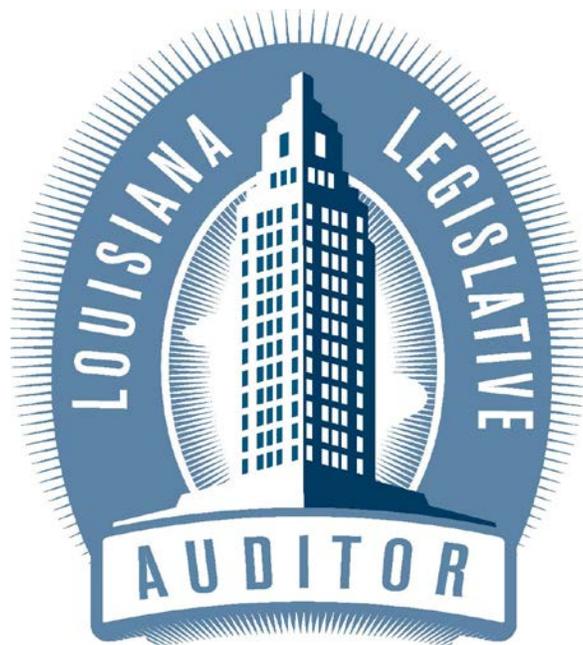


2011 ACTUARIAL REPORT ON THE
LOUISIANA STATE EMPLOYEES' RETIREMENT SYSTEM



ACTUARIAL VALUATION AS OF
JUNE 30, 2011
ISSUED MARCH 2012

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2011 ACTUARIAL REPORT
LOUISIANA STATE EMPLOYEES' RETIREMENT SYSTEM

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LOUISIANA LEGISLATIVE AUDITOR
DARYL G. PURPERA, CPA, CFE

June 6, 2012

The Honorable John A. Alario, Jr.,
President of the Senate
The Honorable Chuck Kleckley,
Speaker of the House of Representatives

Dear Senator Alario and Representative Kleckley:

This report provides the results of an actuarial valuation of the Louisiana State Employees' Retirement System as of June 30, 2011, as required under R.S. 11:127(C).

The report contains our findings, conclusions, and recommendations. I hope this report will benefit you in your legislative decision-making process.

Sincerely,

Daryl G. Purpera, CPA, CFE
Legislative Auditor

DGP:PTR:ch

LASERS 2012

SUMMARY

SUMMARY

2011 Actuarial Report on the Louisiana State Employees' Retirement System

This report has been prepared by the Actuarial Services Section of the Office of the Louisiana Legislative Auditor as required under R.S. 11:127C. This valuation has been prepared as of June 30, 2011 based on plan provisions for the Louisiana State Employees' Retirement System (LASERS) as documented in Louisiana Revised Statutes 11:401 through 11:621. The purpose of the valuation, in general, is to:

1. Measure and compare plan assets and liabilities as of June 30, 2011.
2. Calculate actual employer contribution requirements for FY 2012.
3. Determine the sources and amounts of gains and losses between June 30, 2010 and June 30, 2011.
4. Calculate employer contribution rates for FY 2013.
5. Show measures of actuarial solvency for the retirement system.
6. Provide information necessary for LASERS financial statements and the financial statements for agencies participating in the retirement system.
7. Assess the impact that current law providing cost of living adjustments for LASERS retirees will have on future employer contribution requirements.

A brief summary of information developed in this valuation and in prior year valuations is presented on the following page.

	June 30, 2011	----- Prior Years -----	
		June 30, 2010	June 30, 2009
A. Membership Data			
(1) Retirees	41,142	39,385	38,253
(2) Actives	54,930	58,881	61,991
(3) DROP	2,569	2,629	2,683
(4) Terminated Vesteds	2,125	1,981	1,947
B. Annual Benefits	\$ 841,528,896	\$ 774,119,808	& 729,823,884
C. Total Payroll	2,408,839,604	2,546,456,790	2,562,575,942
D. Valuation Assets	8,763,101,022	8,512,402,951	8,292,849,439
E. Experience Account	0	0	0
F. Investment Returns			
(1) Market (Total Assets)	23.17%	16.24%	-19.55%
(2) Market (excl OPR & self-directed)	23.86%	16.68%	-19.95%
(3) Actuarial Value	5.45%	2.21%	-7.64%
(4) Rate for DROP Accounts	4.95%	1.71%	0.00%
G. Normal Costs			
(1) Total in Dollars	\$ 352,332,629	\$ 393,664,176	\$ 384,065,332
(2) Total Normal Cost Rate	15.30%	15.46%	14.99%
(3) Employer Normal Cost Rate	6.78%	6.98%	6.56%
H. Unfunded Accrued Liability	\$ 6,457,954,026	\$ 6,251,611,737	\$ 5,693,997,872
I. Funded Percentage	57.6%	57.7%	59.3%
J. Funding Requirements for the Fiscal Year Following the Valuation Date			
(1) Employees			
a) Contributions	\$ 194,653,008	\$ 205,103,151	\$ 204,633,489
b) Rate	7.844%	7.816%	7.742%
(2) Employers			
a) Contributions	\$ 687,983,477	\$ 658,505,373	\$ 563,175,836
b) Rate	27.7%	25.1%	21.3%
K. Funding Requirements for the Subsequent Fiscal Year			
(1) Employees			
a) Contributions	\$ 199,991,732	\$ 210,794,601	\$ 210,450,499
b) Rate	7.844%	7.816%	7.742%
(2) Employers			
a) Contributions	\$ 751,995,758	\$ 697,343,371	\$ 597,076,408
b) Rate	29.5%	25.9%	22.0%

The above information reflects the cost of benefits that were in effect on June 30, 2011, including Acts of the 2011 Regular Session of the legislature.

Comment and observations about the June 30, 2011 valuation for LASERS are summarized below:

1. Liability values on June 30, 2011 and employer contribution requirements for FY 2012 were calculated using an 8.25% discount rate. The employer contribution rate for FY 2013 was calculated using an 8.00% discount rate.
2. The employer contribution rate for FY 2013, as calculated for all sub plans combined, has been calculated as 29.5% of pay. If the discount rate had not been changed, the rate would have been 28.2% of pay.
3. The unfunded accrued liability of the plan on June 30, 2012 is projected to increase \$353,186,762 because the discount rate was lowered from 8.25% to 8.00%.
4. The total normal cost increased 52.00 basis points from 14.6267% of pay to 15.1467% as a result of the change in the discount rate. The employer normal cost also increased 52.00 basis points from 6.7827% of pay to 7.3027%.
5. The employee portion of the normal cost is 7.8440% of pay. Employees continue to pay more than 50% of the total normal cost.
6. The market value of assets on June 30, 2011 exceeded the actuarial value on the same date by \$940,427,238. This will have a positive influence on actuarial rates of return for the next couple of years.
7. The rate of return on the market value of assets for FY 2011 was 23.17%, net of investment expenses. The rate of return net of administrative expenses was 22 basis points less, or 22.95%.
8. The rate of return on the actuarial value of assets for FY 2011 was 5.42%, net of investment expenses. The rate of return net of administrative expenses was 22 basis points less, or 5.20%.
9. Investment losses occurred during FY 2011 because the rate of return on the actuarial value of assets was less than the assumed discount rate of 8.25%. Investment losses, in dollars, were \$227,578,940.
10. Employer contributions to the plan were \$98,015,833 less in FY 2011 than required. Employer contribution requirements will be increased \$23,750,376 for the next five years to make up for this shortfall of contributions.

