Actuarial Accrued Liability (EAN):		104.28%	104.71%

	Fiscal 2023	Fiscal 2022
Market Rate of Return:	13.8%	-12.1%
Actuarial Rate of Return:	7.0%	4.8%

	Fiscal 2024	Fiscal 2023
Employers' Normal Cost (Mid-year):	$ 8,473,438	$ 7,730,224
Estimated Administrative Cost:	$ 420,471	$ 352,724
Offset for Projected Ad Valorem Tax Contributions:	$ (1,806,254)	$ (1,683,274)
Offset for Projected Revenue Sharing Funds:	$ (23,341)	$ (23,427)
Net Direct Employer Actuarially Required Contributions:	$ 7,064,314	$ 6,376,247
Projected Payroll:	$ 128,506,690	$ 119,202,988
Actual Employee Contribution Rate:	3.00%	3.00%
Actual Net Direct Employer Contribution Rate:	7.50%	7.50%
Actuarially Required Net Direct Employer Contribution Rate:	5.50%	5.35%

	Fiscal 2025	Fiscal 2024
Minimum Recommended Net Direct Employer Cont. Rate:	5.50%	5.25%

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 ascribe a greater degree of certainty and accuracy to the results than is warranted. In fact, neither of these descriptions 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 data used; 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 particular 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 processes 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. Fortunately, 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 level of funding and to provide for the future benefits of plan participants.

Despite this, future results may materially differ with this actuarial valuation. Employer contribution rates and other funding measures presented in this report will differ as the system is impacted by the following: changes in plan membership, plan liability or investment experience inconsistent with plan assumptions, future changes in plan assumptions or future changes in plan provisions. An analysis of the range of such deviations is outside the scope of this report.

COMMENTS ON DATA

For the valuation, the administrative director of the system furnished a census 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 a similar 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 13,824 active members in Plan A, of whom, 7,037 members, including 553 participants in the Deferred Retirement Option Plan (DROP), have vested retirement benefits; 8,477 former members of Plan A or their beneficiaries are receiving retirement benefits. An additional 10,728 former members of Plan A have contributions remaining on deposit with the system. This includes 948 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 2,384 active members in Plan B, of whom, 1,167 members, including 61 DROP participants, have vested retirement benefits; 1,116 former members of Plan B or their beneficiaries are receiving retirement benefits. An additional 2,310 former members of Plan B have contributions remaining on deposit with the system. Of this number, 209 have vested rights or have filed reciprocal agreements for future retirement benefits.

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 administrator 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 1A and **1B** show the membership counts for plans A and B over the past ten years.

Figure 1A. Plan A Membership Counts

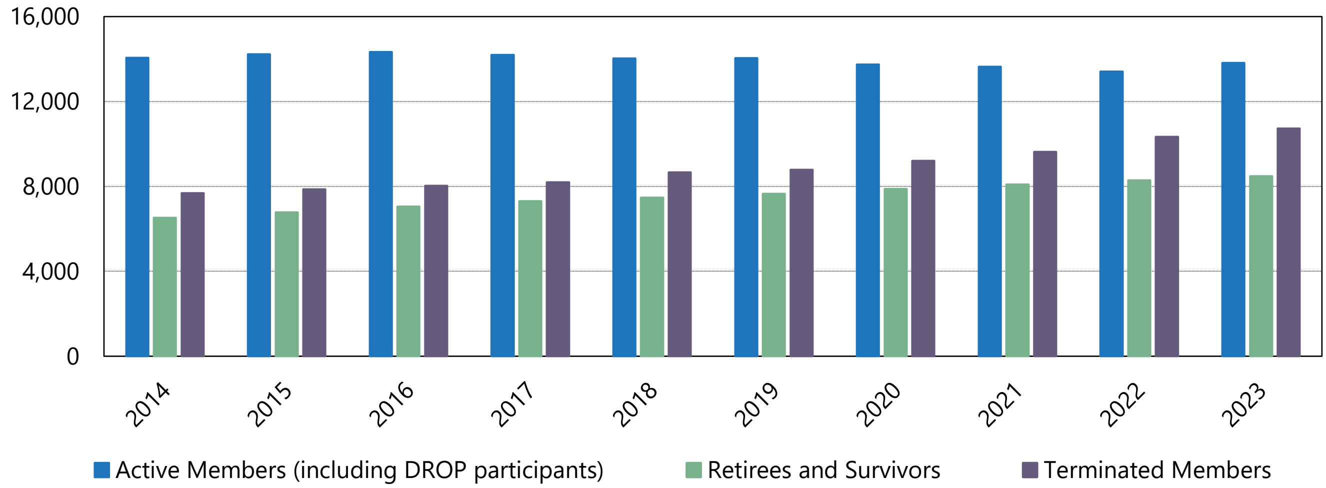
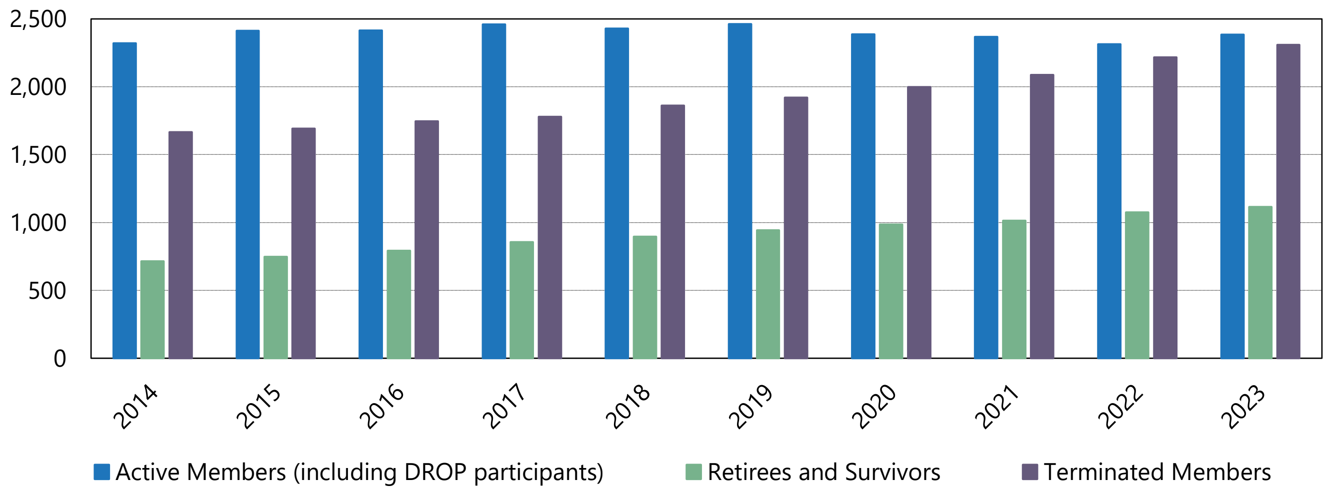


Figure 1B. Plan B Membership Counts



In recent years, our data review process has found a significant number of members coded as active who have zero or low salary for the fiscal year. Consistently, a review of such members' records finds that many of these individuals stopped contributing toward the end of the fiscal year. Often, this is an indication of termination where forms have not been provided to system staff. Although the staff only changes the member's status upon receipt of a notice of termination from the employer, we use information on salary postings throughout the fiscal year to determine those who appear to be terminated at the end of the fiscal year. For those whose status is changed to terminated, some do not have sufficient service credit to be considered as vested in a future benefit. These are changed to terminated due a refund of employee contributions. Those who have sufficient service credit to qualify for a vested benefit have estimated benefits added to their computer record.

The system's database currently does not maintain a code that distinguishes the proper tier of benefits that should apply to each active member. Therefore, we must assign tier codes to members based on their dates of entry and service credit.

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. 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 Duplantier, Hrapmann, Hogan & Maher, L.L.P. As indicated in the system's audit report, the net market value of Plan A's assets was \$4,752,547,557 as of December 31, 2023. For Plan A, the net investment income for Fiscal 2023 measured on a market value basis was \$582,321,522. Contributions to Plan A for the fiscal year totaled \$163,702,852; benefits and expenses amounted to \$267,542,635.

The net market value of Plan B's assets was \$441,183,016 as of December 31, 2023. For Plan B, the net investment income for Fiscal 2023 measured on a market value basis was \$53,822,356. Contributions to Plan B for the fiscal year totaled \$15,202,671; benefits and expenses amounted to \$18,568,554.

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

The system's actuarial funding method is set by R.S. 11:22. Plan A was previously funded under the Frozen Attained Age Normal Cost Method. The Frozen Unfunded Accrued Liability was fully amortized in Fiscal 2012. According to R.S. 11:22(D), for the Fiscal 2013 valuation, Plan A's funding method was changed to the Aggregate Actuarial Cost Method. Plan B is also funded utilizing the Aggregate Actuarial Cost Method. This method does not develop an unfunded actuarial liability. Under the Aggregate Cost 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 both plans, benefit and assumption changes are also spread over future normal costs.

Effective with Fiscal 2008, for both Plans A and B, any excess funds collected pursuant to R. S. 11:105 or R. S. 11:107 are allocated to the Funding Deposit Account. The Funding Deposit Account credit balance as of the end of the prior fiscal year for Plans A and B was \$65,263,833 and \$5,727,180, respectively. Both accounts were increased with interest at the 6.40% valuation interest rate in effect during fiscal 2023. A freeze in the employer contribution rate in Plan A for Fiscal 2023 resulted in a contribution gain of \$32,774,011 as of December 31, 2023. A freeze in the employer contribution rate in Plan B for Fiscal 2023 resulted in a contribution gain of \$3,094,192 as of December 31, 2023. No funds were withdrawn from the Funding Deposit Account during Fiscal 2023 for either plan. After accounting for the withdrawals to fund cost of living increases and adjusting the balance for interest, the resulting balances as of December 31, 2023 for Plans A and B were \$102,214,729 and \$9,187,912, respectively. A history of the Funding Deposit Account for Plans A and B are found in **Figure 2.1** and **2.2**.

Figure 2.1. Plan A | Funding Deposit Account History

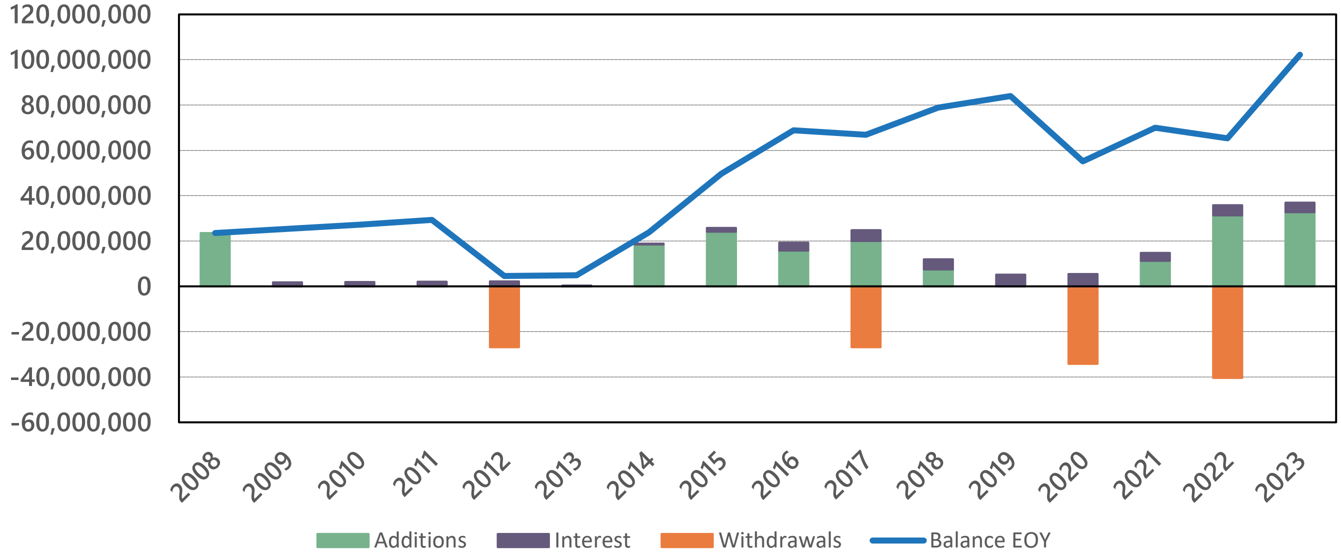
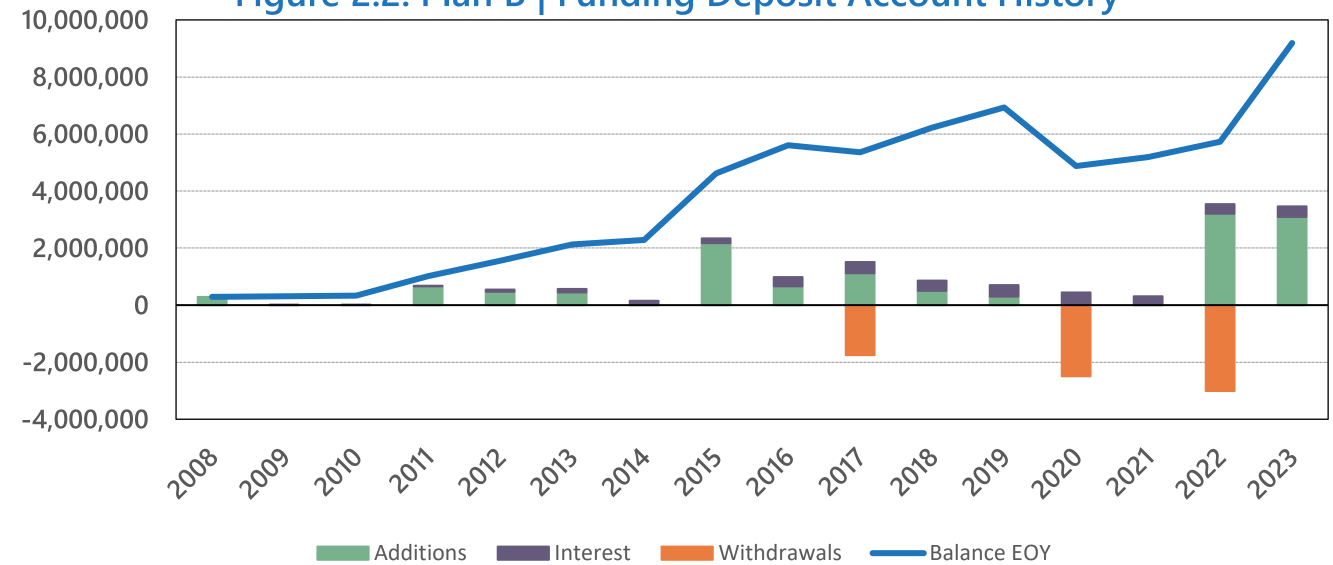


Figure 2.2. Plan B | Funding Deposit Account History



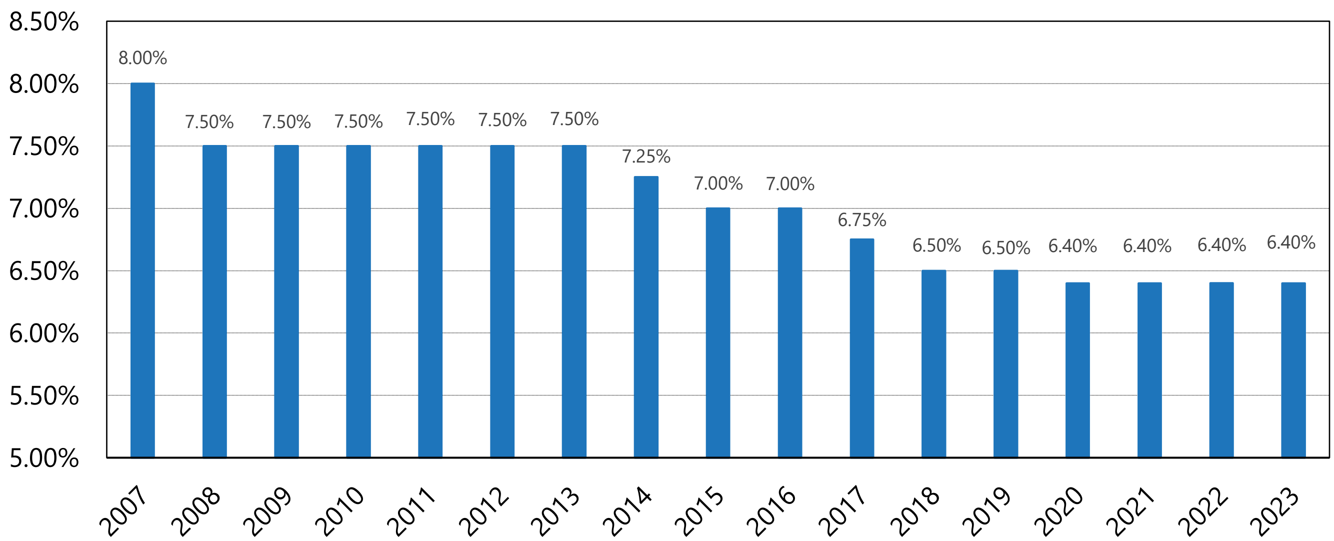
The current year actuarial assumptions utilized for this report are based on the results of an actuarial experience study for the period January 1, 2018 – December 31, 2022, unless otherwise specified. This experience study included a review of all plan decrements in addition to salary scale experience and other demographic factors which impact plan costs. Details related to the study are contained within the 2023 Parochial Employees' Retirement System Experience Study Report. The results of the actuarial valuation rely on the assumptions set by this experience study.

