LOUISIANA SCHOOL EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF
JUNE 30, 2017

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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September 29, 2017

Board of Trustees
Louisiana School Employees' Retirement System
8660 United Plaza Boulevard.
Baton Rouge, Louisiana 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Louisiana School Employees' Retirement System for the fiscal year ending June 30, 2017. 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 Louisiana School Employees' Retirement System of the State of Louisiana. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2018, and to recommend the net direct employer contribution rate for Fiscal 2019. 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 Louisiana School Employees' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

In our opinion, all of the assumptions on which this valuation is based are reasonable individually and in the aggregate. Both economic and demographic assumptions are based on our expectations for future experience for the fund. 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 actuaries are members of the American Academy of Actuaries and have met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and are available to provide further information or answers to any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

By: Gary Curran, F.C.A., M.A.A.A., A.S.A.

Gregory Curran, F.C.A., M.A.A.A., A.S.A.

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SUMMARY OF VALUATION RESULTS
LOUISIANA SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Valuation Date:		June 30, 2017	June 30, 2016
Census Summary:	Active Members	12,055	12,075
	Retired Members and Survivors	13,354	13,148
	DROP Participants	622	676
	Terminated Due a Deferred Benefit	311	275
	Terminated Due a Refund	4,268	3,898
Payroll (excluding DROP accruals):		$ 284,075,888	$ 284,835,111
Benefits in Payment:		$ 167,428,812	$ 159,448,329
Present Value of Future Benefits		$ 2,834,673,526 †	$ 2,803,586,774
Actuarial Accrued Liability (EAN):		$ 2,562,633,003	$ 2,522,157,498
Unfunded Actuarial Accrued Liability:		$ 662,303,876	$ 692,561,828
Experience Account:		$ 4,562,632	$ 633,076
Amortization Conversion Account:		$ 11,106,470	$ 15,719,788
Net Valuation Assets:		$ 1,900,329,127 †	$ 1,829,595,670
Market Value of Assets (Includes side funds):		$ 1,922,705,998	$ 1,767,810,247
Ratio of Net Valuation Assets to Actuarial Accrued Liability:		74.16%	72.54%

	Fiscal 2017	Fiscal 2016
Market Rate of Return (Excluding Money Market DROP funds):	14.14%	-0.59%
Actuarial Rate of Return (Excluding Money Market DROP funds):	8.47%	6.90%
Non-Money Market DROP Account Interest Credit Rate:	7.97%	6.40%

	Fiscal 2018	Fiscal 2017
Employers' Normal Cost (Mid-year):	$ 25,214,102	$ 26,201,992
Amortization Cost (Mid-year):	$ 55,646,286	$ 55,587,510
Projected Administrative Expenses:	$ 4,853,555	$ 4,716,018
Amortization Conversion Account Supplement:	$ (4,267,895)	$ (4,613,318)
Net Direct Employer Actuarially Required Contributions:	$ 81,446,048	$ 81,892,202
Projected Payroll:	$ 292,667,381	$ 293,693,467
Actuarially Required Net Direct Employer Contribution Rate:	27.8%	27.9%
Actual Employee Contribution Rate:		
Employees whose first state service occurred before July 1, 2010:	7.50%	7.50%
Employees whose first state service occurred on or after July 1, 2010:	8.00%	8.00%
Actual Net Direct Employer Contribution Rate:	27.6%	27.3%

	Fiscal 2019	Fiscal 2018
Minimum Recommended Net Direct Employer Cont. Rate:	28.0%	27.6%

† The valuation assets and accrued liability for fiscal 2016 excluded the Experience Account; for fiscal 2017, the valuation assets and accrued liability include the Experience Account. For both years, these assets exclude the Amortization Conversion Account.

GENERAL COMMENTS

The values and calculations in this report were determined by applying statistical analysis and projections to system data and the assumptions listed. There is sometimes a tendency for readers to either dismiss results as mere “guesses” or alternatively to ascribe a greater degree of accuracy to the results than is warranted. In fact, neither of these 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 the actuary is limited in his 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, that which is available 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 with regard to probable future investment experience for the plan.

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

COMMENTS ON DATA

For the valuation, the system's administration 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 of retirees and beneficiaries, sex, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit VIII, there are 12,055 active contributing members in the system of whom 5,717 have vested retirement benefits; in addition, there are 622 participants in the Deferred Retirement Option Plan (DROP); 13,354 former members or their beneficiaries are receiving retirement benefits. An additional 4,579 terminated members have contributions remaining on deposit with the system; of this number 311 have vested rights for future retirement benefits**.**

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. In order 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 retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

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 Louisiana Legislative Auditor's office. As indicated in the system's financial statements, the net market value of system's assets was $1,922,705,998 as of June 30, 2017. Net investment income for Fiscal 2017 measured on a market value basis was $239,412,332. Contributions to the system for the fiscal year totaled $103,559,482; benefits and expenses amounted to $188,076,063.

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

This valuation is based on the Individual Entry Age Normal actuarial cost method. The unfunded accrued liability is amortized with level payments over various periods as specified in Louisiana Revised Statute R.S. 11:102. Effective with the June 30, 2014 valuation, the system's outstanding amortization bases were consolidated and re-amortized over thirty years with level payments. For fiscal years 2015 and 2016, amortization bases for actuarial asset and liability gains or losses (except as noted below) or changes in assumptions were set to be amortized over 30 years. Since the 2016 valuation indicated that the funded ratio of the plan (based on the net valuation assets) exceeded 72%, such amortization periods for new amortization bases beginning with the current valuation will be twenty years. All contribution shortfalls and excesses are amortized as a level dollar amount over 5 years. In each valuation, the first $15,000,000 of any asset gain (adjusted pro-rata for increases in the Actuarial Value of Assets) is used to immediately reduce the system's oldest outstanding amortization base without re-amortization. After the system's funded percentage reaches 80%, the remaining balance of the consolidated amortization base after application of the first level of asset gains by $15,000,000 will be re-amortized over the remaining amortization period. Fifty percent of the asset gains which exceed the adjusted $15,000,000 threshold will be used to fund the system's Experience Account which may be allocated to future permanent benefit increases (commonly referred to cost of living adjustments), subject to certain limitations. Effective with the first system valuation following June 30, 2015 valuation, any such allocation will be amortized as a loss with level payments over ten years. The funding methodology for the plan also includes the application of LSERS "side funds" defined by R.S. 11:102. The funds include the "Amortization Conversion Account" and the system's "Experience Account." For funding purposes, the actuarial value of assets excludes the Amortization Conversion Account.

The Amortization Conversion Account was initially funded from the residual balance in the Experience Account as of June 30, 2013. Payments from the account are made as an offset to employer contributions based on the provisions of Act 478 of the 2014 Regular Legislative Session each year through Fiscal 2019. Any balances in the account as of 2019 will be amortized as an experience gain.

The system's Experience Account is funded by 50% of any investment gains above $15,000,000 (adjusted pro-rata for increases in the Actuarial Value of Assets) subject to the limits on the account value. In addition, each year the balance in the account is credited with investment earnings or debited with investment losses, shown in this report as the rate of return on the Actuarial Value of Assets. The balance in the account cannot exceed the reserve necessary to grant one (two if the system is funded 80% or greater) cost-of-living adjustment (or permanent benefit increase) as otherwise authorized by law. Any funds credited to the Experience Account reduce those allocated to the Investment Gain/Loss Experience base.

Beginning with the Fiscal 2015 actuarial valuation, the general economic and non-economic assumptions used by the prior actuary for the June 30, 2014 valuation were reviewed and a determination was made to retain them with the exception of the statistics related to family composition and rates of remarriage. The change was made in these categories to better accommodate the software model used in this valuation. We do not believe that these changes will have any material effect. The valuation interest rate was determined by reviewing recent and long-term historical economic data as well as forward looking estimates provided by the fund's investment consultant, Segal Marco Advisors, and other consulting groups. Consideration was also given to expected investment costs. Inherent in the determination of future expected nominal returns was an assumption of future long-term inflation of 2.625%.

For Fiscal 2015 actuarial valuation, decrement levels and salary scale were based on those values used by the prior actuary. Since no experience was available to set these assumptions, they were reviewed for reasonableness. In addition, a review was made of the prior actuary's experience report, dated April 5, 2013. This report detailed the experience for the plan over the prior five year period. In particular, a review of the mortality as given in the experience report indicated that even though the RP2000 table without projection was utilized, it included significant margins for mortality improvement; hence no projection was made to the table.

For the June 30, 2015 valuation, although the assumed rate of return was maintained at 7.25%, the interest rate used to discount plan liabilities was reduced to 7.00%. This reduction was made to implicitly account for administrative expenses as an offset to investment gains or an increase to investment losses. Based on Act 94 of the 2016 Regular Session of the Legislature, beginning with the June 30, 2016 actuarial valuation, the explicit cost of projected noninvestment related administrative expenses will be included in the calculation of the actuarially required contribution for the system. With this change, the valuation of plan liabilities based on a valuation interest rate set 0.25% below the assumed long-term rate of return is no longer necessary. Instead, for the June 30, 2016 actuarial valuation, the assumed long-term rate of return was reduced from 7.25% to 7.125% and the valuation interest rate was set equal to the long-term rate of return. This resulted in an increase in the valuation interest rate from 7% to 7.125%. To maintain consistent economic assumptions, with the reduction in the long-term rate of return of 0.125%, the long term expected rate of inflation and the salary scale assumption were also reduced by 0.125%.

For this valuation, a change in liability was recognized for the existing balance in the Experience Account together with the present value of future contributions to the Account up to the maximum permissible value of the Account based upon current account limitations. This change was in recognition of the fact the legal mechanism for credits to the Experience Account are substantively automatic up to the limit set on the account balance. However, contributions to this account in excess of the account limit will require a legislative act. Although the board of trustees has authority to recommend ad hoc Cost of Living Increases (COLAs) be approved by the legislature under limited circumstances, these COLAs have not shown to have a historical pattern, the amounts of the COLAs have not been relative to a defined cost-of-living or inflation index, and there is no evidence to conclude that COLAs will be granted on a predictable basis in the future. 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 beyond the current account limitations of the Experience Account. Since a liability for future COLAs up to the authorized Experience Account balance has been included in the system's accrued liabilities, the assets in the Experience Account were included in the valuation assets for funding purposes.

For prior reports, the term "actuarial value of assets" referred to the smoothed asset value reduced by both the Experience Account and the Amortization Conversion Account. Where used in this report, the term "net valuation assets" refers to the actuarial value of assets reduced solely by the Amortization Conversion Account balance. The term "actuarial value of assets" in this report refers to the smoothed asset values, as calculated in Exhibit III – B, unreduced for any "side funds". The net effect of these changes in the actuarial accrued liabilities and valuation assets was to produce an assumption loss of $15,564,317 with an interest adjusted amortization payment of $1,433,284, or 0.49% of projected payroll.

RISK FACTORS

Defined benefit pension plans are subject to a number of risks. These can be related either to plan assets or liabilities. In order to pay benefits, the plan must have sufficient assets. Several factors can lead to asset levels which are below those required to pay promised benefits. 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.

All pension plans are subject to asset performance risk. Asset performance is comprised of the real rates of return earned on the portfolio of investments plus the underlying inflation rate. High levels of inflation or deflation can present the plan with problems by either reducing the purchasing power of plan benefits or impairing asset values in the trust. Asset performance over the long run 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. Another element of asset risk is reinvestment risk. Recent interest rate declines have subjected pension plans to an increase in this risk. As fixed income securities have matured, investment managers have been forced to reinvest funds at decreasing rates of return. For pension plans which require significant net cash flow above contributions to fund benefit payments, the risk of insufficient liquidity is another risk component which can create problems if it becomes necessary to sell securities under unfavorable market conditions in order to raise cash necessary to pay retirement benefits. Even for individual securities, insolvency and performance risk can subject a plan to stress if these investments comprise a significant portion of plan assets. Security insolvency or severe underperformance can result in steep increases in sponsor contributions where individual investments comprise more than a de minimis amount of the investment portfolio.

In addition to asset risk, the plan is also subject to risks related to liabilities. These risks include longevity risk (the risk that retirees will live longer than expected), termination risk (the risk that fewer than the anticipated number of members will terminate service prior to retirement), and other factors that may have an impact on the liability structure of the plan. Final average compensation plans are vulnerable to unexpectedly large increases in salary for individual members near retirement. Conversely, in cases where plans have large unfunded liabilities, payroll contraction is a risk insofar as contributions which are typically reported as a percentage of payroll may increase as payrolls decline.