11. Benefit improvements during the 2011 regular session of the legislature caused the accrued liability of the plan to increase \$452,190.
12. Demographic experience was favorable to the plan in FY 2011. As a result, a \$140,563,201 gain occurred.
13. The unfunded accrued liability of the plan increased \$206,373,908 between June 30, 2010 and June 30, 2011. The funded ratio of the plan decreased over the same period from 57.7% to 57.6%.
14. If system assets on June 30, 2011, as measured on an actuarial basis, had been allocated to inactive members (those no longer employed by the state), assets would have been sufficient to cover only 86.3% of the liability for these members. The ratio on June 30, 2010 was 90.4%. Unless money is taken from amounts allocated to retirees, there are funds available to cover benefits promised to active members.
15. Amortization payments have not been sufficient for many years to pay the full amount of interest on the unfunded accrued liability. As a result, the outstanding debt has continued to grow each year. However, it is expected that amortization payments scheduled for FY 2013 will be sufficient to cover interest as well as pay a small amount of principal.
16. This valuation recognizes the effect of all diversions of assets to the Experience Account that have occurred in the past as well as all COLAs granted to members given in the past. This valuation does not recognize any future assets diversions or COLAs. Although it appears that this complies with standards set forth in R.S. 11:102 and 11:542, other methods for valuing COLAs may also be appropriate.
17. Nevertheless, the COLA program as set forth in the law is costly. The employer contribution rate is about 2.75% of pay higher than it would have been had no asset diversions or COLAs been given in the past. It is very likely that current provisions of law will produce a consistent pattern of losses to account for asset diversions and COLAs and that, as a result, the employer contribution rate will increase over the next 15 to 20 years to eventually become 6.00% to 7.00% of pay.
18. If future asset diversions and COLA benefits were prefunded, the employer contribution rate would be 5.5% to 6.0% higher than it is now.

This report is considered to be a Statements of Actuarial Opinion. Therefore, I make the following certification:

I, Paul T. Richmond, am the Manager of Actuarial Services for the Office of the Louisiana Legislative Auditor. I am a member of the American Academy of Actuaries, an Associate in the Society of Actuaries, an Enrolled Actuary, and I meet the Qualification Standards of the American Academy of Actuaries to necessary render the actuarial opinion contained herein.

Paul T. Richmond

Paul T. Richmond

3/30/12

Date

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**SECTION I:
DEVELOPMENT OF EMPLOYER CONTRIBUTIONS**

1. Employer Contribution Requirements for FY 2013 - Sub Plans

The calculations of employer contribution rates for FY 2013 for employers participating in each sub plan of LASERS are shown below. These contributions requirements are based on an 8.00% discount rate assumption.

A. Rank and File Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 157,727,613	\$ 2,257,627,654	6.99%
Shared Amortization Costs	500,055,050		22.15%
Plan Specific Costs	1,011,356		0.04%
Total	\$ 658,794,019		29.18%

B. Pre 2011 Judges and Court Officers Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 6,242,704	\$ 49,667,817	12.57%
Shared Amortization Costs	11,001,213		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 17,243,917		34.72%

C. Post 2011 Judges Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 24,892	\$ 413,843	6.01%
Shared Amortization Costs	91,664		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 116,556		28.16%

D. Legislators Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 262,558	\$ 1,675,935	15.67%
Shared Amortization Costs	371,213		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 633,771		37.82%

E. Corrections Officers Primary Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 4,608,046	\$ 39,073,155	11.79%
Shared Amortization Costs	8,654,540		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 13,262,586		33.94%

F. Corrections Officers Secondary Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 13,434,737	\$ 158,630,901	8.47%
Shared Amortization Costs	35,136,079		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 48,570,816		30.62%

G. Wildlife Officers Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 1,983,740	\$ 13,553,141	14.64%
Shared Amortization Costs	3,001,964		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 4,985,704		36.79%

H. Peace Officers Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 553,244	\$ 5,237,498	10.56%
Shared Amortization Costs	1,160,084		22.15%
Plan Specific Costs	311,064		5.94%
Total Cost	\$ 2,024,392		38.65%
Peace Officers Fund	-311,064		-5.94%
Net Employer Cost	\$ 1,713,328		32.71%

I. Alcohol Tobacco Control Officers Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 154,551	\$ 1,960,547	7.88%
Shared Amortization Costs	434,253		22.15%
Plan Specific Costs	81,344		4.15%
Total	\$ 670,148		34.18%
ATC Officers Fund	-81,344		-4.15%
Net Employer Cost	\$ 588,804		30.03%

J. Bridge Police Officers Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 37,658	\$ 638,212	5.90%
Shared Amortization Costs	141,361		22.15%
Plan Specific Costs	0		0.00%
Total	\$ 179,019		28.05%

K. Hazardous Duty Officers Sub Plan

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 1,160,928	\$ 21,135,426	5.49%
Shared Amortization Costs	4,681,408		22.15%
Plan Specific Costs	64,902		0.31%
Total	\$ 5,907,238		27.95%

L. Total For All Sub Plans

	Dollar Contribution	Projected Payroll	Contribution Rate
Normal Cost	\$ 186,190,671	\$ 2,533,614,129	7.30%
Shared Amortization Costs	564,728,829		22.15%
Plan Specific Costs	1,468,666		1.06%
Total	\$ 752,388,166		29.51%
ATC & Police Officer Funds	-392,408		-0.06%
Net Employer Cost	751,995,758		29.45%

2. Employer Contribution Requirements for FY 2012 – Combined Plan

Employer contribution requirements for FY 2012, as measured for all sub plans combined using an 8.25% discount rate assumption, are calculated below. These values have been determined as if the entire system had been measured as a single financial entity. Although R.S. 11:102C requires separate calculations of normal cost for each sub plan within LASERS, values in the aggregate are useful for comparisons with contribution requirements for prior years.

	<u>Dollar Amount</u>	<u>Percent of Salary</u>
1. Employer Portion of Normal Cost	\$ 168,316,288	6.7827%
2. Shared Amortization Payments	493,977,944	19.9060%
3. Amortization Payments for Sub Plans	1,483,979	0.0598%
4. Contribution Variance Payments	<u>24,608,354</u>	<u>0.9917%</u>
5. Total Contribution = 1 + 2 + 3 + 4	\$ 688,386,565	27.7402%
6. Payments from Peace Officers Fund	317,366	0.0128%
7. Payments from ATC Officers Fund	<u>81,868</u>	<u>0.0033%</u>
8. Net Required Employer Contribution = 5 – 6 – 7	\$ 687,987,331	27.7241%
9. Projected Payroll for FY 2012	\$ 2,481,552,887	
10. Total Contribution Rate for FY 2012 = 8 ÷ 9	27.7%	
11. Minimum Contribution Rate	15.5%	
12. Minimum Required Contribution For FY 2012 = 9 x 11	\$ 384,640,697	
13. Required employer Contribution for FY 2012 = The Greater of Item 8 and Item 12	\$ 687,987,331	
14. Employer Contribution Rate Approved by PRSAC For FY 2012	25.9%	

3. Employer Contribution Requirements for FY 2013 – Combined Plan

Employer contribution requirements for FY 2013, as measured for all sub plans combined using an 8.00% discount rate assumption, are calculated below. These values have been determined as if the entire system had been measured as a single financial entity. Although R.S. 11:102C requires separate calculations of normal cost for each sub plan within LASERS, values in the aggregate are useful for comparisons with contribution requirements for prior years.

	<u>Dollar Amount</u>	<u>Percent of Salary</u>
1. Employer Portion of Normal Cost	\$ 186,190,671	7.3027%
2. Shared Amortization Payments	501,844,434	19.6832%
3. Assumption Change (Shared Payment)	30,188,369	1.1840%
4. Amortization Payments for Sub Plans	1,468,666	0.0576%
5. Contribution Variance Payments	<u>32,696,026</u>	<u>1.2824%</u>
6. Total Contribution = 1 + 2 + 3 + 4 + 5	\$ 752,388,166	29.5099%
7. Payments from Peace Officers Fund	311,064	0.0122%
8. Payments from ATC Officers Fund	<u>81,344</u>	<u>0.0032%</u>
9. Net Required Employer Contribution = 6 – 7 - 8	\$ 751,995,758	29.4945%
10. Projected Payroll for FY 2013	\$ 2,549,614,128	
11. Total Contribution Rate for FY 2013 = 9 ÷ 10	29.5%	
12. Minimum Contribution Rate	15.5%	
13. Minimum Required Contribution For FY 2013 = 10 x 12	\$ 395,190,190	
14. Required Employer Contribution for FY 2013 = the greater of Item 9 and Item 13	\$ 751,995,758	

4. Normal Cost Values – Combined Plan

Employee and employer normal cost values, as calculated for all sub plans combined, are shown below. Actual total normal cost values for FY 2012 are based on an 8.25% discount rate. Projected normal cost values for FY 2013 are based on a discount rate of 8.00% reflecting a change in this assumption effective July 1, 2012.

The employee normal cost rate is equal to employee contributions collected in FY 2011 divided by the total payroll for FY 2011.