One of the most important actuarial assumptions within an annual valuation of defined benefit liabilities 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 2007 and 2020 to reduce the long-term rate of return assumption. Capital market assumptions for most risky assets and for traditional fixed income assets have increased in recent years. This has resulted in no further changes in this assumption since 2020. A history of the valuation interest rate applicable to both plans is shown in **Figure 3**.

Despite the lack of change in the valuation interest rate for the past few years, we continue to review this important assumption. Our most recent review of the valuation interest rate was performed based on a set of consultant average capital market assumptions developed by Curran Actuarial Consulting in early 2024. We collected capital market assumptions consisting of estimates of rates of return, standard deviations, and correlation coefficients for thirty asset classes. Segal Marco Advisors and five other consulting firms submitted capital market assumptions for use in developing this set of capital market assumptions. In addition, capital market assumptions from three large national money management firms were used. We have also reviewed the system's assumed rate of long-term inflation by comparing the assumption to several professional sources. The consultant average capital market assumptions and system's long-term assumed rate of inflation were used to derive forward estimates of the Fund's portfolio earnings rate. The actuary's reasonable range for the assumption related to the assumed long-term expected rate of return was reviewed by developing 10,000 stochastic trials over the coming 30 years. These trials were developed based upon the average arithmetic portfolio rate of return and an estimate of the portfolio's long-term standard deviation. The reasonable range was set based upon the 40th through 60th percentile of the geometric 30-year average rates of return taken from these trials. Our study performed in 2024 based upon the system's target asset allocation resulted in a reasonable range of 6.26% through 7.40% with a 50th percentile value of 6.84%.

The lower bound of the 2024 reasonable range is 0.35% higher than the same figure measured in 2020. Given the large shift in capital market assumptions over the past few years and the fact that the current assumed rate of return of 6.40% is within the reasonable range, we do not recommend that the Board consider any further changes in the valuation interest rate at this time.

Figure 3. Assumed Rate of Return



Although the board of trustees has the authority to grant ad hoc cost of living adjustments (COLAs) under limited circumstances, these COLAs have not been shown to have a historical pattern, the amounts of the COLAs have not been relative to a defined cost-of-living or inflation index, and there is no evidence to conclude that COLAs will be granted on a predictable basis in the future. In addition, COLAs paid out of the Funding Deposit Account do not affect the actuarially required contributions to the system. The Board has elected to utilize funds set aside in the system's Funding Deposit Accounts to prefund COLAs since 2016. Although the statutes allow the Board to provide ad hoc COLAs in the future without prefunding, the Board has expressed its desire to continue the use of the Funding Deposit Account as a tool to prefund COLAs. Therefore, the present value of benefits utilized to determine the proper level of actuarial funding does not include provisions for potential future ad hoc COLAs.

The current year actuarial assumptions utilized for the report are outlined on pages seventy-two through seventy-eight. With the exception of an update in the option factors used to estimate benefits due to spouses of members who die prior to retirement, all assumptions used are the same as those used in the 2020 valuation. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments to contribution levels will be required. Such differences will be revealed in future actuarial valuations. For this valuation, the effect of changes in assumptions was a decrease in the required contribution rate for Plan A of 0.3311% and a decrease in the required contribution rate for Plan B of 0.0617%.

RISK FACTORS

Defined benefit pension plans are subject to a number of risks. These 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 a number of 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 102.92% for Plan A and 104.28% for Plan B as of December 31, 2023. A history of this value is shown in **Figures 4A** and **4B**.

Figure 4A. Plan A Historical Funded Status

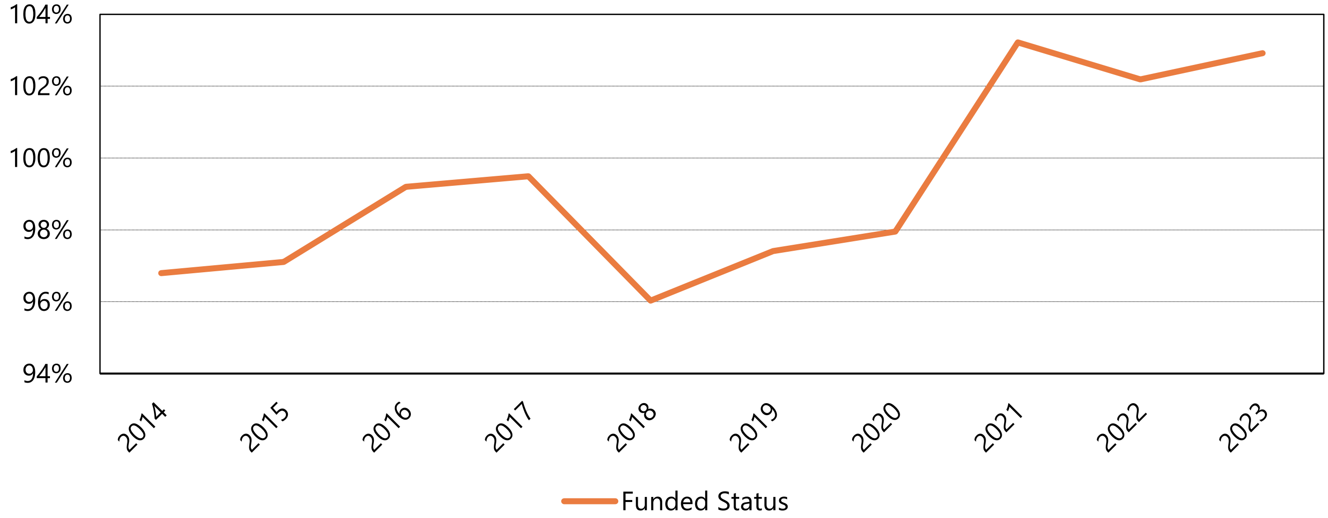
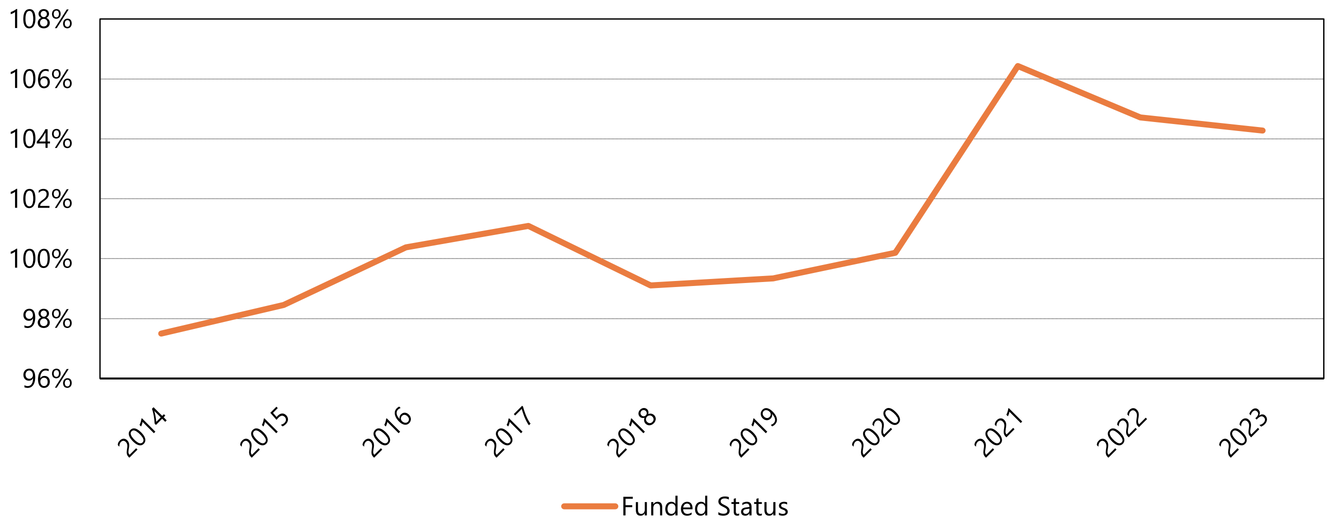


Figure 4B. Plan B Historical Funded Status



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. Exhibits X and XX give a history of this value for the last ten years. However, the underlying trend is somewhat disguised since the system has significantly reduced the valuation interest rate over this period. Absent the reduction in this rate, the current ratio would be significantly higher.

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. Should the plan attempt 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. Since the Board has used the Funding Deposit Account to prefund COLAs over the last seven years, the minimum employer contribution rates have not been affected. 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 long-term average rates of future inflation may remain higher than rates projected during the period prior to 2020 and the Covid-19 pandemic. 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 decline mitigating the reinvestment risk the plan currently faces. As the current cycle of increasing interest rates abates, the possibility of reinvestment risk will undoubtedly increase.

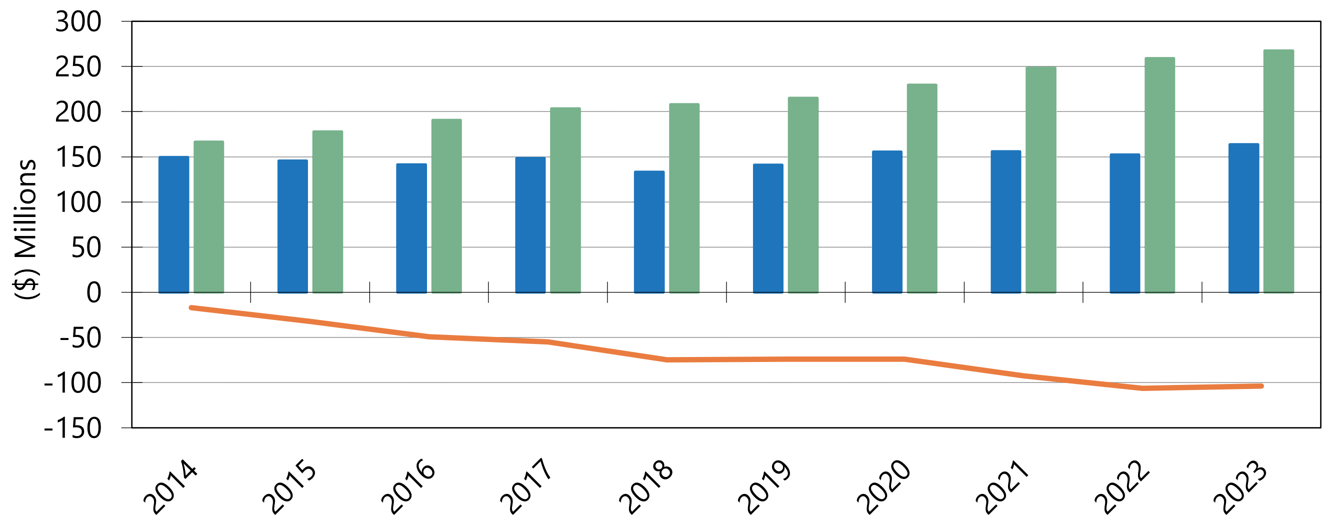
Asset Return Volatility Risk

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

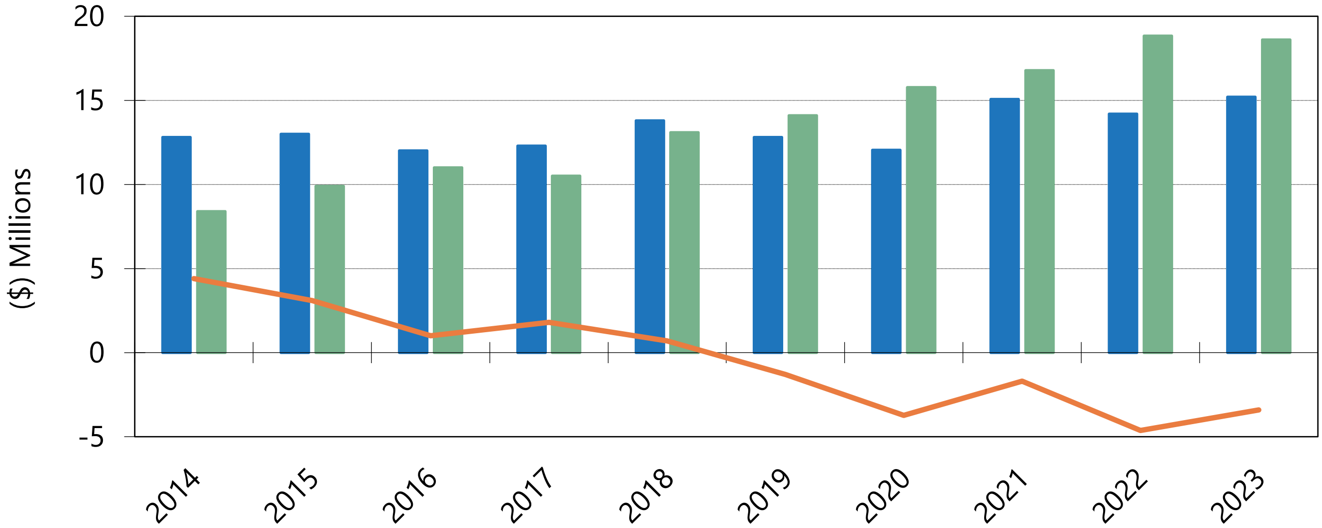
The system is also exposed to risk related to cash flows. Where benefit payments exceed contributions to a plan, the plan will be required to use investment income or potentially investment capital to pay benefits. In cases where it is necessary to use investment income to pay retirement benefits, investment market downturns will 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 **Figure 5A** and **5B** compare the total contribution income to benefits and expenses to determine the noninvestment cash flow of the system over the last ten years. In that ten-year period, Plan A's annual benefit payments have exceeded annual contributions in each year while Plan B has only recently reached negative cash flows. In this situation, portfolio construction is very important, and investment staff must consider what level of liquidity is necessary.

Figure 5A. Plan A Annual Net Non-Investment Cash Flows



Plan A Net Non-Inv. Cash Flows		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Contribution Income ($Mil)		149.4	145.6	141.4	148.4	133.2	140.9	155.6	155.9	152.5	163.7
Benefits and Expenses ($Mil)		166.4	177.9	190.7	203.3	208.0	215.0	229.5	248.3	258.8	267.5
Net Non- Inv. Cash Flow ($Mil)		-17.0	-32.3	-49.3	-54.9	-74.8	-74.1	-73.9	-92.4	-106.3	-103.8

Figure 5B. Plan B Annual Net Non-Investment Cash Flows



Plan B Net Non-Inv. Cash Flows		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Contribution Income ($Mil)		12.8	13.3	12.0	12.3	13.8	12.8	12.0	15.1	14.2	15.2
Benefits and Expenses ($Mil)		8.4	9.9	11.0	10.5	13.1	14.1	15.8	16.8	18.8	18.6
Net Non- Inv. Cash Flow ($Mil)		4.4	3.4	1.0	1.8	0.7	-1.3	-3.8	-1.7	-4.6	-3.4

Future net non-investment cash flows for both plans will depend upon each plan's maturity level 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 system, whereas reduced contribution levels resulting from positive experience will tend to increase the scale of negative cash flows. Absent a significant increase in the active membership of the plans, the trend of higher proportion of retired membership may continue, and the current trend toward higher level of negative non-investment cash flows could continue in the near future.

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. We have determined that for Plan A, based on current assets and demographics, for each percentage under (over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (decrease) in the actuarially required contribution as a percentage of projected payroll of 0.75% for the plan. For Plan B this figure is 0.43%.

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 11.67% of payroll for Plan A and 7.20% of payroll for Plan B. Future adjustments to the future 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 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 by 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 31.97% for Plan A and 13.53% for Plan B; ten years ago this ratio was 22.86% for Plan A and 7.60% 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. Regarding 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 of the 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 plan we have estimated the effective liability duration as 11.09 for Plan A and 11.71 for Plan B, when measured based on the interest sensitivity of each plan's entry-age normal accrued liability.

Other Liability Risks

In addition to asset risk, the plan is also subject to risks related to liabilities. These risks include 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 dependent 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 70 urges and requests the state treasurer and the state and statewide retirement systems to:

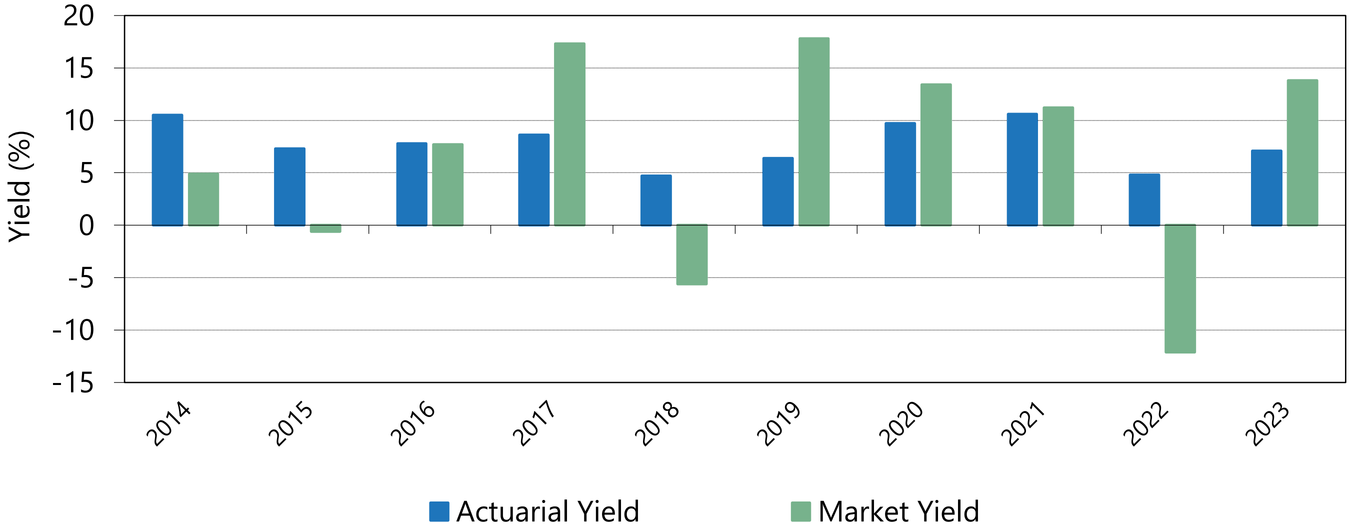
1. Report on investment advisors and companies used by the treasurer and the retirement systems that discriminate against the fossil fuel industry through environmental, social, and governance policies.
2. Report on investment of state and pension assets using nonpecuniary factors.
3. Report on the asset 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 (**Figures 6A** and **6B**). These rates of return on assets were determined by assuming a uniform distribution of income and expense throughout the fiscal year. 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. 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.

