



# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** Roberto L. Peña

**SUBJECT: OFFICE OF RETIREMENT  
SERVICES' FY18-19 PROPOSED  
ADMINISTRATIVE BUDGET**

**DATE:** May 11, 2018

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## **RECOMMENDATION**

Approve the Office of Retirement Services' (ORS) proposed administrative expense budget for Fiscal Year 2018-2019.

## **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, 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**

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 or April meetings (Attachments A and D). The administrative expense budget is divided into four categories: personnel services, non-personnel/equipment, professional services, and medical providers. Table 1 below shows the combined ORS administrative expense budget for both plans. The proposed budget for personnel services decreased because labor costs for employees who opted in to the Voluntary Employee Beneficiary Association were reduced. The proposed budget for non-personnel / equipment decreased due to the selection of a risk consultant as opposed to a risk management system. The proposed budget for professional services decreased due to aligning the budget more closely with past trends for services. The proposed budget for medical services decreased due to the medical panel selection for Measure F was not implemented last fiscal year as planned. Because of all these reductions, the total proposed budget decreased by 8.1% to \$12.1 million, which is the amount that ORS is requesting the City Council to approve.

**TABLE 1 – Office of Retirement Services Proposed Administrative Budget**

<b>Expense Category</b>	<b>2017-2018 Adopted (A)</b>	<b>2017-2018 Forecast (B)</b>	<b>2018-2019 Proposed (C)</b>	<b>% Increase (Decrease) (A to C)</b>	<b>% Increase (Decrease) (B to C)</b>
Personnel Services	\$7,405,600	\$6,190,134	\$7,118,000	(3.9%)	15.0%
Non-personnel / Equipment	\$2,734,100	\$2,079,155	\$2,599,000	(4.9%)	25.0%
Professional Services	\$2,052,900	\$1,718,594	\$1,903,000	(7.3%)	10.7%
Medical Services	\$929,000	\$303,480	\$438,000	(52.9%)	44.3%
<b>TOTAL</b>	<b>\$13,121,600</b>	<b>\$10,291,363</b>	<b>\$12,058,000</b>	<b>(8.1%)</b>	<b>17.2%</b>

The amounts in the table above are included in the source and use statements, which are part of the City's 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.

Table 2 below shows the combined comprehensive budget for informational purposes. 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. 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 meeting for the Federated Board and April meeting for the Police and Fire Board. 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**

	<b>2016-2017 Actual</b>	<b>2017-2018 Adopted</b>	<b>2017-2018 Forecast</b>	<b>2018-2019 Proposed</b>
<b>Source of Funds</b>				
Beginning Balance – Claims Reserve	\$5,251,808,000	\$5,676,101,000	\$5,675,562,374	\$5,942,085,912
COLAs	49,863	50,000	42,078	40,842
City Contributions	328,012,000	367,314,213	372,536,009	376,197,533
Participant Income	72,750,000	75,204,758	74,734,900	72,685,382
Investment Income, net of expenses*	468,238,000	378,519,541	313,281,050	324,786,076
<b>Total Source of Funds</b>	<b>\$6,120,857,863</b>	<b>\$6,497,189,512</b>	<b>\$6,436,156,411</b>	<b>\$6,715,795,745</b>
<b>Use of Funds</b>				
COLAs	49,863	50,000	42,078	40,842
Benefits	379,462,000	408,239,266	399,819,088	422,117,120
Health Insurance	55,806,000	54,573,542	55,783,408	56,492,663
Personnel Service	6,130,294	7,405,600	6,190,134	7,118,000
Non-Personnel/ Equipment	2,271,196	2,734,100	2,079,155	2,599,000
Professional Fees	2,143,934	2,981,900	2,022,074	2,341,000
Ending Balance – Claims Reserve	\$5,674,994,576	\$6,021,205,104	\$5,970,220,474	\$6,225,087,120
<b>Total Use of Funds</b>	<b>\$6,120,857,863</b>	<b>\$6,497,189,512</b>	<b>\$6,436,156,411</b>	<b>\$6,715,795,745</b>

\* Based on the 2016 Annual Fee Reports, total management and incentive fees for the pension and healthcare trusts for the Police and Fire Plan was \$38.355 million and for the Federated System was \$21.850 million for a total of \$60.205 million.

It should be noted that the personnel services costs reflected in the above table can vary from the amount included in the 2018-2019 Proposed Budget due to revised salary, retirement, and benefit costs when compared to those that were approved by the Federated Retirement Board in March and the Police and Fire Retirement Board in April.

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 Comprehensive Annual Fee reports that were presented to the Boards. As indicated in the Fee reports for calendar year 2016, the management and incentive fees for the Police and Fire and Federated pension and healthcare plans totaled \$38.355 million with a fee ratio of 1.21% and \$21.850 million with a fee ratio of 1.07%, respectively, for a combined total of \$60.205 million. The Fee reports include management fees, incentive fees, consultant fees and other investment fees, some of which were based on estimates provided by the investment managers. Please note

HONORABLE MAYOR AND CITY COUNCIL

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**Subject: Office of Retirement Services' FY18-19 Proposed Administrative Budget**

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the Fee reports for calendar year 2017 are expected to be completed in August and will be forwarded to the City Council at that time.

### **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 Donna Busse, Deputy Director of Operations, 408-794-1020.

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

Attachment B: Police and Fire Department Plan FY 18-19 Proposed Budget

Attachment C: Police and Fire Department Plan Comprehensive Annual Fee Report for Calendar Year 2016

Attachment D: Federated Retirement System Budget Proposal Presentation

Attachment E: Federated Retirement System FY18-19 Proposed Budget

Attachment F: Federated Retirement System Comprehensive Annual Fee Report for Calendar Year 2016

# POLICE AND FIRE DEPARTMENT RETIREMENT PLAN FISCAL YEAR 2018-2019 BUDGET PROPOSAL

April 5, 2018

# 2018–2019 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 Police & Fire Department Retirement Plan's FY 2018-19 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, 2017
- **Participant income** – Estimated based on the contribution rates and total covered payroll shown in the actuarial reports for June 30, 2017
- **Investment income** – Calculated using the assumed rate of return based on reserve plus City's contributions for the whole year and other activities for half a 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 FY18-19

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

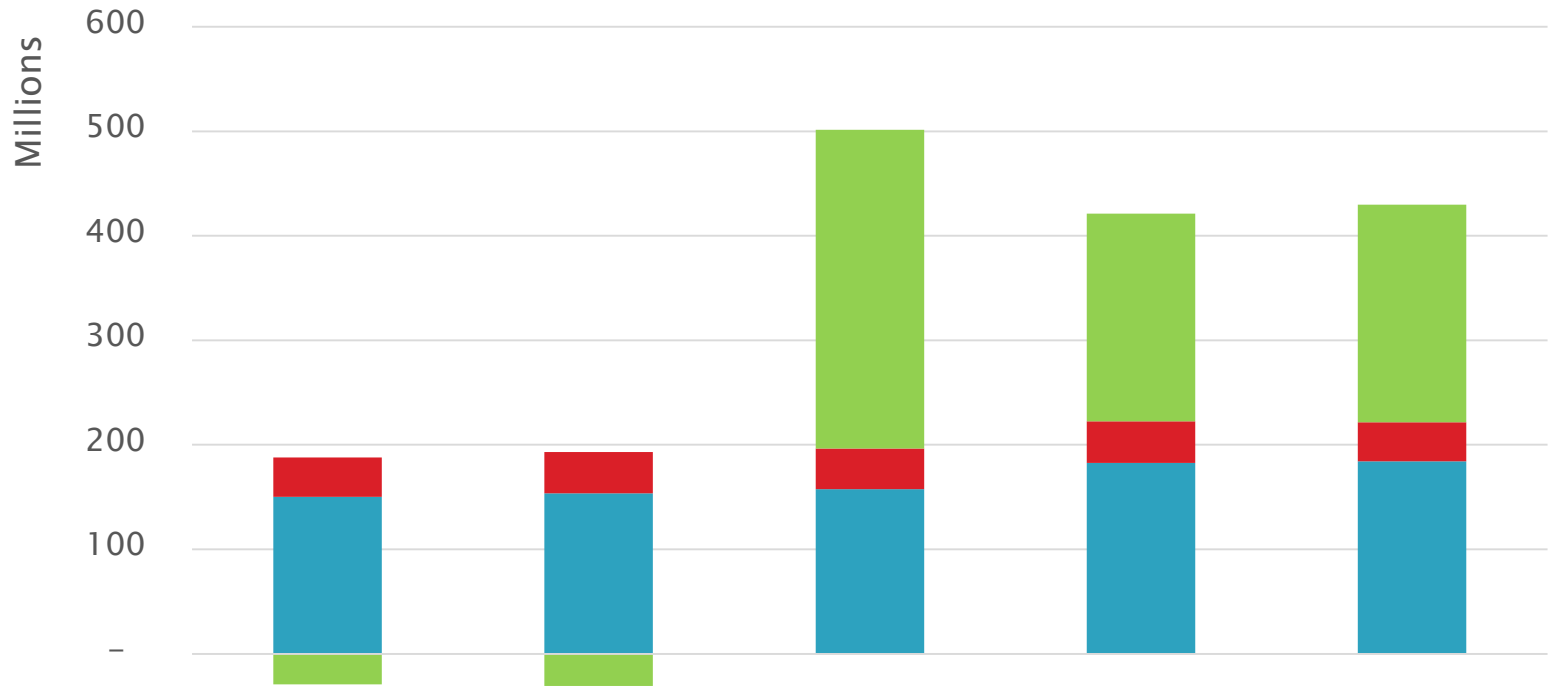
- ▶ **Personnel services** – 50% of the Office of Retirement Services direct staff labor costs including salary and benefits based on the City’s Budget Office labor reports, except for Investments staff which is split based on market value (60% PF and 40% Fed).
- ▶ **Non-personnel/equipment** – administrative overhead cost 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.

\* This was a medical director and staff prior to the FY16-17 budget.



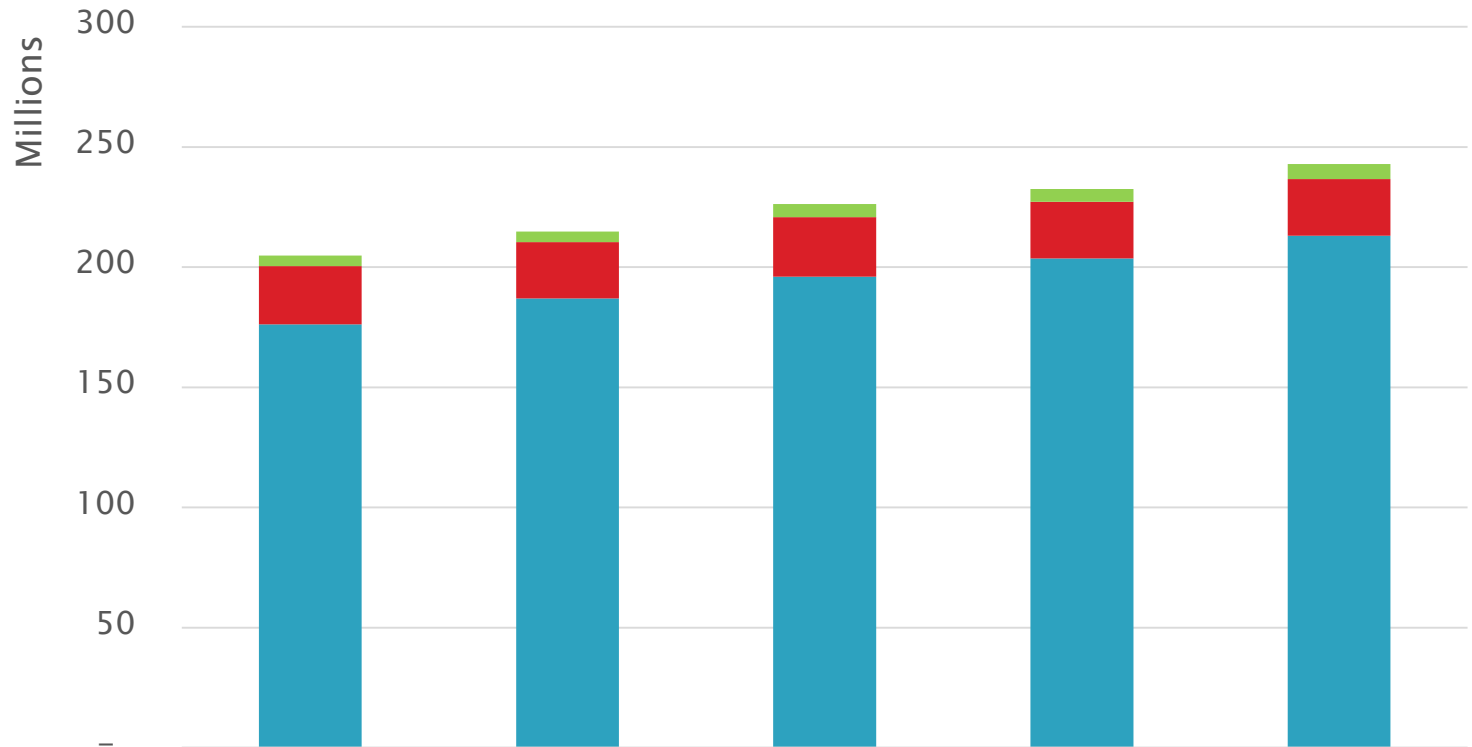
# Sources of Funds



(100)

	FY 14-15 (Actual)	FY 15-16 (Actual)	FY 16-17 (Actual)	FY 17-18 (Forecast)	FY 18-19 (Proposed)
Investment Income	(29,305,000)	(30,889,000)	305,187,000	198,708,474	208,423,486
Participant Income	37,764,000	39,515,000	38,696,000	39,780,746	37,272,734
City Contributions	150,189,000	153,545,000	157,624,000	182,628,714	184,231,413

# Uses of Funds



	FY 14-15 (Actual)	FY 15-16 (Actual)	FY 16-17 (Actual)	FY 17-18 (Forecast)	FY 18-19 (Proposed)
Administrative Expense	4,314,000	4,393,000	5,384,798	5,305,667	6,259,000
Health Insurance	24,205,000	23,449,000	24,799,000	23,687,567	23,492,000
Pension Benefits	176,253,000	186,940,000	196,032,000	203,575,000	213,116,000

# Police & Fire Proposed Administrative Budget for FY 2018–2019

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

Expenses	2016– 2017 Actual (A)	2017– 2018 Adopted (B)	2017– 2018 Forecast (C)	2018–2019 Proposed <sup>(1)</sup> (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,065,147	\$3,911,800	\$3,242,214	\$3,778,000	(3.4%)	16.5%
Non-Personnel / Equipment	1,131,656	1,364,300	1,044,113	1,312,000	(3.8%)	25.7%
Professional Services	908,820	1,062,700	877,740	939,000	(11.6%)	7.0%
Medical Services	279,175	538,000	141,600	230,000	(57.3%)	62.4%
<b>Total</b>	<b>\$5,384,798</b>	<b>\$6,876,800</b>	<b>\$5,305,667</b>	<b>\$6,259,000</b>	<b>(9.0%)</b>	<b>18.0%</b>

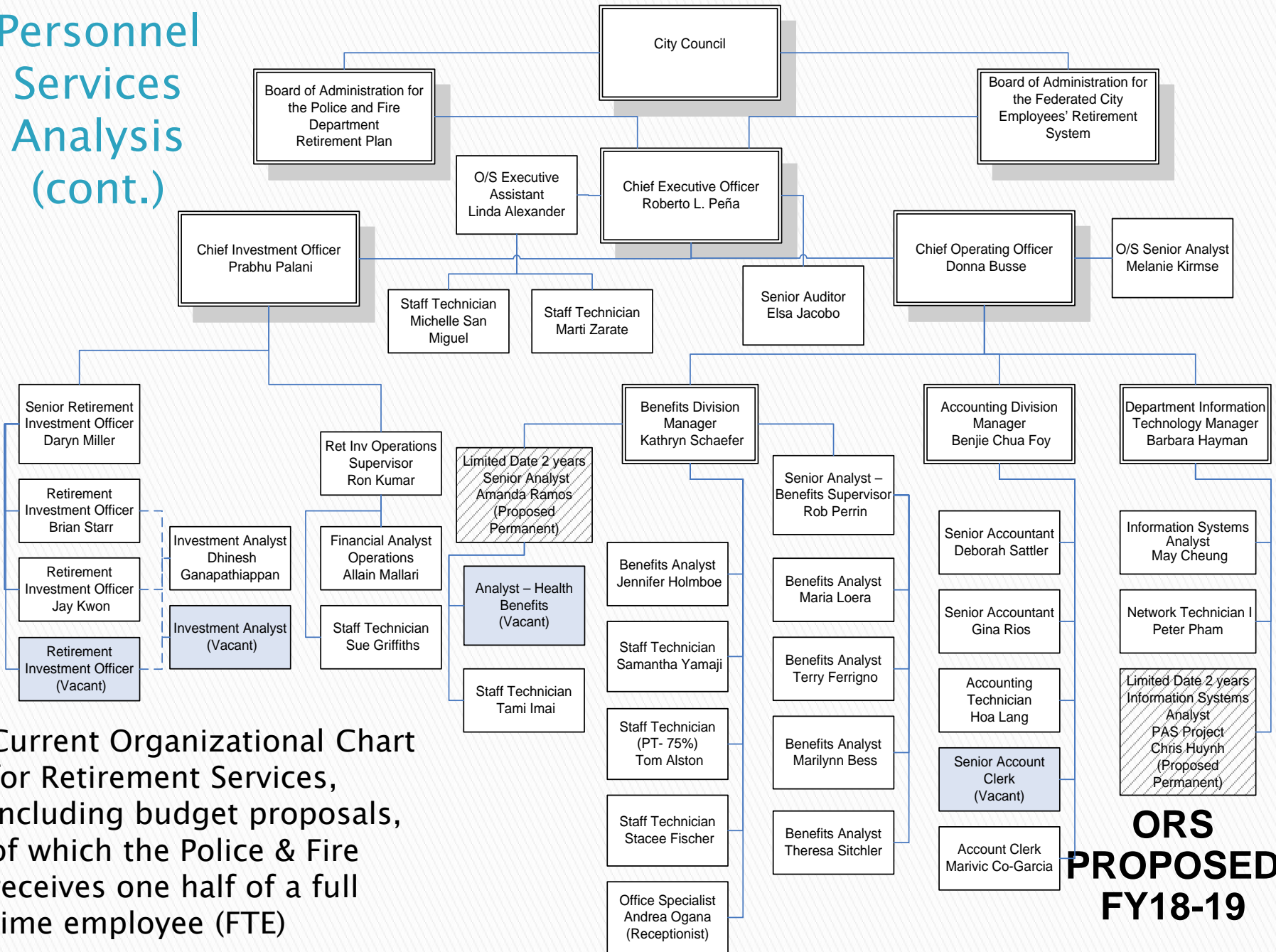
<sup>(1)</sup> – Detail for changes provided in the following slides

# Personnel Services Analysis

Expenses	2016– 2017 Actual (1)	2017– 2018 Adopted (2)	2017– 2018 Forecast (3)	2018– 2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Personnel Services	\$3,065,147	\$3,911,800	\$3,242,214	<b>\$3,778,000</b>	(3.4%)	16.5%
Authorized positions for both plans	39.75	39.75	39.75	39.75	0	0
Full time employee (FTE) allocated to Plan	19.875	19.875	19.875	19.875	0	0
Actual filled FTEs for both plans	33.75		37.75			
FTEs allocated to Plan	16.875		18.875			

- ▶ Personnel Services decreased from last year's budget due to:
  - Tier 2 City contributions for retirement decreased due to the implementation of the VEBA
- ▶ Proposals for FY18–19 included in budget
  - Original request was to make the limited–date Information Systems Analyst and Benefits Senior Analyst that expires 6/30/18 permanent
  - After discussions with City Manager's and Budget Office, limited–date positions extended only for FY18–19

# 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)

**ORS PROPOSED FY18-19**

# Non-Personnel/Equipment Analysis

Expenses	2016-2017 Actual (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Non-personnel/Equipment	\$1,131,656	\$1,364,300	\$1,044,113	\$1,312,000	(3.8%)	25.7%

- ▶ Non-Personnel/Equipment decreased from prior year by \$52,000 mainly to a decrease in the investment analytics and research budget
  - Investment analytics and research budget is comprised of investment-related expenses for cost-analysis, Bloomberg terminals and risk advisory services
    - Budget decreased by \$63,000 since Verus has taken over the risk advisory services from State Street

# Non-Personnel/Equipment Analysis (cont.)

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

Minor Budget Category	2018-2019 Budget Basis	FY18-19 Proposed Budget Amount
Investment analytics and research	Investments data processing Abel/Noser, Barra LLC, BCA Research, Bloomberg, Dynamo, eVestments and Klarifyfx. Also includes risk advisory services and State Street services for performance analysis, compliance and attribution analytics	\$515,000
Rent	Rent for Office of Retirement Services (ORS) based on lease amount, as well as CAM and amortization of construction costs for consolidation	200,000
Insurance	Fiduciary and commercial liability Insurance	190,000
LRS - annual maintenance fee	Pension administration system annual maintenance fee based on contract amount	110,000
IT hardware / software	Includes proposed website overhaul, new scanner and server and yearly PC replacements	90,000
Postage and printing	Postage, shipping and printing costs for open enrollment, Choices mailings and other communication	90,000
Training/Travel	Board and staff travel including conferences, roundtables, due diligence, etc.	70,000
Other non-personnel and equipment	Includes lease, mileage, communication, dues and subscriptions, equipment/furniture, training, supplies, etc.	47,000
<b>NON-PERSONNEL / EQUIPMENT TOTAL</b>		<b>\$1,312,000</b>

# Professional Services Analysis

Expenses	2016-2017 Actual (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Professional Services	\$908,820	\$1,062,700	\$877,740	\$939,000	(11.6%)	7.0%

- ▶ Professional Services decreased from last year's budget due to netting of the following changes:
  - Reed Smith was reduced by \$50,000 to be in line past years' averages
  - Saltzman & Johnson was reduced by \$95,000 based on monthly average for the past year
  - Increase in temp services by \$37,000 due to implementation of PAS which will require additional manpower for running parallel systems
  - Net reduction of \$17,000 in pension administration system- related expenses due to alignment of budget with past trends
  
- ▶ 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 major professional services categories and budget amounts

Minor budget category	2018–19 Budget Basis	FY18–19 Budget Amount
Legal	Legal services provided by Reed Smith, Saltzman and Johnson and Ice Miller LLP – note this budget line excludes investment legal.	\$ 330,000
Actuary	Annual valuation for Pension & OPEB, possible Measure F costs, calculation for 415 matters as well as PAS consultation	230,000
Temp Agencies	Temporary staffing to fill vacant positions and to assist IT with PAS implementation	169,000
Other Professional Services	Includes CAFR design cost, retiree education, board stipends, retiree search agency, governance services, contingency amount, etc.	104,500
Audit	Annual Financial audit agreement amount plus other services	70,000
Pension Admin System (PensionGold)	Ad hoc web changes billed per hour; BCP Monthly charge; Ad hoc change request enhancements, Web Hosting Fee Monthly charge	35,500
	<b>PROFESSIONAL SERVICES OTHER BUDGET TOTAL</b>	<b>\$939,000</b>

# Medical Services Analysis

Expenses	2016-2017 Actual (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Medical Services	\$279,175	\$538,000	\$141,600	\$230,000	(57.3%)	62.4%

- ▶ Medical services decreased from last year due to decreased estimate in number of cases due to the following reasons:
  - Last year's budget was in anticipation of the 3-doctor Board medical advisor panel
  - 2017 started with a backlog of approximately 30 independent medical examiner reports
  - Dr. Tierman was new and it was not known how many reports she was capable of producing per month
  
- ▶ Other considerations:
  - No longer having a City employee providing medical services
  - Outside advisor is more expensive
  - Based on estimate of having 2 cases per month for the medical advisor and 36 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

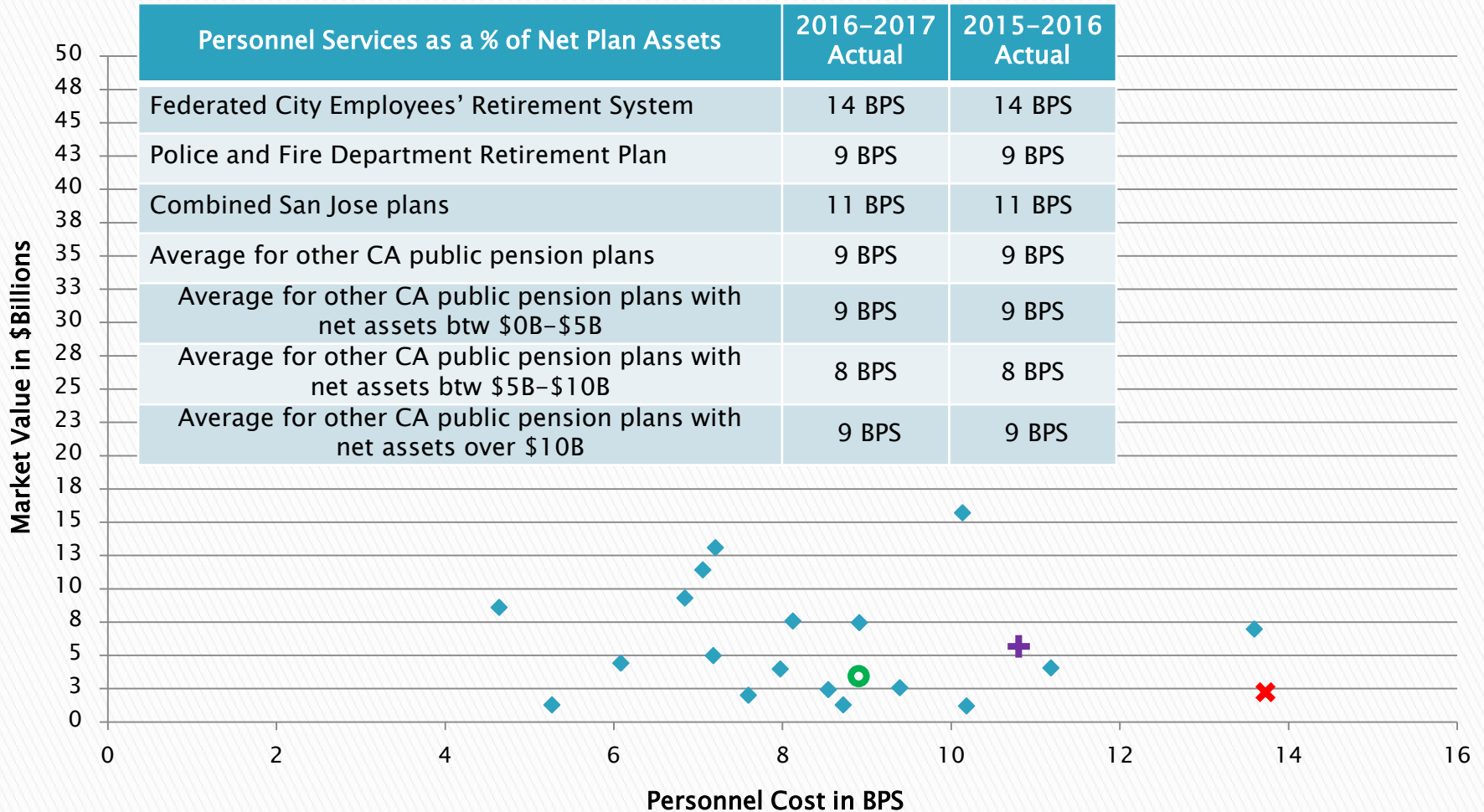
# Personnel Services Analysis – in BPS (cont.)