	Values for FY 2012	
	8.25% Discount Rate	8.00% Discount Rate
A. Total Normal Cost		
1. Retirement Benefits	\$ 277,980,701	\$ 288,056,064
2. Disability Benefits	6,459,872	6,689,447
3. Survivor Benefits	7,496,653	7,747,327
4. Voluntary Terminations	<u>60,395,403</u>	<u>62,366,454</u>
5. Total Normal Cost	\$ 352,332,629	\$ 364,859,292
B. Payrolls		
1. Payroll for FY 2011	\$ 2,408,839,604	\$ 2,408,839,604
2. Projected Payroll for FY 2012	2,481,552,887	2,481,552,887
3. Projected Payroll for FY 2013	2,549,614,128	2,549,614,128
C. Normal Cost Rates		
1. Total Normal Cost Rate = A ÷ B1	14.6267%	15.1467%
2. Employee Normal Cost Rate	7.8440%	7.8440%
3. Employer Normal Cost Rate = C1 – C2	6.7827%	7.3027%
D. Employer Normal Costs		
1. Actual Cost for FY 2012 = B2 x C3	\$ 168,316,288	N/A
2. Projected Cost for FY 2013 = B3 x C3	N/A	\$ 186,190,671

5. Actuarial Accrued Liability

Funding rules under R.S. 11:102 require a measurement of the actuarial accrued liability of the plan as calculated in accordance with the Projected Unit Credit method. This measurement is to be made for all sub plans combined. The components of the actuarial accrued liability are shown below.

	<u>8.25%</u> <u>Discount Rate</u>	<u>8.00%</u> <u>Discount Rate</u>
A. Actual Accrued Liability on June 30, 2011		
1. Accrued Liability for Active Members		
a. Retirement Benefits	\$ 4,355,874,505	\$ 4,502,697,679
b. Disability Benefits	87,736,675	90,480,820
c. Survivor Benefits	84,881,154	87,438,845
d. Voluntary Terminations	<u>534,353,264</u>	<u>554,658,339</u>
e. Total	\$ 5,062,845,598	\$ 5,235,275,683
2. Accrued Liability for Retired and Inactive Members		
a. Regular Retirees	\$ 6,633,293,150	\$ 6,755,775,447
b. Disability Retirees	269,468,313	274,077,033
c. Survivors	631,092,458	641,786,311
d. Members with a Deferred Benefit	174,477,385	180,340,903
e. Contributions Refunded	76,957,888	76,957,888
f. Deferred Benefits for DROP Members	1,544,856,298	1,578,259,801
g. Account Balances for DROP Members	821,745,024	821,745,024
h. Account Balances for ORP Members	<u>6,318,934</u>	<u>6,318,934</u>
i. Total	\$ 10,158,209,450	\$ 10,335,261,341
3. Total Accrued Liability	\$ 15,221,055,048	\$ 15,570,537,024
B. Projected Accrued Liability on June 30, 2012		
1. Accrued Liability on June 30, 2011	\$ 15,221,055,048	\$ 15,570,537,024
2. Actual Normal Cost for FY 2012	352,332,629	364,859,292
3. Estimated Benefit Distributions	(957,394,617)	(957,394,617)
4. Interest	<u>1,246,094,528</u>	<u>1,237,272,651</u>
5. Projected Accrued Liability on June 30, 2012	\$ 15,862,087,588	\$ 16,215,274,350
C. Increase in Accrued Liability on June 30, 2012 Due to the Change in the Discount Rate		
		\$ 353,186,762

6. Assets

A. Market and Book Values

The market value of assets and the book value of assets shown below have been extracted from the June 30, 2011 actuarial valuation report for LASERS prepared by SJ Actuarial Associates.

Date	Asset Values		Unrealized Appreciation (c) = (a) - (b)
	Market Value (a)	Book Value (b)	
June 30, 2011	\$ 9,703,496,641	\$ 8,559,718,294	\$ 1,143,778,347
June 30, 2010	8,064,543,049	8,179,393,406	(114,850,357)
June 30, 2009	7,100,333,387	7,913,334,936	(813,001,549)
June 30, 2008	8,957,887,792	8,360,409,796	<u>597,477,996</u>
Total			\$ 813,404,437

B. Actuarial Value of Assets

The actuarial value of assets is based on an algebraic formula that is equivalent to the formula used by SJ Actuarial Associates.

A. June 30, 2011 Book Value	\$ 8,559,718,294
B. Average Unrealized Appreciation	
1. Total Unrealized Appreciation	813,404,437
2. Averaging Factor	<u> .25</u>
3. Average Unrealized Appreciation = B1 x B2	203,351,109
C. Preliminary Actuarial Value = A + B3	\$ 8,763,069,403
D. Asset Corridor	
1. 80% x Market Value of Assets	7,762,797,313
2. 120% x Market Value of Assets	11,644,195,969
E. Final Actuarial Value = C, but not less than D1 or more than D2	\$ 8,763,069,403

Caveat: This method will produce an actuarial value of assets that is consistently less than the market value of assets during sustained periods of increasing market values and actuarial values that are consistently more than the market value during sustained periods of decreasing market values. This caveat is provided in accordance with Actuarial Standards of Practice No. 44 Section 3.4.1b1.

C. Asset Allocation (Market Values)

	<u>June 30, 2011</u>	<u>June 30, 2010</u>
1. Short-Term Assets		
Cash/Cash Equivalents	\$ 32,568,574	\$ 84,434,055
Short-Term Investments	324,476,431	127,615,624
2. Bonds		
Domestic Issues	1,737,187,044	1,597,637,072
International Issues	395,476,429	391,157,459
3. Equities		
Domestic Stock	2,483,417,237	1,963,558,128
International Stock	2,288,380,973	1,871,907,668
4. Other Assets		
Fixed Assets	9,872,111	11,189,902
Real Estate & Alternative Investments	2,390,566,594	2,009,111,466
5. Receivables minus Payables	38,929,318	55,720,155
6. Securities Lending (Assets minus Liabilities)	<u>(8,580,070)</u>	<u>(47,788,480)</u>
7. Total Assets		
Market Value	\$ 9,703,496,641	\$ 8,064,543,049
Book Value	8,559,718,294	8,179,393,406

D. Income Statement (Market Value)

INCOME	<u>June 30, 2011</u>	<u>June 30, 2010^a</u>
1. Contribution Income		
Member Contributions	\$ 197,825,267	\$ 205,328,033
Employer Contributions	557,563,381	490,701,310
ORP Contributions	<u>619,726</u>	<u>536,331</u>
Sub Total	756,008,374	696,565,674
2. Other Income		
Legislative Appropriations	0	0
Transfers/Purchases	8,203,932	7,215,418
Miscellaneous	<u>5,868,838</u>	<u>4,938,245</u>
Sub Total	14,072,770	12,153,663
3. Investment Income		
Investments	1,913,899,326	1,186,060,257
Investment Expense	<u>(59,586,705)</u>	<u>(46,758,774)</u>
Sub Total	1,854,312,621	1,139,301,483
4. Total Income	\$ 2,624,393,765	\$ 1,848,020,820
 EXPENSE		
1. Operating Expense		
General Administration	\$ 14,951,127	\$ 15,201,829
Post-Employment Benefits	1,310,517	1,561,605
Depreciation	<u>1,919,628</u>	<u>2,134,563</u>
Sub Total	18,181,272	18,897,997
2. Benefit Payments		
Pension Benefits	915,840,721	829,236,652
Return of Employee Contributions	<u>41,553,896</u>	<u>35,676,509</u>
Sub Total	957,394,617	864,913,161
3. Total Expense	\$ 975,575,889	\$ 883,811,158
NET INCOME	\$ 1,648,817,876	\$ 964,209,662

- a. Amounts shown reflect values in the 2010 actuarial valuation, which differ from values in the 2010 restated financial statements for LASERS.

