



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Roberto L. Peña

**SUBJECT: OFFICE OF RETIREMENT
SERVICES' FY23-24 PROPOSED
ADMINISTRATIVE BUDGET**

DATE: May 17, 2023

RECOMMENDATION

Approve the Office of Retirement Services' (ORS) proposed administrative expense budget for Fiscal Year 2023-2024.

BACKGROUND

In October 2017, the City Auditor issued Report 17-06, *Audit of Retirement Services: Greater Transparency Needed in the Budgeting Process, Interactions Among Stakeholders, Investment Policies, and Plan Administration*. The first finding that the City Auditor outlined in the report was that ORS' budget process was not well defined. Thus, the City Auditor provided several recommendations, which were related to the approval of the budget by City Council:

- Recommendation #2: The Office of Retirement Services should include its proposed personnel budget and staffing plan for City Council approval as part of the comprehensive annual budget outlined in Recommendation #3.
- Recommendation #3: The Office of Retirement Services should prepare a comprehensive annual budget document covering the entire aggregate expense of administering each plan.
- Recommendation #4: In compliance with the City Charter, the Office of Retirement Services should formally request each retirement board annually adopt the annual budget document that has also been approved by the City Council.

In order to comply with the recommendations by the City Auditor, the ORS combined proposed administrative expense budget is being brought forward through the Manager's Budget Addendum (MBA) process to be approved as part of the Mayor's June Budget Message.

ANALYSIS

Administrative and Comprehensive Budget Analysis

Historically, ORS prepared an annual administrative expense budget that was approved by both the Police and Fire Department Retirement Plan and Federated City Employees’ Retirement System Boards individually at their March and April meetings (Attachments A and D). Due to the City Auditor’s recommendations, ORS prepared a comprehensive budget through the MBA process.

The administrative expense budget is divided into four categories: personal services, non-personal/equipment, professional services, and medical providers. Table 1 below shows the combined ORS administrative expense budget for both plans. The estimated amount is lower than the adopted budget for fiscal year 2022-2023 mainly due to staffing vacancies and savings in all the other categories due to planned projects not being completed from lack of resources and/ or general cost savings.

The proposed budget for personal services increased mainly due to the upgrade of two positions to address the increased complexity of the plans and adding a temporary Medicare Analyst position. The proposed budget for non-personal/equipment increased mainly due an increase in the information technology budget for a financial reporting system and cubicle reconfigurations, as well as general increases across the board for inflation. The proposed budget for professional services increased due to increases in legal and temporary staffing services, as well as inflation. The proposed budget for medical services remained flat. The total proposed budget increased by 7.2% to \$13.1 million, which is the amount that ORS is requesting the City Council to approve.

TABLE 1 – Office of Retirement Services Proposed Administrative Budget

Expense Category	2022-2023 Modified (A)	2022-2023 Estimate (B)	2023-2024 Proposed (C)	% Increase (Decrease) (A to C)	% Increase (Decrease) (B to C)
Personal Services	\$8,449,000	\$8,356,000	\$9,098,000	7.7%	8.9%
Non-personal / Equipment	\$1,593,000	\$1,476,000	\$1,731,000	8.7%	17.3%
Professional Services	\$1,748,000	\$1,857,000	\$1,834,000	4.9%	(1.2%)
Medical Services	\$415,000	\$341,000	\$415,000	0.0%	21.7%
TOTAL	\$12,205,000	\$12,030,000	\$13,078,000	7.2%	8.7%

The amounts in the table above are included in the source and use statements, which are part of the City Manager’s 2023-2024 Proposed Operating Budget documents. However, the source and use statements are shown for display purposes only, and the medical providers category is combined with the professional services in the source and use statements.

As part of recommendation #3 by the City Auditor, the ORS prepared a comprehensive proposed budget that encompassed both revenue and expenses of the plans described in Table 2 below. The

budget documents consisted of the typical presentation that was historically presented to the Boards (Attachments A and D), as well as a memo explaining the various components of the budget and the proposed budget itself (Attachments B and E). These presentations, memos and budgets were presented to the Boards individually at the March and April meetings for both the Police and Fire and Federated Boards, respectively. The table below combines both plans to represent the Office of Retirement Services' proposed comprehensive budget.

TABLE 2 – Office of Retirement Services Proposed Comprehensive Budget

	2021-2022 Actual	2022-2023 Modified	2022-2023 Estimate	2023-2024 Proposed
Source of Funds				
Beginning Balance – Claims Reserve	\$8,271,906,000	\$7,731,525,000	\$7,731,525,000	\$8,080,720,000
COLAs	27,100	28,500	17,000	19,500
City Contributions	475,194,000	459,423,000	437,944,000	464,738,000
Participant Contributions	81,098,000	83,056,000	83,066,000	85,054,000
Investment (Loss) / Income, net of expenses*	(529,265,000)	473,240,000	409,355,000	427,373,000
Total Source of Funds	\$8,298,960,100	\$8,747,272,500	\$8,661,857,000	\$9,058,719,500
Use of Funds				
COLAs	27,100	28,500	17,000	19,500
Benefits	497,149,000	510,056,000	511,388,000	538,122,000
Health Insurance	57,546,000	57,297,000	57,702,000	58,120,000
Personal Service	7,519,000	8,449,000	8,356,000	9,098,000
Non-Personal/ Equipment	2,282,000	1,593,000	1,476,000	1,731,000
Professional Fees	2,912,000	2,163,000	2,198,000	2,249,000
Ending Balance – Claims Reserve	\$7,731,525,000	\$8,167,686,000	\$8,080,720,000	\$8,448,511,000
Total Use of Funds	\$8,298,960,100	\$8,747,272,500	\$8,661,857,000	\$9,057,850,500

* Based on the 2021 Annual Fee Reports, total management and incentive fees for the pension and healthcare trusts for the Police and Fire Plan was \$71.8 million and for the Federated System was \$44.6 million for a total of \$116.4 million.

It should be noted that the personal services costs reflected in the above table can vary from the amount included in the City Manager's 2023-2024 Proposed Operating Budget due to the City's assumptions used to calculate salary, retirement, and benefit costs when compared to those that were approved by the Federated Retirement Board and the Police and Fire Retirement Board in March.

This combined comprehensive budget nets the investment manager fees and other consultant expenses against investment income. Please see Attachments C and F for the most recent calendar year Comprehensive Annual Fee reports that were presented to the Boards. As indicated in the Fee reports for calendar year 2021, the management and incentive fees for the Police and Fire and

Federated pension plans and healthcare trusts totaled \$71.8 million with a fee ratio of 1.56% and \$44.6 million with a fee ratio of 1.55%, respectively, for a combined total of \$116.4 million. The Fee reports include management fees, incentive fees, consultant fees and other investment fees, some of which were based on calculations by the investment managers. Please note the Fee reports for calendar year 2022 are expected to be completed in August and will be presented to the City Council thereafter.

Investment Fee Analysis

Since the Comprehensive Fee Report for calendar year 2022 will not be available until November 2023 and ORS' commitment to transparency and desire to meet the spirit of the City Auditor's recommendation #3, ORS has prepared a Pro Forma Investment Fee Analysis of potential investment fees for the 2023-2024 fiscal year.

Below are pro forma fee projections in dollar terms calculated by multiplying each plan's asset allocation policy targets as of May 2023 by calendar year 2021 fee ratios and plan assets as of December 2022. **Please note these projections are based on many assumptions with a wide margin of error.**

Notes on Methodology

- The Pro Forma fees shown are approximations of projected fees with a wide margin of error.
- Actual fund management fees will vary as the composition of underlying funds and fund types changes over time.
- Incentive fees do not reduce the Fund's income from investments. Such "fees" (carried interest) are a profit share that affords the fund manager an ownership alignment with the other equity partners. The IRS does not treat carried interest income the same as fee income to managers. Accordingly, while for convenient reference we refer to the managers' equity interest as a "fee", that reference needs to be understood in the context of aligning our interests with the managers. Unlike a fee, the manager only earns the incentive amount if we also earn a profit over a set hurdle amount.
- Actual incentive fees will vary from the values shown since incentive fees are calculated based on the actual performance of underlying funds which is uncertain and subject to change. Calendar year 2021 incentive fee ratios are used as the reference point for estimation purposes, but do not reflect the current performance or expected future performance of investments.
- Other investment-related costs include salary and benefits compensation for investment staff (including a 50% allocation for the CEO), cost of consultants (general, absolute return, risk), custodian bank, other third-party vendors utilized by the investment program, and investment staff travel.
- The calendar year 2022 Fee Report is expected to be available by November 2023.
- Some values may not sum due to rounding.

A summary of the pro forma fees for a combination of all four retirement plans is below and followed by a breakdown of each plan individually. The total pro forma fund management fees, incentive fees, and operating expenses of \$143.8 million with a fee ratio of 1.77% compares to \$125.6 million with a fee ratio of 1.55% in calendar year 2021 as shown in the 2021 Fee Reports. Total pro forma other investment-related costs of \$5.3 million with a fee ratio of 0.07% compares to \$5.2 million with a fee ratio of 0.06% as shown in the 2021 Fee Reports.

All Retirement Plans - Pro Forma Estimated Fund Management Fees (\$ mm) by Asset Class:					
		Pro Forma Fees (\$MM)			
		Management Fees	Incentive Fees	Operating Expenses	Total Expenses
Asset Class					
Growth					
	Public Equity	11.5	0.3	0.7	12.6
	Private Markets	22.0	78.1	7.0	107.1
	Emerging Market Debt	1.5	1.6	0.1	3.2
	High Yield Bonds	0.6	0.0	0.0	0.6
Low Beta					
	Market Neutral Strategies	4.7	9.6	0.8	15.0
	Immunized Cash Flow	0.4	0.0	0.0	0.4
	Short-Term Investment Grade Bonds	0.0	0.0	0.0	0.0
Other					
	Core Real Estate	2.8	0.6	0.6	3.9
	Commodities	0.1	0.0	0.1	0.2
	TIPS	0.1	0.0	0.0	0.1
	Investment Grade Bonds	0.6	0.0	0.0	0.6
	Long Term Government Bonds	0.0	0.0	0.0	0.0
Total Plan		44.2	90.2	9.3	143.8

All Retirement Plans - Pro Forma Estimated Other Estimated Other Investment-Related Costs (\$mm):					
Investment Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
2.3	1.1	1.1	0.9	5.3	0.07%

HONORABLE MAYOR AND CITY COUNCIL

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Federated Pension Fund Management Fees by Asset Class:										
		2021 Fee Ratios				Pro Forma Fees (\$MM)				
		Policy Target	Management Fee	Incentive Fees	Operating Expenses	Total Expense	Management Fees	Incentive Fees	Operating Expenses	Total Expenses
Asset Class										
Growth	Public Equity	49.00%	0.31%	0.01%	0.02%	0.34%	4.3	0.1	0.3	4.8
	Private Markets	21.00%	1.20%	4.06%	0.37%	5.63%	7.2	24.3	2.2	33.8
	Emerging Market Debt	3.00%	0.82%	0.30%	0.05%	1.77%	0.7	0.8	0.0	1.5
	High Yield Bonds	2.00%	0.38%	0.00%	0.00%	0.38%	0.2	0.0	0.0	0.2
Low Beta	Market Neutral Strategies	3.00%	2.08%	4.27%	0.41%	6.76%	1.8	3.7	0.4	5.8
	Immunized Cash Flow	5.00%	0.05%	0.00%	0.00%	0.05%	0.1	0.0	0.0	0.1
Other	Core Real Estate	5.00%	0.63%	0.14%	0.14%	0.91%	0.9	0.2	0.2	1.3
	Commodities	0.00%	0.00%	0.00%	0.00%	0.00%	0.0	0.0	0.0	0.0
	TIPS	2.00%	0.05%	0.00%	0.00%	0.05%	0.0	0.0	0.0	0.0
	Investment Grade Bonds	8.00%	0.11%	0.00%	0.00%	0.11%	0.3	0.0	0.0	0.3
	Long Term Government Bonds	2.00%	0.03%	0.00%	0.00%	0.03%	0.0	0.0	0.0	0.0
							15.5	29.1	3.1	47.7
Federated Health Care Trust Fund Management Fees by Asset Class:										
		2021 Fee Ratios				Pro Forma Fees (\$MM)				
		Policy Target	Management Fee	Incentive Fees	Operating Expenses	Total Expense	Management Fees	Incentive Fees	Operating Expenses	Total Expenses
Asset Class										
Growth	Public Equity	58.00%	0.23%	0.00%	0.02%	0.25%	0.5	0.0	0.0	0.5
Low Beta	Short-Term Investment Grade Bonds	6.00%	0.02%	0.00%	0.00%	0.02%	0.0	0.0	0.0	0.0
Other	Core Real Estate	12.00%	0.54%	0.00%	0.00%	0.54%	0.2	0.0	0.0	0.2
	Commodities	5.00%	0.42%	0.00%	0.27%	0.69%	0.1	0.0	0.0	0.1
	Investment Grade Bonds	14.00%	0.02%	0.00%	0.01%	0.03%	0.0	0.0	0.0	0.0
	Long Term Government Bonds	5.00%	0.03%	0.00%	0.00%	0.03%	0.0	0.0	0.0	0.0
							0.8	0.0	0.1	0.9
Police & Fire Pension Fund Management Fees by Asset Class:										
		2021 Fee Ratios				Pro Forma Fees (\$MM)				
		Policy Target	Management Fee	Incentive Fees	Operating Expenses	Total Expense	Management Fees	Incentive Fees	Operating Expenses	Total Expenses
Asset Class										
Growth	Public Equity	42.00%	0.34%	0.01%	0.02%	0.37%	6.6	0.2	0.4	7.2
	Private Markets	25.00%	1.27%	4.62%	0.41%	6.30%	14.8	53.8	4.8	73.3
	Emerging Market Debt	2.00%	0.85%	0.33%	0.06%	1.84%	0.8	0.9	0.1	1.7
	High Yield Bonds	2.00%	0.38%	0.00%	0.00%	0.38%	0.4	0.0	0.0	0.4
Low Beta	Market Neutral Strategies	3.00%	2.06%	4.24%	0.32%	6.62%	2.9	5.9	0.4	9.2
	Immunized Cash Flow	13.00%	0.05%	0.00%	0.00%	0.05%	0.3	0.0	0.0	0.3
Other	Core Real Estate	5.00%	0.62%	0.14%	0.14%	0.90%	1.4	0.3	0.3	2.1
	Commodities	0.00%	0.18%	0.00%	0.00%	0.18%	0.0	0.0	0.0	0.0
	TIPS	2.00%	0.05%	0.00%	0.00%	0.05%	0.0	0.0	0.0	0.0
	Investment Grade Bonds	4.50%	0.15%	0.00%	0.00%	0.15%	0.3	0.0	0.0	0.3
	Long Term Government Bonds	1.50%	0.03%	0.00%	0.00%	0.03%	0.0	0.0	0.0	0.0
							27.6	61.1	6.0	94.7
Police & Fire Health Care Trust Fund Management Fees by Asset Class:										
		2021 Fee Ratios				Pro Forma Fees (\$MM)				
		Policy Target	Management Fee	Incentive Fees	Operating Expenses	Total Expense	Management Fees	Incentive Fees	Operating Expenses	Total Expenses
Asset Class										
Growth	Public Equity	58.00%	0.04%	0.00%	0.02%	0.06%	0.1	0.0	0.0	0.1
Low Beta	Short-Term Investment Grade Bonds	6.00%	0.01%	0.00%	0.00%	0.01%	0.0	0.0	0.0	0.0
Other	Core Real Estate	12.00%	0.63%	0.12%	0.14%	0.95%	0.2	0.0	0.0	0.3
	Commodities	5.00%	0.42%	0.00%	0.27%	0.69%	0.1	0.0	0.0	0.1
	Investment Grade Bonds	14.00%	0.02%	0.00%	0.01%	0.03%	0.0	0.0	0.0	0.0
	Long Term Government Bonds	5.00%	0.03%	0.00%	0.00%	0.03%	0.0	0.0	0.0	0.0
							0.3	0.0	0.1	0.5

HONORABLE MAYOR AND CITY COUNCIL

May 17, 2023

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COORDINATION

This memorandum has been coordinated with the City Manager's Budget Office.

/s/

ROBERTO L. PEÑA
Chief Executive Officer

For more information on this memorandum, please contact Roberto L. Peña, CEO, 408-794-1000.

Attachment A: Police and Fire Department Retirement Plan Budget Proposal Presentation

Attachment B: Police and Fire Department Plan FY 23-24 Proposed Budget

Attachment C: Police and Fire Department Plan Comprehensive Annual Fee Report for Calendar
Year 2021

Attachment D: Federated Retirement System Budget Proposal Presentation

Attachment E: Federated Retirement System FY23-24 Proposed Budget

Attachment F: Federated Retirement System Comprehensive Annual Fee Report for Calendar
Year 2021

**POLICE AND FIRE DEPARTMENT
RETIREMENT PLAN
FISCAL YEAR 2023-2024
BUDGET PROPOSAL
REVISED PERSONNEL**

April 6, 2023

Police & Fire Proposed Administrative Budget for FY 2023–2024 – ORIGINAL

The following is a comparison of previous fiscal year actual figures, current year adopted budget and forecast, and proposed next year budget:

Expenses	2021–2022 Actual (A)	2022–2023 Adopted/Modified (B)	2022–2023 Forecast (C)	2023–2024 Proposed ⁽¹⁾ (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,936,730	\$4,463,000	\$4,435,225	\$4,839,000	8.42%	9.10%
Non-Personnel / Equipment	682,592	795,000	717,975	859,000	8.05%	19.64%
Professional Services	1,060,191	798,000/ 998,000	958,092	903,000	13.16%/ (9.52%)	(1.64%)
Medical Services	86,899	270,000	254,997	270,000	0.00%	5.88%
Total	\$5,766,412	\$6,326,000/ \$6,526,000	\$6,366,289	\$6,871,000	8.62%/ 5.29%	8.61%

⁽¹⁾ – Detail for changes provided in the following slides

Police & Fire Proposed Administrative Budget for FY 2023–2024 – REVISED

The following is a comparison of previous fiscal year actual figures, current year adopted budget and forecast, and proposed next year budget:

Expenses	2021–2022 Actual (A)	2022–2023 Adopted/Modified (B)	2022–2023 Forecast (C)	2023–2024 Proposed ⁽¹⁾ (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,936,730	\$4,463,000	\$4,435,225	\$4,792,000	7.37%	8.04%
Non-Personnel / Equipment	682,592	795,000	717,975	859,000	8.05%	19.64%
Professional Services	1,060,191	798,000/ 998,000	958,092	903,000	13.16%/ (9.52%)	(1.64%)
Medical Services	86,899	270,000	254,997	270,000	0.00%	5.88%
Total	\$5,766,412	\$6,326,000/ \$6,526,000	\$6,366,289	\$6,824,000	7.87%/ 4.57%	7.19%

⁽¹⁾ – Detail for changes provided in the following slides

Personnel Services Analysis – ORIGINAL

Expenses	2021–2022 Actual (A)	2022–2023 Adopted (B)	2022–2023 Forecast (C)	2023–2024 Proposed (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,936,730	\$4,463,000	\$4,435,225	\$4,839,000	8.42%	9.10%
Authorized positions for both plans	40.00	43.00	43.00	45.00	2	2
Full time employee (FTE) allocated to Plan	20.00	21.50	21.50	22.50	1.00	1.00
Actual filled FTEs for both plans	37.00		38.00			
FTEs allocated to Plan	18.50		19.00			

- ▶ Personnel Services increased from last year’s budget due to:
 - Proposals, budgeting three return to work retirees for the full year and increased benefit rates
- ▶ Proposals for FY23–24 included in budget
 - Upgrading the Account Tech position to an Accountant I/II
 - Adding a Medicare Analyst to the Health Team in Benefits
 - Upgrading the vacant Office Specialist to a Senior Office Specialist and adding another Senior Office Specialist for the Front Desk

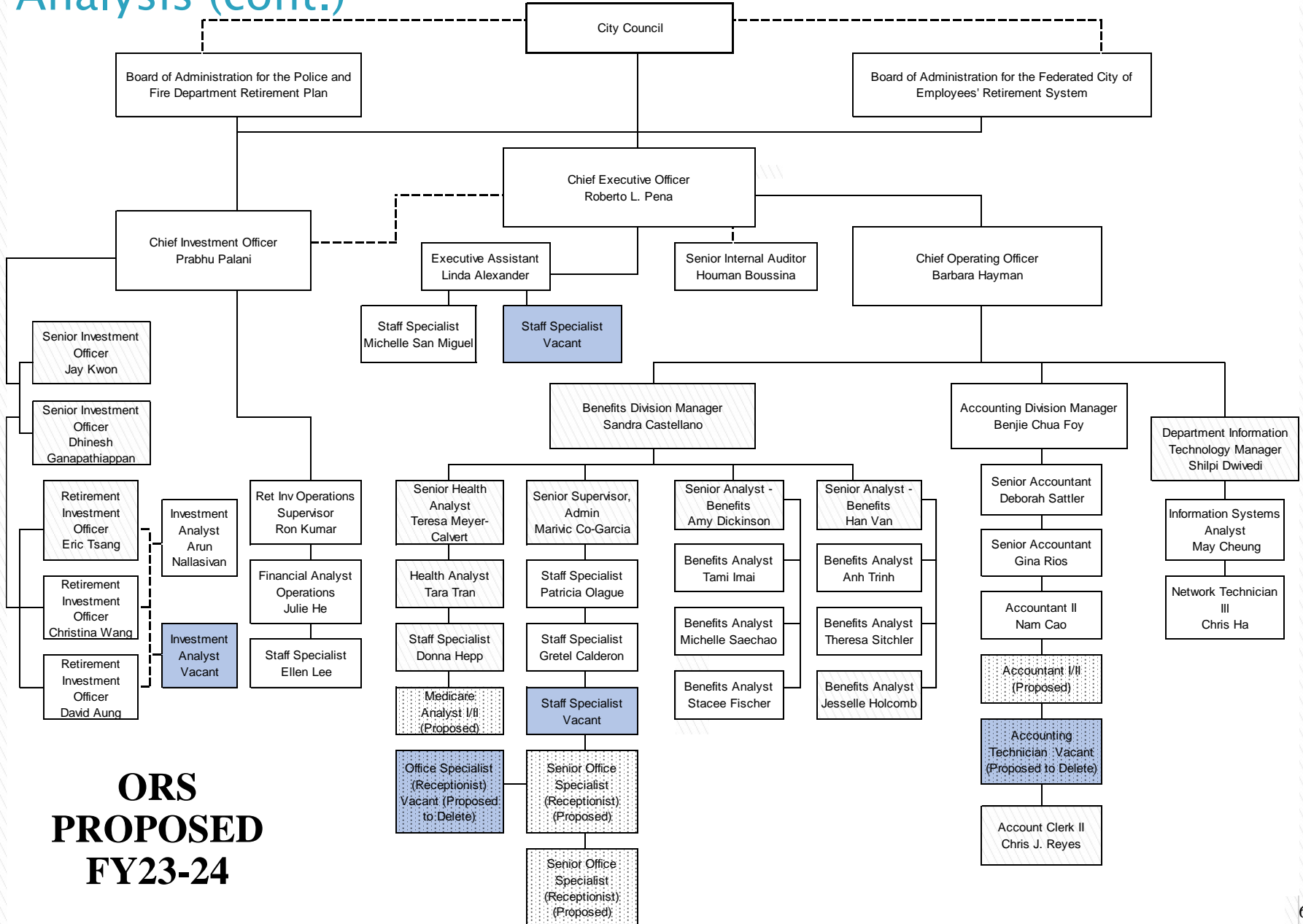
Personnel Services Analysis – REVISED

Expenses	2021–2022 Actual (A)	2022–2023 Adopted (B)	2022–2023 Forecast (C)	2023–2024 Proposed (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,936,730	\$4,463,000	\$4,435,225	\$4,792,000	7.37%	8.04%
Authorized positions for both plans	40.00	43.00	43.00	44.00	1	1
Full time employee (FTE) allocated to Plan	20.00	21.50	21.50	22.00	0.5	0.5
Actual filled FTEs for both plans	37.00		39.00			
FTEs allocated to Plan	18.50		19.50			

- ▶ Personnel Services increased from last year’s budget due to:
 - Proposals, budgeting three return to work retirees for the full year and increased benefit rates
- ▶ Proposals for FY23–24 included in budget
 - Upgrading the Account Tech position to an Accountant I/II
 - Adding a Medicare Analyst to the Health Team in Benefits (overstrength)
 - Upgrading the vacant Office Specialist to a Senior Office Specialist

Personnel Services Analysis (cont.)

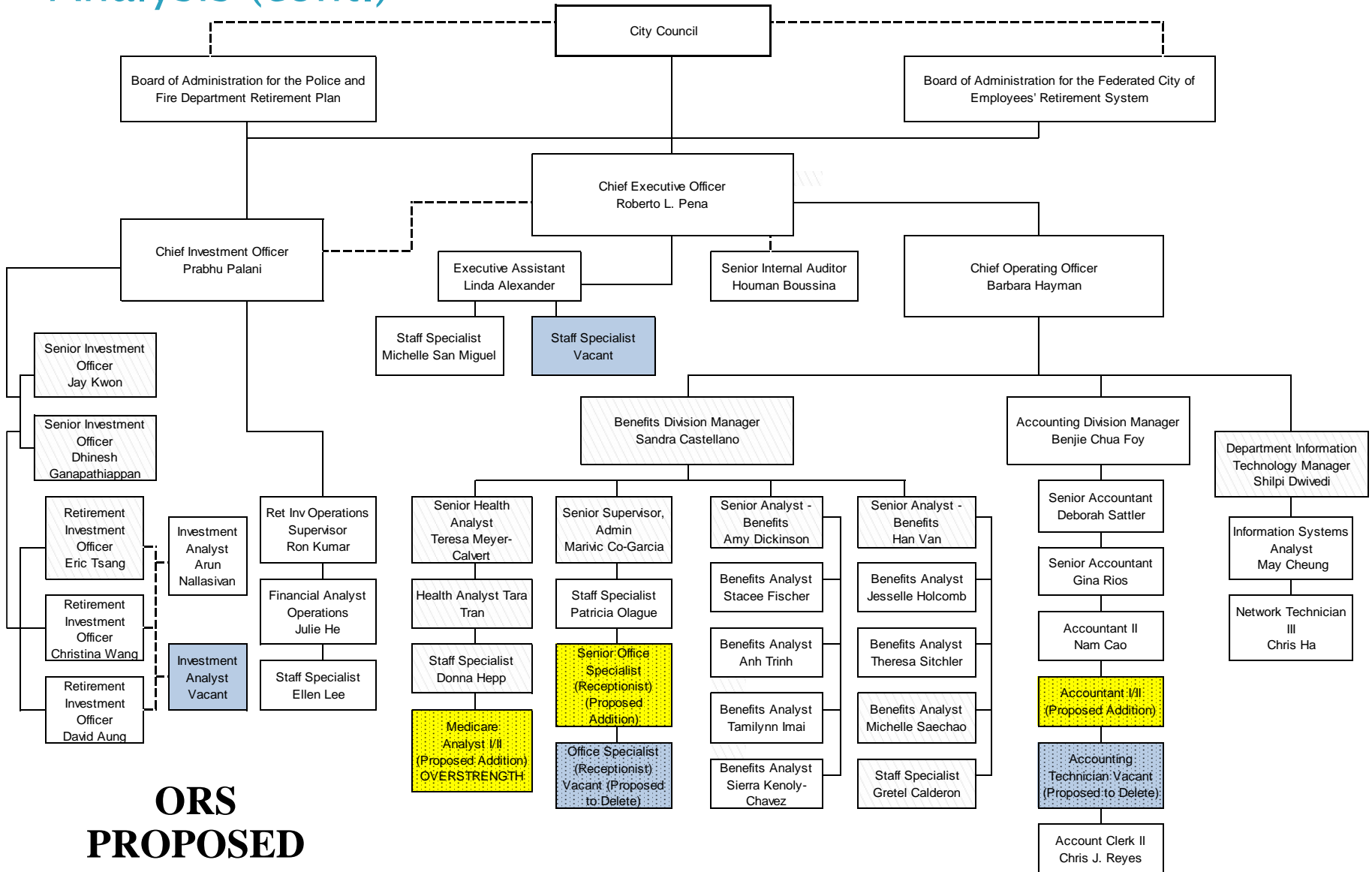
Current Organizational Chart for Retirement Services, including budget proposals, of which the Police & Fire receives one half of a full-time employee (FTE) – ORIGINAL



**ORS
PROPOSED
FY23-24**

Personnel Services Analysis (cont.)

Current Organizational Chart for Retirement Services, including budget proposals, of which the Police & Fire receives one half of a full-time employee (FTE) – REVISED



**ORS
PROPOSED
FY23-24**



Memorandum

**TO: Board of Administration for the
Police and Fire Plan**

FROM: Benjie Chua Foy

**SUBJECT: Consideration of Proposed Budget
for Fiscal Year 2023-2024**

DATE: March 29, 2023

Approved

Date 03/29/23

RECOMMENDATION

Discussion and action on the proposed budget for fiscal year 2023-2024.

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 \$230,120,000.

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 FY24 contribution amounts assume the Board's adoption in April/May, as shown in the June 30, 2022 actuarial reports for pension and healthcare, using the beginning of the year amounts if the City prefunds the Police and Fire Tier 1 and healthcare contributions, similar to the prior year.

