2017 Annual Report

City of Austin Police Retirement System

2017 Annual Report

"To serve the APRS membership and protect the retirement benefits for the past, present and future members of the System"

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INTRODUCTORY SECTION

Letter to Members

Dear Members,

The Board of Trustees and staff of the Austin Police Retirement System are pleased to present the Annual Report for the fiscal year ended December 31, 2017.

The annual report is intended to provide complete and reliable information regarding the financial performance of the System and measure the responsible stewardship of the System's assets.

The annual report is divided into the following sections:

- The Introductory Section provides basic information about the organization.
- The Financial Section includes an investment overview provided by the System's consultants, the independent auditor's report, Management's Discussion and Analysis (MD&A), basic financial statements, notes to the basic financial statements and required supplemental information.
- The Actuarial Section contains the consulting actuary's Certification Letter and the full actuarial valuation report.
- The Historical Information & Benefits Sections contain highlights of historical benefit changes, a comparative statement of membership over the last two years and the membership benefit guide.

Montemayor Britton Bender PC, the System's independent auditor, issued an unqualified opinion on the System's financial statements. The report indicates that the financial statements are in accordance with Governmental Accounting Standards Board rulings and that the System's financial condition and operations are fairly presented. It is the best report an independent auditor may issue.

The 2017 actuarial valuation was performed by Gabriel, Roeder & Smith (GRS). The Actuarial Valuation Report indicates that the funding ratio (assets compared to liabilities) is 64.9 percent, and the funding period to amortize liabilities is 35 years.

The System's management staff is responsible for maintaining internal controls. These controls are designed to provide reasonable assurance that the assets are protected and that financial transactions are executed in accordance with Board policy and federal, state, and local laws and regulations. Additionally, the controls provide assurance regarding Management's responsibility to the System and facilitate the timely preparation of financial statements in accordance with generally accepted accounting principles.

As always, the Board of Trustees and staff welcome your comments. We appreciate your support and the opportunity to serve you. Trustees and staff are dedicated to maintaining the System's financial strength through diversification of fund assets and sound management of the System.

Sincerely,

Jim Beck, Chairman
Board of Trustees

Pattie Featherston
Executive Director

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
2017

Presented to

City of Austin Police Retirement System

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)

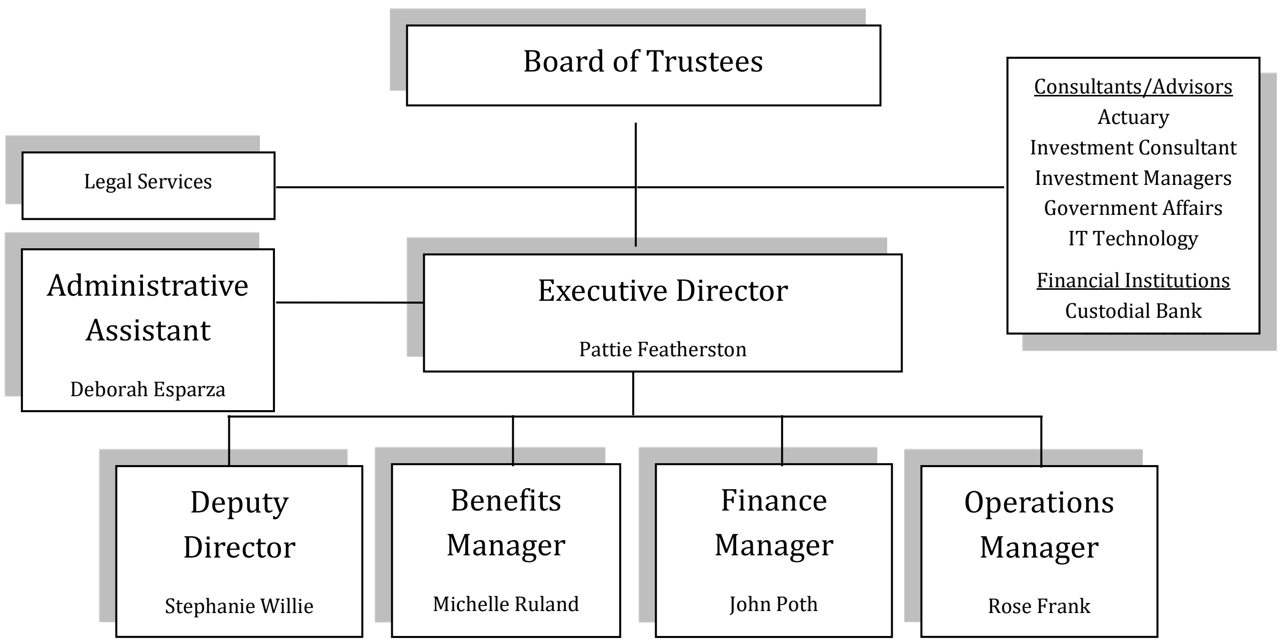
Alan H. Winkle

Alan H. Winkle

Program Administrator

Board of Trustees

Organizational Chart



Key Professional Service Providers

Custodian Bank

The Northern Trust Company, Chicago, Illinois

Investment Consultant & Performance Evaluator

AndCo Consulting, Orlando, Florida

Actuary

Gabriel, Roeder, Smith & Co., Dallas, Texas

Auditor

Montemayor Britton Bender PC, Austin, Texas

Legal Counsel

Chuck Campbell, Jackson Walker, L.L.C., Austin, Texas

Investment Managers

Domestic Equity

Baird Investment Management, Milwaukee, Wisconsin
Kennedy Capital Management, Inc., St. Louis, Missouri
NTGI Russell 3000 Index Fund, Chicago, Illinois
Seizert Capital Partners, Birmingham, Michigan

International Equity

Dreihaus International Securities, LLC, Chicago, Illinois
Lee Munder Capital Group, LLC, Boston, Massachusetts
Thompson Siegel & Walmsley, LLC, Richmond, Virginia

Other Equity

Excelsior Investors, LTD, Dallas, Texas
Sail Capital Partners, LLC, Irvine, California
WR Huff Energy Fund, LP, Morristown, New Jersey

U.S./Non-U.S. Fixed Income

Orleans Capital, Mandeville, Louisiana
Franklin Templeton Global CIT, Miami, Florida

Other Fixed Income (Private Lending)

Capital Point Partners, Houston, Texas
LBC Credit Partners, Inc., Philadelphia, Pennsylvania
Providence Debt Fund III GP LP, New York, New York
Franchise Capital Partners (Capital Springs), Boca Raton, Florida

Multi Asset Class

Double Eagle Capital Management, Irving, Texas

Real Estate

AEW Capital Management, LP., Boston, Massachusetts
ARES (VEF Advisors, LLC), Los Angeles, California
Edison Investments, Inc., Wichita, Kansas
FWAR Investments, Dallas, Texas
Gainesville Land, Hall County, Georgia (formerly Vision Capital Partners)
Invesco Reality Advisors, Dallas, Texas
JP Morgan Asset Management, New York, New York
Morgan Stanley & Co. Inc., New York, New York
Rocksprings Capital Land, Houston, Texas

Timber

BTG Pactual Timberland Group, Atlanta, Georgia
Timberland Investment Resources, Atlanta, Georgia
Domain Timber Advisors (formerly Timbervest), Atlanta, Georgia

FINANCIAL SECTION

Investment Overview

Prepared by: AndCo Consulting, Investment Consultant to the Board

Investors entered 2017 amidst an environment of uncertainty after the unexpected election of Donald Trump in the U.S. For investors who were patient and stuck with investments in global stock markets, they were rewarded with one of the best years of stock market performance on record amidst an environment of record low volatility. Calendar year 2017 proved to be the first year on record in which the U.S. stock market generated positive performance in each calendar month. The U.S. equity markets produced strong results across the market cap spectrum with U.S. large cap stocks (S&P 500) regaining their dominance, up 21.8%, while mid-caps were up 18.5% and small caps were worst performers up 14.6%. Large cap performance continues to be driven by growth oriented issues – Facebook, Amazon, Apple, Netflix, and Google. International Equity Markets delivered returns ahead of U.S. markets for the year, up 27.2%. (MSCI ACWIxUS). Developed markets, as represented by the MSCI EAFE Index, were up 25.0%, while Emerging Markets (MSCI EME Index) were the best performing equity asset class in producing a return of 37.3%. Exiting 2017 investors were confident that markets can continue to rise amidst an environment of "synchronized global expansion."

U.S. stocks registered their largest annual return in four years and set record highs driven by robust earnings growth, an accelerating economy and strong appetite for technology. The Standard & Poor's 500 Composite Index rose 22%, the Dow Jones Industrial Average climbed 28%, while the technology-heavy Nasdaq increased nearly 30%. Strength in Technology, Healthcare and Consumer stocks led U.S. growth indices to once again dominate performance for the year after a brief year of value outperformance in 2016. Energy moved from a top performer in 2016 to a bottom performer in 2017 amidst rising U.S. oil supplies and falling oil prices.

International stock markets had one of their best years in 2017 fueled by strong gains in Europe amidst strong economic growth in the region. Entering 2017 there were fears that a wave of elections could lead to more countries pushing to exit the Eurozone but these fears proved to be unfounded in 2017. For emerging markets, the 37% gain was the best year of performance since 2009 and was fueled by an environment of U.S. Dollar weakness against most emerging market currencies and aggressive stimulus measures being enacted by the Chinese government.

