

Response to Senate Resolution No.175 (2005 Regular Session)

For the Period April 1 to June 30, 2017

## \*Final\*

Pursuant to SR 175 of the 2005 Regular Louisiana Legislative Session, each retirement system is to provide a quarterly report of their investments commencing with the quarter beginning July 1, 2005. The following is the quarterly report for LASERS portfolio for the period April 1 to June 30, 2017. The report provides a listing of LASERS investments by asset class, amount of funds invested and with whom, annual returns on the investments and the management fees.

While market returns provide a snapshot view of investment performance, readers should keep in mind that actuarial returns, which are smoothed over five years to offset market volatility, are a better indicator of the system's ability to consistently achieve the assumed annual actuarial return of 7.75%. The Board adopted a plan to reduce the discount rate to 7.5% in 0.05% increments beginning July 1, 2017.

Therefore, in addition to the data presented in the quarterly SR 175 - Senate Resolution No. 175 Report, the following information is given to further illustrate the System's status.

As of June 30, 2016, LASERS 30-year actuarial return was 8.13%.

## 2nd Quarter 2017

	Net Asset Value			Management Fees	
Manager	\$ (Millions)	Annual Return	Annual Basis Points		Quarterly Dollar Amount
U.S. EQUITY					
LARGE CAP VALUE					
Aronson Johnson & Ortiz	235.5	20.4	0.0		-
	235.5	20.4	0.0		-
SMALL CAP GROWTH					
Rice Hall James	290.9	17.6	50.0		319,411
SMALL CAP VALUE					
LSV Asset Management	168.2	23.2	56.1		238,692
INDEX FUNDS					
LASERS S&P 400 Index Fund	444.4	18.7	n/a		_
LASERS S&P 500 Index Fund	1302.3	17.9	n/a		-
LASERS S&P 600 Index Fund	301.8	22.7	n/a		-
NON-U.S. EQUITY					
LARGE CAP VALUE					
Mondrian Investment Partners	225.9	15.7	28.3		155,189
LARGE CAP CORE					
LASERS MSCI World Ex-USA Index Fund	1479.7	19.5	n/a		-
LASERS Terror-Free International Fund	26.7	21.9	n/a		-
INT'L SMALL CAP					
Mondrian Investment Partners	232.9	19.3	70.4		380,043
Goldman Sachs	365.5	24.0	50.8		436,597
EMERGING MARKETS					
City of London Investment Management	402.0	24.9	93.0		872,052
LSV Emerging Markets	507.5	30.3	85.0		1,066,805
Westwood Global Emerging Markets	275.3	27.3	90.0		613,329
LSV Custom Emerging Markets	233.7	19.6	50.0		275,836
TOTAL EQUITY	\$6,492.3				4,357,955
US FIXED INCOME					
INVESTMENT GRADE	000.0	2.5	47.4		00.002
Loomis Sayles & Co. Orleans Capital Mgt	232.6 173.7	3.5 0.6	17.1 11.0		86,027 47,013
	110.1	0.0	11.0		47,010
HIGH YIELD JP Morgan	215.8	11.2	27.0		142,372
JP Morgan Nomura	215.8	11.2	45.0		225,280
	211.2	1-1.0	-0.0		220,200
EMERGING MARKET DEBT	101.0				
Stone Harbor	161.6	7.2	60.0		214,371
Global Multi-Sector					
Doubleline <sup>1</sup>	202.7	n/a	60.0		268,592
Goldentree <sup>1</sup>	220.5	n/a	75.0		274,584
TOTAL FIXED INCOME	\$1,418.2				1,258,240