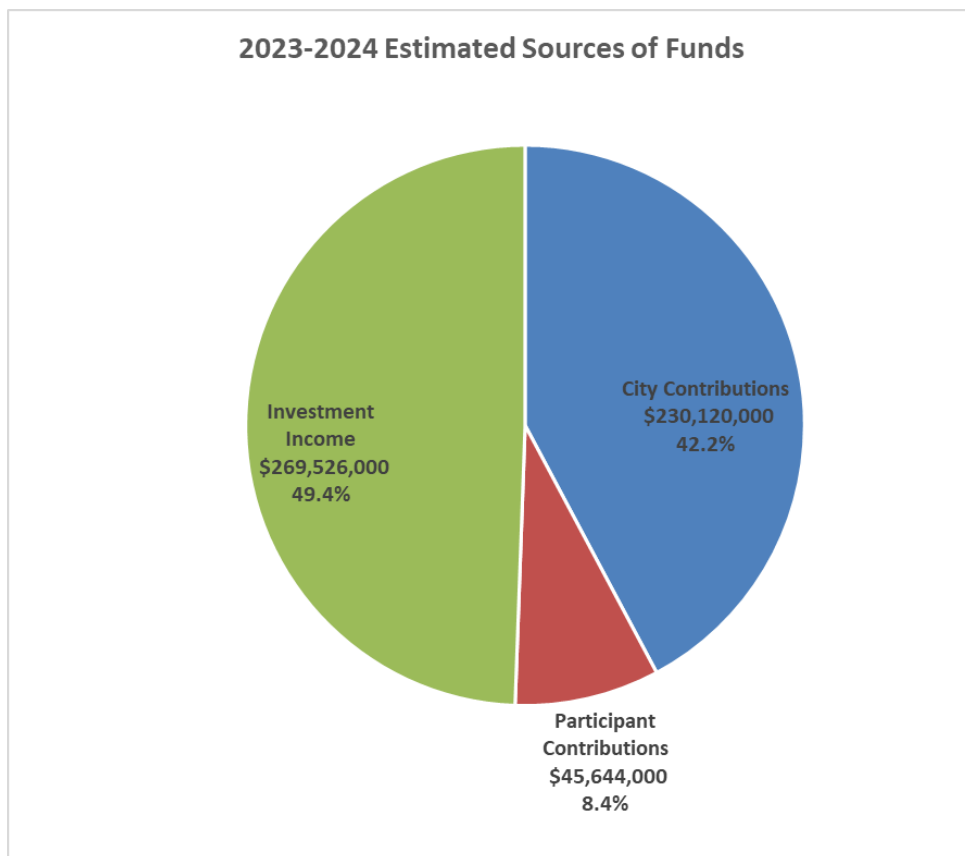
PARTICIPANT CONTRIBUTIONS

Total member contributions are estimated at \$45,644,000, a 1.11% increase from the 2022-2023 adopted amount. Member contributions are calculated based on the contribution rate for each tier. Police Tier 1 contribution rates for pension increased slightly going from 10.99% to 11.09% while their covered payroll

decreased from \$77.5 million to \$70.0 million. Fire Tier 1 contribution rates for pension decreased slightly from 12.11% to 12.00% while covered payroll decreased from \$68.7 million to \$64.2 million. Police Tier 2 contribution rates for pension decreased slightly from 14.37% to 14.35% and covered payroll increased from \$84.2 million to \$96.5 million. Fire Tier 2 contribution rates for pension decreased slightly from 15.18% to 15.11%, while covered payroll increased from \$29.7 million to \$37.2 million. Healthcare contribution rates remain at 8.0% per the Municipal Code for Tier 1 members, while Tier 2 members are required to go into the VEBA.

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 \$282,656,000, an increase of \$14,393,000 over the forecast, or 5.37%, 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 \$25,719,000, a decrease of \$304,000 over the forecast, or 1.17%, which is the average change for the past five years. Health insurance includes health and dental insurance subsidies, as well as Medicare reimbursements.

VEBA withdrawals represent the funds taken out of the healthcare plan by Tier 1 members who opted out and the mandatory movement of Tier 2 members 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 2021-2022 and future withdrawals are expected to be minimal, if any.

ADMINISTRATIVE EXPENSE BUDGET

The proposed administrative expenses budget of \$6,824,000 is a net increase of \$498,000 or 7.87% from the prior year adopted budget of \$6,326,000.

PERSONNEL SERVICES

The budget for personnel services was increased to \$4,792,000, an increase of \$329,000, or 7.37% over the prior year adopted budget of \$4,463,000. 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 Plan and the Federated City Employees' Retirement System (System). The investment staff is split 60/40 between the Plan and the System, which is roughly based on asset size. The number of positions in Retirement Services will increase to 45 from 43 due to the proposals. The proposed personnel changes for FY23-24 are to: 1) add an Overstrength Medicare Analyst in the Health section of the Benefits division, 2) upgrade the vacant Office Specialist to a Senior Office Specialist in the front desk in the Benefits division, and 3) upgrade the vacant Account Tech to an Accountant I/II in the Accounting division to address the increasing and more challenging workloads. Besides the proposed changes, the other reasons for the increase in personnel services is due to the increased benefit rates, as well as having three, instead of two, reemployed retirees for the maximum time allowed per the Municipal Code.

NON-PERSONNEL / EQUIPMENT

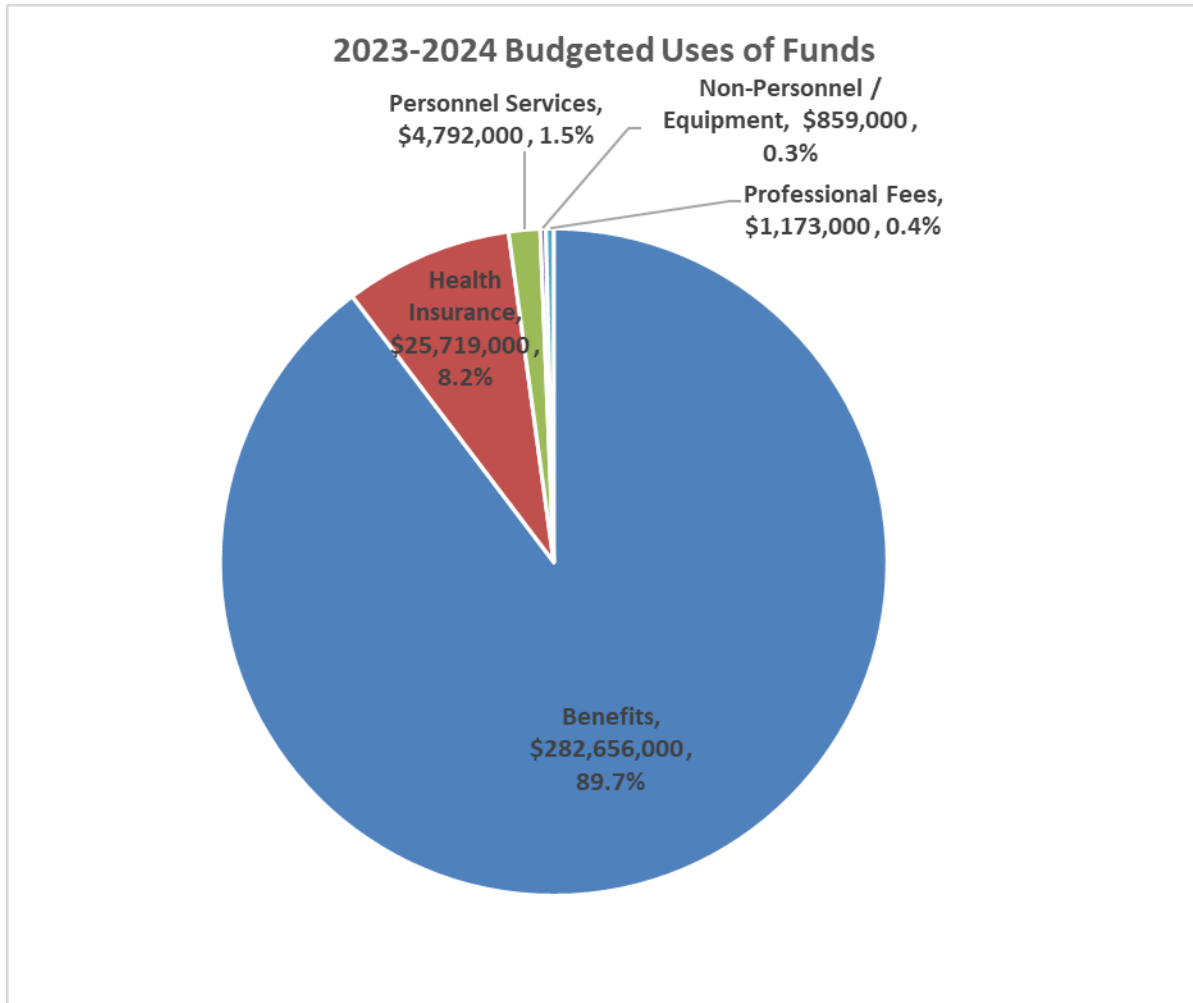
The budget for non-personnel / equipment was increased to \$859,000, an increase of \$64,000, or 8.05% from the prior year adopted budget of \$795,000. This category includes rent, insurance, information technology hardware/software, pension administration annual maintenance fee, postage and printing, training, travel, and other office expenses. The increase is mainly due to the proposed change in financial software in IT hardware/software, the cubicle reconfiguration for the Benefits division, and to account for general increases across the board.

PROFESSIONAL SERVICES

The budget for professional services was increased to \$903,000, a decrease of \$95,000, or 10.5% from the prior year modified budget of \$998,000. The adopted budget was modified to increase legal services by \$150,000 and temp services by \$50,000. If it had not been modified, current year proposed budget would be \$903,000, an increase of \$105,000, or 13.2% from the prior year adopted budget of \$798,000. Core professional services comprise of actuarial services, financial audit services, legal services, and temporary staffing services. The increase is mainly due to the increase in temp services for the Benefits division to backfill for vacancies and assist with peak periods, as well as increases in actuarial and legal services to account for the rise in the need of their services in the past few years.

MEDICAL SERVICES

The budget for medical services remained steady at \$270,000. 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 2023-2024

PROPOSED BUDGET

FISCAL YEAR 2023-2024

POLICE AND FIRE DEPARTMENT RETIREMENT PLAN

REVISED

April 6, 2023

POLICE & FIRE DEPARTMENT RETIREMENT PLAN

Statement of Source and Use of Funds

	(A) 2021-2022 Actual	(B) 2022-2023 Modified	(C) 2022-2023 Forecast	(D) 2023-2024 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
SOURCE OF FUNDS							
Beginning Fund Balance							
Claims Reserve	5,002,953,000	4,675,142,000	4,675,142,000	4,912,692,000	(327,811,000)	0	237,550,000
Total Beginning Fund Balance	5,002,953,000	4,675,142,000	4,675,142,000	4,912,692,000	(327,811,000)	0	237,550,000
Transfers							
City Contributions	242,809,000	235,108,000	235,221,000	230,120,000	(7,701,000)	113,000	(5,101,000)
1970 COLA	500	1,000	500	1,000	500	(500)	500
1980 COLA	6,000	7,000	5,000	7,000	1,000	(2,000)	2,000
1990 COLA	4,000	4,000	4,000	4,000	0	0	0
Total Transfers	242,819,500	235,120,000	235,230,500	230,132,000	(7,699,500)	110,500	(5,098,500)
Revenue							
Participant Income	43,769,000	45,141,000	45,151,000	45,644,000	1,372,000	10,000	493,000
Investment Income, net of expenses	(321,850,000)	297,789,000	257,830,000	269,526,000	619,639,000	(39,959,000)	11,696,000
Total Revenue	(278,081,000)	342,930,000	302,981,000	315,170,000	621,011,000	(39,949,000)	12,189,000
TOTAL SOURCE OF FUNDS	4,967,691,500	5,253,192,000	5,213,353,500	5,457,994,000	285,500,500	(39,838,500)	244,640,500

USE OF FUNDS

Expenditures							
Benefits	259,876,000	265,735,000	268,263,000	282,656,000	5,859,000	2,528,000	14,393,000
Health Insurance	26,458,000	25,618,000	26,023,000	25,719,000	(840,000)	405,000	(304,000)
VEBA withdrawals	0	0	0	0	0	0	0
Personnel Services (Ret.)	3,937,000	4,463,000	4,435,000	4,792,000	526,000	(28,000)	357,000
Non-Personnel/Equipment ⁽¹⁾	1,121,000	795,000	718,000	859,000	(326,000)	(77,000)	141,000
Professional Fees	1,147,000	1,068,000	1,213,000	1,173,000	(79,000)	145,000	(40,000)
1970 COLA	500	1,000	500	1,000	500	(500)	500
1980 COLA	6,000	7,000	5,000	7,000	1,000	(2,000)	2,000
1990 COLA	4,000	4,000	4,000	4,000	0	0	0
Total Expenditures	292,549,500	297,691,000	300,661,500	315,211,000	5,141,500	2,970,500	14,549,500
Ending Fund Balance							
Claims Reserve	4,675,142,000	4,955,501,000	4,912,692,000	5,142,783,000	280,359,000	(42,809,000)	230,091,000
Total Ending Fund Balance	4,675,142,000	4,955,501,000	4,912,692,000	5,142,783,000	280,359,000	(42,809,000)	230,091,000
TOTAL USE OF FUNDS	4,967,691,500	5,253,192,000	5,213,353,500	5,457,994,000	285,500,500	(39,838,500)	244,640,500

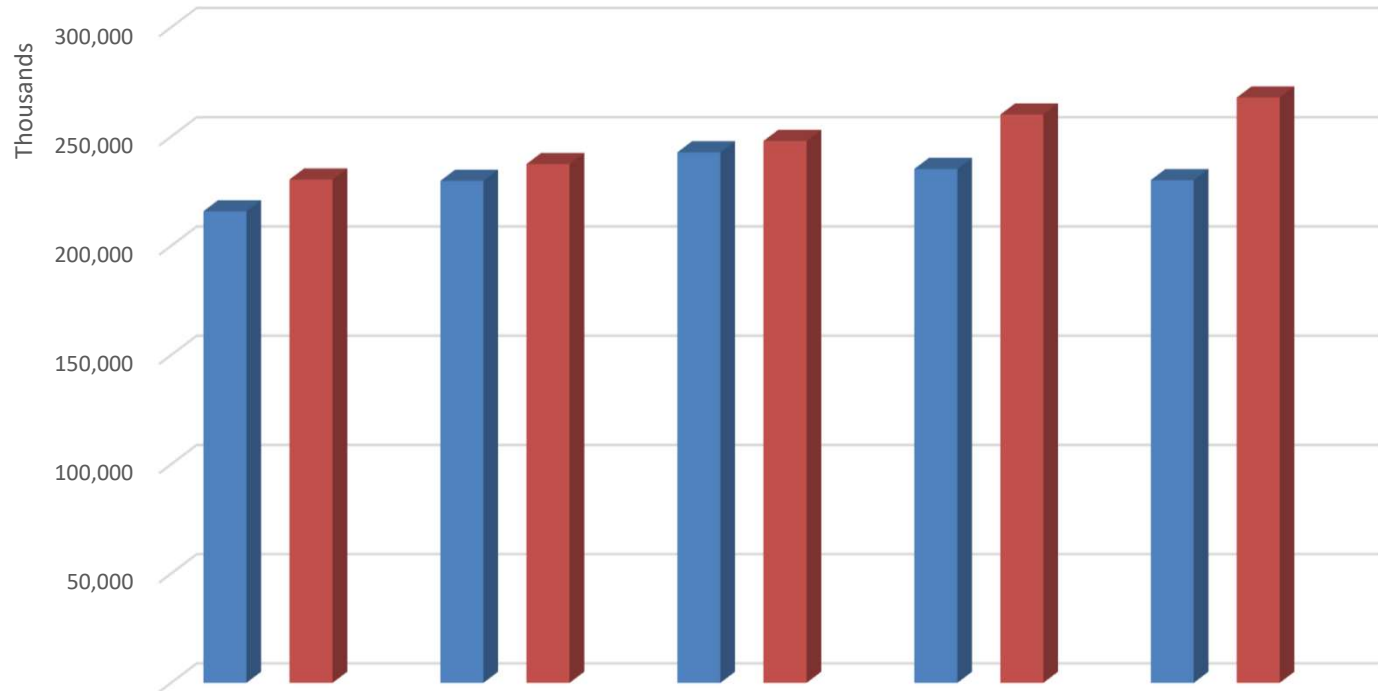
Amount not included in budget since no cash outlay:

Amortization expense for PG3 and GASB 87	\$ 439,062	\$ 439,062	\$ 439,062	\$ 439,062
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⁽¹⁾ Non-personnel equipment FY21-22	\$ 1,121,000
Rounding in ACFR	654
Amortization expense	(439,062)

As shown in Administrative Expenses **\$ 682,592**

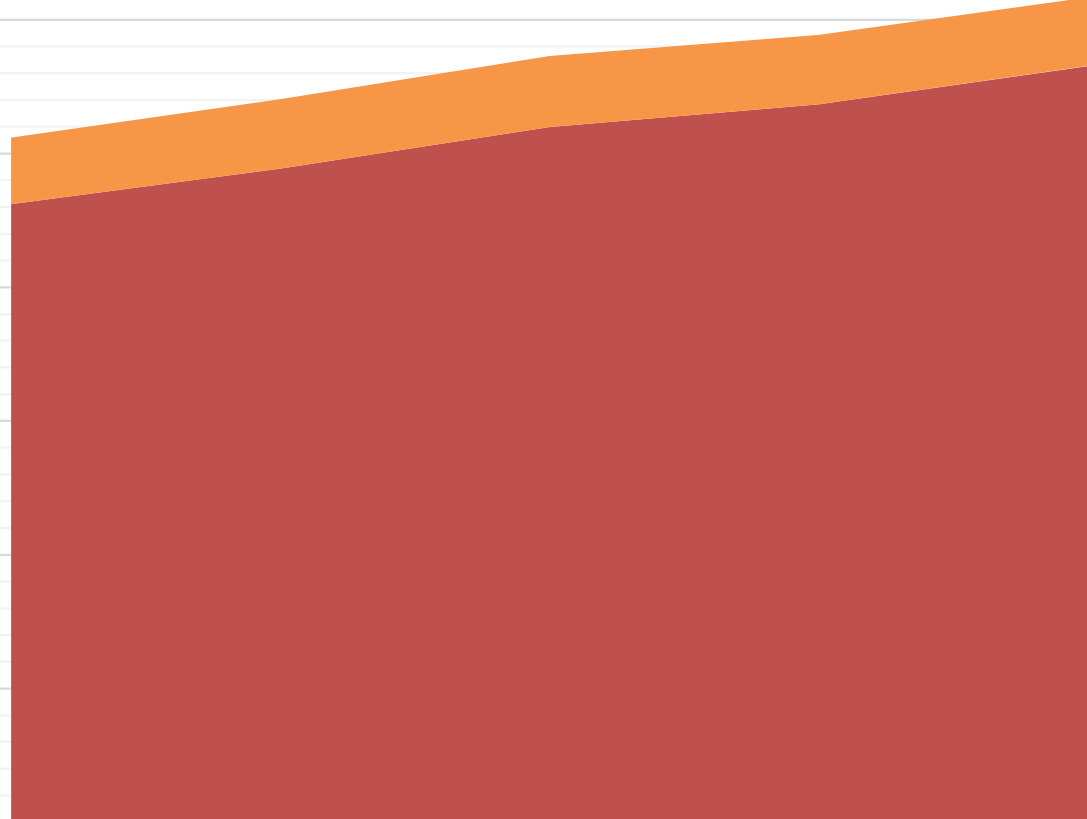
POLICE & FIRE DEPARTMENT RETIREMENT PLAN Total City Contributions & Covered Payroll



	FY 19-20	FY 20-21	FY 21-22	FY 22-23 (Forecast)	FY 23-24 (Estimate)
■ Total City Contributions	215,831,000	229,767,000	242,809,000	235,221,000	230,120,000
Total City Contribution % Change	5.1%	6.5%	5.7%	-3.1%	-2.2%
■ Total Covered Payroll	230,401,000	237,476,000	248,022,000	260,135,000	267,900,000
Total Covered Payroll % Change	5.4%	3.1%	4.4%	4.9%	3.0%

POLICE & FIRE DEPARTMENT RETIREMENT PLAN Pension Benefits and Health Insurance

300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
-



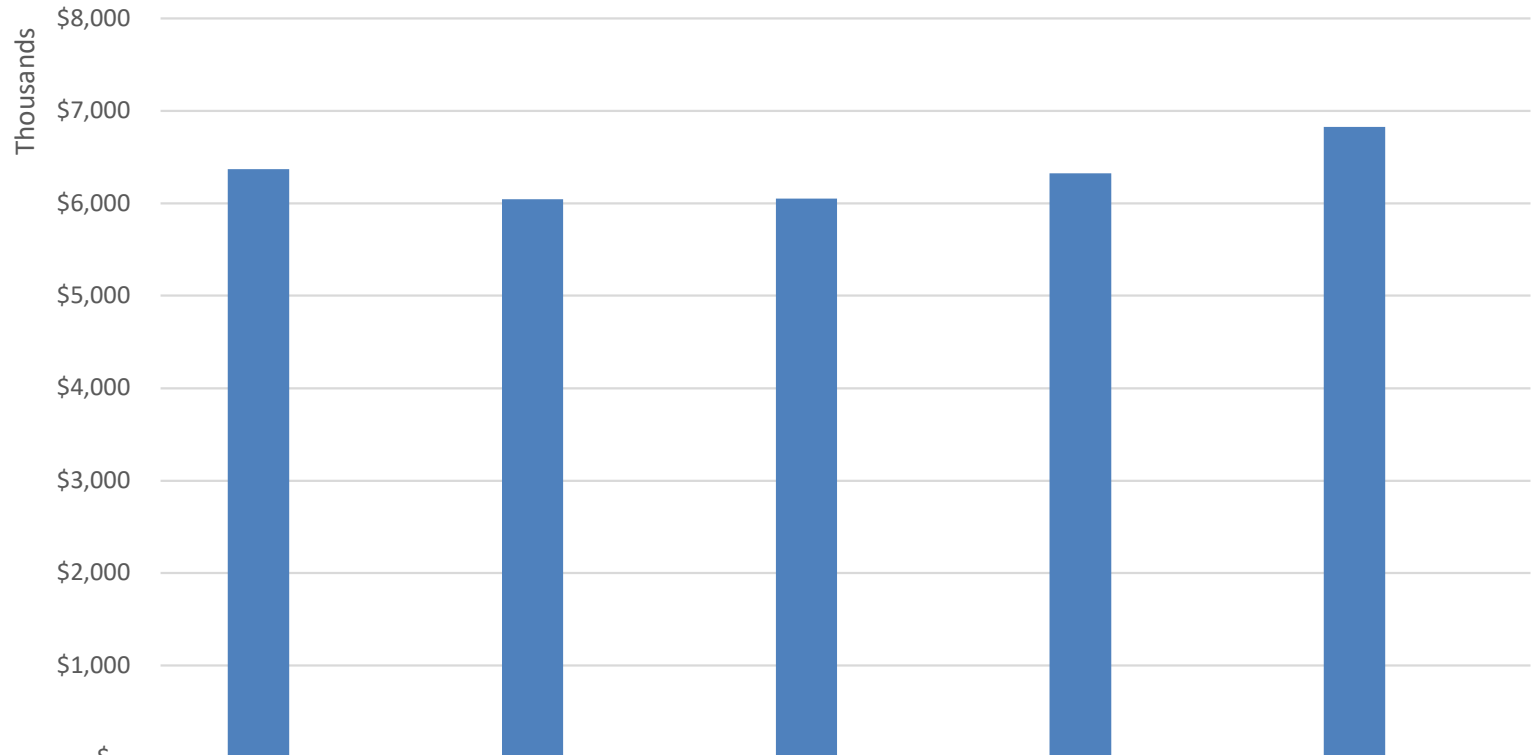
	FY 19-20 - Actual	FY 20-21 - Actual	FY 21-22 - Actual	FY 22-23 - Forecast	FY 23-24 - Proposed
Total Benefits	256,039,000	270,284,000	286,334,000	294,286,000	308,375,000
Health Insurance	25,031,000	25,974,000	26,458,000	26,023,000	25,719,000
Pension Benefits	231,008,000	244,310,000	259,876,000	268,263,000	282,656,000
Health Insurance % Change	-5.2%	3.8%	1.9%	-1.6%	-1.2%
Pension Benefits % Change	6.0%	5.8%	6.4%	3.2%	5.4%

POLICE & FIRE DEPARTMENT RETIREMENT PLAN

Administrative Expenses: FY 2023-2024

	(A) 2021-2022 Actual	(B) 2022-2023 Adopted	(C) 2022-2023 Forecast	(D) 2023-2024 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
PERSONNEL SERVICES							
Salaries and employee benefits	3,936,730	4,463,000	4,435,225	4,792,000	526,270	(27,775)	356,775
Total Personnel Services	3,936,730	4,463,000	4,435,225	4,792,000	526,270	(27,775)	356,775
NON-PERSONNEL / EQUIPMENT							
Rent	232,481	222,000	223,875	230,000	(10,481)	1,875	6,125
Insurance	223,327	256,000	233,436	256,000	32,673	(22,564)	22,564
IT hardware / software	88,962	109,000	81,571	130,000	20,038	(27,429)	48,429
Postage and printing	39,427	60,000	54,798	65,000	20,573	(5,202)	10,202
LRS - annual maintenance fee	49,845	50,000	52,160	55,000	155	2,160	2,840
Training and travel	7,770	25,000	21,720	30,000	17,230	(3,280)	8,280
Other non-personnel / equipment	33,203	58,000	38,519	78,000	24,797	(19,481)	39,481
Office supplies and board meeting expenses	7,577	15,000	11,896	15,000	7,423	(3,104)	3,104
Total Non-personnel / Equipment	682,592	795,000	717,975	859,000	112,408	(77,025)	141,025
PROFESSIONAL SERVICES							
Actuary / actuarial audit	387,400	262,000	283,360	290,000	(125,400)	21,360	6,640
External auditor	92,837	85,000	84,908	85,000	(7,837)	(92)	92
Legal	428,380	275,000	370,807	312,000	(153,380)	95,807	(58,807)
Pension administration system	16,944	24,000	17,852	24,000	7,056	(6,148)	6,148
Temporary staffing agencies	90,741	92,000	159,757	132,000	1,259	67,757	(27,757)
Other professional services	43,889	60,000	41,408	60,000	16,111	(18,592)	18,592
Total Professional Services	1,060,191	798,000	958,092	903,000	(262,191)	160,092	(55,092)
MEDICAL SERVICES							
Independent medical examiners	52,969	100,000	98,750	270,000	47,031	(1,250)	171,250
Medical consultant	33,930	170,000	156,247	-	136,070	(13,753)	(156,247)
Total Medical Services	86,899	270,000	254,997	270,000	183,101	(15,003)	15,003
TOTAL ADMINISTRATIVE EXPENSES	5,766,412	6,326,000	6,366,289	6,824,000	559,588	40,289	457,711

POLICE & FIRE DEPARTMENT RETIREMENT PLAN
Administrative Expense Budget
FY 2020 to FY 2024



	FY 19-20	FY 20-21	FY 21-22	FY 22-23 (Adopted)	FY 23-24 (Proposed)
■ Admin Exp Budget*	\$6,369,000	\$6,044,000	\$6,051,000	\$6,326,000	\$6,824,000
■ % Change	1.8%	-5.1%	0.1%	4.5%	7.9%

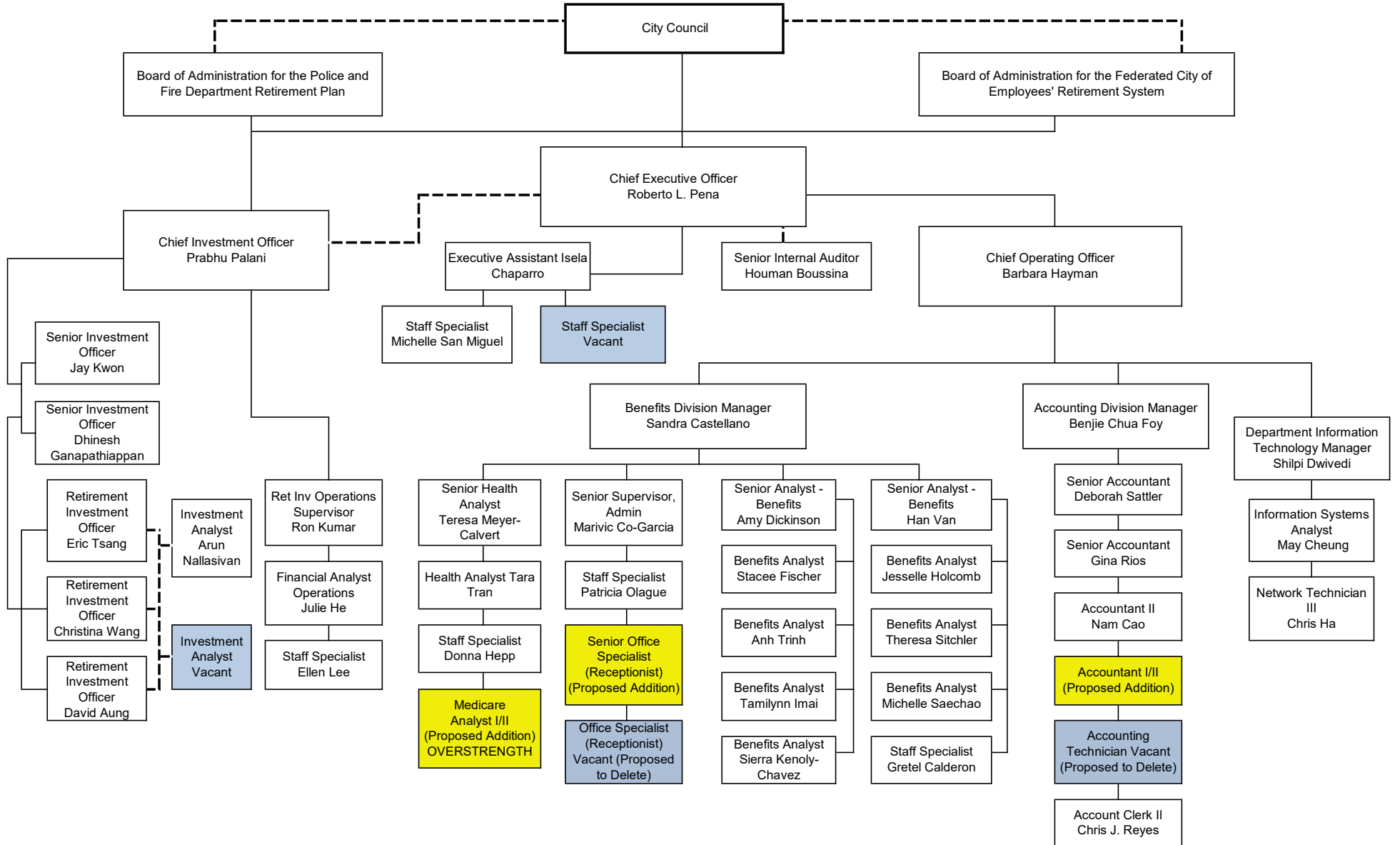
* Amount includes budget for operations only.