The bond market saw a year of yield curve flattening as the short end of the yield curve rose amidst three interest rate hikes of 0.25% by the Federal Reserve and the long end of the curve saw rates decline on continued low inflation expectations. Investors continue to embrace risk in the bond markets as areas like U.S. corporate bonds, high yield bonds, and emerging market bonds proved to be the top performers for the year.

The Austin Police Retirement System investment portfolio returned 11.9% for the full year of 2017. The portfolio generated a return on investment of $83.5 million which brought the total portfolio value to $769.5 million at year end.

The Equity allocation, which represents 64% of the total fund, was the main driver of portfolio returns with a gain of 18.5%. U.S. equities (46% of the total fund) generated gains of 17.4%, while the international equity allocation (16% of the total fund) generated a substantial gain of 27.4% amidst an environment of strong global growth and a weakening U.S. dollar. The U.S. equity allocation saw strong performance from the majority of its actively managed allocations as well as significant returns from its passively managed index allocation.

The Fixed Income allocation (19% of the Fund) posted a return of 2.9% which slightly trailed the return of the broad U.S. bond market for the year. The portfolios U.S. bond manager and private credit managers generated significant gains and performance for the year, while global bonds did not keep up with the benchmark in 2017. Given the low return outlook for bonds the allocation remains low. Interest rates began to rise in late 2017 and continued higher into 2018 and managers have responded with defensively positioned portfolios entering 2018

The Real Estate allocation (9% of the Fund) generated a gain of 2.9% provided mostly from its open-end core commingled fund investment made a couple years ago along with several older investments in the final stages of liquidating their portfolios. The fund committed capital to two non-core value-add real estate funds during the year and those commitments will be invested over the next few years. The Timber allocation (3% of the Fund) posted a small loss of -3.9% in 2017 and that portfolio continues to be reduced through property sales. The Private Equity allocation (2% of the Fund) declined 17.6% in 2017 as the System wrote down underperforming investments that will likely not generate performance moving forward. In 2017 the Board established a new direction for private equity management and expect the allocation to grow consistently over the next seven to ten years to ultimately be a source of return strength for the System moving forward. The Hedge Fund/Multi Asset allocation (4% of the Fund) gained 0.8% for the year. While the low volatility environment proved beneficial for the System's traditional equity holdings, it proved to work against the System's hedge fund managers who look to volatility to create investment opportunities via market dislocations.

The Board of Trustees remains committed to investing for the long haul using a well-diversified mix of investments among various asset classes managed by professional money managers who have demonstrated their professionalism over time with a goal of generating a return that equals or exceeds the actuarial return assumption.

Montemayor Britton Bender PC
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITOR'S REPORT

Board of Trustees
City of Austin Police Retirement System

Report on the Financial Statements

We have audited the accompanying financial statements of City of Austin Police Retirement System (System), which comprise the statements of fiduciary net position as of 31 December 2017 and 2016, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Plan 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 an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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 System'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 System'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 financial status of the System as of 31 December 2017 and 2016, and the changes in its financial status for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and supplemental schedules on pages 16–22 and 51-52 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, and 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 inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, 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.

Montemayor Britton Bender PC

20 August 2018
Austin, Texas

Management Discussion and Analysis

This section of the City of Austin Police Retirement System's (the System) financial report presents our discussion and analysis of the System's financial performance during calendar years 2017 and 2016. We encourage readers to consider the information presented here in conjunction with our financial statements that follow.

Financial Highlights

- Fiduciary net assets held in trust by the System increased by $83.5 million in 2017, and increased by $41.8 million in 2016. The asset increases in 2017 and 2016 are the result of a strengthening U.S. economic market, strong employment, and overall increased consumer confidence in the economy.

- Contributions increased in 2017 by $3.4 million and decreased by $1.8 million in 2016. The increase in 2017 is primarily due to an increase in total payroll and service credit purchases related to an increase in retirements. The decrease in 2016 was primarily due to a decrease in the City's contribution rate required for the Proportionate Retirement Program, pursuant to an updated actuarial analysis in 2015.

- The amount of benefits paid to retired members and beneficiaries, including refunds to terminating employees, increased by $5,720,503 in 2017 and increased $822,063 in 2016. The larger increase in 2017 is due to an increase in retirements and refunds.

- The System's rate of return on investments for the year ended December 31, 2017 was 12.17 percent gross of fees and 11.89 percent net of fees, on a market value basis, as compared to 7.87 percent gross of fees and 7.67 percent net of fees for the year ended December 31, 2016, calculated on a time-weighted return basis.

- The funding objective of the System is to meet long-term benefit obligations through contributions and investment income. As of December 31, 2017, the date of the most recent actuarial valuation, the System's funded ratio of actuarial assets as a percentage of actuarial liabilities is 65.8 percent, as compared to 66.1 percent at December 31, 2016.

See independent auditor's report.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Systems' financial statements, which are comprised of the following:

- **Statement of Fiduciary Net Position** - presents the Systems' assets and liabilities and the resulting Net Position for pension benefits. This statement reflects a year-end snapshot of the Plan's assets at fair market value, along with cash and short-term investments, receivables and other assets and liabilities.
- **Statement of Changes in Fiduciary Net Position** - provides a view of the current year additions to and deductions from the plan. These two statements report the system's Net Position, the difference between assets and liabilities, which is one way to measure the Systems' financial position.
- **Notes to the Financial Statements** - provide additional information that is essential to a full understanding of the data provided in the financial statements.

Collectively, this information presents the Fiduciary Net Position as of the end of each of the last three years, and summarizes the changes in Fiduciary Net Position for the year.

Financial Analysis

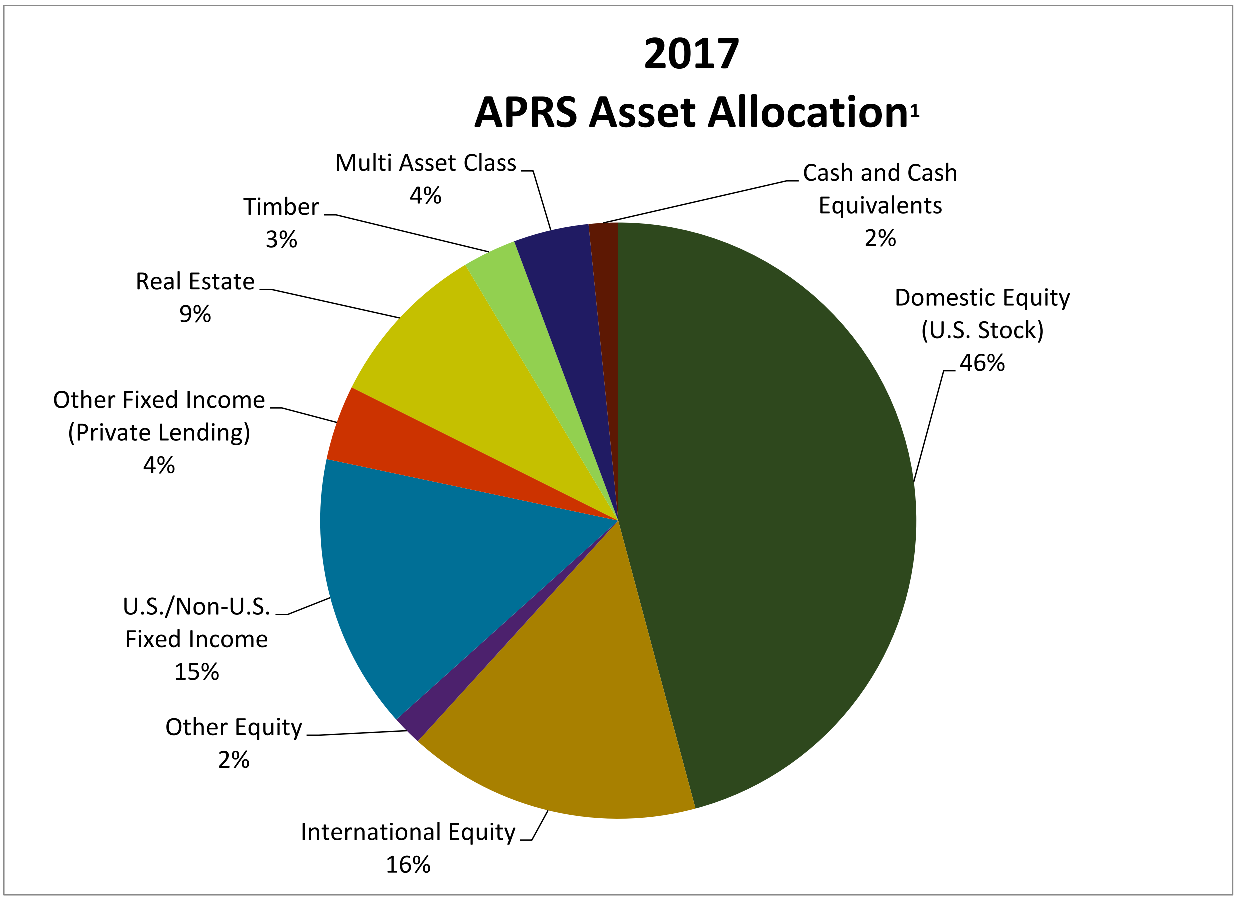
Summary of Fiduciary Net Position
December 31, 2017, 2016 and 2015

Assets	2017	2016	2015
Receivables	$ 1,363,953	$ 1,279,327	$ 3,476,641
Investments	771,506,987	687,472,332	643,286,642
Fixed assets, net	726,034	740,037	439,301
Other	7,665	7,665	10,573
Total assets	$ 773,604,639	$ 689,499,361	$ 647,213,157
Liabilities			
Total Liabilities	4,129,896	3,479,099	3,039,020
Fiduciary net position for pension benefits	$ 769,474,743	$ 686,020,262	$ 644,174,137

See independent auditor's report.