Personnel Expense in BPS of Market Value of Assets – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System, \$3,065,147

“O” below represents the Police and Fire Plan, \$3,065,147

“+” below represents the combined San Jose plans, \$6,130,294



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans' CAFRs

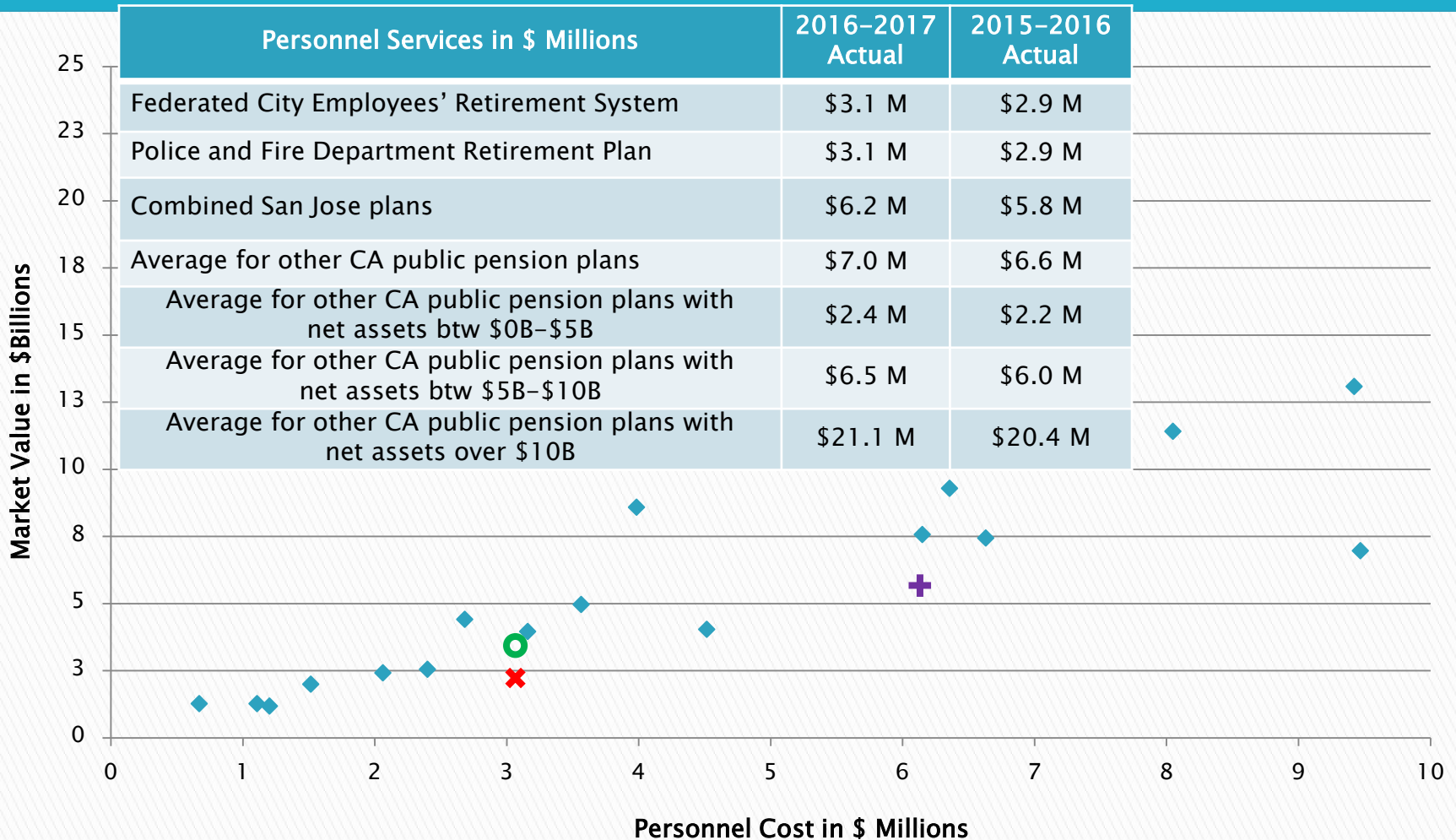
# Personnel Services Analysis – in \$ (cont.)

Personnel Expense in \$ Millions – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System, \$3,065,147

“O” below represents the Police and Fire Plan, \$3,065,147

“+” below represents the combined San Jose plans, \$6,130,294



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans' CAFRs

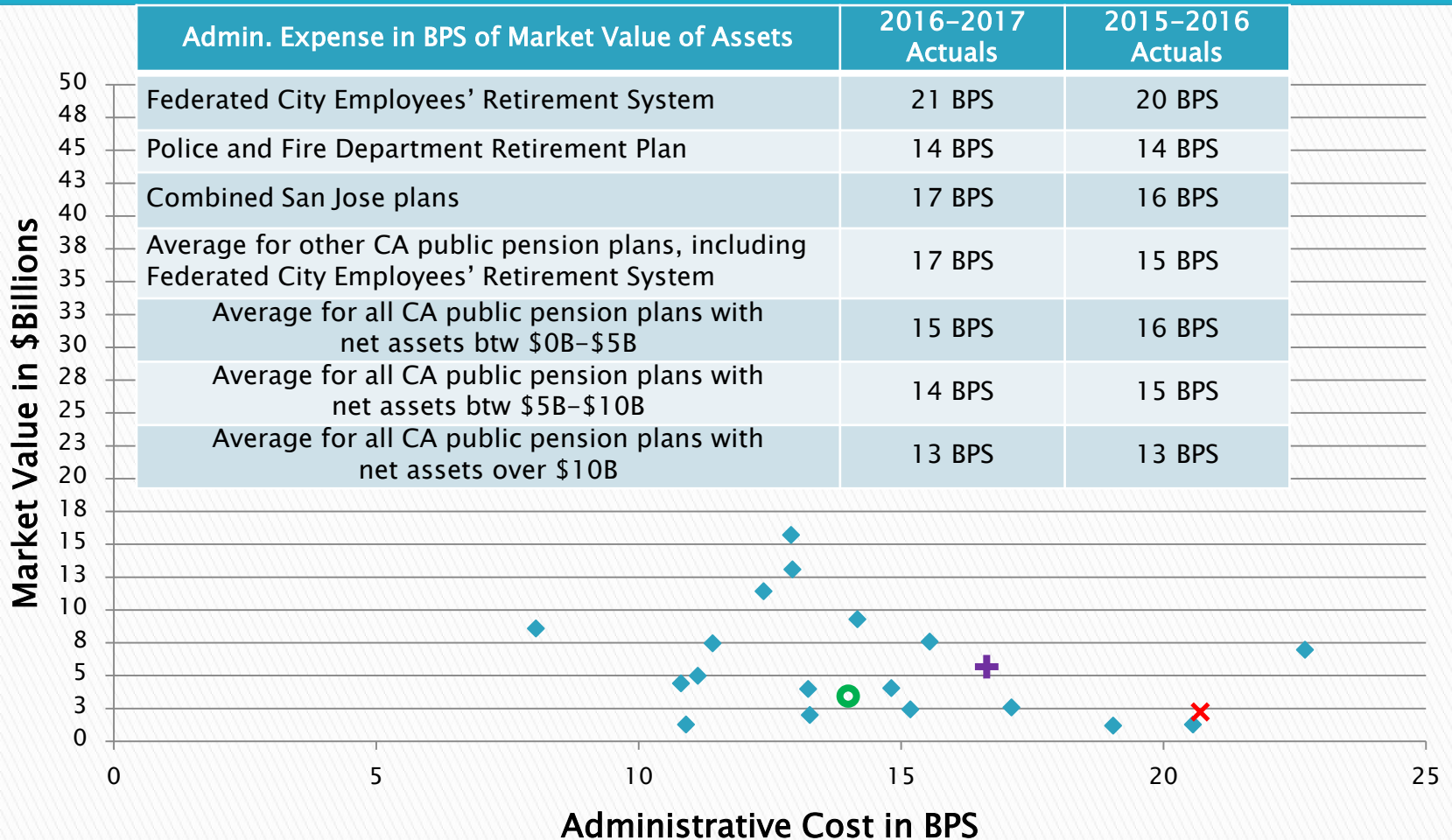
# Administrative Cost Comparison – in BPS

Administrative Expense in BPS of Market Value of Assets – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System , \$4,622,000

“O” below represents the Police and Fire Plan, \$4,817,000

“+” below represents the combined San Jose plans, \$9,439,000



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans' CAFRs

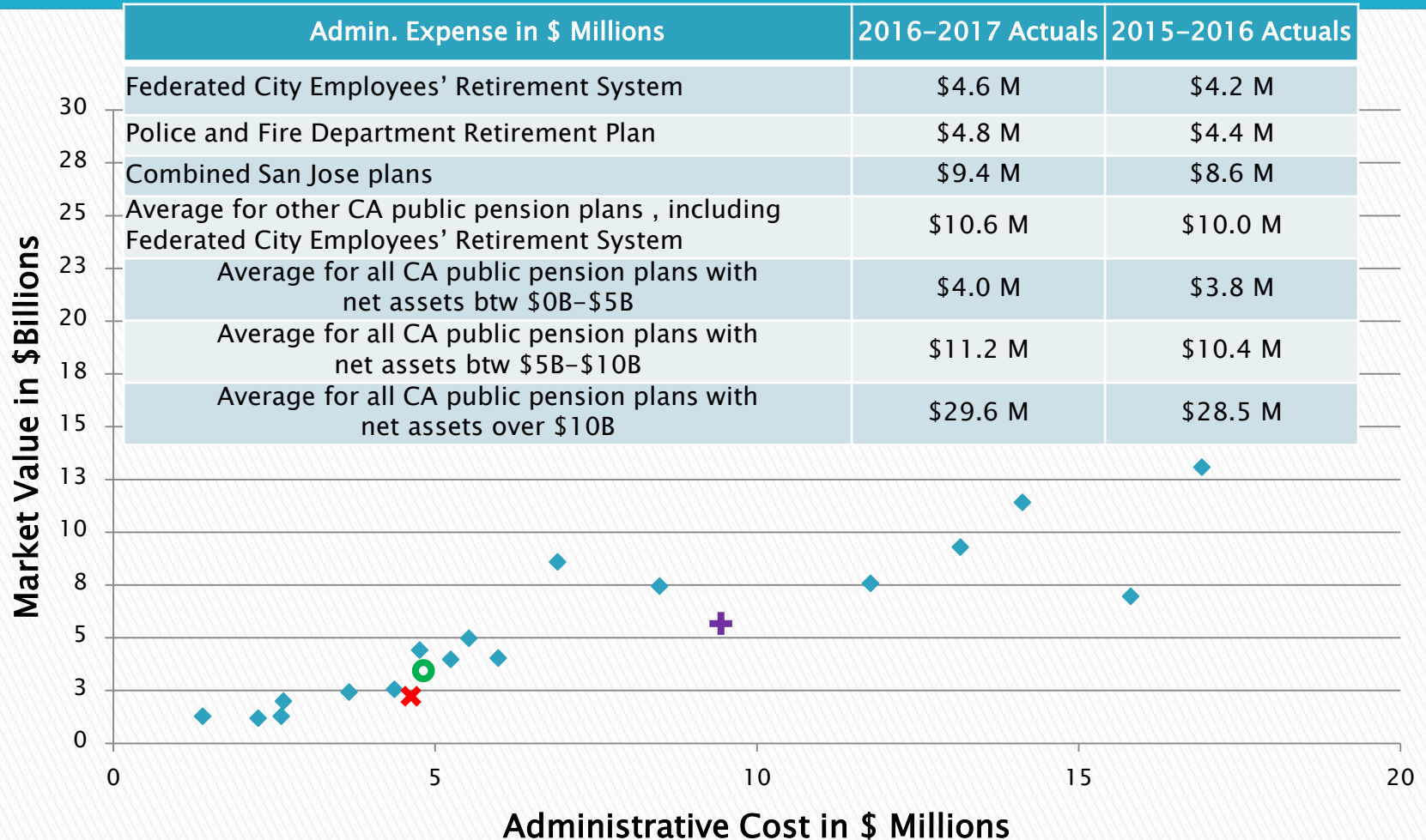
# Administrative Cost Comparison – in \$

Administrative Expense in BPS of Market Value of Assets – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System , \$4,622,000

“O” below represents the Police and Fire Plan, \$4,817,000

“+” below represents the combined San Jose plans, \$9,439,000



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans public information



# Memorandum

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

**FROM: Benjie Chua Foy**

**SUBJECT: Consideration of Proposed Budget  
for Fiscal Year 2018-2019**

**DATE: March 22, 2018**

Approved

*Robert L. Perez*

Date

3/28/18

## RECOMMENDATION

Discussion and action on the proposed budget for fiscal year 2018-2019.

## 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 \$184,231,413.

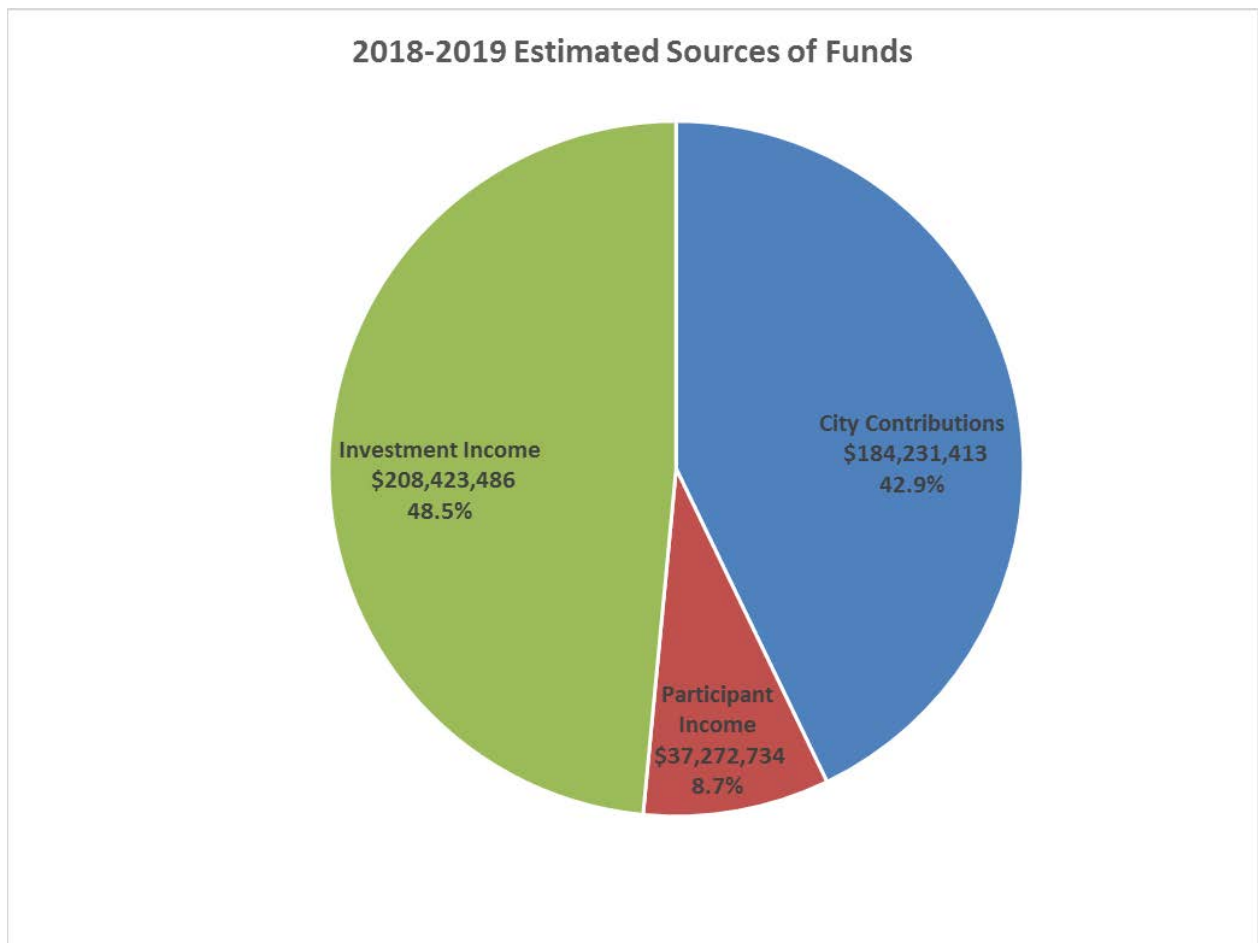
This contribution amount is based on the City contribution rates recommended by the actuary and adopted by the Board, applied as a factor against the City's total covered payroll. The FY19 contributions rates assume the Board's adoption in April/May inclusive of the changes from Measure F, as shown in the June 30, 2017 actuarial reports for pension and healthcare. The City's covered payroll is also based on the amounts shown in the June 30, 2017 actuarial reports for pension and healthcare.

## PARTICIPANT INCOME

Total member contributions are estimated at \$37,272,734, a 10.5% decrease from the 2017-2018 adopted amount. Member contributions are calculated based on the contribution rate for each tier. Police Tier 1 contribution rates for pension decreased from 10.88% to 10.28% while their covered payroll increased slightly from \$91.4 million to \$92.6 million. Fire Tier 1 contribution rates for pension and covered payroll both decreased slightly from 11.38% to 11.09% and from \$75.6 million to \$74.8 million, respectively. Police Tier 2 contribution rates for pension decreased from 15.17% to 13.71% and covered payroll increased from \$23.2 million to \$31.6 million, while Fire Tier 2 contribution rates for pension decreased from 16.26% to 15.13% while covered payroll increased from \$10.1 million to \$11.4 million. Healthcare contribution rates were reduced to 8.0% for Tier 1 members, while Tier 2 members had to go into the VEBA.

## INVESTMENT INCOME

Investment earnings are calculated based on the actuarial assumed rate of return of 6.875%. The beginning fund balance, along with the City's contributions are expected to earn the full rate while the member contributions offset with the expenditures are expected to earn less than the full rate.





## ***USES OF FUNDS***

### **PENSION BENEFITS AND HEALTH INSURANCE**

The pension benefits budget increased to \$213,116,000, an increase of \$9,541,000, or 4.69%, 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 decreased to \$23,492,000, a decrease of \$195,567, or 0.82%, which is the average decrease for the past five years. Health insurance includes health and dental insurance subsidies, as well as Medicare reimbursements.

### ***ADMINISTRATIVE EXPENSE BUDGET***

The proposed administrative expenses budget of \$6,259,000 is a net decrease of 9.0% or \$617,800 from the prior year proposed budget of \$6,876,800.

### **PERSONNEL SERVICES**

The budget for personnel services was reduced to \$3,778,000, a decrease of \$133,800, or 3.4% over the prior year adopted budget of \$3,911,800. 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 remained at 39.75. However, two of the positions are limited-date positions which expire on June 30, 2018. The proposed personnel changes for FY18-19 were originally requested to convert the limited-date positions to permanent positions. After discussions with the City Manager's and Budget Office, these two limited-date positions were extended only for FY18-19. The main reason for the decrease is due to the implementation of the VEBA which essentially reduces the City's contribution for healthcare for Tier 2 members.

### **NON-PERSONNEL / EQUIPMENT**

The budget for non-personnel / equipment was reduced to \$1,312,000, a decrease of \$52,300, or 3.8% over the prior year adopted budget of \$1,364,300. This category includes data processing costs for investments, rent, insurance, information technology hardware/software, pension administration annual maintenance fee, postage and printing, training, travel, and other office expenses. This reduction is due to several reasons:

- \$63,000 reduction in investment analytics and research due to the decrease in the risk management implementation budget to be in line with the contractual amounts due to Verus

## PROFESSIONAL SERVICES

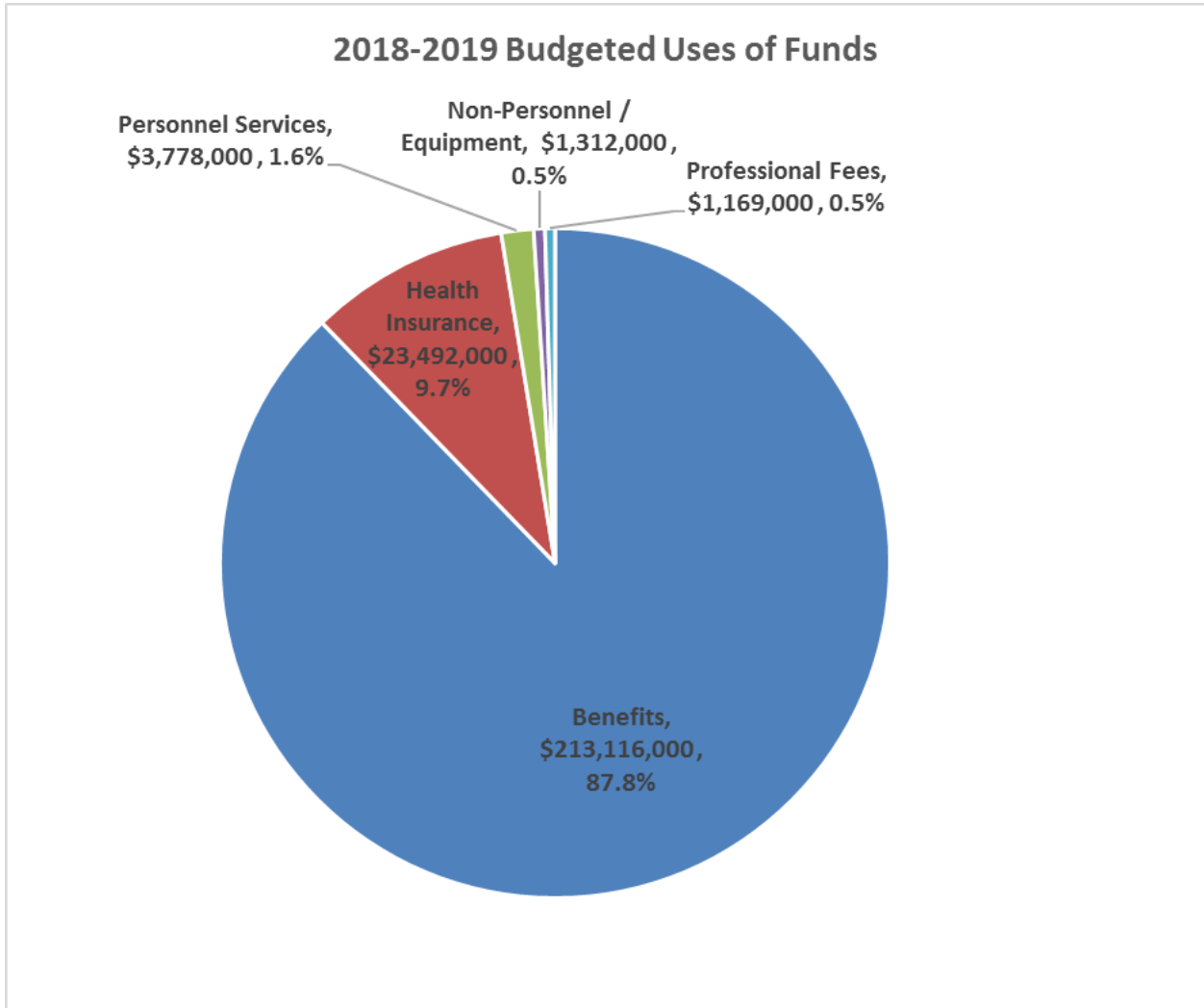
The budget for professional services was reduced to \$939,000, a decrease of \$123,700, or 11.6% over the prior year adopted budget of \$1,062,700. Funding is required to continue the professional services necessary to meet core business needs in the area of actuarial services, financial audit services, legal services, and temporary staffing services. Decreases in budgetary amounts for core professional services resulted from reducing the budgetary amounts to be in line with prior year trends which were offset by planned projects for FY18-19. These include the following:

- \$145,000 reduction in legal services budget to be consistent with past trends
- \$17,000 reduction in pension administration system-related budget to be consistent with past trends
- \$37,000 increase in temporary staffing services budget due to the pensionable earnings correction project, open enrollment and most significantly, the implementation of the new pension administration system which are required for IT, accounting and benefits as parallel productions are occurring.

## MEDICAL SERVICES

The budget for medical services was reduced to \$230,000, a decrease of \$308,000, or 57.3% over the prior year adopted budget of \$538,000. 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). Reasons for the decrease include the following:

- Prior year's budget was prepared in anticipation of a 3-doctor Board medical advisor panel which has not been implemented
- Since Dr. Tierman was a new consultant, it was not known how many reports she would be capable of producing. It was not until late 2017 that her pattern of 4 a month per plan evolved
- Fiscal year 2017 started with a backlog of 30 IME reports received and many reviews required of Dr. Tierman, which were included in last year's budget.
- Current year budget is more in line with a typical year.



