

## Memorandum

TO: Board of Administration for the Federated FROM: Benjie Chua Foy

**City Employees' Retirement System** 

**SUBJECT:** Consideration of Proposed Budget

for Fiscal Year 2024-2025

**DATE:** March 7, 2024

Approved BHAUM

Date 3/13/2024

#### RECOMMENDATION

Discussion and action on the proposed administrative budget for fiscal year 2024-2025.

#### **BACKGROUND**

The Board approves the contribution rates recommended by the actuary which is made by the City. The Board also approves the administrative expense budget for reporting on the Source and Use Statements submitted for inclusion in the City's operating budget. The amounts approved by the Board are the total category amounts and not the individual line items. If the individual line item goes over budget, no approval is required from the Board as long as the total category amount remains under budget. This proposed budget is provided to the Board for discussion and approval, and if necessary, a revised and final budget will be prepared for approval at the next meeting. Highlights of the proposed budget are as follows:

#### **ANALYSIS**

#### **SOURCES OF FUNDS**

#### CITY CONTRIBUTIONS

The City contribution for the retirement and health benefit plan for the coming fiscal year is estimated to be \$254,726,000.

The actual contribution amount is based on the City contribution rates recommended by the actuary and adopted by the Board, applied as a factor against the City's total covered payroll. The FY25 contribution amounts assume the Board's adoption in April/May, as shown in the June 30, 2023 actuarial reports for pension and healthcare, using the throughout the year amounts, similar to FY24.

#### PARTICIPANT CONTRIBUTIONS

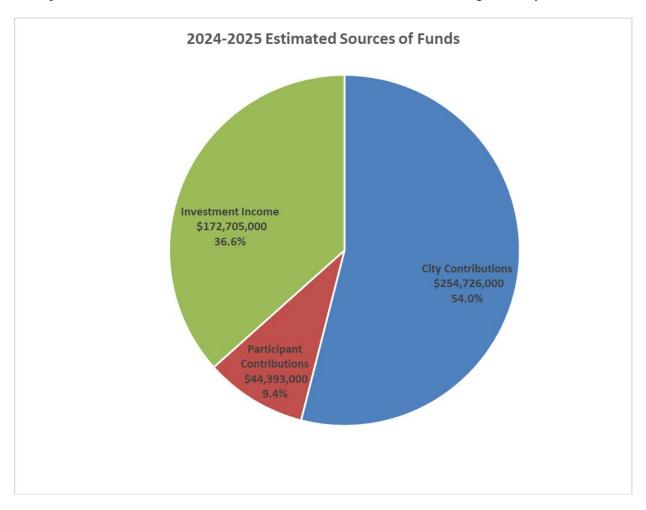
Total member contributions are estimated at \$44,393,000, a 12.64% increase from the 2023-2024 adopted amount. Member contributions are calculated based on the contribution rate for each tier. Tier 1 contribution rates for pension decreased from 7.34% to 6.61% while their covered payroll increased slightly from \$128.9 million to \$130.1 million. Tier 2 contribution rates for pension increased from 8.01% to 8.49%, while covered payroll increased from \$266.8 million to \$319.3 million. Healthcare contribution

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rates remain at 7.5% per the Municipal Code for Tier 1 members and eligible Tier 2 members, while the City's contribution is a flat dollar amount of approximately \$20.4 million, as calculated by the actuary.

#### INVESTMENT INCOME

Investment earnings are calculated based on the actuarial assumed rate of return of 6.625%. The beginning fund balance, along with the City's contributions and member contributions offset with the expenditures are expected to earn less than the full rate since these amounts will occur throughout the year.



#### **USES OF FUNDS**

#### PENSION BENEFITS AND HEALTH INSURANCE

The pension benefits budget increased to \$263,433,000, an increase of \$10,402,000 over the forecast, or 4.11%, which is the average increase for the past five years. Pension benefits include service pensions, disability and survivorship pensions, death benefits and refunds of contributions.

The health insurance budget increased to \$36,093,000, an increase of \$1,059,000 over the forecast, or 3.02%, which is the average change for the past five years. Health insurance includes health and dental insurance subsidies, as well as Medicare reimbursements.

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VEBA withdrawals represent the funds taken out of the healthcare plan by Tier 1 and eligible Tier 2 members who opted out of the healthcare plan. Fiscal year 2017-2018 had the largest amount since it was the first year of the opt-in to the VEBA and will continue through calendar year 2022 for rehired employees with healthcare contributions. There were no VEBA withdrawals in fiscal year 2022-2023, the last year for any VEBA withdrawals.

#### ADMINISTRATIVE EXPENSE BUDGET

The proposed administrative expenses budget of \$7,262,000 is a net increase of \$558,000 or 8.32% from the prior year modified budget of \$6,704,000 and \$1,008,000 or 16.12% from the prior year adopted budget of \$6,254,000.

#### PERSONNEL SERVICES

The budget for personnel services was increased to \$5,111,000, an increase of \$655,000, or 14.70% over the prior year modified budget of \$4,456,000. The Budget Office's labor distribution report drives the personnel budget, which covers all the staff in Retirement Services. The salaries and benefits of all staff, except for investment staff, is split 50/50 between the System and the Police and Fire Department Retirement Plan (Plan). The investment staff is split 40/60 between the System and the Plan, which is roughly based on asset size. The number of positions in Retirement Services will increase to 46 from 43 due to the proposals. The proposed personnel changes for FY24-25 are to: 1) add a Compliance Senior Analyst in the Accounting division, 2) add a Medicare Analyst in the Health section of the Benefits division, and 3) add a Senior Office Specialist to the front desk in the Benefits division to address the issues that have arisen in the current fiscal year, as well as address the increasing and challenging workload. In addition, Staff is adding funding for an overstrength position for one year for Staff Specialist in the Administrative division, an overstrength position in the Benefits division for four months to transition a retiring Analyst to the new hire and 50% funding for a Cybersecurity IT Specialist. One month funding for the current CEO to train the new CEO is also being added to the budget. Besides the proposed changes, the other reasons for the increase in personnel services is due to the increased benefit rates, as well as having five (four in Benefits and one in Admin) reemployed retirees for the maximum time allowed per the Municipal Code.

#### NON-PERSONNEL / EQUIPMENT

The budget for non-personnel / equipment was increased slightly to \$894,000, an increase of \$22,000, or 2.52% from the prior year adopted budget of \$872,000. This category includes rent, insurance, information technology hardware/software, pension administration annual maintenance fee, postage and printing, training, travel, and other office expenses. The increase is mainly due to the removal of the proposed change in financial software in IT hardware/software and to account for general increases across the board.

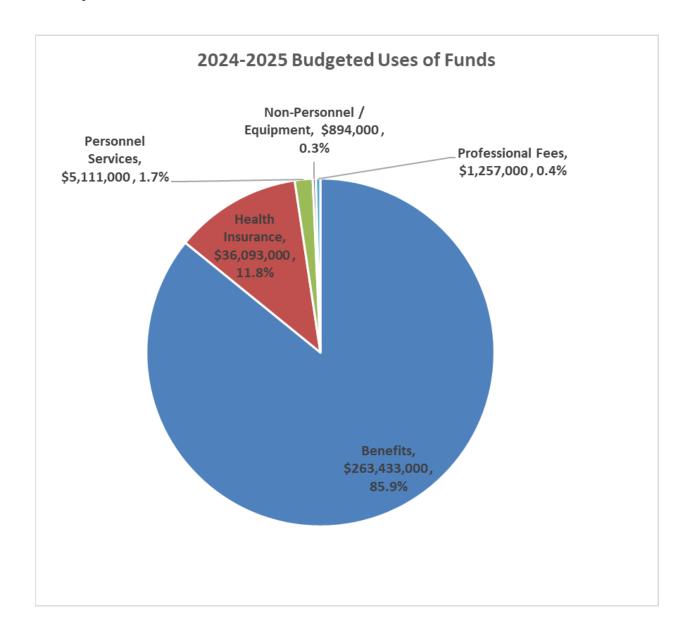
#### PROFESSIONAL SERVICES

The budget for professional services was decreased to \$1,112,000, a decrease of \$119,000, or 9.67% from the prior year modified budget of \$1,231,000. The adopted budget was modified to increase legal services by \$300,000. If it had not been modified, current year proposed budget would be an increase of \$181,000, or 19.40% from the prior year adopted budget of \$931,000. Core professional services comprise of actuarial services, financial audit services, legal services, and temporary staffing services. The increase from the prior year adopted budget is mainly due to the increase in legal services to account for the rise in the need of their services, CPI increases as well as the addition of a death audit vendor and skip trace vendor for the Benefits division.

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#### **MEDICAL SERVICES**

The budget for medical services remained steady at \$145,000. This category is for expenses related to the processing of disability applicants, which include costs for medical services from independent medical examiners (IME). The contract with the medical advisor has been terminated so all services will be from the independent medical examiners.