The total Fiduciary Net Position increased by $83.5 million, or 12.2 percent, to $769.5 million at the end of 2017, compared to $686.0 million at the end of 2016 which was an increase of $41.8 million, or 6.5 percent. The investment asset increase of $84.0 million in 2017 is primarily the result of a growing stock market.

Below is a chart of the System's asset allocation percentages for the year ending December 31, 2017:



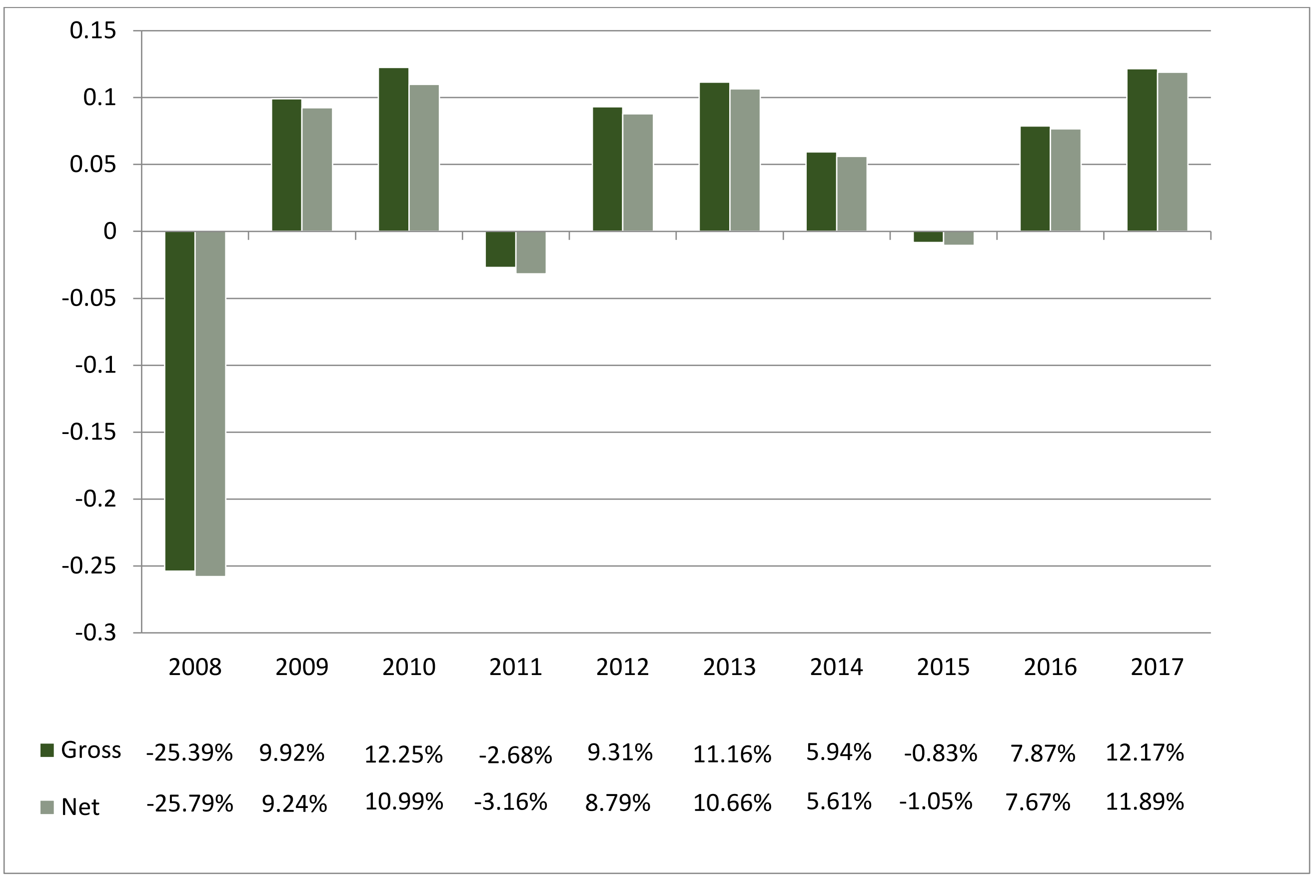
[1] Asset classes revised November 13, 2017

See independent auditor's report.

Investment Returns and Assumptions. The Systems' rate of return in 2017 is 11.89 percent net of expenses. The following chart exhibits the short- and long-term gains and losses.

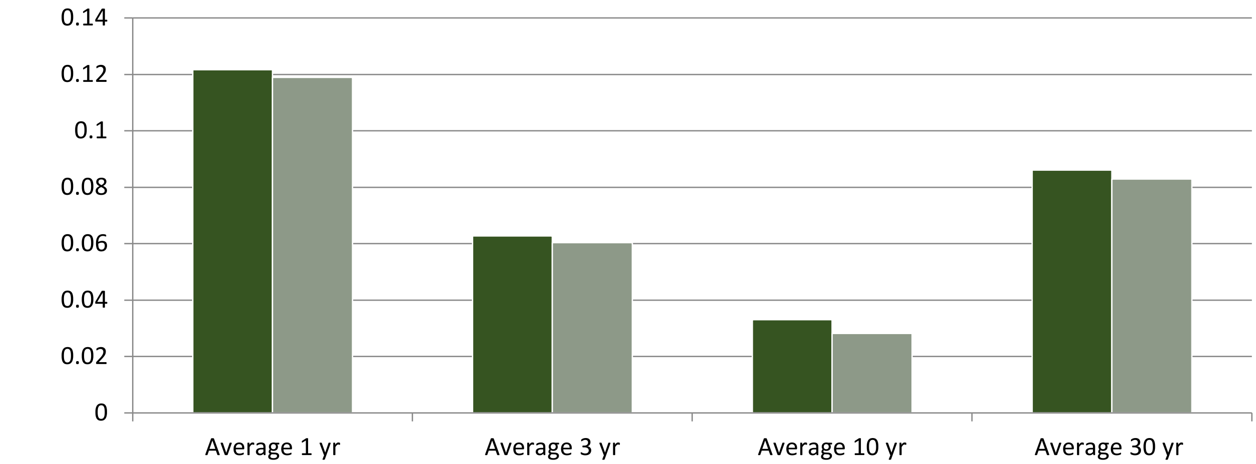
Note: Historical returns for 2000-2015 have been adjusted from previous annual reports to align with the calculations of the current investment consultant using time-weighted annualized returns.

10 Fiscal Year Returns



See independent auditor's report.

Annualized Rolling Gross & Net Investment Returns



	Average 1 yr	Average 3 yr	Average 10 yr	Average 30 yr
Gross Return	12.17%	6.27%	3.30%	8.61%
Net Return	11.89%	6.03%	2.82%	8.29%

See independent auditor’s report.

Summary of Changes in Fiduciary Net Positions

Years Ended December 31, 2017, 2016 and 2015

Additions. Funds to pay benefits are accumulated through contributions and returns on invested funds.

Additions	2017	2016	2015
Contributions[1]	$ 59,493,168	$ 56,105,481	$ 57,948,151
Investment income	83,133,910	39,618,214	1,411,242
Investment expense	(1,819,122)	(1,881,521)	(2,025,329)
Net investment income	81,914,788	37,736,693	(614,087)
Other income	157,214	103,139	7,450
Total additions	$ 141,565,170	$ 93,945,313	$ 57,341,514
Deductions			
Benefit payments & contributions refunded[2]	$ 56,548,004	$ 50,827,501	$ 50,005,438
General and administrative expenses	1,562,685	1,271,687	1,181,008
Total deductions	$ 58,110,689	$ 52,099,188	$ 51,186,446
Net increase/decrease	$ 83,454,481	$ 41,846,125	$ 6,155,068
Fiduciary Net position beginning of year	$ 686,020,262	$ 644,174,137	$ 638,019,069
Fiduciary Net position end of year	$ 769,474,743	$ 686,020,262	$ 644,174,137

[1] Includes COA Contributions, Member Contributions, Contributions Applied to Death Benefit Fund, Contributions Applied to Proportional Retirement, Service Credit Purchases and APRS & Staff Contributions

[2] Includes Retirement Annuities, PROP, DROP, Death Benefit and Refund payments

Member and City of Austin contributions for 2017 and 2016 totaled $59.5 million and $56.1 million, respectively. The 2017 contributions represent an increase of $3.4 million, or 6.0 percent, above 2016. The 2016 contributions represent a decrease of $1.8 million, or 3.2 percent, below 2015. The 2015 contributions represent an increase of $3.9 million, or 7.2 percent, above 2014.

The total rate of return for the System's investment portfolio in 2017 (net of investment expenses) was 11.89 percent as compared to 7.67 percent for 2016 on a time-weighted basis.

