



# FIRE & POLICE PENSION ASSOCIATION of COLORADO





# **FPPA**

COMPREHENSIVE

ANNUAL

FINANCIAL

REPORT

for the

FISCAL YEAR

ENDED

**DECEMBER 31, 2017** 

This report was created under the direction of the **FPPA Board of Directors** Nick Nuanes, Chair David L. Bomberger, CFA, Vice Chair Todd Bower, JD, MBA Pamela M. Feely, CPA, MBA, AF Karen M. Frame, CFA Tammy Hitchens, CPA, CPFO Sue Morgan, CCP Guy Torres, CIMA®, AIF®, MBA Tyson Worrell and prepared by the FPPA Operations Division Kim Collins, Chief Operations Officer Ahni Smith, CPA, Accounting Director



# **FPPA**

Fire & Police Pension Association of Colorado

5290 DTC Parkway, Suite 100 Greenwood Village, CO 80111 303-770-3772 toll-free 800-332-3772

www.FPPAco.org

# FIRE & POLICE PENSION ASSOCIATION of COLORADO

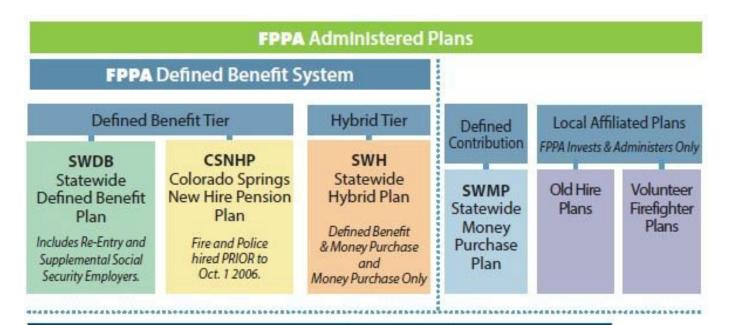




# MISSION STATEMENT

The Fire & Police Pension
Association of Colorado
is committed to our members.
We will prudently invest their
retirement funds,
administer benefits impartially,
and efficiently provide
high quality service.

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**SWD&D** Statewide Death & Disability Plan

Plans above this bar are covered by the Statewide Death & Disability Plan.

457 Deferred Compensation Plan
Plans above this bar may participate in the 457 Deferred Compensation Plan.



June 30, 2018

Dear Fire & Police Pension Association Members, Benefit Recipients, Employers, and Members of the Board of Directors:

We are pleased to present the Fire & Police Pension Association's (FPPA) Comprehensive Annual Financial Report (CAFR) for the calendar year ended December 31, 2017. This CAFR was prepared to aid interested parties in assessing FPPA's financial status as of December 31, 2017, and its results for the year then ended. The compilation of this CAFR reflects the combined efforts of FPPA staff and is the responsibility of FPPA management.

#### **Overview of FPPA**

The Fire & Police Pension Association was established in 1980 pursuant to the Colorado Revised Statutes of 1973, as amended. FPPA administers retirement and disability benefits for police officers and firefighters throughout the State of Colorado. FPPA has defined benefit, defined contribution, hybrid, and 457 deferred compensation plans for the benefit of its members. FPPA's defined benefit programs include cost-sharing multiple-employer pension plans as well as agent multiple-employer pension plans and single-employer pension plans. FPPA administers two funds: the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund ("the Funds").

The Fire & Police Members' Benefit Investment Fund includes the assets of those plans that fall under the complete investment authority of the FPPA Board of Directors. This fund includes the assets of the Defined Benefit System, the Statewide Death & Disability Plan, and Affiliated Local Plans. The Defined Benefit System comprises the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan. Affiliated Local Plans comprises numerous separate Local "Old Hire" police and fire plans and Volunteer Firefighter pension plans.

The Fire & Police Members' Self-Directed Investment Fund consists of the assets in plans where members control their account by choosing from various investment options selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors. The Fire & Police Members' Self-Directed Investment Fund includes the assets in the Fire & Police Members' Statewide Money Purchase Plan and the Fire & Police Members' Deferred Compensation Plan. In addition, the Fire & Police Members' Self-Directed Investment Fund includes assets of certain Deferred Retirement Option Plans within the Defined Benefit System and affiliated Local "Old Hire" pension plans. This fund also includes the Money Purchase Component of the Defined Benefit System – Statewide Hybrid Plan, and the Separate Retirement Account assets from eligible Defined Benefit System retired members.

## **Financial Highlights**

#### **General Economic Conditions**

The Fire & Police Members' Benefit Investment Fund experienced positive performance for the year ended December 31, 2017. Real gross domestic product (GDP), a broad measure of the output of goods and services in the United States, increased at an estimated annual rate of 2.3% in 2017, compared to an increase of 1.5% in 2016. The labor markets improved in 2017 with nonfarm payroll employment increasing by 2.2 million jobs during the year. The unemployment rate decreased to 4.1% in 2017 from 4.7% during 2016. The Federal Reserve increased the targeted federal funds rate three times from 0.75% in 2016 to 1.50% by the end of 2017. The consumer price index increased to 2.1% in 2017 compared to an increase of 1.0% in 2016.

The U.S. markets were positive in 2017. Large company stocks, as measured by the Russell 1000 Index, increased 21.7% in 2017 compared to an increase of 12.1% in 2016. Smaller company stocks, as measured by the Russell 2000 Index, increased 14.6% in 2017 compared to an increase of 21.3% in 2016. The Barclays Capital U.S. Aggregate Bond Index produced a return of 3.5% in 2017 compared to a return of 2.7% in 2016. Developed international equity markets outperformed the U.S. equity markets in 2017. The MSCI EAFE Index increased by 25.6% in 2017 compared to an increase of 1.5% in 2016. The MSCI Emerging Markets Index increased 37.8% in 2017 after increasing 11.6% in 2016.

In the currency markets, the U.S. dollar depreciated against most major currencies in 2017. The Euro appreciated 14.2% against the Dollar, closing at 1.2005 Dollars per Euro in 2017 from 1.0517 at the end of 2016. The British Pound appreciated 9.5% against the Dollar, closing at 1.3513 Dollars per GRB in 2017 from 1.2370 at the end of 2016. The Dollar depreciated 6.5% against the

Letter of Transmittal

Canadian Dollar resulting in a rate of 1.2571 Canadian Dollars per U.S. Dollar in 2017 from 1.3441 at the end of 2016. The Dollar depreciated 3.7% relative to the Japanese Yen to 112.69 Yen per Dollar in 2017 from 116.96 at the end of 2016.

Additional information regarding the investments of the Funds can be found in the Investment section of this report.

#### **Investments**

Net investible assets totaled \$5.393 billion in market value as of December 31, 2017, which was comprised of the Fire & Police Members' Benefit Investment Fund (\$4.940 billion) and the Fire & Police Members' Self-Directed Investment Fund (\$0.452 billion). The Members' Benefit Investment Fund generated a total time-weighted return of 14.95%, net of fees, for the one-year period ending December 31, 2017. This return was 1.30% above the Implementation Benchmark of 13.65%. The Members' Benefit Investment Fund has achieved a 9.48% annualized return since inception in January 1980.

The board of directors establishes and continually updates investment allocation targets. At year-end, the following investment allocation targets were in effect: global equity 37.0%; equity long/short 9.0%; fixed income & cash 17.0%; absolute return 9.0%; managed futures 4.0%; and illiquid alternatives 24.0%. At year-end, the Fire & Police Members' Benefit Investment Fund was allocated as follows: global equity 38.3%; equity long/short 8.9%; fixed Income & cash 17.1%; absolute return 9.5%; managed futures 4.0%; and illiquid alternatives 22.3%. The board of directors has established investment policies and objectives to define acceptable levels of risk, asset allocation targets, asset class guidelines, investment performance objectives, and other guidelines governing the management of the Fire & Police Members' Benefit Investment Fund. The board of directors has adopted a separate statement of policies and objectives for the Fire & Police Members' Self Directed Investment Fund which includes investment objectives, criteria for the selection of investment options and mutual fund guidelines.

Explanations of FPPA's investment policies and asset allocation strategy, as well as the portfolio's composition are included in the Investment Section of this report. Additionally, a review of investment activity and performance for 2017 is included in that section.

#### **Funding Status**

Each pension plan administered by FPPA must be separately funded. Assets from one plan cannot be used to pay the benefit obligations of any other plan. Therefore, the funding status of each individual plan must be judged separately.

FPPA's funding objective for the Fire & Police Members' Benefit Investment Fund is to meet long-term benefit promises through contributions and investment income. The funding ratios listed in the following chart give an indication of how well this objective has been met to date. The higher the funding ratio, the better funded the plan.

The funding ratio (actuarial value of assets divided by actuarial accrued liability) for each of the plans in the Defined Benefit System and the Statewide Death & Disability Plan as of January 1, 2017 is as follows:

Plan (information as of January 1, 2017)	Funding Ratio	Actuarial Value of Assets	Actuarial Accrued Liability
Statewide Death & Disability Plan	104.8%	\$374,943,903	\$357,915,920
Defined Benefit System		_	
Statewide Defined Benefit Plan	101.4%	2,050,113,711	2,021,526,883
Statewide Hybrid Plan – Defined Benefit Component	129.6%	54,702,116	42,201,793
Colorado Springs New Hire Pension Plan – Police Component	86.7%	286,951,659	331,007,540
Colorado Springs New Hire Pension Plan – Fire Component	80.4%	131,529,543	163,542,442

Affiliated Local Plans are not listed because the data necessary to calculate a gain/loss analysis on all Local Plans was not available as of the January 1, 2017, actuarial valuations.

The Affiliated Local Plans and Colorado Springs New Hire Pension Plan - Police and Fire Components are plans for which FPPA has been asked to and has undertaken investment and recordkeeping responsibility, but are not plans for which FPPA has determined or set the benefits, or the funding policy. Funding for pension liabilities for Affiliated Local Plans is the responsibility of the employers. Funding for the Colorado Springs New Hire Pension Plan – Police and Fire Components is the responsibility of the active members and the employer.

Investment income is a significant driver in a defined benefit plan. Market performance was lower than the actuarial return assumption in 2016, and this factor, viewed in isolation, will likely decrease the funded status of the plans. The actuarial assumptions implemented in January 1, 2016 are a more conservative position for the Fire & Police Pension Association and decreased the funded status of the plans. The assumption changes are discussed in more detail in the Actuarial Section.

# **Active Membership and Participating Employers**

The members listed in the following schedule are comprised of 42.2% police officers, 56.8% firefighters, and 0.9% administrative fire district staff.

Active Membership in the Plans	12/31/2017	12/31/2016	% Change
Statewide Death & Disability Plan	12,214	11,975	2.0%
Defined Benefit System			
Statewide Defined Benefit Plan	8,727	7,920	10.2%
Statewide Hybrid Plan	377	353	6.8%
Colorado Springs New Hire Pension Plan*	497	520	(4.4%)
Affiliated Local Plans			
Old Hire*	6	7	(14.3%)
Volunteer Firefighters	2,883	3,074	(6.2%)
Statewide Money Purchase Plan	118	125	(5.6%)

<sup>\*</sup> Plans are closed to new members

The participating employer fire and police departments in the plans are as follows:

Participating Employer Departments in the Plans	12/31/2017	12/31/2016	% Change
Statewide Death & Disability Plan	411	396	3.8%
Defined Benefit System			
Statewide Defined Benefit Plan	227	216	5.1%
Statewide Hybrid Plan	40	37	8.1%
Colorado Springs New Hire Pension Plan	1	1	0.0%
Affiliated Local Plans			
Old Hire	48	49	(2.0%)
Volunteer Firefighters	173	174	(0.6%)
Statewide Money Purchase Plan	48	45	6.7%

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Letter of Transmittal

## **Summary Financial Information**

The following schedule is a comparative summary of the revenues and expenses of the Funds for the years ended December 31, 2017 and December 31, 2016.

	12/31/2017	12/31/2016	% Change
Contributions	\$450,141,473	\$227,732,830	97.7%
Net Investment Income	692,898,213	246,981,141	180.5%
Benefit Payments and Refunds	(420,597,867)	(326,863,043)	28.7%
Administrative Expenses	(7,587,441)	(7,858,514)	(3.4%)
Pension Expense	(7,710,913)	(2,223,205)	246.8%
Net Change	\$707,143,465	\$137,769,209	413.3%

Management's discussion and analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

Additionally, graphs and charts of statistical data may be found throughout the CAFR.

#### **Accounting System and Internal Control**

The financial statements included in this report, along with all other information provided, are the responsibility of the management of the Fire & Police Pension Association. The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America applicable to financial audit contained in Government Auditing Standards, including the pronouncements of the Governmental Accounting Standards Board (GASB). In management's opinion, the financial statements present fairly the financial position of the FPPA at December 31, 2017, and the result of its operations for the period then ended.

The management of the Fire and Police Pension Association is also responsible for maintaining a system of internal accounting controls designed to provide reasonable assurance that transactions are executed and reported in accordance with generally accepted accounting principles. The concept of reasonable assurance recognizes that:

- (1) The cost of a control should not exceed the benefits likely to be derived; and
- (2) The valuation of costs and benefits requires estimates and judgments by management.

FPPA has an internal audit program that encompasses the examination of internal controls. The internal audit function reports directly to the Executive Director and the board of directors. The board of directors has established an Audit Committee, comprised of three board members. The internal auditor reported that FPPA's system of internal controls appears adequate and is being adhered to in the areas tested. Additionally, FPPA completes an annual Service Organization Controls (SOC) 1 Type 2 report on FPPA's internal controls over financial reporting for the Local Affiliated Plans. This report includes controls over information technology and operational processes to provide assurances for Local Affiliated Plans with regard to Governmental Accounting Standards Board (GASB) Statement No. 68, Accounting and Financial Reporting for Pensions. We believe that the internal controls in effect during the year ended December 31, 2017, adequately safeguarded assets and provided reasonable assurance regarding the proper recording and reporting of financial transactions.

#### **Newly Implemented Accounting Standards**

FPPA implemented Government Accounting Standards Board (GASB) Statement No.74, Financial Reporting for Postemployment Benefits Other Than Pension Plans for the reporting period ended December 31, 2017. The objective of GASB Statement No. 74 is to improve the usefulness of information about postemployment benefits other than pensions (OPEB) by providing expanded note disclosure, greater transparency regarding measures of net OPEB liability, and enhanced comparability of reporting from plan to plan. Additional information on the impact of implementation is addressed in the Financial Section.

#### **Independent Audit**

The accounting firm of Eide Bailly LLP rendered an opinion as to the fairness of the Funds' 2017 financial statements. The audit was performed in accordance with government auditing standards generally accepted in the United States of America. The Independent Auditors' Report may be found listed in the Table of Contents at the beginning of this document.

# **Major Initiatives**

In 2017, FPPA continued to follow its strategic plan and made adjustments, as needed, in response to changing economic conditions. Resources were devoted to several major initiatives.

We began an initiative in 2015 to implement the Baldrige Criteria for Performance Excellence to ensure we align our objectives, processes, and resources with our vision. Progress towards meeting our objectives is measured using the following four key results areas:

- Financial Health and Sustainability
- Investment Returns

- Customer Service and Operational Excellence
- Workforce Engagement

Baldrige recipient organizations often set their strategic objectives to achieve a top decile ranking in each key area of importance to their stakeholders. FPPA will follow a similar process as we set strategic goals and objectives in 2018.

FPPA continued its efforts to improve services, prudently manage fund assets, streamline business operations, and increase operational efficiency. In 2017, we completed the following major initiatives:

- FPPA continues to focus on its member and employer education initiative. We presented to members from fire and police departments throughout the State covering information about the death and disability benefits, retirement benefits, and other services provided by the Association. At these meetings, we offer retirement projections to assist members in planning for their future retirement needs. FPPA hosts two annual seminars. One seminar is for members with topics including pre-retirement planning, estate and tax planning, insurance services, and long term care insurance. The other seminar is for employers with topics including accounting requirements, managing membership and contribution data, fiduciary responsibility, and other related topics. We strongly recommend these seminars to members, retirees, and employers. In addition, we expanded our newsletter communication from one to two times a year and added a Facebook presence to provide more timely information to our membership.
- In 2003, legislation was enacted to allow departments who cover their firefighters and police officers in money purchase plans to elect coverage under the FPPA Defined Benefit System. A reentry moratorium was in place since 2014 as the Statewide Defined Benefit Plan Member Contribution Election was completed. The board of directors lifted the moratorium for partial reentry in 2017 to align with their strategic plan objective to expand membership into FPPA's retirement plans. Staff held a series of meetings in 2017 to present information to departments who expressed interest in entering the FPPA Defined Benefit System. Five departments completed the partial reentry process in 2017. Discussions are ongoing with other departments. These meetings are conducted at the request of the employees or employers. A new JoinFPPA website was developed specifically to provide information on the process.
- Per the guidelines of the Audit Procurement Policy, a Request for Proposals for Audit Services was completed in 2017 and a new audit firm (Eide Bailly LLP) was selected.
- A new Plan Allocation of Expenses Policy was implemented effective January 2017 to address the strategic plan initiative
  to improve the methodology for assessing administrative fees to each plan.
- In 2017 we began a multi-year redesign of our core pension management system to incorporate business process management workflow solutions and reengineer the Member Account Portal (MAP) and the Employer Portal with self-service features. MAP was enhanced with additional retiree self-service features. We began the development of a new member onboarding process, which impacts the MAP and the Employer Portal, and will be implemented in 2018.
- FPPA periodically reevaluates its investment consultant relationships. Upon the completion of a rigorous Request for Proposal process, the board of directors selected Cambridge Associates as its new general investment consultant. Cambridge Associates was also selected as the investment consultant supporting FPPA's private markets and hedge fund programs.

Letter of Transmittal

 FPPA enhanced its investment process through the creation of an Internal Investment Committee. Comprised of executive staff and senior investment personnel, the Committee provides additional oversight of the execution of the investment program.

# Legislation

Two pieces of legislation were passed into law affecting FPPA and its plans in 2017:

## Senate Bill 17-020

The bill established a uniform rate for approval for member elections throughout all plans and processes under FPPA governance. The new standard for passage of an election is 65% of members voting in the election.

#### Senate Bill 17-013

This bill authorized the FPPA Board of Directors to develop a multi-employer deferred compensation plan document to allow employers to join a multi-employer plan. A new multi-employer plan was subsequently adopted by the FPPA Board to replace the previous affiliated local deferred compensation plans effective January 1, 2018.

#### **Awards**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Fire and Police Pension Association for its comprehensive annual financial report for the fiscal year ended December 31, 2016. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. FPPA has annually received a Certificate of Achievement from GFOA since our first CAFR was published in 1996.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. The comprehensive annual financial report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. FPPA believes our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

In addition, FPPA received The Public Pension Standards Award for 2017 from the Public Pension Coordinating Council. The award recognizes the Association's conformance with professional standards for plan design and administration.

# **Acknowledgments**

This annual report of the Fire and Police Pension Association was prepared through the combined efforts of the FPPA staff under the leadership of the board of directors. It is intended to provide complete and reliable information which may be used as a basis for making management decisions and as a means for determining compliance with state statutes.

Access to this report is being provided to the State Auditor, the Joint Budget Committee, the Police Officers' and Firefighters' Pension Reform Commission, all participating employers, and other interested parties.

Respectfully submitted,

Dan M. Slack FPPA Executive Director



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Fire & Police Pension Association of Colorado

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2016

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2017

Presented to

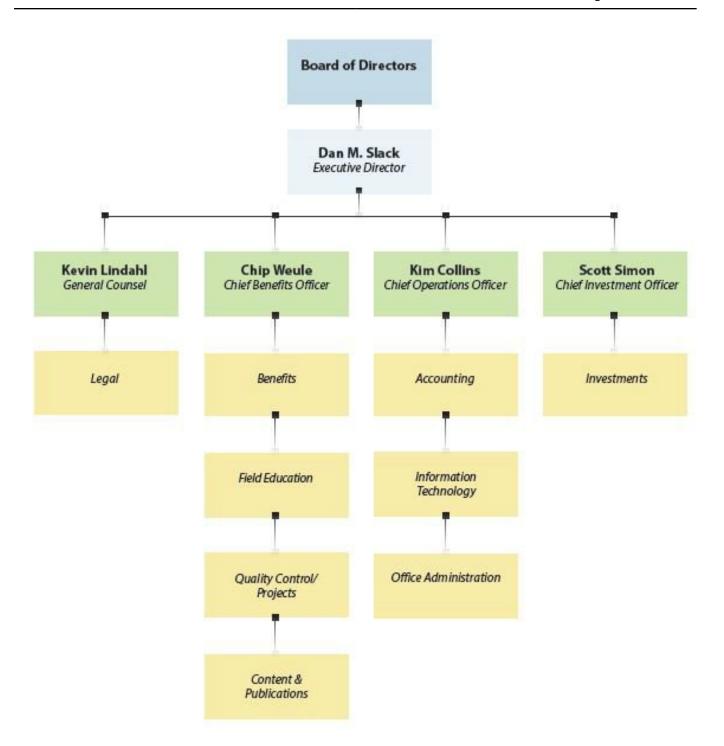
# Fire and Police Pension Association of Colorado

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

> Man HULLAND Q Also H. Windsle Program Administrator



By state statute, the management of the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund (the Funds) is vested in the board of directors of the Fire and Police Pension Association of Colorado. Appointed by the Governor and confirmed by the Senate, the FPPA Board of Directors is composed of nine members:

Two members representing Colorado municipal employers;

One member representing full-time paid firefighters;

One member representing full-time paid police officers;

**One member** who is either a member of the board of directors of a special district, or is the full-time paid professional manager of a special district to represent special districts having volunteer firefighters;

One member from the state's financial or business community with experience in investments;

One member from the state's financial or business community with experience in insurance disability claims; and

**One member** of the state's financial or business community experienced in personnel or corporate administration in corporations of over 200 employees.

All of the eight board of directors mentioned above serve four-year staggered terms.

One member who is a retired firefighter and who, upon completion of his term, is replaced by a retired police officer. Thereafter, the appointment of retired officers alternates between a retired police officer and a retired firefighter for each successive six-year term.

Specific duties of the board of directors include investing and managing the Funds, disbursing money from the Funds, setting required contribution levels, and determining the award of disability and survivor benefits. The board of directors also appoints an Executive Director who is FPPA's chief administrative officer. The Executive Director appoints FPPA staff who are responsible for the day-to-day administration of the firefighter and police pension funds.

The FPPA Board of Directors accomplishes its business at regular and educational meetings, held ten times per year. In accordance with state law, each meeting's proposed agenda items are posted at least 24 hours in advance. All meetings are open to the public.



Nick Nuanes Board Chair Retired Firefighter, Chief Denver Fire Department Member since 2013 Current term expires 9/1/19





Todd Bower, JD, MBA
Deputy Chief,
Denver Fire Department
Member since 2001
Current term expires 9/1/19



Pamela M. Feely,
CPA, MBA, AF
President, West Metro
Fire Rescue District IV
Member since 2011
Current term expires 9/1/19







Tammy Hitchens, CPA, CPFO Finance Director, City of Westminster Member since 2017 Current term expires 9/1/19



Sue Morgan, CCP Human Resources Manager, Town of Castle Rock Member since 2015 Current term expires 9/1/21



Guy Torres, CIMA®, AIF®, MBA Managing Director, Pacific Income Advisers, Inc. Member since 2016 Current term expires 9/1/20



Tyson Worrell
Detective,
Denver Police Department
Member since 2012
Current term expires 9/1/20

#### **Professional Consultants**

#### **Actuarial**

Gabriel Roeder Smith & Co

#### **Auditor**

Eide Bailly LLP BKD, LLP

#### **Board Medical Advisor**

Clarence Henke, M.D., P.C.

#### **Investment Consultants**

Albourne America, LLC AndCO Consulting, LLC Institutional Shareholder Services Pension Consulting Alliance

#### **Investment Compliance**

EIRIS Conflict Risk Network IW Financial Subrosa Investigations, LLC

#### Master Custodian/Trustee

**BNY Mellon Asset Servicing** 

## Recordkeeper

**Fidelity Investments** 

# Management

Calhoun Consulting Partners, LLC Choose People Corey Speaks, LLC Nicoletti-Flater Associates

# Legal Counsel

Hoffman, Parker, Wilson & Carberry, P.C. Ice Miller LLP Jackson Walker LLP SJT Law, LLC Thomas L. Kanan, Esq.

#### **Governmental Relations**

Lombard & Clayton

# **Investment Managers\***

## **Total Fund Overlay**

**Russell Investments** 

Allianz Global Investors Baillie Gifford Overseas

## **Global Equity**

BNP Paribas
Driehaus Asset Management
Kayne Anderson Capital Advisors
Numeric Investors
Russell Investments
State Street Global Advisors
Walter Scott Partners
Winton Capital Management Limited

## Equity Long/Short

AKO Capital
Anchor Bolt Capital
Hitchwood Capital Management
Luxor Capital Partners
Palestra Capital Partners
Pershing Square Capital Management
Rivulet Capital Partners
RK Capital Management
Sachem Head Capital Management
Senator Investment Group
Southpoint Capital Advisors

# Fixed Income

Goldman Sachs Asset Management Loomis Sayles & Company Manulife Asset Management Prudential Capital Group State Street Global Advisors

# **Managed Futures**

AHL Partners
Graham Capital Management
KeyQuant
Winton Capital Management Limited

# **Investment Managers\* - continued**

#### Real Assets

Alpha Petroleum

**ArcLight Energy Partners** 

Arroyo Energy Investment Partners

**BroadRiver Asset Management** 

Capital Royalty Partners Energy Capital Partners

Enervest

**EIG Management Company** 

**Incus Capital** 

Petroleum Equity RHO Raven Capital Management

RiverRock European Capital Partners

Rosemawr Management Scout Energy Partners

Wood Creek Capital Management

#### Real Estate

Blackrock

**Blackstone Capital Partners** 

H2 Real Estate

JP Morgan Asset Management - Real Estate

Morgan Stanley Real Estate
Pauls Realty Fund Advisor
Prudential Real Estate Investors
RREEF Alternative Investments

Velocis

## Absolute Return

Alphadyne Asset Management AQR Capital Management Arrowgrass Capital Partners

Autonomy Capital Citadel Advisors

Commonwealth Opportunity Capital

**HBK Capital** 

**Hudson Bay Capital Associates** 

Hutchin Hill Capital MKP Capital Management Pharo Global Advisors Limited Soroban Capital Partners **Alchemy Special Opportunities** 

American Securities
Boston Ventures

**Bowmark Capital Partners** 

Capital Partners
Catterton Partners
Centre Lane Partners

Coller Investment Management Limited

Commonfund Capital

CVC European Equity Partners Doughty Hanson & Company

**Endeavour Capital** 

**Energy & Minerals Group** 

Enhanced Equity
Ethos Private Equity
Gilde Buyout Partners
Grey Mountain Partners

HIG Bayside H.I.G. Capital

High Road Capital Partners Insight Venture Partners

J.H. Whitney JMI Equity

Kayne Anderson Capital Advisors Kelso Investment Associates

KPS Capital Partners Littlejohn & Co.

Matlin Patterson

Mayfair Equity Partners Mercato Partners

viercato Partners

**MVM Life Science Partners** 

**Nautic Partners** 

NB Dyal

**New Enterprise Associates** 

**Nordic Capital** 

NGP Energy Capital Management

NVM Private Equity Oak Hill Advisors O'Brien-Staley Partners Oxford Bioscience

Palladium Capital Management

**Roark Capital Partners** 

**Rosemont Investment Partners** 

Siguler Guff & Company

**TA Associates** 

**Technology Crossover Ventures** 

Texas Pacific Group
The Raine Group

Thomas McNerney & Partners

**Venture Investment Managers** 

Transom Capital Group

**Ufenau Capital Partners** 

Veritas Capital.

**Private Equity** 

<sup>\*</sup> Additional information on the Investment Managers can be found in the Investment Section





FPPA administers the Fire & Police Members' Benefit Investment Fund which includes the assets of those plans that fall under the complete investment authority of the FPPA Board of Directors. This fund includes the assets of the Defined Benefit System, the Statewide Death & Disability Plan, and numerous separate Local "Old Hire" police and fire plans, and Volunteer Firefighter pension plans. The Defined Benefit System comprises the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan.

In addition, FPPA administers the Fire & Police Members' Self-Directed Investment Fund which consists of the assets of plans where members control their account by choosing from various mutual fund options selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors. The Fire & Police Members' Self-Directed Investment Fund includes the assets in the Fire & Police Members' Statewide Money Purchase Plan, and the IRC 457 Deferred Compensation Plan. In addition, the Fire & Police Members' Self-Directed Investment Fund includes assets of certain Deferred Retirement Option Plans within the Defined Benefit System and Affiliated Local "Old Hire" pension plans. This fund also includes the Money Purchase Component of the Defined Benefit System – Statewide Hybrid Plan and the Separate Retirement Account assets from the eligible Defined Benefit System retired members.

An audit is performed annually on the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund.

General information about each Fund can be found in the Introductory Section of this annual report. A listing of employers by plan or plan type can be found in the Statistical Section of this report. All data in this annual report, other than the Financial Section which follows, has not been audited by FPPA's outside auditors



# Independent Auditor's Report

To the Board of Directors Fire and Police Pension Association of Colorado Greenwood Village, Colorado

# Report on the Financial Statements

We have audited the accompanying financial statements of the Fire and Police Members' Benefit Investment Fund (consisting of the Affiliated Local Plans, the Statewide Death and Disability Plan, and the Defined Benefit System) and the Fire and Police Members' Self-Directed Investment Fund (consisting of the Fire and Police Members' Statewide Money Purchase Plan, the Self-Directed Assets for the Affiliated Local and Defined Benefit System Plans, and the Internal Revenue Code 457 Deferred Compensation Plan) of the Fire and Police Pension Association of Colorado (the "Association"), as of and for the year ended December 31, 2017, and the related notes to the financial statements as listed in the table of contents.

# Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Fire and Police members' Benefit Investment Fund and the Fire and Police Members' Self-Directed Investment Fund as of December 31, 2017, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of annual money-weighted rate of return of pension and OPEB plan investments, schedule of changes in the employers' net pension liability, schedule of employers' contributions, notes to required supplementary information for cost-sharing and single employer plans, schedule of changes in the net OPEB liability for the statewide death and disability plan and the staff healthcare subsidy plan, and the notes to required supplementary information OPEB plans, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods or preparing the information and comparing the information for consistency with management's responses to our inquires, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Association's financial statements. The introductory section, other supplementary information, investment section, actuarial section, and statistical section are presented for purposes of additional analysis and are not a required part of the financial statements.

The other supplementary information as identified in the table of contents is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

## Report on Summarized Comparative Information

The financial statements include summarized prior-year comparative information. The financial statements of the Association as of December 31, 2016, were audited by other auditors, whose report dated June 6, 2017, expressed an unmodified opinion on those statements. The summarized comparative information presented herein as of and for the year ended December 31, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

# Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated June 8, 2018 on our consideration of the Association's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Association's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Association's internal control over financial reporting and compliance.

Side Sailly LLP
Boise, Idaho
June 8, 2018

Management's Discussion and Analysis of the Fire & Police Pension Association's (FPPA) financial performance provides an overview of financial activities for the fiscal year ended December 31, 2017. This discussion and analysis is more meaningful when read in conjunction with the FPPA financial statements and accompanying notes to the financial statements. The FPPA actual results, performance and achievements expressed or implied in these statements are subject to changes in interest rates, securities markets, general economic conditions, legislation, regulations, and other factors.

FPPA administers two funds: the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund ("the Funds"). The Fire & Police Members' Benefit Investment Fund includes the assets of those plans that fall under the complete investment authority of the FPPA Board of Directors. This fund includes the assets of the Defined Benefit System, the Statewide Death & Disability Plan, and numerous separate Local "Old Hire" police and fire plans, and Volunteer Firefighter pension plans. The Defined Benefit System comprises the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan.

The Fire & Police Members' Self-Directed Investment Fund consists of the assets of plans where members control their account by choosing from various mutual fund options selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors or other member-selected investment options available through a Self-Directed Brokerage Account administered by FPPA's recordkeeper (Fidelity Investments). The Fire & Police Members' Self-Directed Investment Fund includes the assets in the Fire & Police Members' Statewide Money Purchase Plan and the IRC 457 Deferred Compensation Plan. In addition, the Fire & Police Members' Self-Directed Investment Fund includes assets of certain Deferred Retirement Option Plans within the Defined Benefit System and affiliated Local "Old Hire" pension plans. This fund also includes the Money Purchase Component of the Defined Benefit System - Statewide Hybrid Plan and the Separate Retirement Account assets from eligible Defined Benefit System retired members.

The members of the FPPA Board of Directors serve as the fiduciaries for the Funds and are responsible for the investment of the Funds. They also select the investment options available to self-directed plan members. As fiduciaries, the FPPA Board members are required to discharge their duties in the interest of members and beneficiaries.

# **Financial Highlights**

Fiduciary Net Position for all plans administered by FPPA increased \$707,143,465 during the calendar year 2017.

## **Change in Fiduciary Net Position**

Affiliated Local Plans	\$93,920,558
Statewide Death & Disability Plan	42,594,913
Defined Benefit System	
Statewide Defined Benefit Plan	424,911,825
Statewide Hybrid Plan	16,691,809
Colorado Springs New Hire Plan - Fire Component	15,371,532
Colorado Springs New Hire Plan - Police Component	38,117,688
FPPA Staff Healthcare Subsidy Plan	30,482
Fire & Police Members' Statewide Money Purchase Plan	2,314,730
Self-Directed Assets for Affiliated Local and Defined Benefit System Plans	46,448,510
IRC 457 Deferred Compensation Plan	26,741,418
otal Increase in Fiduciary Net Position	\$707,143,465

The Fire & Police Members' Benefit Investment Fund experienced continued positive performance for the year ended December 31, 2017. Global stocks were up approximately 24.32% and US bonds were up approximately 3.54% for the year (compared to 2016, where global stock were up 8.72% along with US bonds being up 2.65% percent).

Management's Discussion & Analysis

For the year ended December 31, 2017, the gross rate of return on the Fire & Police Members' Benefit Investment Fund was 15.96 percent, (14.95 percent, net of fees). Performance for the year ended December 31, 2016 was 6.31 percent (5.51 percent, net of fees). The net investment gain for all of the funds, including the Fire & Police Members' Self-Directed Investment Fund administered by FPPA, for the year ended December 31, 2017 was \$692,837,155 as compared to \$246,675,048 for 2016. Overall the investment portfolio continues to face a low return environment. There are no current known facts, conditions or decisions that are expected to have a significant effect on the financial position or results of operations.

#### **Net Investment Gain**

Total Net Investment Gain	\$692,837,155
IRC 457 Deferred Compensation Plan	21,119,356
Self-Directed Assets for Affiliated Local and Defined Benefit System Plans	37,191,506
Fire & Police Members' Statewide Money Purchase Plan	1,789,042
FPPA Staff Healthcare Subsidy Plan	34,387
Colorado Springs New Hire Plan - Police Component	40,775,244
Colorado Springs New Hire Plan - Fire Component	18,450,107
Statewide Hybrid Plan	8,121,968
Statewide Defined Benefit Plan	298,360,773
Defined Benefit System	
Statewide Death & Disability Plan	52,444,244
Affiliated Local Plans	\$214,550,528

# **Overview of the Financial Statements**

The FPPA 2017 fund financial statements, notes to financial statements, required supplementary schedules and other supplementary schedules are prepared in conformity with Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans. Statement No. 67 focuses on plan financial reporting and changes FPPA's financial statements through required note disclosures, actuarial calculations and schedules. In 2015, FPPA began reporting a net pension liability (NPL) instead of the previously required unfunded actuarial accrued liability (UAAL). The Statewide Death & Disability Plan and FPPA Staff Healthcare Subsidy Plan are reported as Other Post-Employment Benefits (OPEB) plans. In 2017, FPPA began reporting a net OPEB liability instead of the previously required UAAL under GASB Statement No. 74, Financial Reporting for Postemployment Benefits Other Than Pension Plans. FPPA has not changed its funding methodology with the implementation of Statements No. 67 and No. 74.

The management discussion and analysis is intended to serve as an introduction to FPPA's Financial Statements. Below is a short description of the following four components of the Financial Section for FPPA: (1) Fund Financial Statements, (2) Notes to the Financial Statements, (3) Required Supplementary Information, and (4) Other Supplementary Schedules.

**Fund Financial Statements.** There are two financial statements presented for the Funds. The Statement of Fiduciary Net Position is a snapshot of account balances as of December 31, 2017. This statement reflects the net assets available to pay future pension benefits. The Statement of Changes in Fiduciary Net Position reflects all the activities that occurred during the year ended December 31, 2017. This statement shows the impact of those activities as additions and deductions to the Funds.

**Notes to the Financial Statements.** The notes are an integral part of the financial statements and provide additional information that is essential for a full understanding of the data provided in the fund financial statements.

**Required Supplementary Information.** The required supplementary information consists of the following schedules: Schedule of Annual Money-Weighted Return on Pension and OPEB Plan Investments, Schedule of Changes in the Employers' Net Pension Liability, Schedule of Employers' Contributions, Schedule of Changes in the Employers' Net OPEB Liability and Schedule of Employers' Contributions for OPEB Plans.

*Other Supplementary Schedules.* The additional schedules (Fiduciary Net Position by Participating Employer, Payments to Consultants, Schedule of Administration and Investment Expenses) are presented for the purpose of additional analysis.

# **Comparative Summary Financial Statements**

*Fire & Police Members' Benefit Investment Fund.* The defined benefit plans within this fund provide retirement, survivor and disability benefits to the employees of affiliated employers. Benefits are funded by member, employer and State of Colorado contributions and by earnings on investments.

**Fire & Police Members' Self-Directed Investment Fund.** The defined contribution plan assets are held for the exclusive benefit of the members. Benefits are funded by member and/or employer contributions and by earnings on the investments.

Fire & Police Members' Benefit Investment Fund Fiduciary Net Position	12/31/2017	12/31/2016	% Change
Assets and Deferred Outflows			
Cash and Short Term Investments	\$287,372,773	\$225,582,807	27.39%
Securities Lending Collateral	0	77,397,016	(100.00%)
Total Other Investments	4,667,422,154	4,084,258,668	14.28%
Receivables	53,017,465	17,570,051	201.75%
Other Assets	4,332,657	3,957,706	9.47%
Deferred Outflows of Resources	11,803,974	3,587,365	229.04%
Total Assets and Deferred Outflows	\$5,023,949,023	\$4,412,353,613	13.86%
Liabilities and Deferred Inflows  Securities Lending Liabilities	\$0	\$77,357,635	(100.00%)
Investment and Other Liabilities	50,864,292	8,438,940	502.73%
Deferred Inflows of Resources	100,190	208,317	0.00%
Net Pension Liability	32,549,920	17,552,907	85.44%
Total Liabilities and Deferred Inflows	\$83,514,402	\$103,557,799	(19.35%)
Fiduciary Net Position Restricted for Pension and Other Post-Employment Benefits	\$4,940,434,621	\$4,308,795,814	14.66%

Fire & Police Members' Self-Directed Investment Fund Fiduciary Net Position	12/31/2017	12/31/2016	% Change
Assets			
Cash and Short Term Investments	\$162,973	\$161,989	0.61%
Total Other Investments	449,959,612	374,819,565	20.05%
Receivables	2,178,749	1,815,122	20.03%
Fiduciary Net Position Restricted for Pension and			
Other Post-Employment Benefits	\$452,301,334	\$376,796,676	20.04%

Fire & Police Members' Benefit Investment Fund Changes in the Fiduciary Net Position	12/31/2017	12/31/2016	% Change
Additions			
Employer Contributions	\$107,937,634	\$108,459,923	(0.48%)
Member Contributions	190.030.232		167.31%
Contributions for Service Reinstatement	0	59,172	100.00%
Affiliations (Withdrawals) *	(582.682)	0	100.00%
State Contributions	2,957,415	2,942,988	0.49%
Investment Income		222,974,948	183.77%
Securities Lending Income	61,058	306,093	(80.05%)
Total Additions	\$933,140,908	\$405,833,295	129.93%
Deductions			
Benefit Payments	\$284,981,165	\$274,598,388	3.78%
Refunds of Contributions		3,058,092	(17.13%)
Administrative Expenses	6,275,822	6,536,677	(3.99%)
Pension Expense	7,710,913	2,223,205	246.84%
Total Deductions	\$301,502,101	\$286,416,362	5.27%
Change in Fiduciary Net Position Restricted for Pension and Other Post-Employment Benefits	\$631,638,807	\$119,416,933	428.94%

<sup>\*</sup> The fiduciary net position of the Fire & Police Members' Benefit Investment Fund decreased by \$582,682 due to the idle funds distribution of Bow Mar Old Hire Police Plan and disaffiliation of Milliken FPD Volunteer Plan during 2017.

Fire & Police Members' Self-Directed Investment Fund Changes in Fiduciary Net Position	12/31/2017	12/31/2016	% Change
Additions			
Employer Contributions	\$3,448,618	\$3,216,216	7.23 %
Member Contributions	44,085,129	41,964,360	5.05 %
Affiliations *	102,265,127		100.00 %
Investment Income/(Loss)	60,099,904	23,700,100	153.59 %
Total Additions	\$209,898,778	\$68,880,676	204.73 %
Deductions			
Refunds of Contributions	\$133,082,501	\$49,206,563	170.46 %
Administrative Expenses	1,311,619	1,321,837	(0.77)%
Total Deductions	\$134,394,120	\$50,528,400	165.98 %
			·

<sup>\*</sup> The fiduciary net position of the Fire & Police Members' Self-Directed Investment Fund increased by \$102,265,127 due to the reentry affiliations of Thornton Police, Thornton Fire and Westminster Police during 2017.

**Statement of Fiduciary Net Position |** December 31, 2017 with Comparative Combined Totals for 2016

	TOTAL MEMBERS' BENEFIT INVESTMENT FUND	TOTAL MEMBERS' SELF-DIRECTED INVESTMENT FUND	COMBINED TOTALS 2017	COMBINED TOTALS 2016
ASSETS				
Cash & Short Term Investments (Note 5)	\$287,372,773	\$162,973	\$287,535,746	\$225,744,796
Investments (Note 5)				
Fixed Income	\$853,972,158		\$853,972,158	\$760,159,795
Global Equity	1,650,203,047		1,650,203,047	1,401,071,123
Equity Long/Short	424,046,552		424,046,552	382,439,478
Real Assets	292,282,622		292,282,622	236,471,123
Real Estate	196,599,541		196,599,541	200,004,785
Absolute Return	463,635,512		463,635,512	383,507,769
Private Capital	608,356,389		608,356,389	570,893,680
Managed Futures	178,326,333		178,326,333	149,710,915
Domestic Fauity Funds		115 280 377	115 280 377	90,101,284
International Equity Funds		22,532,735	22,532,735	15,390,927
Balanced Funds		191,056,738	191,056,738	154,941,810
Fixed Income Funds		22,597,147	22,597,147	20,650,694
Money Market & Stable Value Funds		33,159,565	33,159,565	35,638,775
Brokeragelink Funds		65,333,050	65,333,050	58,096,075
Securities Lending Collateral		03,333,030	03,333,030	77,397,016
Total Investments	\$4,667,422,154	\$449,959,612	\$5,117,381,766	\$4,536,475,249
Total Cash and Investments	\$4,954,794,927	\$450,122,585	\$5,404,917,512	\$4,762,220,045
Receivables	ψ 1,33 1,13 1,3 <u>2</u> 7	ψ 130,112,303	Ç5, 10 1,517,511	ψ 1,7 02,120,0 13
Other	\$41,745	\$1,616,293	\$1,658,038	\$1,447,232
Assets Sold-Pending Trades	41,185,643	71,010,293	41,185,643	9,644,854
Contributions	4,183,043	562,456	4,857,201	3,525,678
Accrued Interest and Dividends	7,495,332	302,430		
Total Receivables		¢2 179 740	7,495,332	4,767,409
Total Receivables	\$53,017,465	\$2,178,749	\$55,196,214	\$19,385,173
Property and Equipment, at Cost, Net of Accumulated Depreciation/Amortization (Note 8)	\$4,098,802		\$4,098,802	\$3,748,192
Other Assets	233,855		233,855	209,514
DEFERRED OUTFLOWS OF RESOURCES				
Changes in Net Pension Liability (Note 9)	11,803,974		11,803,974	3,587,365
TOTAL ASSETS AND DEFERRED OUTFLOWS	\$5,023,949,023	\$452,301,334	\$5,476,250,357	\$4,789,150,289
LIABILITIES				
Payables				
Accounts, Employee and Participants Payable	\$2,325,967		\$2,325,967	\$2,286,432
For Assets Purchased-Pending Trades	48.538.325		48,538,325	6,152,508
Securities Lending Liabilities (Note 5)				
Net Pension Liability (Note 9)	32,549,920		32,549,920	17,552,907
DEFERRED INFLOWS OF RESOURCES				
Changes in Net Pension Liability (Note 9)	100,190		100,190	208,317
TOTAL LIABILITIES AND DEFERRED INFLOWS	\$83,514,402		\$83,514,402	\$103,557,799
FIDUCIARY NET POSITION RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS	\$4,940,434,621	\$452,301,334	\$5,392,735,955	\$4,685,592,490

Statement of Changes in Fiduciary Net Position | For the year ended December 31, 2017 with Comparative Combined Totals for 2016

	TOTAL MEMBERS' BENEFIT INVESTMENT FUND	TOTAL MEMBERS' SELF-DIRECTED INVESTMENT FUND	COMBINED TOTALS 2017	COMBINED TOTALS 2016
ADDITIONS				
Contributions				
Employer	\$107,937,634	\$3,448,618	\$111,386,252	\$96,530,959
Member	190,030,232	44,085,129	234,115,361	128,199,711
Contributions for Service Reinstatement				59,172
Affiliations/(Withdrawals)	(582,682)	102,265,127	101,682,445	
State Contributions	2,957,415		2,957,415	2,942,988
Total Contributions	\$300,342,599	\$149,798,874	\$450,141,473	\$227,732,830
Investment Income				
Net Appreciation in Fair Value of Investments	\$592,068,838	\$37,623,625	\$629,692,463	\$209,756,313
Interest	12,435,949	122,948	12,558,897	11,660,387
Dividends	33,010,148	12,797,670	45,807,818	41,225,520
Other Income	39,207,648		39,207,648	17,504,138
Brokeragelink Income (Loss)		9,555,661	9,555,661	2,665,175
Gain (Loss) on Securities Lending	(39,381)		(39,381)	34,537
Total Investment Income	\$676,683,202	\$60,099,904	\$736,783,106	\$282,846,070
Less Investment Consulting	\$682,900		\$682,900	\$756,225
Less Investment Management Fees	38,887,245		38,887,245	31,361,216
Less Investment Legal Fees	236,959		236,959	325,366
Less Investment Closing Costs	90.675		90,675	55,614
Less FPPA Investment Personnel Services	2,844,633		2,844,633	2,518,564
Less Bank Fees	566,910		566,910	800,632
Less Other Misc. Investment Expenses	636,629		636,629	353,405
Net Investment Income	\$632,737,251	\$60,099,904	\$692,837,155	\$246,675,048
	7032,737,231	700,033,304	<del>7032,037,133</del>	7240,073,040
Securities Lending			Ć222 240	
Income	\$222,248		\$222,248	\$524,125
Borrowers Rebates	(117,088)		(117,088)	(64,014)
Agent Fees	(44,102)		(44,102)	(154,018)
Net Securities Lending Income	\$61,058		\$61,058	\$306,093
Total Additions	\$933,140,908	\$209,898,778	\$1,143,039,686	\$474,713,971
DEDUCTIONS				
Benefit Payments	\$284,981,165		\$284,981,165	\$274,598,388
Refunds of Contributions (including interest earned)	2,534,201	\$133,082,501	135,616,702	52,264,655
Administrative Costs	6,275,822	1,311,619	7,587,441	7,858,514
Pension Expense	7,710,913	_,	7,710,913	2,223,205
Total Deductions	\$301,502,101	\$134,394,120	\$435,896,221	\$336,944,762
		<u> </u>		<u> </u>
NET INCREASE IN FIDUCIARY NET POSITION	\$631,638,807	\$75,504,658	\$707,143,465	\$137,769,209
FIDUCIARY NET POSITION RESTRICTED FOR PENS	SION AND OTHER POST-E	MPLOYMENT BENEFITS		
BEGINNING OF YEAR	\$4,308,795,814	\$376,796,676	\$4,685,592,490	\$4,547,823,281
END OF YEAR	\$4,940,434,621	\$452,301,334	\$5,392,735,955	\$4,685,592,490

# Statement of Fiduciary Net Position | December 31, 2017

			DEFINED BENEFIT SYSTEM				
	AFFILIATED LOCAL PLANS	STATEWIDE DEATH & DISABILITY	STATEWIDE DEFINED BENEFIT PLAN	STATEWIDE HYBRID DB COMPONENT	COLORADO SPRINGS FIRE COMPONENT	COLORADO SPRINGS POLICE COMPONENT	
ASSETS							
Cash & Short Term Investments (Note 5)	\$93,422,470	\$23,403,412	\$139,914,581	\$4,050,721	\$8,239,505	\$18,326,498	
Investments (Note 5)							
Fixed Income	\$277,619,161	\$69,546,819	\$415,777,581	\$12,037,336	\$24,484,951	\$54,459,991	
Global Equity	536,467,121	134,391,235	803,442,390	23,260,768	47,314,353	105,237,673	
Equity Long/Short	137,853,965	34,534,017	206,457,609	5,977,233	12,158,194	27,042,534	
Real Assets	95,018,620	23,803,266	142,305,063	4,119,928	8,380,280	18,639,611	
Real Estate	63,912,856	16,010,912	95,719,375	2,771,208	5,636,870	12,537,656	
Absolute Return	150,724,002	37,758,110	225,732,479	6,535,267	13,293,282	29,567,224	
Private Capital	197,771,541	49,544,065	296,193,436	8,575,210	17,442,695	38,796,445	
Managed Futures	57,972,390	14,522,756	86,822,610	2,513,635	5,112,943	11,372,327	
Domestic Equity Funds						•••••	
International Equity Funds						•••••	
Balanced Funds							
Fixed Income Funds						•••••	
Money Market & Stable Value Funds	······································			·····		•••••	
Brokeragelink Funds Securities Lending Collateral							
Total Investments	\$1,517,339,656	\$380,111,180	\$2,272,450,543	\$65,790,585	\$133,823,568	\$297,653,461	
Total Cash and Investments	\$1,610,762,126	\$403,514,592	\$2,412,365,124	\$69,841,306	\$142,063,073	\$315,979,959	
Receivables							
Other	\$13,571	\$3,400	\$20,325	\$588	\$1,197	\$2,662	
Assets Sold-Pending Trades	13,389,106	3,354,126	20,052,254	580,540	1,180,869	2,626,514	
Contributions	757,002	533,429		52,100	297,531	490,098	
Accrued Interest and Dividends		610.414	2,164,585				
Total Receivables	2,436,669 \$16,596,348	\$4,501,369	3,649,289 \$25,886,453	105,652 \$ <b>738,880</b>	\$1,694,502	477,996 <b>\$3,597,270</b>	
Total Receivables	\$10,590,546	\$4,501,569	\$25,660,455	\$736,660	\$1,694,502	\$5,597,270	
Property and Equipment, at Cost, Net of Accumulated Depreciation/Amortization (Note 8)	\$1,332,486	\$333,803	\$1,995,604	\$57,776	\$117,520	\$261,391	
Other Assets	76,024	19,045	113,858	3,296	6,705	14,914	
	70,024	13,043		3,230			
DEFERRED OUTFLOWS OF RESOURCES							
Changes in Net Pension Liability (Note 9)	3,837,373	961,306	5,747,058	166,385	338,442	752,770	
TOTAL ASSETS AND DEFERRED OUTFLOWS	\$1,632,604,357	\$409,330,115	\$2,446,108,097	\$70,807,643	\$144,220,242	\$320,606,304	
LIABILITIES							
Payables							
Accounts, Employee and Participants Payable	\$756,152	\$189,425	\$1,132,455	\$32,786	\$66,690	\$148,333	
For Assets Purchased-Pending Trades	15,779,401	3,952,923	23,632,091	684,181	1,391,683	3,095,413	
Securities Lending Liabilities (Note 5)							
Net Pension Liability (Note 9)	10,581,705	2,650,840	15,847,737	458,814	933,266	2,075,792	
DEFERRED INFLOWS OF RESOURCES							
Changes in Net Pension Liability (Note 9)	32,571	8,159	48,781	1,412	2,873	6,389	
TOTAL LIABILITIES AND DEFERRED INFLOWS	\$27,149,829	\$6,801,347	\$40,661,064	\$1,177,193	\$2,394,512	\$5,325,927	
FIDUCIARY NET POSITION RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS	\$1,605,454,528	\$402,528,768	\$2,405,447,033	\$69,630,450	\$141,825,730	\$315,280,377	

FPPA STAFF HEALTH SUBSIDY	TOTAL MEMBERS' BENEFIT INVESTMENT FUND	MEMBERS' STATEWIDE MONEY PURCHASE	SELF-DIRECTED ASSETS FOR AFFIL. LOCAL & DB SYSTEM	IRC 457 DEFERRED COMPENSATION PLAN	TOTAL MEMBERS' SELF-DIRECTED INVESTMENT FUND	COMBINED TOTALS 2017
\$15,586	\$287,372,773	\$2,262	\$107,134	\$53,577	\$162,973	\$287,535,746
 \$46,319	\$853,972,158					\$853,972,158
89,507	1,650,203,047					1,650,203,047
23,000	424,046,552					424,046,552
15,854	292,282,622					292,282,622
10,664	196,599,541					196,599,541
25,148	463,635,512					463,635,512
32,997	608,356,389					608,356,389
9,672	178,326,333					178,326,333
		3,856,821	59,401,635	52,021,921	115,280,377	115,280,377
		796,412	12,811,059	8,925,264	22,532,735	22,532,735
		6,751,306	125,215,293	59,090,139	191,056,738	191,056,738
		589,742	14,625,278	7,382,127	22,597,147	22,597,147
		394,235	27,410,763	5,354,567	33,159,565	33,159,565
		45,136	60,700,871	4,587,043	65,333,050	65,333,050
						_
\$253,161	\$4,667,422,154	\$12,433,652	\$300,164,899	\$137,361,061	\$449,959,612	\$5,117,381,766
\$268,747	\$4,954,794,927	\$12,435,914	\$300,272,033	\$137,414,638	\$450,122,585	\$5,404,917,512
\$2	\$41,745		\$104,997	\$1,511,296	\$1,616,293	\$1,658,038
2,234	41,185,643					41,185,643
	4,294,745	23,809	182,748	355,899	562,456	4,857,201
407	7,495,332					7,495,332
\$2,643	\$53,017,465	\$23,809	\$287,745	\$1,867,195	\$2,178,749	\$55,196,214
\$222	\$4,098,802					\$4,098,802
13	233,855					233,855
640	11,803,974					11,803,974
\$272,265	\$5,023,949,023	\$12,459,723	\$300,559,778	\$139,281,833	\$452,301,334	\$5,476,250,357
<del></del>	<del>+0,010,010,010</del>	<del></del>	4000,000,110	<del>+ 103,101,000</del>	<del>+ 102,002,001</del>	<del>, , , , , , , , , , , , , , , , , , , </del>
ć12C	¢2.225.067					ć2 225 067
\$126	\$2,325,967					\$2,325,967
2,633	48,538,325					48,538,325
1 766	22 540 020					22 540 020
1,766	32,549,920					32,549,920
5	100,190					100,190
\$4,530	\$83,514,402					\$83,514,402
6267 725	\$4.040.424.C24	612 450 722	\$200 FF0 770	¢120 201 022	\$4E2 204 224	ćE 202 725 055
\$267,735	\$4,940,434,621	\$12,459,723	\$300,559,778	\$139,281,833	\$452,301,334	\$5,392,735,955

# Statement of Changes in Fiduciary Net Position | For the Year Ended December 31, 2017

			DEFINED BENEFIT SYSTEM				
	AFFILIATED LOCAL PLANS	STATEWIDE DEATH & DISABILITY	STATEWIDE DEFINED BENEFIT PLAN	STATEWIDE HYBRID DB COMPONENT	COLORADO SPRINGS FIRE COMPONENT	COLORADO SPRINGS POLICE COMPONENT	
ADDITIONS							
Contributions							
Employer	\$49,272,548		\$44,644,663	\$1,320,687	\$4,227,414	\$8,464,061	
Member	158,659	\$20,698,646	156,811,895	8,967,398	1,082,336	2,311,298	
Contributions for Service Reinstatement			•••••				
Affiliations/(Withdrawals)	(582,682)						
State Contributions	2,957,415						
Total Contributions	\$51,805,940	\$20,698,646	\$201,456,558	\$10,288,085	\$5,309,750	\$10,775,359	
Investment Income							
Net Appreciation in Fair Value of	•••••						
Investments	\$200,561,953	\$49,084,587	\$279,350,243	\$7,607,320	\$17,267,657	\$38,164,897	
Interest	4,230,581	1,032,766	5,847,816	158,112	363,357	802,642	
Dividends	11,188,096	2,736,311	15,570,298	422,622	962,911	2,128,113	
Other Income	13,443,294	3,235,375	18,375,334	499,379	1,138,249	2,513,893	
Brokeragelink Income (Loss)							
Loss on Securities Lending	(16,085)	(3,272)	(18,361)	(489)	(635)	(537	
Total Investment Income	\$229,407,839	\$56,085,767	\$319,125,330	\$8,686,944	\$19,731,539	\$43,609,008	
Less Investment Consulting	\$230,876	\$56,588	\$322,672	\$8,779	\$19,913	\$44,035	
Less Investment Management Fees	13,147,056	3,222,340	18,374,307	499,941	1,133,924	2,507,564	
Less Investment Legal Fees	80,111	19,635	111,964	3,046	6,910	15,280	
Less Investment Closing Costs  Less FPPA Investment Personnel	30,656	7,514	42,844	1,166	2,643	5,847	
Services	961,718	235,717	1,344,095	36,571	82,947	183,430	
Less Bank Fees	191,662	46,976	267,866	7,288	16,531	36,556	
Less Other Misc. Investment Expenses	215,232	52,753	300,809	8,185	18,564	41,052	
Net Investment Income	\$214,550,528	\$52,444,244	\$298,360,773	\$8,121,968	\$18,450,107	\$40,775,244	
Securities Lending							
Income	\$72,251	\$18,100	\$108,207	\$3,133	\$6,372	\$14,173	
Borrowers Rebates	(38,064)	(9,536)	(57,008)	(1,650)	(3,357)	(7,467)	
Agent Fees	(14,337)	(3,592)	(21,473)	(622)	(1,264)	(2,812	
Net Securities Lending Income	\$19,850	\$4,972	\$29,726	\$861	\$1,751	\$3,894	
Total Additions	\$266,376,318	\$73,147,862	\$499,847,057	\$18,410,914	\$23,761,608	\$51,554,497	
DEDUCTIONS							
Benefit Payments	\$168,478,600	\$28,157,074	\$65,977,013	\$1,493,664	\$7,989,856	\$12,877,649	
Refunds of Contributions (including interest earned)	140,874		2,187,599	27,870	159,851	18,007	
Administrative Costs	1,641,820	1,670,264	2,748,103	67,776	46,806	97,512	
Pension Expense	2,194,466	725,611	4,022,517	129,795	193,563	443,641	
Total Deductions	\$172,455,760	\$30,552,949	\$74,935,232	\$1,719,105	\$8,390,076	\$13,436,809	
NET INCREASE IN FIDUCIARY NET POSITION	\$93,920,558	\$42,594,913	\$424,911,825	\$16,691,809	\$15,371,532	\$38,117,688	
FIDUCIARY NET POSITION RESTRICTED FO			1	ĆE2 020 C44	\$136 AFA 100	6277 462 600	
BEGINNING OF YEAR	\$1,511,533,970	\$359,933,855	\$1,980,535,208	\$52,938,641	\$126,454,198	\$277,162,689	
END OF YEAR	\$1,605,454,528	\$402,528,768	\$2,405,447,033	\$69,630,450	\$141,825,730	\$315,280,377	

TOTAL MEMBERS' BENEFIT INVESTMENT FUND	MEMBERS' STATEWIDE MONEY PURCHASE	SELF-DIRECTED ASSETS FOR AFFIL. LOCAL & DB SYSTEM	IRC 457 DEFERRED COMPENSATION PLAN	TOTAL MEMBERS' SELF-DIRECTED INVESTMENT FUND	COMBINED TOTALS 2017
¢107 027 624	¢420 454	¢1 624 426	ć1 20E 720	¢2 440 610	¢111 206 252
					\$111,386,252
190,030,232	425,436	33,/19,225	9,940,468	44,085,129	234,115,361
(582 682)		102 265 127		102 265 127	101,682,445
		102,203,127		102,203,127	2,957,415
	\$863.890	\$137.608.788	\$11.326.196	\$149.798.874	\$450,141,473
7000,0 12,000	, , , , , , , , , , , , , , , , , , ,	,,,	,,,,	<b>4</b> = 10,100,011	+ ····/- ··-/ ···
\$592,068,838	\$1,341,800	\$20,856,816	\$15,425,009	\$37,623,625	\$629,692,463
12,435,949	762	114,730	7,456	122,948	12,558,897
33,010,148	435,297	7,272,507	5,089,866	12,797,670	45,807,818
39,207,648					39,207,648
	11,183	8,947,453	597,025	9,555,661	9,555,661
(39,381)					(39,381)
\$676,683,202	\$1,789,042	\$37,191,506	\$21,119,356	\$60,099,904	\$736,783,106
\$682,900					\$682,900
38,887,245					38,887,245
236,959					236,959
90,675					90,675
2 944 622					2 044 622
					2,844,633
					566,910
	\$1 789 042	\$37 191 506	\$21 119 356	\$60,099,904	\$692,837,155
7032,737,231	71,703,042	737,131,300	<b>721,113,330</b>	<del>700,033,304</del>	7032,037,133
\$222.248					\$222,248
					(117,088)
					(44,102)
1					\$61,058
				4	
\$933,140,908	\$2,652,932	\$174,800,294	\$32,445,552	\$209,898,778	\$1,143,039,686
********					*******
\$284,981,165					\$284,981,165
2,534,201	304,189	127,314,764	5,463,548	133,082,501	135,616,702
6,275,822	34,013	1,037,020	240,586	1,311,619	7,587,441
7,710,913					7,710,913
\$301,502,101	\$338,202	\$128,351,784	\$5,704,134	\$134,394,120	\$435,896,221
\$631,638,807	\$2,314,730	\$46,448,510	\$26,741,418	\$75,504,658	\$707,143,465
\$631,638,807	\$2,314,730 \$10,144,993	\$46,448,510 \$254,111,268	\$26,741,418   \$112,540,415	\$75,504,658	\$707,143,465
	\$107,937,634 190,030,232 (582,682) 2,957,415 \$300,342,599 \$592,068,838 12,435,949 33,010,148 39,207,648 (39,381) \$676,683,202 \$682,900 38,887,245 236,959 90,675 2,844,633 566,910 636,629 \$632,737,251 \$222,248 (117,088) (44,102) \$61,058 \$933,140,908	MEMBERS' BENEFIT INVESTMENT FUND         MEMBERS' STATEWIDE MONEY PURCHASE           \$107,937,634         \$438,454           190,030,232         425,436           (582,682)         \$300,342,599           \$592,068,838         \$1,341,800           12,435,949         762           33,010,148         435,297           39,207,648         11,183           (39,381)         \$676,683,202         \$1,789,042           \$682,900         38,887,245         236,959           90,675         2,844,633         566,910           636,629         \$632,737,251         \$1,789,042           \$222,248         (117,088)           (44,102)         \$61,058           \$933,140,908         \$2,652,932           \$284,981,165         2,534,201         304,189           6,275,822         34,013           7,710,913         304,189	MEMBERS' BENEFIT INVESTMENT FUND         MEMBERS' STATEWIDE MONEY PURCHASE         SELF-DIRECTED ASSETS FOR AFFIL. LOCAL & DB SYSTEM           \$107,937,634         \$438,454         \$1,624,436           190,030,232         425,436         33,719,225           (582,682)         102,265,127           2,957,415         \$863,890         \$137,608,788           \$592,068,838         \$1,341,800         \$20,856,816           12,435,949         762         114,730           33,010,148         435,297         7,272,507           39,207,648         11,183         8,947,453           \$676,683,202         \$1,789,042         \$37,191,506           \$682,900         38,887,245         236,959           90,675         2,844,633         566,910           636,629         \$632,737,251         \$1,789,042         \$37,191,506           \$222,248         (117,088)         (44,102)           \$61,058         \$933,140,908         \$2,652,932         \$174,800,294           \$284,981,165         2,534,201         304,189         127,314,764           6,275,822         34,013         1,037,020           7,710,913         304,189         127,314,764	MEMBERS BENEFIT INVESTMENT FUND         MEMBERS' MONEY PURCHASE         SELF-DIRECTED ASSETS FOR AFFIL LOCAL & DB SYSTEM         LIRC 457 COMPENSATION PLAN           \$107,937,634         \$438,454         \$1,624,436         \$1,385,728           \$190,030,232         425,436         33,719,225         9,940,468           (\$82,682)         102,265,127         \$9,940,468           \$300,342,599         \$863,890         \$137,608,788         \$11,326,196           \$592,068,838         \$1,341,800         \$20,856,816         \$15,425,009           \$12,435,949         762         114,730         7,456           33,010,148         435,297         7,272,507         5,089,866           39,207,648         11,183         8,947,453         597,025           \$66,83,202         \$1,789,042         \$37,191,506         \$21,119,356           \$682,900         38,887,245         236,959         90,675         \$2,844,633           \$66,910         636,629         \$37,191,506         \$21,119,356           \$5222,248         (117,088)         (44,102)         \$36,058         \$933,140,908         \$2,652,932         \$174,800,294         \$32,445,552           \$284,981,165         2,534,201         304,189         127,314,764         5,463,548 <t< td=""><td>MEMBERS' BENEFIT INVESTMENT PURCHASE         SELF-DIRECTED AFFIL LOCAL PLANT         Read ST DEFERRED COMPENSATION PLAN         MEMBERS' SELF-DIRECTED LOWNESTMENT PUND           \$107,937,634         \$438,454         \$1,624,436         \$1,385,728         \$3,448,618           190,030,232         425,436         33,719,225         9,940,468         44,085,129           (582,682)         102,265,127         102,265,127         102,265,127           2,957,415         \$330,342,599         \$863,890         \$137,608,788         \$11,326,196         \$149,798,874           \$592,068,838         \$1,341,800         \$20,856,816         \$15,425,009         \$37,623,625           12,435,949         762         114,730         7,456         122,948           33,010,148         435,297         7,272,507         5,089,866         12,797,670           39,207,648         11,183         8,947,453         597,025         9,555,661           (39,381)         \$676,683,202         \$1,789,042         \$37,191,506         \$21,119,356         \$60,099,904           \$682,900         38,887,245         \$36,599         \$36,629         \$60,099,904         \$66,010         \$66,010         \$66,029         \$66,010         \$66,029         \$660,099,904         \$60,099,904         \$61,088         \$93,140,908&lt;</td></t<>	MEMBERS' BENEFIT INVESTMENT PURCHASE         SELF-DIRECTED AFFIL LOCAL PLANT         Read ST DEFERRED COMPENSATION PLAN         MEMBERS' SELF-DIRECTED LOWNESTMENT PUND           \$107,937,634         \$438,454         \$1,624,436         \$1,385,728         \$3,448,618           190,030,232         425,436         33,719,225         9,940,468         44,085,129           (582,682)         102,265,127         102,265,127         102,265,127           2,957,415         \$330,342,599         \$863,890         \$137,608,788         \$11,326,196         \$149,798,874           \$592,068,838         \$1,341,800         \$20,856,816         \$15,425,009         \$37,623,625           12,435,949         762         114,730         7,456         122,948           33,010,148         435,297         7,272,507         5,089,866         12,797,670           39,207,648         11,183         8,947,453         597,025         9,555,661           (39,381)         \$676,683,202         \$1,789,042         \$37,191,506         \$21,119,356         \$60,099,904           \$682,900         38,887,245         \$36,599         \$36,629         \$60,099,904         \$66,010         \$66,010         \$66,029         \$66,010         \$66,029         \$660,099,904         \$60,099,904         \$61,088         \$93,140,908<

## **NOTE 1 | ORGANIZATION & PLAN DESCRIPTIONS**

The Fire & Police Members' Benefit Investment Fund was established in 1980 pursuant to the Colorado Revised Statutes of 1973, as amended. (The fund was originally named the Fire & Police Members' Benefit Fund; the name was changed to the Fire & Police Members' Benefit Investment Fund as a result of legislation enacted in 2006.) The Fire & Police Members' Self-Directed Investment Fund was created by Colorado House Bill 1059 in 2006. It combined the separate money purchase plan and self-directed plan funds that had been created by prior legislation. The Funds are administered by a nine-member board of directors appointed by the Governor and confirmed by the Senate to serve four-year staggered terms. In 2010, legislation was passed to extend the term of the retired member position of the board to a six-year term. As trustee, the Fire & Police Pension Association of Colorado (FPPA), collects, invests, administers, and disburses monies on behalf of firefighters and police officers in the State of Colorado within the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund.

