



September 21, 2017

Board of Trustees Louisiana State Employees' Retirement System Post Office Box 44213 Baton Rouge, Louisiana 70804-4213

Ladies and Gentlemen:

This report is prepared for the Louisiana State Employees' Retirement System (LASERS) Board of Trustees to present the results of the actuarial valuation of assets and liabilities, as well as funding requirements, as of June 30, 2017. The primary purpose of the report is to provide a measure of the plan's liability and funding levels and to determine the actuarially required contribution for fiscal year ending 2018 and the projected actuarially required contribution rate for fiscal year ending 2019. Section IV provides disclosures of the Fiduciary Net Position and Net Pension Liabilities required by the Governmental Accounting Standards Board Statements 67/68. Results should not be relied upon for other purposes.

In preparing this valuation, we have relied upon the information provided by the System regarding plan provisions, plan membership, plan assets and other matters as detailed in this report. In particular, we have relied upon the Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position as audited by Duplantier, Hrapmann, Hogan & Maher LLP, Certified Public Accountants. We did not audit the data or plan assets but reviewed for reasonableness and consistency with prior year data. Our review concluded that the data is reasonable and consistent with the prior year's data.

The liabilities and normal costs shown herein have been estimated on the basis of the actuarial cost methods as specified in Louisiana Revised Statutes Title 11 Section 22(6). All actuarial assumptions and methods have been approved by the Board of Trustees and are reasonable and appropriate for the purposes of this valuation. However, other sets of assumptions and methods could also be reasonable and could produce materially different results. Actual results may vary from the assumptions used to prepare the valuation.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements and changes in plan provisions or applicable law. The scope of this report does not include an analysis of the range of such future measurements.

LASERS Actuarial Valuation June 30, 2017

This report has been prepared in accordance with actuarial standards of practice, and to the best of our knowledge, fairly reflects the actuarial present value of accrued benefits of the Louisiana State Employees' Retirement System.

Shelley is an Associate in the Society of Actuaries and Pat is a Fellow in the Society of Actuaries. Shelley and Pat are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

FOSTER & FOSTER INC.

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PRESENTATION OF VALUATION RESULTS

SUMMARY OF VALUATION RESULTS

			Prior	Years
		June 30, 2017	June 30, 2016	June 30, 2015
I.	Membership Census			
	Retirees	48,679	48,201	47,643
	Actives	39,055	39,284	40,194
	DROP	1,520	1,609	1,682
	Terminated Vested	3,794	3,865	3,953
II.	Annual Benefits	\$1,248,400,896	\$1,217,858,640	\$1,170,269,160
III.	Total Payroll	1,821,943,975	1,842,286,184	1,856,735,292
IV.	Valuation Assets	11,976,792,982	11,630,816,397	11,318,433,014
V.	Experience Account	10,455,340	9,714,942	123,579,684
VI.	Investment Yield			
	Market Value (Total Assets)	14.51%	-2.64%	1.34%
	Market Value (Excl. Self Directed, ORP)	15.18%	-2.86%	1.30%
	Actuarial Value	7.62%	5.43%	10.64%
	DROP	7.12%	4.93%	10.14%
VII.	Total Normal Cost	214,222,176	219,475,741	222,225,784
	Total Normal Cost (% of Payroll)	11.76%	11.91%	11.97%
	Employer Normal Cost (% of Payroll)	3.75%	3.93%	4.00%
VIII.	Unfunded Actuarial Accrued Liability	6,815,312,579	6,945,450,226	6,898,227,442
IX.	Funded Percentage	63.7%	62.6%	62.1%
X.	Funding Requirements (Mid-Year)			
	1) Discount Rate (Current Year)	7.70%	7.75%	7.75%
	Discount Rate (Next Year)	7.65%	7.70%	7.75%
	2) Employee Contribution	148,230,786	149,440,502	150,093,960
	Avg. Employee Contribution Rate	8.01%	7.98%	7.97%
	3) Employer Contribution	704,203,905	700,058,533	691,893,177
	Aggregate Rate (Current Year) 1	38.1%	37.4%	36.7%
	4) Projected Employer Contribution	716,802,120	724,363,377	689,209,421
	Proj. Aggregate Rate (Next Year) ¹	37.9%	37.8%	35.8%
	3 00 0			

The above funding requirements measure the cost of benefits that were in effect on June 30, 2017, and includes Acts of the 2017 Regular Legislative Session.

¹ Aggregate employer rate for all plans, net of special sub-plan appropriations.

PROJECTED CONTRIBUTION RATES BY PLAN

Act 1026 of the 2010 Legislative Session requires the employer contribution rate to be determined separately for each plan as shown in the table below. The normal cost portion of each plan's employer contribution rate varies based upon that plan's benefits, member demographics, and the rate contributed by employees. The shared UAL contribution rate is determined in aggregate for all plans. The UAL established due to a specific plan or group of plans due to legislation will be allocated entirely to that plan or those plans. The Rank and File Employer Contribution Rate is applicable to Appellate Law Clerks, as determined by the Public Retirement Systems' Actuarial Committee (PRSAC), and was developed by including Appellate Law Clerk normal costs and payroll. The variation in normal cost rate by plan reflects differences in benefits, actuarial assumptions, and member demographics. The dollar amounts of the aggregate funding requirements for LASERS are shown in Section III.

Projected Cost for Fiscal Year 2018/2019									
	Plan	Normal					Plan	Total	
	Status on	Cost (excl	Employee	Employer	Admin	Shared	Specific	Employer	
	July 1,	Admin) %	NC %	NC %	Expense	UAL	UAL	Contribution	
Plan	2018	(A)	(B)	(A)- (B)	%	%	%	%	
Rank & File, App. Law Clerks	Open	11.5%	7.7%	3.8%	0.95%	33.09%	0.04%	37.9%	
Judges and Court Officers	Closed	17.6%	11.5%	6.1%	0.95%	33.09%	0.0%	40.1%	
Legislators	Closed	19.1%	11.5%	7.6%	0.95%	33.09%	0.0%	41.6%	
Special Legislative	Closed	19.1%	9.5%	9.6%	0.95%	33.09%	0.0%	43.6%	
Corrections - Primary	Closed	8.5%	9.0%	-0.5%	0.95%	33.09%	0.0%	33.5%	
Corrections - Secondary	Closed	12.7%	9.0%	3.7%	0.95%	33.09%	0.0%	37.7%	
Wildlife	Closed	21.8%	9.5%	12.3%	0.95%	33.09%	0.0%	46.3%	
Peace Officers	Closed	11.7%	9.0%	2.7%	0.95%	33.09%	0.0%	36.7%	
Alcohol Tobacco Control	Closed	6.4%	9.0%	-2.6%	0.95%	33.09%	0.0%	31.4%	
Bridge Police	Closed	11.0%	8.3%	2.7%	0.95%	33.09%	0.0%	36.7%	
Judges (Act 992)	Open	18.0%	13.0%	5.0%	0.95%	33.09%	0.0%	39.0%	
Hazardous Duty (Act 992)	Open	13.8%	9.5%	4.3%	0.95%	33.09%	0.12%	38.5%	
Harbor Police Plan	Closed	13.8%	9.0%	4.8%	0.95%	1.33%	0.0%	7.1%	
Aggregate LASERS Plans		11.9%	8.0%	3.9%	0.95%	33.09%	0.0%	37.9%	

FUNDING REQUIREMENTS SPECIFIC TO INDIVIDUAL SUB-PLANS

Rank & File – Act 262 of 2008 increased the disability accrual rate for members hired on or after July 1, 2006. The cost is amortized over 10 years with level payments. This schedule will be paid off in fiscal year 2017/2018. Act 992 of 2010 changed the retirement eligibility for members hired on or after July 1, 2006. The increase in UAL is amortized over 30 years with level payments. Both payments are allocated only to employers of rank and file members.

Hazardous Duty Plan - Act 992 of 2010 changed the normal form of benefit for prior members joining the hazardous duty plan prospectively. The increase in UAL is funded with level payments over a period of 10 years. This payment is allocated only to employers of members of the Hazardous Duty Plan.

Alcohol Tobacco Control - Act 740 of 2008 modified the eligibility requirements for enforcement personnel of the Alcohol Tobacco Control office. The resulting increase in UAL is funded with annual payments over 10 years from the Department of Revenue Alcohol and Tobacco Control Officers Fund. This schedule will be paid off in fiscal year 2017/2018.

Peace Officers - Act 414 of 2007 increased the accrual rate for certain Peace Officers. The resulting UAL increase is funded with annual payments over 30 years from the Department of Public Safety Peace Officers Fund.

Adult Probation and Parole - Act 852 of 2014 increased the accrual rate for certain members of the Corrections Primary sub-plan. The increase in UAL and annual normal costs are funded by appropriations from the Adult Probation and Parole Officer Retirement Fund (APPOR Fund). The first payment in the amount of \$1 million, as required by the Act, paid the first-year increase in normal cost and the remaining balance was applied to the UAL created by the Act. The Act required the remaining UAL balance to be paid over nine years with level payments, so that the total increase would be paid off within 10 years. Funds are allocated annually to LASERS to fund the increase in normal cost and UAL according to the amount established in the actuarial valuation for the prior fiscal year. Due to advance payments allocated to LASERS, the UAL payment shown below will pay off the UAL created by the Act. In addition, not less than quarterly, any balance of the APPOR Fund exceeding \$50,000, shall be transferred to LASERS and held in a separate account to be used as follows: 1) to fund the next fiscal year's UAL payment or normal cost payment, if funds are sufficient to make such payment, or 2) to make an additional payment toward the UAL created by this Act.

Normal Cost, mid-year	\$45,687
UAL Payment, mid-year	\$580,013
Total mid-year	\$625,700
Interest adjusted to April 1, 2018	\$637,411

Harbor Police Plan – Act 648 of 2014 provides for the transfer of the members, assets, and liabilities of the Harbor Police Retirement System into LASERS, effective July 1, 2015. A cooperative endeavor agreement established the terms of the transfer. Effective July 1, 2014, new hires of the Harbor Police Department of the Port of New Orleans are enrolled in the Hazardous Duty Plan. Existing retirees and active members of the HPRS were transferred to LASERS, effective July 1, 2015, and retained current benefits. Members of the Harbor Police sub-plan that have not participated in the Deferred Retirement Option Program (DROP) may apply to transfer to the Hazardous Duty Plan. The employer contribution rate established for members of the Harbor Police sub-plan will not include any payment for LASERS shared UAL existing on July 1, 2015 until the earlier of July 1, 2022 or the date that all sums owed, as established by the cooperative endeavor agreement, have been paid to LASERS.

CHANGES SINCE PRIOR VALUATION

The Board adopted a change in the assumed rate of inflation from 3.00% to 2.75%. Salary assumptions are developed based upon the inflation assumption. Therefore, salary assumptions for all plans were reduced by 0.25%. The inflation assumption is also a component of the assumed rate of return. The total expected rate of return was derived using the 2.75% inflation assumption. The discount rate was reduced from 7.75% to 7.70%, effective July 1, 2017, in accordance with the Board's adopted plan to reduce the discount rate to 7.50% in 0.05% annual increments. This change was anticipated in the prior valuation when determining the projected contribution requirements for Fiscal Year 2017/2018. The discount rate used to determine the projected contribution requirements for Fiscal Year 2018/2019 was reduced to 7.65%.

The requirements of Act 94 of 2016 were met, resulting in a change in how noninvestment-related administrative expenses are funded. The projected contribution requirements for Fiscal Year 2018/2019 decreased, triggering the provisions of the Act. Beginning July 1, 2018, anticipated administrative expenses will be directly funded through the employer contribution, rather than as a reduction to expected investment returns.

CHANGE IN FUNDING REQUIREMENTS

The aggregate employer contribution rate established by the Public Retirement Systems' Actuarial Committee for the 2017/18 plan year was 37.8%. The restated employer contribution rate determined by this valuation for the 2017/18 plan year is 38.1%. Therefore, an employer contribution deficit of 0.3% of payroll is expected next year.

Changes in the required contribution are generally the result of gains or losses resulting from actual experience differing from expected plan experience, expected changes in the UAL payment due to statutory requirements, and changes in actuarial assumptions or methods. Changes in the employer contribution rate are impacted by both the change in the total dollar required contribution and by the total aggregate payroll for active members.

The projected aggregate employer contribution rate increased from 37.8% to 37.9% from Fiscal Year 2017/2018 to Fiscal Year 2018/2019. The reasons for the change are detailed below. The total of the items contributing to the contribution rate change may not exactly equal the actual contribution rate change due to rounding and since the items impacting the rate are not additive and may overlap.

Normal Cost		
Demographic Shift	0.01%	
Discount Rate Change	0.11%	
Salary Assumption Change	-0.30%	
Normal Cost Total Change	-0.18%	
UAL Payment		
Investment Experience Loss	0.06%	
Other Experience Gain	-0.44%	
Statutory UAL Payment Increase	0.21%	
Contribution Variance Payment Change	-0.97%	
Discount Rate Change	0.26%	
Salary Assumption Change	-0.20%	
Total UAL Payment Change	-1.08%	
Payroll Change	0.41%	
Administrative Expenses	0.95%	
Total	0.10%	
Actual Contribution Rate Change	0.10%	
Projected contribution rate for fiscal year 2017/2018		37.8%
Projected contribution rate for fiscal year 2018/2019		
Prior to assumption/method changes:		36.6%
Direct funding of administrative expenses		+ 0.95%
Projected contribution rate with direct funding of administrative ex	xpenses	37.55%
Discount rate change		+ 0.37%
Projected contribution rate with all changes		37.9%

Prior to the changes to direct funding of administrative expenses and to the discount rate, the contribution rate would have decreased by 1.2% due mainly to the pay-off of the 2013 contribution variance and non-investment experience gain. Direct funding of administrative expenses increases the contribution rate to 37.55%, which is less than the projected contribution rate for fiscal year 2017/2018, allowing for the change to direct funding, per Act 94 of 2016. The final aggregate projected contribution rate increases slightly due to the change to direct funding of administrative expenses and the change in the discount rate.

CHANGE IN UNFUNDED ACCRUED LIABILITY

The plan's unfunded accrued liability (UAL) decreased mainly due to a reduction in principal following receipt of the prior year's UAL payment and an experience gain from non-investment actuarial assumptions.

Unfunded Accrued Liability - June 30, 2016		\$ 6,945,450,226
Interest on Unfunded Liability	\$ 538,272,393	
Amortization Payments	(652,321,102)	
Appropriations due to Litter Fines	(250)	
Investment Experience Loss	14,362,813	
Other Experience Gain	(99,637,176)	
Employer Contribution Deficit	27,473,914	
Discount Rate Change	86,563,645	
Salary Assumption Change	(44,851,884)	
Total Change		(130,137,647)
Unfunded Accrued Liability - June 30, 2017		\$ 6,815,312,579

PLAN EXPERIENCE

The actuarial assumptions represent the best estimate of future plan experience in order to properly fund benefits. The results of the actuarial valuation are dependent on the actuarial assumptions used. These assumptions, which are adopted by the Board of Trustees, are detailed in Appendix D of the valuation report. A gain or loss occurs if the actual experience differs from the prior year's projected plan measurements. The funding policy, in Appendix D, describes how investment and non-investment gains are amortized, or allocated for other purposes.

Demographic and Salary Experience

Demographic assumptions include rates of retirement/DROP, rates at which members become disabled, turnover rates, mortality rates, and several other assumptions. Salary assumptions anticipate future salary increases. During the 2016/17 plan year, the system incurred a \$99,637,176 experience gain due to plan experience differing from that anticipated by the demographic and salary assumptions. The experience gain is reduced by administrative expenses, to the extent not directly funded. The gain is amortized over 30 years with level payments.

Investment Experience

For the plan year ending June 30, 2017, the realized actuarial rate of return based upon the actuarial value of assets is 7.62%. Since this is less than the 7.75% discount rate, the result is an investment experience loss of \$14,362,813. The loss is amortized over 30 years with level payments.

The historical geometric average rates of return on the actuarial value of assets, net of investment expenses, for plan years ending June 30 are shown below. The discount rate reflects the expected return needed to fund regular plan benefits. The returns below are comparable to the discount rate plus returns expected to be allocated to the Experience Account and administrative expenses, when not directly funded, currently 8.25% for Fiscal Year 2017/2018 and 8.05% for Fiscal Year 2018/2019.

	Actuarial Rate		Geometric
	of Return		Average
2013	14.05%	5 Year	10.19%
2014	13.45%	10 Year	6.32%
2015	10.64%	20 Year	6.89%
2016	5.43%	25 Year	7.61%
2017	7.62%	30 Year	8.02%

DROP accounts for members eligible for DROP prior to January 1, 2004 are credited with interest following termination of DROP at the System's actuarial rate of return less a 0.5% expense adjustment, but not to below zero. The DROP interest rate for the period July 1, 2016 through June 30, 2017 after the expense adjustment is 7.12%. DROP accounts for members eligible for DROP after are January 1, 2004 are invested self-directed accounts approved by the Board of Trustees.

The Harbor Police Retirement System Annual DROP Interest Rate is the three-year average (calculated as the compound average of 36 months) investment return of the plan assets for the period ending the June 30th immediately preceding that given date. The average rate so determined is to be reduced by a "contingency" adjustment of 0.5%, but not to below zero. The Harbor Police Retirement System Annual DROP Interest Rate for the period July 1, 2017 through June 30, 2018 after the "contingency" adjustment is 2.3452%, as determined by LASERS.

ACTUARIAL ASSETS/VALUATION ASSETS

The gross actuarial value of assets, developed in Section II, are determined based on the market value of assets, with gradual recognition of gains and losses relative to the discount rate over a five-year period in order to smooth the effects of short-term market volatility. Valuation assets are determined as the gross actuarial value of assets less the assets held in side-fund accounts. Valuation assets are used to determine the employer contribution rate (see Section III).

The side-fund accounts excluded from valuation assets are as follows:

Employer Credit Account: This account, established by Act 588 of 2004, accumulates the excess contributions based on the minimum employer contribution rate of 15.5%, over the actuarially determined employer contribution, as restated in the current valuation. The minimum rate is not currently applicable and the account continues to have a zero balance.

Experience Account: The account is used to fund permanent benefit increases for retirees. Fifty percent of any excess return above \$100,000,000 (indexed to increases in the actuarial value of assets, beginning June 30, 2016) will be credited to the Experience Account, subject to the restrictions provided in Act 399 of 2014, as described in the Summary of Plan Provisions (Appendix B). The fund currently has a balance of \$10,455,340.

LEGISLATIVE/PLAN CHANGES

There were no Acts of the 2017 Legislative Session that modified the benefit or funding provisions. A summary of provisions to be implemented in future actuarial valuations, once certain triggers are met, per Acts 94 and 95 of the 2016 legislative Session is provided below.

Act 94 of 2016 provides for direct funding by employers of noninvestment-related administrative expenses beginning in the first fiscal year in which the projected aggregate employer contribution rate, calculated without regard to any changes in the board-approved actuarial valuation rate, will not increase.

Act 95 of 2016 amends the funding policy and other provisions as follows:

- Accelerates the implementation of the reduction in amortization period for most actuarial changes, gains, or losses from 30 years to 20 years. The 20-year amortization will begin once the funded ratio reaches 70%, rather than 85%, as previously required.
- Accelerates the implementation of the change in amortization of actuarial gains allocated to the Experience Account. The transfer of gains to the Experience Account will be amortized as a loss with level payments over a ten-year period, beginning with the first system valuation following June 30, 2015, in which an allocation is made to the system's Experience Account, rather than beginning on June 30, 2019, as provided by prior law.
- Provides for re-amortization of the OAB with level-dollar payments to 2029 in Fiscal Year 2020/2021 or later, when such re-amortization results in annual payments that are not more than the next annual payment otherwise required under prior law.
- Provides that until a system is 80% funded, the net remaining liability of the OAB and EAAB shall be re-amortized after application of the hurdle payments in Fiscal Year 2019/2020 and in every fifth fiscal year thereafter.
- Accelerates the timing of the review of volatility of payment schedules. Prior law required that the results of the study be reported to the Public Retirement Systems' Actuarial Committee by November 1, 2019. Act 95 requires the review of volatility to be done following the close of Fiscal Year 2016/2017 and the report to be submitted by November 1, 2017.

ACCELERATED REDUCTION OF OAB AND EAAB

Act 497 of 2009 established the OAB and EAAB and required the application of certain investment gains and contribution variance credits to these schedules. Act 399 of 2014 modified the provisions of Act 497 and specifies that until the System's funded ratio reaches 85%, the funds applied to these schedules will be used to pay off the schedules early, rather than to reduce employer contributions. Since 2009, \$165,972,060 has been applied to the OAB and \$125,000,000 has been applied to the EAAB. When combined with the surplus dollars appropriated to the System by the legislature, the OAB is paid-off in 2028, one year earlier than the 2029 payoff required by the State Constitution. These funds have resulted in the acceleration of the payoff of the EAAB by 2038, two years earlier than the statutory requirement that this schedule be paid by 2040. A projection of future UAL and UAL payments based on current amortization schedules is shown in Appendix E. This projection assumes that the actuarially determined contributions will be paid when due and all actuarial assumptions will be realized.