Attachment: Proposed Budget for Fiscal Year 2024-2025

## PROPOSED BUDGET

**FISCAL YEAR 2024-2025** 

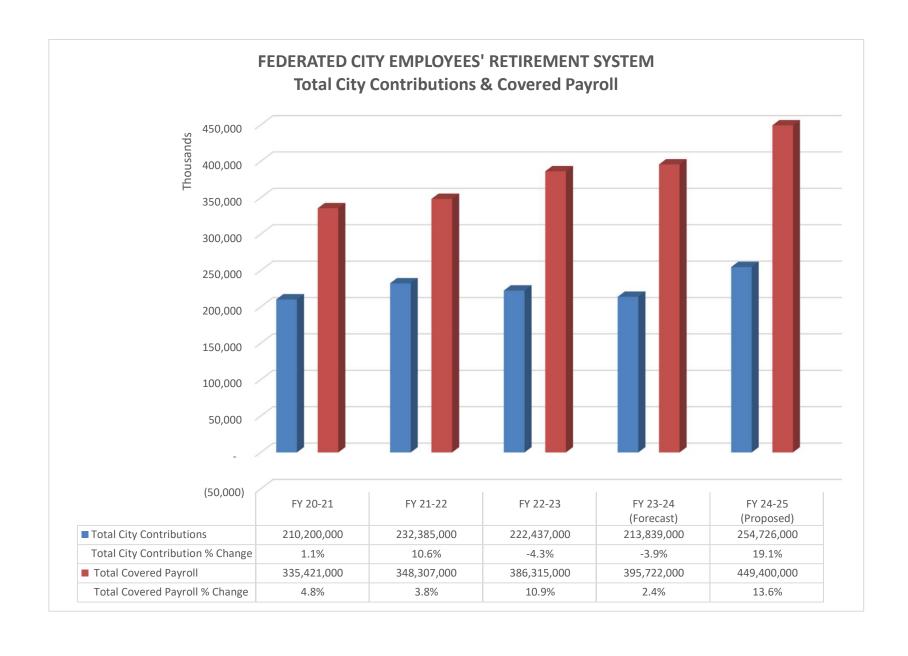
### FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

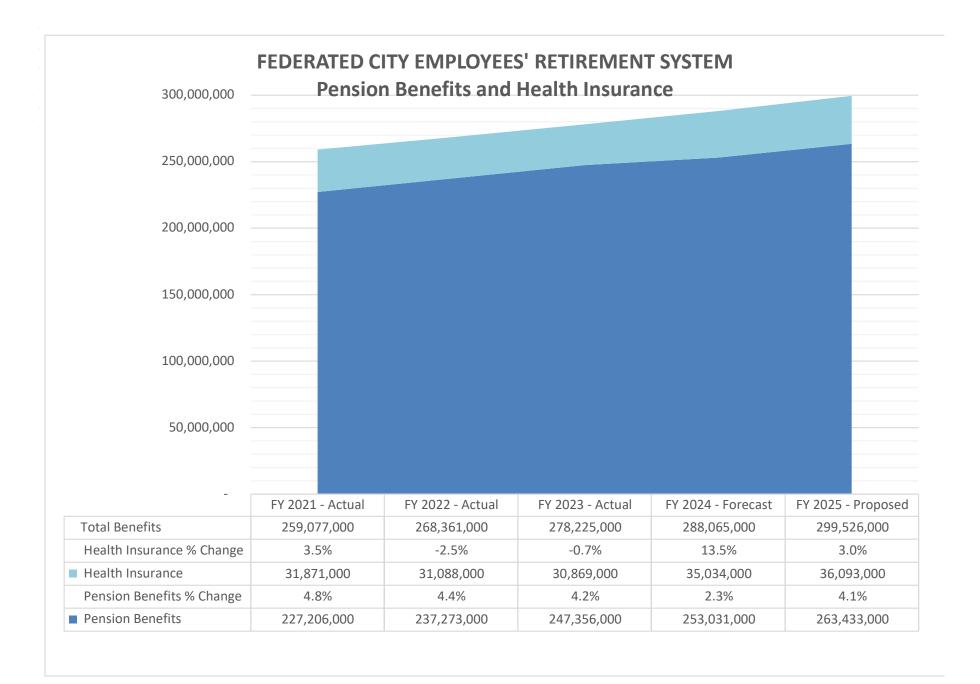
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#### FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

#### **Proposed Budget for Fiscal Year 2024-2025**

	(A) 2022-2023 Actual	(B) 2023-2024 Modified	(C) 2023-2024 Forecast	(D) 2024-2025 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
SOURCE OF FUNDS							
Beginning Fund Balance							
Claims Reserve	3,057,148,000	3,281,923,000	3,281,923,000	3,404,496,600	224,775,000	0	122,573,600
Total Beginning Fund Balance	3,057,148,000	3,281,923,000	3,281,923,000	3,404,496,600	224,775,000	0	122,573,600
Transfers							
COLAs	7,500	7,500	4,500	4,500	0	(3,000)	0
City Contributions	222,437,000	234,618,000	213,839,000	254,726,000	12,181,000	(20,779,000)	40,887,000
Total Transfers	222,444,500	234,625,500	213,843,500	254,730,500	12,181,000	(20,782,000)	40,887,000
Revenue							
Participant Contributions	40,402,000	39,410,000	39,411,600	44,393,000	(992,000)	1,600	4,981,400
Investment Income	246,369,000	157,847,000	163,813,000	172,705,000	(88,522,000)	5,966,000	8,892,000
Total Revenue	286,771,000	197,257,000	203,224,600	217,098,000	(89,514,000)	5,967,600	13,873,400
TOTAL SOURCE OF FUNDS	3,566,363,500	3,713,805,500	3,698,991,100	3,876,325,100	147,442,000	(14,814,400)	177,334,000
USE OF FUNDS							
Expenditures							
COLAs	7,500	7,500	4,500	4,500	0	(3,000)	0
Benefits	247,356,000	255,466,000	253,031,000	263,433,000	8,110,000	(2,435,000)	10,402,000
Health Insurance	30,869,000	32,401,000	35,034,000	36,093,000	1,532,000	2,633,000	1,059,000
VEBA Transfers	0	0	0	0	0	0	0
Personnel Services	3,931,000	4,456,000	4,411,000	5,111,000	525,000	(45,000)	700,000
Non-Personnel/Equipment (1)	1,337,000	872,000	748,000	894,000	(465,000)	(124,000)	146,000
Professional Fees	940,000	1,376,000	1,266,000	1,257,000	436,000	(110,000)	(9,000)
Total Expenditures	284,440,500	294,578,500	294,494,500	306,792,500	10,138,000	(84,000)	12,298,000
Ending Fund Balance	0.004.000.000	0.440.007.000	0.404.400.000	0.500.500.000	407.004.000	(4.4.700.400)	405 000 000
Claims Reserve Total Ending Fund Balance	3,281,923,000 3,281,923,000	3,419,227,000 3,419,227,000	3,404,496,600 3,404,496,600	3,569,532,600 3,569,532,600	137,304,000 137,304,000	(14,730,400)	165,036,000 165,036,000
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TOTAL USE OF FUNDS	3,566,363,500	3,713,805,500	3,698,991,100	3,876,325,100	147,442,000	(14,814,400)	177,334,000
Amount not included in budget since no ca	sh outlay:						
Amortization expense for PG3 and GASB							
87 lease interest expenses	\$ 608,957	\$ 608,957	\$ 608,957	\$ 608,957			
(1) Non-personnel equipment FY22-23	\$ 1,337,000						
Rounding in ACFR	591						
Amortization expense	(608,957)						
As shown in Administrative Expenses	\$ 728,634						

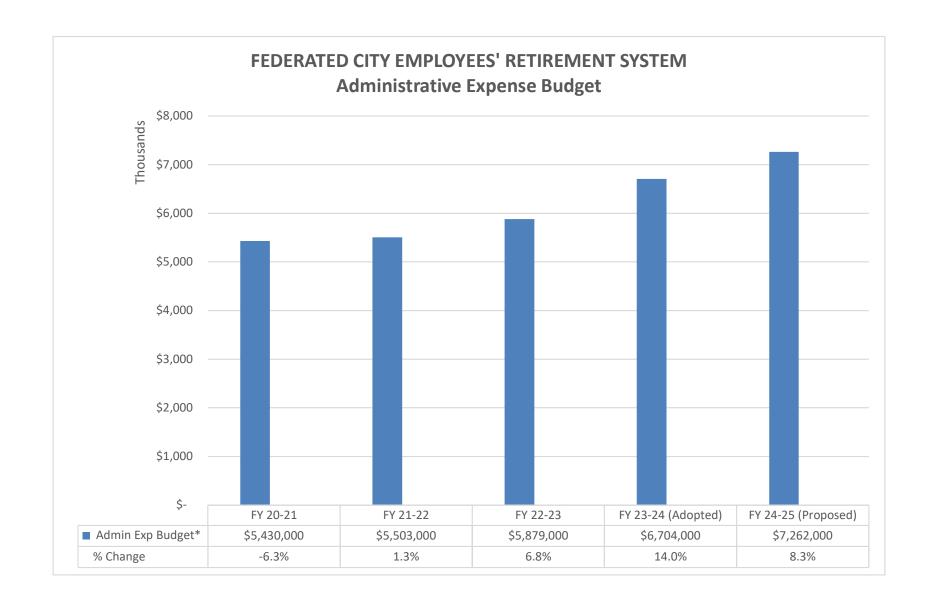




#### FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

#### **Administrative Expenses: FY 2024-2025**

	(A) 2022-2023 Actual	(B) 2023-2024 Modified	(C) 2023-2024 Forecast	(D) 2024-2025 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
PERSONNEL SERVICES							
Salaries and employee benefits	3,931,413	4,456,000	4,411,000	5,111,000	524,587	(45,000)	700,000
Total Personnel Services	3,931,413	4,456,000	4,411,000	5,111,000	524,587	(45,000)	700,000
NON-PERSONNEL / EQUIPMENT							
Insurance	205,667	240,000	214,000	228,000	34,333	(26,000)	14,000
IT hardware / software	71,877	130,000	88,000	130,000	58,123	(42,000)	42,000
LRS - annual maintenance fee	52,160	55,000	55,000	58,000	2,840	· -	3,000
Postage and printing	99,731	100,000	75,000	100,000	269	(25,000)	25,000
Rent	226,361	230,000	234,000	249,000	3,639	4,000	15,000
Training and travel	29,225	30,000	37,000	35,000	775	7,000	(2,000)
Office supplies and board meeting expense	12,010	15,000	23,000	25,000	2,990	8,000	2,000
Other non-personnel / equipment	31,603	72,000	22,000	69,000	40,397	(50,000)	47,000
Total Non-personnel / Equipment	728,634	872,000	748,000	894,000	143,366	(124,000)	146,000
PROFESSIONAL SERVICES							
Actuary / actuarial audit	229,457	295,000	289,000	267,000	65,543	(6,000)	(22,000)
External auditor	84,908	95,000	93,000	92,000	10,092	(2,000)	(1,000)
Legal	325,776	614,000	580,000	490,000	288,224	(34,000)	(90,000)
Pension administration system	16,755	34,000	30,000	34,000	17,245	(4,000)	4,000
Temporary staffing agencies	149,373	132,000	130,000	145,000	(17,373)	(2,000)	15,000
Other professional services	48,824	61,000	44,000	84,000	12,176	(17,000)	40,000
Total Professional Services	855,093	1,231,000	1,166,000	1,112,000	375,907	(65,000)	(54,000)
MEDICAL SERVICES							
Independent medical examiners	42,226	145,000	100,000	145,000	102,774	(45,000)	45,000
Medical consultant	42,486	0	0	0	(42,486)	-	-
Total Medical Services	84,712	145,000	100,000	145,000	60,288	(45,000)	45,000
TOTAL ADMINISTRATIVE EXPENSES	5,599,852	6,704,000	6,425,000	7,262,000	1,104,148	(279,000)	837,000
Amortization expense Rounding	608,957						
Total Admin Expenses per ACFR	6,208,809						



