

# CURRAN ACTUARIAL — CONSULTING, LTD. —

Annual Funding Valuation June 30, 2024

Louisiana Clerks' of Court Retirement & Relief Fund



October 4, 2024

Board of Trustees Clerks' of Court Retirement and Relief Fund 10202 Jefferson Highway, Building A Baton Rouge, Louisiana 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Clerks' of Court Retirement and Relief Fund for the fiscal year ending June 30, 2024. 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 Clerks' of Court Retirement and Relief Fund of the State of Louisiana. The primary purpose of this report is to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2025, and to recommend the net direct employer contribution rate for Fiscal 2026.

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 Clerks' of Court Retirement and Relief Fund 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 June 30, 2020 Experience Study, are summarized in the back of this report, and are described in detail within that separate report unless stated otherwise.

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: A.S.A.

Gregory Curtan, F.C.A., M.A.A.A., Senior Consulting Actuary

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### SUMMARY OF VALUATION RESULTS CLERKS' OF COURT RETIREMENT AND RELIEF FUND

		J	lune 30, 2024	J	une 30, 2023
Census Summary:	Active Members Retired Members and Survivors Terminated Due a Deferred Benefit Terminated Due a Refund		2,106 1,613 78 1,014		2,134 1,584 67 937
Payroll: Benefits in Payment:		\$ \$	105,493,450 50,327,066	\$ \$	
Present Value of Futur Actuarial Accrued Liak Frozen Unfunded Actu Funding Deposit Acco Actuarial Value of Ass Market Value of Asset	bility (EAN): Darial Accrued Liability: Dunt Credit Balance ets (AVA):	\$ \$ \$ \$	1,154,427,252 967,816,832 41,145,459 7,023,124 804,232,341 817,807,571	\$ \$ \$ \$ \$	9,929,258
Ratio of AVA to Actua	rial Accrued Liability (EAN):		83.10%		81.46%
			Fiscal 2024		Fiscal 2023
Market Rate of Return Actuarial Rate of Retu			11.6% 6.3%		8.8% 4.4%
			Fiscal 2025		Fiscal 2024
Employers' Normal Co Amortization Cost (Mi Estimated Administrat Projected Ad Valorem Projected Revenue Sh Net Direct Employer A	id-year): tive Cost Tax Contributions	\$ \$ \$ \$ \$	24,672,734 9,604,814 983,875 (14,439,109) (325,610) 20,496,704	\$ \$ \$ \$ \$	9,604,814 992,875 (12,732,664) (320,115)
Projected Payroll:		\$	106,824,901	\$	107,067,481
Statutory Employee C	ontribution Rate:		8.25%		8.25%
Board Adopted Net D	irect Employer Contribution Rate:		23.00% +		23.00% +
Actuarially Required N	let Direct Employer Contribution Rate:		19.19%		21.55%
			Fiscal 2026		Fiscal 2025
Minimum Recommen	ded Net Direct Employer Cont. Rate:		19.25%		21.50%

+ The Board of Trustees elected to adopt a Net Direct Employer Contribution Rate in excess of the Minimum Recommended Net Direct Employer Contribution Rate.

### **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 assessments is valid. Actuarial calculations by their very nature involve estimations. As such, it is likely that eventual results will differ from those presented. The degree to which such differences evolve will depend on several factors including the completeness and accuracy of the data utilized, the degree to which assumptions approximate future experience, and the extent to which the mathematical model accurately describes the plan's design and future outcomes.

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

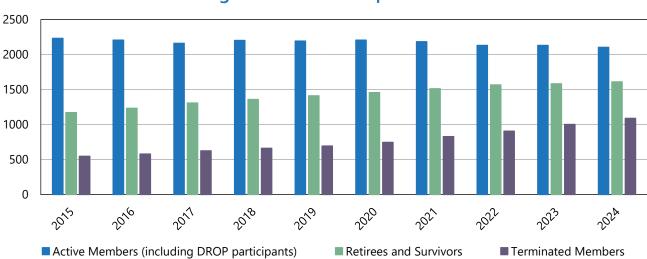
All of the above processes would be in vain if the assumption process was static, and the plan would have to deal with the consequences of actual experience differing from assumptions after forty or fifty years of compounded errors. However, actuarial funding methods for pension plans all allow for periodic corrections of assumptions to conform with reality as it unfolds. This process of repeated

correction of estimates produces imperfect results but is nevertheless a reasonable approach to determine the contribution levels that will 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 system's administrative staff furnished census data 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, beneficiary dates of birth, retiree and beneficiary sex, optional form of benefit chosen, along with original and current benefit amounts, was provided. 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 2,106 active members in the system of whom 859 members have vested retirement benefits including 110 participants in the Deferred Retirement Option Plan (DROP); 1,613 former members or their beneficiaries are receiving retirement benefits. An additional 1,092 terminated members have contributions remaining on deposit with the system; of this number 78 have vested rights for future retirement benefits. According to **Figure 1**, active membership has declined over the past few years, while retiree and survivor levels have increased.



# Figure 1. Membership Counts

Census data submitted to our office is tested for errors and changes are made when errors are identified. 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 that 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 rates of retirement, withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas such as age, service, salary, and current benefits. Records identified by this review as questionable are checked against data from prior valuations, are reviewed against information on the system's membership database, and may be included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and either verified or corrected, the final data is used 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.

A member's salary is an important component of projecting future cash flows and computing normal costs and accrued liabilities. Our modeling requires the entry of annual salary for this purpose. For individuals who have not completed a full year of service during the measurement period, we use an estimate of their service during the fiscal year to annualize salaries.

In addition to the statistical information provided on the system's participants, the system's administrator 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 system assets was \$817,807,571 as of June 30, 2024. Net investment income for Fiscal 2024 measured on a market value basis was \$85,334,808. Contributions to the system for the fiscal year totaled \$47,440,760; benefits and expenses amounted to \$58,615,399.

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. This valuation is based on the Frozen Attained Age Normal actuarial cost method with the unfunded accrued liability frozen as of June 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability, which was determined to be \$58,719,822 as of June 30, 1989, was frozen and amortized over forty years with payments increasing at 4.75% per year. The system's UAL followed this original schedule through 1998.

Since 1997, statutes relevant to the system have provided that the Board of Trustees could require employers to contribute at a rate higher than the minimum recommended net direct employer contribution rate under certain circumstances. For fiscal years 1999 through 2002, the Board did freeze the employer contribution rate. The additional payments of \$6,660,791 and the accrued interest thereon reduced the outstanding Unfunded Accrued Liability by \$9,536,353 through June 30, 2005 and shortened the remaining amortization period to June 30, 2026. However, in 2006 a statutory change reamortized the then existing balance of the Frozen Unfunded Accrued Liability through June 30, 2029 in

order to lower the required annual payment. With overall payroll typically growing at a level below the 4.75% increase in annual UAL payments, the Board of Trustees elected to request an additional legislative change related to UAL payments. Effective July 1, 2016, the statute was changed to amortize the remaining balance using level annual payments through June 30, 2029. This significantly reduced the likelihood that UAL payments would grow as a percentage of payroll. (See Figure 2).

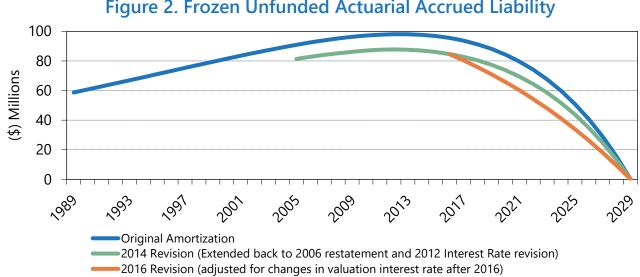


Figure 2. Frozen Unfunded Actuarial Accrued Liability

Effective with Act 347 of 1997, the Board of Trustees was given the right to maintain the net direct employer contribution rate in years where the rate decreases. Originally, such additional contributions were used solely to reduce the system's frozen unfunded actuarial accrued liability without reamortization. Act 703 of 2001 allowed the Board to set the employer rate at a level up to 3% above the minimum actuarially recommended employer contribution rate. Act 631 of 2004 allowed the Board to set the employer contribution rate at any point between the previous year's employer contribution rate and the current minimum actuarially recommended employer contribution rate in years where the rate declines.

The Board of Trustees held the employer contribution rate above the minimum level four times prior to Act 532 of the 2006 regular session, which authorized the Board of Trustees to re-amortize the remaining balance over the remainder of the original 40 year period. Beginning in Fiscal 2009, any additional employer contributions collected due to the action of the Board of Trustees to set the employer contribution rate above the minimum recommended rate were credited to the Funding Deposit Account. Since 2009, the Board has elected to set the employer contribution rate at a level in excess of the minimum employer contribution rate on a number of occasions. In each such year, contribution gains were deposited into the Funding Deposit Account. The Funding Deposit Account may be used to pay off UAL, offset employer contributions in a particular year, lower the long-term normal cost payment required of employers, or prefund COLAs. Since its creation, the Funding Deposit Account has been solely used to prefund retiree COLAs. A history of the Funding Deposit Account that shows contributions, interest, and withdrawals is contained in Figure 3.

