



Police and Fire Annual Fee Report – 2019

Executive Summary

This report marks the fifth 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 2019, management and incentive fees for the pension plan totaled \$40.1 million with a fee ratio of 1.04% as compared to \$39.1 million and 1.07% for 2018 and \$43.4 million and 1.27% for 2017. Fund operating expenses were \$7.2 million in 2019 for a fee ratio of 0.19% as compared to \$5.5 million and 0.15% for 2018 and \$4.6 million and 0.14% for 2017. The health care trust management and incentive fees totaled \$0.1 million with a fee ratio of 0.09% as compared to \$0.2 million with a fee ratio of 0.13% in 2018 and \$0.3 million with a fee ratio of 0.25% in 2017. Fund operating expenses were \$0.1 million in 2019 for a fee ratio of 0.06% as compared to \$0.02 million and 0.02% for 2018 and \$0.02 million and 0.01% for 2017. 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 0.05% for 2018 and \$0.1 million and 0.08% for 2017.

Table 1 - Pension Average Asset Allocation for 2019

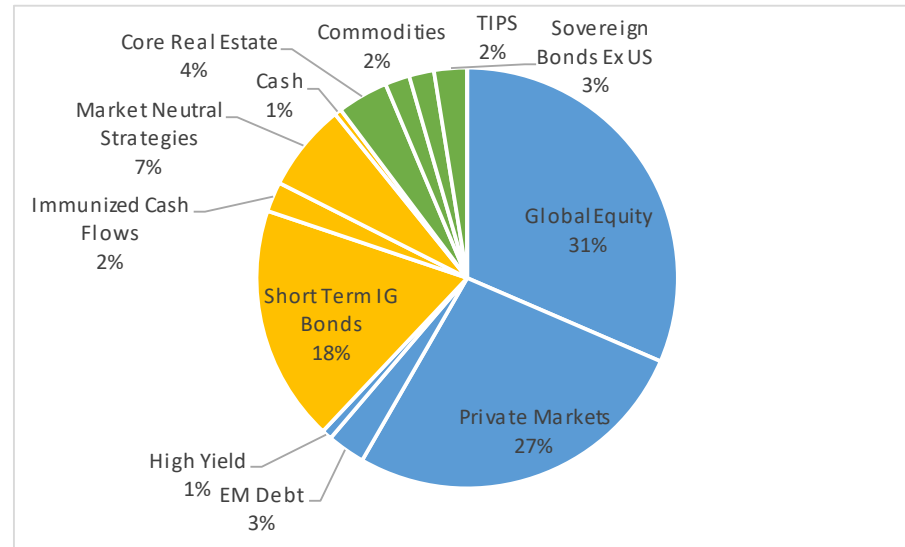
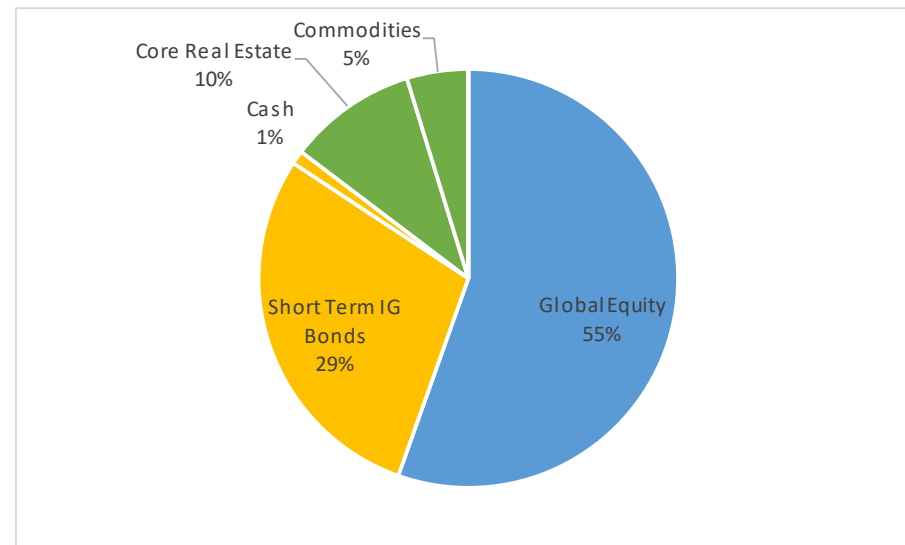


Table 2 - Health Care Trust Average Asset Allocation for 2019



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 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.

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 2018 Report

This year's report has now incorporated the new strategic asset allocation asset classifications.