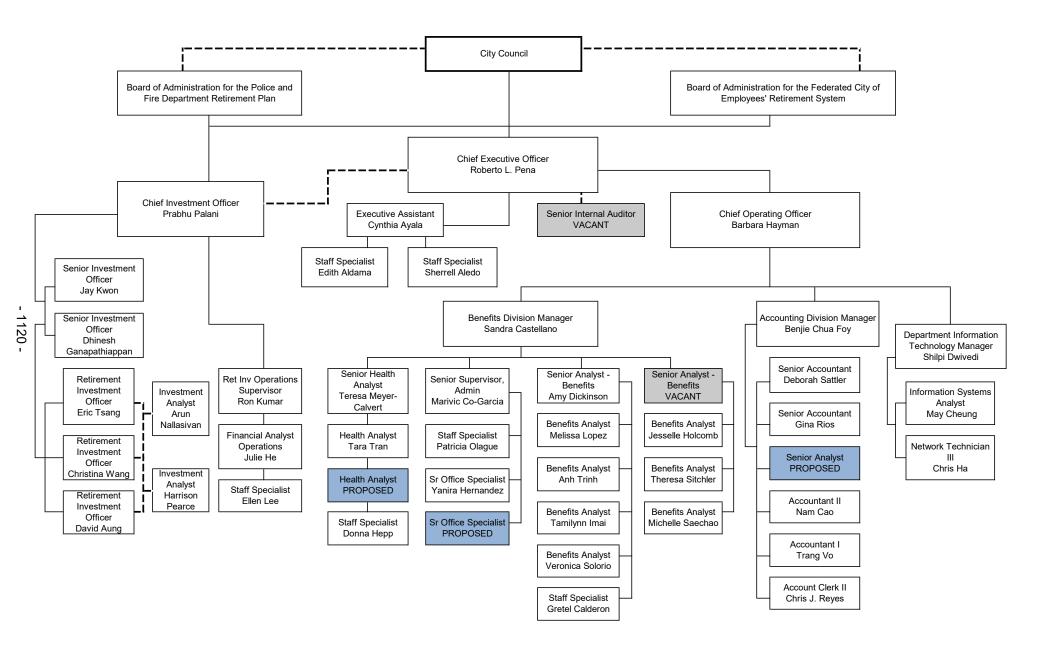
<sup>\*</sup> Amount includes budget for operations only.

#### OFFICE OF RETIREMENT SERVICES

#### **Departmental Position Detail**

Account Clerk II         1.00         1.00         1.00         1.00         2.00	
Accounting Technician   1.00   0.00	
Analyst I/II         7.00         8.00         8.00         9.00         1.00         1.00         Proposed addition of Medicare Analyst for Benefits Division           Assistant Director and Chief Investment Officer         1.00         1.00         1.00         1.00         -         -           Department Information Technology Manager         1.00         1.00         1.00         1.00         -         -           Deputy Director         1.00         1.00         1.00         1.00         -         -           Director of Retirement Services         1.00         1.00         1.00         -         -           Executive Assistant         1.00         1.00         1.00         1.00         -         -           Financial Analyst         1.00         1.00         1.00         1.00         -         -           Information Systems Analyst         1.00         1.00         1.00         1.00         -         -           Network Technician I/I/III         1.00         1.00         1.00         1.00         -         -           Retirement Investment Analyst I/II         2.00         2.00         2.00         2.00         -         -           Senior Accountant         2.00         2.00 </td <td></td>	
Assistant Director and Chief Investment Officer 1.00 1.00 1.00 1.00 1.00	
Department Information Technology Manager   1.00   1.00   1.00   1.00   1.00   -   -   -	n
Deputy Director   1.00   1.00   1.00   1.00   1.00   -   -   -	
Director of Retirement Services   1.00   1.00   1.00   1.00   -   -   -	
Division Manager   2.00   2.00   2.00   2.00   -   -   -	
Executive Assistant 1.00 1.00 1.00 1.00	
Financial Analyst 1.00 1.00 1.00 1.00	
Investments Operations Supervisor	
Information Systems Analyst	
Network Technician I/II/III         1.00         1.00         1.00         1.00         -         -           Office Specialist II         1.00         0.00         0.00         -         -         -           Retirement Investment Analyst I/II         2.00         2.00         2.00         -         -           Retirement Investment Officer         3.00         3.00         3.00         -         -           Senior Accountant         2.00         2.00         2.00         -         -         -	
Office Specialist II         1.00         0.00         0.00         0.00         -         -           Retirement Investment Analyst I/II         2.00         2.00         2.00         -         -           Retirement Investment Officer         3.00         3.00         3.00         -         -           Senior Accountant         2.00         2.00         2.00         -         -         -	
Retirement Investment Analyst I/II         2.00         2.00         2.00         -         -         -           Retirement Investment Officer         3.00         3.00         3.00         -         -           Senior Accountant         2.00         2.00         2.00         -         -         -	
Retirement Investment Officer         3.00         3.00         3.00         -           Senior Accountant         2.00         2.00         2.00         -         -	
Senior Accountant 2.00 2.00 2.00 <b>2.00</b>	
Senior Analyst 3.00 3.00 3.00 4.00 1.00 Proposed addition of a Compliance Senior Analyst in Acco	
	unting
Senior Auditor 1.00 1.00 1.00	
Senior Office Specialist 0.00 1.00 1.00 2.00 1.00 Proposed addition of a Senior Office Specialist in Benefits	
Senior Retirement Investment Officer 2.00 2.00 2.00	
Senior Supervisor, Administration 1.00 1.00 1.00	
Staff Specialist 7.00 6.00 6.00 6.00	
Total Positions 43.00 43.00 43.00 46.00 3.00 3.00	

#### OFFICE OF RETIREMENT SERVICES Proposed Organizational Chart Budget FY24-25





# Federated Annual Fee Report - 2022

## **Executive Summary**

This report marks the eighth anniversary of our annual Fee Report for the Federated City Employees' Retirement System ("Federated", "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 sizeable 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 returns 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 2022, management and incentive fees for the pension plan totaled \$21.5 million with a fee ratio of 0.75% as compared to \$44.6 million and 1.55% for 2021 and \$23.6 million and 0.95% for 2020. Fund operating expenses were \$5.2 million in 2022 for a fee ratio of 0.18% as compared to \$3.1 million and 0.11% in 2021 and \$4.0 million and 0.16% for 2020. The health care trust management and incentive fees totaled \$0.9 million with a fee ratio of 0.24% as compared to \$0.8 million with a fee ratio of 0.21% in 2021 and \$0.6 million with a fee ratio of 0.21% in 2020. Other investment-related costs (staff, consultants, custodian bank, investment legal, etc.) for the pension plan in 2022 were \$2.2 million with a fee ratio of 0.08% as compared to \$2.0 million and 0.07% in 2021 and \$1.7 million and 0.07% in 2020. Other investment-related costs for the health care trust totaled \$0.3 million with a fee ratio of 0.08% as compared to \$0.3 million and 0.07% for 2021 and \$0.2 million and 0.06% for 2020.

Table 1 - Pension Average Asset Allocation for 2022

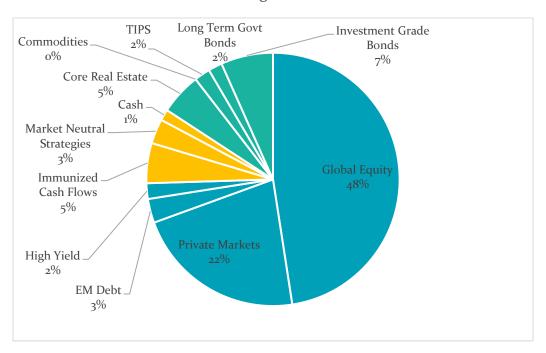
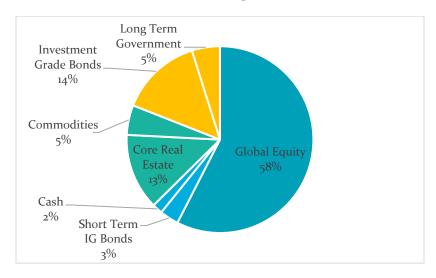


Table 2 - Health Care Trust Average Asset Allocation for 2022



#### 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, BNY Mellon

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 banks, 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 Federated were allocated between the pension plan and health care trust by pro-rating the total costs by the average monthly balance of each plan.