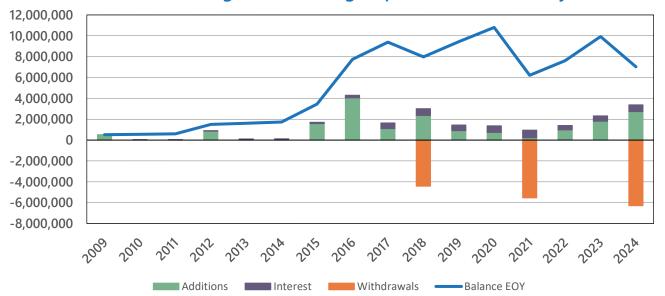


Figure 3. Funding Deposit Account History

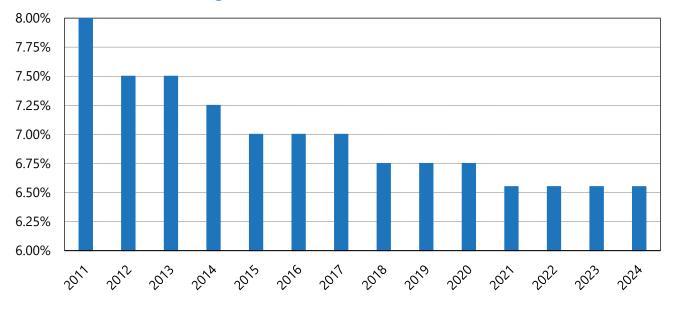
For Fiscal 2024, the contribution rate was set at 23.00%, which exceeded the minimum recommended rate of 21.75%. The additional funds collected, amounting to \$2,728,402, were credited to the Funding Deposit Account. Funds were withdrawn to offset the increase in plan liabilities that were due to a COLA paid on January 1, 2024; the amount withdrawn totaled \$6,284,902. In addition, the account was credited with interest. The ending balance including the additional funds and interest credited at the valuation interest rate was \$7,023,124 as of June 30, 2024.

The cost method used for this valuation generally produces normal costs which are level as a percentage of payroll if assumptions are met and the composition of the active group regarding age and service is stable. Overall costs may increase or decrease depending on payroll growth. Since payments on the Fund's frozen unfunded actuarial accrued liability are level, any increase in payroll will cause payments to decrease as a percentage of payroll; any contraction in payroll will cause payments to increase as a percentage of payroll. Under the Frozen Attained Age Normal Cost Method, actuarial gains and losses affect future normal costs and are spread over the system's average future working lifetime. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs.

The current year actuarial assumptions utilized for this report are based on the results of an actuarial experience study for the period July 1, 2014 – June 30, 2019, unless otherwise specified in this report. 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 2020 Clerks of Court Retirement & Relief Fund 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 2011

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 the Board elected to opportunistically reduce the system's valuation interest rate from 6.75% to 6.55% within the June 30, 2021, actuarial valuation. A history of the valuation interest rate is shown in **Figure 4**.



### Figure 4. Assumed Rate of Return

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. Long-term capital market assumptions were provided by six consulting firms that 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 40<sup>th</sup> through 60<sup>th</sup> 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 6.38% through 7.54% with a 50<sup>th</sup> percentile value of 6.96%.

Although the Board of trustees has authority to grant ad hoc Cost of Living Increases (COLAs) under limited circumstances, these COLAs have not been shown to have an 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. The most recent three COLAs (granted in 2018, 2021 and 2024) were prefunded through the Funding Deposit Account. Furthermore, we believe that it is probable that the costs of future COLAs will be offset with funds from the Funding Deposit Account. Therefore, for purposes of determining the present value of benefits, these COLAs were deemed not to be substantively automatic, and the present value of benefits excludes COLAs not previously granted by the Board of Trustees.

The current year actuarial assumptions utilized for this valuation are outlined at the end of this report. Except for the valuation interest rate, which was last updated in the Fiscal 2021 report, all assumptions used are based on estimates of future long-term experience for the fund as described in the system's 2020 Experience Study report. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments to contribution levels will be required. Such differences will be revealed in future actuarial valuations.

# **RISK FACTORS**

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

#### **Contribution Policy Risk**

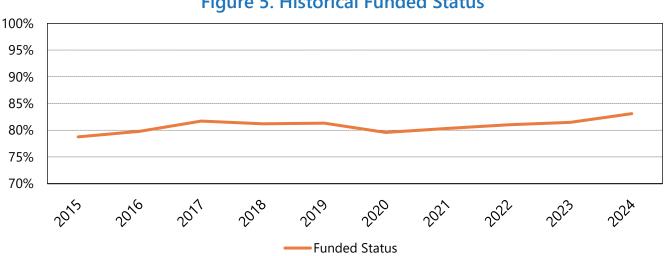
The first risk in this regard is the failure to contribute adequate funds to the plan. In some ways, this is the greatest risk since other risks can usually be addressed by adequate actuarial funding. Louisiana constitutional and statutory provisions greatly limit this risk by requiring that state and 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. This rate is given as a ratio of plan assets to plan liabilities. However, the definition of each of these terms may vary. The two typical alternatives used for assets are the market and actuarial value of assets. There are several alternative measures of liability depending on the funding method employed. The Governmental Accounting Standards Board (GASB) specifies that, for financial reporting purposes, the funded ratio is determined by using the market value of assets divided by the entry age normal accrued liability. This value is given in the system's financial report. Alternatively, we have calculated the ratio of the actuarial value of assets to the entry age normal accrued liability accrued to fund the plan. The ratio is 83.10% for the plan as of June 30, 2024.

This value gives some indication of the financial strength of the plan; however, it does not guarantee the ability of the system 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. In this regard, caution is warranted since market fluctuations in asset values and changes in plan assumptions can distort underlying trends in this value. Figure 5 gives a history of this value for the last ten years. Note that the underlying trend is somewhat disguised since the system has significantly reduced the valuation interest rate over this period. Absent the reductions in the discount rate, the current ratio would be higher and would have shown a larger increase over time. The funded ratio has shown great resiliency given such meaningful changes in the valuation interest rate from 7.0% ten years ago to 6.55% today.



### **Figure 5. Historical Funded Status**

Following are several 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. Were the plan to attempt to offset inflation by providing COLAs (often in the form of permanent benefit increases), minimum contribution rates would typically increase unless provisions are made to prefund such adjustments. Since the Board has used the Funding Deposit Account to prefund COLAs over the last five 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 of returning inflation measures to their 2% target level. Forecasters seem to believe that long-term average rates of future inflation may remain higher than the target level. 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**

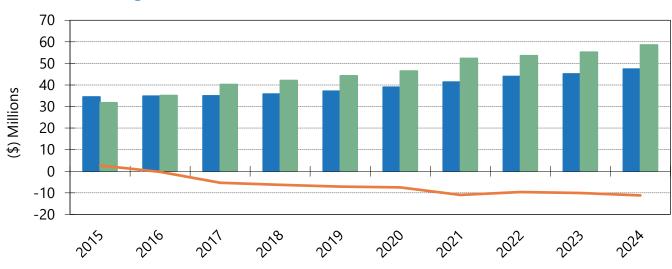
Another element of asset risk is reinvestment risk. Interest rate declines can subject pension plans to an increase in this risk. As fixed income securities mature, investment managers may be forced to reinvest funds at decreasing rates of return. Reinvestment risk was significantly mitigated in recent years as the Federal Reserve increased the Federal Funds Rate. In September 2024, the Federal Reserve changed that policy by reducing that rate for the first time since March 2020. Should Federal Reserve policy continue to reverse the recent cycle of increased interest rates by bringing down the Federal Funds Rate, reinvestment risk will increase.

#### Asset Return Volatility Risk

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

#### **Cash Flow Risk**

The system is also exposed to risk related to cash flow. Where benefit payments exceed contributions to a plan, the plan will be required to use investment income or potentially investment capital to pay benefits. In cases where it is necessary to use investment income to pay retirement benefits, investment market downturns place additional stress on the portfolio and make the recovery from such downturns more difficult since funds available for reinvestment are reduced by benefit payments. The historical cash flow graph and demonstration given below in **Figure 6** compares the total contribution income to benefits and expenses to determine the noninvestment cash flow of the system over the last ten years. In the past nine years, annual benefit payments have exceeded annual contributions to the plan.



#### Figure 6. Annual Net Non-Investment Cash Flows

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Contribution Income (\$Mil)		34.5	34.9	35.0	35.8	37.2	39.0	41.4	44.0	45.2	47.4
Benefits and Expenses (\$Mil)		31.8	35.2	40.3	42.1	44.3	46.5	52.4	53.6	55.3	58.6
Net Non-Inv. Cash Flow (\$Mil)	—	2.7	-0.3	-5.3	-6.3	-7.1	-7.5	-11.0	-9.6	-10.1	-11.2

Future net noninvestment cash flows for the system will be determined based upon both the system maturity and future contribution levels. Hence, increases in future contributions due to adverse actuarial experience will tend to mitigate the potential of negative cash flows arising from the natural maturation of the 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 system, the trend of higher proportions of retired membership may continue and the current trend toward higher levels of negative noninvestment 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 based on the system's current assets and demographics, for each percentage the actuarial rate of return is under the assumed rate of return on the actuarial value of assets, there will be a corresponding increase in the actuarially required contribution as a percentage of projected payroll of 0.79% for the system.

#### 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 2025 by 12.44% of payroll. In the future, adjustments to the assumed rate 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 several risks and risk measures related to system liabilities:

#### **Maturity Risk**

The ability of a system to recover from adverse asset or liability performance is partly related to the maturity of the plan population. In general, plans with increasing active membership are less vulnerable to asset and liability gains and losses than mature plans since changes in plan costs can be partially allocated to new members. If the plan has a large number of active members compared to retirees, asset or liability losses can be more easily addressed. As more members retire, contributions can only be collected from a smaller segment of the overall plan population. Often, population ratios of actives to annuitants are used to measure the plan's ability to adjust or recover from adverse events since

contributions are made by or on behalf of active members but not for retirees. Thus, if the plan suffers a mortality loss through increased longevity, this will affect both actives and retirees, but the system can only fund this loss 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 2024, this ratio is 48%; ten years ago, this ratio was 30%.

#### 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 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 10.11 when measured based on the interest sensitivity of the fund's entry-age normal accrued liability.