OFFICE OF RETIREMENT SERVICES

Departmental Position Detail

Position	2021-2022 Adopted (1)	2022-2023 Adopted (2)	2022-2023 Forecast (3)	2023-2024 Proposed (4)	Increase / (Decrease) (2 to 4)	Increase / (Decrease) (3 to 4)	Explanation
Account Clerk II	1.00	1.00	1.00	1.00	-	-	
Accountant I/II	1.00	1.00	1.00	2.00	1.00	1.00	Upgrade the Account Tech to an Accountant I/II
Accounting Technician	1.00	1.00	1.00	0.00	(1.00)	(1.00)	Upgrade the Account Tech to an Accountant I/II
Analyst I/II	6.00	7.00	8.00	9.00	2.00	1.00	Upgraded Staff Specialist to Analyst I/II in Benefits Division in December 2022 and Proposed addition of Medicare Analyst for Benefits Division - Overstrength
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	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	1.00	1.00	1.00	1.00	-	-	
Information Systems Analyst	1.00	1.00	1.00	1.00	-	-	
Network Technician I/II/III	1.00	1.00	1.00	1.00	-	-	
Office Specialist II	1.00	1.00	1.00	0.00	(1.00)	(1.00)	Upgrade the Office Specialist to a Senior Office Specialist in Benefits Division
Retirement Investment Analyst I/II	2.00	2.00	2.00	2.00	-	-	
Retirement Investment Officer	3.00	3.00	3.00	3.00	-	-	
Senior Accountant	2.00	2.00	2.00	2.00	-	-	
Senior Analyst	2.00	3.00	3.00	3.00	-	-	
Senior Auditor	1.00	1.00	1.00	1.00	-	-	
Senior Office Specialist	0.00	0.00	0.00	1.00	1.00	1.00	Upgrade the Office Specialist in Benefits Division
Senior Retirement Investment Officer	2.00	2.00	2.00	2.00	-	-	
Senior Supervisor, Administration	0.00	1.00	1.00	1.00	-	-	
Staff Specialist	7.00	7.00	6.00	6.00	(1.00)	-	Upgraded Staff Specialist to Analyst I/II in Benefits Division in December 2022
Total Positions	40.00	43.00	43.00	44.00	1.00	1.00	

OFFICE OF RETIREMENT SERVICES
Proposed Organizational Chart
Budget FY23-24





Police and Fire Annual Fee Report – 2021

Executive Summary

This report marks the seventh 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 2021, management and incentive fees for the pension plan totaled \$71.8 million with a fee ratio of 1.56% as compared to \$44.6 million and 1.05% for 2020 and \$40.1 million and 1.04% for 2019. Fund operating expenses were \$4.8 million in 2021 for a fee ratio of 0.10% as compared to \$6.8 million and 0.16% for 2020 and \$6.5 million and 0.17% for 2019. The health care trust management and incentive fees totaled \$0.3 million with a fee ratio of 0.13% as compared to \$0.2 million with a fee ratio of 0.10% in 2020 and \$0.1 million with a fee ratio of 0.09% in 2019. Fund operating expenses were \$0.1 million in 2021 for a fee ratio of 0.04% as compared to \$0.1 million and 0.03% for 2020 and \$0.1 million and 0.06% for 2019. Other investment-related costs (staff, consultants, custodian bank, investment legal, etc.) for the pension plan increased to \$2.8 million with a fee ratio of 0.06% from \$2.4 million with a fee ratio of 0.06% in 2020 after having remained relatively flat over the previous 3 years from 2017-2019 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 0.06% as compared to \$0.1 million and 0.04% for 2020.

Table 1 - Pension Average Asset Allocation for 2021

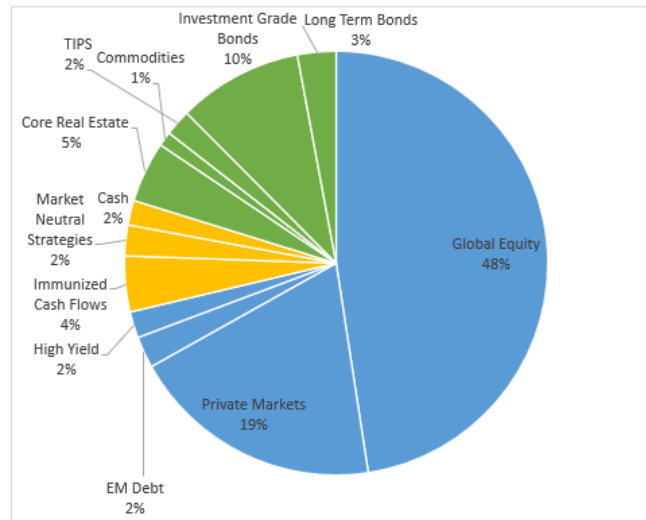
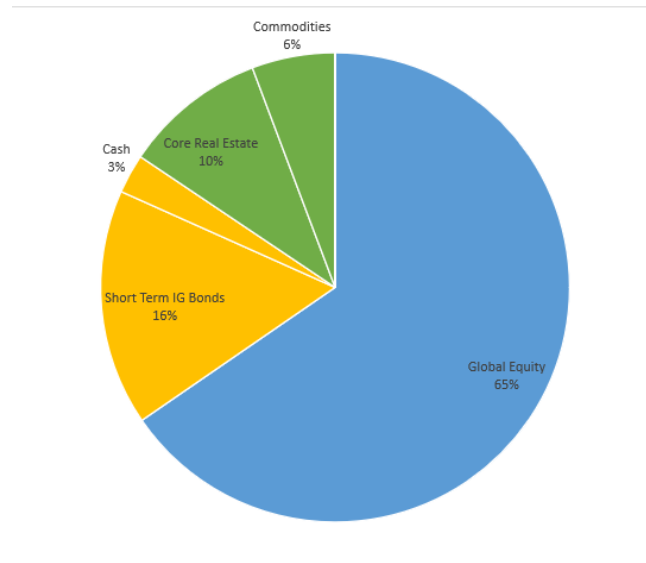


Table 2 - Health Care Trust Average Asset Allocation for 2021



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, Mellon Bank.

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.

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 Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees	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, Incent, and Op Exp	% of Total Plan Fee Ratio	Contribution to Total Plan Fee Ratio	
Growth	20.0	42.4	4.2	62.4	66.6	3,282	71.3%	0.61%	1.29%	0.13%	1.90%	2.03%	86.9%	1.45%
Global Equity	7.5	0.3	0.4	7.7	8.1	2,190	47.6%	0.34%	0.01%	0.02%	0.35%	0.37%	10.6%	0.18%
Passive	0.5	-	0.1	0.5	0.6	1,052	22.9%	0.05%	0.00%	0.01%	0.05%	0.06%	0.8%	0.01%
Active	7.0	0.3	0.3	7.2	7.5	1,138	24.7%	0.61%	0.02%	0.03%	0.63%	0.66%	9.8%	0.16%
Private Markets	11.3	41.1	3.7	52.4	56.1	889	19.3%	1.27%	4.62%	0.42%	5.89%	6.30%	73.2%	1.22%
Passive	0.0	-	0.0	0.0	0.0	153	3.3%	0.02%	0.00%	0.01%	0.02%	0.03%	0.1%	0.00%
Private Equity	5.1	27.0	1.0	32.0	33.1	361	7.8%	1.40%	7.47%	0.28%	8.87%	9.15%	43.2%	0.72%
Private Debt	1.5	3.0	1.3	4.4	5.7	153	3.3%	0.96%	1.93%	0.83%	2.89%	3.72%	7.4%	0.12%
Growth Real Estate	2.7	8.4	0.9	11.1	12.0	149	3.2%	1.78%	5.65%	0.58%	7.43%	8.01%	15.6%	0.26%
Venture	0.5	0.3	0.2	0.8	1.0	9	0.2%	5.91%	3.00%	1.88%	8.91%	10.78%	1.3%	0.02%
Private Real Assets	1.5	2.5	0.3	3.9	4.3	63	1.4%	2.35%	3.88%	0.53%	6.23%	6.76%	5.6%	0.09%
Emerging Markets Debt	0.9	1.0	0.1	2.0	2.0	111	2.4%	0.85%	0.93%	0.06%	1.79%	1.84%	2.7%	0.04%
Active	0.2	-	-	0.2	0.2	33	0.7%	0.53%	0.00%	0.00%	0.53%	0.53%	0.2%	0.00%
Hedged	0.8	1.0	0.1	1.8	1.9	78	1.7%	0.99%	1.33%	0.08%	2.32%	2.40%	2.4%	0.04%
High Yield	0.3	-	-	0.3	0.3	92	2.0%	0.38%	0.00%	0.00%	0.38%	0.38%	0.5%	0.01%
Active	0.3	-	-	0.3	0.3	82	1.8%	0.39%	0.00%	0.00%	0.39%	0.39%	0.4%	0.01%
Passive	0.0	-	-	0.0	0.0	10	0.2%	0.25%	0.00%	0.00%	0.25%	0.25%	0.0%	0.00%
Low Beta	2.3	4.6	0.3	6.9	7.2	390	8.5%	0.60%	1.17%	0.09%	1.77%	1.85%	9.4%	0.16%
Immunized Cash Flows	0.1	-	-	0.1	0.1	196	4.3%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.1	-	-	0.1	0.1	196	4.3%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Market Neutral Strategies	2.2	4.6	0.3	6.8	7.1	108	2.3%	2.06%	4.24%	0.32%	6.30%	6.62%	9.3%	0.16%
Hedged	2.2	4.6	0.3	6.8	7.1	108	2.3%	2.06%	4.24%	0.32%	6.30%	6.62%	9.3%	0.16%
Cash	-	-	-	-	-	87	1.9%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Passive	-	-	-	-	-	87	1.9%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Other	2.2	0.3	0.3	2.5	2.8	931	20.2%	0.23%	0.03%	0.03%	0.26%	0.30%	3.6%	0.06%
Core Real Estate	1.3	0.3	0.3	1.6	1.9	214	4.6%	0.62%	0.14%	0.14%	0.76%	0.91%	2.5%	0.04%
Active	1.3	0.3	0.3	1.6	1.9	214	4.6%	0.62%	0.14%	0.14%	0.76%	0.91%	2.5%	0.04%
Commodities	0.1	-	-	0.1	0.1	51	1.1%	0.18%	0.00%	0.00%	0.18%	0.18%	0.1%	0.00%
Active	0.1	-	-	0.1	0.1	51	1.1%	0.18%	0.00%	0.00%	0.18%	0.18%	0.1%	0.00%
TIPS	0.0	-	-	0.0	0.0	92	2.0%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	92	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	135	2.9%	0.03%	0.00%	0.00%	0.03%	0.03%	0.0%	0.00%
Passive	0.0	-	-	0.0	0.0	135	2.9%	0.03%	0.00%	0.00%	0.03%	0.03%	0.0%	0.00%
Investment Grade Bonds	0.7	-	0.0	0.7	0.7	439	9.5%	0.15%	0.00%	0.00%	0.15%	0.15%	0.9%	0.01%
Passive	0.1	-	0.0	0.1	0.1	305	6.6%	0.02%	0.00%	0.00%	0.02%	0.02%	0.1%	0.00%
Active	0.6	-	-	0.6	0.6	134	2.9%	0.45%	0.00%	0.00%	0.45%	0.45%	0.8%	0.01%
Total Plan	24.5	47.3	4.8	71.8	76.6	4,604	100.0%	0.53%	1.03%	0.10%	1.56%	1.66%	100.0%	1.66%

The table above illustrates that management, incentive, and operating expenses for the pension plan totaled \$76.6 million for 2021 which equated to a total plan fee ratio of 1.66%. The Private Markets and Global Equity asset classes contributed the most to the total plan fee ratio contributing 1.22% and 0.18% respectively.

Table 4 - Pension Fees by Management Type

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees	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
Passive	0.8	-	0.1	0.8	0.9	2,029	44.1%	0.04%	0.00%	0.01%	0.04%	0.05%	1.2%	0.02%
Active	9.5	0.5	0.6	10.0	10.6	1,652	35.9%	0.57%	0.03%	0.04%	0.61%	0.64%	13.9%	0.23%
Hedged	3.0	5.6	0.4	8.6	9.0	186	4.0%	1.61%	3.02%	0.22%	4.63%	4.85%	11.8%	0.20%
Private	11.2	41.1	3.7	52.3	56.0	737	16.0%	1.53%	5.58%	0.50%	7.10%	7.60%	73.1%	1.22%
Total Plan	24.5	47.3	4.8	71.8	76.6	4,604	100.0%	0.53%	1.03%	0.10%	1.56%	1.66%	100.0%	1.66%

For the total pension plan, private management strategies accounted for 1.22% of the total plan fee ratio and represented about 16% of average plan assets. Hedged management strategies were the next largest contributor to the total plan fee ratio accounting for 0.20% of the total plan fee ratio and represented 4.0% of average plan assets. Passive and active management strategies accounted for 0.02% and 0.23% of the total plan fee ratio and represented 44% and 36% of plan assets, respectively.

Table 5 - Pension 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
1.2	0.5	0.6	0.5	2.8	0.06%

Other investment costs for the pension plan equated to a total fee ratio of 0.06%. 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	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
Growth	0.1	-	0.0	0.1	0.1	147	65.4%	0.04%	0.00%	0.02%	0.04%	0.06%	23.0%	0.04%
Global Equity	0.1	-	0.0	0.1	0.1	147	65.4%	0.04%	0.00%	0.02%	0.04%	0.06%	23.0%	0.04%
Passive	0.1	-	0.0	0.1	0.1	147	65.4%	0.04%	0.00%	0.02%	0.04%	0.06%	23.0%	0.04%
Low Beta	0.0	-	-	0.0	0.0	43	19.0%	0.01%	0.00%	0.00%	0.01%	0.01%	1.0%	0.00%
Short Term IG Bonds	0.0	-	-	0.0	0.0	37	16.3%	0.01%	0.00%	0.00%	0.01%	0.01%	1.0%	0.00%
Passive	0.0	-	-	0.0	0.0	37	16.3%	0.01%	0.00%	0.00%	0.01%	0.01%	1.0%	0.00%
Cash	-	-	-	-	-	6	2.7%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Passive	-	-	-	-	-	6	2.7%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Other	0.2	0.0	0.1	0.2	0.3	35	15.6%	0.60%	0.08%	0.19%	0.68%	0.87%	76.0%	0.14%
Core Real Estate	0.2	0.0	0.0	0.2	0.2	22	9.9%	0.70%	0.12%	0.14%	0.82%	0.97%	53.6%	0.10%
Active	0.2	0.0	0.0	0.2	0.2	22	9.9%	0.70%	0.12%	0.14%	0.82%	0.97%	53.6%	0.10%
Commodities	0.1	-	0.0	0.1	0.1	13	5.7%	0.42%	0.00%	0.27%	0.42%	0.69%	22.4%	0.04%
Active	0.1	-	0.0	0.1	0.1	13	5.7%	0.42%	0.00%	0.27%	0.42%	0.69%	22.4%	0.04%
Total Plan	0.3	0.0	0.1	0.3	0.4	225	100.0%	0.12%	0.01%	0.04%	0.13%	0.18%	100.0%	0.18%

The table above illustrates that management, incentive, and operating expenses for the health care trust totaled \$0.4 million for 2021 which equated to a total plan fee ratio of 0.18%. Core Real Estate contributed the most to the total plan fee ratio adding 0.10%.

Table 7 - Health Care Fees by Management Type

Fund Type	Management Fees (\$ mm)	Incentive Fees (\$ mm)	Operating Expenses (\$ mm)	Management and Incentive Fees	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
Passive	0.1	-	0.0	0.1	0.1	190	84.4%	0.03%	0.00%	0.02%	0.03%	0.05%	24.0%	0.04%
Active	0.2	0.0	0.1	0.2	0.3	35	15.6%	0.60%	0.08%	0.19%	0.68%	0.87%	76.0%	0.14%
Total Plan	0.3	0.0	0.1	0.3	0.4	225	100.0%	0.12%	0.01%	0.04%	0.13%	0.18%	100.0%	0.18%

For the total health care trust, active management strategies accounted for 0.14% of the total plan fee ratio and represented 16% of average plan assets. Passive strategies accounted for 0.04% of the total plan fee ratio and represented 84% 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
0.1	0.0	0.0	0.0	0.1	0.06%

Other investment costs for the health care trust equated to a total fee ratio of 0.06%.

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			
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020	2021	Change	2020	2021	Change	Due to Weight	Due to Mgmt Fee	Due to Incent Fee	Due to Opex
Growth	68.6%	71.3%	2.7%	18.2	20.0	1.9	14.7	42.4	27.7	6.2	4.2	-2.0	39.0	66.6	27.6	1.34%	2.03%	0.69%	0.92%	1.45%	0.53%	0.00%	-0.01%	0.56%	-0.06%
Global Equity	40.5%	47.6%	7.1%	5.9	7.5	1.6	-	0.9	0.3	2.6	0.4	-2.2	8.5	8.1	-0.4	0.50%	0.37%	-0.13%	0.20%	0.16%	-0.02%	-0.05%	0.00%	0.01%	-0.06%
Passive	19.7%	22.9%	3.1%	0.3	0.5	0.2	-	-	-	0.1	0.1	0.0	0.4	0.6	0.2	0.05%	0.06%	0.01%	0.01%	0.01%	0.00%	-0.04%	0.00%	0.00%	0.00%
Active	20.8%	24.7%	3.9%	5.6	7.0	1.4	-	0.3	0.3	2.6	0.3	-2.3	8.2	7.5	-0.6	0.92%	0.66%	-0.26%	0.19%	0.16%	-0.03%	-0.01%	-0.01%	0.01%	-0.07%
Private Markets	24.3%	19.3%	-5.0%	11.1	11.3	0.2	12.2	41.1	28.9	3.4	3.7	0.3	26.7	56.1	29.3	2.60%	6.30%	3.70%	0.63%	1.22%	0.59%	-0.07%	0.04%	0.66%	0.02%
Passive	9.3%	3.3%	-5.9%	0.0	0.0	0.0	-	-	-	0.0	0.0	-0.0	0.1	0.0	-0.0	0.01%	0.03%	0.02%	0.00%	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%
Private Equity	6.9%	7.8%	1.0%	5.1	5.1	0.0	10.5	27.0	16.5	1.0	1.0	-0.0	16.6	33.1	16.5	5.71%	9.15%	3.44%	0.39%	0.72%	0.33%	0.04%	-0.03%	0.30%	-0.01%
Private Debt	4.3%	3.3%	-0.9%	2.0	1.5	-0.5	0.8	3.0	2.1	1.4	1.3	-0.1	4.2	5.7	1.5	2.31%	3.72%	1.41%	0.10%	0.12%	0.03%	-0.01%	0.00%	0.05%	0.00%
Growth Real Estate	2.9%	3.2%	0.4%	2.5	2.7	0.1	0.2	8.4	8.2	0.6	0.9	0.3	3.3	12.0	8.6	2.72%	8.01%	5.28%	0.08%	0.26%	0.18%	0.01%	-0.01%	0.16%	0.00%
Venture	0.0%	0.2%	0.2%	0.3	0.5	0.3	0.1	0.3	0.2	0.1	0.2	0.0	0.5	1.0	0.5	25.37%	10.78%	-14.58%	0.01%	0.02%	0.01%	0.04%	-0.02%	0.00%	-0.01%
Private Real Assets	0.9%	1.4%	0.4%	1.2	1.5	0.3	0.6	2.5	1.8	0.3	0.3	0.0	2.1	4.3	2.2	5.28%	6.76%	1.49%	0.05%	0.09%	0.04%	0.02%	-0.01%	0.03%	0.00%
Emerging Markets Debt	2.8%	2.4%	-0.4%	1.0	0.9	-0.1	2.5	1.0	-1.4	0.1	0.1	-0.0	3.6	2.0	-1.6	3.00%	1.84%	-1.16%	0.08%	0.04%	-0.04%	-0.01%	0.00%	-0.03%	0.00%
Active	0.9%	0.7%	-0.2%	0.2	0.2	-0.0	-	-	-	0.0	-	-0.0	0.2	0.2	-0.0	0.59%	0.53%	-0.06%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hedged	2.0%	1.7%	-0.3%	0.9	0.8	-0.1	2.5	1.0	-1.4	0.1	0.1	-0.0	3.4	1.9	-1.5	4.07%	2.40%	-1.67%	0.08%	0.04%	-0.04%	-0.01%	0.00%	-0.03%	0.00%
High Yield	1.0%	2.0%	1.0%	0.1	0.3	0.2	-	-	-	0.0	-	-0.0	0.1	0.3	0.2	0.31%	0.38%	0.07%	0.00%	0.01%	0.00%	-0.01%	0.00%	0.00%	0.00%
Active	0.2%	1.8%	1.6%	0.0	0.3	0.3	-	-	-	-	-	-	0.0	0.3	0.3	0.37%	0.39%	0.02%	0.00%	0.01%	0.01%	-0.01%	0.00%	0.00%	0.00%
Passive	0.8%	0.2%	-0.6%	0.1	0.0	-0.1	-	-	-	0.0	-	-0.0	0.1	0.0	-0.1	0.30%	0.25%	-0.05%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Low Beta	10.3%	8.5%	-1.8%	2.4	2.3	-0.1	7.8	4.6	-3.2	0.4	0.3	-0.0	10.6	7.2	-3.3	2.42%	1.85%	-0.57%	0.25%	0.16%	-0.09%	-0.02%	0.00%	-0.05%	0.00%
Immunized Cash Flows	4.4%	4.3%	-0.1%	0.1	0.1	0.0	-	-	-	-	-	-	0.1	0.1	0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	4.4%	4.3%	-0.1%	0.1	0.1	0.0	-	-	-	-	-	-	0.1	0.1	0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Market Neutral Strategies	3.3%	2.3%	-1.0%	2.3	2.2	-0.1	7.8	4.6	-3.2	0.4	0.3	-0.0	10.5	7.1	-3.3	7.51%	6.62%	-0.89%	0.25%	0.16%	-0.09%	-0.06%	0.01%	-0.03%	0.00%
Hedged	3.3%	2.3%	-1.0%	2.3	2.2	-0.1	7.8	4.6	-3.2	0.4	0.3	-0.0	10.5	7.1	-3.3	7.51%	6.62%	-0.89%	0.25%	0.16%	-0.09%	-0.06%	0.01%	-0.03%	0.00%
Cash	2.7%	1.9%	-0.8%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Passive	2.7%	1.9%	-0.8%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Other	21.1%	20.2%	-0.9%	1.6	2.2	0.6	-	0.3	0.3	0.2	0.3	0.1	1.9	2.8	0.9	0.21%	0.30%	0.09%	0.04%	0.06%	0.02%	0.01%	0.01%	0.01%	0.00%
Core Real Estate	3.9%	4.6%	0.8%	1.0	1.3	0.4	-	0.3	0.3	0.2	0.3	0.1	1.2	1.9	0.7	0.73%	0.91%	0.17%	0.03%	0.04%	0.01%	0.00%	0.00%	0.01%	0.00%
Active	3.9%	4.6%	0.8%	1.0	1.3	0.4	-	0.3	0.3	0.2	0.3	0.1	1.2	1.9	0.7	0.73%	0.91%	0.17%	0.03%	0.04%	0.01%	0.00%	0.00%	0.01%	0.00%
Commodities	0.4%	1.1%	0.7%	0.1	0.1	0.0	-	-	-	0.0	-	-0.0	0.1	0.1	0.0	0.49%	0.18%	-0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	0.4%	1.1%	0.7%	0.1	0.1	0.0	-	-	-	0.0	-	-0.0	0.1	0.1	0.0	0.49%	0.18%	-0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TIPS	1.8%	2.0%	0.2%	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	1.8%	2.0%	0.2%	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	1.4%	2.9%	1.5%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.03%	0.03%	-0.01%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Passive	1.4%	2.9%	1.5%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.03%	0.03%	-0.01%	0.00%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%
Investment Grade Bonds	13.0%	9.5%	-3.5%	0.5	0.7	0.2	-	-	-	0.0	0.0	-0.0	0.5	0.7	0.2	0.09%	0.15%	0.06%	0.01%	0.01%	0.00%	0.04%	0.01%	0.00%	0.00%
Passive	11.8%	6.6%	-5.2%	0.2	0.1	-0.2	-	-	-	0.0	0.0	-0.0	0.3	0.1	-0.2	0.05%	0.02%	-0.03%	0.01%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%
Active	1.2%	2.9%	1.7%	0.3	0.6	0.3	-	-	-	-	-	-	0.3	0.6	0.3	0.49%	0.45%	-0.04%	0.01%	0.01%	0.01%	-0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	22.2	24.5	2.3	22.4	47.3	24.8	6.8	4.8	-2.0	51.4	76.6	25.2	1.21%	1.66%	0.45%	1.21%	1.66%	0.45%	-0.01%	0.00%	0.52%	-0.06%

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			
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020	2021	Change	2020	2021	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Passive	52.4%	44.1%	-8.3%	0.8	0.8	-0.0	-	-	-	0.1	0.1	0.0	0.9	0.9	-0.0	0.04%	0.05%	0.00%	0.02%	0.02%	0.00%	0.10%	0.00%	0.00%	0.00%
Active	27.4%	35.9%	8.5%	7.1	9.5	2.4	-	0.5	0.5	2.8	0.6	-2.2	9.9	10.6	0.7	0.86%	0.64%	-0.21%	0.23%	0.23%	0.00%	-0.03%	-0.01%	0.01%	-0.07%
Hedged	5.3%	4.0%	-1.2%	3.2	3.0	-0.2	10.2	5.6	-4.6	0.4	0.4	-0.0	13.9	9.0	-4.9	6.23%	4.85%	-1.38%	0.33%	0.20%	-0.13%	-0.06%	0.01%	-0.06%	0.00%
Private	15.0%	16.0%	1.0%	11.1	11.2	0.2	12.2	41.1	28.9	3.4	3.7	0.3	26.7	56.0	29.3	4.20%	7.60%	3.40%	0.63%	1.22%	0.59%	0.03%	-0.03%	0.53%	-0.01%
Total Plan	100.0%	100.0%	0.0%	22.2	24.5	2.3	22.4	47.3	24.8	6.8	4.8	-2.0	51.4	76.6	25.2	1.21%	1.66%	0.45%	1.21%	1.66%	0.45%	0.04%	-0.04%	0.53%	-0.08%

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
2020	1.0	0.5	0.2	0.6	2.4	0.06%
2021	1.2	0.5	0.6	0.5	2.8	0.06%
Change	0.2	-0.0	0.3	-0.1	0.4	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						
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020	2021	Change	2020	2021	Change	2020	2021	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Growth	56.2%	65.4%	9.2%	0.0	0.1	0.0	-	-	-	0.0	0.0	0.0	0.06	0.09	0.03	0.06%	0.06%	0.00%	0.03%	0.04%	0.01%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Global Equity	56.2%	65.4%	9.2%	0.0	0.1	0.0	-	-	-	-	-	-	0.1	0.1	0.0	0.06%	0.06%	0.00%	0.03%	0.04%	0.01%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	56.2%	65.4%	9.2%	0.0	0.1	0.0	-	-	-	0.0	0.0	0.0	0.1	0.1	0.0	0.06%	0.06%	0.00%	0.03%	0.04%	0.01%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Low Beta	30.1%	19.0%	-11.1%	0.0	0.0	-0.0	-	-	-	0.0	0.0	-0.0	0.0	0.0	-0.0	0.02%	0.01%	-0.01%	0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Short Term IG Bonds	27.9%	16.3%	-11.6%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.02%	0.01%	-0.01%	0.01%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	27.9%	16.3%	-11.6%	0.0	0.0	-0.0	-	-	-	-	-	-	0.0	0.0	-0.0	0.02%	0.01%	-0.01%	0.01%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cash	2.3%	2.7%	0.5%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	2.3%	2.7%	0.5%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	13.7%	15.6%	1.9%	0.1	0.2	0.1	-	0.03	0.03	0.0	0.0	0.0	0.2	0.3	0.1	0.70%	0.87%	0.17%	0.10%	0.14%	0.04%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%
Core Real Estate	8.9%	9.9%	1.0%	0.1	0.2	0.1	-	0.03	0.03	0.0	0.0	0.0	0.1	0.2	0.1	0.71%	0.97%	0.26%	0.06%	0.10%	0.03%	0.00%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%
Active	8.1%	9.9%	1.7%	0.1	0.2	0.1	-	0.03	0.03	0.0	0.0	0.0	0.1	0.2	0.1	0.76%	0.97%	0.20%	0.06%	0.10%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%
Commodities	4.8%	5.7%	1.0%	0.0	0.1	0.0	-	-	-	0.0	0.0	0.0	0.1	0.1	0.0	0.69%	0.69%	0.01%	0.03%	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	4.8%	5.7%	1.0%	0.0	0.1	0.0	-	-	-	0.0	0.0	0.0	0.1	0.1	0.0	0.69%	0.69%	0.01%	0.03%	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.2	0.3	0.1	-	0.03	0.03	0.1	0.1	0.0	0.2	0.4	0.2	0.14%	0.18%	0.04%	0.14%	0.18%	0.04%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%

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						
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020	2021	Change	2020	2021	Change	2020	2021	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Passive	87.1%	84.4%	-2.7%	0.1	0.1	0.0	-	-	-	0.0	0.0	0.0	0.1	0.1	0.0	0.05%	0.05%	0.00%	0.04%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	12.9%	15.6%	2.7%	0.1	0.2	0.1	-	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.1	0.73%	0.87%	0.13%	0.09%	0.14%	0.04%	0.02%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.2	0.3	0.1	-	0.0	0.0	0.1	0.1	0.0	0.2	0.4	0.2	0.14%	0.18%	0.04%	0.14%	0.18%	0.04%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%

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

	Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodian (\$ mm)	Other Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
2020	0.0	0.0	0.0	0.0	0.1	0.04%
2021	0.1	0.0	0.0	0.0	0.1	0.06%
Change	0.1	0.0	-	0.0	0.1	0.02%

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

As presented in Table 9, the pension total plan fee ratio increased from 1.21% in 2020 to 1.66% in 2021.