Attachment: Proposed Budget for Fiscal Year 2018-2019

**PROPOSED BUDGET**

**FISCAL YEAR 2018-2019**

**POLICE AND FIRE DEPARTMENT RETIREMENT PLAN**

April 5, 2018

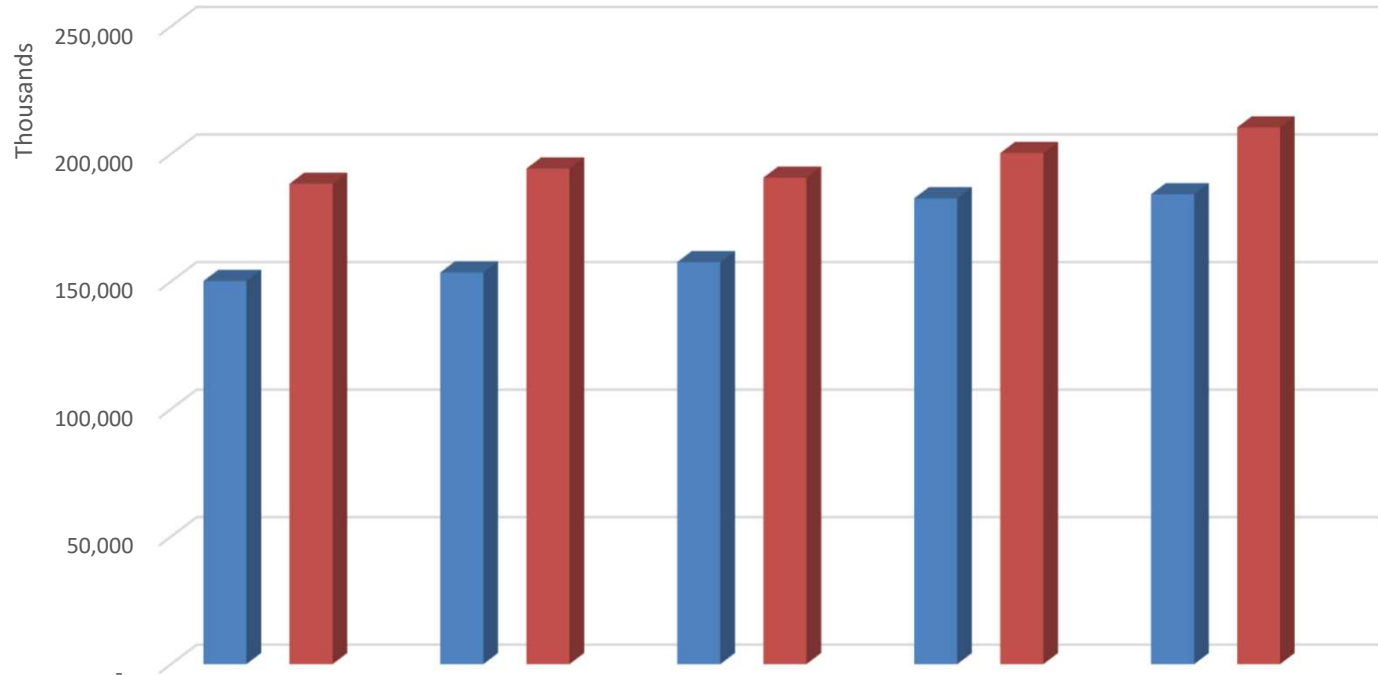
**POLICE & FIRE DEPARTMENT RETIREMENT PLAN**

**Statement of Source and Use of Funds**

	<b>(A)</b> <b>2016-2017</b> <b>Actual</b>	<b>(B)</b> <b>2017-2018</b> <b>Modified</b>	<b>(C)</b> <b>2017-2018</b> <b>Forecast</b>	<b>(D)</b> <b>2018-2019</b> <b>Proposed</b>	<b>(A) to (B)</b> <b>Increase</b> <b>(Decrease)</b>	<b>(B) - (C)</b> <b>Increase</b> <b>(Decrease)</b>	<b>(C) - (D)</b> <b>Increase</b> <b>(Decrease)</b>
<b>SOURCE OF FUNDS</b>							
Beginning Fund Balance							
Claims Reserve	3,167,080,000	3,442,939,000	3,442,939,000	<b>3,631,488,699</b>	275,859,000	0	188,549,699
Total Beginning Fund Balance	3,167,080,000	3,442,939,000	3,442,939,000	<b>3,631,488,699</b>	275,859,000	0	188,549,699
Transfers							
City Contributions	157,624,000	180,811,565	182,628,714	<b>184,231,413</b>	23,187,565	1,817,149	1,602,699
1970 COLA	534	530	534	<b>534</b>	(4)	4	0
1980 COLA	11,348	11,500	10,324	<b>10,260</b>	152	(1,176)	(64)
1990 COLA	5,015	4,445	3,758	<b>3,804</b>	(570)	(687)	46
Total Transfers	157,640,897	180,828,040	182,643,330	<b>184,246,011</b>	23,187,143	1,815,290	1,602,681
Revenue							
Participant Income	38,696,000	41,630,579	39,780,746	<b>37,272,734</b>	2,934,579	(1,849,833)	(2,508,011)
Investment Income, net of expenses	305,187,000	230,461,250	198,708,474	<b>208,423,486</b>	(74,725,750)	(31,752,776)	9,715,012
Total Revenue	343,883,000	272,091,829	238,489,220	<b>245,696,221</b>	(71,791,171)	(33,602,609)	7,207,001
<b>TOTAL SOURCE OF FUNDS</b>	<b><u>3,668,603,897</u></b>	<b><u>3,895,858,869</u></b>	<b><u>3,864,071,550</u></b>	<b><u>4,061,430,931</u></b>	<b><u>227,254,972</u></b>	<b><u>(31,787,319)</u></b>	<b><u>197,359,381</u></b>

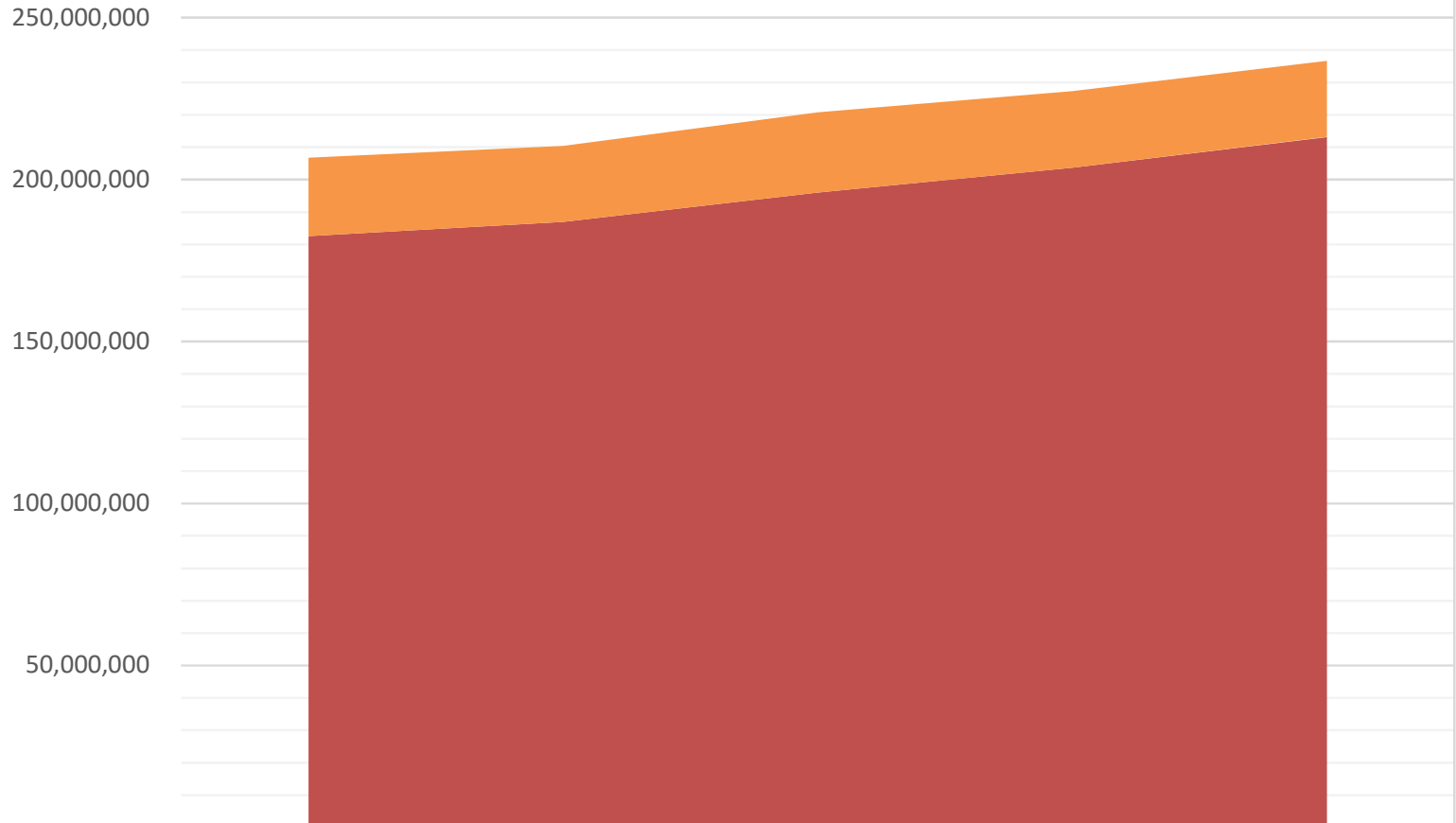


## POLICE & FIRE DEPARTMENT RETIREMENT PLAN Total City Contributions & Covered Payroll



	FY 14-15	FY 15-16	FY 16-17	FY 17-18 (Forecast)	FY 18-19 (Estimate)
<span style="color: blue;">■</span> Total City Contributions	150,189,000	153,545,000	157,624,000	182,628,714	184,231,413
Total City Contribution % Change	6.6%	2.2%	2.7%	15.9%	0.9%
<span style="color: red;">■</span> Total Covered Payroll	188,338,155	194,304,844	190,736,887	200,379,436	210,441,000
Total Covered Payroll % Change	0.2%	3.2%	-1.8%	5.1%	5.0%

## POLICE & FIRE DEPARTMENT RETIREMENT PLAN Pension Benefits and Health Insurance



	FY 2015 - Actual	FY 2016 - Actual	FY 2017 - Actual	FY 2018 - Forecast	FY 2019 - Proposed
Total Benefits	206,776,000	210,389,000	220,831,000	227,262,567	236,608,000
Health Insurance	24,205,000	23,449,000	24,799,000	23,687,567	23,492,000
Pension Benefits	182,571,000	186,940,000	196,032,000	203,575,000	213,116,000
Health Insurance % Change	7.5%	4.2%	10.2%	5.2%	4.4%
Pension Benefits % Change	9.1%	11.7%	17.1%	21.6%	27.3%

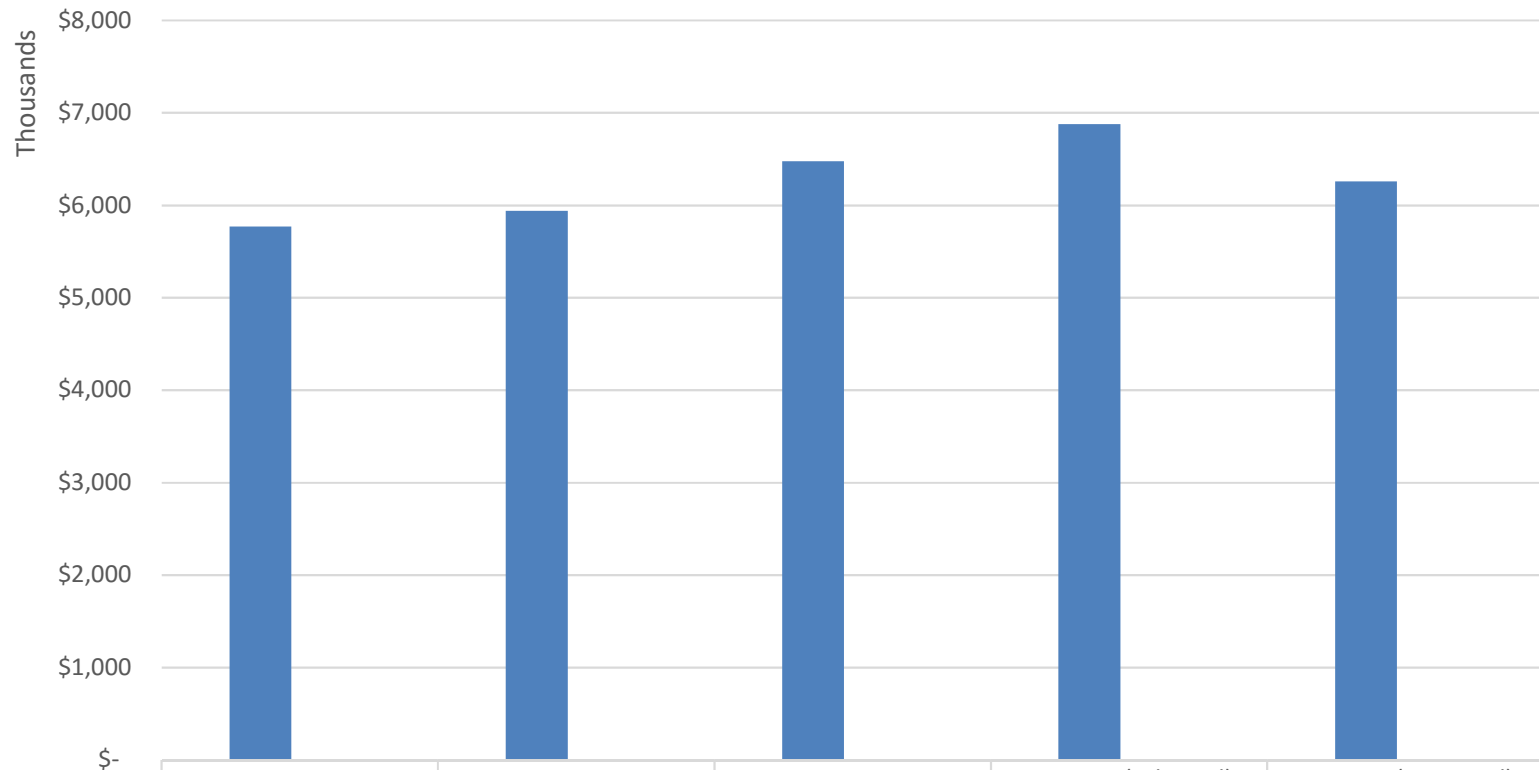


## POLICE & FIRE DEPARTMENT RETIREMENT PLAN

### Administrative Expenses: FY 2018-2019

	(A) 2016-2017 Actual	(B) 2017-2018 Adopted	(C) 2017-2018 Forecast	(D) 2018-2019 Proposed	(A) to (B) Increase (Decrease)	(B) - (C) Increase (Decrease)	(C) - (D) Increase (Decrease)
<b>PERSONNEL SERVICES</b>							
Salaries and employee benefits	3,065,147	3,911,800	3,242,214	<b>3,778,000</b>	846,653	(669,586)	535,786
Total Personnel Services	3,065,147	3,911,800	3,242,214	<b>3,778,000</b>	846,653	(669,586)	535,786
<b>NON-PERSONNEL / EQUIPMENT</b>							
Investment analytics and research	491,255	578,000	442,995	<b>515,000</b>	86,745	(135,005)	72,005
Insurance	168,548	180,000	176,852	<b>190,000</b>	11,452	(3,148)	13,148
IT hardware / software	62,613	78,800	36,291	<b>90,000</b>	16,187	(42,509)	53,709
LRS - annual maintenance fee	103,717	105,000	106,829	<b>110,000</b>	1,283	1,829	3,171
Postage and printing	40,436	105,000	36,848	<b>90,000</b>	64,564	(68,152)	53,152
Rent	197,052	200,000	194,269	<b>200,000</b>	2,948	(5,731)	5,731
Training and travel	30,817	70,000	8,476	<b>70,000</b>	39,183	(61,524)	61,524
Other non-personnel / equipment	37,218	47,500	41,553	<b>47,000</b>	10,282	(5,947)	5,447
Total Non-personnel / Equipment	1,131,656	1,364,300	1,044,113	<b>1,312,000</b>	232,644	(320,187)	267,887
<b>PROFESSIONAL SERVICES</b>							
Actuary	375,673	230,000	250,012	<b>230,000</b>	(145,673)	20,012	(20,012)
External auditor	59,097	70,000	62,232	<b>70,000</b>	10,903	(7,768)	7,768
Legal	324,990	475,000	274,254	<b>330,000</b>	150,010	(200,746)	55,746
Pension administrative system	22,202	52,500	38,018	<b>35,500</b>	30,298	(14,482)	(2,518)
Temporary staffing agencies	83,056	132,000	157,269	<b>169,000</b>	48,944	25,269	11,731
Other professional services	43,802	103,200	95,955	<b>104,500</b>	59,398	(7,245)	8,545
Total Professional Services	908,820	1,062,700	877,740	<b>939,000</b>	153,880	(184,960)	61,260
<b>MEDICAL SERVICES</b>							
Independent medical examiners	172,975	302,000	96,250	<b>140,000</b>	129,025	(205,750)	43,750
Medical consultant	106,200	236,000	45,350	<b>90,000</b>	129,800	(190,650)	44,650
Total Medical Services	279,175	538,000	141,600	<b>230,000</b>	258,825	(396,400)	88,400
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<b>5,384,798</b>	<b>6,876,800</b>	<b>5,305,667</b>	<b>6,259,000</b>	<b>1,492,002</b>	<b>(1,571,133)</b>	<b>953,333</b>

**POLICE & FIRE DEPARTMENT RETIREMENT PLAN**  
**Administrative Expense Budget**  
**FY 2014-2015 to FY 2018-2019**



	FY 14-15	FY 15-16	FY 16-17	FY 17-18 (Adopted)	FY 18-19 (Proposed)
■ Admin Exp Budget*	\$5,768,489	\$5,940,703	\$6,479,200	\$6,876,800	\$6,259,000
■ % Change	17.2%	3.0%	9.1%	6.1%	-9.0%

\* Amount includes budget for operations only.

**OFFICE OF RETIREMENT SERVICES**

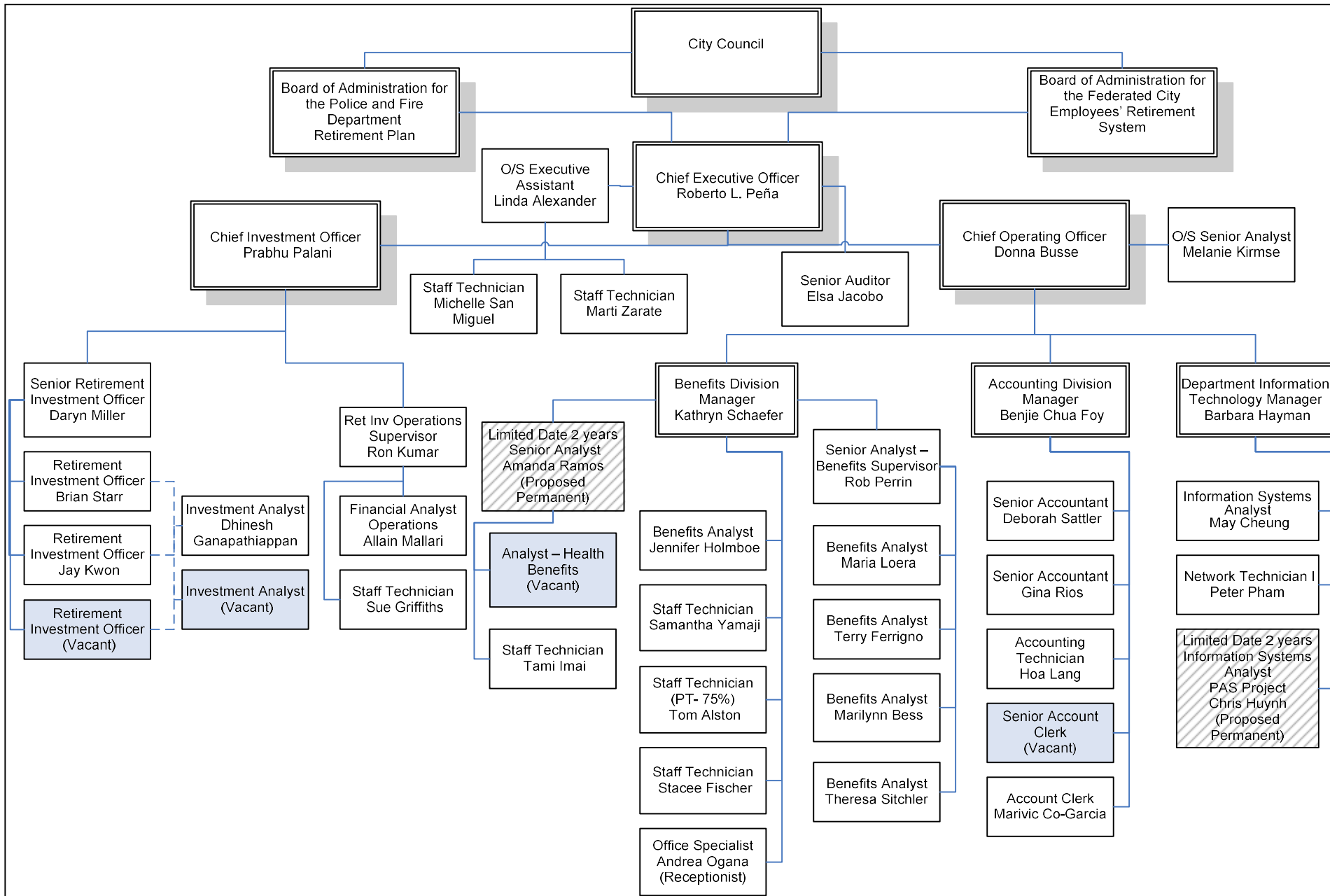
**Departmental Position Detail**

<b>Position</b>	<b>2016-2017 Adopted (1)</b>	<b>2017-2018 Adopted (2)</b>	<b>2017-2018 Forecast (3)</b>	<b>2018-2019 Proposed (4)</b>	<b>Increase / (Decrease) (2 to 4)</b>	<b>Increase / (Decrease) (3 to 4)</b>	<b>Explanation</b>
Account Clerk II	1.00	1.00	1.00	1.00	-	-	
Accounting Technician	1.00	1.00	1.00	1.00	-	-	
Analyst I/II	6.00	6.00	6.00	6.00	-	-	
Assistant Director and Chief Investment Officer	1.00	1.00	1.00	1.00	-	-	Previous one left April 2017 and a new one was hired in March 2018
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	-	-	Previous one left January 2017 and a new one was hired in September 2017
Executive Assistant	0.00	0.00	1.00	1.00	1.00	-	Reclassification from Staff Tech in December 2017
Financial Analyst	1.00	1.00	1.00	1.00	-	-	New one hired December 2017
Investments Operations Officer	0.00	1.00	1.00	1.00	-	-	Reclassification from RIO to this one in July 2017
Information Systems Analyst	2.00	2.00	2.00	2.00	-	-	
Network Technician I/II/III	1.00	1.00	1.00	1.00	-	-	
Office Specialist II	1.00	1.00	1.00	1.00	-	-	
Retirement Investment Analyst I/II	2.00	2.00	1.00	2.00	-	1.00	Vacant position
Retirement Investment Officer	4.00	3.00	2.00	3.00	-	1.00	Reclassification from RIO to this one in July 2017; vacant position
Senior Account Clerk	1.00	1.00	1.00	1.00	-	-	
Senior Accountant	2.00	2.00	2.00	2.00	-	-	
Senior Analyst	2.00	2.00	2.00	2.00	-	-	
Senior Auditor	1.00	1.00	1.00	1.00	-	-	New one hired December 2017
Senior Retirement Investment Officer	1.00	1.00	1.00	1.00	-	-	
Staff Technician	7.00	7.00	6.00	6.00	(1.00)	-	Reclassification from Staff Tech in December 2017
Staff Technician PT	0.75	0.75	0.75	0.75	-	-	
<b>Total Positions</b>	<b>39.75</b>	<b>39.75</b>	<b>37.75</b>	<b>39.75</b>	<b>0.00</b>	<b>2.00</b>	

OFFICE OF RETIREMENT SERVICES

Proposed Organizational Chart

FY18-19





# Police and Fire Annual Fee Report - 2016

## Executive Summary

It is our pleasure to present the second annual Fee Report for the Police and Fire Department Retirement Plan (“Police and Fire”) covering calendar year 2016. Last year, staff released the first iteration for calendar year 2015 with a commitment to produce the report on an annual basis. The goal of the report is to provide insight into the management and incentive fees paid to investment managers along with the overall costs of operating the investment program. Pension plan fee data is generally underreported in the industry and only captures the portion of fees that are paid by invoice. This excludes often sizable embedded fees that are paid out of certain fund structures.

It is important to note that fees are a byproduct 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 current asset allocation as illustrated in Tables 1 and 2 is an expression of the Board’s Investment Policy Statement that “Investments shall be diversified with the intent to minimize the risk of large investment losses”.

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. Building a Private Equity allocation at the same fee level as an active or passive long-only Global Equity allocation is simply not possible. In addition, asset class structuring can have significant impact on fees. The use of active management versus passive management, as well as alternative strategies within traditional asset classes will increase fees. Finally, when evaluating investment managers, Staff places a significant emphasis on fees, negotiating for lower fees, and analyzing that expected value or return is worth the expected cost.

This year, the report includes a comparison to last year’s data, and highlights key changes to fee ratios and the drivers of those changes. Some are attributable to manager performance and others are due to investment manager line-up changes as outlined in the report.

**For calendar year 2016, management and incentive fees for the pension plan totaled \$38.1 million with a fee ratio of 1.21% as compared to \$33.3 million and 1.06% for calendar year 2015. The health care trust totaled \$0.2 million with a fee ratio of 0.28%,**

both figures consistent with 2015. Other investment-related costs (Staff, consultants, custodian bank, investment legal, etc.) for the pension plan were \$2.5 million with a fee ratio of 0.08% as compared to \$2.3 million and 0.07% for 2015, and the health care trust totaled \$0.1 million with a fee ratio of 0.11% as compared to \$0.1 million and 0.10% for 2015.

