



# Police and Fire Annual Fee Report - 2018

## Executive Summary

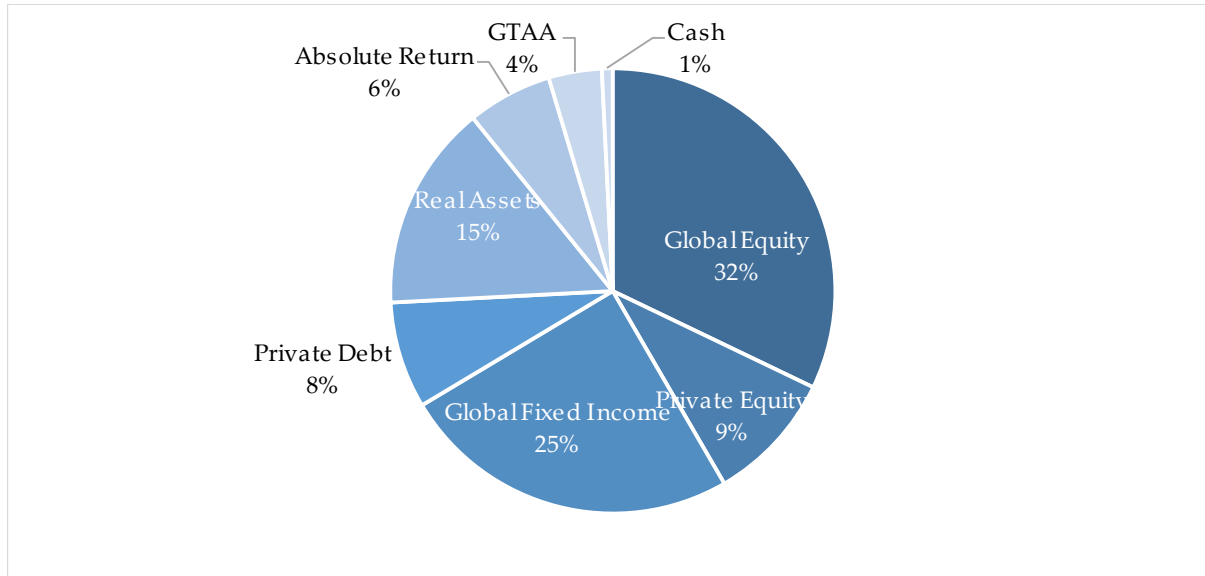
This report marks the fourth anniversary of our annual Fee Report for the Police and Fire Department Retirement Plan (“Police and Fire”, “Plan”). The goal of the report is to provide transparency and insight into the fees and expenses paid to investment managers along with the costs of operating the investment program. Pension plan fee data is generally underreported by peers, and typically represents only the portion of fees that are observable. This excludes often sizable embedded fees (such as incentive fees) that are deducted from account values of certain fund structures.

It is important to note that fees are a function of asset allocation and portfolio construction, which are byproducts of the Board’s objectives, investment beliefs, and risk tolerance. Each year, the Board typically reviews the asset allocation considering updated capital market assumptions and the expected return and volatility of the portfolio associated with those assumptions. The asset allocations in effect for the period covered by this report, as illustrated in tables 1 and 2.

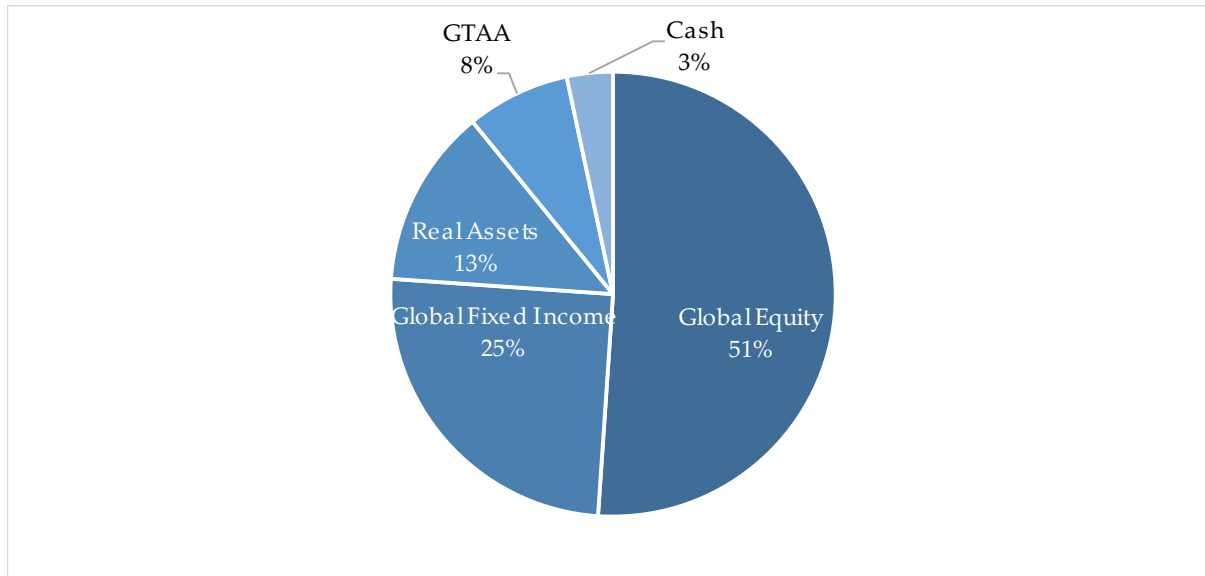
Asset allocation is typically one of the largest determinants of investment management fees at the portfolio level. Asset allocations that introduce alternative asset classes (Private Equity, Private Debt, Real Estate, Hedge Funds, etc.) will have higher levels of investment manager fees, because these asset classes or strategies have higher fee structures than traditional asset classes. In addition, asset class structuring can have a significant impact on fees. The use of active management versus passive management, as well as alternative strategies within traditional asset classes, will increase fees. When evaluating investment managers, staff places a significant emphasis on fees by negotiating for lower fees and analyzing that expected value or return is worth the expected cost.

**For calendar year 2018, management and incentive fees for the pension plan totaled \$39.1 million with a fee ratio of 1.07% as compared to \$43.4 million and 1.27% for 2017 and \$38.2 million and 1.21% for 2016. Fund operating expenses were \$5.5 million in 2018 for a fee ratio of 0.15% as compared to \$4.6 million and 0.14% for 2017. The health care trust management and incentive fees totaled \$0.2 million with a fee ratio of 0.13% as compared to \$0.3 million with a fee ratio of 0.25% in 2017 and \$0.2 million with a fee ratio of 0.28% in 2016. Other investment-related costs (staff, consultants, custodian bank, investment legal, etc.) for the pension plan has stayed relatively flat over the past 3 years at \$2.5 million with a fee ratio of 0.07%. Other investment-related costs for the health care trust totaled \$0.1 million with a fee ratio of 0.05% as compared to \$0.1 million and 0.08% for 2017 and \$0.1 million and 0.11% for 2016.**

**Table 1 - Pension Average Asset Allocation for 2018**



**Table 2 - Health Care Trust Average Asset Allocation for 2018**



## Introduction

The fees in this report represent management fees, incentive fees, fund operating expenses, and other investment-related costs that were incurred during the calendar year. These amounts may include fees that were accrued for the year, but not paid out.