Deductions. The expenses paid by the System encompass benefit payments and administrative costs. Benefit payments, comprising the vast majority of the System’s expenses, include payments to retirees, beneficiaries and alternate payees, as well as refunds of member contributions. Administrative expenses support the direct operations of the System, and include employee salaries and benefits, rent, utilities, and office expenses.

In 2017, benefits paid to retirees, beneficiaries and alternate payees plus contribution refunds to terminating members were $56.5 million, an increase of $5.7 million over the $50.8 million paid in 2016. The total number of retirees, beneficiaries and alternate payees increased to 867 in 2017 compared to 849 in 2016. In 2017 the System actuary accounted for the Forward DROP members in the active member population while in 2016 the past System actuary accounted for the Forward DROP members in the retiree population. Refunds to terminating employees in 2017 increased by 38 percent to $1.37 million in 2017 compared to $996 thousand in 2016. General and administrative expenses in 2017 were $1.56 million and $1.27 million in 2016.

The System lowered its directly billed investment management fees by $62 thousand in 2017 and by $144 thousand in 2016. The decrease in 2017 and 2016 is largely due to an increase in investment indexing that reduces manager fees, and the diligent replacement of managers with higher fees.

Overall Analysis. As of December 31, 2017, the System's Fiduciary Net Position increased by $83.5 million from the prior year. Over the three-year period ending December 31, 2017 the System's Fiduciary Net Position has increased by $125.3 million.

Request for Information. This financial report is designed to provide a general overview of the finances of the City of Austin Police Retirement System for all parties with an interest. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Executive Director, City of Austin Police Retirement System, 2520 South IH-35 Suite 100, Austin, Texas 78704.

See independent auditor's report.

Statement of Fiduciary Net Position

December 31, 2017 and 2016

ASSETS[1]	2017	2016
Investments, at fair value:		
Domestic Equity (U.S. Stock)	$ 352,635,641	$ 281,633,999
International Equity	122,447,653	98,087,795
Other Equity	12,563,438	15,212,975
U.S./Non-U.S. Fixed Income	114,958,695	109,748,163
Other Fixed Income (Private Lending)	31,298,165	31,138,820
Real Estate	69,572,389	69,564,043
Timber	22,349,839	24,563,697
Multi Asset Class	31,444,001	31,190,318
Cash & Cash Equivalents	14,237,166	26,332,523
Total Investments	771,506,987	687,472,333
Interest and dividends receivable	100,695	190,489
City of Austin retirement contributions receivable	745,914	655,753
City of Austin death benefit contributions receivable	5,379	4,692
Member contributions receivable	475,503	408,847
Proportionate retirement program contributions receivable	11,449	9,844
Fixed assets, net	726,034	740,037
Other	32,678	17,367
Total assets	773,609,639	689,499,362
LIABILITIES		
Accounts payable and accrued liabilities	3,361,115	2,710,286
Refunds payable	768,781	768,814
Total liabilities	4,129,896	3,479,099
FIDUCIARY NET POSITION	$ 769,474,743	$ 686,020,262

1 Asset classes revised November 13, 2017

The accompanying notes are an integral part of this financial statement presentation.

Statement of Changes in Fiduciary Net Position

December 31, 2017 and 2016

ADDITIONS TO PLAN NET POSITION:	2017	2016
Contributions:		
City of Austin Retirement Contributions	$ 34,285,790	$ 33,025,835
City of Austin Contributions applied to the Death Benefit Fund	244,003	226,308
City of Austin Contributions applied to Proportional Retirement	514,855	495,205
Member (Police) Contributions	21,385,970	20,582,360
Service Credit Purchases	2,914,966	1,668,174
APRS Employer Contributions	96,556	66,834
APRS Employee Contributions	51,028	40,765
Total contributions	59,493,168	56,105,481
Investment income:		
Net increase (decrease) in the fair value of investments	79,743,640	31,764,798
Interest and dividends	3,990,270	7,853,982
Rental and other income	157,214	102,573
Total investment gain (loss) before expenses	83,891,124	39,721,353
Investment expenses:	(1,819,122)	(1,881,521)
Net gain (loss) from investments	82,072,002	37,839,832
Total additions (deletions) to Fiduciary Net Position	141,565,170	93,945,313
DEDUCTIONS FROM FIDUCIARY NET POSITION:		
Retirement benefit payments	54,909,433	49,761,331
Death benefit payments	109,203	70,000
Contributions refunded to terminating employees	1,529,368	996,170
General and administrative expenses	1,562,685	1,271,687
Total deductions from Fiduciary Net Position	58,110,689	52,099,188
NET INCREASE (DECREASE) IN FIDUCIARY NET POSITION	83,454,481	41,846,125
Beginning fiduciary Net Position	686,020,262	644,174,137
ENDING FIDUCIARY NET POSITION	$ 769,474,743	$ 686,020,262

The accompanying notes are an integral part of this financial statement presentation.

Notes to Financial Statements

Note 1: Organization and System Description

The Board of Trustees (Board) of the City of Austin Police Retirement System (System) is the administrator of a single-employer defined benefit pension plan. The System is considered part of the City of Austin's (City) financial reporting entity and is included in the City's financial reports as a pension trust fund.

The System was originally established in 1979 by a City Council ordinance. However, in 1991, the System became governed by state law with plan amendments to be made by the Legislature of the State of Texas. The System provides retirement, death, disability and withdrawal benefits to plan members and their beneficiaries. Benefits vest after 10 years of credited service. Participants may retire at 23 years of service excluding any purchased military service credit regardless of age, or at age 55 with 20 years of service excluding any purchased military service or at age 62. In 2009, the System and the City began participating in the Texas Proportionate Retirement Program (PRP). Service in other participating public employment retirement systems can be combined with service in the System to satisfy the System's eligibility requirements. Other participating systems include the Texas statewide systems, the City of Austin Employees' Retirement System, and the systems for the City of El Paso employees.

The monthly benefit is equal to 3.2 percent of the highest 36-month average salary multiplied by years and months of service.

The Retroactive Deferred Retirement Option Plan (Retro DROP) provisions require that a participant must have 23 years of creditable service with the retirement system excluding any purchased military service credit on the date the participant elects the Retro DROP benefit computation date. As of Board action on February 18, 2015, the Retro DROP option is open only to members with 23 years of creditable service as of March 31, 2015. Further, the Retro DROP provisions may be changed in the future by Board rule with approval by the System's actuary.

Note 1: Organization and System Description

The Forward Deferred Retirement Option Plan (Forward DROP) provisions require that a participant must have 23 years of creditable service with the retirement system excluding any purchased military service credit on the date the participant elects to enter the Forward DROP. There are two Forward DROP plans; (1) the Five-Year Forward DROP which is only open to members with 23 years of creditable service as of February 17, 2016 and (2) the Seven-Year Forward DROP which is open to members with 23 years of credible service after February 17, 2016. Forward DROP provisions may be changed in the future by Board rule with approval by the System's actuary.

The Post Retirement Option Plan (PROP) is a program allowing retiring members to transfer a DROP lump sum amount or defer a portion of the monthly annuity payments to an interest bearing PROP account. Interest will be paid on the participant's PROP account until the entire lump sum is paid. Interest is payable on PROP accounts on an annual rate determined by the Board.

Members with 20 years of creditable service (including Proportionate Retirement) may purchase Permissive Service credit (PSC) up to a maximum of five years. The purchase constitutes an immediate retirement. PSC deferred retirement is an option allowing a member with at least 20 years of creditable service at termination of employment with the APD the option to purchase service credit necessary to become eligible to retire and delay the retirement benefit.

A $10,000 post-retirement lump sum death benefit is payable from a separate Retiree Death Benefit Fund administered by the System. As of December 31, 2017 and 2016, the assets of the Retiree Death Benefit Fund were $1,226,556 and $1,084,516, respectively, which are included in the System's total market value of Net Assets Held in Trust Available for Pension Benefits of $769,474,743 and $686,020,263, respectively.

Note 1: Organization and System Description

Distributions to members or their beneficiaries are also available in the event of total and permanent disability, provided the member has completed 10 years of service or the injury was sustained during the performance of employment duties, or upon death. The terms of benefit payments are determined by certain elections made by the member, their level of earnings and length of service. Payments to members or their beneficiaries may be increased annually on an ad hoc basis, limited to 6 percent per year, and subject to the approval of the Board and the actuary.

Note 1: Organization and System Description

Participating members in the System include full-time police officers and cadets employed by the police department of the City and employees of the System. The following membership status of the System was reflected in the actuarial valuation as of December 31, 2017 and 2016:

	2017
Retirees and beneficiaries currently receiving benefits	965
(867) and terminated employees entitled to future monthly benefits (98)	
Current participating members	1,866
2017 Total	**2,831**

	2016
Retirees and beneficiaries currently receiving benefits	885
(849) and terminated employees entitled to future monthly benefits (36)	
Current participating members	1,837
2016 Total	**2,722**

Note: In 2017 the System actuary accounted for the Forward DROP members in the active member population while in 2016 the past System actuary accounted for the Forward DROP members in the retiree population.

Note 2: Summary of Significant Accounting Policies

BASIS OF ACCOUNTING

The System's financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred. Revenues are recorded in the accounting period in which they are earned and become measurable.

Note 2: Summary of Significant Accounting Policies

Investment purchases and sales are recorded as of their settlement date. Contributions are recognized as revenues in the period in which the related employees' payroll is earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

CONTRIBUTIONS RECEIVABLE

The final biweekly payroll contributions of employees for the years ended December 31, 2017 and 2016, and the City's related contributions were not deposited in the System by year end and are shown as contributions receivable in both years.