The Fire & Police Members' Benefit Investment Fund includes the assets of those plans that fall under the complete investment authority of the FPPA Board of Directors. This fund includes the assets of the Defined Benefit System, affiliated Local "Old Hire" police and fire plans, affiliated Volunteer Firefighter pension plans, and the Statewide Death & Disability plan. The Defined Benefit System comprises the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan.

The Fire & Police Members' Self-Directed Investment Fund consists of the assets of plans where members control their account by choosing from various mutual fund options selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors or other member-selected investment options available through a Self-Directed Brokerage Account administered by FPPA's recordkeeper (Fidelity Investments). This fund includes the assets in the Fire & Police Members' Statewide Money Purchase Plan and the IRC 457 Deferred Compensation Plan. In addition, this fund includes assets of certain Deferred Retirement Option Plans within the Defined Benefit System and affiliated Local "Old Hire" pension plans. It also includes the Money Purchase component of the Defined Benefit System – Statewide Hybrid Plan and the Separate Retirement Account assets from eligible Defined Benefit System retired members.

The **Affiliated Local Plans** include defined benefit retirement plans for fire and police employees in the State of Colorado hired before April 8, 1978 (Old Hires), provided that such plans have affiliated with FPPA, and the affiliated Volunteer Firefighter pension plans in the State of Colorado. Collectively, these are agent multiple-employer plans.

The **Statewide Death & Disability Plan** is a cost-sharing multiple-employer defined benefit death and disability plan. This plan is reported as an other post-employment plan (OPEB) based on the criteria established by the Governmental Accounting Standards Board (GASB).

The **Defined Benefit System** comprises the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan.

The **Statewide Defined Benefit Plan** covers fire and police employees hired in the State of Colorado by affiliated employers on or after April 8, 1978.

The **Statewide Hybrid Plan** became effective January 1, 2004 and provides a combination of defined benefit and money purchase retirement benefits to the Members of those Employers who have either (1) established a local money purchase plan pursuant to C.R.S. § 31-30.5-801 or 31-31-601 or (2) withdrawn into the Statewide Money Purchase Plan pursuant to C.R.S. § 31-31-501 and subsequently elected to participate in the Statewide Hybrid Plan under C.R.S. § 31-31-1101.

The Colorado Springs New Hire Pension Plan was formed as of October 1, 2006 from two plans merging into one plan document but with a fire and police component. The Plan covers firefighters and police officers who were hired by the City of Colorado Springs on or after April 8, 1978 but prior to October 1, 2006.

The **FPPA Staff Healthcare Subsidy Plan** provides a post-employment healthcare premium subsidy for FPPA Staff meeting minimum service requirements.

The Fire & Police Members' Statewide Money Purchase Plan is a multiple-employer defined contribution plan.

The **Self-Directed Assets for Affiliated Local and Defined Benefit System Plans** include supplemental benefits for the Deferred Retirement Option Plans (DROP), the Money Purchase component for the Statewide Hybrid Plan, and the Separate Retirement Account assets from eligible Defined Benefit System retired members.

The **IRC 457 Deferred Compensation Plan**, created under Internal Revenue Code Section 457, collects amounts deferred by participants of affiliated employers. The assets are held in trust for the exclusive benefit of participants.

In order to facilitate investing and to reduce operating costs, FPPA pools assets within the Fire & Police Members' Benefit Investment Fund for investment purposes. Each month shared revenues (i.e., investment income or loss) and shared operating expenses are allocated to each affiliate and to the statewide plans, based upon each plan's proportionate share of total assets. Any expenses that are incurred by FPPA which are directly related to the administration of a specific plan is paid from that plan's assets. The defined benefit plans' administrative expenses are allocated on a pro-rata share by member count, as of December 31 of the prior year. Assets in the Fire & Police Members' Self-Directed Investment Fund are excluded from this allocation process.

# A. Affiliated Local Plans

#### 1. Plan Description

This is an agent multiple-employer Public Employee Retirement System. There are 221 local plans affiliated with FPPA as of December 31, 2017. These plans are for the benefit of two distinct groups: 1) fire and police employees of affiliated employers hired prior to April 8, 1978 (Old Hires) and 2) volunteer firefighters of affiliated plans. The Old Hire plans are closed to new entrants as of April 8, 1978. Several volunteer firefighter plans have also chosen to close their plans to new entrants.

The Affiliated Local Plans represent the assets of numerous separate plans that have been pooled for investment purposes. The pension plans (volunteer and paid) represented in the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund (for Old Hire Deferred Retirement Option Plan (DROP) assets only) have elected to affiliate with FPPA for plan administration and investment purposes only. Each plan has a separate plan document and actuarial valuation and is governed by its own local pension board which has the authority to amend the plan benefits, such as cost-of-living increases, funeral benefits, and others as applicable to each plan.

#### 2. Contributions

As each affiliated employer has its own plan, there is no uniform amount for either contributions or benefit provisions. There are no paid employees within the Volunteer Firefighter's pension plans and employees do not contribute to their pension plan. The State of Colorado contributes to some of the Affiliated Local Plan Volunteer Firefighters Pension Plans as defined in the Colorado Revised Statutes. Funding for the Local Old Hire Pension Plans is the sole obligation of the employer.

# 3. Benefit Provisions

The benefits vary with each Old Hire plan. The member's Normal Retirement Date for several plans is based on the date a member has completed years of credited service, usually twenty to twenty-five years. Most plans require the member to complete twenty to twenty-five years of credited service and attain the age of 50 to 55. The annual Normal Retirement Benefit calculation ranges from 50-75 percent of salary. Several plans offer a lump sum actuarial equivalent benefit. Most Old Hire plans offer a 50-100 percent benefit to the surviving spouse until death or remarriage. Some plans also offer actuarially equivalent post-retirement death benefits. Several Old Hire plans offer a cost-of-living increase to their retirees and beneficiaries. Some only offer an ad-hoc cost-of-living increase. Others offer an escalation benefit based on the rank at which the member retired. Several Old Hire plans allow a member to participate in the Deferred Retirement Option Plan (DROP) after reaching eligibility for retirement. A member continues to work while participating in the DROP, but must terminate employment within a given time frame, generally between three to five years of entry into the DROP.

The benefits also vary for each Volunteer Firefighter plan. Volunteer Firefighter plans Normal Retirement Date is at age 50 with 20 years of service. The plans vary and offer a flat dollar benefit from \$0 - \$1,400 per month. Some volunteer firefighter plans offer a 50 percent benefit to the surviving spouse until death or remarriage. Volunteer Firefighter plans are restricted by statute and cannot offer a cost-of-living increase.

# 4. Membership

The memberships of these groups as of December 31, 2017, are as follows:

Deferred Retirement Option Plan (DROP) Old Hire Members	3
Retirees and Beneficiaries Currently Receiving Benefits	6,473
Terminated Vested Members Entitled To Benefits But Not Yet Receiving Them	428
Old Hire Members Fully Vested	3
Volunteer Firefighter Members	2,616
Total Members	9,523

## B. Statewide Death & Disability Plan

#### 1. Plan Description

The Plan is a cost-sharing multiple-employer defined benefit death and disability plan covering full-time employees of substantially all fire and police departments in Colorado. As of August 5, 2003, the Plan may include part-time police and fire employees. Contributions to the Plan are used solely for the payment of death and disability benefits. Employers who are covered by Social Security may elect supplementary coverage by the Plan. The Plan was established in 1980 pursuant to Colorado Revised Statutes and currently has 269 participating employer departments. Included in that number are 6 contributing employers as of December 31, 2017, who are covered by Social Security and have elected supplementary coverage by the Plan. The Plan assets are included in the Fire & Police Members' Benefit Investment Fund.

Plan benefits provide 24-hour coverage, both on- and off-duty and are available for members not eligible for normal retirement under a defined benefit plan, or members who have not met 25 years of accumulated service and age 55 under a money purchase plan.

In the case of an on-duty death, benefits may be payable to the surviving spouse or dependent children of active members who were eligible to retire, but were still working. Death and disability benefits are free from state and federal taxes in the event that a member's disability is determined to be the result of an on-duty injury or an occupational disease.

#### 2. Contributions

Prior to 1997, the Plan was primarily funded by the State of Colorado, whose contributions were established by Colorado statute. In 1997 the State made a one-time contribution of \$39,000,000 to fund past and future service costs for all firefighters and police officers hired prior to January 1, 1997. No further State contributions are anticipated.

Members hired on or after January 1, 1997, began contributing 2.4 percent of base salary to this Plan as of January 1, 1997. Contributions may be increased 0.1 percent bienially by the FPPA Board. The contributions increased to 2.7 percent of base salary as of January 1, 2017. This percentage can vary depending on actuarial experience. All contributions are made by members or on behalf of members. The 2.7 percent contribution may be paid entirely by the employer or member, or it may be split between the employer and the member as determined at the local level.

#### 3. Benefits

Benefits are established by Colorado statute.

If a member dies prior to normal retirement eligibility while off-duty, the surviving spouse shall receive a benefit equal to 40 percent of the monthly base salary paid to the member prior to death. An additional 10 percent of base salary is payable if a surviving spouse has two or more dependent children. If there is no surviving spouse, but the member had one or two dependent children, the benefit payable is 40 percent of the member's monthly base salary. If there is no spouse but three or more dependent children, the benefit equals 50 percent of the member's monthly base salary.

As of October 15, 2002, if a member dies prior to retirement while on-duty; the surviving spouse shall receive a benefit equal to 70 percent of the member's monthly base salary regardless of the number of dependent children. If there is no spouse but one or more dependent children living in the member's household the benefit equals 70 percent of the

member's monthly base salary. If there are dependent children without a surviving spouse, and they do not live in the household, the benefit is 40 percent for the first child and 15 percent for each additional child, but not greater than 70 percent in total of the member's monthly base salary. Benefits will be paid to the spouse until death and to dependent children until age 23, death, marriage or other termination of dependency. Benefits may be extended for an incapacitated child.

For purposes of this Plan, a spouse includes a partner in a civil union. These benefits are offset by Money Purchase account balances, Stabilization Reserve Accounts (SRA) and Deferred Retirement Option Plan (DROP) accounts, converted to annuities.

The Plan provides the members with two types of disability: occupational and total.

Occupational Disability means a member is unable to perform their assigned duties due to a medical condition that is expected to last at least 1 year. Assigned duties are those specific tasks or job duties that a member is required to regularly perform. Within the Occupational Disability category, there are two sub-categories: Temporary Occupational Disability and Permanent Occupational Disability.

Temporary Occupational Disability is an occupational disability for which there is prognosis for improvement or recovery through surgical treatment, counseling, medication, therapy or other means.

Permanent Occupational Disability is an occupational disability caused by a condition that is permanent or degenerative and for which there is no prognosis for improvement or recovery through surgical treatment, counseling, medication, therapy or other means.

Total Disability means the member is unable to engage in any substantial gainful activity due to a medically determined physical or mental impairment that may be expected to result in death or that has lasted or is expected to last at least 1 year.

A member who becomes disabled prior to normal retirement eligibility shall be eligible for disability benefits.

If the member is totally disabled, the member shall receive 70 percent of their base salary preceding disability.

If the member is occupationally disabled and their disability is determined to be a permanent occupational disability, the member shall receive 50 percent of their base salary preceding disability regardless of their family status. If the member is occupationally disabled and the disability is determined to be a temporary occupational disability, the member shall receive 40 percent of their base salary preceding disability regardless of their family status for up to five years.

Total disability and permanent occupational disability benefits are offset by the Money Purchase, DROP or SRA balances, converted to annuities. For member's who also participate in Social Security, disability benefits are reduced by Social Security disability benefits derived from employment as a member, if applicable.

Temporary Occupational Disability benefits are payable for a maximum of five years. Permanent Occupational and Total Disability benefits are payable as long as the member remains disabled.

A benefit adjustment of up to 3 percent may be granted to members and spouses by the Fire & Police Pension Association Board of Directors annually. Totally disabled members and their beneficiaries receive an automatic benefit adjustment each year of 3 percent. The benefit adjustment is effective October 1st. A benefit adjustment may begin after receiving benefits for at least 12 calendar months prior to October 1.

#### 4. Membership

The participating employees (members) of the Plan as of December 31, 2017, are as follows:

Retirees and Beneficiaries Currently Receiving Benefits	1,185
Active Non-Vested Members	12,214
Total Members	13,399

## C. Defined Benefit System - Statewide Defined Benefit Plan

#### Plan Description

The Plan is a cost-sharing multiple-employer defined benefit pension plan covering substantially all full-time employees of participating fire or police departments in Colorado hired on or after April 8, 1978 (New Hires), provided that they are not already covered by a statutorily exempt plan. As of August 5, 2003, the Plan may include clerical and other personnel from fire districts whose services are auxiliary to fire protection. The Plan became effective January 1, 1980 and currently has 227 participating employer fire and police departments.

Employers once had the option to elect to withdraw from the Plan, but a change in state statutes permitted no further withdrawals after January 1, 1988 unless the employer elects into and is determined to be eligible to participate in the Statewide Money Purchase Plan.

The Plan assets are included in the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund (for Deferred Retirement Option Plan (DROP) assets and Separate Retirement Account assets from eligible retired members).

#### 2. Contributions

Contribution rates for this Plan are set by state statute. Employer contribution rates can only be amended by state statute. Member contribution rates can be amended by state statute or by election of the membership.

Members of this Plan and their employers contributed at the rate of 8.0 percent of base salary, respectively, for a total contribution rate of 16 percent through 2014. In 2014, the members elected to increase the member contribution rate to the Plan beginning in 2015. Member contribution rates will increase 0.5 percent annually through 2022 to a total of 12.0 percent of base salary. Employer contributions will remain at 8.0 percent resulting in a combined contribution rate of 20.0 percent in 2022. In 2017, the total combined member and employer contribution rate was 17.5 percent.

Contributions from members and employers of plans reentering the system are established by resolution and approved by the FPPA Board of Directors. The reentry group had a combined contribution rate of 20.0 percent of base salary through 2014. It is a local decision on who pays the additional 4.0 percent contribution. Per the 2014 member election, the reentry group also had their required member contribution rate increase 0.5 percent annually beginning in 2015 through 2022 for a total combined member and employer contribution rate of 24.0 percent. In 2017, the total combined member and employer contribution rate was 21.5 percent.

The contribution rate for members and employers of affiliated social security employers was 4.0 percent of base salary for a total contribution rate of 8.0 percent through 2014. Per the 2014 member election, the affiliated social security group also had their required member contribution rate increase 0.25 percent annually beginning in 2015 through 2022 to a total of 6.0 percent of base salary. Employer contributions will remain at 4.0 percent resulting in a combined contribution rate of 10.0 percent in 2022. In 2017, the total combined member and employer contribution rate was 8.75 percent.

### 3. Benefits

On May 23, 1983, the Colorado Revised Statutes were amended to allow the Trustees of the Plan to change the retirement age on an annual basis, depending upon the results of the actuarial valuation and other circumstances. The amended statutes state that retirement age should not be less than age 55 or more than age 60. The Trustees subsequently elected to amend the retirement provisions, effective July 1, 1983, such that any member with at least 25 years of service may retire at any time after age 55 and shall be eligible for a normal retirement pension.

The annual normal retirement benefit is 2.0 percent of the average of the member's highest three years' base salary for each year of credited service up to ten years, plus 2.5 percent for each year of service thereafter.

The benefit for members of affiliated social security employers will be reduced by the amount of social security income the member receives annually, calculated as if the social security benefit started as of age 62 for benefits prior to 2007. Beginning January 1, 2007, members of affiliated social security employers will participate in the Fire & Police Pension Association supplemental social security program which will provide benefits equal to 1.0 percent of the average of the member's highest three years base salary for each year of credited service up to ten years plus 1.25 percent for each year thereafter.

Benefits paid to retired members and beneficiaries may be increased annually on October 1. The amount is based on the FPPA Board of Director's discretion and can range from 0 to the higher of 3 percent or the Consumer Price Index. Benefit adjustment may begin once the retired member has been receiving retirement benefits for at least 12 calendar months prior to October 1.

In addition, upon retirement a member may receive additional benefits credited to the member's "Separate Retirement Account" each year after January 1, 1988. Annually, at the discretion of the FPPA Board of Directors, the difference between the combined member/employer contribution and the actuarially determined contribution rate may be allocated to the stabilization reserve account (SRA). If the cost of the Plan exceeds the combined member/employer contribution rate, funds from the SRA may be used to make up the shortfall. Members do not vest in amounts credited to their Separate Retirement Account until retirement or disability. Members of plans reentering the system have a higher contribution rate. As a result their SRA has two components: the standard SRA and the reentry SRA. The reentry SRA cannot be used to subsidize the costs of the non-reentry members. The reentry SRA could be used to correct any deficiencies in the cost of participation of the entry members only. Effective July 1, 2017, the standard Separate Retirement Account contribution rate for members of the Statewide Defined Benefit Plan was set at 0 percent. The reentry Separate Retirement Account contribution rate was set at 3.70 percent.

A member is eligible for an early retirement after completion of 30 years of service or attainment of age 50 with at least five years of credited service. The early retirement benefit equals the normal retirement benefit reduced on an actuarially equivalent basis.

Upon termination, an member may elect to have their member contributions, along with 5.0 percent as interest, returned as a lump sum distribution. Alternatively, a member with at least five years of accredited service may leave contributions with the Plan and remain eligible for a retirement pension at age 55 equal to 2.0 percent of the member's average highest three years' base salary for each year of credited service up to ten years, plus 2.5 percent for each year of service thereafter.

#### 4. Membership

The participating employees (members) of the Plan as of December 31, 2017, are as follows:

Total Members	10,103
Non-Vested Members	2,777
Partially Vested Members	4,399
Fully Vested Members	425
Deferred Retirement Option Plan (DROP) Members	294
Terminated Members Entitled to Benefits But Not Yet Receiving Such Benefits	1,075
Retirees and Beneficiaries Receiving Benefits	1,133

## D. Defined Benefit System - Statewide Hybrid Plan

#### 1. Plan Description

The Plan was established January 1, 2004 as a cost-sharing multiple-employer pension plan covering full-time firefighters and police officers from departments that elect coverage. The Plan may also cover clerical staff, other fire district personnel whose services are auxiliary to fire protection, or chiefs who have opted out of the Statewide Defined Benefit Plan. The Plan is comprised of two components: Defined Benefit and Money Purchase. With the latter component, members have the option of choosing among various investment options offered by an outside investment manager. The Plan currently has 40 participating employer departments.

Employers may not withdraw from the Plan once affiliated. The Plan assets associated with the Defined Benefit Component are included in the Fire & Police Members' Benefit Investment Fund and the Plan assets associated with the Money Purchase Component and Deferred Retirement Option Plan (DROP) assets are included in the Fire & Police Members' Self-Directed Investment Fund.

#### 2. Contributions

The Plan sets contribution rates at a level that enables all benefits to be fully funded at the retirement date of all members. The members of this Plan and their employers are currently each contributing at the rate determined by the individual employer, however, the rate for both employer and members must be at least 8 percent of the member's base salary for a total of 16 percent. The amount allocated to the Defined Benefit Component is set annually by the Fire & Police Pension Association Board of Directors. Excess contributions fund the Money Purchase Component of the Plan. The Defined Benefit Component contribution rate from July 1, 2017 through June 30, 2018 is 14.80 percent. The Defined Benefit Component contribution rate from July 1, 2016 through June 30, 2017 was 13.50 percent.

Within the Money Purchase Component, members are always fully vested in their own contributions, as well as the earnings on those contributions. Vesting in the employer's contributions within the Money Purchase Component, and earnings on those contributions occurs according to the vesting schedule set by the plan document at 20 percent per year after the first year of service and to be 100 percent vested after five years of service or the attainment of age 55. Employer and member contributions are invested in funds at the discretion of members.

A member may elect to make voluntary after-tax contributions to the Money Purchase Component of the Plan. Additional voluntary contributions from the employer are made on a pre-tax basis.

#### Benefits

A member is eligible for a normal retirement pension upon completing 25 years of credited service and attaining age 55

The annual normal pension of the Defined Benefit Component is 1.5 percent of the average of the member's highest three years' base salary for each year of credited service. Benefits paid to retired members and beneficiaries of the Defined Benefit Component may be increased annually on October 1. The amount is based on the FPPA Board of Directors discretion and can range from 0 percent to 3 percent. Benefit adjustment may begin once the retired member has been receiving retirement benefits for as least 12 calendar months prior to October 1.

A member is eligible for early retirement within the Defined Benefit Component after completion of 30 years of service or attainment of age 50 with at least five years of credited service. The early retirement benefit equals the normal retirement benefit reduced on an actuarially equivalent basis.

Upon termination, a member may elect to have their member contributions, along with 5.0 percent as interest, returned as a lump sum distribution from the Defined Benefit Component. Alternatively, a member with at least five years of accredited service may leave contributions with the Defined Benefit Component of the Plan and remain eligible for a retirement pension at age 55 equal to 1.5 percent of the average of the member's highest three years' base salary for each year of credited service. In addition, upon termination, the vested account balance within the Money Purchase Component becomes available to the member.

#### 4. Membership

The participating employees (members) of the Plan – Defined Benefit Component and Money Purchase Only Component as of December 31, 2017, are as follows:

Defined Benefit Component: Retirees and Beneficiaries Receiving Benefits	36
Defined Benefit Component: Terminated Members Entitled to Benefit But Not Yet Receiving Such Benefits	35
Money Purchase Component: Retirees and Beneficiaries Receiving Benefits and Terminated Members Entitled to Benefits But Not Yet Receiving Such Benefits	177
Deferred Retirement Option Plan (DROP) Members	6
Fully Vested Member	56
Partially Vested Members	251
Non-Vested Members	32
Total Members	593

## E. Defined Benefit System - Colorado Springs New Hire Pension Plan

#### 1. Plan Description

Two plans from the City of Colorado Springs joined the Fire & Police Pension Association Defined Benefit System as of October 1, 2006. They are now one single-employer defined benefit plan, but with a fire component and a police component for fire and police employees hired by the City of Colorado Springs on or after April 8, 1978 but prior to October 1, 2006. The plan is closed to new members as of October 1, 2006.

Employers may not withdraw from the Fire & Police Pension Association Defined Benefit System once elected. The Plan has had several elections since 2006 to allow members to consider transferring to the Fire & Police Pension Association Defined Benefit System - Statewide Defined Benefit Plan. The Plan assets are included in the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund (for Deferred Retirement Option Plan (DROP) assets and Separate Retirement Account assets from eligible retired members).

#### 2. Contributions

The Plan sets contribution rates at a level that enables all benefits to be fully funded at the retirement date of all members within each component as determined by the actuarial study. Effective January 1, 2017, the Fire Component actuarially determined contribution is \$5,132,890. Of this amount the members of the Plan contribute 10 percent of basic salary and the employer remitted the remainder. Effective January 1, 2018, the Fire Component actuarially determined contribution is \$4,981,787. For the Police Component, the actuarially determined contribution for 2017 was \$10,368,391. Of this amount the members of the plan contributed 8 percent of basic salary and the employer remitted the remainder. Effective January 1, 2018, the actuarially determined contribution is \$9,479,498.

#### 3. Benefits

#### Police Component

A member is eligible for a normal retirement pension at any time after age 50, if the member has at least 25 full years of credited service.

The annual normal pension equals 2.0 percent of the member's final average salary (past 39 payroll periods) for each full year of credited service up to ten years, plus 2.75 percent for each full year thereafter with a maximum benefit of 75 percent. Cost-of-living adjustments begin on October 1 immediately before the retiree turns 60, or 10 years after benefits payment commence, whichever is earlier. The amount of the cost-of-living adjustment cannot exceed 3.0 percent per year subject to limitations linked to the consumer price index.

In addition, upon retirement a member may receive additional benefits credited to the member's Separate Retirement Account. These are attributable to contributions in excess of the actuarially determined pension cost and any earnings or losses thereon. Members do not vest in amounts credited to their account until retirement and the Plan may use such stabilization reserve amounts to reduce pension cost in the event such cost exceeds contributions. Effective January 1, 2017, the Separate Retirement Account contribution rate for members of the Police Component was set at 0 percent. This rate will remain the same for calendar year 2018.

A member is eligible for an early retirement benefit after completion of 20 years of service and attainment of age 45. The early retirement benefit is reduced by 7.5 percent for each year that the member is less than age 50.

Upon termination, a member may elect to have all contributions, along with 5 percent per annum, as interest, returned as a lump sum distribution. Alternatively, a member with at least 10 years of accredited service may leave contributions with the Plan and remain eligible for a retirement pension at age 50 equal to 2.0 percent of the member's final average salary (past 39 payroll periods) for each full year of credited service up to ten years plus 2.75 percent for each full year thereafter with a maximum benefit of 75 percent.

## Fire Component

A member is eligible for a normal retirement pension at any time after age 55, if the member has at least 25 years of service.

The annual normal pension is 2.0 percent of the member's final average salary (past 39 payroll periods) for each full year of credited service up to ten years plus 2.85 percent for each full year thereafter with a maximum benefit of 77 percent. Cost-of-living adjustments begin on October 1 immediately before the retired firefighter turns 65 or 10 years

after benefits payment commence, whichever is earlier. The amount of the cost-of-living adjustment cannot exceed 3.0 percent per year subject to limitations linked to the consumer price index.

In addition, upon retirement a member may receive additional benefits credited to the member's Separate Retirement Account. These are attributable to contributions in excess of the actuarially determined pension cost and any earnings or losses thereon. Members do not vest in amounts credited to their account until retirement and the Plan may use such stabilization reserve amounts to reduce pension cost in the event such cost exceeds contributions. Effective January 1, 2017, the Separate Retirement Account contribution rate for members of the Fire Component was set at 0 percent. This rate will remain the same for calendar year 2018.

A member is eligible for an early retirement benefit at age 50 and after completion of 20 years of service. The early retirement benefit is reduced by 4.615 percent for each year that the member is less than age 55.

Upon termination, a member may elect to have all contributions, along with 5 percent per annum, as interest, returned as a lump sum distribution. Alternatively, a member with at least 10 years of accredited service may leave contributions with the Plan and remain eligible for a retirement pension at age 55 equal to 2.0 percent of the member's final average salary (past 39 payroll periods) for each full year of credited service up to ten years plus 2.85 percent for each full year thereafter with a maximum benefit of 77 percent.

## 4. Membership

The participating employees (members) of the Plan as of December 31, 2017, are as follows:

Partially Vested Members  Non-Vested Members	341 
Fully Vested Members	45
Deferred Retirement Option Plan (DROP) Members	101
Terminated Members Entitled to Benefits But Not Yet Receiving Such Benefits	33
Retirees and Beneficiaries Receiving Benefits	372

## F. FPPA Staff Healthcare Subsidy Plan

#### 1. Plan Description

FPPA administers a single-employer defined benefit healthcare plan (FPPA Staff Healthcare Subsidy Plan). The plan provides a healthcare premium subsidy to all full time employees who leave FPPA and have completed at least ten years of service with the FPPA. As of December 31, 2017, there are 53 total active members with 16 active employees meeting the eligibility requirements. In addition, there are 4 inactive vested employees not yet receiving benefits and 5 retirees receiving a benefit. The program began in March 1993.

### 2. Contributions and Benefit Provisions

FPPA provides a health care premium subsidy to eligible retired staff that are enrolled in a health care program (known as PERACare). The subsidy period is limited to the number of years actually worked at FPPA and further limited to the maximum subsidy paid by the Public Employees Retirement Association of Colorado (PERA). The amount of assistance is prorated for years of service less than 20. The subsidy is \$11.50 per month for each year of PERA covered service. This amount decreases to \$5.75 per month for each year of PERA covered service when the beneficiary becomes Medicare eligible. Currently, the maximum monthly subsidy paid by PERA is \$230 for pre-Medicare premiums and \$115 for Medicare-covered premiums. The PERA subsidy can be increased by an act of the Colorado General Assembly. The PERA retiree health plan does not issue a publicly available financial report.

Contributions to the FPPA Staff Healthcare Subsidy Plan are made solely by the Employer. Employees do not contribute to the Plan.

## G. Fire & Police Members' Statewide Money Purchase Plan

1. Plan Description

The Plan is a multiple-employer defined contribution (money purchase) pension fund covering full-time employees of participating fire or police districts in Colorado. As of August 1, 2003, the Plan may include part-time police and fire employees. The Plan may also include clerical or other personnel from fire districts whose services are auxiliary to fire protection.

The Fire & Police Members' Statewide Money Purchase Plan became effective on January 1, 1995. Participants can choose from various investments selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors, as well as mutual funds or other investments offered through a Self-Directed Brokerage Account. There were 48 contributing employer departments as of December 31, 2017. The Plan assets are included in the Fire & Police Members' Self-Directed Investment Fund.

### Contributions and Vesting

Contributions to the Plan are calculated as a percentage of the member's base salary, which is specified by state statute. Current participants contribute 8.0 percent of base salary, which is matched by the employer. Members are always fully vested in their own contributions, and the earnings on those contributions. Vesting in the employer's contributions and earnings on those contributions occurs according to the vesting schedule set by state statute at 20 percent per year after the first year of service to be 100 percent vested after 5 years of service. Employer and member contributions are invested in funds at the discretion of members.

#### 3. Membership

The participating employees (members) of the Plan as of December 31, 2017, are as follows:

Non-Vested Members	25
Fully Vested Members  Partially Vested Members	32 61
Retirees and Beneficiaries Receiving Benefits and Terminated Members Entitled to Benefit But Not Yet Receiving Such Benefits	158

## H. Self-Directed Assets for the Affiliated Local and Defined Benefit System Plans

## 1. Plan Description

These defined contribution accounts consist of the assets of plans where members control their account by choosing from various investment options selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors, as well as mutual funds or other investments offered through a Self-Directed Brokerage Account. The members in this group are in the defined benefit plans described above within Note 1.

The Deferred Retirement Option Plan (DROP) assets which fund a supplemental benefit within the Local Old Hire and Defined Benefit System Plans are included in the Fire & Police Members' Self-Directed Investment Fund. In general, the DROP program allows a member to elect to participate in the supplemental benefit after reaching eligibility for normal retirement (and in some cases, early or vested retirement). A member can continue to work while participating in the DROP, but must terminate employment within 5 years of entry into the DROP. The member's percentage of retirement benefit is frozen at the time of entry into the DROP. The monthly payments that begin at entry into the DROP are accumulated until the member terminates service, at which time the DROP accumulated benefits can be paid as a lump sum, if desired.

Also included is the money purchase component for the Defined Benefit System – Statewide Hybrid Plan. The Plan is described above in Note 1, Section D.

The Separate Retirement Account assets from eligible Defined Benefit System retired members are included in the Fire & Police Members' Self-Directed Investment Fund. The benefits are described above in Note 1, Sections C and E.

## 2. Contributions and Vesting

Within the DROP programs, the member continues contributing at the rate described in each plan, which is credited to the DROP. The member is vested 100 percent in their DROP account. Total DROP assets are \$117,642,052 as of December 31, 2017.

The Defined Benefit System – Statewide Hybrid Plan contributions and vesting are described above in Note 1, Section D.

The Separate Retirement Accounts within the Defined Benefit System are described above in Note 1, Section C and E.

#### 3. Membership

Membership is listed within the defined benefit plans described above in Note 1.

## **NOTE 2 | SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

#### A. Basis of Accounting

FPPA follows the accounting principles and reporting guidelines as set forth by the Governmental Accounting Standards Board. The financial statements are prepared using the accrual basis of accounting and reflect the overall operations of FPPA. Member and employer contributions are recognized in the period in which the contributions are due, and benefits and refunds are recognized when payable in accordance with the terms of each plan.

### B. Reporting Entity

The Governmental Accounting Standards Board has specified the criteria that define a governmental entity for financial reporting purposes. FPPA has considered the possibility of inclusion of additional entities in its comprehensive annual financial report. The definition of the reporting entity is based primarily on financial accountability.

FPPA would be financially accountable for an outside entity if it appointed a voting majority of the organization's governing body and could impose its will on that organization. The same would hold true if FPPA might potentially accrue benefits or incur specific financial burdens on FPPA from an outside entity. Finally, FPPA may be financially accountable for governmental organizations that are fiscally dependent upon it.

Based upon the application of the above criteria, FPPA has no includable entities. In addition, FPPA is not included in the financial statements of any other entity.

#### C. Investments and Investment Income & Expenses

Investments are carried at fair value using quoted market prices, with the following exceptions:

- 1. Private fund investments are recorded at estimated fair value based on valuation of the underlying investments as reported by the general partner via the most recent capital account statements. Reported management fees for private fund investments do not include performance fees, which can generally range from 10-20 percent of a fund's earnings. Performance fees are in the nature of a profit-sharing arrangement and are not considered by management to be a pension expense. FPPA will analyze public market performance and utilize discussions with the general partners to approximate an aggregate change in year-end valuations of its private fund investments. The aggregate change in valuations applied to the 2017 financial statements was a positive \$26,940,945.
- 2. Hedge funds are valued based upon net asset values provided by each hedge fund's third-party administrator. Reported management fees for hedge funds do not include performance fees, which can generally range from 10-20 percent of a fund's earnings. Performance fees are in the nature of a profit-sharing arrangement and are not considered by management to be a pension expense.

Within the Fire & Police Members' Self-Directed Investment Fund, fair value of the Stable Value Funds are determined by the Investment Manager of the Fund and are based on the contract value of the investment adjusted for interest earned and accrued expenses.

Investment transactions are accounted for on the trade date.

Short term investments refer to all investments with a maturity of less than one year, including short term investment funds, repurchase agreements, commercial paper, certificates of deposit, treasury bills, and government agency issues.

Dividend income is recorded on the ex-dividend date. Interest income is accounted for using the accrual method of accounting.

Expenses directly associated with investment management, operations and servicing have been included as 'FPPA Investment Personnel Services' in the Statement of Changes in Fiduciary Net Position. The Schedule of Administrative and Investment Expenses provides a listing of investment expenses by type.

#### D. Cash and Short Term Investments

Cash and short term investments consist of money market funds, cash and cash equivalents held by money managers, certificates of deposit, short term fixed income securities with maturity of 12 months or less, and demand deposits.

## E. Property and Equipment

FPPA has a \$5,000 capitalization threshold for tangible assets. The capitalization threshold for intangible assets, specifically internal use computer software, is \$100,000. Property and equipment are stated at cost, less any write-downs for impairment in value, and are depreciated/amortized using the straight-line method over estimated lives as follows:

Computer and Office Equipment	3 - 5 years
Vehicles	5 years
Furniture	10 years
Building and Improvements	5 - 30 years
Tenant Improvements	life of lease
Internal Use Computer Software	7 years

#### F. Income Taxes

FPPA is exempt from federal income taxes under Section 115 of the Internal Revenue Code.

#### G. Refunds

For defined benefit plans, refunds represent a return of member or employer contributions from the plan. For defined benefit system members, refunds are lump sum distributions to terminated members of their member contributions plus interest, as described above in Note 1. For Affiliated Local Plans, refunds are directed by the local plan board as payments to reimburse the employer or made on behalf of an employer as payment of plan related expenses.

For defined contribution plans, refunds represent distributions to members equal to all or a portion of their member account balances comprised of member and employer contributions and investment earnings or losses.

#### H. FPPA Employee Retirement Plan

FPPA participates in the State Division Trust Fund (SDTF), a cost-sharing multiple-employer defined benefit pension fund administered by the Public Employees' Retirement Association of Colorado. The net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, information about the fiduciary net position and additions to/deductions from the fiduciary net position of the SDTF have been determined using the economic resources measurement focus and the accrual basis of accounting. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

### I. Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from these estimates. Actuarially determined future benefit payments require the use of significant estimates. FPPA believes that the techniques and assumptions used in establishing these estimates are appropriate.

## J. Allocation

Investment related expenses are allocated to each Plan according to its proportionate share of total assets. Other administrative expenses are allocated to each Plan according to its proportionate share of total member headcount. If an expense is determined to be attributable to one particular or several different Plans, then that expense is allocated only to those attributable Plans, rather than being allocated to all Plans as described above. In the current year, Plan administration

costs are included in the Net Increase in Fiduciary Net Position Available of the Fire & Police Members' Benefit Investment Fund.

#### K. New Accounting Pronouncements

In June 2015, the GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The statement addresses accounting and financial reporting for other post-employment benefits that are provided to the employees of state and local governmental employers. Statement No. 75 establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expenses related to OPEB in the basic financial statements, in addition to requiring more extensive note disclosures and required supplementary information. This standard is effective for financial statements for fiscal years beginning after June 15, 2017. Management has evaluated the impact of the new standard and expects to have increased footnote disclosure when implemented for the 2018 annual report.

GASB Statement No. 85, Omnibus 2017, was issued March 2017. This statement addresses practice issues that have been identified during implementation and application of certain GASB statements. Topics include issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and OPEB). The effective date for this standard is reporting periods beginning after June 15, 2017. FPPA is currently evaluating this statement with initial implementation planned for the 2018 annual report.

### **NOTE 3 | CHANGE IN ACCOUNTING POLICY**

GASB Statement No. 74, Financial Reporting for Postemployment Benefits Other Than Pension Plans, was adopted during the year ended December 31, 2017. The statement establishes new accounting and financial reporting requirements for governments whose employees are provided with other post-employment benefits (OPEB), as well as for certain nonemployer governments that have a legal obligation to provide financial support for OPEB provided to the employees of other entities. The requirements for Statement No. 74 require changes in presentation of financial statements, notes to financial statements, and required supplementary information. Significant changes include the elimination of certain actuarial disclosures related to plan funding status, the disclosure of the annual money-weighted rate of return on investments and require additional footnote disclosures and required supplementary information.

The additional footnote disclosures and required supplementary information for OPEB plans impact the Statewide Death & Disability Plan and the FPPA Staff Healthcare Subsidy Plan. These additions include an actuarial calculation of total and net OPEB liability and comprehensive footnote disclosure regarding the OPEB liability, the sensitivity of the net OPEB liability to the discount rate and additional investment activity disclosures.

The implementation of Statement No. 74 resulted in reporting all contributions to the Statewide Death & Disability Plan as member contributions as they are made by or on behalf of members. The 2016 contributions reported as employer contributions of \$15,145,180 were reclassified to conform to the current year presentation as member contributions on the Statement of Changes in Fiduciary Net Position. The implementation did not significantly impact the accounting for receivable and investment balances.

## NOTE 4 | NET PENSION LIABILITY FOR COST-SHARING AND SINGLE EMPLOYER PLANS

## A. Net Pension Liability

Defined Benefit System	Total Pension Liability	Plan Fiduciary Net Position *	Employers' Net Pension Liability (Asset)	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
Statewide Defined Benefit Plan	\$2,285,984,033	\$2,413,276,447	\$(127,292,414)	105.57%
Statewide Hybrid Plan – Defined Benefit Component	53,776,339	69,872,191	(16,095,852)	129.93%
Colorado Springs New Hire Pension Plan – Fire Component	168,928,617	142,035,779	26,892,838	84.08%
Colorado Springs New Hire Pension Plan – Police Component	346,772,188	315,606,098	31,166,090	91.01%
Total	\$2,855,461,177	\$2,940,790,515	\$(85,329,338)	102.99%

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net Pension Liability is the net invested plan assets as of December 31, 2017. It does not include the impact of contributions not received during 2017 and the net pension liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan further described in Note 9, FPPA Employee Retirement Plan.

The net pension liability (i.e., the plan's liability determined in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans, less the fiduciary net position) as of December 31, 2017, is shown above. Actuarial valuation of the ongoing plans involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in 2015 and the changes in assumptions are included in the totals presented in table above. The Schedule of Employers' Net Pension Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The Total Pension Liability as of December 31, 2017, is based on the results of the most recent actuarial valuation date and rolled-forward using generally accepted actuarial procedures.

## **B.** Summary of Actuarial Assumptions

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

	Defined Benefit System		
	Statewide Defined Benefit Plan	Statewide Hybrid Plan - Defined Benefit Component	Colorado Springs New Hire Pension Plan - Fire and Police Components
Valuation Date	January 1, 2017	January 1, 2017	January 1, 2017
Actuarial Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization Method	Level % of Payroll, Open	Level % of Payroll, Open	Level Dollar, Closed
Amortization Period	30 Years	30 Years	21 Years, Beginning January 1, 2017
Asset Valuation Method	5-Year Smoothed Fair Value	5-Year Smoothed Fair Value	5-Year Smoothed Fair Value
Actuarial Assumptions:			
Investment Rate of Return*	7.50%	7.50%	7.50%
Projected Salary Increases*	4.0% - 14.0%	4.0% - 14.0%	4.0% - 14.0%
Cost of Living Adjustment (COLA)	0.00%	0.00%	2.4% (Fire Component) 2.6% (Police Component)
*Includes inflation at	2.50%	2.50%	2.50%

The post-retirement mortality tables for non-disabled retirees is a blend of the Annuitant and Employee RP-2014 generational mortality tables with blue collar adjustment, projected with Scale BB. The occupationally disabled post-retirement mortality assumption uses the same table as used for healthy annuitants, except there is a three year set-forward, meaning a disabled member age 70 will be valued as if they were a 73 year old healthy retiree. The totally disabled post-retirement mortality assumption uses the RP-2014 generational mortality tables for disabled annuitants, except an additional provision to apply a minimum 3 percent mortality probability to males and 2 percent mortality probability for females, is included to reflect substantial impairment for this population. The pre-retirement non-duty mortality tables are adjusted to 55% of the RP-2014 mortality tables for active employees. The on-duty mortality rate is 0.00020.

## C. Target Allocations

Asset Class	<b>Target Allocation</b>	Long Term Expected Rate of Return
Global Equity	37%	8.33%
Equity Long/Short	9%	7.15%
Illiquid Alternatives	24%	9.70%
Fixed Income	15%	3.00%
Absolute Return	9%	6.46%
Managed Futures	4%	6.85%
Cash	2%	2.26%
Total	100%	

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plans target asset allocation as of December 31, 2017, are summarized in the above table.

The discount rate used to measure the total pension liability was 7.50 percent. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the board's funding policy, which establishes the contractually required rates under Colorado statutes. Based on those assumptions, the Plan fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

## D. Changes in Discount Rates

Defined Benefit System	1.00% Decrease *	Current Discount Rate *	1.00% Increase *
Statewide Defined Benefit Plan	\$178,991,159	\$(127,292,414)	\$(381,358,172)
Statewide Hybrid Plan - Defined Benefit Component	(9,527,507)	(16,095,852)	(21,549,928)
Colorado Springs New Hire Pension Plan - Fire Component	49,726,099	26,892,838	8,147,084
Colorado Springs New Hire Pension Plan - Police Component	82,518,850	31,166,090	(9,591,953)
Total	\$301,708,601	\$(85,329,338)	\$(404,352,969)

<sup>\*</sup> Both the long-term rate of return and the resulting single discount rate used were 7.50 percent.

In accordance with GASB Statement No. 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the above table presents the net pension liability of the participating employers calculated using the discount rate of 7.50 percent, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1.00 percent lower (6.50 percent) or 1.00 percent higher (8.50 percent) than the current rate.

## NOTE 5 | DEPOSITS AND PENSION & OPEB PLAN INVESTMENTS

Under Colorado statutes, FPPA, as trustee of the Fire & Police Members' Benefit Investment Fund, has complete discretionary authority to invest and reinvest funds of the Fire & Police Members' Benefit Investment Fund, subject to the prudent investor rule.

FPPA has established a statement of investment objectives and policies for managing and monitoring the Fire & Police Members' Benefit Investment Fund. The investment objective for the Fire & Police Members' Benefit Investment Fund is to balance and prudently manage the investment needs (risk and return) of all plans participating in the Fund.

The investment policy also defines the fiduciaries' responsibilities with respect to the Fire & Police Members' Benefit Investment Fund, their investment authority under the prudent investor rule, the level of acceptable risk for investments, statutory asset allocation restrictions, investment performance objectives, and guidelines within which outside investment managers may operate.

FPPA utilizes an asset liability study as its primary process to establish the overall risk tolerance for the Fund. In establishing Investment Allocation Policy Targets, the board considers the historical and expected risks and correlations of investment classes in creating a portfolio which reduces risk through investment diversification. The FPPA Board conducts a formal asset liability study and investment allocation review at least every 2 years.

The FPPA Board establishes and continually updates interim investment allocation targets. Beginning in June 2017, the following investment allocation targets were in effect: global equity, 37 percent; equity long/short, 9 percent; fixed income and cash, 17 percent; absolute return, 9 percent; managed futures, 4 percent; and illiquid alternatives, 24 percent. At the end 2016 and through June 2017, the following interim investment allocation targets were in effect: global equity, 36 percent; equity long/short, 10 percent; fixed income and cash, 17 percent; absolute return, 10 percent; managed futures, 4 percent; and illiquid alternatives, 23 percent. There were no significant investment policy changes in 2017 other than the above changes in allocation targets.

## A. Cash Deposits and Short Term Investments

Cash deposits and short term investments represent both operating cash accounts held by banks and investment cash on deposit with the investment custodian. FPPA considers fixed income securities with a maturity of 12 months or less to be short term investments. The table below presents FPPA combined total deposits and short term investments as of December 31, 2017.

The table below presents FPPA combined total deposits and short term investments as of December 31, 2017.

Deposits with banks	\$29,945,631
Short Term Investments (maturity of 12 months or less)	257,590,115
Total Deposits and Short Term Investments	\$287,535,746

#### B. Pension & OPEB Plan Cash and Investments

The assets of the Fire & Police Members' Self-Directed Investment Fund are invested in commingled mutual fund investment vehicles. These investments at December 31, 2017 are summarized in the following table:

Cash and Short Term Investments	\$162,973
Investments	
Domestic Equity Funds	\$115,280,377
International Equity Funds	22,532,735
Balanced Funds	191,056,738
Fixed Income Funds	22,597,147
Money Market & Stable Value Funds	33,159,565
Brokeragelink Funds	65,333,050
Total Investments	\$449,959,612
Total Cash and Investments	\$450,122,585

The investments reflected on the Statement of Fiduciary Net Position for the Fire & Police Members' Benefit Investment Fund at December 31, 2017 are summarized in the following table:

Cash and Short Term Investments	\$287,372,773
Investments	
Fixed Income	\$853,972,158
Global Equity	1,650,203,047
Equity Long/Short	424,046,552
Real Assets	292,282,622
Real Estate	196,599,541
Absolute Return	463,635,512
Private Capital	608,356,389
Managed Futures	178,326,333
Securities Lending Collateral	
Total Investments	\$4,667,422,154
Total Cash and Investments	\$4,954,794,927

The annual money-weighted rate of return for the Fire & Police Members' Benefit Investment Fund was 14.95 percent for 2017. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## C. Fair Value Measurement

The Funds categorize their fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

**Level 1 –** Unadjusted quoted prices for identical instruments in active markets.

**Level 2** – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Funds assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table below shows the fair value leveling of the investments for the Funds.

		Fair Value Measures Using			
	Fair Value as of 12/31/2017	Quoted Prices in Active Markets Using Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	
Fire & Police Members' Benefit Investment Fund Investments Measured by Fair Value Level					
ASSETS					
Short-Term Securities					
Short-Term	\$20,100,410	\$15,399,389	\$4,701,021		
STIF	196,058,369	196,058,369	······································	•••••	
Total Short-Term Securities	\$216,158,779	\$211,457,758	\$4,701,021		
Global Equity					
U.S. Common Stocks	\$749,810,690	\$749,810,690			
Foreign Stocks	629,722,866	629,722,866	······································		
Preferred Stocks	3,696,956	3,696,956	······································	•••••	
Total Global Equity	\$1,383,230,512	\$1,383,230,512			
Fixed Income		· ·			
Asset Backed Securities	\$16,962,989	•••••••••••••••••••••••••••••••••••••••	\$16,962,989		
Corporate Bonds	127,032,002	••••••	127,032,002	•••••	
Government & Agency	150,318,627	\$145,682,548	4,636,079		
Mortgages-Agency	36,849,198		36,849,198		
Mortgages-Non-Agency	12,662,526		12,662,526		
International Bonds	36,121,032		36,121,032		
Revenue Bonds	2,187,869	·····	2,187,869		
TIPS	135,964	135,964	2,107,003		
Private Placements	······	133,304	97 020 262		
	87,020,362	2 655 917	87,020,362		
Preferred Stock  Total Fixed Income	6,751,838 \$476,042,407	3,655,817 <b>\$149,474,329</b>	3,096,021 \$ <b>326,568,078</b>		
Total Investment Assets	\$2,075,431,698	\$1,744,162,599	\$331,269,099		
DERIVATIVES	72,073,431,030	71,744,102,333	7331,203,033		
Futures Contracts	\$872,202	\$872,202	······································		
	······	7072,202	¢55 261		
Options Contracts	55,361		\$55,361		
Swaps Total Derivatives	4,319,520 \$5,247,092	\$872,202	4,319,520 <b>\$4,374,881</b>		
INVESTMENTS MEASURED AT THE NET ASSET VALUE (NAV	\$5,247,083	3672,202	Ş4,374,001		
Commingled Global Equity	\$266,035,437				
Commingled Global Equity  Commingled Fixed Income	373,619,766		······		
Absolute Return		·····	······································		
Equity Long/Short	463,635,512 424,046,552				
Managed Futures	178,326,333				
Private Capital	608,356,389		······		
Real Assets	292,282,622		······		
Real Estate  Tatal Importments Massured at the NAV	196,599,541				
Total Investments Measured at the NAV OTHER INVESTMENTS	\$2,802,902,152				
	674 242 004				
Cash Tatal Other Investments	\$71,213,994				
Total Other Investments	\$71,213,994	64 745 004 004	622E 642 000		
TOTAL INVESTMENTS MEASURED AT FAIR VALUE	\$4,954,794,927	\$1,745,034,801	\$335,643,980		

	Fair Value Measures Using				
	Fair Value as of 12/31/2017	Quoted Prices in Active Markets Using Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	
Fire & Police Members' Self-Directed Investment Fund Investments Measured by Fair Value Level					
ASSETS					
Global Equity					
U.S. Common Stocks	\$20,089,425	\$20,089,425			
ETF/Units	19,187,650	19,187,650			
Rights/Warrants	127	127	•••••••••••••••••••••••••••••••••••••••		
Total Global Equity	\$39,277,202	\$39,277,202			
Fixed Income					
Corporate Bonds	\$26,957		\$26,957		
Revenue Bonds	147,703	•••••••••••••••••••••••••••••••••••••••	147,703		
Total Fixed Income	\$174,660	\$0	\$174,660		
Total Investment Assets	\$39,451,862	\$39,277,202	\$174,660		
DERIVATIVES					
Options Contracts	\$(7,812)		\$(7,812)		
Total Derivatives	\$(7,812)		\$(7,812)		
INVESTMENTS MEASURED AT THE NET ASSET VALUE (NAV)					
Domestic Equity Funds	\$115,280,377				
International Equity Funds	22,532,735				
Balanced Funds	191,056,738	······································			
Fixed Income Funds	22,597,147	•••••••••••••••••••••••••••••••••••••••			
Money Market & Stable Value Funds	33,159,565	•••••••••••••••••••••••••••••••••••••••			
Brokeragelink Funds	25,889,000	······································	•••••••••••••••••••••••••••••••••••••••		
Total Investments Measured at the NAV	\$410,515,562				
OTHER INVESTMENTS					
Cash	\$162,973				
Total Other Investments	\$162,973				
TOTAL INVESTMENTS MEASURED AT FAIR VALUE	\$450,122,585	\$39,277,202	\$166,848		

Fire & Police Members' Benefit Investment Fund	Fair Value as of 12/31/2017	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period (Days)
Commingled Global Equity <sup>1</sup>	\$266,035,437		Daily, Monthly	1-30
Commingled Fixed Income <sup>2</sup>	373,619,766		Daily, Monthly	3-30
Absolute Return				
Alternative Beta <sup>3</sup>	95,579,661	······································	Bi-weekly, Monthly	15-30
Long Short <sup>4</sup>	31,620,124	······································	Quarterly	60
Global Macro <sup>5</sup>	143,303,899		Monthly, Quarterly	30-60
Opportunistic <sup>6</sup>	19,834,320		Quarterly	45
Multi-Strategy <sup>7</sup>	142,975,436		Quarterly	45-90
Convertible Arbitrage <sup>8</sup>	30,322,072		Quarterly	65
Equity Long/Short				
Activist <sup>9</sup>	53,040,007		Quarterly	65
Event Driven <sup>10</sup>	20,315,399		Quarterly, Two Year	60-90
Long Short <sup>11</sup>	350,691,146		Quarterly, Annual	45-90
Managed Futures	-	······································		
Alternative Beta <sup>12</sup>	98,965,519		Daily, Weekly	1-3
Hedge Fund <sup>13</sup>	79,360,814	······································	Monthly	43,250
Private Capital <sup>14</sup>	608,356,389	\$359,908,284		
Real Assets <sup>14</sup>	292,282,622	179,846,860		
Real Estate <sup>14</sup>	196,599,541	30,152,882		
Total Investments Measured at the NAV	\$2,802,902,152	\$569,908,026		
Fire & Police Members' Self-Directed Investment Fund				
Domestic Equity Funds <sup>15</sup>	\$115,280,377		Daily	None
International Equity Funds <sup>16</sup>	22,532,735		Daily	None
Balanced Funds <sup>17</sup>	191,056,738		Daily	None
Fixed Income Funds <sup>18</sup>	22,597,147		Daily	None
Money Market & Stable Value Funds <sup>19</sup>	33,159,565		Daily	None
Brokeragelink Funds <sup>20</sup>	25,889,000		Daily	None
Total Investments Measured at the NAV	\$410,515,562			

## Fire & Police Members' Benefit Investment Fund

- <sup>1</sup> Commingled Global Equity Consisting of four funds. These funds target diversified geographic and capitalization exposure to global equity markets. Three funds are dedicated emerging markets equity strategies. One fund is a dedicated MLP strategy.
- <sup>2</sup> **Commingled Fixed Income** Consisting of two funds. These funds target stable returns and income across broad US and global bond markets. One fund is an aggregation of passive fixed income exposures. One fund is dedicated to private placements.
- <sup>3</sup> Alternative Beta Consisting of two funds. These funds target systematic exposure to broad hedge fund strategies and style risk premia.
- <sup>4</sup>Long Short Consisting of one fund. This fund will maintain both long and short exposures within the equity markets.

<sup>&</sup>lt;sup>5</sup> Global Macro – Consisting of four funds. These strategies maintain systematic or discretionary exposure to the equity, fixed income, commodity and currency markets.

- <sup>6</sup> **Opportunistic** Consisting of one fund. This fund is a dedicated merger arbitrage strategy.
- <sup>7</sup> **Multi-Strategy** Consisting of three funds. These funds target a relative value approach in actively allocating to various hedge fund strategies.
- <sup>8</sup> Convertible Arbitrage Consisting of one fund. This fund's strategy involves the simultaneous purchase of convertible securities and the short sale of the same issuer's common stock.
- <sup>9</sup> **Activist** Consisting of two funds. These funds target undervalued companies where the investment manager can act as a catalyst for change.
- <sup>10</sup> **Event Driven** Consisting of two funds. These funds target companies with an impending catalyst for revaluation.
- <sup>11</sup>Long Short Consisting of seven funds. These funds will maintain both long and short exposures within the equity markets.
- <sup>12</sup> **Alternative Beta** Consisting of two funds. These funds target systematic exposure to trend following strategies in securities markets.
- <sup>13</sup> Hedge Fund Consisting of two funds. These funds target active exposure to trend following strategies in securities markets.
- Private Capital, Real Assets and Real Estate Private Capital consisting of 76 funds with exposure to buyout funds, venture capital and special situations. Real Assets is comprised of 20 funds with exposure to energy, lending and diversified assets. Real Estate is comprised of 13 funds with invests in U.S. and global real estate.

## Fire & Police Members' Self-Directed Investment Fund

- <sup>15</sup> **Domestic Equity Funds** Consisting of seven funds. These funds target diversified geographic and capitalization exposure to US equity markets.
- <sup>16</sup> International Equity Funds Consisting of five funds. These funds target diversified geographic and capitalization exposure to Non-US equity markets. One fund is dedicated to emerging markets.
- <sup>17</sup> Balanced Funds Consisting of twelve funds. These target date funds provide diversified global exposure to equity and fixed income strategies appropriate for a participant's retirement age.
- <sup>18</sup> Fixed Income Funds Consisting of four funds. These funds target stable returns and income across broad US and global bond markets. One fund is a dedicated high yield strategy.
- <sup>19</sup> Money Market & Stable Value Funds Consisting of two funds. These funds target stable cash returns.
- <sup>20</sup>Brokeragelink Funds Consisting of several funds. These funds may include various strategies as chosen by the participant.

### D. Investment Risk

Investments are exposed to various risks including custodial credit risk, concentration of credit risk, credit risk, interest rate risk, and foreign currency risk.

## 1. Custodial Credit Risk

FPPA has no formal policy for custodial credit risk for investments. Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, FPPA would not be able to recover the value of investment or collateral securities that are in possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in FPPA's name and are held by either counterparty or the counterparty's trust department or agent but not in FPPA's name. Investment-related cash deposits are under the custody of The Bank of New York Mellon which has an AA- long-term senior debt credit rating by Standard & Poor's and an Aa2 rating by Moody's and an AA rating by Fitch. As of December 31, 2017, FPPA had exposure to cash deposits in the amount of \$287,372,773. For the Fire & Police Members' Self-Directed Investment Fund, all assets are in custody with Fidelity Investments. The custodial agent carries no custodial credit risk as all assets are insured and/or collateralized by the securities held by Fidelity Investments in FPPA's name.

#### 2. Concentration of Credit Risk

FPPA does not have any investments representing five percent or more of the Fire & Police Members' Benefit Investment Fund assets or the Fire & Police Members' Self-Directed Investment Fund in any single issuer. These funds do have investments representing five percent or more of the respective fund assets with investment manager organizations.

The following table summarized FPPA's investments within the Fire & Police Members' Benefit Investment Fund representing five percent or more with any one organization as of December 31, 2017.

Asset Class Manager	Fair Value	% of Total Fund Assets
SSgA BC Aggregate Bond	\$319,652,762	6.49%

There were no investments greater than 5 percent with any one organization within the Fire & Police Members' Self-Directed Investment Fund.

## 3. Credit Risk

Credit risk is the risk that an issuer of a debt instrument will not fulfill its obligations. Although FPPA does not have a specific policy relating to credit risk, through its Master Statement of Investment Policies and Objectives for the Fund, FPPA has established and monitors specific guidelines regarding the types, exposures and quality of securities within each fixed income portfolio.

The following table summarizes FPPA's fixed income securities credit quality ratings as of December 31, 2017:

	Fixed Income Portfo		
Credit Quality Rating	Fair Value	% of Portfolio	
Fire & Police Members' Benefit Investment Fund			
Aaa/AAA	\$298,996,220	24.97%	
Aa/AA	114,899,042	9.60%	
Α	119,985,172	10.02%	
Baa/BBB	154,600,041	12.92%	
Ba/BB	48,588,697	4.06%	
В	16,680,104	1.39%	
Caa/CCC	1,832,591	0.15%	
Ca/CC	105,386	0.01%	
D	356,734	0.03%	
Not Rated	15,419,070	1.29%	
Total Credit Risk Debt Securities	\$771,463,057	64.44%	
U.S. Government Securities	82,509,101	6.89%	
Total Fixed Income Securities	\$853,972,158	71.33%	
Cash	287,372,773	24.00%	
Subtotal	\$1,141,344,931	95.33%	
Fire & Police Members' Self-Directed Investment Fund			
Fixed Income Funds	\$22,597,146	1.89%	
Money Market & Stable Value Funds	33,159,565	2.77%	
Cash	162,973	0.01%	
Subtotal	\$55,919,684	4.67%	
Total Total	\$1,197,264,615	100.00%	

<sup>\*</sup> Fire & Police Members' Self-Directed Investment Fund is not rated.

#### 4. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. FPPA utilizes effective duration as the primary measure of interest rate risk within its fixed income investments. Although FPPA does not have a specific policy relating to interest rate risk, through its Master Statement of Investment Policies and Objectives for the Fund, FPPA has established and monitors specific guidelines regarding the types, exposures and quality of securities within each fixed income portfolio.

The following table summarizes the effective duration of the FPPA's fixed income portfolios at December 31, 2017:

Fixed	Income	Portfo	lio

Security Type	Fair Value	Effective Duration
Fire & Police Members' Benefit Investment Fund		
Asset Backed Securities	\$16,962,989	0.922
Corporate Bonds	376,852,220	5.265
Financial Futures	(135,724)	1.182
Fixed Income Swaps	4,390,347	1.693
Government & Agency	274,118,176	3.997
International Bonds	36,121,032	3.663
Mortgages- Non-Agency	12,662,526	3.755
Mortgages-Agency	36,849,198	6.139
Preferred Stock	6,751,839	0.000
Private Placements	87,020,361	2.381
Puts/Calls/Options	55,361	109.356
Revenue Bonds	2,187,869	7.985
TIPS	135,964	3.266
Cash	287,372,773	0.003
Subtotal	\$1,141,344,931	
Fire & Police Members' Self-Directed Investment Fund		
Fixed Income Funds	\$22,597,146	4.443
Money Market & Stable Value Funds	33,159,565	1.906
Cash	162,973	0.003
Subtotal	\$55,919,684	
Total	\$1,197,264,615	3.261

## 5. Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. FPPA's exposure to foreign currency risk derives primarily from its allocations to non-U.S. dollar denominated international equity. Other sources of foreign currency risk are derived from fixed income and alternative investments. Although FPPA does not have a specific policy relating to foreign currency risk, through its Master Statement of Investment Policies and Objectives for the Fund, FPPA has established and monitors specific guidelines regarding the types, exposures and quality of securities within each investment portfolio.

The fair value of FPPA's exposure to foreign currency risk at December 31, 2017 is summarized in the following table (reported in U.S. Dollars):

Currency	Cash	Global Equity	Fixed Income	Private Capital	Real Assets	Total
Australian Dollar		\$30,828,669	\$5,816,475			\$36,645,144
Brazilian Real		4,698,867				4,698,867
British Pound		96,866,666	1,140,679	\$26,774,990	••••••	124,782,335
Canadian Dollar		52,407,791	4,577,957			56,985,748
Danish Krone		14,109,979			••••••	14,109,979
Euro Currency	\$1,190,319	184,447,105	7,812,705	38,871,020	\$37,648,427	269,969,576
Hong Kong Dollar		82,666,816				82,666,816
Indian Rupee		9,242,144	2,385,931		••••••	11,628,075
Indonesian Rupiah		2,696,933			••••••	2,696,933
Israeli Shekel		1,365,467				1,365,467
Japanese Yen	1,161,817	140,798,785				141,960,602
Korean Won		30,582,549				30,582,549
Mexican Peso		2,413,999	3,073,392			5,487,391
New Zealand Dollar			6,103,770			6,103,770
Norwegian Krone		4,757,593	1,534,913			6,292,506
Philippine Peso		1,081,557	1,697,578			2,779,135
Singapore Dollar		5,816,405	2,585,697			8,402,102
South African Rand		7,455,926				7,455,926
Swedish Krona		14,893,392				14,893,392
Swiss Franc		45,740,220				45,740,220
Taiwan Dollar		19,183,640				19,183,640
Thailand Baht		7,048,640				7,048,640
Turkish Lira		5,227,848				5,227,848
United Arab Emirates Dirham		1,054,427				1,054,427
Other (less than \$1 million in holdings)	1,272,475	3,244,384	2,996,120			7,512,979
Subtotal	\$3,624,611	\$768,629,802	\$39,725,217	\$65,646,010	\$37,648,427	\$915,274,067
U.S. Dollar	\$283,748,162	\$881,573,245	\$814,246,941	\$542,710,379	\$254,634,195	\$2,776,912,922
Grand Total	\$287,372,773	\$1,650,203,047	\$853,972,158	\$608,356,389	\$292,282,622	\$3,692,186,989

The above chart excludes the investment classes of equity long/short, real estate, absolute return, managed futures, and the assets of the Fire & Police Members' Self-Directed Investment Fund which are comprised of U.S. dollar based investments.

### E. Securities Lending

Colorado statute allows FPPA to participate in securities lending transactions. FPPA, via a Securities Lending Authorization Agreement, authorized Deutsche Bank to lend the securities to broker-dealers and banks. Securities were held at BNY Mellon Bank. FPPA temporarily suspended its securities lending program in 2017.

FPPA receives as collateral U.S. and foreign dollar cash, U.S. government securities, foreign sovereign debt and irrevocable bank letters of credit. Borrowers are required to deliver collateral for each loan in amounts equal to 102 percent of the fair value of the loaned securities with respect to U.S. securities and 105 percent of the fair value of loaned securities with respect to foreign securities. FPPA does not impose any restrictions on the amounts of loans that Deutsche Bank made on its behalf. FPPA and borrowers maintained the right to terminate all securities lending transactions on demand. The cash or U.S. Government and Agency securities collateral received on each loan is invested, together with the cash

collateral of other qualified tax-exempt plan lenders. Maturities of the investments made with cash collateral generally do not match the maturities of securities loans. The securities lending positions at December 31, 2017 were all \$0 and at December 31, 2016 were as follows:

	December 31, 2016
Fair Value of Securities on Loan	\$75,547,864
Collateral Held	77,357,635
Fair Value of Invested Collateral	77,397,016
Securities Lending Obligations	77,410,620

The invested collateral and corresponding obligation are reflected in the Statement of Fiduciary Net Position as assets and liabilities, respectively. For the year ended December 31, 2017, the decrease in fair value of the invested collateral was \$(39,381) in comparison to the increase in fair value of the invested collateral for the year ended December 31, 2016 of \$34,537. These changes are reflected in the "Gain (Loss) on Securities Lending" line on the Statement of Changes in Fiduciary Net Position. The invested collateral securities in this program were typically held to maturity and expected to mature at par.

FPPA records its share of lending fees as an expense with a corresponding effect of recognizing security lending income earned.

At December 31, 2017, the fair value of the securities on loan and the invested collateral was \$0.

### F. Interest Income

The Statement of Changes in Fiduciary Net Position for the Fire & Police Members' Benefit Investment Fund reflects interest investment income of \$12,435,949 for the year 2017. Interest income for the Fire & Police Members' Self-Directed Investment Fund totaled \$122,948 for 2017.