#### 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, and 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 Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)	Average Balance (\$ mm)	Average Veight	Fee Ratio - Management Fees		- Fee Ratio - Operating Expenses	Fee Ratio - Mgmt and Incent Fees	Fee Ratio - Mgmt, Incent, and Op Ezp		Contribution to Total Plan Fee Ratio
Growth	14.2	-0.3	4.8	13.9	18.8	2,121	74.5%	0.67%	-0.01%	0.23%	0.66%	0.88%	70.5%	0.66%
Public Equity	3.7	0.1	0.2	3.8	4.0	1,354	47.6%	0.28%	0.00%	0.02%	0.28%	0.30%	15.0%	0.14%
Passive	0.4	-	0.1	0.4	0.5	801	28.1%	0.05%	0.00%	0.01%	0.05%	0.06%	2.0%	0.02%
Active	3.3	0.1	0.1	3.4	3.5	553	19.4%	0.60%	0.01%	0.02%	0.61%	0.63%	13.1%	0.12%
Total Private Markets	9.5	-1.9	4.6	7.6	12.1	623	21.9%	1.52%	-0.30%	0.73%	1.21%	1.94%	45.5%	0.43%
Passive	0.0	-	0.0	0.0	0.0	17	0.6%	0.04%	0.00%	0.02%	0.04%	0.06%	0.0%	0.00%
Private Equity	3.2	-4.5	1.7	-1.3	0.4	332	11.7%	0.96%	-1.35%	0.51%	-0.39%	0.12%	1.5%	0.01%
Private Debt	1.2	0.0	0.7	1.2	1.9	107	3.8%	1.11%	0.04%	0.65%	1.15%	1.79%	7.2%	0.07%
Growth Real Estate	2.7	1.5	0.8	4.2	5.0	103	3.6%	2.63%	1.43%	0.81%	4.07%	4.88%	18.8%	0.18%
Venture/Growth Capital	0.4	0.0	0.1	0.4	0.5	14	0.5%	2.83%	0.10%	1.02%	2.92%	3.94%	2.0%	0.02%
Private Real Assets	2.0	1.1	1.2	3.0	4.2	51	1.8%	3.90%	2.06%	2.34%	5.96%	8.30%	15.9%	0.15%
Emerging Market Bonds	0.8	1.6	0.1	2.4	2.4	87	3.1%	0.92%	1.82%	0.06%	2.74%	2.80%	9.2%	0.09%
Active	0.1	-	-	0.1	0.1	20	0.7%	0.53%	0.00%	0.00%	0.53%	0.53%	0.4%	0.00%
Hedged	0.7	1.6	0.1	2.3	2.3	67	2.4%	1.04%	2.36%	0.08%	3.40%	3.48%	8.8%	0.08%
High Yield Bonds	0.2		-	0.2	0.2	57	2.0%	0.37%	0.00%	0.00%	0.37%	0.37%	0.8%	0.01%
Passive	0.0	-	-	0.0	0.0	5	0.2%	0.24%	0.00%	0.00%	0.24%	0.24%	0.0%	0.00%
Active	0.2	-	-	0.2	0.2	52	1.1%	0.38%	0.00%	0.00%	0.38%	0.38%	0.7%	0.01%
Low Beta	1.7	4.0	0.2	5.8	5.9	276	9.7%	0.63%	1.46%	0.06%	2.08%	2.14%	22.2%	0.21%
Immunized Cash Flows	0.1		-	0.1	0.1	146	5.1%	0.05%	0.00%	0.00%	0.05%	0.05%	0.3%	0.00%
Passive	0.1	-	-	0.1	0.1	146	5.1%	0.05%	0.00%	0.00%	0.05%	0.05%	0.3%	0.00%
Market Neutral Strategies	1.6	4.0	0.2	5.6	5.8	90	3.1%	1.78%	4.48%	0.18%	6.26%	6.44%	21.7%	0.20%
Hedged	1.6	4.0	0.2	5.6	5.8	90	3.1%	1.78%	4.48%	0.18%	6.26%	6.44%	21.7%	0.20%
Cash	0.1		-	0.1	0.1	41	1.4%	0.17%	0.00%	0.00%	0.17%	0.17%	0.3%	0.00%
Passive	0.1	-	-	0.1	0.1	41	1.4%	0.17%	0.00%	0.00%	0.17%	0.17%	0.3%	0.00%
Other	1.5	0.3	0.2	1.8	1.9	450	15.8%	0.32%	0.07%	0.04%	0.39%	0.43%	7.3%	0.07%
Core Real Estate	1.1	0.3	0.2	1.4	1.6	151	5.3%	0.75%	0.20%	0.12%	0.94%	1.07%	6.1%	0.06%
Active	1.1	0.3	0.2	1.4	1.6	151	5.3%	0.75%	0.20%	0.12%	0.94%	1.07%	6.1%	0.06%
TIPS	0.0			0.0	0.0	58	2.0%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.0			0.0	0.0	58	2.0%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Long Term Govt Bonds	0.0			0.0	0.0	51	1.8%	0.03%	0.00%	0.00%	0.03%	0.03%	0.1%	0.00%
Passive	0.0			0.0	0.0	51	1.8%	0.03%	0.00%	0.00%	0.03%	0.03%	0.1%	0.00%
Investment Grade Bonds	0.3		0.0	0.3	0.3	190	6.7%	0.15%	0.00%	0.00%	0.15%	0.15%	1.1%	0.01%
Passive	0.0		0.0	0.0	0.0	65	2.3%	0.02%	0.00%	0.00%	0.02%	0.02%	0.1%	0.00%
Active	0.3	-		0.3	0.3	125	4.4%	0.21%	0.00%	0.00%	0.21%	0.21%	1.0%	0.01%
Total Plan	17.4	4.1	5.2	21.5	26,6	2.847	100.0%	0.61%	0.14%	0.18%	0.75%	0.94%	100%	0.94%

The table above illustrates that management, incentive, and operating expenses for the pension plan totaled \$26.6 million for 2022 which equated to a total plan fee ratio of 0.94%. The Private Markets and Market Neutral Strategies contributed the most to the total plan fee ratio at 0.43% and 0.20%, respectively.

Table 4 - Pension Fees by Management Type

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)	Average Balance (\$ mm)	Average Veight	Fee Ratio - Management Fees	Fee Ratio - Incentive Fees	Operating	Fee Ratio - Mgmt and Incent Fees	Fee Ratio - Mgmt, Incent, and Op Ezp	% of Total	Contribution to Total Plan Fee Ratio
Passive	0.6	-	0.1	0.6	0.7	1,183	41.5%	0.05%	0.00%	0.01%	0.05%	0.06%	2.8%	0.03%
Active	5.0	0.4	0.3	5.4	5.7	901	31.7%	0.56%	0.04%	0.03%	0.59%	0.63%	21.3%	0.20%
Hedged	2.3	5.6	0.2	7.9	8.1	157	5.5%	1.46%	3.57%	0.14%	5.03%	5.17%	30.5%	0.29%
Private	9.4	-1.9	4.6	7.6	12.1	606	21.3%	1.56%	-0.31%	0.75%	1.25%	2.00%	45.5%	0.43%
Total Plan	17.4	4.1	5.2	21.5	26.6	2,847	100.0%	0.61%	0.14%	0.18%	0.75%	0.94%	100.0%	0.94%

For the total pension plan, Private management funds accounted for 0.43% of the total plan fee ratio and represented about 21.3% of average plan assets. Hedged strategies were the next largest contributor to the total plan fee ratio accounting for 0.29% of the total plan fee ratio and represented 5.5% of average plan assets. Passive and active strategies accounted for 0.03% and 0.20% of the total plan fee ratio and represented 41.5% and 31.7% of plan assets, respectively.

**Table 5 - Pension Other Investment Costs** 

			Other		
Investment Staff Salary and			<b>Yendors</b>	Total Other	
Benefits	Consultants	Custodian	and Travel	Costs	Other Costs
(\$ mm)	( <b>\$</b> mm)	( <b>\$</b> mm)	( <b>\$</b> mm)	( <b>\$</b> mm)	Fee Ratio
0.8	0.5	0.4	0.5	2.2	0.08%

Other investment costs for the pension plan equated to a total fee ratio of 0.08%. 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)	Operating Expenses (\$ mm)	Management and Incentive Fees (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)	Average Balance (\$ mm)		Fee Ratio - Management Fees		Operating	Fee Ratio - Mgmt and Incent Fees	Fee Ratio - Mgmt, Incent, and Op Exp	% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio
Growth	0.4	-	0.0	0.4	0.5	211	57.5%	0.20%	0.00%	0.02%	0.20%	0.22%	47.5%	0.13%
Public Equity	0.4		0.0	0.4	0.5	211	57.5%	0.20%	0.00%	0.02%	0.20%	0.22%	47.5%	0.13%
Passive	0.1	-	0.0	0.1	0.1	172	47.0%	0.04%	0.00%	0.02%	0.04%	0.06%	11.1%	0.03%
Active	0.4	-	0.0	0.4	0.4	38	10.5%	0.92%	0.00%	0.02%	0.92%	0.94%	36.4%	0.10%
Low Beta	0.0	-	-	0.0	0.0	19	5.1%	0.07%	0.00%	0.00%	0.07%	0.07%	1.4%	0.00%
Short Term Investment Grade Bond:	0.0	-	-	0.0	0.0	12	3.3%	0.02%	0.00%	0.00%	0.02%	0.02%	0.2%	0.00%
Passive	0.0	-	-	0.0	0.0	12	3.3%	0.02%	0.00%	0.00%	0.02%	0.02%	0.2%	0.00%
Cash	0.0	-	-	0.0	0.0	7	1.8%	0.17%	0.00%	0.00%	0.17%	0.17%	1.1%	0.00%
Passive	0.0	-	-	0.0	0.0	7	1.8%	0.17%	0.00%	0.00%	0.17%	0.17%	1.1%	0.00%
Other	0.5	-	0.1	0.5	0.5	137	37.4%	0.33%	0.00%	0.04%	0.33%	0.37%	51.1%	0.14%
Core Real Estate	0.4	-	-	0.4	0.4	48	13.2%	0.73%	0.00%	0.00%	0.73%	0.73%	48.7%	0.13%
Active	0.4	-	-	0.4	0.4	48	13.2%	0.73%	0.00%	0.00%	0.73%	0.73%	48.7%	0.13%
Commodities	0.1	-	0.1	0.1	0.1	19	5.2%	0.43%	0.00%	0.28%	0.43%	0.71%	18.4%	0.05%
Active	0.1	-	0.1	0.1	0.1	19	5.2%	0.43%	0.00%	0.28%	0.43%	0.71%	18.4%	0.05%
Investment Grade Bonds	0.0	-	0.0	0.0	0.0	52	14.2%	0.02%	0.00%	0.01%	0.02%	0.03%	2.1%	0.01%
Passive	0.0	-	0.0	0.0	0.0	52	14.2%	0.02%	0.00%	0.01%	0.02%	0.03%	2.1%	0.01%
Long Term Government Bonds	0.0	-	-	0.0	0.0	18	4.9%	0.03%	0.00%	0.00%	0.03%	0.03%	0.6%	0.00%
Passive	0.0	-		0.0	0.0	18	4.9%	0.03%	0.00%	0.00%	0.03%	0.03%	0.6%	0.00%
Total Plan	0.9	-	0.1	0.9	1.0	367	100.0%	0.24%	0.00%	0.03%	0.24%	0.27%	100%	0.27%

The table above illustrates that management, incentive, and operating expenses for the health care trust totaled \$1.0 million for 2022 which equated to a total plan fee ratio of 0.27%. The Public Equity and Core Real Estate asset classes contributed the most to the total plan fee ratio with each contributing 0.13%.