Management fees are fees charged by fund managers to invest and manage assets. Incentive fees are performance-based fees for exceeding a hurdle return and are only applicable to certain fund structures. It is important to note that incentive fees are a form of shared economics that are only paid if the manager has produced positive returns or exceeded a predetermined hurdle rate. In some situations, incentive fees can be negative, reflecting the complexity of fee agreements. Operating expenses include overhead related to managing a fund that are indirectly borne by investors, which may include professional, administration, research, tax, legal, custodial and audit expenses for a fund. Trading expenses such as broker commissions are excluded from this report. Other costs include salary and benefits compensation for investment staff (including a 50% allocation for the CEO), cost of consultants (general, absolute return, risk), custodian, other third party vendors utilized by the investment program, and investment staff travel.

Though best efforts have been made to capture all material fees and expenses, this report may not include all indirect expenses and charges that may be paid to managers' affiliates, consultants, or entities for services rendered to the managers, the funds or portfolio entities held by certain funds. Future iterations of this report will continue to grow in sophistication, benefiting from industry-wide initiatives to gain additional transparency, such as the increasing adoption of the Institutional Limited Partners Association ("ILPA") fee reporting template.

## Data Sources

Staff compiled this fee report using the best available information for each fund manager in order to develop a comprehensive view of fees. Fee amounts were reviewed for reasonableness and reconciled to fee schedules. Fees for all managers active at any point during the year are included in this report, including those that were initially funded or terminated mid-year.

Fees for mutual funds, short term investment funds (Cash), and certain public markets commingled funds that deduct fees directly from the funds were calculated by multiplying each funds' fee ratio by the funds' average monthly balance for the year. The average balances were sourced from the Plan custodian bank, State Street.

Absolute Return management and incentive fees were provided by managers with independent re-calculations and reconciliations completed by Plan consultant Albourne. Operating expenses were calculated by Albourne using audited financial statements for each fund. Fees for Private funds were gathered by asking managers to complete the ILPA fee reporting template. The ILPA template is intended to standardize and codify the presentation of fees, expenses, and carried interest information by fund managers to Limited Partners. The remaining manager fees were obtained by having the fund managers fill out a fee template designed by staff.

Within the Other Costs section, consultants, custodian, and other vendor costs were sourced from fee invoices from the vendors. Investment staff salary and benefits were allocated to each of the four San Jose plans by pro-rating the total costs by the average balance of each plan. Similarly, legal costs incurred by Police and Fire were allocated between the pension plan and health care trust by pro-rating the total costs by the average monthly balance of each plan.

## Changes from 2017 Report

This year's report now breaks out yearly changes from four categories – weight changes, management fee ratio changes, incentive fee ratio changes and fund operating expense changes. The 2017 report attribution did not incorporate changes due to fund operating expenses as collection of the data only began in 2017.

## Total Portfolio Fee Summaries

The tables in this report present fees by asset class and management type. Fees by management type are presented by segregating investments into four “fund type” categories: passive, active, hedged, and private. Passive strategies are intended to generate a return that emulates an index. Active strategies include investment managers that attempt to outperform an index on a long only basis. Hedged strategies generally seek to achieve an absolute return (“alpha”) regardless of market direction (“beta”) by employing various strategies including long and short positions. Private strategies utilize a diverse set of approaches to invest in illiquid assets, such as equity of privately held companies or real estate.

## Year-over-Year Comparisons

The year-over-year comparison tables in this report present a time series of changes in average weights, fees, fee ratios, contribution to total plan fee ratios, and a year-over-year attribution. The year-over-year attribution uses the Brinson-Fachler methodology to decompose the change in contribution to total plan fee ratio into 1) impact due to weight changes, 2) impact due to management fee ratio changes, 3) impact due to incentive fee ratio changes and 4) impact due to fund operating expense ratio changes.

## California Government Code §7514.7 (AB 2833)

Assembly Bill 2833 (“AB 2833”) was approved on September 14, 2016 adding Section 7514.7 to California Government Code. The addition to the Code requires California public investment funds to make annual disclosures of fees for alternative investment vehicles at a public meeting.

Tables 15-18 of this report are intended to comply with the law.

*Note: Some values on the report may not sum due to rounding.*

**Table 3 - Pension Fees by Asset Class and Management Type**

Asset Class	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees		Average Balance (\$ mm)	Average Weight	Fee Ratio - Management Fees	Fee Ratio - Incentive Fees	Fee Ratio - Operating Expenses	Fee Ratio - Mgmt and Incent Fees	Fee Ratio - Mgmt, Incent, and Op Exp		Contribution to Total Plan Fee Ratio
				Operating Expenses (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)							% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio	
Global Equity	6.0	1.4	0.3	7.3	7.7	1,176	32.1%	0.51%	0.12%	0.03%	0.62%	0.65%	17.2%	0.21%
Passive	0.2	-	0.1	0.2	0.3	499	13.6%	0.05%	0.00%	0.01%	0.05%	0.06%	0.7%	0.01%
Active	3.9	-	0.1	3.9	4.0	581	15.9%	0.67%	0.00%	0.02%	0.67%	0.69%	9.0%	0.11%
Hedged	1.8	1.4	0.1	3.2	3.3	96	2.6%	1.88%	1.45%	0.14%	3.32%	3.46%	7.4%	0.09%
Private Equity	3.5	4.9	1.2	8.4	9.7	348	9.5%	1.01%	1.41%	0.35%	2.42%	2.77%	21.6%	0.26%
Passive	0.0	-	0.0	0.0	0.0	159	4.3%	0.02%	0.00%	0.01%	0.02%	0.02%	0.1%	0.00%
Private	3.5	4.9	1.2	8.4	9.6	189	5.2%	1.84%	2.60%	0.64%	4.44%	5.08%	21.5%	0.26%
Global Fixed Income	4.0	1.1	0.5	5.0	5.5	906	24.8%	0.44%	0.12%	0.05%	0.56%	0.61%	12.4%	0.15%
Passive	0.2	-	-	0.2	0.2	468	12.8%	0.04%	0.00%	0.00%	0.04%	0.04%	0.4%	0.01%
Active	1.0	-	0.1	1.0	1.1	203	5.5%	0.51%	0.00%	0.04%	0.51%	0.55%	2.5%	0.03%
Hedged	2.8	1.1	0.4	3.8	4.2	235	6.4%	1.17%	0.46%	0.18%	1.63%	1.80%	9.5%	0.12%
Private Debt	2.2	1.0	1.4	3.2	4.6	284	7.8%	0.79%	0.34%	0.49%	1.13%	1.62%	10.3%	0.13%
Passive	0.1	-	-	0.1	0.1	82	2.2%	0.17%	0.00%	0.00%	0.17%	0.17%	0.3%	0.00%
Private	2.1	1.0	1.4	3.1	4.5	202	5.5%	1.04%	0.48%	0.69%	1.52%	2.21%	10.0%	0.12%
Real Assets	5.9	2.1	1.3	8.1	9.4	549	15.0%	1.08%	0.39%	0.24%	1.47%	1.71%	21.0%	0.26%
Passive	0.2	-	-	0.2	0.2	118	3.2%	0.13%	0.00%	0.00%	0.13%	0.13%	0.3%	0.00%
Active	0.6	-	0.2	0.6	0.8	157	4.3%	0.39%	0.00%	0.10%	0.39%	0.49%	1.7%	0.02%
Hedged	0.9	0.3	0.2	1.2	1.4	42	1.1%	2.17%	0.67%	0.42%	2.84%	3.26%	3.1%	0.04%
Private	4.3	1.9	1.0	6.1	7.1	232	6.3%	1.84%	0.80%	0.41%	2.64%	3.06%	15.9%	0.19%
Absolute Return	3.3	2.7	0.8	6.0	6.8	227	6.2%	1.47%	1.18%	0.34%	2.66%	3.00%	15.2%	0.19%
Hedged	3.3	2.7	0.8	6.0	6.8	227	6.2%	1.47%	1.18%	0.34%	2.66%	3.00%	15.2%	0.19%
GTAA	1.0	-	0.0	1.0	1.0	141	3.8%	0.69%	0.00%	0.03%	0.69%	0.72%	2.3%	0.03%
Active	1.0	-	0.0	1.0	1.0	141	3.8%	0.69%	0.00%	0.03%	0.69%	0.72%	2.3%	0.03%
Cash	0.0	-	-	0.0	0.0	29	0.8%	0.12%	0.00%	0.00%	0.12%	0.12%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	29	0.8%	0.12%	0.00%	0.00%	0.12%	0.12%	0.1%	0.00%
<b>Total Plan</b>	<b>26.0</b>	<b>13.2</b>	<b>5.5</b>	<b>39.1</b>	<b>44.7</b>	<b>3,658</b>	<b>100.0%</b>	<b>0.71%</b>	<b>0.36%</b>	<b>0.15%</b>	<b>1.07%</b>	<b>1.22%</b>	<b>100.0%</b>	<b>1.22%</b>