FUNDED STATUS

The funded status is a measure of the plan's assets relative to the plan's obligations. The current funded ratio is 63.73%, as measured by the plans valuation assets divided by the total actuarial accrued liability, based on the asset valuation method, actuarial cost method, and actuarial assumptions described in Appendix D. The funded ratio reflects the change in discount rate and change in salary scale assumptions. The funded status measure is appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's obligations and for assessing the amount of future contributions. This measure would be different if the measure reflected the market value of assets rather than the actuarial value of assets.

Net Income:

ASSETS/FINANCIAL SUMMARY

STATEMENT OF REVENUES AND EXPENSES

---- Prior Years ----June 30, 2016 June 30, 2017 June 30, 2015 **Operating Income:** 1. Contribution Income Member \$ 149,931,242 \$ 152,233,771 \$ 153,281,097 **Employer** 675,166,965 718,163,026 721,640,155 **ORP** 416,785 443,488 497,206 2. Other Income 250 10,790,721 4,540,773 Legislative Acts Income ¹ Transfers/Purchases 9,989,730 10,578,354 9,341,467 Miscellaneous 4,059,275 3,587,522 4,607,147 Total Non-Investment 839,564,247 896,816,507 892,888,220 3. Investment Income ² Investments 1,596,128,574 (229,455,061)226,096,982 Less Investment Expenses (75,527,875)(67,274,172)(73,287,852)Net Investment Income 152.809.130 1,520,600,699 (296,729,233)Total Income 2,360,164,946 600,087,274 1,045,697,350 **Operating Expenses:** 1. General Administration 17,074,984 15,615,605 15,877,682 Other Post Employment 904,975 982,858 940,845 **Depreciation Expenses** 556,901 419,718 1,193,314 2. Benefits Paid Pension Benefits 1,274,461,022 1,238,507,932 1,199,079,252 Return of Contributions 37,606,040 35,997,261 38,308,757 Total Benefits Paid 1,274,505,193 1,312,067,062 1,237,388,009 3. Total Expenses 1,330,603,922 1,291,523,374 \$ 1,255,399,850

1,029,561,024

(691,436,100)

(209,702,500)

¹ The amount of Legislative Acts Income for 2016 is entirely from the Harbor Police Merger; the amount for 2017 is Litter Fines.

² The amount of Investment Income and Expenses are different for 2016 and 2015, due to a reclassification of Commission on Future Contract Options. The category was moved from a deduction in income to expense.

COMPARATIVE SUMMAY OF REVENUES BY SOURCE AND EXPENSES BY TPYE

Revenues by Source

Plan	Member	Employer	Investment	
Year	Contrbution	Contrbution ¹	Income	Total
2008	192,412,444	542,186,406	(357,912,195)	376,686,655
2009	203,050,933	500,503,088	(1,739,762,198)	(1,036,208,177)
2010	205,328,033	503,391,304	1,139,301,483 3	1,848,020,820 3
2011	197,825,267	572,255,877	1,854,312,621	2,624,393,765
2012	192,795,057	669,727,178	(9,610,468)	852,911,767
2013	173,357,802	682,836,602	1,106,494,873	1,962,689,277
2014	152,993,052	635,974,701	1,770,521,381	2,559,489,134
2015	153,281,097	739,607,123	152,809,130	1,045,697,350
2016	152,233,771	744,582,736	(296,729,233)	600,087,274
2017	149,931,242	689,633,005	1,520,600,699	2,360,164,946

Expenses by Type

Plan		Administrative							
Year	Benefits	Refunds	Expenses ^{2,4}	Total					
2008	718,303,319	32,149,383	19,493,731	769,946,433					
2009	771,408,255	30,314,007	19,623,966	821,346,228					
2010	829,236,652	35,676,509	18,897,997	883,811,158					
2011	915,840,721	41,553,896	18,181,272	975,575,889					
2012	978,971,262	43,221,742	18,441,062	1,040,634,066					
2013	1,070,410,859	61,522,162	18,932,247	1,150,865,268					
2014	1,167,477,166	77,118,765	17,638,128	1,262,234,059					
2015	1,199,079,252	38,308,757	18,011,841	1,255,399,850					
2016	1,238,507,932	35,997,261	17,018,181	1,291,523,374					
2017	1,274,461,022	37,606,040	18,536,860	1,330,603,922					

Includes transfers and purchases and the annual employer contribution, and any legislative appropriations.

² Includes other expenses, not related to administration. Beginning in 2008, includes the net OPEB obligation.

³ Amounts shown reflect values used in the 2010 actuarial valuation, rather than the restated 2010 Statement of Assets.

⁴ Investment Income and Administrative Expenses do not tie to LASERS financial statements for 2006-2013 because Investment Administrative Expenses were transferred from Administrative Expenses to Investment Income per instructions from GASB.

STATEMENT OF ASSETS

Prior Years	
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	June 30, 2017	June 30, 2016	J	une 30, 2015 ¹
ASSETS (Market Value)				
1. Short-Term Assets				
Cash/Cash Equivalencies	\$ 197,912,884	\$ 52,222,180	\$	72,437,860
Short-Term Investments	142,663,861	317,630,817		356,969,322
2. Bonds				
Domestic Issues	1,388,750,646	1,302,223,446		1,304,120,351
International Issues	447,375,296	343,290,464		295,597,356
3. Equities				
Domestic Stock	2,666,613,896	2,432,754,709		2,863,226,182
International Stock	3,798,051,961	3,202,542,903		3,288,387,047
4. Other Assets				
Fixed Assets	3,855,740	4,331,820		4,304,276
Real Estate & Alternative Assets	3,048,043,546	3,040,659,840		3,182,457,173
5. Receivables - Payables	59,897,298	28,699,953		48,844,979
6. Securities Lending Assets - Liabilities	110,722	(641,306)		(1,193,620)
TOTAL ASSETS - Market Value	11,753,275,850	10,723,714,826		11,415,150,926
Cost Value	9,574,374,375	9,464,823,588		9,466,953,138

ACTUARIAL VALUE OF ASSETS

The market value of assets is adjusted to gradually recognize investment gains and losses relative to the net assumed investment return, over a 5-year period in 20% increments. The adjusted asset value is subject to Corridor Limits of 80% to 120% of the Market Value of Assets.

	Asset G/L	Deferred %		Deferred \$	
\$	963,342,789	20%	\$	192,668,558	
\$	(733,893,730)	40%	\$	(293,557,492)	
\$	(1,166,526,680)	60%	\$	(699,916,008)	
\$	708,540,587	80%	\$	566,832,470	
			\$	(233,972,472)	
Market Value of Assets					
set C	Gain/Loss			(233,972,472)	
Actu	arial Value of Assets		\$	11,987,248,322	
l LIN	MITS				
= 80	% of Market Value		\$	9,402,620,680	
= 12	0% of Market Value			14,103,931,020	
alue	of Assets		\$	11,987,248,322	
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 963,342,789 \$ (733,893,730) \$ (1,166,526,680) \$ 708,540,587 te of Assets set Gain/Loss	\$ 963,342,789 20% \$ (733,893,730) 40% \$ (1,166,526,680) 60% \$ 708,540,587 80% The of Assets Set Gain/Loss Actuarial Value of Assets Actuarial Value of Assets LIMITS = 80% of Market Value = 120% of Market Value	\$ 963,342,789 20% \$ \$ (733,893,730) 40% \$ \$ (1,166,526,680) 60% \$ \$ 708,540,587 80% \$ set Gain/Loss Actuarial Value of Assets \$ \$ LIMITS = 80% of Market Value \$ = 120% of Market Value	

 $^{^{1}\,}$ Differs from June 30, 2015 valuation due to LASERS reclassification of assets.

SIDE FUNDS AND DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

	Prior	Years	
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		June 30, 2017	J	une 30, 2016	J.	une 30, 2015
EMPLOYER CREDIT ACCOUNT 1:		June 20, 2017	-	unc 20, 2010		<u>une 50, 2015</u>
Prior Year Ending Balance	\$		\$		\$	
~	Ф	-	Ф	-	Ф	-
		-		-		-
- Current Year Disbursements		-		-		-
+ Accumulated Interest		-		-		-
Total Fund Balance - Year End		-		-		-
INITIAL UAL AMORTIZATION FUND:						
Prior Year Ending Balance	\$	-	\$	-	\$	-
+ Current Year Allocation		-		-		-
- Current Year Disbursements		-		-		-
+ Accumulated Interest		-		-		-
Total Fund Balance - Year End		-		-		-
EXPERIENCE ACCOUNT FUND:						
Prior Year Ending Balance	\$	9,714,942	\$	123,579,684	\$	117,093,356
+ Experience Account Allocation		-		-		-
- Benefit Disbursements		-		(120,572,581)		-
+ Accumulated Interest ²		740,398		6,707,839		6,486,328
Fund Balance - Year End		10,455,340		9,714,942		123,579,684
DEVELOPMENT OF						
<u>VALUATION ASSETS</u> :						
Actuarial Value of Assets	\$	11,987,248,322	\$ 1	11,640,531,339	\$	11,442,012,698
- Employer Credit Account		-		-		-
- Initial UAL Fund		-		-		-
- Experience Account Fund		10,455,340		9,714,942		123,579,684
Valuation Assets	\$	11,976,792,982	\$ 1	11,630,816,397	\$	11,318,433,014

¹ The Employer Credit Account was created by ACT 588 of 2004.

The 2015 Experience Account interest credit was calculated to be \$12,456,899, but the total account balance was limited to \$123,579,684, or the cost of one PBI. The remaining interest was credited to valuation assets to be used for regular plan funding.

DEVELOPMENT OF COSTS, LIABILITIES AND CONTRIBUTIONS

Normal Costs and Accrued Liabilities are calculated based on the Provisions of the Plan as summarized in Appendix B in accordance with the Entry Age Normal Cost Method, and the Actuarial Assumptions outlined in Appendix D.

	June 30, 2017		Prior Yea June 30, 20	
		% of		% of
	Dollar Amount	Salary	Dollar Amount	Salary
Discount Rate	7.70%		7.75%	
I. Normal Costs				
Active Members with Complete Data				
a) Retirement Benefits	140,772,747	7.73%	145,514,864	7.90%
b) Disability Benefits	4,837,059	0.27%	4,882,098	0.27%
c) Survivor Benefits	4,828,633	0.27%	4,918,829	0.27%
d) Voluntary Termination	63,783,737	3.50%	64,159,950	3.49%
TOTAL	214,222,176	11.76%	219,475,741	11.91%
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement/Termination Benefits	4,685,254,899		4,753,870,537	
2) Disability Benefits	65,485,353		66,748,699	
3) Survivor Benefits	63,552,876		63,974,141	
	4,814,293,128		4,884,593,377	
b) Retired and Inactive Members				
1) Regular Retirees	10,311,169,162		10,036,518,989	
2) Disability	271,595,562		281,290,589	
3) Survivors	766,314,480		738,363,611	
4) Terminated Vested	340,779,746		335,171,682	
5) Contributions Refunded	84,543,183		85,071,016	
6) DROP Deferred Benefits	1,128,452,897		1,172,501,053	
7) DROP Account Balances	1,069,402,732		1,037,139,136	
8) ORP Account Balances	5,554,671		5,617,170	
	13,977,812,433		13,691,673,246	

	June 30, 2017	Prior Year June 30, 2016
II. Actuarial Accrued Liability	18,792,105,561	18,576,266,623
Discount Rate	7.70%	7.75%
III. Valuation Assets	11,976,792,982	11,630,816,397
IV. Unfunded Actuarial Accrued	6.015.010.550	6045 450 226
Liability - Entry Age Normal ¹	6,815,312,579	6,945,450,226
a) Change over prior year	(130,137,647)	47,222,784
b) Funded Percentage	63.7%	62.6%
V. Employer Contributions To Fund Current Plan Year ¹		
a) Employer Portion of Normal Cost	69,310,576	73,602,183
b) Amortization Payments	587,010,195	573,048,893
c) Prior Contribution Variance Amort. Pmt	49,541,977	55,209,450
TOTAL Required Contribution	705,862,748	701,860,526
Less direct UAL payments ²	1,658,843	1,801,993
NET contribution required	704,203,905	700,058,533
	38.1%	37.4%
PRSAC Approved rate ³	37.8%	35.8%
VI. Projected Employer Contributions		
Discount Rate	7.65%	7.70%
To Fund Next Plan Year ¹		
a) Employer Portion of Normal Cost	72,801,085	77,338,291
b) Administrative Expenses	18,000,000	-
c) Amortization Payments	594,876,032	598,273,174
d) Prior Contribution Variance Amort. Pmt	32,121,216	50,410,755
TOTAL Required Contribution	717,798,333	726,022,220
Less direct UAL payments ²	996,213	1,658,843
NET contribution required	716,802,120	724,363,377
	37.9%	37.8%
Projected Aggregate Employer Normal Cost Rate	3.7573%	4.0389%
Projected Rank and File Employer Normal Cost Rate	3.8516%	3.9596%
VII. Current Payroll	1,821,943,975	1,842,286,184
Projected Payroll - Mid Year	1,850,571,613	1,872,687,991
Projected Payroll - Next Year	1,890,122,115	1,914,031,733

Dollar amounts reflect estimated payments due mid-year on January 1st per Act 81.

² Direct UAL payments for Acts 414, 740, and 852 and direct normal cost payment for Act 852, not included in the employer contribution rate.

³ Constitutional Minimum is 12% without regard to Employer Credits.

GASB STATEMENTS 67/68 REPORTING

The Governmental Accounting Standards Board Statements No. 67/68 establish financial reporting standards for state and local governmental pension plans and their sponsors that are administered through trusts or equivalent arrangements. The required actuarial disclosures are illustrated below. The Plan Fiduciary Net Position is the Market Value of Assets used for the funding valuation. The Total Pension Liability was developed using the Entry Age Normal cost method.

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY

	June 30, 2017		J	June 30, 2016		June 30, 2015	
Total Pension Liability Plan Fiduciary Net Position Net Pension Liability	\$ \$ \$	18,792,105,561 11,753,275,850 7,038,829,711	\$ \$ \$	18,576,266,623 10,723,714,826 7,852,551,797	_ :	\$ 18,216,660,456 \$ 11,415,150,926 \$ 6,801,509,530	
Plan Fiduciary Net Position as a percentage of Total Pension Liability		62.5%		57.7%		62.7%	
Covered Employee Payroll	\$	1,821,943,975	\$	1,842,286,184		\$ 1,856,735,292	
Net Pension Liability as percentage of Covered Employee Payroll		386.3%		426.2%		366.3%	

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year	Actuarially Determined Contribution (ADC) 1	Contributions in Relation to ADC ¹	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
2008	438,991,628	506,484,759	(67,493,131)	2,436,955,566	20.8%
2009	473,267,523	487,353,901	(14,086,378)	2,562,575,942	19.0%
2010	562,524,589	491,237,641	71,286,948	2,546,456,790	19.3%
2011	651,770,540	558,183,107	93,587,433	2,408,839,604	23.2%
2012	687,019,184	637,285,920	49,733,264	2,341,703,286	27.2%
2013	724,391,420	649,029,708	75,361,712	1,951,987,750	33.2%
2014	709,799,409	612,698,414	97,100,995	1,813,759,357	33.8%
2015	697,377,899	722,137,361	(24,759,462)	1,856,735,292	38.9%
2016	694,091,525	718,606,514	(24,514,989)	1,842,286,184	39.0%
2017	701,906,777	675,583,750	26,323,027	1,821,943,975	37.1%

¹ Contributions shown are not interest adjusted. Actual contributions tie to financial statements.

STATEMENT OF CHANGES IN NET PENSION LIABILITY

	2017	2016	2015
Total Pension Liability (TPL)			
Service Cost	219,475,741	222,458,027	208,898,813
Interest	1,405,827,435	1,379,644,606	1,353,766,106
Changes of Benefit Terms - PBI	-	120,572,581	-
Changes of Benefit Terms - Harbor Police Transfer	-	20,680,250	-
Differences Between Expected and Actual	(139,108,937)	(109,244,104)	13,638,601
Changes of Assumptions	41,711,761	-	-
Retirement Benefits	(1,274,461,022)	(1,238,507,932)	(1,199,079,252)
Refunds and Transfers of Member Contributions	(37,606,040)	(35,997,261)	(38,308,757)
Net Change in Total Pension Liability	215,838,938	359,606,167	338,915,511
Total Pension Liability - Beginning	18,576,266,623	18,216,660,456	17,877,744,945
Total Pension Liability - Ending (a)	\$ 18,792,105,561	\$ 18,576,266,623	\$ 18,216,660,456
Plan Fiduciary Net Position			
Employer Contributions	675,583,750	718,606,514	726,678,134
Employee Contributions	149,931,242	152,233,771	153,281,097
Harbor Police Transfer	-	10,790,721	-
Net Investment Income	1,520,600,699	(296,729,233)	152,809,130
Other Income	14,049,255	15,185,501	12,928,989
Retirement Benefits	(1,274,461,022)	(1,238,507,932)	(1,199,079,252)
Refunds and Transfers of Member Contributions	(37,606,040)	(35,997,261)	(38,308,757)
Administrative Expense	(17,074,984)	(15,615,605)	(15,877,682)
Other Postemployment Benefit Expenses	(904,975)	(982,858)	(940,845)
Depreciation and Amortization Expenses	(556,901)	(419,718)	(1,193,314)
Net Change in Plan Fiduciary Net Position	1,029,561,024	(691,436,100)	(209,702,500)
Plan Fiduciary Net Position - Beginning	10,723,714,826	11,415,150,926	11,624,853,426
Plan Fiduciary Net Position - Ending (b)	\$ 11,753,275,850	\$ 10,723,714,826	\$ 11,415,150,926
Ending Net Pension Liability (NPL) (a) - (b)	\$ 7,038,829,711	\$ 7,852,551,797	\$ 6,801,509,530
Plan Fiduciary Net Position as a Percentage			
of the Total Pension Liability	62.5%	57.7%	62.7%
Covered Employee Payroll	\$ 1,821,943,975	\$ 1,842,286,184	\$ 1,856,735,292
Net Pension Liability as a Percentage			
of Covered Employee Payroll	386.3%	426.2%	366.3%

Actuarial Assumptions:

All assumptions used for purposes of GASB Statement 67/68 reporting requirements are described in Appendix D, except for the discount rate. Please see below for a description of the discount rate used for GASB Statement 67/68 reporting.

Discount Rate:

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adjusting for expected inflation of 2.75% and an adjustment for the effect of rebalancing/diversification. The resulting expected long-term nominal rate of return is 8.16%. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2017 are summarized in the following table:

	Long Term Expected
Asset Class	Real Rate of Return
Cash	-0.24%
Domestic Equity	4.31%
International Equity	5.35%
Domestic Fixed Income	1.73%
International Fixed Income	2.49%
Alternative Investments	7.41%
Global Asset Allocation	2.84%
Total Fund	5.26%

The discount rate used to measure the total pension liability was 7.70 percent.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

	1% Decrease	Current Discount Rate	1% Increase
	6.70%	7.70%	8.70%
2017 Employers' Net Pension Liability	8,836,452,507	7,038,829,711	5,510,424,373

The Schedule of Pension Amounts, below, provides employers with amounts to be recognized in the financial statements and note disclosures for GASB 68 reporting. In accordance with GASB Statement 68, changes in total pension liability due to differences between actual and expected experience and changes in assumptions are amortized over a period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees) determined as of the beginning of the measurement period. The current average remaining service life, when rounded up to the next higher whole number, remains at 3 years. Differences between projected and actual investment returns are amortized over a closed 5-year period.

SCHEDULE OF PENSION AMOUNTS						
	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense		
Beginning balance	(7,852,551,797)	(468,354,698)	1,378,120,321	_		
Total Pension Liability Factors:						
Service cost	(219,475,741)			219,475,741		
Interest	(1,405,827,435)			1,405,827,435		
Changes in benefit terms	-			-		
Differences between expected and actual	139,108,937	(139,108,937)	-			
Amortization of current year		46,369,646	-	(46,369,646)		
Amortization of prior years		36,414,701	(4,546,200)	(31,868,501)		
Changes in assumptions	(41,711,761)	-	41,711,761			
Amortization of current year		-	(13,903,920)	13,903,920		
Amortization of prior years		-	-	-		
Benefit payments	1,274,461,022			(1,274,461,022)		
Refunds and Transfers of Member	37,606,040			(37,606,040)		
Net Change in Total Pension Liability	(215,838,938)	(56,324,590)	23,261,641	248,901,887		
Plan Fiduciary Net Position:						
Employer Contributions	675,583,750					
Employee Contributions	149,931,242			(149,931,242)		
Expected earnings on pension plan investments	812,060,112			(812,060,112)		
Differences between projected and actual						
earnings on pension plan investments	708,540,587	(708,540,587)	-			
Amortization of current year		141,708,117	-	(141,708,117)		
Amortization of prior years		197,762,647	(380,089,595)	182,326,948		
Retirement Benefits	(1,274,461,022)			1,274,461,022		
Administrative Expense	(17,074,984)			17,074,984		
Refunds and Transfers of Member	(37,606,040)			37,606,040		
Other	12,587,379			(12,587,379)		
Net Change in Plan Fiduciary Net Position	1,029,561,024	(369,069,823)	(380,089,595)	395,182,144		
Ending Balance	(7,038,829,711)	(893,749,111)	1,021,292,367	644,084,031		

MEMBERSHIP DATA

LASERS provides the data for individual members of the system as of the valuation date. The validity of the results of any actuarial valuation is dependent upon the accuracy of the data provided. Our review of submitted data is limited to validation of reasonableness and consistency in several areas, such as age, service, salary, and current benefits. Our review includes checks for duplicate records and a comparison of the current year records to those submitted in prior years. Records identified as containing suspicious data were assigned values based on information from similar records or based on historical averages for similarly situated members. Suspicious data are not necessarily errors, but data which fall outside the normal parameters. 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.