The largest contributor from an asset class perspective was Private Markets (+65 bps), offset by Global Equities (-11 bps) and Market Neutral Strategies (-8 bps).

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

As shown in the Table 10, the increase in Private strategies incentive fees contributed +59 bps compared to 2020.

As displayed in Table 11, the Other Costs fee ratio for the 2021 year remained the same as the previous year.

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 slightly by 4 bps. A slight increase in weighting to Active strategies along with the management fees and OpEx associated with those strategies drove the small increase in the fee ratio.

As displayed in Table 14, Other Costs also increased by 2 bps.

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
HarbourVest Partners VII - 2005 Buyout P	HarbourVest Partners VII - 2005 Buyout P	One Financial Center Boston, MA 02111	2005	15,000,000	14,027,840	189,119	-	189,119	872	5.7%	1.5	-	-	2,532	-	-	3	-	-
Pantheon USA Fund VI, L.P.	Pantheon USA Fund VI, L.P.	600 Montgomery Street, 23rd Floor San Francisco, CA 94111	2005	40,000,000	38,600,000	10,361,981	-	13,361,980	(7,768,564)	6.6%	1.5	-	-	13,666	-	-	-	-	-
Portfolio Advisors Private Equity Fund III	Portfolio Advisors Private Equity Fund III	9 Old Kings Highway South Darien, CT 06820	2005	25,000,000	22,140,607	3,111,434	-	3,111,434	135,815	5.6%	1.4	-	10,092	-	-	-	-	-	-
HarbourVest Partners VIII - Buyout Fund, L	HarbourVest Partners VIII - Buyout Fund, L	One Financial Center Boston, MA 02111	2006	15,000,000	14,325,000	(1)	-	(1)	5,867,292	6.0%	1.3	-	37,500	1,648	-	-	1,864	-	-
HarbourVest Partners VIII - Venture Fund, L	HarbourVest Partners VIII - Venture Fund, L	One Financial Center Boston, MA 02111	2006	10,000,000	9,800,000	-	-	-	5,867,292	3.4%	1.2	-	37,500	1,648	-	-	1,864	-	-
Siguler Guff Distressed Opportunities Fund	Siguler Guff Distressed Opportunities Fund	825 Third Avenue, 10th Floor New York, NY 10022	2008	30,000,000	29,331,045	3,142,152	2,410,420	7,705,611	1,482,745	10.3%	1.6	-	44,433	14,092	-	-	174,462	-	222,289
TCW/Crescent Mezzanine Partners V, L.P.	TCW/Crescent Mezzanine Partners V, L.P.	1100 Santa Monica Boulevard, Suite 2000 San Francisco, CA 94104	2008	20,000,000	13,230,694	2,287,718	-	2,287,718	252,752	9.6%	1.5	-	-	2,970	-	-	-	-	-
TPG Opportunities Partners II, L.P.	TPG Opportunities Partners II, L.P.	345 California St., Suite 3300 San Francisco, CA 94104	2012	15,000,000	12,250,794	1,419,899	-	3,964,271	35,609	15.0%	1.6	-	-	8,149	-	-	37,798	-	-
Crescent Mezzanine Partners VI, L.P.	Crescent Mezzanine Partners VI, L.P.	1100 Santa Monica Boulevard, Suite 2000 San Francisco, CA 94104	2013	20,000,000	19,544,385	2,894,483	286,876	3,181,359	811,069	0.2%	1.0	-	61,581	11,464	9,910	-	417,112	9,910	716,474
Industry Ventures Partnership Holdings III	Industry Ventures Partnership Holdings III	30 Hotelling Place, 3rd Floor, San Francisco, CA 94111	2013	15,000,000	12,015,611	15,041,193	-	15,041,193	5,460,061	5.5%	1.4	-	66,340	7,382	-	-	1,393,254	-	579,174
TPG Opportunities Partners III, L.P.	TPG Opportunities Partners III, L.P.	345 California St., Suite 3300 San Francisco, CA 94104	2013	15,000,000	8,282,943	7,165,839	-	8,190,432	693,226	4.2%	1.2	5,108	55,449	20,166	-	-	450,390	-	144,563
Warburg Pincus Private Equity XI, L.P.	Warburg Pincus Private Equity XI, L.P.	450 Lexington Avenue New York, NY 10017	2013	20,000,000	20,770,000	16,719,683	-	18,366,243	2,118,001	7.4%	1.4	-	41,164	25,693	816	-	337,072	816	288,500
57 Stars Global Opportunity Fund 3, L.P.	57 Stars Global Opportunity Fund 3, L.P.	616 H Street, N.W., Suite 450 Washington, D.C. 20001	2014	30,000,000	26,871,484	29,239,596	-	-	-	3.3%	1.2	-	135,436	1,779	-	-	851,281	-	-
CCMP Capital Investors III, L.P.	CCMP Capital Investors III, L.P.	277 Park Avenue, 27th Floor New York, NY 10172	2014	20,000,000	17,469,778	18,582,110	227,353	18,809,463	5,275,327	4.3%	1.3	-	118,013	21,035	6,331	-	1,474,295	6,331	1,483,206
Dover Street IX, L.P.	Dover Street IX, L.P.	One Financial Center Boston, MA 02111	2015	30,000,000	10,500,000	-	2,386,434	2,386,434	(8,202,055)	-25.5%	0.6	-	988,252	207,089	-	-	2,225,057	-	-
Francisco Partners IV, L.P.	Francisco Partners IV, L.P.	One Letterman Drive, Bldg C - Suite 410 San Francisco, CA 94129	2015	15,000,000	12,292,500	14,158,162	-	15,628,162	5,600,335	4.7%	1.3	-	135,610	(26,666)	-	-	1,195,754	-	1,247,181
SJPF Private Equity Strategic Partnership	SJPF Private Equity Strategic Partnership	325 N. Saint Paul St., Ste. 4900 Dallas, TX	2017	304,800,000	174,300,000	269,633,039	39,686,468	309,319,507	35,017,577	37.3%	1.9x	-	3,086,783	640,405	-	-	16,337,379	-	-
Canvas Ventures 3, L.P.	Canvas Ventures 3, L.P.	3200 Alpine Rd, Portola Valley, CA 94028	2020	5,000,000	1,813,660	2,036,386	-	2,036,386	103	23.5%	1.1	-	123,864	3,889	-	-	56,187	-	-
Invesco Venture Alpha Fund II, L.P.	Invesco Venture Alpha Fund II, L.P.	225 Liberty Street New York, NY 10281	2020	10,000,000	3,087,647	4,747,578	-	4,747,578	-	297.8%	1.5	-	104,959	44,333	-	-	113,904	-	-
Next Play Capital Fund III, L.P.	Next Play Capital Fund III, L.P.	885 Winslow Street Redwood City, CA 94063	2020	10,000,000	2,000,000	2,021,861	-	2,021,861	1,173	30.3%	1.0	-	96,667	87,404	-	-	1,151	-	-
Northgate Venture Partners IX, L.P.	Northgate Venture Partners IX, L.P.	849 San Ramon Valley Boulevard, Danville, CA 94526	2020	10,000,000	5,700,000	6,070,311	-	6,070,311	(159,582)	9.0%	1.1	-	63,998	6,386	-	-	-	-	-
Top Tier Venture Capital IX, L.P.	Top Tier Venture Capital IX, L.P.	600 Montgomery Street, Suite 480, San Francisco, CA 94111	2020	10,000,000	4,988,951	6,671,270	49,058	6,720,328	124,301	49.5%	1.3	-	100,000	30,773	-	-	104,503	-	-
Innovation Endeavors Fund IV, L.P.	Innovation Endeavors Fund IV, L.P.	1845 El Camino Real Palo Alto, CA 94306	2021	4,200,000	733,955	675,244	-	675,244	-	-22.6%	0.9	-	53,679	-	-	-	-	-	-

Source: Fund managers, Meketa Investment Group, Neuberger Berman

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
GSD S/J Partners	GSD S/J Partners	345 Park Avenue New York, NY 10154	2010	50,000,000	43,365,930	3,757,832	-	3,757,832	(3,260,387)	4.1%	1.1	-	73,633	34,932	-	-	-	-	-
Medley Opportunity Fund II, L.P.	Medley Opportunity Fund II, L.P.	280 Park Avenue, 6th Floor East New York, NY 10017	2010	50,000,000	51,572,237	4,852,337	6,626,247	11,478,584	-	2.4%	1.1	-	53,632	72,716	-	-	-	-	-
White Oak Direct Lending	White Oak Direct Lending	3 Embarcadero Center, 5th Floor San Francisco, CA 94111	2010	50,000,000	85,397,651	33,029,106	-	33,029,106	-	7.8%	1.3	-	271,831	32,018	-	-	-	-	-
Cross Ocean USD ESS Fund I, L.P.	Cross Ocean USD ESS Fund I, L.P.	11 Charles II St. London, SW1Y4QU	2013	90,000,000	76,171,407	6,954,741	353,671	7,308,412	-	7.1%	1.2	-	-	101,878	-	-	-	-	-
Park Square Capital Credit Opportunities	Park Square Capital Credit Opportunities	2nd Floor, Stratton House, 5 Stratton St. London W1J8LA	2013	50,000,000	51,639,010	39,800	23,544,053	23,583,853	491,931	4.7%	1.2	21,955	10,005	46,560	-	-	92,301	-	93,376
Shoreline China Value III, L.P.	Shoreline China Value III, L.P.	301 Main St, Suite 1201A Cambridge, MA 02142	2014	22,500,000	22,377,573	7,524,831	1,409,620	8,934,451	205,402	4.3%	1.2	-	35,127	12,115	-	-	-	-	-
Cross Ocean USD ESS Fund II, L.P.	Cross Ocean USD ESS Fund II, L.P.	11 Charles II St. London, SW1Y4QU	2016	75,000,000	60,000,000	20,038,984	17,012,255	37,051,239	-	6.0%	1.2	-	269,113	374,894	-	-	800,629	-	-
Arbour Lane Credit Opportunity Fund II, L.P.	Arbour Lane Credit Opportunity Fund II, L.P.	700 Canal St. Stamford, CT 06902	2018	12,000,000	23,046,986	15,833,107	8,375,747	24,208,854	2,076,754	24.0%	1.2	-	200,701	92,143	-	-	710,394	-	129,092
Crestline Portfolio Financing Fund II	Crestline Portfolio Financing Fund II	201 Main St, #1900 Fort Worth, TX 76102	2018	12,000,000	5,391,624	2,227,193	3,388,461	6,215,654	1,327	8.5%	1.0	-	13,828	56,070	-	-	14,616	-	-
Octagon CLD Opportunity Fund III, L.P.	Octagon CLD Opportunity Fund III, L.P.	250 Park Ave., 15th Floor, New York, NY 10177, USA	2018	50,000,000	42,500,000	(5,553)	47,644,610	47,644,610	3,628,806	16.8%	1.2	-	66,633	74,715	-	-	-	-	339,812
HPS Special Situations Opportunity Fund	HPS Special Situations Opportunity Fund	40 West 57th St, 33rd Floor New York, NY 10019	2019	12,000,000	7,086,645	7,745,011	534,832	8,279,843	244,813	30.7%	1.2	-	79,598	38,253	-	-	197,196	-	-
Cross Ocean USD ESS Fund III, L.P.	Cross Ocean USD ESS Fund III, L.P.	11 Charles II St. London, SW1Y4QU	2020	32,000,000	25,785,129	33,378,420	572,029	33,950,449	-	20.0%	1.4	-	301,711	250,791	-	-	1,025,765	-	-
Eagle Point Defensive Income	Eagle Point Defensive Income	600 Steamboat Road, Suit 202 Greenwich, CT 06830	2020	12,000,000	6,123,600	6,799,827	170,606	6,970,433	(67,996)	7.9%	1.1	-	9,483	17,119	-	-	4,287	-	-
Arbour Lane Credit Opportunity Fund III, L.P.	Arbour Lane Credit Opportunity Fund III, L.P.	700 Canal St. Stamford, CT 06902	2021	21,000,000	2,738,813	2,718,858	1,283	2,720,141	75,704	-6.5%	1.0	-	2,880	34,216	-	-	23,151	-	-
Strategic Value Special Situations Fund	Strategic Value Special Situations Fund	100 West Putnam Avenue Greenwich, CT 06830	2021	15,500,000	3,875,000	4,239,418	-	4,239,418	(6,388)	40.9%	1.1	-	82,834	38,103	-	-	91,106	-	-

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar Year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Clarion Lion Properties Fund (PF Pension)	Clarion Lion Properties Fund (PF Pension)	230 Park Avenue New York, NY 10017	2019	80,000,000	80,000,000	36,172,602	3,151,010	33,323,612	146,360	3.4%	1.3	-	712,611	44,834	-	-	-	-	-
BlackRock U.S. Core Property (PF Pension)	BlackRock U.S. Core Property (PF Pension)	400 Howard Street San Francisco, CA 94105	2019	122,000,000	122,000,000	103,880,210	45,036,765	148,916,375	583,562	3.2%	1.3	-	517,284	250,456	-	-	-	-	-
Clarion Lion Properties Fund (PF HCT)	Clarion Lion Properties Fund (PF HCT)	230 Park Avenue New York, NY 10017	2019	10,000,000	10,000,000	11,900,212	381,035	12,281,307	18,313	3.4%	1.3	-	84,856	5,441	-	-	-	-	-
BlackRock U.S. Core Property Fund (PF HCT)	BlackRock U.S. Core Property Fund (PF HCT)	400 Howard Street San Francisco, CA 94105	2019	10,500,000	10,500,000	8,365,460	3,859,626	12,825,086	50,257	3.2%	1.3	-	45,350	21,571	-	-	-	-	-
TA Realty Core Property Fund (PF Pension)	TA Realty Core Property Fund (PF Pension)	1 Federal Street Boston, MA 02110	2021	30,000,000	20,000,000	21,456,326	235,000	21,691,326	-	8.7%	1.1	-	37,550	9,269	-	-	-	-	-
Clarion Lion Industrial Trust (PF Pension)	Clarion Lion Industrial Trust (PF Pension)	230 Park Avenue New York, NY 10017	2021	18,500,000	18,500,000	20,488,304	154,314	20,642,618	(2,466)	11.2%	1.1	-	67,822	1,369	-	-	295,041	-	-
TA Realty Core Property Fund (PF HCT)	TA Realty Core Property Fund (PF HCT)	1 Federal Street Boston, MA 02110	2021	10,000,000	10,000,000	10,728,463	117,500	10,845,963	-	8.7%	1.1	-	18,775	4,634	-	-	-	-	-
Clarion Lion Industrial Trust (PF HCT)	Clarion Lion Industrial Trust (PF HCT)	230 Park Avenue New York, NY 10017	2021	1,700,000	1,700,000	1,892,727	14,180	1,896,907	(0)	11.2%	1.1	-	6,352	126	-	-	27,094	-	-
Brookfield Strategic Real Estate Partners	Brookfield Strategic Real Estate Partners	250 Vesey Street, 15th Floor New York, NY 10281	2012	10,000,000	11,384,146	4,538,404	1,360,818	5,839,222	1,029,434	18.3%	1.9	-	48,061	6,132	-	-	115,745	-	-
Blackstone Real Estate Debt Strategies II	Blackstone Real Estate Debt Strategies II	345 Park Avenue New York, NY 10154	2013	12,500,000	12,750,627	28,365	237,520	265,885	-	9.2%	1.2	-	-	-	-	-	-	-	-
European Property Investors Special Oppo	European Property Investors Special Oppo	Berkley Square House (8th Floor) Berkley Square, London W1J6DB, UK	2013	8,652,649	9,244,502	2,838,186	668,226	3,506,412	(93,065)	7.1%	1.3	-	44,810	57,427	-	-	8,440	-	-
Orion European Real Estate Fund IV, C.V.	Orion European Real Estate Fund IV, C.V.	6th Floor, 2 Cavendish Square London W1G0PU	2013	8,265,684	8,608,439	3,686,082	294,492	3,980,574	(550,462)	-1.9%	0.9	-	96,034	-	-	-	-	-	-
Realty Associates Fund X, L.P., The	Realty Associates Fund X, L.P., The	28th State Street Boston, MA 02109	2013	10,000,000	10,000,000	82,293	393,535	1,075,828	(437,689)	12.6%	1.6	-	8,224	3,250	-	-	6,211	-	247,368
Sculptor Real Estate Fund III (fka Och-Ziff)	Sculptor Real Estate Fund III (fka Och-Ziff)	3 West 57th Street, 39th Floor New York, NY 10019	2013	20,000,000	13,334,632	5,182,015	3,603,385	8,785,400	224,803	21.1%	1.6	-	75,531	19,815	-	-	66,389	-	220,686
Brookfield Strategic Real Estate Partners I	Brookfield Strategic Real Estate Partners I	250 Vesey Street, 15th Floor New York, NY 10281	2015	20,000,000	13,638,763	21,593,000	4,374,834	26,567,834	360,363	13.3%	1.6	-	215,474	7,143	128	-	1,813,196	58,391	-
European Property Investors Special Oppo	European Property Investors Special Oppo	Berkley Square House (8th Floor) Berkley Square, London W1J6DB, UK	2015	20,318,680	18,298,103	19,288,334	1,354,501	21,243,434	(48,504)	10.5%	1.4	-	192,822	209,999	-	-	38,532	-	-
KSL Capital Partners IV, L.P.	KSL Capital Partners IV, L.P.	100 St. Paul St., Suite 800 Denver, CO 80206	2015	20,000,000	21,038,094	24,318,978	5,074,271	29,393,249	2,978,068	18.8%	1.6	1,298	194,902	30,829	1,298	-	2,385,941	-	324,429
DRA Growth and Income Fund IX, LLC	DRA Growth and Income Fund IX, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2016	20,000,000	21,303,814	16,536,641	3,129,045	25,665,686	2,464,336	18.7%	1.5	-	314,620	20,752	-	-	1,431,192	-	-
GEM Realty Fund VI, L.P.	GEM Realty Fund VI, L.P.	900 North Michigan Avenue #1450, Chicago, IL 60611	2017	15,000,000	10,125,000	9,675,521	1,725,000	11,400,521	1,114,483	19.8%	1.3	9,897	63,888	27,018	-	-	794,193	-	-
European Property Investors Special Oppo	European Property Investors Special Oppo	Berkley Square House (8th Floor) Berkley Square, London W1J6DB, UK	2018	21,838,464	14,277,556	15,456,564	-	15,456,564	373,001	9.3%	1.1	-	302,611	316,611	-	-	245,377	-	-
Torchlight Debt Opportunity Fund VI, L.P.	Torchlight Debt Opportunity Fund VI, L.P.	280 Park Avenue New York, NY 10017	2018	30,000,000	33,178,270	25,114,384	10,012,923	35,127,307	529,555	8.0%	1.2	-	405,000	67,059	-	-	227,885	-	-
DRA Growth and Income Fund X, LLC	DRA Growth and Income Fund X, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2020	18,000,000	8,201,173	7,650,322	2,191,299	3,842,221	-	36.5%	1.3	-	142,439	29,013	-	-	-	-	-
Exeter Industrial Value Fund V, L.P.	Exeter Industrial Value Fund V, L.P.	101 West Elm Street, Suite 600, Conshohocken, PA 19428	2020	3,500,000	6,650,000	10,440,834	-	10,440,834	-	102.9%	1.6	-	128,250	10,274	-	-	952,377	-	-
Rockpoint Real Estate Fund VI, L.P.	Rockpoint Real Estate Fund VI, L.P.	500 Boylston Street, Suite 1880, Boston, MA	2020	11,500,000	6,748,069	7,890,101	-	7,890,101	-	30.3%	1.2	2,464	172,477	20,906	-	-	348,529	13,085	-
Torchlight Debt Fund VII, L.P.	Torchlight Debt Fund VII, L.P.	280 Park Avenue New York, NY 10017	2020	9,000,000	2,700,000	2,267,077	455,503	2,722,580	27,538	1.4%	1.0	-	175,500	21,110	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Brookfield Infrastructure Fund III, L.P.	Brookfield Infrastructure Fund III, L.P.	250 Vesey Street, 15th Floor New York, NY 10231	2016	20,000,000	17,170,348	17,682,021	971,655	18,653,676	80,129	13.1%	1.4	-	196,573	14,105	-	-	485,329	3,667	-
Global Infrastructure Partners III, L.P.	Global Infrastructure Partners III, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2016	20,000,000	18,451,302	20,801,780	1,361,486	22,163,266	-	10.4%	1.4	-	345,569	24,921	-	-	3,576	-	-
Lime Rock Partners VIII, L.P.	Lime Rock Partners VIII, L.P.	1111 Bagby St, Suite 4600 Houston, TX 77002	2018	6,000,000	5,151,092	5,621,064	459,963	6,081,027	314,888	7.0%	1.2	-	120,000	9,646	4,356	-	292,997	-	-
Lime Rock New Energy	Lime Rock New Energy	274 Riverside Avenue, Westport, CT 06880	2019	9,000,000	4,081,088	2,404,028	3,505,365	5,909,393	2,255,857	20.8%	1.4	-	162,000	63,595	5,073	-	341,425	-	-
Orion Mine Finance Fund III, L.P.	Orion Mine Finance Fund III, L.P.	1045 Avenue of the Americas, 25th Floor, New York, NY 10018	2019	9,000,000	4,245,448	4,833,237	108,802	5,002,039	(128,043)	12.2%	1.2	-	146,250	17,661	-	-	38,267	-	-
Tembo Capital Mining Fund III	Tembo Capital Mining Fund III	London W1J 5ER England, United Kingdom	2019	9,000,000	1,938,381	2,010,640	6,721	2,017,361	-	27.0%	1.0	-	270,740	49,755	-	-	15,309	9,948	-
Crestline Co-Invest II	Crestline Co-Invest II	201 Main St, #1900 Fort Worth, TX 76102	2020	3,150,000	3,150,000	3,936,662	-	3,936,662	-	26.0%	1.2	-	-	29,434	-	-	87,407	-	-
Global Infrastructure Partners IV, L.P.	Global Infrastructure Partners IV, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2020	6,000,000	1,368,484	1,219,260	-	1,219,260	-	-12.7%	0.9	-	105,000	5,771	14,649	-	-	-	-
Kimberidge Energy Fund V, L.P.	Kimberidge Energy Fund V, L.P.	400 Madison Avenue, Suite 14C, New York, NY	2020	7,200,000	6,442,355	9,606,931	1,280,844	10,887,775	496,109	47.8%	1.7	-	143,939	121,466	-	-	1,188,117	-	-
Energy Services Co-Invest	Energy Services Co-Invest	NA	2020	1,800,000	1,800,000	1,800,000	-	1,800,000	-	0.0%	1.0	-	-	-	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions - Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)				Fees and expenses paid by all portfolio companies 2021(\$)	Carried Interest Paid 2021 (\$)	
													Management Fees	Partnership Expenses	Offsets	Other Expense			Incentive/Carried Interest
DE Shaw Composite International Fund	DE Shaw Composite International Fund	166 Avenue of the Americas, 9th Floor New York, NY 10036	N/A	N/A	39,000,000	68,134,297	-	68,134,297	-	12.98%	2.91	-	1,327,967	133,977	-	-	4,079,859	-	4,079,859
Hudson Bay Cap Structure Arbitrage Enh	Hudson Bay Cap Structure Arbitrage Enh	777 Third Ave, 30th Floor, New York, NY 10017	N/A	N/A	38,000,000	13,595,818	-	13,595,818	-	10.03%	1.52	-	131,985	43,640	-	-	490,378	-	490,378
Iguazu Partners LP Fund	Iguazu Partners LP Fund	2 Embarcadero Center # 1645 San Francisco, CA 94111	N/A	N/A	50,000,000	61,649,499	30,000,000	91,649,499	-	8.00%	1.84	-	769,917	62,305	-	-	1,035,261	-	1,035,261
Crabel Advanced Trend Fund	Crabel Advanced Trend Fund	1999 Avenue of the Stars, Suite 2550 Los Angeles, CA 90067	N/A	N/A	68,000,000	65,017,079	-	65,017,079	-	-4.39%	0.96	-	164,302	160,065	-	-	-	-	-

Source: Fund managers, State Street, ORS

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM FISCAL YEAR 2023-2024 BUDGET PROPOSAL

April 20, 2023

2023–2024 Budget at a Glance

- ▶ Development of the budget
- ▶ Administrative expense breakdown
- ▶ Sources of funds
- ▶ Uses of funds
- ▶ Proposed administrative budget
- ▶ Personnel services analysis
- ▶ Non–personnel/equipment analysis
- ▶ Professional services analysis
- ▶ Medical services analysis
- ▶ Analysis and comparisons to other CA plans

Development of the Federated City Employees' Retirement System FY23–24 Proposed Budget

The Proposed Budget is broken down into the following categories:

▶ Sources of Funds

- **City contributions** – Estimated based on the contribution rates and total covered payroll shown in the actuarial reports for June 30, 2022
- **Participant contributions** – Estimated based on the contribution rates and total covered payroll shown in the actuarial reports for June 30, 2022
- **Investment income** – Calculated using the assumed rate of return based on reserve plus City's contributions for the whole year and other activities throughout the year

▶ Uses of Funds

- **Benefits and health insurance** – Pension payments, health insurance subsidy, return of contributions and death benefits. Amounts were calculated based on the average increase for the past 5 years
- **Administrative expense** – This represents the operating expenses for the Office of Retirement Services. The detail is shown in the following slide

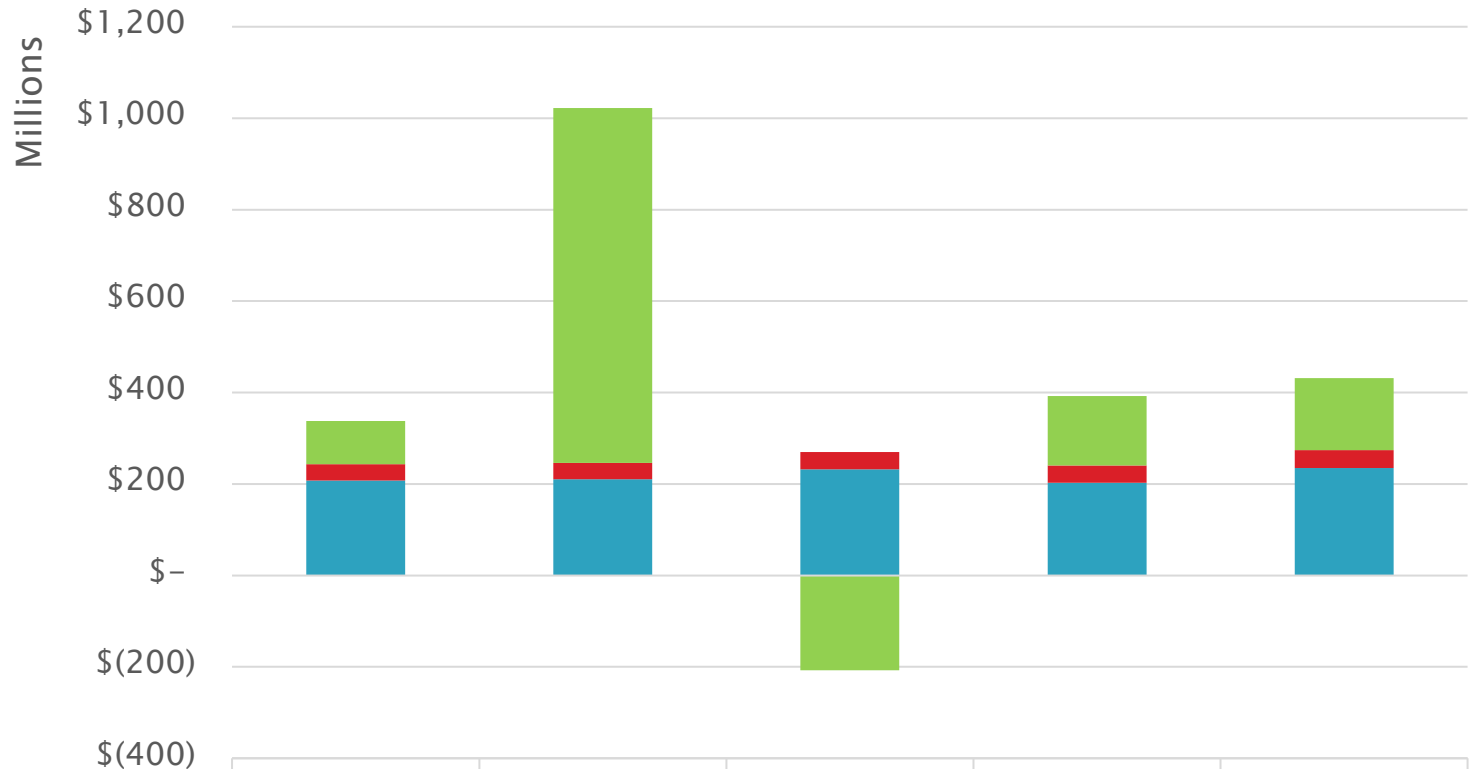
Administrative Expense Budget FY23–24

The Administrative Expense Budget portion is categorized into the following line items:

- ▶ **Personnel services** – 50% of the Office of Retirement Services direct staff labor costs including salary and benefits based on the City’s Budget Office labor reports, except for Investments staff which is split based on asset size (40% Fed and 60% PF).
- ▶ **Non–personnel/equipment** – administrative overhead costs such as rent, supplies, equipment, etc., excluding professional services.
- ▶ **Professional services** – non–investment professional services including actuarial, legal, IT and other professional consulting services.
- ▶ **Medical services** – this represents an estimate for a contracted medical advisor and other independent medical examiners.