	Net Asset Value		Management Ed	Management Fees
Manager	Net Asset Value \$ (Millions)		Annual Basis Points	Management Fees Quarterly Dollar Amoun
	¢ (minions)	Annua Notari	Annual Busis Fonts	quarteriy bonar Antoun
PRIVATE EQUITY				
Adams Street 2005 Non-US	5.3	13.2	37.3	13,969
Adams Street Partnership 2002 US	3.3	15.9	10.0	3,750
Adams Street Partnership 2005 US	13.6	13.3	37.3	32,592
Adams Street 2007 US Fund Adams Street 2007 Non-US	18.5 11.3	18.4 14.9	55.0 55.0	34,370 21,874
Adams Street 2007 Non-OS	3.2	14.9	100.0	21,074
Adams Street 2007 Direct	21.5	15.2	67.0	41,667
Adams Street 2009 Non-US Developed	10.8	22.2	67.0	25,00
Adams Street 2009 Non-US Emerging	5.0	11.3	67.0	8,33
Adams Street 2009 Direct	3.6	7.6	140.0	17,24
AEA Investors Fund VI	10.6	-2.3	175.0	211,750
3CP Energy Services Fund A	36.0	8.2	200.0	166,04
Brinson <sup>2,3</sup>	7.9	4.2	0.0	-
Brookfield Capital IV	17.4	23.2	175.0	210,68
Adams Street V <sup>2</sup>	4.9	-3.8	0.0	-
	15.1	3.0	0.0	24,474
Apollo Inv Fund VIII Apollo European Fund II	48.5 89.8	18.3 14.0	150.0 175.0	77,19 <sup>.</sup> 197,870
Apollo European Fund II ArcLight Energy Ptr Fund VI	43.6	14.0	150.0	272,70
CCMP Capital III	49.0	11.3	150.0	241,92
Cerberus VI <sup>4</sup>	28.7	n/a	150.0	749,69
Coller International Partners VI	59.2	10.1	125.0	247,269
Coller International Partners VII	5.4	86.7	150.0	182,855
Drug Royalty Fund III <sup>5</sup>	10.8	n/a	150.0	33,236
EIG Energy Fund XVI	41.9	41.4	125.0	265,088
Energy Spectrum Fund V <sup>6</sup>	0.6	34.4	175.0	7,78
Energy Spectrum Fund VI <sup>6</sup>	12.9	53.0	175.0	99,70
GTCR Fund XI	31.4	31.3	150.0	36,14
ouisiana Growth Fund	3.7	-51.9	50.0	53,96
ouisiana Growth Fund II	9.0	26.8	50.0	76,742
Gamut Fund I <sup>7</sup>	0.1	n/a	200.0	-
Goldman Sachs PEP IX	37.5	22.0	25.3	47,343
John Hancock <sup>2</sup>	0.4	-5.5	0.0	-
HPEP Partnership III <sup>2</sup>	0.5	9.8	0.0	-
Harbourvest VI - Buyout <sup>2</sup>	1.4	9.7	0.0	-
Harbourvest VI - Direct <sup>2</sup>	1.9	-10.9	0.0	-
Harbourvest VI - Partnership <sup>2</sup>	13.1	11.2	0.0	-
HIPEP Direct IV <sup>2</sup>	0.3	36.7	0.0	-
HPEP Partnership IV <sup>2</sup>	2.7	9.1	0.0	-
Huff Alternative Fund <sup>2</sup>	10.9	16.2	0.0	(2,15
Marathon European Credit Opp Fund <sup>6</sup>	21.5	6.2	100.0	64,79
Mesirow III	8.0	0.1	49.4	31,24
Aesirow IV	39.5	17.2	45.9	68,88
Mesirow V	52.5	23.0	56.7	85,05
Newstone Mezzanine II	17.2	8.2	150.0	(23,31
Daktree European Fund III	43.7	19.0	175.0	125,64
Pantheon Europe VI	27.5	20.5	75.0	52,70
Pantheon VI	18.9	9.3	52.7	108,12
Pantheon VII	31.7	14.1	67.5	91,42
Stepstone Fund II Stepstone Europe Fund II	35.1	15.5	37.5	25,16
Private Advisors IV	19.4 26.5	12.4 19.5	50.0 75.0	10,20 65,62
Private Advisors V	32.0	19.5	90.0	90,00
Private Advisors VI	14.6	6.3	90.0	90,00
Q-BLK II	23.3	3.6	45.9	54,17
Q-BLK III	34.5	5.8	59.7	73,14
iguler Guff DOF III	52.9	13.1	24.0	121,46
Siguler Guff Fund IV	22.8	10.7	71.0	56,56
Siguler Guff Pelican Gem <sup>8</sup>	4.6	n/a	75.0	(58,87
Sterling Partners	22.9	-17.1	200.0	168,60
CW Energy Fund XIV <sup>6</sup>	6.8	16.7	125.0	70,74
CW-EIG Energy Fund XV <sup>6</sup>	24.2	16.2	125.0	84,88
/ista Equity Partners VI	46.9	1.7	150.0	211,42
/ista Equity Partners V	76.3	15.7	150.0	247,22
/ista Equity Partners IV	32.9	8.9	150.0	131,25
Williams Capital <sup>2</sup>	0.1	-90.5	0.0	-