The table above illustrates that management, incentive, and operating expenses for the pension plan totaled \$44.7 million for 2018 which equated to a total plan fee ratio of 1.22%. The Private Equity and Real Asset asset classes contributed the most to the total plan fee ratio with each contributing 0.26%. The GTAA and Private Debt asset classes contributed the least to the total plan fee ratio at 0.03% and 0.13%, respectively.

**Table 4 - Pension Fees by Management Type**

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive		Average Balance (\$ mm)	Average Weight	Fee Ratio - Management Fees	Fee Ratio - Incentive Fees	Fee Ratio - Operating Expenses	Fee Ratio - Mgmt and Incent Fees	Fee Ratio - Mgmt, Incent, and Op Exp		Contribution to Total Plan Fee Ratio
				Fees (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)							Ratio	Ratio	
Passive	0.8	-	0.1	0.8	0.9	1,354	37.0%	0.06%	0.00%	0.01%	0.06%	0.06%	2.0%	0.02%
Active	6.5	-	0.4	6.5	6.9	1,082	29.6%	0.60%	0.00%	0.04%	0.60%	0.64%	15.5%	0.19%
Hedged	8.8	5.4	1.5	14.2	15.7	599	16.4%	1.47%	0.91%	0.25%	2.37%	2.62%	35.2%	0.43%
Private	9.8	7.8	3.6	17.6	21.2	623	17.0%	1.58%	1.24%	0.57%	2.82%	3.40%	47.3%	0.58%
Total Plan	26.0	13.2	5.5	39.1	44.7	3,658	100.0%	0.71%	0.36%	0.15%	1.07%	1.22%	100.0%	1.22%

For the total pension plan, private management strategies accounted for 0.58% of the total plan fee ratio and represented about 17% of average plan assets. Hedged management strategies were the next largest contributor to the total plan fee ratio accounting for 0.43% of the total plan fee ratio and represented 16% of average plan assets. Passive and active management strategies accounted for 0.02% and 0.19% of the total plan fee ratio and represented 37% and 30% of plan assets, respectively.

**Table 5 - Pension Other Investment Costs**

Investment Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel		Other Costs (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
			(\$ mm)	(\$ mm)			
1.0	0.7	0.3	0.5	0.5	2.5	0.07%	

Other investment costs for the pension plan equated to a total fee ratio of 0.07%. As previously discussed, other costs include salary and benefits compensation for investment staff, cost of consultants, custodian, third party vendors utilized by the investment program, and investment staff travel.



**Table 6 - Health Care Fees by Asset Class and Management Type**

Asset Class	Management				Mgmt, Incent, and Op Exp (\$ mm)	Average Balance (\$ mm)	Average Weight	Fee Ratio - Management Fees	Fee Ratio - Incentive Fees	Fee Ratio - Operating Expenses	Fee Ratio - Mgmt and Incent Fees	Fee Ratio -		Contribution to Total Plan Fee Ratio
	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	and Incentive Fees (\$ mm)								Mgmt, Incent, and Op Exp	Mgmt, Incent, and Op Exp	
Global Equity	0.02	-	-	0.02	0.02	71	51.1%	0.03%	0.00%	0.00%	0.03%	0.03%	10.2%	0.01%
Passive	0.02	-	-	0.02	0.02	71	51.1%	0.03%	0.00%	0.00%	0.03%	0.03%	10.2%	0.01%
Global Fixed Income	0.01	-	0.00	0.01	0.01	35	25.0%	0.03%	0.00%	0.00%	0.03%	0.03%	6.0%	0.01%
Passive	0.01	-	0.00	0.01	0.01	35	25.0%	0.03%	0.00%	0.00%	0.03%	0.03%	6.0%	0.01%
Real Assets	0.04	-	0.01	0.04	0.05	18	13.0%	0.23%	0.00%	0.05%	0.23%	0.28%	24.6%	0.04%
Passive	0.01	-	-	0.01	0.01	11	7.7%	0.12%	0.00%	0.00%	0.12%	0.12%	6.2%	0.01%
Active	0.03	-	0.01	0.03	0.04	7	5.3%	0.39%	0.00%	0.11%	0.39%	0.51%	18.4%	0.03%
GTAA	0.10	-	0.01	0.10	0.11	11	7.5%	0.98%	0.00%	0.12%	0.98%	1.09%	56.5%	0.08%
Active	0.10	-	0.01	0.10	0.11	11	7.5%	0.98%	0.00%	0.12%	0.98%	1.09%	56.5%	0.08%
Cash	0.01	-	-	0.01	0.01	5	3.3%	0.12%	0.00%	0.00%	0.12%	0.12%	2.8%	0.00%
Passive	0.01	-	-	0.01	0.01	5	3.3%	0.12%	0.00%	0.00%	0.12%	0.12%	2.8%	0.00%
<b>Total Plan</b>	<b>0.18</b>	<b>-</b>	<b>0.02</b>	<b>0.18</b>	<b>0.20</b>	<b>140</b>	<b>100.0%</b>	<b>0.13%</b>	<b>0.00%</b>	<b>0.02%</b>	<b>0.13%</b>	<b>0.15%</b>	<b>100.0%</b>	<b>0.15%</b>

The table above illustrates that management, incentive, and operating expenses for the health care trust totaled \$0.2 million for 2018 which equated to a total plan fee ratio of 0.15%. The GTAA asset class contributed the most to the total plan fee ratio at 0.08%. The Global Fixed Income and Global Equity asset classes contributed the least to the total plan fee ratio at 0.01% each.