Table 7 - Health Care Fees by Management Type

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees (\$ mm)	Mgmt, Incent, and Op Exp (\$ mm)	Average Balance (\$ mm)	Average Veight	Fee Ratio - Management Fees	Fee Ratio - Incentive Fees	Operating	Fee Ratio - Mgmt and Incent Fees	Mgmt,	% of Total Plan Fee	Contribution to Total Plan Fee Ratio
Passive	0.1	-	0.0	0.1	0.1	261	71.1%	0.04%	0.00%	0.02%	0.04%	0.06%	14.5%	0.04%
Active	0.8	-	0.1	0.8	0.9	106	28.9%	0.75%	0.00%	0.06%	0.75%	0.81%	85.5%	0.23%
Total Plan	0.9		0.1	0.9	1.0	367	100.0%	0.24%	0.00%	0.03%	0.24%	0.27%	100.0%	0.27%

For the total health care trust, active management strategies accounted for 0.23% of the total plan fee ratio and represented 28.9% of average plan assets. Passive strategies accounted for 0.04% of the total plan fee ratio and represented 71.1% of plan assets.

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

Investment Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Yendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
0.1	0.1	0.1	0.0	0.3	0.08%

Other investment costs for the health care trust equated to a total fee ratio of 0.08%.

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

		Average Weig	likt .		danagement Fe	tes	<u> </u>	centive F	ees	Oper	ating Ex	pense	Total F	ees (Mgt/	Incent/Opex)	Fee Rati	io (Mgt/la	cent/Opex)	Contrib	to Total P	lan Fee Ratio		YoY At	tribution	
Asset Class	2021	2022	Change	2021 (\$ mm)	2022 (\$ mm)	Change (\$ mm)	2021 (\$ mm)		Change (\$ mm)	2021 ( <b>\$</b> mm)	2022 ( <b>\$</b> mm)	Chan ge (\$ mm)	2021 (\$ mm)	2022 (\$ mm)	Change (\$ mm)	2021 (\$ mm)	2022 (\$ mm)	Change	2021 (\$ mm)	2022 (\$ mm)	Change	Due to Veight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Ope <b>s</b>
Growth	75.3%	73.8%	-1.5%	12.8	14.2	1.4	26.2	-0.3	-26.4	2.6	4.8	2.2	41.6	18.8	-22.8	1.91%	0.88%	-1.02%	1.45%	0.66%	-0.79%	0.00%	0.06%	-0.89%	0.08%
Public Equity	49.4%	47.6%	-1.9%	4.4	3.7	-0.7	0.2	0.1	-0.1	0.3	0.2	-0.1	4.9	4.0	-0.9	0.35%	0.30%	-0.05%	0.17%	0.14%	-0.03%	0.02%	-0.02%	0.00%	0.00%
Passive	26.9%	28.1%	1.2%	0.4	0.4	0.0				0.1	0.1	0.0	0.5	0.5	0.0	0.07%	0.06%	0.00%	0.02%	0.02%	0.00%	-0.02%	0.00%	0.00%	0.00%
Active	22.5%	19.4%	-3.1%	4.0	3.3	-0.7	0.2	0.1	-0.1	0.2	0.1	-0.1	4.4	3.5	-0.9	0.68%	0.63%	-0.05%	0.15%	0.12%	-0.03%	0.03%	0.00%	0.00%	0.00%
Total Private Markets	21.7%	21.9%	0.2%	7.5	9.5	2.0	25.3	-1.9	-27.2	2.3	4.6	2.3	35.0	12.1	-22.9	5.63%	1.94%	3.69%	1.22%	0.43%	-0.79%	0.01%	0.07%	-0.96%	0.08%
Passive	6.0%	0.6%	-5.4%	0.0	0.0	-0.0				0.0	0.0	-0.0	0.1	0.0	-0.0	0.03%	0.06%	0.03%	0.00%	0.00%	0.00%	0.09%	0.00%	0.00%	0.00%
Private Equity	8.4%	11.7%	3.3%	3.8	3.2	-0.6	19.4	-4.5	-23.9	0.9	1.7	0.8	24.1	0.4	-23.7	10.02%	0.12%	-9.90%	0.84%	0.01%	-0.83%	0.27%	-0.07%	-1.10%	0.01%
Private Debt	3.0%	3.8%	0.8%	0.9	1.2	0.3	1.4	0.0	-1.4	0.6	0.7	0.1	2.9	1.9	-1.0	3.40%	1.79%	-1.61%	0.10%	0.07%	-0.03%	0.01%	0.00%	-0.06%	0.00%
Growth Real Estate	3.0%	3.6%	0.6%	1.7	2.7	1.0	3.4	1.5	-1.9	0.5	0.8	0.3	5.6	5.0	-0.6	6.53%	4.88%	-1.65%	0.19%	0.18%	-0.02%	0.03%	0.02%	-0.09%	0.01%
Venture/Growth Capital	0.0%	0.5%	0.4%	0.1	0.4	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.4	9.82%	3.94%	-5.88%	0.00%	0.02%	0.02%	0.04%	-0.01%	0.00%	-0.01%
Private Real Assets	1.3%	1.8%	0.5%	1.0	2.0	1.0	1.1	1.1	-0.0	0.2	1.2	1.0	2.2	4.2	2.0	5.86%	8.30%	2.44%	0.08%	0.15%	0.07%	0.02%	0.02%	-0.01%	0.03%
Emerging Market Bonds	2.9%	3.1%	0.1%	0.7	0.8	0.1	0.8	1.6	0.8	0.0	0.1	0.0	1.5	2.4	1.0	1.77%	2.80%	1.04%	0.05%	0.09%	0.03%	0.00%	0.00%	0.03%	0.00%
Active	1.2%	0.7%	-0.5%	0.2	0.1	-0.1					-		0.2	0.1	-0.1	0.53%	0.53%	0.00%	0.01%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Hedged	1.7%	2.4%	0.6%	0.5	0.7	0.2	0.8	1.6	0.8	0.0	0.1	0.0	1.3	2.3	1.0	2.64%	3.48%	0.84%	0.05%	0.08%	0.04%	0.01%	0.00%	0.02%	0.00%
High Yield Bonds	1.3%	1.3%	0.0%	0.2	0.2	-0.0		-		-	-	-	0.2	0.2	-0.0	0.38%	0.37%	-0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	0.2%	0.2%	0.0%	0.0	0.0	-0.0					-	-	0.0	0.0	-0.0	0.25%	0.24%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	1.1%	1.1%	0.0%	0.2	0.2	-0.0						-	0.2	0.2	-0.0	0.39%	0.38%	-0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Low Beta	7.4%	9.7%	2.3%	1.4	1.7	0.3	2.9	4.0	1.1	0.3	0.2	-0.1	4.6	5.9	1.3	2.18%	2.14%	-0.03%	0.16%	0.21%	0.05%	0.01%	-0.01%	0.01%	-0.01%
Immunized Cash Flows	3.6%	5.1%	1.5%	0.0	0.1	0.0				-			0.0	0.1	0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Passive	3.6%	5.1%	1.5%	0.0	0.1	0.0		-		-	-	-	0.0	0.1	0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Market Neutral Strategies	2.3%	3.1%	0.8%	1.4	1.6	0.2	2.9	4.0	1.1	0.3	0.2	-0.1	4.5	5.8	1.2	6.76%	6.44%	-0.31%	0.16%	0.20%	0.04%	0.04%	-0.01%	0.01%	-0.01%
Hedged	2.3%	3.1%	0.8%	1.4	1.6	0.2	2.9	4.0	1.1	0.3	0.2	-0.1	4.5	5.8	1.2	6.76%	6.44%	-0.31%	0.16%	0.20%	0.04%	0.04%	-0.01%	0.01%	-0.01%
Cash	1.4%	1.4%	0.0%	-	0.1	0.1				-	-	-		0.1	0.1	0.00%	0.17%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	1.4%	1.4%	0.0%	-	0.1	0.1		-			-	-	-	0.1	0.1	0.00%	0.17%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	14.7%	14.0%	-0.7%	1.1	1.4	0.3	0.2	0.3	0.1	0.2	0.2	-0.0	1.5	1.9	0.5	0.31%	0.43%	0.12%	0.05%	0.07%	0.02%	0.01%	0.01%	0.00%	0.00%
Core Real Estate	4.5%	5.3%	0.8%	0.8	1.1	0.3	0.2	0.3	0.1	0.2	0.2	0.0	1.2	1.6	0.4	0.91%	1.07%	0.16%	0.04%	0.06%	0.02%	-0.01%	0.01%	0.00%	0.00%
Active	4.5%	5.3%	0.8%	0.8	1.1	0.3	0.2	0.3	0.1	0.2	0.2	0.0	1.2	1.6	0.4	0.91%	1.07%	0.16%	0.04%	0.06%	0.02%	-0.01%	0.01%	0.00%	0.00%
Active TIPS Passive	2.0%	2.0%	0.1%	0.0	0.0	0.0				-	-	-	0.0	0.0	0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	2.0%	2.0%	0.1%	0.0	0.0	0.0					-		0.0	0.0	0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Long Term Govt Bonds	2.0%	1.8%	-0.2%	0.0	0.0	-0.0				-	-		0.0	0.0	-0.0	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	2.0%	1.8%	-0.2%	0.0	0.0	-0.0				-			0.0	0.0	-0.0	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Investment Grade Bonds	8.2%	6.7%	-1.6%	0.3	0.3	0.0				0.0	0.0	-0.0	0.3	0.3	0.0	0.12%	0.15%	0.03%	0.01%	0.01%	0.00%	0.02%	0.00%	0.00%	0.00%
Passive	4.7%	2.3%	-2.4%	0.0	0.0	-0.0				0.0	0.0	-0.0	0.0	0.0	-0.0	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%
Acitve	3.5%	4.4%	0.9%	0.2	0.3	0.0		-		-	-	-	0.2	0.3	0.0	0.24%	0.21%	-0.03%	0.01%	0.01%	0.00%	-0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	15.4	17.4	2.0	29.2	4.1	-25.2	3.1	5.2	2.1	47.7	26.6	-21.1	1.66%	0.94%	-0.73%	1.66%	0.94%	-0.73%	0.02%	0.07%	-0.88%	0.07%