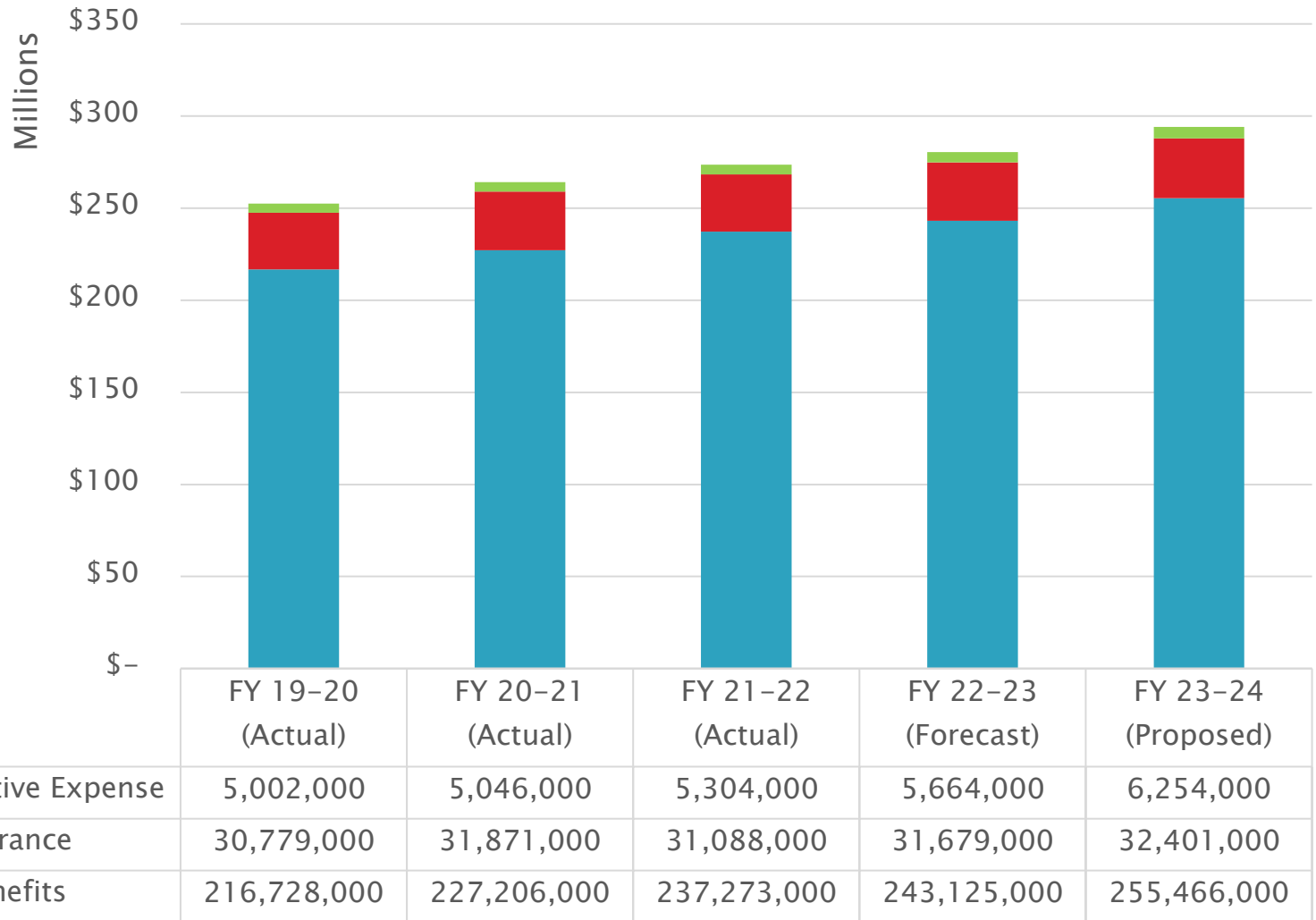
The Administrative Budget does **NOT** include investment professional services, consultants and investment manager fees and capitalized costs.

Sources of Funds



	FY 19-20 (Actual)	FY 20-21 (Actual)	FY 21-22 (Actual)	FY 22-23 (Forecast)	FY 23-24 (Proposed)
Investment Income (Loss)	93,984,000	775,968,000	(207,415,000)	151,525,000	157,847,000
Participant Contributions	35,774,000	35,999,000	37,329,000	37,915,000	39,410,000
City Contributions	207,860,000	210,200,000	232,385,000	202,723,000	234,618,000

Uses of Funds



NOTE: Amortization expense is not included in administrative expense

Federated Proposed Administrative Budget for FY 2023–2024

The following is a comparison of previous fiscal year actual figures, current year adopted budget and forecast, and proposed next year budget:

Expenses	2021–2022 Actual (A)	2022–2023 Adopted/Modified (B)	2022–2023 Forecast (C)	2023–2024 Proposed ⁽¹⁾ (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,581,518	\$3,986,000	\$3,920,651	\$4,306,000	8.03%	9.83%
Non-Personnel / Equipment	722,127	798,000	758,442	872,000	9.27%	14.97%
Professional Services	968,690	850,000/ 950,000	898,981	931,000	9.53%/ (2.00%)	3.56%
Medical Services	31,458	145,000	86,461	145,000	0.00%	67.71%
Total	\$5,303,793	\$5,779,000/ \$5,879,000	\$5,664,535	\$6,254,000	8.22%/ 6.38%	10.41%

⁽¹⁾ – Detail for changes provided in the following slides

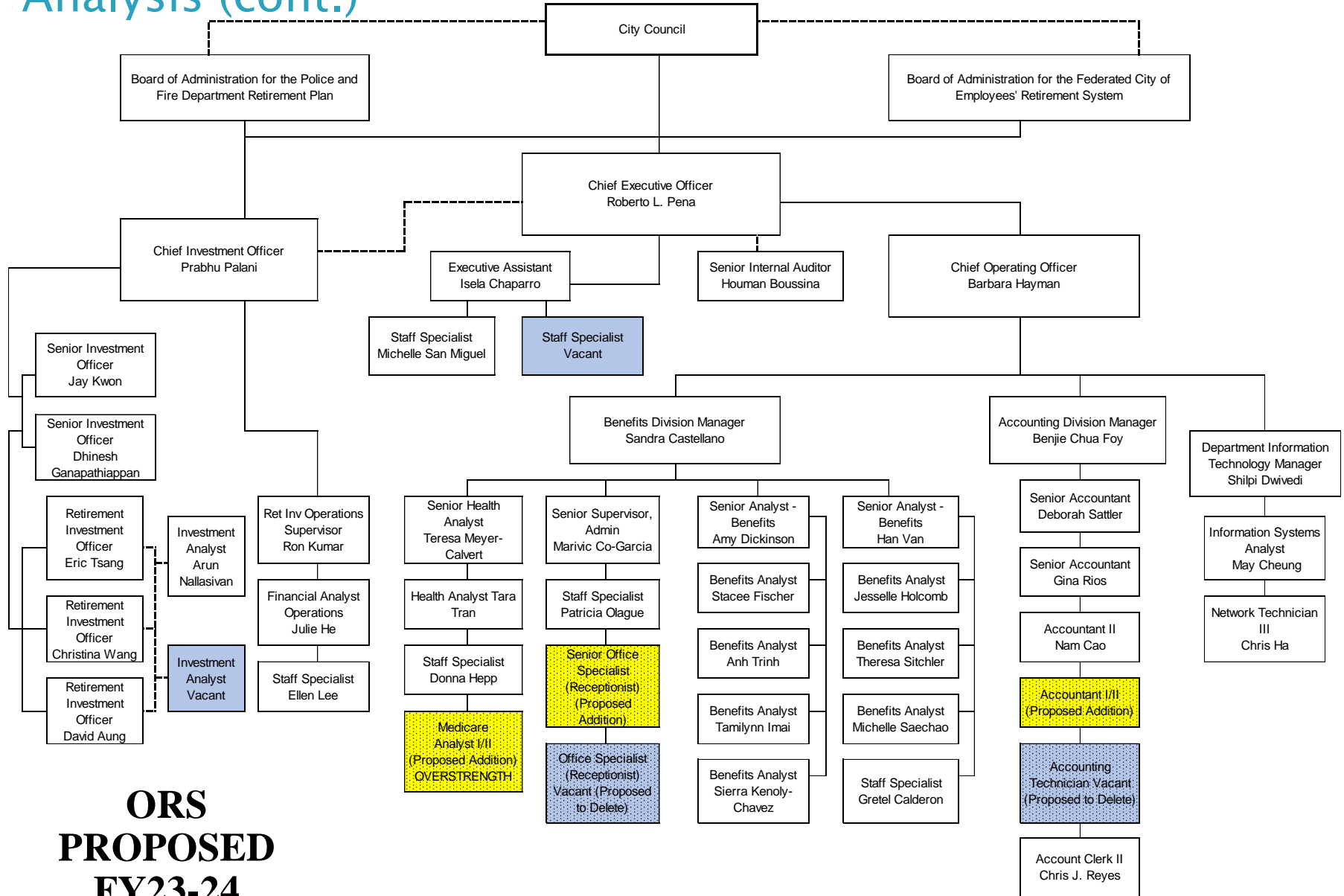
Personnel Services Analysis

Expenses	2021–2022 Actual (A)	2022–2023 Adopted (B)	2022–2023 Forecast (C)	2023–2024 Proposed (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,581,518	\$3,986,000	\$3,920,651	\$4,306,000	8.03%	9.83%
Authorized # of positions for both plans	40.00	43.00	43.00	44.00	1	1
Full time employee (FTE) allocated to Plan	20.00	21.50	21.50	22.00	0.50	0.50
Actual filled FTEs for both plans	37.00		39.00			
FTEs allocated to Plan	18.50		19.50			

- ▶ Personnel Services increased from last year’s budget due to:
 - Proposals, budgeting three return to work retirees for the full year and increased benefit rates
- ▶ Proposals for FY23–24 included in budget
 - Upgrading the Account Tech position to an Accountant I/II
 - Adding a Medicare Analyst to the Health Team in Benefits (overstrength)
 - Upgrading the vacant Office Specialist to a Senior Office Specialist for the Front Desk

Personnel Services Analysis (cont.)

Current Organizational Chart for Retirement Services, including budget proposals, of which the Federated receives one half of a full-time employee (FTE)



**ORS
PROPOSED
FY23-24**

Non-Personnel/Equipment Analysis

Expenses	2021-2022 Actual (A)	2022-2023 Adopted (B)	2022-2023 Forecast (C)	2023-2024 Proposed (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Non-personnel/Equipment	\$722,127	\$798,000	\$758,442	\$872,000	9.27%	14.97%

- ▶ Non-Personnel/Equipment increased from prior year budget by \$74,000 due to the following:
 - Increase in the IT budget for new financial reporting system for \$10,000
 - Addition of \$15,000 for cubicle reconfiguration in the Benefits division for new staff
 - CPI increases for all other areas

Non-Personnel/Equipment Analysis (cont.)

Below is a list of main non-personnel/equip. categories and budget amounts

Minor Budget Category	Budget Basis	FY23-24 Proposed Budget Amount
Insurance	Fiduciary and commercial liability insurance	240,000
Rent	Rent for Office of Retirement Services (ORS) based on lease amount, as well as Common Area Maintenance costs	230,000
IT hardware / software	Includes proposed phone center and social media, wireless microphone system for 5 th floor Board room and hosting service	130,000
Postage and printing	Postage, shipping and printing costs for paystub, open enrollment, contribution rate and newsletter mailings and other communication	100,000
LRS - annual maintenance fee	Pension administration system annual maintenance fee based on contract amount	55,000
Training/Travel	Board and staff travel including conferences, roundtables, due diligence, etc.	30,000
Other non-personnel and equipment	Includes lease, mileage, communication, dues and subscriptions, equipment/furniture, training, supplies, and a buffer for leasehold improvements for the building	87,000
	NON-PERSONNEL / EQUIPMENT TOTAL	\$872,000

Professional Services Analysis

Expenses	2021-2022 Actual (A)	2022-2023 Adopted/ Modified (B)	2022-2023 Forecast (C)	2023-2024 Proposed (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Professional Services	\$968,690	\$850,000/ 950,000	\$898,981	\$931,000	9.53%/ (2.00%)	3.56%

- ▶ Professional Services increased by \$81,000 from last year's adopted budget due to increases in actuarial, legal and temporary staffing services and slight increases across the board for CPI. The adopted budget was modified to add \$25,000 for legal services and \$75,000 for temporary staffing services.
- ▶ Other considerations
 - Cost associated with the new pension administration system are NOT included in the budget as those costs are being capitalized.
- ▶ The following slide is a list major professional services categories, budget basis and budget amounts.

Professional Services – Other Analysis (cont.)

Below is a list of main professional services categories and budget amounts

Minor budget category	Budget Basis	FY23–24 Budget Amount
Legal	Legal services provided by Reed Smith, Saltzman and Johnson and Ice Miller LLP – note this budget line excludes investment legal.	\$359,000
Actuary	Annual valuation and GASB reports for Pension & OPEB, benefit calculations, including 415 matters, and other miscellaneous consultations	270,000
Temp Agencies	Temporary staffing to fill vacant positions and assist with open enrollment	132,000
Audit	Annual financial audit agreement amount plus other services	85,000
Other Professional Services	Includes retiree search agency, governance services and communications consultant	61,000
Pension Admin System (PensionGold)	Ad hoc web changes billed per hour; disaster recovery; ad hoc change request enhancements; web hosting monthly charge	24,000
	PROFESSIONAL SERVICES OTHER BUDGET TOTAL	\$931,000

Medical Services Analysis

Expenses	2021– 2022 Actual (A)	2022– 2023 Adopted (B)	2022– 2023 Forecast (C)	2023– 2024 Proposed (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Medical Services	\$31,458	\$145,000	\$86,461	\$145,000	0.00%	67.71%

- ▶ Medical services remained flat compared to prior year
- ▶ Other considerations:
 - Outside advisor is expensive
 - Based on estimate of having 3 cases per month for the medical advisor and 24 cases annually for the other independent medical examiners
- ▶ Below is a summary of medical services provided:
 - Obtain medical information from disability applicants, attorneys and workers' compensation
 - Review all medical reports received
 - Refer to independent medical examiners
 - Summarize relevant medical information and prepare medical report regarding causation, disability, and medical support of injury
 - Attend monthly Disability Committee hearings

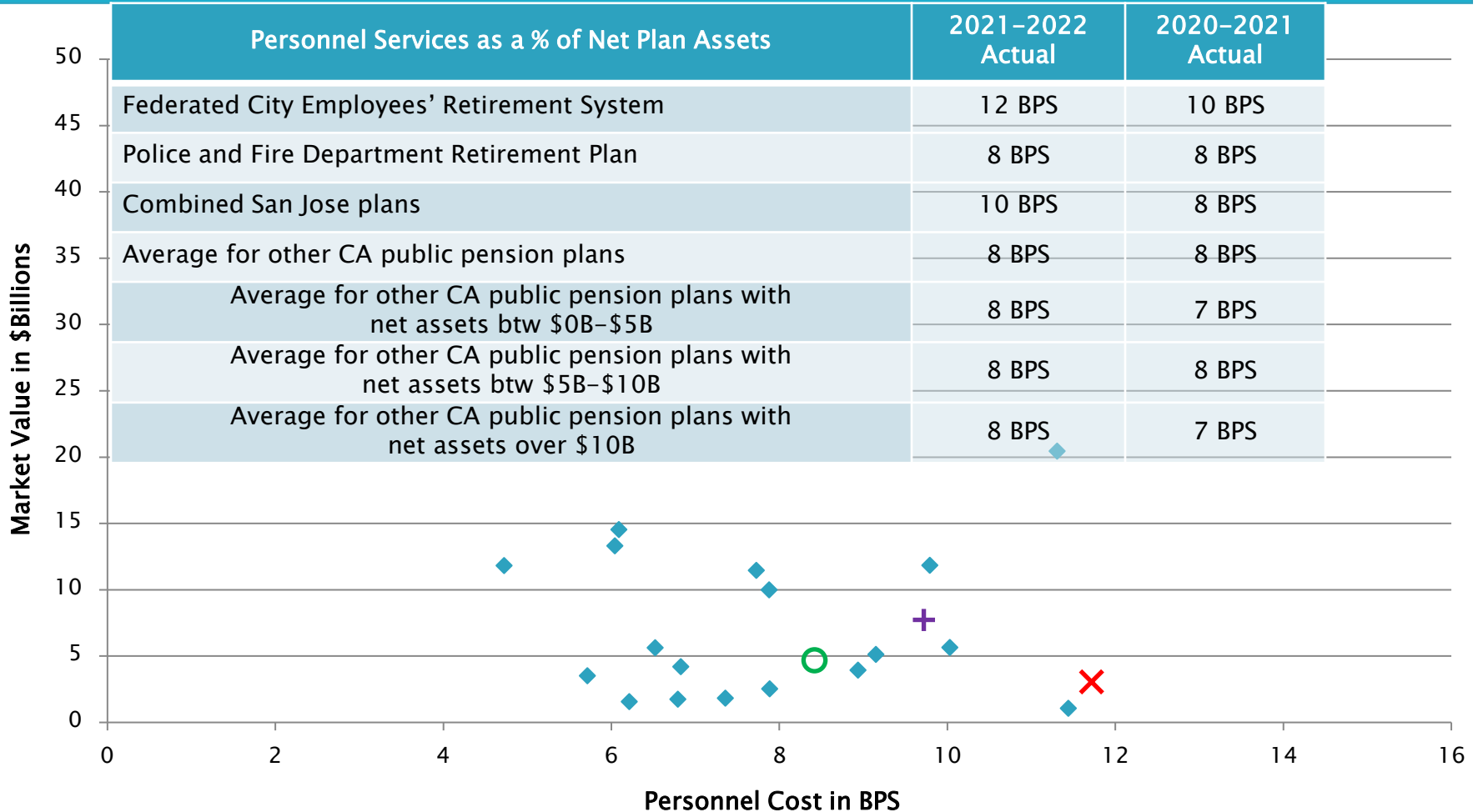
Personnel Services Analysis – in BPS

Personnel Expense in BPS of Market Value of Assets – Actual as of 6/30/22 or most recent financial statement ⁽¹⁾

“X” below represents the Federated System, \$3,582,000

“O” below represents the Police and Fire Plan, \$3,937,000

“+” below represents the combined San Jose plans, \$7,519,000



¹ Retirement Services gathered and compiled most recent financial information from 22 public pension plans' ACFRs; Ventura County was not available at the time this was completed

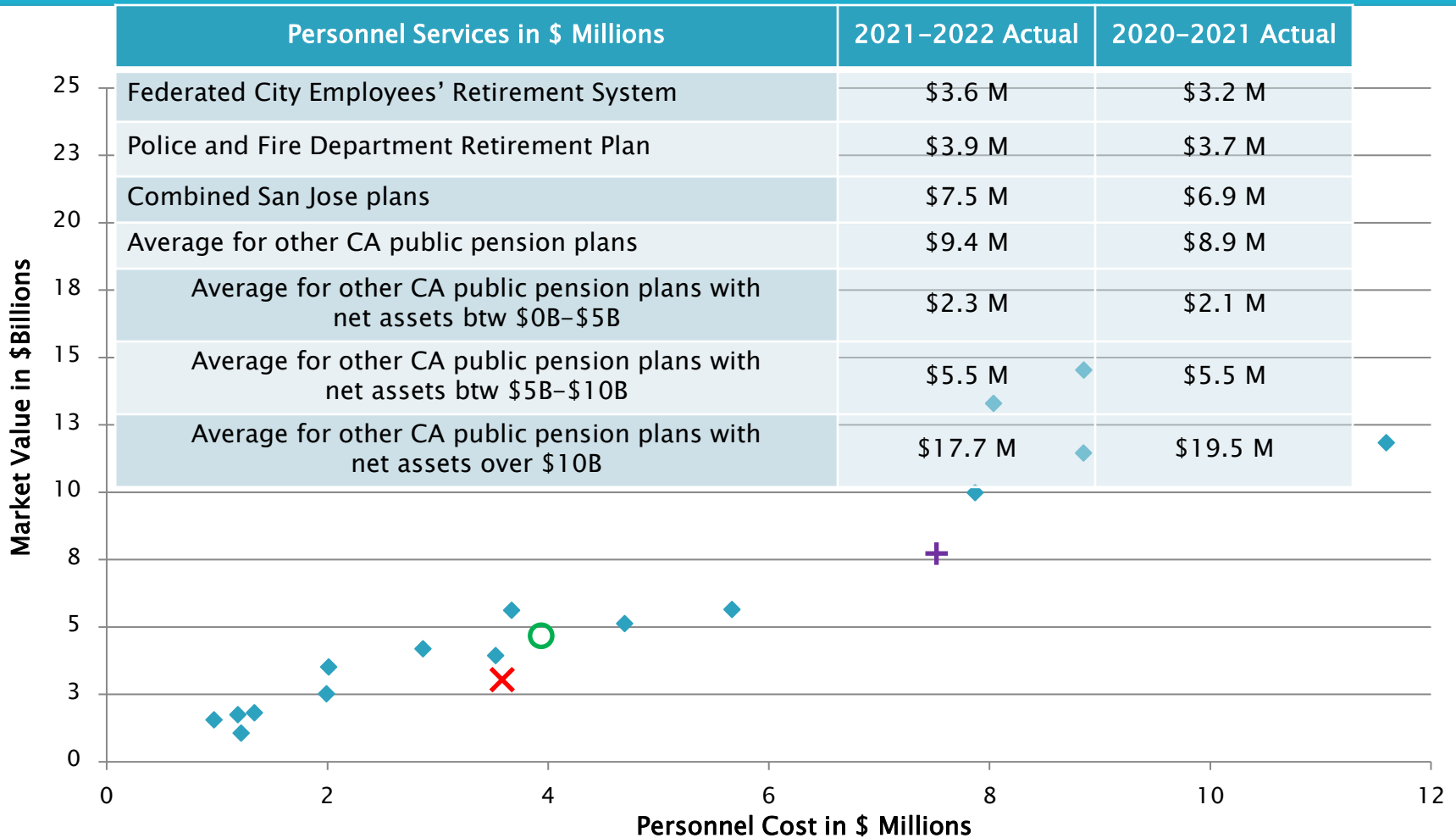
Personnel Services Analysis – in \$

Personnel Expense in \$ Millions – Actual as of 6/30/22 or most recent financial statement ⁽¹⁾

“X” below represents the Federated System, \$3,582,000

“O” below represents the Police and Fire Plan, \$3,937,000

“+” below represents the combined San Jose plans, \$7,519,000



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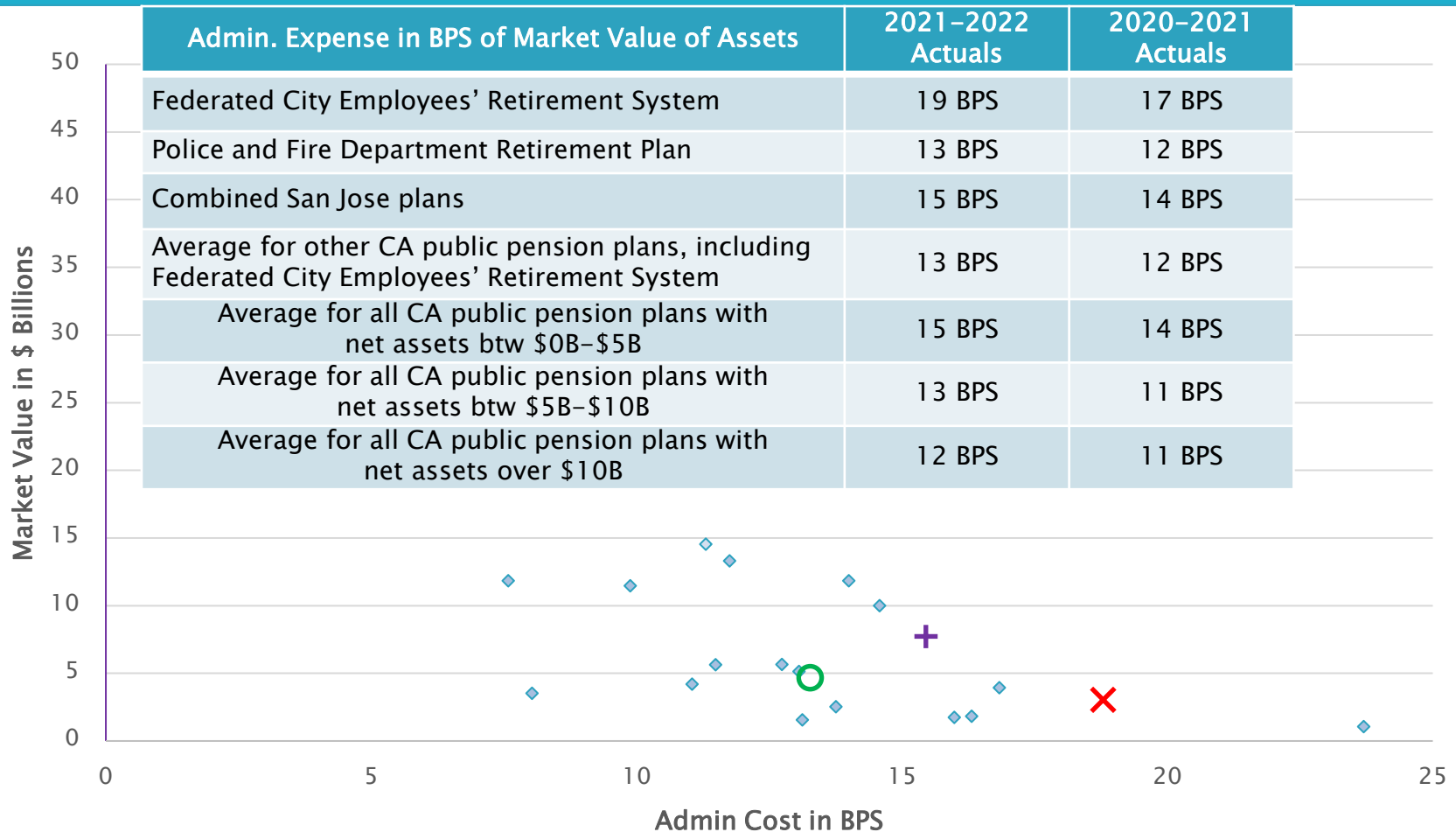
Administrative Cost Comparison – in BPS

Administrative Expense in BPS of Market Value of Assets – Actual as of 6/30/22 or most recent financial statement ⁽¹⁾

“X” below represents the Federated System, \$5,743,000

“O” below represents the Police and Fire Plan, \$6,205,000

“+” below represents the combined San Jose plans, \$11,948,000



¹ Retirement Services gathered and compiled most recent financial information from 22 public pension plans' ACFRs; Ventura County was not available at the time this was completed

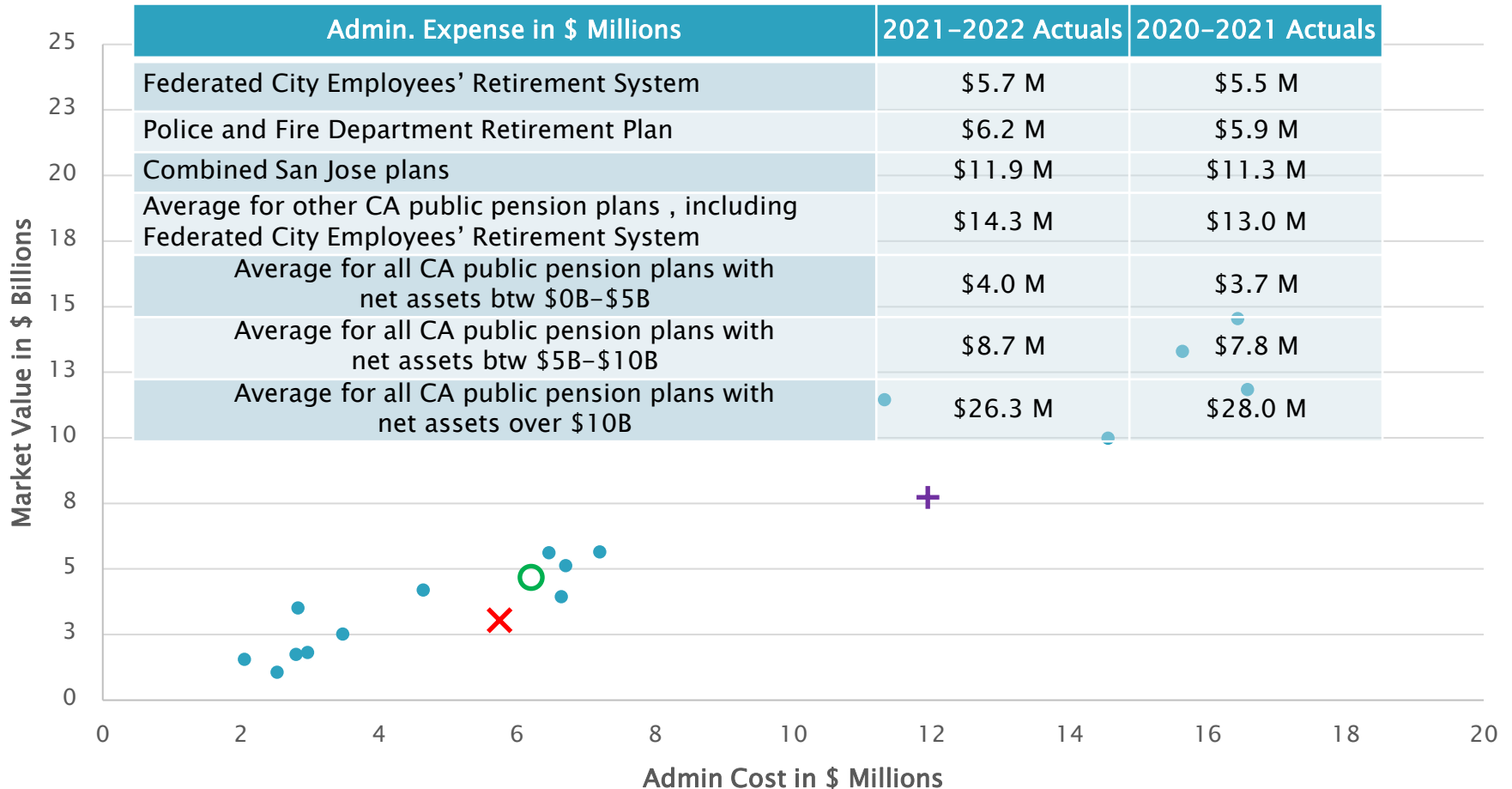
Administrative Cost Comparison – in \$

Administrative Expense in BPS of Market Value of Assets – Actual as of 6/30/22 or most recent financial statement ⁽¹⁾

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¹ Retirement Services gathered and compiled most recent financial information from 22 public pension plans' ACFRs; Ventura County was not available at the time this was completed



Memorandum

TO: Board of Administration for the Federated City Employees' Retirement System **FROM: Benjie Chua Foy**

SUBJECT: Consideration of Proposed Budget for Fiscal Year 2023-2024

DATE: April 7, 2023

Approved

Date

RECOMMENDATION

Discussion and action on the proposed budget for fiscal year 2023-2024.