## NOTE 6 | IRC 457 DEFERRED COMPENSATION PLAN

The IRC 457 Deferred Compensation Plan, created under Internal Revenue Code Section 457, collects voluntary deferred contributions or post-tax contributions through the Roth option by participants of affiliated plans and employees of FPPA. The assets are held in trust for the exclusive benefit of participants. Plan participation is voluntary and contributions are separate from the defined benefit or money purchase contributions made to FPPA. FPPA partners with Fidelity Investments as the recordkeeper for this Plan.

All contributions are invested in the Fire & Police Members' Self-Directed Investment Fund. This plan allows employees to defer a portion of their salary until future years. Participants in the plan are allowed to transfer account balances among a variety of investment funds, or change the contribution percentages designated to each fund on a daily basis. The core investment funds as of December 31, 2017 are:

- Vanguard Institutional Target Retirement 2015 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2020 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2025 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2030 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2035 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2040 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2045 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2050 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2055 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2060 Fund Institutional Shares
- Vanguard Institutional Target Retirement 2065 Fund Institutional Shares
- Vanguard Institutional Target Retirement Income Fund Institutional Shares
- American Beacon Large Cap Value Fund Institutional Class
- American Funds New Perspective Fund Class R6
- Artisan Mid Cap Fund Institutional Class
- Dreyfus/The Boston Company Small Cap Value Fund Class I
- Fidelity® Growth Company Fund Class K

- Fidelity® Money Market Trust Retirement Government Money Market Portfolio Class I
- Franklin International Small Cap Growth Fund Class R6
- Gabelli Small Cap Growth Fund Class I
- Harbor International Fund Institutional Class
- John Hancock Funds Disciplined Value Mid Cap Fund Class R6
- Metropolitan West High Yield Bond Fund Class Institutional
- Oppenheimer Developing Markets Fund Class I
- Dodge & Cox Income Fund
- Templeton Global Bond Fund Class R6
- Vanguard Total Bond Market Index Fund Institutional Shares
- Vanguard Total International Stock Index Fund Admiral Shares
- Vanguard Total Stock Market Index Fund Institutional Shares
- Wells Fargo Stable Return Portfolio Class C

In addition, participants may utilize a Self-Directed Brokerage Account in which the investments are not explicitly offered by the plan and are selected directly by the participant. The deferred compensation and associated appreciation in the fair value of the assets held are not available to employees until termination, retirement, death, or an unforeseen emergency. As of December 31, 2017, there were 2,656 participants with account balances within the plan.

In 2017, participants could contribute up to \$18,000 into the plan. Catch-up contributions up to \$6,000 in 2017 were allowed for participants who had attained age 50 before the close of the plan year. As an alternative to the age 50+ catch-up provisions, participants could defer up to twice the contribution limit in a given year for the three years prior to normal retirement age if the maximum contributions have not been made previously. If the "double limit" or Enhanced Contribution Limit is used, the participant cannot use the age 50+ catch-up provision with the same year. A participant may trigger the Enhanced Contribution Limit by electing a normal retirement age. "Normal Retirement Age" means age 70½ or some other earlier age specified in writing by the participant. In no event shall normal retirement age be earlier than the earliest date at which one may retire under the employer's basic pension plan without the employer's consent and receive immediate retirement benefits, without incurring an actuarial or similar reduction in benefits. The Enhanced Contribution Limit is available to a participant only during one three-year period. If a participant uses the Enhanced Contribution Limit and then postpones normal retirement age or returns to work after retiring, the limitation shall not be available again before a subsequent retirement.

Participants are eligible to take distributions from their account under any of the following conditions: 1.) Participant attains age 70 ½ in the current calendar year 2.) Participant incurs a separation of service, defined as the termination of employment with the employer due to death, retirement, or other cause 3.) Participant suffers an approved hardship that results from an unforeseeable emergency 4.) Trustee-to-Trustee transfer to an FPPA defined benefit plan within the Defined benefit System to purchase service. Benefits for a Participant or Beneficiary shall commence no later than April 1 of the calendar year in which the Participant attains age 70 ½. Beginning in July 2015, participants are eligible to take loans from their account. The outstanding loan balance as of December 31, 2017 is \$1,511,296 and is recorded as part of Other Receivables on the Statements of Fiduciary Net Position.

In response to the 1996 Small Business Protection Act, the Governmental Accounting Standards Board issued Statement No. 32, Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans. This statement requires that amounts deferred under a qualified Section 457 plan be held in trust for the exclusive benefit of participating employees, and not be accessible by the sponsoring government or its general creditors.

In response to this statement, FPPA has modified its trust agreement with respective affiliates to place this plan's activity within the Fire & Police Members' Self-Directed Investment Fund for the purposes of financial statement presentation. Fund balance reserved for withdrawals at December 31, 2017 is \$139,281,833.

## NOTE 7 | OTHER POST EMPLOYMENT BENEFITS (OPEB)

## A. Statewide Death & Disability Plan

## 1. Net OPEB Liability

## Statewide Death & Disability Plan

Total OPEB Liability	\$385,870,588
Plan Fiduciary Net Position *	403,693,032
Net OPEB Liability (Asset)	(17,822,444)
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	104.6%

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net OPEB Liability is the net invested plan assets as of December 31, 2017. It does not include the impact of contributions not received during 2017 and the net OPEB liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan further described in Note 9, FPPA Employee Retirement Plan.

The net OPEB liability (i.e., the plan's liability determined in accordance with Governmental Accounting Standards Board (GASB) Statement No. 74, Financial Reporting for Postemployment Benefits Other Than Pension Plans, less the fiduciary net position) as of December 31, 2017, is shown above. Actuarial valuation of the ongoing plans involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net OPEB liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in 2015 and the changes in assumptions are included in the totals presented in table above. The Schedule of Employers' Net OPEB Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The Total OPEB Liability as of December 31, 2017, is based on the results of the most recent actuarial valuation date and rolled-forward using generally accepted actuarial procedures.

## 2. Summary of Actuarial Assumptions

A summary of the actuarial assumptions used to calculate the Total OPEB Liability is shown below.

Valuation Date	January 1, 2017
Actuarial Method	Entry Age Normal
Amortization Method	N/A
Amortization Period	N/A
Asset Valuation Method	5-Year Smoothed Fair Value
Actuarial Assumptions:	
Investment Rate of Return*	7.5%
Projected Salary Increases*	4.0% - 14.0%
Cost of Living Adjustment (COLA)	0.00%
*Includes inflation at	2.50%

The post-retirement mortality tables for non-disabled retirees is a blend of the Annuitant and Employee RP-2014 generational mortality tables with blue collar adjustment, projected with Scale BB. The occupationally disabled post-retirement mortality assumption uses the same table as used for healthy annuitants, except there is a three year set-forward, meaning a disabled member age 70 will be valued as if they were a 73 year old healthy retiree. The totally disabled post-retirement mortality assumption uses the RP-2014 generational mortality tables for disabled annuitants, except an additional provision to apply a minimum 3 percent mortality probability to males and 2 percent mortality probability for females, is included to reflect substantial impairment for this population. The pre-retirement non-duty mortality tables are adjusted to 55% of the RP-2014 mortality tables for active employees. The on-duty mortality rate is 0.00020.

#### 3. Target Allocations

Asset Class	Target Allocation	Long Term Expected Rate of Return
Global Equity	37%	8.33%
Equity Long/Short	9%	7.15%
Illiquid Alternatives	24%	9.70%
Fixed Income	15%	3.00%
Absolute Return	9%	6.46%
Managed Futures	4%	6.85%
Cash	2%	2.26%
Total	100%	

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future nominal rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Statewide Death & Disability Plan target asset allocation as of December 31, 2017, are summarized in the above table.

The discount rate used to measure the total OPEB liability was 7.50 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate. Based on those assumptions, the Plan fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

#### 4. Changes in Discount Rates

1.00%	Current	1.00%
Decrease *	Discount Rate *	Increase *
\$23,284,398	\$(17,822,444)	\$(52,194,016)

<sup>\*</sup> Both the long-term rate of return and the resulting single discount rate used were 7.50 percent.

In accordance with GASB Statement No. 74 regarding the disclosure of the sensitivity of the net OPEB asset to changes in the discount rate, the above table presents the net OPEB asset of the participating employers calculated using the discount rate of 7.50 percent, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1.00 percent lower (6.50 percent) or 1.00 percent higher (8.50 percent) than the current rate.

Regarding the sensitivity of the net OPEB asset to changes in healthcare cost trend rates, this plan does not provide healthcare benefits and is not subject to the healthcare trend.

### B. FPPA Staff Healthcare Subsidy Plan

The net OPEB liability (i.e., the plan's liability determined in accordance with Governmental Accounting Standards Board (GASB) Statement No. 74, Financial Reporting for Postemployment Benefits Other Than Pension Plans, less the fiduciary net position) as of December 31, 2017, is \$47,089 using a discount rate of 7.5 percent. The Plan net OPEB liability would be \$85,916 if it were calculated using a discount rate 1.0 percent less (6.5 percent) or \$14,289 if it were calculated using a discount rate 1.0 percent higher (8.5 percent).

The total OPEB liability is \$315,955 and the plan fiduciary net position is \$268,866 as of December 31, 2017. The total OPEB liability is based on the alternative measurement methods applied as of December 31, 2017 due to the small size of the plan. FPPA uses a level dollar amortization method over a 10 year amortization period. The discount rate used is

7.5 percent corresponding to the expected investment rate of return as described above for the Statewide Death & Disability Plan. Based on that assumption, the Plan fiduciary net position was projected to be available to make all projected future benefit payments. Regarding the sensitivity of the net OPEB liability to changes in healthcare cost trend rates, this plan does not provide healthcare benefits and is not subject to the healthcare trend.

## NOTE 8 | PROPERTY AND EQUIPMENT

Property and equipment at December 31, 2017, is comprised of the following:

General Assets	Balance 12/31/2016	Additions	Deletions	Balance 12/31/2017
Nondepreciable Assets:				
Land	\$1,937,742			\$1,937,742
Depreciable Assets:				
Building & Improvements	2,487,247	\$216,692	\$(5,255)	2,698,684
Equipment	429,903	80,271	(20,119)	490,055
Intangible Assets (Internally generated computer software)	6,067,814	392,340		6,460,154
Totals at Historical Cost	\$10,922,706	\$689,303	\$(25,374)	\$11,586,635
Less Accumulated Depreciation/Amortization for:				
Building & Improvements	\$(1,860,563)	\$(65,024)	\$5,255	\$(1,920,332)
Equipment	(325,942)	(52,617)	20,119	(358,440)
Intangible Assets (Internally generated computer software)	(4,988,009)	(221,052)		(5,209,061)
Total Accumulated Depreciation/ Amortization	\$(7,174,514)	\$(338,693)	\$25,374	\$(7,487,833)
Total Net Property & Equipment	\$3,748,192	\$350,610	\$0	\$4,098,802

Land, Building, and Improvements are held as an operating asset and not held within the Fire & Police Members' Benefit Investment Fund. Depreciation/Amortization Expense for 2017 totaled \$338,693.

## NOTE 9 | FPPA EMPLOYEE RETIREMENT PLAN

### A. Plan Description

All employees of FPPA are provided with pensions through the State Division Trust Fund (SDTF)—a cost-sharing multiple employer defined benefit pension plan administered by the Public Employees' Retirement Association of Colorado (PERA). Plan benefits are specified in Title 24, Article 51 of the Colorado Revised Statutes (CRS), as amended. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. PERA issues a publicly available comprehensive annual financial report that can be obtained at www.copera.org/investments/pera-financial-reports. PERA's report includes information regarding the investment strategies, allocations and returns of the SDTF, actuarial assumptions and historical information regarding employer contributions and changes in benefit provisions.

## B. Contributions

Plan members and employers are required to contribute at a rate set by statute. The contribution requirements of plan members and employers are established under CRS § 24-51-401. During 2017, members contributed 8.0 percent of covered salary and FPPA, as an employer, contributed 20.15 percent of covered salary. FPPA's employer contributions to the SDTF for the years ending December 31, 2017, 2016 and 2015 were \$920,376, \$920,107, and \$802,974, respectively, equal to the required contributions for each year.

### C. Benefits Provided

PERA provides retirement, disability, and survivor benefits. Retirement benefits are determined by the amount of service credit earned or purchased, highest average salary, the benefit structure under which the member retires, the benefit option selected at retirement, and age at retirement. Retirement eligibility is specified in tables set forth at CRS § 24-51-602, 604, 1713, and 1714.

The lifetime retirement benefit for all eligible retiring employees under the PERA Benefit Structure is the greater of the highest average salary multiplied by 2.5 percent and then multiplied by years of service credit or the value of the retiring employee's member contribution account plus a 100 percent match on eligible amounts as of the retirement date. This amount is then annuitized into a monthly benefit based on life expectancy and other actuarial factors.

In all cases, the service retirement benefit is limited to 100 percent of highest average salary and also cannot exceed the maximum benefit allowed by federal Internal Revenue Code.

Disability benefits are available for eligible employees once they reach five years of earned service credit and are determined to meet the definition of disability.

## D. FPPA Accounting for the SDTF

FPPA accounts for the SDTF under GASB Statement No. 68, Accounting and Financial Reporting for Pensions. GASB Statement No. 68 requires FPPA to record a net pension liability based on its proportionate share of the SDTF's collective net pension liability. Likewise, FPPA's proportionate share of the SDTF's deferred outflows and deferred inflows of resources related to pension and pension expense are recorded in the Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position for the year ending December 31, 2017.

The total pension liability was determined from the December 31, 2016 actuarial valuation. The proportionate share of the FPPA net pension liability calculated using the discount rate of 5.26 percent is \$32,549,920. The proportionate share of the net pension liability would be \$40,315,090 if it were calculated using a discount rate that is 1-percentage-point lower (4.26 percent) or \$26,170,234 if it were calculated using a discount rate that is 1-percentage-point higher (6.26 percent) than the current rate. The proportionate share of the FPPA deferred inflows is \$100,190, deferred outflows is \$11,803,974, and pension expense is \$7,710,913.

## NOTE 10 | FPPA EMPLOYEE DEFINED CONTRIBUTION PENSION PLAN

### A. Plan Description

The SDTF members of FPPA may contribute to the Voluntary Investment Program (VIP), an Internal Revenue Code Section 401(k) defined contribution plan administered by the Public Employees' Retirement Association of Colorado (PERA). Plan participation is optional, and contributions are separate from others made to PERA. Title 24, Article 51, Part 14 of the CRS, as amended, assigns the authority to establish the Plan provisions to the PERA Board of Trustees. PERA issues a publicly available comprehensive annual financial report for the Program. That report can be obtained at www.copera.org/investments/pera-financial-reports.

#### **B.** Contributions

The VIP is funded by member contributions and discretionary employer matching contributions. The maximum contribution levels are set by the Internal Revenue Service and change annually. FPPA matched member contributions up to a maximum \$1,100 in 2017. Employees are immediately vested in their own contributions, employer contributions and investment earnings. The VIP member contributions from FPPA employees for the year ended December 31, 2017 were \$138,527 and the matching employer contributions were \$13,646.

## NOTE 11 | FPPA EMPLOYEE OTHER POST-EMPLOYMENT BENEFITS

### A. Plan Description

FPPA contributes to the Health Care Trust Fund (HCTF), a cost sharing multiple-employer healthcare trust administered by the Public Employees' Retirement Association of Colorado (PERA). The HCTF benefit provides a health care premium subsidy and health care programs (known as PERACare) to PERA participating benefit recipients and their eligible beneficiaries. Title 24, Article 51, Part 12 of the CRS, as amended, establishes the HCTF and sets forth a framework that grants authority to the PERA Board to contract, self-insure and authorize disbursements necessary in order to carry out the purposes of the PERACare program, including the administration of health care subsidies. PERA issues a publicly available comprehensive annual financial report that includes financial statements and required supplementary information for the HCTF. That report can be obtained at www.copera.org/investments/pera-financial-reports.

## **B.** Contributions

FPPA is required to contribute at a rate of 1.02 percent of PERA-includable salary for all PERA members as set by statute. No member contributions are required. The contribution requirements for FPPA are established under Title 24, Article 51, Part 4 of the CRS, as amended. The apportionment of the contributions to the HCTF is established under Title 24, Article 51, Section 208(1)(f) of the CRS, as amended. For the years ending December 31, 2017, 2016 and 2015, FPPA's contributions to the HCTF were \$51,497, \$51,766, and \$47,261, respectively, equal to their required contributions for each year.

## NOTE 12 | RISK MANAGEMENT

FPPA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. It carries commercial coverage of these risks of loss. Claims have not exceeded coverage in any of the last three fiscal years.

## **NOTE 13 | DERIVATIVE INSTRUMENTS**

### A. Forward Foreign Exchange Contracts

Through its various money managers, FPPA may enter into forward foreign exchange contracts to hedge against changes in currency prices relative to the U. S. dollar. Forward foreign exchange contracts are a contractual obligation between two parties to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed-upon exchange rate. Forward commitments are not standardized and carry counterparty risk. Forwards are usually transacted over the counter (OTC) with the foreign exchange department of a bank located in a major money market. Recognition of realized gain or loss depends on whether the currency exchange rate has moved favorably or unfavorably to the contract holder upon termination of the contract. As of December 31, 2017, the total portfolio had 0.0% percent net exposure to forward foreign exchange contracts. The fair value of exposure was comprised of \$784,263,831 in payables and \$782,375,549 in receivables, for a net exposure of \$(1,888,283).

## B. Equity Index Futures

FPPA through its various managers has invested in equity index futures. These future positions are used solely to provide liquidity and market exposure.

FPPA utilizes an Exposure Manager to temporarily rebalance the portfolio via the use of derivatives contracts, primarily index futures. Derivatives contracts can be used to approximate the benchmarks of underlying managers or asset classes. An Exposure Manager may also be utilized to create equity exposure up to the amounts of cash held within the accounts of FPPA's domestic and international equity managers. As of December 31, 2017, the total portfolio had 0.0% percent net exposure to equity index futures. The fair value of exposure was comprised of \$0 in payables and \$1,075,772 in receivables, for a net exposure of \$1,075,772.

### C. Financial Futures, Options

FPPA, through its various money managers, has entered into exchange traded financial futures. The purpose of these contracts is for hedging, as an alternative to investments in the cash market and as an additional yield curve management strategy. These futures included U.S. agency, bond and treasury futures and options. In addition, contracts include Eurodollar and interest rate swap futures. Money managers may also invest in forward contracts. These transactions relate to a forward commitment strategy in cash equivalents or short duration securities with an effective duration of one year or less. As of December 31, 2017, the total portfolio had 0.6% percent net exposure financial futures. The fair value of exposure was comprised of \$5,250,522 in payables and \$32,585,503 in receivables, for a net exposure of \$27,334,981.

## **NOTE 14 | COMMITMENTS AND CONTINGENCIES**

FPPA is involved in various claims and legal actions arising in the ordinary course of business. In the opinion of FPPA's legal counsel, the ultimate resolution of these matters will not have a material adverse effect on the financial condition of the Fire & Police Members' Benefit Investment Fund. FPPA has invested in certain limited partnerships and private fund investments. As part of these investments, FPPA has agreed to contribute additional funds at various times. At December 31, 2017, FPPA had committed approximately \$569.9 million in additional funds to these investments.

## ■ Schedule of Annual Money-Weighted Rate of Return on Pension and OPEB Plan Investments

The annual money-weighted rate of return for the Fire & Police Members' Benefit Investment Fund is as follows:

As of December 31	Annual Money-Weighted Rate of Return
2017	15.0%
2016	5.5%
2015	1.9%
2014	9.9%

Note - Information about the annual money-weighted return for the Fund for ten years is not available as GASB Statement No. 67 was implemented in 2014. Additional years will be reported as they become available.

Schedule of Changes in the Employers' Net Pension Liability | December 31, 2017

## **Defined Benefit System | Statewide Defined Benefit Plan**

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	\$78,479,646	\$72,572,756	\$66,774,163	\$61,258,996
Interest	151,994,779	138,918,731	124,407,008	115,461,452
Benefit Changes	1,548,628	3,080,926	2,819,803	(9,641,302)
Difference Between Actual and Expected Experience	108,970,799	8,604,791	18,544,608	9,903,233
Assumption Changes	0	32,998,660	0	0
Benefit Payments	(65,965,013)	(59,989,380)	(53,076,425)	(47,700,529)
Refunds	(2,187,599)	(1,813,180)	(1,763,962)	(1,848,698)
Net Change in Total Pension Liability	\$272,841,240	\$194,373,304	\$157,705,195	\$127,433,152
Total Pension Liability - Beginning	2,013,142,793	1,818,769,489	1,661,064,294	1,533,631,141
Total Pension Liability - Ending	\$2,285,984,033	\$2,013,142,793	\$1,818,769,489	\$1,661,064,293
Plan Fiduciary Net Position				
Contributions - Employer	\$44,362,720	\$40,930,412	\$38,807,864	\$35,952,356
Contributions - Member	156,430,319	59,427,866	71,434,264	47,508,931
Net Investment Income	298,378,849	101,475,943	30,587,174	138,837,648
Benefit Payments	(65,965,013)	(59,989,380)	(53,076,425)	(47,700,529)
Refunds	(2,187,599)	(1,813,180)	(1,763,962)	(1,848,698)
Plan Direct Expense	0	0	0	0
Administrative Expense	(3,135,872)	(3,383,884)	(3,022,691)	(1,242,382)
Contributions for Service Reinstatements	0	20,412	0	0
Other	0	0	0	0
Net Change in Plan Fiduciary Net Position	\$427,883,404	\$136,668,189	\$82,966,224	\$171,507,326
Plan Fiduciary Net Position - Beginning *	1,985,393,043	1,848,724,854	1,765,758,630	1,623,049,809
Plan Fiduciary Net Position - Ending *	\$2,413,276,447	\$1,985,393,043	\$1,848,724,854	\$1,794,557,135
Net Pension Liability - Ending	\$(127,292,414)	\$27,749,750	\$(96,729,528)	\$(133,492,842)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	105.6%	98.6%	105.5%	108.0%
Covered Payroll	\$577,697,658	\$535,968,391	\$495,534,535	\$449,010,427
Net Pension Liability as a Percentage of Covered Payroll	(22.0%)	5.2%	(19.5%)	(29.7%)

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net Pension Liability in the above Schedules of Changes in the Employers' Net Pension Liability uses the net invested plan assets as of December 31 of each year presented. It does not include the impact of contributions not received during 2017 and the net pension liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan.

Schedule of Changes in the Employers' Net Pension Liability | December 31, 2017

# Defined Benefit System | Statewide Hybrid Plan - Defined Benefit Component

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	\$1,247,137	\$1,296,839	\$1,231,110	\$1,312,804
Interest	3,155,031	2,686,507	2,197,875	1,978,643
Benefit Changes	418,041	360,485	279,549	195,705
Difference Between Actual and Expected Experience	7,887,981	2,908,771	2,908,248	1,409,819
Assumption Changes	0	676,345	0	0
Benefit Payments	(1,493,664)	(1,191,766)	(953,099)	(752,330)
Refunds	(27,870)	(17,151)	(18,365)	(43,962)
Net Change in Total Pension Liability	\$11,186,656	\$6,720,030	\$5,645,318	\$4,100,679
Total Pension Liability - Beginning	42,589,683	35,869,653	30,224,335	26,123,656
Total Pension Liability - Ending	\$53,776,339	\$42,589,683	\$35,869,653	\$30,224,335
Plan Fiduciary Net Position		-	-	
Contributions - Employer	\$1,304,938	\$1,298,684	\$1,302,433	\$1,237,843
Contributions - Member	8,956,842	4,118,336	4,341,844	1,765,286
Net Investment Income	8,122,829	2,656,991	673,519	3,185,166
Benefit Payments	(1,493,664)	(1,191,766)	(953,099)	(752,330)
Refunds	(27,870)	(17,151)	(18,365)	(43,962)
Plan Direct Expense	0	0	0	0
Administrative Expense	(	(0= 000)	(73,679)	(26,331)
Contributions for Service Reinstatements	0	0	0	0
Other	0	0	0	0
Net Change in Plan Fiduciary Net Position	\$16,785,161	\$6,777,225	\$5,272,653	\$5,365,672
Plan Fiduciary Net Position - Beginning *	53,087,030	46,309,805	41,037,152	36,323,815
Plan Fiduciary Net Position - Ending *	\$69,872,191	\$53,087,030	\$46,309,805	\$41,689,487
Net Pension Liability - Ending	\$(16,095,852)	\$(10,497,347)	\$(10,440,152)	\$(11,465,152)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	129.9%	124.6%	129.1%	137.9%
Covered Payroll	\$14,260,540	\$13,829,122	\$13,295,699	\$13,246,537
Net Pension Liability as a Percentage of Covered Payroll	(112.9%)	(75.9%)	(78.5%)	(86.6%)

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net Pension Liability in the above Schedules of Changes in the Employers' Net Pension Liability uses the net invested plan assets as of December 31 of each year presented. It does not include the impact of contributions not received during 2017 and the net pension liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan.

Schedule of Changes in the Employers' Net Pension Liability | December 31, 2017

## Defined Benefit System | Colorado Springs New Hire Plan - Fire Component

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	\$1,872,966	\$2,129,584	\$2,368,863	\$2,394,998
Interest	12,035,124	11,647,997	10,798,529	10,259,613
Benefit Changes	0	0	0	0
Difference Between Actual and Expected Experience	(287,257)	(535,223)	1,091,231	(989,275)
Assumption Changes	0	5,122,523	0	0
Benefit Payments	(7,983,856)	(7,389,735)	(6,228,574)	(5,317,236)
Refunds	(150,551)	(167,056)	0	0
Net Change in Total Pension Liability	\$5,486,426	\$10,808,090	\$8,030,049	\$6,348,100
Total Pension Liability - Beginning	163,442,191	152,634,101	144,604,052	138,255,953
Total Pension Liability - Ending	\$168,928,617	\$163,442,191	\$152,634,101	\$144,604,053
Plan Fiduciary Net Position				
Contributions - Employer	\$4,181,089	\$3,485,586	\$3,437,596	\$3,341,129
Contributions - Member	1,083,453	1,045,342	1,202,513	1,278,915
Net Investment Income	18,445,141	6,569,905	2,206,765	7,744,227
Benefit Payments	(7,983,856)	(7,389,735)	(6,228,574)	(5,317,236)
Refunds	(150,551)	(167,056)	0	0
Plan Direct Expense	(9,300)			
Administrative Expense	(58,095)	(209,340)	(194,093)	(14,933)
Contributions for Service Reinstatements	0	38,760	0	7,001
Other	0	0	0	0
Net Change in Plan Fiduciary Net Position	\$15,507,881	\$3,373,462	\$424,207	\$7,039,103
Plan Fiduciary Net Position - Beginning *	126,527,898	123,154,436	122,730,229	115,691,126
Plan Fiduciary Net Position - Ending *	\$142,035,779	\$126,527,898	\$123,154,436	\$122,730,229
Net Pension Liability - Ending	\$26,892,838	\$36,914,293	\$29,479,665	\$21,873,824
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	84.1%	77.4%	80.7%	84.9%
Covered Payroll	\$13,115,596	\$14,134,843	\$13,991,673	\$12,468,196
Net Pension Liability as a Percentage of Covered Payroll	205.0%	261.2%	210.7%	175.4%

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net Pension Liability in the above Schedules of Changes in the Employers' Net Pension Liability uses the net invested plan assets as of December 31 of each year presented. It does not include the impact of contributions not received during 2017 and the net pension liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan.

Schedule of Changes in the Employers' Net Pension Liability | December 31, 2017

## Defined Benefit System | Colorado Springs New Hire Plan - Police Component

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	\$5,320,575	\$5,823,050	\$6,027,255	\$6,209,684
Interest	24,547,646	23,783,282	22,182,597	20,973,093
Benefit Changes	0	0	0	0
Difference Between Actual and Expected Experience	(6 205 840)		(839,906)	(1,283,125)
Assumption Changes	0	8,534,936		0
Benefit Payments	(12,859,508)	(11,574,477)	(10,088,223)	(8,817,186)
Refunds	(8,707)	(83,530)	(99,734)	(443,708)
Net Change in Total Pension Liability	\$10,704,157	\$21,080,444	\$17,181,989	\$16,638,758
Total Pension Liability - Beginning	336,068,031	314,987,587	297,805,598	281,166,840
Total Pension Liability - Ending	\$346,772,188	\$336,068,031	\$314,987,587	\$297,805,598
Plan Fiduciary Net Position				
Contributions - Employer	\$8,433,311	\$7,512,099	\$7,916,242	\$7,728,841
Contributions - Member	2,319,332	2,628,533	2,493,427	2,830,620
Net Investment Income		14,354,619		
Benefit Payments	(12,859,508)	(11,574,477)	(10,088,223)	(8,817,186)
Refunds	(8,707)	(83,530)		
Plan Direct Expense	(9 300)	0	0	0
Administrative Expense		(451,871)	(412,381)	(9,711)
Contributions for Service Reinstatements	0	0	0	0
Other	0	0	0	0
Net Change in Plan Fiduciary Net Position	\$38,494,129	\$12,385,373	\$4,474,472	\$21,860,907
Plan Fiduciary Net Position - Beginning *	277,111,969	264,726,596	260,252,124	242,667,157
Plan Fiduciary Net Position - Ending *	\$315,606,098	\$277,111,969	\$264,726,596	\$264,528,064
Net Pension Liability - Ending	\$31,166,090	\$58,956,062	\$50,260,991	\$33,277,534
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	91.0%	82.5%	84.0%	88.8%
Covered Payroll	\$29,280,692	\$31,180,071	\$32,359,637	\$30,441,800
Net Pension Liability as a Percentage of Covered Payroll	106.4%	189.1%	155.3%	109.3%

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net Pension Liability in the above Schedules of Changes in the Employers' Net Pension Liability uses the net invested plan assets as of December 31 of each year presented. It does not include the impact of contributions not received during 2017 and the net pension liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan.

Schedule of Employers' Contributions | December 31, 2017

## **Defined Benefit System | Statewide Defined Benefit Plan**

Year ended	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
12/31/2017	\$29,396,340	\$44,362,720	\$(14,966,380)	\$577,697,658	7.7%
12/31/2016	28,512,500	40,930,412	(12,417,912)	535,968,391	7.6%
12/31/2015	23,685,052	38,807,863	(15,122,811)	495,534,535	7.8%
12/31/2014	26,132,407	35,952,356	(9,819,949)	449,010,427	8.0%
12/31/2013	27,222,837	34,688,387	(7,465,550)	426,690,241	8.1%
12/31/2012	26,813,072	33,285,517	(6,472,445)	406,258,662	8.2%
12/31/2011	16,469,596	33,314,074	(16,844,478)	384,803,645	8.7%
12/31/2010	16,472,400	28,896,903	(12,424,503)	353,484,986	8.2%
12/31/2009	16,383,292	28,142,828	(11,759,536)	363,265,902	7.7%
12/31/2008	6,690,792	25,788,749	(19,097,957)	337,918,774	7.6%

Covered Payroll is an actuarial calculated amount comprising base salary reported to FPPA, annualization of base salary for members entering the plan mid-year and estimated wage inflation.

The statutory employer contribution rate for the years presented above was 8 percent and employers met that obligation and contributed 100 percent of the statutorily required amounts. Excess contributions represent the employer contributions in excess of the actuarial determined amount.

## Defined Benefit System | Statewide Hybrid Plan - Defined Benefit Component

Year ended	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
12/31/2017	\$1,304,938	\$1,304,938	\$0	\$14,260,540	9.2%
12/31/2016	1,298,684	1,298,684	0	13,829,122	9.4%
12/31/2015	1,316,896	1,316,896	0	13,295,699	9.9%
12/31/2014	1,237,843	1,237,843	0	13,246,537	9.3%
12/31/2013	1,286,870	1,286,870	0	13,384,707	9.6%
12/31/2012	1,272,726	1,272,726	0	12,195,940	10.4%
12/31/2011	961,701	961,701	0	8,770,187	11.0%
12/31/2010	807,955	807,955	0	9,026,182	9.0%
12/31/2009	795,464	795,464	0	7,726,670	10.3%
12/31/2008	683,205	683,205	0	7,342,967	9.3%

Covered Payroll is an actuarial calculated amount comprising base salary reported to FPPA, annualization of base salary for members entering the plan mid-year and estimated wage inflation.

The statutory employer contribution rate for the years presented above was 8% and employers met that obligation and contributed 100% of the statutorily required amounts.

#### **Cost-Sharing and Single Employer Plans**

Schedule of Employers' Contributions | December 31, 2017

#### Defined Benefit System | Colorado Springs New Hire Plan - Fire Component

Year ended	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
12/31/2017	\$4,181,089	\$4,181,089	\$0	\$13,115,596	31.9%
12/31/2016	3,485,586	3,485,586	0	14,134,843	24.7%
12/31/2015	3,437,596	3,437,596	0	13,991,673	24.6%
12/31/2014	3,341,129	3,341,129	0	12,417,745	26.9%
12/31/2013	3,373,691	3,373,691	0	12,468,196	27.1%
12/31/2012	2,491,104	2,491,104	0	12,349,627	20.2%
12/31/2011	2,754,261	2,754,261	0	12,497,987	22.0%
12/31/2010	3,071,999	3,071,999	0	19,664,027	15.6%
12/31/2009	2,043,837	2,043,837	0	21,535,495	9.5%
12/31/2008	1,873,427	1,873,427	0	22,483,956	8.3%

Covered Payroll is an actuarial calculated amount comprising base salary reported to FPPA, annualization of base salary for members entering the plan mid-year and estimated wage inflation.

#### Defined Benefit System | Colorado Springs New Hire Plan - Police Component

Year ended	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
12/31/2017	\$8,433,311	\$8,433,311	\$0	\$29,280,692	28.8%
12/31/2016	7,512,099	7,512,099	0	31,180,071	24.1%
12/31/2015	7,916,242	7,916,242	0	32,359,637	24.5%
12/31/2014	7,728,841	7,728,841	0	29,508,880	26.2%
12/31/2013	8,050,570	8,050,570	0	30,441,800	26.4%
12/31/2012	6,485,502	6,485,502	0	30,420,085	21.3%
12/31/2011	6,941,971	6,941,971	0	31,381,480	22.1%
12/31/2010	7,199,381	7,199,381	0	33,357,527	21.6%
12/31/2009	4,988,639	4,988,639	0	35,550,304	14.0%
12/31/2008	3,490,595	3,490,595	0	36,735,114	9.5%

Covered Payroll is an actuarial calculated amount comprising base salary reported to FPPA, annualization of base salary for members entering the plan mid-year and estimated wage inflation.

## NOTE 1 | SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY

The total pension liability contained in this schedule was provided by the plans' actuary, Gabriel, Roeder, Smith & Company. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the plan. The required employer contributions and percent of those contributions actually made are presented in the schedule.

#### NOTE 2 | ACTUARIAL ASSUMPTIONS FOR DEFINED BENEFIT SYSTEM

The information presented in the required supplementary schedules was used in the actuarial valuation for purposes of determining the actuarially determined contribution rate. The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the FPPA Board. Additional information as of the latest actuarial valuation follows.

	Defined Benefit System					
	Statewide Defined Benefit Plan	Statewide Hybrid Plan – Defined Benefit Component	Colorado Springs New Hire Pension Plan			
Valuation Date	January 1, 2017	January 1, 2017	January 1, 2017			
Actuarial Method	Entry Age Normal	Entry Age Normal	Entry Age Normal			
Amortization Method	Level % of Payroll, Open	Level % of Payroll, Open	Level Dollar, Closed			
Amortization Period	30 Years	30 Years	21 Years, Beginning January 1, 2017			
Asset Valuation Method	5-Year Smoothed Fair Value	5-Year Smoothed Fair Value	5-Year Smoothed Fair Value			
Actuarial Assumptions:						
Investment Rate of Return*	7.5%	7.5%	7.5%			
Projected Salary Increases*	4.0% – 14.0%	4.0% – 14.0%	4.0% – 14.0%			
Cost of Living Adjustment (COLA)	0%	0%	2.4% (Fire Component) 2.6% (Police Component)			
*Includes inflation at	2.5%	2.5%	2.5%			

#### A. Schedule of Changes in Employers' Net OPEB Liability

Statewide Death & Disability Plan	
	2017
Total OPEB Liability	
Service Cost	\$23,202,629
Interest	27,094,033
Benefit Changes	0
Difference Between Actual and Expected Experience	0
Assumption Changes	0
Benefit Payments	(28,157,074)
Net Change in Total OPEB Liability	\$22,139,588
Total OPEB Liability - Beginning	363,731,000
Total OPEB Liability - Ending	\$385,870,588
Plan Fiduciary Net Position	
Contributions - Member	\$20,535,422
Net Investment Income	52,449,216
Benefit Payments	(28,157,074)
Plan Direct Expense	0
Administrative Expense	(1,881,828)
Other	0
Net Change in Plan Fiduciary Net Position	\$42,945,736
Plan Fiduciary Net Position - Beginning *	360,747,296
Plan Fiduciary Net Position - Ending *	\$403,693,032
Net OPEB Liability - Ending	\$(17,822,444)
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	104.6%
Covered Employee Payroll	\$917,099,955
Net OPEB Liability as a Percentage of Covered Employee Payroll	(1.9%)
	<u> </u>

Note - Information on the change in net OPEB liability for 10 years is not available as GASB Statement No. 74 was implemented in 2017. Additional years will be reported as they become available.

Regarding the sensitivity of the net OPEB liability to changes in healthcare cost trend rates, this plan does not provide healthcare benefits and is not subject to the healthcare trend.

#### B. Schedule of Employers' Contributions

All contributions are made by members or on behalf of members to the Statewide Death & Disability Plan. As such, the employers' actuarial determined contribution is zero.

<sup>\*</sup>The Plan Fiduciary Net Position used to calculate the Net OPEB Liability in the above Schedules of Changes in the Employers' Net Pension Liability uses the net invested plan assets as of December 31 of each year presented. It does not include the impact of contributions not received during 2017 and the net pension liability associated with the FPPA Staff participation in the Public Employees' Retirement Association of Colorado pension plan.

#### NOTE 3 | ACTUARIAL ASSUMPTIONS FOR THE OTHER POST-EMPLOYMENT BENEFITS (OPEB) PLAN

The information presented in the required supplementary schedules for the Statewide Death & Disability Plan was used in the actuarial valuation for purposes of determining the actuarially determined contribution rate. The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the FPPA Board. Additional information as of the latest actuarial valuation used to calculated the Total OPEB Liability follows.

Valuation Date	January 1, 2017
Actuarial Method	Entry Age Normal
Amortization Method	N/A
Amortization Period	N/A
Asset Valuation Method	5-Year Smoothed Fair Value
Actuarial Assumptions:	
Investment Rate of Return*	7.5%
Projected Salary Increases*	4.0% - 14.0%
Cost of Living Adjustment (COLA)	0%
*Includes inflation at	2.5%

The post-retirement mortality tables for non-disabled retirees is a blend of the Annuitant and Employee RP-2014 generational mortality tables with blue collar adjustment, projected with Scale BB. The occupationally disabled post-retirement mortality assumption uses the same table as used for healthy annuitants, except there is a three year set-forward, meaning a disabled member age 70 will be valued as if they were a 73 year old healthy retiree. The totally disabled post-retirement mortality assumption uses the RP-2014 generational mortality tables for disabled annuitants, except an additional provision to apply a minimum 3 percent mortality probability to males and 2 percent mortality probability for females, is included to reflect substantial impairment for this population. The pre-retirement non-duty mortality tables are adjusted to 55% of the RP-2014 mortality tables for active employees. The on-duty mortality rate is 0.00020.

#### NOTE 4 | SCHEDULE OF CHANGES IN NET OPEB LIABILITY

The total OPEB liability contained in this schedule was provided by the plans' actuary, Gabriel, Roeder, Smith & Company. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the plan.

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Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Adams County (North Washington) FPD (Old Hire)	\$2,275,584	\$180,163			
Adams County (North Washington) FPD (Volunteer)	160,540				
Alamosa County FPD (Volunteer)	591,713	13,893			
Alamosa Fire (Volunteer)	1,618,369	38,938	•••••		•••••
Allenspark FPD (Volunteer)	504,399	13,500	•••••		••••••
Aspen FPD (Volunteer)	2,035,685	240,000			••••••
Ault FPD (Volunteer)	637,914	88,073			••••••
Aurora Fire (Old Hire)	71,665,666	3,184,594	•••••		••••••
Aurora Police (Old Hire)	86,937,519	3,906,280			••••••
Bancroft FPD (Old Hire)	1,485,274	706,794	•••••		•••••
Basalt & Rural FPD (Volunteer)	1,748,357	59,365	•••••		••••••
Bennett FPD #7 (Volunteer)	920,029	10,000			••••••
Berthoud FPD (Volunteer)	520,706	13,114			
Big Sandy FPD (Volunteer)	141.650	4.000	•••••		•••••••••••
Big Thompson Canyon Fire (Volunteer)	386,816	25,000			
Black Forest Fire Rescue (Volunteer)	1,184,777	10,000			
Blanca Fire (Volunteer)	146,592	3,959	•••••		••••••
Boone Fire (Volunteer)	35,917	900			
Boulder Mountain FPD (Volunteer)	898,352	35,800			
Boulder Rural FPD (Volunteer)	532,918	159,000	•••••		•••••••••••
Bow Mar Police (Old Hire)	42,234				\$(44,339)
Brighton VFD (Volunteer)	3,564,374	68,950			
Brush Combined Fire (Volunteer)	801,643	38,149	•••••		••••••
Buena Vista Fire (Volunteer)	437,164	12,000			
Calhan FPD (Volunteer)	152,490	3,000			
Cañon City Area FPD (Old Hire)	2,784,086	226,589			••••••
Cañon City Area FPD (Volunteer)	248,554	7,187			
Carbondale & Rural FPD (Volunteer)	2,183,203	63,229			
Cascade FPD (Volunteer)	309.880	15,666	•••••		••••••
Castle Rock Fire (Volunteer)	934,499	20,440			
Cedaredge Police (Old Hire)	74,673				
Central City VFD (Volunteer)	505.889	29,546	•••••		••••••
Central Orchard Mesa FPD (Volunteer)	85,618	15,719			••••••
Cherry Hills FPD (Old Hire)	2,210,748	214,110			••••••
Cheyenne County FPD #1 (Volunteer)	447.300	20.000	•••••		•••••••••••
Clear Creek Fire Authority (Volunteer)	1,939,133	160,000			
Clifton FPD (Volunteer)	1,701,930				
Coal Creek Canyon FPD (Volunteer)	1,012,036	53,000			••••••
Colorado River (Burning Mountain) FPD (Volunteer)	2 464 504	50,000	•••••		
Colorado River (Rifle) FPD (Volunteer)	4.787.336		•••••		
Colorado Springs Fire (Old Hire)	70.493.833	2.286.697			
Colorado Springs Police (Old Hire)	59,630,971	1,833,691			
Cortez Police (Old Hire)	266,459				

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
	\$298,038	\$(503,326)		\$(2,380)	\$(27,505)	\$2,248,079
	22,636	(20,280)	\$(1,300)	(2,706)	(1,650)	158,890
\$24,136	85,976	(34,100)	(1,300)	(9,182)	79,423	671,136
18,549	229,649	(113,088)	(1,300)	(12,189)	160,559	1,778,928
12,150	73,073	(38,792)		(8,806)	51,125	555,524
40,000	286,222	(291,720)	(1,300)	(15,658)	257,544	2,293,229
18,209	92,045	(107,238)	•	(7,115)	83,974	721,888
	10,148,447	(8,400,659)	(10,758)	(25,305)	4,896,319	76,561,985
	12,367,767	(9,526,513)	(10,775)	(28,122)	6,708,637	93,646,156
	166,978	(797,391)		(3,131)	73,250	1,558,524
10,222	249,198	(173,794)	(1,300)	(9,745)	133,946	1,882,303
9,000	131,274	(57,590)		(10,873)	81,811	1,001,840
11,803	72,374	(64,360)	(1,300)	(5,149)	26,482	547,188
3,600	20,437	(5,400)		(4,585)	18,052	159,702
······	54,716	(41,300)	(1,300)	(6,464)	30,652	417,468
······	168,335	(80,928)	••••••	(5,713)	91,694	1,276,471
·····	20,399	(14,910)	(1,300)	(1,767)	6,381	152,973
1,000	4,807	(3,300)		(4,209)	(802)	35,115
22,500	127,903	(61,570)	•••••••••••••••••••••••••••••••••••••••	(14,530)	110,103	1,008,455
29,700	79,639	(131,611)	······	(8,806)	127,922	660,840
·····	2,684	•••••••••••••••••••••••••••••••••••••••	9	(588)	(42,234)	C
56,649	497,825	(362,862)	(5,068)	(9,182)	246,312	3,810,686
26,925	110,424	(104,676)		(12,411)	58,411	860,054
10,800	62,018	(29,663)		(6,464)	48,691	485,855
5,400	22,620	(2,340)	•••••••	(4,585)	24,095	176,585
•••••••••••••••••••••••••••••••••••••••	381,008	(413,373)	••••••••••	(2,380)	191,844	2,975,930
9,969	34,078	(31,120)	••••••	(5,814)	14,300	262,854
49,528	305,131	(190,200)	(17,654)	(18,476)	191,558	2,374,761
5,320	43,148	(38,640)	(1,300)	(5,901)	18,293	328,173
17,635	130,343	(105,840)	······································	(5,149)	57,429	991,928
	10,299	(8,347)		(689)	1,263	75,936
······	72,742	(38,700)		(5,525)	58,063	563,952
6,795	12,820	(24,300)	(1,300)	(4,585)	5,149	90,767
	298,155	(385,824)	······································	(2,568)	123,873	2,334,621
18,000	62,923	(40,800)	(1,300)	(9,370)	49,453	496,753
26,188	286,874	(149,310)	······································	(11,437)	312,315	
13,258	239,576	(139,934)	•••••••••••••••••••••••••••••••••••••••	(8,055)	104,845	1,806,775
28,764	142,468	(116,168)		(15,282)	92,782	1,104,818
30,929	344,119	(273,399)	(1,300)	(8,806)	141,543	2,606,047
	684,417	(262,401)	(1,300)	(9,370)	411,346	5,198,682
·····	10,078,023	(8,156,537)	(2,000)	(34,322)	4,173,861	74,667,694
	8,520,413	(6,759,933)		(28,874)	3,565,297	63,196,268
	37,909	(14,721)	·····	(689)	22,499	288,958

Employer Plan	Fiduciary Net Position Employer Dec 31, 2016 Contributions		Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Crested Butte FPD (Volunteer)	\$3,173,614				
Cripple Creek Fire (Volunteer)	535,999	•••••			•
Crowley VFD (Volunteer)	41,455	\$211			
Crystal Lakes FPD (Volunteer)	282,570	10,000	••••••	•••••	•
Del Norte Police (Old Hire)	1,515	6,472			•
Denver Fire (Old Hire)	316,038,642	16,355,396	\$7,709		
Denver Police (Old Hire)	584,034,459	7,987,837	••••••		
Divide VFD (Volunteer)	478,106	12,000			
Donald Westcott FPD (Volunteer)	906,979	•••••			
Dove Creek FPD (Volunteer)	400,232	74,749			
Durango Fire (Old Hire)	994,944	126,278			
Durango Police (Old Hire)	1,518,834	122,870			
Durango FPD (Volunteer)	5,266,085	162,215			
Eads Fire (Volunteer)	146,550	1,000			
East Grand FPD #4 (Volunteer)	1,987,271	60,000			
Eaton FPD (Volunteer)	1,299,784	125,960			
Eckley Fire (Volunteer)	22,353	2,509			
Elbert FPD & Rescue (Volunteer)	198,943	······			
Elizabeth FPD (Volunteer)	1,035,475	44,811			
Elk Creek FPD (Volunteer)	2,595,088	53,340			
Englewood Fire (Old Hire)	5,743,106	283,390			
Englewood Police (Old Hire)	4,110,223				
Englewood Fire (Volunteer)	43,008	5,975			
Evans FPD (Volunteer)	675,384	88,000			
Evergreen FPD (Volunteer)	4,478,443	225,000			
Falcon FPD (Volunteer)	562,846	20,000			
Federal Heights Fire (Volunteer)	2,890,801				
Fisher's Peak FPD (Volunteer)	186,818	3,100			•
Florence FPD (Volunteer)	1,766,671	135,400			
Foothills Fire & Rescue (Volunteer)	1,554,497	110,000			
Fort Lewis Mesa FPD (Volunteer)	363,837	13,279			•
Fort Morgan Fire (Volunteer)	1,158,500	91,820			
Fort Morgan Rural FPD (Volunteer)	813,990				
Fort Morgan Police (Old Hire)	414,976	99,660			•
Franktown FPD (Volunteer)	3,057,518	36,000			
Frederick Firestone FPD (Volunteer)	125,514	10,003			
Galeton FPD (Volunteer)	1,286,412	216,152			•
Genesee FPD (Volunteer)	1,450,690	90,000			
Glacier View FPD (Volunteer)	286,462	5,900			
Glendale Fire (Volunteer)	213,803				•
Glenwood Springs Fire (Volunteer)	642,829	30,000			
Golden Fire (Volunteer)	2,749,560	150,000			
Golden Gate FPD (Volunteer)	304,267	8,352			

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
\$40,500	\$454,658	\$(171,360)	\$(1,300)	\$(13,027)	\$309,471	\$3,483,085
	77,810	(13,680)		(2,331)	61,799	597,798
	5,882	(180)		(3,458)	2,455	43,910
5,850	41,471	(7,560)	(1,300)	(3,834)	44,627	327,197
	785	(3,000)		(689)	3,568	5,083
	44,879,155	(42,893,023)	(410)	(145,934)	18,202,893	334,241,535
	82,545,492	(56,248,498)	(220)	(193,871)	34,090,740	618,125,199
10,800	69,416	(19,016)		(6,740)	66,460	544,566
	128,233	(64,320)	(1,300)	(4,961)	57,652	964,631
60,328	52,577	(98,560)	•	(11,249)	77,845	478,077
	130,706	(257,593)		(2,003)	(2,612)	992,332
	204,149	(304,342)		(2,004)	20,673	1,539,507
38,552	738,307	(496,563)		(28,998)	413,513	5,679,598
1,000	20,848	(5,400)		(6,176)	11,272	157,822
36,000	285,268	(157,440)	(1,457)	(14,154)	208,217	2,195,488
23,475	180,503	(164,483)	(1,300)	(11,813)	152,342	1,452,126
	2,752	(3,490)		(5,714)	(3,943)	18,410
	28,677	(4,815)		(4,585)	19,277	218,220
18,220	142,580	(169,425)	•••••••••••••••••••••••••••••••••••••••	(6,089)	30,097	1,065,572
24,000	371,441	(185,120)	(9,041)	(21,018)	233,602	2,828,690
	793,209	(939,959)	(1,000)	(7,830)	127,810	5,870,916
	570,932	(861,594)	(1,000)	(7,077)	146,306	4,256,529
	5,040	(21,600)	(120)	(2,143)	(12,848)	30,160
22,123	90,305	(134,865)		(6,927)	58,636	734,020
80,000	645,442	(415,260)	(1,300)	(33,884)	499,998	4,978,441
11,340	75,531	(95,550)	(1,300)	(6,088)	3,933	566,779
	425,112	(11,340)	(1,885)	(4,023)	407,864	3,298,665
2,790	27,286	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••	(5,713)	27,463	214,281
67,777	261,370	(147,720)	(1,300)	(19,228)	296,299	2,062,970
33,120	223,581	(148,800)	·····	(18,664)	199,237	1,753,734
4,343	51,262	(35,294)	•••••••••••••••••••••••••••••••••••••••	(5,713)	27,877	391,714
58,447	157,663	(193,437)	(1,300)	(14,906)	98,287	1,256,787
36,221	111,660	(101,058)	·····	(14,530)	32,293	846,283
•••••••••••••••••••••••••••••••••••••••	56,184	(159,194)	(650)	(1,065)	(5,065)	409,911
32,400	450,906	(60,025)		(7,303)	451,978	3,509,496
9,003	16,350	(31,200)		(3,645)	511	126,025
6,741	187,524	(67,538)	(1,300)	(6,089)	335,490	1,621,902
14,400	203,886	(133,042)	(5,941)	(14,718)	154,585	1,605,275
······································	41,172	(13,200)	······································	(4,596)	29,276	315,738
	30,443	(10,980)	·····	(3,270)		
18,900	86,175	(111,870)	(1,300)	(5,901)	16,004	658,833
77,940	387,082	(392,081)		(20,167)	202,774	2,952,334
	43,606	(23,475)	•••••••••••••••••••••••••••••••••••••••	(3,082)		337,060

Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Grand FPD #1 (Volunteer)	\$1,283,843	\$95,000			
Grand Junction Fire (Old Hire)	8,173,642	320,273	•••••		
Grand Junction Police (Old Hire)	3,733,382	•••••	•••••		
Grand Lake FPD (Volunteer)	1,596,069	•••••	•••••	•••••	
Grand Valley FPD (Volunteer)	3,586,442	•••••	•••••		
Greeley Police (Old Hire)	687,611	99,957			
Greeley (Union Colony) Fire (Old Hire)	8,362,898	•••••	•••••		
Green Mountain Falls-Chipita Park FPD (Volunteer)	259,076	16,003			
Gypsum FPD (Volunteer)	615,262	22,704			
Hartsel FPD (Volunteer)	660,440	58,320	•••••		
Haxtun Fire (Volunteer)	172,744	7,028			
Haxtun Police (Old Hire)	131,993	13,404			
Hillrose Rural FPD (Volunteer)	290,696	26,000	•••••		
Holyoke Fire (Volunteer)	219,724	9,934	•••••		
Holyoke FPD (Volunteer)	192,513	9,600	•••••		
Hot Sulphur Springs/Parshall FPD (Volunteer)	243,305	4,500	•••••	•••••	
Hygiene FPD (Volunteer)	1,223,924	35,463	•••••		
Indian Hills FPD (Volunteer)	305,312	15,000	•••••		
Inter-Canyon FPD (Volunteer)	1,499,297	105,679	•••••		
Jackson 105 FPD (Volunteer)	279,095	14,584	•••••		
Jefferson-Como FPD (Volunteer)	1,157,094	•••••	•••••		
Kiowa FPD (Volunteer)	799,902	•••••	•••••	•••••	
Kremmling FPD (Volunteer)	469,436	40,410	•••••		
La Junta Fire (Old Hire)	761,457	60,388	•••••		
La Junta Police (Old Hire)	649,139	55,128	•••••	•••••	
La Junta Fire (Volunteer)	566,930	•••••	•••••		
La Salle Police (Old Hire)	1,222,624	7,210	7,210		
La Salle FPD (Volunteer)	2,783,985	160,569	•••••	•••••	
Lafayette Fire (Volunteer)	1,315,731	119,164	•••••		
Lake City Area FPD (Volunteer)	98,852	2,700	•••••		
Lake Dillon FPD (Volunteer)	3,814,767	91,082	•••••	•••••	
Lake George FPD (Volunteer)	323,143	9,500	•••••		
Lakewood FPD (Old Hire)	12,301,503	142,931	•••••		
Lamar Fire (Old Hire)	896,324	•••••	•••••	•••••	
Lamar Fire (Volunteer)	865,304	14,200	•••••		
Larkspur FPD (Volunteer)	1,426,723	62,000	•••••		
Las Animas Police (Old Hire)	250,143	•••••	•••••		•
Leadville Fire (Old Hire)	129,550	15,624	•••••		
Lefthand FPD (Volunteer)	1,259,882				
Lewis-Arriola FPD (Volunteer)	1,336,216	85,000			
Limon Area FPD (Volunteer)	637,230	5,000			
Livermore FPD (Volunteer)	187,111	5,000			
Log Hill Mesa FPD (Volunteer)	356,736	20,600	•••••		

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
\$31,557	\$181,732	\$(192,500)		\$(9,995)	\$105,794	\$1,389,637
	1,137,348	(1,152,099)		(6,890)	298,632	8,472,274
	515,966	(425,944)		(3,131)	86,891	3,820,273
	227,387	(98,301)	••••••••••••	(4,210)	124,876	1,720,945
	516,713	(147,958)	\$(1,300)	(7,114)	360,341	3,946,783
	93,431	(135,852)		(1,816)	55,720	743,331
	1,143,151	(1,122,974)	••••••••••••	(5,950)	14,227	8,377,125
10,424	35,734	(33,012)		(4,960)	24,189	283,265
11,952	87,185	(62,420)		(5,901)	53,520	668,782
9,000	92,887	(87,035)	••••••	(7,867)	65,305	725,745
4,297	24,347	(12,126)		(10,309)	13,237	185,981
	18,322	(22,665)		(689)	8,372	140,365
	41,717	(13,860)	(1,300)	(6,277)	46,280	336,976
8,331	30,917	(15,884)	•••••••••••••••••••••••••••••••••••••••	(10,122)	23,176	242,900
8,640	26,354	(32,260)	•••••••••••••••••••••••••••••••••••••••	(15,845)	(3,511)	189,002
4,050	34,696	(15,000)	••••••	(3,834)	24,412	267,717
33,003	175,459	(65,430)	••••••	(11,061)	167,434	1,391,358
12,399	41,480	(44,250)	••••••	(7,028)	17,601	322,913
18,500	209,729	(154,950)	(4,661)	(14,155)	160,142	1,659,439
13,126	38,642	(37,429)		(6,089)	22,834	301,929
	167,049	(37,680)	(5,478)	(5,148)	118,743	1,275,837
	114,930	(32,580)		(6,927)	75,423	875,325
11,250	67,006	(54,495)	••••••••••••	(4,565)	59,606	529,042
	103,955	(115,382)	•••••••••••	(1,252)	47,709	809,166
	87,372	(114,666)	•••••••••••	(1,065)	26,769	675,908
	82,197	(13,163)	(1,300)	(5,437)	62,297	629,227
	181,428			(687)	195,161	1,417,785
45,770	395,340	(349,000)	(1,300)	(12,188)	239,191	3,023,176
42,222	179,646	(215,069)		(9,182)	116,781	
2,430	14,522	(1,200)		(3,457)	14,995	113,847
	535,193	(442.200)		(10,873)	255,176	4,069,943
	45,692	(22,680)		(4,774)	27,738	350,881
	1,688,685	(1,580,628)		(7,641)	243,347	12,544,850
	129,277	(31,706)		(688)	96,883	993,207
12,780	127,194	(12,000)	······	(9,182)	132,992	998,296
28,338	198,920	(174,862)	(1,300)	(8,243)	104,853	1,531,576
	32,542	(53,439)	(_/	(1,065)	(21,962)	228,181
	17,046	(27,990)		(1,065)	3,615	133,165
	180,462	(58,600)	(1,300)	(9,934)	110,628	1,370,510
 17,435	191,680	(129,361)	(2,500)	(12,564)	152,190	1,488,406
4,500	91,508	(26,250)		(7,780)	66,978	704,208
4,500	26,686	(9,240)		(6,089)	20,857	207,968
,JUU	51,697	(19,617)		(9,282)	61,843	418,579

Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Loveland Fire (Old Hire)	\$113,798				
Loveland & Rural Consolidated VFD (Volunteer)	2,644,400	\$101,670	•••••		
Lower Valley FPD (Volunteer)	1,657,974	116,492	•••••		
Lyons FPD (Volunteer)	1,130,801	30,691	•••••		•••••
Mancos FPD (Volunteer)	990,240	27,579	•••••		
Manitou Springs Fire (Old Hire)	322,140	16,959	•••••		
Manitou Springs VFD (Volunteer)	340,752	16,000	•••••		•••••
Manzanola Rural FPD (Volunteer)	188,598	3,477			
Milliken FPD (Volunteer)	558,506		•••••		\$(538,343)
Montrose FPD (Old Hire)	95,356	24,319	•••••		•••••
Montrose FPD (Volunteer)	590,007	34,000			
Mountain View FPD (Old Hire)	287,186	3,295	•••••		
Mountain View FPD (Volunteer)	2,264,434	24,081	•••••		
Nederland FPD (Volunteer)	685,311	26,540	•••••		
New Raymer/Stoneham FPD (Volunteer)	857,274	229,220	•••••		
North Fork FPD (Volunteer)	292,743	30,000	•••••		•••••
North Routt County Fire (Volunteer)	272,009	•••••	•••••		
Northeast Teller County FPD (Volunteer)	577,095	35,962	•••••		•••••
North-West FPD (Volunteer)	299,489	20,000	•••••		•••••
Northwest Conejos FPD (Volunteer)	487,901	14,517	•••••		
Norwood FPD (Volunteer)	464,830	26,604	•••••		•••••
Nucla-Naturita FPD (Volunteer)	659,819	•••••	•••••		•••••
Nunn FPD (Volunteer)	959,546	22,770	•••••		
Oak Creek FPD (Volunteer)	346,971	64,081	•••••		•••••
Olathe FPD (Volunteer)	631,403	50,000	•••••		•••••
Olney Springs Fire (Volunteer)	170,115	•••••	•••••		
Ordway Fire (Volunteer)	214,323	500	•••••		•••••
Ouray VFD (Volunteer)		18,000	•••••		•••••
Palisade VFD (Volunteer)	970,837	17,804	•••••		
Palmer Lake Fire (Volunteer)	25,166	•••••	•••••		•••••
Parker FPD (Volunteer)	315,254	28,670	•••••		•••••
Pawnee FPD (Volunteer)	184,100	3,500	•••••		
Peetz FPD (Volunteer)	306,407	•••••	•••••		
Peyton FPD (Volunteer)	56,381	3,000	•••••		•••••
Pinewood Springs VFD (Volunteer)	188,192	4,723	•••••		
Plateau Valley FPD (Volunteer)	1,698,363	52 <i>,</i> 357	•••••		
Platte Canyon FPD (Volunteer)	1,036,133	24,900	•••••		•••••
Platte Valley FPD (Volunteer)	2,176,113		•••••		
Platteville/Gilcrest FPD (Volunteer)	4,125,228	50,000	•••••		
Pleasant View Metro Fire District (Volunteer)	1,800,099	······································	•••••		
Poudre Canyon FPD (Volunteer)	110,034	5,123			
Poudre Fire Authority (Volunteer)	108,149	4,035			
Pueblo Fire (Old Hire)	33,277,756	1,545,814	•••••		

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
	\$14,591	\$(26,777)		\$(689)	\$(12,875)	\$100,923
•••••••••••••••••••••••••••••••••••••••	360,132	(398,494)	\$(1,300)	(13,591)	48,417	2,692,817
\$29,406	252,371	(90,310)	·····	(9,746)	298,213	1,956,187
14,630	163,984	(47,227)	•••••••••••••••••••••••••••••••••••••••	(12,753)	149,325	1,280,126
	145,379	(15,240)	·····	(4,398)	153,320	1,143,560
·····	45,694	(39,508)	·····	(689)	22,456	344,596
·····	46,005	(56,700)	••••••••••••	(10,872)	(5,567)	335,185
3,038	27,226	(5,760)	(1,300)	(4,398)	22,283	210,881
·····	34,107	(52,653)	121	(1,738)	(558,506)	C
•••••••••••••••••••••••••••••••••••••••	13,149	(34,612)	•••••••••••••••••••••••••••••••••••••••	(877)	1,979	97,335
22,500	84,532	(80,040)	(1,300)	(4,209)	55,483	645,490
•••••••••••	38,230	(51,565)		(689)	(10,729)	276,457
•••••••••••••••••••••••••••••••••••••••	315,112	(227,120)	•••••••••••	(16,885)	95,188	2,359,622
4,500	99,496	(34,688)	•••••••••••••••••••••••••••••••••••••••	(4,961)	90,887	776,198
219,964	132,230	(14,400)	•••••••	(4,961)	562,053	1,419,327
6,693	41,832	(24,150)	•••••••••••••••••••••••••••••••••••••••	(8,618)	45,757	338,500
15,057	37,908	(29,460)	·····	(4,773)	18,732	290,741
	80,402	(61,920)	·····	(5,900)	48,544	625,639
······································	39,534	(58,734)	•••••••••••••••••••••••••••••••••••••••	(4,210)	(3,410)	296,079
12,286	68,497	(43,218)	·····	(16,509)	35,573	523,474
12,666	68,780	(13,282)	·····	(7,867)	86,901	551,731
17,886	94,465	(35,768)	•••••••••••••••••••••••••••••••••••••••	(7,867)	68,716	728,535
18,801	140,856	(15,405)	(2,718)	(4,210)	160,094	1,119,640
	51,678	(61,780)		(5,525)	66,809	413,780
		(89,000)	(1,300)	(8,806)	52,606	684,009
	24,183	(8,550)		(3,458)	12,175	182,290
450	30,540	(9,750)	·····	(5,713)	16,027	230,350
15,843	75,628	(22.248)	·····	(10,497)	76,726	600,693
18.379	138,461	(59,176)	·····	(12,188)	103,280	1,074,117
13,662	4,128	(12,000)	·····	(6,464)	(674)	24,492
······································		(70,308)	•••••••••••••••••••••••••••••••••••••••	(4,773)	(5.394)	309,860
3,150	27,130	(780)	·····	(3,082)	29,918	214,018
9,000	45,045	(100)	·····	(4,585)	49,460	355,867
5,400	8,524	(1,200)	······	(3,458)	12,266	68,647
8,580	26,967	(8,010)	(1,300)	(4,773)	26,187	214,379
	245,286	(70,140)	(_,	(6,927)	220,576	1,918,939
··············	146,075	(90,387)	(1,300)	(7,303)	71,985	1,108,118
	309,459	(136,640)	(1,555)	(10,122)	162,697	2,338,810
79,185	574,055	(463,262)	(1,300)	(11,813)	226,865	4,352,093
1,200	261,847	(36,960)	(1,500)	(11,625)	214,462	2,014,561
4,359	16,052	(30,300)	······	(9,182)	16,352	126,386
3,632	15,013	(11,745)	······	(2,143)	8,792	116,941
	4,671,463	(4,451,570)	(1,068)	(25,116)	1,739,523	35,017,279

Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Pueblo Fire (DROP)	\$940,806		\$63,997		
Pueblo Police (Old Hire)	47,321,283	\$1,542,672	•••••		
Pueblo Rural FPD (Old Hire)	1,719,112	51,207	•		
Rangely Rural FPD (Volunteer)	590,314	19,840	•••••	•••••	
Rattlesnake FPD (Volunteer)	1,030,989	30,817	•		
Red Feather Lakes FPD (Volunteer)	313,200	15,176			
Red White & Blue FPD (Old Hire)	216,787	48,265	•••••		
Red White & Blue FPD (Volunteer)	1,229,783				
Ridgway FPD (Volunteer)	665,771				
Rio Blanco FPD (Volunteer)	4,441,121	305,766	•••••		
Rocky Ford Police (Old Hire)	175,625				
Rocky Ford Fire (Volunteer)	91,959	3,326			
Rocky Mountain VFD (Volunteer)	337,412	•••••	•••••		
Sable Altura FPD (Volunteer)	535,957	5,000	•		
Salida Fire (Old Hire)	106,143	14,074			
Salida Police (Old Hire)	500,666	75 <i>,</i> 808	•••••	•••••	
Sheridan Fire (Volunteer)	317,503	44,000	•		
Silverton San Juan FRA (Volunteer)	288,657	20,000	•••••		
South Adams County FPD (Old Hire)		50,000	•••••	•••••	
South Adams County FPD (Volunteer)	6,187,588	78,340	•••••		
South Arkansas FPD (Volunteer)	143,262	•••••	•••••		
South Conejos FPD (Volunteer)	249,327	12,288	•••••	•••••	
South Metro Fire Rescue (Volunteer)	306,999	•••••	•••••		
Southwest Washington County FPD (Volunteer)	154,182	3,000	•••••		
Springfield Police (Old Hire)	411,335	•••••	•••••	•••••	
Springfield Fire (Volunteer)	152,816	2,199	•••••		
Steamboat Springs VFD (Volunteer)	1,267,084	29,000	•		
Sterling Fire (Old Hire)	661,829	64,508	•••••	•••••	
Sterling Police (Old Hire)	282,700	•••••	•••••		
Sterling Fire (Volunteer)	395,196	13,881	•••••		
Stonewall FPD (Volunteer)	944,255	50,000	•••••	•••••	•
Stratton FPD (Volunteer)	150,886	3,500	•••••		
Sugar City Fire (Volunteer)	98,396	•••••	•••••		
Sugarloaf FPD (Volunteer)	388,382	34,500	•••••	•••••	
Telluride FPD (Volunteer)	1,923,768	123,000	•••••		
Thornton Fire (Old Hire)	4,095,174	551,130	•••••		
Thornton Fire (DROP)	301,031	•••••	80,001	•••••	•
Timberline FPD (Volunteer)	1,648,958	15,300			
Trinidad Fire (Old Hire)	597,885	72,529	•••••		
Trinidad Police (Old Hire)	<u>.</u>	13,070	•••••		
Walsh VFD (Volunteer)	84,935	2,000			
Wellington FPD (Volunteer)	1,515,508				
West Cheyenne FPD (Volunteer)	<u>.</u>	2,000	•••••		

