

LASERS

LOUISIANA STATE EMPLOYEES'
RETIREMENT SYSTEM

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

For the April 1 to June 30, 2020

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, 2020. 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 7.60%. 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, 2019, LASERS 30-year actuarial return was 7.79%.

2nd Qtr 2020

Manager	Net Asset Value \$ (Millions)	Annual Return	Management Fees	
			Annual Basis Points	Quarterly Dollar Amount
U.S. EQUITY				
LARGE CAP VALUE				
Aronson Johnson & Ortiz ¹	198.4	-7.8	0.0	-
SMALL CAP GROWTH				
Rice Hall James ¹	136.7	-10.8	0.0	-
SMALL CAP VALUE				
LSV Asset Management	156.2	-18.8	56.2	212,398
INDEX FUNDS				
LASERS S&P 400 Index Fund	401.4	-6.8	n/a	-
LASERS S&P 500 Index Fund	1115.9	7.6	n/a	-
LASERS S&P 600 Index Fund	182.3	-11.6	n/a	-
NON-U.S. EQUITY				
LARGE CAP VALUE				
Mondrian Investment Partners	202.8	-10.6	28.7	148,756
LARGE CAP CORE				
LASERS MSCI World Ex-USA Index Fund	1061.2	-5.1	n/a	-
LASERS Terror-Free International Fund	27.7	-4.8	n/a	-
INT'L SMALL CAP				
Mondrian Investment Partners	206.1	-6.3	71.1	356,089
Goldman Sachs	317.8	-2.6	51.4	395,314
EMERGING MARKETS				
City of London Investment Management	364.7	-1.9	93.0	716,253
Westwood Global Emerging Markets	248.8	-11.7	89.6	528,793
LSV Custom Emerging Markets	459.8	-16.2	50.0	642,889
TOTAL EQUITY	\$5,079.8			3,000,493
US FIXED INCOME				
INVESTMENT GRADE				
Loomis Sayles & Co.	187.8	9.5	17.7	81,144
Orleans Capital Mgt	136.3	8.5	12.0	41,278
HIGH YIELD				
JP Morgan	133.6	-2.7	27.0	86,575
Nomura	127.1	-3.7	45.0	134,589
EMERGING MARKET DEBT				
Stone Harbor	199.7	-3.6	52.5	247,848
Gramercy	167.2	2.5	85.0	366,664
Global Multi-Sector				
Doubleline	218.9	-1.0	60.0	258,674
Goldentree	249.4	0.9	75.0	347,421
Pimco	277.6	9.4	95.0	622,279
Blackstone	274.7	2.4	78.1	153,081
Zais Group	88.0	-24.7	62.5	158,158
TOTAL FIXED INCOME	\$2,060.2			2,497,711

2nd Qtr 2020

Manager	Net Asset Value \$ (Millions)	Annual Return	Management Fees	
			Annual Basis Points	Quarterly Dollar Amount
ALTERNATIVE ASSETS				
PRIVATE MARKETS				
Adams Street 2005 Non-US	2.6	-11.8	9.3	3,492
Adams Street Partnership 2002 US ²	1.0	-11.8	0.0	-
Adams Street Partnership 2005 US	5.3	-2.0	9.3	8,152
Adams Street 2007 US Fund	8.9	-5.4	22.5	17,188
Adams Street 2007 Non-US	6.0	-11.3	22.5	10,937
Adams Street 2007 Direct	2.0	-9.9	40.0	4,815
Adams Street 2009 US Fund	15.6	-1.5	42.0	26,042
Adams Street 2009 Non-US Developed	7.5	-3.2	42.0	15,625
Adams Street 2009 Non-US Emerging	4.9	-6.9	42.0	5,208
Adams Street 2009 Direct	2.5	-8.5	80.0	9,047
AEA Investors Fund VI	56.3	9.9	150.0	172,833
AEA Investors Fund VII ³	10.5	n/a	175.0	415,725
Atlas Partner Holdings II ⁴	22.3	n/a	100.0	235,656
Baring Asia VII	25.8	7.7	175.0	268,002
BCP Energy Services Fund A	36.8	13.3	200.0	189,072
BCP Fund II A	1.0	-85.6	200.0	375,000
Brinson ^{2,5}	3.1	-9.2	0.0	-
Brookfield Capital IV	40.8	3.8	150.0	177,814
Brookfield Infrastructure IV ⁶	30.3	n/a	140.0	297,500
Brookfield Capital V ⁷	30.2	n/a	150.0	371,543
Adams Street V ²	1.7	-56.9	0.0	-
Apollo Inv Fund VII	5.6	-27.9	0.0	2,706
Apollo Inv Fund VIII	51.9	-0.3	75.0	39,580
Apollo European Fund II	16.3	-13.7	150.0	28,438
Apollo Inv Fund IX	19.5	8.5	150.0	181,735
ArcLight Energy Ptr Fund VI	47.0	-31.8	150.0	196,620
CCMP Capital III	51.7	2.4	100.0	80,841
Cerberus VI	126.7	12.0	150.0	139,057
Coller International Partners VI	27.6	-10.6	72.9	177,106
Coller International Partners VII	60.5	-2.8	125.0	209,272
Coller International Partners VIII ⁸	10.5	n/a	150.0	620,902
Double Line Mortgage	131.0	-2.0	100.0	291,159
Drug Royalty Fund III ⁹	4.9	n/a	0.0	-
EIG Energy Fund XIV ²	2.6	-47.5	0.0	-
EIG Energy Fund XV	9.7	-31.3	125.0	53,374
EIG Energy Fund XVI	43.2	-9.0	125.0	130,455
Energy Spectrum Fund VI	8.6	-11.3	175.0	58,123
GTCR Fund XI	48.7	31.5	150.0	83,462
GTCR Fund XII	31.5	46.2	150.0	225,000
KPS SS Mid Cap ¹⁰	3.4	n/a	125.0	41,920
Louisiana Growth Fund ^{2,9}	0.1	n/a	0.0	-
Louisiana Growth Fund II ⁹	3.1	n/a	12.5	8,109
Gamut Fund I	23.0	-0.5	200.0	48,885
Goldman Sachs PEP IX	22.4	7.2	8.0	20,409
Goldentree Distressed Fund III	57.2	5.2	125.0	185,641
John Hancock ²	0.4	-0.8	0.0	-
HIPEP Partnership III ²	0.1	-8.3	0.0	-
Harbourvest VI - Direct ²	1.0	-41.4	0.0	-
Harbourvest VI - Partnership ²	0.7	-22.0	0.0	-
HIPEP Direct IV ²	0.2	-54.3	0.0	-
Huff Alternative Fund ²	5.0	12.7	0.0	-
Insight Venture Partner XI ⁶	11.3	n/a	175.0	371,875
Insight Venture Partner X	54.3	11.5	175.0	218,750
KKR Asian Fund III	31.9	11.6	150.0	90,051
Mesirow III	3.6	-5.0	36.0	20,693
Mesirow IV	21.9	-0.9	33.5	50,190
Mesirow V	41.6	4.1	41.3	61,987
Newstone Mezzanine II	4.7	7.7	100.0	11,815
OHA Strategic Credit Fund II	24.6	-13.2	138.0	73,467
Oaktree European Fund III	27.7	-6.1	175.0	122,293
Pantheon Europe VI	12.7	2.0	54.7	55,273
Pantheon VI	3.7	-26.8	34.9	43,187
Pantheon VII	12.8	-12.0	49.2	61,513
Stepstone Fund II	0.9	-9.4	37.5	40,221
Stepstone Europe Fund II	12.8	-8.1	50.0	24,023
Private Advisors IV	14.7	2.3	54.7	47,837
Private Advisors V	27.7	10.7	72.9	72,657