**Table 7 - Health Care Fees by Management Type**

Fund Type	Management				Mgmt, Incent, and Op Exp (\$ mm)	Average Balance (\$ mm)	Average Weight	Fee Ratio - Management Fees	Fee Ratio - Incentive Fees	Fee Ratio - Operating Expenses	Fee Ratio - Mgmt and Incent Fees	Fee Ratio -		Contribution to Total Plan Fee Ratio
	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	and Incentive Fees (\$ mm)								Mgmt, Incent, and Op Exp	Mgmt, Incent, and Op Exp	
Passive	0.05	-	0.00	0.05	0.05	122	87.2%	0.04%	0.00%	0.00%	0.04%	0.04%	25.1%	0.04%
Active	0.13	-	0.02	0.13	0.15	18	12.8%	0.73%	0.00%	0.11%	0.73%	0.85%	74.9%	0.11%
<b>Total Plan</b>	<b>0.18</b>	<b>-</b>	<b>0.02</b>	<b>0.18</b>	<b>0.20</b>	<b>140</b>	<b>100.0%</b>	<b>0.13%</b>	<b>0.00%</b>	<b>0.02%</b>	<b>0.13%</b>	<b>0.15%</b>	<b>100.0%</b>	<b>0.15%</b>

For the total health care trust, active management strategies accounted for 0.11% of the total plan fee ratio and represented 13% of average plan assets. Passive strategies accounted for 0.04% of the total plan fee ratio and represented 87% of plan assets.

**Table 8 - Health Care Other Investment Costs**

<b>Investment Staff Salary and Benefits (\$ mm)</b>	<b>Consultants (\$ mm)</b>	<b>Custodian (\$ mm)</b>	<b>Other Vendors and Travel (\$ mm)</b>	<b>Total Other Costs (\$ mm)</b>	<b>Other Costs Fee Ratio</b>
0.01	0.02	0.03	0.01	0.07	0.05%

Other investment costs for the health care trust equated to a total fee ratio of 0.05%.

Table 9 - Pension Year-over-Year Comparison by Asset Class and Management Type

Asset Class	Average Weight			Management Fees			Incentive Fees			Operating Expense			Total Fees (Mgt/Incent/Opex)			Fee Ratio (Mgt/Incent/Opex)			Contrib to Total Plan Fee Ratio			YoY Attribution			
	2017	2018	Change	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017	2018	Change	2017	2018	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex Ratio
Global Equity	29.5%	32.1%	2.7%	5.7	6.0	0.2	2.4	1.4	-1.0	0.3	0.3	0.0	8.4	7.7	-0.7	0.83%	0.65%	-0.18%	0.24%	0.21%	-0.03%	-0.02%	-0.02%	-0.04%	0.00%
Passive	12.4%	13.6%	1.2%	0.2	0.2	0.0	-	-	-	0.1	0.1	0.0	0.3	0.3	0.0	0.07%	0.06%	-0.01%	0.01%	0.01%	0.00%	-0.02%	0.00%	0.00%	0.00%
Active	14.3%	15.9%	1.6%	3.6	3.9	0.3	-	-	-	0.1	0.1	0.1	3.6	4.0	0.4	0.74%	0.69%	-0.05%	0.11%	0.11%	0.00%	-0.01%	-0.01%	0.00%	0.00%
Hedged	2.8%	2.6%	-0.1%	1.9	1.8	-0.1	2.4	1.4	-1.0	0.2	0.1	-0.0	4.4	3.3	-1.1	4.68%	3.46%	-1.22%	0.13%	0.09%	-0.04%	0.00%	0.00%	-0.03%	0.00%
Private Equity	7.9%	9.5%	1.6%	2.9	3.5	0.6	3.3	4.9	1.6	1.1	1.2	0.1	7.3	9.7	2.3	2.72%	2.77%	0.05%	0.21%	0.26%	0.05%	0.02%	-0.01%	0.02%	-0.01%
Passive	0.0%	4.3%	4.3%	0.0	0.0	-0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-0.0	0.04%	0.02%	-0.01%	0.00%	0.00%	0.00%	-0.06%	0.00%	0.00%	0.00%
Private	4.7%	5.2%	0.5%	2.9	3.5	0.6	3.3	4.9	1.6	1.1	1.2	0.1	7.3	9.6	2.3	4.51%	5.08%	0.57%	0.21%	0.26%	0.05%	0.01%	0.00%	0.03%	0.00%
Global Fixed Income	16.7%	24.8%	8.1%	4.0	4.0	-0.0	2.3	1.1	-1.2	0.5	0.5	-0.0	6.8	5.5	-1.3	1.19%	0.61%	-0.58%	0.20%	0.15%	-0.05%	-0.02%	-0.06%	-0.07%	-0.01%
Passive	2.6%	12.8%	10.1%	0.0	0.2	0.1	-	-	-	-	-	-	0.0	0.2	0.1	0.05%	0.04%	-0.01%	0.00%	0.01%	0.00%	-0.14%	0.00%	0.00%	0.00%
Active	7.4%	5.5%	-1.9%	1.3	1.0	-0.3	-	-	-	0.1	0.1	-0.0	1.4	1.1	-0.3	0.56%	0.55%	-0.01%	0.04%	0.03%	-0.01%	0.02%	0.00%	0.00%	0.00%
Hedged	6.6%	6.4%	-0.2%	2.6	2.8	0.1	2.3	1.1	-1.2	0.4	0.4	0.0	5.3	4.2	-1.1	2.35%	1.80%	-0.55%	0.16%	0.12%	-0.04%	0.00%	0.00%	-0.04%	0.00%
Private Debt	6.9%	7.8%	0.8%	2.5	2.2	-0.3	-0.1	1.0	1.1	0.7	1.4	0.7	3.1	4.6	1.5	1.31%	1.62%	0.31%	0.09%	0.13%	0.04%	0.00%	-0.02%	0.03%	0.02%
Passive	0.0%	2.2%	2.2%	-	0.1	0.1	-	-	-	-	-	-	-	0.1	0.1	0.00%	0.17%	0.17%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%
Private	6.9%	5.5%	-1.4%	2.5	2.1	-0.4	-0.1	1.0	1.1	0.7	1.4	0.7	3.1	4.5	1.4	1.31%	2.21%	0.90%	0.09%	0.12%	0.03%	0.00%	0.00%	0.03%	0.02%
Real Assets	16.1%	15.0%	-1.1%	6.6	5.9	-0.7	2.9	2.1	-0.8	1.2	1.3	0.1	10.7	9.4	-1.3	1.93%	1.71%	-0.22%	0.31%	0.26%	-0.06%	-0.01%	-0.02%	-0.02%	0.00%
Passive	2.0%	3.2%	1.3%	0.1	0.2	0.1	-	-	-	-	-	-	0.1	0.2	0.1	0.15%	0.13%	-0.02%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Active	6.5%	4.3%	-2.2%	1.2	0.6	-0.6	-	-	-	0.2	0.2	-0.1	1.4	0.8	-0.6	0.64%	0.49%	-0.15%	0.04%	0.02%	-0.02%	0.02%	-0.01%	0.00%	0.00%
Hedged	1.8%	1.1%	-0.6%	1.6	0.9	-0.7	0.4	0.3	-0.1	0.3	0.2	-0.1	2.3	1.4	-0.9	3.79%	3.26%	-0.53%	0.07%	0.04%	-0.03%	-0.02%	-0.01%	0.00%	0.00%
Private	5.9%	6.3%	0.5%	3.7	4.3	0.6	2.5	1.9	-0.7	0.6	1.0	0.3	6.8	7.1	0.2	3.40%	3.06%	-0.35%	0.20%	0.19%	-0.01%	0.01%	0.00%	-0.03%	0.01%
Absolute Return	7.9%	6.2%	-1.7%	4.2	3.3	-0.9	3.8	2.7	-1.1	0.8	0.8	-0.1	8.9	6.8	-2.1	3.30%	3.00%	-0.30%	0.26%	0.19%	-0.07%	-0.03%	-0.01%	-0.01%	0.00%
Hedged	7.9%	6.2%	-1.7%	4.2	3.3	-0.9	3.8	2.7	-1.1	0.8	0.8	-0.1	8.9	6.8	-2.1	3.30%	3.00%	-0.30%	0.26%	0.19%	-0.07%	-0.03%	-0.01%	-0.01%	0.00%
GTAA	9.3%	3.8%	-5.4%	2.7	1.0	-1.7	-	-	-	0.0	0.0	0.0	2.7	1.0	-1.7	0.84%	0.72%	-0.12%	0.08%	0.03%	-0.05%	0.03%	-0.01%	0.00%	0.00%
Active	9.3%	3.8%	-5.4%	2.7	1.0	-1.7	-	-	-	0.0	0.0	0.0	2.7	1.0	-1.7	0.84%	0.72%	-0.12%	0.08%	0.03%	-0.05%	0.03%	-0.01%	0.00%	0.00%
Cash	5.8%	0.8%	-5.0%	0.2	0.0	-0.2	-	-	-	-	-	-	0.2	0.0	-0.2	0.12%	0.12%	0.00%	0.01%	0.00%	-0.01%	0.06%	0.00%	0.00%	0.00%
Passive	5.8%	0.8%	-5.0%	0.2	0.0	-0.2	-	-	-	-	-	-	0.2	0.0	-0.2	0.12%	0.12%	0.00%	0.01%	0.00%	-0.01%	0.06%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	28.8	26.0	-2.9	14.6	13.2	-1.4	4.6	5.5	0.9	48.1	44.7	-3.4	1.40%	1.22%	-0.18%	1.40%	1.22%	-0.18%	0.05%	-0.14%	-0.10%	0.01%