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 (personnel, non-personnel, professional and medical services) and not the individual line items (e.g., rent, IT, supplies, printing, etc. in the non-personnel category). If an 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 \$234,618,000.

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 FY24 contribution amounts assume the Board's adoption in April/May, as shown in the June 30, 2022 actuarial reports for pension and healthcare, using the middle of the year amounts and no prefunding.

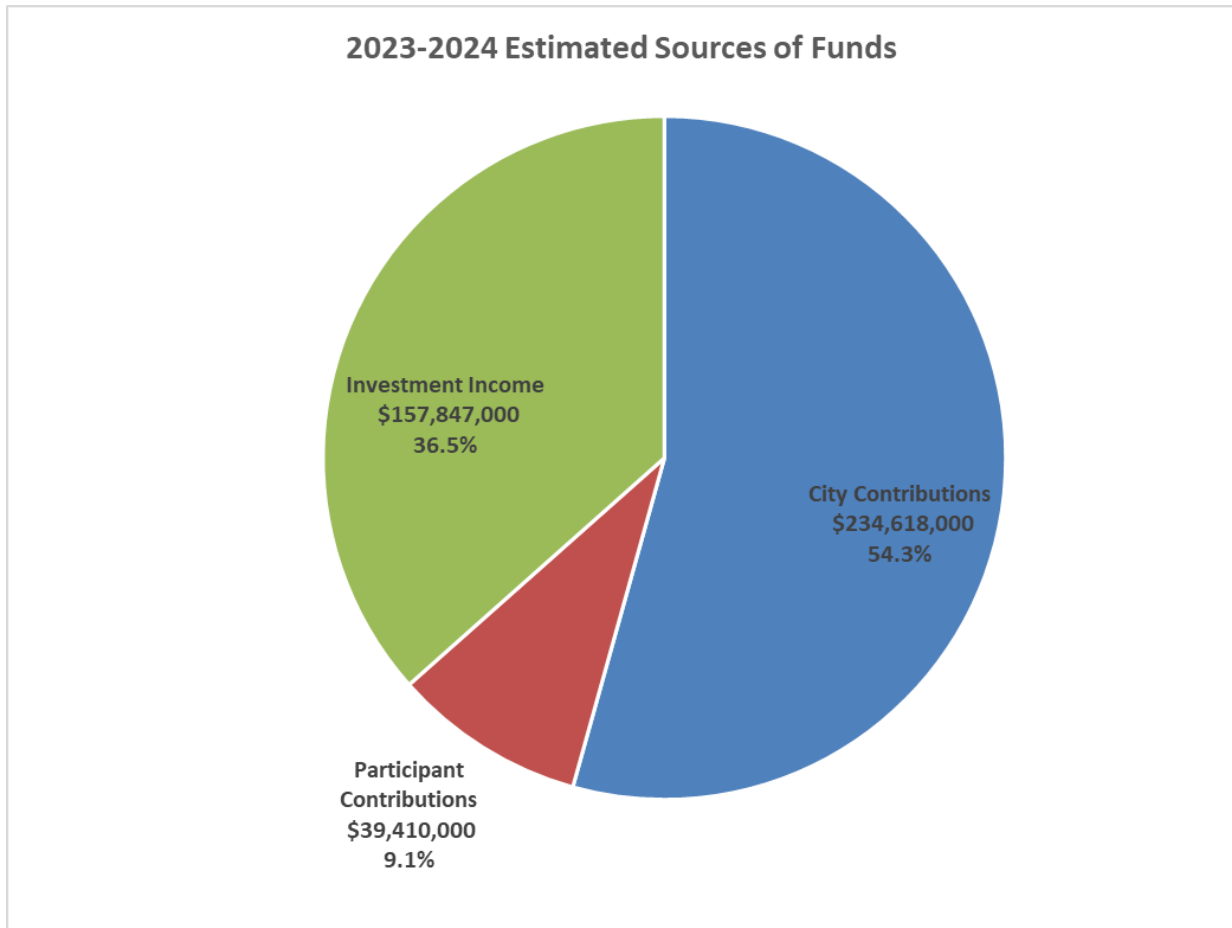
PARTICIPANT CONTRIBUTIONS

Total member contributions are estimated at \$39,410,000, a 3.94% increase from the 2022-2023 adopted amount. Member contributions are calculated based on the contribution rate for each tier. Tier 1 contribution rates for pension decreased slightly from 7.41% to 7.34% and their covered payroll decreased from \$132.6 million to \$128.9 million. Tier 2 contribution rates for pension decreased from 8.13% to 8.01% while covered payroll increased from \$237.2 million to \$266.8 million. Healthcare

contribution rates remain at 7.5% per the Municipal Code for Tier 1 and eligible Tier 2 members, while the City’s contribution is a flat dollar amount of approximately \$18.5 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 \$255,466,000, an increase of \$11,145,000, or 4.56%, 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 \$32,401,000, an increase of \$722,000, or 2.28%, which is the average increase for the past five years. Health insurance includes health and dental insurance subsidies, as well as Medicare reimbursements.

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 was no VEBA withdrawal in FY2021-2022, and future withdrawals for FY2022-2023 are expected to be minimal, if any, since 2022 is the last calendar year that can have any withdrawals.

ADMINISTRATIVE EXPENSE BUDGET

The proposed administrative expenses budget of \$6,254,000 is a net increase of 6.38% or \$375,000 from the prior year modified budget of \$5,879,000.

PERSONNEL SERVICES

The budget for personnel services was increased to \$4,306,000, an increase of \$320,000, or 8.03% over the prior year adopted budget of \$3,986,000. 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 proposed personnel changes for FY23-24 are to: 1) add an Overstrength Medicare Analyst in the Health section of the Benefits division, 2) upgrade the vacant Office Specialist to a Senior Office Specialist in the front desk in the Benefits division, and 3) upgrade the vacant Account Tech to an Accountant I/II in the Accounting division to address the increasing and more challenging workloads. The number of positions in Retirement Services will increase to 44 from 43 due to the proposals. Besides the proposed changes, the other reasons for the increase in personnel services is due to the increased benefit rates, as well as having three, instead of two, reemployed retirees for the maximum time allowed per the Municipal Code.

NON-PERSONNEL / EQUIPMENT

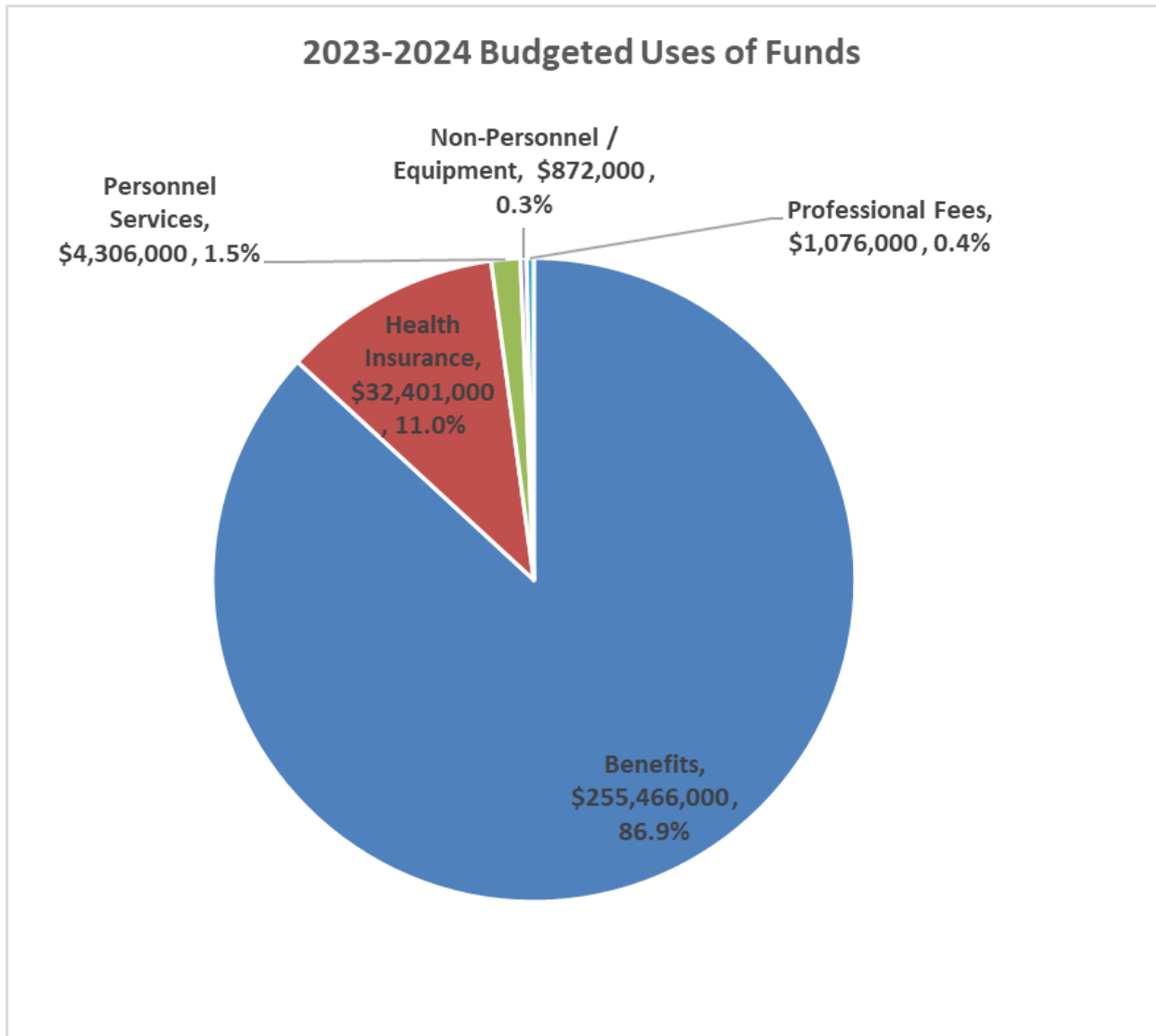
The budget for non-personnel / equipment was increased to \$872,000, an increase of \$74,000, or 9.27% from the prior year adopted budget of \$798,000. This category includes rent, insurance, information technology hardware/software, pension administration annual maintenance fee, postage and printing, training, travel, and other office expenses. The increase is mainly due to the proposed change in financial software in IT hardware/software, the cubicle reconfiguration for the Benefits division, and to account for general increases across the board.

PROFESSIONAL SERVICES

The budget for professional services was reduced to \$931,000, a decrease of \$19,000, or 2.0% from the prior year modified budget of \$950,000. The adopted budget was modified to increase legal services by \$25,000 and temporary staffing service by \$75,000. If it had not been modified, current year proposed budget would be an increase of \$81,000, or 9.5% from the prior year adopted budget of \$850,000. Core professional services comprise of actuarial services, financial audit services, legal services, and temporary staffing services. The increase to the adopted budget is mainly due to the increase in temp services for the Benefits division to backfill for vacancies and assist with peak periods, as well as increases in actuarial and legal services to account for the rise in the need of their services in the past few years. The decrease from the modified budget is minimal and is due to the expectations that legal and temporary staffing services will see a slight reduction.

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 a medical advisor and medical services from independent medical examiners (IME).



PROPOSED BUDGET

FISCAL YEAR 2023-2024

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

April 20, 2023

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

Proposed Budget for Fiscal Year 2023-2024

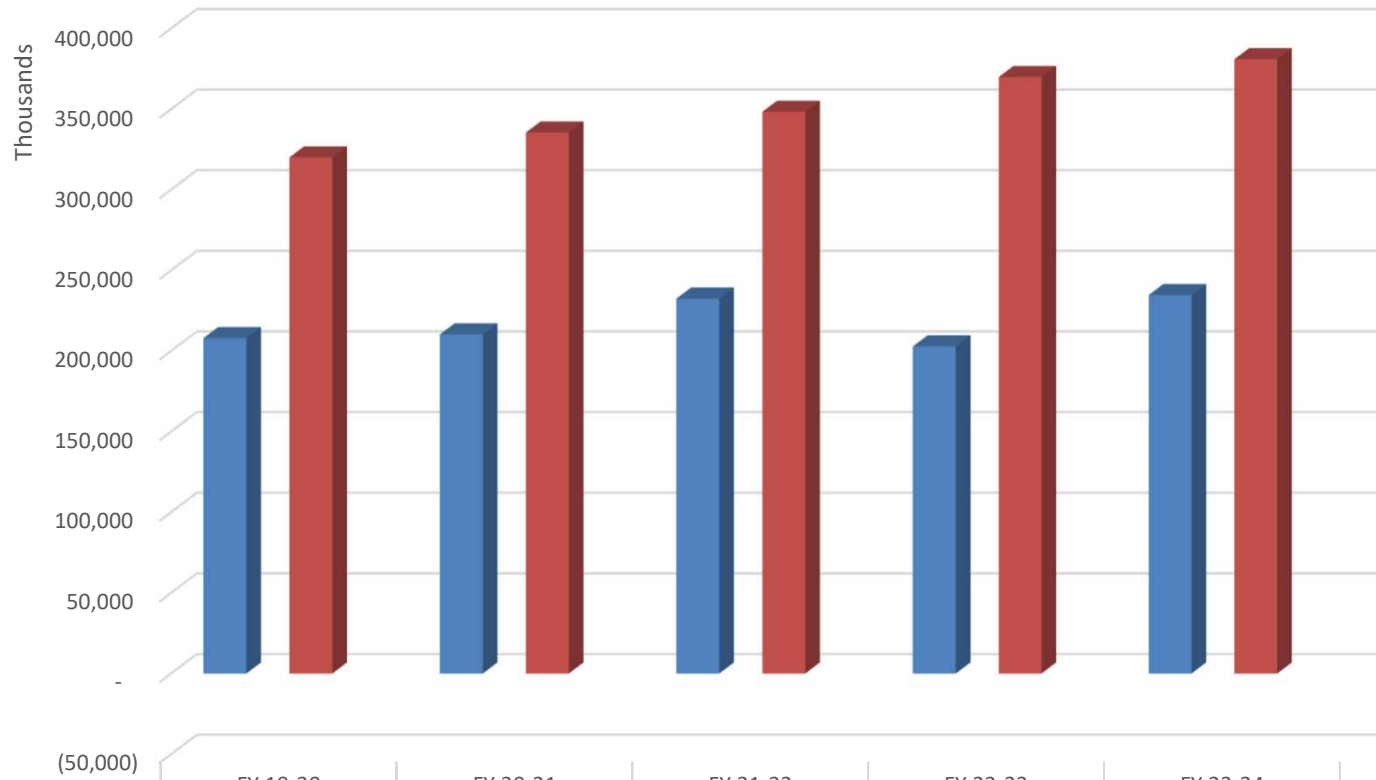
	(A) 2021-2022 Actual	(B) 2022-2023 Modified	(C) 2022-2023 Forecast	(D) 2023-2024 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
SOURCE OF FUNDS							
Beginning Fund Balance							
Claims Reserve	3,268,953,000	3,057,148,000	3,057,148,000	3,168,843,000	(211,805,000)	0	111,695,000
Total Beginning Fund Balance	3,268,953,000	3,057,148,000	3,057,148,000	3,168,843,000	(211,805,000)	0	111,695,000
Transfers							
COLAs	16,600	16,500	7,500	7,500	(100)	(9,000)	0
City Contributions	232,385,000	224,315,000	202,723,000	234,618,000	(8,070,000)	(21,592,000)	31,895,000
Total Transfers	232,401,600	224,331,500	202,730,500	234,625,500	(8,070,100)	(21,601,000)	31,895,000
Revenue							
Participant Contributions	37,329,000	37,915,000	37,915,000	39,410,000	586,000	0	1,495,000
Investment Income	-207,415,000	175,451,000	151,525,000	157,847,000	382,866,000	(23,926,000)	6,322,000
Total Revenue	-170,086,000	213,366,000	189,440,000	197,257,000	383,452,000	(23,926,000)	7,817,000
TOTAL SOURCE OF FUNDS	3,331,268,600	3,494,845,500	3,449,318,500	3,600,725,500	163,576,900	(45,527,000)	151,407,000
USE OF FUNDS							
Expenditures							
COLAs	16,600	16,500	7,500	7,500	(100)	(9,000)	0
Benefits	237,273,000	244,321,000	243,125,000	255,466,000	7,048,000	(1,196,000)	12,341,000
Health Insurance	31,088,000	31,679,000	31,679,000	32,401,000	591,000	0	722,000
VEBA Transfers	0	0	0	0	0	0	0
Personnel Services	3,582,000	3,986,000	3,921,000	4,306,000	404,000	(65,000)	385,000
Non-Personnel/Equipment ⁽¹⁾	1,161,000	798,000	758,000	872,000	(363,000)	(40,000)	114,000
Professional Fees	1,000,000	1,095,000	985,000	1,076,000	95,000	(110,000)	91,000
Total Expenditures	274,120,600	281,895,500	280,475,500	294,128,500	7,774,900	(1,420,000)	13,653,000
Ending Fund Balance							
Claims Reserve	3,057,148,000	3,212,950,000	3,168,843,000	3,306,597,000	155,802,000	(44,107,000)	137,754,000
Total Ending Fund Balance	3,057,148,000	3,212,950,000	3,168,843,000	3,306,597,000	155,802,000	(44,107,000)	137,754,000
TOTAL USE OF FUNDS	3,331,268,600	3,494,845,500	3,449,318,500	3,600,725,500	163,576,900	(45,527,000)	151,407,000

Amount not included in budget since no cash outlay:

Amortization expense for PG3 and GASB 87 lease interest expenses	\$ 439,062	\$ 439,062	\$ 439,062	\$ 439,062
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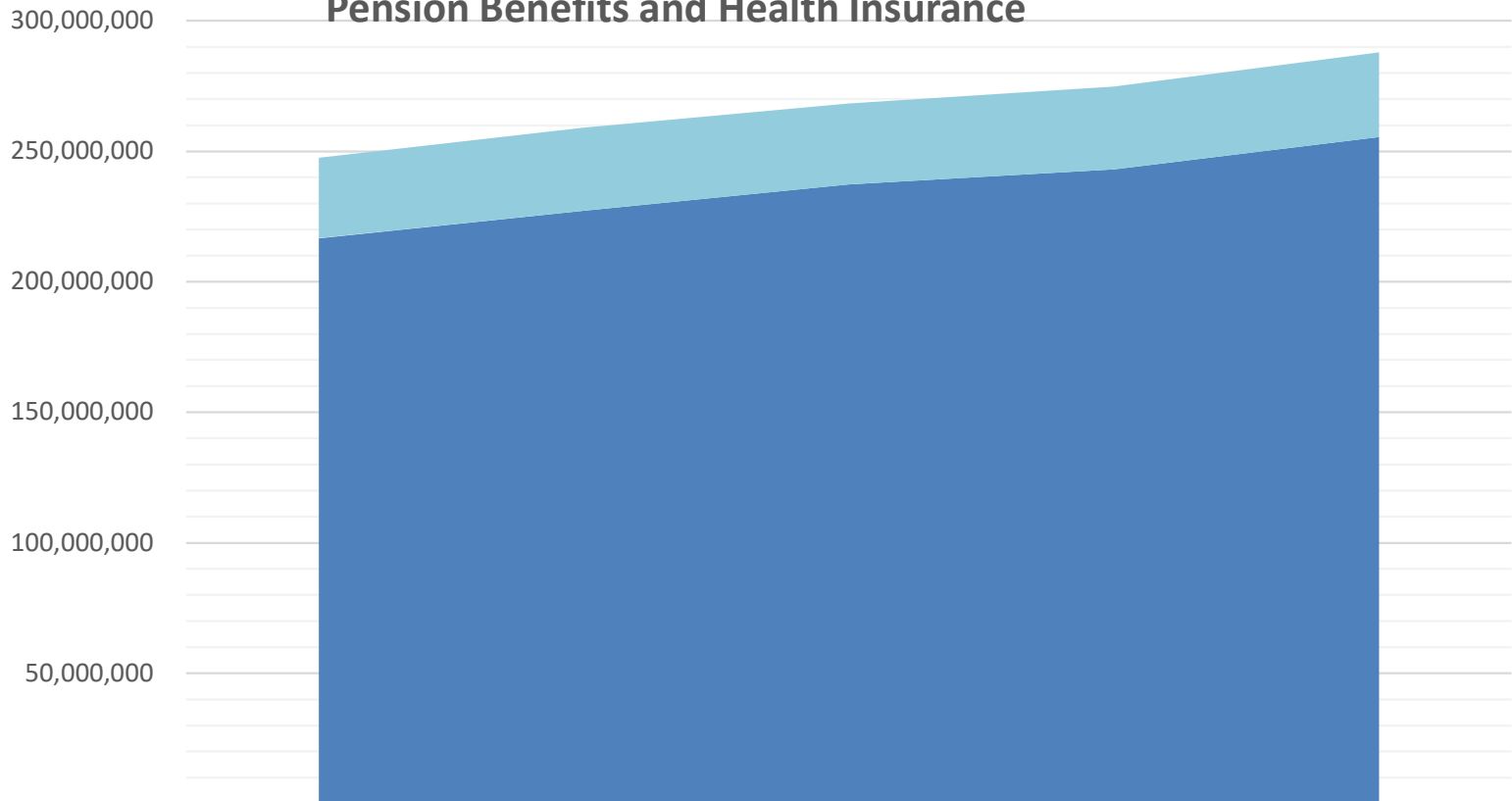
⁽¹⁾ Non-personnel equipment FY21-22	\$ 1,161,000
Rounding in ACFR	189
Amortization expense	(439,062)
As shown in Administrative Expenses	\$ 722,127

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM Total City Contributions & Covered Payroll



	FY 19-20	FY 20-21	FY 21-22	FY 22-23 (Forecast)	FY 23-24 (Proposed)
Total City Contributions	207,860,000	210,200,000	232,385,000	202,723,000	234,618,000
Total City Contribution % Change	4.2%	1.1%	10.6%	-12.8%	15.7%
Total Covered Payroll	319,980,000	335,421,000	348,307,000	369,833,000	380,900,000
Total Covered Payroll % Change	7.1%	4.8%	3.8%	6.2%	3.0%

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM Pension Benefits and Health Insurance



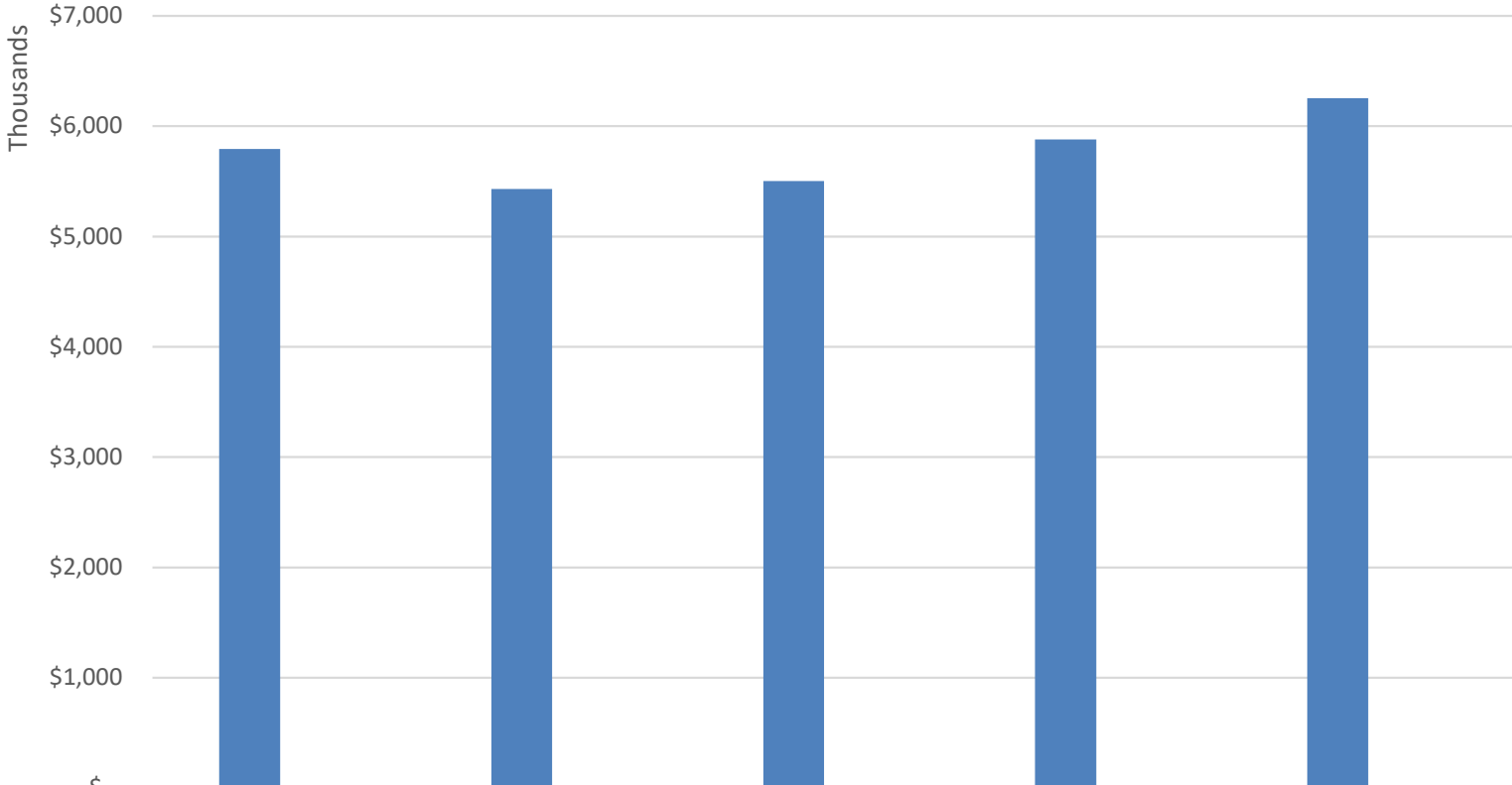
	FY 2020 - Actual	FY 2021 - Actual	FY 2022 - Actual	FY 2023 - Forecast	FY 2024 - Proposed
Total Benefits	247,507,000	259,077,000	268,361,000	274,804,000	287,867,000
Health Insurance % Change	6.8%	3.5%	-2.5%	1.9%	2.3%
Health Insurance	30,779,000	31,871,000	31,088,000	31,679,000	32,401,000
Pension Benefits % Change	5.7%	4.8%	4.4%	2.5%	5.1%
Pension Benefits	216,728,000	227,206,000	237,273,000	243,125,000	255,466,000