Figure 6A. Plan A | Historical Asset Yields

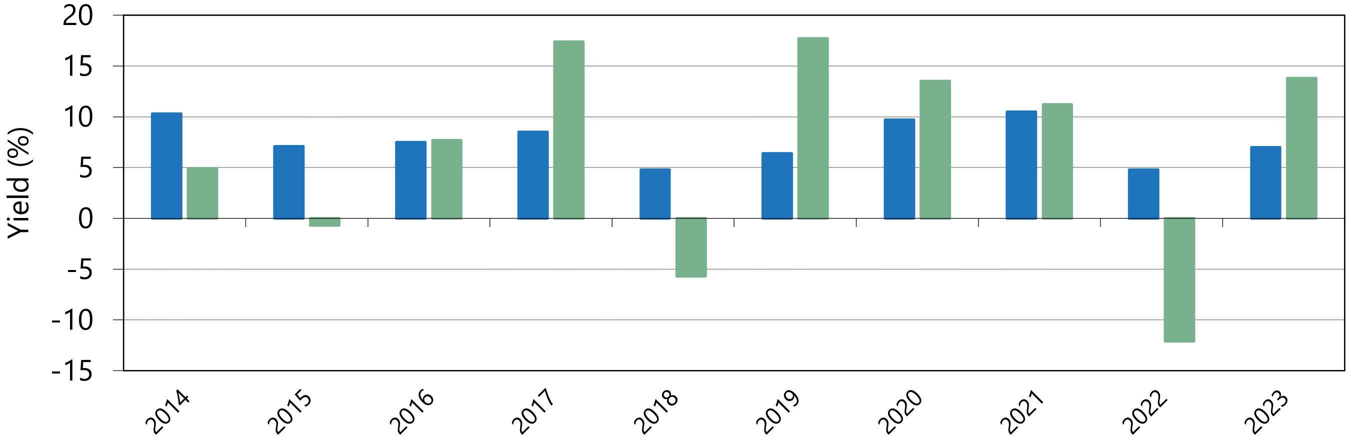


Plan A	Market Yield	Actuarial Yield
2014	4.9%	10.5%
2015	-0.6%	7.3%
2016	7.7%	7.8%
2017	17.3%	8.6%
2018	-5.6%	4.7%
2019	17.8%	6.4%
2020	13.4%	9.7%
2021	11.2%	10.6%
2022	-12.1%	4.8%
2023	13.8%	7.1%

Geometric Average Market Rates of Return		
5-year average	(Fiscal 2019 – 2023)	8.2%
10-year average	(Fiscal 2014 – 2023)	6.3%
15-year average	(Fiscal 2009 – 2023)	8.7%
20-year average	(Fiscal 2004 – 2023)	6.7%
25-year average	(Fiscal 1999 – 2023)	6.3%
30-year average	(Fiscal 1994 – 2023)	7.2%

During 2023, Plan A earned $135,483,912 and Plan B earned $12,536,924 of dividends, interest and other recurring income. In addition, Plan A had net realized and unrealized capital gains and other non-recurring income on investments of $477,298,186 while the total of such gains for Plan B amounted to $44,145,380. Investment expenses were $30,460,576 for Plan A and $2,859,948 for Plan B.

Figure 6B. Plan B | Historical Asset Yields



Plan B	Market Yield	Actuarial Yield
2014	4.9%	10.3%
2015	-0.7%	7.1%
2016	7.7%	7.5%
2017	17.4%	8.5%
2018	-5.7%	4.8%
2019	17.7%	6.4%
2020	13.5%	9.7%
2021	11.2%	10.5%
2022	-12.1%	4.8%
2023	13.8%	7.0%

Geometric Average Market Rates of Return		
5-year average	(Fiscal 2019 – 2023)	8.2%
10-year average	(Fiscal 2014 – 2023)	6.3%
15-year average	(Fiscal 2009 – 2023)	8.7%
20-year average	(Fiscal 2004 – 2023)	6.6%
25-year average	(Fiscal 1999 – 2023)	6.4%
30-year average	(Fiscal 1994 – 2023)	7.0%

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. 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 $135,483,912 and Plan B earned $12,536,924 of dividends, interest and other recurring income. In addition, Plan A had net realized and unrealized capital gains and other non-recurring income on investments of $477,298,186 while the total of such gains for Plan B amounted to $44,145,380. Investment expenses were $30,460,576 for Plan A and $2,859,948 for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 6.40% for Fiscal 2023. This rate is calculated based on the smoothed value of assets subject to constraints as given in Exhibit III-B for Plan A and Exhibit XIII-B 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. Yields in excess of the 6.40% assumption will reduce future costs; yields below 6.40% will increase future costs. Net actuarial investment earnings exceeded the actuarial assumed earnings rate of 6.40%, used for Fiscal 2023, by $33,285,064 for Plan A and exceeded the actuarial assumed earnings rate of 6.40%, used for Fiscal 2023, by $2,685,515 for Plan B. These earnings surpluses for Plan A produced actuarial gains, which decreased the normal cost accrual rate by 0.5098% and the earnings surpluses for Plan B produced actuarial gains, which decreased the normal cost accrual rate by 0.2558% 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. 11:2012. In the course of reviewing data for the December 31, 2023 valuation we found members of Plan A and Plan B with such service and recommend a liability transfer of $72,345 be made from the Plan B trust to the Plan A trust for Fiscal 2023.

PLAN A – DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the plan is given in Exhibit IX. The average active member (including DROP participants) is 47 years old with 9.8 years of service and an annual salary of $52,914. The plan's active membership, inclusive of DROP participants, increased by 412 members during the fiscal year. The plan has experienced a decrease in the active plan population of 203 members over the last five years.

The average regular retiree is 72 years old with an annual benefit of $29,757. The average age at retirement for regular retirees was 62. The number of retirees and beneficiaries receiving benefits from the system increased by 193 during the fiscal year; over the last five years the number of retirees has increased by 1,010 and benefit payments have increased by $56,041,265.

Plan liability experience for Fiscal 2023 was unfavorable. Disabilities were below projected levels and retiree deaths were above projected levels. These factors tend to decrease costs. Retirements, DROP entries, and average salary increases were above projected levels. These factors tend to increase costs. In aggregate, plan liability losses increased the normal cost accrual rate by 0.7528%.

PLAN B – DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the plan is given in Exhibit XIX. The average active member (including DROP participants) is 47 years old with 9.8 years of service and an annual salary of $52,687. The plan's active membership, inclusive of DROP participants, increased by 70 members during the fiscal year. The plan has experienced a decrease in the active plan population of 45 members over the last five years.

The average regular retiree is 72 years old with an annual benefit of $16,181. The average age at retirement for regular retirees was 64. The number of retirees and beneficiaries receiving benefits from the system increased by 42 during the fiscal year; over the last five years the number of retirees has increased by 220 and benefit payments have increased by $5,749,876.

Plan liability experience for Fiscal 2023 was unfavorable. Disabilities were below projected levels and retiree deaths were above projected levels. These factors tend to decrease costs. Retirements, DROP entries, and average salary increases were above projected levels. These factors tend to increase costs. In aggregate, plan liability losses increased the normal cost accrual rate by 0.4280%.

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 applying a cost allocation procedure to the results of an actuarial valuation of liabilities based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. The allocation of costs also depends on an asset smoothing method described in the assumptions section at the end of this report. Each year a determination is made of the normal cost, and the actuarially required contributions are based on the sum of this value and administrative expenses. Under the funding method used for the plan, changes in plan experience, benefits, or assumptions increase or decrease future normal costs. In addition, excess or deficient contributions can decrease or increase future costs. The funding method used for both plans produces no unfunded actuarial accrued liability.

To establish the actuarially required contribution in any given year, it is necessary to define the assumptions and funding method. Thus, the determination of what contribution is actuarially required depends upon the funding method 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.

R.S. 11:103 governs the calculation of the annual actuarially determined employer contribution rate for statewide retirement systems. This statute describes the components of the employer contribution rate found in Exhibit I and Exhibit XI. We believe that the minimum recommended net direct employer contribution rate developed within this report represents a Reasonable Actuarially Determined Contribution (or RADC) under the terms set forth in the actuarial standards of practice. We believe that the cost allocation procedure set forth in the statutes reasonably balances benefit security and intergenerational equity. The consistent payment of actuarially determined contributions based on Louisiana's constitutional requirements significantly improves the benefit security of plan members and retirees. The system's funding methodology seeks intergenerational equity by spreading actuarial costs over the future working lifetime of members. With the use of reasonable actuarial assumptions, the system's contribution allocation procedure should produce reasonably stable and predictable results. The system's annual valuation directly calculates the present value of future benefits for each member and former member. This measure accounts for expected future benefit payments and the expected duration of those payments. The valuation results are based on plan provisions in effect as of the valuation date. Therefore, results will be affected if plan provisions are changed in the future.

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.

For Plan A, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for Fiscal 2024 as of January 1, 2024 is $61,074,983. The total actuarially required contribution is determined by adjusting the value for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 12 of Exhibit I the total actuarially required contribution for Fiscal 2024 is $65,447,773. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for Fiscal 2024 is $54,792,759. This is 7.34% of the projected Plan A payroll for Fiscal 2024.

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. New entrants to the system can also increase or decrease costs as a percent 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.

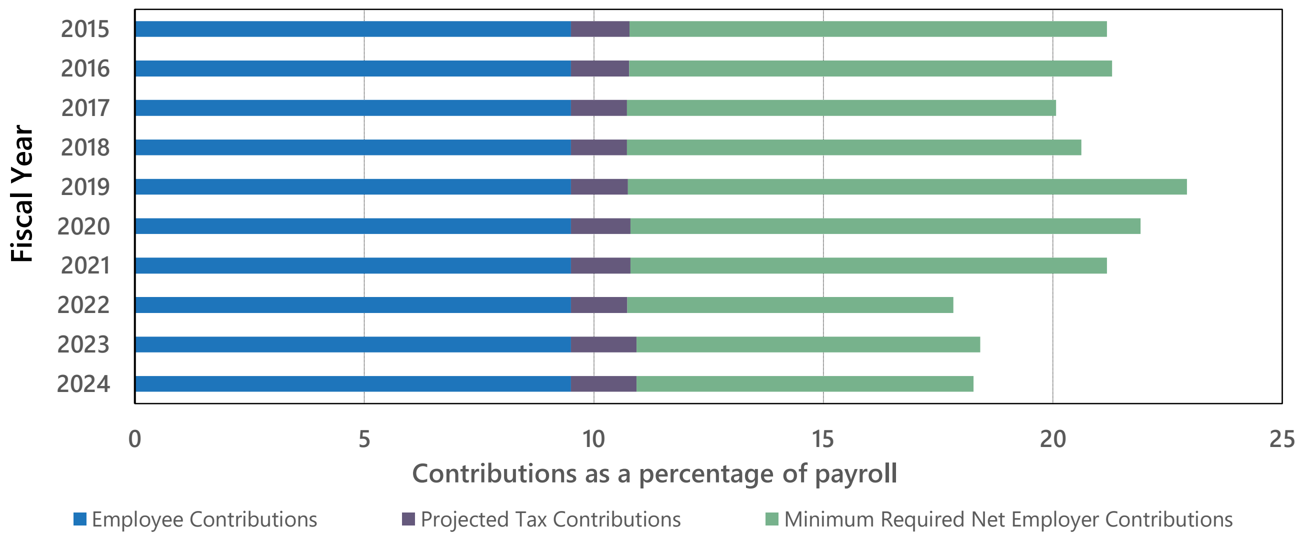
The effects of various factors on the cost structure for Plan A are outlined below:

RECONCILIATION OF THE PLAN A NORMAL COST ACCRUAL RATE	
Employer's Normal Cost Accrual Rate – Fiscal 2023	9.1031%
Factors Increasing the Normal Cost Accrual Rate:	
Plan Liability Experience Loss	0.7528%
Factors Decreasing the Normal Cost Accrual Rate:	
Assumption Changes	0.3311%
Asset Experience Gain	0.5098%
New Members	0.0161%
Employer's Normal Cost Accrual Rate – Fiscal 2024	8.9989%

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 remain level as a percent 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 A of 7.34%; the actual employer contribution rate for Fiscal 2024 is 11.50% 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 7.25% for Fiscal 2025.

Figure 7A is a history of the components of the total actuarial required contribution rate for Plan A.

Figure 7A. Plan A | Components of Actuarial Funding



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 as of January 1, 2024 is $8,214,646. The total actuarially required contribution is determined by adjusting the value for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 12 of Exhibit XI the total actuarially required contribution for Fiscal 2024 is $8,893,909. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for Fiscal 2024 is $7,064,314. This is 5.50% of the projected Plan B payroll for Fiscal 2024.

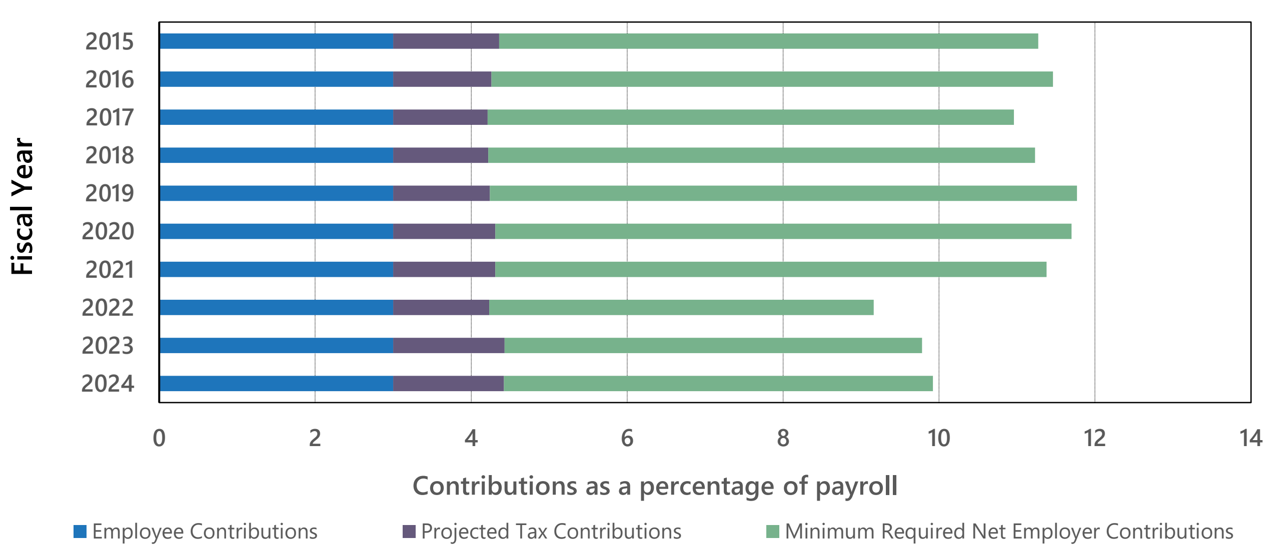
The effects of various factors on the cost structure for Plan B are outlined below:

RECONCILIATION OF THE PLAN B NORMAL COST ACCRUAL RATE	
Employer's Normal Cost Accrual Rate – Fiscal 2023	6.8924%
Factors Increasing the Normal Cost Accrual Rate:	
Plan Liability Experience Loss	0.4280%
New Members	0.0842%
Factors Decreasing the Normal Cost Accrual Rate:	
Assumption Changes	0.0617%
Asset Experience Gain	0.2558%
Employer's Normal Cost Accrual Rate – Fiscal 2024	7.0871%

We estimate that for Plan B the funds collected from ad valorem taxes and revenue sharing funds in Fiscal 2024 will decrease by 0.01% 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 5.50%; the actual employer contribution rate for Fiscal 2024 is 7.50% 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 5.50% for Fiscal 2025.

Figure 7B is a history of the components of the total actuarial required contribution rate for Plan B. For Plan A, the Board may set the net direct employer contribution at any rate between 7.25% and 11.50%. For Plan B, the board may set the rate at any rate between 5.50% and 7.50%. Should the net

Figure 7B. Plan B | Components of Actuarial Funding



direct employer contribution rate be set at a level above the minimum rate under R.S. 11:107, the resulting additional contributions paid by the employers, if they exceed any potential contribution losses, would be added to the Funding Deposit Account for both Plans A and B.

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 Parochial 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 generally 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. (With recent Federal Reserve actions increasing interest rates, the difference in return expectations has lessened.) 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, in most economic environments 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 is generally 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 volatility associated with high quality fixed income investments over the past year has made this measure less informative than expected.