The data contained in this valuation is summarized on the following pages. The data summarized in the tables that follow serve as the basis for determining costs and liabilities.

Salary data contained in the profiles and valuation report exceed the amount reported by internal audit for members with less than one year of service. In the valuation process, salaries are annualized for members with fractional service in the first year of employment.

Disability retirees who have reached normal retirement eligibility requirements are considered regular retirees by LASERS but are classified as disability retirees for purposes of the actuarial valuation. Liabilities are calculated accordingly.

ACTIVE MEMBERS BY PLAN

	2017	2016	2015
Rank and File, Appellate Law Clerks	32,352	32,481	33,271
Legislators	7	8	10
Judges, Prior to 2011	214	219	229
Judges, Post 2011	95	88	81
Wildlife	157	160	169
Corrections Primary	192	237	266
Corrections Secondary	1,701	1,895	2,060
Peace Officers	51	57	62
Alcohol Tobacco Control	12	12	12
Bridge Police	5	5	5
Hazardous Duty Plan	2,624	2,440	2,272
Harbor Police	27	32	0
Post DROP	1,618	1,650	1,757
Total Active Members	39,055	39,284	40,194

TOTAL MEMBERS

	2017	2016	2015
Active Members	39,055	39,284	40,194
DROP Participants	1,520	1,609	1,682
Regular Retirees	40,482	39,998	39,352
Disability Retirees	2,325	2,401	2,457
Survivors	5,872	5,802	5,834
Terminated Vested	3,794	3,865	3,953
Subtotal	93,048	92,959	93,472
Terminated, Due Refund	53,573	52,837	52,193
Total Members	146,621	145,796	145,665

MEMBER RECONCILIATION

		Active			Retired,	
	Active	after	Terminated		Disabled,	
	Pre-DROP	DROP	Vested	In DROP	Survivors	Total
June 30, 2016	37,634	1,650	3,865	1,609	48,201	92,959
Additions						
Initial Membership	4,175					4,175
Non-Vested Rehire	532					532
Data Revisions		2	5	1	34	42
Change in Status						
Active to Terminated Vested	(514)		514			
Active to In DROP	(517)			517		
Active to Retired	(877)				877	
Disabled to Active	2				(2)	
Terminated Vested to Active	133		(133)			
Terminated Vested to Retiree			(195)		195	
Terminated Vested to DROP			(4)	4		
In DROP to Active after DROP		311		(311)		
In DROP to Retiree				(299)	299	
Active After DROP to Retiree		(349)			349	
Data Revisions	0	7	1	1	(9)	
Eliminated from Census						
Refunded	(1,573)		(212)			(1,785)
Terminated, Due Refund	(1,515)		(25)			(1,540)
Deceased	(20)	(3)	(17)	(2)	(1,204)	(1,246)
Data Revisions	(23)		(5)		(61)	(89)
June 30, 2017	37,437	1,618	3,794	1,520	48,679	93,048

LASERS MEMBERSHIP PROFILE Regular Members Before July 2006

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

					Credited Service	9				
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29				2						2
Avg. Pay				\$56,826						\$56,826
30 - 34	4	8	9	200	19	1				241
Avg. Pay	\$75,026	\$203,590	\$291,157	\$8,431,989	\$855,734	\$41,018				\$9,898,514
35 - 39	1	20	39	897	404	30				1391
Avg. Pay	\$18,765	\$531,413	\$1,781,567	\$45,093,276	\$20,143,020	\$1,720,947				\$69,288,988
40 - 44	2	27	33	641	942	332	29			2006
Avg. Pay	\$51,180	\$1,127,515	\$1,345,501	\$32,102,506	\$51,896,991	\$18,208,653	\$2,078,148			\$106,810,494
45 - 49	2	20	23	588	979	857	422	14		2905
Avg. Pay	\$79,168	\$695,258	\$1,216,822	\$29,151,998	\$53,074,415	\$50,753,350	\$26,533,108	\$1,277,171		\$162,781,290
50 - 54	5	11	21	537	803	812	963	113	9	3274
Avg. Pay	\$70,701	\$444,530	\$910,540	\$24,603,871	\$41,107,600	\$44,300,141	\$61,356,202	\$8,084,728	\$552,609	\$181,430,922
55 - 59	2	7	24	606	759	782	262	112	67	2621
Avg. Pay	\$29,619	\$285,741	\$928,694	\$27,488,275	\$36,236,859	\$41,823,609	\$17,527,055	\$8,467,210	\$4,164,336	\$136,951,398
60 - 64	1	7	24	307	347	218	155	77	63	1199
Avg. Pay	\$2,378	\$311,241	\$1,101,447	\$15,586,103	\$17,315,597	\$12,502,550	\$9,834,508	\$5,572,118	\$4,868,627	\$67,094,569
65 - 69			5	104	149	110	70	35	30	503
Avg. Pay			\$185,208	\$5,047,220	\$7,474,257	\$6,703,105	\$4,385,547	\$2,390,104	\$2,658,158	\$28,843,599
70+		1	2	38	48	43	41	14	16	203
Avg. Pay		\$20,515	\$122,623	\$1,612,171	\$2,722,326	\$2,349,868	\$2,370,362	\$869,859	\$938,855	\$11,006,579
Total	17	101	180	3920	4450	3185	1942	365	185	14345
	\$326,837	\$3,619,803	\$7,883,559	\$189,174,235	\$230,826,799	\$178,403,241	\$124,084,930	\$26,661,190	\$13,182,585	\$774,163,179

Averages ---- Attained Age 50.94
Service Years 18.98
Active Salary \$53,967

LASERS MEMBERSHIP PROFILE Regular Members After July 2006

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credited Service						
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25	633	512	8							1153
Avg. Pay	\$22,168	\$12,932,616	\$29,389							\$23,591
25 - 29	706	1543	283	12						2544
Avg. Pay	\$18,404,939	\$51,153,834	\$10,740,466	\$412,826						\$80,712,065
30 - 34	564	1495	1017	218	3					3297
Avg. Pay	\$16,250,069	\$54,494,264	\$46,179,743	\$10,178,003	\$141,567					\$127,243,646
35 - 39	413	1028	887	312	8					2648
Avg. Pay	\$12,494,271	\$39,574,785	\$41,760,836	\$15,207,638	\$398,111					\$109,435,641
40 - 44	352	789	665	280	13					2099
Avg. Pay	\$10,144,575	\$31,500,375	\$30,609,291	\$14,641,063	\$805,570					\$87,700,874
45 - 49	300	770	626	223	11	4				1934
Avg. Pay	\$9,406,935	\$31,524,799	\$29,589,638	\$10,875,496	\$654,833	\$233,158				\$82,284,859
50 - 54	230	679	613	226	13	7	3			1771
Avg. Pay	\$6,928,520	\$26,193,377	\$27,901,617	\$10,614,179	\$753,140	\$433,457	\$158,088			\$72,982,378
55 - 59	159	488	564	203	17	5				1436
Avg. Pay	\$5,035,002	\$19,059,329	\$24,309,783	\$9,161,821	\$1,010,806	\$405,771				\$58,982,512
60 - 64	46	192	356	133	7	1	1			736
Avg. Pay	\$1,557,669	\$7,923,205	\$16,115,247	\$6,189,460	\$631,249	\$69,285	\$56,618			\$32,542,733
65 - 69	15	47	107	41	4					214
Avg. Pay	\$557,884	\$2,686,111	\$5,152,771	\$2,266,270	\$467,032					\$11,130,068
70+	4	13	21	7						45
Avg. Pay	\$94,287	\$487,764	\$1,179,862	\$453,066						\$2,214,979
Total	3422	7556	5147	1655	76	17	4			17877
	\$94,906,777	\$277,530,459	\$233,774,367	\$79,999,822	\$4,862,308	\$1,141,671	\$214,706			\$692,430,110

 Averages
 ---- Attained Age
 40.42

 Service Years
 4.48

 Active Salary
 \$38,733

LASERS MEMBERSHIP PROFILE Appellate Law Clerks

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Cr	edited Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34			4							4
Avg. Pay			\$262,479							\$262,479
35 - 39			7	4						11
Avg. Pay			\$469,727	\$292,647						\$762,374
40 - 44			1	12	4	2				19
Avg. Pay			\$64,970	\$841,421	\$304,060	\$138,908				\$1,349,359
45 - 49			3	7	9	5				24
Avg. Pay			\$238,778	\$517,865	\$714,714	\$396,658				\$1,868,015
50 - 54			1	2	10	6	4	3		26
Avg. Pay			\$93,013	\$151,609	\$839,333	\$568,245	\$359,314	\$289,876		\$2,301,390
55 - 59			3	3	7	4	4	5	2	28
Avg. Pay			\$205,177	\$261,494	\$587,368	\$361,832	\$381,451	\$507,521	\$241,480	\$2,546,323
60 - 64			1	4	3	1	1	2		12
Avg. Pay			\$65,625	\$286,565	\$275,270	\$78,734	\$81,110	\$209,703		\$997,007
65 - 69			1	2		1	1			5
Avg. Pay			\$65,647	\$152,238		\$81,662	\$96,339			\$395,886
70+				1						1
Avg. Pay				\$69,063						\$69,063
Total			21	35	33	19	10	10	2	130
			\$1,465,416	\$2,572,902	\$2,720,745	\$1,626,039	\$918,214	\$1,007,100	\$241,480	\$10,551,896

 Averages
 ----- Attained Age
 50.95

 Service Years
 17.53

 Active Salary
 \$81,168

LASERS MEMBERSHIP PROFILE Participating Legislators

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credite	ed Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34										
Avg. Pay										
35 - 39										
Avg. Pay										
40 - 44										
Avg. Pay										
45 - 49										
Avg. Pay										
50 - 54					1					1
Avg. Pay					\$38,407					\$38,407
55 - 59		1								1
Avg. Pay		\$124,303								\$124,303
60 - 64						1		1		2
Avg. Pay						\$38,259		\$37,473		\$75,732
65 - 69				1					1	2
Avg. Pay				\$37,153					\$38,559	\$75,712
70+				1						1
Avg. Pay				\$87,661						\$87,661
Total		1		2	1	1		1	1	7
		\$124,303		\$124,814	\$38,407	\$38,259		\$37,473	\$38,559	\$401,815

 Averages
 ---- Attained Age
 64.19

 Service Years
 17.73

 Active Salary
 \$57,402

LASERS MEMBERSHIP PROFILE Active Judges Pre 2011

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Cred	lited Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34										
Avg. Pay										
35 - 39			1							1
Avg. Pay			\$120,663							\$120,663
40 - 44			3	2						5
Avg. Pay			\$390,606	\$180,776						\$571,382
45 - 49		1	16	4	4	1				26
Avg. Pay		\$18,737	\$2,200,734	\$501,395	\$560,160	\$150,018				\$3,431,044
50 - 54			10	9	8	6	2			35
Avg. Pay			\$1,472,744	\$1,174,804	\$1,136,106	\$856,028	\$306,113			\$4,945,795
55 - 59	1	1	14	12	8	17	5	1		59
Avg. Pay	\$81,760	\$150,018	\$2,003,696	\$1,789,152	\$1,179,282	\$2,464,968	\$762,278	\$132,443		\$8,563,597
60 - 64			6	7	8	18	7			46
Avg. Pay			\$908,211	\$938,566	\$1,207,193	\$2,772,519	\$1,025,653			\$6,852,142
65 - 69				6	5	9	11			31
Avg. Pay				\$903,442	\$756,885	\$1,330,598	\$1,625,464			\$4,616,389
70+				3	1	3	3	1		11
Avg. Pay				\$426,447	\$150,018	\$468,285	\$463,995	\$150,018		\$1,658,763
Total	1	2	50	43	34	54	28	2		214
	\$81,760	\$168,755	\$7,096,654	\$5,914,582	\$4,989,644	\$8,042,416	\$4,183,503	\$282,461		\$30,759,775

 Averages
 ---- Attained Age
 58.44

 Service Years
 16.94

 Active Salary
 \$143,737

LASERS MEMBERSHIP PROFILE Active Judges Post 2011

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

			Cre	dited Service	!					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34	1	1								2
Avg. Pay	\$47,148	\$150,318								\$197,466
35 - 39	1	7		1						9
Avg. Pay	\$148,818	\$962,444		\$150,018						\$1,261,280
40 - 44	2	13	1							16
Avg. Pay	\$228,155	\$1,864,247	\$150,018							\$2,242,420
45 - 49		15	4							19
Avg. Pay		\$2,082,431	\$603,855							\$2,686,286
50 - 54	1	18	2	1	1					23
Avg. Pay	\$148,818	\$2,690,454	\$300,036	\$150,729	\$147,572					\$3,437,609
55 - 59		6	1		1					8
Avg. Pay		\$911,361	\$150,018		\$150,018					\$1,211,397
60 - 64	2	7	5							14
Avg. Pay	\$302,912	\$1,042,523	\$756,167							\$2,101,602
65 - 69		2	1							3
Avg. Pay		\$305,212	\$150,018							\$455,230
70+		1								1
Avg. Pay		\$91,270								\$91,270
Total	7	70	14	2	2					95
	\$875,851	\$10,100,260	\$2,110,112	\$300,747	\$297,590					\$13,684,560

Averages ---- Attained Age 50.63
Service Years 3.65
Active Salary \$144,048

LASERS MEMBERSHIP PROFILE Hazardous Duty

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credited Serv	ice					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25	316	183	5							504
Avg. Pay	\$21,482	\$5,313,360	\$33,644							\$24,345
25 - 29	198	280	41							519
Avg. Pay	\$5,524,752	\$9,238,432	\$1,555,450							\$16,318,634
30 - 34	109	199	55	13						376
Avg. Pay	\$3,311,368	\$6,825,129	\$2,068,949	\$588,758						\$12,794,204
35 - 39	69	153	50	27	9	3				311
Avg. Pay	\$1,873,805	\$5,089,064	\$2,049,732	\$1,431,149	\$455,084	\$181,362				\$11,080,196
40 - 44	60	94	38	23	23	8				246
Avg. Pay	\$1,566,385	\$3,290,130	\$1,561,008	\$1,151,696	\$1,328,728	\$460,561				\$9,358,508
45 - 49	52	126	29	19	18	21	3			268
Avg. Pay	\$1,355,611	\$4,507,141	\$1,328,190	\$929,921	\$963,356	\$1,191,811	\$272,468			\$10,548,498
50 - 54	35	98	42	12	15	10	3			215
Avg. Pay	\$1,142,096	\$3,774,106	\$1,687,694	\$595,493	\$704,960	\$485,791	\$273,762			\$8,663,902
55 - 59	21	66	15	8	9	7	3			129
Avg. Pay	\$650,463	\$2,571,420	\$694,774	\$383,154	\$464,723	\$324,780	\$171,969			\$5,261,283
60 - 64	10	22	4	2	2	1	1			42
Avg. Pay	\$296,948	\$779,349	\$190,441	\$116,557	\$106,539	\$53,999	\$46,047			\$1,589,880
65 - 69	2	6	3		1					12
Avg. Pay	\$52,185	\$214,377	\$104,710		\$41,549					\$412,821
70+	1		1							2
Avg. Pay	\$26,000		\$67,685							\$93,685
Total	873	1227	283	104	77	50	10			2624
	\$22,588,077	\$41,602,508	\$11,476,854	\$5,196,728	\$4,064,939	\$2,698,304	\$764,246			\$88,391,656

Averages ---- Attained Age 36.72 Service Years 3.83 Active Salary \$33,686

LASERS MEMBERSHIP PROFILE Corrections Primary

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credi	ted Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34										
Avg. Pay										
35 - 39		1			1					2
Avg. Pay		\$29,240			\$65,953					\$95,193
40 - 44				1	18	6				25
Avg. Pay				\$45,377	\$908,037	\$316,776				\$1,270,190
45 - 49					16	13				29
Avg. Pay					\$783,550	\$707,561				\$1,491,111
50 - 54					27	8	6	2		43
Avg. Pay					\$1,359,035	\$434,321	\$354,030	\$205,525		\$2,352,911
55 - 59					38	17	7	1		63
Avg. Pay					\$1,857,636	\$934,781	\$450,269	\$54,455		\$3,297,141
60 - 64				1	12	6	2	2		23
Avg. Pay				\$45,173	\$553,564	\$339,127	\$119,684	\$142,085		\$1,199,633
65 - 69					2	3		1		6
Avg. Pay					\$98,295	\$142,519		\$67,496		\$308,310
70+	·					1				1
Avg. Pay						\$54,576				\$54,576
Total		1		2	114	54	15	6		192
		\$29,240		\$90,550	\$5,626,070	\$2,929,661	\$923,983	\$469,561		\$10,069,065

 Averages
 ---- Attained Age
 53.94

 Service Years
 20.10

 Active Salary
 \$52,443

LASERS MEMBERSHIP PROFILE Corrections Secondary

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

Credited Service											
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total	
< 25											
Avg. Pay											
25 - 29			38	3						41	
Avg. Pay			\$1,357,781	\$118,970						\$1,476,751	
30 - 34	2	1	81	69	10					163	
Avg. Pay	\$57,853	\$31,282	\$3,168,380	\$2,917,244	\$462,130					\$6,636,889	
35 - 39	1		62	111	85	6				265	
Avg. Pay	\$13,683		\$2,393,857	\$5,028,657	\$4,163,034	\$340,398				\$11,939,629	
40 - 44		2	40	77	132	61	1			313	
Avg. Pay		\$51,533	\$1,577,303	\$3,520,204	\$7,028,690	\$3,653,733	\$81,695			\$15,913,158	
45 - 49			42	63	109	121	27			362	
Avg. Pay			\$1,683,893	\$2,694,207	\$5,594,778	\$7,457,538	\$1,935,798			\$19,366,214	
50 - 54	2	2	38	66	77	53	37	6		281	
Avg. Pay	\$66,280	\$48,421	\$1,427,341	\$2,812,226	\$3,850,246	\$3,095,173	\$2,748,687	\$481,113		\$14,529,487	
55 - 59	1		33	40	57	20	11	3		165	
Avg. Pay	\$35,298		\$1,307,475	\$1,684,816	\$2,839,341	\$1,152,120	\$640,124	\$281,403		\$7,940,577	
60 - 64		1	23	21	17	5	3	2	3	75	
Avg. Pay		\$31,098	\$915,373	\$898,411	\$828,201	\$287,812	\$180,795	\$144,047	\$199,740	\$3,485,477	
65 - 69			8	9	6	3	1	1		28	
Avg. Pay			\$272,077	\$414,854	\$354,938	\$182,720	\$41,403	\$80,891		\$1,346,883	
70+			4	2	2					8	
Avg. Pay			\$171,593	\$76,065	\$112,799					\$360,457	
Total	6	6	369	461	495	269	80	12	3	1701	
	\$173,114	\$162,334	\$14,275,073	\$20,165,654	\$25,234,157	\$16,169,494	\$5,628,502	\$987,454	\$199,740	\$82,995,522	

 Averages
 ---- Attained Age
 46.01

 Service Years
 15.31

 Active Salary
 \$48,792

LASERS MEMBERSHIP PROFILE Wildlife

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credit	ed Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29			3							3
Avg. Pay			\$167,510							\$167,510
30 - 34			14	11	1					26
Avg. Pay			\$733,036	\$623,609	\$57,503					\$1,454,148
35 - 39			4	26	7					37
Avg. Pay			\$219,731	\$1,610,775	\$484,246					\$2,314,752
40 - 44			4	8	23	3				38
Avg. Pay			\$221,561	\$518,374	\$1,740,987	\$215,679				\$2,696,601
45 - 49				6	15	9	2			32
Avg. Pay				\$353,985	\$1,147,075	\$761,054	\$152,906			\$2,415,020
50 - 54				3	4	6	4			17
Avg. Pay				\$187,959	\$281,404	\$467,084	\$357,217			\$1,293,664
55 - 59					1		2	1		4
Avg. Pay					\$88,533		\$239,257	\$130,258		\$458,048
60 - 64										
Avg. Pay										
65 - 69										
Avg. Pay										
70+										
Avg. Pay										
Total			25	54	51	18	8	1		157
			\$1,381,838	\$3,294,702	\$3,799,748	\$1,443,817	\$749,380	\$130,258		\$10,799,743