#### **Other Liability Risks**

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

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

# **CHANGES IN PLAN PROVISIONS**

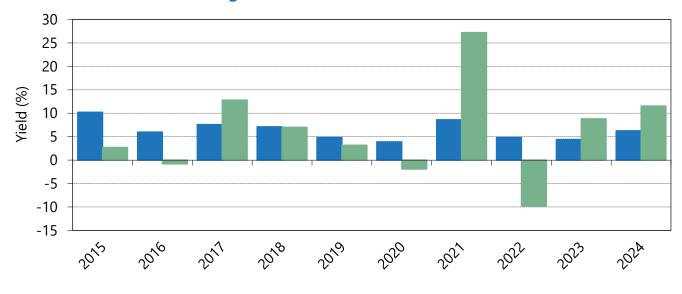
The following legislative changes directly affecting the retirement system were enacted during the 2024 Regular Session of the Louisiana Legislature.

Act 12 of the 2024 regular session of the Louisiana Legislature clarifies that a surviving spouse does not have to be living together with the member at the time of death to qualify for benefits and modifies the Option 1 benefit such that the beneficiary does not have to be duly acknowledged and filed with the board of trustees "at the time of retirement".

Act 46 provides that for systems covered by R.S. 11:103, "employer contributions" as used in the transfer of service credit statute means the actuarially required employer contributions determined in accordance with R.S. 11:103. In other words, funds dedicated to the PBI Funding Account are not eligible for transfer.

### **ASSET EXPERIENCE**

The actuarial and market rates of return for the past ten years are given below. These investment rates of return were determined by assuming a uniform distribution of income and expense throughout the fiscal year.



# Figure 7. Historical Asset Yields

Actuarial Yield

Market Yield

	Market Yield	Actuarial Yield
2015	2.7%	10.2%
2016	-0.8%	6.0%
2017	12.8%	7.6%
2018	7.0%	7.1%
2019	3.2%	4.9%
2020	-1.9%	3.9%
2021	27.2%	8.6%
2022	-9.8%	4.9%
2023	8.8%	4.4%
2024	11.6%	6.3%

Geometric Average Market Rates of Return					
5-year average	(Fiscal 2020 – 2024)	6.4%			
10-year average	(Fiscal 2015 – 2024)	5.7%			
15-year average	(Fiscal 2010 – 2024)	7.8%			
20-year average	(Fiscal 2005 – 2024)	6.0%			
25-year average	(Fiscal 2000 – 2024)	5.4%			
30-year average	(Fiscal 1995 – 2024)	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 and dividends. The rate of return is calculated on assets invested in the system's portfolio. 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 2024, the fund earned \$8,400,041 of dividends, interest and other recurring income. In addition, the system's net income was increased by realized and unrealized capital gains of \$80,587,965. Investment expenses reduced income by \$3,653,198.

The Fiscal 2024 actuarial rate of return is presented for comparison to the assumed long-term rate of return of 6.55%. This rate is calculated based on the actuarial value of assets and the market value income adjusted for actuarial smoothing as given in Exhibit VI. Investment income used to calculate this yield is based upon a smoothing of investment income above or below the valuation interest rate over a five-year period subject to limits as described in the section detailing actuarial assumptions. The difference between rates of return on an actuarial and market value basis results from the smoothing utilized. In the future, yields in excess of the 6.55% assumption will reduce future costs; yields below 6.55% will increase future costs. For Fiscal 2024, the system experienced net actuarial investment losses of \$2,155,463 below the actuarial assumed earnings rate of 6.55% in effect for Fiscal 2024. This shortfall in earnings produced an actuarial loss, which increased the normal cost accrual rate by 0.2122%.

# **DEMOGRAPHICS AND LIABILITY EXPERIENCE**

A reconciliation of the census for the system is given in Exhibit IX. The average active member is 47 years old with 11.69 years of service and an annual salary of \$50,092. The system's active membership decreased during the fiscal year by 28 members. The plan has experienced a decrease in the active plan population of 90 members over the last five years.

The average regular retiree is 72 years old with a monthly benefit of \$2,659. The average age at retirement for regular retirees is 60. The number of retirees and beneficiaries receiving benefits from the system increased by 29 during the fiscal year. Over the last five years, the number of retirees has increased by 199. During this same period, annual benefits in payment increased by \$10,851,251.

Plan liability experience for Fiscal 2024 was slightly positive. Fewer members retiring and entering DROP during the past year and salary increases below expected levels have reduced costs. Withdrawals in excess of projected levels also decreased costs. Disabilities slightly above projected levels and retiree deaths slightly below projected levels partially offset these savings. In aggregate, plan liability gains decreased the normal cost accrual rate by 0.2097%.

# 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 Frozen Attained Age Normal Actuarial Method, the system's normal cost incorporates the cost of additional annual accruals, changes in salary, changes in assumptions, and gains and losses. This funding method does not produce new unfunded accrued liability each year. Instead, the unfunded accrued liability represents a measure of the system's level of funding at the time the State of Louisiana moved to actuarial funding. This Frozen Unfunded Accrued Liability was created in 1989 and is set to be paid off in 2029. Each year a determination is made of the two primary cost components, and the actuarially required contributions are based on the sum of these two components plus administrative expenses. These two components are the normal cost and the scheduled amortization payment on the system's frozen unfunded actuarial accrued liability. Each year the Frozen UAL grows with interest and is reduced by payments. Under the funding method used for the plan, changes in plan experience, benefits, or assumptions do not affect the frozen unfunded actuarial accrued liability. These items increase or decrease future normal costs.

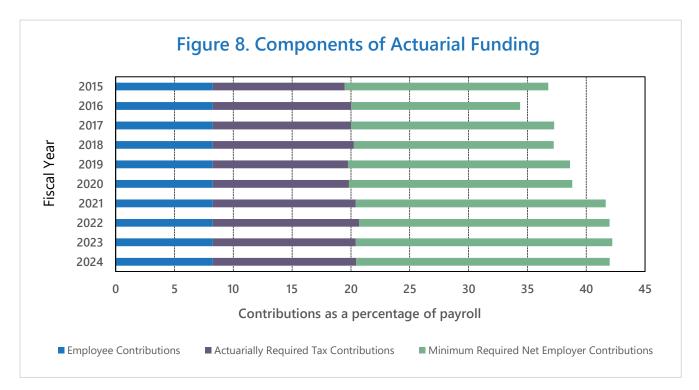
To establish the actuarially required contribution in any given year, it is necessary to define the assumptions, funding method, and method of amortizing the UAL. Thus, the determination of the actuarially required contribution depends upon the funding method and amortization schedules employed. Regardless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

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. We believe that the minimum recommended net direct employer 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.

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The interest adjusted employer normal cost for Fiscal 2025 is \$24,672,734. The interest adjusted amortization payment on the fund's frozen unfunded actuarial accrued liability is \$9,604,814. This annual payment currently represents a cost to employers of 8.99% of projected payroll. Upon its final payment for Fiscal 2029, the employer contribution rate will no longer incorporate this added cost. The gross employer actuarially required contribution is determined by adding estimated administrative expenses to these values. As given on line 16 of Exhibit I the gross employer actuarially required contribution for Fiscal 2025 is \$35,261,423. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for Fiscal 2025 is \$20,496,704 or 19.19% of projected payroll.

The cost of providing benefits to current and former members is borne by employees and employers and relies in part on dedicated ad valorem taxes and revenue sharing funds. **Figure 8** shows the breakdown of annual costs as a percentage of payroll over the past ten years.



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 will increase required future contributions. However, to the extent that COLA's are funded by withdrawals from the Funding Deposit Account, there is no increase in future normal cost since an amount equal to the present value of the additional benefits is released from the Funding Deposit Account to offset the increase in liability. 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 fund's cost structure are outlined below:

RECONCILIATION OF THE NORMAL COST ACCRUAL RATE				
Employer's Normal Cost Accrual Rate – Fiscal 2024	24.6786%			
Factors Increasing the Normal Cost Accrual Rate:				
Asset Experience Loss Cost of Living Increase	0.2122% 0.6187%			
Factors Decreasing the Normal Cost Accrual Rate:				
New Members Plan Liability Experience Gain FDA Offset to fund the 2024 COLA	0.8443% 0.2097% 0.6187%			
Employer's Normal Cost Accrual Rate – Fiscal 2025	23.8368%			

In addition to the above factors, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule the result will be costs that change as a percentage of payroll. For Fiscal 2025, the net effect of the change in payroll on amortization costs was to increase such costs by 0.02% of payroll. 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 these funds will increase by 1.63% of payroll in Fiscal 2025.

Although the minimum recommended net direct employer contribution rate for Fiscal 2024 was 21.75%, the Board of Trustees voted to set the employer contribution rate for Fiscal 2024 at 23.00%. During Fiscal 2024, the system experienced a contribution gain of \$2,728,402. In accordance with R. S. 11:107.1, these additional contributions were credited to the system's Funding Deposit Account as of June 30, 2024. For Fiscal 2025 the minimum recommended net direct employer contribution rate set by the Fiscal 2023 valuation is 21.50%; however, the board-adopted employer contribution rate for Fiscal 2025 is greater than the minimum recommended net direct employer contribution rate for Fiscal 2025 is greater than the minimum recommended net direct employer contribution rate, should the system experience a contribution gain any additional contributions will be credited to the Funding Deposit Account. Since the employers' net direct actuarially required contribution rate for Fiscal 2025 of 19.19% is less than the board-adopted employer contribution rate for Fiscal 2025 of 19.19% is less than the board-adopted employer contribution rate, we do expect the fund to generate a contribution gain during Fiscal 2025 unless payroll during Fiscal 2025 is less than projected payroll or taxes collected are less than projected levels by a sufficient amount.

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 of 19.25% for Fiscal 2026.

Under the provisions of R.S. 11:105, R.S. 11:106 and R.S. 11:107, the Board of Trustees may set the net direct employer contribution at any level between the minimum recommended employer contribution rate of 19.25% and the current employer contribution rate of 23.00%. If the Board sets the net direct employer contribution rate above the minimum rate, any excess funds collected will be deposited in the Funding Deposit Account. Funds in this account can be used to reduce either future required contributions in a particular year, the normal cost accrual rate of the fund, or to reduce the fund's frozen unfunded accrued liability. In addition, the Board of Trustees may grant a cost of living increase to retirees using funds in the Funding Deposit Account, subject to certain limits.