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 have used 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 December 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 5.14% for Plan A and 5.15% for 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 5.14% for Plan A and 5.15% for Plan B. All other assumptions match those used to determine funding liabilities.

Plan A LDROM Comparison	Funding Valuation	LDROM Valuation
Discount Rate	6.40%	5.14%
Accrued Liability for Active Members	$ 2,250,450,549	$ 2,689,257,676
Accrued Liability for Terminated Members	$ 148,154,125	$ 173,989,084
Accrued Liability for Retired Members	$ 2,368,499,550	$ 2,624,792,039
Total Actuarial Accrued Liability (AAL)	$ 4,767,104,224	$ 5,488,038,799
Funded Ratio (AVA/AAL)	102.92%	89.40%

Plan B LDROM Comparison	Funding Valuation	LDROM Valuation
Discount Rate	6.40%	5.15%
Accrued Liability for Active Members	$ 247,058,796	$ 295,127,726
Accrued Liability for Terminated Members	$ 17,498,953	$ 20,853,172
Accrued Liability for Retired Members	$ 171,571,616	$ 189,610,743
Total Actuarial Accrued Liability (AAL)	$ 436,129,365	$ 505,591,641
Funded Ratio (AVA/AAL)	104.28%	89.95%

Typically, the differences in the measures shown above can be viewed within the risk/return framework. By accepting added investment risk, most systems are expected to reduce the employers' responsibility to fund system liabilities over the long run, but that decision generally results in greater variability in employer contributions over time as risky assets typically experience greater return volatility.

COST OF LIVING INCREASES

During calendar 2023 the actual cost of living (as measured by the U.S. Department of Labor CPI-U) increased by 3.35%.

RELEVANT COLA STATUTES

Statute	Description
R.S. 11:1937	Allows the Board of Trustees to provide a cost-of-living increase from excess interest earnings or from funds deposited in the system's Funding Deposit Account to members who have been retired for at least one full calendar year. The increase cannot exceed 2.5% of the current benefit and is payable to retirees aged 62 or over.
R.S. 11:246	Provides supplemental cost-of-living increases to retirees and beneficiaries age 65 and over 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. Such increase shall be payable from interest earnings on investments in excess of normal requirements or from funds deposited in the system's Funding Deposit Account.
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 order to grant a COLA, the system must meet the funded ratio criteria specified in R.S. 11:243. For purposes of COLAs payable under R.S. 11:1937, R.S. 11:246, or R.S. 11:241, the system must have investment earnings in excess of the valuation interest rate sufficient to offset the additional liability due to the cost of the COLA or fund the COLA out of the Funding Deposit Account.

The limitations on timing of COLAs given in R.S. 11:243 are as follows:

- 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.
- 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.
- 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.

Since the Board granted a cost-of-living increase effective January 1, 2023 for retirees and survivors of Plan A and Plan B under R.S. 11:1937, and both plans have a funded ratio in excess of 90%, the system is authorized under R.S. 11:243 to grant a cost-of-living increase effective January 1, 2025 if there is sufficient excess interest earnings or based on funds within the plans' funding deposit accounts.

The following is a history of COLAs provided since January 1, 2003:

COLA HISTORY SINCE 2003	
January 1, 2023	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2021	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2018	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2015	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2011	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A only who had received benefits for at least one year and were at least 62 years old.
January 1, 2008	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2007	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2006	COLA paying 2.5% of current benefit to all retirees and survivors of Plan A and Plan B who had received benefits for at least one year and were at least 62 years old.
January 1, 2005	COLA paying 2.5% of current benefit to all retirees and survivors of Plan B only who had received benefits for at least one year and were at least 62 years old.

All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases unless the Board funds a cost of living increase out of the Funding Deposit Account Credit Balance. For Fiscal 2023, Plan A earned $ 33,285,064 in excess interest and Plan B earned $2,685,515 in excess interest. However, R.S. 11:243 permits payment of a cost of living adjustment from the plan's Funding Deposit Account if the plan 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. If COLAs are paid from the Funding Deposit Account, there will be no increase in the Normal Cost Accrual Rate for the Plans.

The cost of available COLAs are shown below:

Plan A COLA Descriptions	Annual Increase in Benefits	Present Value of Increase
R.S. 11:1937 – 2 1/2% of current benefit to pensioners over age 62	$ 5,170,824	$ 45,434,256
R.S. 11:246 - 2% of original benefit to pensioners over age 65	$ 3,323,232	$ 28,292,296

Plan B COLA Descriptions	Annual Increase in Benefits	Present Value of Increase
R.S. 11:1937 – 2 1/2% of current benefit to pensioners over age 62	$ 393,711	$ 3,491,945
R.S. 11:246 - 2% of original benefit to pensioners over age 65	$ 268,688	$ 2,337,796

EXHIBIT I
PLAN A: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	$	5,953,094,917
2.	Funding Deposit Account Credit Balance	$	102,214,729
3.	Actuarial Value of Assets	$	4,906,092,553
4.	Present Value of Future Employee Contributions	$	561,709,264
5.	Present Value of Future Employer Normal Costs (1 + 2 – 3 – 4)	$	587,507,829
6.	Present Value of Future Salaries	$	6,528,640,577
7.	Employer Normal Cost Accrual Rate (5 ÷ 6)		8.998931%
8.	Projected Fiscal 2024 Salary for Current Membership	$	678,691,539
9.	Employer Normal Cost as of January 1, 2024 (7 × 8)	$	61,074,983
10.	Employer Normal Cost Interest Adjusted for Mid-year Payment	$	62,999,074
11.	Estimated Administrative Cost for Fiscal 2024	$	2,448,699
12.	TOTAL Administrative and Interest Adjusted Actuarial Costs (10 + 11)	$	65,447,773
13.	Offset for Projected Ad Valorem Tax Contributions for Fiscal 2024	$	(10,519,083)
14.	Offset for Projected Revenue Sharing Funds for Fiscal 2024	$	(135,931)
15.	Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2024 (12 + 13 + 14)	$	54,792,759
16.	Projected Payroll for Fiscal 2024	$	746,919,608
17.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2024 (15 ÷ 16)		7.34%
18.	Actual Employer Contribution Rate for Fiscal 2024		11.50%
19.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2025 (17, Rounded to Nearest 0.25%)		7.25%

EXHIBIT II
PLAN A: PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	$ 3,066,671,072	
Survivor Benefits	50,308,594	
Disability Benefits	98,312,905	
Vested Termination Benefits	143,246,257	
Refunds of Contributions	77,902,414	
TOTAL Present Value of Future Benefits for Active Members		$ 3,436,441,242

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	$ 126,674,547	
Terminated Members with Reciprocals Due Benefits at Retirement	299,927	
Terminated Members Due a Refund	21,179,651	
TOTAL Present Value of Future Benefits for Terminated Members		$ 148,154,125

PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees			
Maximum	$ 994,462,747		
Option 1	1,606,008		
Option 2	780,514,304		
Option 3	324,683,924		
Option 4	73,099,275		
TOTAL Regular Retirees		$ 2,174,366,258	
Disability Retirees		36,097,285	
Survivors & Widows		155,500,799	
Accrued Retiree DROP Account Balances		1,021,049	
Interest on DROP balances of active former DROP		1,182,556	
Present value of annuitized DROP balances		331,603	
TOTAL Present Value of Future Benefits for Retirees & Survivors			$ 2,368,499,550

TOTAL Present Value of Future Benefits	$ 5,953,094,917

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

CURRENT ASSETS:				
Cash in Banks	$	106,938,884		
Contributions and Taxes Receivable		36,066,490		
Accrued Interest and Dividends		902,831		
Investments Receivable		3,403,708		
Due (to)/from other Funds		7,144,291		
Liability Transfer (to)/from Plan B		72,345		
Deferred Outflows of Resources		112,170		
Other Current Assets		13		
TOTAL CURRENT ASSETS			$	154,640,732
Property Plant & Equipment			$	495,935
INVESTMENTS:				
Cash Equivalents	$	32,143,229		
Equities		2,411,099,564		
Fixed Income		1,408,230,933		
Real Estate		247,373,197		
Alternative Investments		526,058,358		
TOTAL INVESTMENTS			$	4,624,905,281
TOTAL ASSETS			$	4,780,041,948
CURRENT LIABILITIES:				
Accounts Payable	$	2,994,791		
Benefits Payable		20,395,170		
Refunds Payable		1,443,514		
Investments Payable		1,931,986		
Other Post-Employment Benefits Payable		585,812		
Deferred Inflows of Resources		143,118		
TOTAL CURRENT LIABILITIES			$	27,494,391
MARKET VALUE OF ASSETS			$	4,752,547,557

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

Excess (Shortfall) of invested income
for current and previous 4 years:

Fiscal year 2023	$	312,052,653
Fiscal year 2022		(910,731,525)
Fiscal year 2021		218,362,291
Fiscal year 2020		279,534,404
Fiscal year 2019		397,226,316
Total for five years	$	296,444,139

Deferral of excess (shortfall) of invested income:

Fiscal year 2023 (80%)	$	249,642,122
Fiscal year 2022 (60%)		(546,438,915)
Fiscal year 2021 (40%)		87,344,916
Fiscal year 2020 (20%)		55,906,881
Fiscal year 2019 (0%)		0
Total deferred for year	$	(153,544,996)

Market value of plan net assets, end of year	$	4,752,547,557
Preliminary actuarial value of plan assets, end of year	$	4,906,092,553

Actuarial value of assets corridor

85% of market value, end of year	$	4,039,665,423
115% of market value, end of year	$	5,465,429,691

Final actuarial value of plan net assets, end of year	$	4,906,092,553

EXHIBIT IV
PLAN A: PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	$	561,709,264
Employer Normal Contributions to the Pension Accumulation Fund		587,507,829
Funding Deposit Account Debit / (Credit) Balance		(102,214,729)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	$	1,047,002,364

EXHIBIT V
PLAN A: RECONCILIATION OF CONTRIBUTIONS

Employer Normal Cost for Prior Year	$	57,758,110		
Interest on the Normal Cost		3,696,518		
Administrative Expenses		2,014,861		
Interest on Expenses		63,476		
TOTAL Interest Adjusted Actuarially Required Employer Contributions			$	63,532,965
Direct Employer Contributions	$	83,470,506		
Interest on Employer Contributions		2,629,636		
Ad Valorem Taxes and Revenue Sharing		9,895,101		
Interest on Ad Valorem Taxes and Revenue Sharing Funds		311,733		
TOTAL Interest Adjusted Employer Contributions			$	96,306,976
CONTRIBUTION SURPLUS (DEFICIENCY)			$	32,774,011

EXHIBIT VI
PLAN A: ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (December 31, 2022)			$	4,680,374,638
INCOME:				
Member Contributions	$	65,285,791		
Employer Contributions		83,470,506		
Irregular Contributions		225,174		
Ad Valorem and Revenue Sharing Funds		9,895,101		
Transfer from Plan B		72,345		
Transfers from other Systems		3,587,372		
Other Income		1,166,563		
Total Contributions			$	163,702,852
Net Appreciation in Fair Value of Investments	$	477,287,754		
Interest & Dividends		135,483,912		
Class Action Settlement		10,432		
Investment Expense		(30,460,576)		
Net Investment Income			$	582,321,522
TOTAL Income			$	746,024,374
EXPENSES:				
Retirement Benefits	$	229,777,248		
DROP Disbursements		16,880,261		
Refunds of Contributions		13,634,283		
Transfers to other Systems		5,235,982		
Administrative Expenses		2,014,861		
TOTAL Expenses			$	267,542,635
Net Market Value Income for Fiscal 2023 (Income - Expenses)			$	478,481,739
Unadjusted Fund Balance as of December 31, 2023 (Fund Balance Previous Year + Net Income)			$	5,158,856,377
Adjustment for Actuarial Smoothing			$	(252,763,824)
Actuarial Value of Assets: (December 31, 2023)			$	4,906,092,553

EXHIBIT VII
PLAN A: FUNDING DEPOSIT ACCOUNT

Funding Deposit Account Balance as of December 31, 2022	$	65,263,833
Interest on Opening Balance at 6.40%		4,176,885
Contributions to the Funding Deposit Account		32,774,011
Withdrawals from the Funding Deposit Account		0
Funding Deposit Account Balance as of December 31, 2023	$	102,214,729

EXHIBIT VIII – SCHEDULE A
PLAN A: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	$	2,136,931,040
Present Value of Benefits Payable to Terminated Employees		148,154,125
Present Value of Benefits Payable to Current Retirees and Beneficiaries		2,368,499,550
TOTAL PENSION BENEFIT OBLIGATION	$	4,653,584,715
NET ACTUARIAL VALUE OF ASSETS	$	4,906,092,553
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation		105.43%

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

Accrued Liability for Active Employees	$	2,250,450,549
Accrued Liability for Terminated Employees		148,154,125
Accrued Liability for Current Retirees and Beneficiaries		2,368,499,550
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	$	4,767,104,224
NET ACTUARIAL VALUE OF ASSETS	$	4,906,092,553
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability		102.92%

EXHIBIT IX
PLAN A: CENSUS DATA

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of December 31, 2022	12,855	10,332	557	8,284	32,028
Additions to Census					
Initial membership	1,965	314			2,279
Omitted in error last year				1	1
Death of another member				84	84
Adjustment for multiple records					
Change in Status during Year					
Actives terminating service	(627)	627			
Actives who retired	(233)			233	
Actives entering DROP	(185)		185		
Term. members rehired	81	(81)			
Term. members who retire		(57)		57	
Retirees who are rehired	3			(3)	
Refunded who are rehired	39	15			54
DROP participants retiring			(114)	114	
DROP returned to work	69		(69)		
Incorrect status last year		6	(1)	(1)	4
Eliminated from Census					
Refund of contributions	(674)	(410)			(1,084)
Deaths	(22)	(18)	(4)	(290)	(334)
Included in error last year			(1)		(1)
Adjustment for multiple records				(2)	(2)
Number of members as of December 31, 2023	13,271	10,728	553	8,477	33,029

Plan A | Actives Census by Age:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	97	41	138	31,502	4,347,293
21 - 25	374	355	729	36,315	26,473,626
26 - 30	515	560	1,075	42,516	45,705,056
31 - 35	557	658	1,215	47,288	57,455,033
36 - 40	618	772	1,390	52,879	73,502,315
41 - 45	708	905	1,613	55,714	89,865,892
46 - 50	678	815	1,493	58,645	87,557,104
51 - 55	859	1,010	1,869	57,121	106,758,732
56 - 60	985	944	1,929	56,891	109,743,336
61 - 65	726	716	1,442	55,091	79,441,850
66 - 70	312	289	601	56,209	33,781,566
71 - 75	129	107	236	54,146	12,778,573
76 - 80	47	23	70	45,166	3,161,642
81 - 85	9	10	19	42,597	809,341
86 - 90	3	2	5	21,568	107,840
Total	6,617	7,207	13,824	52,914	731,489,199

Includes 7,037 actives with vested benefits, including 553 DROP participants and 309 active former DROP participants.

Plan A | DROP Participants:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	0	2	2	59,726	119,451
51 - 55	18	19	37	67,200	2,486,399
56 - 60	62	74	136	52,879	7,191,508
61 - 65	110	128	238	33,936	8,076,665
66 - 70	51	55	106	30,053	3,185,667
71 - 75	17	10	27	24,376	658,158
76 - 80	6	1	7	23,941	167,585
Total	264	289	553	39,576	21,885,433

Plan A | Terminated Members Due a Deferred Retirement Benefit:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26	-	30	3	2	**5**	8,618	**43,092**
31	-	35	8	20	**28**	11,692	**327,364**
36	-	40	33	59	**92**	15,013	**1,381,171**
41	-	45	40	76	**116**	17,595	**2,040,989**
46	-	50	56	84	**140**	21,100	**2,953,956**
51	-	55	74	116	**190**	21,726	**4,127,897**
56	-	60	93	131	**224**	21,665	**4,852,981**
61	-	65	47	58	**105**	14,054	**1,475,709**
66	-	70	17	14	**31**	12,182	**377,654**
71	-	75	7	5	**12**	16,340	**196,074**
76	-	80	1	2	**3**	4,750	**14,251**
81	-	85	0	2	**2**	5,637	**11,273**
Total			**379**	**569**	**948**	**18,779**	**17,802,411**

Plan A | Terminated Members Due a Refund of Contributions:

Contributions Ranging From		To	Number	Total Contributions
0	-	99	4,617*	129,036*
100	-	499	1,570	388,872
500	-	999	792	574,095
1,000	-	1,999	672	962,952
2,000	-	4,999	921	2,954,717
5,000	-	9,999	604	4,297,257
10,000	-	19,999	418	5,936,966
20,000	-	99,999	185	5,614,072
100,000	&	Above	1	111,459
Total			**9,780**	**20,969,426**

* Includes 3,311 members due a refund who were not included in the data provided to the actuary since they are maintained external to the system's database. Excludes $210,225 due to deceased members.