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 15-19 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					Average Balance (\$ mm)	Average Weight	Fee Ratio -						
	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	and Incentive Fees (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)			Management Fees	Incentive Fees	Operating Expenses	Fee Ratio - Mgmt and Incent Fees	Mgmt, Incent, and Op Exp	% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio
Growth	17.2	12.5	5.4	29.7	35.1	2,391	62.0%	0.72%	0.52%	0.23%	1.24%	1.47%	74.1%	0.91%
Global Equity	5.6	0.5	2.0	6.0	8.1	1,214	31.5%	0.46%	0.04%	0.17%	0.50%	0.67%	17.1%	0.21%
Passive	0.3	-	0.1	0.3	0.3	488	12.7%	0.06%	0.00%	0.02%	0.06%	0.07%	0.7%	0.01%
Active	4.1	-	1.8	4.1	5.9	648	16.8%	0.63%	0.00%	0.28%	0.63%	0.91%	12.5%	0.15%
Hedged	1.2	0.5	0.1	1.7	1.8	78	2.0%	1.58%	0.60%	0.19%	2.18%	2.37%	3.9%	0.05%
Private Markets	10.3	9.1	3.2	19.3	22.6	1,034	26.8%	0.99%	0.88%	0.31%	1.87%	2.18%	47.7%	0.58%
Passive	0.1	-	0.0	0.1	0.1	242	6.3%	0.03%	0.00%	0.01%	0.03%	0.03%	0.2%	0.00%
Private Equity	4.9	6.4	1.2	11.2	12.4	480	12.4%	1.01%	1.32%	0.25%	2.34%	2.58%	26.2%	0.32%
Private Debt	1.8	0.9	1.3	2.7	4.0	182	4.7%	1.01%	0.50%	0.72%	1.51%	2.22%	8.6%	0.10%
Growth Real Estate	2.5	1.1	0.6	3.7	4.3	96	2.5%	2.65%	1.20%	0.62%	3.85%	4.47%	9.1%	0.11%
Private Real Assets	1.0	0.7	0.1	1.6	1.7	34	0.9%	2.83%	1.96%	0.27%	4.79%	5.06%	3.7%	0.05%
Emerging Markets Debt	1.0	2.5	0.1	3.5	3.5	113	2.9%	0.88%	2.19%	0.08%	3.07%	3.15%	7.5%	0.09%
Active	0.2	-	0.0	0.2	0.3	40	1.0%	0.55%	0.00%	0.08%	0.55%	0.63%	0.5%	0.01%
Hedged	0.8	2.5	0.1	3.2	3.3	73	1.9%	1.06%	3.38%	0.08%	4.44%	4.52%	7.0%	0.09%
High Yield	0.3	0.5	0.1	0.8	0.9	30	0.8%	1.14%	1.60%	0.21%	2.75%	2.96%	1.9%	0.02%
Hedged	0.3	0.5	0.1	0.8	0.9	30	0.8%	1.14%	1.60%	0.21%	2.75%	2.96%	1.9%	0.02%
Low Beta	4.2	4.8	0.8	9.0	9.8	1,069	27.7%	0.39%	0.45%	0.07%	0.84%	0.91%	20.6%	0.25%
Short-Term IG Bonds	0.1	-	0.0	0.1	0.2	700	18.2%	0.02%	0.00%	0.00%	0.02%	0.02%	0.3%	0.00%
Passive	0.1	-	0.0	0.1	0.2	700	18.2%	0.02%	0.00%	0.00%	0.02%	0.02%	0.3%	0.00%
Immunized Cash Flows	0.0	-	-	0.0	0.0	89	2.3%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	89	2.3%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Market Neutral Strategies	4.0	4.8	0.8	8.7	9.5	260	6.7%	1.52%	1.84%	0.30%	3.36%	3.66%	20.1%	0.25%
Hedged	4.0	4.8	0.8	8.7	9.5	260	6.7%	1.52%	1.84%	0.30%	3.36%	3.66%	20.1%	0.25%
Cash	0.0	-	-	0.0	0.0	21	0.5%	0.12%	0.00%	0.00%	0.12%	0.12%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	21	0.5%	0.12%	0.00%	0.00%	0.12%	0.12%	0.1%	0.00%
Other	1.5	-	1.0	1.5	2.5	395	10.3%	0.38%	0.00%	0.24%	0.38%	0.63%	5.2%	0.06%
Core Real Estate	1.1	-	0.9	1.1	2.0	151	3.9%	0.74%	0.00%	0.58%	0.74%	1.32%	4.2%	0.05%
Passive	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Active	1.1	-	0.9	1.1	2.0	151	3.9%	0.74%	0.00%	0.58%	0.74%	1.32%	4.2%	0.05%
Commodities	0.3	-	0.1	0.3	0.4	73	1.9%	0.40%	0.00%	0.13%	0.40%	0.53%	0.8%	0.01%
Active	0.3	-	0.1	0.3	0.4	73	1.9%	0.40%	0.00%	0.13%	0.40%	0.53%	0.8%	0.01%
Hedged	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
TIPS	0.0	-	-	0.0	0.0	74	1.9%	0.06%	0.00%	0.00%	0.06%	0.06%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	74	1.9%	0.06%	0.00%	0.00%	0.06%	0.06%	0.1%	0.00%
Sovereign Bonds Ex US	0.1	-	-	0.1	0.1	98	2.5%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.1	-	-	0.1	0.1	98	2.5%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Core Fixed Income	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Passive	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Active	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
GTAA	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Active	-	-	-	-	-	-	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Total Plan	22.9	17.3	7.2	40.1	47.3	3,856	100.0%	0.59%	0.45%	0.19%	1.04%	1.23%	100.0%	1.23%

The table above illustrates that management, incentive, and operating expenses for the pension plan totaled \$47.3 million for 2019 which equated to a total plan fee ratio of 1.23%. The Private Markets and Market Neutral asset classes contributed the most to the total plan fee ratio contributing 0.58% and 0.25% respectively.

Table 4 - Pension Fees by Management Type

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	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 - Mgmt, Incent, and Op Exp	% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio
			Operating Expenses (\$ mm)	and Incentive Fees (\$ mm)										
Passive	0.6	-	0.1	0.6	0.8	1,711	44.4%	0.04%	0.00%	0.01%	0.04%	0.04%	1.6%	0.02%
Active	5.7	-	2.8	5.7	8.5	912	23.6%	0.63%	0.00%	0.31%	0.63%	0.94%	18.0%	0.22%
Hedged	6.3	8.2	1.0	14.5	15.5	441	11.4%	1.43%	1.86%	0.24%	3.29%	3.53%	32.9%	0.40%
Private	10.2	9.1	3.2	19.3	22.5	792	20.5%	1.29%	1.15%	0.40%	2.43%	2.84%	47.5%	0.58%
Total Plan	22.9	17.3	7.2	40.1	47.3	3,856	100.0%	0.59%	0.45%	0.19%	1.04%	1.23%	100.0%	1.23%

For the total pension plan, private management strategies accounted for 0.58% of the total plan fee ratio and represented about 21% of average plan assets. Hedged management strategies were the next largest contributor to the total plan fee ratio accounting for 0.40% of the total plan fee ratio and represented 11% of average plan assets. Passive and active management strategies accounted for 0.02% and 0.22% of the total plan fee ratio and represented 44% and 24% of plan assets, respectively.