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

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

The standard of practice requires the following when determining the LDROM:

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

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

The U.S. Treasury HQM Corporate Bond Yield Curve is developed using regression variables, projects yield curves beyond the longest maturity date and makes use of bond market characteristics to help generate a stable curve. It represents spot yields of corporate bonds rated AAA, AA, or A and is available monthly on the IRS website. When the June 2023 HQM Corporate Bond Yield Curve is weighted based on the GASB 67 cash flows, the effective single discount rate derived from the analysis is 5.42%.

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 5.42%. All other assumptions match those used to determine funding liabilities.

LDROM Comparison	Fund	ing Valuation	LDF	ROM Valuation
Discount Rate		6.55%		5.42%
Accrued Liability for Active Members	\$	417,235,296	\$	483,379,192
Accrued Liability for Terminated Members	\$	21,970,981	\$	25,032,743
Accrued Liability for Retired Members	\$	528,610,555	\$	577,189,941
Total Actuarial Accrued Liability (AAL)	\$	967,816,832	\$	1,085,601,847
Funded Ratio (AVA/AAL)		83.10%		74.08%

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

# **COST OF LIVING INCREASES**

During Fiscal 2024, the actual cost-of-living (as measured by the US Department of Labor CPI-U) increased by 3.0%. The actual cost-of-living since the most recent COLA (effective January 1, 2024) as measured by CPI-U from December 2023 through June 2024 is 2.4%.

	RELEVANT COLA STATUTES					
Statute	Description	Limitations				
R.S. 11:1549	Allows the Board to grant cost-of-living increases of 2.5% of each retiree's current benefit subject to a limit of \$40 per month.	Applies to those retired for at least one year. Only authorized where there has been a CPI-U increase of at least 3% since the fiscal year in which the last COLA was granted.				
R.S. 11:246	Provides supplemental cost-of-living increases to retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date.	Applies to those retired for at least one year. May only be granted if the system's earnings exceed those which would be realized based on the valuation interest rate as applied to the actuarial value of assets in sufficient amount to offset the present value of the increase or by funding the lifetime cost of the increase through a withdrawal from the Funding Deposit Account balance.				
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.				

R.S. 11:243 sets forth the funding criteria necessary to grant cost of living adjustments to retirees, beneficiaries, and survivors of retired members. The criteria for the fund to qualify as eligible to grant any such increase is as follows: a funded ratio of at least 70% if the system has not granted a benefit increase to retirees, survivors, or beneficiaries in any of the three most recent fiscal years; a funded ratio of at least 80% if the system has not granted such an increase in any of the two most recent fiscal years; or a funded ratio of at least 90% if the system has not granted such an increase in the most recent fiscal years; or a funded ratio at any fiscal year end is the ratio of the actuarial value of assets to the actuarial accrued liability under the funding method prescribed by the legislative auditor (currently the Projected Unit Credit Method for this system.)

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

	COLA HISTORY SINCE 2000
January 1, 2024	2% of benefit in payment on October 1, 1977 <mark>,</mark> or the date the benefit originally received if commenced subsequently; for retirees and survivors over age 65
January 1, 2021	COLA paying \$1 times the number of years of credited service at retirement plus the number of years since retirement; for those retired at least 1 year.
January 1, 2018	COLA paying \$1 times the number of years of credited service at retirement plus the number of years since retirement; for those retired at least 1 year.
January 1, 2014	COLA paying \$1 times the number of years of credited service at retirement plus the number of years since retirement; for those retired at least 1 year.
January 1, 2008	2% of benefit in payment on October 1, 1977, or the date the benefit originally received if commenced subsequently; for retirees and survivors over age 65
January 1, 2007	<ul><li>2.5% of current benefit not to exceed \$40 per month; plus,</li><li>2% of benefit in payment on October 1, 1977, or the date the benefit originally received if commenced subsequently; for retirees and survivors over age 65</li></ul>
January 1, 2003	COLA paying \$1 times the number of years of credited service at retirement plus the number of years since retirement; for those retired at least 1 year.
April 1, 2000	2% of benefit in payment on October 1, 1977, or the date the benefit originally received if commenced subsequently; for retirees and survivors over age 65

# **EXHIBIT I** ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	\$	1,154,427,252
2.	Frozen Unfunded Actuarial Accrued Liability	\$	41,145,459
3.	Actuarial Value of Assets	\$	804,232,341
4.	Funding Deposit Account Credit Balance	\$	7,023,124
5.	Present Value of Future Employee Contributions	<u>\$</u>	73,933,730
6.	Present Value of Future Employer Normal Costs $(1 - 2 - (3 - 4) - 5)$	\$	242,138,846
7.	Present Value of Future Salaries	\$	1,015,817,706
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)		23.836840%
9.	Projected Fiscal 2025 Salary for Current Membership	\$	100,274,816
10.	Employer Normal Cost as of July 1,2024 (8 $\times$ 9)	\$	23,902,347
11.	Employer Normal Cost Interest Adjusted for Mid-year Payment	\$	24,672,734
12.	Amortization Payment on Remaining Frozen Unfunded Accrued Liability		
	with Level Annual Payments	\$	9,304,911
13.	Amortization Payment Interest Adjusted for Mid-year Payment	\$	9,604,814
14.	TOTAL Employer Normal Cost and Amortization Payment (11 + 13)	\$	34,277,548
15.	Estimated Administrative Cost for Fiscal 2025	\$	983,875
16.	GROSS Employer Actuarially Required Contribution		
	for Fiscal 2025 (14 + 15)	\$	35,261,423
17.	Projected Ad Valorem Tax Contributions for Fiscal 2025	\$	(\$14,439,109)
18.	Projected Revenue Sharing Funds for Fiscal 2025	\$	(\$325,610)
19.	Net Direct Employer Actuarially Required Contribution		
	for Fiscal 2025 (16 + 17 + 18)	\$	20,496,704
20.	Projected Payroll for Fiscal 2025	\$	106,824,901
	Employers' Minimum Net Direct Actuarially Required Contribution		10 100/
	as a % of Projected Payroll for Fiscal 2025 (19 ÷ 20)		19.19%
22.	Board Adopted Employer Contribution Rate for Fiscal 2025		23.00%
	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2026 (21, Rounded to nearest 0.25%)		19.25%

### **EXHIBIT II** PRESENT VALUE OF FUTURE BENEFITS

#### PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	\$ 553,979,820	
Survivor Benefits	5,701,767	
Disability Benefits	8,781,799	
Vested Termination Benefits	26,851,076	
Refunds of Contributions	8,531,254	
TOTAL Present Value of Future Benefits for Active Members		\$ 603,845,716

#### PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	\$ 15,675,579
Terminated Members with Reciprocals	
Due Benefits at Retirement	150,693
Terminated Members Due a Refund	6,144,709

TOTAL Present Value of Future Benefits for Terminated Members\$21,970,981

#### **PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:**

Regular Retirees			
Maximum \$ 241,519,540			
Option 1 0			
Option 2 154,002,852			
Option 3			
Option 4 15,105,925			
Option 5			
TOTAL Regular Retirees \$ 4	475,068,095		
Disability Retirees	2,388,547		
Survivors & Widows	26,928,007		
DROP Annuities	69,799		
DROP Account Balances Payable to Retirees	24,156,107		
TOTAL Present Value of Future Benefits for Retirees & Survivors		\$ 5	528,610,555
TOTAL Present Value of Future Benefits	•••••	\$ 1,1	54,427,252

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### **EXHIBIT III – SCHEDULE A** MARKET VALUE OF ASSETS

#### **CURRENT ASSETS:**

Cash in Banks\$ 1,191,440Contributions and Taxes Receivable2,366,749Accrued Interest and Dividends583,037Investments Receivable1,427,870Other Income91,503	
TOTAL CURRENT ASSETS	\$ 5,660,599
Property Plant & Equipment	\$ 775,799
INVESTMENTS:	
Equities \$ 477,679,208   Alternative Investments 58,049   Fixed Income 165,843,227   Real Estate 100,799,785   Cash Equivalents 37,942,043   DROP Account Assets 32,526,676	
TOTAL INVESTMENTS	\$ 814,848,988
TOTAL ASSETS	\$ 821,285,386
CURRENT LIABILITIES:	
Accounts Payable \$ 1,315,275 Investments Payable 2,162,540	
TOTAL CURRENT LIABILITIES	\$ 3,477,815
MARKET VALUE OF ASSETS	\$ 817,807,571

### **EXHIBIT III – SCHEDULE B** ACTUARIAL VALUE OF ASSETS

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

Fiscal year 2024	\$	36,986,068
Fiscal year 2023		15,412,450
Fiscal year 2022		(126,269,439)
Fiscal year 2021		126,233,412
Fiscal year 2020		<u>(55,281,570)</u>
	*	(2.040.070)
Total for five years	\$	(2,919,079)

Deferral of excess (shortfall) of invested income:

Fiscal year 2024 (80%) Fiscal year 2023 (60%) Fiscal year 2022 (40%) Fiscal year 2021 (20%) Fiscal year 2020 ( 0%)	29,588,854 9,247,470 (50,507,776) 25,246,682 <u>0</u>
Total deferred for year	\$ 13,575,230
Market value of plan net assets, end of year	\$ 817,807,571
Preliminary actuarial value of plan assets, end of year	\$ 804,232,341
Actuarial value of assets corridor	
85% of market value, end of year	\$ 695,136,435
115% of market value, end of year	\$ 940,478,707
Final actuarial value of plan net assets, end of year	\$ 804,232,341