Table 1

Pension Average Asset Allocation for 2016

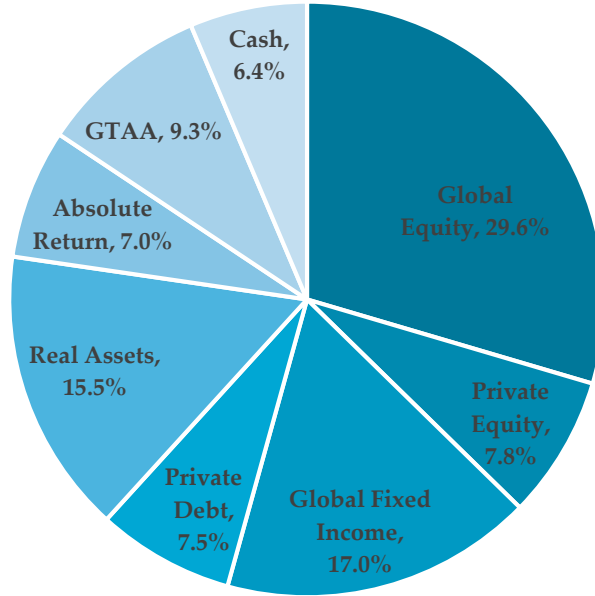
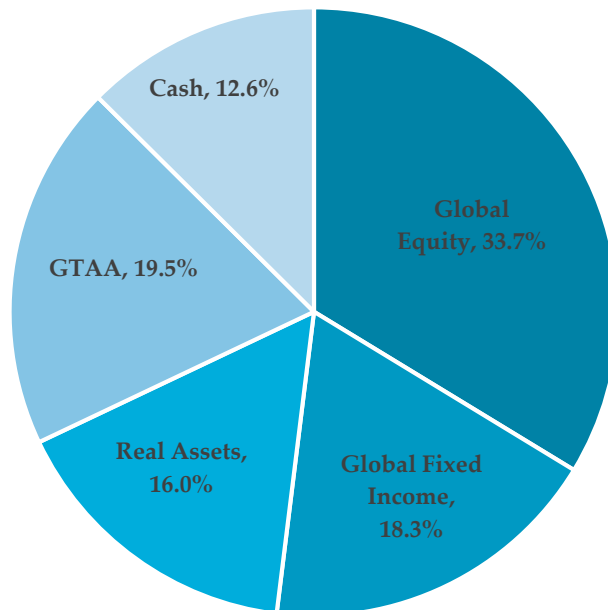


Table 2

Health Care Trust Average Asset Allocation for 2016





## Introduction

The fees in this report represent management fees, incentive fees, 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 rate and are only applicable to certain fund structures. It's 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. Incentive fees can be negative in the case of performance-based fee clawback provisions for underperformance. Both management and incentive fee amounts exclude fund operating expenses charged by investment managers for overhead not directly related to investment management. Trading expenses such as broker commissions are also excluded, as gross performance returns are reported after these expenses have been deducted. Other costs include salary and benefit compensation for investment staff (includes a 50% allocation for the CEO), cost of general consultant and Absolute Return consultant, custodian, and other third party vendors utilized by the investment program.

The fees in this report do not include 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; nor is it intended to include all categories of fees, expenses and charges identified in the Institutional Limited Partners Association (ILPA) fee reporting template.

## Data Sources

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

For most separately managed accounts and public markets commingled funds, quarterly fee invoices from the fund managers were used as the data source. Mutual funds, ETF's, short term investment funds (Cash), and certain public markets commingled funds that deduct fees directly from the funds were calculated by multiplying each fund's fee ratio

by the fund's average balances. The average balances were sourced from our custodian State Street.

The remaining manager fees were sourced from our managers directly. Absolute Return fees were provided by managers with independent quarterly re-calculations and reconciliations completed by our absolute return consultant Albourne. Private Equity fees were gathered by asking our managers to complete the Institutional Limited Partners Association (ILPA) fee reporting template or a similar template. The ILPA template is intended to unify and codify the presentation of fees, expenses, and carried interest information by fund managers to Limited Partners. The remaining manager fees in Global Fixed Income, Private Debt, Real Assets, and GTAA were obtained by having the fund managers fill out a fee template designed by staff.

Within the Other Costs section, consultant, custodian, and other vendor costs were sourced from fee invoices sent by the vendors. Investment staff salary and benefits were allocated to each of the 4 San Jose plans by pro-rating the total cost by the average monthly balance of each plan. Similarly, legal costs incurred by the Police and Fire Department were allocated between the pension plan and health care trust by pro-rating the total cost by the average monthly balance of each plan.

The pension plan uses an Overlay fund that includes investments across multiple asset classes. Overlay fees were allocated on a notional basis to the respective asset classes that were overlaid during the year.

## Changes from 2015 Report

In an effort to provide the most informative and consistent data possible, several changes have been retroactively made to the 2015 report. The methodology changes are outlined below and updated values are represented in the 2015 columns of the Year-over-Year comparison tables.

Updated fee data was received and updated from managers which increased the 2015 Pension Total Plan fee ratio from 1.01% to 1.06%. One manager was re-categorized from Active to Hedged management type.

Staff cost in 2015 only included cash compensation and was split evenly between the Federated and Police and Fire plans. The total cost has been updated to include both cash compensation and benefits and is now pro-rated to each of the 4 San Jose plans based on their average monthly balances.

In 2015, other third party vendors such as data vendors and investment oversight providers were excluded. These are now included in the Other Vendors column along with investment-related legal and research providers.

The Police and Fire pension plan includes a passive Russell 3000 proxy for Private Equity that was shown within the Global Equity asset class in 2015. The fees associated with this proxy have been moved to Private Equity.

Finally, the multi-asset Overlay collateral account balances were captured under the Cash asset class in 2015. The Overlay notional balance of each asset class is now allocated to the respective asset class that the overlay provided economic exposure to.

## Total Portfolio Fee Summaries

The following tables present fees by both 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 a passive 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 opportunities such as non-exchange listed companies, taking listed companies private, investing in the credit market by providing loans, and investing in non-exchange listed 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-Hood-Beebower methodology to decompose the change in contribution to total plan fee ratio into 1) impact due to weights and 2) impact due to fee ratios.

*Note: Some values on the report may not sum due to rounding. The dollar values displayed throughout the report are shown in thousands.*

Table 3

Pension Fees by Asset Class and Management Type

Asset Class	Mgmt Fees (\$000's)	Incent Fees (\$000's)	Mgmt and Incent Fees (\$000's)	Average Balance (\$000's)	Average Weight	Fee Ratio - Mgmt Fees	Fee Ratio - Incent Fees	Fee Ratio - Mgmt and Incent Fees	% of Total Plan Fee Ratio	Contrib to Total Plan Fee Ratio
Global Equity	5,200	100	5,300	932,100	29.6%	0.55%	0.02%	0.57%	13.9%	0.17%
Passive	300	-	300	462,100	14.7%	0.07%	0.00%	0.07%	0.9%	0.01%
Active	3,100	-	3,100	381,800	12.1%	0.80%	0.00%	0.80%	8.0%	0.10%
Hedged	1,800	100	1,900	88,200	2.8%	2.01%	0.16%	2.17%	5.0%	0.06%
Private Equity	2,800	1,900	4,600	244,500	7.8%	1.13%	0.76%	1.89%	12.1%	0.15%
Passive	30	-	30	88,600	2.8%	0.03%	0.00%	0.03%	0.1%	0.00%
Private	2,700	1,900	4,600	155,900	4.9%	1.76%	1.19%	2.95%	12.1%	0.15%
Global Fixed Income	4,300	4,400	8,700	535,600	17.0%	0.81%	0.81%	1.62%	22.8%	0.28%
Passive	60	-	60	300	0.0%	N/A	0.00%	N/A	0.2%	0.00%
Active	1,500	-	1,500	298,600	9.5%	0.50%	0.00%	0.50%	3.9%	0.05%
Hedged	2,800	4,400	7,100	236,700	7.5%	1.17%	1.84%	3.01%	18.7%	0.23%
Private Debt	3,100	-400	2,700	235,000	7.5%	1.32%	-0.16%	1.16%	7.1%	0.09%
Private	3,100	-400	2,700	235,000	7.5%	1.32%	-0.16%	1.16%	7.1%	0.09%
Real Assets	6,900	1,600	8,500	490,200	15.5%	1.40%	0.33%	1.73%	22.3%	0.27%
Passive	60	-	60	48,400	1.5%	0.13%	0.00%	0.13%	0.2%	0.00%
Active	1,100	-	1,100	187,000	5.9%	0.59%	0.00%	0.59%	2.9%	0.04%
Hedged	1,800	1,000	2,700	65,600	2.1%	2.69%	1.50%	4.19%	7.2%	0.09%
Private	3,900	600	4,600	189,200	6.0%	2.08%	0.34%	2.43%	12.0%	0.15%
Absolute Return	3,800	1,900	5,700	222,100	7.0%	1.70%	0.87%	2.57%	15.0%	0.18%
Hedged	3,800	1,900	5,700	222,100	7.0%	1.70%	0.87%	2.57%	15.0%	0.18%
GTAA	2,400	-	2,400	292,300	9.3%	0.82%	0.00%	0.82%	6.3%	0.08%
Active	2,400	-	2,400	292,300	9.3%	0.82%	0.00%	0.82%	6.3%	0.08%
Cash	220	-	220	201,200	6.4%	0.11%	0.00%	0.11%	0.6%	0.01%
Passive	220	-	220	201,200	6.4%	0.11%	0.00%	0.11%	0.6%	0.01%
<b>Total Plan</b>	<b>28,720</b>	<b>9,500</b>	<b>38,120</b>	<b>3,153,000</b>	<b>100.0%</b>	<b>0.91%</b>	<b>0.30%</b>	<b>1.21%</b>	<b>100.0%</b>	<b>1.21%</b>

The table above illustrates that management and incentive fees for the pension plan totaled \$38.1 million for 2016 which equated to a total plan fee ratio of 1.21%. The Global Fixed Income and Real Assets asset classes contributed the most to the total plan fee ratio at 0.28% and 0.27%, respectively. The GTAA and Private Debt asset classes contributed the least to the total plan fee ratio at 0.08% and 0.09%, respectively.

Table 4

Pension Fees by Management Type

Type	Mgmt Fees (\$000's)	Incent Fees (\$000's)	Mgmt and Incent Fees (\$000's)	Average Balance (\$000's)	Average Weight	Fee Ratio - Mgmt Fees	Fee Ratio - Incent Fees	Fee Ratio - Mgmt and Incent Fees	% of Total Plan Fee Ratio	Contrib to Total Plan Fee Ratio
Passive	700	-	700	800,500	25.4%	0.09%	0.00%	0.09%	1.8%	0.02%
Active	8,100	-	8,100	1,159,800	36.8%	0.70%	0.00%	0.70%	21.2%	0.26%
Hedged	10,100	7,400	17,500	612,600	19.4%	1.65%	1.21%	2.86%	45.8%	0.56%
Private	9,800	2,100	11,900	580,100	18.4%	1.69%	0.36%	2.05%	31.2%	0.38%
<b>Total Plan</b>	<b>28,720</b>	<b>9,500</b>	<b>38,120</b>	<b>3,153,000</b>	<b>100.0%</b>	<b>0.91%</b>	<b>0.30%</b>	<b>1.21%</b>	<b>100.0%</b>	<b>1.21%</b>

For the total pension plan, hedged management strategies accounted for 0.56% of the total plan fee ratio and represented about 19% of average plan assets. Private management strategies were the next largest contributor to the total plan fee ratio accounting for 0.38% of the total plan fee ratio and represented 18% of average plan assets. Passive and active management strategies accounted for 0.02% and 0.26% of the total plan fee ratio and represented 25% and 37% of plan assets, respectively.

**Table 5**

**Pension Other Investment Costs**

<b>Staff Salary and Benefits (\$000's)</b>	<b>Consultants (\$000's)</b>	<b>Custodian (\$000's)</b>	<b>Other Vendors (\$000's)</b>	<b>Total Other Costs (\$000's)</b>	<b>Other Costs Fee Ratio</b>
950	820	380	360	2,510	0.08%

Other investment costs for the pension plan equated to a total fee ratio of 0.08%. As previously discussed, other costs include salary and benefits for investment staff, cost of general consultant and Absolute Return consultant, custodian, and other vendors including investment-related legal costs and research tools used by Staff.

**Table 6**

**Health Care Fees by Asset Class and Management Type**

<b>Asset Class</b>	<b>Mgmt Fees (\$000's)</b>	<b>Incent Fees (\$000's)</b>	<b>Mgmt and Incent Fees (\$000's)</b>	<b>Average Balance (\$000's)</b>	<b>Average Weight</b>	<b>Fee Ratio - Mgmt Fees</b>	<b>Fee Ratio - Incent Fees</b>	<b>Fee Ratio - Mgmt and Incent Fees</b>	<b>% of Total Plan Fee Ratio</b>	<b>Contrib to Total Plan Fee Ratio</b>
<b>Global Equity</b>	37	-	37	28,400	33.7%	0.13%	0.00%	0.13%	15.8%	0.04%
Passive	37	-	37	28,400	33.7%	0.13%	0.00%	0.13%	15.8%	0.04%
<b>Global Fixed Income</b>	8	-	8	15,400	18.3%	0.05%	0.00%	0.05%	3.3%	0.01%
Passive	8	-	8	15,400	18.3%	0.05%	0.00%	0.05%	3.3%	0.01%
<b>Real Assets</b>	41	-	41	13,500	16.0%	0.30%	0.00%	0.30%	17.5%	0.05%
Passive	8	-	8	6,700	7.9%	0.12%	0.00%	0.12%	3.4%	0.01%
Active	33	-	33	6,800	8.1%	0.49%	0.00%	0.49%	14.1%	0.04%
<b>GTAA</b>	137	-	137	16,400	19.5%	0.84%	0.00%	0.84%	58.5%	0.16%
Active	137	-	137	16,400	19.5%	0.84%	0.00%	0.84%	58.5%	0.16%
<b>Cash</b>	12	-	12	10,600	12.6%	0.11%	0.00%	0.11%	5.0%	0.01%
Passive	12	-	12	10,600	12.6%	0.11%	0.00%	0.11%	5.0%	0.01%
<b>Total Plan</b>	<b>235</b>	<b>-</b>	<b>235</b>	<b>84,300</b>	<b>100.0%</b>	<b>0.28%</b>	<b>0.00%</b>	<b>0.28%</b>	<b>100.0%</b>	<b>0.28%</b>

The table above illustrates that management and incentive fees for the health care trust totaled \$235,000 for 2016 which equated to a total plan fee ratio of 0.28%. The GTAA

asset class contributed the most to the total plan fee ratio at 0.16%. The Global Fixed Income asset class contributed the least to the total plan fee ratio at 0.01%.

**Table 7**

**Health Care Fees by Management Type**

Type	Mgmt Fees (\$000's)	Incent Fees (\$000's)	Mgmt and Incent Fees (\$000's)	Average Balance (\$000's)	Average Weight	Fee Ratio - Mgmt Fees	Fee Ratio - Incent Fees	Fee Ratio - Mgmt and Incent Fees	% of Total Plan Fee Ratio	Contrib to Total Plan Fee Ratio
Passive	64	-	64	61,000	72.4%	0.11%	0.00%	0.11%	27.4%	0.08%
Active	170	-	170	23,200	27.6%	0.73%	0.00%	0.73%	72.4%	0.20%
<b>Total Plan</b>	<b>235</b>	<b>-</b>	<b>235</b>	<b>84,300</b>	<b>100.0%</b>	<b>0.28%</b>	<b>0.00%</b>	<b>0.28%</b>	<b>100.0%</b>	<b>0.28%</b>

For the total health care trust, active management strategies accounted for 0.20% of the total plan fee ratio and represented about 28% of average plan assets. Passive strategies accounted for 0.08% of the total plan fee ratio and represented 72% of plan assets.

**Table 8**

**Health Care Other Investment Costs**

Staff Salary and Benefits (\$000's)	Consultants (\$000's)	Custodian (\$000's)	Other Vendors (\$000's)	Total Other Costs (\$000's)	Other Costs Fee Ratio
25	19	42	10	96	0.11%

Other investment costs for the health care trust equated to a total fee ratio of 0.11%. As previously discussed, other costs include salary and benefits for investment staff, cost of general consultant, custodian, and other vendors including investment-related legal costs and research tools used by Staff.

Table 9

## Pension Year-over-Year Comparison by Asset Class and Management Type

Asset Class	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Global Equity	30.0%	29.6%	-0.4%	5,100	5,200	100	1,000	100	-900	6,100	5,300	-800	0.64%	0.57%	-0.08%	0.19%	0.17%	-0.03%	0.00%	-0.02%
Passive	15.2%	14.7%	-0.5%	400	300	-100	-	-	-	400	300	-100	0.08%	0.07%	-0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Active	12.6%	12.1%	-0.5%	3,300	3,100	-200	-	-	-	3,300	3,100	-200	0.83%	0.80%	-0.03%	0.10%	0.10%	-0.01%	0.00%	0.00%
Hedged	2.3%	2.8%	0.5%	1,300	1,800	500	1,000	100	-900	2,400	1,900	-500	3.37%	2.17%	-1.20%	0.08%	0.06%	-0.02%	0.02%	-0.03%
Private Equity	8.3%	7.8%	-0.5%	2,800	2,800	-	900	1,900	1,000	3,700	4,600	900	1.42%	1.89%	0.47%	0.12%	0.15%	0.03%	-0.01%	0.04%
Passive	3.3%	2.8%	-0.5%	30	30	-	-	-	-	30	30	-	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Private	5.0%	4.9%	0.0%	2,800	2,700	-100	900	1,900	1,000	3,700	4,600	900	2.36%	2.95%	0.59%	0.12%	0.15%	0.03%	0.00%	0.03%
Global Fixed Income	17.2%	17.0%	-0.2%	4,800	4,300	-500	900	4,400	3,500	5,600	8,700	3,100	1.03%	1.62%	0.59%	0.18%	0.28%	0.10%	0.00%	0.10%
Passive	-0.3%	0.0%	0.3%	24	60	36	-	-	-	24	60	36	0.24%	N/A	N/A	0.00%	0.00%	0.00%		
Active	9.3%	9.5%	0.2%	1,500	1,500	-	-	-	-	1,500	1,500	-	0.51%	0.50%	-0.01%	0.05%	0.05%	0.00%	0.00%	0.00%
Hedged	8.2%	7.5%	-0.7%	3,200	2,800	-400	900	4,400	3,500	4,100	7,100	3,000	1.58%	3.01%	1.43%	0.13%	0.23%	0.10%	-0.01%	0.11%
Private Debt	7.2%	7.5%	0.2%	3,300	3,100	-200	600	-400	-1,000	3,900	2,700	-1,200	1.72%	1.16%	-0.56%	0.12%	0.09%	-0.04%	0.00%	-0.04%
Private	7.2%	7.5%	0.2%	3,300	3,100	-200	600	-400	-1,000	3,900	2,700	-1,200	1.72%	1.16%	-0.56%	0.12%	0.09%	-0.04%	0.00%	-0.04%
Real Assets	15.8%	15.5%	-0.2%	4,500	6,900	2,400	2,000	1,600	-400	6,400	8,500	2,100	1.29%	1.73%	0.45%	0.20%	0.27%	0.07%	0.00%	0.07%
Passive	2.0%	1.5%	-0.4%	70	60	-10	-	-	-	70	60	-10	0.11%	0.13%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%
Active	7.3%	5.9%	-1.3%	1,300	1,100	-200	-	-	-	1,300	1,100	-200	0.57%	0.59%	0.02%	0.04%	0.04%	-0.01%	-0.01%	0.00%
Hedged	0.9%	2.1%	1.2%	700	1,800	1,100	1,500	1,000	-500	2,200	2,700	500	7.97%	4.19%	-3.78%	0.07%	0.09%	0.02%	0.10%	-0.08%
Private	5.7%	6.0%	0.3%	2,500	3,900	1,400	400	600	200	2,900	4,600	1,700	1.62%	2.43%	0.80%	0.09%	0.15%	0.05%	0.01%	0.05%
Absolute Return	4.6%	7.0%	2.4%	2,800	3,800	1,000	1,800	1,900	100	4,600	5,700	1,100	3.15%	2.57%	-0.58%	0.15%	0.18%	0.03%	0.08%	-0.04%
Hedged	4.6%	7.0%	2.4%	2,800	3,800	1,000	1,800	1,900	100	4,600	5,700	1,100	3.15%	2.57%	-0.58%	0.15%	0.18%	0.03%	0.08%	-0.04%
GTAA	10.5%	9.3%	-1.2%	2,800	2,400	-400	-	-	-	2,800	2,400	-400	0.84%	0.82%	-0.02%	0.09%	0.08%	-0.01%	-0.01%	0.00%
Active	10.5%	9.3%	-1.2%	2,800	2,400	-400	-	-	-	2,800	2,400	-400	0.84%	0.82%	-0.02%	0.09%	0.08%	-0.01%	-0.01%	0.00%
Cash	6.4%	6.4%	0.0%	200	220	20	-	-	-	200	220	20	0.10%	0.11%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Passive	6.4%	6.4%	0.0%	200	220	20	-	-	-	200	220	20	0.10%	0.11%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	26,300	28,720	2,420	7,200	9,500	2,300	33,300	38,120	4,820	1.06%	1.21%	0.15%	1.06%	1.21%	0.15%	0.05%	0.10%

Table 10

Pension Year-over-Year Comparison by Management Type

Type	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Passive	26.5%	25.4%	-1.2%	724	700	-24	-	-	-	724	700	-24	0.09%	0.09%	0.00%	0.02%	0.02%	0.00%	0.00%	0.00%
Active	39.6%	36.8%	-2.8%	8,900	8,100	-800	-	-	-	8,900	8,100	-800	0.71%	0.70%	-0.01%	0.28%	0.26%	-0.03%	-0.02%	-0.01%
Hedged	16.0%	19.4%	3.4%	8,000	10,100	2,100	5,200	7,400	2,200	13,300	17,500	4,200	2.64%	2.86%	0.22%	0.42%	0.56%	0.13%	0.09%	0.04%
Private	17.8%	18.4%	0.6%	8,600	9,800	1,200	1,900	2,100	200	10,500	11,900	1,400	1.87%	2.05%	0.18%	0.33%	0.38%	0.04%	0.01%	0.03%
<b>Total Plan</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>26,300</b>	<b>28,720</b>	<b>2,420</b>	<b>7,200</b>	<b>9,500</b>	<b>2,300</b>	<b>33,300</b>	<b>38,120</b>	<b>4,820</b>	<b>1.06%</b>	<b>1.21%</b>	<b>0.15%</b>	<b>1.06%</b>	<b>1.21%</b>	<b>0.15%</b>	<b>0.08%</b>	<b>0.07%</b>

Table 11

Pension Year-over-Year Comparison of Other Costs

	Staff Salary and Benefits (\$000's)	Consultants (\$000's)	Custodian (\$000's)	Other Vendors (\$000's)	Total Other Costs (\$000's)	Other Costs Fee Ratio
2015	890	830	250	300	2,270	0.07%
2016	950	820	380	360	2,510	0.08%
Change	60	-10	130	60	240	0.01%



Table 12

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

Asset Class	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Global Equity	40.6%	33.7%	-6.9%	34	37	3	-	-	-	34	37	3	0.13%	0.13%	0.00%	0.05%	0.04%	-0.01%	-0.01%	0.00%
Passive	40.6%	33.7%	-6.9%	34	37	3	-	-	-	34	37	3	0.13%	0.13%	0.00%	0.05%	0.04%	-0.01%	-0.01%	0.00%
Global Fixed Income	17.5%	18.3%	0.7%	6	8	2	-	-	-	6	8	2	0.05%	0.05%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%
Passive	17.5%	18.3%	0.7%	6	8	2	-	-	-	6	8	2	0.05%	0.05%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%
Real Assets	17.3%	16.0%	-1.4%	34	41	7	-	-	-	34	41	7	0.30%	0.30%	0.00%	0.05%	0.05%	0.00%	0.00%	0.00%
Passive	9.5%	7.9%	-1.6%	7	8	1	-	-	-	7	8	1	0.11%	0.12%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Active	7.9%	8.1%	0.2%	26	33	7	-	-	-	26	33	7	0.51%	0.49%	-0.03%	0.04%	0.04%	0.00%	0.00%	0.00%
GTAA	19.7%	19.5%	-0.2%	104	137	33	-	-	-	104	137	33	0.82%	0.84%	0.01%	0.16%	0.16%	0.00%	0.00%	0.00%
Active	19.7%	19.5%	-0.2%	104	137	33	-	-	-	104	137	33	0.82%	0.84%	0.01%	0.16%	0.16%	0.00%	0.00%	0.00%
Cash	4.9%	12.6%	7.6%	3	12	9	-	-	-	3	12	9	0.10%	0.11%	0.01%	0.00%	0.01%	0.01%	0.01%	0.00%
Passive	4.9%	12.6%	7.6%	3	12	9	-	-	-	3	12	9	0.10%	0.11%	0.01%	0.00%	0.01%	0.01%	0.01%	0.00%
<b>Total Plan</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>181</b>	<b>235</b>	<b>54</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>181</b>	<b>235</b>	<b>54</b>	<b>0.28%</b>	<b>0.28%</b>	<b>0.00%</b>	<b>0.28%</b>	<b>0.28%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

Table 13

Health Care Year-over-Year Comparison by Management Type

Type	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Passive	72.5%	72.4%	0.0%	51	64	13	-	-	-	51	64	13	0.11%	0.11%	0.00%	0.08%	0.08%	0.00%	0.00%	0.00%
Active	27.5%	27.6%	0.1%	130	170	40	-	-	-	130	170	40	0.73%	0.73%	0.00%	0.20%	0.20%	0.00%	0.00%	0.00%
<b>Total Plan</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>181</b>	<b>235</b>	<b>54</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>181</b>	<b>235</b>	<b>54</b>	<b>0.28%</b>	<b>0.28%</b>	<b>0.00%</b>	<b>0.28%</b>	<b>0.28%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

Table 14

Health Care Year-over-Year Comparison of Other Costs

	Staff Salary and Benefits (\$000's)	Consultants (\$000's)	Custodian (\$000's)	Other Vendors (\$000's)	Total Other Costs (\$000's)	Other Costs Fee Ratio
2015	18	14	25	7	64	0.10%
2016	25	19	42	10	96	0.11%
Change	7	5	17	3	32	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 +15 bps from 1.06% in 2015 to 1.21% in 2016.

The largest asset class drivers of the increase were Global Fixed Income (+10 bps contribution) and Real Assets (+7 bps).

Average asset class weight changes contributed +5 bps to the year-over-year change in total plan fee ratio. The largest asset class weight changes came from a 2.4% increase in Absolute Return (+3 bps attribution due to weight), a 1.2% decrease in GTAA (-1 bp), and a 0.5% decrease in Private Equity (-1 bp).

Changes in fee ratios contributed +10 bps to the year-over-year change in total plan fee ratio. Global Fixed Income (+10 bps attribution due to fee ratio) and Real Assets (+7 bps) were the largest increases, partially offset by a decrease in Absolute Return (-4 bps).

A summary of the key drivers in year-over-year changes to pension fee ratios from 2015 to 2016 for each asset class is below along with comparisons of performance net of fees.

The **Global Equity** fee ratio declined from 0.64% in 2015 to 0.57% in 2016 due to lower incentive fees to hedged long/short equity managers. The Marketable Alternative Equity composite return declined from 4.5% in 2015 to 0.6% in 2016 leading to lower incentive fees and bringing the fee ratio for hedged Global Equity managers down from 3.37% in 2015 to 2.17% in 2016. Global Equity asset class performance improved from -0.8% in 2015 to 7.5% in 2016.

**Private Equity** saw a slight increase from 1.42% in 2015 to 1.89% in 2016 on the heels of higher incentive fees. The performance of Private Equity improved on a time-weighted return basis from 5.6% in 2015 to 9.0% in 2016.