ESTIMATES

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions to net position held in trust available for pensions benefit during the reporting period. Actual results could differ from those estimates.

METHOD USED TO VALUE INVESTMENTS

The System's investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair value. The System's real estate investments are appraised periodically and the System receives audited financial statements from the real estate investment managers, which are used to estimate fair value. For other types of investments, the System uses financial statements submitted by investment managers, reviewed for alignment with values held by the external investment consultant and custodial bank.

Note 2: Summary of Significant Accounting Policies

Investment income is recognized in the period earned, and purchases and sales of investments are recorded on a settlement-date basis.

SYSTEM EXPENSES

All System administrative costs are the responsibility of the System.

SUBSEQUENT EVENTS

Management has evaluated subsequent events for disclosure through the date of the Independent Auditor's Report, the date the financial statements were available to be issued.

Note 3: Fixed Assets

Fixed assets are recorded at cost. Depreciation is computed using the straight-line method over the asset's estimated useful life of 30 years for the building and five to seven years for furniture and equipment. Fixed asset activity for the year ended December 31, 2017 consisted of:

	Beginning Balance	Additions	Deletions	Ending Balance
Assets not being depreciated				
Land	$ 150,000	$ -	$ -	$ 150,000
Assets being depreciated				
Building and improvements	1,213,715	51,375		1,265,090
Furniture and equipment	502,053	929		502,982
Leasehold improvements	56,986	8,625		65,611
Accumulated depreciation	(1,182,717)	(74,932)		(1,257,649)
Net Fixed Assets	$ 740,037	$ (14,003)	-	$ 726,034

Note 4: Federal Income Taxes

The System is a public employee retirement system and is exempt from federal income taxes. Favorable determination letters from the Internal Revenue Service were issued in September 1996, April 2007, July 2009, and August 2014.

Note 5: Deposit and Investment Risk

The System is authorized as an independent, defined benefit retirement plan in Article 6243n-1, Vernon's Annotated Texas Civil Statutes, which was signed into law on June 11, 1991. The Board is the trustee of System funds and has the power to invest and reinvest such funds in instruments or investments the Board considers prudent in accordance with the System's investment policy and state and federal law.

The Board has adopted an Investment Policy Statement (IPS) to set forth the factors involved in the management of investment assets for the System and the IPS is included with every investment manager's agreement. The fair values of the System's investments at December 31, 2017 and 2016 are presented, by type, as follows:

Total Investments by Asset Class[1]	**2017**	**2016**
Domestic Equity (U.S. Equity)	$ 352,635,641	$ 281,633,999
International Equity	122,447,653	98,087,795
Other Equity	12,563,438	15,212,975
U.S./Non-U.S. Fixed Income	114,958,695	109,748,163
Other Fixed Income (Private Lending)	31,298,165	31,138,820
Real Estate	69,572,389	69,564,043
Timber	22,349,839	24,563,697
Multi Asset Class	31,444,001	31,190,318
Cash & Cash Equivalents	14,237,166	26,332,523
Total Investments	$ 771,506,987	$ 687,472,333

[1] Asset classes revised November 13, 2017

Note 5: Deposit and Investment Risk

CUSTODIAL CREDIT RISK

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the System will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System and are held by either the counterparty or the counterparty's trust department or agent but not in the System's name. As of December 31, 2017 and 2016, the System's investment securities are not exposed to custodial credit risk because all securities are held by the System's custodial bank in the System's name.

CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools and other pooled investments are excluded from this requirement. As of December 31, 2017, there is no security issued by a single issuer that holds more than 5 percent of the System’s fund.

The Board and Investment Policy Statement (IPS) adopts the philosophy that the most effective risk control procedure is to adequately diversify the investments of the Fund among different asset classes with differing risk profiles. Diversification is achieved through providing a wide variety of investment classes in which to invest the System’s Funds.

Note 5: Deposit and Investment Risk

As of December 31, 2017, the System had the following investment asset allocations:

Asset Class[1]	Target	Allowable Range
Domestic Equity (U.S. Equity)	42.5%	30%-50%
International Equity	15.0%	5%-25%
Other Equity	7.5%	0%-10%
U.S./Non-U.S. Fixed Income	10.0%	5%-30%
Other Fixed Income (Private Lending)	5.0%	0%-10%
Real Estate	15.0%	0%-30%
Timber	0.0%	0%-5%
Multi Asset Class	5.0%	0%-10%
Cash & Cash Equivalents	0.0%	0%-5%

[1] Asset classes revised November 13, 2017

The Board has adopted an Investment Policy Statement (IPS) with a general investment objective to obtain a total rate of return commensurate with the Prudent Investor Rule and any other applicable statutes. Reasonable consistency of return and protection of assets against the inroads of inflation is paramount. Performance results will be compared over the long-term in the context of five years or more given interest rate fluctuations and volatility of securities markets.

The Board will employ investment professionals to oversee and invest the assets within the parameters allowed by the IPS and the agreements. The investment managers will have investment discretion over their mandates, including security selection, sector weightings and investment style, subject to certain constraints of the IPS.

In conjunction with these goals and guidelines are responsibilities of the investment committee, third party consultants, custodians and money managers. The IPS also outlines the review and control procedures that the Board will monitor for compliance.

Note 5: Deposit and Investment Risk

INTEREST RATE RISK

Interest rate risk is the risk that measures whether changes in interest rates will adversely affect the fair value of an investment. The System does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

As of December 31, 2017, the System had the following investments:

Investment Type[1]	Fair Value	Less Than 1 Year	1 to 6 Years	6 to 10 Years	Over 10 Years
Bonds	$73,387,670	$3,998,642	$22,693,784	$15,373,047	$31,322,197

As of December 31, 2016, the System had the following investments:

Investment Type[1]	Fair Value	Less Than 1 Year	1 to 6 Years	6 to 10 Years	Over 10 Years
Bonds	$67,942,195	$3,009,947	$21,187,793	$13,344,072	$30,400,383

[1] Source: 2017 GASB 40 Report

CREDIT RISK

Credit risk is the risk associated with an issuer or other counterparty to an investment that does not fulfill its obligations to the System. While the System has no formal investment policy regarding credit quality rating guidelines, the IPS allows investment managers full discretion in adopting investment strategies to deal with these risks and the portfolios are monitored quarterly by the investment committee.

Note 5: Deposit and Investment Risk

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2017, are as follows:

Quality Rating[1]	Total Fair Value	International Securities	Corporate Bonds	Government Bonds
Aaa / AAA				
Aa1 / AA+	$ 2,025,400		$ 2,025,400	
Aa2 / AA				
Aa3 / AA-	3,428,368		3,428,368	
A1 / A+				
A2 / A	11,166,118		11,166,118	
A3 / A-	11,502,080		11,502,080	
Baa1 / BBB+	8,662,154		8,662,154	
Baa2 / BBB	12,916,402		12,916,402	
Baa3 / BBB-	2,046,518		2,046,518	
Ba1 / BB+				
Ba2 / BB				
Ba3 / BB-				
B1 / B+				
B2 / B				
B3 / B-				
Caa / CCC				
Ca / CC				
C and below				
Not Rated	69,735,252	69,735,252		
U.S. Gov't Guaranteed	21,640,630			21,640,630
Cash & Equivalent	18,405,243	18,405,243		
Total	$ 161,528,165	$ 88,140,495	$ 51,747,040	$ 21,640,630

[1] Source: 2017 GASB 40 Report

Note 5: Deposit and Investment Risk

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2016, are as follows:

Quality Rating[1]	Total Fair Value	International Securities	Corporate Bonds	Government Bonds
Aaa / AAA				
Aa1 / AA+	$ 1,992,500		$ 1,992,500	
Aa2 / AA				
Aa3 / AA-	4,564,579		4,564,579	
A1 / A+				
A2 / A	9,316,945		9,316,945	
A3 / A-	11,198,712		11,198,712	
Baa1 / BBB+	7,847,195		7,847,195	
Baa2 / BBB	9,633,728		9,633,728	
Baa3 / BBB-	2,033,942		2,033,942	
Ba1 / BB+				
Ba2 / BB				
Ba3 / BB-				
B1 / B+				
B2 / B				
B3 / B-				
Caa / CCC				
Ca / CC				
C and below				
Not Rated		$35,905,897		
U.S. Gov't Guaranteed	21,354,593			$ 21,354,593
Cash & Equivalent	(169,211)	(169,211)		
Total	$ 67,772,983	$ 35,736,686	$ 46,587,601	$ 21,354,593

[1] Source: 2017 GASB 40 Report

Note 5: Deposit and Investment Risk

FOREIGN CURRENCY RISK

Foreign currency risk is the risk that occurs when changes in exchange rates adversely affect the fair value of an investment or a deposit. Although the System does not have a formal investment policy governing foreign currency risk, the System does manage its exposure to fair value loss by requiring international investment managers to maintain diversified portfolios to limit foreign currency risk.

The System holds investments in ADRs (American Depository Receipts) which are not included in the schedule below since they are denominated in U.S. dollars and accounted for at fair market value.