# **EXHIBIT IV PRESENT VALUE OF FUTURE CONTRIBUTIONS**

Employee Contributions to the Annuity Savings Fund	\$ 73,933,730
Employer Normal Contributions to the Pension Accumulation Fund	242,138,846
Employer Amortization Payments to the Pension Accumulation Fund	41,145,459
Funding Deposit Account Credit Balance	(7,023,124)

#### TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS ...... \$ 350,194,911

### EXHIBIT V – SCHEDULE A CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability	\$ 47,921,015
Interest on Frozen Unfunded Accrued Liability \$ 3,138,826	
TOTAL Increase in Unfunded Accrued Liability	\$ 3,138,826
Amortization Payment on Unfunded Accrued Liability\$9,304,911Interest on Amortization Payment609,471Withdrawals From Funding Deposit Account0	
TOTAL Decrease in Unfunded Accrued Liability	\$ 9,914,382
NET Change in Frozen Unfunded Accrued Liability	\$ (6,775,556)
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 41,145,459

### **EXHIBIT V – SCHEDULE B** RECONCILIATION OF CONTRIBUTIONS

Interest Adjusted Prior Year Employer Normal Cost\$26,355,746Interest Adjusted Amortization Payment on Remaining UAL9,914,383Interest Adjusted Administrative Expenses868,205	
TOTAL Interest Adjusted Actuarially Required Contributions	\$ 37,138,334
Interest Adjusted Direct Employer Contributions\$25,551,461Interest Adjusted Ad Valorem Taxes and Revenue Sharing14,315,275	
TOTAL Interest Adjusted Employer Contributions	\$ 39,866,736
CONTRIBUTION SHORTFALL (SURPLUS)	\$ (2,728,402)

# **EXHIBIT VI** ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (June 30, 2023)	\$ 767,642,054
INCOME:	
Member Contributions\$ 8,133,570Employer Contributions24,753,637Tax Revenue13,868,292Transfers from Other Systems494,124Other Income191,137	
Total Contributions	\$ 47,440,760
Net Appreciation of Investments\$ 80,587,965Interest & Dividends8,400,041Investment Expense(3,653,198)	
Net Investment Income	\$ 85,334,808
TOTAL Income	\$ 132,775,568
EXPENSES:	
Retirement Benefits\$ 49,272,111DROP Disbursements6,833,852Refunds of Contributions960,101Transfers to Other Systems708,238Administrative Expenses841,097	
TOTAL Expenses	\$ 58,615,399
Net Market Value Income for Fiscal 2024 (Income – Expenses)	\$ 74,160,169
Unadjusted Fund Balance as of June 30, 2024 (Fund Balance Previous Year + Net Income)	\$ 841,802,223
Adjustment for Actuarial Smoothing	\$ (37,569,882)
Actuarial Value of Assets: (June 30, 2024)	\$ 804,232,341

### **EXHIBIT VII** FUNDING DEPOSIT ACCOUNT

Funding Deposit Account Balance as of June 30, 2023	\$ 9,929,258
Interest on Opening Balance at 6.55%	650,366
Contributions to the Funding Deposit Account	2,728,402
Withdrawals from the Funding Deposit Account	(6,284,902)
Funding Deposit Account Balance as of June 30, 2024	\$ 7,023,124

### **EXHIBIT VIII – SCHEDULE A** PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	\$ 409,454,801
Present Value of Benefits Payable to Terminated Employees	21,970,981
Present Value of Benefits Payable to Current Retirees and Beneficiaries	528,610,555
TOTAL PENSION BENEFIT OBLIGATION	\$ 960,036,337
NET ACTUARIAL VALUE OF ASSETS	\$ 804,232,341
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	83.77%

### EXHIBIT VIII – SCHEDULE B ENTRY AGE NORMAL ACCRUED LIABILITIES

Accrued Liability for Active Employees	\$ 417,235,296
Accrued Liability for Terminated Employees	21,970,981
Accrued Liability for Current Retirees and Beneficiaries	528,610,555
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	\$ 967,816,832
ACTUARIAL VALUE OF ASSETS	\$ 804,232,341
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability	83.10%

# EXHIBIT IX CENSUS DATA

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2023	2,022	1,004	112	1,584	4,722
Additions to Census Initial membership Omitted in error last year	179	17			196
Death of another member Adjustment for multiple records				11	11
Change in Status during Year Actives terminating service Actives who retired	(114) (31)	114		31	
Actives entering DROP Term. members rehired Term. members who retire	(44) 3	(3) (7)	44	7	
Retirees who are rehired Refunded who are rehired DROP participants retiring DROP returned to work	2 20	5	(26) (20)	26	7
Eliminated from Census Refund of contributions Deaths Included in error last year Adjustment for multiple records	(39) (2)	(38)	(0)	(46)	(77) (48)
Number of members as of June 30, 2024	1,996	1,092	110	1,613	4,811

#### **Actives Census by Age:**

Ag	е		Number Male	Number Female	Total Number	Average Salary	Total Salary
16	-	20	2	10	12	29,576	354,909
21	-	25	22	71	93	32,690	3,040,157
26	-	30	28	135	163	35,584	5,800,155
31	-	35	22	163	185	39,178	7,247,946
36	-	40	34	224	258	44,524	11,487,136
41	-	45	31	228	259	47,717	12,358,624
46	-	50	32	199	231	54,086	12,493,879
51	-	55	33	207	240	56,464	13,551,448
56	-	60	47	222	269	58,860	15,833,420
61	-	65	31	201	232	56,594	13,129,890
66	-	70	24	70	94	59,689	5,610,806
71	-	75	15	32	47	60,462	2,841,714
76	-	80	13	8	21	77,613	1,629,863
81	-	85	0	2	2	56,752	113,503
Tot	al		334	1,772	2,106	50,092	105,493,450

\* The active census includes 859 actives with vested benefits, including 85 active former DROP participants and 110 current DROP participants.

#### **DROP Participants by Age:**

Age			Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51	-	55	0	1	1	44,932	44,932
56	-	60	9	37	46	54,842	2,522,726
61	-	65	3	34	37	35,897	1,328,204
66	-	70	4	12	16	24,832	397,317
71	-	75	3	3	6	46,336	278,013
76	-	80	3	1	4	31,839	127,356
Total			22	88	110	42,714	4,698,548

	Age		Number Male	Number Male Number Female Total Nun		Average Benefit	Total Benefit
31	-	35	0	1	1	10,143	10,143
36	-	40	0	8	8	21,125	169,003
41	-	45	4	15	19	23,887	453,857
46	-	50	1	15	16	20,480	327,675
51	-	55	4	28	32	25,013	800,405
56	-	60	1	0	1	12,850	12,850
81	-	85	0	1	1	11,518	11,518
-	Tota	al	10	68	78	22,890	1,785,451

#### **Terminated Members Due a Deferred Retirement Benefit:**

#### **Terminated Members Due a Refund of Contributions:**

<b>Contributions Ranging</b>			Number	Total
From	From To			Contributions
0	-	99	62	2,484
100	-	499	147	44,008
500	-	999	119	89,263
1,000	-	1,999	122	175,826
2,000	-	4,999	192	637,443
5,000	-	9,999	157	1,170,868
10,000	-	19,999	149	2,092,739
20,000	-	99,999	66	1,912,087
Total		1,014	6,124,718	

Excludes deceased members whose beneficiaries are due a refund of \$19,991.

# **Regular Retirees:**

	Age		Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51	-	55	0	5	5	24,889	124,444
56	-	60	17	94	111	35,431	3,932,842
61	-	65	26	242	268	36,640	9,819,472
66	-	70	34	297	331	36,273	12,006,479
71	-	75	41	254	295	30,889	9,112,383
76	-	80	38	168	206	26,942	5,550,131
81	-	85	22	115	137	26,481	3,627,855
86	-	90	8	58	66	25,417	1,677,516
91	-	95	6	26	32	16,636	532,362
96	-	100	0	6	6	16,600	99,597
	Tota	al	192	1,265	1,457	31,903	46,483,081

### **Disability Retirees:**

	Age		Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46	-	50	0	2	2	22,809	45,617
51	-	55	1	1	2	37,649	75,297
56	-	60	0	1	1	13,503	13,503
61	-	65	1	2	3	14,148	42,445
66	-	70	0	1	1	11,596	11,596
71	-	75	0	1	1	12,594	12,594
81	-	85	0	2	2	12,138	24,276
	Total		2	10	12	18,777	225,328

#### **Survivors:**

	Age		Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0	-	20	1	1	2	1,330	2,660
26	-	30	0	1	1	62,444	62,444
31	-	35	1	0	1	4,657	4,657
36	-	40	1	1	2	11,804	23,608
46	-	50	1	1	2	8,892	17,783
51	-	55	3	3	6	15,735	94,410
56	-	60	2	3	5	21,092	105,461
61	-	65	5	4	9	17,690	159,209
66	-	70	6	6	12	22,783	273,398
71	-	75	13	13	26	31,070	807,822
76	-	80	13	2	15	25,418	381,269
81	-	85	5	13	18	35,667	641,997
86	-	90	5	20	25	21,097	527,429
91	-	95	3	10	13	29,522	383,785
96	-	100	2	4	6	19,597	117,582
101	-	105	0	1	1	15,143	15,143
-	Tota	al	61	83	144	25,130	3,618,657

— CURRAN ACTUARIAL CONSULTING, LTD. —

### **Active Members:**

	Completed Years of Service											
Attained Ages	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	Over 30	Total			
0 - 20	8	4	-	-	-	-	-	-	12			
21 - 25	28	60	5	-	-	-	-	-	93			
26 - 30	29	93	40	1	-	-	-	-	163			
31 - 35	21	70	58	34	2	-	-	-	185			
36 - 40	19	80	63	49	44	3	-	-	258			
41 - 45	18	61	55	41	47	35	2	-	259			
46 - 50	20	39	45	22	35	36	32	2	231			
51 - 55	8	37	41	27	33	35	37	22	240			
56 - 60	12	41	35	41	43	29	31	37	269			
61 - 65	9	34	32	31	38	31	26	31	232			
66 - 70	2	13	17	20	20	2	8	12	94			
71 & Over	3	12	9	14	13	5	4	10	70			
Total	177	544	400	280	275	176	140	114	2,106			