 Averages
 ----- Attained Age
 41.89

 Service Years
 15.23

 Active Salary
 \$68,788

LASERS MEMBERSHIP PROFILE Peace Officers

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credite	d Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34			1	1						2
Avg. Pay			\$43,585	\$56,600						\$100,185
35 - 39				6	2					8
Avg. Pay				\$297,668	\$100,883					\$398,551
40 - 44			1	4	2	4				11
Avg. Pay			\$34,951	\$219,670	\$115,498	\$203,667				\$573,786
45 - 49				3	2	1	5			11
Avg. Pay				\$131,875	\$90,622	\$44,214	\$333,139			\$599,850
50 - 54					1	4	6			11
Avg. Pay					\$65,358	\$252,383	\$412,405			\$730,146
55 - 59				1	1	1				3
Avg. Pay				\$38,557	\$57,528	\$70,496				\$166,581
60 - 64				1						1
Avg. Pay				\$73,902						\$73,902
65 - 69			1	1	1					3
Avg. Pay			\$83,297	\$39,725	\$75,604					\$198,626
70+			1			_				1
Avg. Pay			\$65,749							\$65,749
Total			4	17	9	10	11			51
			\$227,582	\$857,997	\$505,493	\$570,760	\$745,544			\$2,907,376

 Averages
 ----- Attained Age
 48.19

 Service Years
 17.93

 Active Salary
 \$57,007

LASERS MEMBERSHIP PROFILE Alcohol Tobacco Control

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

Credited Service										
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34			1							1
Avg. Pay			\$42,530							\$42,530
35 - 39				2						2
Avg. Pay				\$107,804						\$107,804
40 - 44			1	1	2					4
Avg. Pay			\$47,426	\$58,011	\$101,062					\$206,499
45 - 49						2				2
Avg. Pay						\$104,737				\$104,737
50 - 54							1			1
Avg. Pay							\$125,547			\$125,547
55 - 59						1	1			2
Avg. Pay						\$66,264	\$69,638			\$135,902
60 - 64										
Avg. Pay										
65 - 69										
Avg. Pay										
70+										
Avg. Pay										
Total			2	3	2	3	2			12
			\$89,956	\$165,815	\$101,062	\$171,001	\$195,185			\$723,019

 Averages
 ----- Attained Age
 44.77

 Service Years
 17.71

 Active Salary
 \$60,252

LASERS MEMBERSHIP PROFILE Bridge Police

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

	Credited Service									
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34			1							1
Avg. Pay			\$45,561							\$45,561
35 - 39				2	1					3
Avg. Pay				\$89,180	\$48,720					\$137,900
40 - 44										
Avg. Pay										
45 - 49										
Avg. Pay										
50 - 54								1		1
Avg. Pay								\$64,056		\$64,056
55 - 59										
Avg. Pay										
60 - 64										
Avg. Pay										
65 - 69										
Avg. Pay										
70+										
Avg. Pay										
Total			1	2	1			1		5
			\$45,561	\$89,180	\$48,720			\$64,056		\$247,517
Averages	Attained A	.ge	40.72							
C	Service Ye		15.82							
	Active Sal		\$49,503							

LASERS MEMBERSHIP PROFILE Harbor Police

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2017

				Credited Se	ervice					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25		1								1
Avg. Pay		\$40,967								\$40,967
25 - 29			1							1
Avg. Pay			\$43,862							\$43,862
30 - 34		1	1	2						4
Avg. Pay		\$40,967	\$45,250	\$93,527						\$179,744
35 - 39					1					1
Avg. Pay					\$42,141					\$42,141
40 - 44		1	2		3					6
Avg. Pay		\$42,255	\$90,877		\$169,622					\$302,754
45 - 49				2	3	2				7
Avg. Pay				\$103,521	\$172,236	\$124,921				\$400,678
50 - 54					1		2			3
Avg. Pay					\$52,550		\$140,514			\$193,064
55 - 59							1			1
Avg. Pay							\$59,781			\$59,781
60 - 64				1		1				2
Avg. Pay				\$64,274		\$65,505				\$129,779
65 - 69					1					1
Avg. Pay					\$54,424					\$54,424
70+										
Avg. Pay										
Total		3	4	5	9	3	3			27
		\$124,189	\$179,989	\$261,322	\$490,973	\$190,426	\$200,295			\$1,447,194

 Averages
 ----- Attained Age
 44.40

 Service Years
 14.89

 Active Salary
 53,600

LASERS MEMBERSHIP PROFILE Active After DROP

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

TOTAL BENEFIT

VALUATION DATE 06/30/2017

				Cre	dited Service				
Age	<1	1	2	3	4	5-9	10-14	15-20	Total
40-44									
Pay									
Benefit									
45-49	1			0					3
Pay	\$16,538			\$0					\$147,045
Benefit	\$37,332			\$0					\$106,116
50-54	37	33	26	8	0	6	3		113
Pay	\$1,348,677	\$2,257,593	\$1,609,572	\$562,696	\$0	\$472,061	\$244,480		\$6,495,079
Benefit	\$1,548,012	\$1,400,928	\$1,015,428	\$338,640	\$0	\$152,400	\$54,636		\$4,510,044
55-59	116	86	79	52	43	50	7	0	435
Pay	\$3,698,048	\$5,049,573	\$5,385,173	\$3,476,382	\$2,537,182	\$3,324,807	\$582,181	\$0	\$24,353,382
Benefit	\$4,870,548	\$3,243,492	\$3,420,024	\$2,141,340	\$1,538,484	\$1,665,684	\$145,212	\$0	\$17,218,452
60 - 64	128	97	76	67	46	117	24	3	558
Pay	\$3,489,224	\$4,934,626	\$4,828,719	\$4,421,448	\$2,704,195	\$7,247,807	\$1,604,180	\$258,440	\$29,488,639
Benefit	\$3,572,136	\$2,042,904	\$2,782,416	\$2,616,816	\$1,560,000	\$3,761,136	\$554,412	\$46,380	\$16,936,200
65 - 69	22	14	70	33	33	110	44	6	332
Pay	\$907,744	\$830,289	\$4,012,412	\$1,989,615	\$1,533,750	\$7,282,211	\$3,538,356	\$482,689	\$20,577,066
Benefit	\$383,700	\$192,396	\$1,620,684	\$659,220	\$574,008	\$2,926,020	\$1,434,624	\$126,792	\$7,917,444
70+	3	4	4	1	3	67	66	29	177
Pay	\$114,410	\$188,520	\$153,148	\$32,802	\$115,029	\$3,817,681	\$4,161,349	\$1,738,214	\$10,321,153
Benefit	\$71,628	\$37,680	\$31,884	\$7,560	\$26,868	\$1,082,088	\$1,298,628	\$520,188	\$3,076,524
Total	307	235	255	161	126	350	144	40	1618
Pay	\$9,574,641	\$13,325,559	\$15,989,024	\$10,482,943	\$6,955,705	\$22,144,567	\$10,130,546	\$2,779,379	\$91,382,364
Benefit	\$10,483,356	\$6,949,668	\$8,870,436	\$5,763,576	\$3,735,876	\$9,587,328	\$3,487,512	\$887,028	\$49,764,780

 Averages
 ---- Attained Age
 62.88

 Service Years
 4.37

 Active Salary
 \$56,479

 Annual Benefit
 \$30,757

LASERS MEMBERSHIP PROFILE DROP Participants

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2017

		Ye	ars Retired				
Age	<1	1 - 2	2-3	3 - 4	4-5	5+	Total
< 40							
40-44	2						2
	\$102,972						\$102,972
45-49	15	6	8	1			30
	\$681,096	\$309,516	\$303,312	\$39,360			\$1,333,284
50-54	81	61	99				241
	\$3,627,024	\$2,635,452	\$4,153,776				\$10,416,252
55-59	221	199	182				602
	\$8,215,728	\$7,948,020	\$7,037,088				\$23,200,836
60-64	197	208	215	1			621
	\$4,203,180	\$5,161,752	\$4,947,684	\$34,944			\$14,347,560
65-69	1	10	9				20
	\$2,976	\$80,760	\$75,972				\$159,708
70-74		2	2				4
		\$24,492	\$76,788				\$101,280
75-79							
80-84							
85-90							
90+							
Total	517	486	515	2			1520
	\$16,832,976	\$16,159,992	\$16,594,620	\$74,304			\$49,661,892

Averages ---- Attained Age 58.21 Years Retired 1.5 Average Benefit \$32,672

LASERS MEMBERSHIP PROFILE Post Retirement Service

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 06/30/2017

			Cr	edited Service						
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
Avg. Pay										
25 - 29										
Avg. Pay										
30 - 34										
Avg. Pay										
35 - 39										
Avg. Pay										
40 - 44										
Avg. Pay										
45 - 49		5								5
Avg. Pay		\$283,910								\$283,910
50 - 54	2	11	5	1						19
Avg. Pay	\$110,000	\$695,098	\$300,502	\$42,931						\$1,148,531
55 - 59	7	19	7	4	1					38
Avg. Pay	\$265,000	\$1,015,045	\$399,394	\$202,959	\$59,987					\$1,942,385
60 - 64	20	16	9	2	4					51
Avg. Pay	\$720,000	\$1,068,985	\$663,012	\$100,884	\$277,197					\$2,830,078
65 - 69	22	22	4	2	1					51
Avg. Pay	\$770,000	\$1,336,777	\$201,527	\$109,879	\$54,576					\$2,472,759
70+	19	20	11	3	4					57
Avg. Pay	\$711,000	\$759,240	\$427,094	\$142,137	\$283,535					\$2,323,006
Total	70	93	36	12	10					221
	\$2,576,000	\$5,159,055	\$1,991,529	\$598,790	\$675,295					\$11,000,669

 Averages
 ---- Attained Age
 65.46

 Service Years
 3.71

 Active Salary
 \$49,777

LASERS MEMBERSHIP PROFILE Regular Retirees

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 06/30/2017

	Years Retired									
Age	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 14	15 - 19	20+	Total
< 40			1	1						2
			\$14,988	\$8,232						\$11,616
40-44	15	6	5	16	10					52
	\$288,696	\$160,932	\$142,068	\$200,892	\$135,144					\$927,732
45-49	51	38	41	73	102	22	1			328
	\$1,778,952	\$1,351,404	\$1,032,228	\$1,431,096	\$1,688,544	\$495,132	\$25,080			\$7,802,436
50-54	83	92	114	259	328	295	69	19		1259
	\$3,350,784	\$3,351,120	\$3,853,644	\$7,295,616	\$8,879,400	\$8,780,280	\$1,310,676	\$305,112		\$37,126,632
55-59	172	182	230	511	729	1770	411	178	21	4204
	\$6,493,908	\$6,975,588	\$8,393,364	\$16,819,080	\$26,136,576	\$64,423,500	\$9,395,916	\$2,935,872	\$376,644	\$141,950,448
60-64	462	473	504	661	773	3001	1702	429	121	8126
	\$10,343,496	\$10,967,316	\$11,899,836	\$16,925,448	\$22,982,220	\$113,127,072	\$52,197,672	\$8,568,624	\$2,164,884	\$249,176,568
65-69	149	183	202	284	482	3224	3291	1304	281	9400
	\$4,281,720	\$4,772,148	\$5,389,236	\$6,388,944	\$11,428,800	\$78,098,892	\$103,127,808	\$37,678,884	\$6,225,252	\$257,391,684
70-74	52	52	82	65	169	943	2484	2033	904	6784
	\$1,384,620	\$1,199,280	\$2,881,356	\$1,305,276	\$4,140,456	\$20,374,836	\$50,644,332	\$59,209,116	\$25,083,672	\$166,222,944
75-79	8	17	19	23	39	206	545	1892	1690	4439
	\$208,752	\$528,972	\$768,816	\$607,104	\$1,133,892	\$5,026,308	\$9,075,960	\$35,667,576	\$44,015,868	\$97,033,248
80-84	5	4	5	3	9	62	136	489	2383	3096
	\$143,028	\$64,452	\$221,856	\$76,404	\$312,816	\$1,880,892	\$2,776,632	\$8,499,852	\$49,139,628	\$63,115,560
85-90	1				1	11	17	124	1669	1823
	\$2,940				\$18,792	\$255,684	\$334,872	\$2,383,560	\$30,040,680	\$33,036,528
90+						1	1	19	948	969
						\$43,380	\$9,276	\$380,964	\$14,433,540	\$14,867,160
Total	998	1047	1203	1896	2642	9535	8657	6487	8017	40482
	\$28,276,896	\$29,371,212	\$34,597,392	\$51,058,092	\$76,856,640	\$292,505,976	\$228,898,224	\$155,629,560	\$171,480,168	\$1,068,674,160

Averages ---- Attained Age 69.41 Years Retired 12.79 Average Benefit \$26,399

LASERS MEMBERSHIP PROFILE Disability Retirees

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 06/30/2017

				Ye	ears Retired					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 40	2	2	2	1		2				9
	\$10,212	\$27,096	\$13,524	\$11,544		\$14,124				\$12,708
40-44	2	3	3	6	1	6	1			22
	\$39,600	\$63,696	\$65,532	\$80,460	\$20,652	\$82,200	\$14,868			\$367,008
45-49	5	9	4	4	9	36	9			76
	\$150,912	\$132,204	\$78,048	\$69,684	\$118,572	\$599,796	\$139,668			\$1,288,884
50-54	8	14	14	12	27	76	28	13	2	194
	\$158,808	\$253,524	\$327,984	\$187,536	\$538,716	\$1,432,680	\$387,024	\$132,852	\$11,736	\$3,430,860
55-59	8	18	17	17	25	106	81	43	20	335
	\$88,956	\$287,220	\$238,368	\$307,884	\$538,308	\$2,044,260	\$1,311,840	\$524,520	\$157,752	\$5,499,108
60-64	1	2	8	13	30	134	142	104	66	500
	\$9,444	\$23,736	\$105,408	\$250,812	\$718,824	\$2,226,984	\$2,525,388	\$1,483,260	\$640,128	\$7,983,984
65-69						44	126	126	128	424
						\$682,056	\$1,900,032	\$1,823,184	\$1,583,916	\$5,989,188
70-74						1	49	101	183	334
						\$66,960	\$666,768	\$1,248,324	\$2,060,880	\$4,042,932
75-79							1	28	191	220
							\$58,092	\$348,156	\$1,964,172	\$2,370,420
80-84								1	127	128
								\$52,608	\$1,168,848	\$1,221,456
85-90									56	56
									\$552,456	\$552,456
90+									27	27
									\$251,628	\$251,628
Total	26	48	48	53	92	405	437	416	800	2325
	\$468,132	\$787,476	\$842,388	\$907,920	\$1,935,072	\$7,163,184	\$7,003,680	\$5,612,904	\$8,391,516	\$33,112,272

Averages ---- Attained Age 66.04
Years Retired 16.41
Average Benefit \$14,242

LASERS MEMBERSHIP PROFILE Survivor Benefits

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 06/30/2017

	_				Years Retired					
Age	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 14	15 - 19	20+	Total
< 40	12	14	15	10	14	86	107	97	127	482
	\$48,360	\$475,164	\$28,884	\$18,936	\$30,048	\$26,832	\$20,592	\$17,400	\$13,572	\$20,796
40-44	1		2	2	3	7	20	12	43	90
	\$31,944		\$33,072	\$8,304	\$47,064	\$119,616	\$394,464	\$208,068	\$604,644	\$1,447,176
45-49		2	2	4	2	17	14	13	43	97
		\$80,592	\$50,484	\$73,188	\$72,864	\$316,128	\$193,044	\$163,332	\$605,340	\$1,554,972
50-54	2	1	2	10	6	22	23	23	18	107
	\$79,956	\$23,724	\$40,104	\$234,096	\$139,728	\$473,088	\$386,064	\$349,008	\$237,384	\$1,963,152
55-59	2	4	7	7	10	58	49	48	56	241
	\$76,452	\$131,844	\$158,964	\$232,032	\$223,896	\$1,314,504	\$930,144	\$658,680	\$751,044	\$4,477,560
60-64	2	6	12	16	13	73	120	72	100	414
	\$52,488	\$112,980	\$240,012	\$327,192	\$424,656	\$1,698,168	\$2,562,984	\$1,172,388	\$1,431,036	\$8,021,904
65-69		7	4	11	10	98	178	131	187	626
		\$225,312	\$106,548	\$158,652	\$221,724	\$2,129,544	\$3,562,236	\$2,914,392	\$3,089,160	\$12,407,568
70-74	1	1	3	3		40	131	188	419	786
	\$103,164	\$27,168	\$90,624	\$107,148		\$915,348	\$2,376,768	\$3,907,968	\$6,778,956	\$14,307,144
75-79	2	1		1		23	64	155	666	912
	\$24,612	\$58,164		\$23,172		\$482,664	\$1,191,732	\$2,428,524	\$10,312,884	\$14,521,752
80-84				1	1	5	13	77	811	908
				\$19,908	\$45,324	\$75,996	\$157,320	\$1,070,292	\$11,238,624	\$12,607,464
85-90				1		2	7	23	660	693
				\$17,292		\$42,324	\$122,892	\$345,684	\$8,771,784	\$9,299,976
90+							_	5	511	516
								\$88,680	\$6,234,252	\$6,322,932
Total	22	36	47	66	59	431	726	844	3641	5872
	\$948,972	\$1,134,948	\$1,153,152	\$1,390,320	\$1,595,844	\$9,874,536	\$14,080,692	\$14,994,888	\$51,779,220	\$96,952,572

 Averages
 ---- Attained Age
 71.72

 Years Retired
 23.00

 Average Benefit
 \$16,511

LASERS MEMBERSHIP PROFILE Terminated Vested

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 06/30/2017

				Credited Serv	icc					
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
<20	0	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20-24	0	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25-29	0	28	0	0	0	0	0	0	0	28
	\$0	\$153,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153,600
30-34	0	227	4	0	0	0	0	0	0	231
	\$0	\$1,702,524	\$15,792	\$0	\$0	\$0	\$0	\$0	\$0	\$1,718,316
35-39	0	376	26	1	0	0	0	0	0	403
	\$0	\$4,258,236	\$250,008	\$10,560	\$0	\$0	\$0	\$0	\$0	\$4,518,804
40-44	0	398	82	14	0	0	0	0	0	494
	\$0	\$6,050,496	\$1,186,224	\$133,500	\$0	\$0	\$0	\$0	\$0	\$7,370,220
45-49	0	481	111	76	9	0	0	0	0	677
	\$0	\$9,064,728	\$1,983,624	\$1,012,680	\$79,560	\$0	\$0	\$0	\$0	\$12,140,592
50-54	0	459	112	109	40	4	0	0	0	724
	\$0	\$9,149,568	\$2,290,512	\$1,682,172	\$372,708	\$27,576	\$0	\$0	\$0	\$13,522,536
55-59	0	529	150	119	69	32	6	0	0	905
	\$0	\$8,683,764	\$2,618,172	\$1,893,660	\$917,280	\$285,792	\$30,960	\$0	\$0	\$14,429,628
60-64	0	88	45	39	20	18	7	0	0	217
	\$0	\$1,489,464	\$638,880	\$580,488	\$291,408	\$208,224	\$45,408	\$0	\$0	\$3,253,872
65-69	0	13	8	21	14	5	5	0	1	67
	\$0	\$177,960	\$127,968	\$271,644	\$201,888	\$46,500	\$34,572	\$0	\$300	\$860,832
70+	0	18	2	3	1	4	7	6	7	48
	\$0	\$277,080	\$16,320	\$26,988	\$5,628	\$36,048	\$49,500	\$28,956	\$2,100	\$442,620
Total	0	2617	540	382	153	63	25	6	8	3794
	\$0	\$41,007,420	\$9,127,500	\$5,611,692	\$1,868,472	\$604,140	\$160,440	\$28,956	\$2,400	\$58,411,020

Averages ---- Attained Age 49.84
Service Years 12.44
Average Benefit \$15,396

SUMMARY OF PLAN PROVISIONS

EFFECTIVE DATE:

July 1, 1947

EMPLOYEE:

Any person legally occupying a position in state service.

EMPLOYER:

The State of Louisiana or any of its boards, commissions, departments, agencies and courts which are contributing members and those approved for membership by the legislature from which any employee receives his compensation.

ELIGIBILITY FOR PARTICIPATION:

Condition of employment in state service except the following: elected or appointed officials or employees who are contributing members of any other state system; public officials and state employees who receive a per diem in lieu of compensation; persons employed on or after July 1, 1991, who work on a part-time basis except those with ten or more years of service in the system; patient or inmate help in state charitable, penal or correctional institutions; part-time students, interns and resident physicians; independent contractors; retirees of the retirement system who return to work under certain conditions; judges in office prior to October 2, 1976 who did not elect to become members prior to October 2, 1976; civilian employees who on November 1, 1981, were within five years of retirement eligibility in the Federal Civil Service Retirement and Disability Fund; certain unclassified, temporary seasonal employees of the Department of Revenue excluding the Louisiana Tax Commission; Employees of the New Orleans City Park Improvement Association, certain employees of political subdivisions.