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

Administrative Expenses: FY 2022-2023

	(A) 2021-2022 Actual	(B) 2022-2023 Adopted	(C) 2022-2023 Forecast	(D) 2023-2024 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
PERSONNEL SERVICES							
Salaries and employee benefits	3,581,518	3,986,000	3,920,651	4,306,000	404,482	(65,349)	385,349
Total Personnel Services	3,581,518	3,986,000	3,920,651	4,306,000	404,482	(65,349)	385,349
NON-PERSONNEL / EQUIPMENT							
Insurance	222,848	240,000	233,361	240,000	17,152	(6,639)	6,639
IT hardware / software	88,961	109,000	81,571	130,000	20,039	(27,429)	48,429
LRS - annual maintenance fee	49,845	50,000	52,160	55,000	155	2,160	2,840
Postage and printing	77,776	85,000	93,841	100,000	7,224	8,841	6,159
Rent	232,481	222,000	223,875	230,000	(10,481)	1,875	6,125
Training and travel	13,652	25,000	30,920	30,000	11,348	5,920	(920)
Office supplies and board meeting expense	7,670	15,000	11,896	15,000	7,330	(3,104)	3,104
Other non-personnel / equipment	28,894	52,000	30,818	72,000	23,106	(21,182)	41,182
Total Non-personnel / Equipment	722,127	798,000	758,442	872,000	75,873	(39,558)	113,558
PROFESSIONAL SERVICES							
Actuary / actuarial audit	336,189	227,000	257,072	270,000	(109,189)	30,072	12,928
External auditor	92,837	85,000	84,908	85,000	(7,837)	(92)	92
Legal	391,173	390,000	336,122	359,000	(1,173)	(53,878)	22,878
Pension administration system	16,944	20,000	17,852	24,000	3,056	(2,148)	6,148
Temporary staffing agencies	90,741	167,000	159,757	132,000	76,259	(7,243)	(27,757)
Other professional services	40,806	61,000	43,270	61,000	20,194	(17,730)	17,730
Total Professional Services	968,690	950,000	898,981	931,000	(18,690)	(51,019)	32,019
MEDICAL SERVICES							
Independent medical examiners	700	40,000	42,000	145,000	39,300	2,000	103,000
Medical consultant	30,758	105,000	44,461	0	74,242	(60,539)	(44,461)
Total Medical Services	31,458	145,000	86,461	145,000	113,542	(58,539)	58,539
TOTAL ADMINISTRATIVE EXPENSES	5,303,793	5,879,000	5,664,535	6,254,000	575,207	(214,465)	589,465
Amortization expense	439,062						
Rounding	145						
Total Admin Expenses per ACFR	5,743,000						

FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM Administrative Expense Budget



	FY 19-20	FY 20-21	FY 21-22	FY 22-23 (Adopted)	FY 23-24 (Proposed)
■ Admin Exp Budget*	\$5,796,000	\$5,430,000	\$5,503,000	\$5,879,000	\$6,254,000
% Change	-0.1%	-6.3%	1.3%	6.8%	6.4%

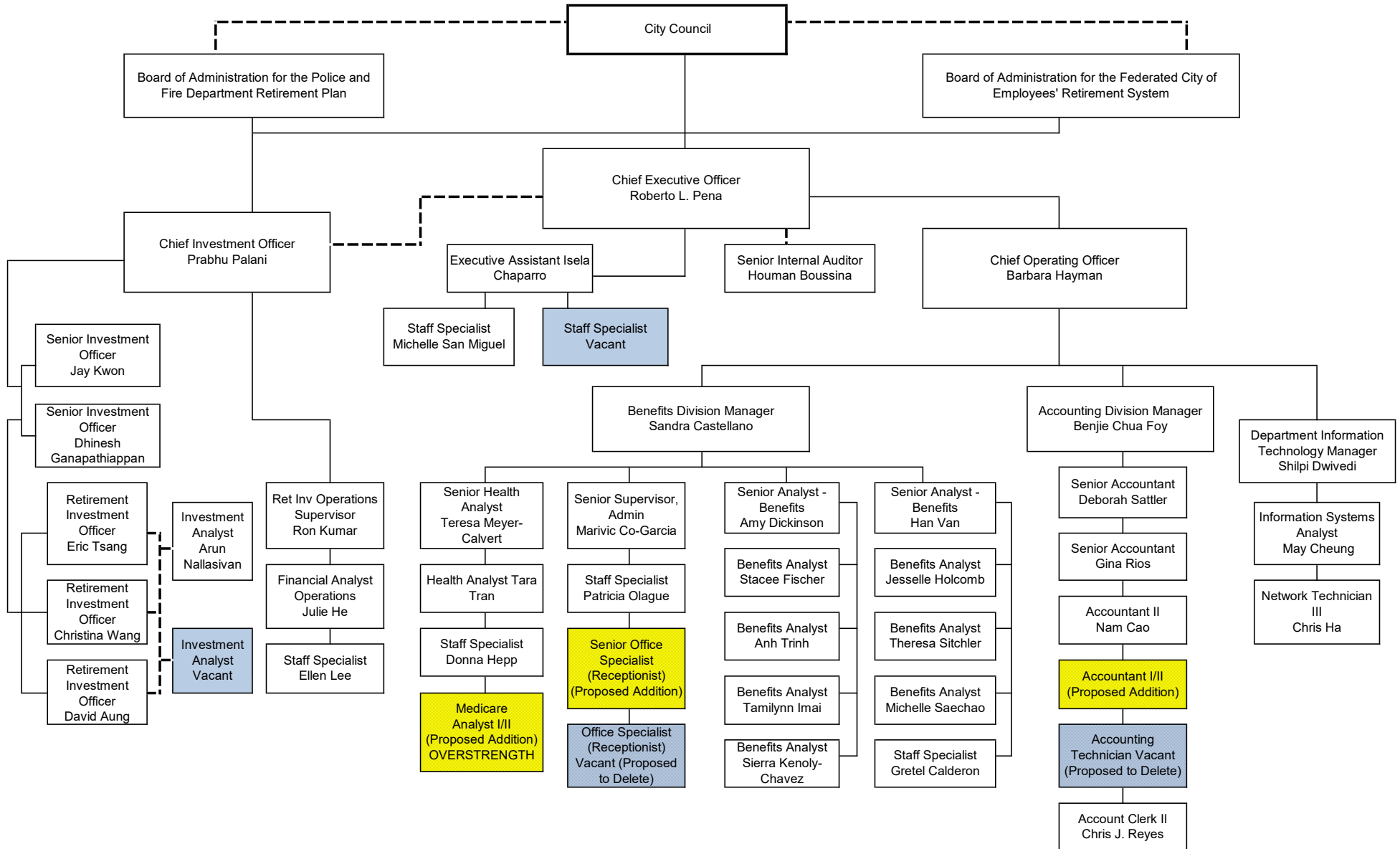
* Amount includes budget for operations only.

OFFICE OF RETIREMENT SERVICES

Departmental Position Detail

Position	2021-2022 Adopted (1)	2022-2023 Adopted (2)	2022-2023 Forecast (3)	2023-2024 Proposed (4)	Increase / (Decrease) (2 to 4)	Increase / (Decrease) (3 to 4)	Explanation
Account Clerk II	1.00	1.00	1.00	1.00	-	-	
Accountant I/II	1.00	1.00	1.00	2.00	1.00	1.00	Upgrade the Account Tech to an Accountant I/II
Accounting Technician	1.00	1.00	1.00	0.00	(1.00)	(1.00)	Upgrade the Account Tech to an Accountant I/II
Analyst I/II	6.00	7.00	8.00	9.00	2.00	1.00	Upgraded Staff Specialist to Analyst I/II in Benefits Division in December 2022 and Proposed addition of Medicare Analyst for Benefits Division - Overstrength
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	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	1.00	1.00	1.00	1.00	-	-	
Information Systems Analyst	1.00	1.00	1.00	1.00	-	-	
Network Technician I/II/III	1.00	1.00	1.00	1.00	-	-	
Office Specialist II	1.00	1.00	1.00	0.00	(1.00)	(1.00)	Upgrade the Office Specialist to a Senior Office Specialist in Benefits Division
Retirement Investment Analyst I/II	2.00	2.00	2.00	2.00	-	-	
Retirement Investment Officer	3.00	3.00	3.00	3.00	-	-	
Senior Accountant	2.00	2.00	2.00	2.00	-	-	
Senior Analyst	2.00	3.00	3.00	3.00	-	-	
Senior Auditor	1.00	1.00	1.00	1.00	-	-	
Senior Office Specialist	0.00	0.00	0.00	1.00	1.00	1.00	Upgrade the Office Specialist in Benefits Division
Senior Retirement Investment Officer	2.00	2.00	2.00	2.00	-	-	
Senior Supervisor, Administration	0.00	1.00	1.00	1.00	-	-	
Staff Specialist	7.00	7.00	6.00	6.00	(1.00)	-	Upgraded Staff Specialist to Analyst I/II in Benefits Division in December 2022
Total Positions	40.00	43.00	43.00	44.00	1.00	1.00	

**OFFICE OF RETIREMENT SERVICES
Proposed Organizational Chart
Budget FY22-23**





Federated Annual Fee Report - 2021

Executive Summary

This report marks the seventh 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 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 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 2021, management and incentive fees for the pension plan totaled \$44.6 million with a fee ratio of 1.55% as compared to \$23.6 million and 0.95% for 2020 and \$19.2 million and 0.89% for 2019. Fund operating expenses were \$3.1 million in 2021 for a fee ratio of 0.11% as compared to \$4.0 million and 0.16% in 2020 and \$3.8 million and 0.18% for 2019. The health care trust management and incentive fees totaled \$0.8 million with a fee ratio of 0.21% as compared to \$0.6 million with a fee ratio of 0.21% in 2020 and \$0.7 million with a fee ratio of 0.24% in 2019. Other investment-related costs (staff, consultants, custodian bank, investment legal, etc.) for the pension plan in 2021 were \$2.0 million with a fee ratio of 0.07% as compared to \$1.7 million and 0.07% in 2020 and \$1.9 million and 0.09% in 2019. Other investment-related costs for the health care trust totaled \$0.3 million with a fee ratio of 0.07% as compared to \$0.2 million and 0.06% for 2020 and \$0.2 million and 0.07% for 2019.

Table 1 - Pension Average Asset Allocation for 2021

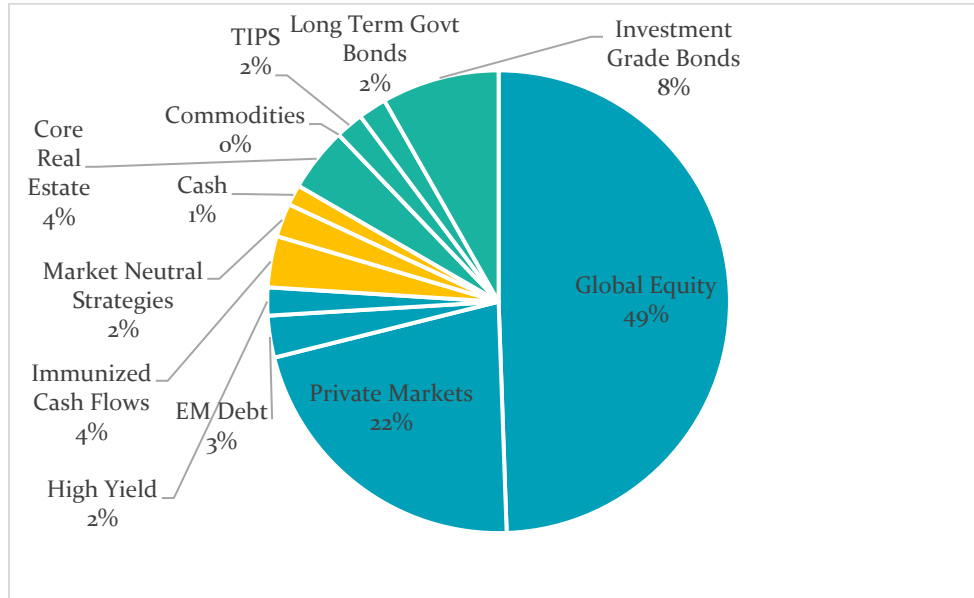
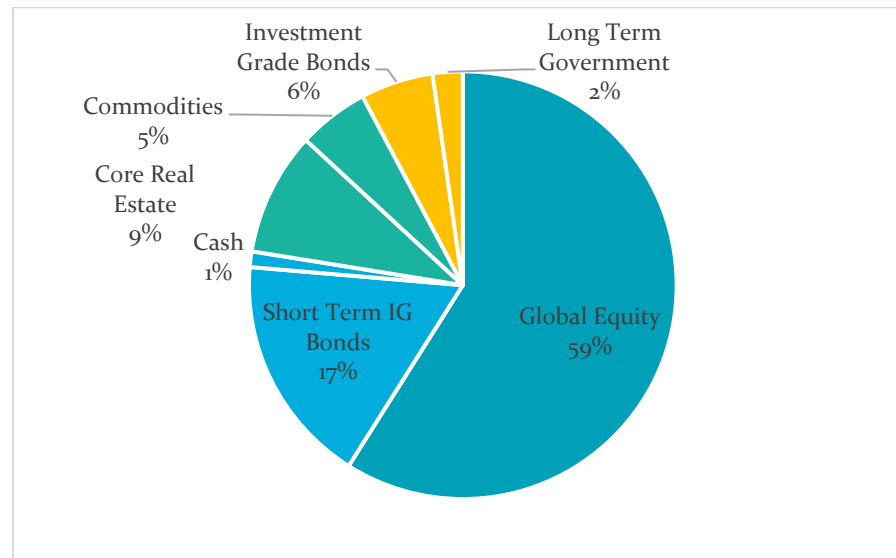


Table 2 - Health Care Trust Average Asset Allocation for 2021



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 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 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
Growth	12.8	26.2	2.6	39.0	41.6	2,181	76.0%	0.59%	1.20%	0.12%	1.79%	1.91%	87.2%	1.45%
Public Equity	4.4	0.2	0.3	4.6	4.9	1,419	49.4%	0.31%	0.01%	0.02%	0.32%	0.35%	10.3%	0.17%
Passive	0.4	-	0.1	0.4	0.5	773	26.9%	0.05%	0.00%	0.01%	0.05%	0.07%	1.1%	0.02%
Active	4.0	0.2	0.2	4.2	4.4	646	22.5%	0.62%	0.02%	0.04%	0.65%	0.68%	9.2%	0.15%
Private Markets	7.5	25.3	2.3	32.7	35.0	622	21.7%	1.20%	4.06%	0.37%	5.26%	5.63%	73.4%	1.22%
Passive	0.0	-	0.0	0.0	0.1	171	6.0%	0.02%	0.00%	0.01%	0.02%	0.03%	0.1%	0.00%
Private Equity	3.8	19.4	0.9	23.2	24.1	241	8.4%	1.58%	8.06%	0.39%	9.64%	10.02%	50.6%	0.84%
Private Debt	0.9	1.4	0.6	2.3	2.9	85	3.0%	1.06%	1.65%	0.68%	2.72%	3.40%	6.1%	0.10%
Growth Real Estate	1.7	3.4	0.5	5.1	5.6	85	3.0%	1.96%	3.97%	0.60%	5.93%	6.53%	11.7%	0.19%
Venture	0.1	0.0	0.0	0.1	0.1	1	0.0%	5.82%	0.57%	3.42%	6.40%	9.82%	0.2%	0.00%
Private Real Assets	1.0	1.1	0.2	2.0	2.2	38	1.3%	2.56%	2.77%	0.52%	5.33%	5.86%	4.7%	0.08%
Emerging Markets Debt	0.7	0.8	0.0	1.4	1.5	84	2.9%	0.82%	0.90%	0.05%	1.72%	1.77%	3.1%	0.05%
Active	0.2	-	-	0.2	0.2	35	1.2%	0.53%	0.00%	0.00%	0.53%	0.53%	0.4%	0.01%
Hedged	0.5	0.8	0.0	1.3	1.3	49	1.7%	1.02%	1.54%	0.08%	2.56%	2.64%	2.7%	0.05%
High Yield	0.2	-	-	0.2	0.2	56	2.0%	0.38%	0.00%	0.00%	0.38%	0.38%	0.4%	0.01%
Passive	0.0	-	-	0.0	0.0	6	0.2%	0.25%	0.00%	0.00%	0.25%	0.25%	0.0%	0.00%
Active	0.2	-	-	0.2	0.2	51	1.1%	0.39%	0.00%	0.00%	0.39%	0.39%	0.4%	0.01%
Low Beta	1.4	2.9	0.3	4.3	4.6	211	7.4%	0.69%	1.36%	0.13%	2.04%	2.18%	9.6%	0.16%
Immunized Cash Flows	0.0	-	-	0.0	0.0	103	3.6%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	103	3.6%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Market Neutral Strategies	1.4	2.9	0.3	4.3	4.5	67	2.3%	2.08%	4.27%	0.41%	6.35%	6.76%	9.5%	0.16%
Hedged	1.4	2.9	0.3	4.3	4.5	67	2.3%	2.08%	4.27%	0.41%	6.35%	6.76%	9.5%	0.16%
Cash	-	-	-	-	-	41	1.4%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Passive	-	-	-	-	-	41	1.4%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Other	1.1	0.2	0.2	1.3	1.5	478	16.6%	0.24%	0.04%	0.04%	0.27%	0.31%	3.1%	0.05%
Core Real Estate	0.8	0.2	0.2	1.0	1.2	129	4.5%	0.63%	0.14%	0.14%	0.77%	0.91%	2.5%	0.04%
Active	0.8	0.2	0.2	1.0	1.2	129	4.5%	0.63%	0.14%	0.14%	0.77%	0.91%	2.5%	0.04%
TIPS	0.0	-	-	0.0	0.0	56	2.0%	0.05%	0.00%	0.00%	0.05%	0.05%	0.1%	0.00%
Passive	0.0	-	-	0.0	0.0	56	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	57	2.0%	0.03%	0.00%	0.00%	0.03%	0.03%	0.0%	0.00%
Passive	0.0	-	-	0.0	0.0	57	2.0%	0.03%	0.00%	0.00%	0.03%	0.03%	0.0%	0.00%
Investment Grade Bonds	0.3	-	0.0	0.3	0.3	236	8.2%	0.11%	0.00%	0.00%	0.11%	0.12%	0.6%	0.01%
Passive	0.0	-	0.0	0.0	0.0	135	4.7%	0.02%	0.00%	0.00%	0.02%	0.02%	0.1%	0.00%
Active	0.2	-	-	0.2	0.2	101	3.5%	0.24%	0.00%	0.00%	0.24%	0.24%	0.5%	0.01%
Total Plan	15.4	29.2	3.1	44.6	47.7	2,870	100.0%	0.54%	1.02%	0.11%	1.55%	1.66%	100.00%	1.66%

The table above illustrates that management, incentive, and operating expenses for the pension plan totaled \$47.7 million for 2021 which equated to a total plan fee ratio of 1.66%. The Private Markets and Public Equity Strategies contributed the most to the total plan fee ratio at 1.22% and 0.17%, 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 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
Passive	0.6	-	0.1	0.6	0.7	1,342	46.7%	0.04%	0.00%	0.01%	0.04%	0.05%	1.5%	0.02%
Active	5.5	0.3	0.4	5.8	6.2	961	33.5%	0.57%	0.03%	0.04%	0.60%	0.64%	13.0%	0.22%
Hedged	1.9	3.6	0.3	5.5	5.8	117	4.1%	1.63%	3.11%	0.27%	4.75%	5.02%	12.3%	0.20%
Private	7.4	25.3	2.3	32.7	35.0	451	15.7%	1.65%	5.60%	0.50%	7.25%	7.75%	73.3%	1.22%
Total Plan	15.4	29.2	3.1	44.6	47.7	2,870	100.0%	0.54%	1.02%	0.11%	1.55%	1.66%	100.0%	1.66%

For the total pension plan, Private management funds accounted for 1.22% of the total plan fee ratio and represented about 15.7% of average plan assets. Active management strategies were the next largest contributor to the total plan fee ratio accounting for 0.22% of the total plan fee ratio and represented 33.5% of average plan assets. Passive and hedged strategies accounted for 0.02% and 0.20% of the total plan fee ratio and represented 46.7% and 4.1% of plan assets, respectively.

Table 5 - Pension Other Investment Costs

Investment Staff Salary and Benefits (\$ mm)	Consultants (\$ mm)	Custodians (\$ mm)	Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
0.8	0.5	0.5	0.4	2.0	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)	Operating Expenses (\$ mm)	Management and Incentive Fees (\$ mm)	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
Growth	0.5	-	0.0	0.5	0.6	225	59.0%	0.23%	0.00%	0.02%	0.23%	0.25%	61.4%	0.15%
Global Equity	0.5	-	0.0	0.5	0.6	225	59.0%	0.23%	0.00%	0.02%	0.23%	0.25%	61.4%	0.15%
Passive	0.1	-	0.0	0.1	0.1	178	46.8%	0.05%	0.00%	0.02%	0.05%	0.07%	13.2%	0.03%
Active	0.4	-	0.0	0.4	0.4	47	12.2%	0.92%	0.00%	0.02%	0.92%	0.95%	48.2%	0.12%
Zero Beta	0.0	-	-	0.0	0.0	71	18.6%	0.02%	0.00%	0.00%	0.02%	0.02%	1.3%	0.00%
Short Term IG Bonds	0.0	-	-	0.0	0.0	66	17.4%	0.02%	0.00%	0.00%	0.02%	0.02%	1.3%	0.00%
Passive	0.0	-	-	0.0	0.0	66	17.4%	0.02%	0.00%	0.00%	0.02%	0.02%	1.3%	0.00%
Cash	-	-	-	-	-	4	1.2%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Passive	-	-	-	-	-	4	1.2%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Other	0.3	-	0.1	0.3	0.3	85.7	22.5%	0.33%	0.00%	0.07%	0.33%	0.40%	37.4%	0.09%
Core Real Estate	0.2	-	-	0.2	0.2	36	9.3%	0.54%	0.00%	0.00%	0.54%	0.54%	32.0%	0.08%
Active	0.2	-	-	0.2	0.2	36	9.3%	0.54%	0.00%	0.00%	0.54%	0.54%	32.0%	0.08%
Commodities	0.1	-	0.1	0.1	0.1	20	5.4%	0.42%	0.00%	0.27%	0.42%	0.69%	23.2%	0.06%
Active	0.1	-	0.1	0.1	0.1	20	5.4%	0.42%	0.00%	0.27%	0.42%	0.69%	23.2%	0.06%
Investment Grade Bonds	0.0	-	0.0	0.0	0.0	21.0	5.5%	0.02%	0.00%	0.01%	0.02%	0.02%	0.8%	0.00%
Passive	0.0	-	0.0	0.0	0.0	21	5.5%	0.02%	0.00%	0.01%	0.02%	0.02%	0.8%	0.00%
Long Term Government B	0.0	-	-	0.0	0.0	8.7	2.3%	0.03%	0.00%	0.00%	0.03%	0.03%	0.5%	0.00%
Passive	0.0	-	-	0.0	0.0	9	2.3%	0.03%	0.00%	0.00%	0.03%	0.03%	0.5%	0.00%
Total Plan	0.8	-	0.1	0.8	0.9	381	100.0%	0.21%	0.00%	0.03%	0.21%	0.24%	100.00%	0.24%

The table above illustrates that management, incentive, and operating expenses for the health care trust totaled \$0.9 million for 2021 which equated to a total plan fee ratio of 0.24%. The Global Equity asset class contributed the most to the total plan fee ratio at 0.15%.

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 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
Passive	0.1	-	0.0	0.1	0.1	279	73.1%	0.04%	0.00%	0.01%	0.04%	0.05%	15.3%	0.04%
Active	0.7	-	0.1	0.7	0.8	103	26.9%	0.69%	0.00%	0.06%	0.69%	0.76%	84.7%	0.20%
Total Plan	0.8	-	0.1	0.8	0.9	381	100.0%	0.21%	0.00%	0.03%	0.21%	0.24%	100.0%	0.24%

For the total health care trust, active management strategies accounted for 0.20% of the total plan fee ratio and represented 26.9% of average plan assets. Passive strategies accounted for 0.04% of the total plan fee ratio and represented 73.1% of plan assets.

Table 8 - Health Care Other Investment Costs

Investment Staff Salary and Benefits (\$ mm)	Consultant s (\$ mm)	Custodia n (\$ mm)	Vendors and Travel (\$ mm)	Total Other Costs (\$ mm)	Other Costs Fee Ratio
0.1	0.1	0.1	0.0	0.3	0.07%

Other investment costs for the health care trust equated to a total fee ratio of 0.07%.