Plan A | Regular Retirees:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46	-	50	0	2	2	50,346	100,691
51	-	55	34	19	53	57,923	3,069,919
56	-	60	182	146	328	52,148	17,104,561
61	-	65	536	538	1,074	39,011	41,897,351
66	-	70	844	922	1,766	31,638	55,872,178
71	-	75	854	795	1,649	26,739	44,093,296
76	-	80	578	527	1,105	24,745	27,343,425
81	-	85	334	342	676	21,338	14,424,508
86	-	90	170	153	323	18,885	6,099,764
91	-	95	51	87	138	15,772	2,176,500
96	-	100	7	19	26	16,206	421,363
101	-	105	2	4	6	6,757	40,544
Total			3,592	3,554	7,146	29,757	212,644,100

Plan A | Disability Retirees:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31	-	35	1	0	1	19,435	19,435
41	-	45	0	1	1	37,571	37,571
46	-	50	4	5	9	17,902	161,119
51	-	55	18	12	30	19,642	589,246
56	-	60	45	33	78	18,241	1,422,813
61	-	65	31	20	51	13,622	694,725
66	-	70	12	8	20	14,391	287,815
Total			111	79	190	16,909	3,212,724

Plan A | Survivors:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0	-	20	5	8	13	19,039	247,505
26	-	30	0	2	2	10,469	20,938
31	-	35	3	3	6	20,311	121,867
36	-	40	1	1	2	19,796	39,592
41	-	45	3	5	8	8,672	69,375
46	-	50	3	6	9	16,108	144,968
51	-	55	2	14	16	22,140	354,239
56	-	60	4	44	48	21,522	1,033,075
61	-	65	19	91	110	19,125	2,103,791
66	-	70	27	110	137	20,569	2,817,945
71	-	75	21	184	205	16,889	3,462,304
76	-	80	18	171	189	14,138	2,672,074
81	-	85	20	183	203	13,102	2,659,740
86	-	90	4	108	112	13,056	1,462,297
91	-	95	4	62	66	9,345	616,779
96	-	100	0	12	12	12,540	150,474
101	-	105	0	3	3	3,987	11,960
Total			134	1,007	1,141	15,766	17,988,923

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	94	44	-	-	-	-	-	-	138
21 - 25	367	349	13	-	-	-	-	-	729
26 - 30	281	564	217	13	-	-	-	-	1,075
31 - 35	219	491	356	134	15	-	-	-	1,215
36 - 40	208	418	354	254	146	10	-	-	1,390
41 - 45	178	422	341	236	274	142	20	-	1,613
46 - 50	146	382	262	198	212	183	106	4	1,493
51 - 55	164	410	343	252	222	221	193	64	1,869
56 - 60	148	340	389	270	268	214	174	126	1,929
61 - 65	54	196	337	251	224	159	127	94	1,442
66 - 70	20	60	129	122	95	79	53	43	601
71 & Over	9	27	44	57	48	39	42	64	330
Total	1,888	3,703	2,785	1,787	1,504	1,047	715	395	13,824

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	31,509	31,487	-	-	-	-	-	-	31,502
21 - 25	35,230	37,121	45,286	-	-	-	-	-	36,315
26 - 30	37,878	42,881	46,861	54,447	-	-	-	-	42,516
31 - 35	37,115	45,959	51,007	57,435	60,393	-	-	-	47,288
36 - 40	43,635	46,841	56,326	57,630	64,811	80,716	-	-	52,879
41 - 45	40,489	47,592	54,663	60,766	67,927	68,948	59,574	-	55,714
46 - 50	42,873	48,992	56,026	57,996	68,683	73,621	76,310	74,646	58,645
51 - 55	40,213	45,318	49,987	57,126	65,617	68,220	79,906	77,756	57,121
56 - 60	40,262	48,332	51,747	60,104	58,521	62,363	73,439	72,908	56,891
61 - 65	38,479	44,821	52,271	53,396	53,617	64,112	65,478	74,912	55,091
66 - 70	33,386	48,853	52,341	54,155	60,476	59,297	65,583	67,861	56,209
71 & Over	35,874	38,860	42,372	53,920	49,115	46,955	63,512	57,676	51,083
Average	38,574	45,166	52,309	57,400	62,437	66,096	72,643	71,170	52,914

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	-	-	-	-	-	-	-	5	5
31 - 35	-	-	-	-	-	-	-	28	28
36 - 40	-	-	-	-	-	-	2	90	92
41 - 45	-	-	-	-	-	2	57	57	116
46 - 50	-	-	-	-	5	89	40	6	140
51 - 55	3	2	2	13	105	56	9	-	190
56 - 60	36	33	45	55	48	7	-	-	224
61 - 65	52	12	16	20	5	-	-	-	105
66 - 70	29	2	-	-	-	-	-	-	31
71 & Over	17	-	-	-	-	-	-	-	17
Total	137	49	63	88	163	154	108	186	948

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	-	-	-	-	-	-	-	8,618	8,618
31 - 35	-	-	-	-	-	-	-	11,692	11,692
36 - 40	-	-	-	-	-	-	18,041	14,945	15,013
41 - 45	-	-	-	-	-	29,420	21,318	13,456	17,595
46 - 50	-	-	-	-	28,082	24,330	13,463	18,277	21,100
51 - 55	88,803	15,433	42,890	20,159	24,847	12,916	16,731	-	21,726
56 - 60	28,327	21,664	25,394	21,823	13,363	19,123	-	-	21,665
61 - 65	16,600	11,311	12,728	10,780	11,508	-	-	-	14,054
66 - 70	12,369	9,473	-	-	-	-	-	-	12,182
71 & Over	13,035	-	-	-	-	-	-	-	13,035
Average	19,925	18,377	22,733	19,067	21,155	20,009	17,966	13,937	18,779

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	-	-	-	-	-	-	-	2
51 - 55	23	11	10	6	3	-	-	-	53
56 - 60	58	48	43	93	75	11	-	-	328
61 - 65	131	143	129	218	306	122	17	8	1,074
66 - 70	106	130	180	299	631	280	109	31	1,766
71 - 75	34	40	55	158	578	508	188	88	1,649
76 - 80	12	17	18	53	181	361	313	150	1,105
81 - 85	2	5	8	13	49	103	198	298	676
86 - 90	2	1	2	2	18	33	42	223	323
91 & Over	-	-	-	-	-	6	10	154	170
Total	370	395	445	842	1,841	1,424	877	952	7,146

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	50,346	-	-	-	-	-	-	-	50,346
51 - 55	55,808	71,097	52,416	58,901	42,235	-	-	-	57,923
56 - 60	45,299	54,352	51,360	51,496	57,865	48,256	-	-	52,148
61 - 65	31,559	34,040	33,753	36,769	46,109	46,915	32,738	16,993	39,011
66 - 70	25,211	25,755	28,026	28,101	31,017	44,042	36,672	16,260	31,638
71 - 75	24,515	20,838	24,678	22,515	24,515	26,613	39,975	26,220	26,739
76 - 80	30,523	22,956	20,807	31,382	21,859	22,735	25,563	29,228	24,745
81 - 85	8,015	25,227	28,038	25,976	19,777	22,966	19,896	21,632	21,338
86 - 90	4,653	21,011	10,667	26,695	18,028	19,019	18,744	19,082	18,885
91 & Over	-	-	-	-	-	24,716	12,994	15,326	15,520
Average	32,549	32,855	31,705	32,271	31,270	30,516	28,423	21,422	29,757

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	1	-	-	-	-	-	-	-	1
36 - 40	-	-	-	-	-	-	-	-	-
41 - 45	-	-	1	-	-	-	-	-	1
46 - 50	-	4	3	2	-	-	-	-	9
51 - 55	2	8	8	5	6	1	-	-	30
56 - 60	3	19	27	16	5	7	1	-	78
61 - 65	4	12	13	6	5	2	7	2	51
66 - 70	-	7	4	3	1	-	2	3	20
71 - 75	-	-	-	-	-	-	-	-	-
76 - 80	-	-	-	-	-	-	-	-	-
81 & Over	-	-	-	-	-	-	-	-	-
Total	10	50	56	32	17	10	10	5	190

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	19,435	-	-	-	-	-	-	-	19,435
36 - 40	-	-	-	-	-	-	-	-	-
41 - 45	-	-	37,571	-	-	-	-	-	37,571
46 - 50	-	22,610	14,654	13,360	-	-	-	-	17,902
51 - 55	21,338	22,688	18,514	21,766	16,277	10,465	-	-	19,642
56 - 60	20,813	22,833	17,288	19,233	14,044	10,661	7,201	-	18,241
61 - 65	11,587	13,784	17,083	16,879	15,080	7,917	8,189	5,531	13,622
66 - 70	-	17,469	19,965	13,616	5,882	-	7,167	8,202	14,391
71 - 75	-	-	-	-	-	-	-	-	-
76 - 80	-	-	-	-	-	-	-	-	-
81 & Over	-	-	-	-	-	-	-	-	-
Average	17,090	19,869	17,828	18,293	14,657	10,093	7,886	7,134	16,909

Plan A | Surviving Beneficiaries of Former Members:

Attained Ages	Completed Years Since Retirement								Total
	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	
0 - 30	-	8	6	-	-	-	1	-	15
31 - 35	-	2	1	2	1	-	-	-	6
36 - 40	-	1	-	-	-	1	-	-	2
41 - 45	-	-	4	1	1	-	1	1	8
46 - 50	-	1	4	3	1	-	-	-	9
51 - 55	1	4	7	3	1	-	-	-	16
56 - 60	1	8	9	11	10	8	1	-	48
61 - 65	5	33	20	23	19	5	4	1	110
66 - 70	1	17	50	27	21	10	9	2	137
71 - 75	-	9	36	60	50	28	17	5	205
76 - 80	-	7	16	34	66	33	26	7	189
81 & Over	-	2	13	23	72	82	80	124	396
Total	8	92	166	187	242	167	139	140	1,141

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

Attained Ages	Completed Years Since Retirement								Total
	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 & Over	
0 - 30	-	18,544	18,957	-	-	-	6,348	-	17,896
31 - 35	-	20,747	63,598	7,331	2,115	-	-	-	20,311
36 - 40	-	32,634	-	-	-	6,958	-	-	19,796
41 - 45	-	-	12,443	6,549	1,970	-	2,395	8,689	8,672
46 - 50	-	7,527	28,756	6,017	4,365	-	-	-	16,108
51 - 55	48,503	25,034	21,647	14,970	9,160	-	-	-	22,140
56 - 60	20,855	39,747	21,903	23,233	16,380	8,809	7,278	-	21,522
61 - 65	19,527	18,294	26,221	19,325	18,179	11,763	6,141	4,800	19,125
66 - 70	22,331	18,797	21,084	27,683	18,424	20,397	8,013	5,705	20,569
71 - 75	-	16,498	19,366	19,078	16,522	14,565	11,111	9,826	16,889
76 - 80	-	30,410	17,530	12,230	13,900	13,556	12,093	11,957	14,138
81 & Over	-	12,296	14,336	11,839	11,803	12,465	12,840	12,249	12,377
Average	23,665	21,275	20,684	17,992	14,492	13,278	11,822	11,976	15,766

EXHIBIT X
PLAN A: YEAR-TO-YEAR COMPARISON

	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Number of Active Members	13,824	13,412	13,643	13,750
Number of Retirees & Survivors	8,477	8,284	8,096	7,873
Number of Terminated Due Deferred	948	956	901	849
Number Terminated Due Refunds	9,780	9,376	8,731	8,351
Active Lives Payroll	$ 731,489,199	$ 675,490,286	$ 672,340,250	$ 666,414,649
Retiree Benefits in Payment	$ 233,845,747	$ 225,184,598	$ 211,189,264	$ 201,085,695
Market Value of Assets	$ 4,752,547,557	$ 4,274,065,818	$ 4,976,037,622	$ 4,561,001,343
Entry Age Normal Accrued Liability	$ 4,767,104,224	$ 4,580,134,176	$ 4,426,022,763	$ 4,306,898,028
Ratio of AVA to EAN Accrued Liability	102.92%	102.19%	103.22%	97.95%
Actuarial Value of Assets	$ 4,906,092,553	$ 4,680,374,638	$ 4,568,593,183	$ 4,218,785,899
Present Value of Future Employer Normal Cost	$ 587,507,829	$ 550,648,440	$ 514,180,024	$ 725,789,884
Present Value of Future Employee Contributions	$ 561,709,264	$ 518,547,540	$ 518,500,733	$ 513,701,674
Funding Deposit Account Balance	$ 102,214,729	$ 65,263,833	$ 69,983,070	$ 55,177,473
Present Value of Future Benefits	$ 5,953,094,917	$ 5,684,306,785	$ 5,531,290,870	$ 5,403,099,984

	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021
Employee Contribution Rate	9.50%	9.50%	9.50%	9.50%
Estimated Tax Contribution as a % of Projected Payroll	1.43%	1.43%	1.23%	1.30%
Actuarially Required Net Direct Contribution Rate	7.34%	7.49%	7.10%	10.38%
Actual Employer Contribution Rate	11.50%	11.50%	11.50%	12.25%

	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014
	14,042	14,027	14,201	14,330	14,232	14,061
	7,651	7,467	7,301	7,050	6,783	6,523
	818	813	709	703	678	660
	7,967	7,845	7,482	7,329	7,182	7,026
	$ 634,490,049	$ 615,887,352	$ 605,199,478	$ 599,421,070	$ 577,600,460	$ 566,547,812
	$ 185,969,386	$ 177,804,484	$ 170,697,910	$ 157,140,568	$ 146,994,479	$ 137,309,161
	$ 4,091,788,575	$ 3,540,960,468	$ 3,829,020,281	$ 3,313,917,014	$ 3,124,593,132	$ 3,175,649,999
	$ 4,019,234,688	$ 3,908,729,734	$ 3,676,214,901	$ 3,446,813,538	$ 3,316,128,533	$ 3,133,179,431
	97.41%	96.03%	99.49%	99.20%	97.11%	96.80%
	$ 3,915,328,623	$ 3,753,426,178	$ 3,657,539,805	$ 3,419,149,648	$ 3,220,157,028	$ 3,032,888,183
	$ 717,931,079	$ 756,070,638	$ 604,529,232	$ 555,155,571	$ 592,955,250	$ 560,647,763
	$ 480,272,531	$ 466,755,194	$ 437,372,887	$ 422,091,697	$ 405,879,187	$ 389,156,042
	$ 83,972,205	$ 78,847,141	$ 66,910,393	$ 68,896,088	$ 49,644,401	$ 23,781,823
	$ 5,029,560,028	$ 4,897,404,869	$ 4,632,531,531	$ 4,327,500,828	$ 4,169,347,064	$ 3,958,910,165

	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015
	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
	1.30%	1.24%	1.22%	1.22%	1.27%	1.28%
	11.11%	12.18%	9.99%	9.35%	10.52%	10.40%
	12.25%	11.50%	11.50%	12.50%	13.00%	14.50%

EXHIBIT XI
PLAN B: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	$	549,176,298
2.	Funding Deposit Account Credit Balance	$	9,187,912
3.	Actuarial Value of Assets	$	454,789,737
4.	Present Value of Future Employee Contributions	$	29,176,553
5.	Present Value of Future Employer Normal Costs (1 + 2 – 3 – 4)	$	74,397,920
6.	Present Value of Future Salaries	$	1,049,770,515
7.	Employer Normal Cost Accrual Rate (5 ÷ 6)		7.087065%
8.	Projected Fiscal 2024 Salary for Current Membership	$	115,910,410
9.	Employer Normal Cost as of January 1, 2024 (7 × 8)	$	8,214,646
10.	Employer Normal Cost Interest Adjusted for Mid-year Payment	$	8,473,438
11.	Estimated Administrative Cost for Fiscal 2024	$	420,471
12.	TOTAL Administrative and Interest Adjusted Actuarial Costs (10 + 11)	$	8,893,909
13.	Offset for Projected Ad Valorem Tax Contributions for Fiscal 2024	$	(1,806,254)
14.	Offset for Projected Revenue Sharing Funds for Fiscal 2024	$	(23,341)
15.	Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2024 (12 + 13 + 14)	$	7,064,314
16.	Projected Payroll for Fiscal 2024	$	128,506,690
17.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2024 (15 ÷ 16)		5.50%
18.	Actual Employer Contribution Rate for Fiscal 2024		7.50%
19.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2025 (17, Rounded to Nearest 0.25%)		5.50%

EXHIBIT XII
PLAN B: PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	$	321,321,711		
Survivor Benefits		5,630,370		
Disability Benefits		11,576,221		
Vested Termination Benefits		17,086,718		
Refunds of Contributions		4,490,709		
TOTAL Present Value of Future Benefits for Active Members			$	360,105,729

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	$	15,885,921		
Terminated Members with Reciprocals Due Benefits at Retirement		45,675		
Terminated Members Due a Refund		1,567,357		
TOTAL Present Value of Future Benefits for Terminated Members			$	17,498,953

PRESENT VALUE OF FUTURE BENEFITS FOR PENSIONERS:

Regular Retirees by Option Selected:

Maximum	$	66,730,748
Option 1		222,442
Option 2		67,329,504
Option 3		18,527,288
Option 4		2,051,734

TOTAL Regular Retirees	$	154,861,716		
TOTAL Disability Retirees	$	3,228,406		
TOTAL Survivors & Widows	$	13,204,117		
Accrued Retiree DROP Account Balances	$	36,329		
Interest on DROP balances of active former DROP	$	183,293		
Present value of annuitized DROP balances	$	57,755		
TOTAL Present Value of Future Benefits for Retirees & Survivors			$	171,571,616
TOTAL Present Value of Future Benefits			$	549,176,298

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

CURRENT ASSETS:

Cash in Banks	$ 49,250,220		
Contributions and Taxes Receivable	3,654,091		
Accrued Interest and Dividends	76,757		
Investments Receivable	294,957		
Due (to)/from other Funds	(7,144,291)		
Liability Transfer to Plan A	(72,345)		
Other Current Assets	18,010		
TOTAL CURRENT ASSETS		$ 46,077,399	