Liability risk also includes factors such as data errors. 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. 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.

Recommended actuarial contributions are based on expectations related to asset and liability performance; all of the above mentioned factors can produce unexpected changes in the future cost structures of the plan. For this reason, future costs may differ significantly from current levels. 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, certain factors have the potential on their own accord to pose a significant risk to future cost levels and solvency.

Beyond identifying risk categories, it is possible to quantify some risk factors. One fairly well known risk metric is the funded ratio of the plan. The rate is given as plan assets divided by plan liabilities.

However, the definition of each of these terms may vary. The two typical alternatives used for assets are the market and actuarial value of assets. There are a number of alternative measures of liability depending on the funding method employed. The Governmental Accounting Standards Board (GASB) specifies that for financial reporting purposes, the funded ratio is determined by using the market value of assets divided by the entry age normal accrued liability. This value is given in the system's financial report. Alternatively, we have calculated the ratio of the net valuation assets to the entry age normal accrued liability based on the funding methodology used to fund the plan. The ratio is 74.16% as of June 30, 2017. This value gives some indication of the financial strength of the plan; however, it does not guarantee the ability of the fund to pay benefits in the future or indicate that in the future, contributions are likely to be less than or greater than current contributions. In addition, the ratio cannot be used in isolation to compare the relative strength of different retirement systems. However, the trend of this ratio over time can give some insight into the financial health of the plan. Even in this regard, caution is warranted since market fluctuations in asset values and changes in plan assumptions can distort underlying trends in this value. One additional risk measure is the sensitivity of the plan's cost structure to asset gains and losses. For this plan, we have determined that based on current assets and demographics, for each percentage under the assumed rate of return on the actuarial value of assets, there will be a corresponding increase in the actuarially required contribution as a percentage of projected payroll of 0.58% for the fund. For earnings above the assumed rate of return, the reduction in costs will generally be less than this amount due to the Priority Excess Allocation and the allocation of a portion of investment gains to the Experience Account.

The ability of a system to recover from adverse asset or liability performance is related to the maturity of the plan population. In general, plans with increasing active membership are less sensitive 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. One measure of risk related to plan maturity is the ratio of total benefit payments to active payroll. For Fiscal 2017 this ratio is 59%; ten years ago this ratio was 44%. One other area of risk is the risk that plan assumptions will need to be revised to conform to changing actual or expected plan experience. Such assumption revisions could relate to demographic or economic factors. 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 2018 by 9.8% of payroll.

There is also 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 assumption, completion of amortization payment and credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors and additional risk metrics is beyond the scope of this report.

CHANGES IN PLAN PROVISIONS

The following legislative changes directly affecting the retirement system were enacted during the 2017 Regular Session of the Louisiana Legislature.

Act 285 of the 2017 Regular Session of the Louisiana Legislature provides a framework to correct enrollment errors for all employees in positions covered by state and statewide retirement systems. The act requires the member to be enrolled in the correct system with a transfer of contributions and interest from the erroneous system to the correct system. As a part of the correction of the enrollment error, the member will be credited with the correct service credit, accrual rate, and employee contribution balance in the correct system. If the correction occurs within three years of the enrollment error, the correct system shall complete the correction upon receipt of the employee contributions and employer contributions that would have been paid had the member been properly enrolled with interest at the system's board-approved actuarial valuation interest rate. If the correction occurs more than three years after the enrollment error, the correct system shall receive the greater of 1) Employee contributions and employer contributions plus interest, and 2) The actuarial cost to the correct system of the service credit transferred. The employer must pay the difference between the amount transferred from the incorrect system to the correct system and the cost of the correction.

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.

	Market Value †	Actuarial Value †
2008	-4.74%	5.87%
2009	-16.94%	-7.08%
2010	13.02%	0.55%
2011	23.28%	4.35%
2012	2.27%	9.07%
2013	13.73%	12.04%
2014	16.96%	13.63%
2015	3.00%	11.63%
2016	-0.59%	6.90%
2017	14.14%	8.47%

† Rates of return calculated based on assets inclusive of Amortization Conversion Account and Experience Account but exclusive of money market DROP assets and income.

Geometric Average Market Rates of Return

5 year average	(Fiscal 2013 – 2017)	9.23%
10 year average	(Fiscal 2008 – 2017)	5.77%
15 year average	(Fiscal 2003 – 2017)	6.79%

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. The rate of return is calculated on assets invested in the system's portfolio. DROP and IBRP assets invested in money market investments have been excluded from the rate of return calculation. 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 2017, the fund earned $20,582,671 of dividends, interest and other recurring income. In addition, the Fund had net realized and unrealized capital gains on investments of $228,797,500. In addition, the Fund had investment expenses of $9,967,839.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.125% used for the valuation. DROP accounts that are credited with earnings based on the actuarial rate of return of the system should be credited with 7.97% (i.e. 8.47% less 0.50% as detailed in R.S. 11:1152(F)(3)). The actuarial rate of return is calculated based on the actuarial value of assets net of DROP and IBRP assets invested in money market accounts and includes all interest, dividends, and recognized capital gains as given in Exhibit VI net of money market income earned by DROP and IBRP assets. Investment income used to calculate this yield is based upon a smoothing of investment returns above or below the valuation interest rate over a five year period, subject to constraints. The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate. Yields in excess of the 7.125% assumption will reduce future costs; yields below 7.125% will increase future costs. For Fiscal 2017, the system experienced actuarial investment earnings of $24,634,307 above the actuarial assumed earnings rate of 7.125%. Partially offsetting these asset experience gains were allocations of $15,932,442 to the oldest UAL debit base and $3,875,934 to the Experience Account leaving net asset gains of $4,825,931. This actuarial gain decreased the interest-adjusted amortization payments on the system's UAL by $265,072 or 0.09% of projected payroll.

DEMOGRAPHICS AND LIABILITY EXPERIENCE

The average active contributing member is 52 years old with 9.7 years of service credit and an annual salary of $23,565. The system's active contributing membership experienced a decrease of 20 members during Fiscal 2017; over the last five years, the number of active contributing members decreased by 361. The number of DROP participants decreased by 54 during Fiscal 2017.

The average service retiree is 73 years old with a monthly benefit of $1,095. The number of retirees and beneficiaries receiving benefits from the system increased by 206 during the fiscal year. Over the last five years, the number of retirees increased by 424 with annual benefits in payment increasing by $32,855,232.

Liability experience for the year was favorable. The total number of retirements were below projected levels. Salary increases were also below expected levels. Withdrawals and deaths were above projected levels. These factors tend to reduce costs. DROP entries and disabilities were above projected levels. This partially offset other gains. Net plan liability experience gains totaled $19,955,111. The interest adjusted amortization credit on this gain was $1,837,622, or 0.63% of projected payroll.

FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components. These two components are the normal cost and the amortization payments on the unfunded actuarial accrued liability. The normal cost refers to the annual cost for active members allocated to each year by the particular cost method utilized. The term unfunded accrued liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. In addition it may be increased or diminished by plan experience, changes in assumptions, or changes in benefits including COLA's. Contributions in excess of or less than the actuarially required amount can also decrease or increase the UAL balance. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution. Finally, payroll growth affects plan costs since payments on the system's unfunded accrued liability are on a fixed, level dollar schedule. If payroll increases, these costs are reduced as a percentage of payroll. Conversely, if payroll decreases, these costs are increased as a percentage of payroll.

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

An explanation of the change in costs related to asset and liability gains and losses as well as changes in demographics and assumptions is given in prior sections of the report. In addition to these components, variances in contribution levels and payroll also affect costs. For Fiscal 2017 contributions totaled $3,079,929 less than required; the interest-adjusted amortization expense based on the contribution deficit for Fiscal 2018 is $728,187, or 0.25% of projected payroll. In addition, for Fiscal 2018 the net effect of the change in payroll on amortization costs was to increase such costs by 0.07% of projected payroll.

A reconciliation of the change in costs is given below. Values listed in dollars are interest adjusted for payment throughout the fiscal year. Percentages are based on the projected payroll for Fiscal 2018 except for those items labeled Fiscal 2017.

	Dollars	Percentage of Payroll
Employer Normal Cost for Fiscal 2017	$ 26,201,992	8.92%
Cost of Demographic and Salary Changes	$ (987,890)	(0.30%)
Employer Normal Cost for Fiscal 2018	$ 25,214,102	8.62%
UAL Payments for Fiscal 2017	$ 55,587,510	18.93%
Change due to change in payroll	N/A	0.07%
Additional Amortization Expenses for Fiscal 2018:		
Liability Assumption Loss (Gain)	$ 1,853,446	0.63%
Asset Experience Loss (Gain)	$ (2,268,518)	(0.78%)
Priority Excess Allocation	$ 1,467,182	0.50%
Gains Allocated to Experience Account	$ 536,264	0.18%
Asset Assumption Loss (Gain)	$ (420,162)	(0.14%)
Liability Loss (Gain)	$ (1,837,622)	(0.63%)
Contribution Loss (Gain)	$ 728,187	0.25%
Total Amortization Expense (Credit) for Fiscal 2018	$ 55,646,286	19.01%

Amortization Conversion Account Supplement for Fiscal 2018	$ (4,267,895)	(1.46%)
Projected Adminstrative Expenses for Fiscal 2018	$ 4,853,555	1.66%
Total Normal Cost & Amortization Payments	$ 81,446,048	27.83%

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The employer's normal cost for Fiscal 2018, interest adjusted for mid-year payment is $47,473,827. The amortization payments on the system's unfunded actuarial accrued liability total $55,646,286. The total actuarially required contribution is determined by adding these two values together with administrative expenses. The net direct actuarially required employer contribution for Fiscal 2018 is determined based on the sum of employer normal cost, amortization payments on the unfunded actuarial accrued liability, and administrative expenses less a payment from the system's Amortization Conversion Account set at $4,267,895 for Fiscal 2018. As given in line 14 of Exhibit I, the total actuarially required employer contribution for Fiscal 2018 is $81,446,048, or 27.8% of projected payroll.

Since the actual employer contribution rate for Fiscal 2018 is 27.6% of payroll, there will be a contribution deficit of 0.2% of payroll. This deficit will increase the actuarially required contribution recommended for Fiscal 2019. In order to determine a minimum recommended net direct employer contribution rate for Fiscal 2019, the Employer Normal Cost and Amortization Payments were estimated for Fiscal 2019 and adjusted for the impact of the estimated contribution shortfall for Fiscal 2018 and the scheduled payment from the Amortization Conversion Account. As given in line 25 of Exhibit I, the estimated actuarially required net direct employer contribution for Fiscal 2019 is $84,468,842, or 28.0% of projected payroll.

COST OF LIVING ADJUSTMENTS

During Fiscal 2017, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.63%. Cost of living provisions for the system are detailed in R.S. 11:1145.1 within the statutes relative to the Experience Account. The Experience Account cannot be credited with funds that would cause the balance in the account to exceed the reserve of one permanent benefit increase (PBI) if the system is less than 80% funded or two permanent benefit increases if the system is at least 80% funded. R.S. 11:1145.1(2) sets forth the basis for determining the maximum percentage increase in the benefits permissible. The maximum percentage increase is based upon the funded percentage of the system as of the most recent actuarial valuation, and is limited to 2.0% in any year in which the system does not earn an actuarial rate of return of at least 7.125%, according to the following:

Funded Percentage of the System	Maximum Percent PBI
At least 80%	3.0%
At least 75% but less than 80%	2.5%
At least 65% but less than 75%	2.0%
At least 55% but less than 65%	1.5%
Less than 55%	No COLA permitted

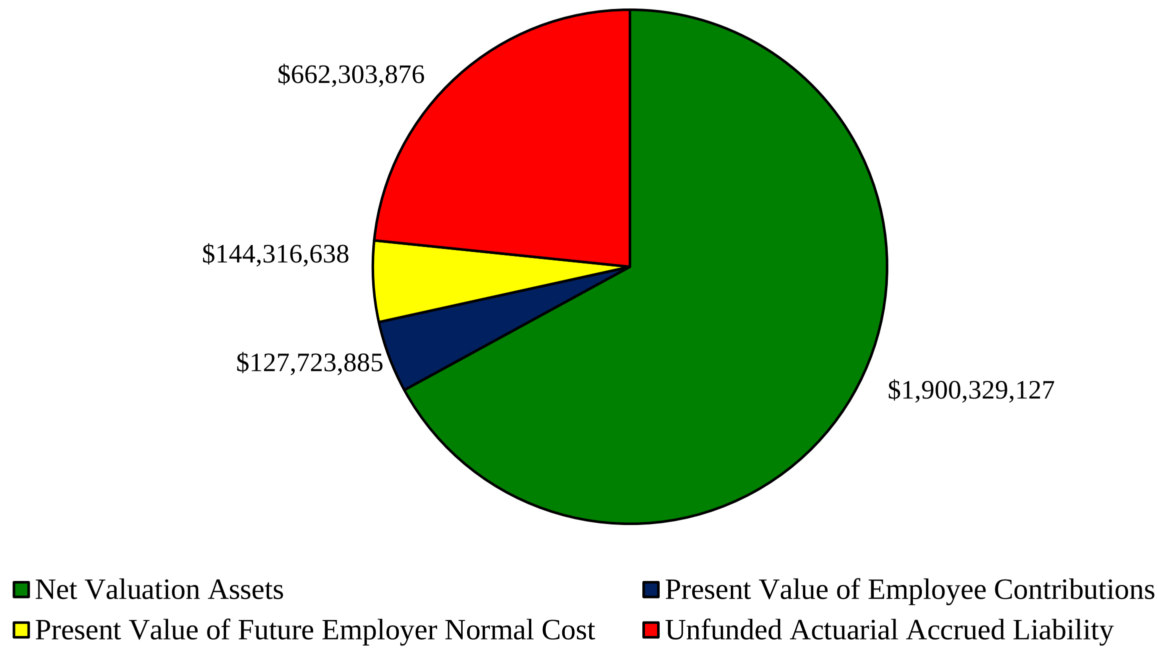
In addition, if the fund is less than 85% funded and the legislature granted a permanent benefit increase in the preceding fiscal year, no increase may be granted.