E. Allocation of Assets to Sub Accounts

	<u>June 30, 2011</u>	<u>June 30, 2010</u>
EMPLOYER CREDIT ACCOUNT		
1. Ending Balance for Prior Year	\$ 0	\$ 0
2. Allocation for Current Year	0	0
3. Disbursements for Current Year	0	0
4. Accumulated Interest	<u>0</u>	<u>0</u>
5. Total End of Year Balance = 1 + 2 + 3 + 4	\$ 0	\$ 0
INITIAL UAL AMORTIZATION FUND		
1. Ending Balance for Prior Year	\$ 0	\$ 206,813,005
2. Allocation for Current Year	0	0
3. Disbursements for Current Year	0	(91,484,360)
4. Accumulated Interest	<u>0</u>	<u>6,972,250</u>
5. Sub Total = 1 + 2 + 3 + 4	\$ 0	\$ 122,300,895
6. Allocation from Sub Account	0	0
7. Disbursements from Sub Account	0	(125,007,459)
8. Accumulated Interest in Sub Account	<u>0</u>	<u>2,706,564</u>
9. Total End of Year Balance = 6 + 7 + 8	\$ 0	\$ 0
EXPERIENCE ACCOUNT FUND		
1. Ending Balance for Prior Year	\$ 0	\$ 0
2. Allocation for Current Year	0	0
3. Disbursements for Current Year	0	0
4. Accumulated Interest	<u>0</u>	<u>0</u>
5. Total End of Year Balance = 1 + 2 + 3 + 4	\$ 0	\$ 0
VALUATION ASSETS		
1. Actuarial Value of Assets	\$ 8,763,069,403	\$ 8,512,402,951
2. Employer Credit Account	0	0
3. Initial UAL Amortization Fund	0	0
5. Experience Account Fund	<u>0</u>	<u>0</u>
6. Valuation Assets = 1 - 2 - 3 - 4 - 5	\$ 8,763,069,403	\$ 8,512,402,951

7. Rate of Return on Investments

A. Rates of Return on Investments Based on Market Values

The market value of assets includes funds that have been invested outside the trust fund by members with money in ORP and self-directed accounts. Column (a) shows the rate of return on investments with these account funds included; column (b) shows the rate of return associated with ORP and self-directed account funds; and column (c) shows the rate of return with these funds excluded.

	Market Value (a)	Self Directed & ORP Values (b)	Net Market Value (c) = (a) - (b)
1. Asset Value on June 30, 2010	\$ 8,064,543,049	\$ 262,090,154	\$ 7,802,452,895
2. Contributions	770,081,144	104,780,732	665,300,412
3. Legislative Appropriations	0	0	0
4. Expenses	975,575,889	56,243,046	919,332,843
5. Asset Value on June 30, 2011	\$ 9,703,496,641	\$ 323,988,364	\$ 9,379,508,277
6. Investment Income = 5 - 1 - 2 - 3 + 4	\$ 1,844,448,337	\$ 13,360,524	\$ 1,831,087,813
7. Unrounded Rates of Return = 6 / [1 + .5 x (2 - 4)]	23.1662355%	4.6656554%	23.8564643%
8. Rounded Rate of Return on Investments	23.17%	4.67%	23.86%

B. Rates of Return on Investments Based on Actuarial Value

The actuarial value of assets includes funds that have been invested outside the trust fund by members with money in ORP and self-directed accounts. Column (a) shows the rate of return on investments with these account funds included; column (b) shows the rate of return associated with ORP and self-directed account funds; and column (c) shows the rate of return with these funds excluded.

	Actuarial Value (a)	Self-Directed & OPR Values (b)	Net Actuarial Value (c) = (a) - (b)
1. Asset Value on June 30, 2010	\$ 8,512,402,951	\$ 262,090,154	\$ 8,250,312,797
2. Contributions	770,081,144	104,780,732	665,300,412
3. Legislative Appropriations	0	0	0
4. Expenses	975,575,889	56,243,046	919,332,843
5. Asset Value on June 30, 2011	\$ 8,763,069,403	\$ 323,988,364	\$ 8,439,081,039
6. Investment Income = 5 - 1 - 2 - 3 + 4	\$ 456,161,197	\$ 13,360,524	\$ 442,800,673
7. Unrounded Rates of Return = 6 / [1 + .5 x (2 - 4)]	5.4242554%	4.6656554%	5.4509972%
8. Rounded Rate of Return on Investments	5.42%	4.67%	5.45%

C. Summary of Rates of Return on Investments

	Rates Measured on June 30		
	2011	2010	2009
1. Total Market Value	23.17%	16.24%	-19.55%
2. Net Market Value	23.86%	16.68%	-19.95%
3. Actuarial Value	5.42%	N/A	N/A
4. Net Actuarial Value	5.45%	2.21%	-7.64%
5. Rate Payable on DROP Accounts other than ORP and Self-directed Funds	4.95%	1.71%	0.00%
6. Five Year Geometric Average of Total Actuarial Value	4.29%	5.73%	7.63%

8. Actuarial Gains and Losses

The unfunded accrued liability on June 30, 2010, and June 30, 2011, is shown below.

	June 30, 2011	June 30, 2010
Actuarial Accrued Liability	\$ 15,221,055,048	\$ 14,764,014,688
Actuarial Value of Assets	8,763,069,403	8,512,402,951
Unfunded Accrued Liability	\$ 6,457,985,645	\$ 6,251,611,737

The unfunded accrued liability on June 30, 2011 is reconciled below with the unfunded accrued liability on June 30, 2010.

A. Unfunded Accrued Liability on June 30, 2010	\$ 6,251,611,737
B. Increases in the UAL Due To:	
1. Interest on the UAL	\$ 515,757,970
2. Amendments	452,190
3. Employer Shortfall Deficit	98,015,833
4. Investment Loss	227,578,940
5. Experience Loss	-
6. Subtotal = 1 + 2 + 3 + 4 + 5	\$ 841,804,933
C. Decreases in the UAL Due to:	
1. Employer Amortization Payment	\$ 494,867,824
2. Investment Gain	-
3. Experience Gain	140,563,201
4. Subtotal = 1 + 2 + 3	\$ 635,431,025
D. Unfunded Accrued Liability on June 30, 2011 = A + B6 - C4	\$ 6,457,985,645

A shortfall in employer contributions is expected to occur for FY 2012 because the actual employer contribution rate, 27.7% of pay, is less than the 25.9% of pay rate set by PRSAC a year ago. The expected shortfall of employer contributions is calculated below.

A. Employer Contributions Required in Mid Year for FY 2012	\$	687,987,331
B. Employer Contributions expected in Mid Year for FY 2012		642,721,324
C. Shortfall of Employer Contributions Expected in Mid Year for FY 2012 = A – B	\$	45,266,007
D. Interest at 8.25% per year from Mid Year to End of Year on the Shortfall		1,830,222
E. Total Employer Contribution Shortfall on June 30, 2012 = C + D	\$	47,096,229

If all actuarial assumptions are met, the unfunded accrued liability, on June 30, 2012, is expected to be the amount shown below:

A. Unfunded Accrued Liability on June 30, 2011		\$	6,457,985,645
B. Increases due to:			
1. Interest	\$	532,783,816	
2. Expected Employer Contribution Deficits		47,096,229	
3. Change in the Discount Rate		<u>353,186,762</u>	
4. Total Increases			933,066,807
C. Decreases due to:			
1. Amortization Payments	\$	520,070,277	
2. Interest on Payments		<u>21,027,794</u>	
3. Total Decreases			<u>541,098,071</u>
D. Expected Unfunded Accrued Liability on June 30, 2012 = A + B4 – C3	\$		6,849,954,381