CREDITABLE SERVICE:

For service prior to January 1, 1973: 1/4 year granted for each 89 day interval of service, not to exceed one credit per fiscal year. Minimum 15 days required for 1st Quarter credit.

For service on or after January 1, 1973, a member shall receive credit based on the ratio of actual pay to the annual base per calendar year. Fractional service shall be rounded to the next highest 1/10th, not to exceed 100 percent per year.

ADDITIONAL CREDITABLE SERVICE:

- 1. Credit for service canceled by withdrawal of accumulated contributions may be restored by member by paying into system the amount withdrawn plus interest at the Actuarial Valuation rate.
- 2. Maximum of four years of credit for military service may be obtained for each member with at least two years of service, contingent on payment of Actuarial Cost.

- 3. Credit for service which was classified as a job appointment or emergency appointment where the intended duration of employment exceeds two years of service.
- 4. At retirement, all accumulated unused sick and annual leave shall be credited based on the following schedule:

1 - 26 Days	10% of a Year
27 - 52 Days	20% of a Year
53 - 78 Days	30% of a Year
79 - 104 Days	40% of a Year
105 - 130 Days	50% of a Year
131 - 156 Days	60% of a Year
157 - 182 Days	70% of a Year
183 - 208 Days	80% of a Year
209 - 234 Days	90% of a Year
235 - 260 Days	100% of a Year

Service credit for unused leave can be used for computation purpose only, not for eligibility. An actuarial equivalent lump sum is available after August 15, 1993.

EARNABLE COMPENSATION:

The base pay earned by an employee for a given pay period as reported by the employing agency. This includes the full amount earned by an employee, overtime, and per diem earned by an employee of the House of Representatives, the Senate, or an agency of the legislature, and expense allowances and per diem paid to members of the legislature, the clerk, or sergeant at arms of the House of Representatives and president and secretary or sergeant at arms of the Senate.

AVERAGE FINAL COMPENSATION FOR BENEFIT PURPOSES:

The average annual earned compensation for the 36 highest months of successive employment, or the highest 36 successive joined months where interruption of service occurred; part-time employees use the base pay the part-time employee would have received had employment been full-time. Per Act 75 of 2005, average final compensation for Regular members, Bridge Police, and Appellate Law Clerks hired on or after July, 1, 2006, is determined as the 60 highest months of successive employment. Per Act 992 of 2010, average final compensation for Judges hired on or after January 1, 2011 and all members of the Hazardous Duty Plan is based on the highest 60 months. Compensation is limited by the 401a(17) compensation limit of the Internal Revenue Code for certain members.

ACCUMULATED CONTRIBUTIONS:

The sum of all amounts deducted from earned compensation and credited to the individual account in the employee's savings account, plus regular interest credited prior to July 1971.

EMPLOYER CONTRIBUTIONS:

Determined in accordance with Louisiana Revised Statutes Sections 102 and 102.1, which require the employer rate to be actuarially determined and set annually, based on the Public Retirement Systems' Actuarial Committee's recommendation to the Legislature.

EMPLOYEE CONTRIBUTIONS:

Plan	Current Contribution
Regular Employees, Appellate Law Clerks, Optional Retirement Plan	
Pre-Act 75 (hired before 7/1/2006)	7.5%
Post-Act 75 (hired after 6/30/2006)	8.0%
Legislators	11.5%
Special Legislative	9.5%
Judges hired before 1/1/2011	11.5%
Judges hired after 12/31/2010	13%
Corrections Primary and Secondary	9.0%
Wildlife and Fisheries, Hazardous Duty	9.5%
Peace Officers/Alcohol Tobacco Control	9.0%
Bridge Police	8.5%
Harbor Police	9.0%

NORMAL RETIREMENT ELIGIBILITY AND BENEFIT:

Members whose first employment which makes them eligible for membership in a Louisiana state retirement system occurs on or after July 1, 2015:

- 1. Regular Plan: Eligible with 5 years at age 62. Benefit accrual rate is 2.5%.
- 2. Judges: Eligible with 5 years at age 62. Benefit accrual is 3.5%, plus regular plan benefits for prior service.
- 3. Hazardous Duty Plan: Eligible with 12 years at age 55 or 25 years at any age. Benefit accrual rate is 3.33% for service earned in the Hazardous Duty Plan if the last 10 years of service was earned in a hazardous duty position; otherwise, the accrual rate is 2.5%.

Members whose first employment which makes them eligible for membership in a Louisiana state retirement system occurs during January 1, 2011 to June 30, 2015:

- 1. Regular Plan: Eligible with 5 years at age 60. Benefit accrual rate is 2.5%.
- 2. Judges: Eligible with 5 years at age 60. Benefit accrual is 3.5% plus regular plan benefits for prior service.
- 3. Hazardous Duty Plan: Eligible with 12 years at age 55 or 25 years at any age. Benefit accrual rate is 3.33% for service earned in the Hazardous Duty Plan if the last 10 years of service was earned in a hazardous duty position; otherwise, the accrual rate is 2.5%.

Members whose first employment which makes them eligible for membership in a Louisiana state retirement system occurs prior to January 1, 2011:

1. Regular members hired prior to July 1, 2006: Eligible with 10 years at age 60, or 25 years at age 55, or 30 years at any age. Regular members hired on or after July 1, 2006 are eligible with 5 years at age 60. Benefit accrual rate is 2.5% for all years of service.

- 2. Judges, Court Officers, and Appellate Law Clerks: Eligible with 18 years at any age, 10 years at age 65, 20 total years with at least 12 years as a judge or court officer at age 50, 12 years at age 55, or age 70 regardless of service. Judges and Court Officers earn 3.5% for year of service, plus regular plan benefits for prior service. Appellate Law Clerks earn 2.5% for all years of service.
- 3. Members of the legislature, governor, lieutenant governor and state treasurer: Eligible with 16 years of service at any age, 20 total years with at least 12 years as a member of this class at age 50, or 12 years at age 55. Members earn 3.5% per year of service, plus regular plan benefits for prior service.
- 4. Plans for certain employees of the Department of Public Safety and Corrections:
 - a. Corrections Primary, hired before August 15, 1986: Eligible with 10 years at age 60 or 20 years at any age. Benefit accrual rate is 2.5%.
 - b. Corrections Primary, hired during August 15, 1986 to December 31, 2001: Eligible with 10 years at age 60 or 20 years at age 50. Benefit accrual rate is 2.5%.
 - c. Corrections Primary, hired prior to January 1, 2002, and employed as a probation and parole officers in the office of adult services of the Department of Corrections: Eligible as stated above. Benefit accrual rate is 3.0% for service earned prior to July 1, 2014 and 3.33% for service earned after June 30, 2014.
 - d. Corrections Secondary Plan, hired after January 1, 2002, or transferred from Corrections Primary Plan: Eligible with 10 years at age 60 or 25 years at any age. Benefit accrual rate is 3.33%.

5. Wildlife and Fisheries:

- a. Members hired before July 1, 2003: 10 years at age 55, or 20 years at any age. Benefit accrual is 3.0% for service earned prior to July 1, 2003 and 3.33% for service earned after June 30, 2003.
- b. Members hired on or after July 1, 2003: 10 years at age 60, or 25 years at any age. Benefit accrual is 3.33%.
- 6. Peace Officers: Eligible with 10 years of service and age 60 or at 25 years at age 55, or 30 years at any age. Benefit accrual is 3.33%.
- 7. Alcohol Tobacco Control: Eligible with 10 years of service and age 60 or at 25 years of service at any age. Benefit accrual is 3.33%.
- 8. Bridge Police: Eligible with 10 years at age 60, or 25 years at any age. Benefit accrual is 2.5%.

Members originally enrolled in the Harbor Police Retirement System who transferred to LASERS and elected not to enroll in the Hazardous Duty Plan are eligible with 25 years at any age, 10 years at age 60, 12 years at age 55, or 20 years at age 45. Benefit accrual is 3.33%.

NOTES:

- A. Benefits are limited to 100% of final average compensation.
- B. Retirees who return to work will continue to receive unreduced benefits if compensation does not exceed 50% of the annual benefit during the fiscal year. Earnings above this limit will result in a corresponding reduction to benefits. Retirees who return to work may choose to suspend their retirement benefits and resume making contributions in the system. Upon subsequent retirement, benefit will resume. If post-retirement employment is at least 36 months, a supplemental benefit will be calculated. Otherwise, employee contributions will be refunded.
- C. A \$300 annual supplemental benefit is provided to persons who become members of the retirement system prior to July 1, 1986 (Act 608 of 1986).

D. For members employed after January 1, 1990, the annual pension paid from the trust cannot exceed the maximum benefit provided under Section 415(b) of the Internal Revenue Code, and related Section 415 regulations, as adjusted for inflation and form of benefit other than life annuity or qualified joint and survivor annuity for retirement ages.

ACTUARIALLY REDUCED RETIREMENT:

Members with 20 years of service credit at any age are eligible for an actuarially reduced benefit from the earliest date member would be eligible if employment had continued, to the earliest normal retirement date, based on service earned to date. This does not apply to the correctional secondary plan members, wildlife agents hired on or after July 1, 2003, or harbor police plan members.

POST RETIREMENT INCREASES:

The provisions regarding future Permanent Benefit Increases (PBIs) were substantially changed by Act 399 of 2014. PBIs may be granted, if requested by the Board and approved with a two-thirds vote of both houses of legislature, provided there are sufficient funds in the Experience Account to fully fund the increase on an actuarial basis.

Experience Account Credits/Debits: After allocation of the first \$100,000,000 to the unfunded accrued liability, the Experience Account is credited with 50% of the remaining excess investment income, up to a maximum balance as described below. The \$100,000,000 threshold is indexed based upon the increase in the actuarial value of assets. Excess investment income is investment income for the prior fiscal year in excess of the expected income based on the actuarial valuation rate for that fiscal year. Balances in the Experience Account accrue interest at the actuarial rate of return earned during the prior year. All credits are limited as follows:

If the system's funded ratio is less than 80%, the Experience Account is limited to the reserve necessary to grant one PBI. If the funded ratio is at least 80%, the Experience Account is limited to the reserve necessary to fund two PBI's. The Experience Account is debited for the increase in actuarial accrued liability resulting from the increases.

<u>Permanent Benefit Increases:</u> No increase can be granted if the legislature granted an increase in the preceding fiscal year, unless the system is 85% funded or greater. Additionally, PBI's are limited to the lesser of the increase in the CPI-U for the twelve-month period ending on the system's valuation date, or an amount determined by the system's funded ratio:

Funded Ratio	PBI Increase Limit
< 55%	0%
55% to <65%	1.5%
65% to <75%	2.0%
75% to <80%	2.5%
80% +	3.0%

Beginning July 1, 2015, any increase is limited to the first \$60,000 of a retiree's annual benefit, increased annually by the CPI-U for the twelve-month period ending in June. If the actuarial rate of return for the prior plan year is less than 8.25%, regardless of the discount rate, the increase is limited to the lesser of 2% or the amount described above.

<u>Eligibility Requirements:</u> Benefits are restricted to those retirees who have attained age 60 and have been retired for at least one year. The minimum age 60 for the receipt of a benefit increase does not apply to disability retirees.

MINIMUM BENEFITS:

Effective September 1, 2001, retirees and beneficiaries receiving retirement benefits shall be entitled to a minimum benefit which is not less than \$30.00 per month for each year of creditable service. The minimum benefit is adjusted for the option elected at retirement.

DISABILITY RETIREMENT:

Eligibility:

Ten years of creditable service and certification of disability by medical board. (Medical examination may be required once per year for the first five years of disability retirement, and once every three years thereafter, until age 60.) No minimum service requirement for judges hired before January 1, 2011. Five years of service for members of the harbor police plan.

Benefit:

- 1. The disability retirement annuity shall be equivalent to the regular retirement formula without reduction due to age for all classes of membership.
- 2. For judges and court officers, the benefit in (1) but not less than 50% of current salary.
- 3. Corrections Primary Plan: disabilities incurred in the line of duty may retire with 60% of their final average compensation, regardless of years of service. Otherwise, benefits paid per (1) above.
- 4. Corrections Secondary Plan: disabilities incurred in the line of duty may retire with 40% of their final average compensation, regardless of years of service. If the member has 10 or more years of service, the benefit will be the greater of 40% of final average compensation or the benefit determined by (1) above. Disabilities incurred not in the line of duty determined per (1) above.
- 5. For certain Wildlife agents; partial disabilities not eligible for (1) above receive 75% of the benefit in (1); members totally disabled while in the line of duty receive 60% of average compensation.
- 6. Members of the Hazardous Duty Plan with disabilities incurred in the line of duty may retire with 75% of their final average compensation, regardless of years of service. Disabilities incurred not in the line of duty paid per (1) above.

7. Members of the Harbor Police Plan with disabilities incurred in the line of duty receive 60% of final average compensation. Disabilities incurred not in the line of duty pay 40% of final average compensation if under age 55, and regular retirement allowance if age 55 or greater.

SURVIVOR'S BENEFITS:

Members whose first employment which makes them eligible for membership in a Louisiana state retirement system occurs on or after January 1, 2011, or members of the Hazardous Duty Plan regardless of when hired:

Eligibility and Benefit:

1. Regular Members and Judges

- a. Surviving spouse with minor children of a deceased member with five years of service credit, two of which were earned immediately prior to death, or 20 years of service will receive 50% of the retirement benefit that would have been due to the member, or \$600 per month if greater. Each qualifying child will receive 50% of the spouse's benefit, up to 2 children. The total spouse and children benefit is subject to a minimum based on the Option 2A equivalent for the surviving spouse.
- b. Surviving spouse, legally married one year prior to death, of a deceased member with 10 years of service credit, two of which were earned immediately prior to death, or 20 years of service regardless of date earned will receive the Option 2A equivalent of the retirement benefit that would have been due to the member, or \$600 per month if greater.
- c. Surviving minor children will each (up to two) receive 50% of the benefit paid to a surviving spouse with children. This amount will be divided equally among all eligible children.
- d. Surviving physically handicapped or mentally disabled children continue to receive a minor child's benefit described above in (1) or (3), whichever is applicable.

2. Hazardous duty members:

- a. Surviving spouse and children of members who did not die in the line of duty receive benefits described for non-Hazardous Duty members
- b. Surviving spouse and children of members who died in the line of duty receive 80% of the member's final average compensation. The benefit is shared equally.
- c. Surviving spouse of a retired member will receive 75% of members' monthly benefit. If no spouse, then surviving children receive 1.c. above.
- 3. If no one is eligible to receive a survivor benefit, named beneficiary receives accumulated contributions.

Members whose first employment which makes them eligible for membership in a Louisiana state retirement system occurs prior to January 1, 2011:

Eligibility and Benefit:

1. Regular members:

a. Surviving spouse, legally married one year prior to death, of a deceased member with 10 years of service credit, two of which were earned immediately prior to death, or 20 years of service, receive the greater of 50% of member's average compensation or \$200 per month.

- b. If member with no spouse has surviving minor child, and 5 years of service credit, two of which were earned immediately prior to death, or 20 years of service regardless of date earned, minor children receive the greater of 75% of member's average compensation or \$300 per month.
- c. For surviving spouse with minor children, the spouse must be eligible per (a) above and the children per (b) above to receive these benefits. If either one is ineligible, then the criteria in (a) or (b) would apply accordingly.
- d. Surviving physically handicapped or mentally disabled children continue to receive a minor child's benefit described above in (1a) or (1c) whichever is applicable.
- 2. Surviving spouse of a judge or court officer receive survivor's benefit described in (1a) or (1b), but not less than the greater of 1/3 the member's current compensation, 50% of the retirement pay which such member was entitled or receiving prior to death, or 50% of the member's final average compensation (if the provisions of R.S. 11:471 are met). Benefit limited to 75% of average compensation.

3. Corrections

- a. In the line of duty:
 - i. Surviving spouse with no minor children: 60% of average compensation if member had less than 25 years of service, or 75% of average compensation with 25 or more years of service.
 - ii. Minor children or disabled children and no spouse: 60% of average compensation if member had less than 5 years of service (25 years for Secondary Plan), or 75% of average compensation if member had 5 or more years of service (25 years for Secondary Plan).
 - iii. Surviving spouse with minor children: 60% of average compensation if member had less than 5 years of service (25 years for secondary plan) and benefit divided 1/3 to spouse and 2/3 to minor children equally. 75% of average compensation with 5 or more years of service (25 years for Secondary Plan) and benefit divided 1/3 to spouse and 2/3 to minor children equally.
- b. Not in the line of duty: Benefits in accordance with the provisions for regular members.

4. Wildlife agents

- a. In line of duty:
 - i. Surviving spouse receives 75% of average compensation if member has 25 or more years of service, otherwise, spouse receives 60% of compensation. Benefits cease upon remarriage.
 - ii. Minor children: one child 30% of average compensation, 2 children 40%, 3 children 50%, 4 or more children 60%, divided equally among children.
- b. Not in the line of duty benefit to surviving spouse and children: Surviving spouse receives a benefit as if the member retired on the date of death, until remarried. If member dies prior to age 55 with at least 15 years of service, benefit computed based on years of service without regard to age.
- c. Survivors of retired wildlife agents will receive 75% of the retiree benefit in priority order: surviving spouse (until remarriage), minor children, parents who derive main support from retiree.
- 5. If no one is eligible to receive a survivor benefit, then the named beneficiary will receive the member's accumulated contributions.

6. Harbor Police

a. In line of duty benefit to surviving spouse is 60% of average compensation, regardless of years of service. Benefits cease upon remarriage. Benefits continue to minor children until age 18.

b. Not in the line of duty benefit to surviving spouse with children is 60% of final average compensation, until remarried and children attain age 18. If no children, surviving spouse receives 40% of final average compensation, until remarried.

OPTIONAL FORMS OF BENEFIT:

In lieu of receiving normal retirement benefit, member may elect to receive actuarial equivalent of retirement allowance in a reduced form as follows:

- Option 1 If a member dies before receiving present value of annuity in monthly payments, balance paid to designated beneficiary(ies).
- Option 2 100% of reduced retirement allowance, if member dies, continued for designated beneficiary's lifetime.
- Option 3 50% of reduced retirement allowance, if member dies, continued for designated beneficiary's lifetime.
- Option 4 Other benefits of equal actuarial value may be elected with approval of board.
 - A. 90% of the maximum retirement allowance to member; when member dies, 55% of the maximum retirement allowance continued to beneficiary.
 - B. 55% of the reduced retirement allowance, if member dies, continued for designated beneficiary's lifetime.

Member's reduced benefit reverts to the maximum if the beneficiary predeceases the annuitant.

If divorced after retirement, optional benefit can revert to maximum benefit with actuarial adjustment.

<u>Automatic COLA Option</u> – An irrevocable retirement option which permits the member to receive an actuarially reduced benefit with a 2.5% annual benefit COLA (Cost of Living Adjustment) beginning on the first retirement anniversary date, but not before the retiree attains age 55 or would have attained age 55 in the case of a surviving spouse. This option can be chosen in combination with the above options.

<u>Initial Benefit Option</u> - Maximum benefit actuarially reduced for partial lump sum equal to not more than 36 months of maximum monthly pension.

REFUND OF CONTRIBUTIONS:

If a member ceases to be a member, except by death or retirement, he shall be paid in full or partially at his option, the amount of the accumulated contributions credited to his individual account in annuity savings fund plus any accumulated interest thereon as of June 30, 1971; if member of legislature, no interest. No interest credited after June 30, 1971. Death prior to retirement - accumulated contributions credited to individual account in annuity savings fund are returnable to a designated beneficiary or to member's estate.

DEFERRED RETIREMENT OPTION PLAN:

Instead of terminating employment and accepting a service retirement allowance, any member who has met the normal eligibility requirements may participate in the Deferred Retirement Option Plan (DROP).

<u>Normal Eligibility</u>: Any member who is eligible for unreduced service retirement allowance may begin participation on the first retirement eligibility date for a period not to exceed the third anniversary of retirement eligibility.

<u>Benefit:</u> Upon termination of employment, a participant will receive, at his option:

- (1) Lump sum payment (equal to the payments to the account);
- (2) A true annuity based upon his account; or
- (3) Other methods of payment approved by the Board of Trustees.

If a participant dies during the period of participation in the program, his account balance shall be paid to the beneficiary, or if none, to his estate in any form approved by the Board of Trustees.

If employment is not terminated at the end of DROP participation, then:

- (1) Payment into account shall cease;
- (2) Payment from account only upon termination of employment; and
- (3) The participant shall resume active contributing membership.