Table 5 - Pension Other Investment Costs

Investment Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other		Other Costs Fee Ratio
			Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	
1.0	0.7	0.3	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 Fees (\$ mm)	Incentive Fees (\$ mm)	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 - Mgmt, Incent, and Op Exp	% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio
			Operating Expenses (\$ mm)	and Incentive Fees (\$ mm)										
Growth	0.0	-	0.0	0.0	0.1	83	55.4%	0.04%	0.00%	0.02%	0.04%	0.07%	24.2%	0.04%
Global Equity	0.0	-	0.0	0.0	0.1	83	55.4%	0.04%	0.00%	0.02%	0.04%	0.07%	24.2%	0.04%
Passive	0.0	-	0.0	0.0	0.1	83	55.4%	0.04%	0.00%	0.02%	0.04%	0.07%	24.2%	0.04%
Low Beta	0.0	-	-	0.0	0.0	45	29.9%	0.02%	0.00%	0.00%	0.02%	0.02%	4.8%	0.01%
Short Term IG Bonds	0.0	-	-	0.0	0.0	43	28.9%	0.02%	0.00%	0.00%	0.02%	0.02%	3.9%	0.01%
Passive	0.0	-	-	0.0	0.0	43	28.9%	0.02%	0.00%	0.00%	0.02%	0.02%	3.9%	0.01%
Cash	0.0	-	-	0.0	0.0	2	1.1%	0.12%	0.00%	0.00%	0.12%	0.12%	0.8%	0.00%
Passive	0.0	-	-	0.0	0.0	2	1.1%	0.12%	0.00%	0.00%	0.12%	0.12%	0.8%	0.00%
Other	0.1	-	0.1	0.1	0.2	22	14.7%	0.42%	0.00%	0.30%	0.42%	0.72%	71.1%	0.11%
Core Real Estate	0.1	-	0.1	0.1	0.1	15	9.9%	0.43%	0.00%	0.39%	0.43%	0.82%	54.2%	0.08%
Passive	0.0	-	-	0.0	0.0	7	4.8%	0.12%	0.00%	0.00%	0.12%	0.12%	3.9%	0.01%
Active	0.1	-	0.1	0.1	0.1	8	5.1%	0.72%	0.00%	0.75%	0.72%	1.47%	50.3%	0.08%
Commodities	0.0	-	0.0	0.0	0.0	7	4.7%	0.40%	0.00%	0.13%	0.40%	0.53%	16.9%	0.03%
Active	0.0	-	0.0	0.0	0.0	7	4.7%	0.40%	0.00%	0.13%	0.40%	0.53%	16.9%	0.03%
Total Plan	0.1	-	0.1	0.1	0.2	150	100.0%	0.09%	0.00%	0.06%	0.09%	0.15%	100.0%	0.15%

The table above illustrates that management, incentive, and operating expenses for the health care trust totaled \$0.2 million for 2019 which equated to a total plan fee ratio of 0.15%. Core Real Estate contributed the most to the total plan fee ratio adding 0.08%.

Table 7 - Health Care Fees by Management Type

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	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 - Mgmt, Incent, and Op Exp	% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio
			Operating Expenses (\$ mm)	and Incentive Fees (\$ mm)										
Passive	0.1	-	0.0	0.1	0.1	135	90.2%	0.04%	0.00%	0.01%	0.04%	0.05%	32.8%	0.05%
Active	0.1	-	0.1	0.1	0.2	15	9.8%	0.57%	0.00%	0.45%	0.57%	1.02%	67.2%	0.10%
Total Plan	0.1	-	0.1	0.1	0.2	150	100.0%	0.09%	0.00%	0.06%	0.09%	0.15%	100.0%	0.15%

For the total health care trust, active management strategies accounted for 0.10% of the total plan fee ratio and represented 10% of average plan assets. Passive strategies accounted for 0.05% of the total plan fee ratio and represented 90% of plan assets.