Property Plant & Equipment	$ 74,514

INVESTMENTS:

Cash Equivalents	$ 2,728,011	
Equities	204,619,738	
Fixed Income	120,453,629	
Real Estate	21,527,570	
Alternative Investments	47,673,646	
TOTAL INVESTMENTS		$ 397,002,594
TOTAL ASSETS		$ 443,154,507

CURRENT LIABILITIES:

Benefits Payable	$ 1,488,809	
Accounts Payable	243,162	
Investments Payable	170,263	
Refunds Payable	69,257	
TOTAL CURRENT LIABILITIES		$ 1,971,491
MARKET VALUE OF ASSETS		$ 441,183,016

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

Excess (Shortfall) of invested income
for current and previous 4 years:

Fiscal year 2023	$	28,921,895
Fiscal year 2022		(82,650,543)
Fiscal year 2021		19,533,805
Fiscal year 2020		25,162,835
Fiscal year 2019		34,442,464
Total for five years	$	25,410,456

Deferral of excess (shortfall) of invested income:

Fiscal year 2023 (80%)	$	23,137,516
Fiscal year 2022 (60%)		(49,590,326)
Fiscal year 2021 (40%)		7,813,522
Fiscal year 2020 (20%)		5,032,567
Fiscal year 2019 (0%)		0
Total deferred for year	$	(13,606,721)

Market value of plan net assets, end of year	$	441,183,016
Preliminary actuarial value of plan assets, end of year	$	454,789,737

Actuarial value of assets corridor

85% of market value, end of year	$	375,005,564
115% of market value, end of year	$	507,360,468

Final actuarial value of plan net assets, end of year	$	454,789,737

EXHIBIT XIV
PLAN B: PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	$	29,176,553
Employer Normal Contributions to the Pension Accumulation Fund		74,397,920
Funding Deposit Account Debit / (Credit) Balance		(9,187,912)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	$	94,386,561

EXHIBIT XV
PLAN B: RECONCILIATION OF CONTRIBUTIONS

Employer Normal Cost for Prior Year	$	7,494,131		
Interest on Normal Cost		479,624		
Administrative Expenses		347,671		
Interest on Expenses		10,953		
TOTAL Interest Adjusted Actuarially Required Employer Contributions			$	8,332,379
Direct Employer Contributions	$	9,316,579		
Interest on Employer Contributions		293,507		
Ad Valorem Taxes and Revenue Sharing Funds		1,761,007		
Interest on Taxes and Revenue Sharing Funds		55,478		
TOTAL Interest Adjusted Employer Contributions			$	11,426,571
CONTRIBUTION SURPLUS (DEFICIENCY)			$	3,094,192

EXHIBIT XVI
PLAN B: ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (December 31, 2022)		$	428,173,067
INCOME:			
Member Contributions	$ 3,628,722		
Employer Contributions	9,316,579		
Irregular Contributions	1,958		
Ad Valorem Taxes and Revenue Sharing	1,761,007		
Transfers from other Systems	397,489		
Other Income	96,916		
Total Contributions		$	15,202,671
Net Appreciation in Fair Value of Investments	$ 44,144,410		
Interest & Dividends	12,536,924		
Class Action Settlement	970		
Investment Expense	(2,859,948)		
Net Investment Income		$	53,822,356
TOTAL Income		$	69,025,027
EXPENSES:			
Retirement Benefits	$ 16,655,535		
DROP Disbursements	782,031		
Refunds of Contributions	567,149		
Transfers to other Systems	143,823		
Transfer from B to A	72,345		
Administrative Expenses	347,671		
TOTAL Expenses		$	18,568,554
Net Market Value Income for Fiscal 2023 (Income - Expenses)		$	50,456,473
Unadjusted Fund Balance as of December 31, 2023 (Fund Balance Previous Year + Net Income)		$	478,629,540
Adjustment for Actuarial Smoothing		$	(23,839,803)
Actuarial Value of Assets (December 31, 2023)		$	454,789,737

EXHIBIT XVII
PLAN B: FUNDING DEPOSIT ACCOUNT

Funding Deposit Account Balance as of December 31, 2022	$	5,727,180
Interest on Opening Balance at 6.40%		366,540
Contributions to the Funding Deposit Account		3,094,192
Withdrawals from the Funding Deposit Account		0
Funding Deposit Account Balance as of December 31, 2023	$	9,187,912

EXHIBIT XVIII – SCHEDULE A
PLAN B: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	$	222,112,842
Present Value of Benefits Payable to Terminated Employees		17,498,953
Present Value of Benefits Payable to Current Retirees and Beneficiaries		171,571,616
TOTAL PENSION BENEFIT OBLIGATION	$	411,183,411
NET ACTUARIAL VALUE OF ASSETS	$	454,789,737
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation		110.61%

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

Accrued Liability for Active Employees	$	247,058,796
Accrued Liability for Terminated Employees		17,498,953
Accrued Liability for Current Retirees and Beneficiaries		171,571,616
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	$	436,129,365
NET ACTUARIAL VALUE OF ASSETS	$	454,789,737
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability		104.28%

EXHIBIT XIX
PLAN B: CENSUS DATA

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2022	2,260	2,218	54	1,074	5,606
Additions to Census					
Initial membership	342	39			381
Omitted in error last year					
Death of another member				19	19
Adjustment for multiple records					
Change in Status during Year					
Actives terminating service	(134)	134			
Actives who retired	(42)			42	
Actives entering DROP	(22)		22		
Term. members rehired	12	(12)			
Term. members who retire		(15)		15	
Retirees who are rehired					
Refunded who are rehired	10	1			11
DROP participants retiring			(4)	4	
DROP returned to work	11		(11)		
Eliminated from Census					
Refund of contributions	(111)	(46)			(157)
Deaths	(2)	(6)		(38)	(46)
Included in error last year					
Adjustment for multiple records	(1)	(3)			(4)
Number of members as of June 30, 2023	2,323	2,310	61	1,116	5,810

Plan B | Actives Census by Age:

Age			Number Male	Number Female	Total Number	Average Salary	Total Salary
16	-	20	6	7	13	32,549	423,142
21	-	25	53	71	124	35,676	4,423,801
26	-	30	73	98	171	44,637	7,632,927
31	-	35	88	117	205	47,458	9,728,850
36	-	40	81	149	230	53,133	12,220,570
41	-	45	105	171	276	56,035	15,465,610
46	-	50	101	161	262	57,964	15,186,508
51	-	55	153	147	300	55,831	16,749,401
56	-	60	174	176	350	55,032	19,261,270
61	-	65	160	115	275	54,289	14,929,432
66	-	70	73	44	117	53,691	6,281,825
71	-	75	29	15	44	50,705	2,231,040
76	-	80	10	3	13	71,235	926,058
81	-	85	4	-	4	36,277	145,106
Total			1,110	1,274	2,384	52,687	125,605,540

Includes 1,167 actives with vested benefits, including 61 DROP participants and 67 active former DROP participants.

Plan B | DROP Participants:

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
56	-	60	4	3	7	30,949	216,646
61	-	65	21	19	40	27,608	1,104,319
66	-	70	5	6	11	14,651	161,158
71	-	75	2	0	2	11,890	23,780
76	-	80	1	0	1	31,765	31,765
Total			33	28	61	25,208	1,537,668

Plan B | Terminated Members Due a Deferred Retirement Benefit:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26 - 30	0	2	**2**	4,974	**9,948**
31 - 35	2	12	**14**	7,076	**99,062**
36 - 40	10	9	**19**	9,081	**172,545**
41 - 45	12	17	**29**	9,643	**279,643**
46 - 50	5	14	**19**	11,836	**224,879**
51 - 55	10	31	**41**	13,880	**569,065**
56 - 60	16	27	**43**	13,748	**591,143**
61 - 65	15	14	**29**	8,196	**237,690**
66 - 70	5	6	**11**	9,152	**100,677**
71 - 75	1	1	**2**	5,917	**11,833**
Total	**76**	**133**	**209**	**10,988**	**2,296,485**

Plan B | Terminated Members Due a Refund of Contributions:

Contributions Ranging From	To	Number	Total Contributions
0	99	1,129*	30,194*
100	499	399	98,587
500	999	159	113,573
1,000	1,999	169	246,602
2,000	4,999	166	519,882
5,000	9,999	72	467,102
10,000	19,999	7	83,452
Total		**2,101**	**1,559,392**

* Includes 718 members due a refund who were not included in the data provided to the actuary since they are maintained external to the system's database. Excludes $7,965 due to deceased members.

Plan B | Regular Retirees:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
56 - 60	12	8	20	33,161	663,222
61 - 65	60	63	123	21,502	2,644,727
66 - 70	130	132	262	17,737	4,646,998
71 - 75	122	105	227	15,538	3,527,024
76 - 80	79	72	151	13,385	2,021,075
81 - 85	58	42	100	11,128	1,112,842
86 - 90	20	27	47	11,050	519,361
91 - 95	2	7	9	8,445	76,007
96 - 100	0	2	2	7,405	14,809
Total	483	458	941	16,181	15,226,065

Plan B | Disability Retirees:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	1	0	1	7,401	7,401
41 - 45	1	0	1	8,117	8,117
46 - 50	2	1	3	8,378	25,135
51 - 55	2	1	3	10,368	31,103
56 - 60	6	3	9	12,614	113,525
61 - 65	4	1	5	10,933	54,664
66 - 70	1	2	3	7,263	21,789
Total	17	8	25	10,469	261,734

Plan B | Survivors:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	0	1	1	4,844	4,844
41 - 45	0	2	2	8,131	16,262
46 - 50	1	1	2	7,271	14,541
51 - 55	1	3	4	12,701	50,804
56 - 60	1	2	3	11,592	34,775
61 - 65	2	12	14	9,569	133,964
66 - 70	2	24	26	11,345	294,967
71 - 75	6	20	26	9,535	247,902
76 - 80	2	29	31	11,683	362,179
81 - 85	1	25	26	9,530	247,788
86 - 90	0	11	11	6,996	76,961
91 - 95	0	3	3	5,079	15,236
96 - 100	0	1	1	5,846	5,846
Total	16	134	150	10,040	1,506,069

Plan B | 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	11	2	-	-	-	-	-	-	13
21 - 25	63	57	4	-	-	-	-	-	124
26 - 30	49	84	36	2	-	-	-	-	171
31 - 35	43	77	67	16	2	-	-	-	205
36 - 40	27	83	57	43	20	-	-	-	230
41 - 45	39	77	50	36	47	24	3	-	276
46 - 50	33	79	44	43	32	25	6	-	262
51 - 55	23	61	55	40	37	39	27	18	300
56 - 60	16	82	67	46	41	34	43	21	350
61 - 65	18	45	59	41	33	32	19	28	275
66 - 70	5	18	19	26	17	13	11	8	117
71 & Over	2	4	8	9	12	9	5	12	61
Total	329	669	466	302	241	176	114	87	2,384

Plan B | 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	32,960	30,291	-	-	-	-	-	-	32,549
21 - 25	33,554	37,742	39,655	-	-	-	-	-	35,676
26 - 30	40,572	44,904	49,694	41,999	-	-	-	-	44,637
31 - 35	40,229	43,233	54,854	57,468	37,659	-	-	-	47,458
36 - 40	47,137	49,050	54,972	61,121	55,756	-	-	-	53,133
41 - 45	48,430	51,360	56,329	63,953	60,301	60,990	68,465	-	56,035
46 - 50	47,369	47,926	59,501	67,771	77,630	56,257	69,065	-	57,964
51 - 55	44,434	47,708	58,075	59,212	55,132	57,274	68,387	63,034	55,831
56 - 60	44,538	43,898	50,090	61,953	57,168	63,168	67,113	65,035	55,032
61 - 65	40,535	41,667	52,197	56,440	61,950	54,554	61,060	70,749	54,289
66 - 70	45,865	37,429	46,892	55,830	67,877	53,227	71,642	50,292	53,691
71 & Over	36,552	53,563	55,014	67,786	51,622	48,648	80,055	42,257	54,134
Average	41,598	45,437	53,973	61,067	61,038	57,540	67,549	61,963	52,687

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	-	-	-	-	-	-	-	2	2
31 - 35	-	-	-	-	-	-	-	14	14
36 - 40	-	-	-	-	-	-	2	17	19
41 - 45	-	-	-	-	-	2	7	20	29
46 - 50	-	-	-	-	1	8	8	2	19
51 - 55	-	-	-	2	26	12	1	-	41
56 - 60	8	6	9	9	9	2	-	-	43
61 - 65	10	8	2	4	5	-	-	-	29
66 - 70	11	-	-	-	-	-	-	-	11
71 & Over	2	-	-	-	-	-	-	-	2
Total	31	14	11	15	41	24	18	55	209

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	-	-	-	-	-	-	-	4,974	4,974
31 - 35	-	-	-	-	-	-	-	7,076	7,076
36 - 40	-	-	-	-	-	-	14,921	8,394	9,081
41 - 45	-	-	-	-	-	6,786	15,127	8,009	9,643
46 - 50	-	-	-	-	5,186	17,559	8,760	4,574	11,836
51 - 55	-	-	-	11,016	15,790	10,799	6,891	-	13,880
56 - 60	12,851	18,209	18,677	11,490	10,376	7,101	-	-	13,748
61 - 65	11,244	7,487	6,334	5,915	5,805	-	-	-	8,196
66 - 70	9,152	-	-	-	-	-	-	-	9,152
71 & Over	5,917	-	-	-	-	-	-	-	5,917
Average	10,573	12,082	16,432	9,940	13,125	12,410	11,817	7,655	10,988

Plan B | 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	-	-	-	-	-	-	-	-	-
51 - 55	-	-	-	-	-	-	-	-	-
56 - 60	2	5	3	10	-	-	-	-	20
61 - 65	26	29	22	24	19	2	-	1	123
66 - 70	17	43	27	50	97	18	7	3	262
71 - 75	6	7	14	23	100	57	15	5	227
76 - 80	1	4	5	7	37	52	36	9	151
81 - 85	-	-	-	7	12	17	41	23	100
86 - 90	-	-	-	-	1	5	8	33	47
91 & Over	-	-	-	-	-	-	-	11	11
Total	52	88	71	121	266	151	107	85	941

Plan B | 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	-	-	-	-	-	-	-	-	-
51 - 55	-	-	-	-	-	-	-	-	-
56 - 60	28,967	33,885	30,012	34,583	-	-	-	-	33,161
61 - 65	16,817	23,003	23,236	22,711	24,031	11,535	-	4,489	21,502
66 - 70	15,756	17,235	14,023	17,743	19,815	20,198	9,843	5,923	17,737
71 - 75	8,790	18,870	16,304	15,207	15,527	14,121	21,718	16,163	15,538
76 - 80	21,265	14,169	27,435	16,919	13,106	12,840	11,620	12,959	13,385
81 - 85	-	-	-	12,308	13,993	12,029	9,669	11,211	11,128
86 - 90	-	-	-	-	9,836	14,077	11,717	10,467	11,050
91 & Over	-	-	-	-	-	-	-	8,256	8,256
Average	16,097	20,073	18,948	19,276	17,271	14,133	12,179	10,750	16,181

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	-	1	-	-	-	-	-	-	1
41 - 45	-	1	-	-	-	-	-	-	1
46 - 50	-	2	-	-	1	-	-	-	3
51 - 55	1	-	1	1	-	-	-	-	3
56 - 60	1	2	2	2	2	-	-	-	9
61 - 65	-	1	1	2	-	1	-	-	5
66 - 70	-	1	-	2	-	-	-	-	3
71 - 75	-	-	-	-	-	-	-	-	-
76 - 80	-	-	-	-	-	-	-	-	-
81 & Over	-	-	-	-	-	-	-	-	-
Total	2	8	4	7	3	1	-	-	25

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	-	7,401	-	-	-	-	-	-	7,401
41 - 45	-	8,117	-	-	-	-	-	-	8,117
46 - 50	-	9,921	-	-	5,293	-	-	-	8,378
51 - 55	8,764	-	12,642	9,697	-	-	-	-	10,368
56 - 60	25,698	10,890	17,213	9,658	6,153	-	-	-	12,614
61 - 65	-	6,794	8,507	16,948	-	5,468	-	-	10,933
66 - 70	-	7,618	-	7,086	-	-	-	-	7,263
71 - 75	-	-	-	-	-	-	-	-	-
76 - 80	-	-	-	-	-	-	-	-	-
81 & Over	-	-	-	-	-	-	-	-	-
Average	17,231	8,944	13,894	11,011	5,866	5,468	-	-	10,469

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
41 - 45	-	-	1	-	-	-	1	-	2
46 - 50	-	-	-	-	1	1	-	-	2
51 - 55	2	1	-	1	-	-	-	-	4
56 - 60	-	1	1	1	-	-	-	-	3
61 - 65	-	4	3	3	3	1	-	-	14
66 - 70	-	3	5	6	7	3	2	-	26
71 - 75	-	4	4	8	3	5	2	-	26
76 - 80	-	-	1	10	12	6	2	-	31
81 & Over	-	1	4	2	10	11	6	7	41
Total	2	14	20	31	36	27	13	7	150

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	-	-	4,844	-	-	-	-	-	4,844
41 - 45	-	-	12,772	-	-	-	3,490	-	8,131
46 - 50	-	-	-	-	12,078	2,463	-	-	7,271
51 - 55	14,410	8,502	-	13,483	-	-	-	-	12,701
56 - 60	-	17,268	11,208	6,299	-	-	-	-	11,592
61 - 65	-	12,279	7,687	6,178	11,967	7,350	-	-	9,569
66 - 70	-	21,273	10,402	11,101	10,931	8,207	5,695	-	11,345
71 - 75	-	10,425	13,166	8,007	12,175	8,982	4,028	-	9,535
76 - 80	-	-	13,370	8,647	12,465	16,279	7,541	-	11,683
81 & Over	-	5,846	9,481	5,361	6,723	12,656	6,591	6,478	8,435
Average	14,410	13,304	10,393	8,586	10,495	11,713	5,966	6,478	10,040