**Global Fixed Income** increased from 1.03% in 2015 to 1.62% in 2016. The fee ratio for hedged Global Fixed Income strategies increased from 1.58% in 2015 to 3.01% in 2016 as incentive fee increased from strong returns of managers in this category. The performance of Global Fixed Income improved from -1.7% in 2015 to 6.6% in 2016.

**Private Debt** declined from 1.72% in 2015 to 1.16% in 2016 from lower incentive fees. Private Debt was spun out into a separate asset class from Global Fixed in the middle of 2015 so a full year of performance is not available for that year. Private Debt returned 2.6% in 2016.

**Real Assets** increased from 1.29% in 2015 to 1.73% in 2016 due to a combination of a spike in management fees for private funds and higher management fees in hedged funds offsetting a decline in incentive fees for hedged funds. Five new private Real Assets funds began calling capital in 2016. The Real Assets asset class was created as a combination of Real Estate, Commodities, and Infrastructure in the middle of 2015 so a full year of performance is not available for that year. Real Assets returned 8.2% in 2016.

**Absolute Return** had a notable decline from 3.15% in 2015 to 2.57% in 2016, even as performance improved slightly from 1.2% in 2015 to 1.3% in 2016. This is due in large part to negotiating more favorable and better aligned fee agreements with existing and newly hired managers.

The **GTAA** and **Cash** asset classes were roughly flat year over year.

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

As shown in the Table 10 contribution to total plan fee ratio change column, the largest drivers of the +15 bps total plan fee ratio increase from fund management types were Hedged (+13 bps change in contribution) and Private (+4 bps), which were partially offset by a decline in Active (-3 bps).

Weight changes increased the total plan fee ratio by +8 bps with the largest contributor the 3.4% increase to hedged strategies (+9 bps attribution due to weight).

Changes to fee ratios increased the total plan fee ratio by +7 bps with the largest contributors being hedged strategies (+4 bps attribution due to fee ratio) and private strategies (+3 bps).

As displayed in Table 11, **Other Costs** increased slightly from 0.07% in 2015 to 0.08% in 2016 with custodian expenses contributing the most to the increase. State Street began providing performance, risk, and compliance services in the middle of 2015 and 2016 represents the first full year of these services.

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

As seen in Tables 12 and 13, the Health Care total plan fee ratio was unchanged at 0.28% with no material changes to report.

As displayed in Table 14, **Other Costs** increased slightly from 0.10% to 0.11% in 2016 with custodian expenses contributing the most to the increase. State Street began providing performance, risk, and compliance services in the middle of 2015 and 2016 represents the first full year of these services.

**FEDERATED CITY EMPLOYEES'  
RETIREMENT SYSTEM  
FISCAL YEAR 2018-2019  
BUDGET PROPOSAL**

March 15, 2018

# 2018–2019 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's FY 2018–19 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, 2017
- **Participant income** – Estimated based on the contribution rates and total covered payroll shown in the actuarial reports for June 30, 2017
- **Investment income** – Calculated using the assumed rate of return based on reserve plus City's contributions for the whole year and other activities for half a 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 FY18-19

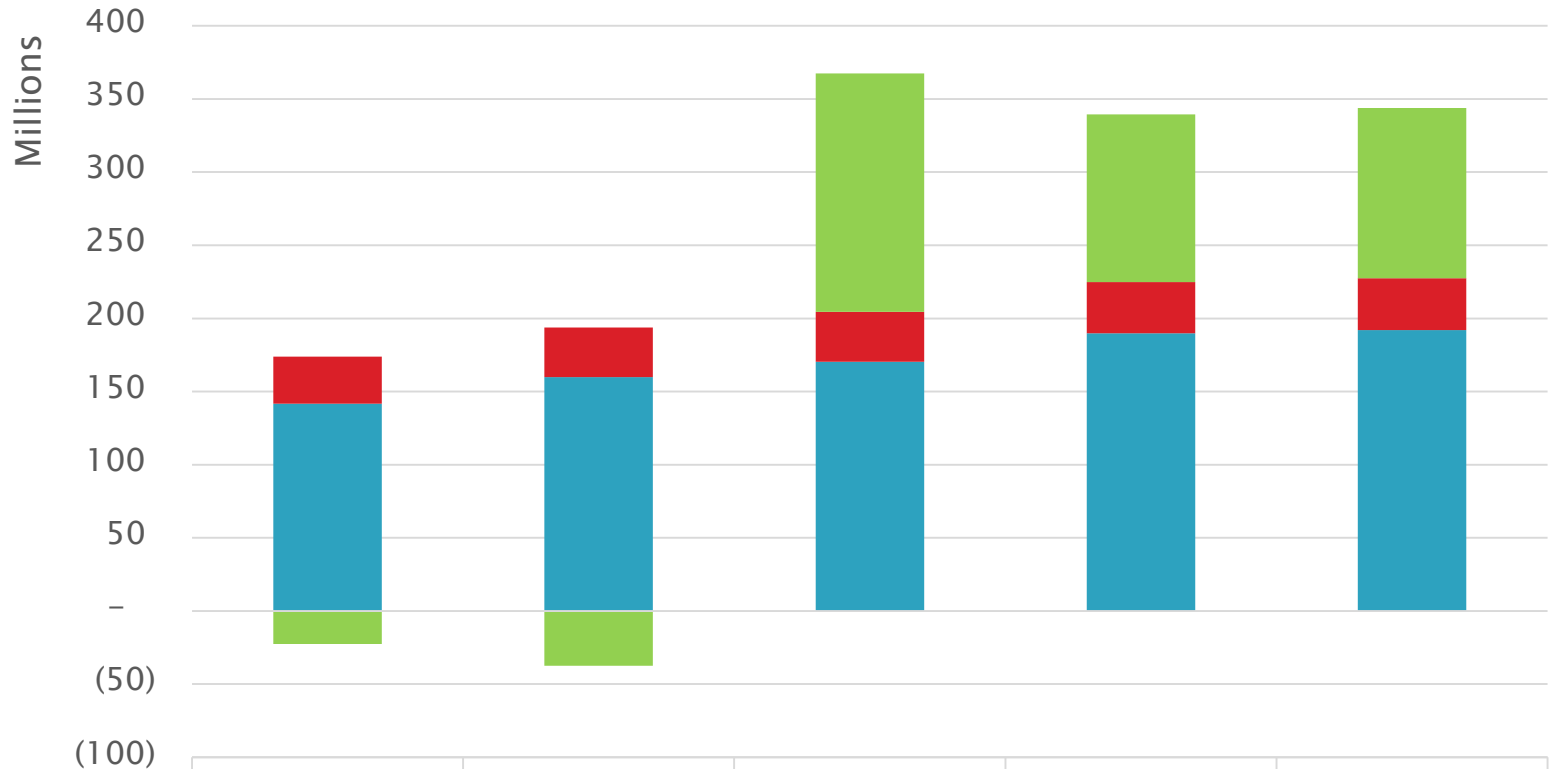
The Administrative Expense Budget portion is categorized into the following line items:

- ▶ **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 market value (40% Fed and 60% PF).
- ▶ **Non-personnel/equipment** – administrative overhead cost 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.

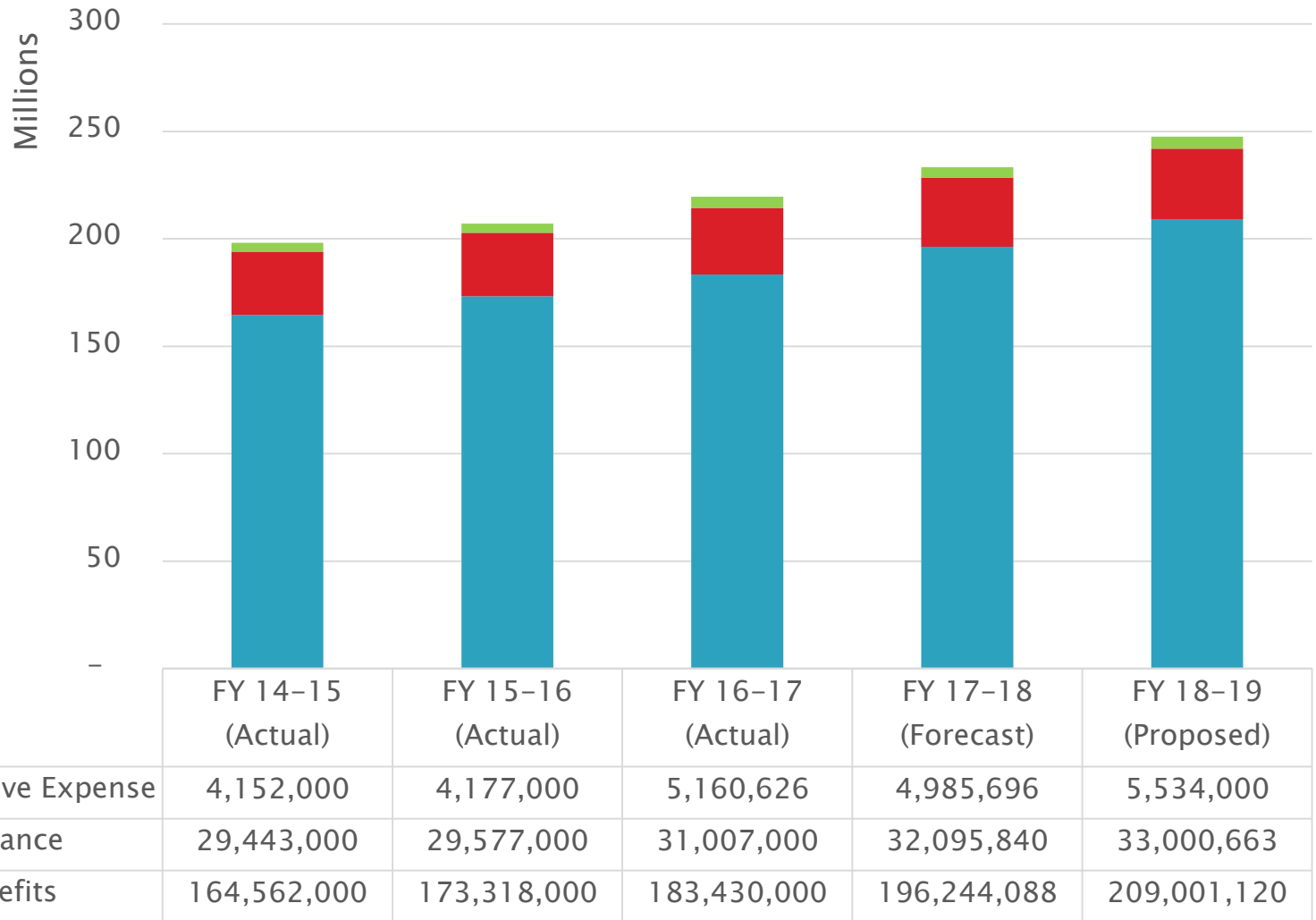
\* This was a medical director and staff prior to the FY16-17 budget.

# Sources of Funds



	FY 14-15 (Actual)	FY 15-16 (Actual)	FY 16-17 (Actual)	FY 17-18 (Forecast)	FY 18-19 (Proposed)
Investment Income	(22,564,000)	(37,457,000)	163,051,000	114,572,576	116,362,590
Participant Income	32,266,000	33,801,000	34,054,000	34,954,154	35,412,648
City Contributions	141,710,000	159,921,000	170,388,000	189,907,295	191,966,120

# Uses of Funds



# Federated Proposed Administrative Budget for FY 2018–2019

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

Expenses	2016– 2017 Actual (A)	2017– 2018 Adopted (B)	2017– 2018 Forecast (C)	2018–2019 Proposed <sup>(1)</sup> (D)	% Increase (Decrease) (B to D)	% Increase (Decrease) (C to D)
Personnel Services	\$3,065,147	\$3,493,800	\$2,947,920	\$3,340,000	(4.4%)	13.3%
Non-Personnel / Equipment	1,139,540	1,369,800	1,035,042	1,287,000	(6.0%)	24.3%
Professional Services	806,974	990,200	840,854	964,000	(2.7%)	14.7%
Medical Services	148,965	391,000	161,880	208,000	(46.8%)	28.5%
<b>Total</b>	<b>\$5,160,626</b>	<b>\$6,244,800</b>	<b>\$4,985,696</b>	<b>\$5,799,000</b>	<b>(7.1%)</b>	<b>16.3%</b>

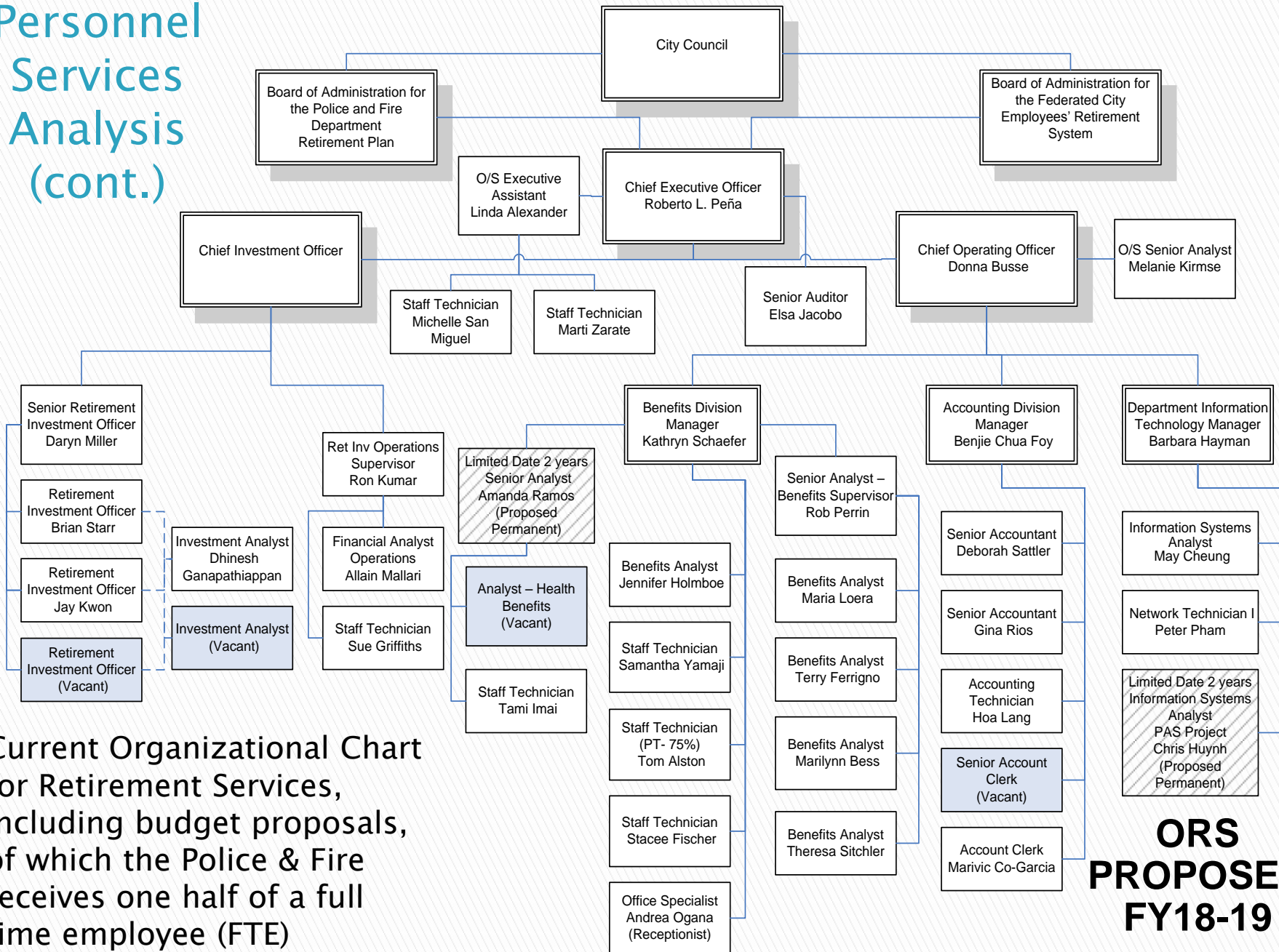
<sup>(1)</sup> – Detail for changes provided in the following slides

# Personnel Services Analysis

Expenses	2016– 2017 Actual (1)	2017– 2018 Adopted (2)	2017– 2018 Forecast (3)	2018– 2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Personnel Services	\$3,065,147	\$3,493,800	\$2,947,920	<b>\$3,340,000</b>	(4.4%)	13.3%
Authorized positions for both plans	39.75	39.75	39.75	39.75	0	0
Full time employee (FTE) allocated to Plan	19.875	19.875	19.875	19.875	0	0
Actual filled FTEs for both plans	33.75		37.75			
FTEs allocated to Plan	16.875		18.875			

- ▶ Personnel Services decreased from last year’s budget due to:
  - Decreased fringe benefits costs based on City Budget Office labor distribution report
    - Tier 2 City contributions for retirement decreased due to the implementation of the VEBA
  
- ▶ Proposals for FY18–19 included in budget
  - Make permanent the limited–date Information Systems Analyst that expired 6/30/18
  - Make permanent the limited–date Benefits Senior Analyst that expired 6/30/18

# 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)

**ORS PROPOSED FY18-19**

# Non-Personnel/Equipment Analysis

Expenses	2016-2017 Actual (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Non-personnel/Equipment	\$1,139,540	\$1,369,800	\$1,035,042	\$1,287,000	(6.0%)	24.3%

- ▶ Non-Personnel/Equipment decreased from prior year by \$83,000 mainly to a decrease in the investment analytics and research budget
  - Investment analytics and research budget is comprised of investment-related expenses for cost-analysis, Bloomberg terminals and risk advisory services
    - Budget decreased by \$93,000 since Verus has taken over the risk advisory services from State Street

# Non-Personnel/Equipment Analysis (cont.)

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

Minor Budget Category	2018-2019 Budget Basis	FY18-19 Proposed Budget Amount
Investment analytics and research	Investments data processing Abel/Noser, Barra LLC, BCA Research, Bloomberg, Dynamo, eVestments and Klarifyfx. Also includes risk advisory services and State Street services for performance analysis, compliance and attribution analytics	\$485,000
Rent	Rent for Office of Retirement Services (ORS) based on lease amount, as well as CAM and amortization of construction costs for consolidation	200,000
Insurance	Fiduciary and commercial liability Insurance	195,000
LRS - annual maintenance fee	Pension administration system annual maintenance fee based on contract amount	110,000
IT hardware / software	Includes proposed website overhaul, new scanner and server and yearly PC replacements	90,000
Postage and printing	Postage, shipping and printing costs for open enrollment, Choices mailings and other communication	90,000
Training/Travel	Board and staff travel including conferences, roundtables, due diligence, etc.	70,000
Other non-personnel and equipment	Includes lease, printing, mileage, communication, dues and subscriptions, equipment/furniture, training, supplies, etc.	47,000
<b>NON-PERSONNEL / EQUIPMENT TOTAL</b>		<b>\$1,287,000</b>



# Professional Services Analysis

Expenses	2016-2017 Actual (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Professional Services	\$806,974	\$990,200	\$840,854	\$964,000	(2.7%)	14.7%

- ▶ Professional Services decreased from last year's budget due to netting of the following changes:
  - Cheiron services decreased by \$36,000 based on contract services for FY18-19
  - Reed Smith was reduced by \$50,000 to be in line past years' averages
  - Saltzman & Johnson was increased by \$37,000 based on monthly average for the past year
  - Increase in temp services by \$37,000 due to implementation of PAS which will require additional manpower for running parallel systems
  - Net reduction of \$14,000 in pension administration system- related expenses due to alignment of budget with past trends
  
- ▶ 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 major professional services categories and budget amounts

Minor budget category	2018–19 Budget Basis	FY18–19 Budget Amount
Legal	Legal services provided by Reed Smith, Saltzman and Johnson and Ice Miller LLP – note this budget line excludes investment legal.	\$ 382,000
Actuary	Annual valuation for Pension & OPEB, possible Measure F costs, calculation for 415 matters as well as PAS consultation	209,000
Temp Agencies	Temporary staffing to fill vacant positions and to assist IT with PAS implementation	169,000
Other Professional Services	Includes CAFR design cost, retiree education, board stipends, retiree search agency, governance services, contingency amount, etc.	98,500
Audit	Annual Financial audit agreement amount plus other services	70,000
Pension Admin System (PensionGold)	Ad hoc web changes billed per hour; BCP Monthly charge; Ad hoc change request enhancements, Web Hosting Fee Monthly charge	35,500
	<b>PROFESSIONAL SERVICES OTHER BUDGET TOTAL</b>	<b>\$964,000</b>

# Medical Services Analysis

Expenses	2016-2017 Actual (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	% Increase (Decrease) (2 to 4)	% Increase (Decrease) (3 to 4)
Medical Services	\$148,965	\$391,000	\$161,880	\$208,000	(46.8%)	28.5%

- ▶ Medical services decreased from last year due to decreased estimate in number of cases due to the following reasons:
  - Last year's budget was in anticipation of the 3-doctor Board medical advisor panel
  - 2017 started with a backlog of approximately 30 independent medical examiner reports
  - Dr. Tierman was new and it was not known how many reports she was capable of producing per month
  
- ▶ Other considerations:
  - No longer having a City employee providing medical services
  - Outside advisor is more expensive
  - Based on estimate of having 2 cases per month for the medical advisor and 36 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

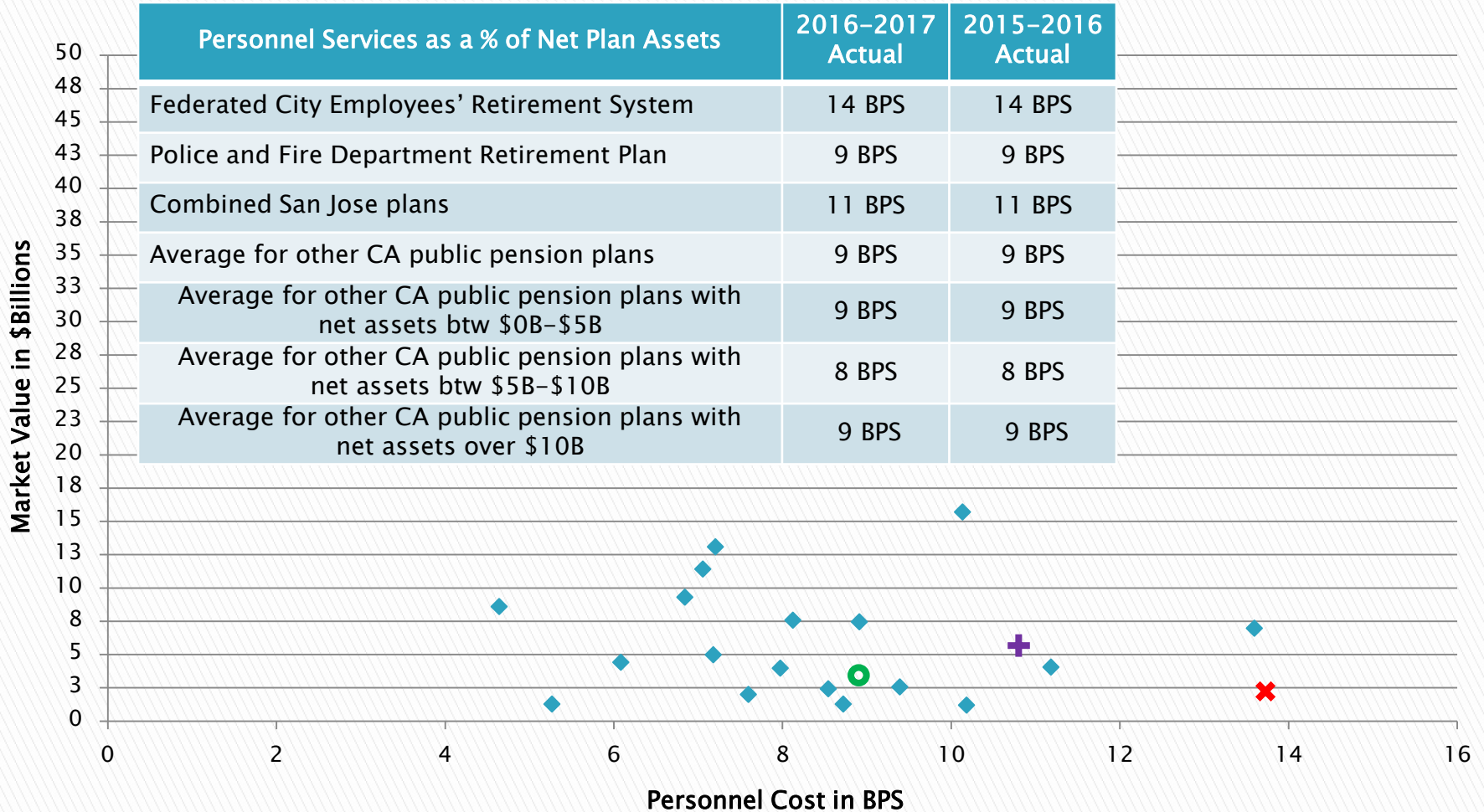
# Personnel Services Analysis – in BPS (cont.)