Table 8 - Health Care Other Investment Costs

Investment Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
0.0	0.0	0.0	0.0	0.1	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			
	2018	2019	Change	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018	2019	Change	2018	2019	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Growth	63.6%	62.0%	-1.6%	19.0	17.2	-1.8	10.5	12.5	2.0	4.2	5.4	1.2	33.7	35.1	1.3	1.45%	1.47%	0.0%	0.92%	0.91%	-0.01%	0.00%	-0.06%	0.04%	0.03%
Global Equity	32.1%	31.5%	-0.7%	6.0	5.6	-0.4	1.4	0.5	-0.9	0.3	2.0	1.7	7.7	8.1	0.4	0.65%	0.67%	0.01%	0.21%	0.21%	0.00%	0.00%	-0.01%	-0.02%	0.04%
Passive	13.6%	12.7%	-1.0%	0.2	0.3	0.0	-	-	-	0.1	0.1	0.0	0.3	0.3	0.0	0.06%	0.07%	0.01%	0.01%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%
Active	15.9%	16.8%	0.9%	3.9	4.1	0.2	-	-	-	0.1	1.8	1.7	4.0	5.9	1.9	0.69%	0.91%	0.22%	0.11%	0.15%	0.04%	0.00%	-0.01%	0.00%	0.04%
Hedged	2.6%	2.0%	-0.6%	1.8	1.2	-0.6	1.4	0.5	-0.9	0.1	0.1	0.0	3.3	1.8	-1.5	3.46%	2.37%	-1.10%	0.09%	0.05%	-0.04%	-0.01%	-0.01%	-0.02%	0.00%
Private Markets	22.7%	26.8%	4.1%	9.9	10.3	0.4	8.0	9.1	1.0	3.4	3.2	-0.2	21.3	22.6	1.3	2.56%	2.18%	-0.38%	0.58%	0.58%	0.00%	0.06%	-0.05%	-0.02%	-0.03%
Passive	4.3%	6.3%	1.9%	0.0	0.1	0.0	-	-	-	0.0	0.0	0.0	0.0	0.1	0.0	0.02%	0.03%	0.01%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Private Equity	5.2%	12.4%	7.3%	3.5	4.9	1.4	4.9	6.4	1.4	1.2	1.2	-0.0	9.6	12.4	2.8	5.08%	2.58%	-2.49%	0.26%	0.32%	0.06%	0.28%	-0.10%	-0.16%	-0.05%
Private Debt	7.8%	4.7%	-3.0%	2.2	1.8	-0.4	1.0	0.9	-0.1	1.4	1.3	-0.1	4.6	4.0	-0.6	1.62%	2.22%	0.60%	0.13%	0.10%	-0.02%	-0.01%	0.01%	0.01%	0.01%
Growth Real Estate	2.2%	2.5%	0.2%	2.4	2.5	0.1	1.7	1.1	-0.6	0.5	0.6	0.1	4.7	4.3	-0.4	5.71%	4.47%	-1.24%	0.13%	0.11%	-0.02%	0.01%	-0.01%	-0.02%	0.00%
Private Real Assets	3.2%	0.9%	-2.3%	1.7	1.0	-0.7	0.4	0.7	0.3	0.3	0.1	-0.2	2.4	1.7	-0.6	2.01%	5.06%	3.05%	0.06%	0.05%	-0.02%	-0.02%	0.01%	0.01%	0.00%
Emerging Markets Debt	4.2%	2.9%	-1.3%	1.2	1.0	-0.2	0.8	2.5	1.7	0.2	0.1	-0.1	2.1	3.5	1.4	1.37%	3.15%	1.78%	0.06%	0.09%	0.03%	0.00%	0.00%	0.05%	0.00%
Active	2.3%	1.0%	-1.3%	0.5	0.2	-0.2	-	-	-	0.1	0.0	-0.0	0.5	0.3	-0.3	0.61%	0.63%	0.02%	0.01%	0.01%	-0.01%	0.01%	0.00%	0.00%	0.00%
Hedged	1.8%	1.9%	0.0%	0.7	0.8	0.1	0.8	2.5	1.7	0.1	0.1	-0.0	1.6	3.3	1.7	2.33%	4.52%	2.19%	0.04%	0.09%	0.04%	0.00%	0.00%	0.04%	0.00%
High Yield	4.6%	0.8%	-3.8%	2.1	0.3	-1.7	0.3	0.5	0.2	0.3	0.1	-0.3	2.7	0.9	-1.8	1.59%	2.96%	1.37%	0.07%	0.02%	-0.05%	-0.01%	0.00%	0.01%	0.00%
Hedged	4.6%	0.8%	-3.8%	2.1	0.3	-1.7	0.3	0.5	0.2	0.3	0.1	-0.3	2.7	0.9	-1.8	1.59%	2.96%	1.37%	0.07%	0.02%	-0.05%	-0.01%	0.00%	0.01%	0.00%
Low Beta	11.7%	27.7%	16.1%	3.4	4.2	0.8	2.7	4.8	2.1	0.8	0.8	0.0	6.9	9.8	2.9	1.61%	0.91%	-0.70%	0.19%	0.25%	0.07%	0.06%	-0.11%	-0.05%	-0.03%
Short-Term IG Bonds	4.7%	18.2%	13.5%	0.0	0.1	0.1	-	-	-	-	0.0	0.0	0.0	0.2	0.1	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	-0.16%	0.00%	0.00%	0.00%
Passive	4.7%	18.2%	13.5%	0.0	0.1	0.1	-	-	-	-	0.0	0.0	0.0	0.2	0.1	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	-0.16%	0.00%	0.00%	0.00%
Immunized Cash Flows	0.0%	2.3%	2.3%	-	0.0	0.0	-	-	-	-	-	-	-	0.0	0.0	0.00%	0.05%	0.05%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%
Passive	0.0%	2.3%	2.3%	-	0.0	0.0	-	-	-	-	-	-	-	0.0	0.0	0.03%	0.05%	0.02%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%
Absolute Return	6.2%	6.7%	0.6%	3.3	4.0	0.6	2.7	4.8	2.1	0.8	0.8	0.0	6.8	9.5	2.7	3.00%	3.66%	0.66%	0.19%	0.25%	0.06%	0.01%	0.00%	0.04%	0.00%
Hedged	6.2%	6.7%	0.6%	3.3	4.0	0.6	2.7	4.8	2.1	0.8	0.8	0.0	6.8	9.5	2.7	3.00%	3.66%	0.66%	0.19%	0.25%	0.06%	0.01%	0.00%	0.04%	0.00%
Cash	0.8%	0.5%	-0.3%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.12%	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	0.8%	0.5%	-0.3%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.12%	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	24.7%	10.3%	-14.5%	3.5	1.5	-2.0	-	-	-	0.6	1.0	0.4	4.1	2.5	-1.6	0.45%	0.63%	0.18%	0.11%	0.06%	-0.05%	0.11%	0.00%	0.00%	0.02%
Core Real Estate	5.3%	3.9%	-1.3%	1.2	1.1	-0.1	-	-	-	0.3	0.9	0.5	1.6	2.0	0.4	0.82%	1.32%	0.50%	0.04%	0.05%	0.01%	0.01%	0.00%	0.00%	0.02%
Passive	1.7%	0.0%	-1.7%	0.1	-	-0.1	-	-	-	-	-	-	0.1	-	-0.1	0.17%	0.00%	-0.17%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%
Active	3.5%	3.9%	0.4%	1.1	1.1	-0.0	-	-	-	0.3	0.9	0.5	1.5	2.0	0.5	1.13%	1.32%	0.19%	0.04%	0.05%	0.01%	0.00%	-0.01%	0.00%	0.01%
Commodities	5.4%	1.9%	-3.6%	1.5	0.3	-1.2	0.3	-	-0.3	0.3	0.1	-0.2	2.1	0.4	-1.8	1.08%	0.53%	-0.54%	0.06%	0.01%	-0.05%	0.01%	-0.01%	0.00%	0.00%
Active	4.3%	1.9%	-2.4%	0.6	0.3	-0.3	-	-	-	0.2	0.1	-0.1	0.8	0.4	-0.4	0.49%	0.53%	0.04%	0.02%	0.01%	-0.01%	0.02%	0.00%	0.00%	0.00%
Hedged	1.1%	0.0%	-1.1%	0.9	-	-0.9	0.3	-	-0.3	0.2	-	-0.2	1.4	-	-1.4	3.26%	0.00%	-3.26%	0.04%	0.00%	-0.04%	-0.02%	0.00%	0.00%	0.00%
TIPS	0.5%	1.9%	1.4%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.10%	0.06%	-0.04%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Passive	0.5%	1.9%	1.4%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.10%	0.06%	-0.04%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Sovereign Bonds Ex US	0.0%	2.5%	2.5%	-	0.1	0.1	-	-	-	-	-	-	-	0.1	0.1	0.00%	0.05%	0.05%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%
Passive	0.0%	2.5%	2.5%	-	0.1	0.1	-	-	-	-	-	-	-	0.1	0.1	0.00%	0.05%	0.05%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%
Core Fixed Income	10.8%	0.0%	-10.8%	0.7	-	-0.7	-	-	-	0.0	-	-0.0	0.7	-	-0.7	0.18%	0.00%	-0.18%	0.02%	0.00%	-0.02%	0.11%	0.00%	0.00%	0.00%
Passive	7.6%	0.0%	-7.6%	0.1	-	-0.1	-	-	-	-	-	-	0.1	-	-0.1	0.05%	0.00%	-0.05%	0.00%	0.00%	0.00%	0.09%	0.00%	0.00%	0.00%
Active	3.2%	0.0%	-3.2%	0.6	-	-0.6	-	-	-	0.0	-	-0.0	0.6	-	-0.6	0.50%	0.00%	-0.50%	0.02%	0.00%	-0.02%	0.02%	0.00%	0.00%	0.00%
GTAA	3.8%	0.0%	-3.8%	1.0	-	-1.0	-	-	-	0.0	-	-0.0	1.0	-	-1.0	0.72%	0.00%	-0.72%	0.03%	0.00%	-0.03%	0.02%	0.00%	0.00%	0.00%
Active	3.8%	0.0%	-3.8%	1.0	-	-1.0	-	-	-	0.0	-	-0.0	1.0	-	-1.0	0.72%	0.00%	-0.72%	0.03%	0.00%	-0.03%	0.02%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	26.0	22.9	-3.1	13.2	17.3	4.1	5.5	7.2	1.6	44.7	47.3	2.6	1.22%	1.23%	0.01%	1.22%	1.23%	0.01%	0.17%	-0.18%	-0.01%	0.02%