Note: YoY attribution effects of fund types within assets classes may not sum to the asset class value

**Table 10 - Pension Year-over-Year Comparison by Management Type**

Type	Average Weight			Management Fees			Incentive Fees			Operating Expense			Total Fees (Mgt/Incent/Opex)			Fee Ratio (Mgt/Incent/Opex)			Contrib to Total Plan Fee Ratio			YoY Attribution			
	2017	2018	Change	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017	2018	Change	2017	2018	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Passive	26.0%	37.0%	11.0%	0.6	0.8	0.2	-	-	-	0.1	0.1	0.0	0.7	0.9	0.2	0.08%	0.06%	-0.02%	0.02%	0.02%	0.00%	-0.15%	0.00%	0.00%	0.00%
Active	37.5%	29.6%	-7.9%	8.7	6.5	-2.2	-	-	-	0.4	0.4	-0.0	9.1	6.9	-2.2	0.71%	0.64%	-0.07%	0.27%	0.19%	-0.08%	0.05%	-0.02%	0.00%	0.00%
Hedged	19.0%	16.4%	-2.6%	10.4	8.8	-1.6	8.9	5.4	-3.4	1.7	1.5	-0.2	20.9	15.7	-5.2	3.22%	2.62%	-0.60%	0.61%	0.43%	-0.18%	-0.05%	-0.02%	-0.07%	0.00%
Private	17.5%	17.0%	-0.5%	9.1	9.8	0.7	5.7	7.8	2.0	2.4	3.6	1.2	17.2	21.2	3.9	2.87%	3.40%	0.52%	0.50%	0.58%	0.07%	-0.01%	0.01%	0.05%	0.03%
<b>Total Plan</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>28.8</b>	<b>26.0</b>	<b>-2.9</b>	<b>14.6</b>	<b>13.2</b>	<b>-1.4</b>	<b>4.6</b>	<b>5.5</b>	<b>0.9</b>	<b>48.1</b>	<b>44.7</b>	<b>-3.4</b>	<b>1.40%</b>	<b>1.22%</b>	<b>-0.18%</b>	<b>1.40%</b>	<b>1.22%</b>	<b>-0.18%</b>	<b>-0.15%</b>	<b>-0.04%</b>	<b>-0.03%</b>	<b>0.03%</b>

**Table 11 - Pension Year-over-Year Comparison of Other Costs**

	Inv Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
2017	0.8	0.8	0.4	0.5	2.5	0.07%
2018	1.0	0.7	0.3	0.5	2.5	0.07%
Change	0.2	-0.0	-0.1	-0.0	0.1	0.00%

Table 12 - Health Care Year-over-Year Comparison by Asset Class and Management Type

Asset Class	Average Weight			Management Fees			Incentive Fees			Operating Expense			Total Fees (Mgt/Incent/Opex)			Fee Ratio (Mgt/Incent/Opex)			Contrib to Total Plan Fee Ratio			YoY Attribution			
	2017	2018	Change	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017	2018	Change	2017	2018	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex Fee Ratio
Global Equity	14.8%	51.1%	36.3%	0.03	0.02	-0.01	-	-	-	-	-	-	0.03	0.02	-0.01	0.09%	0.03%	-0.06%	0.03%	0.01%	-0.01%	-0.09%	-0.03%	0.00%	0.00%
Passive	14.8%	51.1%	36.3%	0.03	0.02	-0.01	-	-	-	-	-	-	0.03	0.02	-0.01	0.09%	0.03%	-0.06%	0.03%	0.01%	-0.01%	-0.09%	-0.03%	0.00%	0.00%
Global Fixed Income	10.9%	25.0%	14.1%	0.01	0.01	0.00	-	-	-	-	0.00	0.00	0.01	0.01	0.00	0.04%	0.03%	-0.01%	0.01%	0.01%	0.00%	-0.04%	0.00%	0.00%	0.00%
Passive	10.9%	25.0%	14.1%	0.01	0.01	0.00	-	-	-	-	0.00	0.00	0.01	0.01	0.00	0.04%	0.03%	-0.01%	0.01%	0.01%	0.00%	-0.04%	0.00%	0.00%	0.00%
Real Assets	7.0%	13.0%	6.1%	0.05	0.04	-0.01	-	-	-	0.01	0.01	-0.00	0.06	0.05	-0.01	0.38%	0.28%	-0.10%	0.05%	0.04%	-0.02%	0.00%	-0.01%	0.00%	0.00%
Passive	3.2%	7.7%	4.5%	0.01	0.01	0.00	-	-	-	-	-	-	0.01	0.01	0.00	0.12%	0.12%	0.00%	0.01%	0.01%	0.00%	-0.01%	0.00%	0.00%	0.00%
Active	3.8%	5.3%	1.5%	0.04	0.03	-0.01	-	-	-	0.01	0.01	-0.00	0.05	0.04	-0.01	0.60%	0.51%	-0.09%	0.05%	0.03%	-0.02%	0.00%	0.00%	0.00%	0.00%
GTAA	8.7%	7.5%	-1.1%	0.17	0.10	-0.06	-	-	-	0.00	0.01	0.01	0.17	0.11	-0.05	0.86%	1.09%	0.23%	0.15%	0.08%	-0.07%	-0.01%	0.01%	0.00%	0.01%
Active	8.7%	7.5%	-1.1%	0.17	0.10	-0.06	-	-	-	0.00	0.01	0.01	0.17	0.11	-0.05	0.86%	1.09%	0.23%	0.15%	0.08%	-0.07%	-0.01%	0.01%	0.00%	0.01%
Cash	7.8%	3.3%	-4.4%	0.02	0.01	-0.02	-	-	-	-	-	-	0.02	0.01	-0.02	0.12%	0.12%	0.00%	0.02%	0.00%	-0.02%	0.01%	0.00%	0.00%	0.00%
Passive	7.8%	3.3%	-4.4%	0.02	0.01	-0.02	-	-	-	-	-	-	0.02	0.01	-0.02	0.12%	0.12%	0.00%	0.02%	0.00%	-0.02%	0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.28	0.18	-0.09	-	-	-	0.02	0.02	0.01	0.29	0.20	-0.09	0.26%	0.15%	-0.11%	0.26%	0.15%	-0.11%	-0.13%	-0.03%	0.00%	0.00%