The System's exposure to foreign currency risk as of December 31, 2017, is as follows:

2017 Foreign Currency Risk[1]

Country	Non-Securities	International Equities	Other[2]
Belgium, Euro			$1,992,860
Canada, Dollar		$61,975	
France, Euro		23,098	
India, Rupee		250,211	
Ireland, Euro		887,667	
Israel, Shekel		220,269	
Netherlands, Euro		142,597	
Norway, Krone		155,817	
Taiwan, Dollar		205,074	
UK, Pound		31,363	
	$	$1,978,071	$1,992,860

1 Source: 2017 GASB 40 Report

2 Represents corporate bonds

Note 5: Deposit and Investment Risk

The System's exposure to foreign currency risk as of December 15, 2016, is as follows:

2016 Foreign Currency Risk[1]

Country	Non-Securities		International Equities		Other[2]
Greece, Euro		$	39,321		
Netherlands, Euro			69,119		
Belgium, Euro					1,960,420
India, Rupee			108,878		
Israel, Shekel			468,203		
Taiwan, Dollar			116,760		
	$ -	$	802,281	$	1,960,420

1 Source: 2017 GASB 40 Report

2 Represents corporate bonds

Note 6: Fair Market Measurement

In accordance with GASB 72, the System categorizes the fair measurement of its investments within a fair value hierarchy as established by generally accepted accounting principles. Fair value measurements are classified as Level 1, Level 2 or Level 3, based on inputs utilized to establish fair values:

> Level-1 inputs are based on quoted prices (unadjusted) in active markets for identical assets or liabilities in active markets that an entity can access at the measurement date.
>
> Level-2 inputs (other than quoted prices included within Level 1) are observable for similar assets or liabilities.
>
> Level-3 inputs are developed by the reporting entity based on unobservable inputs for an asset or liability.

The categorization of investments described below is based solely on the objectivity of the inputs used, to reflect relative reliability in the measurement of an investment's fair value, and does not reflect the level of risk associated with the investment.

Note 6: Fair Value Measurement

APRS investments have the following fair value measurements as of December 31, 2017.

2017 GASB 72 Fair Value Measurement

Investments by fair value level:	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Observable Inputs (Level 3)
Short-Term Securities				
Cash - STIF Account	14,237,166		14,237,167	
Total	**$14,237,166**		**$14,237,167**	
Debt Securities (1)				
Debt Securities	77,295,521		77,295,521	
Total	**$77,295,521**		**$77,295,521**	
Equity Securities				
U.S. Denominated Equities	141,868,719	141,868,719		
Total	**$141,868,719**	**$141,868,719**		
Pooled Funds				
Domestic equity collective trust	210,766,922	210,766,922		
International equity collective trust	84,157,697	84,157,697		
Global bond collective trust	37,668,150		37,668,150	
Emerging markets collective trust	22,381,484	22,381,484		
International equity mutual fund	15,908,472	15,908,472		
Total	**$370,882,725**	**$333,214,575**	**$37,668,150**	
Total investments by fair value level	**$604,284,131**	**$475,083,294**	**$129,200,838**	
Investments Measured at Level 3				
Timber	22,349,839	a, b, c,		22,349,839
Real Estate	69,572,389	d, e, f, g, h, i, j, k, l, m, n		69,572,389
Other Fixed Income (Private Lending)	31,293,189	o, p, q, r, s		31,293,189
Other Equity	12,563,438	t, u, v, w, x, y		12,563,438
Multi Asset Class	31,444,001	z		31,444,001
Total	**$167,222,856**			**$167,222,857**
Total investments measured at fair value	**$771,506,987**			

(1) **Includes**: Commercial mortgage-backed securities, Corporate Bonds, Government mortgage-backed securities, Government agencies and Government Bonds. All held by one manager.

2017 Financial Notes and Security Descriptions Footnotes:		**Liquidity**	**Notice**
a) BTG Pactual I	Actively managed diversified timber holdings located in the USA. The investment is in liquidation.	Illiquid	N/A
b) Capital Timberland Investments	Actively managed diversified timber holdings located in Texas, USA.	Illiquid	N/A
c) Domain Environmental (formerly Timbervest)	Actively managed real estate portfolio of environmental preservation and restoration projects located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
d) Rocksprings Funds	Actively manage portfolio of real estate investments located in Texas, USA.	Illiquid	N/A
e) CBRE Special Situation Fund	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
f) ARES (VEF Advisors Funds)	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
g) Invesco Real Estate Funds	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
h) Edison Investments (Jayhawk & Sycamore)	Actively managed opportunistic and value-added real estate portfolio of primarily equity real estate investments located in the USA. The investment is in liquidation.	Illiquid	N/A
i) JP Morgan India Property Fund	Actively managed opportunistic and value-added real estate portfolio of equity real estate investments located in India. This fund is near the end of its expected term.	Illiquid	N/A
j) Gainesville Property (formerly Vision Capital)	Actively managed portfolio of real estate investments located in the Georgia, USA.	Illiquid	N/A
k) FWAR Investments	Actively managed portfolio of real estate investments located in the Arizona, USA. The investment is in liquidation.	Illiquid	N/A
l) Morgan Stanley Prime Property Fund	Actively managed core portfolio of primarily equity real estate investments located in the USA.	Quarterly	90 days
m) AEW Partners Fund VIII	Actively managed core portfolio of primarily equity real estate investments located in the United States.	Illiquid	N/A
n) Green Oak U.S. III	Actively managed core portfolio of primarily equity real estate investments located in the United States. Contracted. Waiting to fund.	Illiquid	N/A
o) LBC Credit Partners III	Actively managed private investment fund of private loan investments located in the USA.	Illiquid	N/A
p) LBC Credit Partners IV	Actively managed private investment fund of private loan investments located in the USA.	Illiquid	N/A
q) Providence Debt Fund III	Actively managed private investment fund of private loan investments located in the USA.	Illiquid	N/A
r) Capital Point Partners	Actively managed private investment fund of private loan investments located in the USA. This investment is in liquidation.	Illiquid	N/A
s) Franchise Equity Capital Partners II (Capital Springs)	Actively managed private investment fund of private loan investments located in the USA. This investment is in liquidation.	Illiquid	N/A
t) Huff Energy	Actively managed portfolio of private energy investments located in the USA. The fund is nearing the end of its expected term.	Illiquid	N/A
u) Sail Venture I	Actively managed private equity portfolio of venture capital investments located in the USA.	Illiquid	N/A
v) Sail Ventures II	Actively managed private equity portfolio of venture capital investments located in the USA.	Illiquid	N/A
w) Sail Pre-Exit Acceleration Fund	Actively managed private equity portfolio of venture capital investments located in the USA.	Illiquid	N/A
x) Excelsior Investors	Actively managed private equity portfolio of private finance oriented investments located in the USA.	Illiquid	N/A
y) Franklin Park Private Equity Fund	Actively managed portfolio of private finance oriented investments located in the United States.	Illiquid	N/A
z) Double Eagle Capital Ace Fund	Diversified fund of hedge funds with blending global macro, long/short equity and diversified credit strategies.	Quarterly	95 days

Note 6: Fair Value Measurement

APRS investments have the following fair value measurements as of December 31, 2016.

2016 GASB 72 Fair Value Measurement

Investments by fair value level:	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Observable Inputs (Level 3)
Short-Term Securities				
Cash - STIF Account	26,332,523		26,332,523	
Total	**$26,332,523**		**$26,332,523**	
Debt Securities (1)				
Debt Securities	73,842,266		73,842,266	
Total	**$73,842,266**		**$73,842,266**	
Equity Securities				
US Denominated Equities	122,182,219	122,182,219		
Total	**$122,182,219**	**$122,182,219**		
Pooled Funds				
Domestic equity collective trust	159,451,780	159,451,780		
International equity collective trust	68,590,593	68,590,593		
Global bond collective trust	35,905,897		35,905,897	
Emerging markets collective trust	16,465,942	16,465,942		
International equity mutual fund	13,031,260	13,031,260		
Total	**$293,445,472**	**$257,539,575**	**$35,905,897**	
Total investments by fair value level	**$515,802,480**	**$379,721,794**	**$136,080,686**	
Investments Measured at Level 3				
Timber	24,563,697	a, b, c,		24,563,697
Real Estate	69,564,043	d, e, f, g, h, i, j, k, l, m, n,		69,564,043
Other Equity (Private Equity)	15,212,975	o, p, q, r, s, t,		15,212,975
Other Fixed Income (Private Lending)	31,138,820	u, v, w, x, y,		31,138,820
Hedge Funds	31,190,318	z		31,190,318
Total	**$171,669,853**			**$171,669,853**
Total investments measured at fair value	**$687,472,333**			

(1) **Includes**: Commercial mortgage-backed securities, Corporate Bonds, Government mortgage-backed securities, Government agencies and Government Bonds. All held by one manager.