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

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

Type	Average Weight			Management Fees			Incentive Fees			Operating Expense			Mgmt and Incent Fees			Fee Ratio (Mgmt and Incent)			Contrib to Total Plan Fee Ratio			YoY Attribution			
	2018	2019	Change	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018	2019	Change	2018	2019	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Passive	33.3%	44.4%	11.1%	0.6	0.6	0.0	-	-	-	0.1	0.1	0.0	0.7	0.8	0.1	0.06%	0.04%	-0.01%	0.02%	0.02%	0.00%	-0.34%	-0.01%	0.00%	0.00%
Active	33.1%	23.6%	-9.5%	7.6	5.7	-1.9	-	-	-	0.7	2.8	2.1	8.4	8.5	0.1	0.69%	0.94%	0.24%	0.23%	0.22%	-0.01%	0.23%	0.00%	0.00%	0.06%
Hedged	16.4%	11.4%	-5.0%	8.8	6.3	-2.5	5.4	8.2	2.8	1.5	1.0	-0.4	15.7	15.5	-0.2	2.62%	3.53%	0.90%	0.43%	0.40%	-0.03%	0.03%	0.00%	0.11%	0.00%
Private	17.2%	20.5%	3.3%	8.9	10.2	1.3	7.8	9.1	1.3	3.2	3.2	-0.0	19.9	22.5	2.6	3.16%	2.84%	-0.32%	0.54%	0.58%	0.04%	0.00%	-0.03%	-0.02%	-0.02%
Total Plan	100.0%	100.0%	0.0%	26.0	22.9	-3.1	13.2	17.3	4.1	5.5	7.2	1.6	44.7	47.3	2.6	1.22%	1.23%	0.01%	1.22%	1.23%	0.01%	-0.08%	-0.04%	0.09%	0.03%

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
2018	1.0	0.7	0.3	0.5	2.5	0.07%
2019	1.0	0.7	0.3	0.5	2.5	0.07%
Change	-0.0	0.0	-0.0	0.0	-0.0	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						
	2018	2019	Change	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018	2019	Change	2018	2019	Change	2018	2019	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Growth	51.1%	55.4%	4.3%	0.0	0.0	0.0	-	-	-	-	0.0	0.0	0.02	0.05	0.03	0.03%	0.07%	0.04%	0.01%	0.04%	0.02%	-0.01%	0.01%	0.00%	0.01%	0.01%	0.00%	0.01%
Global Equity	51.1%	55.4%	4.3%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.1	0.0	0.03%	0.07%	0.04%	0.01%	0.04%	0.02%	-0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
Passive	51.1%	55.4%	4.3%	0.0	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.1	0.0	0.03%	0.07%	0.04%	0.01%	0.04%	0.02%	-0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
Low Beta	10.8%	29.9%	19.1%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.05%	0.02%	-0.03%	0.01%	0.01%	0.00%	-0.06%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Short Term IG Bonds	7.4%	28.9%	21.4%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.02%	0.02%	0.00%	0.00%	0.01%	0.00%	-0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	7.4%	28.9%	21.4%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.02%	0.02%	0.00%	0.00%	0.01%	0.00%	-0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cash	3.3%	1.1%	-2.3%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.12%	0.12%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	3.3%	1.1%	-2.3%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.12%	0.12%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	38.1%	14.7%	-23.5%	0.2	0.1	-0.1	-	-	-	-	-	-	0.2	0.2	-0.0	0.33%	0.72%	0.40%	0.13%	0.11%	-0.02%	0.00%	0.02%	0.00%	0.00%	0.04%	0.00%	0.04%
Core Real Estate	7.0%	9.9%	2.9%	0.0	0.1	0.1	-	-	-	-	0.1	0.1	0.0	0.1	0.1	0.12%	0.82%	0.70%	0.01%	0.08%	0.07%	-0.01%	0.03%	0.00%	0.00%	0.04%	0.00%	0.04%
Passive	7.0%	4.8%	-2.2%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.12%	0.12%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	0.0%	5.1%	5.1%	-	0.1	0.1	-	-	-	-	0.1	0.1	-	0.1	0.1	0.00%	1.47%	1.47%	0.00%	0.08%	0.08%	-0.02%	0.04%	0.00%	0.00%	0.04%	0.00%	0.04%
Commodities	5.3%	4.7%	-0.6%	0.0	0.0	-0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.51%	0.53%	0.03%	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	5.3%	4.7%	-0.6%	0.0	0.0	-0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.51%	0.53%	0.03%	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.2	0.1	-0.0	-	-	-	0.0	0.1	0.1	0.2	0.2	0.0	0.15%	0.15%	0.00%	0.15%	0.15%	0.00%	-0.07%	0.02%	0.00%	0.00%	0.05%	0.00%	0.05%

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

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					
	2018	2019	Change	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2019 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018 (\$ mm)	2019 (\$ mm)	Change (\$ mm)	2018	2019	Change	2018	2019	Change	2018	2019	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio
Passive	87.2%	90.2%	3.0%	0.0	0.1	0.0	-	-	-	0.0	0.0	0.0	0.1	0.1	0.0	0.04%	0.05%	0.01%	0.04%	0.05%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%
Active	12.8%	9.8%	-3.0%	0.1	0.1	-0.0	-	-	-	0.0	0.1	0.0	0.2	0.2	-0.0	0.85%	1.02%	0.17%	0.11%	0.10%	-0.01%	-0.02%	-0.02%	0.00%	0.00%	0.03%	
Total Plan	100.0%	100.0%	0.0%	0.2	0.1	-0.0	-	-	-	0.0	0.1	0.1	0.2	0.2	0.0	0.15%	0.15%	0.00%	0.15%	0.15%	0.00%	-0.02%	-0.02%	0.00%	0.00%	0.04%	

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
2018	0.0	0.0	0.0	0.0	0.1	0.05%
2019	0.0	0.0	0.0	0.0	0.1	0.05%
Change	-0.0	0.0	0.0	0.0	0.0	0.00%

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

As presented in Table 9, the pension total plan fee ratio ticked slightly higher to 1.23% in 2019 from 1.22% in 2018.

The largest detractors from an asset class perspective were Short Term IG (-16 bps), Private Markets (-5 bps), and Sovereign Bonds ex US (-3 bps), partially offset by Core Fixed Income (+11 bps) and EM Debt (+5 bps).

Benefits from changes in the management fee ratio (-18bps) were largely offset by changes in weighting amongst the asset classes (+17 bps).

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

As shown in the Table 10 YoY attribution section, the benefits from changes in weightings to passive strategies (-8 bps) and better management fee ratios (-4 bps) were offset by changes due to incentive fees (+9 bps).