Note: YoY attribution effects of fund types within assets classes may not sum to the asset class value

Table 13 - Health Care Year-over-Year Comparison by Management Type

Type	Average Weight			Management Fees			Incentive Fees			Operating Expense			Total Fees (Mgt/Incent/Opex)			Fee Ratio (Mgt/Incent/Opex)			Contrib to Total Plan Fee Ratio			YoY Attribution			
	2017	2018	Change	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017 (\$ mm)	2018 (\$ mm)	Change (\$ mm)	2017	2018	Change	2017	2018	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Incent Fee Ratio
Passive	74.7%	87.2%	12.5%	0.07	0.05	-0.02	-	-	-	-	0.00	0.00	0.07	0.05	-0.02	0.08%	0.04%	-0.04%	0.06%	0.04%	-0.03%	-0.02%	-0.04%	0.00%	0.00%
Active	25.3%	12.8%	-12.5%	0.21	0.13	-0.07	-	-	-	0.02	0.02	0.01	0.22	0.15	-0.07	0.78%	0.85%	0.07%	0.20%	0.11%	-0.09%	-0.06%	0.00%	0.00%	0.01%
Total Plan	100.0%	100.0%	0.0%	0.28	0.18	-0.09	-	-	-	0.02	0.02	0.01	0.29	0.20	-0.09	0.26%	0.15%	-0.11%	0.26%	0.15%	-0.11%	-0.09%	-0.04%	0.00%	0.01%

Table 14 - Health Care Year-over-Year Comparison of Other Costs

	Inv Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
2017	0.05	0.04	0.10	0.03	0.23	0.10%
2018	0.08	0.05	0.05	0.03	0.22	0.08%
Change	0.03	0.01	-0.05	0.00	-0.01	-0.03%

## Analysis of Pension Year-over-Year Changes by Asset Class

As presented in Table 9, the pension total plan fee ratio decreased by -18 bps from 1.40% in 2017 to 1.22% in 2018.

The largest drivers of the decrease from an asset class perspective were Global Fixed Income (-16 bps), Global Equity (-7 bps), and Absolute Return (-5 bps), partially offset by Cash (+6 bps) and GTAA (+3 bps).

Asset class weight changes contributed +5 bps to the year-over-year change in total plan fee ratio. Cash was the largest contributor (+6bps) with Absolute Return being the largest detractor (-3bps).

Changes in management fee ratios detracted -14 bps to the year-over-year change in total plan fee ratio. This was spread relatively evenly across all asset classes with Global Fixed Income being the largest detractor (-6bps).

Changes in incentive fee ratios detracted -10 bps to the year-over-year change in total plan fee ratio. Global Fixed Income was the largest detractor (-7 bps) followed by Global Equity (-4 bps).

## Analysis of Pension Year-over-Year Changes by Management Type and Other Costs

As shown in the Table 10 YoY attribution section, the driver of the -18bps total plan fee ratio decrease was both passive strategies and hedged strategies (-15 bps each). The decrease from passive strategies is entirely attributed to the increase in weight from 26% to 37% while the decrease from hedged strategies is a combination of lower weight, reduced management fee and incentive fee ratios.

As displayed in Table 11, **Other Costs** remained constant (0.07%) in 2018.

## Analysis of Health Care Year-over-Year Changes by Asset Class, Management Type and Other Costs

As seen in Tables 12 and 13, the Health Care total plan fee ratio declined from 0.26% in 2017 to 0.15% due to a reduction in management fee ratio for passive funds (-4 bps) and reduction in active fund exposure (-6 bp).

As displayed in Table 14, **Other Costs** decreased from 0.08% to 0.05% in 2018.

Table 15 – California Government Code §7514.7 Disclosure, Private Equity

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2018 (\$)	2018 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2018 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2018 (\$)	Fees and expenses paid from the Fund to GP and related parties 2018 (\$)					Fees and expenses paid by all portfolio companies 2018(\$)	Carried Interest Paid 2018 (\$)
												Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Pantheon USA Fund VI, L.P.	600 Montgomery Street, 23rd Floor San Francisco, CA 94111	2005	40,000,000	38,600,000	13,361,980	1,160,000	14,521,980	79,924	7.10%	1.54	-	170,586	5,508	-	-	-	-	-
Portfolio Advisors Private Equity Fund III, L.P.	9 Old Kings Highway South Darien, CT 06820	2005	25,000,000	22,140,607	5,588,315	165,247	5,753,562	-	6.70%	1.52	-	15,623	-	-	256,054	-	-	-
HarbourVest Partners VII - 2005 Buyout Partnership Fund, L.P.	One Financial Center Boston, MA 02111	2005	15,000,000	14,027,840	-	-	-	-	6.50%	1.57	-	26,751	2,892	-	-	(8,880)	-	-
HarbourVest Partners VIII - Buyout Fund, L.P.	One Financial Center Boston, MA 02111	2006	15,000,000	14,325,000	6,052,191	1,054,332	7,106,523	-	10.40%	1.72	-	131,693	7,642	-	-	311,955	-	-
HarbourVest Partners VIII - Venture Fund, L.P.	One Financial Center Boston, MA 02111	2006	10,000,000	9,800,000	6,473,688	520,472	6,994,160	-	10.50%	1.85	-	141,315	5,876	-	-	63,914	-	-
Siguler Guff Distressed Opportunities Fund III, L.P.	825 Third Avenue, 10th Floor New York, NY 10022	2008	30,000,000	29,331,045	-	507,834	507,834	-	10.70%	1.60	4,000	86,919	8,978	-	-	625,994	-	666,518
TCW/Crescent Mezzanine Partners V, L.P.	11100 Santa Monica Boulevard, Suite 2000 Los Angeles, CA 90025	2008	20,000,000	13,230,694	2,287,718	-	2,287,718	-	8.60%	1.45	-	22,533	6,977	-	-	-	-	-
TPG Opportunities Partners II, L.P.	345 California St., Suite 3300 San Francisco, CA 94104	2012	15,000,000	12,250,794	3,964,271	2,021,899	5,986,170	-	16.60%	1.61	-	224,999	53,627	-	-	208,992	-	139,008
Crescent Mezzanine Partners VI, L.P.	11100 Santa Monica Boulevard, Suite 2000 Los Angeles, CA 90025	2013	20,000,000	19,091,740	8,432,804	2,105,619	10,538,423	152,505	8.50%	1.25	-	138,449	15,731	(23,999)	-	(81,372)	23,999	-
Warburg Pincus Private Equity XI, L.P.	450 Lexington Avenue New York, NY 10017	2013	20,000,000	20,770,000	18,366,243	948,780	19,315,023	780	13.50%	1.53	-	111,173	51,367	(3,848)	-	635,031	3,848	279,671
TPG Opportunities Partners III, L.P.	345 California St., Suite 3300 San Francisco, CA 94104	2013	15,000,000	8,216,997	8,190,432	466,982	8,657,414	-	10.70%	1.29	-	224,999	54,842	(4,906)	-	233,651	4,906	58,815
Industry Ventures Partnership Holdings III, L.P.	30 Hotaling Place, 3rd Floor, San Francisco, CA 94111	2013	15,000,000	12,015,611	15,041,193	-	15,041,193	-	20.30%	1.70	-	131,713	151,994	-	-	459,857	-	-
57 Stars Global Opportunity Fund 3, L.P.	616 H Street, N.W., Suite 450 Washington, D.C. 20001	2014	30,000,000	25,969,042	29,047,341	-	29,047,341	-	4.80%	1.15	-	216,713	320	-	-	(187,401)	-	-
CCMP Capital Investors III, L.P.	277 Park Avenue, 27th Floor New York, NY 10172	2014	20,000,000	17,278,434	17,478,435	73,019	17,551,454	73,019	8.00%	1.24	-	300,000	19,983	(4,555)	-	(674,056)	4,555	-
Francisco Partners IV, L.P.	One Letterman Drive, Bldg C - Suite 410 San Francisco, CA 94129	2015	15,000,000	12,292,500	15,628,162	-	15,628,162	-	26.30%	1.67	-	188,731	24,301	-	18,143	1,616,895	-	-
Dover Street IX, L.P.	One Financial Center Boston, MA 02111	2015	30,000,000	7,800,000	10,946,140	314,005	11,260,145	-	37.00%	1.25	-	326,367	40,616	-	-	617,061	-	-
SJPF Private Equity Strategic Partnership, L.P.	325 N. Saint Paul St., Ste. 4900 Dallas, TX 75201	2017	200,271,506	53,646,421	31,646,421	-	31,646,421	-	18.80%	1.10	-	1,129,512	509,420	-	-	430,425	-	-
Crestline Portfolio Financing	201 Main St, #1900 Fort Worth, TX 76102	2018	22,000,000	7,289,357	5,439,283	2,237,509	7,676,792	-	NM	1.05	-	39,819	3,564	-	-	-	-	-
Innovation Endeavors III	1845 El Camino Real Palo Alto, CA 94306	2018	4,200,000	638,402	554,782	35	554,817	-	NM	0.87	-	98,467	16,881	-	-	-	-	-