2016 Financial Notes and Security Descriptions Footnotes:		Liquidity	Notice
a) BTG Pactual 1, 2, 3 -	Actively managed diversified timber holdings located in the USA. The investment is in liquidation.	Illiquid	N/A
b) Capital Timberland Investments -	Actively managed diversified timber holdings located in Texas, USA.	Illiquid	N/A
c) Timbervest -	Actively managed real estate portfolio of environmental preservation and restoration projects located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
d) RockSpring Land Funds -	Actively manage portfolio of real estate investments located in Texas, USA.	Illiquid	N/A
e) CB Richard Ellis Funds -	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
f) Sentinel Funds -	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
g) New Boston Funds -	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
h) VEF Advisors Funds -	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
i) Invesco Real Estate Funds -	Actively manage value-added real estate portfolio of primarily equity real estate investments located in the USA. This fund is near the end of its expected term.	Illiquid	N/A
j) Edison Investments (Jayhawk & Sycamore) -	Actively managed opportunistic and value-added real estate portfolio of primarily equity real estate investments located in the USA. The investment is in liquidation.	Illiquid	N/A
k) JP Morgan India Property Fund -	Actively managed opportunistic and value-added real estate portfolio of equity real estate investments located in India. This fund is near the end of its expected term.	Illiquid	N/A
l) Gainesville Land (formerly Vision Capital Partners) -	Actively managed portfolio of real estate investments located in the Georgia, USA.	Illiquid	N/A
m) FWAR Investments -	Actively managed portfolio of real estate investments located in the Arizona, USA. The investment is in liquidation.	Illiquid	N/A
n) Morgan Stanley Prime Property Fund -	Actively managed core portfolio of primarily equity real estate investments located in the USA.	Quarterly	90 days
o) LBC Credit Partners III -	Actively managed private investment fund of private loan investments located in the USA.	Illiquid	N/A
p) LBC Credit Partners IV -	Actively managed private investment fund of private loan investments located in the USA.	Illiquid	N/A
q) Providence Debt Fund III -	Actively managed private investment fund of private loan investments located in the USA.	Illiquid	N/A
r) Capital Point Partners -	Actively managed private investment fund of private loan investments located in the USA. This investment is in liquidation.	Illiquid	N/A
s) Capital Partners II -	Actively managed private investment fund of private loan investments located in the USA. This investment is in liquidation.	Illiquid	N/A
t) Capital Partners III -	Actively managed private investment fund of private loan investments located in the USA. This investment is in liquidation.	Illiquid	N/A
u) Huff Energy -	Actively managed portfolio of private energy investments located in the USA. The fund is nearing the end of its expected term.	Illiquid	N/A
v) Sail Venture I -	Actively managed private equity portfolio of venture capital investments located in the USA.	Illiquid	N/A
w) Sail Ventures II -	Actively managed private equity portfolio of venture capital investments located in the USA.	Illiquid	N/A
x) Sail Pre-Exit Acceleration Fund -	Actively managed private equity portfolio of venture capital investments located in the USA.	Illiquid	N/A
y) Excelsior Investors -	Actively managed private equity portfolio of private finance oriented investments located in the USA.	Illiquid	N/A
z) Double Eagle Capital Ace Fund -	Diversified fund of hedge funds with blending global macro, long/short equity and diversified credit strategies.	Quarterly	95 days

Note 7: Schedule of Investment Returns

For the year ended December 31, 2017 and 2016 the annual money-weighted rate of return on investments, net of investment expense, was 11.95 percent and 5.88 percent, respectively, as calculated by the System actuary.

Note 8: Contributions

The System is funded by biweekly contributions from both employees and the City based on employee compensation, consisting of base pay and longevity pay. Under the provisions that were in effect during December 2017 and 2016, participants are required to contribute 13 percent of their compensation.

The City's required contribution rate for fiscal year 2017 and 2016 was 21.313 percent.

Since September 1, 2003, a portion of the City's total contribution has been allocated to the Retiree Death Benefit Fund. The allocation rate for fiscal year 2017 was 0.145 percent. In fiscal year 2016 the rate was 0.147 percent.

The City contribution rate is required by the state law governing the System and may be changed by amendment made by the Legislature of the State of Texas. The member contribution rate must be at least 13 percent in accordance with state law. The member contribution rate may be changed by the Legislature of the State of Texas or by appropriate actions of the Board and the participating members in accordance with state law.

Note 8: Contributions

While contribution rates are not actuarially determined, state law requires that each plan of benefits adopted by the System must be approved by a qualified actuary. The actuary certifies that the contribution commitment by the police officers and the City provides an adequate financing arrangement at the time any change is made. Using the entry age actuarial cost method, the System's normal cost is determined as a percentage of payroll. The excess of the total contribution rate over the normal cost rate is used to amortize the System's unfunded actuarial accrued liability. The amortization period is determined using the open, level percentage of payroll method. Based on the actuarial valuation as of December 31, 2017 and the plan provisions recognized in the valuation, the normal cost is 22.291 percent of pay and the amortization period is 35 years. Based on the actuarial valuation as of December 31, 2016 as conducted by the prior actuary, the normal cost was 21.724 percent of pay and the amortization period was 27.3 years.

The System selected a different actuary, Gabriel, Roeder & Smith (GRS), for completion of the 2017 actuarial valuation. GRS replicated the 2016 valuation of the prior actuary and closely replicated the Unfunded Actuarial Accrued Liability; however, GRS determined the amortization period to be 34 years and the normal cost to be 22.309 percent as of December 31, 2016.

Note 9: Commitments and Contingencies

The System's investments in real assets (real estate and timber) are included in the table appearing in Note 5. In connection with those investments, the System has remaining commitments as of December 31, 2017 and 2016 of approximately $91,922,228 million and $94,127,740 million, respectively, pursuant to the terms of the respective interests.

At December 31, 2017 and 2016, the total accumulated lump sum benefit due to forward DROP participants was $10,662,425 and $8,087,876 respectively.

At December 31, 2017 and 2016, the total accumulated lump sum benefit due to PROP participants was $30,173,974 and $29,011,929, respectively.

Note 10: Net Pension Liability of the Sponsor

The components of the Net Pension Liability of the Sponsor on December 31, 2017 were as follows:

Total Pension Liability	$1,189,590,940
Plan Fiduciary Net Position Sponsor's	$ (769,474,743)
Net Pension Liability	$ 420,116,197
Plan Fiduciary Net Position as a percentage of Total Pension Liability	64.68%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of December 31, 2017 using the following actuarial assumptions:

Inflation	3.0%
Salary Increases	Services Based
Discount Rate	7.70%
Investment Rate of Return	7.70%

Mortality rates (all lives) were based on the RP-2000 Combined Healthy without projection - Sex Distinct.

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 expenses 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.

Note 10: Net Pension Liability of the Sponsor

The components of the Net Pension Liability of the Sponsor on December 31, 2016 were as follows:

Total Pension Liability	$1,106,189,208
Plan Fiduciary Net Position Sponsor's	$ (686,020,262)
Net Pension Liability	$ 420,168,946
Plan Fiduciary Net Position as a percentage of Total Pension Liability	62.02%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of December 31, 2016 using the following actuarial assumptions:

Inflation	3.0%
Salary Increases	Services Based
Discount Rate	7.70%
Investment Rate of Return	7.70%

Mortality rates (all lives) were based on the RP-2000 Combined Healthy without projection- Sex Distinct. Based on a study of over 650 public safety funds, this table reflects a 10 percent, margin for future mortality improvements.

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 expenses 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.

Note 10: Net Pension Liability of the Sponsor

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of December 31, 2017 are summarized in the following table:

Asset Class[1]	Long Term Expected Real Rate of Return
Domestic Equity	7.50%
International Equity	8.50%
Other Equity	7.50%
U.S./Non-U.S. Fixed Income	3.00%
Other Fixed Income (Private Lending)	3.50%
Real Estate	4.50%
Timber	2.50%
Multi Asset Class	5.00%
Cash & Cash Equivalents	0.00%

[1] Asset classes revised November 13, 2017

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.7 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate of 13.00 percent of compensation and that plan sponsor contributions will be made at the current contribution rate of 21.313 percent of total payroll. Based on those assumptions, the pension plan's Fiduciary Net Position was projected to be available to make all 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.

	1% Decrease	Current Discount Rate	1% Increase
	6.70%	7.70%	8.70%
Sponsor's Net Pension Liability	$ 553,553,243	$ 420,116,197	$ 307,088,678

Note 10: Net Pension Liability of the Sponsor

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of December 31, 2016 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.50%
International Equity	8.50%
Domestic Fixed Income	2.50%
Global Fixed Income	3.50%
Real Estate	4.50%
Timber	2.50%
Private Equity	7.50%
Hedge Funds	5.00%

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.70 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate of 13.00 percent of compensation and that plan sponsor contributions will be made at the current contribution rate of 21.313 percent of total payroll. Based on those assumptions, the pension plan's Fiduciary Net Position was projected to be available to make all 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.