EXHIBIT XX
PLAN B: YEAR-TO-YEAR COMPARISON

	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Number of Active Members	2,384	2,314	2,367	2,387
Number of Retirees & Survivors	1,116	1,074	1,013	985
Number of Terminated Due Deferred	209	197	174	158
Number Terminated Due Refunds	2,101	2,021	1,914	1,841
Active Lives Payroll	$ 125,605,540	$ 116,672,661	$ 115,392,433	$ 114,185,471
Retiree Benefits in Payment	$ 16,993,868	$ 16,194,352	$ 14,395,520	$ 13,557,343
Market Value of Assets	$ 441,183,016	$ 390,726,543	$ 449,392,040	$ 405,656,961
Entry Age Normal Accrued Liability	$ 436,129,365	$ 408,897,511	$ 388,045,808	$ 374,570,332
Ratio of AVA to EAN Accrued Liability	104.28%	104.71%	106.43%	100.20%
Actuarial Value of Assets	$ 454,789,737	$ 428,173,067	$ 412,987,548	$ 375,316,220
Present Value of Future Employer Normal Cost	$ 74,397,920	$ 71,210,607	$ 63,846,141	$ 87,209,842
Present Value of Future Employee Contributions	$ 29,176,553	$ 28,799,586	$ 28,418,706	$ 28,295,937
Funding Deposit Account Balance	$ 9,187,912	$ 5,727,180	$ 5,194,363	$ 4,881,920
Present Value of Future Benefits	$ 549,176,298	$ 522,456,080	$ 500,058,032	$ 485,940,079

	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021
Employee Contribution Rate	3.00%	3.00%	3.00%	3.00%
Estimated Tax Contribution as a % of Payroll	1.42%	1.43%	1.23%	1.31%
Actuarially Required Net Direct Contribution Rate	5.50%	5.35%	4.93%	7.07%
Actual Employer Contribution Rate	7.50%	7.50%	7.50%	7.50%

Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014
2,462	2,429	2,459	2,415	2,413	2,321
942	896	855	792	747	714
152	154	142	138	139	135
1,769	1,708	1,637	1,608	1,554	1,531
$ 111,568,953	$ 105,914,905	$ 103,056,369	$ 100,932,377	$ 98,127,898	$ 91,698,297
$ 12,183,667	$ 11,243,993	$ 10,430,299	$ 9,070,674	$ 8,150,177	$ 7,448,991
$ 360,893,172	$ 307,800,757	$ 325,626,878	$ 275,756,021	$ 255,103,397	$ 253,501,744
$ 348,089,703	$ 329,243,218	$ 307,480,656	$ 283,598,901	$ 267,985,810	$ 249,207,071
99.34%	99.11%	101.09%	100.38%	98.46%	97.50%
$ 345,786,489	$ 326,300,632	$ 310,818,392	$ 284,685,809	$ 263,849,591	$ 242,977,968
$ 86,369,014	$ 83,679,498	$ 76,666,027	$ 71,874,582	$ 74,851,929	$ 61,503,111
$ 27,007,067	$ 25,843,520	$ 24,893,108	$ 24,084,343	$ 23,527,632	$ 19,608,454
$ 6,928,047	$ 6,220,583	$ 5,361,971	$ 5,602,259	$ 4,622,489	$ 2,281,164
$ 452,234,523	$ 429,603,067	$ 407,015,556	$ 375,042,475	$ 357,606,663	$ 321,808,369

Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015
3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
1.31%	1.24%	1.22%	1.21%	1.26%	1.36%
7.39%	7.53%	7.01%	6.75%	7.20%	6.91%
7.50%	7.50%	7.50%	8.00%	8.00%	9.00%

SUMMARY OF PRINCIPAL PLAN PROVISIONS

All members of the Parochial Employees' Retirement System are participants in either Plan A or Plan 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.

PLAN A PROVISIONS

CONTRIBUTION RATES

The Plan A fund is financed by employee contributions at a rate determined by the Board subject to the statutory range of 8% through 11% of each member's earnings and employer contributions as determined by the Public Retirement Systems' Actuarial Committee. 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 East Baton Rouge Parish, and remits the money to the system on an annual basis. The system also receives revenue sharing funds each year as appropriated by the legislature. In any fiscal year in which employer contribution rate as actuarially determined is scheduled to decrease, the Board of Trustees may elect to maintain the existing rate or any rate between the existing and minimum rates.

RETIREMENT BENEFITS

Members hired on or before December 31, 2006, with seven years of creditable service may retire at age sixty-five; ten years of creditable service may retire at age sixty; members with twenty-five years of service may retire at age fifty-five; members with thirty years of service may retire regardless of age. Members hired on or after January 1, 2007, with seven years of creditable service may retire at age sixty-seven; ten years of creditable service may retire at age sixty-two; members with thirty years of service may retire at age fifty-five. The retirement allowance is equal to three percent of the member's final compensation multiplied by his years of creditable service; however, any employee who was a member of the supplemental plan only prior to the revision date has the benefit earned for service credited prior to the revision date on the basis of one percent of final compensation plus two dollars per month for each year of service credited prior to the revision date, and three percent of final compensation for each year of service credited after the revision date. All accumulated annual leave for which payment cannot be made in accordance with law and all unused sick leave accumulated at the time of retirement is included in the member's creditable service for retirement computation purposes. The retirement allowance may not exceed the greater of one hundred percent of member's final salary or final compensation. Final compensation for members hired before January 1, 2007 refers to the highest 36 months of consecutive or joined service; final compensation for members hired after December 31, 2006 refers to the highest 60 months of consecutive or joined service.

DISABILITY BENEFITS

Five years of creditable service are required in order to be eligible for disability benefits for members hired on or before December 31, 2006. Seven years of creditable service are required in order to be eligible for disability benefits for members hired on or after January 1, 2007. Disabled members receive a normal retirement allowance if eligible. Otherwise, the member receives the lesser of three percent of compensation multiplied by his years of service, not to be less than fifteen years, or the accrual percentage as defined for retirement benefits multiplied by final compensation multiplied by years of service assuming continued service to age sixty for members hired on or before December 31, 2006 or age sixty-two for members hired on or after January 1, 2007.

SURVIVOR BENEFITS

Five years of creditable service is required in order to be eligible for survivor benefits. If a member is eligible for normal retirement at the time of death, the surviving spouse receives an automatic option 2 benefit. If the member was not eligible for a normal retirement, the surviving unmarried spouse with minor children receives sixty percent of final compensation. If the member was not eligible for a normal retirement, the surviving unmarried spouse with no minor children receives forty percent of final compensation payable upon the attainment of age sixty by the spouse, or upon becoming disabled. Minor children with no unmarried spouse receive thirty percent of final compensation each, not to exceed a total of sixty percent of final compensation.

CONTRIBUTION REFUNDS

Upon withdrawal from service, members not entitled to a retirement allowance are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued rights in the system. If a member receives a refund of contributions and is subsequently rehired on or after January 1, 2007, the provisions applicable to members initially hired on or after January 1, 2007 will apply.

PLAN B PROVISIONS

CONTRIBUTION RATES

The Plan B fund is financed by employee contributions at a rate determined by the Board subject to the statutory range of 3% through 5% of each member's earnings and employer contributions as determined by the Public Retirement Systems' Actuarial Committee. 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 East Baton Rouge Parish, and remits the money to the system on an annual basis. The system also receives revenue sharing funds each year as appropriated by the legislature. In any fiscal year in which the employer contribution rate as actuarially determined is scheduled to decrease, the Board of Trustees may elect to maintain the existing rate or any rate between the existing and minimum rates.

RETIREMENT BENEFITS

Members hired on or before December 31, 2006, with seven years of creditable service may retire at age sixty-five; ten years of creditable service may retire at age sixty; members with thirty years of service may retire at age fifty-five. Members hired on or after January 1, 2007, with seven years of creditable service may retire at age sixty-seven; ten years of creditable service may retire at age sixty-two; members with thirty years of service may retire at age fifty-five. The retirement allowance is equal to two percent of the member's final compensation multiplied by the years of creditable service. All accumulated annual leave for which payment cannot be made in accordance with law and all unused sick leave accumulated at the time of retirement is included in the member's creditable service for retirement computation purposes. Final compensation for members hired before January 1, 2007 refers to the highest 36 months of consecutive or joined service; final compensation for members hired after December 31, 2006 refers to the highest 60 months of consecutive or joined service.

DISABILITY BENEFITS

Five years of creditable service is required in order to be eligible for disability benefits for members hired on or before December 31, 2006. Seven years of creditable service is required in order to be eligible for disability benefits for members hired on or after January 1, 2007. Disabled members receive a normal retirement allowance, if eligible. Otherwise, the member receives the lesser of two percent of compensation multiplied by the years of service, not to be less than fifteen years, or two percent of final compensation multiplied by the years of service assuming continued service to age sixty for members hired on or before December 31, 2006 or age sixty-two for members hired on or after January 1, 2007.

SURVIVOR BENEFITS

The surviving spouse of a member who was eligible for normal retirement at the time of death receives an automatic option 2 benefit. The surviving spouse of a member with ten or more years of creditable service and not eligible for normal retirement at the time of death receives an option 2 benefit payable at attainment of age fifty by the spouse.

CONTRIBUTION REFUNDS

Upon withdrawal from service, members not entitled to a retirement allowance are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued rights in the system. If a member receives a refund of contributions and is subsequently rehired on or after January 1, 2007, the provisions applicable to members initially hired on or after January 1, 2007 will apply.

PROVISIONS APPLICABLE TO BOTH PLAN A AND B

OPTIONAL ALLOWANCES

Upon application for retirement any member may elect to receive their benefit in a retirement allowance payable throughout their life, or he may elect at that time to receive the actuarial equivalent of their retirement allowance in a reduced retirement allowance payable throughout life. A retiree cannot change the designation of beneficiary.

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

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

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

DEFERRED RETIREMENT OPTION PLAN

In lieu of terminating employment and accepting a service retirement allowance, any member of Plan A or Plan 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. In terms of DROP eligibility, any member whose service, when combined with service in any other state or statewide public retirement system exceeds thirty years will be eligible to include reciprocally recognized service credit. Upon commencement of 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 fund. This fund does earn interest once the member terminates participation in DROP but continues their employment. The interest rate is based upon the rate of return of a short-term U.S. Treasury security, a group of short-term U.S. Treasury Securities, or an index of short-term U.S. Treasury securities to be selected by the board of trustees. This interest is to be credited to the individual's account balance on an annual basis. Additionally, no cost-of-living increases are payable to the 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 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 Deferred Retirement Option Plan fund 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. 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 those individuals hired on or before December 31, 2006; or at least sixty months for those individuals hired on or after January 1, 2007.

COST OF LIVING INCREASES

Under R.S. 11:246, 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). Under R.S. 11:1937, 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 up to two and one-half percent of the member's current benefit to those age sixty-two and over. 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 other cost of living increases the Board may grant an increase to retirees in the form "X×(A&B)" where "A" is equal to the number of years of credited service accrued as retirement or death of the member or retiree and "B" is equal to the number of years since death of the member or retiree to June 30 of the initial year of increase and "X" is equal to any amount available for funding such increase up to a maximum of $1.00.

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 following chart illustrates the effect of emerging experience on the plan.

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

The following assumptions apply to both Plan A and Plan B unless stated otherwise.

ACTUARIAL COST METHOD

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

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

VALUATION INTEREST RATE

6.40% (Net of Investment Expense)

ACTUARIAL ASSET VALUES

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.

Note: All deferrals are based on the valuation interest rate in effect as of the beginning of the fiscal year for each individual year.

ANNUAL SALARY INCREASE RATE

Plan A - 4.75% (2.3% inflation / 2.45% Merit)
Plan B - 4.25% (2.3% inflation / 1.95% Merit)

ACTIVE MEMBER MORTALITY

Pub-2010 Public Retirement Plans Mortality Table for General Employees multiplied by 130% for males and 125% for females, each with full generational projection using the MP2021 scale.

ANNUITANT AND BENEFICIARY MORTALITY

Pub-2010 Public Retirement Plans Mortality Table for General Healthy Retirees multiplied by 130% for males and 125% for females, each with full generational projection using the MP2021 scale

DISABLED LIVES MORTALITY

Pub-2010 Public Retirement Plans Mortality Table for General Disabled Retirees multiplied by 130% for males and 125% for females, each with full generational projection using the MP2021 scale

RETIREE COST OF LIVING INCREASE

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.

RATES OF RETIREMENT

The table of these rates is included later in the report. All eligible persons age 85 and over in both plans are assumed to retire immediately. These rates apply only to those individuals eligible to retire.

RETIREMENT LIMITATIONS

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

RATES OF DROP ENTRY

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

DROP PARTICIPATION

Plan A members who enter the DROP plan are assumed to participate for the full 3 year period and 60% are assumed to retire at the end of DROP participation with 40% assumed to work 3 years post DROP and then retire.

DROP PARTICIPATION

Plan B members who enter the DROP plan are assumed to participate for the full 3 year period and 45% are assumed to retire at the end of DROP participation with 55% assumed to work 2 years post DROP and then retire.

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS

All eligible persons age 86 and over in Plan A and age 85 and over in Plan B are assumed to retire immediately. These rates only apply to members who return to work after completing the DROP plan and then subsequently retire. A table of these rates is included later in the report.

DISABILITY RATES

60% of the disability rates used for the 28th valuation of the Railroad Retirement System for individuals with 10-19 years of service for Plan A. 60% of the disability rates used for the 28th valuation of the Railroad Retirement System for individuals with 10-19 years of service for Plan B. A table of these rates is included later in the report.

RATES OF WITHDRAWAL

The rates of withdrawal are applied based upon completed years of service:

PLAN A			
Service Duration (≤)	Factor	Service Duration (≤)	Factor
1	0.26	8	0.07
2	0.19	9	0.06
3	0.14	10	0.05
4	0.12	11 – 15	0.04
5	0.10	16 - 18	0.03
6	0.09	19 - 21	0.02
7	0.08	>21	0.01

PLAN B			
Service Duration (≤)	Factor	Service Duration (≤)	Factor
1	0.23	8	0.07
2	0.19	9 - 10	0.06
3	0.15	11 - 12	0.05
4	0.12	13 - 14	0.04
5	0.10	15 - 18	0.03
6	0.09	19 - 21	0.02
7	0.08	>21	0.01

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

VESTING ELECTING PERCENTAGE

The percent of those who are vested at termination and elect deferred benefits in lieu of contribution refunds are as follows:

Plan A Tier 1	
Age	Rate
Under Age 50	60%
Age 50 and above	80%

Plan A Tier 2	
Age	Rate
Under Age 40	45%
Age 40 – 49	55%
Above Age 49	60%

Plan B Tier 1	
Age	Rate
Under Age 50	60%
Age 50 and above	85%

Plan B Tier 2	
Age	Rate
Under Age 50	45%
Age 50 and above	65%

MARRIAGE AND OPTION SELECTION

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 2019 Table F1: Family Households, by Type, Age of Own Children, Age of Family Members, and Age of Householder provided by the U.S. Census Bureau:

Member's Age	% With Children	Number of Children	Average Age
25	60%	1.77	4
35	82%	2.11	8
45	63%	1.75	11
55	11%	1.42	14
65	2%	1.50	14

SICK AND ANNUAL LEAVE (TIER 1 MEMBERS)

At retirement or DROP entry, members of Plan A tier 1 are assumed to convert leave time equal to 1.2% of total creditable service. At retirement for those remaining employed after completing DROP participation, members are assumed to convert leave time equal to 5.5% of their total post-DROP service credit.

At retirement or DROP entry, members of Plan B tier 1 are assumed to convert leave time equal to 0.6% of total creditable service. At retirement for those remaining employed after completing DROP participation, members are assumed to convert leave time equal to 5.3% of their total post-DROP service credit.