If there are sufficient funds in the Experience Account and the system met the necessary criteria to grant a PBI, the Board of Trustees may recommend to the President of the Senate and the Speaker of the House of Representatives that the system be permitted to grant a permanent benefit increase. Permanent benefit increases are based on the benefit in payment at the time the adjustment is approved with a maximum adjustment based on the first $60,000 of benefits, where the $60,000 limit is increased annually by the consumer price index for all urban consumers from July 1, 2017. No PBI can be paid in an amount greater than the increase in the Consumer Price Index for all urban consumers during the twelve month period ending on the system's valuation date. Permanent benefit increases may be provided only to retirees who have received benefits for at least one full year. In addition, non-disabled retirees may only receive a PBI if they have attained age sixty.

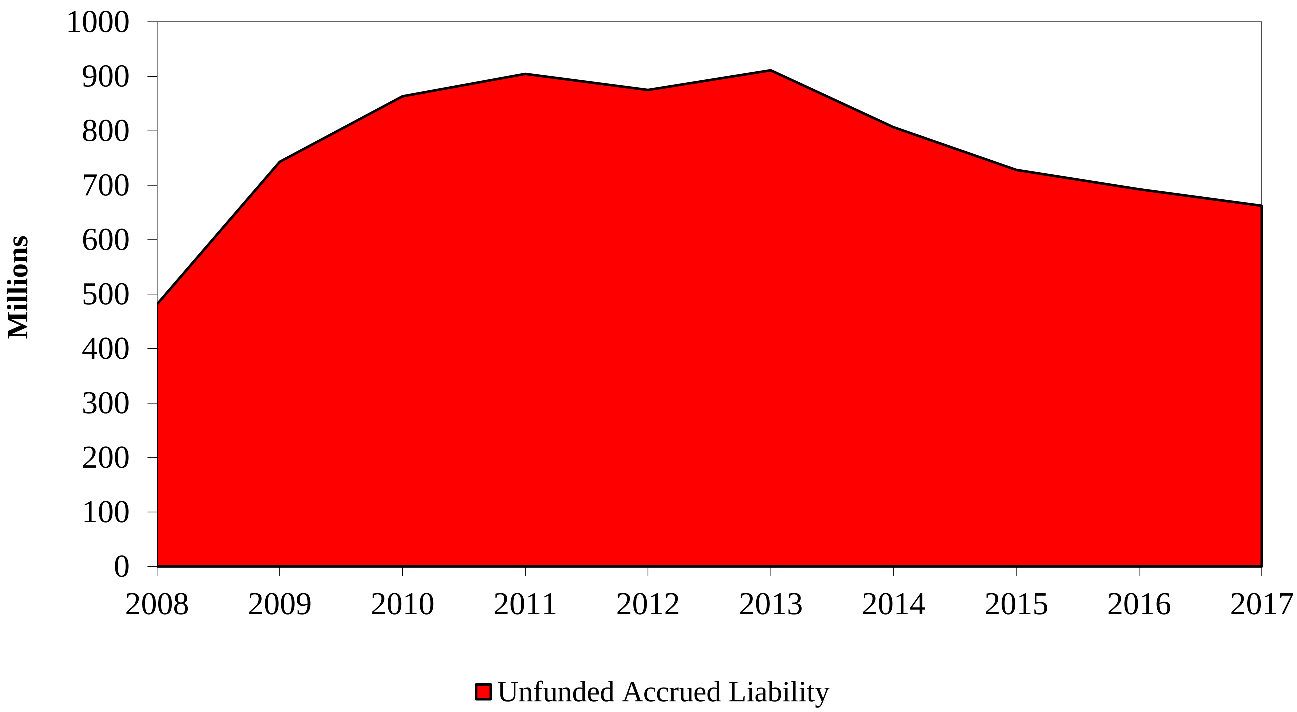
Although the system did not grant a PBI in the preceding fiscal year, the system did not reach the maximum reserve permitted in the Experience Account and thus does not qualify to request that the Louisiana Legislature grant a PBI under the provisions of R. S. 11:1145.1.