Personnel Expense in BPS of Market Value of Assets – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System, \$3,065,147

“O” below represents the Police and Fire Plan, \$3,065,147

“+” below represents the combined San Jose plans, \$6,130,294



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans' CAFRs

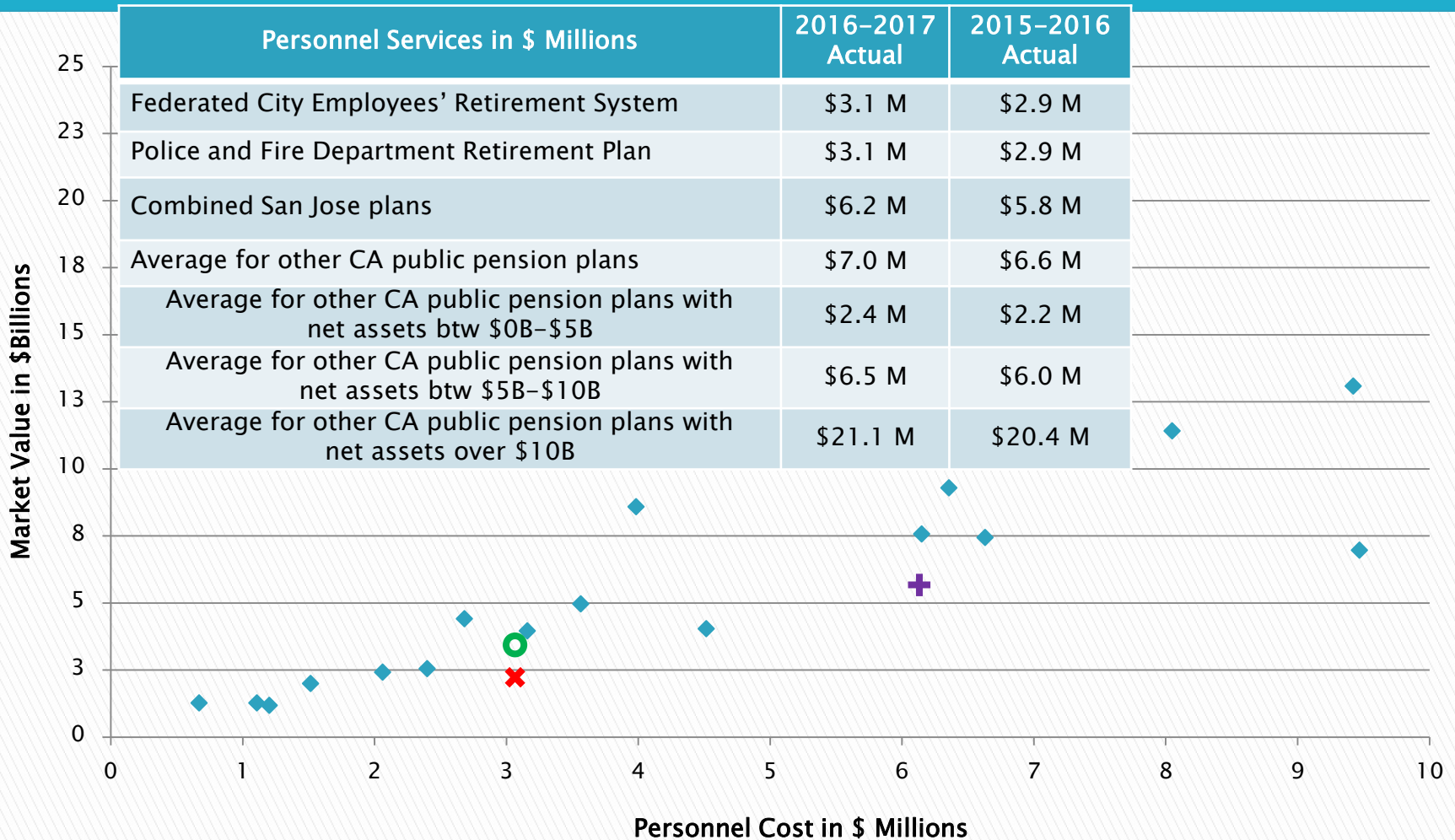
# Personnel Services Analysis – in \$ (cont.)

Personnel Expense in \$ Millions – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System, \$3,065,147

“O” below represents the Police and Fire Plan, \$3,065,147

“+” below represents the combined San Jose plans, \$6,130,294



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans' CAFRs

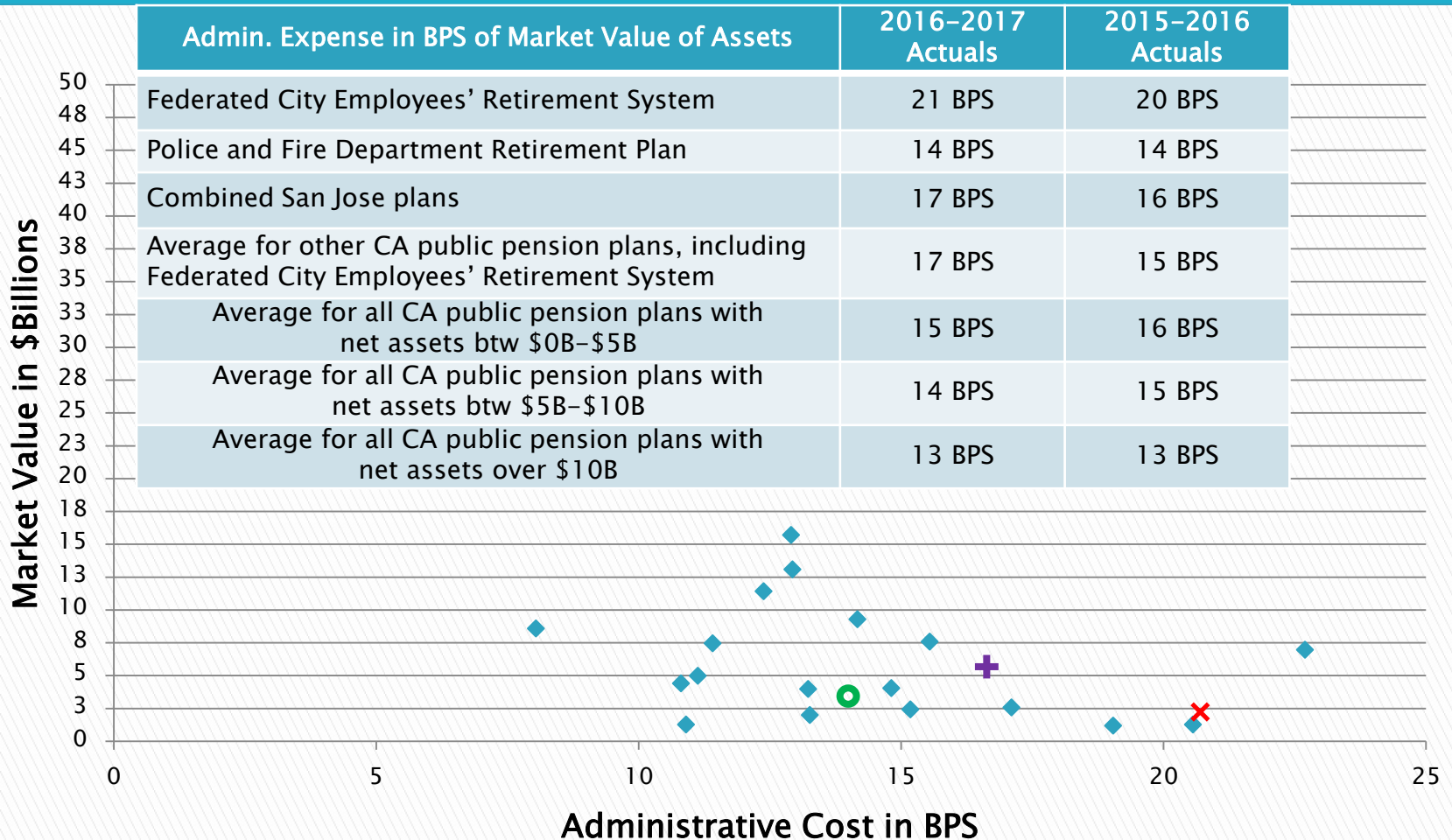
# Administrative Cost Comparison – in BPS

Administrative Expense in BPS of Market Value of Assets – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

“X” below represents the Federated System , \$4,622,000

“O” below represents the Police and Fire Plan, \$4,817,000

“+” below represents the combined San Jose plans, \$9,439,000



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans' CAFRs

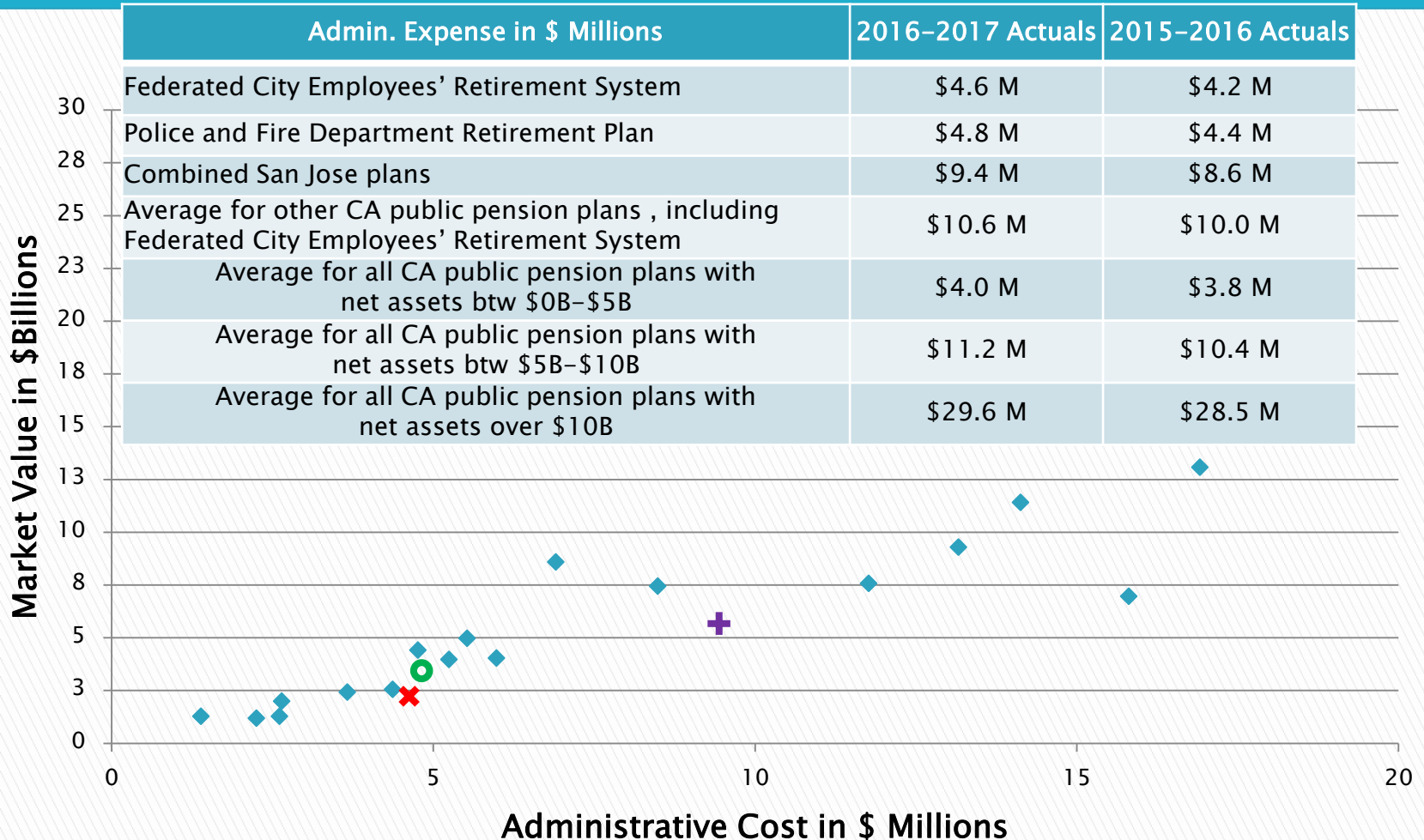
# Administrative Cost Comparison – in \$

Administrative Expense in BPS of Market Value of Assets – Actual as of 6/30/17 or most recent financial statement <sup>(1)</sup>

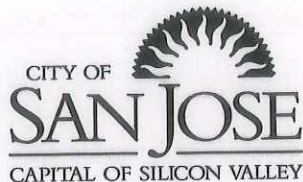
“X” below represents the Federated System , \$4,622,000

“O” below represents the Police and Fire Plan, \$4,817,000

“+” below represents the combined San Jose plans, \$9,439,000



<sup>1</sup> Retirement Services gathered and compiled most recent financial information from 21 public pension plans public information



# Memorandum

**TO: Board of Administration for the  
Federated Retirement System**

**FROM: Benjie Chua Foy**

**SUBJECT: Consideration of Proposed Budget  
for Fiscal Year 2018-2019**

**DATE: March 7, 2018**

Approved

*Roberto L. Pera*

Date

*3/7/18*

## RECOMMENDATION

Discussion and action on the proposed budget for fiscal year 2018-2019.

## 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, if 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 \$191,966,120.

This 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 FY19 contributions rates assume the Board's adoption in April/May inclusive of the changes from Measure F, as shown in the June 30, 2017 actuarial reports for pension and healthcare. The City's covered payroll is also based on the amounts shown in the June 30, 2017 actuarial reports for pension and healthcare.

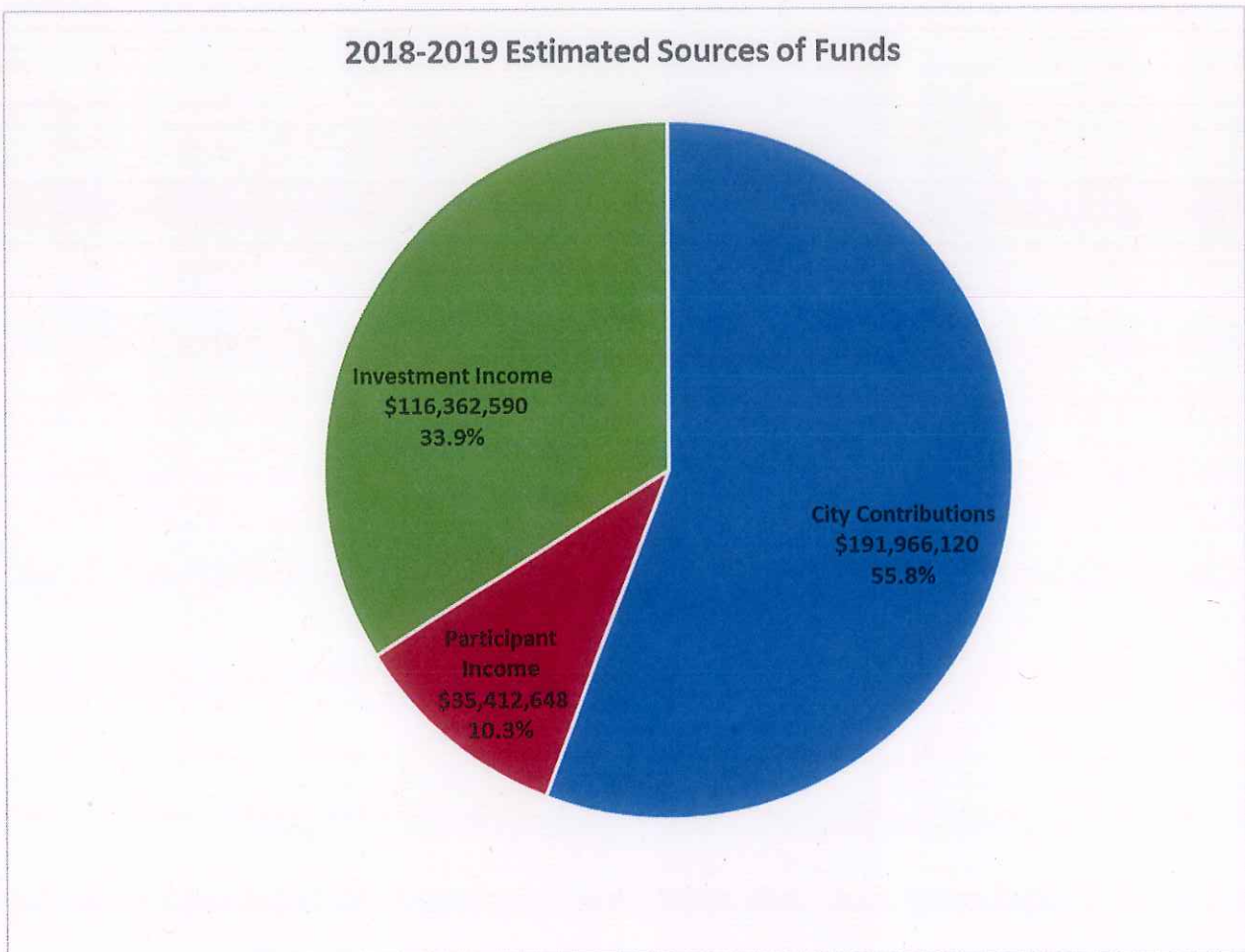


## PARTICIPANT INCOME

Total member contributions are estimated at \$35,412,648, a 5.5% increase from the 2017-2018 adopted amount. Member contributions are calculated based on the contribution rate for each tier. Tier 1 contribution rates for pension increased from 6.6% to 6.85% while their covered payroll decreased from \$165.6 million to \$158.8 million. Tier 2 contribution rates for pension and covered payroll increased from 7.72% to 8.28% and from \$109.3 million to \$137.9 million, respectively. Healthcare contribution rates were reduced to 7.5% for members, while the City's contribution is a flat dollar amount of approximately \$26 million. In addition, the covered payroll will most likely decrease due to the VEBA opt-in from Measure F.

## INVESTMENT INCOME

Investment earnings are calculated based on the actuarial assumed rate of return of 6.875%. The beginning fund balance, along with the City's contributions are expected to earn the full rate while the member contributions offset with the expenditures are expected to earn less than the full rate.



## *USES OF FUNDS*

### PENSION BENEFITS AND HEALTH INSURANCE

The pension benefits budget increased to \$209,001,120, an increase of \$11,606,329, or 5.88%, 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 \$33,000,663, an increase of \$904,823, or 2.82%, which is the average increase for the past five years. Health insurance includes health and dental insurance subsidies, as well as Medicare reimbursements.

### *ADMINISTRATIVE EXPENSE BUDGET*

The proposed administrative expenses budget of \$5,799,000 is a net decrease of 7.1% or \$445,800 from the prior year proposed budget of \$6,244,800.

### PERSONNEL SERVICES

The budget for personnel services was reduced to \$3,340,000, a decrease of \$153,800, or 4.4% over the prior year adopted budget of \$3,493,800. 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 based on asset size. The number of positions in Retirement Services remained at 39.75. However, two of the positions are limited-date positions which expire on June 30, 2018. The proposed personnel changes for FY18-19 are to convert the limited-date positions to permanent positions. The main reason for the decrease is due to the implementation of the VEBA which essentially reduces the City's contribution for healthcare for Tier 2 members.

### NON-PERSONNEL / EQUIPMENT

The budget for non-personnel / equipment was reduced to \$1,287,000, a decrease of \$82,800, or 6.0% over the prior year adopted budget. This category includes data processing costs for investments, rent, insurance, information technology hardware/software, pension administration annual maintenance fee, postage and printing, training, travel, and other office expenses. This reduction is due to several reasons:

- \$93,000 reduction in investment analytics and research due to the decrease in the risk management implementation budget to be in line with the contractual amounts due to Verus
- \$10,000 increase due to general increases in fees and contracts.

## PROFESSIONAL SERVICES

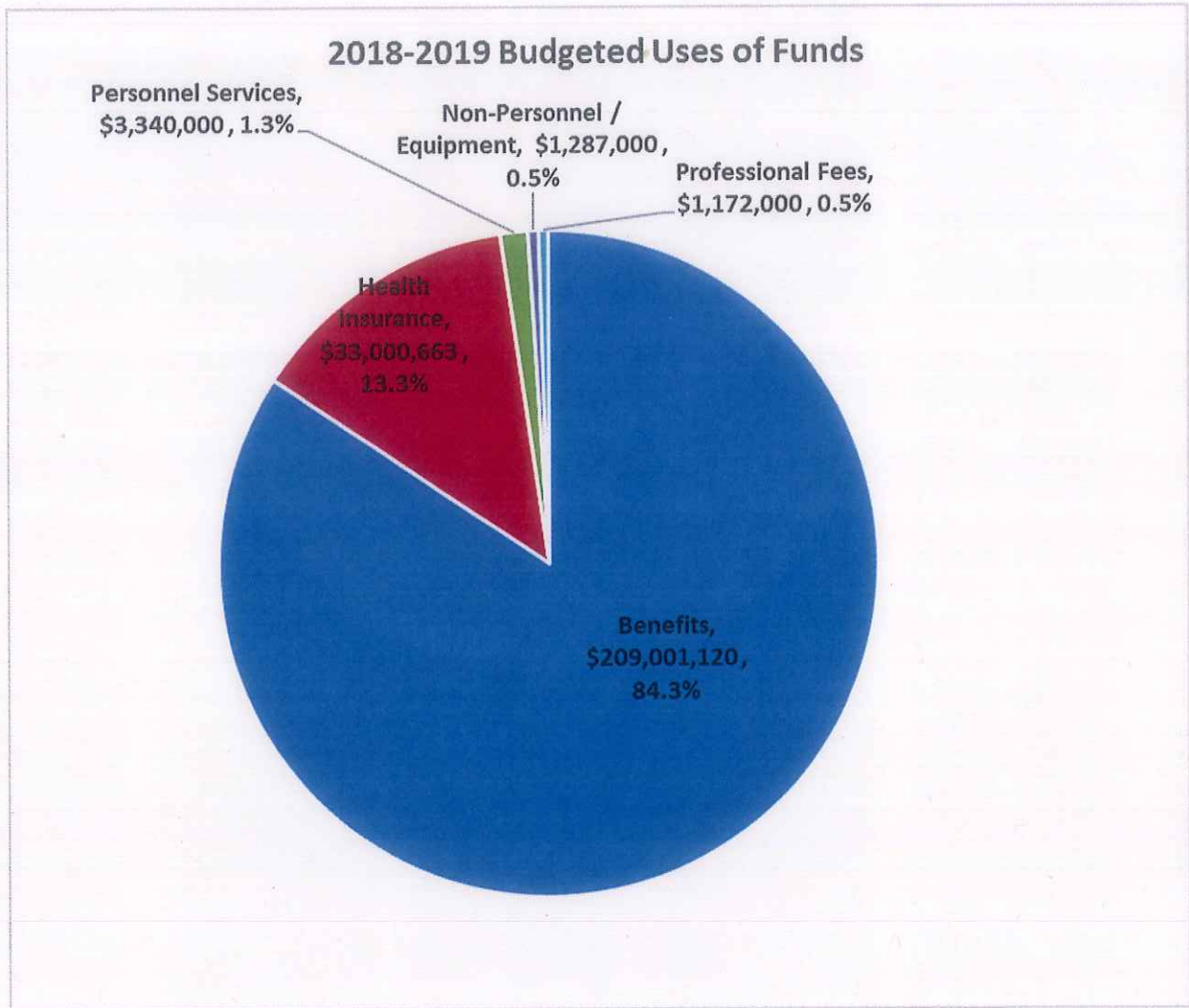
The budget for professional services was reduced to \$964,000, a slight decrease of \$26,200, or 2.7% over the prior year adopted budget of \$990,200. Funding is required to continue the professional services necessary to meet core business needs in the area of actuarial services, financial audit services, legal services, and temporary staffing services. Decreases in budgetary amounts for core professional services resulted from reducing the budgetary amounts to be in line with prior year trends which were offset by planned projects for FY18-19. These include the following:

- \$36,000 reduction in actuarial services budget based on contractual services and projected retention services
- \$13,000 reduction in legal services budget to be consistent with past trends
- \$14,000 reduction in pension administration system-related budget to be consistent with past trends
- \$37,000 increase in temporary staffing services budget due to the pensionable earnings correction project, open enrollment and most significantly, the implementation of the new pension administration system which are required for IT, accounting and benefits as parallel productions are occurring.

## MEDICAL SERVICES

The budget for medical services was reduced to \$208,000, a decrease of \$183,000, or 28.5% over the prior year adopted budget of \$391,000. 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). Reasons for the decrease include the following:

- Prior year's budget was prepared in anticipation of a 3-doctor Board medical advisor panel which has not been implemented
- Since Dr. Tierman was a new consultant, it was not known how many reports she would be capable of producing. It was not until late 2017 that her pattern of 4 a month per plan evolved
- Fiscal year 2017 started with a backlog of 30 IME reports received and many reviews required of Dr. Tierman, which were included in last year's budget.
- Current year budget is more in line with a typical year.