	Net Asset Value			Management Fees
Manager	\$ (Millions)	Annual Return	Annual Basis Points	Quarterly Dollar Amoun
ABSOLUTE RETURN STRATEGIES				
Bridgewater Pure Alpha	306.9	9.3	174.4	1,349,675
Bridgewater PA Major Markets	63.9	10.2	200.0	244,180
PAAMCO	40.1	-0.5	100.0	159,929
Prisma Capital Partners	239.8	6.8	65.0	388,80
Entrust Capital Partners	226.6	9.4	125.0	421,626
Stark Investments (Liquidating)	4.4	n/a	125.0	(824
GLOBAL ASSET ALLOCATION STRAT	TEGIES			
Bridgewater All Weather	738.8	5.4	30.4	564,275
TOTAL ALTERNATIVE ASSETS <sup>9</sup>	\$3,055.5			8,585,097
TOTAL PLAN <sup>10</sup>	11,029.4			14,201,292

<sup>1</sup> The portfolio was funded 05/2016.

<sup>2</sup> The fund no longer charges fees.

<sup>3</sup> This is a composite of seven limited partnerships.

<sup>4</sup> The portfolio was funded 09/2016.

<sup>5</sup> LASERS is awaiting final escrow distribution from this fund, so one year return is not listed.

<sup>6</sup> Annual Basis Points are based on historical cost or net asset value.

<sup>7</sup> The portfolio was funded 08/2016.

<sup>8</sup> The portfolio was funded 11/2016.

<sup>9</sup> The net asset values and returns are reflected net of fees for all Alternatives, and includes \$7.5 million for Pinnacle Asset Management.

<sup>10</sup> The Total Plan Market Value includes \$52.4 million in cash/cash equivalents and \$11.0 million in the Harbor Police transition account. The Total Quarterly Dollar Amount does not include \$291,677 for Self-Directed Plan and Optional Retirement Plan. The quarterly management fee dollar amount includes fee adjustments from prior periods. For the majority of LASERS investment managers, management fees are paid quarterly in arrears, based upon the market value of assets under its management, excluding any cash balance, as reported by LASERS custodian bank, and are calculated as follows:

The fee is calculated at the end of each calendar quarter as follows: (Average of market value of assets under management on last business day of each of the four preceding calendar months, which shall not include funds that are managed by LASERS custodian bank) times the annual percentage fee schedule (basis points) divided by four. Fees on invested contributions and withdrawals during each calendar quarter will be computed separately on a pro-rata basis. It is not necessary to pro-rate contributions and withdrawals for Month 1 of the calculation period. Contributions and withdrawals are to be calculated as such:

Contributions: (month end market value for the month in which the contribution was made less any cash balance) minus the amount of the contribution, and then multiplied by the number of days the funds were not in the account, divided by the total number of days for the month.

Withdrawals: (month end market value for the month in which the withdrawal was made less any cash balance) plus the amount of the withdrawal, and then multiplied by the number of days the funds were in the account, divided by the total number of days for the month.

The managers shall provide a monthly reconciliation of their records to LASERS custodian bank. Should the manager fail to reconcile LASERS portfolio on a timely basis, LASERS maintains the right to withhold payment of the management fee until the portfolio has been reconciled to LASERS satisfaction.

Private Equity earns fees as a percentage of LASERS capital commitment to each fund. The fees are deducted from the portfolios on a quarterly basis and verified with the receipt of each manager's annual audited financials. The one exception is for Adams Street Secondary 1998 Fund and Adams Street Primary 1997 and 1999 Funds, for which billing is handled by UBS Global Asset Management. For these funds an invoice is received, verified, and paid on a quarterly basis. Investment Terminology

Annual Return	Annualized returns express the rate of return over a given time period on an annual basis, or as a return per year. An annualized return can be calculated over any period one year or longer and is useful for comparing two or more portfolios over similar time periods.
Basis Point	One gradation on a 100-point scale which is used in expressing variations on the yield of bonds. A basis point is equal to one-hundreth of a percentage point.
Concentrated Portfolio	A portfolio that generally has fewer securities than traditional portfolios.
Index Fund	A fund (or account) comprised of securities, the characteristics of which will produce a return which will replicate (or substantially replicate) a designated securities index.
Management Fee	The fee charged by the investment manager for supervision of an investment. Generally quoted in terms of a percent of assets.
Market Value	The current or prevailing price of a security or commodity as indicated by current market quotations, and therefore the price at which additional amounts can presumably be purchased or sold.
Universe	The list of all assets eligible for inclusion in a portfolio.

Louisiana State Employees' Retirement System 8401 United Plaza Boulevard - Baton Rouge, LA 70809 P.O. Box 44213 - Baton Rouge, LA 70804