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 & 2	Disability Rates
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
37	0.00000	0.00000	0.00000	0.00000	0.00000	0.00078
38	0.00000	0.00000	0.00000	0.00000	0.00000	0.00084
39	0.00000	0.00000	0.00000	0.00000	0.00000	0.00084
40	0.00000	0.00000	0.00000	0.00000	0.00000	0.00090
41	0.00000	0.00000	0.00000	0.00000	0.00000	0.00102
42	0.00000	0.00000	0.00000	0.00000	0.00000	0.00108
43	0.00000	0.00000	0.00000	0.00000	0.00000	0.00120
44	0.00000	0.00000	0.00000	0.00000	0.00000	0.00126
45	0.00000	0.00000	0.00000	0.00000	0.00000	0.00144
46	0.08000	0.00000	0.32000	0.00000	0.12000	0.00162
47	0.08000	0.00000	0.32000	0.00000	0.12000	0.00180
48	0.08000	0.00000	0.32000	0.00000	0.12000	0.00204
49	0.08000	0.00000	0.40000	0.00000	0.12000	0.00234
50	0.08000	0.00000	0.43000	0.00000	0.12000	0.00264
51	0.08000	0.00000	0.44000	0.00000	0.12000	0.00306
52	0.08000	0.00000	0.42000	0.00000	0.12000	0.00354
53	0.09000	0.00000	0.39000	0.00000	0.12000	0.00414
54	0.10000	0.00000	0.34000	0.00000	0.12000	0.00480
55	0.10000	0.07000	0.29000	0.30000	0.12000	0.00564
56	0.11000	0.07000	0.25000	0.30000	0.29000	0.00666
57	0.11000	0.07000	0.22000	0.30000	0.27000	0.00786
58	0.10000	0.07000	0.20000	0.30000	0.26000	0.00930
59	0.09000	0.07000	0.19000	0.30000	0.26000	0.01098
60	0.08000	0.07000	0.18000	0.30000	0.27000	0.01602
61	0.08000	0.07000	0.18000	0.30000	0.27000	0.01872
62	0.08000	0.07000	0.18000	0.13000	0.28000	0.01908
63	0.08000	0.12000	0.17000	0.13000	0.29000	0.01908
64	0.10000	0.16000	0.16000	0.12000	0.29000	0.01908
65	0.11000	0.18000	0.14000	0.12000	0.29000	0.01908
66	0.13000	0.19000	0.12000	0.11000	0.28000	0.01908
67	0.13000	0.18000	0.10000	0.10000	0.26000	0.01908
68	0.13000	0.17000	0.09000	0.10000	0.25000	0.01908
69	0.13000	0.15000	0.07000	0.09000	0.23000	0.01908
70	0.12000	0.13000	0.06000	0.08000	0.22000	0.01908
71	0.11000	0.11000	0.05000	0.07000	0.21000	0.01908
72	0.11000	0.09000	0.04000	0.07000	0.21000	0.01908
73	0.11000	0.09000	0.04000	0.07000	0.21000	0.01908
74	0.12000	0.09000	0.03000	0.07000	0.20000	0.01908
75	0.14000	0.12000	0.03000	0.08000	0.20000	0.01908

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 & 2	Disability Rates
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00072
37	0.00000	0.00000	0.00000	0.00000	0.00000	0.00078
38	0.00000	0.00000	0.00000	0.00000	0.00000	0.00084
39	0.00000	0.00000	0.00000	0.00000	0.00000	0.00084
40	0.00000	0.00000	0.00000	0.00000	0.00000	0.00090
41	0.00000	0.00000	0.00000	0.00000	0.00000	0.00102
42	0.00000	0.00000	0.00000	0.00000	0.00000	0.00108
43	0.00000	0.00000	0.00000	0.00000	0.00000	0.00120
44	0.00000	0.00000	0.00000	0.00000	0.00000	0.00126
45	0.00000	0.00000	0.00000	0.00000	0.00000	0.00144
46	0.00000	0.00000	0.00000	0.00000	0.00000	0.00162
47	0.00000	0.00000	0.00000	0.00000	0.00000	0.00180
48	0.00000	0.00000	0.00000	0.00000	0.00000	0.00204
49	0.00000	0.00000	0.00000	0.00000	0.00000	0.00234
50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00264
51	0.00000	0.00000	0.00000	0.00000	0.00000	0.00306
52	0.00000	0.00000	0.00000	0.00000	0.00000	0.00354
53	0.00000	0.00000	0.00000	0.00000	0.00000	0.00414
54	0.00000	0.00000	0.00000	0.00000	0.00000	0.00480
55	0.18000	0.10000	0.28000	0.27000	0.24000	0.00564
56	0.13000	0.10000	0.29000	0.27000	0.24000	0.00666
57	0.10000	0.10000	0.28000	0.27000	0.24000	0.00786
58	0.08000	0.10000	0.26000	0.27000	0.24000	0.00930
59	0.07000	0.10000	0.23000	0.27000	0.24000	0.01098
60	0.07000	0.10000	0.20000	0.27000	0.25000	0.01602
61	0.08000	0.10000	0.17000	0.27000	0.26000	0.01872
62	0.10000	0.10000	0.14000	0.11000	0.26000	0.01908
63	0.13000	0.15000	0.12000	0.10000	0.26000	0.01908
64	0.15000	0.18000	0.10000	0.09000	0.26000	0.01908
65	0.18000	0.20000	0.08000	0.09000	0.26000	0.01908
66	0.19000	0.21000	0.06000	0.08000	0.26000	0.01908
67	0.20000	0.21000	0.05000	0.08000	0.25000	0.01908
68	0.20000	0.20000	0.04000	0.07000	0.24000	0.01908
69	0.19000	0.19000	0.04000	0.07000	0.23000	0.01908
70	0.18000	0.17000	0.04000	0.06000	0.22000	0.01908
71	0.17000	0.16000	0.04000	0.06000	0.20000	0.01908
72	0.16000	0.15000	0.05000	0.05000	0.20000	0.01908
73	0.14000	0.14000	0.05000	0.05000	0.20000	0.01908
74	0.14000	0.14000	0.05000	0.05000	0.21000	0.01908
75	0.15000	0.15000	0.05000	0.05000	0.24000	0.01908

PRIOR YEAR 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 following chart illustrates the effect of emerging experience on the plan.

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

The following assumptions apply to both Plan A and Plan B unless stated otherwise.

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

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

ACTUARIAL ASSET VALUES: 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: 6.40%

ANNUAL SALARY INCREASE RATE:	4.75% (2.45% Merit / 2.30% Inflation) for Plan A 4.25% (1.95% Merit / 2.30% Inflation) for Plan B
ACTIVE MEMBER MORTALITY:	Pub-2010 Public Retirement Plans Mortality Table for General Employees multiplied by 130% for males and 125% for females, each with full generational projection using the MP2018 scale.
ANNUITANT AND BENEFICIARY MORTALITY	Pub-2010 Public Retirement Plans Mortality Table for General Healthy Retirees multiplied by 130% for males and 125% for females, each with full generational projection using the MP2018 scale
DISABLED LIVES MORTALITY:	Pub-2010 Public Retirement Plans Mortality Table for General Disabled Retirees multiplied by 130% for males and 125% for females, each with full generational projection using the MP2018 scale
RETIREE COST OF LIVING INCREASE:	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.
RATES OF RETIREMENT:	The table of these rates is included later in the report. All eligible persons age 85 and over in both plans are assumed to retire immediately. These rates apply only to those individuals eligible to retire.

RATES OF WITHDRAWAL: The rates of withdrawal are applied based upon completed years of service:

PLAN A:

Service Duration ≤	Factor	Service Duration ≤	Factor
1	0.21	17	0.02
2	0.18	18	0.02
3	0.16	19	0.02
4	0.13	20	0.02
5	0.11	21	0.01
6	0.09	22	0.01
7	0.08	23	0.01
8	0.07	24	0.02
9	0.06	25	0.02
10	0.05	26	0.02
11	0.04	27	0.01
12	0.04	28	0.01
13	0.04	29	0.01
14	0.03	30	0.01
15	0.03	>30	0.01
16	0.03		

PLAN B

Service Duration ≤	Factor	Service Duration ≤	Factor
1	0.21	17	0.02
2	0.18	18	0.02
3	0.15	19	0.01
4	0.13	20	0.01
5	0.10	21	0.01
6	0.08	22	0.01
7	0.07	23	0.01
8	0.06	24	0.01
9	0.05	25	0.02
10	0.05	26	0.02
11	0.04	27	0.02
12	0.04	28	0.02
13	0.04	29	0.01
14	0.03	30	0.01
15	0.03	>30	0.01
16	0.02		

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

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

FAMILY STATISTICS: Assumptions used in determining the cost of various survivor benefits are listed below:

Age at Death	% with Children	# of Children	Average Age
25	70%	1.84	5
35	86%	2.13	9
45	75%	1.70	12
55	22%	1.42	14
65	4%	1.45	15

VESTING ELECTING PERCENTAGE: The percent of those who are vested at termination and elect deferred benefits in lieu of contribution refunds are as follows:

Plan A:	Under Age 40:	30%
	Age 40 – 49:	45%
	Above Age 49:	60%
Plan B:	Under Age 40:	45%
	Age 40 – 49:	45%
	Above Age 49:	55%

SICK AND ANNUAL LEAVE: (Tier 1 members) Retirees were assumed to convert 1.44 months for Plan A and 0.6 months for Plan B of sick and annual leave to retirement credit for each ten years of service credit.

RATES OF DROP ENTRY: The table of these rates is included later in the report. These rates apply only to those individuals eligible to enter the DROP plan.

DROP PARTICIPATION: All members who enter the DROP plan are assumed to participate for the full 3 year period and 50% are assumed to retire at the end of DROP participation with 50% assumed to work 2 years post DROP and then retire.

DISABILITY RATES:	40% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10-19 years of service for Plan A. 40% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10-19 years of service for Plan B. A table of these rates is included later in the report.
RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS	The table of these rates is included later in the report. All eligible persons age 85 and over in both plans are assumed to retire immediately. These rates only apply to members who return to work after completing the DROP plan and then subsequently retire.

ACTUARIAL TABLES AND RATES – PLAN A

Age	Remarriage Rates	Tier 1 Retirement Rates	Tier 2 Retirement Rates	Tier 1 DROP Entry Rates	Tier 2 DROP Entry Rates	Post-DROP Retirement Rates	Base Disability Rates
18	0.06124	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
19	0.06124	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
20	0.06124	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
21	0.05818	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
22	0.05524	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
23	0.05242	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
24	0.04971	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
25	0.04566	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
26	0.04335	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
27	0.04114	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
28	0.03902	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
29	0.03698	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
30	0.03502	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
31	0.03314	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
32	0.03134	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
33	0.02961	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
34	0.02795	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
35	0.02636	0.00000	0.00000	0.00000	0.00000	0.00000	0.0017
36	0.02483	0.00000	0.00000	0.00000	0.00000	0.00000	0.0019
37	0.02336	0.00000	0.00000	0.00000	0.00000	0.00000	0.0021
38	0.02195	0.00000	0.00000	0.00000	0.00000	0.00000	0.0024
39	0.02060	0.00000	0.00000	0.00000	0.00000	0.00000	0.0027
40	0.01930	0.00000	0.00000	0.00000	0.00000	0.00000	0.0031
41	0.01805	0.00000	0.00000	0.00000	0.00000	0.00000	0.0035
42	0.01686	0.00000	0.00000	0.00000	0.00000	0.00000	0.0039
43	0.01571	0.00000	0.00000	0.00000	0.00000	0.00000	0.0044
44	0.01461	0.00000	0.00000	0.00000	0.00000	0.00000	0.0050
45	0.01355	0.00000	0.00000	0.00000	0.00000	0.00000	0.0057
46	0.01253	0.09000	0.00000	0.27000	0.00000	0.38000	0.0065
47	0.01156	0.09000	0.00000	0.27000	0.00000	0.38000	0.0073
48	0.01063	0.09000	0.00000	0.27000	0.00000	0.38000	0.0083
49	0.00973	0.08000	0.00000	0.45000	0.00000	0.38000	0.0094
50	0.00887	0.07000	0.00000	0.47000	0.00000	0.38000	0.0107
51	0.00804	0.06000	0.00000	0.43000	0.00000	0.38000	0.0122
52	0.00725	0.08000	0.00000	0.42000	0.00000	0.38000	0.0138
53	0.00649	0.10000	0.00000	0.44000	0.00000	0.38000	0.0157
54	0.00576	0.12000	0.00000	0.41000	0.00000	0.38000	0.0178
55	0.00000	0.12000	0.12000	0.35000	0.35000	0.36000	0.0202
56	0.00000	0.10000	0.10000	0.28000	0.28000	0.33000	0.0230
57	0.00000	0.09000	0.09000	0.23000	0.23000	0.32000	0.0261
58	0.00000	0.08000	0.08000	0.19000	0.19000	0.32000	0.0296
59	0.00000	0.08000	0.08000	0.18000	0.18000	0.32000	0.0337
60	0.00000	0.08000	0.08000	0.17000	0.17000	0.31000	0.0488
61	0.00000	0.08000	0.08000	0.17000	0.17000	0.28000	0.0488
62	0.00000	0.08000	0.08000	0.16000	0.16000	0.25000	0.0488
63	0.00000	0.09000	0.09000	0.15000	0.15000	0.25000	0.0488
64	0.00000	0.11000	0.11000	0.14000	0.14000	0.26000	0.0488
65	0.00000	0.13000	0.14000	0.12000	0.12000	0.28000	0.0488
66	0.00000	0.15000	0.16000	0.10000	0.10000	0.27000	0.0488
67	0.00000	0.14000	0.15000	0.08000	0.08000	0.25000	0.0488
68	0.00000	0.13000	0.14000	0.08000	0.08000	0.23000	0.0488
69	0.00000	0.12000	0.13000	0.10000	0.09000	0.21000	0.0488
70	0.00000	0.12000	0.12000	0.12000	0.10000	0.22000	0.0488
71	0.00000	0.10000	0.11000	0.11000	0.11000	0.23000	0.0488
72	0.00000	0.08000	0.10000	0.10000	0.10000	0.22000	0.0488
73	0.00000	0.08000	0.11000	0.09000	0.09000	0.17000	0.0488
74	0.00000	0.10000	0.12000	0.07000	0.08000	0.13000	0.0488
75	0.00000	0.13000	0.14000	0.06000	0.06000	0.13000	0.0488

ACTUARIAL TABLES AND RATES – PLAN B

	Remarriage Rates	Tier 1 Retirement Rates	Tier 2 Retirement Rates	Tier 1 DROP Entry Rates	Tier 2 DROP Entry Rates	Post-DROP Retirement Rates	Base Disability Rates
18	0.06124	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
19	0.06124	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
20	0.06124	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
21	0.05818	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
22	0.05524	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
23	0.05242	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
24	0.04971	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
25	0.04566	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
26	0.04335	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
27	0.04114	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
28	0.03902	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
29	0.03698	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
30	0.03502	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
31	0.03314	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
32	0.03134	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
33	0.02961	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
34	0.02795	0.00000	0.00000	0.00000	0.00000	0.00000	0.0015
35	0.02636	0.00000	0.00000	0.00000	0.00000	0.00000	0.0017
36	0.02483	0.00000	0.00000	0.00000	0.00000	0.00000	0.0019
37	0.02336	0.00000	0.00000	0.00000	0.00000	0.00000	0.0021
38	0.02195	0.00000	0.00000	0.00000	0.00000	0.00000	0.0024
39	0.02060	0.00000	0.00000	0.00000	0.00000	0.00000	0.0027
40	0.01930	0.00000	0.00000	0.00000	0.00000	0.00000	0.0031
41	0.01805	0.00000	0.00000	0.00000	0.00000	0.00000	0.0035
42	0.01686	0.00000	0.00000	0.00000	0.00000	0.00000	0.0039
43	0.01571	0.00000	0.00000	0.00000	0.00000	0.00000	0.0044
44	0.01461	0.00000	0.00000	0.00000	0.00000	0.00000	0.0050
45	0.01355	0.00000	0.00000	0.00000	0.00000	0.00000	0.0057
46	0.01253	0.00000	0.00000	0.00000	0.00000	0.00000	0.0065
47	0.01156	0.00000	0.00000	0.00000	0.00000	0.00000	0.0073
48	0.01063	0.00000	0.00000	0.00000	0.00000	0.00000	0.0083
49	0.00973	0.00000	0.00000	0.00000	0.00000	0.00000	0.0094
50	0.00887	0.00000	0.00000	0.00000	0.00000	0.00000	0.0107
51	0.00804	0.00000	0.00000	0.00000	0.00000	0.00000	0.0122
52	0.00725	0.00000	0.00000	0.00000	0.00000	0.00000	0.0138
53	0.00649	0.00000	0.00000	0.00000	0.00000	0.00000	0.0157
54	0.00576	0.00000	0.00000	0.00000	0.00000	0.00000	0.0178
55	0.00000	0.08000	0.08000	0.31000	0.31000	0.02000	0.0202
56	0.00000	0.09000	0.09000	0.31000	0.31000	0.02000	0.0230
57	0.00000	0.09000	0.09000	0.27000	0.27000	0.02000	0.0261
58	0.00000	0.07000	0.07000	0.25000	0.25000	0.12000	0.0296
59	0.00000	0.06000	0.06000	0.23000	0.23000	0.24000	0.0337
60	0.00000	0.07000	0.07000	0.20000	0.20000	0.31000	0.0488
61	0.00000	0.09000	0.09000	0.15000	0.15000	0.33000	0.0488
62	0.00000	0.10000	0.11000	0.11000	0.11000	0.31000	0.0488
63	0.00000	0.10000	0.11000	0.10000	0.09000	0.26000	0.0488
64	0.00000	0.11000	0.13000	0.10000	0.09000	0.22000	0.0488
65	0.00000	0.15000	0.16000	0.09000	0.09000	0.20000	0.0488
66	0.00000	0.19000	0.18000	0.07000	0.07000	0.19000	0.0488
67	0.00000	0.20000	0.19000	0.04000	0.05000	0.20000	0.0488
68	0.00000	0.17000	0.17000	0.03000	0.04000	0.17000	0.0488
69	0.00000	0.13000	0.15000	0.03000	0.04000	0.14000	0.0488
70	0.00000	0.10000	0.15000	0.04000	0.05000	0.17000	0.0488
71	0.00000	0.10000	0.15000	0.04000	0.07000	0.25000	0.0488
72	0.00000	0.12000	0.15000	0.05000	0.08000	0.31000	0.0488
73	0.00000	0.15000	0.16000	0.04000	0.08000	0.29000	0.0488
74	0.00000	0.19000	0.16000	0.02000	0.05000	0.22000	0.0488
75	0.00000	0.21000	0.17000	0.01000	0.01000	0.21000	0.0488

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