Upon termination of employment, the benefit payments indicated above shall be paid. The participant shall receive an additional retirement benefit based on additional service rendered since termination of DROP participation, usually the normal method of computation of benefit subject to the following:

- (1) If additional service was less than the period used to determine the average compensation, then the average compensation figure used to calculate the additional benefit shall be based on compensation used to determine the initial benefit.
- (2) If additional service was greater than the period used to determine the average compensation, the average compensation figure used to calculate the additional benefit shall be based on compensation earned during the period of additional service.

DROP accounts for members who become eligible for retirement prior to January 1, 2004, and participate in DROP shall earn interest, following termination of DROP, at a rate of 0.5% below the actuarial rate of the System's investment portfolio. Members eligible for retirement on or after January 1, 2004, must invest their DROP accounts in self- directed accounts approved by the Board of Trustees.

The annual DROP interest rate for the Harbor Police plan is the three-year average investment return of the plan assets (calculated as the compound average of 36 months) for the period ending the June 30th immediately preceding that given date. This rate is determined by LASERS is reduced by a 0.5% "contingency" adjustment, but not to below zero. DROP interest is forfeited if member does not cease employment after DROP participation.

FUNDING POLICY

LASERS' funding policy is established by Sections 102 and 102.1 of Title 11 of the Louisiana Revised Statutes. LASERS is funded by employee and employer contributions, as a percentage of payroll, plus investment earnings. The basic elements of the annual required contribution are the normal cost, which is the cost of benefits earned by current active employees that is allocated to the current year, plus amortization of the unfunded accrued liability (UAL). Act 55 of 2014, Section 1, appropriates a percentage of nonrecurring revenue in accordance with the Constitution Article VII, Section 10(D)(2)(b)(ii) and requires the funds to be used to reduce the IUAL. The funds are used to reduce the Original Amortization Base (OAB), which includes the Initial Unfunded Accrued Liability (IUAL).

Per State constitutional provisions, the employer contribution rate cannot drop below 12%, without regard to employer credits, and without a corresponding adjustment to the employee contribution rate. Per statutory provisions, the employer contribution rate cannot drop below 15.5% until the UAL that existed on June 30, 2004 is fully funded. Amounts paid to the system due to the minimum will be accumulated in the employer credit account to be used exclusively to reduce any UAL created before July 1, 2004.

Employee contributions are fixed and established by statutes. Employer contributions are determined using the Entry Age Normal actuarial cost method, as required by statute and actuarial assumptions regarding future experience, such as long-term expected investment rates of return, future salary increases, and demographic assumptions such as rates of retirement, termination, disability, and mortality. The actuarial assumptions utilized in this report can be found in Appendix D of this report. The cost method is used to determine the normal cost, which is divided into the employee portion and the employer portion, both expressed as a percentage of payroll. The cost method also determines the plans total actuarial accrued liability. The Unfunded Accrued Liability (UAL) is determined as the total actuarial accrued liability less the plan's valuation assets, which are developed in Section II of this report. The UAL changes annually due to plan experience gains or losses, which develop as actual plan experience will differ from that assumed by the actuarial assumptions, and if applicable, changes in benefits, or actuarial methods and/or assumptions. Statutes provide for the amortization of changes in the UAL.

Benefit changes resulting in an actuarial cost can only be enacted by a two-thirds vote of the legislature and must be paid within 10 years. Non-investment experience gains and losses and investment losses are amortized over 30 years with level payments. Investment gains are first allocated to the OAB and EAAB, without re-amortization, up to the \$100 million threshold amounts, indexed beginning June 30, 2016, as required by Act 399 of 2014. By not re-amortizing, gains applied to these schedules result in earlier pay-off of these schedules. One-half of any remaining gains are credited to the Experience Account up to the statutory cap. Any remaining gains are then amortized over 30 years with level payments. Beginning in 2016, the full investment gain remaining after the allocation to the OAB and EAAB will be amortized over 30 years, and any gains credited to the Experience Account will be amortized as an offsetting loss over a 10-year period. Once the fund attains a funded ratio of 70%, future gains or losses (investment and non-investment) that would have otherwise been amortized over 30 years will be amortized over 20 years.

The OAB will be re-amortized with level-dollar payments to 2029 in fiscal year 2020/21 or later, when such re-amortization results in annual payments less than the next annual payment otherwise required. If the System is less than 80% funded, the net remaining liability of the OAB and EAAB shall be re-amortized after application of the "threshold allocations" in Fiscal Year 2019-2020 and in every fifth fiscal year thereafter. Once the system attains an 80% funded ratio, the OAB and EAAB will be re-amortized following allocations of "threshold allocations" or contribution variance surpluses.

Future payments to amortize the OAB will increase by 2.0%. All other schedules will have level payments.

If aggregate payroll increases at the same rate as the increase in amortization payments, the employer contribution rate attributable to the amortization payments will maintain a level percentage of payroll. If future aggregate payroll increases at a higher rate than the total amortization payments, the employer contribution will decrease. A table and graph showing future UAL amortization payments in aggregate for all current schedules are shown in Appendix E.

Employers pay the full required employer contribution rate, as recommended to the legislature by the Public Retirement Systems' Actuarial Committee (PRSAC). This rate is determined as the projected actuarially determined contribution divided by the projected payroll. The actual actuarially determined contribution and actual payroll will vary from the projected amounts, resulting in a contribution variance. Per statutory requirements, contribution surpluses through fiscal year 2016/2017 will be allocated to the OAB and contribution deficits will be amortized over a five-year period with level payments.

The funding policy described above is consistent with the plan accumulating adequate assets to make benefit payments when due and improving the funded status of the plan by fully amortizing the unfunded accrued liability, assuming the actuarially determined contributions will be paid when due and all actuarial assumptions will be realized.

ACTUARIAL COST METHODS AND ASSUMPTIONS

ACTUARIAL COST METHOD:

Louisiana Statutes, R. S. 11:22, prescribes the Entry Age Normal cost method for funding valuation purposes. This cost method generally produces normal costs that are level as a percentage of the member's projected pay if the composition of the active group with regard to age, sex, and service is stable. Normal costs are attributed from the first period in which a member accrues benefits through all assumed exit ages until retirement.

ASSET VALUATION:

The market value of assets is adjusted to gradually recognize investment gains and losses relative to the discount rate over a 5-year period in 20% increments. The adjusted asset value is subject to Corridor Limits of 80% to 120% of the market value of assets.

ACCOUNTING DISCLOSURE:

The Statements of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position provided by the accounting staff were the final drafts prior to publication. If these statements differ from the final audit report by a margin that affects employer contribution rate or the yield to the actuarial value of assets, a revised actuarial report will be issued, but only to the extent that any differences in reporting affect the employer's contribution rate or the return on the Actuarial Value of Assets.

ADMINISTRATIVE EXPENSES:

Administrative expenses are not explicitly assumed but rather funded in accordance with R.S. 11 Section 102, which by omission of language regarding the funding of administrative expenses precludes funding of these expenses by a direct allocation through the employer contribution rate. These expenses are instead funded through the employer rate as part of the total experience gain/loss which is amortized over a 30-year period. The investment return assumption is reduced by 15 basis points to reflect administrative expenses that are paid from plan assets and not otherwise recognized. Therefore, these expenses and the resulting experience losses are expected to be offset by long-term investment earnings. The adjustment to the discount rate is in accordance with Actuarial Standard of Practice Statement 27, (paragraph 3.8.3.e.).

Act 94 of 2016 requires direct funding of administrative expenses by employers to begin in the first fiscal year in which the projected aggregate employer contribution rate does not increase, without regard to any increases resulting from changes in the board-approved actuarial valuation rate. The projected aggregate employer rate for fiscal year 2018/2019 meets the requirements provided by Act 94, therefore the projected required funding for fiscal year 2018/2019, determined by the June 30, 2017 actuarial valuation, includes expected administrative expenses.

POST RETIREMENT BENEFIT INCREASES:

The accrued actuarial liability includes previously granted post-retirement benefit increases. Louisiana law pertaining to LASERS retiree benefit increases provides for the funding of future increases by requiring the automatic transfer of a portion of excess investment earnings to the Experience Account. The law does not provide for automatic benefit increases. Many conditions must be met before an increase can be granted, as described in the Post-Retirement Increases section of the Summary of Plan Provisions in Appendix B of this report. The legislature and governor have the ultimate authority as to whether a future increase will be granted. Since a portion of investment earnings will be used to fund these benefits, which are not accrued benefits of the plan, the accrued benefits are discounted using a net discount rate. The net discount rate is determined as the gross expected long-term return less investment and administrative expenses and the expected return used to provide for future retiree benefit increases. This adjustment is made in accordance with Actuarial Standards of Practice No. 27 regarding the selection of economic assumptions, which states that it is appropriate to adjust the economic assumptions to provide for plan provisions that are difficult to measure, such as gain-sharing provisions.

The adjustment for gain-sharing reflects LASERS' specific statutory provisions which require 50% of investment gains, determined using the actuarial value of assets, above the statutory threshold of \$100 million, indexed to increases in the actuarial value of assets. Transfers to the Experience Account are limited based upon the maximum balance of this account, which has been significantly decreased by Act 399 of 2014. The liabilities in this report were not developed to include future ad hoc retiree benefit increases. However, the assumptions include an adjustment to recognize that investment earnings will be allocated to the Experience Account to fund potential future increases, in accordance with Actuarial Standards of Practice No. 27 (paragraph 3.5.1).

ACTUARIAL ASSUMPTIONS:

Demographic and Salary assumptions used in the valuation were adopted by the Board of Trustees following the most recent experience study. The Retirement System is required to conduct an experience study every five years. An experience study was completed for the observation period of 2009-2013. The recommended assumption changes based on this study were adopted by the Board, effective July 1, 2014. The experience study report, dated January 16, 2014, provides further information regarding the rationale for these assumptions. The current rate tables are illustrated at the end of this appendix.

INFLATION:

The Board of Trustees adopted a change in the inflation assumption from 3.0% to 2.75%, effective July 1, 2017.

DISCOUNT RATE / INVESTMENT EARNINGS:

A discount rate of 7.70% was used for the June 30, 2017 valuation. The Board adopted a plan to reduce the discount rate in 0.05% increments beginning July 1, 2017. Therefore, the discount rate was reduced from 7.75% to 7.70%. The projected contribution requirements for Fiscal Year 2018/2019 were determined using a discount rate of 7.65%. Investment manager fees are treated as a direct offset to investment income.

June 30, 2017 Funding Valuation Assumptions:

The discount rate for funding purposes reflects the assumed investment rate of return, net of investment and administrative expenses, and net of investment gains expected to be allocated to the Experience Account to fund future permanent benefit increases. Therefore, by excluding returns expected to be used for purposes other than funding plan benefits, the discount rate represents the expected returns to be used to fund regular plan benefits.

The analysis is supported by the system's expected long-term rate of return on alternative investments, and capital market assumptions provided by the Board's investment consultant for all other assets, with a 2.75% inflation component, which results in an expected long-term geometric average nominal rate of return of 8.16%. After adjusting for gain-sharing (40 basis points) and administrative expenses (15 basis points), the net return available to fund regular plan benefits is 7.61%. This is reasonably close to the 7.70% discount rate, therefore we conclude that the 7.70% discount is reasonable.

Based on recent historical administrative expenses relative to plan assets, it is assumed that 15 basis points will be used to offset administrative expenses. A long-term (30-year) average of approximately 40 basis points is assumed to be transferred to the Experience Account annually. This estimate is based on one hundred 30-year projections of annual market returns provided by NEPC and LASERS investment staff, based upon LASERS' target portfolio allocation. Annual investment gains and losses are projected for each scenario with the resulting experience gains allocated to the Experience Account, according to current statutory provisions.

June 30 2017 GASB Assumptions:

A discount rate of 7.70% is used for GASB reporting purposes. Section IV of this report provides expected real rates of return by asset class. Using an inflation assumption of 2.75%, the corresponding long-term nominal rate of return is 8.16%, which supports the 7.70% long-term expected rate of return used for GASB reporting purposes.

June 30, 2018 Funding Valuation Assumptions:

A 7.65% discount rate was used to determine the projected fiscal year 2018/2019 funding requirements, in accordance with the Board's plan to reduce the discount rate to 7.50% in 0.05% annual increments. Since administrative expenses will be directly funded beginning July 1, 2018, the reasonableness of the discount rate is measured relative to the long-term expected return net of investment gains expected to be deferred to the Experience Account to fund future permanent benefit increases, with no further reduction for administrative expenses. Adjusting the 8.16% expected investment return described above by 40 basis points for gain sharing results in an expected return of 7.76% to be used to fund regular plan benefits. Therefore, we conclude that the 7.65% discount rate is reasonable.

MORTALITY ASSUMPTIONS:

The mortality table for non-disabled retirees is based upon the RP-2000 table with mortality improvement projected through 2015 using scale AA, based on plan experience. The adjustment for mortality improvement anticipates future improvements in mortality beyond the measurement date. This table was determined to be appropriate relative to actual experience and adopted by the Board following the most recent experience study.

Mortality assumptions for disability benefits are based upon the RP-2000 disability table with no projection of mortality improvement, based on plan experience.

DISABILITY ASSUMPTION:

Rates of total and permanent disability, based upon attained age, are projected in accordance with the most recent experience study.

RETIREMENT/DROP ASSUMPTION:

Eligibility for normal retirement benefits and DROP participation is based on age and service requirements that vary by plan.

TERMINATION ASSUMPTIONS:

Voluntary termination or withdrawal rates are based on the most recent experience study. Rates for Regular members and Corrections/Hazardous Duty members are based on a combination of age and service. Rates for Judges and Wildlife are based on service. For members terminating with vested benefits, it is assumed that 20% will elect to withdraw their accumulated employee contribution, and 80% will receive a benefit beginning at age 60.

SALARY GROWTH:

The rates of annual salary growth are based upon the member's years of service and are based on the most recent experience study. The rates include anticipated productivity growth, merit adjustments, and a 2.75% inflation component, which is consistent with the inflation assumptions used to develop the discount rate. All salary increase assumptions were decreased by 0.25%, effective July 1, 2017, due to the change in the inflation assumption from 3.00% to 2.75%. For valuation purposes, current salaries and projected future salaries are limited to the Section 401(a)(17) limit of the Internal Revenue Service Code, with future indexed increases.

FAMILY STATISTICS:

The composition of the family is based upon Current Population Reports published by the United States Census Bureau. Seventy-five percent of the membership is assumed to be married. The wife is assumed to be three years younger than the husband. Sample rates for the assumed number of minor children are as follows:

	Number of	Years for Youngest
Age of	Minor	Child to Attain
Member	Children	Majority
25	1.2	17
30	1.4	15
35	1.7	13
40	1.7	10
45	1.4	8
50	1.1	4

CONVERTED LEAVE:

Leave credit is accrued throughout a member's career and converted to service credit or paid as a lump sum. Converted leave rates below represent the percentage increase in a retiree's accrued benefit upon conversion of the leave to benefits. The rates, shown below, are based on the most recent experience study.

	Regular	
	Retirement	Disability
Regular Members	3.5%	1.5%
Judicial Members	1.0%	1.0%
Corrections	5.0%	3.0%
Wildlife	6.0%	3.0%

Actuarial Assumptions, effective July 1, 2014 Regular Members

	DEAT	H RATES			TERMINATION RATES							
			DISABILITY	< 1	1	2-3	4-5	6	7	8	9	10+
AGE	MALE	FEMALE	RATES	YEAR	YEAR	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS	YEARS
18	0.00024	0.00015	0.0000	0.450	0.300	0.220	0.140	0.100	0.080	0.070	0.060	0.050
19	0.00025	0.00015	0.0000	0.450	0.300	0.220	0.140	0.100	0.080	0.070	0.060	0.050
20	0.00026	0.00015	0.0000	0.450	0.300	0.220	0.140	0.100	0.080	0.070	0.060	0.050
21	0.00027	0.00015	0.0000	0.400	0.300	0.220	0.140	0.100	0.080	0.070	0.060	0.050
22	0.00028	0.00015	0.0000	0.350	0.250	0.220	0.140	0.100	0.080	0.070	0.060	0.050
23	0.00030 0.00031	0.00016	0.0000	0.290	0.250	0.220 0.210	0.130	0.100	0.080	0.070 0.070	0.060	0.050
24	0.00031	0.00016	0.0000	0.290	0.210 0.207	0.210	0.120	0.100	0.080	0.070	0.060	0.050
25 26	0.00032	0.00017 0.00018	0.0000	0.290	0.207	0.200	0.118 0.116	0.100	0.080	0.070	0.060	0.050
27	0.00035	0.00018	0.0000	0.290	0.204	0.200	0.116	0.100	0.080	0.070	0.060	0.050
28	0.00033	0.00019	0.0000	0.290	0.201	0.190	0.114	0.100	0.080	0.070	0.060	0.050
29	0.00037	0.00020	0.0001	0.290	0.198	0.170	0.112	0.100	0.080	0.070	0.060	0.050
30	0.00038	0.00021	0.0001	0.290	0.192	0.170	0.110	0.100	0.080	0.070	0.060	0.050
31	0.00041	0.00023	0.0001	0.290	0.132	0.160	0.106	0.100	0.080	0.070	0.060	0.050
32	0.00052	0.00027	0.0001	0.290	0.186	0.150	0.104	0.100	0.080	0.070	0.060	0.050
33	0.00059	0.00034	0.0001	0.290	0.183	0.130	0.102	0.100	0.080	0.070	0.060	0.050
34	0.00065	0.00037	0.0001	0.290	0.180	0.130	0.100	0.100	0.080	0.070	0.060	0.050
35	0.00072	0.00040	0.0004	0.290	0.177	0.130	0.098	0.100	0.080	0.070	0.060	0.050
36	0.00078	0.00043	0.0004	0.285	0.174	0.130	0.096	0.100	0.080	0.070	0.060	0.050
37	0.00084	0.00046	0.0004	0.280	0.171	0.120	0.094	0.100	0.080	0.070	0.060	0.050
38	0.00088	0.00048	0.0004	0.275	0.168	0.120	0.092	0.100	0.080	0.070	0.060	0.050
39	0.00092	0.00052	0.0004	0.270	0.165	0.120	0.090	0.100	0.080	0.070	0.060	0.050
40	0.00096	0.00056	0.0004	0.265	0.162	0.110	0.088	0.100	0.080	0.070	0.060	0.050
41	0.00100	0.00062	0.0014	0.260	0.159	0.110	0.086	0.100	0.080	0.070	0.060	0.050
42	0.00105	0.00068	0.0014	0.255	0.156	0.110	0.084	0.100	0.080	0.070	0.060	0.050
43	0.00110	0.00075	0.0014	0.250	0.153	0.080	0.082	0.080	0.070	0.060	0.050	0.040
44	0.00117	0.00082	0.0014	0.245	0.150	0.080	0.080	0.080	0.070	0.060	0.050	0.040
45	0.00124	0.00088	0.0022	0.240	0.147	0.080	0.078	0.080	0.070	0.060	0.050	0.040
46	0.00131	0.00095	0.0022	0.235	0.144	0.080	0.076	0.080	0.070	0.060	0.050	0.040
47	0.00138	0.00101	0.0022	0.230	0.141	0.080	0.074	0.080	0.070	0.060	0.050	0.040
48	0.00146	0.00109	0.0028	0.225	0.138	0.080	0.072	0.080	0.070	0.060	0.050	0.040
49	0.00154	0.00118	0.0028	0.220	0.135	0.080	0.070	0.080	0.070	0.060	0.050	0.040
50	0.00163	0.00130	0.0028	0.215	0.132	0.080	0.068	0.080	0.070	0.060	0.050	0.040
51	0.00184	0.00145	0.0028	0.210	0.129	0.080	0.066	0.080	0.070	0.060	0.050	0.040
52	0.00197	0.00163	0.0036	0.205	0.126	0.080	0.064	0.080	0.070	0.060	0.050	0.040
53	0.00215 0.00236	0.00184 0.00209	0.0036 0.0036	0.200	0.123 0.120	0.080	0.062	0.080	0.070 0.070	0.060	0.050	0.040
54 55	0.00236	0.00209	0.0036	0.193	0.120	0.080	0.058	0.080	0.070	0.060	0.050	0.040
56	0.00272	0.00241	0.0036	0.190	0.117	0.080	0.056	0.080	0.070	0.060	0.050	0.040
57	0.00320	0.00282	0.0036	0.180	0.114	0.080	0.054	0.080	0.070	0.060	0.050	0.040
58	0.00303	0.00323	0.0048	0.175	0.111	0.080	0.052	0.080	0.070	0.060	0.050	0.040
59	0.00414	0.00304	0.0040	0.170	0.105	0.080	0.052	0.080	0.070	0.060	0.050	0.040
60	0.00530	0.00469	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
61	0.00612	0.00539	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
62	0.00698	0.00618	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
63	0.00810	0.00709	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
64	0.00913	0.00800	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
65	0.01031	0.00900	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
66	0.01184	0.01016	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
67	0.01321	0.01128	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
68	0.01446	0.01247	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
69	0.01603	0.01378	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
70	0.01770	0.01553	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
71	0.01959	0.01698	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
72	0.02175	0.01888	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
73	0.02422	0.02067	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040
74	0.02702	0.02291	0.0000	0.165	0.102	0.080	0.048	0.080	0.070	0.060	0.050	0.040