Components of Present Value of Future Benefits

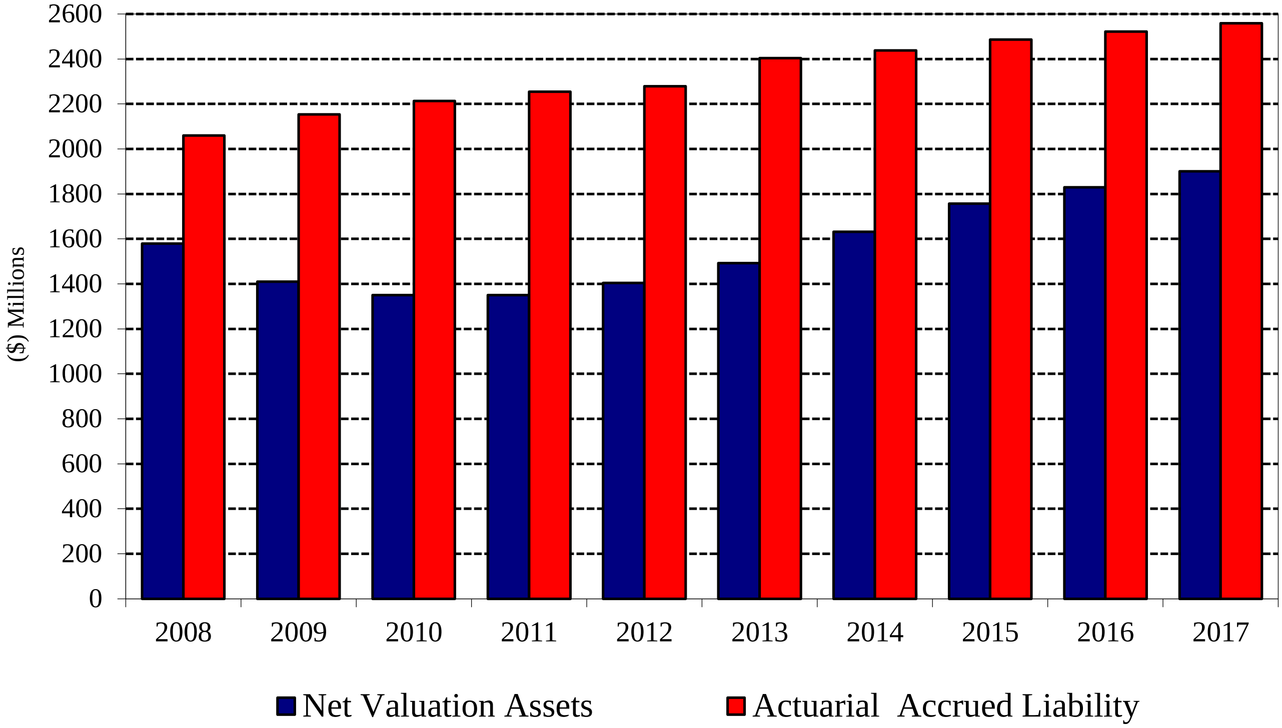
June 30, 2017



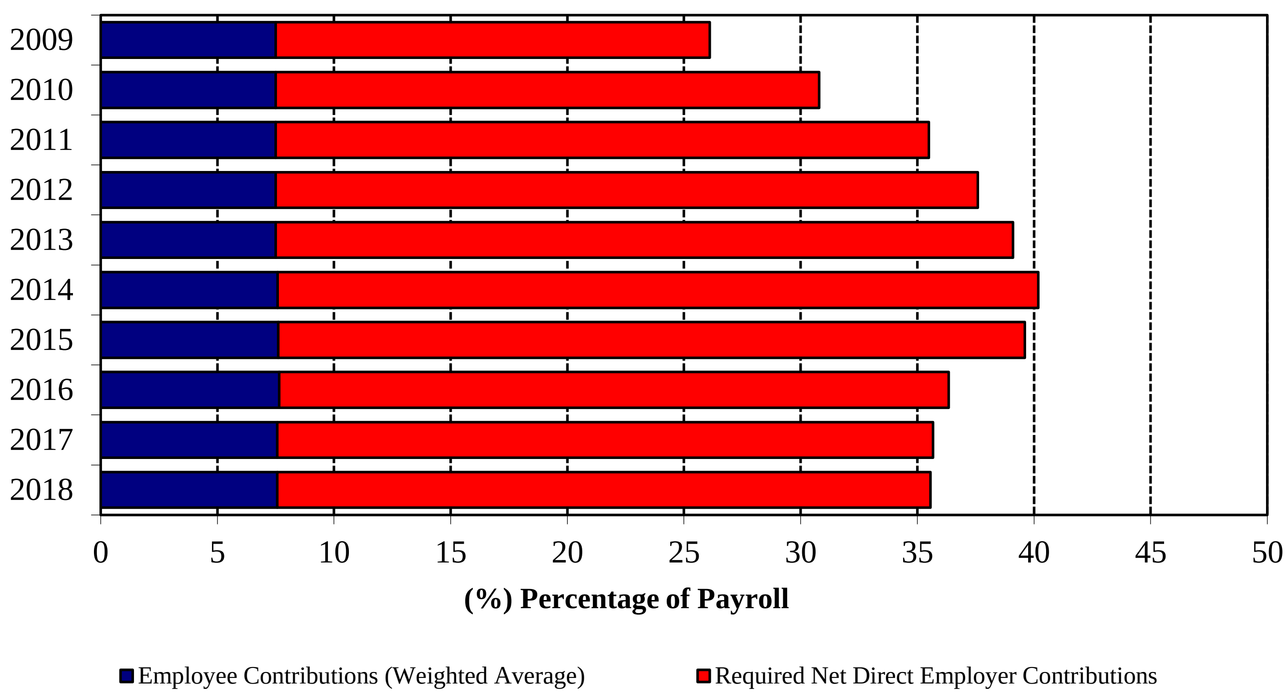
Unfunded Accrued Liability



Net Valuation Assets vs. Actuarial Accrued Liability

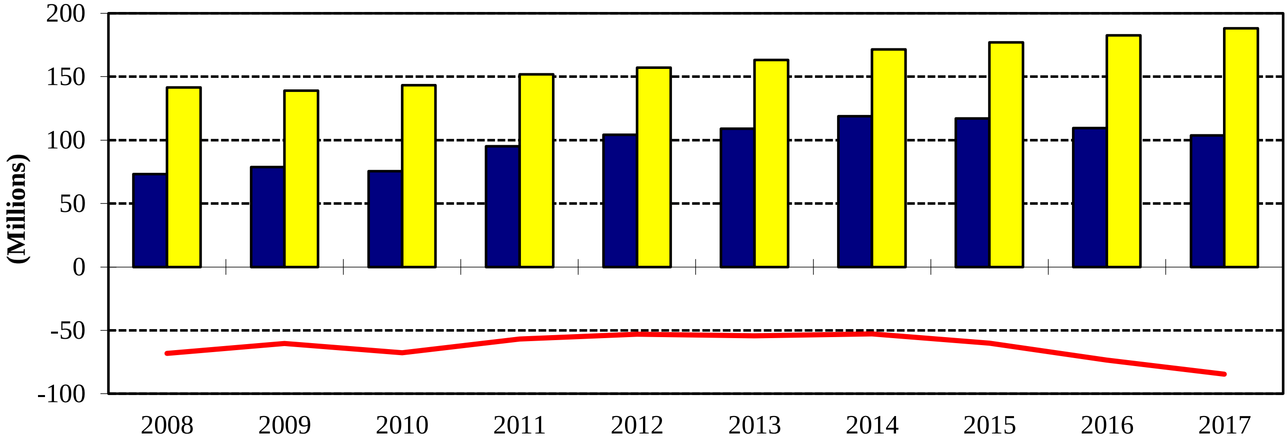


Components of Actuarial Funding



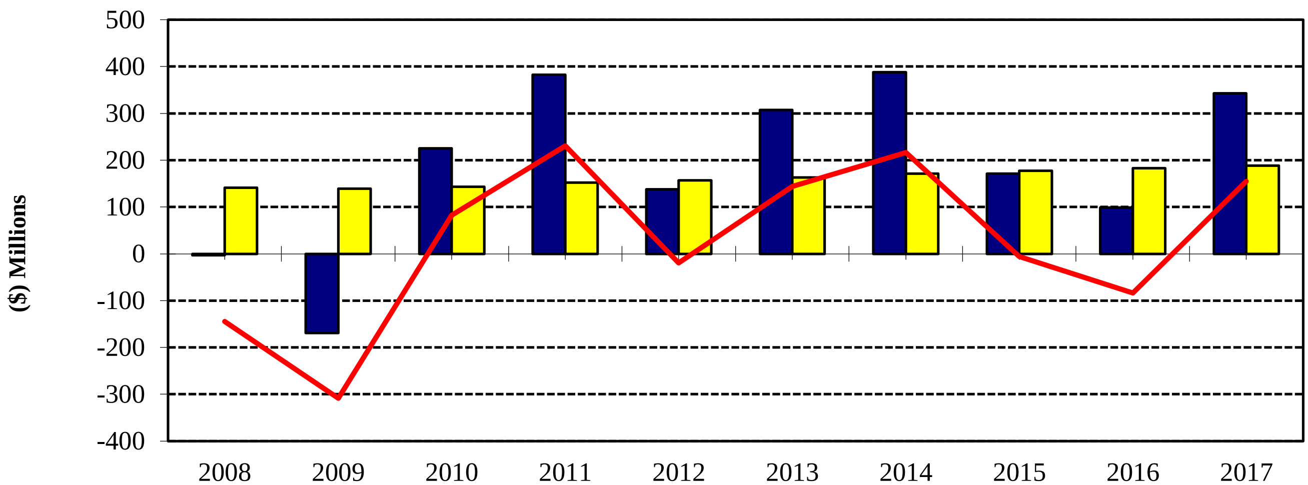
(2012 and later employee contribution level is a weighted average of rates paid by employees in different tiers)

Net Non-Investment Income



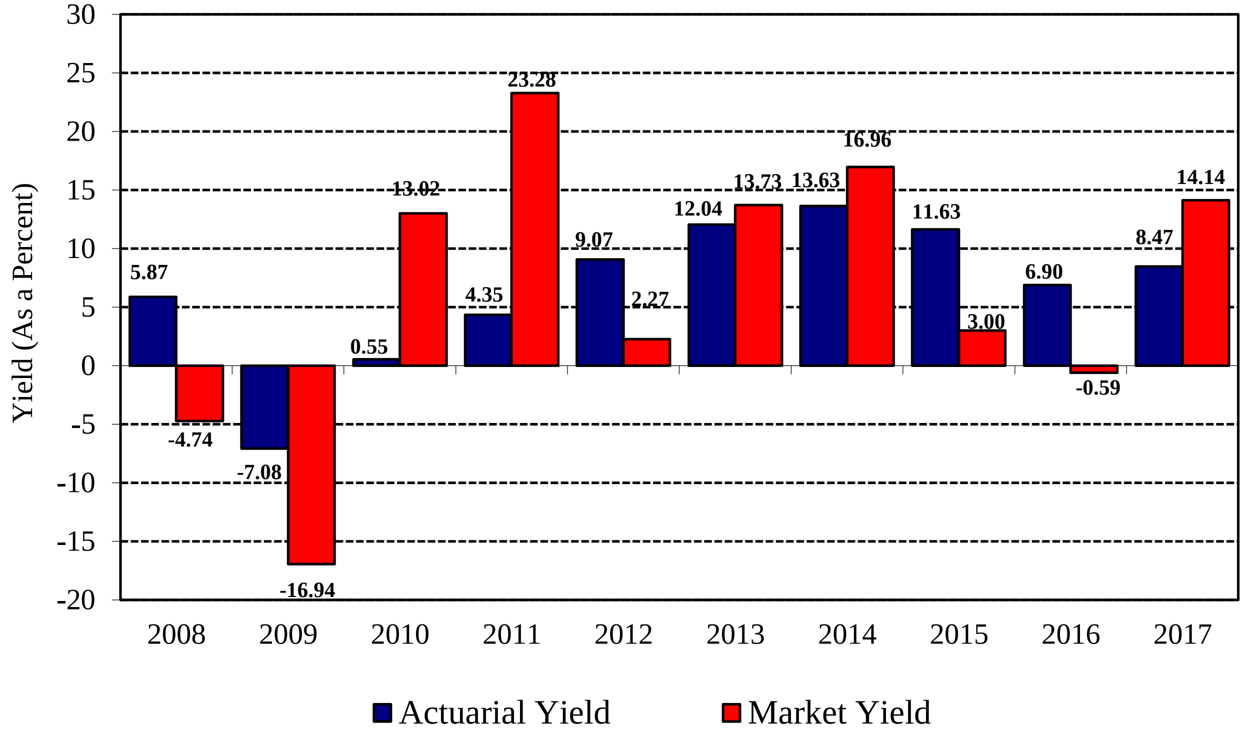
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Non-Investment Income ($Mil)		73.2	78.7	75.6	95.1	104.3	109.0	118.9	117.1	109.4	103.6
Benefits and Expenses ($Mil)		141.4	139.1	143.3	151.9	157.2	163.3	171.6	177.1	182.7	188.1
Net Non-Investment Income ($Mil)		-68.2	-60.4	-67.7	-56.8	-52.9	-54.3	-52.7	-60.0	-73.3	-84.5

Total Income vs. Expenses
(Based on Market Value of Assets)



		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Income ($Mil)		-3.0	-169.5	225.5	382.7	137.7	307.3	387.8	171.2	99.0	343.0
Benefits and Expenses ($Mil)		141.4	139.1	143.3	151.9	157.2	163.3	171.6	177.1	182.7	188.1
Net Change in MVA ($Mil)		-144.4	-308.6	82.2	230.8	-19.5	144.0	216.2	-5.9	-83.7	154.9

Historical Asset Yields



EXHIBITS

EXHIBIT I
ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Normal Cost of Retirement Benefits	$	35,197,146
2.	Normal Cost of Death Benefits	$	1,787,898
3.	Normal Cost of Disability Benefits	$	1,686,183
4.	Normal Cost of Deferred Retirement Benefits	$	2,523,779
5.	Normal Cost of Contribution Refunds	$	4,672,891
6.	TOTAL Normal Cost as of July 1, 2017 (1 + 2 + 3 + 4 + 5)	$	45,867,897
7.	TOTAL Normal Cost Interest Adjusted for Midyear Payment	$	47,473,827
8.	Adjustment to Total Normal Cost for Employee Portion	$	22,259,725
9.	TOTAL Employer Normal Cost Adjusted for Midyear Payment (7 – 8)	$	25,214,102
10.	Amortization Payments on Unfunded Accrued Liability at Midyear	$	55,646,286
11.	Projected Administrative Expenses for Fiscal 2018	$	4,853,555
12.	TOTAL Normal Cost & Amortization Payments (9 + 10 + 11)	$	85,713,943
13.	Amortization Conversion Account Supplement for Fiscal 2018	$	(4,267,895)
14.	Net Direct Actuarially Required Employer Contribution for Fiscal 2018 (12 + 13)	$	81,446,048
15.	Projected Payroll for Contributing Members (Fiscal 2018)	$	292,667,381
16.	Net Direct Actuarially Required Employer Contribution as a Percentage of Projected Payroll for Fiscal 2018 (14 ÷ 15)		27.8%
17.	Actual Net Direct Employer Contribution Rate for Fiscal 2018		27.6%
18.	Projected Fiscal 2018 Contribution Loss (Gain) as a % of Payroll (16 – 17)		0.2%
19.	Projected Fiscal 2018 Employer Contribution Shortfall (Surplus) (15 × 18)	$	585,335
20.	Estimated Amortization of Fiscal 2018 Employer Contribution Shortfall (Surplus) Based on Midyear Payment in Fiscal 2019	$	143,236
21.	Estimated Fiscal 2019 Employer Normal Cost Adjusted for Midyear Payment	$	25,976,669
22.	Estimated Fiscal 2019 Amortization Payments based on Fiscal 2018 UAL	$	55,646,286
23.	Estimated Fiscal 2018 Administrative Expenses	$	4,980,961
24.	Amortization Conversion Account Supplement for Fiscal 2019	$	(2,278,309)
25.	Estimated Actuarially Required Employer Contributions for Fiscal 2019 (20 + 21 + 22 + 23 + 24)	$	84,468,842
26.	Projected Payroll for Contributing Members (Fiscal 2019)	$	301,518,712
27.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2019 (25 ÷ 26, Rounded to nearest 0.10%)		28.0%

EXHIBIT II
PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	$ 1,072,014,163	
Survivor Benefits	26,388,169	
Disability Benefits	22,565,736	
Vested Termination Benefits	59,804,466	
Refunds of Contributions	34,211,397	
TOTAL Present Value of Future Benefits for Active Members		$ 1,214,983,931

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	$ 26,809,336	
Terminated Members with Reciprocals Due Benefits at Retirement	229,389	
Terminated Members Due a Refund	7,104,494	
TOTAL Present Value of Future Benefits for Terminated Members		$ 34,143,219

PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees	$ 1,374,884,089	
Disability Retirees	22,413,954	
Survivors & Widows	138,435,777	
Liability Attributable to the Experience Account	20,126,949	
DROP Account Balances Payable to Retirees	28,326,709	
IBRP Account Balance	1,358,898	
TOTAL Present Value of Future Benefits for Retirees & Survivors		$ 1,585,546,376

TOTAL Present Value of Future Benefits .... $ 2,834,673,526

EXHIBIT III – SCHEDULE A
MARKET VALUE OF ASSETS

CURRENT ASSETS:		
Cash in Banks	$ 50,717,071	
Contributions Receivable	15,040,289	
Accrued interest and dividends	2,101,000	
Investments Receivable	1,972,580	
Other Current Assets	1,812,211	
TOTAL CURRENT ASSETS		$ 71,643,151
Property Plant & Equipment		$ 3,163,915
INVESTMENTS:		
Cash Equivalents	$ 22,716,298	
Equities	999,698,860	
Fixed Income	545,325,450	
Real Estate	188,120,848	
Alternative Investments	100,237,071	
Collateral for Securities Lending	91,268,757	
Other Investments	388,922	
TOTAL INVESTMENTS		$ 1,947,756,206
TOTAL ASSETS		$ 2,022,563,272
CURRENT LIABILITIES:		
Accounts Payable	$ 1,263,908	
Benefits Payable	895,819	
Refunds Payable	228,286	
Investments Payable	2,712,026	
Securities Lending Obligations	91,268,757	
Other Post-Employment Benefits	3,488,478	
TOTAL CURRENT LIABILITIES		$ 99,857,274
MARKET VALUE OF ASSETS		$ 1,922,705,998

EXHIBIT III – SCHEDULE B
ACTUARIAL VALUE OF ASSETS

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

Fiscal year 2017	$ 118,660,351
Fiscal year 2016	(139,840,706)
Fiscal year 2015	(76,298,518)
Fiscal year 2014	153,829,757
Fiscal year 2013	89,907,429
Total for five years	$ 146,258,313

Deferral of excess (shortfall) of invested income:

Fiscal year 2017 (80%)	$ 94,928,281
Fiscal year 2016 (60%)	(83,904,424)
Fiscal year 2015 (40%)	(30,519,407)
Fiscal year 2014 (20%)	30,765,951
Fiscal year 2013 (0%)	0
Total deferred for year	$ 11,270,401

Market value of plan net assets, end of year	$ 1,922,705,998
Preliminary actuarial value of plan assets, end of year	$ 1,911,435,597
Actuarial value of assets corridor	
85% of market value, end of year	$ 1,634,300,098
115% of market value, end of year	$ 2,211,111,898
Actuarial Value of Plan Assets, end of year	$ 1,911,435,597
Amortization Conversion Account Balance, end of year	$ 11,106,470
Net Valuation Assets, end of year	$ 1,900,329,127

† Excess (shortfall) of actual investment income versus expected investment income is calculated based on assets and income adjusted to exclude the money market DROP accounts.