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
***	\$136,483	,		н	\$200,480	\$1,141,286
	6,655,301	\$(5,543,482)		\$(21,357)	2,633,134	49,954,417
•••••••••••••••••••••••••••••••••••••••	235,124	(233,659)		(2,004)	50,668	1,769,780
\$5,166	85,611	(41,160)		(8,055)	61,402	651,716
12,600	144,949	(87,154)	\$(1,300)	(12,651)	87,261	1,118,250
•••••••••••••••••••••••••••••••••••••••	43,265	(36,000)		(4,497)	17,944	331,144
•	29,109	(73,252)		(876)	3,246	220,033
	173,571	(90,854)		(7,491)	75,226	1,305,009
	95,737	(24,600)	(1,300)	(6,564)	63,273	729,044
29,473	662,147	(266,760)	(1,300)	(13,027)	716,299	5,157,420
	21,820	(50,198)		(876)	(29,254)	146,371
2,170	13,318	(1,375)		(6,739)	10,700	102,659
	45,564	(47,840)		(5,903)	(8,179)	329,233
	75,396	(39,600)		(9,936)	30,860	566,817
	14,283	(27,391)		(1,064)	(98)	106,045
	68,209	(129,025)		(1,628)	13,364	514,030
23,194	39,305	(101,796)	(1,300)	(4,585)	(1,182)	316,321
10,813	41,785	(12,480)		(8,994)	51,124	339,781
•	73,431	(78,002)		(877)	44,552	570,379
70,506	864,216	(659,690)		(16,409)	336,963	6,524,551
	19,316	(19,845)	(1,300)	(2,143)	(3,972)	139,290
11,059	34,710	(23,853)		(8,618)	25,586	274,913
	42,320	(34,907)		(3,458)	3,955	310,954
9,000	22,102	(7,060)		(5,149)	21,893	176,075
	57,096	(44,000)		(689)	12,407	423,742
1,979	22,115	(3,140)		(4,022)	19,131	171,947
21,600	178,089	(132,015)		(6,277)	90,397	1,357,481
	91,073	(115,767)		(1,252)	38,562	700,391
	40,095	(19,409)		(689)	19,997	302,697
12,493	55,263	(42,720)		(6,176)	32,741	427,937
9,450	139,224	(44,385)		(8,055)	146,234	1,090,489
3,150	21,748	(8,238)		(4,021)	16,139	167,025
•••••••••••••••••••••••••••••••••••••••	13,869	(4,800)		(4,024)	5,045	103,441
12,022	55,499	(43,725)		(9,746)	48,550	436,932
69,156	271,831	(203,760)	(1,300)	(20,731)	238,196	2,161,964
•••••••••••••••••••••••••••••••••••••••	607,804	(788,438)		(4,259)	366,237	4,461,411
•••••••••••••••••••••••••••••••••••••••	47,675	•••••••••••••••••••••••••••••••••••••••			127,676	428,707
13,770	230,522	(168,096)	(1,300)	(13,779)	76,417	1,725,375
	85,284	(104,242)		(1,628)	51,943	649,828
•••••••••••••••••••••••••••••••••••••••	4,984	(17,624)		(1,440)	(1,010)	36,306
1,000	12,485	·····		(4,210)	11,275	96,210
	211,259	(146,100)	(1,300)	(7,491)	56,368	1,571,876
1,800	22,548	(4,800)		(5,713)	15,835	 173,183

Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
West Douglas County FPD (Volunteer)	\$527,848	\$27,395			
West Metro FPD (Volunteer)	731,446	21,604	•	•••••	
West Routt FPD (Volunteer)	2,663,022	65.761		•••••	
Westminster VFD (Volunteer)	2,361,580		•••••	••••••	
Wet Mountain FPD (Volunteer)	1.836.236	48,970			
Wiggins Rural FPD (Volunteer)	1,107,872	120,000		••••••	
Wiley Rural FPD (Volunteer)	133,236	1.000	•••••	••••••	
Windsor Severance FPD (Volunteer)	2.694.847	66.249			
Yampa FPD (Volunteer)	421,211	20,000			
Yuma Fire (Volunteer)	552,509	10,000			
Subtotal Affiliated Local Plans	\$1,516,013,519	\$49,127,883	\$158,917	\$0	\$(582,682)
Contributions Receivable at 12/31/16	494.633	(455 <i>,</i> 595)	(1,055)		
Contributions Receivable at 12/31/17		600,260	797		
Changes in Net Pension Liability	(4,974,182)		•	•••••	
Pension Expense, Current Year					
Total Affiliated Local Plans	\$1,511,533,970	\$49,272,548	\$158,659	\$0	\$(582,682)
Statewide Death & Disability Plan	\$360,747,296		\$20,535,422		
Contributions Receivable at 12/31/16	370,205		(370,205)		
Contributions Receivable at 12/31/17			533.429		
Changes in Net Pension Liability	(1,183,646)		•		
Pension Expense, Current Year				•••••	
Total Statewide Death & Disability Plan	\$359,933,855	\$0	\$20,698,646	\$0	\$0

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
\$19,521	\$72,334	\$(70,508)		\$(14,630)	\$34,112	\$561,960
19,444	103,012	(66,975)		(6,927)	70,158	801,604
32,500	381,495	(179,584)		(8,430)	291,742	2,954,764
	334,535	(167,160)		(6,089)	161,286	2,522,866
24,110	266,156	(114,984)		(8,994)	215,258	2,051,494
90,000	161,825	(63,000)	\$(1 <i>,</i> 300)	(8,055)	299,470	1,407,342
	19,280	(2,400)		(3,458)	14,422	147,658
59,624	377,238	(279,550)	(1,300)	(10,585)	211,676	2,906,523
8,175	59,083	(46,420)		(5,712)	35,126	456,337
9,000	79,967	(18,575)	(1,300)	(10,121)	68,971	621,480
\$2,839,453	\$214,570,378	\$(168,478,600)	\$(140,874)	\$(2,033,565)	\$95,460,910	\$1,611,474,429
(37,983)					(494,633)	0
155,945					757,002	757,002
				391,745	391,745	(4,582,437)
				(2,194,466)	(2,194,466)	(2,194,466)
\$2,957,415	\$214,570,378	\$(168,478,600)	\$(140,874)	\$(3,836,286)	\$93,920,558	\$1,605,454,528
	\$52,449,216	\$(28,157,074)		\$(1,881,828)	\$42,945,736	\$403,693,032
					(370,205)	0
					533,429	533,429
				211,564	211,564	(972,082)
				(725,611)	(725,611)	(725,611)
\$0	\$52,449,216	\$(28,157,074)	\$0	\$(2,395,875)	\$42,594,913	\$402,528,768

Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Statewide Defined Benefit Plan	\$1,985,393,043	\$44,362,720	\$156,430,319		
Statewide Defined Benefit Plan (SRA Periodic Payments)	155,871				
Subtotal Statewide Defined Benefit Plan	\$1,985,548,914	\$44,362,720	\$156,430,319	\$0	\$0
Contributions Receivable at 12/31/16	1,501,066	(706,553)	(794,513)		
Contributions Receivable at 12/31/17		988,496	1,176,089		•••••
Changes in Net Pension Liability	(6,514,772)		•		•••••
Pension Expense, Current Year					
Total Statewide Defined Benefit Plan	\$1,980,535,208	\$44,644,663	\$156,811,895	\$0	\$0
Statewide Hybrid Plan - Defined Benefit Component	\$53,087,030	\$1,304,938	\$8,956,842		
Contributions Receivable at 12/31/16	25.795	(18.863)	(6.932)		
Contributions Receivable at 12/31/17		34.612	17,488		
Changes in Net Pension Liability	(174,184)				•••••
Pension Expense, Current Year			•••••		•••••
Total Statewide Hybrid Plan - Defined Benefit Component	\$52,938,641	\$1,320,687	\$8,967,398	\$0	\$0
Colorado Springs New Hire Plan - Fire Component	\$126,527,898	\$4,181,089	\$1,083,453		
Colorado Springs New Hire Plan - Fire Component (SRA Periodic Payments)	89,420				
Contributions Receivable at 12/31/16	252,323	(214,810)	(37,513)		
Contributions Receivable at 12/31/17		261,135	36,396		•••••
Changes in Net Pension Liability	(415,443)				
Pension Expense, Current Year					
Total Colorado Springs New Hire Plan - Fire Component	\$126,454,198	\$4,227,414	\$1,082,336	\$0	\$0
Colorado Springs New Hire Plan - Police					
Component	\$277,111,969	\$8,433,311	\$2,319,332		
Colorado Springs New Hire Plan - Police Component (SRA Periodic Payments)	494,190				
Contributions Receivable at 12/31/16	467,382	(387,951)	(79,431)		•••••
Contributions Receivable at 12/31/17		418,701	71,397		•••••
Changes in Net Pension Liability	(910,852)				
Pension Expense, Current Year					•••••
Total Colorado Springs New Hire Plan - Police Component	\$277,162,689	\$8,464,061	\$2,311,298	\$0	\$0
FPPA Staff Healthcare Subsidy	\$238,033	\$8,261			
Changes in Net Pension Liability	(780)		•••••		•••••
Pension Expense, Current Year			••••••		••••••
FPPA Staff Healthcare Subsidy	\$237,253	\$8,261	\$0	\$0	\$0
Total - Members' Benefit Investment Fund	\$4,308,795,814	\$107,937,634	\$190,030,232	\$0	\$(582,682)
	. , , ,	, : ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , ,		, (==,=,=,=,=,=,=,=,=,=,=,=,=,=,=,=,=,=,

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
	\$298,378,848	\$(65,965,013)	\$(2,187,599)	\$(3,135,872)	\$427,883,403	\$2,413,276,446
	11,651	(12,000)		(60)	(409)	155,462
\$0	\$298,390,499	\$(65,977,013)	\$(2,187,599)	\$(3,135,932)	\$427,882,994	\$2,413,431,908
······································	······································	•••••••••••••••••••••••••••••••••••••••	·····		(1,501,066)	0
······································	······································	······································	·····		2,164,585	2,164,585
·····	······	······	·····	387,829	387,829	(6,126,943)
			••••••	(4,022,517)	(4,022,517)	(4,022,517)
\$0	\$298,390,499	\$(65,977,013)	\$(2,187,599)	\$(6,770,620)	\$424,911,825	\$2,405,447,033
	\$8,122,829	\$(1,493,664)	\$(27,870)	\$(77,914)	\$16,785,161	\$69,872,191
<u>-</u>	30,122,023	٠	(۲٫۵۷۵)	ې(77,514)	(25,795)	0,872,191
	······		·····		52,100	52,100
<u>.</u>	······		·····	10,138	10,138	(164,046)
			·····	(129,795)	(129,795)	(129,795)
\$0	\$8,122,829	\$(1,493,664)	\$(27,870)	\$(197,571)	\$16,691,809	\$69,630,450
	\$18,445,141	\$(7,983,856)	\$(159,851)	\$(58,095)	\$15,507,881	\$142,035,779
······································						
	6,717	(6,000)	·····	(20)	697	90,117
					(252,323)	0
			<u>-</u>		297,531	297,531
······				11,309	11,309	(404,134)
				(193,563)	(193,563)	(193,563)
\$0	\$18,451,858	\$(7,989,856)	\$(159,851)	\$(240,369)	\$15,371,532	\$141,825,730
	\$40,741,455	\$(12,859,508)	\$(18,007)	\$(122,454)	\$38,494,129	\$315,606,098
<u>.</u>	740,741,433	7(12,033,300)	\$(10,007)	7(122,434)	730,734,123	7313,000,030
	37,683	(18,141)		(140)	19,402	513,592
	-				(467,382)	0
					490,098	490,098
				25,082	25,082	(885,770)
				(443,641)	(443,641)	(443,641)
\$0	\$40,779,138	\$(12,877,649)	\$(18,007)	\$(541,153)	\$38,117,688	\$315,280,377
	\$34,391	\$(7,309)		\$(4,510)	\$30,833	\$268,866
				969	969	189
				(1,320)	(1,320)	(1,320)
\$0	\$34,391	\$(7,309)	\$0	\$(4,861)	\$30,482	\$267,735
\$2,957,415	\$632,798,309	\$(284,981,165)	\$(2,534,201)	\$(13,986,735)	\$631,638,807	\$4,940,434,621

Employer Plan	Fiduciary Net Position Dec 31, 2016	Employer Contributions	Member Contributions	Contributions for Service Reinstatement	Affiliations/ (Withdrawals)
Members' Statewide Money Purchase Plan	\$10,125,774	\$436,251	\$423,049		<u> </u>
Contributions Receivable at 12/31/16	19,219	(9,598)	(9,621)		
Contributions Receivable at 12/31/17		11,801	12,008		
Total Members' Statewide Money Purchase Plan	\$10,144,993	\$438,454	\$425,436	\$0	\$0
Self-Directed Assets for Affiliated Local & DB System					
Statewide Defined Benefit Plan (SRA)	\$22,411,984		\$4,645,415		
Statewide Defined Benefit Plan (DROP)	61,543,732		19,813,279		
Statewide Hybrid Plan - Money Purchase Component	132,936,420	\$1,619,487	2,301,975		\$102,265,127
Statewide Hybrid Plan (DROP)	706,120		281,992		
Colorado Springs New Hire Plan - Fire Component (DROP)	5,742,113		2,655,354		
Colorado Springs New Hire Plan - Fire Component (SRA)	9,147				
Colorado Springs New Hire Plan - Police Component (DROP)	14,455,020		3,820,402		
Aurora Fire (DROP)	2,128,058		101,427		
Aurora Police (DROP)	1,713,840				
Colorado Springs Fire (DROP)	575,644				•••••
Colorado Springs Police (DROP)	984,130				
Denver Fire (DROP)	6,184,704				
Denver Police (DROP)	3,634,137		80,970		
Englewood Police (DROP)	108,344				
Pueblo Fire (DROP)	818,487				
Subtotal Self Directed Assets for Affiliated Local & DB System	\$253,951,880	\$1,619,487	\$33,700,814	\$0	\$102,265,127
Contributions Receivable at 12/31/16	159,388	(51,259)	(108,129)		
Contributions Receivable at 12/31/17		56,208	126,540		
Total Self-Directed Assets for Affiliated Local & DB System	\$254,111,268	\$1,624,436	\$33,719,225	\$0	\$102,265,127
IRC 457 Deferred Compensation Plan	\$112,304,748	\$1,373,190	\$9,832,774		
Contributions Receivable at 12/31/16	235,667	(26,055)	(209,612)		
Contributions Receivable at 12/31/17	,	38,593	317,306		
Total IRC 457 Deferred Compensation Plan	\$112,540,415	\$1,385,728	\$9,940,468	\$0	\$0
Total - Members' Self Directed Investment Fund	\$376,796,676	\$3,448,618	\$44,085,129	\$0	\$102,265,127
	<b></b>	<b>A</b>			
Grand Total - FPPA	\$4,685,592,490	\$111,386,252	\$234,115,361	\$0	\$101,682,445

State Contributions	Net Investment Income	Benefit Payments	Refunds	Administrative and Pension Expenses	Change in Fiduciary Net Position	Fiduciary Net Position Dec 31,2017
	\$1,789,042		\$(304,189)	\$(34,013)	\$2,310,140	\$12,435,914
			······		(19,219)	0
······································	······································		······		23,809	23,809
\$0	\$1,789,042	\$0	\$(304,189)	\$(34,013)	\$2,314,730	\$12,459,723
······································		······································		······	······	
	\$2,501,954	······	\$(5,377,964)	\$(57,636)	\$1,711,769	\$24,123,753
	7,945,157	•	(14,388,714)	(174,961)	13,194,761	74,738,493
	22,440,492		(102,227,467)	(728,936)	25,670,678	158,607,098
	87,110		(24,806)	(5,017)	339,279	1,045,399
	901,630		(496,101)	(16,430)	3,044,453	8,786,566
_	1,000		(6,000)	(20)	(5,020)	4,127
	2,075,168		(1,609,201)	(28,861)	4,257,508	18,712,528
	171,032	······································	(382,354)	(3,138)	(113,033)	2,015,025
		······	(91,969)	(5,190)		1,792,375
		······	(57,981)	(937)	14,647	590,291
	50,813	······································	(3,000)	(1,537)	46,276	1,030,406
············	479,751		(1,319,803)	(8,395)	(848,447)	5,336,257
	237,903	······	(831,125)	(5,038)	(517,290)	3,116,847
	2,758		(111,062)	(40)	(108,344)	0
	47,479		(387,217)	(884)	(340,622)	477,865
\$0	\$37,191,506	\$0	\$(127,314,764)	\$(1,037,020)	\$46,425,150	\$300,377,030
•	•	•			(159,388)	0
					182,748	182,748
\$0	\$37,191,506	\$0	\$(127,314,764)	\$(1,037,020)	\$46,448,510	\$300,559,778
	\$21,119,356		\$(5,463,548)	\$(240,586)	\$26,621,186	\$138,925,934
		······			(235,667)	0
	······································	······			355,899	355,899
\$0	\$21,119,356	\$0	\$(5,463,548)	\$(240,586)	\$26,741,418	\$139,281,833
\$0	\$60,099,904	\$0	\$(133,082,501)	\$(1,311,619)	\$75,504,658	\$452,301,334
12		4600000				
\$2,957,415	\$692,898,213	\$(284,981,165)	\$(135,616,702)	\$(15,298,354)	\$707,143,465	\$5,392,735,955

# Payments to Consultants

	December 31, 2017
Actuarial Consultants Gabriel Roeder Smith & Co.	\$345,899
Gabrier Roeder Smith & Co.	, 5343,033
Auditors	
CliftonLarsonAllen LLP	75,800
Paragon Audit & Consulting, Inc.	
BKD, LLP	10,335
Investment Consultants	
Albourne America LLC	400,000
Pension Consulting Alliance	295,000
AndCo Consulting, LLC	80.000
Subrosa Investigations, LLC	20,675
IW Financial	10,500
EIRIS Conflict Risk Network	1,000
Legal Counsel	
Jackson Walker LLP	203,831
Hoffman, Parker, Wilson & Carberry, P.C.	20,781
Thomas L. Kanan, Esq.	5.380
SJT Law, LLC	4,060
Ice Miller LLP	2,728
Legislative Consultants	
Lombard & Clayton	40,000
Management Consultants	
CoreySpeaks, LLC	9,680
Choose People	6,400
Calhoun Consulting Partners, LLC	1,800
Nicoletti-Flater Associates	438
Medical Consultant	
Clarence Henke, M.D., PC	49,156
Recordkeeping Services	
Fidelity Investments	241,893
Total Payments To Consultants	\$1,836,211

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# Schedule of Administrative and Investment Expenses

Fire & Police Members' Benefit Investment Fund

Expense Group	2017	2016	2015	2014
<b>Professional Contracts</b>				
Actuarial Contract	\$343,251	\$367,009	\$412,412	\$292,328
Audit Fees	75,091	105,612	106,109	126,094
Computer Maintenance & Lease		508,417	454,390	523,686
Insurance & Bonding	180,919	165,166	160,289	149,391
Legal & Legislative Counsel	(34 263)	113,521	129,382	99,609
Management Consulting	102.256	68,887	17,064	24,781
Medical Exam Fees	253,255	243,204	202,733	230,698
Hearing Officers - D&D	9,440	17,444	7,801	22,028
Outside Services/Contract Help	62,431	106,074	57,324	55,928
Records Management	6,068	1,595	1,951	6,245
Total Professional Contracts	\$1,523,431	\$1,696,929	\$1,549,455	\$1,530,788
Personnel Services				
Salaries	\$3,495,905	\$3,286,289	\$3,036,727	\$3,033,856
Employee Benefits	1,304,530	1,048,276	927,428	1,000,083
Employment Programs	88,344	38,119	28,005	47,951
Total Personnel Services	\$4,888,779	\$4,372,684	\$3,992,160	\$4,081,890
Staff Education				
Tuition Assistance Program	\$33,409	\$37,867	\$19,200	\$45,369
Conferences & Seminars	33,110	27,233	26,589	25,932
Total Staff Education	\$66,519	\$65,100	\$45,789	\$71,301

2013	2012	2011	2010	2009	2008
\$288,200	\$288,000	\$324,000	\$272,000	\$453,000	\$301,000
61,285	59,555	57,875	56,220	39,000	37,500
532,616	494,693	367,028	225,997	344,595	98,328
138,761	155,438	121,532	158,784	111,335	124,258
244,073	123,582	141,701	73,035	64,159	100,376
6,050	0	21,624	23,375	29,400	277
184,795	187,797	144,008	157,822	144,441	122,377
21,284	22,773	23,948	13,625	13,965	9,954
77,096	39,585	58,411	53,392	54,705	58,599
6,220	6,913	6,366	5,972	5,726	9,899
\$1,560,380	\$1,378,336	\$1,266,493	\$1,040,222	\$1,260,326	\$862,568
\$2,853,094	\$3,740,834	\$3,161,744	\$2,952,056	\$2,839,136	\$2,588,431
851,929	1,128,226	888,233	829,521	747,331	640,571
18,032	18,087	16,980	6,728	22,134	147,601
\$3,723,055	\$4,887,147	\$4,066,957	\$3,788,305	\$3,608,601	\$3,376,603
\$48,424	\$16,927	\$18,214	\$13,429	\$8,800	\$20,348
25,786	25,299	22,028	21,321	19,788	34,893
\$74,210	\$42,226	\$40,242	\$34,750	\$28,588	\$55,241

# **Schedule of Administrative and Investment Expenses**

Fire & Police Members' Benefit Investment Fund

Expense Group	2017	2016	2015	2014
Other Operating Expenses				
Company Vehicles	\$3,447	\$3,523	\$4,105	\$4,244
Board Expenses	57,820	51,682	66,905	56,292
Data Processing Supplies	70,933	48,961	81,986	76,736
Equipment Rental & Maintenance	27.195	41,712	40,946	35,690
Meetings & Travel	25,996	18,620	19,503	29,712
Operating Expense - Two DTC		117,211	134,161	128,204
Postage	21,452	28,664	30,702	22,166
Printing & Mailing	68,606	61,586	63,476	66,814
Retirement Services	17,816	18,362	15,047	13,935
Subscriptions & Dues	18,773	17,904	18,045	16,465
Supplies	43,252	21,946	27,127	47,471
Telephone	8,650	8,683	9,793	9,949
Total Other Operating Expense	\$500,743	\$438,854	\$511,796	\$507,678
Total Operating Expense	\$6,979,472	\$6,573,567	\$6,099,200	\$6,191,657
Change in Net Pension Liability	\$(1,038,636)	\$(920,107)	\$(802,974)	\$0
Depreciation/Amortization Expense		3(920,107) 884,904	865,880	
	338,693			869,843
Delinquency Income  Total Administrative Expense	(3,707) <b>\$6,275,822</b>	\$ <b>6,536,677</b>	\$6,131,263	(4,738) <b>\$7,056,762</b>
Total Administrative expense	30,273,822	\$6,536,677	\$6,131,263	\$7,030,762
Capital Expenditures	\$689,303	\$596,117	\$339,823	\$470,437
Total Administrative Expense and Capital	\$6,965,125	\$7,132,794	\$6,471,086	\$7,527,199
Asset Based Fees				
Consulting	\$682,900	\$756,225	\$743,225	\$746,225
Management Fees	38,887,245	31,361,216	30,202,534	26,132,254
Legal Fees	236,959	325,366	252,619	451,784
Closing Costs	90,675	55,614	106,869	102,850
FPPA Investment Personnel Costs	2,844,633	2,518,564	2,375,749	1,667,279
Bank/Security Lending Fees	566,910	800,632	775,499	663,347
Other Misc. Expenses				
Certifications & Training	682			
Computer Software	499,187	245,760	129,853	112,157
Conferences & Seminars	10.375			
Meetings & Travel / Due Diligence	111,402	91,953	130,260	98,009
Subscriptions & Dues	14,983	11,165	5,375	5,200
Printing & Mailing Expense	0	4,527	4,457	4,763
Total Asset Based Fees	\$43,945,951	\$36,171,022	\$34,726,440	\$29,983,868

2013	2012	2011	2010	2009	2008
\$3,815	\$3,275	\$4,449	\$5,790	\$3,446	\$4,137
31,017	44,133	27,760	30,504	31,884	47,799
43,268	160,361	81,452	60,189	45,135	115,649
32,413	34,176	26,441	29,078	31,111	37,767
14,323	11,813	15,607	25,267	20,628	23,217
106,774	81,678	74,930	98,926	80,759	68,920
21,775	39,972	62,299	58,828	57,794	65,460
80,644	64,249	84,172	73,045	68,414	104,161
10,546	6,886	7,247	7,441	9,926	8,032
14,817	16,736	18,497	23,699	21,131	20,320
31,103	16,213	62,152	38,437	40,478	39,697
13,486	12,405	15,150	23,701	28,123	30,655
\$403,981	\$491,897	\$480,156	\$474,905	\$438,829	\$565,814
\$5,761,626	\$6,799,606	\$5,853,848	\$5,338,682	\$5,336,344	\$4,860,226
4.0	4.0	4.0	4.0	4.0	4.0
\$0	\$0	\$0	\$0	\$0	\$0
821,671	808,550	784,935	777,727	166,754	124,158
(22,690)	0	0	0	0	0
\$6,560,607	\$7,608,156	\$6,638,783	\$6,116,409	\$5,503,098	\$4,984,384
\$126,977	\$375,571	\$391,016	\$202,049	\$6,700	\$60,051
\$6,687,584	\$7,983,727	\$7,029,799	\$6,318,458	\$5,509,798	\$5,044,435
\$779,225	\$881,875	\$412,788	\$217,000	\$242,125	\$372,500
24,938,863	19,963,855	16,457,643	15,142,901	13,399,161	18,610,131
647,946	203,171	79,304	64,736	80,396	0
65,836	54,117	26,273	10,000	27,398	0
1,416,658	0	0	0	0	0
799,320	673,888	633,304	510,865	628,407	1,104,469
94,474	92,402	48,104	0	0	0
65,573	80,567	54,232	0	0	0
5,497	4,580	4,255	0	0	0
4,337	5,662	3,025	0	0	0
20 017 720	\$21,960,117	\$17 718 928	\$15,945,502	\$14,377,487	\$20,087,100

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This section of the comprehensive annual financial report has been prepared by the Investment Division of the Fire & Police Pension Association of Colorado.

J. Scott Simon, CFA Chief Investment Officer

The mission of the Fire and Police Pension Association 'to prudently investment member retirement funds' is facilitated by the management of various fund investment portfolios, which totaled \$5.393 billion in fair value as of December 31, 2017.

Specifically, the Association is responsible for administering two separate funds:

- The Fire & Police Members' Benefit Investment Fund (\$4.940 billion) defined benefit plans. General Information and data found on the following pages, and
- The Fire & Police Members' Self-Directed Investment Fund (\$452 million) defined contribution plans.



#### Dear Members:

The Fire & Police Members' Benefit Investment Fund returned +14.95% (net of fees) in 2017, outperforming its implementation benchmark of +13.64%. The Fund generated \$687 million in investment earnings ending the year at \$4.93 billion. The total fund has achieved a 9.48% annualized return since its inception.

#### **Market Overview**

Capital markets experienced strong performance in 2017. An uptick in global economic activity helped lift expectations for corporate earnings growth across developed and emerging markets. FPPA's broad global public equity benchmark was up 24.32% for the year. Volatility within the equity markets remained at historic lows. The yield curve flattened with short term yields rising and long-term government yields remaining low. Combined with corporate bond spreads tightening, the Barclays U.S. Aggregate Bond Index had a solid year of performance at 3.54%. Citing strengthening economic conditions, the Federal Reserve hiked interest rates three times in 2017. The US Dollar ended the year down nearly 10% against a basket of major developed currencies.

#### **FPPA Asset Classes**

- Public Equity: FPPA implements a global equity portfolio with meaningful exposure to Non-US equities. The portfolio benefited as Non-US markets significantly outperformed US markets in 2017. Emerging markets equities were the strongest performers with that index being up just over 37% for the year. FPPA's emerging markets did even better with a 45% annual return. With only a few exceptions, FPPA's other active managers contributed by outperforming their benchmarks for the year. The equity portfolio did experience a slight drag in performance from the currency overlay program given the depreciation of the US Dollar over the year.
- Equity Long/Short: FPPA's dedicated equity long/short portfolio had a solid year of performance. Surpassing its 5-year
  track record, since inception portfolio performance has exceeded its benchmark by 2.0% on an annualized basis. The
  program continues to perform well by providing solid equity performance at a significantly lower risk profile relative to
  the broader equity markets.
- Fixed Income: FPPA's fixed income portfolio performed relatively well attributable to our unconstrained strategies which
  have a heavier credit exposure and are designed to better manage through rising interest rate environments. FPPA
  added one new fixed income manger relationship this year with the hiring of Loomis Sayles for a core fixed income
  strategy.
- Managed Futures: Since 2014, FPPA has implemented a dedicated allocation to managed futures strategies. These
  strategies are designed to benefit from long-term market trends and provide attractive risk-adjusted and uncorrelated
  returns relative to traditional asset classes. While these strategies struggled for most of the year, the portfolio had a
  strong fourth quarter bringing it into positive performance territory for the year. Strong equity and commodities markets
  were the primary contributors.
- Absolute Return: Hedge funds strategies in general had a solid year of performance. The higher performing strategies
  included higher beta hedged equity strategies and emerging markets equity. FPPA's exposure to lower beta equity
  strategies, combined with some specific manager under performance, resulted in the portfolio slightly lagging its
  benchmark. A capital structure arbitrage fund and an additional multi-strategy fund were added to the portfolio during
  the year.
- Illiquid Alternatives: In 2017, FPPA committed \$258 million with eleven managers in various private capital, real estate and real assets strategies. FPPA continued its prudent multi-year process of reaching its long-term allocation target of 30% into these strategies. The aggregate illiquid alternatives portfolio had a solid year of performance, but slightly lagged its overall benchmark due to its real assets portfolio and a few underperforming funds.

The Investment Department continues to grow and is now a staff of 11 seasoned professionals. The staff is supported by a strong governance structure of the FPPA Board, Investment Committee and Executive Director which continues to provide the resources and flexibility necessary to execute the investment strategy. We look forward to another year of progress with implementing an investment program which will achieve the goals of the plan.

Best regards,

J. Scott Simon, CFA Chief Investment Officer

#### **General Information**

The Members of the Association's Board of Directors serve as the fiduciaries for the Funds and are responsible for the investment of the Funds, or the selection of investment options available to defined contribution, deferred compensation and self-directed DROP plan members. As fiduciaries, the FPPA Board Members are required to discharge their duties solely in the interest of fund participants and beneficiaries. The FPPA Board has established investment policies and allocates assets, or selects investment options, based upon member characteristics, plan provisions, and the financial requirements of the Funds, in addition to considering the risk/reward trade-offs of various investments.

The Association has established long range statements of investment objectives and policies for managing and monitoring the Funds. The investment policies establish investment objectives and define the responsibilities of the fiduciaries with respect to the Funds, their investment authority under Colorado law, the level of acceptable risk for investments, investment allocation targets, investment performance objectives, and guidelines within which outside investment managers must operate.

The assets in the Fire & Police Members' Benefit Investment Fund are managed primarily by professional investment management firms. Similarly, investment options offered to defined contribution and deferred compensation plan members are typically pooled investment vehicles managed by professional money managers.

The Association's investment staff coordinates and monitors the investments and fund options, and assists the board of directors in the formulation and implementation of investment policies and long-term investment strategies. The investment staff is also responsible for the contents of this section of the annual report. To the extent applicable, investment managers are required to report results in conformance with standards developed by the CFA Institute (CFAI). FPPA utilizes its custodian bank to independently calculate investment performance.

#### **Summary of Investment Objectives**

The FPPA Board, in developing long-term investment objectives, investment class allocations and investment guidelines, recognizes that the Fund includes the assets of several different benefit plans, all having a different funded status. The overall objective of the Fund is to balance and prudently manage the investment needs of all plans participating in the Fund, including the need to eliminate current unfunded liabilities and/or to protect surpluses, if possible.

At its July 2015 meeting, the board of directors reviewed and approved recommended changes to the actuarial assumptions. The actuarial assumptions reduced the expected inflation from 3.0% to 2.5% and increased the expected real return on assets. Beginning in 2016, over the long-term, the performance objective of the Fund is to achieve a compound real rate of return of on invested assets of 5.0%. The FPPA Board expects the objectives to be fulfilled within the levels of risk that a prudent investor would take under similar conditions.

#### **Investment Allocation**

FPPA utilizes an asset liability study as its primary process to establish the overall risk tolerance for the Fund. In establishing Investment Allocation Policy Targets, the board of directors considers the historical and expected risks and correlations of investment classes in creating a portfolio which reduces risk through investment diversification. The FPPA Board conducts a formal asset liability study and investment allocation review at least every 2 years.

The FPPA Board establishes and continually updates investment allocation targets. At the end of 2017, the following investment allocation targets were in effect: global equity 37.0%; equity long/short 9.0%; fixed income & cash 17.0%; absolute return 9.0%; managed futures 4.0%; and illiquid alternatives 24.0%.

For the Fire & Police Members' Benefit Investment Fund, as of December 31, 2017, the Association employed the external investment managers listed further in this section.

#### **Basis of Presentation**

The assets of the Fire & Police Members' Benefit Investment Fund are presented at fair value based on the asset balances of the investment portfolio. The fair value of assets per the financial statements are reallocated to reflect investment exposures on a trade date basis, to account for cash held within accounts of investment managers, and to reflect derivatives exposures created with cash collateral. The fair value of assets in the investment portfolio does not include assets of the FPPA operational cash or assets held in the securities lending investment pool. Performance calculations were prepared using time-weighted rates of return and are net of fees unless otherwise indicated. Returns for periods longer than one year are annualized.

#### Asset Allocation

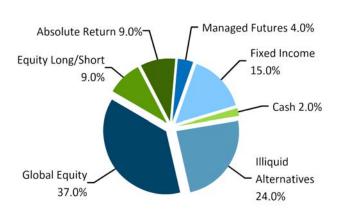
**Global Equity** 

38.3%

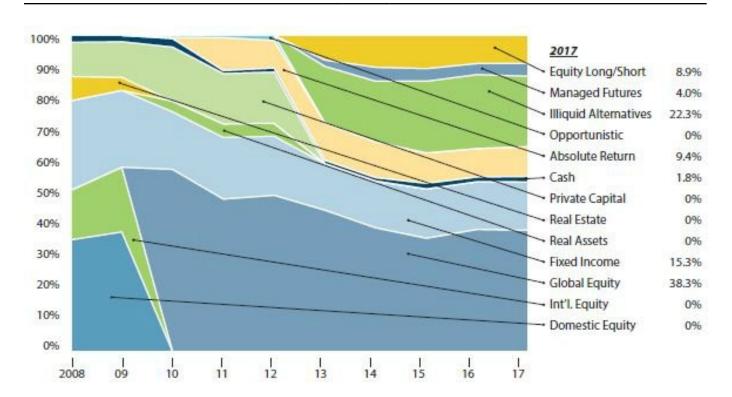
# 2017 Asset Allocation

# Absolute Return 9.4% Equity Long/Short 8.9% Fixed Income 15.3% Cash 1.8%

## 2017 Target Asset Allocation



#### ■ FPPA Asset Allocation 2008-2017



Alternatives

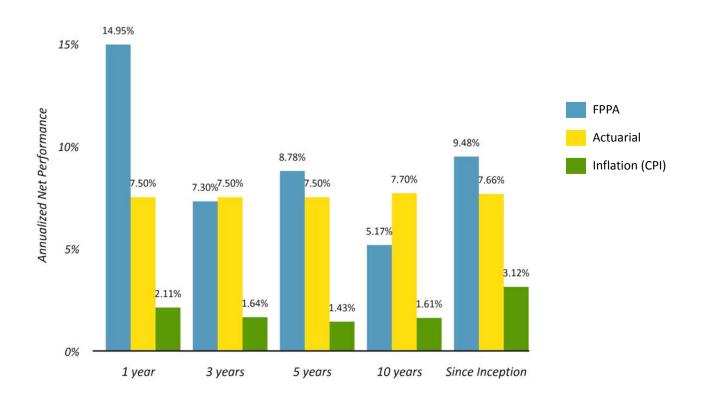
22.3%

## Investment Summary as of December 31, 2017

	Fair Value per Financial Statement	Reallocation	Fair Value Per Investment Portfolio	Percent of Fair Value
Global Equity	\$1,650,203,047	\$236,970,361	\$1,887,173,408	38.3%
Equity Long/Short	424,046,552	12,371,704	436,418,256	8.9%
Fixed Income	853,972,158	(102,009,337)	751,962,821	15.3%
Managed Futures	178,326,333	20,000,000	198,326,333	4.0%
Absolute Return	463,635,512	1,582,270	465,217,782	9.4%
Real Assets	292,282,622	0	292,282,622	5.9%
Real Estate	196,599,541	0	196,599,541	4.0%
Private Capital	608,356,389	875,184	609,231,573	12.4%
Investment Cash & Short Term	287,372,773	(199,430,190)	87,942,583	1.8%
	\$4,954,794,927	\$(29,640,008)	\$4,925,154,919	100.00%

<sup>\*</sup>The total fair value of the Members' Benefit Investment Fund does not include physical assets of the Association, assets in the Association's operational cash account, receivable and payables of the Association, and overlay program exposures have been reallocated back to the investment portfolios that hold them.

## ■ Net Performance vs. Inflation and Actuarial Requirements (Inception – 2017)



# ■ Asset Allocation by Category and Investment Manager

Asset Class Manager	Investment Style	Management Fees	1 Year Net Return %	Total Assets	% of Total Fund Assets
Global Equity					
Allianz Best Styles	Active World Equity	\$509,395	23.10 %	\$194.787.071	3.95%
Artio Global Investors <sup>1</sup>	Active EAFE	0	9.91 %	5,280	0.00%
Baillie Gifford Overseas	Active Emerging Markets	430,164	53.25 %	87,118,035	1.77%
BNP Paribas FX Overlay <sup>5</sup>	Foreign Currency Overlay	330,727	N/M	13,533,112	0.27%
Driehaus	Global Small Cap	752,829	42.66 %	116,422,730	2.36%
		732,829 0			0.01%
Global Transition Account	MSCI World Index MLP		11.53 %	65,140	
Kayne Anderson Midstream		354,224	(3.30)%	34,468,671	0.70%
LSV Asset Management <sup>1</sup>	Active EAFE	0	13.85 %	14,536	0.00%
Numeric EM Core	Active Emerging Markets	559,029	43.31 %	110,419,176	2.24%
Russell US Equity Overlay	US Small Cap	115,905	14.77 %	141,385,433	2.87%
SSGA EDHEC	Active World Equity	107,669	22.94 %	161,680,276	3.28%
SSGA EM Enhanced	Active Emerging Markets	96,243	38.12 %	50,029,555	1.02%
SSgA MSCI US	MSCI US	141,362	21.86 %	436,399,803	8.86%
SSgA MSCI World <sup>1</sup>	MSCI World Index	0	N/A	1,226	0.00%
SSgA MSCI World ex. US	MSCI World ex. US	99,201	24.66 %	300,866,663	6.11%
Walter Scott	Active World Equity	1,115,270	27.59 %	201,927,968	4.10%
Winton Global <sup>2</sup>	Active World Equity	101,534	8.32 %	118,818	0.01%
Russell	Fund Overlay	210,424	17.65 %	37,929,915	0.77%
otal Global Equity	1	\$4,923,976		\$1,887,173,408	38.32%
quity Long/Short					
AKO	Equity Long/Short	\$824,217	19.31 %	\$49,254,453	1.00%
Anchor Bolt	Equity Long/Short	709,346	8.70 %	48,828,417	0.99%
Hitchwood Capital	Equity Long/Short	590,144	18.92 %	49,619,676	1.01%
Luxor	Equity Long/Short	43,186	34.12 %	6,674,988	0.13%
Palestra Capital <sup>3</sup>	Equity Long/Short	276,832	N/A	49,968,510	1.01%
Pershing Square	Equity Long/Short	192,921	(2.27)%	9,267,253	0.19%
Rivulet Capital	Equity Long/Short	650,511	14.10 %	51,684,139	1.05%
Sachem Head	Equity Long/Short	594,928	12.72 %	43,772,754	0.89%
Senator Global Opportunity	Equity Long/Short	770,285	13.27 %	26,012,115	0.53%
Opportunity		803,152	14.61 %	54,216,907	1.10%
South Point	Faulty Long/Short				
South Point Tessera QP Small Cap	Equity Long/Short Equity Long/Short	673,329	9.27 %	47,119,044	0.96%

# ■ Asset Allocation by Category and Investment Manager

Asset Class Manager	Investment Style	Management Fees	1 Year Net Return %	Total Assets	% of Total Fund Assets
Fixed Income					
Fixed Income Impaired		\$0	N/A	\$529,107	0.01%
Fixed Income Transition <sup>2</sup>		2,838	N/A	0	0.00%
GSAM Strategic Income <sup>2</sup>	Unconstrained Bonds	396,449	11.64 %	579,608	0.01%
Loomis Sayles Core <sup>3</sup>	Core	79,203	N/A	136,181,892	2.77%
Manulife	Unconstrained Bonds	295,139	4.11 %	102,555,804	2.08%
PriVest	Investment Grade Bonds	132,386	5.52 %	45,158,368	0.92%
Prudential ABS Return	Unconstrained Bonds	536,765	6.60 %	134,703,569	2.73%
SSgA BC Agg Index Fund	Core	(29,132)	3.59 %	319,652,762	6.49%
Russell	Fund Overlay	69,911	17.65 %	12,601,711	0.26%
Total Fixed Income		\$1,483,559		\$751,962,821	15.27%
Managed Futures					
AHL Pure Momentum	Hedge Fund	\$517,363	2.72 %	\$48,954,884	0.99%
Blue Trend <sup>2</sup>	Hedge Fund	245,794	N/A	0	0.00%
Graham Tactical Trend	Hedge Fund	232,470	5.64 %	50,010,635	1.02%
KeyQuant Key Trends <sup>3</sup>	Hedge Fund	108,297	N/A	49,822,463	1.01%
Winton Diversified Futures	Hedge Fund	413,371	7.02 %	49,538,351	1.01%
Total Managed Futures		\$1,517,295		\$198,326,333	4.03%
Absolute Return					
Alphadyne Global	Hedge Fund	\$547,071	14.72 %	\$29,456,579	0.60%
AQR Delta II	Hedge Fund	549,896	4.48 %	56,573,872	1.15%
AQR SPF	Hedge Fund	357,658	13.89 %	39,005,789	0.79%
Arrowgrass	Hedge Fund	49,838	(1.46)%	19,834,320	0.40%
Autonomy Global Macro	Hedge Fund	676,813	6.11 %	32,287,332	0.65%
Citadel Kensington <sup>3</sup>	Hedge Fund	0	N/A	43,132,649	0.88%
CommonWealth					••••••
Opportunity II <sup>2</sup>	Hedge Fund	58,001	N/A	0	0.00%
HBK	Hedge Fund	811,781	5.18 %	55,298,230	1.12%
Hudson Bay <sup>3</sup>	Hedge Fund	75,000	N/A	30,322,072	0.62%
Hutchin Hill	Hedge Fund	862,122	(7.61)%	46,126,827	0.94%
MKP Opportunity	Hedge Fund	560,467	(1.17)%	30,365,265	0.62%
Pharo Macro	Hedge Fund	1,035,948	16.68 %	51,194,723	1.04%
Soroban	Hedge Fund	454,376	11.11 %	31,620,124	0.64%
Total Absolute Return		\$6,038,971		\$465,217,782	9.45%

# ■ Asset Allocation by Category and Investment Manager

Asset Class Manager	Investment Style	Management Fees	1 Year Net Return %	Total Assets	% of Total Fund Assets
Real Assets					
Alpha Petro Holdco <sup>3</sup>	Oil & Gas	\$0	N/A	\$5,000,000	0.10%
Arclight Capital V	Energy Infrastructure	168,427	17.42 %	11,913,120	0.24%
Arroyo Energy II <sup>3</sup>	Energy Infrastructure	265,337	N/A	10,569,868	0.21%
Broadriver II <sup>4</sup>	Life Settlements	192,500	N/M	22,291,831	0.45%
Capital Royalty II	Diversified Private Credit	92,084	1.13 %	7,720,207	0.16%
EIG Real Assets XV	Energy Infrastructure	175,071	12.91 %	12,131,722	0.25%
EIG Real Assets XVI	Energy Infrastructure	220,128	28.96 %	11,010,668	0.22%
Energy Capital Partners II	Energy Infrastructure	58,933	40.43 %	6,486,156	0.13%
Energy Capital Partners III <sup>4</sup>	Energy Infrastructure	161,312	N/M	9,118,764	0.18%
Enervest Fund XII <sup>6</sup>	Oil & Gas	0	N/A	0	0.00%
Enervest Fund XIII-A	Oil & Gas	(19,601)	N/A	0	0.00%
Freestone Series I <sup>4</sup>	Diversified Real Assets	1,031,999	N/M	55,513,743	1.13%
Freestone Series II <sup>4</sup>	Diversified Real Assets	0	N/M	7,322,638	0.15%
Iberia Credit II <sup>4</sup>	Diversified Private Credit	660,021	N/M	14,871,897	0.30%
Petroleum Equity Rho <sup>4</sup>	Oil & Gas	1,261,985	N/M	18,982,895	0.39%
Raven I	Asset Backed Lending	107,723	(6.97)%	5,760,328	0.12%
Raven III <sup>4</sup>	Asset Backed Lending	348,133	N/M	9,960,047	0.20%
Riverrock Euro II <sup>4</sup>	Diversified Private Credit	75,066	N/M	3,793,635	0.08%
Rosemawr III <sup>4</sup>	Diversified Private Credit	42,057	N/M	4,366,280	0.09%
Scout I-B	Oil & Gas	498,167	(15.96)%	8,517,521	0.17%
Scout II-B <sup>4</sup>	Oil & Gas	714,631	N/M	32,498,195	0.66%
Scout III-B <sup>4</sup>	Oil & Gas	484,256	N/M	26,900,812	0.55%
Valuation Adjustment <sup>7</sup>		···········		7,552,295	0.15%
Total Real Assets		\$6,538,229		\$292,282,622	5.93%
Real Estate					
Blackrock Diamond <sup>6</sup>	Value Added	\$0	N/A	\$10,237	0.00%
Blackstone RE VI	Opportunistic	43,318	44.95 %	3,192,028	0.07%
Blackstone RE VII	Opportunistic	109,390	13.05 %	12,152,051	0.25%
Blackstone RE VIII <sup>4</sup>	Opportunistic	787,500	N/M	15,766,141	0.32%
H/2 Real Estate	Distressed Debt	137,825	12.12 %	5,939,990	0.12%
JP Morgan	Core	710,846	6.13 %	73,345,589	1.49%
Morgan Stanley	Core	349,670	8.82 %	34,642,155	0.70%
Pauls REO 2012	Real Estate Debt	29,905	(17.14)%	1,634,196	0.03%
Pauls REO 2014 <sup>4</sup>	Real Estate Debt	77,615	N/M	588,757	0.01%
PRISA	Core	362,154	6.47 %	37,399,952	0.76%
RREEF	Core	0	(2.51)%	26,592	0.00%
Velocis II <sup>4</sup>	Value Added	(51,190)	N/M	10,541,716	0.21%
Valuation Adjustment <sup>7</sup>		())	,	1,360,137	0.03%
a a c. o a j a o ci i i ci i c				2,500,157	0.0070

# ■ Asset Allocation by Category and Investment Manager

Asset Class Manager	Investment Style	Management Fees	1 Year Net Return %	Total Assets	% of Total Fund Assets
Private Capital					
Alchemy Special III <sup>4</sup>		\$63,285	N/M	\$4,438,074	0.09%
American Securities Partners VI		103,304	44.81%	8,386,770	0.17%
Ascribe Opportunity Fund II		192,523	(0.52%)	6,185,740	0.12%
Ascribe Opportunity Fund III <sup>4</sup>		216,220	N/M	4,307,919	0.09%
Bowmark Capital Partners IV		176,336	9.07%	7,586,090	0.15%
Capital Partners Income II		176,694	39.91%	12,278,016	0.25%
Catterton Partners V		11,826	(34.41%)	65,812	0.00%
Catterton Partners VI		72,420	(4.97%)	4,821,952	0.10%
Catterton Partners VII		221,020	21.10%	19,324,072	0.39%
Center Lane III		159,656	(0.81%)	4,274,409	0.09%
Center Lane IV <sup>4</sup>		0	N/M	10,504,451	0.21%
Coller International Partners IV		0	(2.68%)	18,633	0.00%
Commonfund Capital Venture Partners IX		74,883	15.44%	19,404,145	0.39%
Commonfund Capital Venture Partners X		62,293	10.49%	12,100,131	0.25%
CVC European Equity Partners III		02,233	0.48%	588,173	0.23%
CVC European Equity Partners IV		(10,918)	149.13%	30,813	0.00%
		•••••••••••••••••••••••••••••••••••••••			•••••
CVC European Equity Partners V		20,748 0	77.01%	4,127,010	0.08%
Doughty Hanson III			97.40%	59,220	0.00%
Dyal Capital II <sup>4</sup>		299,794	N/M	3,474,681	0.07%
Endeavour Capital IV		0	(1.41%)	123,458	0.00%
Endeavour Capital VI		113,285	1.30%	8,857,083	0.18%
Endeavour Capital VII <sup>4</sup>		242,935	N/M	7,820,425	0.16%
Energy & Minerals Group II		162,451	21.18%	17,205,330	0.35%
Energy & Minerals Group III <sup>4</sup>		248,885	N/M	15,685,811	0.32%
Enhanced Equity II		50,000	(45.18%)	483,747	0.01%
GBOF IV		113,964	45.65%	9,184,408	0.19%
Grey Mountain III		198,005	30.98%	8,405,159	0.17%
HIG Bayside Opportunities Fund II		174,863	12.78%	7,386,522	0.15%
HIG Middle Market II <sup>4</sup>		200,000	N/M	4,567,761	0.09%
High Road Capital Partners I		47,675	(29.75%)	6,273,391	0.13%
High Road Capital Partners II		225,973	16.39%	5,852,467	0.12%
Insight Venture Parnters VII		112,044	27.00%	11,420,263	0.23%
JH Whitney VII		286,810	16.10%	11,324,015	0.23%
JMI Equity VI		99,454	(11.94%)	506,355	0.01%
JMI Equity VII		203,699	28.20%	11,166,558	0.23%
Kayne Anderson Energy III		0	(22.67%)	90,609	0.00%
Kayne Anderson Energy IV		0	4.24%	837,084	0.02%
Kayne Anderson Energy VI		128,278	4.32%	4,124,897	0.08%
Kelso Investment Assoc VIII		67,676	5.59%	8,062,375	0.16%
KPS Special Situations III		33,990	0.80%	4,467,453	0.09%
Littlejohn Opportunities Fund II <sup>4</sup>		28,259	N/M	4,953,628	0.10%
Mayfair I <sup>4</sup>		46,227	N/M	8,545,092	0.17%
Mercato Growth III <sup>4</sup>		423,541	N/M	6,519,062	0.13%
Mountain View FD II <sup>5</sup>		527	N/A	0,515,002	0.00%
MVM III		76,901	23.10%	6,205,868	0.13%
MVM IV <sup>4</sup>			······		
		329,000	N/M	12,343,430	0.25%
Nautic Partners VI		11,799	27.01%	2,455,385	0.05%
Nautic Partners VII <sup>4</sup>		23,815	N/M	5,875,322	0.12%

## ■ Asset Allocation by Category and Investment Manager

Asset Class Manager	Investment Style	Management Fees	1 Year Net Return %	Total Assets	% of Total Fund Assets
Nautic Partners VIII <sup>4</sup>		\$268,333	N/M	\$2,334,363	0.05%
New Enterprise Associates XIII	••••••	84,019	7.03%	12,071,016	0.25%
NGP Natural Resources X	••••••	89,396	3.32%	4,758,693	0.10%
Nordic Capital VII		119,406	32.37%	8,856,144	0.18%
Nordic Capital VIII	••••••	123,404	60.77%	7,019,161	0.14%
OHA Strategic Credit Fund II		(45,455)	7.16%	234,680	0.00%
OSP Value I <sup>4</sup>		225,000	N/M	23,477,524	0.48%
OSP Value II <sup>4</sup>	••••••	0	N/M	2,000,000	0.04%
Oxford Bioscience Partners IV <sup>5</sup>		1,797	N/A	0	0.00%
Palladium Equity IV <sup>4</sup>		184,273	N/M	9,210,746	0.19%
Raine Partners II <sup>5</sup>	•••••	400,000	N/M	11,275,051	0.23%
Roark Capital Partners II		0	14.45%	18,536,585	0.38%
Roark Capital Partners III		74,161	12.70%	10,898,675	0.22%
Roark Capital Partners IV <sup>4</sup>	•••••	249,020	N/M	11,545,075	0.23%
Rosemont Partners III		300,000	48.10%	12,657,667	0.26%
SIF IV	•••••	120,004	7.45%	16,621,192	0.34%
SIF VII <sup>4</sup>	•••••	92,496	N/M	5,886,705	0.12%
Siguler Guff <sup>4</sup>		289,053	N/M	7,207,318	0.15%
SVB Venture Overage <sup>4</sup>	•••••	35,429	N/M	9,189,225	0.19%
TA XI	••••••	148,136	32.72%	5,229,104	0.11%
TCV VII	••••••	47,561	41.51%	8,665,665	0.18%
TCV VIII⁴		300,000	N/M	15,247,349	0.31%
Thomas, McNerney & Partners I	••••••	0	76.13%	1,109,463	0.02%
Thomas, McNerney & Partners II	••••••	40,300	(7.55%)	2,834,865	0.06%
TPG Growth II		72,696	(2.12%)	11,475,437	0.23%
Transom II <sup>4</sup>	••••••	132,544	N/M	15,370,898	0.31%
Ufenau IV <sup>4</sup>	••••••	275,161	N/M	7,027,791	0.14%
Ufenau V <sup>4</sup>		322,812	N/M	3,500,742	0.07%
Veritas Capital IV	••••••	0	25.06%	11,868,560	0.24%
Veritas Capital V <sup>4</sup>	•••••	186,307	N/M	22,374,298	0.45%
Valuation Adjustment <sup>7</sup>				18,028,512	0.37%
Total Private Capital		\$9,625,993		\$609,231,573	12.37%
Cash account & Short Term BNY/Mellon Bank			1.17%	\$87,942,583	1.78%
Annual Accrual Adjustment		73,338			
TOTAL FEES & ASSETS		\$38,887,245	14.95%	\$4,925,154,919	100.00%

\*The total fair value of the Members' Benefit Investment Fund does not include physical assets of the Association, assets in the Association's operational cash account, receivable and payables of the Association, and assets held in the securities lending investment pool.

<sup>&</sup>lt;sup>1</sup> Manager terminated in 2010

<sup>&</sup>lt;sup>2</sup> Manager terminated in 2017

<sup>&</sup>lt;sup>3</sup> Manager hired in 2017, no one year return.

N/M = Not Meaningful. FPPA does not report returns for illiquid partnerships investments with less than 36 months of history.

 $<sup>^{5}</sup>$  N/M = Not Meaningful.

Manager in liquidation.

See Note 2.C. Summary of Significant Accounting Policies, within the Financial Statements

# ■ Top 20 Equity Holdings

Company	Fair Value
APPLE INC	\$20,770,444
MICROSOFT CORP	19,973,419
JOHNSON & JOHNSON	13,749,147
ALPHABET INC-CL C	11,407,853
AMAZON.COM INC	10,548,619
CISCO SYSTEMS INC	9,981,899
JPMORGAN CHASE & CO	9,896,548
MASTERCARD INC	9,575,034
FACEBOOK INC	9,466,020
AIA GROUP LTD	8,450,345
ADOBE SYSTEMS INC	8,341,249
NESTLE SA	8,241,380
BANK OF AMERICA CORP	7,700,941
WALT DISNEY CO/THE	7,557,415
ROCHE HOLDING AG	7,522,993
EXXON MOBIL CORP	7,504,683
NOVARTIS AG	7,281,725
NOVO NORDISK A/S	6,871,104
ALPHABET INC-CL A	6,855,527
AMPHENOL CORP	6,614,501

The top 20 holdings exclude commingled funds. A complete list of holdings is available upon request.

# ■ Top 20 Fixed Income Holdings

Company	Descri	ption	Fair Value
U S TREASURY NOTE	VAR RT	01/31/2019	\$14,523,200
U S TREASURY NOTE	VAR RT	04/30/2018	9,507,030
U S TREASURY NOTE	0.75%	04/15/2018	8,944,589
U S TREASURY NOTE	1.00%	03/15/2019	8,315,664
U S TREASURY NOTE	VAR RT	10/31/2018	8,212,546
U S TREASURY NOTE	VAR RT	01/31/2018	8,001,920
U S TREASURY NOTE	0.88%	01/15/2018	6,599,208
FNMA SF MTG	3.50%	01/01/2048	5,190,070
U S TREASURY NOTE	1.50%	10/31/2019	4,204,912
FNMA SF MTG	4.00%	01/01/2048	3,848,323
U S TREASURY NOTE	1.88%	04/30/2022	3,410,749
GNMA II JUMBOS	3.00%	01/20/2048	3,047,361
FHLMC GOLD SFM	3.50%	01/01/2048	2,808,654
U S TREASURY NOTE	1.88%	09/30/2022	2,694,384
U S TREASURY NOTE	2.00%	10/31/2022	2,450,469
U S TREASURY NOTE	1.38%	07/31/2019	2,367,017
U S TREASURY BOND	2.88%	11/15/2046	2,359,386
FNMA SF MTG	3.00%	01/01/2048	2,250,000
U S TREASURY BOND	4.75%	02/15/2037	2,231,485
U S TREASURY NOTE	2.00%	11/30/2022	2,093,772

The top 20 holdings exclude commingled funds, SWAPS & SWAP collateral. A complete list of holdings is available upon request.

## ■ Performance Summary as of December 31, 2017

Series Name Benchmark Indices	4Q Return Percentage	1 Year Return Percentage	Annualized 3 Year Return Percentage	Annualized 5 Year Return Percentage
FPPA Total Fund - Gross of Fees	4.75%	15.96%	8.17%	9.61%
FPPA Total Fund - Net of Fees	4.45%	14.95%	7.30%	8.78%
Custom Total Fund Benchmark <sup>1</sup>	4.37%	16.81%	7.80%	9.00%
Public Fund Median (BNY/Mellon)	3.73%	15.78%	7.77%	9.01%
Global Public Equity Accounts - Gross of Fees	5.57%	25.43%	10.52%	12.11%
Global Public Equity Accounts - Net of Fees	5.48%	25.00%	10.22%	11.84%
MSCI ACWI IMI w/USA Gross	5.83%	24.58%	10.10%	11.58%
Equity Long/Short - Gross of Fees	3.09%	15.52%	5.93%	8.75%
Equity Long/Short - Net of Fees	2.33%	13.79%	4.32%	7.12%
HFRI Equity Hedge	3.36%	13.29%	5.77%	6.60%
Fixed Income Accounts - Gross of Fees	0.63%	4.05%	2.68%	2.06%
Fixed Income Accounts - Net of Fees	0.57%	3.82%	2.44%	1.82%
Barclays Capital U.S. Aggregate Index	0.39%	3.54%	2.24%	2.10%
Managed Futures - Gross of Fees	8.33%	4.16%	(0.21%)	N/A
Managed Futures - Net of Fees	7.88%	3.23%	(1.15%)	N/A
Barclays Hedge BTOP 50 Index	3.67%	(0.82%)	(2.08%)	N/A
Absolute Return - Gross of Fees	1.46%	7.58%	5.45%	6.31%
Absolute Return - Net of Fees	0.80%	6.12%	3.91%	4.72%
90 Day T-Bill + 400bps	1.24%	4.84%	4.38%	4.24%
Total Illiquid Alternative - Gross of Fees <sup>2</sup>	8.13%	15.79%	12.22%	14.86%
Total Illiquid Alternative - Net of Fees <sup>2</sup>	7.65%	13.73%	10.51%	13.29%
Private Capital Accounts - Gross of Fees	8.60%	22.20%	16.39%	18.00%
Private Capital Accounts - Net of Fees	8.12%	20.18%	14.71%	16.47%
Real Asset Accounts - Gross of Fees	10.05%	5.32%	0.40%	6.41%
Real Asset Accounts - Net of Fees	9.47%	2.57%	(1.77%)	4.33%
Real Estate Accounts - Gross of Fees	4.15%	10.43%	10.91%	13.29%
Real Estate Accounts - Net of Fees	3.83%	9.19%	9.61%	12.10%
MSCI ACWI IMI w/US Gross + 200bps Lagged	5.79%	21.10%	10.07%	12.78%
Comparative Benchmarks				
ILPA All Funds	3.94%	15.49%	10.20%	12.43%
NCREIF NFI-ODCE Index	1.85%	6.66%	9.42%	10.52%
Actuarial Rate	1.83%	7.50%	7.50%	7.50%

Returns were calculated using time-weighted rates of return adjusted for significant cash flows (5% of the portfolio or greater) or the Modified-Dietz method.

<sup>&</sup>lt;sup>1</sup> Composite of the index benchmark returns of each asset class multiplied by their target asset allocations.

<sup>&</sup>lt;sup>2</sup> The majority of Illiquid Alternative accounts are reported on a quarter lag.

# ■ Summary of Brokerage Commissions

Broker Name	Total Commission	Shares Traded	Per Share
STATE STREET BK & TR CO, LONDON	\$39,515	7,857,075	0.005
MORGAN STANLEY & CO INC, NY	59,453	7,482,451	0.008
DEUTSCHE BK INTL EQ, LONDN	2,987	3,360,824	0.001
CREDIT SUISSE, NEW YORK	16,364	3,357,695	0.005
CREDIT SUISSE, LONDON	9,918	3,074,468	0.003
GOLDMAN SACHS INTL, LONDON	4,705	2,545,803	0.002
UBS WARBURG ASIA LTD, HONG KONG	6,101	2,107,614	0.003
ROYAL BANK OF CANADA EUROPE LTD, LONDON	7,342	1,985,654	0.004
BARCLAYS CAPITAL, LONDON	10,457	1,893,109	0.006
UBS WARBURG, LONDON	6,346	1,705,586	0.004
DEUTSCHE BK SECS INC, NY	3,953	1,675,496	0.002
DAIWA SECS LTD, HONG KONG	4,190	1,612,433	0.003
STATE STREET GLOBAL MARKETS LLC, BOSTON	14,323	1,597,269	0.009
INSTINET EUROPE LIMITED, LONDON	10,712	1,406,483	0.008
JEFFERIES & CO INC, NEW YORK	11,401	1,342,593	0.008
INVESTMENT TECHNOLOGY GROUP LTD, DUBLIN	8,054	1,338,607	0.006
GOLDMAN SACHS & CO, NY	8,451	1,304,007	0.006
MERRILL LYNCH INTL LONDON EQUITIES	5,207	1,026,170	0.005
CITIGROUP GLOBAL MARKETS LTD, LONDON	6,034	995,467	0.006
SOCIETE GENERALE LONDON BRANCH, LONDON	6,473	944,428	0.007
UBS SECURITIES LLC, STAMFORD	5,797	869,677	0.007
CREDIT LYONNAIS SECS, HONG KONG	769	738,751	0.001
RBC DOMINION SECS INC, TORONTO	10,969	727,934	0.015
NOMURA SECS INTL INC, NEW YORK	240	720,883	0.000
JP MORGAN SECS LTD, TAIWAN	1,365		0.002
NUMIS SECURITIES INC., NEW YORK	5,061	647,744	0.008
LP MORGAN SECS LTD. LONDON	6.543	633.056	0.010
BERENBERG GOSSLER & CIE. HAMBURG	12.443	630,031	0.020
BRADESCO S.A. CTVM, SAO PAULO	1,904	598,700	0.003
SVENSKA HANDELSBANKEN, STOCKHOLM	9,200	549.768	0.017
CITIGROUP GBL MKTS/SALOMON, NEW YORK	3,538		
BNP PARIBAS SECURITIES SVCS, HONG KONG	422	500,263	0.001
SCOTIA CAPITAL MKTS, TORONTO	5,662	481,604	0.012
CITIGROUP GBL MKTS AUSTRALIA PTY. SYDNEY			0.001
KNIGHT CAPITAL EUROPE LTD, LONDON	1,899	417,540	0.005
J.P. MORGAN SECURITIES, HONG KONG	476	395,139	0.003
INSTINET PACIFIC ITD. HONG KONG	321	381 067	0.001
DAIWA SECS AMER INC, NEW YORK	10,853	358,243	0.030
STATE ST BK & TR CO/SAFEKEEPING, N QUINC	1.059	358,243	0.030
		339,780	
MACQUARIE CAPITAL LTD, LONDON			
	1,287	334,969	0.004
CITIGROUP GBL MKTS CCTVM SA, BRAZIL	2,328	287,562	0.008

# ■ Summary of Brokerage Commissions

Broker Name	<b>Total Commission</b>	Shares Traded	Per Share
UNION BANK SWITZERLAND SECS, LONDON	\$2,038	271,718	0.008
CITIGROUP GBL MKTS INC, NEW YORK	1,693	264,331	0.006
PEEL HUNT LLP, LONDON	2,243	263,067	0.009
BANCO SANTANDER, NEW YORK	1,476	244,420	0.006
INSTINET AUSTRALIA CLEARING SERV, SYDNEY	797	243,011	0.003
PAREL, PARIS	10,918	240,311	0.045
MACQUARIE SECURITIES LTD, AUCKLAND	446	223,218	0.002
BANCO BTG PACTUAL SA, RIO DE JANEIRO	2,638	218,529	0.012
All Other Brokers	172,159	6,035,977	0.029
Total	\$519,717	68,260,338	0.008

#### **General Information**

## **Summary of the Fund's Objectives**

Members of the Self-Directed Investment Fund direct their contributions to one or more of the investment options selected by the Self-Directed Plans Committee pursuant to the fund structure approved by the board of directors or investment options available through a Self-Directed Brokerage Account administered by FPPA's record keeper. It is the Self-Directed Plans Committee's intent to select well-managed funds, across diversified asset classes, as investment options for members participating in the plans. In doing so, the FPPA Board acts pursuant to the requirements of Colorado law governing its selection of investment options for such members, and pursuant to the Fund's master statement of investment policies and objectives, while at the same time seeking to delegate its fiduciary liability to the extent prudent.