Actuarial Assumptions, effective July 1, 2014 Regular Members

	RETIREMENT/DROP RATES							
	< 10	10-19	20-24	25-29	30+			
AGE	YOS	YOS	YOS	YOS	YOS			
18	0.000	0.000	0.020	0.030	0.000			
19	0.000	0.000	0.020	0.030	0.000			
20	0.000	0.000	0.020	0.030	0.000			
21	0.000	0.000	0.020	0.030	0.000			
22	0.000	0.000	0.020	0.030	0.000			
23	0.000	0.000	0.020	0.030	0.000			
24	0.000	0.000	0.020	0.030	0.000			
25	0.000	0.000	0.020	0.030	0.000			
26	0.000	0.000	0.020	0.030	0.000			
27	0.000	0.000	0.020	0.030	0.000			
28	0.000	0.000	0.020	0.030	0.000			
29	0.000	0.000	0.020	0.030	0.000			
30	0.000	0.000	0.020	0.030	0.000			
31	0.000	0.000	0.020	0.030	0.000			
32	0.000	0.000	0.020	0.030	0.000			
34	0.000	0.000	0.020	0.030	0.000			
35	0.000	0.000	0.020	0.030	0.000			
36	0.000	0.000	0.020	0.030	0.000			
37	0.000	0.000	0.020	0.030	0.000			
38	0.000	0.000	0.020	0.030	0.000			
39	0.000	0.000	0.020	0.030	0.000			
40	0.000	0.000	0.020	0.030	0.000			
41	0.000	0.000	0.020	0.030	0.000			
42	0.000	0.000	0.020	0.030	0.000			
43	0.000	0.000	0.020	0.030	0.000			
44	0.000	0.000	0.020	0.030	0.000			
45	0.000	0.000	0.020	0.030	0.030			
46	0.000	0.000	0.020	0.030	0.030			
47	0.000	0.000	0.020	0.030	0.500			
48	0.000	0.000	0.020	0.060	0.500			
49	0.000	0.000	0.020	0.070	0.500			
50	0.000	0.000	0.030	0.070	0.430			
51	0.000	0.000	0.030	0.070	0.400			
52 53	0.000	0.000	0.030	0.080	0.470			
54	0.000	0.000	0.030	0.120	0.440			
55	0.000	0.000	0.080	0.550	0.300			
56	0.000	0.000	0.080	0.320	0.250			
57	0.000	0.000	0.080	0.300	0.220			
58	0.000	0.000	0.080	0.280	0.200			
59	0.000	0.000	0.250	0.350	0.180			
60	0.100	0.330	0.550	0.300	0.240			
61	0.250	0.180	0.210	0.180	0.220			
62	0.250	0.160	0.200	0.180	0.250			
63	0.250	0.160	0.150	0.250	0.250			
64	0.250	0.170	0.150	0.180	0.250			
65	0.250	0.240	0.250	0.250	0.250			
66	0.250	0.160	0.250	0.200	0.300			
67	0.250	0.230	0.300	0.180	0.350			
68	0.250	0.230	0.100	0.180	0.200			
69	0.250	0.230	0.250	0.400	0.200			
70 71	0.750 0.750	0.230	0.250	0.350	0.250			
72	0.750	0.230	0.250	0.350	0.250			
73	0.750	0.230	0.250	0.350	0.250			
74	0.750	0.230	0.250	0.350	0.250			
, ,	0.750	0.230	0.230	0.550	0.230			

	SALARY
DUR	INCREASE
0	0.1275
1	0.0775
2	0.0675
3	0.0625 0.0575
5	0.0575
6	0.0525
7	0.0515
8	0.0505
9	0.0495
10	0.0485
11	0.0475
12	0.0465
13	0.0455
14	0.0445
15	0.0425
16 17	0.0425
	0.0415 0.0405
18 19	0.0403
20	0.0393
21	0.0365
22	0.0375
23	0.0375
24	0.0375
25	0.0375
26	0.0375
27	0.0375
28	0.0375
29	0.0375
30	0.0375
31	0.0375
32	0.0375
33	0.0375
34	0.0375
35	0.0375
36	0.0375 0.0375
38	0.0375
39	0.0375
40	0.0375
41	0.0375
42	0.0375
43	0.0375
44	0.0375
45	0.0375
46	0.0375
47	0.0375
48	0.0375
49	0.0375
50	0.0375
51	0.0375
52 53	0.0375
53	0.0375 0.0375
55	0.0375
56	0.0375
30	0.0373

Actuarial Assumptions, effective July 1, 2014 Judges

	DEAT	H RATES		RETIR	EMENT	/DROP
			DISABILITY	< 15	15-19	20+
AGE	MALE	FEMALE	RATES	YOS	YOS	YOS
18	0.00024	0.00015	0.0000	0.000	0.000	0.000
19	0.00025	0.00015	0.0000	0.000	0.000	0.000
20	0.00026	0.00015	0.0000	0.000	0.000	0.000
21	0.00027	0.00015	0.0000	0.000	0.000	0.000
22	0.00028	0.00015	0.0000	0.000	0.000	0.000
23	0.00030	0.00016	0.0000	0.000	0.000	0.000
24	0.00031	0.00016	0.0000	0.000	0.000	0.000
25	0.00032	0.00017	0.0000	0.000	0.000	0.000
26	0.00035	0.00018	0.0000	0.000	0.000	0.000
27	0.00035	0.00019	0.0000	0.000	0.000	0.000
28	0.00037	0.00020	0.0000	0.000	0.000	0.000
29	0.00038	0.00021	0.0000	0.000	0.000	0.000
30	0.00041	0.00023	0.0000	0.000	0.000	0.000
31	0.00046	0.00027	0.0000	0.000	0.000	0.000
32	0.00052	0.00031	0.0000	0.000	0.000	0.000
33	0.00059	0.00034	0.0000	0.000	0.000	0.000
34	0.00065	0.00037	0.0000	0.000	0.000	0.000
35	0.00072	0.00040	0.0000	0.000	0.000	0.000
36	0.00078	0.00043	0.0000	0.000	0.000	0.000
37	0.00084	0.00046	0.0000	0.000	0.000	0.000
38	0.00088	0.00048	0.0000	0.000	0.000	0.000
39	0.00092	0.00052	0.0000	0.000	0.000	0.000
40	0.00096	0.00056	0.0000	0.000	0.000	0.000
41	0.00100	0.00062	0.0000	0.000	0.000	0.000
42	0.00105	0.00068	0.0000	0.000	0.000	0.000
43	0.00110	0.00075	0.0000	0.000	0.000	0.000
44	0.00117	0.00082	0.0000	0.000	0.000	0.000
45	0.00124	0.00088	0.0000	0.000	0.000	0.000
46	0.00131	0.00095	0.0002	0.000	0.200	0.000
47	0.00138	0.00101	0.0002	0.000	0.200	0.000
48	0.00146	0.00109	0.0002	0.000	0.200	0.000
49	0.00154	0.00118	0.0002	0.000	0.200	0.050
50	0.00163	0.00130	0.0002	0.000	0.200	0.050
51	0.00184	0.00145	0.0002	0.000	0.100	0.050
52	0.00197	0.00163	0.0002	0.000	0.100	0.050
53	0.00215	0.00184	0.0002	0.000	0.100	0.050
54	0.00236	0.00209	0.0002	0.000	0.200	0.050
55	0.00272	0.00241	0.0002	0.050	0.200	0.100
56	0.00320	0.00282	0.0002	0.050	0.100	0.060
57	0.00363	0.00323	0.0002	0.100	0.020	0.060
58	0.00414	0.00364	0.0002	0.050	0.020	0.060
59	0.00467	0.00412	0.0002	0.050	0.020	0.080
60	0.00530	0.00469	0.0002	0.100	0.020	0.080
61	0.00612	0.00539	0.0002	0.100	0.020	0.120
62	0.00698	0.00618	0.0002	0.200	0.020	0.120
63	0.00810	0.00709	0.0002	0.200	0.020	0.060
64	0.00913	0.00800	0.0002	0.150	0.100	0.060
65	0.01031	0.00900	0.0002	0.500	0.100	0.060
66	0.01184	0.01016	0.0002	0.100	0.100	0.110
67	0.01321	0.01128	0.0002	0.100	0.100	0.100
68	0.01446	0.01247	0.0002	0.100	0.100	0.100
69	0.01603	0.01378	0.0002	0.100	0.100	0.100
70	0.01770	0.01553	0.0000	0.100	0.100	0.100
71	0.01959	0.01698	0.0000	0.050	0.400	0.400
72	0.02175	0.01888	0.0000	0.050	0.400	0.400
73	0.02422	0.02067	0.0000	0.050	0.400	0.400
74	0.02702	0.02291	0.0000	0.050	0.400	0.400

	TERMINATION	SALARY
DUR	RATES	INCREASE
0	0.000	0.0525
1	0.030	0.0275
2	0.040	0.0275
3	0.030	0.0275
4	0.020	0.0275
5	0.010	0.0275
6	0.010	0.0275
7	0.010	0.0275
8	0.010	0.0275
9	0.010	0.0275
10	0.010	0.0275
11	0.010	0.0275
12	0.010	0.0275
13	0.010	0.0275
14	0.010	0.0275
15	0.010	0.0275
16	0.010	0.0275
17	0.010	0.0275
18	0.010 0.010	0.0275
19		0.0275 0.0275
20 21	0.010 0.010	0.0275
22	0.010	0.0275
23	0.010	0.0275
24	0.010	0.0275
25	0.010	0.0275
26	0.010	0.0275
27	0.010	0.0275
28	0.010	0.0275
29	0.010	0.0275
30	0.010	0.0275
31	0.010	0.0275
32	0.010	0.0275
33	0.010	0.0275
34	0.010	0.0275
35	0.010	0.0275
36	0.010	0.0275
37	0.010	0.0275
38	0.010	0.0275
39	0.010	0.0275
40	0.010	0.0275
41	0.010	0.0275
42	0.010	0.0275
43	0.010	0.0275
44	0.010 0.010	0.0275
46	0.010	0.0275 0.0275
47	0.010	0.0275
48	0.010	0.0275
49	0.010	0.0275
50	0.010	0.0275
51	0.010	0.0275
52	0.010	0.0275
53	0.010	0.0275
54	0.010	0.0275
55	0.010	0.0275
56	0.010	0.0275

Actuarial Assumptions, effective July 1, 2014 Corrections/Hazardous Duty

	DEATH DATES		DIGI DIL ITI		ENT/DROP	TERMINATION RATES			
ACE		H RATES	DISABILITY		TES				
AGE	MALE	FEMALE	RATES	< 25 YOS	>= 25 YOS	< 10 YOS	>10 YOS		
18 19	0.00024	0.00015 0.00015	0.0000	0.200 0.200	0.250 0.250	0.50	0.00		
20	0.00025 0.00026	0.00015	0.0000	0.200	0.250	0.50 0.46	0.00		
21	0.00026	0.00015	0.0000	0.200	0.250	0.46	0.00		
22	0.00027	0.00015	0.0000	0.200	0.250	0.42	0.00		
23	0.00028	0.00015	0.0000	0.200	0.250	0.35	0.00		
24	0.00030	0.00016	0.0000	0.200	0.250	0.32	0.10		
25	0.00031	0.00017	0.0000	0.200	0.250	0.29	0.10		
26	0.00035	0.00017	0.0000	0.200	0.250	0.27	0.10		
27	0.00035	0.00019	0.0000	0.200	0.250	0.25	0.10		
28	0.00037	0.00020	0.0000	0.200	0.250	0.23	0.10		
29	0.00038	0.00021	0.0000	0.200	0.250	0.21	0.10		
30	0.00041	0.00023	0.0000	0.200	0.250	0.20	0.10		
31	0.00046	0.00027	0.0000	0.200	0.250	0.20	0.10		
32	0.00052	0.00031	0.0000	0.200	0.250	0.20	0.10		
33	0.00059	0.00034	0.0000	0.200	0.250	0.20	0.08		
34	0.00065	0.00037	0.0000	0.200	0.250	0.20	0.08		
35	0.00072	0.00040	0.0020	0.200	0.250	0.20	0.08		
36	0.00078	0.00043	0.0020	0.200	0.250	0.18	0.06		
37	0.00084	0.00046	0.0020	0.200	0.250	0.18	0.06		
38	0.00088	0.00048	0.0020	0.200	0.250	0.18	0.06		
39	0.00092	0.00052	0.0020	0.200	0.250	0.18	0.06		
40	0.00096	0.00056	0.0025	0.200	0.250	0.18	0.05		
41	0.00100	0.00062	0.0025	0.200	0.250	0.18	0.05		
42	0.00105	0.00068	0.0025	0.200	0.250	0.18	0.05		
43	0.00110	0.00075	0.0025	0.200	0.250	0.18	0.05		
44	0.00117	0.00082	0.0025	0.200	0.250	0.18	0.06		
45	0.00124	0.00088	0.0025	0.200	0.250	0.17	0.06		
46	0.00131	0.00095	0.0025	0.200	0.250	0.17	0.06		
47	0.00138	0.00101	0.0025	0.200	0.250	0.17	0.06		
48	0.00146	0.00109	0.0025	0.200	0.250	0.17	0.06		
49	0.00154	0.00118	0.0030	0.200	0.250	0.17	0.07		
50	0.00163	0.00130	0.0030	0.350	0.200	0.13	0.07		
51	0.00184	0.00145	0.0030	0.100	0.250	0.13	0.07		
52	0.00197	0.00163	0.0050	0.250	0.350	0.13	0.07		
53	0.00215	0.00184	0.0050	0.250	0.350	0.13	0.07		
54	0.00236	0.00209	0.0050	0.300	0.350	0.13	0.10		
55	0.00272	0.00241	0.0075	0.300	0.350	0.13	0.10		
56	0.00320	0.00282	0.0075	0.300	0.350	0.13	0.10		
57	0.00363	0.00323	0.0075	0.300	0.350	0.13	0.10		
58	0.00414	0.00364	0.0075	0.300	0.350	0.13	0.10		
59	0.00467	0.00412	0.0075	0.300	0.350	0.13	0.10		
60	0.00530	0.00469	0.0000	0.450	0.500	0.13 0.13	0.10 0.10		
61	0.00612 0.00698	0.00539 0.00618	0.0000	0.400 0.400	0.500 0.500				
63	0.00898	0.00618	0.0000	0.400	0.500	0.13 0.13	0.10 0.10		
64	0.00810	0.00709	0.0000	0.400	0.500	0.13	0.10		
65	0.00913	0.00800	0.0000	0.350	0.500	0.13	0.10		
66	0.01031	0.00900	0.0000	0.350	0.500	0.13	0.10		
67	0.01104	0.01010	0.0000	0.350	0.500	0.13	0.10		
68	0.01321	0.01123	0.0000	0.350	0.500	0.13	0.10		
69	0.01448	0.01247	0.0000	0.350	0.500	0.13	0.10		
70	0.01770	0.01573	0.0000	0.500	0.500	0.13	0.10		
71	0.01959	0.01698	0.0000	0.500	0.500	0.13	0.10		
72	0.02175	0.01888	0.0000	0.500	0.500	0.13	0.10		
73	0.02422	0.02067	0.0000	0.500	0.500	0.13	0.10		
74	0.02702	0.02291	0.0000	0.500	0.500	0.13	0.10		

	SALARY
DUR	INCREASE
0	0.1425
1	0.0810
2	0.0675
3	0.0665
5	0.0615
6	0.0605 0.0600
7	0.0595
8	0.0590
9	0.0585
10	0.0580
11	0.0575
12	0.0570
13	0.0565
14	0.0560
15	0.0555
16	0.0550
17	0.0545
18	0.0540
19	0.0535
20	0.0530
21	0.0525
22	0.0525
23	0.0520
24	0.0520
25	0.0525
26	0.0525
27	0.0435
28	0.0435 0.0430
29 30	0.0430
31	0.0335
32	0.0335
33	0.0335
34	0.0335
35	0.0335
36	0.0335
37	0.0335
38	0.0335
39	0.0335
40	0.0335
41	0.0335
42	0.0335
43	0.0335
44	0.0335
45	0.0335
46	0.0335
47	0.0335
48	0.0335
49	0.0335 0.0335
50	0.0335
51 52	0.0335
53	0.0335
54	0.0335
55	0.0335
56	0.0335
30	0.0333

Actuarial Assumptions, effective July 1, 2014 Wildlife

	DEAT	H RATES	DISABILITY		IENT/DROP TES
AGE	MALE	FEMALE	RATES	< 25 YOS	>= 25 YOS
18	0.00024	0.00015	0.0000	0.200	0.250
19	0.00025	0.00015	0.0000	0.200	0.250
20	0.00026	0.00015	0.0000	0.200	0.250
21	0.00027	0.00015	0.0000	0.200	0.250
22	0.00028	0.00015	0.0000	0.200	0.250
23	0.00030	0.00016	0.0000	0.200	0.250
24	0.00031	0.00016	0.0000	0.200	0.250
25	0.00032	0.00017	0.0000	0.200	0.250
26	0.00035	0.00018	0.0000	0.200	0.250
27	0.00035	0.00019	0.0000	0.200	0.250
28	0.00037	0.00020	0.0000	0.200	0.250
29	0.00038	0.00021	0.0000	0.200	0.250
30	0.00041	0.00023	0.0000	0.200	0.250
31	0.00046	0.00027	0.0000	0.200	0.250
32	0.00052	0.00031	0.0000	0.200	0.250
33	0.00059	0.00034	0.0000	0.200	0.250
34	0.00065	0.00037	0.0000	0.200	0.250
35	0.00072	0.00040	0.0020	0.200	0.250
36	0.00078	0.00043	0.0020	0.200	0.250
37	0.00084	0.00046	0.0020	0.200	0.250
38	0.00088	0.00048	0.0020	0.200	0.250
39	0.00092	0.00052	0.0020	0.200	0.250
40	0.00096	0.00056	0.0025	0.200	0.250
41	0.00100	0.00062	0.0025	0.200	0.250
42	0.00105	0.00068	0.0025	0.200	0.250
43	0.00110	0.00075	0.0025	0.200	0.250
44	0.00117	0.00082	0.0025	0.200	0.250
45	0.00124	0.00088	0.0025	0.200	0.250
46	0.00131	0.00095	0.0025	0.200	0.250
47	0.00138	0.00101	0.0025	0.200	0.250
48	0.00146	0.00109	0.0025	0.200	0.250
49	0.00154	0.00118	0.0030	0.200	0.250
50	0.00163	0.00130	0.0030	0.350	0.200
51	0.00184	0.00145	0.0030	0.100	0.250
52	0.00197	0.00163	0.0050	0.250	0.350
53	0.00215	0.00184	0.0050	0.250	0.350
54	0.00236	0.00209	0.0050	0.300	0.350
55	0.00272	0.00241	0.0075	0.300	0.350
56	0.00320	0.00282	0.0075	0.300	0.350
57	0.00363	0.00323	0.0075	0.300	0.350
58	0.00414	0.00364	0.0075	0.300	0.350
59	0.00467	0.00412	0.0075	0.300	0.350
60	0.00530	0.00469	0.0000	0.450	0.500
61	0.00612	0.00539	0.0000	0.400	0.500
62	0.00698	0.00618	0.0000	0.400	0.500
63	0.00810	0.00709	0.0000	0.400	0.500
64	0.00913	0.00800	0.0000	0.400	0.500
65	0.01031	0.00900	0.0000	0.350	0.500
66	0.01184	0.01016	0.0000	0.350	0.500
67	0.01321	0.01128	0.0000	0.350	0.500
68	0.01446	0.01247	0.0000	0.350	0.500
69	0.01603	0.01378	0.0000	0.350	0.500
70	0.01770	0.01553	0.0000	0.500	0.500
71	0.01959	0.01698	0.0000	0.500	0.500
72	0.02175	0.01888	0.0000	0.500	0.500
73	0.02422	0.02067	0.0000	0.500	0.500
74	0.02702	0.02291	0.0000	0.500	0.500
, ,	0.02,02	0.022/1	0.0000	0.500	0.500

DUR	TERMINATION RATES	SALARY INCREASE
0	0.080	0.1425
1	0.080	0.0810
2	0.080	0.0675
3	0.080	0.0665
4	0.050	0.0615
5	0.050	0.0605
6	0.030	0.0600
7	0.030	0.0595
8	0.030	0.0590
9	0.030	0.0585
10	0.030	0.0580
11	0.030	0.0575
12	0.030	0.0570
13	0.030	0.0565
14	0.030	0.0560
15	0.030	0.0555
16	0.030	0.0550
17	0.030	0.0545
18	0.030	0.0543
19	0.030	0.0535
20	0.030	0.0530
21	0.030	0.0530
22	0.030	0.0525
23	0.000	0.0523
	0.030	
24 25	0.030	0.0520
	0.030	0.0525
26	0.030	0.0525
27	0.030	0.0435
28	0.030	0.0435
29	0.030	0.0430
30	0.030	0.0335
31	0.030	0.0335
32	0.030	0.0335
33	0.030	0.0335
34	0.030	0.0335
35	0.030	0.0335
36	0.030	0.0335
37	0.030	0.0335
38	0.030	0.0335
39	0.030	0.0335
40	0.030	0.0335
41	0.030	0.0335
42	0.030	0.0335
43	0.030	0.0335
44	0.030	0.0335
45	0.030	0.0335
46	0.030	0.0335
47	0.030	0.0335
48	0.030	0.0335
49	0.030	0.0335
50	0.030	0.0335
51	0.030	0.0335
52	0.030	0.0335
53	0.030	0.0335
54	0.030	0.0335
55	0.030	0.0335
56	0.030	0.0335