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

		Average Weig	<b>h</b> t	M	anagement Fe	es	Incentive Fees		es	Oper	ating Ex	pense	Total Fe	es (Mgt/la	cent/Opex)	Fee Ratio	(Mgt/ln	cent/Opex)	Contrib	to Total P	lan Fee Ratio		YoY Att	ribution	
Туре	2021	2022	Change	2021 (\$ mm)	2022 (\$ mm)	Change (\$ mm)	2021 (\$ mm)		Change (\$ mm)	/ re	2022 (\$ mm)		2021 ( <b>\$</b> mm)	2022 (\$ mm)	Change (\$ mm)	2021	2022	Change	2021	2022	Change	Due to Veight	Due to Mgmt Fee	Incent Fee	Due to Opez
												mm)											Ratio	Ratio	
Passive	46.7%	41.5%	-5.2%	0.6	0.6	0.0		-	-	0.1	0.1	-0.0	0.7	0.7	0.0	0.05%	0.06%	0.01%	0.02%	0.03%	0.00%	0.08%	0.00%	0.00%	0.00%
Active	33.5%	31.7%	-1.8%	5.5	5.0	-0.4	0.3	0.4	0.0	0.4	0.3	-0.1	6.2	5.7	-0.5	0.64%	0.63%	-0.02%	0.22%	0.20%	-0.02%	0.02%	0.00%	0.00%	0.00%
Hedged	4.1%	5.5%	1.5%	1.9	2.3	0.4	3.6	5.6	2.0	0.3	0.2	-0.1	5.8	8.1	2.3	5.02%	5.17%	0.15%	0.20%	0.29%	0.08%	0.05%	-0.01%	0.03%	-0.01%
Private	15.7%	21.3%	5.6%	7.4	9.4	2.0	25.3	-1.9	-27.2	2.3	4.6	2.3	35.0	12.1	-22.9	7.75%	2.00%	-5.76%	1.22%	0.43%	-0.79%	0.34%	-0.02%	1.26%	0.05%
Total Plan	100.0%	100.0%	0.0%	15.4	17.4	2.0	29.2	4.1	-25.2	3.1	5.2	2.1	47.7	26.6	-21.1	1.66%	0.94%	0.73%	1.66%	0.94%	-0.73%	0.49%	-0.03%	1.23%	0.04%

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

	Inv Staff Salary and Benefits (\$ mm)	Consultant s (\$ mm)	Custodian (\$ mm)	Other Yendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
2021	0.8	0.5	0.5	0.4	2.0	0.07%
2022	0.8	0.5	0.4	0.5	2.2	0.08%
Change	0.1	0.0	-0.0	0.1	0.2	0.01%

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

		Average Veig	jht	W	lanagement Fe	es	la-	centive Fe	es	Opera	ting Ex	pense	Total Fe	es (Mgt/li	ncent/Opex)	Fee Rati	o (Mgt/lne	ent/Opex)	Contrib	to Total Pl	an Fee Ratio		YoY At	tribution	$\neg$
Asset Class	2021	2022	Change	2021 (\$ mm)	2022 (\$ mm)	Change (\$ mm)	2021 (\$ mm)		Change (\$ mm)	(±	2022 ( <b>\$</b> mm)	Chan ge (\$ mm)	2021 ( <b>\$</b> mm)	2022 (\$ mm)	Change (\$ mm)	2021 (\$ mm)	2022 (\$ mm)	Change	2021 ( <b>\$</b> mm)	2022 ( <b>\$</b> mm)	Change	Due to Veight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opez
Growth	59.0%	57.5%	-1.4%	0.5	0.4	-0.1				0.0	0.0	-0.0	0.6	0.5	-0.1	0.25%	0.22%	-0.03%	0.15%	0.13%	-0.02%	0.00%	-0.01%	0.00%	0.00%
Public Equity	59.0%	57.5%	-1.4%	0.5	0.4	-0.1				0.0	0.0	-0.0	0.6	0.5	-0.1	0.25%	0.22%	-0.03%	0.15%	0.13%	-0.02%	0.00%	-0.01%	0.00%	0.00%
Passive	46.8%	47.0%	0.3%	0.1	0.1	-0.0	-	-	-	0.0	0.0	-0.0	0.1	0.1	-0.0	0.07%	0.06%	0.00%	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	12.2%	10.5%	-1.7%	0.4	0.4	-0.1				0.0	0.0	-0.0	0.4	0.4	-0.1	0.95%	0.94%	0.00%	0.12%	0.10%	-0.02%	-0.01%	0.00%	0.00%	0.00%
Low Beta	18.6%	5.1%	-13.5%	0.0	0.0	0.0		-	-		-	-	0.0	0.0	0.0	0.02%	0.07%	0.06%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%
Short Term Investment Grade Bond	17.4%	3.3%	-14.1%	0.0	0.0	-0.0				-	-	-	0.0	0.0	-0.0	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%
Passive	17.4%	3.3%	-14.1%	0.0	0.0	-0.0							0.0	0.0	-0.0	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%
Cash	1.2%	1.8%	0.6%	-	0.0	0.0				-		-	-	0.0	0.0	0.00%	0.17%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	1.2%	1.8%	0.6%		0.0	0.0				-	-			0.0	0.0	0.00%	0.17%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	22.5%	37.4%	14.9%	0.3	0.5	0.2				0.1	0.1	0.0	0.3	0.5	0.2	0.40%	0.37%	-0.03%	0.09%	0.14%	0.05%	0.02%	0.00%	0.00%	-0.01%
Core Real Estate	9.3%	13.2%	3.9%	0.2	0.4	0.2				-		-	0.2	0.4	0.2	0.54%	0.73%	0.19%	0.08%	0.13%	0.06%	0.01%	0.03%	0.00%	0.00%
Active	9.3%	13.2%	3.9%	0.2	0.4	0.2				-	-	-	0.2	0.4	0.2	0.54%	0.73%	0.19%	0.08%	0.13%	0.06%	0.01%	0.03%	0.00%	0.00%
Commodities	5.4%	5.2%	-0.2%	0.1	0.1	-0.0				0.1	0.1	-0.0	0.1	0.1	-0.0	0.69%	0.71%	0.02%	0.06%	0.05%	-0.01%	0.00%	0.00%	0.00%	0.00%
Active	5.4%	5.2%	-0.2%	0.1	0.1	-0.0				0.1	0.1	-0.0	0.1	0.1	-0.0	0.69%	0.71%	0.02%	0.06%	0.05%	-0.01%	0.00%	0.00%	0.00%	0.00%
Investment Grade Bonds	5.5%	14.2%	8.7%	0.0	0.0	0.0		-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.02%	0.03%	0.01%	0.00%	0.01%	0.00%	-0.02%	0.00%	0.00%	0.00%
Passive	5.5%	14.2%	8.7%	0.0	0.0	0.0		-		0.0	0.0	0.0	0.0	0.0	0.0	0.02%	0.03%	0.01%	0.00%	0.01%	0.00%	-0.02%	0.00%	0.00%	0.00%
Long Term Government Bonds	2.3%	4.9%	2.6%	0.0	0.0	0.0				-			0.0	0.0	0.0	0.03%	0.03%	-0.01%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%
Passive	2.3%	4.9%	2.6%	0.0	0.0	0.0		-		-			0.0	0.0	0.0	0.03%	0.03%	-0.01%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.8	0.9	0.1		-		0.1	0.1	-0.0	0.9	1.0	0.1	0.24%	0.27%	0.03%	0.24%	0.27%	0.03%	0.05%	-0.01%	0.00%	-0.01%

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

		Average Weig	<b>L</b> t	h	Management Fees			centive F	ees	Oper	ating Ex	pense	Total Fe	es (Mgt/li	cent/Opex)		Fee Rati	•	Contrib	to Total Pi	an Fee Ratio		YoY Att	ribution	
Туре	2021	2022	Change	2021 (\$ mm)	2022 (\$ mm)	Change (\$ mm)	2021 ( <b>\$</b> mm)	2022 (\$ mm)	Change (\$ mm)	í.	2022 ( <b>\$</b> mm)	Chan ge (\$ mm)	2021 (\$ mm)	2022 (\$ mm)	Change (\$ mm)	2021	2022	Change	2021	2022	Change	Due to Veight	Mgmt Fee	Due to Incent Fee Ratio	Due to Opez
Passive	73.1%	71.1%	-2.0%	0.1	0.1	0.0	-	-		0.0	0.0	0.0	0.1	0.1	0.0	0.05%	0.06%	0.01%	0.04%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	26.9%	28.9%	2.0%	0.7	0.8	0.1	-	-		0.1	0.1	-0.0	0.8	0.9	0.1	0.76%	0.81%	0.05%	0.20%	0.23%	0.03%	0.01%	0.02%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.8	0.9	0.1				0.1	0.1	-0.0	0.9	1.0	0.1	0.24%	0.27%	0.03%	0.24%	0.27%	0.03%	0.01%	0.02%	0.00%	0.00%

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

	Inv Staff Salary and Benefits (\$ mm)	Consultant s (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
2021	0.1	0.1	0.1	0.0	0.3	0.07%
2022	0.1	0.1	0.1	0.0	0.3	0.08%
Change	0.0	-0.0	0.0	-0.0	0.0	0.01%

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

As presented in Table 9, the pension total plan fee ratio decreased by about 73 bps from 1.66% in 2021 to 0.94% in 2022.

The largest driver of the decrease from an asset class perspective were Private Markets (-79 bps contribution), partially offset by Market Neutral Strategy (+4 bps).

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

As shown in the Table 10 YoY attribution section, benefits from changes in the incentive fee ratio (-123 bps) and management fee ratio (-3 bps) were incrementally offset by an increase in manager-related operating expenses (+4 bps)

As displayed in Table 11, Other Costs increased 1 bps from 0.07% in 2021 to 0.08% 2022.

## 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 increased 3 bps from 24 bps in 2021 to 27 bps in 2022 due to changes in weight (+1 bps) and management fee ratio (+2 bps).

As displayed in Table 14, Other Costs remained increased slightly from 2021 to 2022 going from 7 bps to 8 bps.