In order to provide members with the opportunity to select risk/reward strategies to meet their savings and investment goals, the Self-Directed Plans Committee provides fund options with distinctly different risk/reward trade-offs. To this end, the board's policy is to have a study of investment options performed approximately every two years. The purpose of this study is to provide updated information regarding the risk/reward profiles of current fund options, as well as alternative fund options across various asset classes. This information will be utilized by the Self-Directed Plans Committee in determining appropriate fund options.

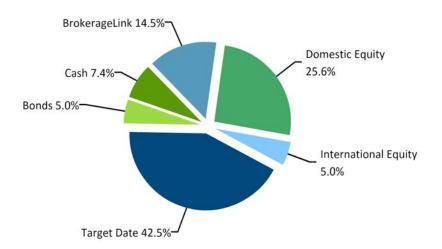
Members make their own decisions when directing the investment of their contributions and accumulated account balances among the investment options offered. Members assume the risk of investment results derived from both the options offered and the strategies they select. It is the member's responsibility to allocate and reallocate assets among investment options as personal circumstances change. The options offered allow the members to address the risks and needs members face.

### **Fund Options for Members**

As with any investment strategy, diversification is a component of effective risk management. FPPA's Board of Directors has selected a variety of funds across various asset classes from which members can select investment options. Within the funds, one or more pooled investment vehicles are offered in the following asset classes: Stable Value, Money Market, Domestic Bond, Domestic Equity, International Equity and Target Date Retirement Funds. FPPA utilizes Fidelity Investments® to provide recordkeeping and investment management services for FPPA's self-directed plans.

### ■ December 31, 2017 Asset Allocation

### 2017 Asset Allocation



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P: 720.274.7270 | F: 303.694.0633 | www.grsconsulting.com

April 2, 2018

Board of Directors Fire & Police Pension Association 5290 DTC Parkway, Suite 100 Greenwood Village, CO 80111

#### Re: Actuarial Certification of Defined Benefit Plans

Dear Members of the Board:

This letter concerns the actuarial valuations (both funding and accounting) of the FPPA Defined Benefit System - Statewide Defined Benefit Plan, the Defined Benefit System - Statewide Hybrid Plan Defined Benefit Component, the Statewide Death & Disability Plan, the Colorado Springs New Hire Plans, and affiliated local old hire and volunteer fire plans.

For each plan, a contribution rate was determined which provides for funding as shown in the following table:

Plan	Funding Objective
Defined Benefit System - Statewide Defined Benefit Plan	Current cost plus level percent of payroll amortization of unfunded liability over 30 years
Defined Benefit System - Statewide Hybrid Plan Defined Benefit Component	Current cost plus level percent of payroll amortization of unfunded liability over 30 years
Statewide Death & Disability Plan	Current cost funded as level percent of payroll of contributing members
Defined Benefit System – Colorado Springs New Hire Pension Plans	Current cost plus level dollar amortization of unfunded liability over 22 years
Affiliated Local Old Hire Plans	Current cost plus level dollar amortization of unfunded liability over 17 years
Affiliated Volunteer Fire Plans	Current cost plus level dollar amortization of unfunded liability over 19 years

Most affiliated plans are valued every two years, while the Defined Benefit System and Statewide Death & Disability Plans, and certain state assisted local old hire plans are valued every year. The funding objective for each plan is currently being realized, with the exception of certain affiliated local old hire plans.

The Statewide Death & Disability Plan ("D&D") contribution rate was increased to 2.6% effective January 1, 2007, the maximum rate currently permitted by statute. The D&D contribution rate may only be

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Board of Directors, Fire and Police Pension Association April 2, 2018 Page 2

changed every two years by statute. Based on the January 1, 2016 actuarial valuation, the Board elected to increase the contribution rate to 2.7% for the two-year period beginning January 1, 2017.

The Defined Benefit System and Statewide Death & Disability Plans, and affiliated local old hire plans were last valued as of January 1, 2017. The affiliated old hire plans were last valued as of January 1, 2017.

The total pension liability for GASB 67 purposes was rolled-forward from the valuation date to the plan's fiscal year ending December 31, 2017 using generally accepted actuarial principles. During 2017, ad hoc benefit adjustments were granted to retirees of the Statewide Defined Benefit Plan and Statewide Hybrid Plan Defined Benefit Component. The Schedule of Changes in the Employer's Net Pension Liability reflects these changes. There were no other significant events or material changes in benefit provisions that required an adjustment to the roll-forward liabilities.

The total OPEB liability for GASB 74 purposes was rolled-forward from the valuation date to the Statewide Death and Disability Plan's fiscal year ending December 31, 2017 using generally accepted actuarial principles.

A single discount rate was used to measure the total pension liability and the total OPEB liability for the fiscal years ending December 31, 2016 and December 31, 2017. This single discount rate was based on the expected rate of return on pension plan investments of 7.50% and municipal bond rates of 3.78% and 3.31% (based on the Fidelity "20-Year Municipal GO AA Index" as of the end of December) for fiscal years ending 2016 and 2017, respectively. The resulting discount rates were 7.50%. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were sufficient to finance all the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each system.

The valuations were performed based on data provided by FPPA's administrative staff, with an examination of the data for reasonableness. The actuarial methods and assumptions used are in full compliance with all the parameters established by GASB Statements Nos. 67, 68, 74 and 75 and meet the parameters set for the disclosures presented in the financial section by GASB Statement Nos. 67 and 74. The assumptions and methods used for funding purposes meet the parameters set by applicable Actuarial Standards of Practice. GRS provided the following schedules for the December 31, 2017 Comprehensive Annual Financial Report (CAFR):

#### Financial Section

- Net Pension Liability
- Required Discount Rate Sensitivity Information for the Defined Benefit System providing the Net Pension Liability at a discount rate that is one percentage point lower and one percentage point higher than the discount rate
- Required Supplementary Information Schedule of Changes in the Employer's Net Pension Liability



#### **Actuary's Certification Letter**

Board of Directors, Fire and Police Pension Association April 2, 2018 Page 3

Required Supplementary Information – Schedule of Employers' Contributions

The following were provided for the Statewide Death and Disability Plan:

- Net OPEB Liability
- Required Discount Rate Sensitivity Information of the Net OPEB Liability at a discount rate that is
  one percentage point lower and one percentage point higher than the discount rate
- Required Supplementary Information Schedule of Changes in the Net OPEB Liability

#### Actuarial Section

- Schedule of Active Member Valuation Data
- Gain/(Loss) on Actuarial Value of Assets
- Schedule of Retirees and Beneficiaries Added To and Removed From Benefit Payroll
- Schedule of Funding Progress
- Solvency Test
- Summary of Actuarial Information for Affiliated Local Plans

#### Statistical Section

Schedule of Average Benefit Payments for New Benefit Recipients

We have reviewed these schedules for their accuracy. To the best of our knowledge, the supporting schedules fully and fairly disclose the accuarial conditions of the plans.

The undersigned are independent actuaries. Both are Members of the Society of Actuaries and meet the Qualifications Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Company

Joseph P. Newton, F.S.A., E.A.

Senior Consultant

Dana Woolfrey, F.S.A., E.A.

Consultant



#### **General Information**

The Fire & Police Members' Benefit Investment Fund of the Fire & Police Pension Association includes the assets of the Defined Benefit System, Affiliated Local "Old Hire" police and fire plans, Affiliated Local Volunteer Firefighter pension plans, and the Statewide Death & Disability Plan. The Defined Benefit System comprises the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan. An independent actuarial firm is hired by the Association to perform annual valuations on the three statewide plans and the Colorado Springs New Hire Pension Plan, and to perform biennial valuations on the local "Old Hire" and volunteer plans. In 2017 and 2016 the independent actuarial valuations were performed by Gabriel, Roeder, Smith & Company.

All of the Affiliated Local "Old Hire" police and fire pension plans have a valuation performed as of January 1 of the even numbered years (2016, 2018, etc.). All of the Affiliated Local Volunteer Firefighter pension plans have valuations performed as of January 1 of the odd numbered years (2017, 2019, etc.).

Each of the locally administered plans has a different benefit and member structure. All of the affiliated plans use the actuarial assumptions which have been established by the Fire & Police Pension Association's Board of Directors.

The following data covers detailed information on the Defined Benefit System, Statewide Death & Disability Plan and the Affiliated Local plans.

## **Summary of Actuarial Assumptions**

The Defined Benefit System is a multi-tiered system that is comprised of the Statewide Defined Benefit Plan, the Statewide Hybrid Plan, and the Colorado Springs New Hire Pension Plan. The Defined Benefit System - Statewide Defined Benefit Plan and the Defined Benefit System - Statewide Hybrid Plan are cost-sharing multiple-employer public employee retirement systems (PERS).

The Defined Benefit System – Statewide Defined Benefit Plan was created by state statute to cover all members hired on and after April 8, 1978 for retirement benefits. This plan was created as the successor to local "Old Hire" plans, most of which had significant unfunded liabilities. The local "Old Hire" plans are closed to new entrants. As of December 31, 2017, 227 employer fire and police departments throughout the state were participating in the Defined Benefit System – Statewide Defined Benefit Plan.

The Defined Benefit System – Statewide Hybrid Plan was created by state statute on January 1, 2004 as an option for local Money Purchase plans and participants in the Fire & Police Members' Statewide Money Purchase plan. It allows participants in these plans to migrate to a defined benefit plan administered by the Fire & Police Pension Association. The plan is comprised of two components, the Defined Benefit Component and the Money Purchase Component. As of December 31, 2017, 40 employer fire and police departments throughout the state were participating.

Two plans joined the Defined Benefit System as of October 1, 2006. They are defined benefit plans for fire and police employees hired on and after April 8, 1978 but prior to October 1, 2006 for the City of Colorado Springs. Upon joining the Defined Benefit System, these two plans merged into one plan document but with a police and fire component. The plan is closed to new members as of October 1, 2006.

The Statewide Death & Disability Plan is a defined benefit cost-sharing multiple-employer death and disability plan, previously funded almost exclusively by contributions from the state. This plan was created by state statute, and is designed to provide both on- and off-duty coverage for death and disability for all members in the state who have not yet completed the age and service requirements for a normal retirement. As of December 31, 2017, 269 employer fire and police departments were participating.

The Affiliated Local Plans include defined benefit retirement plans for fire and police employees in the State of Colorado hired before April 8, 1978 (Old Hires), provided that such plans have affiliated with the Fire & Police Pension Association, and the affiliated volunteer firefighter pension plans in the State of Colorado. There are 221 Affiliated Local Plans as of December 31, 2017.

The valuations for the Defined Benefit System - Statewide Defined Benefit Plan and the Colorado Springs New Hire Pension Plan are used to determine the normal cost of the plan, and to determine any "excess" contribution amounts which may be allocated to the members' separate retirement accounts (SRAs) for the following year.

#### **General Information and Summary of Actuarial Assumptions**

The valuation for the Defined Benefit System - Statewide Hybrid Plan – Defined Benefit Component is also used to determine the normal cost of the plan and to determine any "excess" contribution amounts which may be allocated to the Money Purchase Component of the Plan.

The Fire & Police Pension Association supplied the data for the retired, active and inactive members to the actuary. The data was examined for general reasonableness and consistency with prior years' information by the independent actuarial firm but was not audited.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA) and an Enrolled Actuary (EA).

The actuarial assumptions have been selected by the Fire & Police Pension Association's Board of Directors based upon the actuary's analysis and recommendations from the 2015 Experience Study. The assumptions and methods are detailed within the Actuarial Section of this report. The FPPA Board has sole authority to determine the actuarial assumptions used for the plans. The assumptions that are based upon the actuary's recommendations are internally consistent and are reasonably based on the actual past experience of the plans. These assumptions are also in full compliance with all of the parameters established by Government Accounting Standards Board (GASB) Statements No. 67, No. 68, and No. 74. The following economic and non-economic assumptions were adopted by the Fire & Police Pension Association's Board of Directors and were first used during the January 1, 2016 actuarial valuations.

#### **Actuarial Experience Study**

At least every five years the Fire & Police Pension Association's Board of Directors, in accordance with best practices, reviews its economic and demographic actuarial assumptions.

At its July 2015 meeting, the board of directors reviewed and approved recommended changes to the actuarial assumptions. The assumption changes were effective for actuarial valuations beginning January 1, 2016. The actuarial assumptions impacted actuarial factors for benefit purposes such as purchases of service credit and other benefits where actuarial factors are used. The date the new actuarial assumptions were effective for benefit purposes was October 1, 2016.

The main actuarial factor changes effective January 1, 2016 were:

- Reduce the inflation assumption from 3.0% to 2.5%. It was determined that the 3.0% assumption is higher than the long term historical average, the recent historical average, and most sources of future expectations. The decision to lower the assumption to 2.5% places the assumption closer to recent inflation levels and closer to the levels expected in the bond market. The real return on investments was increased to 5.0% for an overall nominal investment return of 7.50%. The productivity component of the salary increases was increased from 1.0% to 1.5%. The aggregate effect of these changes (inflation, real return, and the productivity component of the salary increase) on the actuarial results was minimal.
- Add an explicit charge for administrative expenses in the actuarial contribution calculation. Although the nominal
  investment return was not changed from 7.50%, adding an explicit administrative expense effectively reduces the return
  that must be earned by the plans in order to meet the actuarial assumption since the investment return is no longer
  net of administrative expenses. This does not alter the accrued liability, but it does increase the actuarially calculated
  contribution.
- Revise the base mortality tables and the explicit assumption for increasing longevity in the future to reflect current mortality studies. This had the effect of increasing longevity expectations, and in turn, increasing expected costs and liabilities.
- Increase the expected incidence of Total Disability for members of FPPA's defined benefit plans. Disability incidence is an important assumption for FPPA plans because a disability occurrence shifts all liability from the Defined Benefit System plans (Statewide Defined Benefit Plan, Statewide Hybrid Defined Benefit Component Plan, Colorado Springs New Hire Plan) to the Statewide Death & Disability Plan. Increasing the expected incidence of Total Disability creates a large increase in projected benefits from the Statewide Death & Disability Plan and reduces projected benefits from the Defined Benefit System retirement plans.

The actuarial assumptions implemented January 1, 2016 are a more conservative position for the Fire & Police Pension Association as it proceeds forward. As always, the assumptions will be reviewed against actual experience each year and gains or losses recognized in accordance with Governmental Accounting Standards Board standards and our actuarial methods and policies.

#### **Economic Assumptions**

Effective January 1, 2016 the investment rate of return for purposes of the actuarial valuation is 7.5% per annum, compounded annually and net of operating expenses. Future inflation is assumed to be 2.5% annually and is included in the active members' salary projections. Thus the real investment rate of return, net of inflation, is 5.0% per annum. Even though lowering the inflation assumption actually increases the assumed real rate of return assumption, there have been adjustments to the asset allocation as inflation expectations have continued to decrease in order to increase the real return of the portfolio.

Effective January 1, 2016, active members' salary increases are composed of three pieces, inflation increases, productivity component of 1.5%, and step-rate/promotional component which varies by the service of the member. The inflation assumption is 2.5% annually. For the Statewide Plans, retirees and beneficiaries are not assumed to receive annual cost-of-living increases as described under current state statute.

Under the affiliated plans, paid plan retirees and beneficiaries from limited rank escalation departments are projected to receive annual cost-of-living increases of 3.5% per annum, compounded annually for benefits accrued prior to January 1, 1980, and 3% per annum compounded annually for benefits accrued after January 1, 1980 (maximum permitted by law). Paid plan retirees and beneficiaries from full rank escalation departments are projected to receive annual cost-of-living increases of 3.5% per annum.

Assets are valued at an actuarial value of assets. The actuarial value of assets is based on the fair value of assets with a five-year phase-in of actual investment return in excess of or less than expected investment income. The returns are computed net of administrative and investment expenses.

No new members are projected to be added to the plans.

## **Non-economic Assumptions**

Effective January 1, 2016, the post-retirement mortality tables for non-disabled retirees is a blend of the Annuitant and Employee RP-2014 generational mortality tables with blue collar adjustment projected with Scale BB. The occupationally disabled post-retirement mortality assumption uses the same table as used for healthy annuitants, except there is a three year set-forward, meaning a disabled member age 70 will be valued as if they were a 73 year old healthy retiree. The totally disabled post-retirement mortality assumption uses the RP-2014 generational mortality tables for disabled annuitants, except an additional provision to apply a minimum 3% mortality probability to males and 2% mortality probability for females is included to reflect substantial impairment for this population. The pre-retirement off-duty mortality tables are adjusted to 55% of the RP-2014 mortality tables for active employees. The on-duty mortality rate is 0.00020.

The actuarial method used for the valuation of benefits for funding and financial reporting purposes is specified by state statute to be either the Entry Age Normal or Aggregate Cost Method, with experience gains or losses adjusting the unfunded actuarial accrued liability. The surplus in the Defined Benefit System - Statewide Defined Benefit Plan and the Defined Benefit System - Statewide Hybrid Plan are amortized over 30 years from the valuation date. Since the two components of the Colorado Springs New Hire Pension Plan are closed plans, the amortization period for these plans are over 30 years from January 1, 2008. State statute also specifies that the Defined Benefit System - Statewide Defined Benefit Plan must be fully funded on an actuarially sound basis without necessitating an increase in the 8% employer and 8% member contribution or such higher member contribution rate established in an election of the membership. Within the Defined Benefit System - Statewide Defined Benefit Plan employer contribution rates can only be amended by state statute. Member contribution rates can be amended by state statute or by an election of the membership.

## ■ Pre-Retirement Assumptions – Annual Rate Per 1,000 Members

Sample	Disability			Years of Separation		ration	Attained -	De	eath
Ages	Occupational	Total	Volunteer	Service	Members	Volunteer	Age in 2016	Male	Female
25	0.29	0.02	0.16	0	98.5	165.79	25	0.54	0.31
30	1.35	0.17	0.26	5	43.6	123.85	30	0.52	0.33
35	1.82	0.34	0.45	10	17.9	82.97	35	0.57	0.38
40	2.67	0.52	0.97	15	9.9	54.92	40	0.64	0.44
45	3.29	0.72	3.50	20	8.1	0.00	45	0.89	0.60
50	4.89	0.94	6.50	23	5.2	0.00	50	1.39	0.88
55	6.88	1.17	8.10				55	2.17	1.22

### For Statewide Death and Disability Plan:

## Service Retirement:

- 1) Statewide Defined Benefit System members Age 55 with 5 years of service, or current age, if greater.
- 2) Money purchase plan members Earlier of age 65 or age 55 with 25 years of service; or current age, if greater.
- 3) Denver Police local plan members Age after 25 years of service or current age, if greater.
- 4) Denver Fire local plan members Age 50 and 25 years of service or current age, if greater.
- 5) All other plan members Age 52 or current age, if greater.

## ■ Pre-Retirement Assumptions – Salary Increase Rates

Years of Service	Annual Step-Rate/ Promotional Rate	Total Annual Rate of Increase Including 2.5% Inflation Component and 1.5% Productivity Component
1	10.00%	14.00%
2	8.50%	12.50%
3	8.00%	12.00%
4	7.50%	11.50%
5	2.50%	6.50%
6	1.50%	5.50%
7	1.50%	5.50%
8	1.00%	5.00%
9	0.75%	4.75%
10	0.50%	4.50%
11	0.50%	4.50%
12	0.50%	4.50%
13	0.25%	4.25%
14	0.25%	4.25%
15	0.00%	4.00%

# **■** Post-Retirement Assumptions

			_		Annual Rate per 1,000 Members							
			Limite	d Rank		althy or Survivor		ationally d Retirees		tally d Retirees		Member ath
Sample Ages	COLA Increases	Full Rank	(Pre 1980)	(Post 1980)	(Male)*	(Female)*	(Male)*	(Female)*	(Male)*	(Female)*	(Male) *	(Female)
20	N/A										0.49	0.30
30	N/A										0.52	0.33
40	N/A										0.64	0.44
45	N/A										0.89	0.60
50	N/A	3.5%	3.5%	3.0%	2.17	1.23	2.94	1.59	30.00	20.00	1.39	0.88
55	N/A	3.5%	3.5%	3.0%	3.68	1.97	5.56	3.33	30.00	20.00	2.17	1.22
60	N/A	3.5%	3.5%	3.0%	7.24	4.62	10.18	6.89	30.00	20.00		
65	N/A	3.5%	3.5%	3.0%	12.31	8.52	15.95	11.24	30.93	20.36		
70	N/A	3.5%	3.5%	3.0%	19.10	13.63	25.23	18.36	39.14	27.53		

<sup>\*</sup>Age attained in 2016.

# ■ Schedule of Active Member Valuation Data

Valuation Date	Number	Average Age	Average Service	Covered Payroll	Annual Average Pay	% Increase in Average Pay
1/1/2017	6,900	40.7	10.5	\$513,837,288	\$74,469	3.86%
1/1/2016	6,602	40.7	10.5	473,359,565	71,699	1.46%
1/1/2015	6,245	40.8	10.7	441,313,862	70,667	1.19%
1/1/2014	6,110	40.7	10.6	426,690,241	69,835	(0.18%)
1/1/2013	5,807	41.0	10.8	406,258,662	69,960	3.94%
1/1/2012	5,717	40.8	10.5	384,803,645	67,309	1.19%
1/1/2011	5,314	40.7	10.5	353,484,986	66,520	1.83%
1/1/2010	5,331	40.1	9.9	384,253,545	65,326	5.12%
1/1/2009	5,197	39.6	9.5	322,971,268	62,146	3.91%
1/1/2008	4,988	39.3	9.2	298,313,990	59,806	2.00%

# ■ Gain (Loss) on Actuarial Value of Assets

	Valuation as of January 1, 2017	Valuation as of January 1, 2016
Actuarial assets, prior valuation	\$1,890,604,068	\$1,714,971,185
Total Contributions since prior valuation	100,378,690	110,242,127
Benefits and refunds since prior valuation	(65,186,443)	(54,839,864)
Assumed net investment income at actuarial rate%*		
Beginning assets	141,795,305	128,622,839
Contributions	3,764,201	4,134,080
Benefits and refunds paid	(2,444,492)	(2,056,495)
Total	\$143,115,014	\$130,700,424
Expected actuarial assets	\$2,068,911,329	\$1,901,073,872
Actual actuarial assets, this valuation	\$2,050,113,711	\$1,890,604,068
Asset gain/(loss)	\$(18,797,618)	\$(10,469,804)
	Loss	Loss

<sup>\*7.5%</sup> as of 1/1/2012

## ■ Schedule of Retirees and Beneficiaries Added To and Removed From Benefit Payroll\*

	Added to Payroll**		Ided to Payroll** Removed from Payroll		F	Payroll	% Increase	Average
Year Ended	Number	Annual Benefit	Number	Annual Benefit	Number	Annual Benefit	in Annual Benefit	Annual Benefit
12/31/2016	131	\$6,612,256	5	\$138,121	1,301	\$54,808,412	13.39%	\$42,128
12/31/2015	131	6,463,995	5	120,311	1,175	48,334,277	15.11%	41,136
12/31/2014	146	6,358,310	5	121,694	1,049	41,990,593	17.44%	40,029
12/31/2013	155	7,528,613	2	81,763	908	35,753,977	26.31%	39,377
12/31/2012	115	5,199,290	1	43,620	755	28,307,127	22.27%	37,493
12/31/2011	130	5,959,060	2	68,483	641	23,151,457	34.05%	36,118
12/31/2010	94	3,862,662	5	131,169	513	17,270,880	27.56%	33,666
12/31/2009	75	2,981,664	4	43,765	424	13,539,387	27.71%	31,933
12/31/2008	65	2,375,478	3	75,874	353	10,601,488	27.70%	30,033
12/31/2007	66	2,201,387	1	29,009	291	8,301,884	35.44%	28,529

<sup>\*</sup>Includes beneficiaries of deceased members with a deferred benefit

## Schedule of Funding Progress

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded (Surplus) Actuarial Accrued Liability as a Percentage of Covered Payroll
1/1/2017	\$2,050,113,711	\$2,021,526,883	\$(28,586,828)	101.4%	\$513,837,288	(5.56)%
1/1/2016	1,890,604,068	1,846,961,999	(43,642,069)	102.4%	473,359,565	(9.22)%
1/1/2015	1,714,971,185	1,652,901,084	(62,070,101)	103.8%	441,313,862	(14.06)%
1/1/2014	1,546,834,469	1,533,631,141	(13,203,328)	100.9%	426,690,241	(3.09)%
1/1/2013	1,374,576,631	1,404,607,765	30,031,134	97.9%	406,258,662	7.39 %
1/1/2012	1,225,537,747	1,271,490,169	45,952,422	96.4%	384,803,645	11.94 %
1/1/2011	1,080,284,447	1,049,622,033	(30,662,414)	102.9%	353,484,986	(8.67)%
1/1/2010	963,500,681	963,300,852	(199,829)	100.0%	363,265,902	(0.06)%
1/1/2009	856,090,014	847,821,122	(8,268,892)	101.0%	337,918,774	(2.45)%
1/1/2008	950,114,346	795,499,983	(154,614,363)	119.4%	312,857,166	(49.42)%

## **Limitations of Funded Status Measurements**

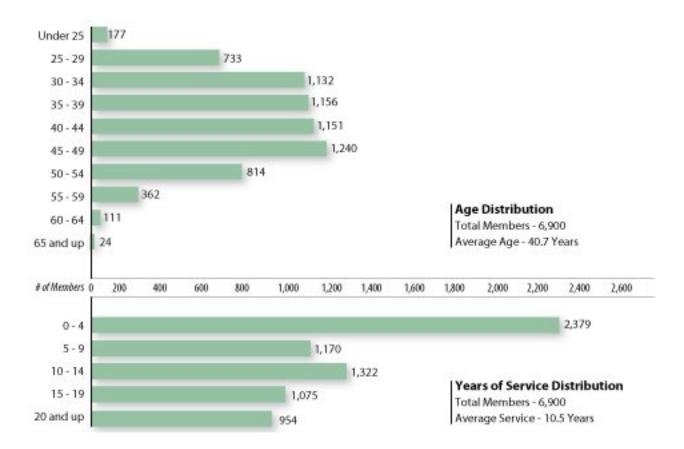
Unless otherwise indicated, a funded status measurement presented in this chart is based upon the actuarial accrued liability and the actuarial value of assets.

With regard to any funded status measurements presented in this chart:

- (1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
- (2) The measurement alone is inappropriate for assessing the need for or the amount of future employer contributions.
- (3) The measurement would produce a different result if the market value of assets were used instead of the actuarial value of a sets, unless the market value of assets is used in the measurement.

<sup>\*\*</sup>Includes Benefit Adjustments

# ■ Age and Years of Service Distribution



### **Solvency Test**

The Fire & Police Pension Association's funding objective for the Defined Benefit System - Statewide Defined Benefit Plan is to be able to pay the retirement benefits promised to the members including the granting of an annual benefit adjustment to all retirees and beneficiaries. The objective is to entirely fund these promised benefits by the total member and employer combined contribution rate. In 2017, the total member and employer combined contribution rate was 17.5% of base salary.

A short-term solvency test is used to check the funding progress towards its funding objective. In a short-term solvency test, the plan's present assets are compared with: (1) liability for active member contributions on deposit, (2) liability for future benefits to present retired lives, (3) liability for service already rendered by active members.

Expressing the net assets available for benefits as a percentage of the different liability measures provides one indication of the funding status on a going-concern basis. Generally, the greater the percentages, the stronger the public employee retirement system.

The schedule on this page illustrates the progress in funding the various liability measures. As can be seen by the funded percentages, the liabilities were not covered by current assets as of the January 1, 2012 and 2013 valuation dates. As of the January 1, 2014 valuation, the liabilities are 100% covered by current assets. This plan does not have any unfunded liability and current contributions exceed the cost of annual benefit accruals.

## ■ Solvency Test

		Aggre	gate Accrued Liabili	ties For				
		(1)	(2)	(3)				
Valuation Valuation Assets		Active Member Contributions	Retirees, Beneficiaries and Vested Terminations	Members (Employer Financed Portion)	Portion of Accrued Liabilities Covered by Reported Assets			
Date	(000's)	(000's)	(000's)	(000's)	(1)	(2)	(3)	
1/1/2017	\$2,050,114	\$441,466	\$691,929	\$888,132	100%	100%	100%	
1/1/2016	1,890,604	422,699	608,987	815,276	100%	100%	100%	
1/1/2015	1,714,971	384,837	521,492	746,572	100%	100%	100%	
1/1/2014	1,546,834	369,248	443,857	720,526	100%	100%	100%	
1/1/2013	1,374,577	353,206	355,705	695,697	100%	100%	95.7%	
1/1/2012	1,225,538	331,763	296,225	643,502	100%	100%	92.9%	
1/1/2011	1,080,284	276,908	210,799	561,915	100%	100%	100%	
1/1/2010	963,501	259,369	165,390	538,542	100%	100%	100%	
1/1/2009	856,090	232,742	135,004	480,075	100%	100%	100%	
1/1/2008	950,114	211,285	110,301	473,914	100%	100%	100%	

### Summary of Plan Provisions

#### **Plan Description**

The Fire & Police Pension Association Defined Benefit System – Statewide Defined Benefit Plan ("Plan") is a cost-sharing multiple-employer defined benefit pension plan. The Plan covers substantially all full-time employees of participating fire or police departments in Colorado hired on or after April 8, 1978, provided that they are not already covered by a statutorily exempt plan. As of August 5, 2003, the Plan may include clerical and other personnel from fire districts whose services are auxiliary to fire protection. The Plan was established in 1980 pursuant to Colorado Revised Statutes.

Employers once had the option to elect to withdraw from the Plan, but a change in state statutes permitted no further withdrawals after January 1, 1988 unless the employer elects into and is determined to be eligible to participate in the Statewide Money Purchase Plan.

The Plan assets are included in the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund (for Deferred Retirement Option Plan "DROP" assets and Separate Retirement Account "SRA" assets from eligible retired members.)

#### **Plan Year**

A twelve-month period ending December 31.

#### **Members Included**

Members included are active employees who are full-time salaried employees of a participating municipality, fire protection district, fire authority, or county improvement district normally serving at least 1,600 hours in a calendar year and whose duties are directly involved with the provision of police or fire protection. As of August 5, 2003, the Plan may include clerical and other personnel employed by a fire protection district, fire authority, or a county improvement district.

Also included are employees of any employer that covers members under the federal Social Security Act or any county that chooses to affiliate with the Fire & Police Pension Association and includes all personnel employed by a sheriff expected to work 1,600 hours or more in a calendar year who are directly involved with the provision of law enforcement or fire protection, as certified by the county.

## **Compensation Considered (Base Salary)**

Base salary means the total base rate of pay including Member Contributions to the Statewide Defined Benefit Plan or Statewide Money Purchase Plan which are "picked up" by the employer:

- And shall also include longevity pay, sick leave pay taken in the normal course of employment, vacation leave pay taken in the normal course of employment, shift differential, and mandatory overtime that is part of the Member's fixed, periodic compensation.
- 2) Accumulated vacation leave pay will also be included if a Member completes their service requirement for purposes of Normal retirement while exhausting accumulated vacation leave.
- 3) In the event an employer has established or does establish a Deferred Compensation Plan, the amount of the Member's salary that is deferred shall be included in the Member's base salary.
- 4) Any amounts voluntarily contributed to an Internal Revenue Code Section 125 "Cafeteria Plan" shall be included in the Member's base salary.
- 5) Base salary shall not include overtime pay (except as noted in section 1) above), step—up pay or other pay for temporarily acting in a higher rank (a Member is deemed temporarily acting in a higher rank if the appointment to the rank is anticipated to last less than six months.), uniform allowances, accumulated sick leave pay, accumulated vacation leave pay (except as noted in the preceding sentence), and other forms of extra pay (including Member Contributions which are paid by the employer and not deducted from the Member's salary).

#### **Contribution Rates**

Contribution rates for this Plan are set by state statute. Employer contribution rates can only be amended by state statute. Member contribution rates can be amended by state statute or by election of the membership.

Members of this Plan and their employers contributed at the rate of 8 percent of base salary for a total contribution rate of 16 percent through 2014. In 2014, the members elected to increase the member contribution rate to the Plan beginning in 2015. Member contribution rates will increase 0.5 percent annually through 2022 to a total of 12 percent of base salary. Employer contributions will remain at 8 percent resulting in a combined contribution rate of 20 percent in 2022.

Contributions from members and employers of plans reentering the system are established by resolution and approved by the Fire & Police Pension Association's Board of Directors. The reentry group had a combined contribution rate of 20 percent of base salary through 2014. It is a local decision on who pays the additional 4 percent contribution. Per the 2014 member election, the reentry group also had their required member contribution rate increase 0.5 percent annually beginning in 2015 through 2022 for a total combined member and employer contribution rate of 24 percent.

The contribution rate for members and employers of affiliated social security employers was 4 percent of base salary for a total contribution rate of 8 percent effective January 1, 2007 through 2014. Per the 2014 member election, the affiliated social security group also had their required member contribution rate increase 0.25 percent annually beginning in 2015 through 2022 to a total of 6 percent of base salary. Employer contributions will remain at 4 percent resulting in a combined contribution rate of 10 percent in 2022.

## ■ Contribution Rate Implementation Schedule

Effective Date	Member Contribution Rate	Employer Contribution Rate	Total Combined Contribution Rate
1/1/2014	8.0%	8.0%	16.0%
1/1/2015	8.5%	8.0%	16.5%
1/1/2016	9.0%	8.0%	17.0%
1/1/2017	9.5%	8.0%	17.5%
1/1/2018	10.0%	8.0%	18.0%
1/1/2019	10.5%	8.0%	18.5%
1/1/2020	11.0%	8.0%	19.0%
1/1/2021	11.5%	8.0%	19.5%
1/1/2022	12.0%	8.0%	20.0%
Beyond	12.0%	8.0%	20.0%

Note: The Statewide Defined Benefit Plan - Reentry group has a combined contribution rate of 20% through 2014. It is a local decision on who pays the additional 4% contribution. Effective 1/1/2015, the member contribution rate will increase by 0.5% per year over 8 years for a total combined member and employer contribution rate of 24%.

#### Supplemental Social Security – Contribution Rate Implementation Schedule

Effective Date	Member Contribution Rate	Employer Contribution Rate	Total Combined Contribution Rate
1/1/2014	4.00%	4.00%	8.00%
1/1/2015	4.25%	4.00%	8.25%
1/1/2016	4.50%	4.00%	8.50%
1/1/2017	4.75%	4.00%	8.75%
1/1/2018	5.00%	4.00%	9.00%
1/1/2019	5.25%	4.00%	9.25%
1/1/2020	5.50%	4.00%	9.50%
1/1/2021	5.75%	4.00%	9.75%
1/1/2022	6.00%	4.00%	10.00%
Beyond	6.00%	4.00%	10.00%

## **Highest Average Salaries (HAS)**

HAS is the average of the member's highest three annual base salaries.

#### **Normal Retirement Date**

A member's Normal Retirement shall be the date on which the member has completed at least 25 years of credited service and has attained the age of 55.

#### **Normal Retirement Benefit**

The annual Normal Retirement Benefit shall be 2 percent of the average of the member's highest three years base salary for each year of credited service up to ten years plus 2.5 percent for each year thereafter.

The benefit for members of affiliated social security employers will be reduced by the amount of social security income the member receives annually, calculated as if the social security benefit started as of age 62 for benefits prior to 2007. Beginning January 1, 2007, members of affiliated social security employers will participate in the Fire & Police Pension Association supplemental social security program which will provide benefits equal to 1 percent of the average of the member's highest three years base salary for each year of credited service up to ten years plus 1.25 percent for each year thereafter.

Benefits are paid as a monthly life annuity. Other forms of payment are available.

#### **Early Retirement Benefit**

A member shall be eligible for an Early Retirement Benefit after completion of thirty years of service or attainment of age 50 with at least five years of credited service. The Early Retirement Benefit shall be the Normal Retirement Benefit reduced on an actuarially equivalent basis.

Benefits are paid as a monthly life annuity. Optional forms of payment are available.

#### **Terminated Vested Benefit**

A member who terminates with at least five years of service is vested. A vested member who does not withdraw their contributions from the Plan is eligible for a vested benefit, payable at age 55. The annual vested benefit is equal to 2 percent of the average of the member's highest three years base salary for each year of credited service up to ten years plus 2.5 percent for each year thereafter. Both the highest average salary and service are determined at the time the member leaves active employment or enters the Deferred Retirement Option Plan (DROP). Benefits may commence at age 55.

The benefit for members of affiliated social security employers earned prior to January 1, 2007 will be reduced by the amount of social security income the member receives annually.

Benefits are paid as a monthly life annuity. Other forms of payment are available.

#### **Deferred Retirement Benefit**

Members who qualify for a Normal or Vested Retirement may defer the receipt of their defined benefit pension to as late as age 65 and receive the actuarial equivalent of the benefit.

Benefits are paid as a monthly life annuity. Optional forms of payment are available.

#### **Severance Benefit**

All members leaving covered employment with less than five years of service credit are eligible. Optionally, vested members (those with five or more years of service credit) may withdraw their accumulated contributions in lieu of the future vested benefits otherwise due.

The member receives a lump-sum payment equal to the sum of their member contributions. 5 percent as interest is credited on these contributions.

#### **Death Benefit of Active Members**

Death must have occurred while an active or an inactive, non-retired member.

Upon the death of a non-vested active, unmarried member with no spouse, no dependent children, and no beneficiary, a refund of the member's contributions is paid to the member's estate. If the member was vested, single and had no dependent children and was not eligible for a Normal or Early retirement, a joint and survivor annuity may be paid to the beneficiary if greater than the refund. The benefit for members of affiliated social security employers earned prior to January 1, 2007 will be reduced by the amount of social security income the member receives annually.

Survivors (spouse or dependent children) of active members who die prior to retirement eligibility are covered by the benefits provided by the Statewide Death & Disability Plan. For purposes of the Statewide Death & Disability Plan benefits, a spouse includes a partner in a civil union.

Survivors of an active or inactive member who is eligible for a Normal or Early retirement and who dies after leaving active service but before electing a payment option or receiving the first pension payment is eligible to receive a benefit according to payment Option 1, (Joint and 100% Survivor benefits).

### **Forms of Payment**

The Plan provides six choices for receipt of the retirement benefit:

#### **Normal Option**

The retiree receives a full, monthly pension benefit for their life. No monthly benefits are paid to a beneficiary following the retiree's death. However, if at the time of the member's death, they have not recouped in pension payments the amount of the member contributions (including all funds paid in to purchase service credit), the remaining funds plus 5% as interest would be paid to the member's beneficiary or estate as a lump sum.

#### Option 1

(Joint and 100% Survivor) - Under Option 1, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent monthly pension will continue for the life of the retiree. Upon the death of the retiree, the same monthly pension will be paid to the retiree's designated beneficiary for life.

#### Option 2

(Joint and 50% Survivor) - Under Option 2, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent monthly pension will continue for the life of the retiree. Upon the death of the retiree, 50 percent of the same monthly pension will be paid to the retiree's designated beneficiary for life.

#### Option 3

(Joint and 50% Last Survivor) - Under Option 3, an actuarially equivalent normal, deferred, early or vested retirement monthly pension will be shared by the retiree and their named beneficiary. Upon the death of either the retiree or the designated beneficiary, 50 percent of the same monthly pension will be paid to the survivor for life.

## Option 4

(Joint and 100% Survivor with "Pop Up") - Under Option 4, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent, monthly pension will continue for the life of the retiree. Upon the death of the retiree, the same monthly pension will be paid to the retiree's designated beneficiary for life. However, if the designated beneficiary dies before the retiree, the monthly pension benefit "pops—up" or reverts to the Normal Option effective with the first day of the month following the date of the death of the beneficiary.

## Option 5

(Joint and 50% Survivor with "Pop Up") - Under Option 5, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent monthly pension will continue for the life of the retiree. Upon the death of the retiree, 50 percent of the same monthly pension benefit will be paid to the retiree's beneficiary for life. However, if the beneficiary dies before the retiree, the monthly pension benefit "pops—up" or reverts to the Normal Option effective with the first day of the month following the date of the death of the beneficiary.

Survivor benefits are paid according to the payment option elected by the member at the time of retirement or entry into DROP.

Actuarial equivalence is based on tables adopted by the Fire and Police Pension Association Board of Directors.

#### **Benefit Adjustments for Benefits in Pay Status**

Benefits to members and beneficiaries may be increased annually on October 1. The amount is based on the Fire & Police Pension Association Board of Directors discretion and can range from 0 percent to the higher of 3 percent or the Consumer Price Index. Benefit adjustment may begin once the retired member has been receiving retirement benefits for at least 12 calendar months prior to October 1.

#### Stabilization Reserve Account (SRA)

Annually, at the discretion of the board of directors, the difference between the combined member/employer contribution and the actuarially determined contribution rate may be allocated to the stabilization reserve account (SRA). Amounts set aside in the SRA are allocated to individual accounts for each member. A member may receive the amounts in this individual account only upon election of Normal, Early, Disability or Vested retirement. If the cost of the Plan exceeds the combined member/employer contribution rate, funds from the SRA may be used to make up the shortfall. If a member leaves with less than five years of service credit, the SRA account is forfeited. Likewise, if a vested member elects to take a refund of member contributions instead of a retirement, the SRA is forfeited. The SRA may be payable in the event of the active member's death if the member was vested at the time of death, or if the member's survivors receive benefits from the Statewide Death & Disability Plan, the applicable SRA offset applies.

Members of plans reentering the system have a higher contribution rate. As a result their SRA has two components: the standard SRA and the reentry SRA. The component of the member's SRA attributable to the higher contribution rate is considered the reentry SRA. The reentry SRA cannot be used to subsidize the costs of the non-reentry members. The reentry SRA could be used to correct any deficiencies in the cost of participation for the reentry members only.

A member may elect to convert the SRA or reentry SRA to a lifetime monthly benefit with survivor benefits.

### **Deferred Retirement Option Plan (DROP)**

A member may elect to participate in the DROP after reaching eligibility for normal retirement, early retirement, or vested retirement and age 55. A member can continue to work while participating in the DROP, but must terminate employment within 5 years of entry into the DROP. The member's percentage of retirement benefit is determined at the time of entry into the DROP. The monthly payments that begin at entry into the DROP are accumulated in a DROP account until the member terminates service, at which time the DROP accumulated benefits can be paid as periodic installments, a lump sum, or if desired a member may elect to convert the DROP to a lifetime monthly benefit with survivor benefits. While participating in DROP, the member continues to make pension contributions, which are credited to the DROP. Effective January 1, 2003, the member shall self-direct the investments of their DROP funds.

### **Changes in Plan Provisions**

The plan provisions have not changed since the prior valuation.

### **Changes in Actuarial Assumptions**

There were no changes in actuarial assumptions since the January 1, 2016 valuation.

# ■ Schedule of Active Member Valuation Data

Valuation Date	Number	Average Age	Average Service	Covered Payroll	Annual Average Pay	% Increase in Average Pay
1/1/2017	150	46.3	13.4	\$12,506,946	\$83,380	3.98%
1/1/2016	160	46.1	12.2	12,830,741	80,192	3.05%
1/1/2015	156	46.1	11.5	12,140,184	77,822	2.26%
1/1/2014	170	45.6	10.8	12,937,791	76,105	1.02%
1/1/2013	172	45.3	10.3	12,958,335	75,339	10.58%
1/1/2012	171	44.5	8.9	11,650,031	68,129	(2.59%)
1/1/2011	121	43.4	9.7	8,462,937	69,942	2.20%
1/1/2010	126	42.7	8.9	8,622,865	68,435	6.30%
1/1/2009	114	41.2	8.8	7,338,959	64,377	5.93%
1/1/2008	115	40.9	8.5	6,988,987	60,774	(10.08%)

# ■ Gain (Loss) on Actuarial Value of Assets

	Valuation as of January 1, 2017	Valuation as of January 1, 2016
Actuarial assets, prior valuation	\$47,344,971	\$39,772,760
Total Contributions since prior valuation	5,417,020	5,644,278
Benefits and refunds since prior valuation	(1,296,786)	(971,463)
Assumed net investment income at actuarial rate%*		
Beginning assets	3,550,873	2,982,957
Contributions	203,138	211,660
Benefits and refunds paid	(48,630)	(36,430)
Total	\$3,705,381	\$3,158,187
Expected actuarial assets	\$55,170,586	\$47,603,762
Actual actuarial assets, this valuation	\$54,702,116	\$47,344,971
Asset gain/(loss) since prior valuation	\$(468,470)	\$(258,791)
	Loss	Loss

<sup>\*7.5%</sup> as of 1/1/2012

## Schedule of Retirees and Beneficiaries Added To and Removed From Benefit Payroll

	Added to Payroll*		Removed	Removed from Payroll		Payroll		Average
Year Ended	Number	Annual Benefit	Number	Annual Benefit	Number	Annual Benefit	% Increase in Annual Benefit	Annual Benefit
12/31/2016	6	\$329,916	0	\$0	40	\$1,419,211	30.29%	\$35,480
12/31/2015	9	225,384	0	0	34	1,089,295	26.09%	32,038
12/31/2014	6	266,259	0	0	25	863,911	44.55%	34,556
12/31/2013	3	111,306	0	0	19	597,652	22.89%	31,455
12/31/2012	2	54,220	0	0	16	486,346	12.55%	30,397
12/31/2011	4	174,855	0	0	14	432,126	67.96%	30,866
12/31/2010	4	90,509	0	0	10	257,272	54.27%	25,727
12/31/2009	0	4,858	0	0	6	166,763	3.00%	27,794
12/31/2008	2	59,330	0	0	6	161,905	66.76%	26,984
12/31/2007	1	13,802	0	0	4	97,089	16.57%	24,272

## ■ Schedule of Funding Progress

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded (Surplus) Actuarial Accrued Liability as a Percentage of Covered Payroll
1/1/2017	\$54,702,116	\$42,201,793	\$(12,500,323)	129.6%	\$12,631,900	(98.96)%
1/1/2016	47,344,971	35,776,922	(11,568,049)	132.3%	13,118,579	(88.18)%
1/1/2015	39,772,760	29,177,530	(10,595,230)	136.3%	12,462,773	(85.02)%
1/1/2014	34,476,002	26,123,656	(8,352,346)	132.0%	13,246,537	(63.05)%
1/1/2013	29,758,000	23,313,204	(6,444,796)	127.6%	13,384,707	(48.15)%
1/1/2012	23,666,933	18,832,849	(4,834,084)	125.7%	12,195,940	(39.64)%
1/1/2011	18,107,030	13,658,025	(4,449,005)	132.6%	8,770,187	(50.73)%
1/1/2010	15,373,546	12,107,329	(3,266,217)	127.0%	9,026,182	(36.19)%
1/1/2009	13,642,709	10,648,712	(2,993,997)	128.1%	7,726,670	(38.75)%
1/1/2008	14,075,984	9,774,906	(4,301,078)	144.0%	7,342,967	(58.57)%

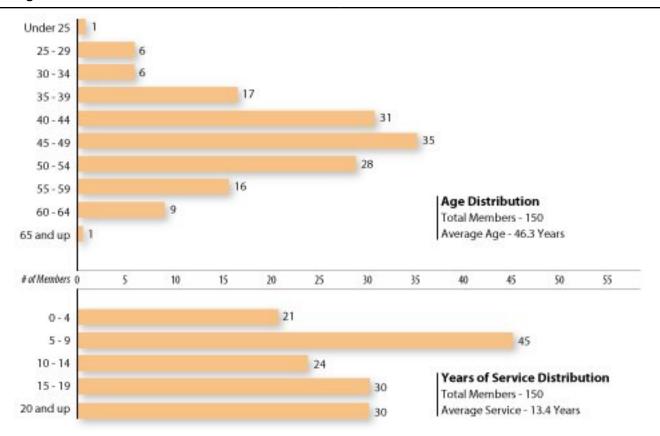
## **Limitations of Funded Status Measurements**

Unless otherwise indicated, a funded status measurement presented in this chart is based upon the actuarial accrued liability and the actuarial value of assets.

With regard to any funded status measurements presented in this chart:

- (1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
- (2) The measurement alone is inappropriate for assessing the need for or the amount of future employer contributions.
- (3) The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets, unless the market value of assets is used in the measurement.

# ■ Age and Years of Service Distribution



#### **Solvency Test**

The Fire & Police Pension Association's funding objective for the Defined Benefit System - Statewide Hybrid Plan is to be able to pay the retirement benefits promised to the members including the granting of an annual benefit adjustment to all retirees and beneficiaries. Contribution rates are actuarially determined each year as the sum of the normal cost and the amortization of the unfunded accrued liability over a period of 30 years from the current valuation date. The board of directors then certifies the rates allocated to the Defined Benefit component of the Statewide Hybrid Plan such that the rates will remain relatively stable over time and that will meet this financing objective. The contribution rate from July 1, 2016 through June 30, 2017 was 13.5%. The contribution rate from July 1, 2017 through June 30, 2018 is 14.8%.

A short-term solvency test is used to check the funding progress towards its funding objective. In a short-term solvency test, the plan's present assets are compared with: (1) liability for active member contributions on deposit, (2) liability for future benefits to present retired lives, (3) liability for service already rendered by active members.

Expressing the net assets available for benefits as a percentage of the different liability measures provides one indication of the funding status on a going-concern basis. Generally, the greater the percentages, the stronger the public employee retirement system.

The following schedule illustrates the progress in funding the various liability measures. As can be seen by the funded percentages, the liabilities are 100% covered by current assets. This plan does not have any unfunded liability and current contributions exceed the cost of annual benefit accruals.

## ■ Solvency Test

		Aggre	gate Accrued Liabi	ilities For				
	-	(1)	(2)	(3)				
Valuation	Valuation	Active Member	Retirees and	Active Members (Employer –	Fund	ded Percenta	centages	
Date	of Assets	Contributions	Beneficiaries	Financed Portion)	(1)	(2)	(3)	
1/1/2017	\$54,702,116	\$12,984,652	\$18,669,580	\$10,547,561	100%	100%	100%	
1/1/2016	47,344,971	12,829,719	14,350,900	8,596,303	100%	100%	100%	
1/1/2015	39,772,760	10,736,366	10,903,060	7,538,104	100%	100%	100%	
1/1/2014	34,476,002	11,990,004	7,712,307	6,421,345	100%	100%	100%	
1/1/2013	29,758,000	12,049,328	5,853,027	5,410,849	100%	100%	100%	
1/1/2012	23,666,933	9,883,610	5,280,530	3,668,709	100%	100%	100%	
1/1/2011	18,107,030	7,303,256	3,146,943	3,207,826	100%	100%	100%	
1/1/2010	15,373,546	7,717,567	2,233,942	2,155,820	100%	100%	100%	
1/1/2009	13,642,709	7,488,207	2,201,593	958,912	100%	100%	100%	
1/1/2008	14,075,984	9,263,435	1,249,679	(738,208)	100%	100%	100%	

#### Summary of Plan Provisions

## **Plan Description**

The Fire & Police Pension Association Defined Benefit System – Statewide Hybrid Plan ("Plan") was established January 1, 2004 as a cost-sharing multiple-employer pension plan covering full-time firefighters and police officers from departments that elect coverage. The Plan may also cover clerical staff, other fire district personnel whose services are auxiliary to fire protection, or Chiefs who have opted out of the Statewide Defined Benefit Plan. The Plan is comprised of two components: Defined Benefit and Money Purchase. With the latter component, members have the option of choosing among various investment options offered by an outside investment manager.

Employers may not withdraw from the Plan once affiliated. The Plan assets for the Defined Benefit Component are included in the Fire & Police Members' Benefit Investment Fund and Plan assets associated with the Money Purchase Component and the Deferred Retirement Option Plan "DROP" are included in the Fire & Police Members' Self-Directed Investment Fund.

### **Plan Year**

A twelve-month period ending December 31.

#### **Members Included**

Members included are active employees who are full-time salaried employees of a participating municipality, fire protection district, fire authority, or county improvement district normally serving at least 1,600 hours in a calendar year and whose duties are directly involved with the provision of police or fire protection. The Plan may include clerical and other personnel from fire districts whose service are auxiliary to fire protection or sheriff departments, as certified by the county.

## **Compensation Considered (Base Salary)**

Base salary means the total base rate of pay including Member Contributions to the Defined Benefit System which are "picked up" by the employer. The definition of Base Salary is subject to the following conditions:

- 1) The definition of Base Salary shall also include longevity pay, sick leave pay taken in the normal course of employment, vacation leave pay taken in the normal course of employment, shift differential, and mandatory overtime that is part of the Member's fixed, periodic compensation.
- 2) Accumulated vacation leave pay shall also be included if a Member completes his/her service requirement for purposes of normal retirement while exhausting accumulated vacation leave.
- 3) In the event an employer has established or does establish a Deferred Compensation Plan, the amount of the Member's salary that is deferred shall be included in the Member's base salary.
- 4) Any amounts voluntarily contributed to an Internal Revenue Code Section 125 "Cafeteria Plan" shall be included in the Member's base salary.
- 5) Base salary shall not include overtime pay (except as noted in (1) above), step—up pay or other pay for temporarily acting in a higher rank (a member is deemed to be temporarily acting in a higher rank if the appointment to the rank is anticipated to last less than six months), uniform allowances, accumulated sick leave pay, accumulated vacation leave pay (except as noted in (2) above), and other forms of extra pay (including Member Contributions which are paid by the employer and not deducted from the Member's salary).

#### **Contribution Rates**

The Plan sets contribution rates at a level that enables all benefits to be fully funded at the retirement date of all members. The members of this Plan and their employers are currently each contributing at the rate determined by the individual employer, however, the rate for both employer and members must be at least 8 percent of the member's base salary for a total of 16 percent. The amount allocated to the Defined Benefit Component is set annually by the Fire & Police Pension Association Board of Directors. Excess contributions fund the Money Purchase Component of the Plan. The Defined Benefit Component of the total contribution rate for this Plan was as follows:

Effective Date	Defined Benefit Portion of the Total Contribution
7/1/2017 - 6/30/2018	14.80%
7/1/2016 - 6/30/2017	13.50%
7/1/2015 - 6/30/2016	12.60%
7/1/2014 - 6/30/2015	12.50%
7/1/2013 - 6/30/2014	12.60%
7/1/2012 - 6/30/2013	13.00%
1/1/2012 - 6/30/2012	12.90%
7/1/2011 - 12/31/2011	11.30%
7/1/2010 - 6/30/2011	11.50%
7/1/2009 - 6/30/2010	11.40%
8/1/2008 - 6/30/2009	11.00%
8/1/2007 - 7/31/2008	10.25%
8/1/2006 - 7/31/2007	11.00%

Within the Money Purchase Component, members are always fully vested in their own contributions, as well as the earnings on those contributions. Vesting in the employer's contributions within the Money Purchase Component, and earnings on those contributions occurs according to the vesting schedule set by the Plan document at 20 percent per year after the first year of service and to be 100 percent vested after 5 years of service or the attainment of age 55. Employer and member contributions are invested in funds at the discretion of members.

A member may elect to make voluntary after-tax contributions to the Money Purchase Component of the Plan. Additional voluntary contributions from the employer are made on a pre-tax basis.

#### **Highest Average Salaries (HAS)**

HAS is the average of the member's highest three annual base salaries.

#### **Normal Retirement Date**

A member's Normal Retirement Date shall be the date on which the member has completed at least 25 years of credited service and has attained the age of 55.

#### **Normal Retirement Benefit**

The annual Normal Retirement Benefit of the Defined Benefit Component is 1.5 percent of the average of the member's highest three years base salary for each year of credited service.

Benefits of the Defined Benefit Component are paid as a monthly life annuity. Other forms of payment are available.

## **Early Retirement Benefit**

A member shall be eligible for an Early Retirement Benefit within the Defined Benefit Component after completion of 30 years of service or attainment of age 50 with at least five years of credited service. The Early Retirement Benefit shall be the reduction of the Normal Retirement Benefit on an actuarially equivalent basis.

Benefits of the Defined Benefit Component are paid as a monthly life annuity. Other forms of payment are available.

#### **Terminated Vested Benefit**

A member who terminates with at least five years of active service credit is vested. A vested member who does not withdraw their contributions from the Plan is eligible for a vested benefit within the Defined Benefit Component, payable at age 55. The annual vested benefit is equal to 1.5 percent of the average of the member's highest three years base salary for each year of credited service. Both the highest average salary and service credits are determined at the time the member leaves active employment or enters the Deferred Retirement Option Plan (DROP). Benefits may commence at age 55.

Benefits of the Defined Benefit Component are paid as a monthly life annuity. Other forms of payment are available.

#### **Deferred Retirement Benefit**

Members who qualify for a Normal or Vested Retirement within the Defined Benefit Component may defer the receipt of their defined benefit pension to as late as age 65 and receive the actuarial equivalent of the benefit.

Benefits of the Defined Benefit Component are paid as a monthly life annuity. Other forms of payment are available.

#### **Severance Benefit**

All members with contributions in the Defined Benefit Component and leaving covered employment with less than five years of service credit are eligible. Optionally, vested members (those with five or more years of service credit) may withdraw their accumulated contributions from the Defined Benefit Component in lieu of the benefits otherwise due.

The member receives a lump-sum payment equal to the sum of their member contributions. Five percent as interest is credited on these contributions. In addition, upon termination, the vested account balance within the Money Purchase Component is available to the member.

#### **Death Benefit of Active Members**

Death must have occurred while an active or an inactive, non-retired member.

Upon the death of an active, unmarried member with no spouse, no dependent children, and no beneficiary, a refund of the member's contributions is paid to the member's estate. If the member was eligible for retirement, a joint and survivor annuity may be paid to the beneficiary when the member would have been age 55.

Survivors (spouse or dependent children) of active members who die prior to retirement eligibility are covered by the benefits provided by the Statewide Death & Disability Plan. For purposes of the Statewide Death & Disability Plan, a spouse includes a partner in a civil union.

### **Forms of Payment**

The Plan provides six choices for receipt of the retirement benefit:

Normal Option The retiree receives a full, monthly pe

The retiree receives a full, monthly pension benefit for their life. No monthly benefits are paid to a beneficiary following the retiree's death. However, if at the time of the member's death, they have not recouped in pension payments the amount of the member contributions (including all funds paid in to purchase service credit), the remaining funds plus 5% as interest would be paid to the member's beneficiary or estate as a lump sum.

Option 1 (Joint and 100% Survivor) - Under Option 1, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent monthly pension will continue for the life of the retiree. Upon the death of the retiree, the same monthly pension will be paid to the retiree's designated beneficiary for life.

life.

#### Defined Benefit System | Statewide Hybrid Plan - Defined Benefit Component

- Option 2 (Joint and 50% Survivor) Under Option 2, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent monthly pension will continue for the life of the retiree. Upon the death of the retiree, 50 percent of the same monthly pension will be paid to the retiree's designated beneficiary for
- Option 3 (Joint and 50% Last Survivor) Under Option 3, an actuarially equivalent normal, deferred, early or vested retirement monthly pension will be shared by the retiree and their named beneficiary. Upon the death of either the retiree or the designated beneficiary, 50 percent of the same monthly pension will be paid to the survivor for life.
- Option 4 (Joint and 100% Survivor with "Pop Up") Under Option 4, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent, monthly pension will continue for the life of the retiree. Upon the death of the retiree, the same monthly pension will be paid to the retiree's designated beneficiary for life. However, if the designated beneficiary dies before the retiree, the monthly pension benefit "pops—up" or reverts to the Normal Option effective with the first day of the month following the date of the death of the beneficiary.
- Option 5 (Joint and 50% Survivor with "Pop Up") Under Option 5, an actuarially equivalent normal, deferred, early or vested retirement pension will be paid from the effective date of the retiree's retirement or later in the case of a deferred retirement. The actuarially equivalent monthly pension will continue for the life of the retiree. Upon the death of the retiree, 50 percent of the same monthly pension benefit will be paid to the retiree's beneficiary for life. However, if the beneficiary dies before the retiree, the monthly pension benefit "pops—up" or reverts to the Normal Option effective with the first day of the month following the date of the death of the beneficiary.

Survivor benefits are paid according to the payment option elected by the member at the time of retirement or entry into DROP.

Actuarial equivalence is based on tables adopted by the Fire & Police Pension Association Board of Directors.

#### **Benefit Adjustments for Benefits in Pay Status**

Benefits to members and beneficiaries may be increased annually on October 1. The amount is based on the Fire & Police Pension Association Board of Directors discretion and can range from 0 percent to 3 percent. Benefit adjustment may begin once the retired member has been receiving retirement benefits for at least 12 calendar months prior to October 1.

#### **Deferred Retirement Option Plan (DROP)**

A member may elect to participate in the DROP after reaching eligibility for normal retirement, early retirement or vested retirement and age 55. A member continues to work while participating in the DROP, but must terminate employment within 5 years of entry into the DROP. The member's percentage of retirement benefit is frozen at the time of entry into the DROP. The monthly payments that begin at entry into the DROP are accumulated until the member terminates service, at which time the DROP accumulated benefits can be paid as periodic installments, a lump sum, or if desired a member may elect to convert the DROP to a lifetime monthly benefit with survivor benefits. The member continues to make contributions, which are credited to the DROP. The member shall self-direct the investments of their DROP funds.

## **Changes in Plan Provisions**

The plan provisions have not changed since the prior valuation.

## **Changes in Actuarial Assumptions**

There were no changes in actuarial assumptions since the January 1, 2016 valuation.

Two plans from the City of Colorado Springs joined the Fire & Police Pension Association Defined Benefit System as of October 1, 2006. They are now one single-employer defined benefit pension plan, Colorado Springs New Hire Pension Plan ("Plan"), but with a fire component and a police component for fire and police employees hired by the City of Colorado Springs on or after April 8, 1978 but prior to October 1, 2006. The plan is closed to new members as of October 1, 2006.

Employers may not withdraw from the Fire & Police Pension Association Defined Benefit System once elected. The Plan members had opportunities to transfer to the Fire & Police Pension Association Defined Benefit System - Statewide Defined Benefit Plan in conjunction with the administrative change. The Plan assets are included in the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund (for Deferred Retirement Option Plan "DROP" assets and Separate Retirement Account assets from eligible retired members).

Note: The fire and police components are studied separately.

# ■ Schedule of Active Member Valuation Data

	Valuation Date	Number	Average Age	Average Service	Covered Payroll	Annual Average Pay	% Increase in Average Pay
Police Component	1/1/2017	318	46.2	18.0	\$25,429,284	\$79,966	1.50%
	1/1/2016	350	45.8	17.4	27,575,061	78,786	2.79%
	1/1/2015	384	45.2	16.7	29,432,993	76,648	2.98%
	1/1/2014	409	44.6	16.1	30,441,800	74,430	4.23%
	1/1/2013	426	43.7	15.2	30,420,085	71,409	0.80%
	1/1/2012	443	42.9	14.3	31,381,480	70,839	(0.19%)
	1/1/2011	470	42.2	13.6	33,357,527	70,973	0.02%
	1/1/2010	501	41.5	12.9	35,550,304	70,959	1.41%
	1/1/2009	525	40.7	12.1	36,735,114	69,972	0.71%
	1/1/2008	562	40.1	11.3	39,048,754	69,482	8.42%
Fire Component	1/1/2017	110	47.3	18.3	\$9,619,561	\$87,451	1.80%
	1/1/2016	130	47.5	18.6	11,167,162	85,901	2.09%
	1/1/2015	149	47.5	18.6	12,537,370	84,143	4.60%
	1/1/2014	155	46.8	17.8	12,468,196	80,440	4.87%
	1/1/2013	161	46.0	17.0	12,349,627	76,706	1.27%
	1/1/2012	165	45.0	16.0	12,497,987	75,745	1.69%
	1/1/2011	264	43.1	14.0	19,664,027	74,485	(0.39%)
	1/1/2010	288	42.7	13.7	21,535,495	74,776	1.44%
	1/1/2009	305	42.3	13.3	22,483,956	73,718	(1.31%)
	1/1/2008	319	41.7	12.5	23,827,770	74,695	14.54%

# ■ Gain (Loss) on Actuarial Value of Assets

	Police Co	mponent	Fire Cor	nponent
	Valuation as of January 1, 2017	Valuation as of January 1, 2016	Valuation as of January 1, 2017	Valuation as of January 1, 2016
Actuarial assets, prior valuation	\$271,515,321	\$253,937,185	\$126,813,938	\$120,350,555
Total Contributions since prior valuation	10,140,632	10,409,669	4,569,688	4,640,109
Benefits and refunds since prior valuation	(12,109,879)	(10,187,956)	(7,766,131)	(6,228,574)
Assumed net investment income at actuarial rate%		40.045.200	0.544.045	0.026.202
Beginning assets	20,363,649	19,045,289	9,511,045	9,026,292
Contributions	380,274	390,363	171,364	174,004
Benefits and refunds paid	(454,120)	(382,048)	(291,230)	(233,572)
Total	\$20,289,803	\$19,053,604	\$9,391,179	\$8,966,724
Expected actuarial assets	\$289,835,877	\$273,212,502	\$133,008,674	\$127,728,814
Actual actuarial assets, this valuation	\$286,951,659	\$271,515,321	\$131,529,543	\$126,813,938
Asset gain/(loss) since prior valuation	\$(2,884,218)	\$(1,697,181)	\$(1,479,131)	\$(914,876)
	Loss	Loss	Loss	Loss

<sup>\*7.5%</sup> as of 1/1/2012

# ■ Schedule of Retirees and Beneficiaries Added To and Removed From Benefit Payroll

		Added	to Payroll*	Removed	from Payroll	F	Payroll	   % Increase	Average
	Year Ended	Number	Annual Benefit	Number	Annual Benefit	Number	Annual Benefit	in Annual Benefit	Annual Benefit
Police	12/31/2016	27	\$1,251,164	3	\$86,395	274	\$11,818,155	10.93%	\$43,132
Component	12/31/2015	26	1,266,408	1	32,035	250	10,653,386	13.11%	42,614
•••••	12/31/2014	24	1,230,728	1	22,383	225	9,419,013	14.72%	41,862
	12/31/2013	9	460,165	2	75,382	202	8,210,668	4.92%	40,647
	12/31/2012	9	428,295	2	73,884	195	7,825,885	4.74%	40,133
	12/31/2011	25	1,044,739	3	97,040	188	7,471,474	14.53%	39,742
	12/31/2010	21	1,007,007	0	0	166	6,523,775	18.25%	39,300
	12/31/2009	16	791,367	1	14,525	145	5,516,768	16.39%	38,047
	12/31/2008	17	847,350	0	0	130	4,739,926	21.77%	36,461
	12/31/2007	21	897,046	0	0	113	3,892,576	29.95%	34,448
Fire	12/31/2016	23	\$1,149,453	1	\$30,677	161	\$7,776,184	16.80%	\$48,299
Component	12/31/2015	19	1,149,542	1	37,545	139	6,657,408	20.05%	47,895
•••••	12/31/2014	6	257,233	0	0	121	5,545,411	4.86%	45,830
•••••	12/31/2013	7	275,015	2	71,310	115	5,288,178	4.01%	45,984
•••••	12/31/2012	2	96,704	0	0	110	5,084,473	1.94%	46,222
•••••	12/31/2011	14	711,103	1	18,613	108	4,987,769	16.12%	46,183
	12/31/2010	16	901,143	0	0	95	4,295,279	26.55%	45,213
	12/31/2009	14	725,800	0	0	79	3,394,136	27.20%	42,964
•••••	12/31/2008	11	536,669	0	0	65	2,668,336	25.18%	41,051
	12/31/2007	12	592,154	0	0	54	2,131,667	38.46%	39,475
		L		.4		4			

<sup>\*</sup>Includes Cost-of-Living Adjustments granted since the prior valuation.