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	$	127,723,885
Employer Normal Contributions to the Pension Accumulation Fund		144,316,638
Employer Amortization Payments to the Pension Accumulation Fund		662,303,876
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	$	934,344,399

EXHIBIT V – SCHEDULE A
ACTUARIAL ACCRUED LIABILITIES

LIABILITY FOR ACTIVE MEMBERS				
Accrued Liability for Retirement Benefits	$	863,128,838		
Accrued Liability for Survivor Benefits		15,804,126		
Accrued Liability for Disability Benefits		12,586,032		
Accrued Liability for Vested Termination Benefits		44,842,729		
Accrued Liability for Refunds of Contributions		6,581,683		
TOTAL Actuarial Accrued Liability for Active Members			$	942,943,408
LIABILITY FOR TERMINATED MEMBERS			$	34,143,219
LIABILITY FOR RETIREES AND SURVIVORS			$	1,585,546,376
TOTAL ACTUARIAL ACCRUED LIABILITY			$	2,562,633,003
NET VALUATION ASSETS			$	1,900,329,127
UNFUNDED ACTUARIAL ACCRUED LIABILITY			$	662,303,876

EXHIBIT V – SCHEDULE B
CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY

PRIOR YEAR UNFUNDED ACCRUED LIABILITY			$	692,561,828
Interest on Unfunded Accrued Liability	$	49,345,030		
Liability Assumption Loss		20,126,949		
Contribution Shortfall with Accrued Interest		3,079,929		
Gains Allocated to the Experience Account		3,875,934		
TOTAL Additions to UAL			$	76,427,842
Gross Asset Experience Gain		24,634,307		
Asset Assumption Gain		4,562,632		
Liability Experience Gain		19,955,111		
Interest Adjusted Amortization Payments		57,533,744		
TOTAL Reductions to UAL			$	106,685,794
NET Change in Unfunded Accrued Liability			$	(30,257,952)
CURRENT YEAR UNFUNDED ACCRUED LIABILITY			$	662,303,876

EXHIBIT V – SCHEDULE C
AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
June 30, 2017

FISCAL YEAR	DESCRIPTION	AMORT. PERIOD	INITIAL BALANCE	YEARS REMAINING	REMAINING BALANCE	AMORT. PAYMENTS
2014	Cumulative Bases	30	$904,498,330	27	$828,006,818	$68,897,690
2014	Asset Experience Gain (Allocated by Act 399 of 2014)	5	(7,500,000)	2	(3,312,477)	(1,713,213)
2014	Liability Experience Gain	30	(81,635,532)	27	(78,914,585)	(6,218,364)
2014	Contribution Loss	5	823,919	2	363,895	188,206
2015	Change in Data/Model Loss	30	(42,073,134)	28	(41,161,328)	(3,204,087)
2015	Liability Assumption Loss	30	53,611,596	28	52,449,729	4,082,801
2015	Asset Experience Gain	30	(32,513,380)	28	(31,808,753)	(2,476,062)
2015	Liability Experience Gain	30	(29,473,558)	28	(28,834,809)	(2,244,564)
2015	Contribution Gain	5	(3,883,540)	3	(2,486,981)	(886,659)
2016	Asset Experience Loss	30	7,620,492	29	7,541,615	580,478
2016	Liability Experience Gain	30	(366,508)	29	(362,715)	(27,918)
2016	Contribution Gain	5	(4,417,900)	4	(3,651,582)	(1,009,189)
2016	Liability Assumption Gain	30	(29,907,056)	29	(29,597,498)	(2,278,120)
2016	Asset Assumption Loss	30	211,528	29	209,338	16,113
2017	Gross Asset Experience Gain	20	(24,634,307)	20	(24,634,307)	(2,191,779)
2017	Gains Allocated to Experience Account	10	3,875,934	10	3,875,934	518,123
2017	Priority Excess Allocation	20	15,932,442	20	15,932,442	1,417,551
2017	Liability Experience Gain	20	(19,955,111)	20	(19,955,111)	(1,775,459)
2017	Contribution Loss	5	3,079,929	5	3,079,929	703,554
2017	Liability Assumption Loss	20	20,126,949	20	20,126,949	1,790,748
2017	Asset Assumption Gain	20	(4,562,632)	20	(4,562,632)	(405,949)

TOTAL Unfunded Actuarial Accrued Liability	$ 662,303,876	
TOTAL Fiscal 2018 Amortization Payments at Beginning of Year		$ 53,763,900
TOTAL Fiscal 2018 Amortization Payments Adjusted to Mid-Year		$ 55,646,286

† Balance reduced by application of investment gains assigned by Act 399 of 2014. See Exhibit V – Schedule D for a detailed calculation of the outstanding balance.

EXHIBIT V – SCHEDULE D
CUMULATIVE AMORTIZATION BASE ADJUSTMENT

2014 Initial Cumulative Amortization Base	$	905,696,581
2014 Applied Base Reduction for Privatization Liability		(1,198,251)
2014 Priority Excess Interest Applied to Base		(7,500,000)
2014 PBI Cap Excess Applied to Base		(3,252,257)
2014 Adjusted Initial Amortization Base	$	893,746,073
2015 Amortization Payment (Beginning of Year)		(69,677,675)
2015 Interest on Amortization Base net of Amortization Payment		59,744,957
2015 Priority Excess Interest Applied to Base		(15,000,000)
Net Balance as of June 30, 2015 on 2014 Cumulative Base	$	868,813,355
2016 Amortization Payment (Beginning of Year)		(68,153,884)
2016 Interest on Amortization Base net of Amortization Payment		56,046,163
2016 Priority Excess Interest Applied to Base		0
Net Balance as of June 30, 2016 on 2014 Cumulative Base	$	856,705,634
2017 Amortization Payment (Beginning of Year)		(68,897,690)
2017 Interest on Amortization Base net of Amortization Payment		56,131,316
2017 Priority Excess Interest Applied to Base		(15,932,442)
Net Balance as of June 30, 2017 on 2014 Cumulative Base	$	828,006,818

EXHIBIT VI
ANALYSIS OF CHANGE IN ASSETS

Net Valuation Assets (June 30, 2016)			$ 1,829,595,670
INCOME:			
Member Contributions	$	21,874,930	
Employer Contributions		78,768,502	
Irregular Contributions		2,916,050	
Total Contributions			$ 103,559,482
Net Appreciation of Investments	$	228,797,500	
Interest & Dividends		12,879,860	
Alternative Investment Income		7,267,308	
Miscellaneous Income		435,503	
Investment Expense		(9,967,839)	
Net Investment Income			$ 239,412,332
TOTAL Income			$ 342,971,814
EXPENSES:			
Retirement Benefits	$	179,085,508	
Refunds of Contributions		4,231,413	
Transfers to Other Systems		563,815	
Administrative Expenses		4,195,327	
TOTAL Expenses			$ 188,076,063
Net Market Value Income for Fiscal 2017 (Income – Expenses)			$ 154,895,751
Unadjusted Fund Balance as of June 30, 2017 (Fund Balance Previous Year + Net Income)			$ 1,984,491,421
Income Adjustment for Actuarial Smoothing			$ (89,408,688)
Change in Side Fund Balances			$ 5,246,394
Net Valuation Assets: (June 30, 2017)			$ 1,900,329,127

EXHIBIT VII – SCHEDULE A
EXPERIENCE ACCOUNT

1.	Experience Account Balance – June 30, 2016	$	633,076
2.	Investment Gain, if any	$	23,684,310
3.	Priority Excess Interest Allocated to Reduce UAL	$	15,932,442
4.	Residual Investment Gain, if any (2 – 3)	$	7,751,868
5.	Investment Gain to Allocate to the Experience Account (50% × 4)	$	3,875,934
6.	Credit for Investment Earnings on Initial Balance based on AVA rate of return, if positive	$	53,622
7.	Total Preliminary Credits to be Allocated to Experience Account (5 + 6)	$	3,929,556
8.	Debit for Investment Losses on Initial Balance based on AVA rate of return, if negative	$	0
9.	Present Value of Permanent Benefit Increase Paid July 1, 2017	$	0
10.	Total Preliminary Debits to be Allocated to Experience Account (8 + 9)	$	0
11.	Total Net Credit/Debit to be Allocated to Experience Account (7 + 10)	$	3,929,556
12.	Limit to the Experience Account Balance – June 30, 2017 (Present Value of PBI at CPI-U for Fiscal 2017 or 1.63%)	$	20,126,949
13.	Experience Account Balance – June 30, 2017 (Lesser of 1+11 & 2-at least 0)		4,562,632

EXHIBIT VII – SCHEDULE B
AMORTIZATION CONVERSION ACCOUNT

Amortization Conversion Account Balance as of June 30, 2016	$	15,719,788

Fiscal Year Supplemental Contributions to be funded by the Amortization Conversion Account:

2014-15	$	560,927
2015-16		3,359,318
2016-17		4,613,318
2017-18		4,267,895
2018-19		2,278,309
Total	$	15,079,767

Residual balance as of June 30, 2019 to be amortized as a gain	$	4,560,266
Amortization Conversion Account Balance as of June 30, 2017	$	11,106,470

EXHIBIT VIII
CENSUS DATA

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2016	12,075	4,173	676	13,148	30,072
Additions to Census					
Initial membership	1,204	295			1,499
Omitted in error last year		1			1
Death of another member			(4)	120	116
Adjustment for multiple records				3	3
Change in Status during Year					
Actives terminating service	(446)	446			
Actives who retired	(417)			417	
Actives entering DROP	(197)	(7)	204		
Term. members rehired	50	(50)			
Term. members who retire		(29)		29	
Retirees who are rehired					
Refunded who are rehired	20	4			24
DROP participants retiring			(135)	135	
DROP returned to work	118		(118)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(312)	(225)			(537)
Deaths	(41)	(28)		(498)	(567)
Included in error last year			(1)		(1)
Adjustment for multiple records	1	(1)			
Number of members as of June 30, 2017	12,055	4,579	622	13,354	30,610

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	5	0	5	22,901	114,505
21 - 25	88	59	147	21,061	3,095,952
26 - 30	177	196	373	21,771	8,120,698
31 - 35	250	329	579	22,505	13,030,396
36 - 40	302	560	862	22,446	19,348,209
41 - 45	372	717	1,089	23,477	25,566,536
46 - 50	630	1,063	1,693	23,810	40,309,693
51 - 55	933	1,552	2,485	24,250	60,260,447
56 - 60	1,012	1,362	2,374	24,358	57,826,913
61 - 65	652	642	1,294	23,363	30,231,234
66 - 70	372	361	733	22,948	16,821,096
71 - 75	164	142	306	22,844	6,990,323
76 - 80	51	43	94	20,915	1,966,029
81 - 85	12	7	19	18,921	359,490
86 - 90	1	1	2	17,184	34,367
TOTAL	5,021	7,034	12,055	23,565	284,075,888

THE ACTIVE CENSUS INCLUDES 5,717 ACTIVES WITH VESTED BENEFITS, INCLUDING 545 ACTIVE FORMER DROP PARTICIPANTS. THE 622 CURRENT DROP PARTICIPANTS ARE EXCLUDED.