As displayed in Table 11, Other Costs remained constant (0.07%) compared to 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 was remained unchanged at 15 bps. Benefits from changes in weight (-2 bps) and management fee (-2 bps) were offset by higher operating expenses (+4 bps)

As displayed in Table 14, Other Costs also remained constant at 5 bps.

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 2019 (\$)	2019 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2019 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2019 (\$)	Fees and expenses paid from the Fund to GP and related parties 2019 (\$)					Fees and expenses paid by all portfolio companies 2019(\$)	Carried Interest Paid 2019 (\$)
												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	36,960,000	7,246,692	-	7,246,692	-	6.80%	1.52	-	153,527	8,525	-	-	-	-	-
Portfolio Advisors Private Equity Fund III, L.P.	9 Old Kings Highway South Darien, CT 06820	2005	25,000,000	22,000,000	3,465,023	1,138,201	4,603,224	-	6.60%	1.52	-	12,969	-	-	-	-	-	-
HarbourVest Partners VII - 2005 Buyout Partnership Fund, L.P.	One Financial Center Boston, MA 02111	2005	15,000,000	14,025,000	266,769	-	266,769	-	6.40%	1.57	-	-	3,420	-	-	-	-	-
HarbourVest Partners VIII - Buyout Fund, L.P.	One Financial Center Boston, MA 02111	2006	15,000,000	14,325,000	3,705,697	-	3,705,697	-	10.40%	1.75	-	95,952	1,958	-	-	6,396	-	19,598
HarbourVest Partners VIII - Venture Fund, L.P.	One Financial Center Boston, MA 02111	2006	10,000,000	9,800,000	5,015,646	-	5,015,646	-	10.70%	1.93	-	63,972	2,204	-	-	(5,298)	-	38,763
Siguler Guff Distressed Opportunities Fund III, L.P.	825 Third Avenue, 10th Floor New York, NY 10022	2008	30,000,000	29,100,000	4,876,146	-	4,876,146	-	10.70%	1.61	-	69,501	8,975	-	-	21,812	-	45,957
TCW/Crescent Mezzanine Partners V, L.P.	11100 Santa Monica Boulevard, Suite 2000 Los Angeles, CA 90025	2008	20,000,000	20,220,097	517,680	903,891	1,421,571	-	8.80%	1.46	-	12,164	2,467	-	-	-	-	-
TPG Opportunities Partners II, L.P.	345 California St., Suite 3300 San Francisco, CA 94104	2012	15,000,000	10,634,869	1,577,882	844,721	2,422,603	-	16.20%	1.61	-	18,853	23,895	-	-	(9,391)	-	-
Crescent Mezzanine Partners VI, L.P.	11100 Santa Monica Boulevard, Suite 2000 Los Angeles, CA 90025	2013	20,000,000	21,554,904	7,131,812	2,700,269	9,832,081	-	8.80%	1.46	-	100,035	13,322	2,981	-	783,881	2,981	-
Warburg Pincus Private Equity XI, L.P.	450 Lexington Avenue New York, NY 10017	2013	20,000,000	21,350,000	12,574,984	7,922,523	20,497,507	-	12.70%	1.60	-	98,768	38,041	10,646	-	350,962	10,646	1,072,819
TPG Opportunities Partners III, L.P.	345 California St., Suite 3300 San Francisco, CA 94104	2013	15,000,000	17,036,906	7,677,618	2,375,334	10,052,952	-	10.80%	1.39	-	88,471	33,031	-	-	233,111	-	112,726
Industry Ventures Partnership Holdings III, L.P.	30 Hotaling Place, 3rd Floor, San Francisco, CA 94111	2013	15,000,000	12,015,611	27,291,431	558,502	27,849,933	-	23.00%	2.18	-	119,175	15,254	-	-	690,472	-	-
57 Stars Global Opportunity Fund 3, L.P.	616 H Street, N.W., Suite 450 Washington, D.C. 20001	2014	30,000,000	29,519,487	31,046,026	1,642,759	32,688,785	-	4.50%	1.18	-	189,215	243	-	-	-	-	-
CCMP Capital Investors III, L.P.	277 Park Avenue, 27th Floor New York, NY 10172	2014	20,000,000	19,277,267	17,787,438	2,016,350	19,803,788	-	8.90%	1.32	-	226,056	22,339	7,260	-	1,380,914	7,260	-
Francisco Partners IV, L.P.	One Letterman Drive, Bldg C - Suite 410 San Francisco, CA 94129	2015	15,000,000	14,617,500	19,565,957	-	19,565,957	-	29.70%	2.16	-	182,324	20,069	-	-	1,789,291	-	591,965
Dover Street IX, L.P.	One Financial Center Boston, MA 02111	2015	30,000,000	21,600,000	22,429,694	5,700,000	28,129,694	-	32.00%	1.40	-	306,235	44,200	-	-	748,361	-	147,112
SJPF Private Equity Strategic Partnership, L.P.	325 N. Saint Paul St., Ste. 4900 Dallas, TX 75201	2017	265,000,000	81,250,000	88,313,354	2,000,000	90,313,354	-	14.60%	1.10	-	3,315,146	856,518	421,971	-	55,867	-	-
Crestline Portfolio Financing	201 Main St, #1900 Fort Worth, TX 76102	2018	22,000,000	11,514,611	10,169,555	144,304	10,313,859	-	NM	1.13	-	90,213	70,217	-	-	163,169	-	-
Innovation Endeavors III	1845 El Camino Real Palo Alto, CA 94306	2018	4,200,000	1,365,000	1,272,061	-	1,272,061	-	NM	1.43	-	84,000	13,815	-	-	150,101	-	-