# ■ Schedule of Funding Progress

	Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded (Surplus) Actuarial Accrued Liability as a Percentage of Covered Payroll
Police	1/1/2017	\$286,951,659	\$331,007,540	\$44,055,881	86.7%	\$25,429,284	173.25%
Component	1/1/2016	271,515,321	319,975,168	48,459,847	84.9%	27,575,061	175.74%
••••••	1/1/2015	253,937,185	297,810,707	43,873,522	85.3%	29,432,993	149.06%
•••••••••••••••••••••••••••••••••••••••	1/1/2014	233,009,247	281,166,840	48,157,593	82.9%	30,441,800	158.20%
••••••	1/1/2013	212,428,394	258,960,907	46,532,513	82.0%	30,420,085	152.97%
••••••	1/1/2012	197,710,046	246,518,300	48,808,254	80.2%	31,381,480	155.53%
••••••	1/1/2011	187,249,190	226,088,133	38,838,943	82.8%	33,357,427	116.43%
•••••••••••••••••••••••••••••••••••••••	1/1/2010	170,960,335	213,764,095	42,803,760	80.0%	35,550,304	120.40%
••••••	1/1/2009	156,099,012	198,695,916	42,596,904	78.6%	36,735,114	115.96%
•••••••••••••••••••••••••••••••••••••••	1/1/2008	178,548,098	188,263,199	9,715,101	94.8%	39,048,754	24.88%
Fire	1/1/2017	\$131,529,543	\$163,542,442	\$32,012,899	80.4%	\$9,619,561	332.79%
Component	1/1/2016	126,813,938	157,971,179	31,157,241	80.3%	11,167,162	279.01%
••••••	1/1/2015	120,350,555	145,875,351	25,524,796	82.5%	12,537,370	203.59%
•••••••••••••••••••••••••••••••••••••••	1/1/2014	111,882,235	138,255,953	26,373,718	80.9%	12,468,196	211.53%
••••••	1/1/2013	103,516,709	129,466,329	25,949,620	80.0%	12,349,627	210.12%
•••••••••••••••••••••••••••••••••••••••	1/1/2012	98,326,872	124,211,363	25,884,491	79.2%	12,497,987	207.11%
•••••••••••••••••••••••••••••••••••••••	1/1/2011	108,848,941	127,909,057	19,060,116	85.1%	19,664,027	96.93%
	1/1/2010	100,709,022	121,361,624	20,652,602	83.0%	21,535,495	95.90%
	1/1/2009	92,515,096	113,068,434	20,553,338	81.8%	22,483,956	91.41%
••••••	1/1/2008	104,946,386	107,389,381	2,442,995	97.7%	23,827,770	10.25%

# **Limitations of Funded Status Measurements**

Unless otherwise indicated, a funded status measurement presented in this chart is based upon the actuarial accrued liability and the actuarial value of assets.

With regard to any funded status measurements presented in this chart:

- (1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
- (2) The measurement alone is inappropriate for assessing the need for or the amount of future employer contributions.
- (3) The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets, unless the market value of assets is used in the measurement.

# ■ Age and Years of Service Distribution \*

	<b>Valuation Date</b>	Average Age	Average Service
Police Component	1/1/2017	46.2	18.0
	1/1/2016	45.8	17.4
	1/1/2015	45.2	16.7
	1/1/2014	44.6	16.1
	1/1/2013	43.7	15.2
	1/1/2012	42.9	14.3
	1/1/2011	42.2	13.6
	1/1/2010	41.5	12.9
	1/1/2009	40.7	12.1
	1/1/2008	40.1	11.3
Fire Component	1/1/2017	47.3	18.3
	1/1/2016	47.5	18.6
	1/1/2015	47.5	18.6
	1/1/2014	46.8	17.8
	1/1/2013	46.0	17.0
	1/1/2012	45.0	16.0
	1/1/2011	43.1	14.0
	1/1/2010	42.7	13.7
	1/1/2009	42.3	13.3
	1/1/2008	41.7	12.5

<sup>\*</sup>A breakdown by age/service was not available in the actuarial valuations.

# **Solvency Test**

The Fire & Police Pension Association's funding objective for the Defined Benefit System – Colorado Springs New Hire Pension Plan is to be able to pay the retirement benefits promised to the members including the granting of an annual cost-of-living increase to all retirees and beneficiaries. Contribution rates are actuarially determined each year as the sum of the normal cost and the amortization of the unfunded accrued liability over a period of 21 years from the January 1, 2017 valuation. The board of directors then certifies the rates allocated to the fire and police components of the Colorado Springs New Hire Pension Plan such that the rates will remain relatively stable over time and that will meet this financing objective. As of January 1, 2017, the fire plan annual required contribution is \$5,132,890. Of this amount the members of the plan contribute 10% of basic salary and the employer remitted the remainder. Effective January 1, 2018, the fire plan annual required contribution is \$4,981,787. For the police plan, the annual required contribution for 2017 was \$10,368,391. Of this amount the members of the plan contributed 8% of basic salary and the employer remitted the remainder. Effective January 1, 2018, the annual required contribution is \$9,479,498.

A short-term solvency test is used to check the funding progress towards its funding objective. In a short-term solvency test, the plan's present assets are compared with: (1) liability for active member contributions on deposit, (2) liability for future benefits to present retired lives, (3) liability for service already rendered by active members.

Expressing the net assets available for benefits as a percentage of the different liability measures provides one indication of the funding status on a going-concern basis. Generally, the greater the percentages, the stronger the public employee retirement system. The following schedule illustrates the progress in funding the various liability measures. As can be seen by the funded percentages, the liabilities are not covered by current assets.

# ■ Solvency Test

			Aggre	gate Accrued Liab	ilities For			
			(1) Active	(2) Retirees	(3) Active Members			
	Valuation Valuation Assets		Member and Contributions Beneficiarie		(Employer Financed Portion)	Funded Percentages		
	Date	(000's)	(000's)	(000's)	(000's)	(1)	(2)	(3)
Police	1/1/2017	\$286,952	\$29,768	\$179,910	\$121,329	100%	100%	63.69%
Component	1/1/2016	271,515	30,658	161,841	127,476	100%	100%	61.99%
	1/1/2015	253,937	31,514	139,420	126,876	100%	100%	65.42%
	1/1/2014	233,009	31,545	124,081	125,541	100%	100%	61.64%
••••••	1/1/2013	212,428	30,326	118,304	110,331	100%	100%	57.82%
	1/1/2012	197,710	29,048	112,336	105,134	100%	100%	53.58%
	1/1/2011	187,249	28,721	96,564	100,804	100%	100%	61.47%
	1/1/2010	170,960	28,025	82,218	103,521	100%	100%	58.65%
	1/1/2009	156,099	26,693	70,017	101,986	100%	100%	58.23%
	1/1/2008	178,548	26,162	57,986	104,116	100%	100%	90.67%
Fire	1/1/2017	\$131,530	\$11,906	\$112,324	\$39,312	100%	100%	18.57%
Component	1/1/2016	126,814	13,776	97,364	46,831	100%	100%	33.47%
	1/1/2015	120,351	15,131	78,621	52,124	100%	100%	51.03%
	1/1/2014	111,882	14,705	75,027	48,525	100%	100%	45.65%
	1/1/2013	103,517	13,989	72,425	43,053	100%	100%	39.73%
	1/1/2012	98,327	12,800	70,830	40,581	100%	100%	36.22%
	1/1/2011	108,849	17,297	59,509	51,103	100%	100%	62.70%
	1/1/2010	100,709	17,531	46,439	57,391	100%	100%	64.02%
	1/1/2009	92,515	17,117	36,551	59,400	100%	100%	65.40%
	1/1/2008	104,946	16,186	29,492	61,711	100%	100%	96.04%

# Summary of Plan Provisions

### **Police Component**

#### **Plan Year**

A twelve-month period ending December 31.

#### **Members Included**

Members included are active employees hired on or after April 8, 1978 but prior to October 1, 2006. As of October 1, 2006, administration of the plan has been transferred to the Fire & Police Pension Association and the plan has been closed. All members hired on or after October 1, 2006 will become members of the Fire & Police Pension Association Defined Benefit System - Statewide Defined Benefit Plan.

# **Compensation Considered**

Basic salary, including longevity pay, sick pay taken in the normal course of employment, vacation leave pay taken in the normal course of employment, third-week pay and mandatory overtime that is part of the members annual fixed periodic compensation. Also, all salary amounts deferred for 457 or Section 125 "cafeteria plan" are included.

### **Contribution Rates**

The Plan sets contribution rates at a level that enables all benefits to be fully funded at the retirement date of all members within each component as determined by the actuarial study. Effective January 1, 2017, the Police Component actuarially determined contribution was \$10,368,391. Of this amount the members of the Plan contributed 8 percent of basic salary and the employer remitted the remainder. Effective January 1, 2018, the actuarially determined contribution is \$9,479,498.

# **Final Average Salary**

Final Average Salary is the average of monthly basic salary compensation awarded to the member during the 18 months immediately preceding termination or retirement.

#### **Normal Retirement Date**

A member's Normal Retirement Date shall be the date on which the member has completed at least 25 full years of credited service and has attained age 50.

### **Normal Retirement Benefit**

Any member who elects to retire on or after his Normal Retirement Date shall be eligible for a monthly pension equal to 2 percent of Final Average Salary for each full year of service for the first 10 years, plus 2.75 percent of Final Average Salary for each full year of service in excess of 10 years. The maximum monthly pension is 75 percent of Final Average Salary. The maximum pension is earned upon completing 30 years of service.

#### **Early Retirement Benefit**

A member under the Police Component who has a minimum of 20 years of service is eligible to receive a reduced, early retirement pension benefit beginning at age 45. The early retirement pension benefit shall be equal to 2 percent of Final Average Salary for each full year of service for the first 10 years, plus 2.75 percent for each full year of service thereafter, not to exceed the maximum monthly pension benefit of 75 percent, reduced by 7.5 percent for each year and portion thereof that the benefit commences prior to age 50.

Any member hired prior to May 1, 2001, who has completed at least 20 years of service and who has attained the age of 45 years may elect to retire from active service but shall receive 50 percent of the member's Final Average Salary, with that amount reduced by 0.5 percent for each month or portion thereof that such member lacks to attain the age of 50 years as of the date of retirement.

Any member hired after April 30, 2001, and before October 1, 2003, who has completed at least 20 years of service prior to attaining the age of 45 years may elect to retire from active service shall receive 50 percent of the member's Final Average Salary,

with that amount reduced by 0.5 percent for each month or portion thereof that such member lacks to attain the age of 50 years as of the date of retirement.

### **Deferred Retirement Benefit**

Any member retiring and eligible for a Normal Retirement Benefit may elect to defer receipt of such pension until attaining the age of 65 years. In the case of such an election, the annual deferred retirement pension shall be actuarially equivalent to the normal retirement pension.

#### **Terminated Vested Benefit**

A member who terminates with at least 10 years of active service may leave the contributions in the Plan and when the member attains age 50 be eligible to receive a monthly vested benefit equal to 2 percent of Final Average Salary for each full year of credited service for the first 10 years, plus 2.75 percent of Final Average Salary for each full year of credited service in excess of 10 years. The maximum benefit is 75 percent of Final Average Salary.

#### **Severance Benefit**

In lieu of a future pension, a member may upon termination elect to have the accumulated member contributions refunded in a lump sum. Interest is credited at 5 percent per annum.

### **Death & Disability Benefit of Active Members**

Disabled members and survivors (spouse or dependent children) of active members who die prior to retirement eligibility are covered by the benefits provided by the Fire & Police Pension Association Statewide Death & Disability Plan.

#### **Post-Retirement Death Benefit**

If a retired member dies, the "qualified surviving spouse" shall receive, until death, a monthly pension equal to 70 percent of the monthly benefit the member was receiving prior to death, including cost-of-living increases. If there is no "qualified surviving spouse" or if the qualified surviving spouse dies, each qualified surviving child should receive equal shares of the qualified surviving spouses benefit, as long as the child remains a "qualified child." For purposes of this Plan, a spouse includes a partner in a civil union.

# **Cost-of-Living Adjustment (COLA)**

Benefits are increased to reflect increases in the consumer price index but in no case may benefits be increased by more than 3 percent for any one year. Cost-of-living adjustments begin on October 1st immediately prior to the earlier of attainment of age 60 or 10 years after benefit payments commenced.

# **Deferred Retirement Option Plan (DROP)**

A member may elect to participate in the DROP after reaching eligibility for Normal Retirement. A member continues to work while participating in the DROP, but must terminate employment within 5 years of entry into the DROP. The member's percentage of retirement benefit is frozen at the time of entry into the DROP. The monthly payments that begin at entry into the DROP are accumulated until the member terminates service, at which time the DROP accumulated benefits can be paid as a lump sum, if desired. The member continues contributing the member contribution rate which is credited to the DROP. Effective March 1, 2003, the member shall self-direct the investments of their DROP funds.

# **Purchase of Service Credit**

Active members of this Plan may purchase service credit for other employment completed within the United States not covered by this Plan. The cost of such service credit purchase shall be determined by the Fire & Police Pension Association Board of Directors and shall be on an actuarially equivalent basis. A member shall not be allowed to purchase service credit to the extent that the additional accrued benefits derived from the purchased service credit would result in the annual amount of the member's benefit exceeding the annual benefit limitation for defined benefit plans as determined under section 415 of the Internal Revenue Code (Ord. 02-114).

# **Stabilization Reserve Account (SRA)**

Annually, at the discretion of the Fire & Police Pension Association Board of Directors, a contribution may be allocated to the SRA based on the actuarial study for the previous year. Amounts set aside in the SRA are allocated to individual accounts for each member. A member may receive the amount in this individual account upon election of normal, early vested, disability, deferred retirement, or in the event of the active member's death. If the cost of the defined benefit plan exceeds the combined member/employer contribution rate, funds from the SRA may be used to make up the shortfall. Effective January 1, 2008, the Separate Retirement Account contribution rate for members of the Police Component was set at 0 percent. The rate will remain at 0 percent for calendar years 2017 and 2018.

# **Changes in Plan Provisions**

The plan provisions have not changed since the prior valuation.

### **Fire Component**

#### **Plan Year**

A twelve-month period ending December 31.

#### **Members Included**

Members included are active employees hired on or after April 8, 1978 but prior to October 1, 2006. As of October 1, 2006, administration of the plan has been transferred to the Fire & Police Pension Association and the plan has been closed. All members hired on or after October 1, 2006 will become members of the Fire & Police Pension Association Defined Benefit System - Statewide Defined Benefit Plan.

# **Compensation Considered**

Basic salary, including longevity pay, sick pay taken in the normal course of employment, vacation leave pay taken in the normal course of employment, third week pay and mandatory overtime (including Annual Pay in lieu of leave) that is part of the members annual fixed periodic compensation. Also, all salary amounts deferred for 457 or Section 125 "cafeteria plan" are included.

### **Contribution Rate**

The Plan sets contribution rates at a level that enables all benefits to be fully funded at the retirement date of all members within each component as determined by the actuarial study. Effective January 1, 2017, the Fire Component actuarially determined contribution is \$5,132,890. Of this amount the members of the Plan contribute 10 percent of basic salary and the employer remitted the remainder. Effective January 1, 2018, the actuarially determined contribution is \$4,981,787.

# **Final Average Salary**

Final Average Salary is the average of monthly basic salary compensation awarded to the member during the 18 months immediately preceding termination or retirement.

# **Normal Retirement**

Date A member's Normal Retirement Date shall be the date on which the member has completed at least 25 years of credited service and has attained age 55.

# **Normal Retirement Benefit**

Any member who elects to retire on or after his Normal Retirement Date shall be eligible for a monthly pension equal to 2 percent of Final Average Salary for each year of service for the first 10 years, plus 2.85 percent of Final Average Salary for each year of service in excess of 10 years. The maximum monthly pension is 77 percent of Final Average Salary. The maximum pension is earned upon completing 30 years of service.

### **Early Retirement Benefit**

A member shall be eligible for an Early Retirement Benefit payable on or after the attainment of age 50 and completion of 20 years of service. The Early Retirement Benefit is 2 percent of Final Average Salary for each year of service for the first 10 years, plus 2.85 percent of Final Average Salary for each year of service in excess of 10 years. The maximum monthly pension is 77 percent of Final Average Salary. The Early Retirement Benefit shall be reduced 4.615 percent for each year that the benefit commences before age 55.

### **Deferred Retirement Benefit**

Any member retiring and eligible for a Normal Retirement Benefit may elect to defer receipt of such pension until attaining the age of 65 years. In the case of such an election, the annual deferred retirement pension shall be actuarially equivalent to the normal retirement pension.

### **Terminated Vested Benefit**

A member who terminates with at least 10 years of active service may leave the contributions in the Plan and when the member attains age 55 be eligible to receive a monthly vested benefit equal to 2 percent of Final Average Salary for each year of credited service for the first 10 years, plus 2.85 percent of Final Average Salary for each year of credited service in excess of 10 years. The maximum benefit is 77 percent of Final Average Salary.

#### **Severance Benefit**

In lieu of a future pension, a member may upon termination elect to have the accumulated member contributions refunded in a lump sum. Interest is credited at 5 percent per annum.

### **Death & Disability Benefit of Active Members**

Disabled members and survivors (spouse or dependent children) of active members who die prior to retirement eligibility are covered by the benefits provided by the Fire & Police Pension Association Statewide Death & Disability Plan.

### **Post-Retirement Death Benefit**

If a retired member dies, the "qualified surviving spouse" shall receive, until death, a monthly pension equal to 70 percent of the monthly benefit the member was receiving prior to death, including cost-of-living increases. If there is no "qualified surviving spouse" or if the qualified surviving spouse dies, each qualified surviving child should receive equal shares of the qualified surviving spouses benefit, as long as the child remains a "qualified child." For purposes of this Plan, a spouse includes a partner in a civil union.

### Cost-of-Living Adjustment (COLA)

Benefits are increased to reflect increases in the consumer price index but in no case may benefits be increased by more than 3 percent for any one year. Cost-of-living adjustments begin on October 1st immediately prior to the earlier of attainment of age 65 or 10 years after benefit payments commenced.

# **Deferred Retirement Option Plan (DROP)**

A member may elect to participate in the DROP after reaching eligibility for Normal Retirement or the "Rule of 75" with a minimum age of 50 years. This means that a member must attain age 50 and the sum of his or her credited service must total 75 or greater at date of severance in order to qualify for the DROP program. A member continues to work while participating in the DROP, but must terminate employment within 5 years of entry into the DROP. The member's percentage of retirement benefit is frozen at the time of entry into the DROP. The monthly payments that begin at entry into the DROP are accumulated until the member terminates service, at which time the DROP accumulated benefits can be paid as a lump sum, if desired. The member continues contributing the member contribution rate which is credited to the DROP. The member shall self-direct the investments of their DROP funds.

### **Purchase of Service Credit**

Active members of this Plan may purchase service credit for other employment completed within the United States not covered by this Plan. The cost of such service credit purchase shall be determined by the Fire & Police Pension Association Board of Directors and shall be on an actuarially equivalent basis. A member shall not be allowed to purchase service credit to the extent that the additional accrued benefits derived from the purchased service credit would result in the annual amount of the member's benefit exceeding the annual benefit limitation for defined benefit plans as determined under section 415 of the Internal Revenue Code (Ord. 04-107).

### Stabilization Reserve Account (SRA)

Annually, at the discretion of the Fire & Police Pension Association Board of Directors, a contribution may be allocated to the SRA based on the actuarial study for the previous year. Amounts set aside in the SRA are allocated to individual accounts for each member. A member may receive the amounts in this individual account upon election of normal, vested, early, disability, deferred

retirement, or in the event of the active member's death. If the cost of the defined benefit plan exceeds the combined member/ employer contribution rate, funds from the SRA may be used to make up the shortfall. Effective January 1, 2008, the Separate Retirement Account contribution rate for members of the Fire Component was set at 0 percent. The rate will remain at 0 percent for calendar years 2017 and 2018.

# **Changes in Plan Provisions**

The plan provisions have not changed since the prior valuation.

# **Changes in Actuarial Assumptions**

There were no changes in actuarial assumptions since the January 1, 2016 valuation.

# ■ Schedule of Active Member Valuation Data

Valuation Date	Number	Average Age	Average Service	Covered Payroll	Annual Average Pay	% Increase in Average Pay
1/1/2017	11,975	41.5	11.1	\$917,100	\$76,585	3.65%
1/1/2016	11,681	41.7	11.3	863,106	73,890	1.70%
1/1/2015	11,391	41.8	11.5	827,633	72,657	1.66%
1/1/2014	11,341	41.7	11.5	810,578	71,473	0.59%
1/1/2013	11,076	41.8	11.7	787,010	71,055	3.00%
1/1/2012	10,958	41.6	11.5	755,952	68,986	0.22%
1/1/2011	10,903	41.4	11.3	750,497	68,834	1.42%
1/1/2010	11,077	40.8	10.9	751,781	67,869	3.77%
1/1/2009	11,157	40.3	10.4	729,724	65,405	7.34%
1/1/2008	10,971	40.0	10.1	668,502	60,934	3.56%

# ■ Gain (Loss) on Actuarial Value of Assets

	Valuation as of January 1, 2017	Valuation as of January 1, 2016
Actuarial assets, prior valuation	\$361,070,410	\$345,009,408
Total Contributions since prior valuation	18,216,116	16,937,907
Benefits since prior valuation	(26,949,344)	(24,096,515)
Assumed net investment income at actuarial rate%*		
Beginning assets	27,080,281	25,875,706
Contributions	683,104	635,172
Benefits and refunds paid	(1,010,600)	(903,619)
Total	\$26,752,785	\$25,607,259
Expected actuarial assets	\$379,089,967	\$363,458,059
Actual actuarial assets, this valuation	\$374,943,903	\$361,070,410
Asset gain/(loss) since prior valuation	\$(4,146,064)	\$(2,387,649)
	Loss	Loss

<sup>\*7.5%</sup> as of 1/1/2012

# ■ Schedule of Retirees and Beneficiaries Added To and Removed From Benefit Payroll

	Added to Payroll*		Removed f	Removed from Payroll		ayroll	% Increase	Average
Year Ended	Number	Annual Benefit	Number	Annual Benefit	Number	Annual Benefit	in Annual Benefit	Annual Benefit
12/31/2016	68	\$2,098,542	20	\$413,487	1,111	\$26,580,140	6.77%	\$23,925
12/31/2015	52	1,797,136	9	184,015	1,063	24,895,085	6.93%	23,420
12/31/2014	67	2,082,872	15	299,192	1,020	23,281,964	8.30%	22,825
12/31/2013	56	1,853,252	16	341,854	968	21,498,284	7.56%	22,209
12/31/2012	56	1,721,508	9	166,231	928	19,986,885	8.44%	21,538
12/31/2011	46	1,239,908	18	414,489	881	18,431,608	4.69%	20,921
12/31/2010	50	1,366,173	9	185,774	853	17,606,189	7.19%	20,640
12/31/2009	54	1,537,193	14	312,334	812	16,425,790	8.06%	20,229
12/31/2008	45	1,259,221	20	339,442	772	15,200,931	6.44%	19,690
12/31/2007	39	1,264,925	16	258,356	747	14,281,152	7.58%	19,118

<sup>\*</sup>Includes benefit adjustments

# ■ Schedule of Funding Progress

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded (Surplus) Actuarial Accrued Liability as a Percentage of Covered Payroll				
Results Using the Aggregate Funding Method										
1/1/2017	\$374,943,903	\$357,915,920	\$(17,027,983)	104.8%	\$917,099,955	(1.86)%				
1/1/2016	361,070,410	344,781,994	(16,288,416)	104.7%	863,105,687	(1.89)%				
1/1/2015	345,009,408	298,128,930	(46,880,478)	115.7%	827,633,440	(5.66)%				
1/1/2014	325,180,768	284,820,249	(40,360,519)	114.2%	810,578,220	(4.98)%				
1/1/2013	305,454,945	272,350,253	(33,104,692)	112.2%	787,009,650	(4.21)%				
1/1/2012	290,988,339	255,841,269	(35,147,071)	113.7%	755,952,497	(4.65)%				
1/1/2011	281,577,454	260,688,472	(20,888,983)	108.0%	750,497,200	(2.78)%				
1/1/2010	266,477,875	250,709,436	(15,768,440)	106.3%	758,113,476	(2.08)%				
1/1/2009	257,279,496	241,813,411	(15,466,086)	106.4%	740,172,854	(2.09)%				
1/1/2008	300,642,721	223,999,678	(76,643,044)	134.2%	679,223,009	(11.28)%				

This plan is valued under the Aggregate Funding Method, where the Actuarial Accrued Liability is set equal to the assets, resulting in no Unfunded Actuarial Accrued Liability and a Funded Ratio of 100%. The Actuarial Accrued Liability reported here is the Present Value of Projected Benefits, less the Present Value of Projected Member Contributions.

Since the Aggregate Funding Method presented in the previous chart does not identify or separately amortize unfunded actuarial liabilities, information about the Statewide Death & Disability Plan's funded status and funding progress has been prepared using the Entry Age Funding Method for this purpose. The information presented below is intended to serve as a surrogate for the funded status and funding progress of the plan.

# **Results Using the Entry Age Normal Funding Method**

	1/1/2017	\$374,943,903	\$372,201,460	\$(2,742,443)	100.7%	\$917,099,955	(0.30)%
	1/1/2016	361,070,410	347,242,942	(13,827,468)	104.0%	863,105,687	(1.60)%
	1/1/2015	345,009,408	311,334,019	(33,675,389)	110.8%	827,633,440	(4.07)%
	1/1/2014	325,180,768	289,577,412	(35,603,356)	112.3%	810,578,220	(4.39)%
	1/1/2013	305,454,945	274,068,253	(31,386,692)	111.5%	787,009,650	(3.99)%
	1/1/2012	290,988,339	253,869,640	(37,118,699)	114.6%	755,952,497	(4.91)%
	1/1/2011	281,577,454	229,959,016	(51,618,438)	122.4%	750,497,200	(6.88)%
	1/1/2010	266,477,875	216,103,895	(50,373,980)	123.3%	758,113,476	(6.64)%
•••	1/1/2009	257,279,496	203,673,786	(53,605,710)	126.3%	740,172,854	(7.24)%
	1/1/2008	300,642,721	182,814,659	(117,828,062)	164.5%	679,223,009	(17.35)%

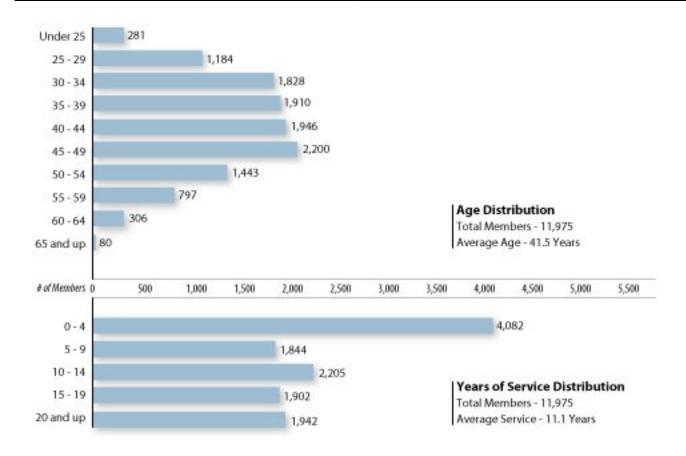
# **Limitations of Funded Status Measurements**

Unless otherwise indicated, a funded status measurement presented in this chart is based upon the actuarial accrued liability and the actuarial value of assets.

With regard to any funded status measurements presented in this chart:

- (1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
- (2) The measurement alone is inappropriate for assessing the need for or the amount of future employer contributions.
- (3) The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets, unless the market value of assets is used in the measurement.

# ■ Age and Years of Service Distribution



# **Solvency Test**

The Fire & Police Pension Association's funding objective for the Statewide Death & Disability Plan is to be able to pay the death and disability benefits promised to the members including the granting of an annual benefit adjustment to all retirees and beneficiaries. The objective is to entirely fund these promised benefits by the contribution rate. For Colorado firefighters and police officers hired on or after January 1, 1997, a percentage of each member's base salary is required for coverage under the plan. In 2017, the contribution rate was 2.7%.

A short-term solvency test is used to check the funding progress towards its funding objective. In a short-term solvency test, the plan's present assets are compared with: (1) liability for active member contributions on deposit, (2) liability for future benefits to present retired lives, (3) liability for service already rendered by active members.

Expressing the net assets available for benefits as a percentage of the different liability measures provides one indication of the funding status on a going-concern basis. Generally, the greater the percentages, the stronger the public employee retirement system.

The following schedule illustrates the progress in funding the various liability measures. As can be seen by the funded percentages, the liabilities are 100% covered by current assets. This plan does not have any unfunded liability and current contributions exceed the cost of annual benefit accruals.

# ■ Solvency Test

		Aggre	egate Accrued Lia	abilities For			
		(1)	(2)	(3)			
Valuation	Valuation Assets	Active Member Contributions	Retirees and Beneficiaries	Active Members (Employer Financed Portion)	Fund	ded Percentag	ges
Date	(000's)	(000's)	(000's)	(000's)	(1)	(2)	(3)
1/1/2017	\$374,944	\$0	\$318,379	\$39,537	100%	100%	100%
1/1/2016	361,070	0	296,216	48,566	100%	100%	100%
1/1/2015	345,009	0	268,883	29,246	100%	100%	100%
1/1/2014	325,181	0	247,646	37,174	100%	100%	100%
1/1/2013	305,455	0	230,546	41,804	100%	100%	100%
1/1/2012	290,988	0	212,239	43,602	100%	100%	100%
1/1/2011	281,577	0	191,243	69,445	100%	100%	100%
1/1/2010	266,478	0	178,039	72,671	100%	100%	100%
1/1/2009	257,279	0	165,740	76,074	100%	100%	100%
1/1/2008	300,643	0	154,614	69,386	100%	100%	100%

# Summary of Plan Provisions

# **Plan Description**

The Fire & Police Pension Association Statewide Death & Disability Plan ("Plan") is a cost-sharing multiple-employer defined benefit death and disability plan covering full-time employees of substantially all fire and police departments in Colorado. As of August 5, 2003, the Plan may include part-time police and fire employees. Contributions to the Plan are used for the payment of death and disability benefits. Employers who are covered by Social Security may elect supplementary coverage by the Plan. The Plan was established in 1980 pursuant to Colorado Revised Statutes. The Plan assets are included in the Fire & Police Members' Benefit Investment Fund.

Plan benefits provide 24-hour coverage, both on- and off-duty and are available for members not eligible for normal retirement under a defined benefit plan, or members who have not met 25 years of accumulated service and age 55 under a money purchase plan.

In the case of an on-duty death, benefits may be payable to the surviving spouse and/or dependent children of active members who were eligible to retire, but were still working. Death and disability benefits are free from state and federal taxes in the event that a member's disability is determined to be the result of an on-duty injury or an occupational disease.

### **Plan Year**

A twelve-month period ending December 31.

### **Members Included**

Members included are active employees who are full-time salaried employees of a participating municipality or fire protection district normally serving at least 1,600 hours in a calendar year and whose duties are directly involved with the provision of police or fire protection. As of August 5, 2003, the Plan may include part-time police and fire employees. A department chief who elects to be exempted from the Fire & Police Pension Association Defined Benefit System and covered under Social Security or Colorado Public Employees Retirement Association shall not be covered by the Plan.

Also included are employees of any employer that covers members under the federal Social Security Act or any county that chooses to affiliate with the Fire & Police Pension Association and includes all personnel employed by a sheriff expected to work 1,600 hours or more in a calendar year who are directly involved with the provision of law enforcement or fire protection, as certified by the county, except that personnel whose position does not require passage of a fitness for duty test shall not be eligible for participation in the Statewide Death & Disability Plan.

### **Compensation Considered (Base Salary)**

Base salary means the total base rate of pay including Member Contributions to the Statewide Defined Benefit Plan or Statewide Money Purchase Plan (or contributions to any alternate retirement plan) which are "picked up" by the employer:

- 1) And shall also include longevity pay, sick leave pay taken in the normal course of employment, vacation leave pay taken in the normal course of employment, shift differential, and mandatory overtime that is part of the Member's fixed, periodic compensation.
- 2) Accumulated vacation leave pay will also be included if a Member completes their service requirement for purposes of Normal retirement while exhausting accumulated vacation leave.
- 3) In the event an employer has established or does establish a Deferred Compensation Plan, the amount of the Member's salary that is deferred shall be included in the Member's base salary.
- 4) Any amounts voluntarily contributed to an Internal Revenue Code Section 125 "Cafeteria Plan" shall be included in the Member's base salary.
- 5) Base salary shall not include overtime pay (except as noted in the preceding sentence), step—up pay or other pay for temporarily acting in a higher rank (a Member is deemed temporarily acting in a higher rank if the appointment to the

rank is anticipated to last less than six months), uniform allowances, accumulated sick leave pay, accumulated vacation leave pay (except as noted in the preceding sentence), and other forms of extra pay (including Member Contributions which are paid by the employer and not deducted from the Member's salary).

6) The base salary under the Plan for each Member of the Colorado Springs New Hire Pension Plan shall be the same as the basic salary as defined in the Colorado Springs New Hire Pension Plan.

#### **Contribution Rates**

Prior to 1997, the Plan was primarily funded by the State of Colorado, whose contributions were established by Colorado statute. In 1997 the State made a one-time contribution of \$39,000,000 to fund past and future service costs for all firefighters and police officers hired prior to January 1, 1997. No further State contributions are anticipated.

Members hired on or after January 1, 1997 and members covered by Social Security, began contributing 2.4 percent of base salary to this Plan as of January 1, 1997. The contribution increased to 2.6 percent of base salary as of January 1, 2007. The contribution rate increased to 2.7 percent of base salary as of January 1, 2017. This percentage can vary depending on actuarial experience. All contributions are made by members or on behalf of members. The contribution may be paid entirely by the employer or member, or it may be split between the employer and the member.

### **Pre-Retirement Death Benefits**

If a member dies prior to normal retirement eligibility while off-duty, the surviving spouse shall receive a benefit equal to 40 percent of the monthly base salary paid to the member prior to death. An additional 10 percent of base salary is payable if a surviving spouse has two or more dependent children. If there is no surviving spouse, but the member had one or two dependent children, the benefit payable is 40 percent of the member's monthly base salary. If there is no spouse but three or more dependent children, the benefit equals 50 percent of the member's monthly base salary.

As of October 15, 2002, if a member dies prior to retirement while on-duty; the surviving spouse shall receive a benefit equal to 70 percent of the member's monthly base salary regardless of the number of dependent children. If there is no spouse but one or more dependent children living in the member's household the benefit equals 70 percent of the member's monthly base salary. If there are dependent children without a surviving spouse, and they do not live in the household, the benefit is 40 percent for the first child and 15 percent for each additional child, but not greater than 70 percent in total of the member's monthly base salary. Benefits will be paid to the spouse until death and to dependent children until age 23, death, marriage or other termination of dependency. Benefits may be extended for an incapacitated child.

For purposes of this Plan, a spouse includes a partner in a civil union. These benefits are offset by Money Purchase account balances, Stabilization Reserve Accounts ("SRA") and Deferred Retirement Option Plan ("DROP") accounts, converted to annuities.

### **Disability Benefits**

The Plan provides the members with two types of disability: occupational and total.

Occupational Disability means a member is unable to perform their assigned duties due to a medical condition that is expected to last at least 1 year. Assigned duties are those specific tasks or job duties that a member is required to regularly perform. Within the Occupational Disability category, there are two sub-categories: Temporary Occupational Disability and Permanent Occupational Disability.

Temporary Occupational Disability is an occupational disability for which there is prognosis for improvement or recovery through surgical treatment, counseling, medication, therapy or other means.

Permanent Occupational Disability is an occupational disability caused by a condition that is permanent or degenerative and for which there is no prognosis for improvement or recovery through surgical treatment, counseling, medication, therapy or other means.

Total Disability means the member is unable to engage in any substantial gainful activity due to a medically determined physical or mental impairment that may be expected to result in death or that has lasted or is expected to last at least 1 year.

A member who becomes disabled prior to normal retirement eligibility shall be eligible for disability benefits.

If the member is totally disabled, the member shall receive 70 percent of their base salary preceding disability

If the member is occupationally disabled and their disability is determined to be a permanent occupational disability, the member shall receive 50 percent of their base salary preceding disability regardless of their family status. If the member is occupationally disabled and the disability is determined to be a temporary occupational disability, the member shall receive 40 percent of their base salary preceding disability regardless of their family status for up to five years.

Total disability and permanent occupational disability benefits are offset by the Money Purchase, DROP or SRA balances, converted to annuities. For member's who also participate in Social Security, disability benefits are reduced by Social Security disability benefits derived from employment as a member, if applicable.

Temporary Occupational Disability benefits are payable for a maximum of five years. Permanent Occupational and Total Disability benefits are payable as long as the member remains disabled.

# Offsets for SRA, Money Purchase Balances, and DROP

Plan benefits are reduced by the actuarially equivalent annuities of the SRA, Money Purchase, and DROP account balances. A maximum of 16 percent (or 20 percent for reentry members) of the annual Money Purchase contributions apply for this purpose. Benefits provided by the Plan are also offset by any defined benefit that the member may have received due to work as a Colorado firefighter or police officer.

Spousal income, IRAs, insurance benefits, legal awards, and other investment incomes are not subject to any offset. Deferred compensation accounts are generally not subject to an offset. However, if a department chief has contributions directed to a deferred compensation plan in lieu of a pension plan, the benefit award is offset based on the amount in the deferred compensation account. The amount of the offset is calculated in the same manner as the money purchase offset.

Actuarial equivalence is based on tables adopted by the Fire & Police Pension Association Board of Directors.

## **Optional Forms of Payment**

The Plan provides four choices for receipt of the Permanent Occupational and Total Disability benefits:

- Normal Option The disabled retiree receives an unreduced benefit, payable for as long as the disability exists and as long as the member remains eligible. Upon the death of the retiree, the benefit is discontinued.
- Option 1 (Joint and 100% Survivor) The disabled retiree's benefit amount is reduced on an actuarially equivalent basis, payable for as long as the disability exists and as long as the member remains eligible. Upon the death of the retiree, the designated beneficiary receives 100 percent of the retiree's actuarially equivalent reduced benefit for life.
- Option 2 (Joint and 50% Survivor) The disabled retiree's benefit amount is reduced on an actuarially equivalent basis, payable for as long as the disability exists and as long as the member remains eligible. Upon the death of the retiree, the designated beneficiary receives 50 percent of the retiree's actuarially equivalent reduced benefit for life.
- Option 3 (Family Benefit) The disabled retiree's benefit amount is reduced on an actuarially equivalent basis, payable for as long as the disability exists and as long as the member remains eligible. Upon the death of the retiree, the actuarially equivalent reduced benefit amount is paid to the surviving spouse\* and dependent children, if any, until the death of the surviving spouse, the death of any incapacitated child, or until the youngest child reaches age 23, whichever is later.

\*Per FPPA Rule 402.10(c) 'Spouse' for the purposes of Payment Option 3 means the Member's spouse at the time the first benefit payment is negotiated. If the spouse beneficiary is removed by the Member or dies, the Member is not permitted to add a subsequent spouse.

Actuarial equivalence is based on tables adopted by the Fire & Police Pension Association Board of Directors.

# **Benefit Adjustments for Benefits in Pay Status**

A benefit adjustment of up to 3 percent may be granted to members and survivors by the Fire & Police Pension Association Board of Directors annually. Totally disabled members and their beneficiaries receive an automatic benefit adjustment each year of 3 percent. The benefit adjustment is effective October 1st. A benefit adjustment may begin after receiving benefits for at least 12 calendar months prior to October 1.

# **Changes in Plan Provisions**

The plan provisions have not changed since the prior valuation.

# **Changes in Actuarial Assumptions**

There were no changes in actuarial assumptions since the January 1, 2016 valuation.

Actuarial valuations are completed every other year for the Affiliated Local Plans. The affiliated volunteer fire pension plans' actuarial valuations are completed on the odd years and the old hire actuarial pension plans' actuarial valuations are completed on the even years. Each employer participating in the system is financially responsible for its own liabilities. Accordingly, the aggregate numbers presented in this section are indicative only of the overall condition of the system and are not indicative of the status of any one employer.

# ■ Schedule of Active Member Valuation Data

Valuation Date	Number of Participating Employers	Number of Paid and Volunteer Members	Annual Payroll of Paid Members	Annual Average Pay of Paid Members	% Increase in Average Pay
1/1/2016 and 1/1/2017	221	2,818	281,057	\$93,686	0.0 %
1/1/2015 and 1/1/2016	223	3,170	281,057	93,686	6.5 %
1/1/2014 and 1/1/2015	223	3,174	615,871	87,982	0.0 %
1/1/2013 and 1/1/2014	224	3,458	615,871	87,982	0.6 %
1/1/2012 and 1/1/2013	224	3,461	874,274	87,427	0.0 %
1/1/2011 and 1/1/2012	224	3,730	874,274	87,427	(2.8)%
1/1/2010 and 1/1/2011	226	3,758	3,416,792	89,916	0.7 %
1/1/2009 and 1/1/2010	227	3,730	3,483,331	89,316	9.5 %
1/1/2008 and 1/1/2009	230	3,763	6,199,241	81,569	0.0 %
1/1/2007 and 1/1/2008	228	3,927	6,199,241	81,569	29.2 %

# ■ Gain | (Loss) on Actuarial Value of Assets

Note: Data to calculate a gain/loss analysis on all local plans was not available as of the 1/1/2016 and 1/1/2017 actuarial valuations.

# Schedule of Retirees and Beneficiaries Added To and Removed From Benefit Payroll

	Added t	o Payroll		ed from /roll	Payroll		% Increase	Average
Year Ended	Number	Annual Benefit	Number	Annual Benefit	Number	Annual Benefit	in Annual Benefit	Annual Benefit
1/1/2016 and 1/1/2017	N/A	N/A	N/A	N/A	6,526	\$168,488,670	N/A	\$25,818
1/1/2015 and 1/1/2016	N/A	N/A	N/A	N/A	6,433	167,518,196	N/A	26,040
1/1/2014 and 1/1/2015	N/A	N/A	N/A	N/A	6,553	165,215,117	N/A	25,212
1/1/2013 and 1/1/2014	N/A	N/A	N/A	N/A	6,397	163,950,416	N/A	25,629
1/1/2012 and 1/1/2013	N/A	N/A	N/A	N/A	6,538	164,776,863	N/A	25,203
1/1/2011 and 1/1/2012	N/A	N/A	N/A	N/A	6,305	163,638,762	N/A	25,954
1/1/2010 and 1/1/2011	N/A	N/A	N/A	N/A	6,402	158,198,482	N/A	24,711
1/1/2009 and 1/1/2010	N/A	N/A	N/A	N/A	6,185	156,599,326	N/A	25,319
1/1/2008 and 1/1/2009	N/A	N/A	N/A	N/A	6,258	151,639,626	N/A	24,231
1/1/2007 and 1/1/2008	N/A	N/A	N/A	N/A	6,046	150,903,385	N/A	24,959

### **Solvency Test**

Each employer participating in the system is financially responsible for its own liabilities. Accordingly, the aggregate numbers presented are indicative only of the overall condition of the system and are not indicative of the status of any one employer.

A short–term solvency test is used to check the funding progress towards its funding objective. In a short–term solvency test, the plan's present assets are compared with: (1) liability for active member contributions on deposit, (2) liability for future benefits to present retired lives, (3) liability for service already rendered by active members.

Expressing the next assets available for benefits as a percentage of the different liability measures provides one indication of the funding status on a going—concern basis. Generally, the greater the percentages, the stronger the public employee retirement system.

# ■ Solvency Test

		Aggreg	ate Accrued Lia	abilities For			
		(1)	(2)	(3)			
	Valuation	Active Member	Retirees and	Active Members (Employer			
Valuation	Assets	Contributions	Beneficiaries	Financed Portion) _	Fun	ded Percent	ages
Date	(000's)	(000's)	(000's)	(000's)	(1)	(2)	(3)
1/1/2016 and 1/1/2017	\$1,637,880	*	*	\$2,037,472	N/A	N/A	80.4%
1/1/2015 and 1/1/2016	1,625,899	*	*	2,032,517	N/A	N/A	80.0%
1/1/2014 and 1/1/2015	1,637,698	*	*	1,972,326	N/A	N/A	83.0%
1/1/2013 and 1/1/2014	1,619,114	*	*	1,971,130	N/A	N/A	82.1%
1/1/2012 and 1/1/2013	1,516,275	*	*	2,044,975	N/A	N/A	74.1%
1/1/2011 and 1/1/2012	1,501,490	*	*	2,027,014	N/A	N/A	74.1%
1/1/2010 and 1/1/2011	1,626,454	*	*	2,038,237	N/A	N/A	79.8%
1/1/2009 and 1/1/2010	1,618,456	*	*	2,036,108	N/A	N/A	79.5%
1/1/2008 and 1/1/2009	1,855,494	*	*	2,081,304	N/A	N/A	89.2%
1/1/2007 and 1/1/2008	1,859,987	*	*	2,064,576	N/A	N/A	90.1%

<sup>\*</sup> Included in Column 3

### Summary of Plan Provisions

### **Members Included**

The Affiliated Local Plans are for the benefit of two distinct groups. The first of those are fire and police employees of affiliated employers hired prior to April 8, 1978 (Old Hires). The second of those are the volunteer firefighters of affiliated plans.

# **Compensation Considered**

Compensation comprises base salary, including longevity, sick and vacation pay.

Volunteer members are not compensated. Their benefit is generally based on the total assets in the plan.

### **Normal Retirement Date**

The member's Normal Retirement Date varies with each Old Hire plan. Several plans are based on the date a member has completed years of credited service, usually twenty to twenty-five years. Most plans require the member to complete twenty to twenty-five years of credited service and attain the age of 50 to 55.

Volunteer plans Normal Retirement Date is at age 50 with 20 years of service.

### **Normal Retirement Benefit**

The annual Normal Retirement Benefit varies with each Old Hire plan. The benefit calculation ranges from 50-75% of salary. Several plans offer a lump sum actuarial equivalent benefit.

Volunteer plans offer a flat dollar benefit from \$0 - \$1,400 per month.

### **Deferred Vested Benefit**

Some Old Hire plans allow a member to leave their contributions in the fund and be eligible to receive a vested benefit based on salary times years of credited service at termination, usually with a maximum benefit of 50% of pay. The benefit is payable at normal retirement age, typically age 50 or 55. The minimum eligibility for this benefit is usually ten or twenty years of service at termination. Most plans do not offer deferred vested benefits.

Volunteer plans offer a flat dollar benefit that ranges from 50-100% of the normal retirement benefit depending on the years of credited service at termination. The benefit is usually payable at age 50.

### **Severance Benefits**

In lieu of a future pension, some Old Hire plans offer their members upon termination an election to have accumulated contributions refunded in a lump sum. In addition to receiving accumulated contributions, the member may receive interest on the total accumulated contributions. Most plans do not offer severance benefits.

Volunteer plans are restricted by statute and cannot offer severance benefits.

### **Cost-of-Living Adjustments for Benefits in Pay Status**

Several Old Hire plans offer a cost-of-living increase to their retirees and beneficiaries. Some only offer an ad-hoc cost-of-living increase. Others offer an escalation benefit based on the rank at which the member retired.

Volunteer plans are restricted by statute and cannot offer a cost-of-living increase.

### **Contribution Rates**

The contribution rate varies for each Old Hire plan. Paid member rates range from 0-10%.

Volunteer members do not contribute to their plan.

# **Pre-Retirement Death and Disability Benefits**

The paid Old Hire members are covered by the Statewide Death & Disability Plan.

Some volunteer plans offer a 50% benefit. All volunteer plans are required to pay at least a \$100 lump sum funeral benefit.

# **Post-Retirement Death Benefits**

Most Old Hire plans offer a 50-100% benefit to the surviving spouse until death or remarriage. Some plans also offer actuarially equivalent post-retirement death benefits.

Some volunteer plans offer a 50% benefit to the surviving spouse until death or remarriage.

# **Deferred Retirement Option Plan (DROP)**

Several Old Hire plans allow a member to participate in the DROP after reaching eligibility for normal or delayed retirement. A member continues to work while participating in the DROP, but must terminate employment within a given time frame, generally between three to five years of entry into the DROP. The member's percentage of retirement benefit is frozen at the time of entry into the DROP. The monthly payments accumulate in the DROP account until the member terminates service, at which time the DROP and accumulated benefits can be paid as a lump sum or periodic payments, if desired. The member continues contributing the employee percentage of pay which is credited to the DROP.

Volunteer plans are restricted by statute and cannot offer a DROP.

# **Changes in Plan Provisions**

The provisions of the local plans will vary from plan to plan, as will the periodic changes made to the plans. Local Old Hire plans are required to complete a supplemental actuarial valuation prior to adopting any benefit changes to the plan. Local volunteer fire plans are required to complete a supplemental actuarial valuation if improving their normal retirement benefit above \$100 per month. The following Summary of Actuarial Information and Additional Information is reflective of any changes in plan provisions and is the known Current Plan as of December 31, 2017. The data is adjusted to reflect the impact of such plan provisions as calculated within the required supplemental actuarial study.

# **Changes in Actuarial Assumptions**

There were no changes to the actuarial assumptions since the prior valuations for the Old Hire plans.

The global assumption set for the Volunteer Firefighter plans administered by FPPA was changed in the 2015 Experience Study and effective with the January 1, 2017 valuations. Significant changes affecting the Volunteer Firefighter plans valuations include:

- Reduce inflation from 3.0% to 2.5%,
- Increase real return from 4.5% to 5.0%,
- Update pre- and post-retirement mortality to a table based on RP-2014 generational mortality. Post-retirement mortality includes a blue collar adjustment for healthy retirees.

An explicit charge, equal to the average of the administrative expenses paid in the two prior fiscal years, is included in the calculated annual contribution.

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Employer Plan	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Annual Active Covered Payroll
Adams County (North Washington) FPD (Old Hire)	1/1/2016	\$2,611,791	\$3,865,552	\$1,253,761	67.6%	\$0
Adams County (North Washington) FPD (Volunteer)	1/1/2017	168,659	152,178	(16,481)	110.8%	N/A
Alamosa County FPD (Volunteer)	1/1/2017	617,355	643,127	25,772	96%	N/A
Alamosa Fire (Volunteer)	1/1/2017	1,687,928	1,371,270	(316,658)	123.1%	N/A
Allenspark FPD (Volunteer)	1/1/2017	525 <i>,</i> 595	620,809	95,214	84.7%	N/A
Aspen FPD (Volunteer)	1/1/2017	2,133,263	3,735,243	1,601,980	57.1%	N/A
Ault FPD (Volunteer)	1/1/2017	669,712	1,253,986	584,274	53.4%	N/A
Aurora Fire (Old Hire)	1/1/2016	77,708,819	108,887,994	31,179,175	71.4%	0
Aurora Police (Old Hire)	1/1/2016	93,116,832	131,482,930	38,366,098	70.8%	111,083
Bancroft FPD (Old Hire)	1/1/2016	1,551,179	5,837,771	4,286,592	26.6%	0
Basalt & Rural FPD (Volunteer)	1/1/2017	1,820,737	2,091,710	270,973	87%	N/A
Bennett FPD #7 (Volunteer)	1/1/2017	957,720	798,236	(159,484)	120%	N/A
Berthoud FPD (Volunteer)	1/1/2017	546,050	668,705	122,655	81.7%	N/A
Big Sandy FPD (Volunteer)	1/1/2017	148,756	53,023	(95,733)	280.5%	N/A
Big Thompson Canyon Fire (Volunteer)	1/1/2017	405,372	601,597	196,225	67.4%	N/A
Black Forest Fire Rescue (Volunteer)	1/1/2017	1,235,285	897,220	(338,065)	137.7%	N/A
Blanca Fire (Volunteer)	1/1/2017	154,404	131,802	(22,602)	117.1%	N/A
Boone Fire (Volunteer)	1/1/2017	39,014	39,754	740	98.1%	N/A
Boulder Mountain FPD (Volunteer)	1/1/2017	938,008	1,018,388	80,380	92.1%	N/A
Boulder Rural FPD (Volunteer)	1/1/2017	564,998	1,559,099	994,101	36.2%	N/A
Brighton VFD (Volunteer)	1/1/2017	3,730,997		196,659	95%	
Brush Combined Fire (Volunteer)	1/1/2017	840,991	1,370,946	529,955	61.3%	
Buena Vista Fire (Volunteer)	1/1/2017	455,945	501.431	45.486	90.9%	 N/A
Calhan FPD (Volunteer)	1/1/2017	159,661	116,198	(43,463)	137.4%	N/A
Cañon City Area FPD (Old Hire)	1/1/2016	2,995,542	5,316,905	2,321,363	56.3%	0
Cañon City Area FPD (Volunteer)	1/1/2017	262,420	415,042	152,622	63.2%	N/A
Carbondale & Rural FPD (Volunteer)	1/1/2017	2,296,266	2,557,279	261,013	89.8%	N/A
Cascade FPD (Volunteer)	1/1/2017	324,260	432,144	107,884	75%	N/A
Castle Rock Fire (Volunteer)	1/1/2017	976,167	1,201,828	225,661	81.2%	N/A
Cedaredge Police (Old Hire)	1/1/2016	88,706	42,179	(46,527)	210.3%	0
Central City VFD (Volunteer)	1/1/2017	528,709	578,366	49,657	91.4%	 N/A
Central Orchard Mesa FPD (Volunteer)	1/1/2017	92,016	297,946	205,930	30.9%	N/A
Cherry Hills FPD (Old Hire)	1/1/2016	2,399,223	4,487,878	2,088,655	53.5% 53.5%	0
Cheyenne County FPD #1 (Volunteer)	1/1/2010	468,590	554,266	85,676	84.5%	 N/A
Clear Creek Fire Authority (Volunteer)	1/1/2017	2,027,871	1,964,696	(63,175)	103.2%	N/A N/A
					106.9%	
Coal Crook Capyon EPD (Volunteer)	1/1/2017	1,779,099	1,663,955	(115,144)		N/A
Coal Creek Canyon FPD (Volunteer)	1/1/2017	1,056,698	1,491,734	435,036	70.8%	N/A

<sup>\*</sup>Eligible at age 50 with 20 years of service

Note: Information reported is the known Volunteer Plan Normal Retirement Benefit as of December 31, 2017.

				Additional	nformation			
Calculated Annual Contribution	Amortization Period (Years)	Number of Active Members	Number of Active Members in DROP	Number of Annuitants	Number of Inactive Members	Average Age of Active Members (Years)	Average Service of Active Members (Years)	Volunteer Plan Normal Retirement Benefit (Monthly)*
\$180,163	10	0	0	10	0	N/A	N/A	N/A
(1,251)	12	0	0	9	0	N/A	N/A	\$350
8,220	20	24	0	18	1	40.7	15.8	200
(23,395)	20	23	0	32	4	31.9	5.9	375
21,575	20	22	0	17	2	47.6	7.1	250
181,797	20	23	0	50	4	41.3	7.7	600
57,919	20	11	0	21	0	42.7	7.8	500
3,184,594	20	0	2	132	0	N/A	N/A	N/A
3,906,280	20	1	0	146	0	61.0	38.9	N/A
706,794	8	0	0	14	0	N/A	N/A	N/A
38,423	20	8	0	38	0	52.6	12.5	575
(5,642)	20	22	0	24	6	32.2	3.5	275
11,746	20	2	0	21	0	42.0	11.0	400
(9,160)	20	10	0	9	0	38.8	8.9	50
29,466	20	15	0	 11	3	35.7	4.1	400
(29,408)	20	4	0	20	1	40.0	2.5	500
(1,140)	20	0	0	4	0	N/A	N/A	350
1,224	20	10	0	7	0			50
25,036	20	35	0	35	1	53.7	10.5	200
102,338	20	7	0	30	4	43.3	8.9	500
18,752	20	1	0	38	<u></u> 4	N/A	N/A	950
64,660	20	26		36	4	37.8	8.6	260
10,422	20	13	0	12	4	42.8	5.0	250
(1,129)	20	14		2	<u></u> 3	39.2	8.1	150
226,589	20	0	0	11	0	N/A	N/A	N/A
18,006	20	11	 0	14	0	42.0	8.8	200
90,385	20	42		45		41.2	4.2	. <b></b> 500
13,283	20	10	 0	16		48.8	9.7	200
25,867	20	2	 0	19		49.5	16.0	675
(9,622)	6			1		N/A	N/A	N/A
15,691	20	13		ν	3	30.8	2.2	. <u></u> 500
23,306	20	10		Δ	U.	45.5	7.8	<u></u> 270
214,110		10		ت  11		43.5 N/A		· <b>-</b> ······
	18 20	0 27	υ 	11 17	υ 	39.3	N/A 9.4	N/A 200
11,230 (7,705)	20		·····		υ ••••••	40.0	13.5	450
	<b></b>	8 	 O	38 	Э ••••••••••••••••••••••••••••••••••••			
(5,280)	20	6 22	U	27	4 ••••••	38.4	5.4	600
61,472	20	32	U	34	9	46.8	6.9	300

#### Summary of Actuarial Information

Employer Plan	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Annual Active Covered Payroll
Colorado River (Burning Mountain) FPD (Volunteer)	1/1/2017	\$2,561,833	\$3,065,210	\$503,377	83.6%	N/A
Colorado River (Rifle) FPD (Volunteer)	1/1/2017	4,955,605	3,085,440	(1,870,165)	160.6%	N/A
Colorado Springs Fire (Old Hire)	1/1/2016	76,765,326	98,527,662	21,762,336	77.9%	0
Colorado Springs Police (Old Hire)				17,543,891		
Cortez Police (Old Hire)	1/1/2016	290,784	173,129	(117,655)	168%	0
Crested Butte FPD (Volunteer)	1/1/2017	3,306,819	3,237,360	(69,459)	102.1%	N/A
Cripple Creek Fire (Volunteer)					303.3%	N/A
Crowley VFD (Volunteer)	1/1/2017	44 220	12,125	(32,214)	365.7%	N/A
Crystal Lakes FPD (Volunteer)	1/1/2017				163.2%	N/A
Del Norte Police (Old Hire)						
Denver Fire (Old Hire)	1/1/2016	346,003,532	497,663,581		69.5%	89,857
Denver Police (Old Hire)	1/1/2016	630,910,491	702,470,993	71,560,502	29.2%	0
Divide VFD (Volunteer)	1/1/2017	498.386	378.576			N/A
Donald Westcott FPD (Volunteer)				(169,225)	121.9%	
Dove Creek FPD (Volunteer)	1/1/2017	422,823	1,261,868	839,045	22 5%	NI/A
Durango Fire (Old Hire)						
Durango Police (Old Hire)	4 /4 /0 0 4 0	1,706,299	2,883,012	1,176,713	59.2%	0
Durango FPD (Volunteer)	1/1/2017	5,499,378	6,331,020	831,642	86.9%	N/A
Eads Fire (Volunteer)	1/1/2017	153 858	108 271	(45 587)	142.1%	N/A
East Grand FPD #4 (Volunteer)	1/1/2017	2,069,460		328,649	86.3%	N/A
Eaton FPD (Volunteer)		1,362,886	1,712,368	349,482	79.6%	N/A
Eckley Fire (Volunteer)						
Elbert FPD & Rescue (Volunteer)		207,115	83,593	(123,522)	247.8%	N/A
Elizabeth FPD (Volunteer)	1/1/2017	1,084,285	1,824,199	739,914	59.4%	N/A
Elk Creek FPD (Volunteer)				(458,616)	120.4%	N/A
Englewood Fire (Old Hire)	1/1/2016	6,522,598	9,032,530	2,509,932	72.2%	0
Englewood Police (Old Hire)		4,589,625	8,841,403	4,251,778	51.9%	0
Englewood Fire (Volunteer)		47,810	111,172	63,362	43%	N/A
Evans FPD (Volunteer)	1/1/2017	715,082	1,550,534	835,452	46.1%	N/A
Evergreen FPD (Volunteer)	1/1/2017	4,667,159	6,101,903	1,434,744	76.5%	N/A
Falcon FPD (Volunteer)	1/1/2017	592,730	929,374	336,644	63.8%	N/A
Federal Heights Fire (Volunteer)	1/1/2017	2,998,439	253,426	(2,745,013)	1,183.2%	N/A
Fisher's Peak FPD (Volunteer)	1/1/2017	195,695	99,114	(96,581)	197.4%	N/A
Florence FPD (Volunteer)	1/1/2017	1,829,207	1,537,484	(291,723)	119%	N/A
Foothills Fire & Rescue (Volunteer)	1/1/2017	1,619,679	1,962,678	342,999	82.5%	N/A
Fort Lewis Mesa FPD (Volunteer)	1/1/2017	379,764	485,441	105,677	78.2%	N/A
Fort Morgan Police (Old Hire)	1/1/2016	486,398	1,343,702	857,304	36.2%	0
Fort Morgan Fire (Volunteer)	1/1/2017	1,218,017	2,522,790	1,304,773	48.3%	N/A

<sup>\*</sup>Eligible at age 50 with 20 years of service

Note: Information reported is the known Volunteer Plan Normal Retirement Benefit as of December 31, 2017

				Additional I	nformation			
Calculated Annual Contribution	Amortization Period (Years)	Number of Active Members	Number of Active Members in DROP	Number of Annuitants	Number of Inactive Members	Average Age of Active Members (Years)	Average Service of Active Members (Years)	Volunteer Plan Normal Retirement Benefit (Monthly)*
\$49,359	20	0	0	36	5	0.0	0.0	\$875.50
(177,693)	20	4	0	34	6	51.0	11.0	875.50
2,286,697	19	0	0	182	0	N/A	N/A	N/A
1,833,691	19	0	0	153	0	N/A	N/A	N/A
(12,718)	14	0	0	1	0	N/A	N/A	N/A
19,697	20	27	0	27	9	40.2	8.9	680
(37,295)	20	0	0	6	1	N/A	N/A	300
(2,432)	20	12	0	1	0	50.2	16.4	10
(1,481)	20	11	0	4	0	59.7	6.2	300
6,472	3	0	0	1	0	N/A	N/A	N/A
16,355,396	17	1	2	799	0	61.0	37.9	N/A
7,987,837	20	0	1	1,051	0	N/A	N/A	N/A
(1,492)	20	22	0	7	1	43.4	5.0	299
(11,099)	20	5	0	15	1	33.4	6.8	400
87,450	20	21	0	30	3	41.3	9.0	300
126,278	15	0	0	9	0	N/A	N/A	N/A
122,870	18	0	0	8	0	N/A	N/A	N/A
200,767	20	65	0	75	8	38.5	3.2	800
(2,652)	20	22	0	5	0	30.1	9.2	100
70,485	20	33	0	31	5	37.0	5.6	600
64,459	20	35	0	21	1	28.0	3.2	900
3,800	20	14	0	11	0	42.2	14.5	26
(10,911)	20	13	0	5	1	45.8	13.3	75
73,306	20	0	0	26	1	N/A	N/A	750
(1,189)	20	46	0	57	2	37.6	5.7	400
283,390	16	0	1	39	0	N/A	N/A	N/A
445,045	17	0	1	36	0	N/A	N/A	N/A
13,796	7	0	0	6	0	N/A	N/A	450
82,282	20	2	0	24	5	43.5	8.5	675
266,777	20	92	0	69	13	40.4	5.1	600
34,336	20	0	0	26	1	N/A	N/A	500
(275,034)	20	8	0	4	4	28.8	4.0	450
(6,112)	20	21	0	0	4	45.2	9.5	100
(32,932)	20	55	0	41	0	37.6	7.0	300
63,966	20	40	0	47	6	43.4	5.1	400
16,711	20	9	0	14	2	44.8	6.8	300
102,788	14	0	0	3	0	N/A	N/A	N/A
134,344	20	30	0	40	3	36.7	9.0	425

		Sum	ımary of Actu	arial Informati	on	
Employer Plan	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Annual Active Covered Payroll
Fort Morgan Rural FPD (Volunteer)	1/1/2017	\$847,162	\$1,294,664	\$447,502	65.4%	N/A
Franktown FPD (Volunteer)	1/1/2017	3,177,172	843,970	(2,333,202)	376.5%	N/A
Frederick Firestone FPD (Volunteer)	1/1/2017	134,859	251,429	116,570	53.6%	N/A
Galeton FPD (Volunteer)	1/1/2017	1,347,638	906,083	(441,555)	148.7%	N/A
Genesee FPD (Volunteer)	1/1/2017	1,521,904	1,748,269	226,365	87.1%	N/A
Glacier View FPD (Volunteer)	1/1/2017	298,199	204,075	(94,124)	146.1%	N/A
Glendale Fire (Volunteer)	1/1/2017	224,050	94,736	(129,314)	236.5%	N/A
Glenwood Springs Fire (Volunteer)	1/1/2017	677,116	1,115,982	438,866	60.7%	N/A
Golden Fire (Volunteer)	1/1/2017	2,867,018	4,927,679	2,060,661	58.2%	N/A
Golden Gate FPD (Volunteer)	1/1/2017	318,386	269,351	(49,035)	118.2%	N/A
Grand FPD #1 (Volunteer)	1/1/2017	1,341,119	2,465,745	1,124,626	54.4%	N/A
Grand Junction Fire (Old Hire)	1/1/2016	9,039,230	13,038,163	3,998,933	69.3%	0
Grand Junction Police (Old Hire)	1/1/2016	4,127,239	3,560,821	(566,418)	115.9%	0
Grand Lake FPD (Volunteer)	1/1/2017	1,663,201	1,142,126	(521,075)	145.6%	N/A
Grand Valley FPD (Volunteer)	1/1/2017	3,699,225	1,855,108	(1,844,117)	199.4%	N/A
Greeley Police (Old Hire)	1/1/2016	764,527	1,105,102	340,575	69.2%	0
Greeley (Union Colony) Fire (Old Hire)	1/1/2016	9,477,428	10,407,221	929,793	91.1%	0
Green Mountain Falls-Chipita Park FPD (Volunteer)	1/1/2017	273,579	441,215	167,636	62%	N/A
Gypsum FPD (Volunteer)	1/1/2017	644,096	888,635	244,539	72.5%	N/A
Hartsel FPD (Volunteer)	1/1/2017	691,674	1,205,800	514,126	57.4%	N/A
Haxtun Fire (Volunteer)	1/1/2017	182,002	168,194	(13,808)	108.2%	N/A
Haxtun Police (Old Hire)	1/1/2016	149,681	267,820	118,139	55.9%	0
Hillrose Rural FPD (Volunteer)	1/1/2017	304,040	209,409	(94,631)	145.2%	N/A
Holyoke Fire (Volunteer)	1/1/2017	230,965	193,136	(37,829)	119.6%	N/A
Holyoke FPD (Volunteer)	1/1/2017	203,527	380,585	177,058	53.5%	N/A
Hot Sulphur Springs/Parshall FPD (Volunteer)	1/1/2017	254,911	186,847	(68,064)	136.4%	N/A
Hygiene FPD (Volunteer)	1/1/2017	1,275,437	868,155	(407,282)	146.9%	N/A
Indian Hills FPD (Volunteer)	1/1/2017	322,197	537,399	215,202	60%	N/A
Inter-Canyon FPD (Volunteer)	1/1/2017	1,573,502	2,173,542	600,040	72.4%	N/A
Jackson 105 FPD (Volunteer)	1/1/2017	293,723	444,538	150,815	66.1%	N/A
Jefferson-Como FPD (Volunteer)	1/1/2017	1,201,246	562,385	(638,861)	213.6%	N/A
Kiowa FPD (Volunteer)	1/1/2017	831,446	471,336	(360,110)	176.4%	N/A
Kremmling FPD (Volunteer)	1/1/2017	491,116	747,230	256,114	65.7%	N/A
La Junta Fire (Old Hire)	1/1/2016	830,213	1,421,660	591,447	58.4%	0
La Junta Police (Old Hire)	1/1/2016	731,163	1,155,620	424,457	63.3%	0
La Junta Fire (Volunteer)	1/1/2017	589,609	248,588	(341,021)	237.2%	N/A
La Salle Police (Old Hire)	1/1/2016	1,192,388	1,125,720	(66,668)	105.9%	80,117
La Salle FPD (Volunteer)	1/1/2017	2,891,667	3,812,893	921,226	75.8%	N/A