Attachment: Proposed Budget for Fiscal Year 2018-2019

**PROPOSED BUDGET**  
**FISCAL YEAR 2018-2019**

**FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM**

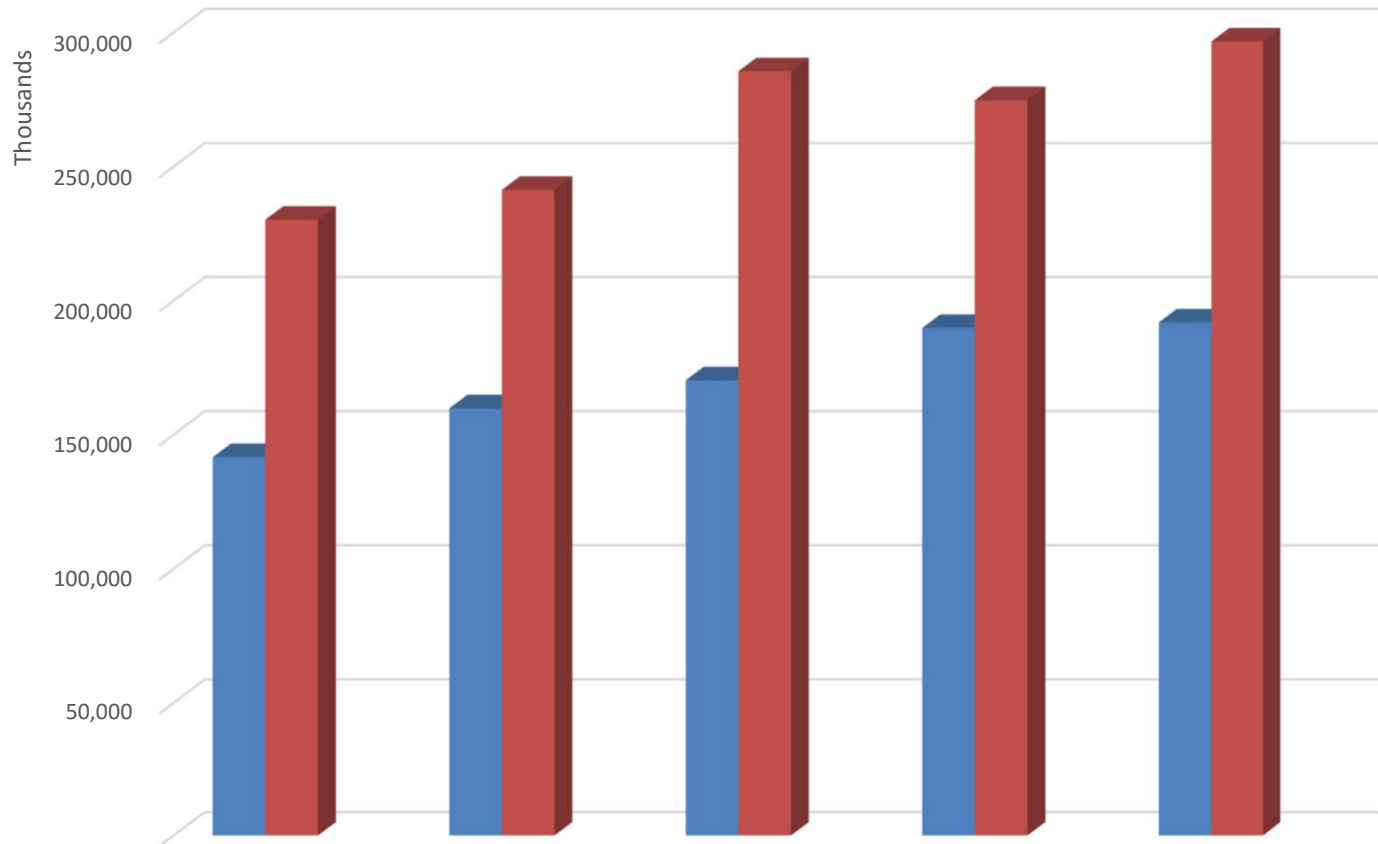
March 15, 2018

# FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

## Proposed Budget for Fiscal Year 2018-2019

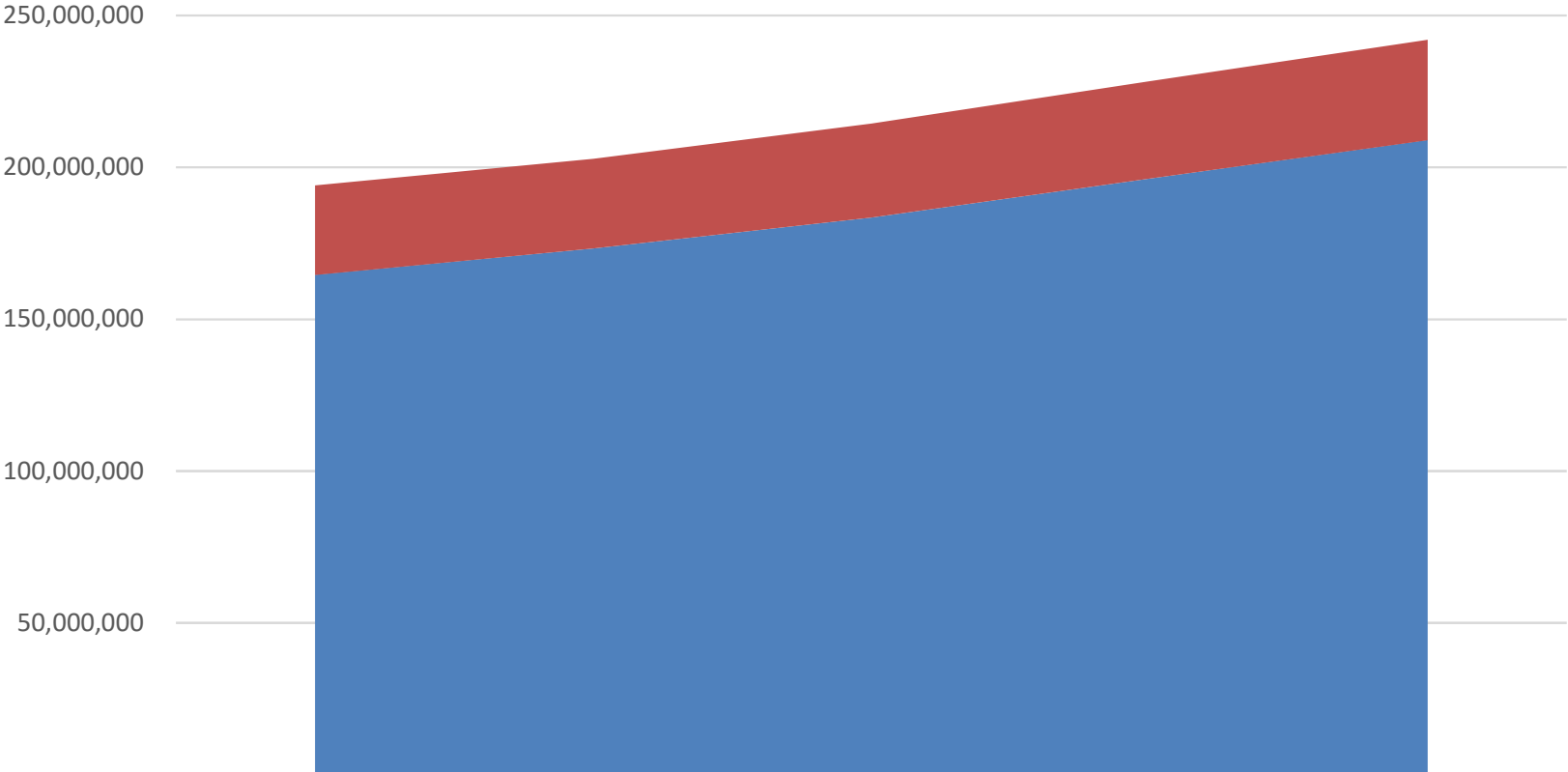
	<u>2016-2017 Actual</u>	<u>2017-2018 Adopted</u>	<u>2017-2018 Forecast</u>	<u>2018-2019 Proposed</u>
<b>SOURCE OF FUNDS</b>				
Beginning Fund Balance				
Claims Reserve	2,084,728,000	2,233,162,000	2,232,623,374	2,310,597,212
Total Beginning Fund Balance	2,084,728,000	2,233,162,000	2,232,623,374	2,310,597,212
Transfers				
COLAs	32,966	33,525	27,462	26,244
City Contributions	170,388,000	186,502,648	189,907,295	191,966,120
Total Transfers	170,420,966	186,536,173	189,934,757	191,992,364
Revenue				
Participant Income	34,054,000	33,574,179	34,954,154	35,412,648
Investment Income	163,051,000	148,058,291	114,572,576	116,362,590
Total Revenue	197,105,000	181,632,470	149,526,730	151,775,238
<b>TOTAL SOURCE OF FUNDS</b>	<b><u>2,452,253,966</u></b>	<b><u>2,601,330,643</u></b>	<b><u>2,572,084,861</u></b>	<b><u>2,654,364,814</u></b>
<b>USE OF FUNDS</b>				
Expenditures				
COLAs	32,966	33,525	27,462	26,244
Benefits	183,430,000	197,394,791	196,244,088	209,001,120
Health Insurance	31,007,000	30,250,000	32,095,840	33,000,663
Personnel Services	3,065,147	3,493,800	2,947,920	3,340,000
Non-Personal/Equipment <sup>(1)</sup>	<b>1,139,540</b>	1,369,800	1,035,042	1,287,000
Professional Fees <sup>(2)</sup>	<b>955,939</b>	1,381,200	1,002,734	1,172,000
Total Expenditures	219,630,592	233,923,116	233,353,086	247,827,027
Ending Fund Balance				
Claims Reserve	2,232,623,374	2,367,407,527	2,338,731,774	2,406,537,787
Total Ending Fund Balance	2,232,623,374	2,367,407,527	2,338,731,774	2,406,537,787
<b>TOTAL USE OF FUNDS</b>	<b><u>2,452,253,966</u></b>	<b><u>2,601,330,643</u></b>	<b><u>2,572,084,861</u></b>	<b><u>2,654,364,814</u></b>
Per CAFR	613,864			
Investment data processing fees	435,900			
CAFR design, stipends and education budgeted as professional fees	(13,941)			
Amount capitalized in CAFR	103,717			
	<b>(1) 1,139,540</b>			
Per CAFR	941,998			
CAFR design, stipends and education budgeted as professional fees	13,941			
	<b>(2) 955,939</b>			

### Total City Contributions & Covered Payroll



	FY 14-15	FY 15-16	FY 16-17	FY 17-18 (Forecast)	FY 18-19 (Estimate)
Total City Contributions	141,710,000	159,921,000	170,388,000	189,907,295	191,966,120
Total Covered Payroll	230,294,798	241,365,429	285,595,469	274,822,267	296,700,000
Total City Contribution % Change	11.7%	12.9%	6.5%	11.5%	1.1%

## Federated City Employees' Retirement System Pension Benefits and Health Insurance



	FY 2015 - Actual	FY 2016 - Actual	FY 2017 - Actual	FY 2018 - Forecast	FY 2019 - Proposed
Total	194,005,000	202,895,000	214,437,000	228,339,928	242,001,783
Health Insurance	29,443,000	29,577,000	31,007,000	32,095,840	33,000,663
Pension Benefits	164,562,000	173,318,000	183,430,000	196,244,088	209,001,120

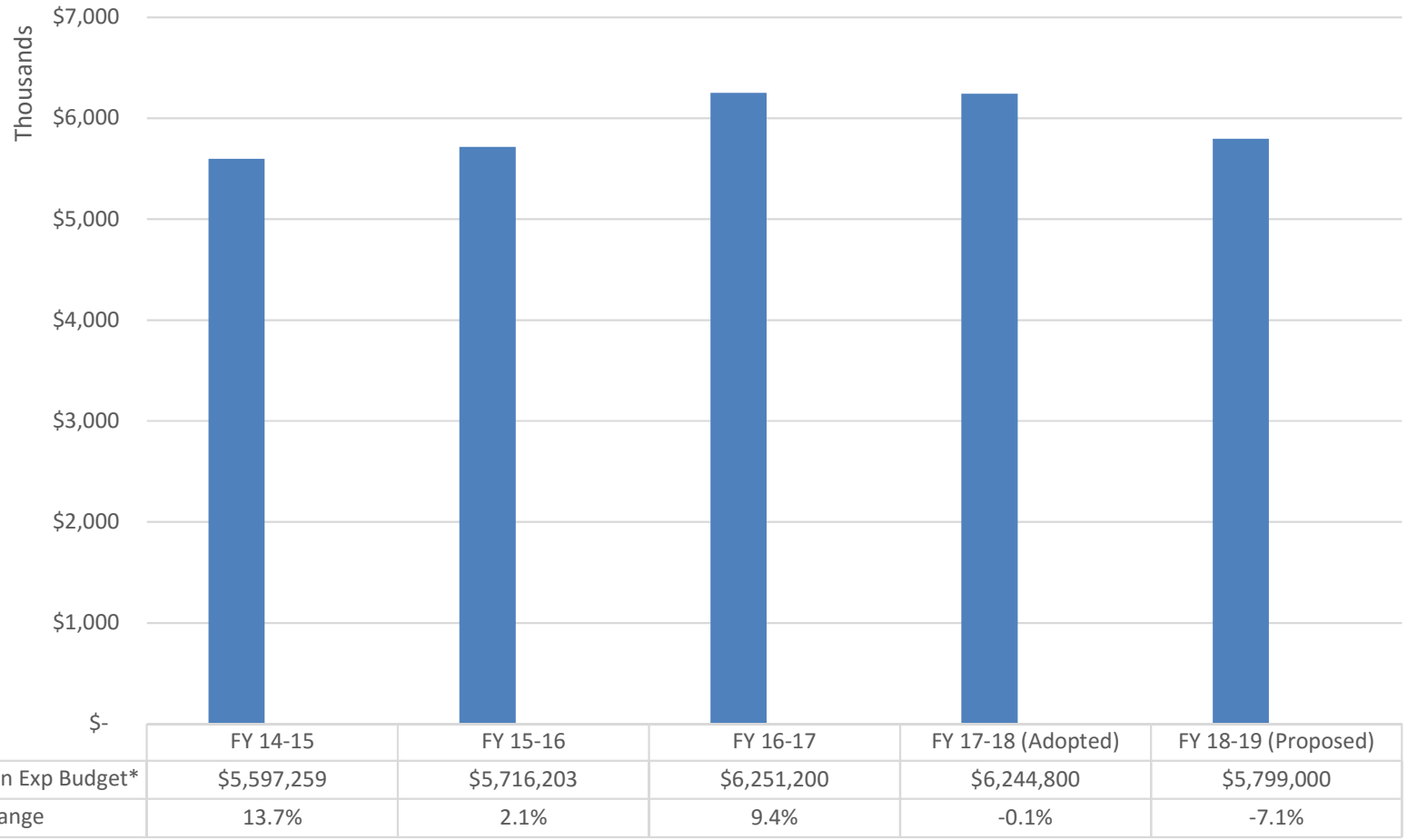


## FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM

### Administrative Expenses: FY 2018-2019

	<u>2016-2017</u> <u>Actual</u>	<u>2017-2018</u> <u>Adopted</u>	<u>2017-2018</u> <u>Forecast</u>	<u>2018-2019</u> <u>Proposed</u>
<b>PERSONNEL SERVICES</b>				
Salaries and employee benefits	3,065,147	3,493,800	2,947,920	3,340,000
Total Personnel Services	3,065,147	3,493,800	2,947,920	3,340,000
<b>NON-PERSONNEL / EQUIPMENT</b>				
Investment analytics and research	463,400	578,000	412,995	485,000
Insurance	184,443	185,000	195,095	195,000
IT hardware / software	62,149	78,800	36,292	90,000
LRS - annual maintenance fee	103,717	105,000	106,829	110,000
Postage and printing	57,469	105,000	36,541	90,000
Rent	197,051	200,000	194,269	200,000
Training and travel	41,811	70,000	9,410	70,000
Other non-personnel / equipment	29,500	48,000	43,611	47,000
Total Non-personnel / Equipment	1,139,540	1,369,800	1,035,042	1,287,000
<b>PROFESSIONAL SERVICES</b>				
Actuary	297,124	245,000	166,280	209,000
External auditor	59,107	70,000	62,232	70,000
Legal	301,802	395,000	338,241	382,000
Pension administrative system	22,202	52,500	38,018	35,500
Temporary staffing agencies	83,056	132,000	157,269	169,000
Other professional services	43,683	95,700	78,814	98,500
Total Professional Services	806,974	990,200	840,854	964,000
<b>MEDICAL SERVICES</b>				
Independent medical examiners	88,365	220,000	95,280	136,000
Medical consultant	60,600	171,000	66,600	72,000
Total Medical Services	148,965	391,000	161,880	208,000
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<b><u>5,160,626</u></b>	<b><u>6,244,800</u></b>	<b><u>4,985,696</u></b>	<b><u>5,799,000</u></b>

### Administrative Expense Budget FY 2014-2015 to FY 2018-2019



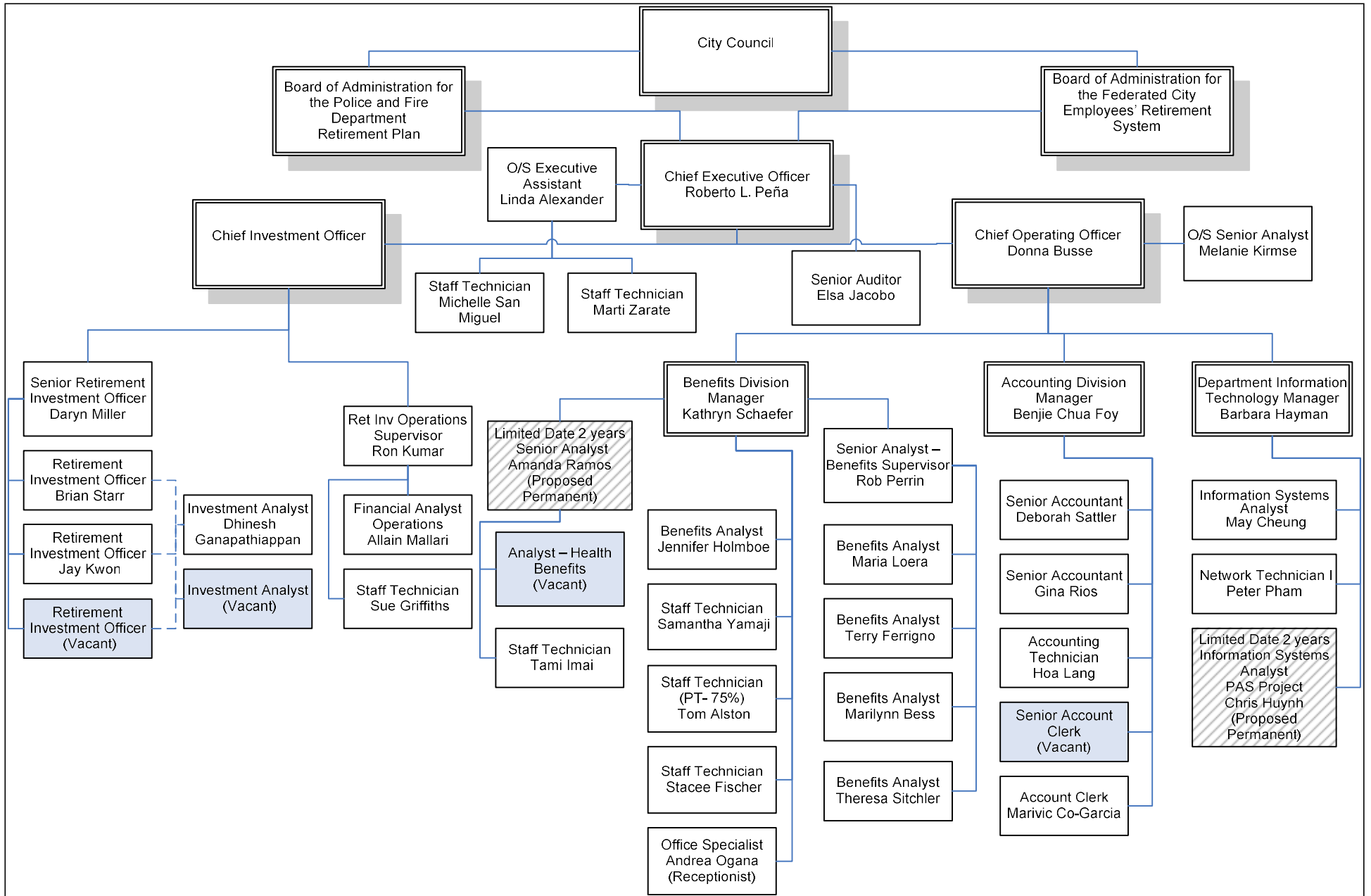
\* Amount includes budget for operations only.

**Office of Retirement Services**

**Departmental Position Detail**

Position	2016-2017 Adopted (1)	2017-2018 Adopted (2)	2017-2018 Forecast (3)	2018-2019 Proposed (4)	Increase / (Decrease) (2 to 4)	Increase / (Decrease) (3 to 4)	Explanation
Account Clerk II	1.00	1.00	1.00	1.00	-	-	
Accounting Technician	1.00	1.00	1.00	1.00	-	-	
Analyst I/II	6.00	6.00	6.00	6.00	-	-	
Assistant Director and Chief Investment Officer	1.00	1.00	1.00	1.00	-	-	Previous one left April 2017 and a new one was hired in March 2018
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	-	-	Previous one left January 2017 and a new one was hired in September 2017
Executive Assistant	0.00	0.00	1.00	1.00	1.00	-	Reclassification from Staff Tech in December 2017
Financial Analyst	1.00	1.00	1.00	1.00	-	-	New one hired December 2017
Investments Operations Officer	0.00	1.00	1.00	1.00	-	-	Reclassification from RIO to this one in July 2017
Information Systems Analyst	2.00	2.00	2.00	2.00	-	-	
Network Technician I/II/III	1.00	1.00	1.00	1.00	-	-	
Office Specialist II	1.00	1.00	1.00	1.00	-	-	
Retirement Investment Analyst I/II	2.00	2.00	1.00	2.00	-	1.00	Vacant position
Retirement Investment Officer	4.00	3.00	2.00	3.00	-	1.00	Reclassification from RIO to this one in July 2017; vacant position
Senior Account Clerk	1.00	1.00	1.00	1.00	-	-	
Senior Accountant	2.00	2.00	2.00	2.00	-	-	
Senior Analyst	2.00	2.00	2.00	2.00	-	-	
Senior Auditor	1.00	1.00	1.00	1.00	-	-	New one hired December 2017
Senior Retirement Investment Officer	1.00	1.00	1.00	1.00	-	-	
Staff Technician	7.00	7.00	6.00	6.00	(1.00)	-	Reclassification from Staff Tech in December 2017
Staff Technician PT	0.75	0.75	0.75	0.75	-	-	
<b>Total Positions</b>	<b>39.75</b>	<b>39.75</b>	<b>37.75</b>	<b>39.75</b>	<b>0.00</b>	<b>2.00</b>	

**OFFICE OF RETIREMENT SERVICES  
PROPOSED ORGANIZATIONAL CHART  
FY 18-19**





# Federated Annual Fee Report - 2016

## Executive Summary

It is our pleasure to present the second annual Fee Report for the Federated City Employees' Retirement System ("Federated") covering calendar year 2016. Last year, staff released the first iteration for calendar year 2015 with a commitment to produce the report on an annual basis. The goal of the report is to provide insight into the management and incentive fees paid to investment managers along with the overall costs of operating the investment program. Pension plan fee data is generally underreported in the industry and only captures the portion of fees that are paid by invoice. This excludes often sizable embedded fees that are paid out of certain fund structures.

It is important to note that fees are a byproduct 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 current asset allocation as illustrated in Tables 1 and 2 is an expression of the Board's Investment Policy Statement that "Investments shall be diversified with the intent to minimize the risk of large investment losses".

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. Building a Private Equity allocation at the same fee level as an active or passive long-only Global Equity allocation is simply not possible. In addition, asset class structuring can have significant impact on fees. The use of active management versus passive management, as well as alternative strategies within traditional asset classes will increase fees. Finally, when evaluating investment managers, Staff places a significant emphasis on fees, negotiating for lower fees, and analyzing that expected value or return is worth the expected cost.

This year, the report includes a comparison to last year's data, and highlights key changes to fee ratios and the drivers of those changes. Some are attributable to manager performance and others are due to investment manager line-up changes as outlined in the report.

**For calendar year 2016, management and incentive fees for the pension plan totaled \$21.3 million with a fee ratio of 1.07% compared to \$22.2 million and 1.10% for calendar year 2015. The health care trust totaled \$0.6 million with a fee ratio of 0.36%**

compared to \$0.3 million and 0.24% for 2015. Other investment-related costs (Staff, consultants, custodian bank, investment legal, etc.) for the pension plan were \$1.6 million with a fee ratio of 0.08% consistent with 2015, and the health care trust totaled \$0.2 million with a fee ratio of 0.12% compared to \$0.1 million and 0.12% for 2015.

Table 1

Pension Average Asset Allocation for 2016

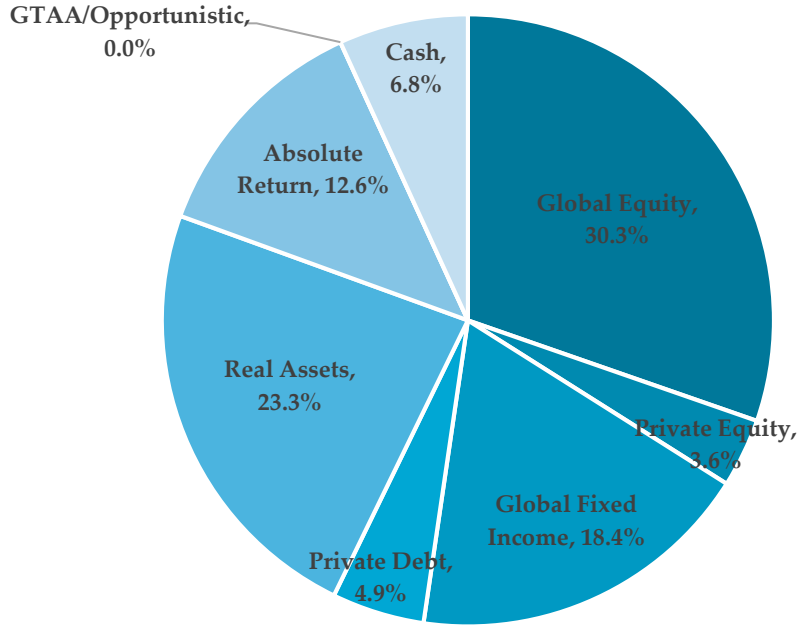
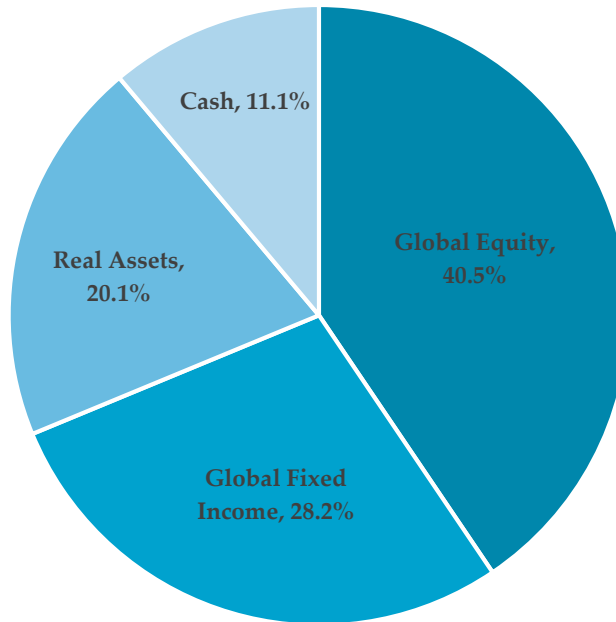


Table 2

Health Care Trust Average Asset Allocation for 2016





## Introduction

The fees in this report represent management fees, incentive fees, 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 rate and are only applicable to certain fund structures. It's 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. Incentive fees can be negative in the case of performance-based fee clawback provisions for underperformance. Both management and incentive fee amounts exclude fund operating expenses charged by investment managers for overhead not directly related to investment management. Trading expenses such as broker commissions are also excluded, as gross performance returns are reported after these expenses have been deducted. Other costs include salary and benefit compensation for investment staff (includes a 50% allocation for the CEO), cost of general consultant and Absolute Return consultant, custodian, and other third party vendors utilized by the investment program.

The fees in this report do not include 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; nor is it intended to include all categories of fees, expenses and charges identified in the Institutional Limited Partners Association ("ILPA") fee reporting template.

## Data Sources

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

For most separately managed accounts and public markets commingled funds, quarterly fee invoices from the fund managers were used as the data source. 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 fund's fee ratio

by the fund's average balances. The average balances were sourced from our custodian State Street.

The remaining manager fees were sourced from our managers directly. Absolute Return fees were provided by managers with independent quarterly re-calculations and reconciliations completed by our absolute return consultant Albourne. Private Equity fees were gathered by asking our managers to complete the ILPA fee reporting template or a similar template. The ILPA template is intended to unify and codify the presentation of fees, expenses, and carried interest information by fund managers to Limited Partners. The remaining manager fees in Global Fixed Income, Private Debt, and Real Assets were obtained by having the fund managers fill out a fee template designed by staff.

Within the Other Costs section, consultant, custodian, and other vendor costs were sourced from fee invoices sent by the vendors. Investment staff salary and benefits were allocated to each of the 4 San Jose plans by pro-rating the total cost by the average monthly balance of each plan. Similarly, investment-related legal costs incurred by Federated were allocated between the pension plan and health care trust by pro-rating the total cost by the average monthly balance of each plan.

The pension plan uses an Overlay fund that includes investments across multiple asset classes. Overlay fees were allocated on a notional basis to the respective asset classes that were overlaid during the year.