9. Amortization Payments for FY 2012

Year	Description	Amortization		Initial Liability	Years Remaining	Balance on June 30, 2011	Mid-Year Payment	Balance on June 30, 2012
		Method	Period					
Shared Bases								
2010	OAB	I	19	\$ 1,936,750,759	18	\$ 1,945,868,193	\$ 154,222,096	\$ 1,945,944,622
2010	EAAB	I	30	2,493,227,298	29	2,527,280,661	175,690,718	2,552,986,965
2009	Assumption Change	L	30	(221,451,744)	28	(217,563,634)	(19,354,265)	(215,375,826)
2009	Change in Liability	L	30	1,381,087,874	28	1,356,839,607	120,703,230	1,343,195,300
2010	Change in Liability	L	30	630,583,407	29	625,267,015	55,111,232	619,512,022
2011	Change in Liability	L	30	<u>87,015,739</u>	30	<u>87,015,739</u>	<u>7,604,933</u>	<u>86,282,117</u>
Total				\$ 6,307,213,333		\$ 6,324,707,581	\$ 493,977,944	\$ 6,332,545,200
Plan Specific Bases								
2007	Act 414 Peace Officers	L	30	3,631,308	26	3,492,842	317,366	3,450,803
2008	Act 262 Rank and File	L	10	1,999,338	7	1,555,505	289,619	1,382,505
2008	Act 740 ATC Officers	L	10	565,160	7	439,700	81,868	390,798
2010	Act 992 Rank and File	L	10	5,036,841	9	4,693,256	729,623	4,321,326
2011	Act 992 Haz Duty	L	10	<u>452,190</u>	10	<u>452,190</u>	<u>65,503</u>	<u>421,344</u>
Total				\$ 11,684,837		\$ 10,633,493	\$ 1,483,979	\$ 9,966,776
Total Outstanding Balances						\$ 6,335,341,074	\$ 495,461,923	\$ 6,342,511,976
Employers Credit Balance								
2007	Contrib Variance	L	5	12,897,054	1	\$ 3,003,660	\$ 3,125,106	\$ -
2008	Contrib Variance	L	5	(70,222,054)	2	(31,462,334)	(17,015,620)	(16,354,370)
2009	Contrib Variance	L	5	(13,861,476)	3	(8,965,456)	(3,358,797)	(6,210,505)
2010	Contrib Variance	L	5	74,727,281	4	62,052,868	18,107,289	48,332,815
2011	Contrib Variance	L	5	<u>98,015,833</u>	5	<u>98,015,833</u>	<u>23,750,376</u>	<u>81,391,474</u>
Total				\$ 101,556,638		\$ 122,644,571	\$ 24,608,354	\$ 107,159,414
Grand Total						\$ 6,457,985,645	\$ 520,070,277	\$ 6,449,671,390

10. Amortization Payments for FY 2013

Year	Description	Amortization		Initial Liability	Years Remaining	Remaining Balance	Mid-Year Payment	Balance on June 30, 2013
		Method	Period					
Shared Bases								
2010	OAB	I	19	\$ 1,936,750,759	17	\$ 1,945,944,622	\$ 159,970,850	\$ 1,935,373,608
2010	EAAB	I	30	2,493,227,298	28	2,552,986,965	181,246,671	2,568,868,856
2009	Assumption Change	L	30	(221,451,744)	27	(215,375,826)	(18,952,205)	(212,910,183)
2009	Change in Liability	L	30	1,381,087,874	27	1,343,195,300	118,195,775	1,327,818,271
2010	Change in Liability	L	30	630,583,407	28	619,512,022	53,942,764	613,014,019
2011	Change in Liability	L	30	<u>87,015,739</u>	29	<u>86,282,117</u>	<u>7,440,579</u>	<u>85,452,210</u>
Total				\$ 6,307,213,333		\$ 6,332,545,200	\$ 501,844,434	\$ 6,317,616,781
Plan Specific Bases								
2007	Act 414 Peace Officers	L	30	\$ 3,631,308	25	\$ 3,450,803	\$ 311,064	\$ 3,403,600
2008	Act 262 Rank and File	L	10	1,999,338	6	1,382,505	287,768	1,194,048
2008	Act 740 ATC Officers	L	10	565,160	6	390,798	81,344	337,526
2010	Act 992 Rank and File	L	10	5,036,841	8	4,321,326	723,588	3,915,058
2011	Act 992 Haz Duty	L	10	<u>452,190</u>	9	<u>421,344</u>	<u>64,902</u>	<u>387,603</u>
Total				\$ 11,684,837		\$ 9,966,776	\$ 1,468,666	\$ 9,237,835
Total Outstanding Balances						\$ 6,342,511,976	\$ 503,313,100	\$ 6,326,854,616
New Base for 2012								
Total	Assumption Change	L	30	\$ 353,186,762	30	\$ 353,186,762	\$ 30,188,369	\$ 350,069,030
Employers Credit Balance								
2008	Contrib Variance	L	5	\$ (70,222,054)	1	\$ (16,354,370)	\$ (16,995,960)	\$ -
2009	Contrib Variance	L	5	(13,861,476)	2	(6,210,505)	(3,351,191)	(3,224,686)
2010	Contrib Variance	L	5	74,727,281	3	48,332,815	18,046,769	33,444,688
2011	Contrib Variance	L	5	98,015,833	4	81,391,474	23,646,130	63,329,013
2012	Contrib Variance	L	5	<u>47,096,229</u>	5	<u>47,096,229</u>	<u>11,350,278</u>	<u>39,068,372</u>
Total				\$ 135,755,813		\$ 154,255,643	\$ 32,696,026	\$ 132,617,387
Grand Total						\$ 6,849,954,381	\$ 566,197,495	\$ 6,809,541,033

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SECTION II
MEASURES OF ACTUARIAL SOLVENCY

1. Comparison of Assets to Accrued Liability

An actuarial funding method is the process by which a retirement system allocates pension plan costs over members' employment careers. In other words, the actuarial funding method is the manner by which an annual budget is established to pay for benefit costs for each member either individually or in the aggregate.

One way to measure actuarial solvency is to determine the extent to which the budgeting process has been successful. A retirement system with assets equal to the system's accrued liability has satisfied its budgeting methodology, or in other words is on budget. A plan with assets that are less than the accrued liability has not been successful in its budgeting, or is behind its budget. And a plan that has more assets than its accrued liability is ahead of its budgetary process.

LASERS uses the Projected Unit Credit funding (or budgeting) method. Under this method, the cost of pensions charged to employers and employees each year is roughly equivalent to the actuarial value of benefits earned in that year. The accrued liability is the value of all charges accumulated to the date of the valuation.

	<u>June 30, 2011</u>	<u>June 30, 2010</u>
Accrued Liability	\$ 15,221,055,048	\$ 14,764,014,688
Actuarial Value of Assets	8,763,069,403	8,512,402,951
Unfunded Accrued Liability	6,457,985,645	6,251,611,737
Ratio of Assets to the Accrued Liability	57.6%	57.7%

It is also useful to determine which portion of the accrued liability is covered by assets. Although there is no legal requirement to do so, there is a general understanding that a plan has a greater obligation to retirees than it does to active members. Retiree benefits are a current obligation; promises made to active members are an obligation that will come due in the future. A comparison of assets and accrued liability on this basis is shown below.

	<u>June 30, 2011</u>	<u>June 30, 2010</u>
Actuarial Value of Assets	\$ 8,763,069,403	\$ 8,512,402,951
Accrued Liability for Inactive Members	10,158,209,450	9,418,601,821
Ratio of Assets to Inactive Liabilities	86.3%	90.4%
Asset Shortfall for Inactive Members	\$ 1,395,140,047	\$ 906,198,870
Assets Available for Active Members	\$ 0	\$ 0
Accrued Liability for Active Members	5,062,845,598	5,345,412,867
Ratio of Assets to Active Liabilities	0.00%	0.00%
Asset Shortfall for Active Members	\$ 5,062,845,598	\$ 5,345,412,867

The following conclusions can be drawn from the above tables:

1. Plan assets are only sufficient to cover 86.3% of the liability for members who are no longer employed by the state. A year ago plan assets were sufficient to cover 90.4% of the liability for members no longer employed.
2. No assets are available for active members. Even though current active members have been contributing to the plan for many years, those dollars have been allocated to people who are no longer employed.

2. Funding Measures for GASB

Accounting disclosure requirements for the Louisiana State Employees' Retirement System are set forth by the Government Accounting Standards Board (GASB). The Retirement System must comply with GASB Statement No. 25 as modified by Statement No. 50. Employers participating in LASERS must disclose in accordance with GASB Statement No. 27 as modified by Statement No. 50.

Information pertaining to these disclosure requirements is set forth below using the format suggested in the GASB statements. These formats are not necessarily the ones that will be used by LASERS of any of its participating employees.

DRAFT NOTES TO FINANCIAL STATEMENTS

Louisiana State Employees' Retirement System

Draft Notes to the Financial Statements

For the Fiscal Year Ended June 30, 2011

The Louisiana State Employees' Retirement System (LASERS) administers one defined benefit pension plan. System assets may be used only for the payment of benefits to members of the plan, in accordance with the terms of the plan, and for the payment of expenses associated with administering the retirement system.

A. Summary of Significant Accounting Policies

Basis of Accounting: LASERS financial statements are prepared using the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds of employee contributions are recognized when due and payable in accordance with the terms of the plan.