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

Fund Name	Address		Commitment	Contributions Since	Remaining	Distributions for Calendar	2022 Distributions • Remaining Yalue	Cash Profit Distributed	Net IRR Since	Investment Multiple	Fees and expenses paid directly to GP	Fees and exp	penses paid fr	om the Fi 2022 (\$		and related parties	Fees and expenses paid by all	Carried Interest
runu Name	Address	Year	Amount (\$)	Inception (\$)	Yalue (\$)	gear 2022 (\$)	of Partnership (\$)	for Calendar Year 2022 (\$)	Incept (%)	Since Incept	and related parties 2022 (\$)	Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation	portfolio companies 2022 (\$)	Paid 2022 (\$)
Pathway Private Eq Fund VIII	2211 Michelson Drive, Ninth Floor Irvine, CA 92612	2004	40,000,000	40,139,675	599,425	404,187	1,003,612	255,388	6.6%	1.5	-	62,978	43,868	-	-	9,417	-	-
Pantheon Global Secondary III	600 Montgomery Street, 23rd Floor San Francisco, CA 94111	2006	40,000,000	37,840,000	443,066	400,000	843,066	(1,653,408)	1.9%	1.1	-	-	23,269	-	-		-	-
Pantheon USA Fund VII, LP	600 Montgomery Street, 23rd Floor San Francisco, CA 94111	2006	40,000,000	37,280,000	5,995,301	2,374,463	8,369,764	706,828	10.1%	1.9	-	51,542	17,696	-	-	(44,937)	-	-
Great Hill Equity Partners IV	One Liberty Square Boston, Massachusetts 02109	2008	5,000,000	5,000,000	3,117,624	173,291	3,290,915	(27,309)	23.4%	3.1	-	-	16,690	-	-	(60,974)	-	42,949
Partners Group Secondary 2008	1660 17th Street, Suite 201 Denver, CO 80202	2008	9,522,344	10,123,420	534,529	115,317	649,846	65,763	8.9%	1.5	-	-	2,408		-	9,805	-	2,621
Partners Group Secondary 2011	1660 17th Street, Suite 201 Denver, CO 80202	2011	20,000,000	13,053,192	3,398,070	1,249,034	4,647,104	1,230,400	15.7%	1.8	-	147,622	327	-	-	(246,158)	-	138,782
PE Strategic Partnership, LP	325 N. Saint Paul St., Ste. 4900 Dallas, TX 75201	2017	350,200,000	336,100,000	292,719,264	6,902,150	299,621,414	16,192,007	24.7%	1.8	-	2,722,522	1,550,098	-	-	(4,009,089)	-	-
Crestline Portfolio Financing	201 Main St, #1900 Fort Worth, TX 76102	2018	15,000,000	13,968,232	7,850,269	2,506,752	10,357,021	(318,612)	8.6%	1.2	-	106,851	36,703	-	-	38,625	-	-
Innovation Endeavors III	1845 El Camino Real Palo Alto, CA 94306	2018	4,800,000	4,521,603	14,239,718	1,257,892	15,497,610	13	46.0%	3.0	-	77,339	-	77,339	-	(169,926)	-	-
Innovation Endeavors Fund IV, L.P.	1845 El Camino Real Palo Alto, CA 94306	2021	4,800,000	1,558,805	1,477,729	-	1,477,729	-	-5.1%	0.9	-	96,000	-	96,000	-		-	-
Soma Capital Fund III	10 E 39th St 925, New York City, New York, 10016	2021	5,000,000	2,007,183	2,169,009		2,169,009	1,668	9.6%	1.1	-	124,955	11,096		-	20,048	-	-
TI Platform SJFed, L.P.	1160 Battery Street East Suite 100 San Francisco, CA 94111	2021	50,000,000	8,050,000	8,117,372	-	8,117,372	-	0.7%	1.0	-	94,461	95,746	7,631	-	(6,695)	-	-
Fin VC Horizons II	473 Jackson Street Suite 300 San Francisco, California 94111	2022	5,000,000	3,939,059	3,548,572	-	3,548,572	-	-14.6%	0.9	-	73,805	33,096	-				

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

Fund Name	Address	Vintage	Commitment	Contributions Since	Remaining	Distributions for Calendar	2022 Distributions + Remaining Value	Cash Profit Distributed	Net IRR Since	Investment Multiple	Fees and expenses paid directly to GP	Fees and exp	enses paid fr	om the Fu 2022 (\$		nd related parties	Fees and expenses paid by all	Carried Interest
THIS HARE	Address	Year	Amount (\$)	Inception (\$)	Value (\$)	year 2022 (\$)	of Partnership (\$)	for Calendar Year 2022 (\$)	incept (2)	Since Incept	and related parties 2022 (\$)	Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation	portfolio companies 2022 (\$)	Paid 2022 (\$)
GSO SJ Partners	345 Park Avenue New York, NY 10154	2010	50,000,000	43,365,930	4,406,568	-	4,406,568	(4,532,147)	4.4%	1.1		30,894	15,379	-		-	-	-
Medley Opportunity Fund II, L.P.	280 Park Avenue, 6th Floor East New York, NY 10017	2010	50,000,000	50,047,962	4,852,337	-	4,852,337	-	2.4%	1.1		22,800	151,286		-	-	-	-
White Oak Direct Lending	3 Embarcadero Center, 5th Floor San Francisco, CA 94111	2010	50,000,000	88,348,325	37,768,869	-	37,768,869	-	8.2%	1.4	471,497	430,128	41,363		-	-	-	-
Cross Ocean USD ESS Fund II, L.P.	11 Charles II St. London, SW1Y4QU	2016	15,000,000	12,007,402	2,625,553	1,366,636	3,992,189	(256,058)	5.5%	1.2		36,951	89,257		-	3,859		-
Arbour Lane Credit Opportunity Fund II, L.P.	700 Canal St, Stamford, CT 06902	2018	8,000,000	15,364,657	10,768,411	-	10,768,411	-	14.5%	1.2		140,000	52,898		-	60,501		-
Crestline Co-Investment	201 Main St, #1900 Fort Worth, TX 76102	2018	1,600,000	1,598,573	1,438,196	-	1,438,196	-	13.6%	1.4		8,737	2,919		-	35,454		-
Crestline Portfolio Financing Fund II	201 Main St, #1900 Fort Worth, TX 76102	2018	8,000,000	5,163,024	2,392,507	558,065	2,950,572	22,435	10.9%	1.1		30,096	17,479		-	45,399		-
Octagon CLO Opportunity Fund III, L.P.	250 Park Ave., 15th Floor, New York, NY 10177, USA	2018	25,000,000	21,250,000	(2,780)	-	-		16.8%	1.2			-	-	-	-	-	-
HPS Special Situations Opportunity Fund	40 West 57th St, 33rd Floor New York, NY 10019	2019	8,000,000	6,411,723	7,512,419	178,679	7,691,098	145,317	21.0%	1.3		82,540	19,639		-	210,116		-
Cross Ocean USD ESS Fund III, L.P.	11 Charles II St. London, SW1Y4QU	2020	18,000,000	17,195,551	22,039,359	840,379	22,879,738	599,999	14.9%	1.4		193,457	136,736	-	-	(243,663)		-
Eagle Point Defensive Income	600 Steamboat Road, Suit 202 Greenwich, CT 06830	2020	8,000,000	7,415,200	7,013,069	356,747	7,369,816	11,278	0.6%	1.0		56,098	24,729		-	(41,944)	-	-
AG Credit Solutions Fund II	245 Park Avenue New York, NY 10167	2021	9,000,000	4,496,250	4,111,174	201,428	4,312,602	(160,425)	-9.3%	1.0		40,160	8,679	-	-	-		-
Arbour Lane Credit Opportunity Fund III, L.P.	700 Canal St, Stamford, CT 06902	2021	9,000,000	3,828,077	3,551,347	11,722	3,563,069	-	-8.9%	0.9		26,483	6,616		-	(13,022)		-
Strategic Value Special Situations Fund V	100 West Putnam Avenue Greenwich, CT 06830	2021	7,500,000	2,998,125	3,229,733	8,922	3,238,655	(61,638)	8.2%	1.1		58,127	27,845		-	(20,988)		-
Eagle Point Defensive Income Fund II, L.P.	600 Steamboat Road, Suit 202 Greenwich, CT 06830	2022	10,000,000	1,217,000	1,264,024	-	1,264,024	4,578	21.0%	1.0	-	2,577	20,355		-	4,368	-	
HPS Special Situations Opportunity Fund II, L.P.	40 West 57th St, 33rd Floor New York, NY 10019	2022	10,000,000	1,001,608	975,038	-	975,038	9,358	-36.0%	1.0		3,293	41,361	-			-	-
Octagon CLO Opportunity Fund IV	250 Park Ave., 15th Floor, New York, NY 10177, USA	2022	9,000,000	7,650,000	7,790,326	-	7,790,326	-	3.9%	1.0	-	21,514	35,078		-		-	