DROP PARTICIPANTS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51 - 55	23	14	37	34,202	1,265,484
56 - 60	85	85	170	21,793	3,704,791
61 - 65	145	215	360	14,184	5,106,367
66 - 70	15	16	31	6,957	215,663
71 - 75	10	6	16	6,073	97,172
76 - 80	5	2	7	6,731	47,115
81 - 85	1	0	1	4,043	4,043
TOTAL	284	338	622	16,786	10,440,635

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	3	0	3	9,889	29,666
36 - 40	3	3	6	12,892	77,354
41 - 45	7	9	16	11,136	178,172
46 - 50	20	27	47	9,898	465,217
51 - 55	36	37	73	11,866	866,215
56 - 60	58	58	116	11,805	1,369,347
61 - 65	10	26	36	8,902	320,459
66 - 70	2	7	9	7,065	63,586
71 - 75	0	3	3	5,695	17,085
76 - 80	1	1	2	1,712	3,423
TOTAL	140	171	311	10,902	3,390,524

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From		To	Number	Total Contributions
0	-	99	849	39,568
100	-	499	1,300	318,606
500	-	999	527	377,228
1000	-	1999	553	803,844
2000	-	4999	624	2,034,670
5000	-	9999	303	2,124,346
10000	-	19999	107	1,434,447
20000	-	99999	5	106,397
		TOTAL	4,268	7,239,106

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	1	0	1	25,698	25,698
46 - 50	15	2	17	12,202	207,429
51 - 55	91	51	142	20,407	2,897,755
56 - 60	378	254	632	20,946	13,238,132
61 - 65	742	949	1,691	16,428	27,779,861
66 - 70	1,040	1,395	2,435	14,648	35,668,860
71 - 75	859	1,376	2,235	12,336	27,571,430
76 - 80	749	1,196	1,945	10,022	19,492,497
81 - 85	513	787	1,300	9,679	12,582,448
86 - 90	278	366	644	9,696	6,244,325
91 - 99	99	123	222	10,497	2,330,365
TOTAL	3,766	3,502	11,264	13,143	148,038,800

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	3	6	9	10,270	92,428
46 - 50	7	17	24	8,667	208,016
51 - 55	30	63	93	9,374	871,754
56 - 60	39	82	121	8,071	976,637
71 - 75	1	0	1	4,368	4,368
TOTAL	80	168	248	8,682	2,153,203

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	24	20	44	11,363	499,992
26 - 30	3	4	7	12,596	88,170
31 - 35	3	1	4	6,682	26,729
36 - 40	4	11	15	7,973	119,589
41 - 45	3	12	15	7,500	112,503
46 - 50	15	23	38	9,699	368,549
51 - 55	9	51	60	10,280	616,787
56 - 60	22	110	132	11,432	1,509,067
61 - 65	25	124	149	10,295	1,533,950
66 - 70	49	203	252	10,368	2,612,667
71 - 75	43	222	265	9,108	2,413,631
76 - 80	66	259	325	8,891	2,889,456
81 - 85	34	237	271	8,052	2,182,119
86 - 90	21	168	189	8,581	1,621,722
91 - 99	1	75	76	8,446	641,878
TOTAL	322	1,520	1,842	9,358	17,236,809

ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20	4	1										5
21 - 25	59	48	25	12	1	2						147
26 - 30	127	78	49	42	31	44	2					373
31 - 35	117	106	76	60	36	130	53	1				579
36 - 40	126	128	94	92	64	216	116	25	1			862
41 - 45	118	116	125	64	75	251	205	100	34	1		1,089
46 - 50	180	114	117	112	94	383	310	216	124	43		1,693
51 - 55	199	150	166	126	121	457	542	367	256	92	9	2,485
56 - 60	171	146	129	130	115	499	435	370	299	50	30	2,374
61 - 65	74	105	84	93	71	323	166	134	101	89	54	1,294
66 - 70	41	39	45	33	34	156	105	98	82	60	40	733
71 & Over	10	20	25	21	21	83	65	39	45	31	61	421
Totals	1226	1051	935	785	663	2544	1999	1350	942	366	194	12055

AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Salary
0 - 20	23,779	19,389										22,901
21 - 25	20,793	21,350	21,878	20,492	13,674	18,931						21,061
26 - 30	20,064	21,057	21,367	23,413	22,503	25,981	29,583					21,771
31 - 35	20,101	21,441	22,768	21,024	21,605	24,525	26,670	34,476				22,505
36 - 40	19,933	20,957	21,089	21,595	20,890	23,130	26,195	30,687	46,210			22,446
41 - 45	19,928	19,920	22,079	21,155	21,398	23,130	24,190	30,602	37,963	70,188		23,477
46 - 50	20,835	21,513	21,227	21,500	21,999	23,291	24,498	25,669	29,014	34,658		23,810
51 - 55	20,480	20,934	21,600	23,510	23,038	23,485	24,687	25,377	27,600	31,269	37,900	24,250
56 - 60	20,756	20,418	21,765	22,571	22,826	23,617	24,907	25,575	27,783	30,258	34,262	24,358
61 - 65	19,597	20,435	20,296	21,281	22,874	23,362	23,729	25,354	26,245	27,101	25,596	23,363
66 - 70	20,102	20,748	18,853	18,197	22,537	21,324	22,834	24,085	25,984	26,242	29,574	22,948
71 & Over	20,753	16,776	22,827	19,296	18,524	20,389	23,413	22,421	24,605	24,253	24,501	22,210
Average	20,344	20,758	21,462	21,810	22,158	23,260	24,581	25,789	27,809	29,203	27,983	23,565

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 30												0
31 - 35										3		3
36 - 40									6			6
41 - 45								16				16
46 - 50						2	45					47
51 - 55	3	1				69						73
56 - 60	33	21	29	14	19							116
61 - 65	36											36
66 - 70	9											9
71 - 75	3											3
76 - 80	2											2
81 & Over												0
Totals	86	22	29	14	19	71	45	16	6	3	0	311

AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 30												0
31 - 35										9,889		9,889
36 - 40									12,892			12,892
41 - 45								11,136				11,136
46 - 50						16,522	9,604					9,898
51 - 55	22,311	46,084				10,916						11,866
56 - 60	14,888	11,691	9,336	9,362	12,143							11,805
61 - 65	8,902											8,902
66 - 70	7,065											7,065
71 - 75	5,695											5,695
76 - 80	1,712											1,712
81 & Over												0
Average	11,195	13,254	9,336	9,362	12,143	11,074	9,604	11,136	12,892	9,889	0	10,902

SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 50	4	2	3	3	2	3			1			18
51 - 55	27	23	17	13	17	25	16	4				142
56 - 60	89	69	74	46	56	139	118	28	9	3	1	632
61 - 65	207	215	174	124	161	391	299	82	27	6	5	1,691
66 - 70	133	119	158	187	198	761	659	131	57	24	8	2,435
71 - 75	50	43	40	64	65	531	938	363	97	34	10	2,235
76 - 80	23	22	29	24	26	190	587	708	258	53	25	1,945
81 - 85	2	7	6	8	7	68	144	424	460	136	38	1,300
86 - 90	1		5		4	9	33	73	210	254	55	644
91 & Over						1	3	9	26	82	101	222
Totals	536	500	506	469	536	2118	2797	1822	1145	592	243	11264

AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 50	17,316	9,403	17,875	11,237	8,781	11,470			5,750			12,952
51 - 55	20,067	24,977	28,913	28,565	13,525	19,177	10,257	11,290				20,407
56 - 60	21,338	25,555	24,932	27,269	24,431	22,475	14,049	8,404	6,926	6,830	8,277	20,946
61 - 65	16,021	15,085	17,145	17,429	18,655	19,529	15,357	7,862	5,036	5,583	6,159	16,428
66 - 70	12,800	13,386	14,912	15,922	14,518	14,150	17,272	11,030	6,408	6,463	6,233	14,648
71 - 75	12,332	11,596	13,279	13,065	12,413	13,273	12,902	11,040	8,691	6,872	4,795	12,336
76 - 80	12,234	12,596	14,015	14,740	12,218	11,357	9,834	9,339	10,305	8,795	7,560	10,022
81 - 85	26,123	14,279	13,570	10,915	15,738	12,337	9,742	8,995	9,588	9,605	9,978	9,679
86 - 90	30,391		12,676		9,544	7,654	9,996	8,125	9,206	9,928	12,101	9,696
91 & Over						5,015	10,247	7,882	9,636	10,435	11,064	10,497
Average	15,876	16,137	17,415	17,218	16,355	15,184	13,384	9,587	9,315	9,447	10,239	13,143

DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 40												0
41 - 45	2		2	3		2						9
46 - 50	3	5	1	1	2	11	1					24
51 - 55	20	10	9	8	9	20	11	3	3			93
56 - 60	15	13	17	11	10	41	11	3				121
61 - 65												0
66 - 70												0
71 - 75							1					1
76 & Over												0
Totals	40	28	29	23	21	74	24	6	3	0	0	248

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 40												0
41 - 45	11,765		8,135	11,820		8,584						10,270
46 - 50	8,871	8,329	9,915	8,608	9,606	8,092	13,007					8,667
51 - 55	11,661	10,516	11,730	11,490	9,341	7,983	5,467	5,842	4,835			9,374
56 - 60	9,590	10,624	8,903	8,401	8,246	7,220	5,235	4,958				8,071
61 - 65												0
66 - 70												0
71 - 75							4,368					4,368
76 & Over												0
Average	10,680	10,176	9,762	9,930	8,845	7,593	5,629	5,400	4,835	0	0	8,682

SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20	7	9	2	3		5	7	1				34
21 - 25		3				5	1	1				10
26 - 30						1	3	2	1			7
31 - 35						1	1	2				4
36 - 40	1		2		1	2	4		1	1	3	15
41 - 45	2	1		2		1	6	1	1		1	15
46 - 50	2	3			2	3	7	7	8	5	1	38
51 - 55	2	3	1	2	3	12	18	7	8	2	2	60
56 - 60	5	7	8	6	6	29	33	18	16	2	2	132
61 - 65	2	4	5		3	35	41	31	20	8		149
66 - 70	1		5	1	9	54	82	53	29	12	6	252
71 - 75	1	1	1	2	3	25	81	71	53	19	8	265
76 - 80		1	1	2	2	18	52	102	84	46	17	325
81 - 85		1		2		2	26	52	73	86	29	271
86 - 90						3	3	16	47	67	53	189
91 & Over								3	5	16	52	76
Totals	23	33	25	20	29	196	365	367	346	264	174	1842

AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	
0 - 20	15,842	11,734	19,180	4,452		13,546	9,112	13,135				12,143
21 - 25		5,910				11,142	5,911	7,775				8,712
26 - 30						26,406	10,327	13,819	3,146			12,596
31 - 35						7,571	13,138	3,010				6,682
36 - 40	5,190		13,119		8,677	10,984	6,071		10,921	7,594	4,905	7,973
41 - 45	11,225	3,943		7,397		8,356	8,744	5,086	1,685		3,725	7,500
46 - 50	10,868	10,560			16,731	13,813	14,061	6,324	6,354	8,969	1,856	9,699
51 - 55	11,584	5,832	10,337	18,650	19,888	11,704	11,826	6,118	6,202	5,426	6,110	10,280
56 - 60	13,163	12,003	12,959	8,323	12,178	14,741	11,796	9,108	7,568	6,341	9,050	11,432
61 - 65	18,953	18,335	10,311		9,226	12,851	11,132	8,150	6,139	7,729		10,295
66 - 70	12,059		15,235	7,417	14,462	12,662	10,366	9,027	7,894	8,419	7,445	10,368
71 - 75	10,931	8,091	22,154	8,042	11,088	10,265	10,074	8,195	9,137	7,157	6,044	9,108
76 - 80		4,886	9,734	37,808	8,254	7,964	9,377	8,048	8,968	9,302	8,802	8,891
81 - 85		9,678		12,412		11,860	8,569	6,924	8,628	7,999	7,699	8,052
86 - 90						8,247	14,562	5,813	8,908	9,576	7,548	8,581
91 & Over								16,076	7,795	8,003	8,204	8,446
Average	13,485	10,802	13,529	11,966	13,189	12,138	10,322	8,027	8,422	8,562	7,720	9,358

EXHIBIT IX
YEAR-TO-YEAR COMPARISON

	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014
Number of Active Members	12,055	12,075	12,061	12,054
Number of Retirees & Survivors	13,354	13,148	13,024	12,711
DROP Participants	622	676	660	537
Number of Terminated Due Deferred Benefits	311	275	276	413
Number Terminated Due Refunds	4,268	3,898	3,940	3,793
Active Lives Payroll (excludes DROP participants)	$ 284,075,888	$ 284,835,111	$ 276,949,800	$ 274,347,650
Retiree Benefits in Payment	$ 167,428,812	$ 159,448,329	$ 154,831,625	$ 146,084,220
Market Value of Assets (Includes Side Funds)	$ 1,922,705,998	$ 1,767,810,247	$ 1,851,456,181	$ 1,857,367,056
Ratio of Net Valuation Assets to Actuarial Accrued Liability	74.16%	72.54%	70.71%	66.92%
Actuarial Accrued Liability (EAN)	$ 2,562,633,003	$ 2,522,157,498	$ 2,485,583,187	$ 2,438,251,413
Net Valuation Assets	$ 1,900,329,127	$ 1,829,595,670	$ 1,757,432,206	$ 1,631,618,702
Unfunded Actuarial Accrued Liability (UAL)	$ 662,303,876	$ 692,561,828	$ 728,150,981	$ 806,632,711
Employee Experience Account	$ 4,562,632	$ 633,076	$ 23,058,055	$ 20,787,326
Amortization Conversion Account	$ 11,106,470	$ 15,719,788	$ 19,079,106	$ 19,640,033