2nd Qtr 2020

Manager	Net Asset Value		Management Fees	
	\$ (Millions)	Annual Return	Annual Basis Points	Quarterly Dollar Amount
ALTERNATIVE ASSETS				
PRIVATE MARKETS cont'd				
Private Advisors VI	29.6	10.9	90.0	90,000
Q-BLK II	10.4	25.9	33.5	41,735
Q-BLK III ²	22.8	16.1	0.0	-
Siguler Guff DOF III	38.2	39.4	12.0	56,741
Siguler Guff Fund IV	14.1	5.6	29.0	28,822
Siguler Guff Pelican Gem	76.7	1.6	75.0	274,755
Sterling Partners	12.8	-22.5	200.0	115,992
Vista Equity Partners IV	22.1	-10.9	150.0	57,164
Vista Equity Partners V	81.0	2.3	150.0	168,284
Vista Equity Partners VI	120.7	2.8	150.0	371,443
Vista Equity Partners VII	28.9	0.6	150.0	423,655
Warburg Pincus	21.2	6.4	140.0	350,000
Williams Capital ²	0.5	-41.4	0.0	-
ABSOLUTE RETURN STRATEGIES				
Bridgewater Pure Alpha	7.1	-10.6	200.0	35,550
Prisma Capital Partners	263.1	-0.7	65.0	421,066
Entrust Capital Partners	291.9	-11.5	110.3	509,715
RISK PARITY				
Bridgewater Custom ¹¹	297.2	1.1	67.4	490,211
AQR Capital Management	249.9	-13.1	110.0	812,248
TOTAL ALTERNATIVE ASSETS ¹²	\$3,028.0			11,039,657
TOTAL PLAN ¹³	\$10,660.1			16,537,861

¹ The fund's fee structure is performance based.

² The fund no longer charges fees.

³ The portfolio was funded 10/2019.

⁴ The portfolio was funded 8/2019.

⁵ This is a composite of six limited partnerships.

⁶ The portfolio was funded 3/2020.

⁷ The portfolio was funded 9/2019.

⁸ The portfolio was funded in 5/2020.

⁹ LASERS is awaiting final escrow distribution from this fund, so one year return is not listed.

¹⁰ The portfolio was funded 11/2019.

¹¹ Bridgewater Major Market and Bridgewater All Weather were merged to form this new fund 01/2018.

¹² The net asset values and returns are reflected net of fees for all Alternatives, and includes \$1.2 million for Paamco and \$2.3 million for Stark, which are being liquidated.

¹³ The Total Plan Market Value includes \$492.0 million in cash/cash equivalents.

The Total Quarterly Dollar Amount does not include \$332,163 for Self-Directed Plan and Optional Retirement Plan.

The Total Quarterly Dollar Amount does not include \$2,133.53 in fees for liquidating funds.

The Total Quarterly Dollar Amount includes fee adjustments from prior periods.

Annual Basis Points for fees vary and may be based on historical cost, net asset value, invested capital or other similar items.

Comments

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-hundredth 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.

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