Method Used to Value Investments: Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals. Fair value of other securities is determined by the mean of the most recent bid and asked prices as obtained from dealers that make markets in such securities. Investments for which market quotations are not readily available are valued at their fair values as determined by the custodian under the direction of the LASERS board of trustees, with the assistance of a valuation service.

Please note: The statement given above relative to the method used to value investments is a statement that is typically made. The LLA does not affirm the validity of this statement relative to the valuation of LASERS assets.

B. Plan Description and Contribution Information

Membership in LASERS consisted of the following at June 30, 2011, the date of the latest actuarial valuation.

Retirees and beneficiaries receiving benefits*	43,711
Terminated plan members entitled to, but not yet receiving benefits	2,125
Active plan members	54,930
Total	100,766
Number of participating employers	355

* This includes 2,569 members who are participating in DROP.

Plan Description: LASERS is a single employer defined benefit pension plan that covers rank and file employees of the state and various groups of employees working in positions that are considered hazardous duty. LASERS provides retirement, disability and death benefits to members, beneficiaries and survivors. Cost of living adjustments (COLAs) are provided at the discretion of the LASERS board of trustees as long as specified thresholds set forth in the law are met and approval is given by the legislature.

Contributions: Plan members are required to contribute from 7.5% to 13.0% of their annual covered compensation depending upon the set of benefit provisions under which they accrue benefits. The State of Louisiana is required to contribute at an actuarially determined rate.

C. Funded Status and Funding Progress

The funded status of the retirement system as of June 30, 2011, the most recent actuarial valuation date, is as follows.

Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) – (a)]/(c)
6/30/11	\$8,763,069	\$15,221,055	\$6,457,986	57.6%	\$2,408,839	268.1%

Dollar values are shown in thousands of dollars.

The schedules of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the AALs for benefits.

Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2011
Actuarial cost method	Projected Unit Credit Method
Amortization method	Increasing payments until 2029 with generally level payments thereafter. New debits and credits are generally amortized over 30 years.
Remaining amortization period	30 years ^a
Asset valuation method	The book value of assets plus the average of the unrealized appreciation as measured on the most recent valuation date and the prior three valuation dates, subject to a limit of 80% and 120% of the market value of assets.
Actuarial Assumptions	
Investment rate of return*	8.25%
Projected salary increases*	Generally ranges from 4.5% to 6.0%
COLAs	0.0% per year

* Includes inflation at 3.0% per year

- a. The UAAL is being amortized over various periods of time with some payments calculated as level dollar amounts and some payments increased at various rates from year to year. Amortization payments for FY 2011 were not sufficient to pay interest on the UAAL. Larger amortization payments are scheduled to be made in future years with the entire UAAL scheduled for complete amortization in 30 years.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Funding Progress

Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) – (a)]/(c)
6/30/02	\$ 6,460,594	\$ 9,206,734	\$ 2,746,140	70.2%	\$ 1,861,887	147.5%
6/30/03	6,487,538	9,796,306	3,308,768	66.2%	1,924,680	171.9%
6/30/04	6,097,815	10,237,574	4,139,759	59.6%	2,017,726	205.2%
6/30/05	6,673,500	10,847,062	4,173,562	61.5%	2,100,043	198.7%
6/30/06	7,430,784	11,548,680	4,117,896	64.3%	1,979,705	208.0%
6/30/07	8,345,495	12,421,907	4,076,412	67.2%	2,175,367	187.4%
6/30/08	9,167,170	13,562,214	4,395,044	67.6%	2,436,956	180.3%
6/30/09	8,499,662	13,986,847	5,487,185	60.8%	2,562,576	214.1%
6/30/10	8,512,403	14,764,015	6,251,612	57.7%	2,546,457	245.5%
6/30/11	8,763,069	15,221,055	6,457,954	57.6%	2,408,840	268.1%

Schedule of Employer Contributions

Fiscal Year	Actuarial Required Contribution (ARC)	Percentage of ARC Contributed	Annual Pension Cost (APC)	Actual Contribution	Interested Adjusted Actual Contribution	Percentage of APC Contributed	Net Pension Obligation
2002	\$ 279,119	97.2%	\$ 281,791	\$ 260,795	\$ 271,339	96.3%	\$ 2,048
2003	326,335	94.8%	328,773	297,564	309,595	94.1%	21,225
2004	367,881	95.4%	364,930	337,156	350,788	96.1%	35,367
2005	411,728	99.2%	404,460	392,409	408,275	100.9%	31,552
2006	423,503	93.1%	415,185	378,793	394,108	94.9%	52,629
2007	434,797	97.0%	420,367	405,504	421,900	100.4%	51,096
2008	456,741	115.4%	440,895	506,485	526,963	119.5%	(34,973)
2009	492,403	102.8%	491,379	486,590	506,264	103.0%	(49,858)
2010	585,269	87.2%	590,821	490,701	510,542	86.4%	30,422
2011	678,123	85.6%	672,330	557,563	580,107	86.3%	122,645

Notes:

1. All shaded information was taken from valuation reports prepared by the System actuary.
2. The information in the above table has been prepared using the projected unit credit actuarial cost method.
3. All dollar amounts are in thousands of dollars.

DRAFT NOTES TO THE FINANCIAL STATEMENTS

For Employers Participating in LASERS

Draft Notes to the Financial Statements

For the Fiscal Year Ended June 30, 2011

Plan Description: LASERS is a single employer defined benefit pension plan that covers rank and file employees of the state and various groups of employees working in positions that are considered hazardous duty. LASERS provides retirement, disability and death benefits to members, beneficiaries and survivors. Cost of living adjustments (COLAs) are provided at the discretion of the LASERS board of trustees as long as specified thresholds set forth in the law are met and approval is given by the legislature. The Louisiana state legislature has the authority to establish and amend benefit provisions. LASERS issues a publically available financial report that includes financial statements and required supplementary information (RSI) for the system. That report may be obtained by writing to LASERS, at P.O. Box 44213, Baton Rouge, LA 70804, or by calling (800) 256-3000.

Funding Policy: Sources of funding are established and may be amended by the Louisiana state legislature. Plan members are required to contribute amounts ranging from 7.5% to 13.0% of their covered compensation. The state of Louisiana is required to contribute at an actuarially determined rate.

Annual Pension Cost and Net Pension Obligation: The annual pension cost for all employers participating in LASERS and net pension obligation in the aggregate to LASERS for the year ending June 30, 2011 were as follows:

Annual required contribution (ARC)	\$ 678,123
Interest on net pension obligation	2,510
Adjustment to ARC	(8,303)
Annual pension cost	\$ 672,330
Employer contributions made	580,107
Increase (decrease) in net pension obligation	\$ 92,223
Net pension obligation beginning of the year	30,422
Net pension obligation end of the year	\$ 122,645

All dollar amounts are in thousands of dollars.

Schedule of Employer Contributions

Fiscal Year	Actuarial Required Contribution (ARC)	Percentage of ARC Contributed	Annual Pension Cost (APC)	Actual Contribution	Interested Adjusted Actual Contribution	Percentage of APC Contributed	Net Pension Obligation
2002	\$ 279,119	97.2%	\$ 281,791	\$ 260,795	\$ 271,339	96.3%	\$ 2,048
2003	326,335	94.8%	328,773	297,564	309,595	94.1%	21,225
2004	367,881	95.4%	364,930	337,156	350,788	96.1%	35,367
2005	411,728	99.2%	404,460	392,409	408,275	100.9%	31,552
2006	423,503	93.1%	415,185	378,793	394,108	94.9%	52,629
2007	434,797	97.0%	420,367	405,504	421,900	100.4%	51,096
2008	456,741	115.4%	440,895	506,485	526,963	119.5%	(34,973)
2009	492,403	102.8%	491,379	486,590	506,264	103.0%	(49,858)
2010	585,269	87.2%	590,821	490,701	510,542	86.4%	30,422
2011	678,123	85.6%	672,330	557,563	580,107	86.3%	122,645

Notes:

1. All shaded information was taken from valuation reports prepared by the System actuary.
2. The information in the above table has been prepared using the projected unit credit actuarial cost method.
3. All dollar amounts are in thousands of dollars.