<sup>\*</sup>Eligible at age 50 with 20 years of service

Note: Information reported is the known Volunteer Plan Normal Retirement Benefit as of December 31, 2017

				Additional I	nformation			
Calculated Annual Contribution	Amortization Period (Years)	Number of Active Members	Number of Active Members in DROP	Number of Annuitants	Number of Inactive Members	Average Age of Active Members (Years)	Average Service of Active Members (Years)	Volunteer Plan Normal Retirement Benefit (Monthly)*
\$45,313	20	30	0	39	2	36.7	8.4	\$ 225
(237,131)	20	10	0	22	1	43.8	12.4	350
15,877	11	0	0	14	0	N/A	N/A	200
(51,730)	20	14	0	11	2	41.3	5.5	500
58,512	20	32	0	40	0	47.9	5.9	450
(680)	20	14	0	5	3	46.6	3.4	250
(12,329)	20	0	0	12	0	N/A	N/A	100
44,500	20	2	0	22	2	54.0	5.0	550
231,006	20	31	0	61	9	36.9	10.1	615
(4,917)	20	1	0	10	0	35.0	10.0	300
121,386	20	15	0	28	3	37.8	7.2	700
424,262	18	0	0	34	0	N/A	N/A	N/A
(71,061)	12	0	0	14	0	N/A	N/A	N/A
(40,016)	20	4	0	11	2	48.3	2.5	900
(169,754)	20	11	0	20	1	34.0	5.6	857.20
44,789	11	0	0	7	0	N/A	N/A	N/A
126,660	16	0	0	29	0	N/A	N/A	N/A
20,558	20	11	0	10	0	44.8	7.3	325
34,096	20	10	0	13	3	37.2	7.0	500
73,406	20	14	0	19	3	49.2	5.9	650
(178)	20	29	0	20	0	39.2	11.6	50
13,404	20	0	0	1	0	N/A	N/A	N/A
(9,957)	20	13	0	13	2	42.7	9.2	100
(2,114)	20	20	0	24	4	37.9	6.3	55
19,213	20	27	0	46	4	43.0	10.1	60
(3,636)	20	10	0	5	0	35.7	4.1	250
(30,469)	20	28	0	22	3	41.8	5.5	300
28,669	20	15	0	17	0	41.6	6.3	250
85,398	20	42	0	26	1	42.7	6.6	432
17,461	20	7	0	17	3	44.0	5.0	200
(35,193)	20	15	0	7	0	41.8	2.7	1,000
(29,834)	20	14	0	13	4	28.2	2.4	300
30,788	20	9	0	13	3	38.4	5.2	450
60,388	19	0	0	4	0	N/A	N/A	N/A
55,128	13	0	0	3	0	N/A	N/A	N/A
(29,781)	20	18	0	5	0	37.9	10.8	200
(3,701)	20	1	0	0	0	64.0	43.0	N/A
98,735	20	26	0	30	3	27.8	2.8	1,000

Summary of	Actuaria	I Information
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Employer Plan	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Annual Active Covered Payroll
Lafayette Fire (Volunteer)	1/1/2017	\$1,387,707	\$2,328,493	\$940,786	59.6%	N/A
Lake City Area FPD (Volunteer)	1/1/2017	103,732	27,641	(76,091)	375.3%	N/A
Lake Dillon FPD (Volunteer)	1/1/2017	3,982,200	4,938,265	956,065	80.6%	N/A
Lake George FPD (Volunteer)	1/1/2017	338,265	442,795	104,530	76.4%	N/A
Lakewood FPD (Old Hire)	1/1/2016	14,000,265	14,910,117	909,852	93.9%	0
Lamar Fire (Old Hire)	1/1/2016	913,625	287,112	(626,513)	318.2%	0
Lamar Fire (Volunteer)	1/1/2017	898,812	333,237	(565,575)	269.7%	N/A
Larkspur FPD (Volunteer)	1/1/2017	1,492,485	2,083,358	590,873	71.6%	N/A
Las Animas Police (Old Hire)	1/1/2016	286,882	571,675	284,793	50.2%	0
Leadville Fire (Old Hire)	1/1/2016	155,044	270,577	115,533	57.3%	0
Lefthand FPD (Volunteer)	1/1/2017	1,313,288	869,740	(443,548)	151%	N/A
Lewis-Arriola FPD (Volunteer)	1/1/2017	1,392,264	1,813,918	421,654	76.8%	N/A
Limon Area FPD (Volunteer)	1/1/2017	664,298	283,039	(381,259)	234.7%	N/A
Livermore FPD (Volunteer)	1/1/2017	196,091	190,611	(5,480)	102.9%	N/A
Log Hill Mesa FPD (Volunteer)	1/1/2017	373,689	350,654	(23,035)	106.6%	N/A
Loveland & Rural Consolidated VFD (Volunteer)	1/1/2017	2,776,027	3,993,486	1,217,459	69.5%	N/A
Loveland Fire (Old Hire)	1/1/2016	136,274	99,179	(37,095)	137.4%	0
Lower Valley FPD (Volunteer)	1/1/2017	1,732,941	1,316,707	(416,234)	131.6%	N/A
Lyons FPD (Volunteer)	1/1/2017	1,177,235	957,530	(219,705)	122.9%	N/A
Mancos FPD (Volunteer)	1/1/2017	1,028,766	291,586	(737,180)	352.8%	N/A
Manitou Springs Fire (Old Hire)	1/1/2016	343,870	503,940	160,070	68.2%	0
Manitou Springs VFD (Volunteer)	1/1/2017	358,381	589,349	230,968	60.8%	N/A
Manzanola Rural FPD (Volunteer)	1/1/2017	197,032	105,020	(92,012)	187.6%	N/A
Montrose FPD (Old Hire)	1/1/2016	118,769	303,931	185,162	39.1%	0
Montrose FPD (Volunteer)	1/1/2017	619,062	896,001	276,939	69.1%	N/A
Mountain View FPD (Old Hire)	1/1/2016	345,218	346,062	844	99.8%	0
Mountain View FPD (Volunteer)	1/1/2017	2,369,702	2,649,061	279,359	89.5%	N/A
Nederland FPD (Volunteer)	1/1/2017	713,584	723,460	9,876	98.6%	N/A
New Raymer/Stoneham FPD (Volunteer)	1/1/2017	889,731	261,688	(628,043)	340%	N/A
North Fork FPD (Volunteer)	1/1/2017	306,986	391,634	84,648	78.4%	N/A
North Routt County Fire (Volunteer)	1/1/2017	284,938	396,712	111,774	71.8%	N/A
Northeast Teller County FPD (Volunteer)	1/1/2017	605,318	718,738	113,420	84.2%	N/A
North-West FPD (Volunteer)	1/1/2017	316,134	632,186	316,052	50%	N/A
Northwest Conejos FPD (Volunteer)	1/1/2017	510,318	677,645	167,327	75.3%	N/A
Norwood FPD (Volunteer)	1/1/2017	484,175	396,202	(87,973)	122.2%	N/A
Nucla-Naturita FPD (Volunteer)	1/1/2017	687,772	513,332	(174,440)	134%	N/A
Nunn FPD (Volunteer)	1/1/2017	998,225	375,407	(622,818)	265.9%	N/A
Oak Creek FPD (Volunteer)	1/1/2017	367,168	762,736	395,568	48.1%	N/A

<sup>\*</sup>Eligible at age 50 with 20 years of service

Note: Information reported is the known Volunteer Plan Normal Retirement Benefit as of December 31, 2017

				Additional I	nformation			
Calculated Annual Contribution	Amortization Period (Years)	Number of Active Members	Number of Active Members in DROP	Number of Annuitants	Number of Inactive Members	Average Age of Active Members (Years)	Average Service of Active Members (Years)	Volunteer Plan Normal Retirement Benefit (Monthly)*
\$84,663	20	0	0	37	6	N/A	N/A	\$ 600
(4,583)	20	11	0	1	1	49.3	3.0	100
91,438	20	1	0	50	1	N/A	N/A	1,000
24,279	20	13	0	6	1	61.8	7.2	450
142,931	14	0	0	40	0	N/A	N/A	N/A
(61,783)	20	0	0	1	0	N/A	N/A	N/A
(52,208)	20	37	0	5	1	35.4	6.5	250
70,028	20	8	0	30	0	47.6	7.6	695
33,962	15	0	0	3	0	N/A	N/A	N/A
15,624	17	0	0	3	0	N/A	N/A	N/A
(20,697)	20	29	0	18	0	46.6	6.0	400
54,216	20	26	0	31	4	34.3	8.4	425
(31,932)	20	21	0	13	2	37.8	3.8	175
8,046	20	21	0	6	0	54.0	5.6	200
6,615	20	25	0	18	0	55.1	6.8	200
114,327	20	0	0	62	4	N/A	N/A	750
(14,247)	4	 0		1	 N	N/A	N/A	N/A
(32,447)	20	21	 0	 17	8	31.9	3.0	600
4,665	20	38	 0	16	 8	37.2	4.3	350
(74,509)	20	13	 0	5	 N	41.6	10.7	200
16,956	20	0	 0		 N	N/A	N/A	N/A
28,688	20	30	 0	 21	1	37.2	3.9	225
(8,488)	20	11		7	 N	43.5	14.5	60
24,319	14			······································	 0	N/A	N/A	N/A
29,255	20	2		 14	1	46.0	12.5	725
3,295	4	0	0	14 1	0	 N/A	N/A	N/A
28,076	20	······································	0	69	12	51.0	7.0	500
8,226	20	0	 0	10	3	51.3	13.4	400
(105,958)	20	 12		6	 2	36.5	7.6	200
14,042	20	29	 0	 11	 n	47.7	8.8	160
	<b></b>	9		11 10	1	·····	5.6	
15,439	20	 1			 1	49.5		300
9,165	20 20	T	U 	21	4	33.0	7.0 9.7	400
34,347	<b></b>	 20		13	12	53.7		475
20,424	20 20	28		41 9	13 1	39.2 	11.9	100
(6,488)	20	26	U		1	51.0	10.7	175
(15,274)	20	16		19 	1	40.6	8.3	200
(58,396)	20	12		4	1	41.8	11.3	325
40,136	20	4	0	16	4	46.0	12.0	400

Employer Plan	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded (Surplus) Actuarial Accrued Liability	Funded Ratio	Annual Active Covered Payroll
Olathe FPD (Volunteer)	1/1/2017	\$659,340	\$1,119,721	\$460,381	58.9%	N/A
Olney Springs Fire (Volunteer)	1/1/2017	178,334	119,562	(58,772)	149.2%	N/A
Ordway Fire (Volunteer)	1/1/2017	223,889	144,959	(78,930)	154.4%	N/A
Ouray VFD (Volunteer)	1/1/2017	545,916	282,325	(263,591)	193.4%	N/A
Palisade VFD (Volunteer)	1/1/2017	1,008,921	462,686	(546,235)	218.1%	N/A
Palmer Lake Fire (Volunteer)	1/1/2017	28,184	97,155	68,971	29%	N/A
Parker FPD (Volunteer)	1/1/2017	334,369	641,936	307,567	52.1%	N/A
Pawnee FPD (Volunteer)	1/1/2017	192,221	40,774	(151,447)	471.4%	N/A
Peetz FPD (Volunteer)	1/1/2017	320,388	57	(320,331)	562,084.2%	N/A
Peyton FPD (Volunteer)	1/1/2017	59,807	27,585	(32,222)	216.8%	N/A
Pinewood Springs VFD (Volunteer)	1/1/2017	196,841	202,076	5,235	97.4%	N/A
Plateau Valley FPD (Volunteer)	1/1/2017	1,758,393	1,555,438	(202,955)	113%	N/A
Platte Canyon FPD (Volunteer)	1/1/2017	1,085,483	1,127,094	41,611	96.3%	N/A
Platte Valley FPD (Volunteer)	1/1/2017	2,267,943	1,853,892	(414,051)	122.3%	N/A
Platteville/Gilcrest FPD (Volunteer)	1/1/2017	4,312,604	5,099,868	787,264	84.6%	N/A
Pleasant View Metro Fire District (Volunteer)	1/1/2017	1,869,235	1,337,486	(531,749)	139.8%	N/A
Poudre Canyon FPD (Volunteer)	1/1/2017	115,235	84,548	(30,687)	136.3%	N/A
Poudre Fire Authority (Volunteer)	1/1/2017	114,925	128,651	13,726	89.3%	N/A
Pueblo Fire (Old Hire)	1/1/2016	36,406,436	48,844,137	12,437,701	74.5%	0
Pueblo Police (Old Hire)	1/1/2016	51,614,509	65,398,075	13,783,566	78.9%	0
Pueblo Rural FPD (Old Hire)	1/1/2016	1,930,682	2,361,512	430,830	81.8%	0
Rangely Rural FPD (Volunteer)	1/1/2017	614,990	689,686	74,696	89.2%	N/A
Rattlesnake FPD (Volunteer)	1/1/2017	1,073,277	1,172,314	99,037	91.6%	N/A

328,032

255,447

693,609

234,616

96,730

354,569

559,527

129,627

571,721

341,816

301,382

355,702

6,419,100

\$152,038

1,283,479

4,589,919

447,757

619,972

364,153

450,139

509,274

764,720

236,171

858,474

297,640

807,034

7,701,927

\$159,073

1,300,563

25,858

1,001,788

3,683,934

119,725

364,525

(281,691)

(329,456)

(905,985)

215,523

(70,872)

154,705

205,193

106,544

728,842

516,658

(3,742)

451,332

\$7,035

1,282,827

73.3%

41.2%

128.1%

190.5%

124.6%

52.1%

374.1%

69.6%

73.2%

54.9%

39.8%

101.3%

44.1%

83.3%

95.6%

44%

Red Feather Lakes FPD (Volunteer)

Red White & Blue FPD (Old Hire)

Red White & Blue FPD (Volunteer)

Ridgway FPD (Volunteer)

Rio Blanco FPD (Volunteer)

Rocky Ford Police (Old Hire)

Rocky Ford Fire (Volunteer)

Rocky Mountain VFD (Volunteer)

Silverton San Juan FRA (Volunteer)

South Adams County FPD (Old Hire)

South Arkansas FPD (Volunteer)

South Adams County FPD (Volunteer)

Sable Altura FPD (Volunteer)

Salida Fire (Old Hire)

Salida Police (Old Hire)

Sheridan Fire (Volunteer)

Note: Information reported is the known Volunteer Plan Normal Retirement Benefit as of December 31, 2017

1/1/2017

1/1/2016

1/1/2017

1/1/2017

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N/A

0

0

N/A

N/A

N/A

N/A

0

0

0

<sup>\*</sup>Eligible at age 50 with 20 years of service

				Additional I	nformation			
Calculated Annual Contribution	Amortization Period (Years)	Number of Active Members	Number of Active Members in DROP	Number of Annuitants	Number of Inactive Members	Average Age of Active Members (Years)	Average Service of Active Members (Years)	Volunteer Plan Normal Retirement Benefit (Monthly)*
\$59,025	20	19	0	20	2	34.9	5.2	\$ 500
(3,627)	20	6	0	5	2	48.6	11.0	150
(5,657)	20	12	0	13	0	42.3	10.6	75
(26,731)	20	25	0	24	1	45.5	9.5	90
(35,847)	20	42	0	14	3	30.1	3.1	300
7,691	20	19	0	10	0	29.9	2.6	100
30,619	20	0	0	20	0	N/A	N/A	420
(14,631)	20	9	0	2	0	44.9	14.4	50
(33,395)	20	19	0	0	0	37.4	7.7	0
(1,851)	20	11	0	1	1	34.9	3.7	100
8,188	20	17	0	3	0	57.1	7.6	225
5,136	20	19	0	12	0	45.9	11.3	700
8,230	20	12	0	20	0	46.2	10.3	375
(17,661)	20	19	0	22	7	30.8	4.2	750
80,724	20	3	0	46	8	40.5	4.5	1,030
61,842	20	50	0	3	3	28.4	3.0	1,400
4,460	20	42	0	0	1	49.6	4.4	100
2,305	20	1	0	5	0	63.0	30.0	300
1,565,925	13	0	1	132	0	N/A	N/A	N/A
1,571,421	16	0	0	117	0	N/A	N/A	N/A
51,207	16	0	0	8	0	N/A	N/A	N/A
23,465	20	26	0	11	0	35.0	6.9	350
35,307	20	36	0	23	2	37.0	6.4	375
18,260	20	6	0	11	1	62.7	3.7	400
48,265	12	0	0	2	0	N/A	N/A	N/A
(26,431)	20	0	0	31	3	N/A	N/A	400
(26,316)	20	18	0	11	0	40.9	4.9	300
(81,172)	20	27	0	35	1	41.0	7.1	900
29,260	12	0	0	2	0	N/A	N/A	N/A
(6,382)	20	24	0	5	1	38.6	7.4	. <u></u> 25
18,150	20	1	0	22	2	66.0	27.0	200
57,666	20	32	0	9	5	34.4	3.7	550
14,074	15	0	0	3	0	N/A	N/A	N/A
75,808	18	0	0	6	0	N/A	N/A	
66,102	12	0	0	18	1	N/A	N/A	579
2,373	20	25	0	11	6	52.4	12.6	100
48,096	20	0	0	2	0	N/A	N/A	N/A
125,749	20	 8	0	64	9	37.6	9.0	1,000
1,774	20	0	0	6	0	N/A	N/A	225

	Information

South Conejos FPD (Volunteer)	1/1/2017 1/1/2017 1/1/2017	\$260,843 321,553	\$241,102	4		Payroll
o		321,553		\$(19,741)	108.2%	N/A
South Metro Fire Rescue (Volunteer)	1/1/2017	,	328,772	7,219	97.8%	N/A
Southwest Washington County FPD (Volunteer)	1/1/2017	160,842	151,764	(9,078)	106%	N/A
Springfield Police (Old Hire)	1/1/2016	460,742	359,315	(101,427)	128.2%	0
Springfield Fire (Volunteer)	1/1/2017	160,261	53,389	(106,872)	300.2%	N/A
Steamboat Springs VFD (Volunteer)	1/1/2017	1,324,825	1,549,419	224,594	85.5%	N/A
Sterling Fire (Old Hire)	1/1/2016	730,824	1,355,918	625,094	53.9%	0
Sterling Police (Old Hire)	1/1/2016	308,244	136,821	(171,423)	225.3%	0
Sterling Fire (Volunteer)	1/1/2017	414,683	492,963	78,280	84.1%	N/A
Stonewall FPD (Volunteer)	1/1/2017	976,557	764,225	(212,332)	127.8%	N/A
Stratton FPD (Volunteer)	1/1/2017	157,981	61,154	(96,827)	258.3%	N/A
Sugar City Fire (Volunteer)	1/1/2017	103,934	105,117	1,183	98.9%	N/A
Sugarloaf FPD (Volunteer)	1/1/2017	409,266	651,788	242,522	62.8%	N/A
Telluride FPD (Volunteer)	1/1/2017	2,015,287	2,940,892	925,605	68.5%	N/A
Thornton Fire (Old Hire)	1/1/2016	4,890,245	7,470,746	2,580,501	65.5%	0
Timberline FPD (Volunteer)	1/1/2017	1,734,031	1,937,293	203,262	89.5%	N/A
Trinidad Fire (Old Hire)	1/1/2016	635,872	1,249,122	613,250	50.9%	0
Trinidad Police (Old Hire)	1/1/2016	53,056	122,445	69,389	43.3%	0
Walsh VFD (Volunteer)	1/1/2017	89,355	51,007	(38,348)	175.2%	N/A
Wellington FPD (Volunteer)	1/1/2017	1,578,303	2,313,638	735 <i>,</i> 335	68.2%	N/A
West Cheyenne FPD (Volunteer)	1/1/2017	164,690	126,804	(37,886)	129.9%	N/A
West Douglas County FPD (Volunteer)	1/1/2017	555,105	888,709	333,604	62.5%	N/A
West Metro FPD (Volunteer)	1/1/2017	767,719	666,230	(101,489)	115.2%	N/A
West Routt FPD (Volunteer)	1/1/2017	2,773,891	2,200,353	(573,538)	126.1%	N/A
Westminster VFD (Volunteer)	1/1/2017	2,466,939	1,594,849	(872,090)	154.7%	N/A
Wet Mountain FPD (Volunteer)	1/1/2017	1,906,984	1,461,880	(445,104)	130.4%	N/A
Wiggins Rural FPD (Volunteer)	1/1/2017	1,153,366	940,655	(212,711)	122.6%	N/A
Wiley Rural FPD (Volunteer)	1/1/2017	139,804	47,929	(91,875)	291.7%	N/A
Windsor Severance FPD (Volunteer)	1/1/2017	2,815,855	3,346,267	530,412	84.1%	N/A
Yampa FPD (Volunteer)	1/1/2017	441,596	646,259	204,663	68.3%	N/A
Yuma Fire (Volunteer)	1/1/2017	575,582	256,111	(319,471)	224.7%	N/A

<sup>\*</sup>Eligible at age 50 with 20 years of service

Note: Information reported is the known Volunteer Plan Normal Retirement Benefit as of December 31, 2017

	Additional Information							
Calculated Annual Contribution	Amortization Period (Years)	Number of Active Members	Number of Active Members in DROP	Number of Annuitants	Number of Inactive Members	Average Age of Active Members (Years)	Average Service of Active Members (Years)	Volunteer Plan Normal Retirement Benefit (Monthly)*
\$(1,787)	20	19	0	21	0	37.6	10.3	\$ 100
2,070	20	0	0	12	1	N/A	N/A	400
1,660	20	15	0	6	1	42.1	9.2	100
(9,675)	14	0	0	1	0	N/A	N/A	N/A
(9,256)	20	13	0	3	0	39.2	7.3	95
23,084	20	1	0	24	3	47.0	8.0	650
64,508	19	0	0	4	0	N/A	N/A	N/A
(27,941)	9	0	0	1	0	N/A	N/A	N/A
10,738	20	9	0	16	2	25.7	3.2	300
13,916	20	25	0	11	1	51.3	5.5	550
(8,896)	20	9	0	6	1	41.6	11.2	50
2,139	20	11	0	4	0	50.6	15.1	100
34,507	20	23	0	23	0	47.5	8.7	220
112,777	20	58	0	45	1	44.4	8.6	400
269,653	18	0	1	19	0	N/A	N/A	N/A
32,541	20	10	0	54	3	53.2	9.2	340
72,529	14	0	0	6	0	N/A	N/A	N/A
13,070	9	0	0	5	0	N/A	N/A	N/A
(1,757)	20	17	0	0	0	46.4	8.7	100
93,272	20	9	0	16	9	30.3	5.5	1,000
(1,881)	20	21	0	4	0	37.8	11.1	100
46,916	20	31	0	39	1	43.5	6.7	200
(12,697)	20	0	0	29	2	N/A	N/A	250
(45,073)	20	14	0	24	1	32.9	3.3	750
(86,067)	20	0	0	27	0	N/A	N/A	700
(42,699)	20	13	0	24	5	37.2	8.5	400
(25,119)	20	22	0	14	1	31.4	6.9	300
(7,646)	20	11	0	2	0	37.1	5.9	100
53,941	20	3	0	37	10	40.7	6.3	775
27,962	20	13	0	12	0	38.4	10.5	400
(31,912)	20	24	0	24	0	42.4	12.5	75

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The objectives of the Statistical Section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information in order to understand and assess the overall financial condition of the Fire & Police Members' Benefit Investment Fund and the Fire & Police Members' Self-Directed Investment Fund. In support of these objectives, FPPA reports information in this section in compliance with Governmental Accounting Standards Board (GASB) Statement 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements relative to the supplementary information provided in this section.

#### FINANCIAL TREND INFORMATION

Pages 179 - 180 Detailed re

Detailed revenue and expense categories for the past 10 years.

- Revenues by Source All Plans
- Revenue Allocation All Plans
- Expenses by Type All Plans

Page 181 - 196

Financial trend information about the growth of FPPA's assets within various reporting entities.

Changes in Fiduciary Net Position

This schedule provides detailed information about the trends of key sources of additions and deductions to the Plans' fiduciary net position, which assist in providing a context framing how the Plans' financial position have changed over time.

#### **OPERATING INFORMATION**

Pages 197 - 201 Payment information according to Year Retired within the ranges of Years of Service Credit.

• Schedule of Average Benefit Payments for New Benefit Recipients

Pages 202 - 205 Principal Participating Employers by Plan

Pages 206 - 212 Employers

Those employers affiliated for coverage under each applicable plan.

Pages 213 - 218 Benefit and Refund Deductions from Net Position by Type.

### **DEMOGRAPHIC AND ECONOMIC INFORMATION**

Pages 219 - 225

Demographic information is designed to provide additional insight regarding FPPA's active and retired membership. Economic information provides an overall summary of the sources of change within the Total Pension Fund Fiduciary Net Position managed by FPPA. All non-accounting data is derived from FPPA internal sources. The demographic and economic information presented includes:

- Active Members by Plan Type
- Retired Members by Plan Type
- Defined Benefit System Membership by Status
- Statewide Death & Disability Plan Membership by Status
- Active and Retired Members by Occupation
- Growth of Total Pension Fund Net Position
- Schedule of Retired Members by Type of Benefit.

While the material in this section is intended to supplement the independent auditor's report contained elsewhere, none of the information within the Statistical Section has been reviewed or certified as to its accuracy by FPPA's auditors.

# ■ Revenues by Source – All Plans

For Year Ended	Investment Earnings	State Funding*	Employers	Employees	Contributions for Service Reinstatements	Affiliations	Total
2017	\$692,898,213	\$2,957,415	\$111,386,252	\$234,115,361		\$101,682,445	\$1,143,039,686
2016	246,981,141	2,942,988	111,676,139	113,054,531	\$59,172		474,713,971
2015	72,378,714	2,916,894	123,912,110	122,762,059		(424,968)	321,544,809
2014	288,997,131	2,929,781	116,898,369	97,049,216	17,816		505,892,313
2013	570,927,282	145,255,639	114,808,487	107,025,634	32,919	10,350,550	948,400,511
2012	393,619,896	8,303,953	104,833,565	104,175,480		(1,528,280)	609,404,614
2011	24,699,751	3,102,866	101,823,398	115,127,440		85,939,479	330,692,934
2010	402,703,434	3,078,432	89,914,037	79,691,769		211,874	575,599,546
2009	515,320,880	2,908,504	79,071,860	72,855,332		26,112,745	696,269,321
2008	(1,072,758,209)	37,592,294	88,810,611	60,950,939		1,051,718	(884,352,647)

<sup>\*</sup> Prior to 2014, State Funding was provided to both Local Affiliated Old Hire and Volunteer Firefighter plans. The Local Affiliated Old Hire plans had state funding suspended from 2009-2011. The State completed their obligation to fund Local Affiliated Old Hire plans as of 5/31/2013. Beginning in 2014 and going forward, the State Funding amounts are representative for Affiliated Volunteer Firefighter plans only.

# ■ Revenue Allocation — All Plans

Additions to Fund Balance	Benefit Payments	Administrative Expenses	Refunds & Withdrawals	Pension Expense & Change in Net Pension Liability**	Total
\$707,143,465	\$284,981,165	\$7,587,441	\$135,616,702	\$7,710,913	\$1,143,039,686
137,769,209	274,598,388	7,858,514	52,264,655	2,223,205	474,713,971
(17,120,086)	260,160,933	6,978,847	70,279,168	1,245,947	321,544,809
199,350,710	250,181,029	7,872,867	48,487,707		505,892,313
646,654,542	242,611,084	7,218,541	51,916,344		948,400,511
320,639,551	230,312,590	8,307,066	50,145,407		609,404,614
26,307,100	221,287,914	7,386,801	75,711,119		330,692,934
314,956,021	217,548,445	6,501,353	36,593,727		575,599,546
461,550,570	196,224,840	5,829,521	32,664,390		696,269,321
(1,104,966,569)	185,187,189	5,215,816	30,210,917		(884,352,647)
	\$707,143,465 137,769,209 (17,120,086) 199,350,710 646,654,542 320,639,551 26,307,100 314,956,021 461,550,570	Fund Balance         Payments           \$707,143,465         \$284,981,165           137,769,209         274,598,388           (17,120,086)         260,160,933           199,350,710         250,181,029           646,654,542         242,611,084           320,639,551         230,312,590           26,307,100         221,287,914           314,956,021         217,548,445           461,550,570         196,224,840	Fund Balance         Payments         Expenses           \$707,143,465         \$284,981,165         \$7,587,441           137,769,209         274,598,388         7,858,514           (17,120,086)         260,160,933         6,978,847           199,350,710         250,181,029         7,872,867           646,654,542         242,611,084         7,218,541           320,639,551         230,312,590         8,307,066           26,307,100         221,287,914         7,386,801           314,956,021         217,548,445         6,501,353           461,550,570         196,224,840         5,829,521	Fund Balance         Payments         Expenses         Withdrawals           \$707,143,465         \$284,981,165         \$7,587,441         \$135,616,702           137,769,209         274,598,388         7,858,514         52,264,655           (17,120,086)         260,160,933         6,978,847         70,279,168           199,350,710         250,181,029         7,872,867         48,487,707           646,654,542         242,611,084         7,218,541         51,916,344           320,639,551         230,312,590         8,307,066         50,145,407           26,307,100         221,287,914         7,386,801         75,711,119           314,956,021         217,548,445         6,501,353         36,593,727           461,550,570         196,224,840         5,829,521         32,664,390	Additions to Fund BalanceBenefit PaymentsAdministrative ExpensesRefunds & Withdrawals& Change in Net Pension Liability**\$707,143,465\$284,981,165\$7,587,441\$135,616,702\$7,710,913137,769,209274,598,3887,858,51452,264,6552,223,205(17,120,086)260,160,9336,978,84770,279,1681,245,947199,350,710250,181,0297,872,86748,487,707646,654,542242,611,0847,218,54151,916,344320,639,551230,312,5908,307,06650,145,40726,307,100221,287,9147,386,80175,711,119314,956,021217,548,4456,501,35336,593,727461,550,570196,224,8405,829,52132,664,390

<sup>\*\*</sup> Pension Expense & Change in Net Pension Liability is not available prior to 2015 with the implementation of GASB Statement No. 68 in 2015.

# **■** Expenses by Type — All Plans

For Year Ended	Benefit Payments	Refunds	Administrative Expenses	Pension Expense & Change in Net Pension Liability*	Capital Expenses	Total
2017	\$284,981,165	\$135,616,702	\$7,587,441	\$7,710,913	\$689,303	\$436,585,524
2016	274,598,388	52,264,655	7,858,514	2,223,205	596,117	337,540,879
2015	260,160,933	70,279,168	6,978,847	1,245,947	339,823	339,004,718
2014	250,181,029	48,487,707	7,872,867		470,437	307,012,040
2013	242,611,084	51,916,344	7,218,541		126,977	301,872,946
2012	230,312,590	50,145,407	8,307,066		375,571	289,140,634
2011	221,287,914	75,711,119	7,386,801		391,016	304,776,850
2010	217,548,445	36,593,727	6,501,353		202,049	260,845,574
2009	196,224,840	32,664,390	5,829,521		6,700	234,725,451
2008	185,187,189	30,210,917	5,215,816		60,051	220,673,973

<sup>\*</sup> Pension Expense & Change in Net Pension Liability is not available prior to 2015 with the implementation of GASB Statement No. 68 in 2015.

**Affiliated Local Plans** 

Member Contributions	Additions	2017	2016	2015	2014	
Affiliations (withdrawals) (582,682) 0 (424,968) State Contributions 2,957,415 2,942,988 2,916,894 2,929 Investment Income (Loss) 214,570,378 80,195,810 29,503,367 109,355 Total Additions \$266,376,318 \$122,465,136 \$88,460,826 \$165,053  Deductions  Benefit Payments:  Retirees/Survivors \$168,478,600 \$168,257,048 \$165,621,180 \$164,721 Death/Disability Refunds of Contributions 140,874 918,003 201,899 521 Administrative Costs 2,033,565 2,561,689 2,523,894 2,680 Total Deductions \$170,653,039 \$171,736,740 \$168,346,973 \$167,922 Changes in Fiduciary Net Position \$95,723,279 \$(49,271,604) \$(79,886,147) \$(2,869, Changes in Net Pension Liability 391,745 322,903 299,237 Persion Expense (2,194,466) (50,661) (464,315) Effect of Change in Accounting Principle (4,631,346)  State Contributions  Member Contributions  Member Contributions  South Additions 2017 2016 2015 2014  Employer Contributions  Member Contributions  Member Contributions  South Additions \$20,492,16 17,960,708 5,609,095 22,363  Total Additions \$73,147,862 \$36,337,796 \$22,307,121 \$37,884  Deductions  Benefit Payments:  Retirees/Survivors  Death/Disability \$28,157,074 \$26,128,642 \$24,096,515 \$22,707 Editations \$9,172 0 12  Administrative Costs 1,881,828 761,530 706,905 722  Total Deductions \$30,038,902 \$26,993,944 \$24,803,420 \$23,442  Changes in Fiduciary Net Position \$43,108,960 \$93,884,52 \$(2,496,299) \$14,441  Changes in Fiduciary Net Position \$42,496,515 \$22,070  Total Deductions \$30,038,902 \$26,993,944 \$24,803,420 \$23,442  Changes in Fiduciary Net Position \$43,108,960 \$93,884,52 \$(2,496,299) \$14,441	Employer Contributions	\$49,272,548	\$39,169,647	\$56,296,280	\$52,530,357	
Affiliations (Withdrawals) (582,682) 0 (424,968) State Contributions 2,957,415 2,942,988 2,916,894 2,929 Investment Income (Loss) 214,570,378 80,195,810 29,503,367 109,355 Total Additions \$266,376,318 \$122,465,136 \$88,460,826 \$165,053  Deductions Benefit Payments: Retires/Survivors \$168,478,600 \$168,257,048 \$165,621,180 \$164,721 Death/Disability Returned of Contributions 140,874 918,003 201,899 521 Administrative Costs 2,033,565 2,561,689 2,523,894 2,680 Total Deductions \$170,653,039 \$177,736,740 \$168,346,973 \$167,922 Changes in Fiduciary Net Position \$59,723,279 \$(49,271,604) \$(79,886,147) \$(2,869,646) \$1,922,037 Pension Expense (2,194,466) (500,661) (464,315) Fiduciary Net Position at End of Year \$1,560,983,332 1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Effect of Change in Accounting Principle Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665,903 1,648,535 Fiduciary Net Position \$1,600,600,600,60			156,691	169,253	237,228	
Total Additions   S266,376,318   S122,465,136   S88,460,826   S165,053			0	(424,968)	0	
Investment Income (Loss)		2,957,415	2,942,988	2,916,894	2,929,781	
Deductions		214,570,378	80,195,810	29,503,367	109,355,637	
Benefit Payments: Retires/Survivors \$168,478,600 \$168,257,048 \$165,621,180 \$164,721 Death/Disability Returnes of Contributions 140,874 918,003 201,899 521 Administrative Costs 2,033,565 2,561,689 2,523,894 2,680 Total Deductions \$170,653,039 \$171,736,740 \$168,346,973 \$167,922 Changes in Fiduciary Net Position \$95,723,279 \$(49,271,604) \$(79,886,147) \$(2,869, Changes in Net Pension Liability 391,745 322,903 229,237 Pension Expense (2,194,466) (500,661) (464,315) Fiduciary Net Position at Beginning of Year 1,511,533,970 \$1,560,983,332 1,645,665,903 1,645,565 Fiduciary Net Position at End of Year \$1,605,454,528 \$1,511,533,970 \$1,560,983,332 \$1,645,665  Statewide Death & Disability Plan Additions 2017 2016 2015 2014 Employer Contributions Member Contributions Member Contributions S20,698,646 \$18,377,088 \$16,698,025 \$15,521 Affiliations (Withdrawals) State Contributions Investment Income (Loss) \$2,449,216 17,960,708 5,609,096 22,363 Total Additions \$73,147,862 \$36,337,796 \$22,307,121 \$37,884  Deductions Benefit Payments: Retires/Survivors Death/Disability \$2,81,57,074 \$26,128,642 \$24,096,515 \$22,707 Refunds of Contributions \$30,038,902 \$26,949,344 \$24,803,420 \$23,402 Changes in Fiduciary Net Position \$43,108,960 \$9,388,452 \$(2,496,299) \$14,441,414,414,414,414,414,414,414,414,	Total Additions	\$266,376,318	\$122,465,136	\$88,460,826	\$165,053,003	
Retirees/Survivors	Deductions					
Death/Disability   Refunds of Contributions   140,874   918,003   201,899   5.21	Benefit Payments:			1		
Death/Disability         Refunds of Contributions         140,874         918,003         201,899         5.21           Administrative Costs         2,033,565         2,561,689         2,523,894         2,603         2,617,736,740         \$168,346,973         \$167,922           Changes in Fiduciary Net Position         \$95,723,279         \$(49,271,604)         \$(79,886,147)         \$(2,869, 270,903)         \$(29,271,604)         \$(79,886,147)         \$(2,869, 270,903)         \$(29,271,604)         \$(79,886,147)         \$(2,869, 270,903)         \$(29,271,604)         \$(79,886,147)         \$(2,869, 270,903)         \$(29,271,604)         \$(79,886,147)         \$(2,869, 270,903)         \$(29,271,604)         \$(29,2707,604)         \$(29,2707,604)	Retirees/Survivors	\$168,478,600	\$168,257,048	\$165,621,180	\$164,721,406	
Administrative Costs 2,033,565 2,561,689 2,523,894 2,680 Total Deductions \$170,653,039 \$171,736,740 \$168,346,973 \$167,922 Changes in Fiduciary Net Position \$95,723,279 \$(49,271,604) \$(79,886,147) \$(2,869, Changes in Net Pension Liability 391,745 322,903 299,237 Pension Expense (2,194,466) \$(500,661) \$(464,315) \$(465,665,903) \$(465,665) \$(465,316) \$(464,315) \$(464,315) \$(464,315) \$(464,315) \$(464,315) \$(464,315) \$(464,315) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(465,665) \$(465,316) \$(464,315) \$(466,315) \$(4	Death/Disability					
Total Deductions	Refunds of Contributions	140,874	918,003	201,899	521,475	
Changes in Fiduciary Net Position         \$95,723,279         \$(49,271,604)         \$(79,886,147)         \$(2,869, Changes in Net Pension Liability)         \$391,745         \$322,903         299,237           Pension Expense         (2,194,466)         (500,661)         (464,315)           Fiduciary Net Position at Beginning of Year         1,511,533,970         1,560,983,332         1,645,655,903         1,648,535           Effect of Change in Accounting Principle         (4,631,346)         (4,631,346)         (4,631,346)           Fiduciary Net Position at End of Year         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan           Additions         2017         2016         2015         2014           Employer Contributions           Member Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)           State Contributions           Investment Income (Loss)         \$2,449,216         17,960,708         \$,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Death/Disability         \$28	Administrative Costs	2,033,565	2,561,689	2,523,894	2,680,031	
Changes in Net Pension Liability         391,745         322,903         299,237           Pension Expense         (2,194,466)         (500,661)         (464,315)           Fiduciary Net Position at Beginning of Year         1,511,533,970         1,560,983,332         1,645,665,903         1,648,535           Effect of Change in Accounting Principle         (4,631,346)         (4,631,346)         Fiduciary Net Position at End of Year         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan           Additions         2017         2016         2015         2014           Employer Contributions           Member Contributions           Member Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)           State Contributions           Investment Income (Loss)         \$2,449,216         17,960,708         \$5,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707 <td cols<="" td=""><td>Total Deductions</td><td>\$170,653,039</td><td>\$171,736,740</td><td>\$168,346,973</td><td>\$167,922,912</td></td>	<td>Total Deductions</td> <td>\$170,653,039</td> <td>\$171,736,740</td> <td>\$168,346,973</td> <td>\$167,922,912</td>	Total Deductions	\$170,653,039	\$171,736,740	\$168,346,973	\$167,922,912
Changes in Net Pension Liability         391,745         322,903         299,237           Pension Expense         (2,194,466)         (500,661)         (464,315)           Fiduciary Net Position at Beginning of Year         1,511,533,970         1,560,983,332         1,645,665,903         1,648,535           Effect of Change in Accounting Principle         (4,631,346)         Fiduciary Net Position at End of Year         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan           Additions         2017         2016         2015         2014           Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         State Contributions         \$17,960,708         \$5,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Deductions           Benefit Payments:         Retirees/Survivors         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         \$9,172         0         12           Administrative Costs         \$1,881,828         761,530         706,905         722     <	Changes in Fiduciary Net Position	<i>\$95,723,279</i>	\$(49,271,604)	\$(79,886,147)	\$(2,869,909)	
Fiduciary Net Position at Beginning of Year         1,511,533,970         1,560,983,332         1,645,665,903         1,648,535           Effect of Change in Accounting Principle         (4,631,346)         (4,631,346)           Fiduciary Net Position at End of Year         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan           Additions         2017         2016         2015         2014           Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)           State Contributions           Investment Income (Loss)         \$2,449,216         17,960,708         5,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Death/Disability           Retirees/Survivors         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         \$59,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420<				299,237		
Fiduciary Net Position at Beginning of Year         1,511,533,970         1,560,983,332         1,645,665,903         1,648,535           Effect of Change in Accounting Principle         (4,631,346)         (4,631,346)           Fiduciary Net Position at End of Year         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan           Additions         2017         2016         2015         2014           Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         \$346,698,025         \$15,521         \$15,521           Affiliations (Withdrawals)         \$346,698,025         \$15,521         \$15,521           Affiliations (Withdrawals)         \$346,698,025         \$15,521         \$17,960,708         \$16,698,025         \$15,521           Affiliations (Withdrawals)         \$346,698,025         \$17,960,708         \$5,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         \$59,172         0	Pension Expense	(2,194,466)	(500,661)	(464,315)		
Statewide Death & Disability Plan         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan           Additions         2017         2016         2015         2014           Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         \$14,690,708         \$1,609,096         <			1,560,983,332		1,648,535,812	
Statewide Death & Disability Plan         \$1,605,454,528         \$1,511,533,970         \$1,560,983,332         \$1,645,665           Statewide Death & Disability Plan         2017         2016         2015         2014           Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         State Contributions         \$10,960,708         \$5,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Deductions           Benefit Payments:         Retirees/Survivors           Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         \$9,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Effect of Change in Accounting Principle			(4,631,346)		
Statewide Death & Disability Plan         2017         2016         2015         2014           Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Member Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         \$34,49,216         \$17,960,708         \$5,609,096         \$22,363           Investment Income (Loss)         \$2,449,216         \$17,960,708         \$5,609,096         \$22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Deductions         Benefit Payments:         Retirees/Survivors           Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         \$9,172         0         12           Administrative Costs         \$1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Fiduciary Net Position at End of Year	\$1.605.454.528	\$1.511.533.970		\$1,645,665,903	
Employer Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         State Contributions         \$22,363         \$15,521         \$15,521           Investment Income (Loss)         \$2,449,216         \$17,960,708         \$5,609,096         \$22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Deductions         Benefit Payments:         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         \$9,172         0         12           Administrative Costs         \$1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Statewide Death & Disability Plan					
Member Contributions         \$20,698,646         \$18,377,088         \$16,698,025         \$15,521           Affiliations (Withdrawals)         State Contributions         Investment Income (Loss)         52,449,216         17,960,708         5,609,096         22,363           Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Deductions         Benefit Payments:           Retirees/Survivors         Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         59,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Additions	2017	2016	2015	2014	
Affiliations (Withdrawals) State Contributions Investment Income (Loss) 52,449,216 17,960,708 5,609,096 22,363  Total Additions \$73,147,862 \$36,337,796 \$22,307,121 \$37,884  Deductions  Benefit Payments:  Retirees/Survivors  Death/Disability \$28,157,074 \$26,128,642 \$24,096,515 \$22,707  Refunds of Contributions 59,172 0 12  Administrative Costs 1,881,828 761,530 706,905 722  Total Deductions \$30,038,902 \$26,949,344 \$24,803,420 \$23,442  Changes in Fiduciary Net Position \$43,108,960 \$9,388,452 \$(2,496,299) \$14,441	Employer Contributions					
State Contributions         Investment Income (Loss)       52,449,216       17,960,708       5,609,096       22,363         Total Additions       \$73,147,862       \$36,337,796       \$22,307,121       \$37,884         Deductions         Benefit Payments:       Retirees/Survivors         Death/Disability       \$28,157,074       \$26,128,642       \$24,096,515       \$22,707         Refunds of Contributions       59,172       0       12         Administrative Costs       1,881,828       761,530       706,905       722         Total Deductions       \$30,038,902       \$26,949,344       \$24,803,420       \$23,442         Changes in Fiduciary Net Position       \$43,108,960       \$9,388,452       \$(2,496,299)       \$14,441	Member Contributions	\$20,698,646	\$18,377,088	\$16,698,025	\$15,521,154	
Investment Income (Loss)   52,449,216   17,960,708   5,609,096   22,363     Total Additions   \$73,147,862   \$36,337,796   \$22,307,121   \$37,884     Deductions	Affiliations (Withdrawals)					
Total Additions         \$73,147,862         \$36,337,796         \$22,307,121         \$37,884           Deductions           Benefit Payments:         Retirees/Survivors           Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         59,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	State Contributions					
Deductions         Benefit Payments:         Retirees/Survivors         Death/Disability       \$28,157,074       \$26,128,642       \$24,096,515       \$22,707         Refunds of Contributions       59,172       0       12         Administrative Costs       1,881,828       761,530       706,905       722         Total Deductions       \$30,038,902       \$26,949,344       \$24,803,420       \$23,442         Changes in Fiduciary Net Position       \$43,108,960       \$9,388,452       \$(2,496,299)       \$14,441	Investment Income (Loss)	52,449,216	17,960,708	5,609,096	22,363,360	
Benefit Payments:         Retirees/Survivors         Death/Disability       \$28,157,074       \$26,128,642       \$24,096,515       \$22,707         Refunds of Contributions       59,172       0       12         Administrative Costs       1,881,828       761,530       706,905       722         Total Deductions       \$30,038,902       \$26,949,344       \$24,803,420       \$23,442         Changes in Fiduciary Net Position       \$43,108,960       \$9,388,452       \$(2,496,299)       \$14,441	Total Additions	\$73,147,862	\$36,337,796	\$22,307,121	\$37,884,514	
Retirees/Survivors           Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         59,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Deductions					
Death/Disability         \$28,157,074         \$26,128,642         \$24,096,515         \$22,707           Refunds of Contributions         59,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Benefit Payments:	,		,		
Refunds of Contributions         59,172         0         12           Administrative Costs         1,881,828         761,530         706,905         722           Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Retirees/Survivors					
Administrative Costs       1,881,828       761,530       706,905       722         Total Deductions       \$30,038,902       \$26,949,344       \$24,803,420       \$23,442         Changes in Fiduciary Net Position       \$43,108,960       \$9,388,452       \$(2,496,299)       \$14,441	Death/Disability	\$28,157,074	\$26,128,642	\$24,096,515	\$22,707,843	
Total Deductions         \$30,038,902         \$26,949,344         \$24,803,420         \$23,442           Changes in Fiduciary Net Position         \$43,108,960         \$9,388,452         \$(2,496,299)         \$14,441	Refunds of Contributions		59,172	0	12,647	
Changes in Fiduciary Net Position \$43,108,960 \$9,388,452 \$(2,496,299) \$14,441	Administrative Costs	1,881,828	761,530	706,905	722,214	
	Total Deductions	\$30,038,902	\$26,949,344	\$24,803,420	\$23,442,704	
	Changes in Fiduciary Net Position	\$43,108,960	<i>\$9,388,452</i>	\$(2,496,299)	\$14,441,810	
Shanges in recir chaining 211,007 /0,007 07,100	Changes in Net Pension Liability	211,564	76,837	67,190		

(725,611)

359,933,855

\$402,528,768

(183,499)

350,652,065

\$359,933,855

(104,257)

339,783,538

\$354,225,348

354,225,348

(1,039,917)

\$350,652,065

Pension Expense

Fiduciary Net Position at Beginning of Year

Effect of Change in Accounting Principle

Fiduciary Net Position at End of Year

2013	2012	2011	2010	2009	2008
\$52,371,362	\$46,585,541	\$46,108,486	\$37,239,905	\$30,813,175	\$46,007,84
176,577	140,504	169,643	276,165	366,911	640,23
(1,537,861)	(17,186)	2,512,024	(678,910)	······································	21,19
145,255,639	8,303,953	3,102,866	3,078,432	2,908,504	37,592,29
218,204,672	154,887,279	11,809,291	178,431,326	240,361,700	(552,351,083
\$414,470,389	\$209,900,091	\$63,702,310	\$218,346,918	\$274,450,290	\$(468,089,520
\$165,121,187	\$165,552,566	\$162,511,376	\$164,220,145	\$157,644,750	\$152,270,53
848,221	315,017	584,749	1,823,003	5,045,932	2,958,38
3,160,989	3,200,335	3,002,396	2,927,262	2,797,233	2,693,66
\$169,130,397	\$169,067,918	\$166,098,521	\$168,970,410	\$165,487,915	\$157,922,57
\$245,339,992	\$40,832,173	\$(102,396,211)	\$49,376,508	\$108,962,375	\$(626,012,091
1,403,195,820	1,362,363,647	1,464,759,858	1,415,383,350	1,306,420,975	1,932,433,06
1,648,535,812	4	4	4		4
	\$1,403,195,820	\$1,362,363,647	\$1,464,759,858	\$1,415,383,350	\$1,306,420,97
					\$1,306,420,975
2013	\$1,403,195,820	\$1,362,363,647	2010	\$1,415,383,350	\$1,306,420,975
					2008
2013	2012	2011	2010	2009	
<b>2013</b> \$14,561,110	<b>2012</b> \$13,616,969	<b>2011</b> \$12,956,389	<b>2010</b> \$12,309,050	<b>2009</b> \$11,885,404	\$10,918,63 \$10,918,63 (89,411,107
<b>2013</b> \$14,561,110 45,003,288	\$13,616,969 \$13,323,103	\$12,956,389 2,035,621	<b>2010</b> \$12,309,050 33,679,604	\$11,885,404 42,062,468	<b>2008</b> \$10,918,63
<b>2013</b> \$14,561,110 45,003,288	\$13,616,969 \$13,323,103	\$12,956,389 2,035,621	<b>2010</b> \$12,309,050 33,679,604	\$11,885,404 42,062,468	\$10,918,63 (89,411,107
\$14,561,110 \$14,561,110 45,003,288 \$59,564,398	\$13,616,969 \$13,323,103 \$45,940,072	\$12,956,389 \$12,956,389 2,035,621 \$14,992,010	\$12,309,050 \$12,309,050 33,679,604 \$45,988,654	\$11,885,404 \$11,885,404 42,062,468 \$53,947,872	\$10,918,63 \$10,918,63 (89,411,107 \$(78,492,470
\$14,561,110 \$14,561,110 45,003,288 \$59,564,398 \$21,018,988	\$13,616,969 \$13,323,103 \$45,940,072	\$12,956,389 2,035,621 \$14,992,010 \$18,217,570	\$12,309,050 \$12,309,050 33,679,604 \$45,988,654 \$17,376,644	\$11,885,404 \$11,885,404 42,062,468 \$53,947,872 \$15,995,412	\$10,918,63 \$10,918,63 (89,411,107 \$(78,492,470 \$14,886,70
\$14,561,110 \$14,561,110 45,003,288 \$59,564,398 \$21,018,988 32,919	\$13,616,969 \$13,323,103 \$45,940,072 \$19,482,152	\$12,956,389 2,035,621 \$14,992,010 \$18,217,570 47,192	\$12,309,050 \$12,309,050 33,679,604 \$45,988,654 \$17,376,644 58,440	\$11,885,404 \$11,885,404 42,062,468 \$53,947,872 \$15,995,412 14,242	\$10,918,63 \$10,918,63 (89,411,107 \$(78,492,470 \$14,886,70
\$14,561,110 \$14,561,110 45,003,288 \$59,564,398 \$21,018,988 32,919 827,325	\$13,616,969 \$13,616,969 32,323,103 \$45,940,072 \$19,482,152 673,194	\$12,956,389 2,035,621 \$14,992,010 \$18,217,570 47,192 592,716	\$12,309,050 \$12,309,050 33,679,604 \$45,988,654 \$17,376,644 58,440 544,161	\$11,885,404 \$11,885,404 42,062,468 \$53,947,872 \$15,995,412 14,242 485,984	\$10,918,63 \$10,918,63 (89,411,10) \$(78,492,470 \$14,886,70 435,76 \$15,322,47
\$14,561,110 45,003,288 \$59,564,398 \$21,018,988 32,919 827,325 \$21,879,232	\$13,616,969 \$13,616,969 32,323,103 \$45,940,072 \$19,482,152 673,194 \$20,155,346	\$12,956,389 2,035,621 \$14,992,010 \$18,217,570 47,192 592,716 \$18,857,478	\$12,309,050 \$12,309,050 33,679,604 \$45,988,654 \$17,376,644 58,440 544,161 \$17,979,245 \$28,009,409	\$11,885,404 42,062,468 \$53,947,872 \$15,995,412 14,242 485,984 \$16,495,638	\$10,918,63 \$10,918,63 (89,411,107 \$(78,492,470

Defined Benefit System				
Additions	2017	2016	2015	2014
Employer Contributions				
Member Contributions				
Contributions for Service Reinstatement				
Affiliations (Withdrawals)				
State Contributions				
Investment Income (Loss)				
Total Additions				
Deductions Benefit Payments:				
Retirees/Survivors				
Death/Disability				
Refunds of Contributions				
Administrative Costs				
Total Deductions				
Changes in Fiduciary Net Position				
Fiduciary Net Position at Beginning of Year				
Fiduciary Net Position at End of Year				

Note: With the implementation of GASB Statement No. 67 in 2014, FPPA is now presenting the individual plan information of those plans that comprise the Defined Benefit System in the Financial Section; therefore, data is presented for the Defined Benefit System prior to 2014.

2013	2012	2011	2010	2009	2008
\$46,987,285	\$43,554,063	\$41,676,619	\$40,075,299	\$36,109,248	\$31,867,543
63,990,476	65,719,525	76,527,790	41,303,655	46,415,422	33,780,203
32,919					
265,190,786	177,692,483	9,332,179	165,582,369	193,591,955	(382,348,087)
\$376,201,466	\$286,966,071	\$127,536,588	\$246,961,323	\$276,116,625	\$(316,700,341)
	7280,900,071	3127,330,366	3240,301,323	3270,110,023	\$(510,700,541)
\$56,470,909	\$45,277,872	\$40,558,968	\$35,951,656	\$22,584,678	\$18,029,951
\$56,470,909	\$45,277,872	\$40,558,968	\$35,951,656	\$22,584,678	\$18,029,951
\$56,470,909 3,130,258	\$45,277,872 1,988,637	\$40,558,968 2,400,352	\$35,951,656 1,883,717	\$22,584,678 2,488,556	\$18,029,951 4,076,623 1,854,959
\$56,470,909 3,130,258 3,988,951	\$45,277,872 1,988,637 3,734,627	\$40,558,968 2,400,352 3,043,671	\$35,951,656 1,883,717 2,644,986	\$22,584,678 2,488,556 2,219,881	\$18,029,951 4,076,623
\$56,470,909 3,130,258 3,988,951 \$63,590,118	\$45,277,872 1,988,637 3,734,627 \$51,001,136	\$40,558,968 2,400,352 3,043,671 \$46,002,991	\$35,951,656 1,883,717 2,644,986 \$40,480,359	\$22,584,678 2,488,556 2,219,881 \$27,293,115	\$18,029,951 4,076,623 1,854,959 \$23,961,533

<b>Defined Benefit System</b>   Statewide De	fined Benefit Plan			
Additions	2017	2016	2015	2014
Employer Contributions	\$44,644,663	\$41,240,159	\$38,079,177	\$35,919,292
Member Contributions	156,811,895	59,793,315	70,733,575	47,475,429.05
Contributions for Service Reinstatement		20,412	······································	10,815
Affiliations (Withdrawals)			······································	
State Contributions				
Investment Income (Loss)	298,390,499	101,487,849	30,600,923	111,783,092
Total Additions	\$499,847,057	\$202,541,735	\$139,413,675	\$195,188,628.05
Deductions				
Benefit Payments:				
Retirees/Survivors	\$65,977,013	\$60,019,888	\$53,129,403	\$47,655,798.11
Death/Disability				
Refunds of Contributions	2,187,599	1,813,180	1,763,962	1,848,697.58
Administrative Costs	3,135,932	3,383,944	3,022,771	2,981,129
Total Deductions	\$71,300,544	\$65,217,012	\$57,916,136	\$52,485,624.69
Changes in Fiduciary Net Position	\$428,546,513	\$137,324,723	\$81,497,539	\$142,703,003.36
Changes in Net Pension Liability	387,829	422,911	353,403	
Pension Expense	(4,022,517)	(1,273,038)	(548,363)	
Fiduciary Net Position at Beginning of Year	1,980,535,208	1,844,060,612	1,768,227,718	1,625,524,715
Effect of Change in Accounting Principle		······	(5,469,685)	
Fiduciary Net Position at End of Year	\$2,405,447,033	\$1,980,535,208	\$1,844,060,612	\$1,768,227,718.36

Statistical Section		Financial Trend	Information
Statistical Section	_	Fillalicial Hellu	IIIIOIIIIauoi

Changes in Fid	uciarv Net	<b>Position</b>
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2013	2012	2011	2010	2009	2008

Additions	2017	2016	2015	2014
Employer Contributions	\$1,320,687	\$1,296,013	\$1,298,827	\$1,235,014
Member Contributions	8,967,398	4,117,438	4,323,776	1,764,160
Contributions for Service Reinstatement				
Affiliations (Withdrawals)				
State Contributions				
Investment Income (Loss)	8,122,829	2,656,991	673,519	2,565,885
Total Additions	\$18,410,914	\$8,070,442	\$6,296,122	\$5,565,059
Deductions				
Benefit Payments:				
Retirees/Survivors	\$1,493,664	\$1,191,766	\$953,099	\$752,330
Death/Disability				
Refunds of Contributions	27,870	17,151	18,365	35,373
Administrative Costs	77,914	87,869	73,679	67,974
Total Deductions	\$1,599,448	\$1,296,786	\$1,045,143	\$855,677
Changes in Fiduciary Net Position	\$16,811,466	\$6,773,656	\$5,250,979	\$4,709,382
Changes in Net Pension Liability	10,138	11,307	8,852	
Pension Expense	(129,795)	(43,608)	(13,735)	
Fiduciary Net Position at Beginning of Year	52,938,641	46,197,286	41,088,190	36,378,808
Effect of Change in Accounting Principle			(137,000)	
Fiduciary Net Position at End of Year	\$69,630,450	\$52,938,641	\$46,197,286	\$41,088,190

Ctatistical Castian	■ Financial Trend Information	

Changes in Fiduciary	Net	Position
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2013	2012	2011	2010	2009	2008
2013	2012	2011	2010	2003	2008
					_

Defined Benefit System   Colorado Sprin		Plan – Fire Compo		
Additions	2017	2016	2015	2014
Employer Contributions	\$4,227,414	\$3,700,396	\$3,437,596	\$3,341,129
Member Contributions	1,082,336	1,082,855	1,202,513	1,278,915
Contributions for Service Reinstatement		38,760	•••••	7,001
Affiliations (Withdrawals)		•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••	
State Contributions		•••••••••••••••••••••••••••••••••••••••	••••••	
Investment Income (Loss)	18,451,858	6,576,572	2,213,385	7,931,299
Total Additions	\$23,761,608	\$11,398,583	\$6,853,494	\$12,558,344
Deductions				
Benefit Payments:				
Retirees/Survivors	\$7,989,856	\$7,395,735	\$6,234,574	\$5,406,076
Death/Disability				
Refunds of Contributions	159,851	167,056		
Administrative Costs	58,115	209,360	194,113	195,698
Total Deductions	\$8,207,822	\$7,772,151	\$6,428,687	\$5,601,774
Changes in Fiduciary Net Position	\$15,553,786	\$3,626,432	\$424,807	\$6,956,570
Changes in Net Pension Liability	11,309	26,969	23,557	
Pension Expense	(193.563)	(64.820)	(36,553)	
Fiduciary Net Position at Beginning of Year	126,454,198	122,865,617	122,818,402	115,861,832
Effect of Change in Accounting Principle		······································	(364,596)	
Fiduciary Net Position at End of Year	\$141,825,730	\$126,454,198	\$122,865,617	\$122,818,402

			Statistica	al Section  Financia	al Trend Information
				Changes in Fi	duciary Net Position
2013	2012	2011	2010	2009	2008
·····					
			_		
<u>.</u>					<u> </u>

Defined Benefit System   Colorado Spri	ngs New Hire Pensio			
Additions	2017	2016	2015	2014
Employer Contributions	\$8,464,061	\$7,900,050	\$7,916,242	\$7,728,841
Member Contributions	2,311,298	2,707,964	2,493,427	2,830,620
Contributions for Service Reinstatement			•	
Affiliations (Withdrawals)				
State Contributions				
Investment Income (Loss)	40,779,138	14,390,904	4,700,518	16,759,706
Total Additions	\$51,554,497	\$24,998,918	\$15,110,187	\$27,319,167
Deductions				
Benefit Payments:				
Retirees/Survivors	\$12,877,649	\$11,592,619	\$10,115,964	\$8,928,010
Death/Disability			•	
Refunds of Contributions	18,007	83,530	99,734	443,707.61
Administrative Costs	122,594	452,011	412,521	409,357
Total Deductions	\$13,018,250	\$12,128,160	\$10,628,219	\$9,781,074.61
Changes in Fiduciary Net Position	\$38,536,247	\$12,870,758	\$4,481,968	\$17,538,092.39
Changes in Net Pension Liability	25,082	59,129	50,691	
Pension Expense	(443.641)	(157,454)	(78,656)	
Fiduciary Net Position at Beginning of Year	277,162,689	264,390,256	260,720,815	243,182,723
Effect of Change in Accounting Principle			(784,562)	
Fiduciary Net Position at End of Year	\$315,280,377	\$277,162,689	\$264,390,256	\$260,720,815.39

			Statistica	Il Section ■ Financia	I Trend Information
				Changes in Fig	duciary Net Position
2013	2012	2011	2010	2009	2008

FPPA Staff Healthcare Subsidy Plan				
Additions	2017	2016	2015	2014
Employer Contributions	\$8,261	\$8,478	\$5,818	\$6,240
Member Contributions				
Affiliations (Withdrawals)				
State Contributions				
Investment Income (Loss)	34,391	12,207	4,159	14,757
Total Additions	\$42,652	\$20,685	\$9,977	\$20,997
Deductions				
Benefit Payments:				
Retirees/Survivors	\$7,309	\$12,690	\$10,198	\$9,566
Death/Disability				
Refunds of Contributions				
Administrative Costs	4,510	381	354	359
Total Deductions	\$11,819	\$13,071	\$10,552	\$9,925
Changes in Fiduciary Net Position	\$30,833	\$7,614	\$(575)	\$11,072
Changes in Net Pension Liability	969	51	44	
Pension Expense	(1,320)	(125)	(68)	
Fiduciary Net Position at Beginning of Year	237,253	229,713	230,994	219,922
Effect of Change in Accounting Principle			(682)	
Fiduciary Net Position at End of Year	\$267,735	\$237,253	\$229,713	\$230,994

Additions	2017	2016	2015	2014
Employer Contributions	\$438,454	\$424,263	\$405,178	\$385,503
Member Contributions	425,436	406,716	386,856	367,925
Affiliations (Withdrawals)				
State Contributions				
Investment Income (Loss)	1,789,042	732,303	(20,666)	412,534
Total Additions	\$2,652,932	\$1,563,282	\$771,368	\$1,165,962
Deductions Benefit Payments:				
Benefit Payments:				
Benefit Payments:  Retirees/Survivors	\$304,189	\$247,528	\$245,503	\$300,406
Benefit Payments:  Retirees/Survivors  Death/Disability  Refunds of Contributions	\$304,189 34,013	\$247,528 45,494	\$245,503 5,745	
Benefit Payments: Retirees/Survivors Death/Disability				(2,477)
Benefit Payments: Retirees/Survivors Death/Disability Refunds of Contributions Administrative Costs	34,013	45,494	5,745	(2,477) \$ <b>297,92</b> 9
Benefit Payments:  Retirees/Survivors  Death/Disability  Refunds of Contributions  Administrative Costs  Total Deductions	34,013 <b>\$338,202</b>	45,494 <b>\$293,022</b>	5,745 <b>\$251,248</b>	\$300,406 (2,477) <b>\$297,929</b> <i>\$868,033</i>

2013	2012	2011	2010	2009	2008
\$8,056	\$13,266	\$14,823	\$14,316	\$13,632	\$12,425
28,411	19,028	962	17,556	19,670	(38,716)
\$36,467	\$32,294	\$15,785	\$31,872	\$33,302	\$(26,291
\$8,264	\$6,500	\$5,958	\$7,041	\$6,349	\$1,348
\$8,264	\$6,500	\$5,958	\$7,041	\$6,349	\$1,348
\$28,203	\$25,794	\$9,827	\$24,831	\$26,953	\$(27,639)
191,719	165,925	156,098	131,267	104,314	131,953
\$219,922	\$191,719	\$165,925	\$156,098	\$131,267	\$104,314
2013	2012	2011	2010	2009	2008
\$402,308	\$378,338	\$313,947	\$319,739	\$295,874	\$282,877
383,665	357,791	297,614	312,330 25,671	295,874	283,369
999,304	681,003	71,541	684,169	958,382	(1,405,228)
\$1,785,277	\$1,417,132	\$683,102	\$1,341,909	\$1,550,130	\$(838,98
\$951,163 3,360	\$1,067,020 8	\$175,587 11,116	\$402,564 6,460	\$262,920 14,623	\$500,04
\$954,523	\$1,067,028	\$186,703	\$409,024	\$277,543	\$500,040
\$830,754	\$350,104	\$496,399	\$932,885	\$1,272,587	\$(1,339,022
6,655,826	6,305,722	5,809,323	4,876,438	3,603,851	4,942,873

Additions	2017	2016	2015	2014
Employer Contributions	\$1,624,436	\$1,630,058	\$1,835,971	\$2,282,111
Member Contributions	33,719,225	32,195,754	31,834,156	32,938,657
Affiliations (Withdrawals)	102,265,127			
State Contributions				
Investment Income (Loss)	37,191,506	15,239,580	(906,517)	12,440,752
Total Additions	\$174,800,294	\$49,065,392	\$32,763,610	\$47,661,520
Benefit Payments:				
Benefit Payments:  Retirees/Survivors				
Retirees/Survivors	\$127,314,764	\$41,738,925	\$62,813,697	\$39,891,560
Retirees/Survivors  Death/Disability	\$127,314,764 1,037,020	\$41,738,925 1,078,844	\$62,813,697 782,721	
Retirees/Survivors  Death/Disability  Refunds of Contributions				797,665
Retirees/Survivors  Death/Disability  Refunds of Contributions  Administrative Costs	1,037,020	1,078,844	782,721	797,665 <b>\$40,689,225</b>
Retirees/Survivors  Death/Disability  Refunds of Contributions  Administrative Costs  Total Deductions	1,037,020 \$128,351,784	1,078,844 \$ <b>42,817,769</b>	782,721 \$ <b>63,596,418</b>	\$39,891,560 797,665 <b>\$40,689,225</b> <b>\$6,972,295</b> 271,724,158

Note: Included above are the self-directed assets of the Statewide Hybrid - Money Purchase Component Plan and the Deferred Retirement Option Plan and Separate Retirements Accounts for Affiliated Local and Defined Benefit System Plans.