### **Average Annual Salary of Active Members:**

	Completed Years of Service											
Attained Ages	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	Over 30	Average			
0 - 20	27,798	33,131	-	-	-	-	-	-	29,576			
21 - 25	30,162	33,359	38,819	-	-	-	-	-	32,690			
26 - 30	32,491	34,032	41,431	35,700	-	-	-	-	35,584			
31 - 35	31,891	35,929	42,610	44,268	43,372	-	-	-	39,178			
36 - 40	33,697	37,627	42,477	50,429	55,372	84,440	-	-	44,524			
41 - 45	31,991	38,461	43,163	57,124	55,832	56,479	59,855	-	47,717			
46 - 50	33,102	37,604	49,307	48,191	66,875	69,645	63,708	99,885	54,086			
51 - 55	34,885	44,145	48,155	45,982	54,391	69,961	68,820	74,240	56,464			
56 - 60	29,464	43,227	50,473	59,416	56,149	57,802	74,530	83,889	58,860			
61 - 65	32,762	39,155	47,150	54,021	59,669	63,768	66,263	75,911	56,594			
66 - 70	39,429	50,323	44,385	48,570	62,428	101,72	59,500	101,983	59,689			
71 & Over	42,038	45,608	41,780	46,683	75,035	102,75	54,807	117,362	65,501			
Average	32,144	37,822	44,929	51,397	58,867	65,660	67,380	84,979	50,092			

	Years until Retirement Eligibility											
Attained Ages	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	Over 20	Total			
0 - 30	-	-	-	-	-	-	-	-	-			
31 - 35	-	-	-	-	-	-	-	1	1			
36 - 40	-	-	-	-	-	2	5	1	8			
41 - 45	-	-	-	-	1	17	1	-	19			
46 - 50	-	-	-	-	15	1	-	-	16			
51 - 55	12	10	3	7	-	-	-	-	32			
56 - 60	1	-	-	-	-	-	-	-	1			
61 - 65	-	-	-	-	-	-	-	-	-			
66 - 70	-	-	-	-	-	-	-	-	-			
71 & Over	1	-	-	-	_		-	-	1			
Total	14	10	3	7	16	20	6	2	78			

### **Terminated Members Due a Deferred Retirement Benefit:**

# Average Annual Benefits of Terminated Members Due a Deferred Retirement Benefit:

	Years until Retirement Eligibility											
Attained Ages	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	Over 20	Average			
0 - 30	-	-	-	-	-	-	-	-	-			
31 - 35	-	-	-	-	-	-	-	10,143	10,143			
36 - 40	-	-	-	-	-	25,293	21,300	11,915	21,125			
41 - 45	-	-	-	-	13,917	24,467	24,000	-	23,887			
46 - 50	-	-	-	-	21,024	12,312	-	-	20,480			
51 - 55	21,574	23,861	37,710	27,112	-	-	-	-	25,013			
56 - 60	12,850	-	-	-	-	-	-	-	12,850			
61 - 65	-	-	-	-	-	-	-	-	-			
66 - 70	-	-	-	-	-	-	-	-	-			
71 & Over	11,518	-	-	-	-	-	-	-	11,518			
Average	20,232	23,861	37,710	27,112	20,580	23,942	21,750	11,029	22,890			

## **Service Retirees:**

	Completed Years Since Retirement											
Attained Ages	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	Over 20	Total			
0 - 50	-	-	-	-	-	-	-	-	-			
51 - 55	5	-	-	-	-	-	-	-	5			
56 - 60	19	23	28	36	5	-	-	-	111			
61 - 65	15	12	30	65	138	8	-	-	268			
66 - 70	13	14	15	21	125	138	5	-	331			
71 - 75	8	7	7	23	70	86	93	1	295			
76 - 80	1	2	5	7	46	45	52	48	206			
81 - 85	-	1	1	2	15	20	21	77	137			
86 - 90	-	-	-	3	-	5	10	48	66			
91 & Over	-	-	1	-	1	-	4	32	38			
Total	61	59	87	157	400	302	185	206	1,457			

# Average Annual Benefits Payable to Service Retirees:

	Completed Years Since Retirement											
Attained Ages	0 - 1	1 - 2	2 - 3	3 - 5	5 - 10	10 - 15	15 - 20	Over 20	Average			
0 - 50	-	-	-	-	-	-	-	-	-			
51 - 55	24,889	-	-	-	-	-	-	-	24,889			
56 - 60	40,333	35,356	28,438	39,378	27,893	-	-	-	35,431			
61 - 65	41,183	35,411	35,701	41,827	34,620	26,182	-	-	36,640			
66 - 70	35,821	32,073	26,888	41,132	41,087	33,182	21,946	-	36,273			
71 - 75	26,849	23,178	50,585	38,024	32,594	30,497	27,813	15,740	30,889			
76 - 80	11,337	23,586	16,994	23,934	31,210	27,654	29,558	21,292	26,942			
81 - 85	-	30,126	67,828	9,565	38,032	36,975	27,223	21,157	26,481			
86 - 90	-	-	-	101,246	-	33,300	31,846	18,517	25,417			
91 & Over	-	-	48,060	-	15,966	-	19,408	15,322	16,631			
Average	36,071	32,656	32,478	40,542	35,892	31,661	28,114	19,641	31,903			

### **Disability Retirees:**

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

# Average Annual Benefits Payable to Disability Retirees:

	Completed Years Since Retirement											
Attained Ages	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	Over 30	Average			
0 - 30	-	-	-	-	-	-	-	-	-			
31 - 35	-	-	-	-	-	-	-	-	-			
36 - 40	-	-	-	-	-	-	-	-	-			
41 - 45	-	-	-	-	-	-	-	-	-			
46 - 50	22,809	-	-	-	-	-	-	-	22,809			
51 - 55	64,983	-	10,314	-	-	-	-	-	37,649			
56 - 60	-	-	-	-	13,503	-	-	-	13,503			
61 - 65	-	-	19,457	10,241	-	12,747	-	-	14,148			
66 - 70	-	-	-	11,596	-	-	-	-	11,596			
71 - 75	-	12,594	-	-	-	-	-	-	12,594			
76 - 80	-	-	-	-	-	-	-	-	-			
81 & Over	-	14,372	-	-	-	9,904	-	-	12,138			
Average	36,867	13,483	14,886	10,919	13,503	11,326	-	-	18,777			

	Completed Years Since Retirement											
Attained Ages	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	Over 30	Total			
0 - 30	-	-	3	-	-	-	-	-	3			
31 - 35	-	-	-	-	1	-	-	-	1			
36 - 40	-	-	-	-	2	-	-	-	2			
41 - 45	-	-	-	-	-	-	-	-	-			
46 - 50	-	-	-	1	1	-	-	-	2			
51 - 55	-	1	1	3	-	1	-	-	6			
56 - 60	-	1	2	-	-	2	-	-	5			
61 - 65	-	1	4	-	3	1	-	-	9			
66 - 70	-	2	3	3	2	1	1	-	12			
71 - 75	-	-	8	7	7	1	1	2	26			
76 - 80	-	-	3	2	5	5	-	-	15			
81 & Over	-	1	2	9	4	16	10	21	63			
Total	-	6	26	25	25	27	12	23	144			

### **Surviving Beneficiaries of Former Members:**

## Average Annual Benefits Payable to Survivors of Former Members:

Completed Years Since Retirement										
Attained Ages	0 - 1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	Over 30	Average	
0 - 30	-	-	21,701	-	-	-	-	-	21,701	
31 - 35	-	-	-	-	4,657	-	-	-	4,657	
36 - 40	-	-	-	-	11,804	-	-	-	11,804	
41 - 45	-	-	-	-	-	-	-	-	-	
46 - 50	-	-	-	6,941	10,842	-	-	-	8,892	
51 - 55	-	19,239	29,872	12,681	-	7,255	-	-	15,735	
56 - 60	-	28,394	33,023	-	-	5,511	-	-	21,092	
61 - 65	-	34,060	19,060	-	15,099	3,613	-	-	17,690	
66 - 70	-	10,801	38,386	19,189	33,239	7,508	5,087	-	22,783	
71 - 75	-	-	41,698	26,153	26,354	41,427	32,741	16,259	31,070	
76 - 80	-	-	10,417	32,571	40,270	16,705	-	-	25,418	
81 & Over	-	96,629	109,297	41,525	41,853	12,715	25,194	17,819	26,761	
Average	-	33,321	35,994	28,980	28,165	13,252	24,147	17,683	25,130	

## EXHIBIT X YEAR-TO-YEAR COMPARISON

	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021
Number of Active Members Number of Retirees & Survivors Number of Terminated Due Deferred Benefits Number Terminated Due Refunds	2,106 1,613 78 1,014	2,134 1,584 67 937	2,134 1,570 67 842	2,186 1,513 73 758
Active Lives Payroll	\$ 105,493,450	\$ 104,780,822	\$ 99,956,242	\$ 99,168,314
Retiree Benefits in Payment	\$ 50,327,066	\$ 48,122,247	\$ 47,283,505	\$ 45,056,002
Market Value of Assets	\$ 817,807,571	\$ 743,647,402	\$ 693,234,084	\$ 778,388,343
Entry Age Normal Accrued Liability	\$967,816,832	\$ 942,365,952	\$919,516,517	\$895,507,526
Ratio of AVA to EAN Accrued Liability	83.10%	81.46%	81.03%	80.35%
Actuarial Value of Assets	\$ 804,232,341	\$ 767,642,054	\$ 745,089,408	\$ 719,550,211
Frozen Unfunded Actuarial Accrued Liability	\$ 41,145,459	\$ 47,921,015	\$ 54,280,054	\$ 60,248,181
Present Value of Future Employer Normal Cost	\$ 242,138,846	\$ 249,673,608	\$ 236,558,903	\$ 230,116,485
Present Value of Future Employee Contrib.	\$ 73,933,730	\$ 73,585,375	\$ 70,042,991	\$ 69,109,669
Funding Deposit Account Balance	\$ 7,023,124	\$ 9,929,258	\$ 7,614,046	\$ 6,218,667
Present Value of Future Benefits	\$ 1,154,427,252	\$ 1,128,892,794	\$ 1,098,357,310	\$ 1,072,805,879

	Fiscal 2025	Fiscal 2024	Fiscal 2023	Fiscal 2022
Employee Contribution Rate	8.25%	8.25%	8.25%	8.25%
Estimated Tax Contribution as a % of Payroll	13.82%	12.19%	12.17%	12.44%
Actuarially Required Net Direct Employer Contribution Rate	19.19%	21.55%	21.79%	21.28%
Actual Employer Contribution Rate	23.00%	23.00%	22.25%	22.25%

+ Exceeds minimum recommended employer contribution rate in years where Board elected to hold the rate higher.