	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015
Employee Contribution Rate For Employees Hired Before July 1, 2010	7.50%	7.50%	7.50%	7.50%
Employee Contribution Rate For Employees Hired On Or After July 1, 2010	8.00%	8.00%	8.00%	8.00%
Actuarially Required Employer Contribution as a Percentage of Projected Payroll	27.8%	27.9%	28.7%	32.0%
Actual Employer Contribution as a Percentage of Projected Payroll	27.6%	27.3%	30.2%	33.0%

	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008
	12,184	12,416	12,854	13,166	13,265	13,153
	13,369	12,930	12,717	12,450	12,290	12,159
	559	612	619	599	508	583
	355	339	351	355	361	385
	N/A	N/A	N/A	N/A	N/A	N/A
	$ 290,013,756	$ 277,191,001	$ 296,693,950	$ 306,332,902	$ 315,400,539	$ 289,528,924
	$ 142,752,516	$ 134,573,580	$ 128,989,260	$ 123,992,280	$ 120,719,868	$ 118,321,000
	$ 1,641,164,883	$ 1,497,109,136	$ 1,516,634,590	$ 1,285,852,191	$ 1,203,687,757	$ 1,512,241,849
	62.10%	61.60%	59.88%	61.00%	65.49%	76.64%
	$ 2,404,014,249	$ 2,278,472,127	$ 2,254,351,456	$ 2,213,362,198	$ 2,153,359,512	$ 2,060,241,891
	$ 1,492,914,745	$ 1,403,463,883	$ 1,349,829,757	$ 1,350,072,547	$ 1,410,315,974	$ 1,578,991,310
	$ 911,099,504	$ 875,008,244	$ 904,521,699	$ 863,289,651	$ 743,043,538	$ 481,250,581
	$ 31,668,697	$ 11,641,275	$ 0	$ 0	$ 0	$ 0
	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

	Fiscal 2014	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009
	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
	8.00%	8.00%	8.00%	8.00%	N/A	N/A
	32.6%	31.6%	30.1%	28.0%	23.3%	18.6%
	32.3%	30.8%	28.6%	24.3%	17.6%	17.8%

SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Louisiana School Employees' Retirement System (LSERS) was established as of July 1, 1947, for the purpose of providing retirement allowances and other benefits as described under R.S. 11:1001 – 11:1206. The following summary of plan provisions covers many of the most important plan provisions covering LSERS, but is not a description of every plan provision and should only be used for general informational purposes. This summary does not constitute a guarantee of benefits. The provisions contained within this section are as of June 30, 2017.

MEMBERSHIP:

Any school bus operator, janitor, custodian, maintenance employee, bus aide, monitor or attendant or other regular school employee helping with the transportation of school children, and who is a legal employee of a parish or city school board of the State of Louisiana along with employees of the system.

CONTRIBUTION RATES:

Employees whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred before July 1, 2010 contribute 7.50% of salary and employees whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2010 contribute 8.00% of salary. Employers contribute an actuarially determined "normal contribution" rate plus "accrued liability contribution" rate. Members are not required to contribute to the system once they have enough service to have accrued 100% of their final average compensation, but the employer is required to continue to contribute the employer's contribution until the member retires or enters DROP.

CONTRIBUTION REFUNDS:

Upon withdrawal from service, members not entitled to a retirement allowance may receive a refund of accumulated contributions. Refunds are payable ninety days after the effective date of withdrawal from service, if the member's employer has submitted all contributions. (Members who are entitled to a retirement allowance may waive their right to the benefit and accept a refund of accumulated contributions.)

FINAL AVERAGE COMPENSATION:

For members whose first employment making them eligible for membership in the system began on or before June 30, 2006, the final average compensation is based on the 36 highest successive or joined months of employment. The compensation used to determine the final average compensation cannot increase more than 10% per year, unless the raise is due to an increase in compensation by legislative act or city/parish system-wide salary increase.

For members whose first employment making them eligible for membership in the system began on or after July 1, 2006 and whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before June 30, 2010, the final average compensation is based on the 60 highest successive or joined months of employment. The compensation used to determine the final average compensation cannot increase more than 10% per year, unless the raise is due to an increase in compensation by legislative act or city/parish system-wide salary increase.

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems began on or after July 1, 2010, the final average compensation is based on the 60 highest successive or joined months of employment. The compensation used to determine the final average compensation cannot increase more than 15% per year, unless the raise is due to an increase in compensation by legislative act or city/parish system-wide salary increase.

VESTED WITHDRAWAL BENEFITS:

Members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before June 30, 2010, who have ten or more years of creditable service, may elect to leave accumulated contributions on deposit and after withdrawal from service receive a retirement allowance based on the creditable service and accrual rate for their period of membership upon reaching age sixty.

Members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2010 and on or before June 30, 2015, who have five or more years of creditable service, may elect to leave accumulated contributions on deposit and after withdrawal from service receive a retirement allowance based on the creditable service and accrual rate for their period of membership upon reaching age sixty.

Members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2015, who have five or more years of creditable service, may elect to leave accumulated contributions on deposit and after withdrawal from service receive a retirement allowance based on the creditable service and accrual rate for their period of membership upon reaching age sixty-two.

NORMAL RETIREMENT BENEFITS:

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before June 30, 2010, eligibility for normal retirement occurs upon the attainment of age 60 and 10 years of accredited service, or age 55 and 25 years of accredited service, or at any age and 30 years of accredited service. The retirement allowance is equal to three and one-third percent of the member's final average compensation multiplied by his years of creditable service.

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2010 and on or before June 30, 2015, eligibility for normal retirement occurs upon the attainment of age 60 and 5 years of accredited service. The retirement allowance is equal to two and one-half percent of the member's final average compensation multiplied by his years of creditable service.

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2015, eligibility for normal retirement occurs upon the attainment of age 62 and 5 years of accredited service. The retirement allowance is equal to two and one-half percent of the member's final average compensation multiplied by his years of creditable service.

In addition to the normal retirement benefits, members receive a supplementary allowance equal to twenty-four dollars per annum, or two dollars per month, for each year of accredited service.

The retirement benefits provided by the system cannot annually exceed one hundred percent of average compensation.

EARLY RETIREMENT:

Members are eligible to retire under the early retirement provisions if they have at least twenty (20) years of service credit regardless of attained age, exclusive of military service and unused annual and sick leave.

The early retirement benefit is calculated, inclusive of military service credit and allowable unused annual and sick leave, actuarially reduced from the earliest age that the member would normally become eligible for a regular retirement benefit if they had continued in service to that age.

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 retiree dies before receiving in annuity payments the present value of their 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 retiree'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 retiree'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 reduced benefit and to provide a specified benefit to their designated beneficiary, which in total is actuarially equivalent to the maximum benefit. The form of benefit selected under Option 4 must be approved by the Board of Trustees.

NOTE: Under Option 4, the Board of Trustees has approved the "pop up" form of benefit which provides a benefit that reverts to the maximum benefit if the beneficiary predeceases the retiree. This feature requires additional reduction to the member's benefit. (The system refers to the available popup options as option 2A, providing a beneficiary benefit equal to the member's reduced benefit and option 3A, providing a beneficiary benefit equal to one-half of the member's reduced benefit)

Self-Funded COLA Options: A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2½% 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.

Initial Benefit Retirement Plan (IBRP): This plan is available only to members who have not participated in the Deferred Retirement Option Plan (DROP) and who meet regular retirement eligibility requirements. Under this plan, members may receive an initial benefit plus a reduced monthly retirement allowance which, when combined, equal the actuarially equivalent amount of the maximum or optional retirement allowance. The reduced monthly retirement allowance can be paid in the form of a maximum benefit or according to options described above. The initial benefit may not exceed an amount equal to thirty-six payments of the member's maximum retirement allowance. The initial benefit is placed in an account called an "IBRP Account" where interest is credited annually and can be withdrawn as a lump-sum payment, monthly payments, or other periodic payments.

DISABILITY BENEFITS:

Any member who meets the minimum service requirement for disability and who has been officially certified as likely to be totally and permanently incapacitated, either mentally or physically, from the further performance of the duties being performed is entitled to disability benefits.

A member whose first employment making them eligible for membership in LSERS occurred on or before June 30, 2006, may apply for disability benefits if he is not eligible to receive a regular service retirement allowance and has five years of actual credited service. The disability retirement allowance is equal to two and one-half percent of final average compensation multiplied by the years of creditable service, but not less than thirty-three and one-third percent of final average compensation. Such members are not eligible to choose an optional allowance. Upon the death of such disability retiree who leaves a surviving spouse who had been married to the deceased for at least two years prior to death, the spouse receives a benefit equal to 75% of the benefit being received by the disability retiree at death. These benefits are payable for the life of the spouse unless the spouse remarries before age 55. In such a case, the benefit ceases upon the remarriage.

A member whose first employment making them eligible for membership in LSERS occurred on or after July 1, 2006 and whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before June 30, 2010 may apply for disability benefits if he is not eligible to receive a regular service retirement allowance and has ten years of actual credited service. The disability retirement allowance is equal to three percent of final average compensation multiplied by the years of creditable service. Upon the death of such disability retiree who leaves a surviving spouse who had been married to the deceased for at least two years prior to the death of the disability retiree, the spouse receives a benefit equal to 75% of the benefit being received by the disability retiree at their death. These benefits are payable for the life of the spouse unless the spouse remarries before age 55. In such a case, the benefit ceases upon the remarriage.

A member whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2010 may apply for disability benefits if he is not eligible to receive a regular service retirement allowance and has ten years of actual credited service. The disability retirement allowance is equal to the regular retirement formula without reduction by reason of age. A selection of retirement option must be made at the time of retirement and upon the death of the disabled retiree, the option amount selected is paid to the option beneficiary.

SURVIVOR BENEFITS:

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before June 30, 2010:

In the case of a death of an active member with 5 years of creditable service (at least 2 years earned immediately prior to death) or a member with 20 years of service at the time of death who has a surviving spouse with a minor child or children, the benefit payable is 75% of the deceased member's final average compensation or $300 per month, whichever is greater. One-third of this benefit is designated to the spouse and two-thirds to the minor child or children. Child benefits cease at attainment of eighteen years, or upon marriage, except that benefits may continue until age twenty-three if the child remains a full-time student at a high school, vocational school, college, or university.

In the case of a death of an active member with 5 years of creditable service (at least 2 years earned immediately prior to death) or a member with 20 years of service at the time of death who has no surviving spouse but has a minor child or children, the benefit payable is 75% of the deceased member's final average compensation or $300 per month, whichever is greater. These benefits are paid to the person having legal custody of the child and benefits cease at attainment of eighteen years, or upon marriage, except that benefits may continue until age twenty-three if the child remains a full-time student at a high school, vocational school, college, or university.

In the case of a death of an active member with 10 years of creditable service (at least 2 years earned immediately prior to death) or a member with 20 years of service at the time of death who has a surviving spouse but has no minor child or children, the benefit payable is 50% of the deceased member's final average compensation or $200 per month, whichever is greater. Such benefits will not be paid to any surviving spouse who has remarried since the death of the member prior to the age of 55 unless the member was eligible for regular retirement or had twenty years of service credit on the date of death.

Any surviving child of a deceased member, regardless of age, who has a total physical or mental disability and is dependent on the surviving spouse or other legal guardian, may continue to receive lifetime surviving child benefits equal to 75% of the deceased member's final average compensation or $300 per month, whichever is greater. The total benefits are reduced to an amount which, when added to the other state assistance being received, does not exceed the maximum survivor benefits payable.

In the event of death of a member with no surviving spouse or child due benefits, the accumulated contributions are payable to the designated beneficiaries, or estate.

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after July 1, 2010:

In the case of a death of an active member with 5 years of creditable service (at least 2 years earned immediately prior to death) or a member with 20 years of service at the time of death who has a surviving spouse with a minor child or children, a spousal survivor is paid a benefit equal to 50% of the benefit to which the member would have been entitled if he had retired on the date of his death using the member's applicable accrual rate regardless of years of service or age, or $600 per month, whichever is greater.

These benefits are payable for the life of the spouse unless the spouse remarries before age 55. In such a case, the benefit ceases upon the remarriage, and resumes payment upon a subsequent divorce or death of a new spouse.