Funded Status and Funding Progress: As of June 30, 2011, the most recent actuarial valuation date, the plan was 57.6% funded. The actuarial accrued liability for benefits was \$15,221,055,000 and the actuarial value of assets was \$8,763,069,000 resulting in an unfunded actuarial accrued liability (UAAL) of \$6,457,986,000. The covered payroll (annual payroll of active employees covered by the plan) was \$2,408,840,000 and the ratio of the UAAL to the covered payroll was 286.1%.

The schedule of funding progress, presented as RSI following the notes to the financial statements, present multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. Information about the funded status of LASERS has been calculated using the projected unit credit cost method.

Schedules of Funding Progress

Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) – (a)]/(c)
6/30/02	\$ 6,460,594	\$ 9,206,734	\$ 2,746,140	70.2%	\$ 1,861,887	147.5%
6/30/03	6,487,538	9,796,306	3,308,768	66.2%	1,924,680	171.9%
6/30/04	6,097,815	10,237,574	4,139,759	59.5%	2,017,726	205.2%
6/30/05	6,673,500	10,847,062	4,173,562	61.5%	2,100,043	198.7%
6/30/06	7,430,784	11,548,680	4,117,896	64.3%	1,979,705	208.0%
6/30/07	8,345,495	12,421,907	4,076,412	67.2%	2,175,367	187.4%
6/30/08	9,167,170	13,562,214	4,395,044	67.6%	2,436,956	180.3%
6/30/09	8,499,662	13,986,847	5,487,185	60.8%	2,562,576	214.1%
6/30/10	8,512,403	14,764,015	6,251,612	57.7%	2,546,457	245.5%
6/30/11	8,763,069	15,221,055	6,457,954	57.6%	2,408,840	268.1%

Actuarial Methods and Assumptions: In the June 30, 2011, actuarial valuation, the project unit credit actuarial cost method was used. Actuarial assumptions included (a) 8.25 percent investment rate of return (net of administrative expenses) and (b) projected salary increases that generally range from 4.5 percent to 6.0 percent per year. Both (a) and (b) included an inflation component, but the inflation component has not been provided. The actuarial value of assets was determined using techniques that spread the effects of short term volatility in the market value of investments over a four year period. The UAAL is being amortized over various periods of time with some payments calculated as level dollar amounts and some payments increased at various rates from year to year. Amortization payments for FY 2011 were not sufficient to pay interest on the UAAL. Larger amortization payments are scheduled to be made in future years with the entire UAAL scheduled for complete amortization in 30 years.

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SECTION III
VALUATION OF COLA PROVISIONS

1. Actuarial Basis for the Valuation of COLA Benefits

This valuation has been prepared using methods for the treatment of the COLA provisions of Louisiana law that are consistent with methods employed by the actuary for LASERS. We are using these methods for the following reasons:

- A. There appears to be a legal foundation for the methods being used.
- B. Actuarial Standards of Practice as set forth by the American Academy of Actuaries permits the use of legally prescribed methods even though the use of such methods may not comply with standards that otherwise would apply in the absence of such a mandate.

The following topics will be addressed in this section of the report:

- A. The Legal Basis for the Payment of COLAs
- B. The Basis for the Actuarial Methods Used in this Valuation
- C. Conflicting Constitutional Provisions
- D. Actuarial Costs

2. The Legal Basis for the Payment of COLAs

The legal basis for the payment of cost of living adjustments to retirees of the Louisiana State Employees' Retirement System is found in R.S. 11:102.1 and 11:542. A special account called the Experience Account is established by R.S. 11:542. Act 497 of the 2009 regular Session set the balance of this account at \$0 on June 30, 2009. The balance in the Experience Account on June 30, 2011 continues to be \$0.

A. Experience Account

Rules pertaining to future debits and credits to the Experience Account are summarized below:

Credits:

1. LASERS will calculate each year the amount of investment gain or loss that has occurred during the system's fiscal year. The gain or loss will be based on the actuarial value of assets. A gain occurs when the rate of return on the actuarial value of assets exceeds 8.25%. A loss occurs when the rate of return is less than 8.25%.
2. Fifty percent (50%) of any investment gain so determined that exceeds \$100 million will be transferred from the regular pool of assets for LASERS into the LASERS Experience Account. The effective date of this transfer is June 30 of the fiscal year in which the investment gain occurs.
3. Funds in the Experience Account are invested in the same manner the regular pool of assets. The balance in the Experience Account at the beginning of the fiscal year earns the same rate of return as assets in the regular asset pool. This return may be positive or negative. The effective date of this credit or debit is June 30 of the fiscal year in which the investment return is earned.
4. The maximum value permitted in the Experience Account is equal to two (2) times the actuarial cost of providing a full COLA of 3% to all eligible retirees and beneficiaries. In other words, the amount of any transfer of investment gains cannot cause the Experience Account value to exceed two times the actuarial cost of a full COLA.

Debits:

1. Whenever a permanent benefit increase is granted through the approval process outlined in the law, an amount equal to the actuarial cost of the benefit so granted is transferred from the Experience Account back to the regular pool of assets. This

transfer occurs on the same date that eligible retirees begin to receive the permanent benefit increase, which is the July 1 following the completion of the approval process.

2. The value of the Experience Account cannot be less than \$0.

B. Approval Process

A permanent benefit increase potentially becomes payable whenever there is an increase in the cost of living based on the Consumer Price Index for all urban consumers (CPI-U) and other specified numerical measures are satisfied. A permanent benefit increase may be granted only in accordance with the following approval process.

1. The actuary for LASERS must determine that the necessary conditions exist for a permanent increase to be granted and then determine the actuarial cost that will be incurred by the Experience Account should such an increase be approved.
2. The LASERS actuary must also declare that there are sufficient monies in the Experience Account to cover the actuarial cost of the permanent benefit increase.
3. The actuary for the Legislative Auditor must review the actuarial cost analysis and must not disagree with the assessment prepared by the LASERS actuary.
4. The LASERS board of trustees must approve the permanent benefit increase.
5. The LASERS board of trustees must ask the Speaker of the House and the President of the Senate to have a bill or resolution introduced authorizing the permanent benefit increase.
6. A majority of both the House and the Senate must vote favorably to permit the permanent benefit increase to be granted. As shown below, it appears that Article 10 Section 29(F) of the Louisiana constitution requires a 2/3 vote, not just a majority vote.

Benefit provisions for members of any public retirement system, plan, or fund that is subject to legislative authority shall be altered only by legislative enactment. No such benefit provision having an actuarial cost shall be enacted unless approved by two-thirds of the elected members of each house of the legislature.

7. The permanent benefit increase becomes effective on the first day of the fiscal year following the legislative session.

3. Basis for the Actuarial Methods Used in this Valuation

After careful review of Louisiana law and constitution, we believe there is considerable support for the methods we have used in our valuation, and the LASERS actuary has used, to account for the COLA program contained in R.S. 11:542. The actuarial methods used are summarized below.

A. Diversion of Assets

In our actuarial opinion, the diversion of investment gains from the regular pool of assets to the Experience Account constitutes an actuarial loss to the retirement system and a new unfunded accrued liability (UAL) amount is created equal to the amount so diverted. In accordance with R.S. 11:102, the new UAL should be amortized over a period of 30 years.

B. Ad Hoc Benefit Increases

In our actuarial opinion, permanent benefit increases are granted on an ad hoc basis. Approvals are not automatic; a significant number of approvals must be obtained from various entities before a permanent increase is granted. Actuarial standards of practice encourage recognition of a systematic pattern of ad hoc COLAs, but do not require such recognition.

C. Actuarial Treatment When COLAs Are Granted

Article 10 Section 29(F) of the constitution provides that

“... no such benefit provision for any member of a state retirement system having an actuarial cost shall be approved by the legislature unless a funding source providing new or additional funds sufficient to pay all such cost within ten years of the effective date of the benefit provision is identified in such enactment.”

The accrued liability for LASERS increases when a permanent benefit increase is approved. However, in compliance with Article 10 Section 29(F), a source exists to fund the benefit improvement – funds contained in the Experience Account. A dollar amount equal to the additional liability so incurred is then transferred from the Experience Account back to the regular pool of assets; no unfunded accrued liability is created; and all the requirements of Article 10 section 29(F) have been satisfied.

In our actuarial opinion, a new UAL is not created when a permanent benefit increase is approved because there is a funding source to offset the entire increase in liability.