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY June 30, 2017 (7.70% Discount Rate)

		Amtz.	Amtz.		Years	Remaining		Mid-Year
Date	Description	Method	Period	Initial Liability	Remain	Balance		Payment
2017	OAB	Note 1	12	1,585,628,383	12	1,585,628,383		198,266,840
2017	EAAB	Note 2	23	2,385,531,722	23	2,385,531,722		224,415,570
2017	2009 Change in Assumptions	L	22	(200,587,931)	22	(200,587,931)		(18,500,685)
2017	2009 Experience Loss	L	22	1,250,970,321	22	1,250,970,321		115,379,864
2017	2010 Experience Loss	L	23	580,493,261	23	580,493,261		52,625,635
2017	2011 Experience Loss	L	24	81,262,854	24	81,262,854		7,252,002
2017	2012 Assumption Change	L	25	338,642,125	25	338,642,125		29,789,008
2017	2012 Experience Loss	L	25	258,251,629	25	258,251,629		22,717,374
2017	2013 Change in Asset Val Method	L	26	(81,608,501)	26	(81,608,501)		(7,084,774)
2017	2013 Experience Gain	L	26	(517,649,789)	26	(517,649,789)		(44,939,336)
2017	2014 Change in Assumptions	L	27	703,549,175	27	703,549,175		60,344,349
2017	2014 Change in Cost Method	L	27	603,402,114	27	603,402,114		51,754,603
2017	2014 Investment Exper Gain	L	2	(186,198,344)	2	(186,198,344)		(100,198,881)
2017	2014 Non-Inv Experience Gain	L	27	(59,356,454)	27	(59,356,454)		(5,091,082)
2017	2015 Experience Gain	L	28	(150,634,479)	28	(150,634,479)		(12,777,605)
2017	2016 Experience Loss	L	29	167,396,431	29	167,396,431		14,055,488
2017	2017 Change in Assumptions	L	30	41,711,761	30	41,711,761		3,469,679
2017	2017 Experience Gain	L	30	(85,274,362)	30	(85,274,362)		(7,093,315)
		_		pecific UAL				
2017	Act 414 - Chg in Lia	L	20	3,168,362	20	3,168,362		304,045
2017	Act 262 - Chg in Lia	L	1	276,004	1	276,004		286,433
2017	Act 740 - Chg in Lia	L	1	78,019	1	78,019		80,967
2017	Act 992 - 2010 Chg in Lia - Note 3	L	3	1,931,947	3	1,931,947		718,458
2017	Act 992 - 2011 Chg in Lia - Note 4	L	4	222,730	4	222,730		64,366
2017	Act 992 - 2012 Chg in Lia - Note 5	L	5	316,806	5	316,806		75,854
2017	Act 852 - 2014 Chg in Lia - Note 6	L	1	558,895	1	558,895		580,013
2017	Harbor Police - Note 7	L	5	2,725,733	5	2,725,773		515,325
	Total Outstanding Balance					\$ 6,724,808,452	\$	587,010,195
						, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	, ,
Emplo	yers Credit Balance							
2017	2013 Contribution Variance	L	1	18,103,252	1	18,103,252		18,787,303
2017	2014 Contribution Variance	L	2	44,926,961	2	44,926,961		24,176,537
2017	2015 Cont. Variance - Note 7	L	3	-	3	-		-
2017	2016 Cont. Variance - Note 8	L	4	_	4	_		_
2017	2017 Contribution Variance	L	5	27,473,914		\$ 27,473,914	\$	6,578,137
- ,	Total Contribution Variance Balance		-	. , ,		\$ 90,504,127	\$	49,541,977
						,	т	· //- ·
Total U	nfunded Actuarial Accrued Liability	7				\$ 6,815,312,579	\$	636,552,172

See UAL Schedule Notes within this Appendix.

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY June 30, 2018 - Projected (7.65% Discount Rate)

D 4	ъ	Amtz.	Amtz.	T '4' 1T' 1914	Years	Remaining		Mid-Year
2018	Description OAB	Method Note 1	Period 11	Initial Liability 1,501,963,197	Remain 11	Balance 1,501,963,197		Payment 201,818,000
2018	EAAB	Note 1	22		22	2,336,322,304		
2018	2009 Change in Assumptions	L L	21	2,336,322,304 (196,833,448)	21	(196,833,448)		223,623,380 (18,433,010)
2018	2009 Change in Assumptions 2009 Experience Loss	L L	21	1,227,555,416	21	1,227,555,416		114,957,807
	*							
2018	2010 Experience Loss	L	22	570,577,090	22	570,577,090		52,426,911
2018	2011 Experience Loss	L	23	79,994,066	23	79,994,066		7,223,792
2018	2012 Assumption Change	L	24	333,802,950	24	333,802,950		29,669,868
2018	2012 Experience Loss	L	24	254,561,229	24	254,561,229		22,626,517
2018	2013 Change in Asset Val Method	L	25 25	(80,539,875)	25 25	(80,539,875)		(7,055,693)
2018	2013 Experience Gain	L	25	(510,871,404)	25	(510,871,404)		(44,754,873)
2018	2014 Change in Assumptions	L	26	695,097,934	26	695,097,934		60,090,549
2018	2014 Change in Cost Method	L	26	596,153,869	26	596,153,869		51,536,930
2018	2014 Investment Exper Gain	L	1	(96,550,610)	1	(96,550,610)		(100,175,620)
2018	2014 Non-Inv Experience Gain	L	26	(58,643,447)	26	(58,643,447)		(5,069,670)
2018	2015 Experience Gain	L	27	(148,972,913)	27	(148,972,913)		(12,722,623)
2018	2016 Experience Loss	L	28	165,699,366	28	165,699,366		13,993,695
2018	2017 Discount Rate/Salary Chg	L	29	41,322,782	29	41,322,782		3,454,115
2018	2017 Experience Gain	L	29	(84,479,146)	29	(84,479,146)		(7,061,496)
2018	2018 Discount Rate Change	L	30	83,005,259	30	83,005,259		6,873,001
			Plan Sp	ecific UAL				
2018	Act 414 - Chg in Lia	L	19	3,096,792	19	3,096,792		303,009
2018	Act 262 - Chg in Lia	L	0	-	0	-		, -
2018	Act 740 - Chg in Lia	L	0	-	0	-		_
2018	Act 992 - 2010 Chg in Lia - Note 3	L	2	1,335,101	2	1,335,101		718,130
2018	Act 992 - 2011 Chg in Lia - Note 4	L	3	173,082	3	173,082		64,323
2018	Act 992 - 2012 Chg in Lia - Note 5	L	4	262,480	4	262,480		75,786
2018	Act 852 - 2014 Chg in Lia - Note 6	L	0		0	,		-
2018	Harbor Police - Note 7	L	4	2,400,860	4	2,400,860		693,204
	Total Outstanding Balance					6,716,432,934		594,876,032
	Total Outstanding Dalance					0,710,432,734		374,070,032
Employ	yers Credit Balance							
2018	2014 Contribution Variance	L	1	23,296,262	1	23,296,262		24,170,924
2018	2015 Cont. Variance - Note 7	L	2	-	2	-		-
2018	2016 Cont. Variance - Note 8	L	3	_	3	-		_
2018	2017 Contribution Variance	L	4	22,762,707	4	22,762,707	\$	6,572,312
2018	2018 Projected Cont. Variance	L	5	5,761,493	5	5,761,493	\$	1,377,980
	Total Contribution Variance Balance		J	2,. 32, .70	-	\$ 51,820,462	\$	32,121,216
						,020,102	+	, -, -0
Total U	nfunded Actuarial Accrued Liability	7				\$ 6,768,253,396	\$	626,997,248

See UAL Schedule Notes within this Appendix.

AMORTIZATION SCHEDULES NOTES

Act 497 of 2009 consolidated all LASERS amortization schedules established on or before July 1, 2008, except those established due to benefit changes for a specific plan, into two schedules: the Original Amortization Base (OAB) and the Experience Account Amortization Base (EAAB). The OAB consists of the outstanding balance of the Initial Unfunded Accrued Liability (IUAL) and other schedules with negative outstanding balances, and was credited with the balance of funds from the IUAL fund. The EAAB consists of the 2004 schedule and all other remaining schedules. The outstanding balance of this schedule was credited with funds from the IUAL subaccount, which were originally transferred from the Employee Experience Account on June 30, 2009. The EAAB payment schedule is prescribed by statute, as described in Note 2 below.

All schedules were re-amortized, effective July, 1, 2017, using a rate of 7.70%. Projected July 1, 2018 schedules are based on a 7.65% rate.

Note 1: The Original Amortization Base includes the following bases that existed prior to Act 497 of 2009: 1993 (Initial Liability), 1993 (Change in Liability), 1994, 1995, 1997, 1998, 2005, 2006, and 2007 (excluding schedules established to amortize liability resulting from Acts 414, 262, and 740). The new combined balance was credited with funds from IUAL Account. The OAB was reduced by \$50 Million on June 30, 2013 and re-amortized. Future payments will increase by 2% per year until paid off in 2029 or before. The OAB was reduced by \$250 in fiscal year 2016/2017 due to litter fines paid to LASERS, per Act 368 of 2015.

Note 2: The Experience Account Amortization Base includes the following bases that existed prior to Act 497 of 2009: 1996, 1999 – 2003, 2004 (the liability resulting from Act 588 of 2004 which zeroed out the Experience Account), and 2008. The new combined balance was credited with funds from the sub-account of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009. The EAAB was reduced by \$50 Million on June 30, 2013 and re-amortized. Future payments will remain level until paid off in 2040 or before.

Note 3: Act 992 - 2010 Increase in Accrued Liability - Change in retirement eligibility for Act 75 members

Note 4: Act 992 - 2011 Increase in Accrued Liability - Change in normal form of benefit for prior members joining the Hazardous Duty Plan prospectively between January 1, 2011 and June 30, 2011.

Note 5: Act 992 - 2012 Increase in Accrued Liability - Change in normal form of benefits for prior members joining the Hazardous Duty Plan prospectively between July 1, 2011 and June 30, 2012.

Note 6: Act 852 - 2014 Increase in Accrued Liability - Change in benefits for certain probation and parole officers employed by the office of adult services of the Department of Public Safety and Corrections prior to December 31, 2001. An additional payment of \$3,101,201.01 was paid to LASERS on May 12, 2016, and was used to make an additional payment toward this schedule, per R.S. 11:546, E (3)(b).

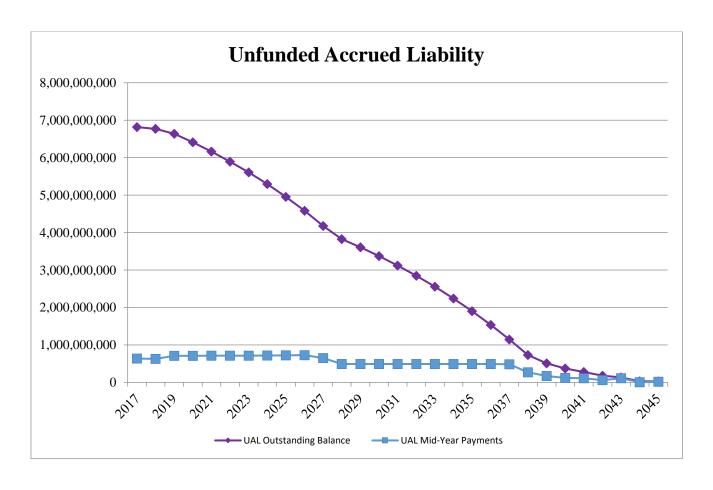
Note 7: The Harbor Police "established UAL" per the Cooperative Endeavor Agreement is paid by quarterly payments. The June 30, 2016 UAL was reduced substantially by a \$6,000,000 payment received by LASERS on December 31, 2016. The balance will be paid with level quarterly payments. The balance and payments as of June 30, 2017, are adjusted to include one quarterly payment that was paid in June 2017, but not due until July 2017.

Note 8: The 2015 contribution variance surplus of \$25,700,989 was used to reduce the OAB, with no reamortization per Act 399 of 2014. The 2016 contribution variance surplus of \$15,271,071 was used to reduce the OAB, with no re-amortization per Act 399 of 2014.

UAL Outstanding Balance and Payment Schedule Based on June 30, 2017 UAL Schedules *

FY	UAL Outstanding Balance	UAL Mid-Year Payments	Payment %	FY	UAL Outstanding Balance	UAL Mid- Year Payments	Payment %
Beginning	(Millions)	(Millions)	Change	Beginning	(Millions)	(Millions)	Change
2017	6,815	637	0.0%	2033	2,554	492	0.0%
2018	6,768	627	-1.5%	2034	2,240	492	0.0%
2019	6,635	707	12.8%	2035	1,901	492	0.0%
2020	6,410	710	0.5%	2036	1,536	492	0.0%
2021	6,163	715	0.6%	2037	1,143	482	-2.0%
2022	5,893	712	-0.4%	2038	731	268	-44.4%
2023	5,605	715	0.4%	2039	509	171	-36.0%
2024	5,293	719	0.6%	2040	370	119	-30.6%
2025	4,952	724	0.6%	2041	275	112	-6.1%
2026	4,580	728	0.6%	2042	181	59	-46.9%
2027	4,175	647	-11.1%	2043	133	111	87.4%
2028	3,823	492	-24.0%	2044	28	5	-95.9%
2029	3,605	492	0.0%	2045	25	17	280.4%
2030	3,371	492	0.0%	2046	9	3	-81.1%
2031	3,118	492	0.0%	2047	7	7	110.5%
2032	2,847	492	0.0%				

^{*} Includes the June 30, 2018 projected contribution deficit and discount rate change.



Components of Original Amortization Base (Dollar amounts in millions)

	Annual Outstanding Balance					Annual Payments				
	IUAL	IUAL Acct	Net IUAL	Other Schedules	Total OAB	IUAL	IUAL Acct	Net IUAL	Other Schedules	Total OAB
2017	2,516.2	-80.5	2,435.7	-850.1	1,585.6	313.4	-10.0	303.5	-105.2	198.3
2018	2,384.7	-76.4	2,308.4	-806.4	1,502.0	319.7	-10.2	309.5	-107.3	202.2
2019	2,236.6	-71.7	2,164.9	-757.1	1,407.7	326.1	-10.4	315.7	-109.5	206.3
2020	2,070.4	-66.5	2,003.9	-701.8	1,302.1	332.6	-10.6	322.0	-111.6	210.4
2021	1,884.6	-60.6	1,824.0	-640.0	1,184.0	339.3	-10.8	328.5	-113.9	214.6
2022	1,677.6	-54.1	1,623.5	-571.1	1,052.4	346.1	-11.0	335.1	-116.2	218.9
2023	1,447.7	-46.8	1,400.8	-494.5	906.3	353.0	-11.2	341.8	-118.5	223.3
2024	1,192.8	-38.8	1,154.0	-409.7	744.3	360.0	-11.4	348.6	-120.8	227.7
2025	911.0	-29.9	881.1	-315.8	565.3	367.2	-11.7	355.6	-123.3	232.3
2026	600.1	-20.1	580.0	-212.2	367.8	374.6	-11.9	362.7	-125.7	236.9
2027	257.5	-9.3	248.2	-98.1	150.2	267.3	-9.6	257.6	-101.8	155.9
2028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

This table has changed from previously published tables due to the change in discount rate from 7.75% to 7.70%.

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 – Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the actuarial present value of benefits attributable to service credit earned (or accrued) as of the valuation date.

Actuarial Present Value of Benefits – Amount which, together with future interest, is expected to be sufficient to pay all benefits to be paid in the future, regardless of when earned, as determined by the application of a particular set of actuarial assumptions; equivalent to the actuarial accrued liability plus 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 investment earnings, changes in compensation, rates of mortality, withdrawal, disablement, and retirement as well as statistics related to marriage and family composition.

Actuarial Cost Method – A method of determining the portion of the cost of a pension plan to be allocated to each year; sometimes referred to as the "actuarial funding method." Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs.

Actuarial Equivalence – Series of payments with equal actuarial present values on a given date when valued using the same set of actuarial assumptions.

Actuarial Present Value - The amount of funds required as of a specified date to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments between the specified date and the expected date of payment.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to market value of assets, or some modification using an asset valuation method to reduce the volatility of asset values.

Actuarially Reduced – The method of adjusting a benefit received at an early date, or paid in a form other than the lifetime of the member so that the expected total cost to the retirement system is equivalent to the cost if the benefit did not begin until later, or was paid for the lifetime of the member.

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 – Paying off an interest-discounted amount with periodic payments of interest and (generally) principal, as opposed to paying off with a lump sum payment.

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 Variance – The difference between actuarially required contribution and the actual amount received based upon a projected contribution rate. Results in an increase or decrease to future required contributions.

Discount Rate – The interest rate used in developing present values to reflect the time value of money.

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

Employer Normal Cost – Portion of the normal cost not paid by employee contributions.

Entry Age Normal (EAN) Funding Method – A standard actuarial funding method whereby each member's normal costs (service costs) are generally level as a percentage of pay from entry age until retirement. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the UAL.

Experience Gain (Loss) – The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities during the period between two valuation dates. It is a measurement of the difference between actual and expected experience, and may be related to investment earnings above (or below) those expected or changes in the liability due to fewer (or greater) than expected numbers of retirements, deaths, disabilities, or withdrawals, or variances in pay increases relative to assumed pay increases. The effect of such gains (or losses) is to decrease (or increase) future costs.

Experience Account Amortization Base (EAAB) – Amortization base created in 2010 by Act 497 of 2009. Consolidated and re-amortized schedules created in the following valuation years, which existed prior to Act 497: 1996, 1999 - 2003, 2004 (the liability resulting from Act 588 of 2004 which zeroed out the Experience Account), and 2008. The new combined balance was credited with funds from the sub-account of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009.

Funded Ratio – A measure of the ratio of the actuarial value of assets to liabilities of the system. Typically, the assets used in the measure are the actuarial value of assets as determined by the asset valuation method adopted by the Board of Trustees; the liabilities are determined using the actuarial funding method specified by Louisiana statute. Thus, the funded ratio depends not only on the financial strength of the plan but also on the asset valuation method used to determine the assets and on the funding method used to determine the liabilities.

Governmental Accounting Standards Board (GASB) — Governmental agency that sets the accounting standards for state and local government operations.

Market Value of Assets (MVA) – The value of assets as they would trade on an open market.

 $Normal\ Cost$ — Computed differently under different funding methods, generally that portion of the actuarial present value of benefits allocated to the current plan year.

Original Amortization Base (OAB) – Amortization base created in 2010 by Act 497 of 2009. Consolidated and re-amortized schedules created in the following valuation years, which existed prior to Act 497: 1993 (Initial Unfunded Accrued Liability), 1993 (Change in Liability), 1994, 1995, 1997, 1998, 2005, 2006, and 2007 (excluding schedules established to amortize liability resulting from Acts 414, 262, and 740).

Permanent Benefit Increase – An increase in specified current retiree benefits authorized by statutes.

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.

Projected Unit Credit (PUC) Funding Method – A standard actuarial funding method whereby the actuarial present value of projected benefits of each individual is accumulated from the participant's attained age to anticipated retirement. The portion attributable to current year benefit accruals is called the normal cost. The actuarial present value of future benefits in proportion to service accrued on the date of valuation is called the

actuarial accrued liability. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the unfunded actuarial accrued liability.

Public Retirement Systems' Actuarial Committee (PRSAC) – A committee created within the Department of the Treasury by Louisiana Public Retirement Law to insure orderly and consistent strategies for continuing development and growth that will attain and maintain the soundness of the public retirement systems, plans and funds and report to the House and Senate committees on retirement and the Joint Legislative Committee on the Budget all findings and recommendations.

Side-Fund Assets – Assets held in the trust for purposes other than for paying the accrued benefits or administrative expenses of the plan.

Unfunded Actuarial Accrued Liability (UAAL or UAL) – The excess of the actuarial accrued liability over the valuation assets; sometimes referred to as "unfunded past service liability". UAL increases each time an actuarial loss occurs and when new benefits are added without being fully funded initially and decreases when actuarial gains occur.

Valuation Assets – The actuarial value of assets less side-fund assets; represents the portion of the actuarial value of assets available to pay the accrued benefits of the plan.

Vested Benefit – Benefits that the members are entitled to regardless of employment status.