When all surviving children cease to be eligible for benefits, the surviving spouse is paid the benefits due to a surviving spouse without minor children or disabled children, as described below.

In addition to any benefits payable to a spouse or in cases where only surviving minor or disabled children are due benefits, each surviving eligible child, subject to a maximum of two children, is paid 50% percent of the benefit to which a spouse with children is entitled. These benefits are payable even if a member dies after retirement leaving an eligible minor or disabled child.

Any surviving child of a deceased member, regardless of age, who has a total physical or mental disability and is dependent on the surviving spouse or other legal guardian may continue to receive surviving child benefits. The total benefits paid are reduced to an amount which, when added to the other state assistance being received does not exceed the maximum survivor benefits payable.

In the case of a death of an active member with 10 years of creditable service (at least 2 years earned immediately prior to death) or a member with 20 years of service at the time of death who has a surviving spouse to whom they were married for at least one year prior to their death who has no minor child or children, a spousal survivor benefit equal to the accrued benefit that would have been due under option 2, or $600 per month, whichever is greater, is payable. Unless the member was eligible to retire at the time of death, such spousal benefits cease upon remarriage and resume upon a subsequent divorce or death of the new spouse.

In the event of death of a member with no surviving spouse or child due benefits, the accumulated contributions are payable to the designated beneficiaries, or estate.

DEFERRED RETIREMENT OPTION PLAN (DROP):

In lieu of terminating employment and accepting a service retirement allowance, any member of the system who is eligible to receive a regular retirement allowance may elect to participate in the DROP and defer the receipt of benefits. An election to participate may be made only once and the duration of participation shall be specified and shall not exceed three years. The three year period begins within sixty calendar days after the member reaches eligibility. The participation period must end not more than three years and sixty calendar days from the date the member reaches eligibility. Upon commencement of participation in the plan, active membership in the system terminates and neither the employee nor employer contributions are payable. Compensation and creditable service remain as they existed on the effective date of commencement of participation in the plan and creditable service excludes conversion of sick and annual leave. 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 DROP 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 DROP account equal to the payments to the account or systematic disbursements based on the individual's subaccount in any manner approved by the Board. The monthly benefits that were being paid into the fund during the period of participation will begin to be paid to the retiree based on the option selected at DROP entry. If employment is not terminated at the end of the DROP period, payments into the account cease and employee and employer contributions resume. Monthly retirement benefits payable after termination of participation in the plan and employment include a "base benefit" equal to the participant's monthly credit to the account plus conversion of sick and annual leave, if any, based on the final average compensation rate used to calculate the monthly credit and an additional benefit if employment continues. The additional benefit is based on service credit for the period after plan participation. If the participant dies while still employed, the credits and benefits, if any, due beneficiaries are payable as if the member retired immediately prior to death.

NOTE: For anyone eligible to enter DROP prior to January 1, 2004, the DROP Account Balance earns interest at a rate of one-half of one percentage point below the percentage rate of return of the System's investment portfolio as certified by the actuary on an annual basis. For all others, DROP accounts are placed in liquid asset money market investments approved by the Board of Trustees.

COST OF LIVING ADJUSTMENTS:

Act 333 of 2007 established an Experience Account to be used to pay cost of living adjustments (COLAs), or permanent benefit increases (PBIs). The Experience Account is credited with 50% of the investment experience gain in excess of $15 million (indexed based on increases in the actuarial value of assets after June 30, 2015) along with that portion of the net investment income, if any, attributable to the prior year balance, subject to maximum accumulation limitation based upon the Plan's funded percentage. The account is also debited with that portion of the system's net investment loss, if any, attributable to the prior year balance. In no event may the amount in the Experience Account fall below zero. Once the balance of the Experience Account accumulates a sum sufficient to grant retirees a PBI, the Board may recommend the granting of a PBI on benefits up to $60,000 (indexed), not to exceed the lesser of the CPI-U or a percentage determined based on the funded level percentage attained by the system as described in R. S. 11:1145.1(C)(2), provided a PBI had not been granted in the prior year. Benefits are restricted to disability retirees and those retirees and beneficiaries who have attained the age of 60 and have been retired for at least one year. Maximum limitations are outlined in ACT 399 of 2014.

ACTUARIAL ASSUMPTIONS

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

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

ACTUARIAL COST METHOD: Individual Entry Age Normal With Allocation of Cost Based on Earnings. Entry and Attained Ages Calculated on an Age Near Birthday Basis.

VALUATION INTEREST RATE: 7.125% (Net of investment expenses)

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

ACTIVE MEMBER MORTALITY: RP 2000 Combined Healthy Sex Distinct Tables

ANNUITANT AND BENEFICIARY MORTALITY: RP 2000 Combined Healthy Sex Distinct Tables

RETIREE COST OF LIVING INCREASES: 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 and accrued liabilities within this report do not include provisions for potential future increases not yet authorized by the Legislature, but do include a recognition of the existing balance in the Experience Account together with the present value of future contributions to the Account up to the maximum permissible value of the Account based upon current account limitations.

ANNUAL SALARY INCREASE RATE: The gross rates including inflation of 2.625% and merit increases are as follows:

Years of Service	Salary Growth Rate
1-2	5.375%
3-18	4.075%
19-26	3.875%
27-30	3.375%
Above 30	3.075%

RETIREMENT RATES: The table of these rates through age 75 is included later in the report. These rates apply only to those individuals eligible to retire.

ACCUMULATED LEAVE POLICIES: Retirements are monitored to determine the amount of leave converted to service credit. Leave credit is accrued throughout the duration of the member's career. The average service credit converted is expressed as 3% percent of the accrued benefit.

RETIREMENT LIMITATIONS: Projected retirement benefits are not subject to IRS Section 415 limits.

DROP ENTRY RATES: The table of these rates is included later in the report. These rates apply only to those individuals eligible to enter the DROP plan and are applied only in the year of earliest DROP eligibility.

DROP PARTICIPATION PERIOD: All DROP participants are assumed to participate for 3 years and retire at the end of this participation period.

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS: Active former DROP participants retire according to the rates listed for all actives. The table of these rates through age 75 is included later in the report.

DISABILITY RATES: The table of these rates through age 75 is included later in this report.

WITHDRAWAL RATES: The table of these rates through age 75 is included later in the report.

MARRIAGE STATISTICS: 80% 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 are listed below.

Member's Age	% With Children	Number of Children	Average Age
25	62%	1.66	6
30	74%	1.94	8
35	82%	2.06	10
40	81%	1.98	12
45	66%	1.75	13
50	40%	1.48	14
55	19%	1.35	15
60	6%	1.35	15
65	2%	1.35	15

DISABLED LIVES MORTALITY: RP-2000 Disabled Lives Mortality Tables for Males and Females

VESTING ELECTING PERCENTAGE: For members terminating with less than twenty years of service, it is assumed that 80% will withdraw their accumulated employee contributions. For members terminating with twenty or more years of service, it is assumed that only 30% will withdraw their accumulated employee contributions. The remaining are assumed to receive a deferred vested retirement benefit.

ACTUARIAL TABLES AND RATES

Age	Male Mortality Rates	Female Mortality Rates	Retirement Rates for those hired prior to 7/1/2010	Retirement Rates for those hired after 6/30/2010 and before 7/1/2015	Retirement Rates for those hired after 6/30/2015	DROP Rates for those hired prior to 7/1/2010	DROP Rates for those hired after 6/30/2010 and before 7/1/2015	DROP Rates for those hired after 6/30/2015	Disability Rates	Termination Rates
18	0.000316	0.000188	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15000
19	0.000331	0.000190	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15000
20	0.000345	0.000191	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15000
21	0.000357	0.000192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15000
22	0.000366	0.000194	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15000
23	0.000373	0.000197	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.13000
24	0.000376	0.000201	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.13000
25	0.000376	0.000207	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.13000
26	0.000378	0.000214	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
27	0.000382	0.000223	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
28	0.000393	0.000235	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
29	0.000412	0.000248	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
30	0.000444	0.000264	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
31	0.000499	0.000307	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
32	0.000562	0.000350	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10000
33	0.000631	0.000394	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08000
34	0.000702	0.000435	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08000
35	0.000773	0.000475	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.07000
36	0.000841	0.000514	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.07000
37	0.000904	0.000554	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.07000
38	0.000964	0.000598	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.06500
39	0.001021	0.000648	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.06500
40	0.001079	0.000706	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00200	0.06500
41	0.001142	0.000774	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00200	0.05500
42	0.001215	0.000852	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00200	0.05500
43	0.001299	0.000937	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00300	0.05500
44	0.001397	0.001029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00300	0.05500
45	0.001508	0.001124	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00300	0.04500
46	0.001616	0.001223	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00300	0.04500
47	0.001734	0.001326	0.80000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00400	0.04500
48	0.001860	0.001434	0.70000	0.00000	0.00000	0.35000	0.00000	0.00000	0.00400	0.04500
49	0.001995	0.001550	0.55000	0.00000	0.00000	0.35000	0.00000	0.00000	0.00500	0.04000
50	0.002138	0.001676	0.55000	0.00000	0.00000	0.35000	0.00000	0.00000	0.00500	0.04000
51	0.002449	0.001852	0.55000	0.00000	0.00000	0.30000	0.00000	0.00000	0.00600	0.04000
52	0.002667	0.002018	0.55000	0.00000	0.00000	0.30000	0.00000	0.00000	0.00600	0.04000
53	0.002916	0.002207	0.55000	0.00000	0.00000	0.20000	0.00000	0.00000	0.00600	0.04000
54	0.003196	0.002424	0.37000	0.00000	0.00000	0.20000	0.00000	0.00000	0.00600	0.04000
55	0.003624	0.002717	0.37000	0.00000	0.00000	0.50000	0.00000	0.00000	0.00700	0.04000
56	0.004200	0.003090	0.37000	0.00000	0.00000	0.15000	0.00000	0.00000	0.00700	0.04000
57	0.004693	0.003478	0.37000	0.00000	0.00000	0.15000	0.00000	0.00000	0.00600	0.04000
58	0.005273	0.003923	0.45000	0.00000	0.00000	0.15000	0.00000	0.00000	0.00600	0.04000
59	0.005945	0.004441	0.30000	0.00000	0.00000	0.15000	0.00000	0.00000	0.00300	0.04000
60	0.006747	0.005055	0.30000	0.48000	0.00000	0.45000	0.45000	0.00000	0.00300	0.04000
61	0.007676	0.005814	0.25000	0.25000	0.00000	0.10000	0.10000	0.00000	0.00300	0.04000
62	0.008757	0.006657	0.25000	0.25000	0.48000	0.05000	0.05000	0.45000	0.00300	0.04000
63	0.010012	0.007648	0.25000	0.25000	0.25000	0.05000	0.05000	0.10000	0.00300	0.04000
64	0.011280	0.008619	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
65	0.012737	0.009706	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
66	0.014409	0.010954	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
67	0.016075	0.012163	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
68	0.017871	0.013445	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
69	0.019802	0.014860	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
70	0.022206	0.016742	0.25000	0.25000	0.25000	0.05000	0.05000	0.05000	0.00300	0.04000
71	0.024570	0.018579	0.25000	0.25000	0.25000	0.00000	0.00000	0.00000	0.00300	0.04000
72	0.027281	0.020665	0.25000	0.25000	0.25000	0.00000	0.00000	0.00000	0.00300	0.04000
73	0.030387	0.022970	0.25000	0.25000	0.25000	0.00000	0.00000	0.00000	0.00300	0.04000
74	0.033900	0.025458	0.99000	0.99000	0.99000	0.00000	0.00000	0.00000	0.00300	0.04000
75	0.037834	0.028106	0.99000	0.99000	0.99000	0.00000	0.00000	0.00000	0.00300	0.04000

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 – A value of assets that reflects averaged (or smoothed) investment returns over a specified period of time. The actuarial value of assets is used to determine the required plan contributions. The use of smoothed asset values is meant to reduce contribution volatility.

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.

Deferred Retirement Option Plan (DROP) Account – The account into which DROP accruals are paid and from which DROP lump sum balances are disbursed.

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.

Initial Benefit Retirement Plan (IBRP) Account – The account into which the initial benefit is deposited. Interest is credited thereto and monthly payments made from this account.

Net Valuation Assets – Refers to the actuarial value of assets, determined based upon the smoothing technique described in the section on Actuarial Assumptions within this report, reduced by the Amortization Conversion Account balance, if any.

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

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

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

Unfunded Actuarial Accrued Liability – The excess of the actuarial accrued liability over the actuarial value of assets.

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

NOTES