The methodology summarized above complies with the law and constitution. And because the actuary is required to prepare valuations in compliance with rules established by law, this valuation also complies with actuarial standards of practice.

4. Conflicting Constitutional Provisions

Article 10 section 29(E)(1) of the constitution states the following:

“The actuarial soundness of state and statewide retirement systems shall be attained and maintained and the legislature shall establish, by law, for each state or statewide retirement system, the particular method of actuarial valuation to be employed for this purpose.”

The method established by law is summarized in the previous section. However, the method so prescribed leads to a systematic creation of unfunded accrued liabilities and an ever increasing pattern of increasing contribution requirements. An issue is, “Which part of the above constitutional mandate should be followed?” Should the actuary abide by the legal provisions that have been prescribed by law; or should the actuary develop his own methods to value the COLA program to comply with the “actuarial soundness” phrase?

Systematic Pattern of New UALs

The COLA program outlined in R.S. 11:542 and the funding rules outlined in R.S. 11:102 will produce a systematic pattern of actuarial losses, new UALs, and increases in employer contribution requirements. The basis for this conclusion is summarized below.

- A. Current law as currently written shields future legislatures from having to make a perhaps difficult financial decision to grant cost of living adjustments.
- B. Under current law, the diversion of assets from the regular pool of assets to the Experience Account is automatic whenever investment gains are large enough. The LASERS board of trustees does not have to approve the diversion. The legislature does not have to approve the diversion. It occurs automatically as long as the amount in the Experience Account after the diversion does not exceed two times the actuarial cost of a full COLA.
- C. It is possible in theory that from time to time investment gains to be transferred to the Experience Account will be restricted by the maximum Experience Account value. This could happen if there has been a substantial investment gain with either very low levels of inflation or a reluctance of the board of trustees or the legislature to grant a COLA. Nevertheless, such events are quite unlikely, because rates of inflation have ranged from 2.5% to 3.0% a year for many years, and periods of high investment returns are generally characterized by some degree of inflation. Furthermore, if there is inflation, and there is money in the Experience Account, it is very unlikely that the

- legislature will fail to approve a permanent benefit increase. Why deny retirees a benefit that has already been paid for? The COLA will be perceived as having no cost because a source of funding is already available.
- D. Nevertheless, in reality, the COLA has not been paid for. Employers will be paying for the asset diversion that funded the Experience Account for another 25 to 30 years.
- E. It is perhaps helpful to see the COLA provision of law as a charitable man with two pockets – the pocket on his left is the Regular Pool pocket that has already been committed to charities and the pocket on his right is the Experience Account pocket. He regularly takes money out his left pocket (the Regular Pool) and puts it into his right pocket (the Experience Account). When the money in the right pocket gets large enough, he pledges to give it to another charity. He then says to himself, I have to fund the pledge I made, so he take the money in his right pocket (the Experience Account) and puts it back into his left pocket (the Regular Pool) and thinks to himself, “All is well.” But it is obvious that all is not well. He doesn’t have any more money than he had before, but he has increased his charitable obligation.

5. Actuarial Costs

Rules for funding COLAs under R.S. 11:542 and R.S. 11:102 were initially enacted under Act 401 of the 1999 Regular Session of the legislature. Although the approval process has been modified a couple of times since 1999, funding rules have generally remained intact. As indicated earlier, these are the rules that were following in the preparation of this valuation.

However, what if more emphasis is placed on the first part of Article 10 Section 29(E)(1) – *“the actuarial soundness of state and statewide retirement systems shall be attained and maintained?”* What effect will this have on the valuation of COLA benefits? Actuarial standards of practice are currently being revised to require advance recognition of COLAs when a systematic pattern of ad hoc COLA increases have been given in the past. GASB’s preliminary views on pensions also contain this requirement. What effect will this have on liability measurements and employer contribution requirements?

We have identified several methods for valuing COLAs based on alternative interpretations of the constitution and proposed actuarial and GASB standards. Long range cost implications of the methods currently being used are provided below along with long range cost implications associated with the each alternative.

A. Current Method

This method is described in Part 3 above.

Amortization payments associated with past diversions of investment gains to the Experience Account currently costs about 2.75% of pay. In other words, if these diversions had not occurred, the employer contribution rate would be 2.75% less than what is it now.

It is expected that amortization payments associated with COLAs will increase systematically over the next 20 years to about 7.0% of pay. Thereafter, the rate will still continue to increase but at a much slower pace than over the next 20 year period.

B. Direct Recognition Method

A COLA contribution rate is calculated in such a manner that the present value of future COLA contributions will be equal to the present value of future diversions from the regular asset pool to the Experience Account minus any amount in the Experience Account.

The following information is based on stochastic modeling using open group valuation techniques for the existing COLA program. This analysis was designed to estimate the likelihood and frequency of transfers to the Experience Account.

1. A diversion of asset gains from the regular pool of assets to the Experience Account is expected to occur 35% to 40% of the time.
2. The average diversion amount (including zeros for every year when a diversion does not occur) is estimated to be \$125 million a year, or about 1.2% of the actuarial value of assets.
3. The average annual expected COLA is estimated to be about 1.2%.
4. The annual cost to pre-fund the COLA program is estimated to be about 5.8% of pay.

C. Discount Rate Method

The COLA program will be accounted for actuarially by lowering the discount rate by a sufficient number of basis points.

We estimate that the discount rate will have to be lowered 105 basis points to fully recognize the current COLA program. As a result, the employer contribution rate will be 5.5% of pay to 6.0% of pay larger than it is currently.

D. Equivalent COLA Method

The COLA program will be accounted for actuarially by assuming everyone's retirement benefit upon reaching age 60 will be increased by the average COLA adjustment (1.2% a year; see Item B3 above).

The estimated cost of this method ranges from 5.5% to 6.0% of pay.

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SECTION IV
BASIS FOR THE VALUATION

1. Basis for the Valuation

The basis for this valuation is the same as the basis used by SJ Actuarial Associates, the actuary for LASERS, unless otherwise indicated below or in the body of this document.

A. Census Data

Data summaries can be found in the June 30, 2011 actuarial valuation prepared by SJ Actuarial Associates, which is on the LASERS website. This valuation is based on the same census data set as used by SJ Actuarial Associates. SJ Actuarial Associates provided us with a set of census data files it used in the preparation of its valuation. The data in this set of files had been edited and reviewed by SJ Actuarial Associates. We did not attempt to conduct our own review and edits.

B. Plan Provisions

Plan summaries can be found in the June 30, 2011 actuarial valuation prepared by SJ Actuarial Associates, which is on the LASERS website. This valuation is based on same benefit provisions as used by SJ Actuarial Associates.

C. Actuarial Assumptions and Methods

A description of the actuarial methods and assumptions can be found in the June 30, 2011 actuarial valuation prepared by SJ Actuarial Associates, which is on the LASERS website. This valuation is based on the same actuarial methods and assumptions with the following exceptions.

- We used a discount rate assumption of 8.00% to determine contribution requirements for the fiscal year ending June 30, 2013 and 8.25% to determine requirements for the year ending June 30, 2012.
- The discount rate we used in our valuation is assumed to be net of investment and administration expenses (\$59,586,705 and \$18,181,272 respectively for FY 2011). Rates of return on investments shown in Section I, Part 7 are net of investment expenses, but not net of administrative expenses. Actuarial rates of return would be 22 basis points lower if administrative expenses had been included in the calculations.

D. Benchmarking

We tested our valuation results by comparing normal cost and liability values produced by our valuation system with values produced by the valuation software used by SJ Actuarial Associates. Comparisons of values were made for each sub plan, for each member status category, and for each type of decrement. Our values in the aggregate

were generally within 2% of the values produced by SJ Actuarial Associates. Comparative values by sub plan, by status category, and by decrement exhibited larger deviations, but on the whole produced values acceptable for valuation purposes.

Because we could not precisely match results produced by SJ Actuarial Associates, normal cost values in our valuation for FY 2013 were calculated according to the following formula.

Value = $A \times B / C$, where

- A = the value produced by SJ Actuarial Associates for FY 2013 using an 8.25% discount rate.
- B = the value produced by the LLA for FY 2013 using an 8.00% discount rate, and
- C = The value produced by the LLA for FY 2013 using an 8.25% discount rate.