Additions	2017	2016	2015	2014
Employer Contributions	\$1,385,728	\$1,161,895	\$905,027	\$815,971
Member Contributions	9,940,468	9,361,890	8,652,472	7,289,039
Affiliations (Withdrawals)				
State Contributions				
Investment Income (Loss)	21,119,356	7,728,217	930	5,370,110
Total Additions	\$32,445,552	\$18,252,002	\$9,558,429	\$13,475,120
Deductions				
Benefit Payments:				
Retirees/Survivors				
Death/Disability				
Death, Disability			\$5,136,008	
Refunds of Contributions	\$5,463,548	\$7,220,110	\$3,130,006	\$5,433,841
	\$5,463,548 240,586	\$7,220,110 197,499	59,118	\$5,433,841 20,917
Refunds of Contributions				
Refunds of Contributions Administrative Costs Total Deductions	240,586	197,499	59,118	20,917
Refunds of Contributions Administrative Costs	240,586 <b>\$5,704,134</b>	197,499 <b>\$7,417,609</b>	59,118 <b>\$5,195,126</b>	20,917 <b>\$5,454,758</b>

2013	2012	2011	2010	2009	2008
\$2,393,547	\$2,460,673	\$2,421,796	\$2,277,700	\$2,279,807	\$2,065,284
32,544,971	27,921,453	29,697,334	28,407,353	17,604,699	17,009,496
11,888,411	2,094,860	83,427,455	865,113	26,112,745	1,532,625
29,174,866	20,173,141	1,596,788	16,632,880	27,211,960	(30,051,876)
\$76,001,795	\$52,650,127	\$117,143,373	\$48,183,046	\$73,209,211	\$(9,444,471)
\$42,699,246	\$42,317,300	\$67,711,031	\$27,588,789	\$22,942,996	\$20,852,584
638,000	679,615	649,032	336,571	271,171	
\$43,337,246	\$42,996,915	\$68,360,063	\$27,925,360	\$23,214,167	\$20,852,584
\$32,664,549	\$9,653,212	\$48,783,310	\$20,257,686	\$49,995,044	\$(30,297,055)
220 050 600		······································		·····	• • • • • • • • • • • • • • • • • • • •
239,059,609	229,406,397	180,623,087	160,365,401	110,370,357	140,667,412
	\$239,059,609	\$229,406,397	\$180,623,087	\$160,365,401	140,667,412 <b>\$110,370,357</b>
\$271,724,158	\$239,059,609	\$229,406,397	\$180,623,087	\$160,365,401	\$110,370,357
\$271,724,158 2013	\$239,059,609 2012	\$229,406,397 2011			
2013 \$790,036 7,232,784	\$239,059,609	\$229,406,397	\$180,623,087	\$160,365,401	\$110,370,357
\$271,724,158 2013 \$790,036	\$239,059,609 2012 \$754,739 7,519,449	\$229,406,397 2011 \$700,428	\$180,623,087	\$160,365,401	\$110,370,357
<b>2013</b> \$790,036 7,232,784	\$239,059,609 2012 \$754,739 7,519,449 (3,605,954)	\$229,406,397 2011 \$700,428 6,080,792	\$180,623,087 2010 7,084,610	\$160,365,401 2009 5,860,778	\$110,370,357 2008 6,856,002 (17,374,290)
<b>2013</b> \$790,036 7,232,784  13,771,024	\$239,059,609 2012 \$754,739 7,519,449 (3,605,954) 7,862,887	\$229,406,397 2011 \$700,428 6,080,792 (145,669)	\$180,623,087 2010 7,084,610 7,693,086	\$160,365,401 2009 5,860,778 11,134,415	\$110,370,357 2008 6,856,002 (17,374,290)
<b>2013</b> \$790,036 7,232,784  13,771,024	\$239,059,609 2012 \$754,739 7,519,449 (3,605,954) 7,862,887	\$229,406,397 2011 \$700,428 6,080,792 (145,669)	\$180,623,087 2010 7,084,610 7,693,086	\$160,365,401 2009 5,860,778 11,134,415	\$110,370,357 2008 6,856,002

\$1,755,473

61,989,750

\$63,745,223

\$9,898,569

52,091,181

\$61,989,750

\$15,044,820

37,046,361

\$52,091,181

\$17,522,733

71,799,624

\$89,322,357

\$8,054,401

63,745,223

\$71,799,624

\$(12,339,423)

49,385,784

\$37,046,361

**Affiliated Local Plans** 

# Schedule of Average Benefit Payments for New Benefit Recipients

Year Retired	In Total	Year Retired	In Total
1/1/2017 - 12/31/2017		1/1/2012 - 12/31/2012	
Average monthly benefit	\$1,004	Average monthly benefit	\$344
Average highest average salary	Not Available	Average highest average salary	Not Available
Number of service retirees	185	Number of service retirees	157
1/1/2016 - 12/31/2016		1/1/2011 - 12/31/2011	
Average monthly benefit	\$971	Average monthly benefit	\$456
Average highest average salary	Not Available	Average highest average salary	Not Available
Number of service retirees	169	Number of service retirees	135
1/1/2015 - 12/31/2015		1/1/2010 - 12/31/2010	
Average monthly benefit	\$878	Average monthly benefit	\$415
Average highest average salary	Not Available	Average highest average salary	Not Available
Number of service retirees	190	Number of service retirees	172
1/1/2014 - 12/31/2014		1/1/2009 - 12/31/2009	
Average monthly benefit	\$887	Average monthly benefit	\$429
Average highest average salary	Not Available	Average highest average salary	Not Available
Number of service retirees	197	Number of service retirees	125
1/1/2013 - 12/31/2013		1/1/2008 - 12/31/2008	
Average monthly benefit	\$834	Average monthly benefit	\$399
Average highest average salary	Not Available	Average highest average salary	Not Available
Number of service retirees	229	Number of service retirees	95

 $Note:\ Information\ on\ Years\ of\ Service\ is\ not\ available\ for\ the\ Affiliated\ Local\ Plans.$ 

#### In Total **Year Retired** In Total **Year Retired** 1/1/2017 - 12/31/2017 1/1/2012 - 12/31/2012 Average monthly benefit \$2,401 Average monthly benefit \$2,160 \$6,400 Average final salary \$5,748 Average highest average salary Number of service retirees 92 Number of service retirees 56 1/1/2016 - 12/31/2016 1/1/2011 - 12/31/2011 Average monthly benefit \$2,239 Average monthly benefit \$2,078 Average final salary \$6,148 Average highest average salary \$5,362 Number of service retirees 68 Number of service retirees 46 1/1/2015 - 12/31/2015 1/1/2010 - 12/31/2010 Average monthly benefit Average monthly benefit \$2,478 \$2,777 Average final salary \$5,787 Average highest average salary \$5,804 50 Number of service retirees Number of service retirees 52 1/1/2014 - 12/31/2014 1/1/2009 - 12/31/2009 Average monthly benefit \$2,336 Average monthly benefit \$2,372 Average final salary \$5,829 Not Available Average highest average salary Number of service retirees 67 Number of service retirees 54 1/1/2013 - 12/31/2013 1/1/2008 - 12/31/2008 Average monthly benefit \$2,413 Average monthly benefit \$2,332 \$5,761 Average highest average salary Average highest average salary Not Available Number of service retirees 56 Number of service retirees 45

Statewide Death & Disability Plan

Note: Service is not taken into consideration in the benefit calculation for the Statewide Death & Disability Plan, therefore only totals are available.

			Years of Serv	ice Credit		
Year Retired	0-10	10-15	15-20	20-25	25-30	30+
1/1/2017 - 12/31/2017						
Average monthly benefit	\$892	\$1,264	\$2,262	\$4,084	\$4,238	\$5,94
Average highest average salary	\$5,382	\$5,394	\$6,290	\$8,802	\$7,660	\$8,08
Number of service retirees	14	18	16	14	35	
1/1/2016 - 12/31/2016						
Average monthly benefit	\$628	\$1,263	\$1,870	\$3,192	\$4,541	\$5,19
Average highest average salary	\$5,442	\$5,259	\$5,919	\$6,737	\$6,299	<b>\$7,8</b> 1
Number of service retirees	10	11	13	13	44	2
1/1/2015 - 12/31/2015						
Average monthly benefit	\$725	\$1,217	\$1,929	\$3,594	\$4,390	\$4,87
Average highest average salary	\$4,877	\$5,157	\$5,509	\$7,235	\$7 <i>,</i> 437	\$7,28
Number of service retirees	3	19	9	22	33	
1/1/2014 - 12/31/2014						
Average monthly benefit	\$700	\$1,089	\$2,167	\$3,317	\$4,003	\$5,33
Average highest average salary	\$4,861	\$4,467	\$5,945	\$6,809	\$7,021	\$7,44
Number of service retirees	13	18	6	30	43	3
1/1/2013 - 12/31/2013						
Average monthly benefit	\$639	\$1,186	\$2,249	\$3,174	\$4,226	\$5,13
Average highest average salary	\$4,719	\$7,173	\$6,925	\$6,765	\$7,378	\$7,50
Number of service retirees	9	12	5	25	42	(
1/1/2012 - 12/31/2012						
Average monthly benefit	\$314	\$963	\$2,052	\$3,088	\$3,978	\$5,00
Average highest average salary	\$3,787	\$4,863	\$5,771	\$6,733	\$6,709	\$7,14
Number of service retirees	2	9	9	23	35	3
1/1/2011 - 12/31/2011						
Average monthly benefit	\$708	\$986	\$1,459	\$3,003	\$4,031	\$4,7
Average highest average salary	\$5,403	\$4,914	\$4,656	\$6,329	\$6,842	\$6,78
Number of service retirees	4	9	6	24	44	2
1/1/2010 - 12/31/2010						
Average monthly benefit	\$681	\$863	\$1,692	\$3,171	\$3,954	\$4,57
Average highest average salary	\$1,958	\$3,607	\$4,463	\$6,487	\$6,829	\$6,94
Number of service retirees	4	4	13	15	32	
1/1/2009 - 12/31/2009						
Average monthly benefit	\$0	\$834	\$2,275	\$2,527	\$3,600	\$4,60
Average highest average salary	\$0	\$3,903	\$5,755	\$5,457	\$6,056	\$6,61
Number of service retirees	0	8	7	13	30	
1/1/2008 - 12/31/2008						
Average monthly benefit	\$1,165	\$1,193	\$1,632	\$2,566	\$3,667	\$3,7
Average highest average salary	\$3,940	\$3,957	\$4,107	\$4,965	\$5 <i>,</i> 478	\$6,89
Number of service retirees	2	5	9	15	26	

			Years of Serv	vice Credit		
Year Retired	0-10	10-15	15-20	20-25	25-30	30+
1/1/2017 - 12/31/2017						
Average monthly benefit	\$0	\$0	\$0	\$3,684	\$4,001	\$5,338
Average highest average salary	\$0	\$0	\$0	\$8,951	\$6,778	\$8,211
Number of service retirees	0	0	0	1	1	1
1/1/2016 - 12/31/2016						
Average monthly benefit	\$0	\$0	\$0	\$3,208	\$2,984	\$5,652
Average highest average salary	\$0	\$0	\$0	\$8,818	\$6,824	\$10,565
Number of service retirees	0	0	0	2	2	2
1/1/2015 - 12/31/2015						
Average monthly benefit	\$1,287	\$2,338	\$1,952	\$1,614	\$0	\$2,844
Average highest average salary	\$5,007	\$10,889	\$5,670	\$5,952	\$0	\$6,965
Number of service retirees	4	1	1	1	0	2
1/1/2014 - 12/31/2014						
Average monthly benefit	\$3,412	\$0	\$0	\$0	\$0	\$3,488
Average highest average salary	\$3,837	\$0	\$0	\$0	\$0	\$6,820
Number of service retirees	2	0	0	0	0	4
1/1/2013 - 12/31/2013						
Average monthly benefit	\$0	\$0	\$0	\$0	\$3,162	\$2,459
Average highest average salary	\$0	\$0	\$0	\$0	\$8,083	\$5,455
Number of service retirees	0	0	0	0	1	2
1/1/2012 - 12/31/2012						
Average monthly benefit	\$0	\$1,552	\$0	\$2,065	\$0	\$0
Average highest average salary	\$0	\$4,964	\$0	\$5,815	\$0	\$0
Number of service retirees	0	1	0	1	0	0
1/1/2011 - 12/31/2011						
Average monthly benefit	\$4,560	\$1,671	\$0	\$0	\$0	\$4,889
Average highest average salary	N/A	\$8,854	\$0	\$0	\$0	\$7,530
Number of service retirees	1	1	0	0	0	1
1/1/2010 - 12/31/2010						
Average monthly benefit	\$0	\$993	\$0	\$0	\$1,801	\$2,374
Average highest average salary	\$0	\$4,168	\$0	\$0	\$5,674	\$6,331
Number of service retirees	0	1	0	0	1	2
1/1/2009 - 12/31/2009						
Average monthly benefit	\$0	\$0	\$0	\$0	\$0	\$0
Average highest average salary	\$0	\$0	\$0	\$0	\$0	\$0
Number of service retirees	0	0	0	0	0	0
1/1/2008 - 12/31/2008						
Average monthly benefit	\$0	\$0	\$0	\$0	\$1,579	\$3,365
Average highest average salary	\$0	\$0	\$0	\$0	\$4,887	\$7,901
Number of service retirees	0	0	0	0	1	1

#### **Defined Benefit System** | Colorado Springs New Hire Pension Plan

			Years of Ser	vice Credit		
Year Retired	0-10	10-15	15-20	20-25	25-30	30+
1/1/2017 - 12/31/2017						
Average monthly benefit	\$0	\$1,590	\$2,571	\$3,790	\$4,427	\$5,563
Average highest average salary	\$0	\$5,672	\$6,270	\$7,347	\$7,019	\$7,651
Number of service retirees	0	4	3	5	22	7
1/1/2016 - 12/31/2016						
Average monthly benefit	\$0	\$1,515	\$1,212	\$2,686	\$4,498	\$5,441
Average highest average salary	\$0	\$6,001	\$6,088	\$6,824	\$7,305	\$7,108
Number of service retirees	0	3	2	10	25	9
1/1/2015 - 12/31/2015						
Average monthly benefit	\$0	\$1,000	\$2,291	\$3,684	\$4,369	\$6,243
Average highest average salary	\$0	\$4,710	\$5,935	\$6,622	\$7,058	\$8,362
Number of service retirees	0	4	3	8	19	11
1/1/2014 - 12/31/2014						
Average monthly benefit	\$0	\$1,186	\$1,917	\$3,253	\$4,081	\$5,828
Average highest average salary	\$0	\$4,744	\$5,053	\$6,126	\$6,516	\$7,718
Number of service retirees	0	3	4	5	9	9
1/1/2013 - 12/31/2013						
Average monthly benefit	\$0	\$1,287	\$1,703	\$3,165	\$4,099	\$0
Average highest average salary	\$0	\$5,589	\$5,017	\$6,293	\$6,602	\$0
Number of service retirees	0	2	2	7	5	0
1/1/2012 - 12/31/2012						
Average monthly benefit	\$0	\$1,281	\$2,977	\$2,711	\$4,522	\$4,327
Average highest average salary	\$0	\$5,629	\$7,088	\$5,449	\$6,885	\$5,769
Number of service retirees	0	2	1	3	4	1
1/1/2011 - 12/31/2011						
Average monthly benefit	\$0	\$1,253	\$1,903	\$3,114	\$4,559	\$5,255
Average highest average salary	\$0	\$5,064	\$5,653	\$6,323	\$6,985	\$6,955
Number of service retirees	0	3	7	9	13	7
1/1/2010 - 12/31/2010						
Average monthly benefit	\$0	\$1,283	\$1,843	\$3,607	\$4,397	\$5,879
Average highest average salary	\$0	\$5,639	\$5,064	\$6,746	\$6,903	\$8,512
Number of service retirees	0	1	3	6	19	8
1/1/2009 - 12/31/2009						
Average monthly benefit	\$0	\$930	\$1,567	\$3,092	\$4,596	\$5,188
Average highest average salary	\$0	\$4,312	\$5,223	\$5,839	\$7,030	\$6,868
Number of service retirees	0	3	1	6	8	12
1/1/2008 - 12/31/2008						
Average monthly benefit	\$0	\$1,767	\$0	\$3,238	\$4,116	\$5,981
Average highest average salary	\$0	\$5,684	\$0	\$5,923	\$6,390	\$7,961
Number of service retirees	0	1	0	7	17	3

# **Affiliated Local Plans**

		As of 12/31/2	2017		As of 12/31/2	2008
Employer	Rank	Covered Active Members	Percentage of Total Plan	Rank	Covered Active Members	Percentage of Total Plan
Evergreen Fire Protection District (Volunteer)	1	102	3.53%	3	86	1.92%
Durango Fire Protection District (Volunteer)	2	81	2.80%	1	107	2.39%
Telluride Fire Protection District (Volunteer)	3	60	2.08%	8	61	1.36%
Carbondale & Rural Fire Protection District (Volunteer)	4	52	1.80%	N/A*	N/A*	N/A*
Foothills Fire & Rescue (Volunteer)	5	45	1.56%	N/A*	N/A*	N/A*
East Grand Fire Protection District #4 (Volunteer)	6	42	1.45%	N/A*	N/A*	N/A*
Florence Fire Protection District (Volunteer)	6	42	1.45%	5	77	1.72%
Boulder Mountain Fire Protection District (Volunteer)	7	40	1.38%	N/A*	N/A*	N/A*
Lamar Fire (Volunteer)	7	40	1.38%	N/A*	N/A*	N/A*
Pleasant View Metro Fire District (Volunteer)	7	40	1.38%	N/A*	N/A*	N/A*
Hygiene Fire Protection District (Volunteer)	8	37	1.28%	N/A*	N/A*	N/A*
Lyons Fire Protection District (Volunteer)	8	37	1.28%	N/A*	N/A*	N/A*
Holyoke Fire Protection District (Volunteer)	9	36	1.25%	N/A*	N/A*	N/A*
Northwest Conejos County Fire Protection District (Volunteer)	9	36	1.25%	N/A*	N/A*	N/A*
Rattlesnake Fire Protection District (Volunteer)	9	36	1.25%	N/A*	N/A*	N/A*
Inter-Canyon Fire Protection District (Volunteer)	10	35	1.21%	10	54	1.21%
South Adams County Fire Protection District (Volunteer)	N/A**	N/A**	N/A**	2	94	2.10%
Golden Volunteer Fire Department	N/A**	N/A**	N/A**	4	82	1.83%
Mountain View Fire Protection District (Volunteer)	N/A**	N/A**	N/A**	6	68	1.52%
Evans Volunteer Fire Department	N/A**	N/A**	N/A**	7	62	1.38%
Lafayette Fire (Volunteer)	N/A**	N/A**	N/A**	9	60	1.34%
Larkspur Fire Protection District (Volunteer)	N/A**	N/A**	N/A**	10	54	1.21%
	<del>-</del>					

Note: Many of the plans in this group are closed plans and do not have active members.

<sup>\*</sup>In 2008, this employer did not rank in the Top Ten.

<sup>\*\*</sup>In 2017, this employer did not rank in the Top Ten.

# **Statewide Death & Disability**

		As of 12/31/2	2017		2008	
Employer	Rank	Covered Active Members	Percentage of Total Plan	Rank	Covered Active Members	Percentage of Total Plan
Denver Police	1	1,416	11.59%	1	1,472	13.16%
Denver Fire	2	900	7.37%	2	865	7.73%
Aurora Police	3	699	5.72%	3	629	5.62%
Colorado Springs Police	4	636	5.21%	4	619	5.53%
South Metro Fire Rescue	5	402	3.29%	6	329	2.94%
Colorado Springs Fire	6	388	3.18%	5	402	3.59%
Aurora Fire	7	351	2.87%	8	289	2.58%
West Metro Fire Protection District	8	318	2.60%	7	325	2.90%
Thornton Police	9	236	1.93%	N/A*	N/A*	N/A*
Fort Collins Police	10	235	1.92%	10	182	1.63%
Pueblo Police	N/A**	N/A**	N/A**	9	185	1.65%

<sup>\*</sup>In 2008, this employer did not rank in the Top Ten.

# **Defined Benefit System |** Statewide Defined Benefit Plan

		As of 12/31/2	2017	As of 12/31/2008		
Employer	Rank	Covered Active Members	Percentage of Total Plan	Rank	Covered Active Members	Percentage of Total Plan
Denver Police	1	1,575	18.05%	1	1,503	27.18%
Denver Fire	2	1,019	11.68%	2	857	15.50%
Colorado Springs Police	3	401	4.59%	10	92	1.66%
Aurora Fire	4	346	3.96%	N/A*	N/A*	N/A*
Colorado Springs Fire	5	314	3.60%	8	98	1.77%
Pueblo Police	6	217	2.49%	3	185	3.35%
Thornton Police	7	203	2.33%	N/A*	N/A*	N/A*
West Metro Fire Protection District	8	189	2.17%	9	94	1.70%
Arvada Fire Protection District	9	163	1.87%	8	98	1.77%
Westminster Police	10	160	1.83%	N/A*	N/A*	N/A*
Pueblo Fire	N/A**	N/A**	N/A**	4	121	2.19%
Westminster Fire	N/A**	N/A**	N/A**	5	113	2.04%
North Metro Fire Rescue	N/A**	N/A**	N/A**	6	105	1.90%
Union Colony Fire Rescue	N/A**	N/A**	N/A**	7	101	1.83%

<sup>\*</sup>In 2008, this employer did not rank in the Top Ten.

<sup>\*\*</sup>In 2017, this employer did not rank in the Top Ten.

<sup>\*\*</sup>In 2017, this employer did not rank in the Top Ten.

# **Defined Benefit System | Statewide Hybrid Plan**

		As of 12/31/2	2017		As of 12/31/2	2008
Employer	Rank	Covered Active Members	Percentage of Total Plan	Rank	Covered Active Members	Percentage of Total Plan
West Metro Fire Protection District	1	160	42.44%	1	238	65.21%
Aurora Fire	2	49	13.00%	N/A*	N/A*	N/A*
Evans Police	3	37	9.81%	2	27	7.40%
Westminster Police	4	21	5.57%	N/A*	N/A*	N/A*
Littleton Fire	5	19	5.04%	N/A*	N/A*	N/A*
Thornton Police	6	12	3.18%	N/A*	N/A*	N/A*
Westminster Fire	7	11	2.92%	3	22	6.03%
Canon City Police	8	8	2.12%	4	19	5.21%
Thornton Fire	8	8	2.12%	N/A*	N/A*	N/A*
Lafayette Police	9	7	1.86%	6	10	2.74%
North Metro Fire Rescue	10	6	1.59%	5	14	3.84%
Summit Fire & EMS Authority	10	6	1.59%	N/A*	N/A*	N/A*
Lake Dillon Fire Protection District	N/A**	N/A**	N/A**	7	8	2.19%
Snowmass Wildcat Fire Protection District	N/A**	N/A**	N/A**	8	6	1.64%
Brighton Police	N/A**	N/A**	N/A**	9	4	1.10%
Trinidad Fire	N/A**	N/A**	N/A**	9	4	1.10%
Federal Heights Police	N/A**	N/A**	N/A**	10	3	0.82%

<sup>\*</sup>In 2008, this employer did not rank in the Top Ten.

# Fire & Police Members' Statewide Money Purchase Plan

		As of 12/31/2	2017	As of 12/31/2008		
Employer	Rank	Covered Active Members	Percentage of Total Plan	Rank	Covered Active Members	Percentage of Total Plan
Colorado River Fire Protection District	1	17	14.41%	N/A*	N/A*	N/A*
Elizabeth Fire Protection District	1	17	14.41%	3	16	15.84%
Grand Valley Fire Protection District	1	17	14.41%	N/A*	N/A*	N/A*
Windsor Severance Fire Protection District	2	14	11.86%	N/A*	N/A*	N/A*
Eaton Fire Protection District	3	8	6.78%	2	19	18.81%
Mountain Village Police	4	5	4.24%	4	8	7.92%
West Routt Fire Protection District	4	5	4.24%	N/A*	N/A*	N/A*
Upper Pine River Fire Protection District	5	3	2.54%	N/A*	N/A*	N/A*
Fairmount Fire Protection District	6	2	1.69%	N/A*	N/A*	N/A*
Jefferson-Como Fire Protection District	6	2	1.69%	N/A*	N/A*	N/A*
Sable-Altura Fire Protection District	6	2	1.69%	N/A*	N/A*	N/A*
Rifle Fire Protection District	N/A**	N/A**	N/A**	1	32	31.68%
Central City Police	N/A**	N/A**	N/A**	5	4	3.96%
Colorado Springs Police	N/A**	N/A**	N/A**	6	3	2.97%

<sup>\*</sup>In 2008, this employer did not rank in the Top Ten.

<sup>\*\*</sup>In 2017, this employer did not rank in the Top Ten.

<sup>\*\*</sup>In 2017, this employer did not rank in the Top Ten.

# **Principal Participating Employers**

#### **Defined Benefit System** | Colorado Springs New Hire Pension Plan

		As of 12/31/2	2017		As of 12/31/2	2008
Employer	Rank	Covered Active Members	Percentage of Total Plan	Rank	Covered Active Members	Percentage of Total Plan
Colorado Springs Police	1	353	71.03%	1	539	63.71%
Colorado Springs Fire	2	144	28.97%	2	307	36.29%

### **Employers of Affiliated Local Volunteer Firefighters Plans**

Adams County
(North Washington) FPD\*
Alamosa County FPD
Alamosa Fire
Allenspark FPD
Aspen FPD
Ault FPD

Basalt & Rural FPD Bennett FPD #7 Berthoud FPD Big Sandy FPD

Big Thompson Canyon Fire Black Forest Fire Rescue

Blanca Fire\* Boone Fire

Boulder Mountain FPD Boulder Rural FPD Brighton VFD\* Brush Combined Fire Buena Vista Fire Calhan FPD Cañon City Area FPD

Carbondale & Rural FPD Cascade FPD Castle Rock Fire

Central City VFD
Central Orchard Mesa FPD
Cheyenne County FPD #1

Clear Creek Fire Authority Clifton FPD

Coal Creek Canyon FPD

Colorado River

(Burning Mountains) FPD\*
Colorado River (Rifle) FPD
Crested Butte FPD
Cripple Creek Fire\*
Crowley VFD
Crystal Lakes FPD
Divide VFD
Donald Wescott FPD

Dove Creek FPD Durango FPD Eads Fire

East Grand FPD #4
Eaton FPD
Eckley Fire

Elbert FPD & Rescue Elizabeth FPD\* Elk Creek FPD Englewood Fire\* Evans FPD Evergreen FPD Falcon FPD\* Federal Heights Fire Fisher's Peak FPD

Florence FPD

Foothills Fire & Rescue Fort Lewis Mesa FPD Fort Morgan Fire Fort Morgan Rural FPD Franktown FPD

Frederick Firestone FPD\*

Galeton FPD
Genesee FPD
Glacier View FPD
Glendale Fire\*
Glenwood Springs Fire

Golden Fire
Golden Gate FPD
Grand FPD #1
Grand Lake FPD
Grand Valley FPD
Green Mountain
Falls-Chipita Park FPD

Gypsum FPD Hartsel FPD Haxtun Fire Hillrose Rural FPD Holyoke Fire Holyoke FPD Hot Sulphur

Springs/Parshall FPD Hygiene FPD Indian Hills FPD Inter-Canyon FPD Jackson 105 FPD Jefferson-Como FPD

Kiowa FPD Kremmling FPD La Junta Fire La Salle FPD Lafayette Fire\*

Lake City Area FPD Lake Dillon FPD\* Lake George FPD Lamar Fire Larkspur FPD Lefthand FPD Lewis-Arriola FPD Limon Area FPD Livermore FPD Log Hill Mesa FPD Loveland & Rural Consolidated VFD\* Lower Valley FPD Lyons FPD Mancos FPD Manitou Springs VFD

Manzanola Rural FPD Montrose FPD Mountain View FPD Nederland FPD

New Raymer/Stoneham FPD

North Fork FPD

North Routt County Fire Northeast Teller County FPD North-West FPD

Northwest Conejos County FPD Norwood FPD Nucla-Naturita FPD Nunn FPD

Oak Creek FPD
Olathe FPD
Olney Springs Fire
Ordway Fire
Ouray VFD
Palisade VFD
Palmer Lake Fire
Parker FPD\*
Pawnee FPD
Peetz FPD

Peyton FPD

Pinewood Springs VFD Plateau Valley FPD Platte Canyon FPD Platte Valley FPD Platteville/Gilcrest FPD Pleasant View
Metro Fire District
Poudre Canyon FPD
Poudre Fire Authority\*
Rangely Rural FPD
Rattlesnake FPD
Red Feather Lakes FPD
Red White & Blue FPD\*
Ridgway FPD
Rio Blanco FPD

Rio Blanco FPD
Rocky Ford Fire
Rocky Mountain VFD\*
Sable-Altura FPD
Sheridan Fire\*
Silverton San Juan FRA

South Adams County FPD
South Arkansas FPD\*
South Conejos FPD
South Metro Fire Rescue\*
Southwest Washington

County FPD Springfield Fire Steamboat Springs VFD

Sterling Fire
Stonewall FPD
Stratton FPD
Sugar City Fire
Sugarloaf FPD
Telluride FPD
Timberline FPD
Walsh VFD
Wellington FPD
West Cheyenne FPD
West Douglas County FPD

West Metro FPD\*
West Routt FPD
Westminster VFD\*
Wet Mountain FPD
Wiggins Rural FPD
Wiley Rural FPD
Windsor Severance FPD

Yampa FPD

Yuma Fire

<sup>\*</sup> No active members at December 31, 2017

Colorado Springs Fire Colorado Springs Police

# **Employers of Affiliated Local "Old Hire" Plans**

**Adams County** (North Washington) FPD\* Aurora Fire\* Aurora Police

Bancroft FPD\* Cañon City Area FPD\* Cedaredge Police\* Cherry Hills FPD\* Colorado Springs Fire\*

Colorado Springs Police\* Cortez Police\*

Del Norte Police\* Denver Fire

Denver Police Durango Fire\* Durango Police\* Englewood Fire\* Englewood Police\* Fort Morgan Police\* **Grand Junction Fire\*** Grand Junction Police\* Greeley Police\*

Greeley (Union Colony) Fire\*

Haxtun Police\* La Junta Fire\* La Junta Police\* La Salle Police Lakewood FPD\* Lamar Fire\* Las Animas Police\* Leadville Fire\* Loveland Fire\* Manitou Springs Fire\* Montrose FPD\*

Mountain View FPD\* Pueblo Fire Pueblo Police\*

Pueblo Rural FPD\* Red White & Blue FPD\* Rocky Ford Police\* Salida Fire\* Salida Police\*

South Adams County FPD\* Springfield Police\* Sterling Fire\*

Sterling Police\* Thornton Fire Trinidad Fire\* Trinidad Police\*

# **Employers of Affiliated Statewide Defined Benefit Supplemental Social Security Plans**

Akron Police\* Cedaredge Police\* **Debeque Police** 

Frederick Police Haxtun Police Holyoke Police

Johnstown Police **Kersey Police Kremmling Police**  Springfield Police Windsor Police

<sup>\*</sup> No active members at December 31, 2017

# **Employers Participating in the FPPA's 457 Deferred Compensation Plan**

Adams County FPD
Alamosa Police\*
Arvada FPD
Arvada Police
Ault Police
Aurora Fire
Aurora Police
Basalt & Rural FPD
Bayfield Police
Bennett FPD # 7
Berthoud FPD

Black Forest Fire Rescue
Boulder Rural FPD
Brighton Police
Broadmoor FPD
Brush Police
Buena Vista Police
Cañon City Area FPD
Cañon City Police
Carbondale & Rural FPD

Castle Rock Fire
Center Police
Chaffee County FPD
Cimarron Hills FPD
Clear Creek Fire Authority\*
Clifton FPD\*

Colorado River FPD Colorado Springs Fire Colorado Springs Police Columbine Valley Police\*

Columbine Valley Pol Cortez FPD Crested Butte FPD Cripple Creek Fire Cunningham FPD Debeque FPD Debeque Police Donald Wescott FPD Durango FPD
East Grand FPD #4
Eaton FPD
Elizabeth FPD
Elk Creek FPD
Estes Valley FPD
Fairmount FPD

Falcon FPD
Federal Heights Fire
Federal Heights Police
Firestone Police
Foothills Fire & Rescue
Fort Collins Fire\*
Fort Collins Police
Fort Lewis-Mesa FPD\*
Fort Lupton FPD
FPPA Employees
Frederick-Firestone FPD
Front Range Fire Rescue FPD

Genesee FPD
Glendale Police\*
Granada Police\*
Grand FPD #1
Grand Lake FPD
Grand Valley FPD
Greater Eagle FPD\*
Greeley Fire

**Greeley Police** 

Green Mtn
Falls-Chipita Park FPD\*

Gypsum FPD Hartsel FPD Holyoke Police Hudson FPD Hugo Police\* Idaho Springs Police\* Ignacio Police Inter-Canyon FPD Jackson 105 FPD\* Jefferson-Como FPD Kiowa FPD

Kremmling FPD
La Jara Police\*
La Salle FPD
Lake Dillon FPD
Lakeside Police\*
Larkspur FPD
Lefthand FPD\*
Lochbuie Police
Lone Tree Police
Los Pinos FPD
Loveland FRA
Loveland Police
Lower Valley FPD

Lyons FPD\*

Manitou Springs Fire Manitou Springs Police

Montrose FPD Mountain View FPD Mountain Village Police Nederland FPD

North Metro Fire Rescue Northeast Teller County FPD

North-West FPD
Pagosa FPD
Palisade Fire\*
Palisade Police\*
Plateau Valley FPD\*
Platte Canyon FPD
Platte Valley FPD
Platteville Police
Platteville-Gilcrest FPD
Pleasant View
Metro Fire District

Poudre Fire Authority

Pueblo Fire
Pueblo Police
Pueblo Rural FPD
Red White & Blue FPD
Rocky Mountain FPD
Sable-Altura FPD
Salida Fire
Salida Police

Snowmass Wildcat FPD South Adams County FPD Southeast Weld FPD

Southern Park County FPD\*

Sterling Fire
Sterling Police
Strasburg FPD #8\*
Stratmoor Hills FPD
Stratton Police\*
Telluride FPD
Timberline FPD

Tri-Lakes Monument FPD

Trinidad Fire Trinidad Police\* Upper Pine River FPD

Vail Fire
Vail Police\*
Wellington FPD
West Metro FPD
West Routt FPD
Wiggins Police\*

Windsor Severance FPD

Wray Police Yuma Police

<sup>\*</sup> No active members at December 31, 2017

# Employers of the Defined Benefit System | Statewide Defined Benefit Plan

Adams County FPD Aguilar Police\* Alma Police Antonito Police Arvada FPD Aspen FPD Ault FPD\* Ault Police Aurora Fire Basalt & Rural FPD **Basalt Police Bayfield Police** Bennett FPD #7 Berthoud FPD Beulah Fire Protection & Ambulance District Big Sandy FPD Black Forest Fire Rescue

Blanca Police
Boulder Mountain FPD
Boulder Rural FPD
Bow Mar Police\*
Briggsdale FPD
Brighton (Greater) FPD
Brighton Police
Broadmoor FPD
Brush Police
Buena Vista Fire
Buena Vista Police
Byers FPD #9
Cañon City Police
Carbondale & Rural FPD

Castle Rock Fire

Center Police

Black Hawk Fire

Central City Fire\*
Chaffee County FPD
Cimarron Hills FPD
Clear Creek Fire Authority
Clifton FPD
Coal Creek Canyon FPD
Collbran Marshalls Police\*
Colorado Centre
Metro District Fire\*
Colorado River FPD

Columbine Valley Police
Copper Mountain Fire
Cortez FPD
Crested Butte FPD
Cripple Creek Fire
Cunningham FPD
Dacono Police
Debeque FPD

Colorado Springs Fire

Colorado Springs Police

Denver Fire
Denver Police
Dillon Police
Dinosaur Police
Donald Wescott FPD
Durango FPD
Eads Police\*
East Grand FPD #4
Eaton FPD
Edgewater Police
Elizabeth Police

Empire Police
Englewood Police
Erie Police
Estes Valley FPD
Evans FPD
Evans Police
Evergreen FPD
Fairmount FPD
Fairplay Marshalls
Falcon FPD
Federal Heights Fire

Elk Creek FPD

Federal Heights Police Firestone Police Florence Police Florissant FPD\* Foothills Fire & Rescue Fort Lewis-Mesa FPD Fort Lupton FPD Fountain Fire Fowler Police Franktown FPD

Frederick Firestone FPD

Frisco Police

Genesee FPD

Georgetown Police

Front Range Fire Rescue FPD Garden City Police Gateway-Unaweep FPD

Gilcrest Police\*
Granada Police\*
Grand FPD #1
Grand Lake FPD
Grand Valley FPD
Greater Eagle FPD
Greeley Fire
Green Mountain

Falls-Chipita Park FPD\*
Gypsum FPD
Hartsel FPD
Hudson FPD
Hugo Police
Hygiene FPD\*
Idaho Springs Police

Ignacio Police Indian Hills FPD Inter-Canyon FPD Jackson 105 FPD\* Jefferson-Como FPD Kiowa FPD Kremmling FPD

Kremmling FPD
La Jara Police
La Salle FPD
La Salle Police
La Veta Police
Lafayette Fire
Lafayette Police
Lake Dillon FPD
Lake George FPD\*
Lakeside Police
Lamar Fire\*
Larkspur FPD

Las Animas Police\*
Leadville Fire
Leadville Police
Lefthand FPD
Littleton Fire
Lochbuie Police
Log Lane Village Police
Lone Tree Police
Los Pinos FPD
Lower Valley FPD
Lyons FPD
Manassa Police

Mead Police
Milliken Police
Minturn Fire\*
Montrose FPD
Mountain View FPD
Mountain View Police
Nederland FPD
North Fork Fire

Manitou Springs Fire

Manitou Springs Police

North Metro Fire Rescue North Routt FPD

Northeast Teller County FPD

North-West FPD Nunn Police Oak Creek FPD Oak Creek Police Olathe Police

Pagosa FPD Pagosa Springs Police Palisade Fire Palisade Police

Palmer Lake Fire Palmer Lake Police Paonia Police Parachute Police
Parker Police
Plateau Valley FPD
Platte Canyon FPD
Platte Valley FPD
Platteville Police
Platteville-Gilcrest FPD
Pleasant View
Metro Fire District
Pueblo Fire
Pueblo Rural FPD
Pueblo West Metro FPD
Rattlesnake FPD
Red White & Blue FPD

Rio Blanco FPD
Rocky Mountain FPD
Rye FPD
Sable-Altura FPD
Salida Fire
Salida Police
San Luis Police\*
Sanford Police
Security FPD
Sheridan Police

Silt Police

Snowmass Wildcat FPD
South Adams County FPD
South Fork FPD
South Fork Police
Southeast Weld FPD
Southern Park County FPD
Steamboat Springs Fire

Sterling Fire
Sterling Police
Strasburg FPD #8
Stratmoor Hills FPD
Stratton Police
Telluride FPD
Thornton Fire
Thornton Police
Timberline FPD

Tri Lakes Monument FPD

Trinidad Fire

Upper Pine River FPD Wellington FPD

West Douglas County FPD

West Metro FPD West Routt FPD Westminster Fire Westminster Police Wiggins Police

Windsor-Severance FPD

Wray Police Yuma Police

<sup>\*</sup> No active members at December 31, 2017

### Employers of the Defined Benefit System | Statewide Hybrid Plan

Arvada FPD\*
Aurora Fire
Basalt Police
Brighton Police\*
Buena Vista Police
Cañon City Police
Carbondale & Rural FPD
Dacono Police\*
Dillon Police\*

**Edgewater Police** 

Englewood Police
Evans Police
Federal Heights Fire\*
Federal Heights Police\*
Florence Police\*
Foothills Fire and Rescue
Fountain Fire
Granada Police
Grand FPD #1\*

Greater Eagle FPD\*

Lafayette Police
Lake Dillon FPD
Littleton Fire
Milliken Police
Montrose FPD\*
North Metro Fire Rescue
Oak Creek Police
Sable-Altura FPD
Security FPD\*

Sheridan Police

Snowmass Wildcat FPD Sterling Fire\* Thornton Fire Thornton Police Timberline FPD\* Trinidad Fire Upper Pine River FPD

Upper Pine River FPD
West Metro FPD
Westminster Fire
Westminster Police

### **Employers of the Statewide Money Purchase Plan**

Ault FPD
Bayfield Police
Black Hawk Fire
Briggsdale FPD\*
Brighton (Greater) FPD
Central City Fire
Central City Police\*
Cimarron Hills FPD
Clear Creek Fire Authority
Colorado Centre
Metro District Fire
Colorado River FPD
Colorado Springs Police

Copper Mountain Fire
Denver Police
Eaton FPD
Elizabeth FPD
Elizabeth Police
Elk Creek FPD\*
Fairmont FPD
Falcon FPD
Federal Heights Fire
Galeton FPD\*
Genesee FPD\*
Grand Valley FPD
Greater Eagle FPD

Jefferson-Como FPD
Kiowa FPD\*
Kremmling FPD
Lake George FPD\*
Las Animas Police\*
Leadville Police
Louviers FPD\*
Manassa Police\*
Mountain View Police
Mountain Village Police
Nederland FPD
Pagosa FPD

Platteville-Gilcrest FPD Rocky Mountain FPD Sable-Altura FPD Salida Fire\* Southern Park County FPD\*

Telluride FPD
Timberline FPD
Upper Pine River FPD
West Routt FPD
Windsor Severance FPD

### Employers of Affiliated Statewide Death & Disability Supplemental Social Security Plan

Debeque Police Haxtun Police Holyoke Police Johnstown Police Kersey Police Springfield Police

Platteville Police\*

<sup>\*</sup> No active members at December 31, 2017

### Employers with Active Members in the Statewide Death & Disability Plan

Adams County FPD Alamosa Police Alma Police Antonito Police Arvada FPD Arvada Police Aspen FPD Aspen Police Ault FPD **Ault Police** Aurora Fire Aurora Police Avon Police Basalt & Rural FPD **Basalt Police Bayfield Police** Bennett FPD #7 Berthoud FPD

**Beulah Fire Protection** & Ambulance District

Big Sandy FPD

Black Forest Fire Rescue Black Hawk Fire

Blanca Police **Boulder Fire** 

**Boulder Mountain FPD Boulder Police Boulder Rural FPD** Briggsdale FPD Brighton (Greater) FPD **Brighton Police** 

**Broomfield Police Brush Police** Buena Vista Fire Buena Vista Police Byers FPD #9

**Broadmoor FPD** 

Canon City Area FPD Canon City Police Carbondale & Rural FPD Castle Rock Fire

Central City Fire Chaffee County FPD Cherry Hills Village Police Cimarron Hills FPD

Clear Creek Fire Authority

Clifton FPD

Center Police

Coal Creek Canyon FPD Collbran Marshals Colorado Centre

Metro District Fire Colorado River FPD

Colorado Springs Fire

Colorado Springs Police

Columbine Valley Police Commerce City Police Copper Mountain Fire

Cortez FPD Cortez Police Crested Butte FPD Cripple Creek Fire Cunningham FPD Dacono Police Debegue FPD Del Norte Police Delta Police Denver Fire **Denver Police** 

Donald Wescott FPD Durango FPD **Durango Police** Eagle River FPD East Grand FPD #4

**Dillon Police** 

**Dinosaur Police** 

Eaton FPD **Edgewater Police** Elizabeth FPD Elizabeth Police Elk Creek FPD **Empire Police Englewood Police** Erie Police Estes Valley FPD Evans FPD **Evans Police** Evergreen FPD

Fairmount FPD

Fairplay Marshalls Police Falcon FPD Federal Heights Fire Federal Heights Police Firestone Police Florence Police Foothills Fire & Rescue Fort Collins Fire

Fort Collins Police Fort Lewis-Mesa FPD Fort Lupton FPD Fort Lupton Police Fort Morgan Police Fountain Fire Fountain Police Fowler Police

Franktown FPD Frederick Firestone FPD

Frisco Police

Front Range Fire Rescue FPD

Fruita Police

Garden City Police Gateway-Unaweep FPD

Genesee FPD Georgetown Police Glendale Police **Glenwood Springs Fire Glenwood Springs Police** 

Golden Police Granada Police Grand FPD #1 **Grand Junction Fire Grand Junction Police** Grand Lake FPD **Grand Valley FPD Greater Eagle FPD Greeley Fire Greeley Police** Green Mountain

Golden Fire

Falls-Chipita Park FPD Greenwood Village Police

Gypsum FPD Hartsel FPD **Hudson FPD Hugo Police Idaho Springs Police** Ignacio Police Indian Hills FPD Inter-Canyon FPD Jefferson-Como FPD

Kiowa FPD Kremmling FPD La Jara Police La Junta Fire La Junta Police La Salle FPD La Salle Police La Veta Police Lafayette Fire

Lafayette Police Lake Dillon FPD Lake George FPD Lakeside Police Lamar Fire Lamar Police Larkspur FPD Leadville Fire Leadville Police Lefthand FPD Littleton Fire Littleton Police

Lochbuie Police Log Lane Village Police Lone Tree Police Longmont Fire

**Longmont Police** Los Pinos FPD Loveland FRA Loveland Police Lower Valley FPD Lyons FPD Manassa Police Manitou Springs Fire Manitou Springs Police

Mead Police Milliken Police Monte Vista Police Montrose FPD Montrose Police Mountain View FPD Mountain View Police Mountain Village Police

Nederland FPD North Fork FPD

North Metro Fire Rescue

North Routt FPD

Northeast Teller County FPD

Northglenn Police North-West FPD Nunn Police Oak Creek FPD Oak Creek Police Olathe Police Pagosa FPD

Pagosa Springs Police

Palisade Fire Palisade Police Palmer Lake Fire Palmer Lake Police Paonia Police Parachute Police Parker Police Plateau Valley FPD Platte Canyon FPD Platte Valley FPD Platteville Police Platteville-Gilcrest FPD

Pleasant View Metro Fire District Poudre Fire Authority Pueblo Fire Pueblo Police

Pueblo Rural FPD Pueblo West Metro Fire Rangely Police Rattlesnake FPD

Red White & Blue FPD

Rifle Police Rio Blanco FPD Rocky Ford Fire

## Employers with Active Members in the Statewide Death & Disability Plan

Rocky Ford Police Rocky Mountain FPD Rye FPD Sable-Altura FPD Salida Fire Salida Police Sanford Police Security FPD Sheridan Police

Silt Police

Snowmass Village Police Snowmass Wildcat FPD South Adams County FPD South Fork FPD South Fork Police South Metro Fire Rescue Southeast Weld FPD Southern Park County FPD Steamboat Springs Fire Steamboat Springs Police

Sterling Fire Sterling Police Strasburg FPD #8 Stratmoor Hills FPD Stratton Police
Telluride FPD
Telluride Police
Thornton Fire
Thornton Police
Timberline FPD
Tri-Lakes Monument FPD

Trinidad Fire
Trinidad Police
Upper Pine River FPD

Vail Fire Vail Police Wellington FPD

West Douglas County FPD

West Metro FPD West Routt FPD Westminster Fire Wheat Ridge Police Wiggins Police

Windsor Severance FPD Woodland Park Police

Wray Police Yuma Police

Affiliated Local Plans				
Type of Benefit	2017	2016	2015	2014
Age and service benefits:				
Retirees & Survivors	\$168,478,600	\$168,257,048	\$165,621,180	\$164,721,406
Disability	0	0	0	0
Total Benefits	\$168,478,600	\$168,257,048	\$165,621,180	\$164,721,406
Type of Refund				
Contributions				
(including interest earned)	\$140,874	\$918,003	\$201,899	\$521,475
Total Refunds	\$140,874	\$918,003	\$201,899	\$521,475

Statewide Death & Disability Plan							
Type of Benefit	2017	2016	2015	2014			
Age and service benefits:							
Retirees & Survivors	\$0	\$0	\$0	\$0			
Disability	28,157,074	26,128,642	24,096,515	22,707,843			
Total Benefits	\$28,157,074	\$26,128,642	\$24,096,515	\$22,707,843			
Type of Refund							
Contributions							
(including interest earned)	\$0	\$59,172	\$0	\$12,647			
Total Refunds	\$0	\$59,172	\$0	\$12,647			

Defined Benefit System   Statewide Defined Benefit Plan							
Type of Benefit	2017	2016	2015	2014			
Age and service benefits:							
Retirees & Survivors	\$65,977,013	\$60,019,888	\$53,129,403	\$47,655,798			
Disability	0	0	0	0			
Total Benefits	\$65,977,013	\$60,019,888	\$53,129,403	\$47,655,798			
Type of Refund							
Contributions							
(including interest earned)	\$2,187,599	\$1,813,180	\$1,763,962	\$1,848,698			
Total Refunds	\$2,187,599	\$1,813,180	\$1,763,962	\$1,848,698			

2013	2012	2011	2010	2009	2008
\$165,121,187	\$165,552,566	\$162,511,376	\$164,220,145	\$157,644,750	\$152,270,531
0	0	0	0	0	0
\$165,121,187	\$165,552,566	\$162,511,376	\$164,220,145	\$157,644,750	\$152,270,531
\$848,221	\$315,017	\$584,749	\$1,823,003	\$5,045,932	\$2,958,380
\$848,221	\$315,017	\$584,749	\$1,823,003	\$5,045,932	\$2,958,380

2008	2009	2010	2011	2012	2013
:	\$0	\$0	\$0	\$0	\$0
14,886,70	15,995,412	17,376,644	18,217,570	19,482,152	21,018,988
\$14,886,7	\$15,995,412	\$17,376,644	\$18,217,570	\$19,482,152	\$21,018,988
	\$14,242	\$58,440	\$47,192	\$0	\$32,919
	\$14,242	\$58,440	\$47,192	\$0	\$32,919

2013	2012	2011	2010	2009	2008
\$42,442,562	\$31,959,003	\$28,284,899	\$25,448,990	\$13,547,142	\$10,892,80
0	0	0	0	0	
\$42,442,562	\$31,959,003	\$28,284,899	\$25,448,990	\$13,547,142	\$10,892,80
		!		+	
\$2,796,217	\$1,616,336	\$1,882,112	\$1,493,913	\$1,927,732	\$3,621,10
\$2,796,217	\$1,616,336	\$1,882,112	\$1,493,913	\$1,927,732	\$3,621,10

## Defined Benefit System | Statewide Hybrid Plan - Defined Benefit Component

Type of Benefit	2017	2016	2015	2014
Age and service benefits:				
Retirees & Survivors	\$1,493,664	\$1,191,766	\$953,099	\$752,330
Disability	0	0	0	0
Total Benefits	\$1,493,664	\$1,191,766	\$953,099	\$752,330
Type of Refund				
Contributions				
(including interest earned)	\$27,870	\$17,151	\$18,365	\$35,373
Total Refunds	\$27,870	\$17,151	\$18,365	\$35,373

#### **Defined Benefit System** | Colorado Springs New Hire Pension Plan – Combined Police & Fire

Type of Benefit	2017	2016	2015	2014
Age and service benefits:	,			
Retirees & Survivors	\$20,867,505	\$18,988,354	\$16,350,538	\$14,334,086
Disability	0	0	0	0
Total Benefits	\$20,867,505	\$18,988,354	\$16,350,538	\$14,334,086
Type of Refund				
Contributions				
(including interest earned)	\$177,858	\$250,586	\$99,734	\$443,707
Total Refunds	\$177,858	\$250,586	\$99,734	\$443,707

2013	2012	2011	2010	2009	2008
\$525,814	\$449,818	\$317,469	\$236,346	\$282,930	\$155,143
0	0	0	0	0	C
\$525,814	\$449,818	\$317,469	\$236,346	\$282,930	\$155,143
\$36,845	\$3,097	\$14,990	\$5,069	\$232,027	\$78,716
\$36,845	\$3,097	\$14,990	\$5,069	\$232,027	\$78,716

2013	2012	2011	2010	2009	2008
\$13,463,745	\$12,832,278	\$11,920,608	\$10,259,279	\$8,754,606	\$6,982,0
0	0	0	0	0	
\$13,463,745	\$12,832,278	\$11,920,608	\$10,259,279	\$8,754,606	\$6,982,0
13,463,745	\$12,832,278	\$11,920,608	\$10,259,279	\$8,754,606	\$6,982,
\$297,196	\$353,856	\$479,250	\$384,736	\$0	\$376,7
\$297,196	\$353,856	\$479,250	\$384,736	\$0	\$376,7

Fire & Police Members'	Statewide Money	y Purchase Plan

Type of Benefit	2017	2016	2015	2014
Age and service benefits:	Age and Service benefits ar	e not calculated for this	plan.	
Type of Refund				
Contributions (including interest earned)	\$304,189	\$247,528	\$245,503	\$300,406
Total Refunds	\$304,189	\$247,528	\$245,503	\$300,406

Self-Directed Assets fo	<sup>·</sup> Affiliated Local Plans and	d Defined Benefit System Plans
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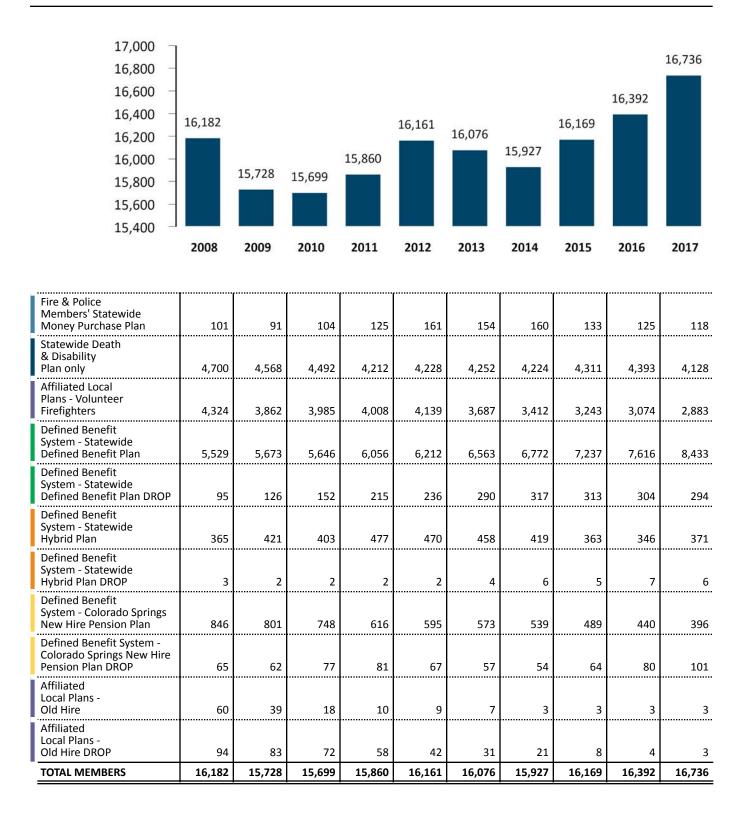
Type of Benefit	2017	2016	2015	2014
Age and service benefits:	Age and Service benefits ar	e not calculated for this	plan.	
Type of Refund				
Contributions (including interest earned)	\$127,314,764	\$41,738,925	\$62,813,697	\$39,891,560
Total Refunds	\$127,314,764	\$41,738,925	\$62,813,697	\$39,891,560

IRC 457 Defe	erred Com	pensation Plar	ì
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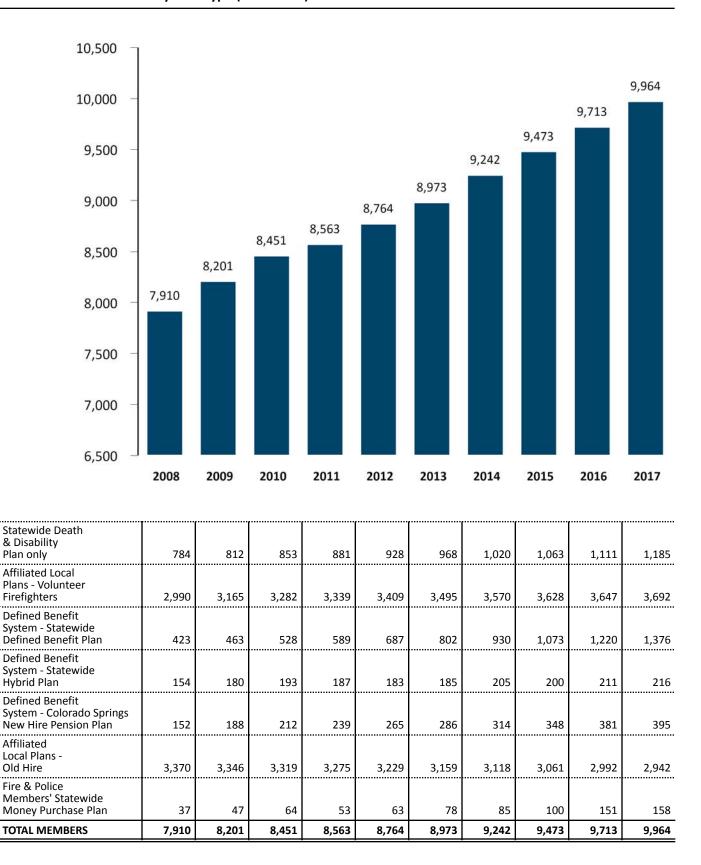
Type of Benefit	2017	2016	2015	2014
Age and service benefits:	Age and Service benefits are	e not calculated for this	plan.	
Type of Refund				
Contributions (including interest earned)	\$5,463,548	\$7,220,110	\$5,136,008	\$5,433,841
Total Refunds	\$5,463,548	\$7,220,110	\$5,136,008	\$5,433,841

2013	2012	2011	2010	2009	2008
\$951,163	\$1,067,020	\$175,587	\$402,564	\$262,920	\$500
\$951,163	\$1,067,020	\$175,587	\$402,564	\$262,920	\$500
2013	2012	2011	2010	2009	2008
\$42,699,246	\$42,317,300	\$67,711,031	\$27,588,789	\$22,942,996	\$20,852
\$42,699,246	\$42,317,300	\$67,711,031	\$27,588,789	\$22,942,996	\$20,852
2013	2012	2011	2010	2009	2008
\$4,254,537	\$4,457,433	\$4,792,208	\$4,837,214	\$1,909,744	\$1,821
\$4,254,537	\$4,457,433	\$4,792,208	\$4,837,214	\$1,909,744	\$1,821

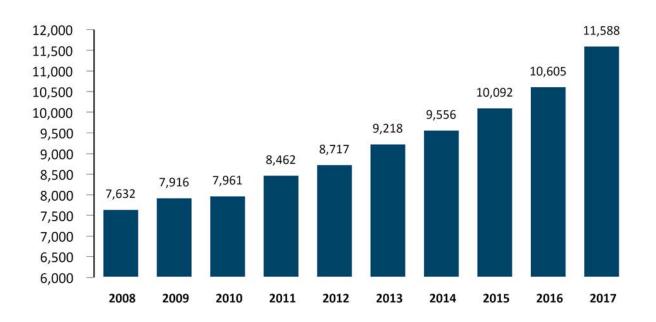
#### ■ FPPA Active Members by Plan Type (2008-2017)



#### ■ FPPA Retired Members by Plan Type (2008-2017)

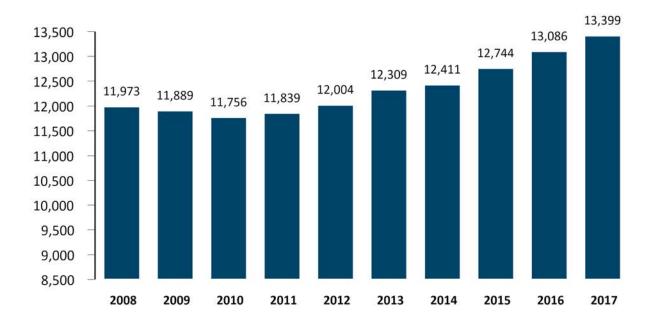


## ■ Defined Benefit System Members by Status (2008-2017)



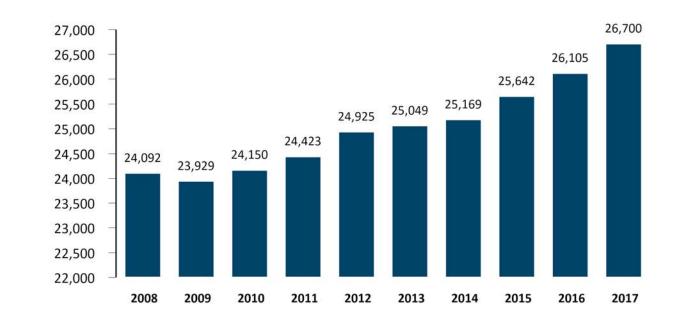
Defined Benefit System   S	Statewide I	Defined Bo	enefit Plar	า						
Terminated Vested	164	167	170	165	171	187	204	216	716	1,075
Retired & Beneficiaries	259	296	358	424	516	615	726	857	1,220	1,133
Non-Vested Actives	2,300	2,139	1,841	1,792	1,686	1,877	2,071	2,499	2,381	2,777
Partially Vested Actives	2,918	3,208	3,467	3,899	4,161	4,355	4,352	4,360	4,128	4,399
Fully Vested Actives	311	326	338	365	365	331	349	378	391	425
DROP Actives	95	126	152	215	236	290	317	313	304	294
Defined Benefit System   S	Statewide I	Hybrid Pla	n							
Retired, Beneficiaries, & Terminated Vested	154	180	193	187	183	185	205	200	234	248
Non-Vested Actives	72	75	55	80	54	52	36	48	24	32
Partially Vested Actives	78	73	82	104	126	119	127	120	251	251
Fully Vested Actives	215	273	266	293	290	287	256	195	48	56
DROP Actives	3	2	2	2	2	4	6	5	7	6
Defined Benefit System   (	Colorado S	prings Nev	w Hire Per	nsion Plan	– Combin	ed Police 8	& Fire			
Retired, Beneficiaries, & Terminated Vested	152	188	212	239	265	286	314	348	393	405
Non-Vested Actives	409	349	268	174	114	90	45	16	0	0
Partially Vested Actives	380	405	435	399	431	426	424	424	383	341
Fully Vested Actives	57	47	45	43	50	57	70	49	45	45
DROP Actives	65	62	77	81	67	57	54	64	80	101
TOTAL MEMBERS	7,632	7,916	7,961	8,462	8,717	9,218	9,556	10,092	10,605	11,588

## ■ Members by Status (2008-2017)



Statewide Death & Disability Plan										
Disabled Retirees & Beneficiaries	784	812	853	881	928	968	1,020	1,063	1,111	1,185
Non-Vested Actives	11,189	11,077	10,903	10,958	11,076	11,341	11,391	11,681	11,975	12,214
TOTAL MEMBERS	11,973	11,889	11,756	11,839	12,004	12,309	12,411	12,744	13,086	13,399

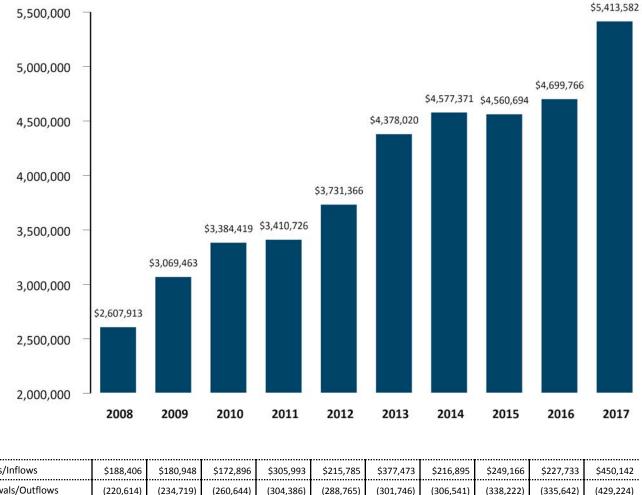
## ■ FPPA All Plans Active and Retired Members by Occupation (2008-2017)



Retired Firefighters	5,257	5,487	5,690	5,784	6,010	6,062	6,247	6,401	6,537	6,675
Active Firefighters	9,772	9,317	9,363	9,550	9,838	9,599	9,390	9,388	9,481	9,514
Retired Police	2,646	2,704	2,748	2,776	2,729	2,884	2,967	3,041	3,143	3,241
Active Police	6,344	6,309	6,228	6,201	6,213	6,365	6,431	6,636	6,765	7,069
Retired Administrative	7	10	13	3	25	27	28	31	33	48
Active Administrative	66	102	108	109	110	112	106	145	146	153
TOTAL MEMBERS	24,092	23,929	24,150	24,423	24,925	25,049	25,169	25,642	26,105	26,700

## ■ Growth of Total Pension Fund Position (2008-2017)

## (Total \$ in Thousands 000's)



Total \$ in thousands (000's)	\$2,607,913	\$3,069,463	\$3,384,419	\$3,410,726	\$3,731,366	\$4,378,020	\$4,577,371	\$4,560,694	\$4,699,766	\$5,413,582
Beginning Net Position	3,712,879	2,607,913	3,069,463	3,384,419	3,410,726	3,731,366	4,378,020	4,577,371	4,560,694	4,699,766
Return on Investments	(1,072,758)	515,321	402,704	24,700	393,620	570,927	288,997	72,379	246,981	692,898
Withdrawals/Outflows	(220,614)	(234,719)	(260,644)	(304,386)	(288,765)	(301,746)	(306,541)	(338,222)	(335,642)	(429,224)
Revenues/Inflows	\$188,406	\$180,948	\$172,896	\$305,993	\$215,785	\$377,473	\$216,895	\$249,166	\$227,733	\$450,142

# ■ Schedule of Retired Members by Type of Benefit as of December 31, 2017

			Month	ıly Benefit Aı	mount		
	<=\$500	\$501- \$1,000	\$1,001- \$1,500	\$1,501- \$2,000	\$2,001- \$2,500	>\$2,501	Total
Statewide Death & Disability Plan							
Occupational Disability	22	83	184	183	139	189	800
Occupational Disability-Survivor	21	10	13	6	0	2	52
Total Disability	1	1	2	2	9	70	85
Total Disability-Survivor	1	5	8	11	6	23	54
Survivor of Active	6	6	19	38	28	23	120
*Fire & Police Members' Statewide	Money Purcha	se Plan					
*Money Purchase Only	N/A	N/A	N/A	N/A	N/A	N/A	151
Defined Benefit System - Statewide	Defined Benef	it Plan					
Retired	2	1	5	9	19	469	505
Vested	36	160	115	65	83	202	661
Retired-Survivor	8	15	8	4	5	14	54
Defined Benefit System - Statewide	Hybrid Plan						
*Money Purchase Only	N/A	N/A	N/A	N/A	N/A	N/A	174
Retired	0	0	0	1	2	19	22
Vested	1	3	2	2	2	5	15
Retired-Survivor	0	0	0	0	0	0	0
Defined Benefit System - Colorado	Springs New Hi	re Pension P	lan				
Retired	0	0	1	3	4	188	196
Vested	0	7	43	23	14	82	169
Retired-Survivor	1	4	4	4	1	2	16
Affiliated Local Plans							
Disability Retirement	5	5	1	0	1	630	642
Disability-Survivor	8	6	2	8	66	242	332
Retired	1,011	461	25	14	35	1,485	3,031
Vested	1,499	290	8	3	0	60	1,860
Retired-Survivor	377	44	22	32	69	230	774
Totals	2,999	1,101	462	408	483	3,935	9,713

<sup>\*</sup> Details not available for members in the Money Purchase plans.



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