Fiscal 2020 Fiscal 2019		Fiscal 2018		Fiscal 2017		Fiscal 2016		iscal 2015	
	2,209 1,459 70 679	2,196 1,414 78 618		2,205 1,360 78 585	2,164 1,311 78 550		2,208 1,235 81 500		2,234 1,173 78 471
\$	97,551,861	\$ 95,247,068	\$	92,738,643	\$ 89,180,971	\$	90,323,689	\$	89,814,463
\$	41,681,173	\$ 39,475,815	\$	37,248,506	\$ 34,679,675	\$	30,727,570	\$	28,162,472
\$	621,541,786	\$ 641,204,758	\$	628,437,651	\$ 593,677,582	\$	531,220,994	\$	535,853,689
\$	845,767,564	\$ 805,671,731	\$	777,615,742	\$ 729,009,277	\$	700,260,558	\$	669,774,954
	79.59%	81.33%		81.22%	81.72%		79.81%		78.76%
\$	673,105,546	\$ 655,273,733	\$	631,612,601	\$ 595,749,559	\$	558,910,784	\$	527,535,949
\$	65,798,853	\$ 70,998,546	\$	75,869,452	\$ 80,361,839	\$	84,560,331	\$	86,060,294
\$	213,871,483	\$ 180,972,019	\$	168,433,783	\$ 141,532,146	\$	144,555,899	\$	141,097,058
\$	65,395,769	\$ 63,205,970	\$	60,449,719	\$ 56,483,625	\$	56,237,290	\$	55,853,464
\$	10,803,791	\$ 9,429,752	\$	7,981,218	\$ 9,388,977	\$	7,741,426	\$	3,449,340
\$	1,007,367,860	\$ 961,020,516	\$	928,384,337	\$ 864,738,192	\$	836,522,878	\$	807,097,425

Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016
8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
12.17%	11.58%	11.50%	12.00%	11.76%	11.76%
21.24%	18.99%	18.87%	16.99%	17.27%	14.37%
21.00%	19.00%	19.00%	19.00%	19.00%	19.00%

## SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Clerks' of Court Retirement and Relief Fund is a defined benefit pension plan which provides retirement allowances and other benefits. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

#### MEMBERSHIP

Members include the clerk of the supreme court, the clerks of each of the courts of appeal, each of the district courts, and each of the city and traffic courts in cities having a population in excess of four hundred thousand, and the employees of such clerks, who work an average of more than twenty hours per week, and the employees of the Louisiana Clerks of Court Association, the Louisiana Clerks' of Court Retirement and Relief Fund, and the Louisiana Clerks of Court Insurance Fund.

#### **CONTRIBUTION RATES**

Under the provisions of R.S. 11:62 and 11:103, the fund is financed by statutory employee contributions of 8.25% of earnable compensation. (Under R.S. 11:1562(C), the employer may elect to pay all or a portion of the employee contributions). In addition, the fund receives revenue sharing funds as appropriated each year by the legislature. Also, under R.S. 11:82, each sheriff and ex-officio tax collector remits the employers' share of the actuarially required contribution to fund the system's defined benefit plan up to a maximum of 0.25% of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish. Should employee contributions and tax funds collected from ad valorem taxes and revenue sharing funds be insufficient to provide for the gross employer actuarially required contribution, the employer is required to make direct contributions as determined by the Public Retirement Systems' Actuarial Committee. Under R.S. 11:106, the Board of trustees is authorized to require a net direct contribution rate of up to three percent more than the rate determined under R.S. 11:103. Under R.S. 11:105 and R.S. 11:207, in any fiscal year during which the net direct employer contribution rates would otherwise be decreased, the Board of trustees is authorized to set the employer contribution rate at any point between the previous year's employer contribution rate and the decreased rate that would otherwise occur. Any excess funds resulting from the additional contributions will be credited to the Funding Deposit Account defined in R.S. 11:107.1.

#### 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.

#### **RETIREMENT BENEFITS**

Members with twelve or more years of creditable service may retire at age fifty-five (age sixty if they are hired on or after January 1, 2011). The retirement allowance is equal to three percent of the member's monthly average final compensation multiplied by the number of years of creditable service, not to exceed one hundred percent of monthly average final compensation. The retirement benefit accrual rate is increased to 3 1/3% for all service credit accrued after June 30, 1999 (for members hired prior to

January 1, 2011). For members whose first employment making them eligible for system membership began before July 1, 2006 and who retire prior to January 1, 2011, monthly average final compensation is based on the highest thirty-six consecutive months, with a limit of increase of 10% in each of the last three years of measurement. For members whose first employment making them eligible for system membership began on or after July 1, 2006, monthly average final compensation is based on the highest compensated sixty consecutive months or successive joined months if service was interrupted, with a limit increase of 10% in each of the last five years of measurement. For members of measurement. For members who were employed prior to July 1, 2006 and who retire after December 31, 2010, the period of final average compensation is thirty-six months plus the number of whole months elapsed since January 1, 2011, not to exceed sixty months.

#### **OPTIONAL ALLOWANCES**

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

Option 1 – If the member dies before he has received in annuity payments the present value of his member's annuity as it was at the time of retirement the balance is paid to his beneficiary.

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

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

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

Option 5 – Upon retirement, the member receives 90% of the maximum benefit. Upon the death of the member, the spouse receives one-half of the reduced benefit.

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

#### **DISABILITY BENEFITS**

Disability benefits are awarded to active members who are totally and permanently disabled as a result of injuries sustained in the line of duty or to active members with ten or more years of creditable service who are totally disabled due to any cause. A member who is officially certified as totally and permanently disabled by the State Medical Disability Board will be paid monthly disability retirement benefits equal to the greater of forty percent of their monthly average final compensation or seventy-five percent of their monthly regular retirement benefit computed as per R.S. 11:1521(C).

#### SURVIVOR BENEFITS

Upon the death of any active contributing member with less than five years of creditable service, his accumulated contributions are paid to his designated beneficiary. Upon the death of any active contributing member with five or more years of service, automatic option 2 benefits are payable to the surviving spouse. These benefits are based on the retirement benefits accrued at the member's date of death with option factors used as if the member had continued in service to earliest normal retirement age. Benefit payments commence on the date a member would have first become eligible for normal retirement assuming continued service until that time. In lieu of a deferred survivor benefit, the surviving spouse may elect benefits payable immediately with benefits reduced one-quarter of 1% for each month by which payments commence in advance of member's earliest normal retirement age. If a member has no surviving spouse, the surviving minor children under eighteen or disabled children are paid one-half of the member's accrued retirement benefit in equal shares. Upon the death of any former member with less than twelve years of service, the designated beneficiary may receive his accumulated contributions. Upon the death of any former member with twelve or more years of service, automatic option 2 benefits are payable to the surviving spouse with payments to commence on the member's retirement eligibility date. In lieu of periodic payments, the surviving spouse or children may receive a refund of the member's accumulated contributions.

#### DEFERRED RETIREMENT OPTION PLAN

In lieu of terminating employment and accepting a service retirement allowance, any member of the system who is eligible for a service retirement allowance may elect to participate in the Deferred Retirement Option Plan for up to thirty-six months and defer the receipt of benefits. Upon commencement of participation in the plan, active membership in the system terminates and the participant's contributions cease; however, employer contributions continue. Compensation and creditable service remain as they existed on the effective date of commencement of participation in the plan. The monthly retirement benefits that would have been payable, had the member elected to cease employment and receive a service retirement allowance, are paid into the Deferred Retirement Option Plan account. Upon termination of employment at the end of the specified period of participation, a participant in the program may receive, at his option, a lump sum payment from the account equal to the payments to the account, or a true annuity based upon his account (subject to approval by the Board of Trustees); in addition, the member receives the monthly benefits that were paid into the fund during the period of participation. If employment is not terminated at the end of the participation period, payments into the account cease and the member resumes active contributing membership in the system. Interest is paid on DROP account balances for members who complete their DROP participation but do not terminate employment. The interest earnings are based on the actual rate of return on funds in such accounts. These interest accruals cease upon termination of employment. Upon termination, the member receives a lump sum payment from the DROP fund equal to the payments made to that fund on his behalf, or a true annuity based on his account (subject to approval by the Board of Trustees). The monthly benefit payments that were being paid into the DROP fund are paid to the retiree and an additional benefit based on his additional service rendered since termination of DROP participation is calculated using the normal method of benefit computation. Prior to January 1, 2011, the average compensation used to calculate the additional benefit is that used to calculate the original benefit unless his period of additional service is at least thirty-six months; effective January 1, 2011 the average compensation for members whose additional service is less than thirty-six months is equal to the lesser of the amount used to calculate his original benefit or the compensation earned in the period of additional service divided by the number of months of additional service. For former DROP participants who retire after December 31, 2010, the period used to determine final average compensation for post-DROP service is thirty-six months plus the number of whole months elapsed from January 1, 2011 to the date of DROP entry. In no event can the entire monthly benefit amount paid to the retiree exceed 100% of the average compensation used to compute the additional benefit. If a participant dies during the period of participation in the program, a lump sum payment equal to his account balance is paid to his named beneficiary or, if none, to his estate.