Source: Fund managers, Meketa Investment Group, Neuberger Berman



**Table 16 – California Government Code §7514.7 Disclosure, Private Debt**

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2018 (\$)	2018 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2018 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2018 (\$)	Fees and expenses paid from the Fund to GP and related parties 2018 (\$)					Fees and expenses paid by all portfolio companies 2018(\$)	Carried Interest Paid 2018 (\$)
												Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Medley Opportunity Fund II, L.P.	280 Park Avenue, 6th Floor East New York, NY 10017	2010	50,000,000	55,149,363	25,063,110	2,581,655	27,644,765	2,581,655	4.12%	1.19	-	356,910	351,461	(51,134)	-	2,760	-	-
GSO SJ Partners	345 Park Avenue New York, NY 10154	2010	50,000,000	44,151,480	8,481,265	4,645,589	13,126,854	3,965,089	7.58%	1.25	-	183,215	87,764	-	-	15,535	-	-
White Oak Direct Lending	3 Embarcadero Center, 5th Floor San Francisco, CA 94111	2010	50,000,000	85,220,954	10,847,687	7,570,661	18,418,348	-	2.03%	1.05	240,026	-	59,135	-	-	-	-	-
Marathon European Credit Opportunity Fund SPC	One Bryant Park, 38th Floor New York, NY 10036	2011	25,000,000	25,000,001	2,340,066	2,749,937	5,090,003	-	8.73%	1.24	-	-	35,635	-	-	216,409	-	564,246
Cross Ocean USD ESS Fund I, L.P.	11 Charles II St. London, SW1Y4QU	2013	90,000,000	75,956,859	8,864,913	20,670,397	29,535,310	-	7.10%	1.20	-	49,505	-	-	-	-	-	-
Park Square Capital Credit Opportunities II	2nd Floor, Stratton House, 5 Stratton St, London W1J8LA	2013	50,000,000	44,822,998	42,548,214	1,290,130	43,838,344	-	3.70%	1.11	-	664,597	171,863	-	-	224,115	-	-
Shoreline China Value III, L.P.	3 Jin Sui Road, Zhujiang New, Suite 1201A Guangzhou, 510623, China	2014	22,500,000	22,046,300	13,014,003	2,382,365	15,396,368	-	5.46%	1.15	-	142,590	18,918	-	-	(20,080)	-	-
Cross Ocean USD ESS Fund II, L.P.	11 Charles II St. London, SW1Y4QU	2016	75,000,000	52,500,000	56,900,567	1,954,395	58,854,962	-	9.55%	1.15	-	457,938	607,615	-	-	349,531	-	-
Arrowmark Co-Investment	100 Fillmore Street, Suite 325, Denver, CO 80206	2017	10,000,000	10,000,000	10,305,109	979,778	11,284,887	-	12.92%	1.13	-	-	-	-	-	195,473	-	195,473
Octagon CLO Opportunity Fund III, L.P.	250 Park Ave., 15th Floor, New York, NY 10177, USA	2018	25,000,000	-	-	-	-	-	N/A	N/A	-	-	-	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

Table 17 – California Government Code §7514.7 Disclosure, Private Real Assets

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2018 (\$)	2018 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2018 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2018 (\$)	Fees and expenses paid from the Fund to GP and related parties 2018 (\$)					Fees and expenses paid by all portfolio companies 2018(\$)	Carried Interest Paid 2018 (\$)
												Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Brookfield Strategic Real Estate Partners	250 Vesey Street, 15th Floor New York, NY 10281	2012	10,000,000	11,510,400	8,080,860	3,990,154	12,071,014	88,562	21.26%	1.91	-	86,156	14,000	-	-	480,231	-	-
Orion European Real Estate Fund IV, C.V.	6th Floor, 2 Cavendish Square London W1G0PU	2013	8,360,027	6,042,964	2,698,390	183,214	2,881,604	167,436	3.44%	1.09	-	65,267	-	-	-	28,682	-	19,360
Realty Associates Fund X, L.P., The	28th State Street Boston, MA 02109	2013	10,000,000	10,000,000	5,805,377	1,023,092	6,828,469	79,929	10.87%	1.45	-	124,323	6,627	-	-	104,729	-	-
Och-Ziff Real Estate Fund III	9 West 57th Street, 39th Floor New York, NY 10019	2013	20,000,000	10,894,489	7,824,383	4,625,646	12,450,029	258,151	25.33%	1.51	-	300,000	54,094	-	-	450,711	-	175,225
European Property Investors Special Opportunities 3, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2013	8,807,339	8,496,599	5,733,851	1,164,288	6,898,138	11,649	11.13%	1.33	-	82,930	118,358	-	-	-	-	-
Blackstone Real Estate Debt Strategies II	345 Park Avenue New York, NY 10154	2013	12,500,000	12,750,627	1,003,238	2,626,090	3,629,328	145,317	9.25%	1.16	-	28,730	-	-	-	816	-	58,447
KSL Capital Partners IV, L.P.	100 St. Paul St., Suite 800 Denver, CO 80206	2015	20,000,000	12,483,496	10,737,196	2,513,471	13,250,667	-	17.70%	1.20	-	350,000	26,973	(11,191)	-	603,377	-	-
European Property Investors Special Opportunities 4, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2015	19,822,116	14,144,357	15,349,479	27,754	15,377,232	-	10.67%	1.14	-	224,102	130,848	-	-	-	-	-
European Property Investors Special Opportunities 5, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2018	21,700,000	-	-	-	-	-	NA	NA	-	-	-	-	-	-	-	-
Brookfield Strategic Real Estate Partners II	250 Vesey Street, 15th Floor New York, NY 10281	2015	20,000,000	16,384,147	17,102,000	1,608,000	18,710,000	352,000	10.67%	1.19	-	290,277	16,721	(4,669)	-	49,414	94,909	-
Global Infrastructure Partners III, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2016	20,000,000	14,647,425	14,026,367	32,333	14,058,700	4,031	0.87%	1.01	-	350,000	30,908	(79,266)	-	-	-	-
DRA Growth and Income Fund IX, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2016	20,000,000	10,780,445	9,949,319	1,835,679	11,784,998	815,259	17.62%	1.17	-	208,418	44,472	-	-	-	-	-
Brookfield Infrastructure Fund III, L.P.	250 Vesey Street, 15th Floor New York, NY 10281	2016	20,000,000	12,313,860	12,191,219	1,113,512	13,304,732	-	14.88%	1.17	-	260,000	40,193	-	-	134,857	3,638	-
GEM Realty Fund VI, L.P.	900 North Michigan Avenue #1450, Chicago, IL 60611	2017	15,000,000	1,725,000	888,663	900,000	1,788,663	90,902	6.19%	1.04	-	194,063	19,595	-	-	-	2,308	-
Lime Rock Partners VIII, L.P.	1111 Bagby St, Suite 4600 Houston, TX 77002	2018	6,000,000	-	-	-	-	-	NM	NM	-	195,452	13,037	(3,971)	5,495	-	-	-
Torchlight Debt Opportunity Fund VI, L.P.	280 Park Avenue New York, NY 10017	2018	30,000,000	2,309,115	1,680,099	470,535	2,150,634	-	NM	0.93	-	450,122	105,911	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