## Changes from 2015 Report

In an effort to provide the most informative and consistent data possible, several changes have been retroactively made to the 2015 report. The methodology changes are outlined below and updated values are represented in the 2015 columns of the Year-over-Year comparison tables.

Staff cost in 2015 only included cash compensation and was split evenly between the Federated and Police and Fire plans. The total cost has been updated to include both cash compensation and benefits and is now pro-rated to each of the 4 San Jose plans based on their average monthly balances.

In 2015, other third party vendors such as data vendors and investment oversight providers were excluded. These are now included in the Other Vendors column along with investment-related legal and research providers.

Finally, the multi-asset Overlay collateral account balances were captured under the Cash asset class in 2015. The Overlay notional balance of each asset class is now allocated to the respective asset class that the overlay provided economic exposure to.

## Total Portfolio Fee Summaries

The following tables present fees by both 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 a passive 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 opportunities such as non-exchange listed companies, taking listed companies private, investing in the credit market by providing loans, and investing in non-exchange listed 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-Hood-Beebower methodology to decompose the change in contribution to total plan fee ratio into 1) impact due to weights and 2) impact due to fee ratios.

*Note: Some values on this report may not sum due to rounding. The dollar values displayed throughout the report are shown in thousands.*

Table 3

Pension Fees by Asset Class and Management Type

Asset Class	Mgmt Fees (\$000's)	Incent Fees (\$000's)	Mgmt and Incent Fees (\$000's)	Average Balance (\$000's)	Average Weight	Fee Ratio - Mgmt Fees	Fee Ratio - Incent Fees	Fee Ratio - Mgmt and Incent Fees	% of Total Plan Fee Ratio	Contrib to Total Plan Fee Ratio
Global Equity	4,300	200	4,500	603,000	30.3%	0.71%	0.03%	0.74%	21.1%	0.23%
Passive	300	-	300	256,600	12.9%	0.10%	0.00%	0.10%	1.2%	0.01%
Active	1,700	-	1,700	230,200	11.6%	0.75%	0.00%	0.75%	8.1%	0.09%
Hedged	2,300	200	2,500	116,100	5.8%	2.01%	0.15%	2.15%	11.8%	0.13%
Private Equity	1,400	500	1,900	72,300	3.6%	1.96%	0.64%	2.60%	8.8%	0.09%
Private	1,400	500	1,900	72,300	3.6%	1.96%	0.64%	2.60%	8.8%	0.09%
Global Fixed Income	1,300	600	1,900	364,900	18.4%	0.37%	0.16%	0.53%	9.2%	0.10%
Passive	200	-	200	213,600	10.7%	0.07%	0.00%	0.07%	0.7%	0.01%
Active	500	-	500	106,400	5.4%	0.50%	0.00%	0.50%	2.5%	0.03%
Hedged	700	600	1,300	44,900	2.3%	1.47%	1.34%	2.81%	5.9%	0.06%
Private Debt	1,200	-200	1,100	97,300	4.9%	1.28%	-0.17%	1.12%	5.1%	0.05%
Private	1,200	-200	1,100	97,300	4.9%	1.28%	-0.17%	1.12%	5.1%	0.05%
Real Assets	3,600	1,700	5,300	463,900	23.3%	0.77%	0.37%	1.14%	24.9%	0.27%
Passive	200	-	200	220,500	11.1%	0.08%	0.00%	0.08%	0.8%	0.01%
Active	300	-	300	79,500	4.0%	0.39%	0.00%	0.39%	1.5%	0.02%
Hedged	1,000	600	1,600	39,000	2.0%	2.68%	1.50%	4.18%	7.7%	0.08%
Private	2,000	1,100	3,200	124,800	6.3%	1.63%	0.91%	2.55%	15.0%	0.16%
Absolute Return	4,300	2,100	6,400	250,800	12.6%	1.72%	0.84%	2.56%	30.2%	0.32%
Hedged	4,300	2,100	6,400	250,800	12.6%	1.72%	0.84%	2.56%	30.2%	0.32%
Cash	150	-	150	136,000	6.8%	0.11%	0.00%	0.11%	0.7%	0.01%
Passive	150	-	150	136,000	6.8%	0.11%	0.00%	0.11%	0.7%	0.01%
<b>Total Plan</b>	<b>16,250</b>	<b>4,900</b>	<b>21,250</b>	<b>1,988,200</b>	<b>100.0%</b>	<b>0.82%</b>	<b>0.25%</b>	<b>1.07%</b>	<b>100.0%</b>	<b>1.07%</b>

The table above illustrates that management and incentive fees for the pension plan totaled \$21.3 million for 2016 which equated to a total plan fee ratio of 1.07%. The Absolute Return and Real Assets asset classes contributed the most to the total plan fee ratio at 0.32% and 0.27%, respectively. The Private Debt and Private Equity asset classes contributed the least to the total plan fee ratio at 0.05% and 0.09%, respectively.

Table 4

Pension Fees by Management Type

Type	Mgmt Fees (\$000's)	Incent Fees (\$000's)	Mgmt and Incent Fees (\$000's)	Average Balance (\$000's)	Average Weight	Fee Ratio - Mgmt Fees	Fee Ratio - Incent Fees	Fee Ratio - Mgmt and Incent Fees	% of Total Plan Fee Ratio	Contrib to Total Plan Fee Ratio
Passive	700	-	700	826,800	41.6%	0.08%	0.00%	0.08%	3.3%	0.04%
Active	2,500	-	2,500	416,100	20.9%	0.60%	0.00%	0.60%	11.8%	0.13%
Hedged	8,300	3,500	11,800	450,800	22.7%	1.84%	0.78%	2.62%	55.5%	0.59%
Private	4,600	1,400	6,200	294,400	14.8%	1.56%	0.48%	2.11%	29.2%	0.31%
<b>Total Plan</b>	<b>16,250</b>	<b>4,900</b>	<b>21,250</b>	<b>1,988,200</b>	<b>100.0%</b>	<b>0.82%</b>	<b>0.25%</b>	<b>1.07%</b>	<b>100.0%</b>	<b>1.07%</b>

Hedged strategies contributed the most to the total plan fee ratio at 0.59% and represented about 23% of average plan assets. Private strategies were the next largest contributor accounting for 0.31% of the total plan fee ratio and represented 15% of

average plan assets. Passive and active management strategies accounted for 0.04% and 0.13% of the total plan fee ratio and represented 42% and 21% of plan assets, respectively.

**Table 5**

**Pension Other Investment Costs**

<b>Staff Salary and Benefits (\$000's)</b>	<b>Consultants (\$000's)</b>	<b>Custodian (\$000's)</b>	<b>Other Vendors (\$000's)</b>	<b>Total Other Costs (\$000's)</b>	<b>Other Costs Fee Ratio</b>
600	430	360	170	1,560	0.08%

Other investment costs for the pension plan equated to a total fee ratio of 0.08%. As previously discussed, other costs include salary and benefits for investment staff, cost of general consultant and Absolute Return consultant, custodian, and other vendors including investment-related legal costs and research tools used by Staff.

**Table 6**

**Health Care Fees by Asset Class and Management Type**

<b>Asset Class</b>	<b>Mgmt Fees (\$000's)</b>	<b>Incent Fees (\$000's)</b>	<b>Mgmt and Incent Fees (\$000's)</b>	<b>Average Balance (\$000's)</b>	<b>Average Weight</b>	<b>Fee Ratio - Mgmt Fees</b>	<b>Fee Ratio - Incent Fees</b>	<b>Fee Ratio - Mgmt and Incent Fees</b>	<b>% of Total Plan Fee Ratio</b>	<b>Contrib to Total Plan Fee Ratio</b>
<b>Global Equity</b>	310	-	310	68,100	40.5%	0.45%	0.00%	0.45%	51.7%	0.18%
Passive	21	-	21	41,200	24.5%	0.05%	0.00%	0.05%	3.6%	0.01%
Active	288	-	288	26,900	16.0%	1.07%	0.00%	1.07%	48.2%	0.17%
<b>Global Fixed Income</b>	18	-	18	47,400	28.2%	0.04%	0.00%	0.04%	2.9%	0.01%
Passive	18	-	18	47,400	28.2%	0.04%	0.00%	0.04%	2.9%	0.01%
<b>Real Assets</b>	206	44	251	33,800	20.1%	0.61%	0.13%	0.74%	41.9%	0.15%
Passive	11	-	11	15,200	9.0%	0.08%	0.00%	0.08%	1.9%	0.01%
Active	28	-	28	7,200	4.3%	0.40%	0.00%	0.40%	4.7%	0.02%
Hedged	77	44	121	2,900	1.7%	2.64%	1.50%	4.14%	20.2%	0.07%
Private	89	-	90	8,500	5.1%	1.05%	0.01%	1.05%	15.0%	0.05%
<b>Cash</b>	21	-	21	18,700	11.1%	0.11%	0.00%	0.11%	3.4%	0.01%
Passive	21	-	21	18,700	11.1%	0.11%	0.00%	0.11%	3.4%	0.01%
<b>Total Plan</b>	555	44	600	168,000	100.0%	0.33%	0.03%	0.36%	100.0%	0.36%

The table above illustrates that management and incentive fees for the health care trust totaled \$600,000 for 2016 which equated to a total plan fee ratio of 0.36%. The Global Equity asset class contributed the most to the total plan fee ratio at 0.18%. The Global Fixed Income asset class contributed the least to the total plan fee ratio at 0.01%.

Table 7

Health Care Fees by Management Type

Type	Mgmt Fees (\$000's)	Incent Fees (\$000's)	Mgmt and Incent Fees (\$000's)	Average Balance (\$000's)	Average Weight	Fee Ratio - Mgmt Fees	Fee Ratio - Incent Fees	Fee Ratio - Mgmt and Incent Fees	% of Total Plan Fee Ratio	Contrib to Total Plan Fee Ratio
Passive	71	-	71	122,400	72.9%	0.06%	0.00%	0.06%	11.9%	0.04%
Active	317	-	317	34,000	20.2%	0.93%	0.00%	0.93%	52.9%	0.19%
Hedged	77	44	121	2,900	1.7%	2.66%	1.52%	4.17%	20.2%	0.07%
Private	89	-	90	8,500	5.1%	1.05%	0.00%	1.06%	15.0%	0.05%
<b>Total Plan</b>	<b>555</b>	<b>44</b>	<b>600</b>	<b>168,000</b>	<b>100.0%</b>	<b>0.33%</b>	<b>0.03%</b>	<b>0.36%</b>	<b>100.0%</b>	<b>0.36%</b>

For the total health care trust, active management strategies accounted for 0.19% of the total plan fee ratio and represented about 20% of average plan assets. Passive strategies contributed the least to the total plan fee ratio at 0.04% and represented 73% of plan assets.

Table 8

Health Care Other Investment Costs

Staff Salary and Benefits (\$000's)	Consultants (\$000's)	Custodian (\$000's)	Other Vendors (\$000's)	Total Other Costs (\$000's)	Other Costs Fee Ratio
51	26	117	15	209	0.12%

Other investment costs for the health care trust equated to a total fee ratio of 0.12%. As previously discussed, other costs include salary and benefits for investment staff, cost of general consultant, custodian, and other vendors including investment-related legal costs and research tools used by Staff.

Table 9

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

Asset Class	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Global Equity	32.9%	30.3%	-2.5%	5,000	4,300	-700	1,900	200	-1,700	6,900	4,500	-2,400	1.04%	0.74%	-0.30%	0.34%	0.23%	-0.12%	-0.03%	-0.09%
Passive	11.1%	12.9%	1.9%	300	300	-	-	-	-	300	300	-	0.13%	0.10%	-0.04%	0.01%	0.01%	0.00%	0.00%	0.00%
Active	15.9%	11.6%	-4.3%	2,500	1,700	-800	-	-	-	2,500	1,700	-800	0.78%	0.75%	-0.03%	0.12%	0.09%	-0.04%	-0.03%	0.00%
Hedged	5.9%	5.8%	-0.1%	2,200	2,300	100	1,900	200	-1,700	4,100	2,500	-1,600	3.43%	2.15%	-1.27%	0.20%	0.13%	-0.08%	0.00%	-0.07%
Private Equity	4.2%	3.6%	-0.6%	1,400	1,400	-	600	500	-100	2,000	1,900	-100	2.34%	2.60%	0.26%	0.10%	0.09%	0.00%	-0.01%	0.01%
Private	4.2%	3.6%	-0.6%	1,400	1,400	-	600	500	-100	2,000	1,900	-100	2.34%	2.60%	0.26%	0.10%	0.09%	0.00%	-0.01%	0.01%
Global Fixed Income	18.6%	18.4%	-0.3%	1,700	1,300	-400	100	600	500	1,800	1,900	100	0.48%	0.53%	0.05%	0.09%	0.10%	0.01%	0.00%	0.01%
Passive	12.5%	10.7%	-1.7%	100	200	100	-	-	-	100	200	100	0.04%	0.07%	0.03%	0.00%	0.01%	0.00%	0.00%	0.00%
Active	2.5%	5.4%	2.8%	300	500	200	-	-	-	300	500	200	0.58%	0.50%	-0.08%	0.01%	0.03%	0.01%	0.02%	0.00%
Hedged	3.6%	2.3%	-1.3%	1,300	700	-600	100	600	500	1,400	1,300	-100	1.93%	2.81%	0.87%	0.07%	0.06%	-0.01%	-0.03%	0.02%
Private Debt	5.4%	4.9%	-0.5%	1,400	1,200	-200	-	-200	-200	1,400	1,100	-300	1.29%	1.12%	-0.17%	0.07%	0.05%	-0.01%	-0.01%	-0.01%
Private	5.4%	4.9%	-0.5%	1,400	1,200	-200	-	-200	-200	1,400	1,100	-300	1.29%	1.12%	-0.17%	0.07%	0.05%	-0.01%	-0.01%	-0.01%
Real Assets	23.5%	23.3%	-0.2%	2,200	3,600	1,400	700	1,700	1,000	3,000	5,300	2,300	0.63%	1.14%	0.51%	0.15%	0.27%	0.12%	0.00%	0.12%
Passive	11.8%	11.1%	-0.7%	200	200	-	-	-	-	200	200	-	0.08%	0.08%	-0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Active	6.1%	4.0%	-2.1%	500	300	-200	-	-	-	500	300	-200	0.41%	0.39%	-0.02%	0.02%	0.02%	-0.01%	-0.01%	0.00%
Hedged	0.0%	2.0%	2.0%	-	1,000	1,000	-	600	600	-	1,600	1,600	0.00%	4.18%	4.18%	0.00%	0.08%	0.08%	0.00%	0.08%
Private	5.7%	6.3%	0.6%	1,600	2,000	400	700	1,100	400	2,300	3,200	900	2.00%	2.55%	0.55%	0.11%	0.16%	0.05%	0.01%	0.03%
Absolute Return	10.9%	12.6%	1.7%	4,300	4,300	-	2,700	2,100	-600	7,000	6,400	-600	3.18%	2.56%	-0.62%	0.35%	0.32%	-0.02%	0.05%	-0.08%
Hedged	10.9%	12.6%	1.7%	4,300	4,300	-	2,700	2,100	-600	7,000	6,400	-600	3.18%	2.56%	-0.62%	0.35%	0.32%	-0.02%	0.05%	-0.08%
Cash	4.4%	6.8%	2.4%	90	150	60	-	-	-	90	150	60	0.10%	0.11%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%
Passive	4.4%	6.8%	2.4%	90	150	60	-	-	-	90	150	60	0.10%	0.11%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	16,100	16,250	150	6,000	4,900	-1,100	22,200	21,250	-950	1.10%	1.07%	-0.03%	1.10%	1.07%	-0.03%	0.01%	-0.04%

Table 10

Pension Year-over-Year Comparison by Management Type

Type	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Passive	39.7%	41.6%	1.9%	700	700	-	-	-	-	700	700	-	0.09%	0.08%	0.00%	0.03%	0.04%	0.00%	0.00%	0.00%
Active	24.5%	20.9%	-3.5%	3,300	2,500	-800	-	-	-	3,300	2,500	-800	0.67%	0.60%	-0.07%	0.16%	0.13%	-0.04%	-0.02%	-0.01%
Hedged	20.5%	22.7%	2.2%	7,800	8,300	500	4,700	3,500	-1,200	12,500	11,800	-700	3.03%	2.62%	-0.41%	0.62%	0.59%	-0.03%	0.07%	-0.09%
Private	15.4%	14.8%	-0.5%	4,400	4,600	200	1,300	1,400	100	5,700	6,200	500	1.84%	2.11%	0.26%	0.28%	0.31%	0.03%	-0.01%	0.04%
<b>Total Plan</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>16,100</b>	<b>16,250</b>	<b>150</b>	<b>6,000</b>	<b>4,900</b>	<b>-1,100</b>	<b>22,200</b>	<b>21,250</b>	<b>-950</b>	<b>1.10%</b>	<b>1.07%</b>	<b>-0.03%</b>	<b>1.10%</b>	<b>1.07%</b>	<b>-0.03%</b>	<b>0.04%</b>	<b>-0.07%</b>

Table 11

Pension Year-over-Year Comparison of Other Costs

	Staff Salary and Benefits (\$000's)	Consultants (\$000's)	Custodian (\$000's)	Other Vendors (\$000's)	Total Other Costs (\$000's)	Other Costs Fee Ratio
2015	570	480	290	210	1,550	0.08%
2016	600	430	360	170	1,560	0.08%
Change	30	-50	70	-40	10	0.00%



Table 12

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

Asset Class	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Global Equity	44.4%	40.5%	-3.8%	188	310	122	-	-	-	188	310	122	0.36%	0.45%	0.09%	0.16%	0.18%	0.02%	-0.01%	0.04%
Passive	27.6%	24.5%	-3.1%	15	21	6	-	-	-	15	21	6	0.05%	0.05%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Active	16.7%	16.0%	-0.8%	173	288	115	-	-	-	173	288	115	0.88%	1.07%	0.19%	0.15%	0.17%	0.02%	-0.01%	0.03%
Global Fixed Income	26.4%	28.2%	1.8%	11	18	7	-	-	-	11	18	7	0.04%	0.04%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%
Passive	26.4%	28.2%	1.8%	11	18	7	-	-	-	11	18	7	0.04%	0.04%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%
Real Assets	16.5%	20.1%	3.7%	70	206	136	-	44	44	70	251	181	0.36%	0.74%	0.38%	0.06%	0.15%	0.09%	0.01%	0.08%
Passive	5.2%	9.0%	3.8%	5	11	6	-	-	-	5	11	6	0.08%	0.08%	-0.01%	0.00%	0.01%	0.00%	0.00%	0.00%
Active	9.5%	4.3%	-5.2%	42	28	-14	-	-	-	42	28	-14	0.38%	0.40%	0.02%	0.04%	0.02%	-0.02%	-0.02%	0.00%
Hedged	0.0%	1.7%	1.7%	-	77	77	-	44	44	-	121	121	0.00%	4.14%	4.14%	0.00%	0.07%	0.07%	0.00%	0.07%
Private	1.7%	5.1%	3.4%	23	89	66	-	-	-	23	90	67	1.13%	1.05%	-0.08%	0.02%	0.05%	0.03%	0.04%	0.00%
Cash	12.8%	11.1%	-1.7%	15	21	6	-	-	-	15	21	6	0.10%	0.11%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Passive	12.8%	11.1%	-1.7%	15	21	6	-	-	-	15	21	6	0.10%	0.11%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%
Total Plan	100.0%	100.0%	0.0%	284	555	271	-	44	44	284	600	316	0.24%	0.36%	0.11%	0.24%	0.36%	0.11%	0.00%	0.12%

Table 13

Health Care Year-over-Year Comparison by Management Type

Type	Average Weight			Management Fees			Incentive Fees			Management and Incentive Fees			Fee Ratio			Contrib to Total Plan Fee Ratio			YoY Attribution	
	2015	2016	Change	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015 (\$000's)	2016 (\$000's)	Change (\$000's)	2015	2016	Change	2015	2016	Change	Due to Weight	Due to Fee Ratio
Passive	72.0%	72.9%	0.8%	46	71	25	-	-	-	46	71	25	0.05%	0.06%	0.00%	0.04%	0.04%	0.00%	0.00%	0.00%
Active	26.2%	20.2%	-6.0%	215	317	102	-	-	-	215	317	102	0.70%	0.93%	0.23%	0.18%	0.19%	0.01%	-0.04%	0.05%
Hedged	0.0%	1.7%	1.7%	-	77	77	-	44	44	-	121	121	0.00%	4.17%	4.17%	0.00%	0.07%	0.07%	0.00%	0.07%
Private	1.7%	5.1%	3.3%	23	89	66	-	-	-	23	90	67	1.13%	1.06%	-0.07%	0.02%	0.05%	0.03%	0.04%	0.00%
<b>Total Plan</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>284</b>	<b>555</b>	<b>271</b>	<b>-</b>	<b>44</b>	<b>44</b>	<b>284</b>	<b>600</b>	<b>316</b>	<b>0.24%</b>	<b>0.36%</b>	<b>0.11%</b>	<b>0.24%</b>	<b>0.36%</b>	<b>0.11%</b>	<b>0.00%</b>	<b>0.12%</b>

Table 14

Health Care Year-over-Year Comparison of Other Costs

	Staff Salary and Benefits (\$000's)	Consultants (\$000's)	Custodian (\$000's)	Other Vendors (\$000's)	Total Other Costs (\$000's)	Other Costs Fee Ratio
2015	33	21	70	11	135	0.12%
2016	51	26	117	15	209	0.12%
Change	18	5	47	4	74	0.01%

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

As presented in Table 9, the pension total plan fee ratio decreased by -3 bps from 1.10% in 2015 to 1.07% in 2016.

The largest asset class drivers of the decrease were Global Equity (-12 bps change in contribution) and Absolute Return (-2 bps) which were offset by an increase in Real Assets (+12 bps).

Average asset class weight changes contributed +1 bp to the year-over-year change in total plan fee ratio. The largest asset class weight changes came from a 2.5% decrease in Global Equity (-3 bps attribution due to weight), a 2.4% increase in Cash (no impact), and a 1.7% increase in Absolute Return (+5 bps).

Changes in fee ratios contributed -4 bps to the year-over-year change in total plan fee ratio. Global Equity (-9 bps attribution due to fee ratio) and Absolute Return (-8 bps) were the largest negatives, partially offset by an increase in Real Assets (+12 bps).

A summary of the key drivers in year-over-year changes to pension fee ratios from 2015 to 2016 for each asset class is below along with comparisons of performance net of fees.

The **Global Equity** fee ratio declined from 0.34% in 2015 to 0.23% in 2016 due to lower incentive fees to hedged long/short equity managers and lower weight in active managers. The Marketable Alternative Equity composite return declined from 3.3% in 2015 to 0.7% in 2016 leading to lower incentive fees and bringing the fee ratio for hedged Global Equity managers down from 3.43% in 2015 to 2.15% in 2016. Additionally, the active manager weight declined by 4.3% from 2015 to 2016. Global Equity asset class performance improved from -1.7% in 2015 to 6.1% in 2016.

**Private Equity** saw a slight increase from 2.34% in 2015 to 2.60% in 2016 as fees remained the same in dollar terms but average weight declined from 4.2% in 2015 to 3.6% in 2016. The performance of Private Equity declined on a time-weighted return basis from 7.6% in 2015 to 5.3% in 2016.

**Global Fixed Income** increased modestly from 0.48% in 2015 to 0.53% in 2016. The fee ratio for hedged Global Fixed Income strategies increased from 1.93% in 2015 to 2.81% in 2016, but was offset by a 1.3% reduction in average weight. The performance of Global Fixed Income improved from -0.1% in 2015 to 2.8% in 2016.

**Private Debt** declined from 1.29% in 2015 to 1.12% in 2016. The performance of Private Debt declined on a time-weighted basis from 2.7% in 2015 to 1.4% in 2016.

**Real Assets** increased from 0.63% in 2015 to 1.14% in 2016 due to a combination of an initiation of hedged Real Assets strategies that had a fee ratio of 4.18% and a spike in management and incentive fees for private funds. Two new private Real Assets funds began calling capital in 2016. The performance of Real Assets improved significantly from -12.8% in 2015 to 13.9% in 2016.

**Absolute Return** had a notable decline from 3.18% in 2015 to 2.56% in 2016 due in large part to negotiating more favorable and better aligned fee agreements with existing and newly hired managers. The performance of Absolute Return declined slightly from 1.8% in 2015 to 1.5% in 2016.

The **GTAA/Oppportunistic** asset class remained unfunded and **Cash** was roughly flat year over year.

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

As shown in the Table 10 contribution to total plan fee ratio change column, the largest drivers of the -3 bps total plan fee ratio decline from fund management types were Active (-4 bps change in contribution) and Hedged (-3 bps), which were partially offset by an increase in Private (+3 bps).

Weight changes increased the total plan fee ratio by +4 bps with the largest contributor the 2.2% increase to hedged strategies (+7 bps attribution due to weight) which was offset by a 3.5% decline in active strategies (-2 bps) and 0.5% decline in private strategies (-1 bp).

Changes to fee ratios decreased the total plan fee ratio by -7 bps with the largest contributor coming from hedged strategies which saw its fee ratio decline from 3.03% in 2015 to 2.62% in 2016 (-9 bps attribution due to fee ratio).

As displayed in Table 11, **Other Costs** were flat at 0.08% with the largest change a \$70,000 increase in custodian expenses. State Street began providing performance, risk, and compliance services in the middle of 2015 and 2016 represents the first full year of these services.

## Analysis of Health Care Year-over-Year Changes by Asset Class

As seen in table 12, the health care total plan fee ratio increased by +12 bps from 0.24% in 2015 to 0.36% in 2016. The largest drivers of the increase were Real Assets (+9 bps contribution) and Global Equity (+2 bps).

The **Real Assets** fee ratio increased from 0.36% in 2015 to 0.74% in 2016 primarily from initiating 1.7% of average plan assets in hedged Real Assets strategies that had a fee ratio of 4.14%.

**Global Equity** increased from 0.36% in 2015 to 0.45% in 2016 as the fee ratio for active strategies increased from 0.88% in 2015 to 1.07% in 2016.

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

As shown in the Table 13 YoY attribution, all +12 bps of the total plan change were due to changes in fee ratios with no net change due to weight. Fee ratio changes in hedged strategies were the largest contributor (+7 bps attribution due to fee ratio) followed by active strategies (+5 bps). A 6.0% decline in average weight for active strategies (-4 bps attribution due to weight) was offset by the 3.3% increase in private strategies (+4 bps).

As displayed in Table 14, **Other Costs** were flat at 0.12%. State Street began providing performance, risk, and compliance services in the middle of 2015 and 2016 represents the first full year of these services.