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 2019 (\$)	2019 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2019 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2019 (\$)	Fees and expenses paid from the Fund to GP and related parties 2019 (\$)					Fees and expenses paid by all portfolio companies 2019(\$)	Carried Interest Paid 2019 (\$)
												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	55,269,861	16,901,054	4,302,758	21,203,812	-	3.26%	1.16	-	248,779	328,000	39,818	-	-	-	-
GSO SJ Partners	345 Park Avenue New York, NY 10154	2010	50,000,000	44,584,153	6,513,038	-	6,513,038	-	6.05%	1.19	-	174,036	79,794	-	-	(15,536)	-	-
White Oak Direct Lending	3 Embarcadero Center, 5th Floor San Francisco, CA 94111	2010	50,000,000	85,397,651	13,106,990	62,133	13,169,123	-	2.81%	1.07	-	144,319	34,003	-	-	-	11,880	-
Marathon European Credit Opportunity Fund SPC	One Bryant Park, 38th Floor New York, NY 10036	2011	25,000,000	25,000,001	1,353,806	1,079,944	2,433,750	-	8.65%	1.24	-	-	22,486	-	-	23,421	-	-
Cross Ocean USD ESS Fund I, L.P.	11 Charles II St. London, SW1Y4QU	2013	90,000,000	75,956,859	7,127,740	1,715,386	8,843,126	-	6.90%	1.19	-	-	75,175	-	-	-	-	-
Park Square Capital Credit Opportunities II	2nd Floor, Stratton House, 5 Stratton St. London W1J8LA	2013	50,000,000	44,822,998	38,949,240	7,594,797	46,544,037	-	4.99%	1.20	-	607,223	110,824	-	-	115,180	-	-
Shoreline China Value III, L.P.	3 Jin Sui Road, Zhujiang New, Suite 1201A Guangzhou, 510623, China	2014	22,500,000	22,219,024	9,861,743	3,107,593	12,969,336	-	4.36%	1.14	-	98,739	17,231	-	-	-	-	-
Cross Ocean USD ESS Fund II, L.P.	11 Charles II St. London, SW1Y4QU	2016	75,000,000	60,000,000	42,058,669	26,219,096	68,277,765	-	8.66%	1.20	-	529,126	448,663	-	-	684,200	-	-
Arrowmark Co-Investment	100 Fillmore Street, Suite 325, Denver, CO 80206	2017	10,000,000	10,000,000	-	11,240,095	11,240,095	-	12.94%	1.22	-	-	-	-	-	97,176	-	97,176
Octagon CLO Opportunity Fund III, L.P.	250 Park Ave., 15th Floor, New York, NY 10177, USA	2018	25,000,000	17,500,000	16,190,127	1,156,003	17,346,130	-	-1.26%	0.99	-	77,552	185,715	-	-	-	-	-
Cross Ocean USD ESS Fund III	11 Charles II St. London, SW1Y4QU	2019	32,000,000	10,980,334	10,882,133	20,312	10,902,445	-	-2.69%	0.99	-	29,973	124,633	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

Table 17 – California Government Code §7514.7 Disclosure, Growth Real Estate

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2019 (\$)	2019 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2019 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2019 (\$)	Fees and expenses paid from the Fund to GP and related parties 2019 (\$)					Fees and expenses paid by all portfolio companies 2019(\$)	Carried Interest Paid 2019 (\$)
												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	11,709,236	5,653,203	2,757,922	8,411,125	-	19.76%	1.91	-	65,375	17,000	-	-	55,625	-	1,299,123
Orion European Real Estate Fund IV, C.V.	6th Floor, 2 Cavendish Square London W1G0PU	2013	8,360,027	6,637,704	2,857,497	79,245	2,936,742	-	1.00%	1.03	-	68,920	-	-	-	4,138	-	4,138
Realty Associates Fund X, L.P., The	28th State Street Boston, MA 02109	2013	10,000,000	10,000,000	1,726,015	4,931,589	6,657,604	-	13.04%	1.61	-	56,025	6,711	-	-	186,569	-	519,117
Och-Ziff Real Estate Fund III	9 West 57th Street, 39th Floor New York, NY 10019	2013	20,000,000	12,197,409	7,910,818	2,058,309	9,969,127	-	22.86%	1.53	-	154,770	66,898	-	-	21,632	-	-
European Property Investors Special Opportunities 3, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2013	8,807,339	8,972,468	2,643,033	2,475,275	5,118,309	-	6.57%	1.19	-	64,454	76,586	-	-	-	-	-
Blackstone Real Estate Debt Strategies II	345 Park Avenue New York, NY 10154	2013	12,500,000	12,750,627	343,891	677,589	1,021,480	-	9.18%	1.16	-	7,325	42,206	-	-	3,219	-	-
KSL Capital Partners IV, L.P.	100 St. Paul St., Suite 800 Denver, CO 80206	2015	20,000,000	17,066,322	16,127,037	466,147	16,593,184	-	13.98%	1.22	-	217,944	38,976	15,195	-	243,290	15,195	-
European Property Investors Special Opportunities 4, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2015	19,822,116	16,487,630	18,045,548	1,304,379	19,349,927	-	10.52%	1.22	-	211,037	149,761	-	-	13,941	-	13,941
Brookfield Strategic Real Estate Partners II	250 Vesey Street, 15th Floor New York, NY 10281	2015	20,000,000	17,510,074	18,777,714	1,566,737	20,344,451	-	11.30%	1.30	-	290,041	11,092	4,636	-	541,195	86,644	-
DRA Growth and Income Fund IX, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2016	20,000,000	19,549,616	17,743,641	1,885,136	19,628,777	-	14.21%	1.17	-	379,650	45,265	-	-	-	-	-
GEM Realty Fund VI, L.P.	900 North Michigan Avenue #1450, Chicago, IL 60611	2017	15,000,000	1,950,000	2,741,434	-	2,741,434	-	NM	1.41	-	202,500	20,103	-	-	-	13,941	-
European Property Investors Special Opportunities 5, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2018	21,700,000	597,271	193,827	-	193,827	-	-94.96%	0.32	-	324,666	58,504	-	-	-	-	-
Torchlight Debt Opportunity Fund VI, L.P.	280 Park Avenue New York, NY 10017	2018	30,000,000	11,155,991	11,788,122	-	11,788,122	-	6.57%	1.04	-	405,000	59,179	-	-	76,498	-	-
Rockpoint Real Estate Fund VI	500 Boylston Street, Suite 1880, Boston, MA	2019	11,500,000	-	-	-	-	-	NM	NM	-	24,781	-	-	-	-	-	-
DRA Growth and Income Fund X, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2019	18,000,000	-	-	-	-	-	NM	NM	-	1,982	10,571	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