Table 18 – California Government Code §7514.7 Disclosure, Hedge Funds

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2018 (\$)	2018 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2018 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2018 (\$)	Fees and expenses paid from the Fund to GP and related parties 2018 (\$)					Fees and expenses paid by all portfolio companies 2018(\$)	Carried Interest Paid 2018 (\$)
												Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Beach Point Total Ret Fund II	1620 26th St Suite 6000N Santa Monica, CA 90404	N/A	N/A	75,000,000	67,452,862	-	67,452,862	N/A	3.13%	1.18	-	924,909	157,449	-	-	-	-	-
Claren Road Credit Master Fund Ltd	51 Astor Place, 12th Floor New York, NY 10003	N/A	N/A	30,000,000	127,983	3,370,909	3,498,892	N/A	-5.49%	0.75	-	-	544	-	-	-	-	-
Davidson Kempner Institutional Partners, L.P.	520 Madison Avenue, 30th Floor New York, NY 10022	N/A	N/A	20,000,000	25,926,827	-	25,926,827	N/A	6.00%	1.41	-	400,569	17,348	-	-	138,023	-	138,023
DE Shaw Composite International Fund	1166 Avenue of the Americas, 9th Floor	N/A	N/A	27,000,000	40,932,537	1,000,496	41,933,033	N/A	10.40%	1.77	-	853,690	39,090	-	-	1,231,211	-	1,231,211
Dymon Asia Macro	1 Temasek Avenue #11-01 Millenia Tower,	N/A	N/A	25,000,000	25,971,676	-	25,971,676	N/A	0.64%	1.02	-	394,981	32,264	-	-	-	-	-
Hudson Bay Cap Structure Arbitrage Enhanced Fund	777 Third Ave, 30th Floor, New York, NY 10017	N/A	N/A	30,000,000	30,424,416	-	30,424,416	N/A	5.18%	1.07	-	332,631	184,924	-	-	903,204	-	903,204
Iguazu Partners LP Fund	2 Embarcadero Center # 1645 San Francisco, CA 94111	N/A	N/A	50,000,000	64,406,750	-	64,406,750	N/A	6.21%	1.34	-	692,625	94,406	-	-	783,266	-	783,266
Kepos Alpha Fund	620 8th Ave., 44th Floor, New York, NY 10018	N/A	N/A	19,000,000	10,490,673	4,874,131	15,364,804	N/A	-2.21%	0.88	-	143,663	26,187	-	-	-	-	-
Keynes Leveraged Quantitative Strategies Fund	9th Floor Orion House, 5 Upper St Martin's	N/A	N/A	20,000,000	9,398,457	10,000,000	19,398,457	N/A	-0.19%	0.99	-	81,458	31,829	-	-	-	-	-
Man AHL Evolution Frontier	100 St. Paul Street, Suite 800, Denver, CO 80206	N/A	N/A	13,000,000	15,303,172	-	15,303,172	N/A	5.63%	1.15	-	299,395	135,982	-	-	524,547	-	524,547
MW Eureka Fund Ltd	350 Park Avenue, 18th Floor New York, NY 10022	N/A	N/A	37,500,000	42,721,237	-	42,721,237	N/A	7.03%	1.38	-	900,981	26,927	-	-	628,459	-	852,889
Pharo Macro Fund, Ltd	1370 Avenue of the Americas, 26th Floor	N/A	N/A	30,000,000	31,231,571	4,388,017	35,619,588	N/A	9.36%	1.28	-	626,279	30,941	-	-	176,650	-	176,650
Pine River Fund Ltd	580 California Street, San Francisco, CA 94104	N/A	N/A	20,000,000	6,218,397	16,520,018	22,738,415	N/A	2.38%	1.15	-	26,084	35,243	-	-	-	-	-
Pine River Volatility Arbitrage Fund	580 California Street, San Francisco, CA 94104	N/A	N/A	25,000,000	24,646,000	-	24,646,000	N/A	-2.31%	0.96	-	121,386	9,868	-	-	-	-	-
Pinnacle Natural Resources Fund	712 Fifth Avenue, 29th Floor New York, NY 10019	N/A	N/A	65,000,000	61,414,015	-	61,414,015	N/A	1.86%	1.05	-	911,991	176,222	-	-	281,116	-	281,116
Sandler Plus Fund	711 5th Ave #15, New York, NY 10022	N/A	N/A	15,000,000	20,590,807	-	20,590,807	N/A	8.54%	1.59	-	426,351	73,143	-	-	447,646	-	447,646
Senator Global Opportunity Offshore Fund Ltd	510 Madison Ave # 28, New York, NY 10022	N/A	N/A	19,300,000	25,063,867	-	25,063,867	N/A	4.31%	1.27	-	468,276	32,546	-	-	-	-	309,427
Symphony Long Short Credit LP	555 California St #2975 San Francisco, CA 94104	N/A	N/A	75,000,000	70,730,966	-	70,730,966	N/A	4.73%	1.25	-	732,924	143,151	-	-	156,677	-	156,677
Systematica Alternative Markets Master Fund	650 Fifth Ave New York, NY 10019	N/A	N/A	2,000,000	2,185,499	-	2,185,499	N/A	2.45%	1.04	-	45,886	4,562	-	-	46,375	-	46,375
Systematica Trend Following Fund	650 Fifth Ave New York, NY 10019	N/A	N/A	20,000,000	20,910,515	-	20,910,515	N/A	2.45%	1.04	-	61,508	74,411	-	-	-	-	-
Tempo Volatility Fund	1 Greenwich Plaza, Greenwich, CT 06830	N/A	N/A	20,000,000	21,123,071	-	21,123,071	N/A	6.11%	1.14	-	330,721	165,121	-	-	372,076	-	372,076

Source: Fund managers, Albourne, State Street, ORS