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			
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Growth	70.9%	75.3%	4.4%	11.5	12.8	1.3	4.3	26.2	21.9	3.6	2.6	-0.9	19.3	41.6	22.3	1.10%	1.91%	0.80%	0.78%	1.45%	0.67%	0.00%	-0.05%	0.72%	-0.06%
Public Equity	42.4%	49.4%	7.1%	3.1	4.4	1.3	0.0	0.2	0.1	1.3	0.3	-1.0	4.4	4.9	0.5	0.43%	0.35%	-0.08%	0.18%	0.17%	-0.01%	-0.05%	0.01%	0.00%	-0.05%
Passive	23.5%	26.9%	3.5%	0.2	0.4	0.2	-	-	-	0.1	0.1	0.0	0.3	0.5	0.2	0.05%	0.07%	0.02%	0.01%	0.02%	0.01%	-0.04%	0.00%	0.00%	0.00%
Active	18.6%	22.5%	3.9%	2.8	4.0	1.2	-	0.2	0.2	1.2	0.2	-1.0	4.0	4.4	0.4	0.88%	0.68%	-0.20%	0.16%	0.15%	-0.01%	-0.01%	0.00%	0.01%	-0.05%
Private Markets	24.9%	21.7%	-3.2%	7.7	7.5	-0.2	3.2	25.3	22.1	2.2	2.3	0.0	13.1	35.0	21.9	2.14%	5.63%	3.49%	0.53%	1.22%	0.69%	-0.03%	-0.01%	0.77%	0.00%
Passive	11.7%	6.0%	-5.7%	0.0	0.0	0.0	-	-	-	0.0	0.0	-0.0	0.1	0.1	-0.0	0.02%	0.03%	0.01%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%
Private Equity	6.4%	8.4%	2.0%	4.3	3.8	-0.5	2.4	19.4	17.0	0.9	0.9	0.1	7.6	24.1	16.6	4.77%	10.02%	5.25%	0.31%	0.84%	0.53%	0.07%	-0.09%	0.55%	-0.01%
Private Debt	2.9%	3.0%	0.1%	1.0	0.9	-0.1	0.5	1.4	0.9	0.7	0.6	-0.1	2.2	2.9	0.7	3.05%	3.40%	0.35%	0.09%	0.10%	0.01%	0.00%	-0.01%	0.03%	-0.01%
Growth Real Estate	2.9%	3.0%	0.0%	1.6	1.7	0.1	-0.1	3.4	3.5	0.5	0.5	0.0	2.1	5.6	3.5	2.84%	6.53%	3.69%	0.08%	0.19%	0.11%	0.00%	-0.01%	0.12%	0.00%
Venture	0.0%	0.0%	0.0%	-	0.1	0.1	-	0.0	0.0	-	0.0	0.0	-	0.1	0.1	0.00%	9.82%	9.82%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Private Real Assets	1.0%	1.3%	0.3%	0.8	1.0	0.2	0.3	1.1	0.7	0.2	0.2	0.0	1.3	2.2	1.0	5.27%	5.86%	0.59%	0.05%	0.08%	0.03%	0.01%	-0.01%	0.02%	0.00%
Emerging Markets Debt	2.7%	2.9%	0.2%	0.5	0.7	0.2	1.1	0.8	-0.3	0.1	0.0	-0.0	1.7	1.5	-0.2	2.49%	1.77%	-0.73%	0.07%	0.05%	-0.02%	0.00%	0.00%	-0.02%	0.00%
Active	1.2%	1.2%	0.0%	0.2	0.2	0.0	-	-	-	0.0	-	-0.0	0.2	0.2	0.0	0.60%	0.53%	-0.07%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Hedged	1.5%	1.7%	0.2%	0.4	0.5	0.1	1.1	0.8	-0.3	0.0	0.0	0.0	1.5	1.3	-0.2	4.07%	2.64%	-1.43%	0.06%	0.05%	-0.02%	0.01%	0.00%	-0.02%	0.00%
High Yield	0.9%	1.3%	0.4%	0.1	0.2	0.1	-	-	-	0.0	-	-0.0	0.1	0.2	0.1	0.31%	0.38%	0.07%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	0.8%	0.2%	-0.6%	0.1	0.0	-0.0	-	-	-	0.0	-	-0.0	0.1	0.0	-0.0	0.30%	0.25%	-0.05%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Active	0.1%	1.1%	1.0%	0.0	0.2	0.2	-	-	-	-	-	-	0.0	0.2	0.2	0.37%	0.39%	0.02%	0.00%	0.01%	0.01%	-0.01%	0.00%	0.00%	0.00%
Low Beta	11.1%	7.4%	-3.7%	1.9	1.4	-0.4	5.0	2.9	-2.1	0.3	0.3	-0.0	7.2	4.6	-2.6	2.62%	2.18%	-0.45%	0.29%	0.16%	-0.13%	-0.06%	0.00%	-0.03%	0.00%
Immunized Cash Flows	4.5%	3.6%	-0.9%	0.1	0.0	-0.0	-	-	-	-	-	-	0.1	0.0	-0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Passive	4.5%	3.6%	-0.9%	0.1	0.0	-0.0	-	-	-	-	-	-	0.1	0.0	-0.0	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Market Neutral Strategies	4.1%	2.3%	-1.8%	1.8	1.4	-0.4	5.0	2.9	-2.1	0.3	0.3	-0.0	7.1	4.5	-2.6	7.04%	6.76%	-0.28%	0.29%	0.16%	-0.13%	-0.10%	0.01%	-0.02%	0.00%
Hedged	4.1%	2.3%	-1.8%	1.8	1.4	-0.4	5.0	2.9	-2.1	0.3	0.3	-0.0	7.1	4.5	-2.6	7.04%	6.76%	-0.28%	0.29%	0.16%	-0.13%	-0.10%	0.01%	-0.02%	0.00%
Cash	2.5%	1.4%	-1.1%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Passive	2.5%	1.4%	-1.1%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%
Other	16.9%	14.7%	-2.3%	0.9	1.1	0.2	-	0.2	0.2	0.1	0.2	0.0	1.1	1.5	0.4	0.24%	0.31%	0.07%	0.04%	0.05%	0.01%	0.02%	0.00%	0.01%	0.00%
Core Real Estate	4.0%	4.5%	0.5%	0.6	0.8	0.2	-	0.2	0.2	0.1	0.2	0.1	0.7	1.2	0.4	0.73%	0.91%	0.18%	0.03%	0.04%	0.01%	0.00%	0.00%	0.01%	0.00%
Active	4.0%	4.5%	0.5%	0.6	0.8	0.2	-	0.2	0.2	0.1	0.2	0.1	0.7	1.2	0.4	0.73%	0.91%	0.18%	0.03%	0.04%	0.01%	0.00%	0.00%	0.01%	0.00%
TIPS	1.7%	2.0%	0.3%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.04%	0.05%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	1.7%	2.0%	0.3%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.04%	0.05%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Long Term Govt Bonds	1.0%	2.0%	1.0%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%
Passive	1.0%	2.0%	1.0%	0.0	0.0	0.0	-	-	-	-	-	-	0.0	0.0	0.0	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%
Investment Grade Bonds	10.8%	8.2%	-2.6%	0.3	0.3	0.0	-	-	-	0.0	0.0	-0.0	0.3	0.3	0.0	0.10%	0.12%	0.02%	0.01%	0.01%	0.00%	0.03%	0.00%	0.00%	0.00%
Passive	10.1%	4.7%	-5.4%	0.2	0.0	-0.1	-	-	-	0.0	0.0	-0.0	0.2	0.0	-0.1	0.06%	0.02%	-0.04%	0.01%	0.00%	-0.01%	0.06%	0.00%	0.00%	0.00%
Active	0.0%	3.5%	3.5%	0.1	0.2	0.1	-	-	-	-	-	-	0.1	0.2	0.1	0.56%	0.24%	-0.33%	0.00%	0.01%	0.00%	-0.02%	-0.01%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	14.3	15.4	1.1	9.3	29.2	19.9	4.0	3.1	-0.9	27.6	47.7	20.1	1.12%	1.66%	0.54%	1.12%	1.66%	0.54%	-0.04%	-0.05%	0.69%	-0.06%

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

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

Type	Average Weight			Management Fees			Incentive Fees			Operating Expense			Total Fees (Mgt/Incent/Opex)			Fee Ratio (Mgt/Incent/Opex)			Contrib to Total Plan Fee Ratio			YoY Attribution			
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex
Passive	55.7%	46.7%	-9.0%	0.6	0.6	0.0	-	-	-	0.1	0.1	0.0	0.7	0.7	0.0	0.05%	0.05%	0.00%	0.03%	0.02%	0.00%	0.10%	0.00%	0.00%	0.00%
Active	25.2%	33.5%	8.3%	3.7	5.5	1.7	-	0.3	0.3	1.4	0.4	-1.0	5.1	6.2	1.1	0.82%	0.64%	-0.18%	0.21%	0.22%	0.01%	-0.02%	-0.01%	0.01%	-0.06%
Hedged	5.9%	4.1%	-1.8%	2.3	1.9	-0.4	6.1	3.6	-2.5	0.4	0.3	-0.0	8.7	5.8	-2.9	6.05%	5.02%	-1.04%	0.35%	0.20%	-0.15%	-0.09%	0.00%	-0.05%	0.00%
Private	13.3%	15.7%	2.5%	7.7	7.4	-0.2	3.2	25.3	22.1	2.2	2.3	0.1	13.1	35.0	21.9	4.00%	7.75%	3.75%	0.53%	1.22%	0.69%	0.07%	-0.11%	0.73%	-0.03%
Total Plan	100.0%	100.0%	0.0%	14.3	15.4	1.1	9.3	29.2	19.9	4.0	3.1	-0.9	27.6	47.7	20.1	1.12%	1.66%	0.54%	1.12%	1.66%	0.54%	0.05%	-0.12%	0.69%	-0.09%

Table 11 - Pension 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
2020	0.6	0.5	0.2	0.4	1.7	0.07%
2021	0.8	0.5	0.5	0.4	2.0	0.07%
Change	0.1	-0.0	0.2	-0.0	0.3	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				
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020	2021	Change	2020	2021	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex	
Growth	57.6%	59.0%	1.4%	0.37	0.51	0.14	-	-	-	0.09	0.05	-0.04	0.46	0.56	0.10	0.26%	0.25%	-0.01%	0.15%	0.15%	0.00%	0.00%	0.01%	0.00%	0.00%	-0.02%
Global Equity	57.6%	59.0%	1.4%	0.37	0.51	0.14	-	-	-	0.09	0.05	-0.04	0.46	0.56	0.10	0.26%	0.25%	-0.01%	0.15%	0.15%	0.00%	0.00%	0.01%	0.00%	0.00%	-0.02%
Passive	46.3%	46.8%	0.5%	0.07	0.08	0.02	-	-	-	0.03	0.04	0.01	0.09	0.12	0.03	0.07%	0.07%	0.00%	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	11.3%	12.2%	0.9%	0.31	0.43	0.12	-	-	-	0.06	0.01	-0.05	0.37	0.44	0.07	1.05%	0.95%	-0.10%	0.12%	0.12%	0.00%	0.01%	0.01%	0.00%	0.00%	-0.02%
Zero Beta	29.2%	18.6%	-10.6%	0.02	0.01	-0.01	-	-	-	-	-	-	0.02	0.01	-0.01	0.02%	0.02%	0.00%	0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%
Short Term IG Bonds	28.0%	17.4%	-10.6%	0.02	0.01	-0.01	-	-	-	-	-	-	0.02	0.01	-0.01	0.02%	0.02%	0.00%	0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%
Passive	28.0%	17.4%	-10.6%	0.02	0.01	-0.01	-	-	-	-	-	-	0.02	0.01	-0.01	0.02%	0.02%	0.00%	0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%
Cash	1.3%	1.2%	-0.1%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Passive	1.3%	1.2%	-0.1%	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	13.2%	22.5%	9.2%	0.22	0.29	0.07	-	-	-	0.04	0.06	0.02	0.26	0.34	0.08	0.62%	0.40%	-0.22%	0.08%	0.09%	0.01%	0.04%	-0.04%	0.00%	0.00%	-0.01%
Core Real Estate	8.4%	9.3%	0.9%	0.15	0.19	0.04	-	-	-	-	-	-	0.15	0.19	0.04	0.59%	0.54%	-0.05%	0.09%	0.08%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	8.4%	9.3%	0.9%	0.15	0.19	0.04	-	-	-	-	-	-	0.15	0.19	0.04	0.59%	0.54%	-0.05%	0.09%	0.08%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Commodities	4.8%	5.4%	0.5%	0.06	0.09	0.02	-	-	-	0.04	0.05	0.01	0.10	0.14	0.04	0.68%	0.69%	0.00%	0.06%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	4.8%	5.4%	0.5%	0.06	0.09	0.02	-	-	-	0.04	0.05	0.01	0.10	0.14	0.04	0.68%	0.69%	0.00%	0.06%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Investment Grade Bonds	0.0%	5.5%	5.5%	-	0.00	0.00	-	-	-	-	0.00	0.00	-	0.01	0.01	0.00%	0.02%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%
Passive	0.0%	5.5%	5.5%	-	0.00	0.00	-	-	-	-	0.00	0.00	-	0.01	0.01	0.00%	0.02%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%
Long Term Government	0.0%	2.3%	2.3%	-	0.00	0.00	-	-	-	-	-	-	-	0.00	0.00	0.00%	0.03%	0.03%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%
Passive	0.0%	2.3%	2.3%	-	0.00	0.00	-	-	-	-	-	-	-	0.00	0.00	0.00%	0.03%	0.03%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	0.61	0.81	0.20	-	-	-	0.13	0.11	-0.02	0.74	0.92	0.18	0.24%	0.24%	0.00%	0.24%	0.24%	0.00%	0.02%	0.00%	0.00%	0.00%	-0.02%

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

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

Type	Average Weight			Management Fees			Incentive Fees			Operating Expense			Total Fees (Mgt/Incent/Opex)			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution				
	2020	2021	Change	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020 (\$ mm)	2021 (\$ mm)	Change (\$ mm)	2020	2021	Change	2020	2021	Change	Due to Weight	Due to Mgmt Fee Ratio	Due to Incent Fee Ratio	Due to Opex	
Passive	75.5%	73.1%	-2.4%	0.08	0.10	0.02	-	-	-	0.03	0.04	0.01	0.11	0.14	0.03	0.05%	0.05%	0.00%	0.04%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	24.5%	26.9%	2.4%	0.52	0.71	0.19	-	-	-	0.10	0.07	-0.04	0.63	0.78	0.15	0.82%	0.76%	-0.06%	0.20%	0.20%	0.00%	0.01%	0.00%	0.00%	0.00%	-0.02%
Total Plan	100.0%	100.0%	0.0%	0.61	0.81	0.20	-	-	-	0.13	0.11	-0.02	0.74	0.92	0.18	0.24%	0.24%	0.00%	0.24%	0.24%	0.00%	0.02%	0.00%	0.00%	0.00%	-0.02%

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
2020	0.08	0.05	0.04	0.03	0.20	0.06%
2021	0.10	0.05	0.06	0.05	0.26	0.07%
Change	0.02	0.00	0.02	0.02	0.07	0.01%

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

As presented in Table 9, the pension total plan fee ratio increased by about 54 bps from 1.12% in 2020 to 1.66% in 2021.

The largest driver of the increase from an asset class perspective were Private Markets (72 bps contribution), partially offset by Public Equity (-9 bps) and Market Neutral Strategy (-11 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 management fee ratio (-12 bps) and lower manager-related operating expenses (-9bps) were largely offset by an increase in incentive fee ratio (69 bps)

As displayed in Table 11, Other Costs stayed the same at 0.07% in 2021 and 2020.

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 stayed consistent from 2020 to 2021 at 0.24% in 2020 due to changes in weight (2 bps) offset by lower operating expense ratio (-2 bps).

As displayed in Table 14, Other Costs remained increased slightly from 2020 to 2021 going from 6 bps to 7 bps.

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

Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
												Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Pathway Private Equity Fund VIII	2211 Michelson Drive, Ninth Floor Irvine, CA 92612	2004	40,000,000	40,088,130	4,784,429	-	5,051,203	(22,411)	6.6%	1.5	-	62,978	42,778	-	-	-	-	-
Pantheon Global Secondary Fund III 'B'	600 Montgomery Street, 23rd Floor San Francisco, CA 94111	2006	40,000,000	37,840,000	864,348	-	864,348	(3,618,566)	1.9%	1.1	-	-	11,568	-	-	-	-	-
Pantheon USA Fund VII	600 Montgomery Street, 23rd Floor San Francisco, CA 94111	2006	40,000,000	37,280,000	18,660,071	880,000	24,660,070	4,546,872	10.3%	1.9	-	177,147	7,345	-	-	96,523	-	-
Great Hill Equity Partners IV	One Liberty Square Boston, Massachusetts 02109	2008	5,000,000	4,983,750	3,806,237	-	3,806,237	(1,027)	24.0%	3.1	-	-	1,740	-	-	72,866	-	-
Partners Group Secondary 2008	1660 17th Street, Suite 201 Denver, CO 80202	2008	9,522,345	10,123,420	1,500,469	-	1,764,255	-	9.1%	1.5	-	-	4,233	-	-	11,933	-	-
Partners Group Secondary 2011, L.P.	1660 17th Street, Suite 201 Denver, CO 80202	2011	20,000,000	13,053,192	10,410,281	354,456	12,019,397	-	16.8%	1.9	-	194,009	182,072	-	-	254,869	-	-
PE Strategic Partnership	325 N. Saint Paul St., Ste. 4900 Dallas, TX 75201	2017	274,500,000	173,522,404	271,345,596	35,967,665	307,313,261	39,736,604	36.9%	2.0	-	3,129,500	641,593	-	-	16,619,823	-	-
Crestline Portfolio Financing	201 Main St, #1900 Fort Worth, TX 76102	2018	15,000,000	12,626,550	8,293,173	4,494,629	12,793,802	(79,943)	10.4%	1.2	-	134,754	44,681	-	-	103,354	-	-
Innovation Endeavors Fund III	1845 El Camino Real Palo Alto, CA 94306	2018	4,800,000	4,137,603	-	-	-	(928)	75.5%	3.4	-	96,000	-	-	-	2,225,969	-	-
Innovation Endeavors Fund IV, L.P.	1845 El Camino Real Palo Alto, CA 94306	2021	4,800,000	838,805	771,714	-	771,714	-	-22.6%	0.9	-	-	-	-	-	-	-	-
TI Platform SJFed, L.P.	1160 Battery Street East Suite 100 San Francisco, CA 94111	NA	50,000,000	8,050,000	8,117,372	-	8,117,372	-	5.5%	1.0	-	6,749	40,028	-	-	6,695	-	-

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
GSO SJ Partners	GSO SJ Partners	345 Park Avenue New York, NY 10154	2010	50,000,000	43,365,930	3,757,832	-	3,757,832	(3,260,387)	4.1%	1.1	-	73,693	34,392	-	-	-	-	-
Medley Opportunity Fund II, L.P.	Medley Opportunity Fund II, L.P.	280 Park Avenue, 6th Floor East New York, NY 10017	2010	50,000,000	50,047,362	4,852,337	6,626,247	11,478,584	-	2.4%	1.1	-	53,632	72,716	-	-	-	-	
White Oak Direct Lending	White Oak Direct Lending	3 Embarcadero Center, 5th Floor San Francisco, CA 94111	2010	50,000,000	88,348,325	33,029,101	-	33,029,101	-	7.9%	1.3	-	271,830	32,018	-	-	-	-	
Cross Ocean USD ESS Fund II, L.P.	Cross Ocean USD ESS Fund II, L.P.	11 Charles II St. London, SW1Y4GU	2016	15,000,000	12,007,402	4,007,739	3,402,443	7,410,248	-	5.9%	1.2	-	53,823	74,979	-	-	160,145	-	
Arbour Lane Credit Opportunity Fund II, L.P.	Arbour Lane Credit Opportunity Fund II, L.P.	700 Canal St, Stamford, CT 06302	2018	8,000,000	15,364,657	10,555,405	5,583,831	16,133,236	-	24.0%	1.2	-	133,801	61,429	-	-	473,536	86,061	
Crestline Portfolio Financing Fund II	Crestline Portfolio Financing Fund II	201 Main St, #1900 Fort Worth, TX 76102	2018	8,000,000	3,994,415	1,464,734	2,658,374	4,143,768	864	8.5%	1.0	-	9,219	37,373	-	-	9,744	-	
Octagon CLO Opportunity Fund III, L.P.	Octagon CLO Opportunity Fund III, L.P.	250 Park Ave., 15th Floor, New York, NY 10117, USA	2018	25,000,000	21,250,000	(2,780)	23,822,305	23,822,305	1,814,403	16.8%	1.2	-	33,316	37,357	-	-	-	169,906	
HPS Special Situations Opportunity Fund	HPS Special Situations Opportunity Fund	40 West 57th St, 33rd Floor New York, NY 10019	2019	8,000,000	4,724,430	5,163,341	356,555	5,519,896	163,208	30.7%	1.2	-	53,065	25,506	-	-	131,464	-	
Crestline Co-Invest II	Crestline Co-Invest II	201 Main St, #1900 Fort Worth, TX 76102	2020	1,900,000	1,900,000	2,374,495	-	2,374,495	-	26.0%	1.2	-	1,620	19,247	-	-	10,022	-	
Cross Ocean USD ESS Fund III, L.P.	Cross Ocean USD ESS Fund III, L.P.	11 Charles II St. London, SW1Y4GU	2020	18,000,000	14,504,196	18,775,362	321,767	19,097,129	-	20.0%	1.4	-	169,712	141,070	-	-	576,393	-	
Eagle Point Defensive Income	Eagle Point Defensive Income	600 Steamboat Road, Suite 202 Greenwich, CT 06830	2020	8,000,000	4,082,400	4,533,218	113,738	4,646,956	(45,331)	7.9%	1.1	-	6,322	11,413	-	-	2,858	-	
Arbour Lane Credit Opportunity Fund III, L.P.	Arbour Lane Credit Opportunity Fund III, L.P.	700 Canal St, Stamford, CT 06302	2021	3,000,000	1,540,582	1,529,358	722	1,530,080	-	-6.5%	1.0	-	1,620	19,247	-	-	10,022	-	
Strategic Value Special Situations Fund V	Strategic Value Special Situations Fund V	100 West Putnam Avenue Greenwich, CT 06830	2021	7,500,000	1,875,000	2,051,336	-	2,051,336	(3,382)	40.9%	1.1	-	40,081	18,431	-	-	44,083	-	
Crestline Co-Investment	Crestline Co-Investment	201 Main St, #1900 Fort Worth, TX 76102	N/A	1,600,000	1,571,454	1,091,992	-	1,091,992	-	10.0%	1.2	-	8,760	17,244	-	-	1,899	-	

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Clarion Lion Properties Fund (Fed Pens)	Clarion Lion Properties Fund (Fed Pens)	230 Park Avenue New York, NY 10017	2019	49,000,000	49,000,000	54,918,484	1,923,884	60,636,829	89,719	9.4%	1.3	-	435,047	27,512	-	-	-	-	
Clarion Lion Properties Fund (Fed HC)	Clarion Lion Properties Fund (Fed HC)	230 Park Avenue New York, NY 10017	2019	12,000,000	12,000,000	13,447,727	471,047	14,847,962	21,970	9.4%	1.3	-	106,529	6,736	-	-	-	-	
BlackRock U.S. Core Property Fund (Fed)	BlackRock U.S. Core Property Fund (Fed)	400 Howard Street San Francisco, CA 94105	2019	72,000,000	72,000,000	79,446,634	28,149,413	87,881,310	344,382	9.3%	1.3	-	304,879	147,803	-	-	-	-	
BlackRock U.S. Core Property Fund (Fed)	BlackRock U.S. Core Property Fund (Fed)	400 Howard Street San Francisco, CA 94105	2019	20,500,000	20,500,000	22,623,100	5,696,823	25,024,868	98,065	9.3%	1.3	-	87,110	42,088	-	-	-	-	
TA Realty Core Property Fund (Fed Pens)	TA Realty Core Property Fund (Fed Pens)	1 Federal Street Boston, MA 02110	2021	23,000,000	17,000,000	16,800,250	199,750	18,438,137	-	8.7%	1.1	-	31,918	7,878	-	-	-	-	
TA Realty Core Property Fund (Fed HC)	TA Realty Core Property Fund (Fed HC)	1 Federal Street Boston, MA 02110	2021	11,000,000	11,000,000	10,870,750	129,250	11,930,559	-	8.7%	1.1	-	20,852	5,098	-	-	-	-	
Clarion Lion Industrial Trust (Fed Pens)	Clarion Lion Industrial Trust (Fed Pens)	230 Park Avenue New York, NY 10017	2021	11,000,000	11,000,000	11,000,000	91,754	12,274,065	(1,466)	11.2%	1.1	-	40,833	814	-	-	175,354	-	
Clarion Lion Industrial Trust (Fed HC)	Clarion Lion Industrial Trust (Fed HC)	230 Park Avenue New York, NY 10017	2021	2,800,000	2,800,000	2,800,000	23,356	3,124,318	(373)	11.2%	1.1	-	10,463	207	-	-	44,265	-	
DRA Growth and Income Fund VI	DRA Growth and Income Fund VI	220 East 42nd Street, 27th Floor New York, NY 10017	2007	9,709,422	10,556,217	-	415,780	415,780	(16,260)	10.6%	1.7	-	-	1,036	-	-	74,825	-	3,600
DRA Growth and Income Fund VII, LLC	DRA Growth and Income Fund VII, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2011	15,000,000	15,391,171	1,277,549	1,315,465	2,593,014	1,269,177	21.5%	2.3	-	24,318	9,457	-	-	105,335	-	230,876
DRA Growth and Income Fund VIII, LLC	DRA Growth and Income Fund VIII, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2014	15,000,000	17,745,643	6,074,516	3,734,768	9,809,284	(441,466)	8.8%	1.3	-	156,374	11,917	-	-	106,453	-	-
European Property Investors Special Opp	European Property Investors Special Opp	Berkeley Square House (8th Floor) Berkeley Square, London W1J8DB, UK	2015	14,670,121	13,300,890	13,930,898	1,411,583	15,342,481	(28,617)	10.6%	1.4	-	139,261	151,667	-	-	27,870	-	-
DRA Growth and Income Fund IX, LLC	DRA Growth and Income Fund IX, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2016	20,000,000	21,303,814	16,536,641	9,129,045	25,665,686	2,464,336	18.7%	1.5	-	314,620	20,752	-	-	1,431,192	-	-
GEM Realty Fund VI, L.P.	GEM Realty Fund VI, L.P.	900 North Michigan Avenue #1450, Chicago, IL 60611	2017	10,000,000	6,750,000	6,450,347	1,150,000	7,600,347	742,989	19.8%	1.3	6,598	42,592	18,012	-	-	529,462	-	-
European Property Investors Special Opp	European Property Investors Special Opp	Berkeley Square House (8th Floor) Berkeley Square, London W1J8DB, UK	2018	12,643,321	8,265,952	8,948,536	-	8,948,536	182,573	9.9%	1.1	-	175,196	183,301	-	-	142,060	-	-
Torchlight Debt Opportunity Fund VI, L.P.	Torchlight Debt Opportunity Fund VI, L.P.	280 Park Avenue New York, NY 10017	2018	30,000,000	33,178,270	25,114,384	10,012,923	35,127,307	529,555	8.0%	1.2	-	405,000	67,059	-	-	227,895	-	-
DRA Growth and Income Fund X, LLC	DRA Growth and Income Fund X, LLC	220 East 42nd Street, 27th Floor New York, NY 10017	2020	10,000,000	4,556,208	4,250,512	1,217,390	5,467,902	-	36.5%	1.3	-	79,116	16,118	-	-	-	-	-
Essex Industrial Value Fund V, L.P.	Essex Industrial Value Fund V, L.P.	101 West Elm Street, Suite 600, Conshohocken, PA 19428	2020	5,500,000	3,850,000	6,044,694	-	6,044,694	-	102.9%	1.6	-	74,250	5,948	-	-	551,376	-	-
Rockpoint Real Estate Fund VI, L.P.	Rockpoint Real Estate Fund VI, L.P.	500 Boylston Street, Suite 1880, Boston, MA	2020	6,500,000	3,814,126	4,459,621	-	4,459,621	-	30.3%	1.2	1,393	97,437	11,816	-	-	196,995	7,396	-
Torchlight Debt Fund VII, L.P.	Torchlight Debt Fund VII, L.P.	280 Park Avenue New York, NY 10017	2020	6,000,000	1,800,000	1,511,385	303,668	1,815,053	18,399	1.4%	1.0	-	117,000	14,074	-	-	-	-	-

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Global Infrastructure Partners III, L.P.	Global Infrastructure Partners III, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2016	25,000,000	23,064,128	26,002,222	1,701,856	27,704,078	-	10.4%	1.4	-	431,983	31,193	-	-	4,470	-	-
Lime Rock Partners VIII, L.P.	Lime Rock Partners VIII, L.P.	274 Riverside Avenue, Westport, CT 06880	2018	3,200,000	2,747,247	2,987,891	245,314	3,243,205	167,940	7.0%	1.2	-	64,000	5,137	2,324	-	156,265	-	-
Lime Rock New Energy	Lime Rock New Energy	274 Riverside Avenue, Westport, CT 06880	2019	5,000,000	2,267,272	1,335,568	1,947,425	3,282,993	1,253,254	20.8%	1.4	-	90,000	35,333	2,820	-	189,681	-	-
Orion Mine Finance Fund III, L.P.	Orion Mine Finance Fund III, L.P.	1045 Avenue of the Americas, 25th Floor, New York, NY 10018	2019	5,000,000	2,326,481	2,718,465	23,696	2,742,161	(71,135)	12.1%	1.2	-	81,250	9,812	-	-	21,259	-	-
Tembo Capital Mining Fund III	Tembo Capital Mining Fund III	180 Piccadilly, London W1J 3ER, England, United Kingdom	2019	6,000,000	1,292,254	1,340,425	4,461	1,344,906	-	27.0%	1.0	-	180,493	33,172	-	-	10,206	-	-
Energy Services Co-Invest	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.	Global Infrastructure Partners IV, L.P.	1345 Avenue of the Americas, 30th Floor, New York, NY 10105	2020	3,200,000	729,858	650,271	-	650,271	-	-12.7%	0.9	-	56,000	3,078	7,813	-	-	-	-
Kimmeridge Energy Fund V, L.P.	Kimmeridge Energy Fund V, L.P.	400 Madison Avenue, Suite 14C, New York, NY	2020	3,800,000	3,400,132	5,070,325	676,001	5,746,326	261,835	47.8%	1.7	-	75,968	64,107	-	-	627,062	-	-

Source: Fund managers, Meketa Investment Group

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

Lookup Name	Fund Name	Address	Vintage Year	Commitment Amount (\$)	Contributions Since Inception (\$)	Remaining Value (\$)	Distributions for Calendar year 2021 (\$)	2021 Distributions + Remaining Value of Partnership (\$)	Cash Profit Distributed for Calendar Year 2021 (\$)	Net IRR Since Incept (%)	Investment Multiple Since Incept	Fees and expenses paid directly to GP and related parties 2021 (\$)	Fees and expenses paid from the Fund to GP and related parties 2021 (\$)					Fees and expenses paid by all portfolio companies 2021 (\$)	Carried Interest Paid 2021 (\$)
													Management Fees	Partnership Expenses	Offsets	Other Expenses	Incentive/Carried Interest Allocation		
Iguazu Partners LP Fund	Iguazu Partners LP Fund	2 Embarcadero Center # 1645 San Francisco, CA 94111	N/A	NA	NA	56,601,539	-	56,601,539	-	9.2%	1.3	-	503,706	39,380	-	-	755,628	-	755,628
Pine River Fund, Ltd	Pine River Fund, Ltd		N/A	NA	NA	376,583	160,000	536,583	-	5.4%	1.6	-	2,039	2,474	-	-	-	-	-
DE Shaw Composite Fund, LLC	DE Shaw Composite Fund, LLC	1166 Avenue of the Americas, 9th Floor New York, NY 10036	N/A	NA	NA	42,536,897	-	42,536,897	-	12.2%	2.9	-	1,209,890	83,643	-	-	2,547,095	-	2,547,095
Hudson Bay	Hudson Bay	777 Third Ave, 30th Floor, New York, NY 10017	N/A	NA	NA	9,063,878	-	9,063,878	-	10.0%	1.5	-	87,990	29,093	-	-	326,919	-	326,919
Crabel Advanced Trend	Crabel Advanced Trend	1999 Avenue of the Stars, Suite 2550 Los Angeles, CA 90067	N/A	NA	NA	39,201,474	-	39,201,474	-	-4.4%	1.0	-	99,065	160,065	-	-	-	-	-

Source: Fund managers, State Street, ORS