Table 18 – 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 2019 (\$)	2019 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2019 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2019 (\$)	Fees and expenses paid from the Fund to GP and related parties 2019 (\$)					Fees and expenses paid by all portfolio companies 2019(\$)	Carried Interest Paid 2019 (\$)
												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	11,709,236	5,653,203	2,757,922	8,411,125	-	19.76%	1.91	-	65,375	17,000	-	-	55,625	-	1,299,123
Orion European Real Estate Fund IV, C.V.	6th Floor, 2 Cavendish Square London W1G0PU	2013	8,360,027	6,637,704	2,857,497	79,245	2,936,742	-	1.00%	1.03	-	68,920	-	-	-	4,138	-	4,138
Realty Associates Fund X, L.P., The	28th State Street Boston, MA 02109	2013	10,000,000	10,000,000	1,726,015	4,931,589	6,657,604	-	13.04%	1.61	-	56,025	6,711	-	-	186,569	-	519,117
Och-Ziff Real Estate Fund III	9 West 57th Street, 39th Floor New York, NY 10019	2013	20,000,000	12,197,409	7,910,818	2,058,309	9,969,127	-	22.86%	1.53	-	154,770	66,898	-	-	21,632	-	-
European Property Investors Special Opportunities 3, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2013	8,807,339	8,972,468	2,643,033	2,475,275	5,118,309	-	6.57%	1.19	-	64,454	76,586	-	-	-	-	-
Blackstone Real Estate Debt Strategies II	345 Park Avenue New York, NY 10154	2013	12,500,000	12,750,627	343,891	677,589	1,021,480	-	9.18%	1.16	-	7,325	42,206	-	-	3,219	-	-
Brookfield Infrastructure Fund III, L.P.	250 Vesey Street, 15th Floor New York, NY 10281	2016	20,000,000	15,112,114	15,713,383	1,772,028	17,485,411	-	16.50%	1.31	-	260,000	14,802	-	-	571,857	5,843	-
Global Infrastructure Partners III, L.P.	1345 Avenue of the Americas, 30th Floor,	2016	20,000,000	16,741,968	16,402,668	1,900,710	18,303,378	-	7.31%	1.14	-	333,002	26,570	-	-	81,550	-	-
Lime Rock Partners VIII, L.P.	1111 Bagby St, Suite 4600 Houston, TX 77002	2018	6,000,000	4,043,486	4,445,411	2,317	4,447,728	-	6.76%	1.07	-	120,000	5,428	5,771	277	19,904	-	-
Global Infrastructure Partners IV, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2019	6,000,000	108,139	(5,213)	-	(5,213)	-	NM	(0.05)	-	108,138	531	-	-	-	-	-
Kimmeridge Energy Fund V	400 Madison Avenue, Suite 14C, New York, NY	2019	7,200,000	1,607,762	409,883	997,987	1,407,870	-	-68.81%	0.68	-	155,348	46,498	-	2,103	-	-	-

Source: Fund managers, Meketa Investment Group

Table 19 – California Government Code §7514.7 Disclosure, Hedge Funds

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2019 (\$)	2019 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2019 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2019 (\$)	Fees and expenses paid from the Fund to GP and related parties 2019 (\$)					Fees and expenses paid by all portfolio companies 2019(\$)	Carried Interest Paid 2019 (\$)
												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	-	51,636,697	51,636,697	-	3.89%	1.26	-	344,199	63,227	-	-	482,849	-	482,849
DE Shaw Composite International Fund	1166 Avenue of the Americas, 9th Floor	N/A	N/A	39,000,000	52,135,105	-	52,135,105	-	11.08%	2.03	-	1,262,177	103,019	-	-	1,545,192	-	1,545,192
Dymon Asia Macro	1 Temasek Avenue #11-01 Millenia Tower,	N/A	N/A	27,000,000	-	26,606,216	26,606,216	-	-0.33%	0.99	-	221,047	16,913	-	-	-	-	-
Hudson Bay Cap Structure Arbitrage Enhanced Fund	777 Third Ave. 30th Floor, New York, NY 10017	N/A	N/A	38,000,000	43,673,867	-	43,673,867	-	6.43%	1.16	-	422,293	140,510	-	-	1,493,918	-	1,493,918
Iguazu Partners LP Fund	2 Embarcadero Center # 1645 San Francisco, CA 94111	N/A	N/A	50,000,000	8,963,290	21,905,611	30,868,901	-	6.38%	1.52	-	773,507	58,340	-	-	2,463,862	-	2,463,862
Kepos Alpha Fund	620 8th Ave., 44th Floor, New York, NY 10018	N/A	N/A	12,000,000	14,242,863	-	14,242,863	-	1.96%	1.14	-	193,084	60,476	-	-	181,929	-	181,929
Keynes Leveraged Quantitative Strategies Fund	9th Floor Orion House, 5 Upper St Martin's	N/A	N/A	20,000,000	17,165,877	-	17,165,877	-	3.99%	1.17	-	126,906	48,947	-	-	401,067	-	401,067
Man AHL Evolution Frontier	100 St. Paul Street, Suite 800, Denver, CO 80206	N/A	N/A	15,000,000	18,333,486	-	18,333,486	-	6.54%	1.25	-	350,603	44,057	-	-	257,575	-	257,575
MW Eureka Fund Ltd	350 Park Avenue, 18th Floor New York, NY 10022	N/A	N/A	37,500,000	-	46,446,271	46,446,271	-	7.61%	1.50	-	683,112	50,727	-	-	205,006	-	205,006
Pharo Macro Fund, Ltd	1370 Avenue of the Americas, 26th Floor	N/A	N/A	35,000,000	37,055,927	-	37,055,927	-	8.03%	1.34	-	754,090	37,043	-	-	464,849	-	464,849
Pine River Fund Ltd	580 California Street, San Francisco, CA 94104	N/A	N/A	20,000,000	811,800	1,466,737	2,278,537	-	5.38%	1.44	-	6,306	5,459	-	-	-	-	-
Pine River Volatility Arbitrage Fund	580 California Street, San Francisco, CA 94104	N/A	N/A	25,000,000	-	16,064,575	16,064,575	-	0.41%	1.01	-	125,520	138,072	-	-	52,261	-	52,261
Sandler Plus Fund	711 5th Ave #15, New York, NY 10022	N/A	N/A	15,000,000	-	22,097,712	22,097,712	-	8.15%	1.65	-	298,574	44,033	-	-	-	-	-
Senator Global Opportunity Offshore Fund Ltd	510 Madison Ave # 28, New York, NY 10022	N/A	N/A	48,952,269	8,963,290	21,905,611	30,868,901	-	6.38%	1.52	-	240,571	50,337	-	-	262,226	-	262,226
Systematica Alternative Markets Master Fund	650 Fifth Ave New York, NY 10019	N/A	N/A	2,000,000	3,981,846	-	3,981,846	-	4.04%	1.10	-	74,720	43,804	-	-	199,087	-	199,087
Systematica Trend Following Fund	650 Fifth Ave New York, NY 10019	N/A	N/A	20,000,000	12,649,796	-	12,649,796	-	4.04%	1.10	-	63,468	43,804	-	-	-	-	-
Tempo Volatility Fund	1 Greenwich Plaza, Greenwich, CT 06830	N/A	N/A	20,000,000	23,765,094	-	23,765,094	-	5.42%	1.19	-	352,498	108,243	-	-	188,352	-	188,352

Source: Fund managers, State Street, ORS