### COST OF LIVING ADJUSTMENTS

The Board of Trustees is authorized to grant retired members and widows of members who have been retired for at least one full calendar year an annual cost of living increase of 2.50% of their benefit (not to exceed forty dollars per month), and all retired members and widows who are sixty-five years of age and older a 2% increase in their original benefit (or their benefit as of October 1, 1977, if they retired prior to that time). In order to grant the 2.50% COLA the increase in the Consumer Price Index must have exceeded 3% since the last COLA granted. In order for the Board to grant either of these increases, the system must meet certain other criteria detailed in the statute related to funding status. In lieu of the prior provisions, R.S. 11:241 provides for cost of living benefits payable based on a formula equal to up to \$1 times the total of the number of years of credited service accrued at retirement or at death of the member or retiree plus the number of years since retirement or since death of the member or retiree to the system's fiscal year end preceding the payment of the benefit increase. In order for the board to grant any of these increases, the system must meet certain criteria detailed in the statutes related to funding status related to funding status and interest earnings.

# **ACTUARIAL ASSUMPTIONS**

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors which 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

#### ACTUARIAL COST METHOD

Frozen Attained Age Normal Actuarial Method with allocation based on earnings. The actuarial accrued liabilities utilized to calculate the frozen unfunded accrued liability were calculated on the Projected Unit Credit Cost Method. Changes in assumptions and plan benefits are funded through adjustments to future normal costs.

#### VALUATION INTEREST RATE

6.55% (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 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

Salary increases include 2.4% inflation and merit increases. The gross rates including inflation and merit increases are as follows:

Years of Service (less than or equal to)	Salary Increase (in the following year)		
1 – 5	6.2%		
Above 5	5.0%		

#### ACTIVE MEMBER MORTALITY

Pub-2010 Public Retirement Plans Mortality Table for General Employees multiplied by 120% for males and 120% for females, each with full generational projection using the MP2019 scale.

#### ANNUITANT AND BENEFICIARY MORTALITY:

Pub-2010 Public Retirement Plans Mortality Table for General Healthy Retirees multiplied by 120% for males and 120% for females, each with full generational projection using the MP2019 scale.

#### DISABLED LIVES MORTALITY

Pub-2010 on-Safety Disabled Retiree Table multiplied by 120% for males and 120% for females, each with full generational projection using the MP2019 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. These rates apply only to those individuals eligible to retire. For Tiers 1 and 2, the rates shown are not adjusted for members at first eligibility. For Tier 3 only, the assumed rate of retirement for members at first eligibility is multiplied by 1.5 times the relevant rate listed in the table of these rates.

#### **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 retire. For Tiers 1 and 2, the rates shown are not adjusted for members at first eligibility. For Tier 3 only, the assumed rate of retirement for members at first eligibility is multiplied by 2.8 times the relevant rate listed in the table of these rates.

#### **DROP PARTICIPATION**

All persons who enter the DROP are assumed to participate for the full 3 year period and 2/3 are assumed to retire at the end of DROP participation with 1/3 assumed to work 4 years post DROP and then retire.

#### RATES OF WITHDRAWAL

The rates of withdrawal are applied based upon completed years of service according to the following table:

Service Duration (≤)	Factor	Service Duration (≤)	Factor
1	0.180	11	0.040
2	0.130	12	0.030
3	0.100	13	0.030
4	0.080	14	0.030
5	0.070	15	0.030
6	0.070	16	0.030
7	0.070	17	0.030
8	0.060	18	0.030
9	0.050	19 – 23	0.020
10	0.050	>23	0.010

Note: Withdrawal rates for members eligible to retire are assumed to be zero.

#### **RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS**

The rates of retirement for active former DROP participants are included later in this report.

#### MARRIAGE STATISTICS

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

#### FAMILY STATISTICS

Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in 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	Remarriage Rates
25	60%	1.77	4	0.04566
35	82%	2.11	8	0.02636
45	63%	1.75	11	0.01355
55	11%	1.42	14	N/A
65	2%	1.50	14	N/A

#### **DISABILITY RATES**

55% of the disability rates used for the 27<sup>th</sup> valuation of the Railroad Retirement System for individuals with 10-19 years of service. The table of these rates is included later in the report.

### SERVICE-RELATED DISABILITIES

10% of total disabilities

#### VESTING ELECTING PERCENTAGE

80% of those vested elect deferred benefits in lieu of contribution refunds.

# **ACTUARIAL TABLES AND RATES**

Age	Tier 1 and 2 Retirement Rates	Tier 3 Retirement Rates	Tier 1 and 2 DROP Entry Rates	Tier 3 DROP Entry Rates	Disability Rates	Tier 1 and 2 Post-DROP Retirement Rates	Tier 3 Post-DROP Retirement Rates
18	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
19	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
20	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
22	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
23	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
24	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
25	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
26	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
27	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
28	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
29	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
30 31	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000	0.00066 0.00066	0.00000 0.00000	0.00000 0.00000
32	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
33	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
34	0.00000	0.00000	0.00000	0.00000	0.00066	0.00000	0.00000
35	0.00000	0.00000	0.00000	0.00000	0.00072	0.00000	0.00000
36	0.00000	0.00000	0.00000	0.00000	0.00072	0.00000	0.00000
37	0.00000	0.00000	0.00000	0.00000	0.00072	0.00000	0.00000
38	0.00000	0.00000	0.00000	0.00000	0.00077	0.00000	0.00000
39	0.00000	0.00000	0.00000	0.00000	0.00083	0.00000	0.00000
40	0.00000	0.00000	0.00000	0.00000	0.00088	0.00000	0.00000
41	0.00000	0.00000	0.00000	0.00000	0.00094	0.00000	0.00000
42	0.00000	0.00000	0.00000	0.00000	0.00099	0.00000	0.00000
43	0.00000	0.00000	0.00000	0.00000	0.00110	0.00000	0.00000
44	0.00000	0.00000	0.00000	0.00000	0.00116	0.00000	0.00000
45	0.00000	0.00000	0.00000	0.00000	0.00132	0.00000	0.00000
46	0.00000	0.00000	0.00000	0.00000	0.00143	0.00000	0.00000
47	0.00000	0.00000	0.00000	0.00000	0.00160	0.00000	0.00000
48	0.00000	0.00000	0.00000	0.00000	0.00182	0.00000	0.00000
49	0.00000	0.00000	0.00000	0.00000	0.00209	0.00000	0.00000
50	0.00000	0.00000	0.00000	0.00000	0.00237	0.00000	0.00000
51	0.00000	0.00000	0.00000	0.00000	0.00270	0.00000	0.00000
52	0.00000	0.00000	0.00000	0.00000	0.00314	0.00000	0.00000
53	0.00000	0.00000	0.00000	0.00000	0.00363	0.00000	0.00000
54	0.00000	0.00000	0.00000	0.00000	0.00424 0.00495	0.00000	0.00000
55 56	0.12000 0.02000	0.00000	0.34000	0.00000		0.21000	0.00000
50	0.02000	0.00000 0.00000	0.23000 0.17000	0.00000 0.00000	0.00583 0.00688	0.21000 0.21000	0.00000 0.00000
58	0.08000	0.00000	0.14000	0.00000	0.00814	0.21000	0.00000
59	0.08000	0.00000	0.12000	0.00000	0.00963	0.21000	0.00000
60	0.08000	0.08000	0.12000	0.12000	0.01315	0.23000	0.23000
61	0.07000	0.07000	0.13000	0.12000	0.01601	0.25000	0.25000
62	0.07000	0.07000	0.15000	0.15000	0.01771	0.26000	0.26000
63	0.07000	0.07000	0.17000	0.17000	0.01859	0.26000	0.26000
64	0.08000	0.08000	0.18000	0.18000	0.01414	0.26000	0.26000
65	0.09000	0.09000	0.20000	0.20000	0.01139	0.25000	0.25000
66	0.11000	0.11000	0.22000	0.22000	0.00286	0.24000	0.24000
67	0.13000	0.13000	0.23000	0.23000	0.00286	0.24000	0.24000
68	0.15000	0.15000	0.24000	0.24000	0.00286	0.23000	0.23000
69	0.16000	0.16000	0.25000	0.25000	0.00286	0.23000	0.23000
70	0.17000	0.17000	0.25000	0.25000	0.00286	0.23000	0.23000
71	0.17000	0.17000	0.25000	0.25000	0.00286	0.23000	0.23000
72	0.16000	0.16000	0.24000	0.24000	0.00286	0.24000	0.24000
73	0.15000	0.15000	0.23000	0.23000	0.00286	0.26000	0.26000
74	0.14000	0.14000	0.20000	0.20000	0.00286	0.27000	0.27000
75	0.14000	0.14000	0.17000	0.17000	0.00286	0.27000	0.27000

# 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.

#### TIER 1

Members whose first employment making them eligible for membership in the system began on or before June 30, 2006.

#### TIER 2

Members whose first employment making them eligible for membership in the system began on or after July 1, 2006 and on or before December 31, 2010.

#### TIER 3

Members whose first employment making them eligible for membership in the system began on or after January 1, 2011.

#### FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

The excess of the entry age normal actuarial accrued liability over the actuarial value of assets as of the date the Unfunded Actuarial Accrued Liability was frozen in 1989. Each year's required payment pays interest and a portion of principal.

#### VESTED BENEFITS

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