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

		Vistage	Commitment	Contributions	Remaining	Distributions	2022 Distributions +	Cash Profit Distributed	Met IRR Since	lavestment Multiple	Fees and expenses paid directly to GP	Fees and exp	oenses paid fr	om the Fe 2022 (:		nd related parties	Fees and expenses paid by all	Carried Interest
Fund Name	Address	Year	Amount (\$)	Since Inception (\$)	Value (\$)	for Calendar year 2022 (\$)	Remaining Value of Partnership (\$)	for Calendar Year 2022 (\$)	Incept (2)	Since Incept	and related parties 2022 (\$)	Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation	portfolio companies 2022 (\$)	Paid 2022 (\$)
DRA Growth and Income Fund VI	220 East 42nd Street, 27th Floor New York, NY 10017	2007	9,709,422	10,556,217	-	-	-	-	10.6%	1.7	-	-	-	-		-	-	-
DRA Growth and Income Fund VII, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2011	15,000,000	16,001,808	1,345,789	265,638	1,611,427	14,933	21.7%	2.3		20,293	(6,480)	-	-	57,610	-	45,000
DRA Growth and Income Fund VIII, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2014	15,000,000	17,779,367	5,023,416	1,006,638	6,030,054	290,805	8.2%	1.3	-	124,316	24,126	-		101,010	-	-
European Property Investors Special Opportunities 4, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2015	14,591,648	13,300,890	12,524,794	767,870	13,292,664	71,933	7.9%	1.4		114,361	113,054			24,821	-	-
DRA Growth and Income Fund IX, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2016	20,000,000	21,443,380	14,831,216	3,477,143	18,308,359	1,086,778	17.7%	1.6		278,508	33,019		-	93,107	-	-
GEM Realty Fund VI, L.P.	900 North Michigan Avenue #1450, Chicago, IL 60611	2017	10,000,000	8,250,000	4,664,480	3,232,500	7,896,980	1,946,133	13.9%	1.3	-	104,782	31,747	-		13,342	7,521	
European Property Investors Special Opportunities 5, L.P.	Berkeley Square House (8th Floor) Berkeley Square, London W1J6DB, UK	2018	12,383,497	10,483,899	8,606,400	1,238,866	9,845,266	165,793	-4.1%	0.9	-	143,231	158,483	-		-	-	-
Torchlight Debt Fund VI, L.P.	280 Park Avenue New York, NY 10017	2018	30,000,000	39,255,788	21,994,897	11,484,564	33,479,461	1,177,323	8.3%	1.2	-	316,229	80,776	-	-	345,483	-	-
Praedium X Middle-Income Housing Fund, L.P.	733 Third Ave. 24th Floor New York, NY 10017	2019	10,000,000	3,397,588	2,942,181	36,142	3,038,323	38,751	NM	0.9		454,137	47,741	23,962		-	-	-
DRA Growth and Income Fund X, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2020	10,000,000	8,542,215	7,606,924	1,416,255	9,023,179	177,173	25.3%	1.2		158,772	19,100			-	-	-
Exeter Industrial Value Fund V, L.P.	101 West Elm Street, Suite 600, Conshohocken, PA 19428	2020	5,500,000	5,415,494	8,031,132	-	8,031,132	207,838	37.6%	1.5		74,250	21,893			106,588	-	-
H.I.G. Realty Partners IV	1450 Brickell Avenue Miami, FL 33131	2020	10,000,000	4,919,230	5,039,486	1,258,277	6,297,763	454,016	111.9%	1.3		429,808	104,975		-	324,282	-	101,199
Rockpoint Real Estate Fund VI, L.P.	500 Boylston Street, Suite 1880, Boston, MA	2019	6,500,000	5,291,916	5,489,111	722,507	6,211,618	345,371	14.4%	1.2		60,811	13,005			71,198	10,640	-
Torchlight Debt Fund VII, L.P.	280 Park Avenue New York, NY 10017	2020	6,000,000	3,303,668	3,203,547	-	3,203,547	32,320	NM	1.1	-	78,000	17,153		-	-	-	-
Centerbridge Partners Real Estate Fund II, L.P.	375 Park Avenue New York, NY 10512-0002	2021	10,000,000	1,509,867	1,361,408	-	1,361,408	(4,238)	NM	0.9	-	133,080	16,388	5,217	-	(9,951)	-	-
AIGGRE US Real Estate Fund IV, L.P.	28 Liberty Street 46th Floor New York, NY 10005	2022	10,000,000	5,008,541	6,170,633	36,970	6,207,603	1,447,784	NM	1.2	-	133,476	145,618	-	-	343,585	-	-
GCP SecureSpace Property Partners, L.P.	100 Wilshire Boulevard Suite 1400 Santa Monica, CA 3040	2022	6,000,000	1,831,773	1,120,841	401,541	1,522,382	-	NM	0.8	-	73,664	13,870	6,288		-	-	-
Clarion Lion Properties Fund (Fed Pension)	230 Park Avenue New York, NY 10017	2019	49,000,000	49,000,000	61,893,860	1,591,832	63,485,692	161,228	9.2%	1.3		516,916	39,677	-		-	-	-
Clarion Lion Properties Fund (Fed HC)	230 Park Avenue New York, NY 10017	2019	12,000,000	12,000,000	15,155,767	389,787	15,545,554	39,480	9.2%	1.3	-	126,576	9,713	-		-	-	-
BlackRock U.S. Core Property Fund (Fed Pension)	400 Howard Street San Francisco, CA 94105	2019	72,000,000	72,000,000	31,296,652	60,478,206	91,774,858	632,458	10.4%	1.3		202,398	91,714	-		-	-	-
BlackRock U.S. Core Property Fund (Fed HC)	400 Howard Street San Francisco, CA 94105	2019	20,500,000	20,500,000	10,069,979	16,301,722	26,371,702	181,740	10.4%	1.3	-	65,440	29,663	-	-	-	-	-
TA Realty Core Property Fund (Fed Pension)	1 Federal Street Boston, MA 02110	2021	56,000,000	56,000,000	55,722,275	1,355,365	57,077,640		12.0%	1.0	-	222,592	49,587	-			-	-
TA Realty Core Property Fund (Fed HC)	1 Federal Street Boston, MA 02110	2021	21,000,000	21,000,000	21,684,533	625,445	22,309,978		12.0%			106,186	23,571	-				<u> </u>
Clarion Lion Industrial Trust (Fed Pension)	230 Park Avenue New York, NY 10017 230 Park Avenue	2021	11,000,000	11,000,000	14,829,831	193,891	15,023,721	8,839	22.6%		-	191,761	3,710	-		296,917	-	-
Clarion Lion Industrial Trust (Fed HC)	New York, NY 10017	2021	3,800,000	3,800,000	4,835,460	54,332	4,889,792	2,998	22.6%	1.3		57,456	1,105	-	-	79,007	-	-

Table 18 – California Government Code §7514.7 Disclosure, Private Real Assets

Global Infrastructure Partners III, L.P. New Yo	Address		Commitment	Contributions Since	Remaining	Distributions for Calendar	2022 Distributions	Cash Profit Distributed for	Net IRR Since	Investment Multiple	Fees and expenses paid directly to GP	Fees and exp	enses paid fr	om the Ft 2022 (\$		nd related parties	Fees and expenses paid by all	Carried Interest
T unu rume	Nutras	Year	Amount (\$)	Inception (\$)	¥alue (\$)		of Partnership (\$)	Calendar Year 2022 (\$)	incept (%)	Since Incept	and related parties 2022 (\$)	Management Fees		Offsets	Other Expenses	Incentive/Carried Interest Allocation	portfolio companies 2022 (\$)	Paid 2022 (\$)
Global Infrastructure Partners III, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2016	25,000,000	25,411,760	25,960,608	5,407,970	31,368,578	-	10.7%	1.5		353,156	26,212			15,261		
Lime Rock Partners VIII, L.P.	274 Riverside Avenue, Westport, CT 06880	2018	3,200,000	3,320,196	3,859,359	777,626	4,636,985	503,079	13.8%	1.5		64,000	3,451	-		268,038		
Lime Rock New Energy	274 Riverside Avenue, Westport, CT 06880	2019	5,000,000	2,858,558	1,810,813	56,719	1,867,532	46,730	15.8%	1.3		90,000	6,865	6,880		(14,766)		
Mountain Capital Partners II	811 Louisiana Street, Suite 2550, Houston, TX 77002	2019	6,000,000	1,296,948	1,013,606	329,626	1,343,232	-	4.3%	1.0		90,000	8,123	6,912		-	•	,
Orion Mine Finance Fund III, L.P.	1045 Avenue of the Americas, 25th Floor, New York, NY 10018	2019	5,000,000	3,846,288	4,463,786	196,277	4,660,063	26,330	12.1%	1.2		81,250	9,120	-		105,448		
Tembo Capital Mining Fund III	180 Piccadilly London W1J 9ER England, United Kingdom	2019	6,000,000	1,853,310	1,871,980	4,719	1,876,699	-	1.5%	1.0	-	120,001	89,568	8,097		(10,206)	3,082	,
Crestline Co-Invest II	201 Main St, #1900 Fort Worth, TX 76102	2020	1,900,000	1,907,234	3,605,292	-	3,605,292	-	38.4%	1.9	-	-	9,877	-	-	135,952	•	•
Energy Services Co-Invest	NA	2020	1,200,000	1,200,000	1,200,000	-	1,200,000	-	0.0%	1.0	-	-	-	-	-	-	-	-
Global Infrastructure Partners IV, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2020	3,200,000	2,505,539	2,584,486	5,192	2,589,678	157	3.5%	1.0	-	56,000	6,165	20,471	-	-	-	
Kimmeridge Energy Fund V, L.P.	400 Madison Avenue, Suite 14C, New York, NY	2020	3,800,000	5,099,176	5,799,392	2,315,585	8,114,977	1,599,238	40.9%	1.8	-	63,722	176,159	-		330,825	-	
H.I.G. Infrastructure Partners	1450 Brickel   Avenue Miami, FL 33131	2021	11,000,000		(100,285)	-	(100,285)	(59,487)	NM	NM	-	229,644	241,757	-	-	84,010	102,468	-
Aether Real Assets Seed Partners I, L.P.	1900 Sixteenth Street, Suite 825 Denver, CO 80202	2022	6,000,000	344,819	1,003,004		1,003,004	-	NM	2.9		605,656	254,089			42,485	-	
Hull Street Energy Partners II, L.P.	4747 Bethesda Avenue Suite 1220 Bethesda, Maryland 20814	2022	6,000,000	318,033	218,959	-	218,959		NM	0.7	-	120,000	22,975	29,779	-	3,372		
Kimmeridge Fund VI, L.P.	400 Madison Avenue, Suite 14C, New York, NY	2022	9,000,000	7,648,489	7,889,062	430	7,889,492	(181,665)	NM	1.0		121,648	340,177			93,189	-	-

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

Fund Name	Address	Vintage	Commitment	Contributions Since	Remaining	Distributions	2022 Distributions • Remaining Value	Cash Profit Distributed for	Net IRR Since	Investment Multiple	Fees and expenses paid directly to GP	Fees and exp	enses paid fr	om the Fu 2022 (\$		nd related parties	Fees and expenses paid by all	Carried Interest
ruid Name	Address	Year	Amount (\$)	Inception (\$)	¥alue (\$)		of Partnership (\$)		Incept (%)	Since Incept	and related parties 2022 (\$)	Management Fees			Other Expenses	Incentive/Carried Interest Allocation	portfolio companies 2022 (\$)	Paid 2022 (\$)
Crabel Advanced Trend	1999 Avenue of the Stars, Suite 2550 Los Angeles, CA 90067	N/A	NA	NA	34,523,541	14,000,088	48,523,628	-	11.6%	1.2		193,671	28,454				-	-
DE Shaw Composite Fund, LLC	1166 Avenue of the Americas, 9th Floor New York, NY 10036	N/A	NA	NA	44,663,253	6,766,784	51,430,037	3,657,280	16.0%	3.0		1,302,547	93,692	-		3,657,280	-	3,657,280
Hudson Bay	777 Third Ave. 30th Floor, New York, NY 10017	N/A	NA	NA	9,902,845	-	9,902,845	364,363	9.9%	1.7		95,128	31,738	-		364,363	-	364,363
Iguazu Partners LP Fund	2 Embarcadero Center # 1645 San Francisco, CA 94111	N/A	NA	NA	68,682,584		68,682,584	1,585,744	10.0%	1.4		699,581	53,840		-	1,585,744	-	1,585,744
Pine River Fund, Ltd	3 Bryant Park, 24th Floor New York, NY 10036	N/A	NA	NA	303,706	47,111	350,817	-	3.7%	1.3		1,590	8,731	-	-		-	-
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Source: Fund managers, State Street, ORS