	1% Decrease	Current Discount Rate	1% Increase
	6.70%	7.70%	8.70%
Sponsor's Net Pension Liability	$ 543,431,167	$ 420,168,946	$ 315,660,846

DISCLOSURES IN ACCORDANCE WITH GASB STATEMENT NO. 67 REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability and Related Ratios

Plan year ending December 31,	2017	2016	2015	2014	2013
Total pension liability					
Service Cost	$ 35,322,361	$ 32,989,949	$ 32,138,760	$ 30,253,628	$ 28,769,060
Interest on the Total Pension Liability	84,471,608	80,845,879	76,999,651	72,442,934	68,919,471
Benefit Changes	0	0	(4,079,852)	(11,015,618)	0
Difference between expected and actual experience of the Total Pension Liability	17,240,801	7,454,959	(6,318,435)	0	0
Assumption Changes	0	5,148,318	3,903,538	14,137,496	0
Contributions - Buy Back	2,914,966	1,668,174	4,648,271	2,207,398	0
Benefit Payments and Refunds	(56,548,004)	(50,827,501)	(50,005,439)	(45,403,126)	(42,825,265)
Net Change in Total Pension Liability	83,401,732	77,279,778	57,286,494	62,622,712	54,863,266
Total Pension Liability - Beginning	1,106,189,208	1,028,909,430	971,622,936	909,000,224	854,136,958
Total Pension Liability - Ending	$ 1,189,590,940	$ 1,106,189,208	$ 1,028,909,430	$ 971,622,936	$ 909,000,224
Plan Fiduciary Net Position					
Contributions - Employer	$ 35,141,204	$ 33,814,182	$ 33,239,271	$ 32,399,740	$ 31,160,764
Contributions - Member	21,436,998	20,623,125	20,060,610	19,457,407	19,467,960
Contributions - Buy Back	2,914,966	1,668,174	4,648,271	2,207,398	0
Pension Plan Net Investment Income	82,072,002	37,964,881	(321,704)	35,574,317	49,524,150
Benefit Payments and Refunds	(56,548,004)	(50,827,501)	(50,005,439)	(45,403,126)	(42,825,265)
Pension Plan Administrative Expense	(1,562,685)	(1,396,736)	(1,465,939)	(1,327,071)	(1,114,856)
Other	0	0	0	0	0
Net Change in Plan Fiduciary Net Position	83,454,481	41,846,125	6,155,070	42,908,665	56,212,753
Plan Fiduciary Net Position - Beginning	686,020,262	644,174,137	638,019,067	595,110,402	538,897,649
Plan Fiduciary Net Position - Ending	$ 769,474,743	$ 686,020,262	$ 644,174,137	$ 638,019,067	$ 595,110,402
Net Pension Liability - Ending	420,116,197	420,168,946	384,735,293	333,603,869	313,889,822
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	64.68 %	62.02 %	62.61 %	65.67 %	65.47 %
Covered Employee Payroll	$ 164,899,985	$ 158,655,196	$ 154,243,493	$ 149,790,754	$ 144,089,468
Net Pension Liability as a Percentage of Covered Employee Payroll	254.77 %	264.83 %	249.43 %	222.71 %	217.84 %

Notes to Schedule:

For FYE 2017, the covered payroll was determined by imputing the pay based on actual member contributions.

Prior to FYE 2017, the covered payroll was determined by the prior actuary.

Schedules of Required Supplementary Information

Schedule of Employer Contributions

PY Ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2013	N/A	N/A	N/A	$ 144,089,468	21.63%
2014	N/A	N/A	N/A	149,790,754	21.63%
2015	N/A	N/A	N/A	154,243,493	21.55%
2016	N/A	N/A	N/A	158,655,196	21.313%
2017	N/A	N/A	N/A	164,899,985	21.313%

Schedule of Investment Returns

The returns for the Plan's fiscal years shown below were determined as annual money-weighted rates of returns net of investment expenses.

Fiscal Year Ending December 31,	Annual Return
2017	11.95%
2016	5.88%
2015	-0.05%
2014	5.71%
2013	8.90%

ACTUARIAL SECTION

Austin Police Retirement System

Annual Actuarial Valuation - Funding

As of December 31, 2017

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

August 9, 2018

Board of Trustees
Austin Police Retirement System
2520 South IH 35, Suite 100
Austin, TX 78704

Re: Actuarial Valuation for Funding Purposes as of December 31, 2017

Members of the Board:

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the Austin Police Retirement System (APRS) as of December 31, 2017. This report was prepared at the request of the Board and is intended for use by APRS staff and those designated or approved by the Board. This report may be provided to parties other than APRS only in its entirety and only with the permission of the Board.

Actuarial Valuation

The primary purposes of the actuarial valuation report are to determine the adequacy of the current City contribution rate, describe the current financial condition of APRS, analyze changes in the condition of APRS, and provide various summaries of the data.

Plan Provisions

There were no changes to the plan provisions during the past year. The current plan provisions are outlined in Section D of this report.

Actuarial Assumptions and Methods

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees effective with the December 31, 2016 actuarial valuation. In order to assess the reasonableness of the assumptions in our first actuarial valuation for APRS, we have relied on the analysis prepared by the prior actuary. We have also recommended that the Board conduct a five-year experience study to review the assumptions prior to the next actuarial valuation. The current actuarial assumptions and methods are outlined in Section E of this report.

Data

The valuation was based upon information as of December 31, 2017 furnished by APRS staff, concerning system benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by APRS staff.

5605 North MacArthur Boulevard | Suite 870 | Irving, Texas 75038-2631

Certification

All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Internal Revenue Code and ERISA.

The signing actuaries are independent of the plan sponsor. Ryan Falls is an Enrolled Actuary, a Fellow of the Society of Actuaries, and a Member of the American Academy of Actuaries, and meets the Qualification Standards of the American Academy of Actuaries. Finally, each of the undersigned are experienced in performing valuations for public retirement systems.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

R. Ryan Falls
Lewis Ward

R. Ryan Falls, FSA, EA, MAAA
Senior Consultant & Actuary

Lewis Ward
Consultant

Table of Contents

SECTION A

EXECUTIVE SUMMARY

Executive Summary

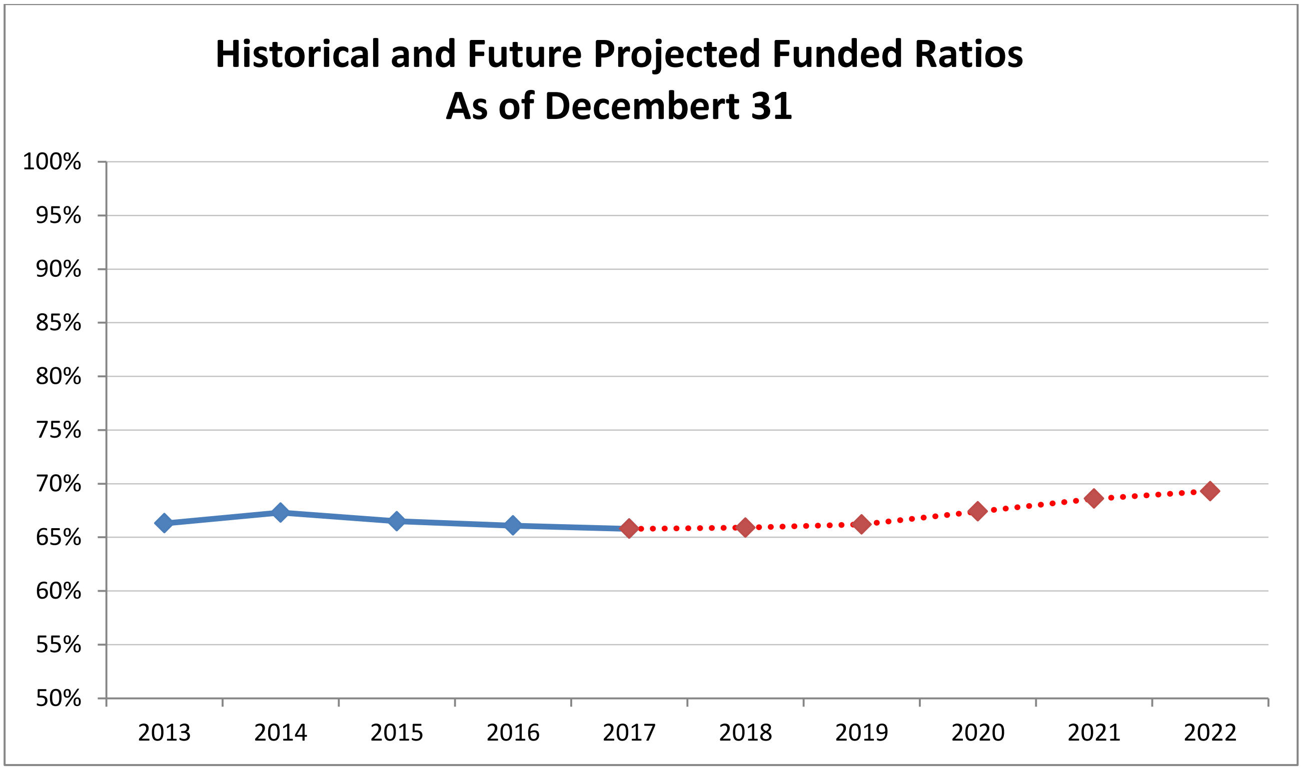
Item	December 31, 2017	December 31, 2016[1]
Membership		
• Number of		
- Active members	1,866	1,883
- Inactive, vested	45	30
- Inactive, nonvested	53	6
- Annuitants	867	803
- Total	2,831	2,722
• Annualized Payroll on Valuation Date	$ 162,490,560	$ 163,894,324
Statutory contribution rates		
• Members	13.000%	13.000%
• City	21.313%	21.313%
Contribution to be Allocated to Retiree Death Benefit Fund	0.121%	0.145%
Actuarially Determined Contribution Rates		
Estimated Years until UAAL is Eliminated:		
• 20 Years	26.052%	24.407%
• 30 Years	22.269%	20.566%
• 40 Years	20.488%	18.765%
Assets		
• Market value (MVA)	$ 769,474,743	$ 686,020,262
• Actuarial value (AVA)	$ 779,484,342	$ 733,105,429
• Return on market value	11.7%	5.7%
• Return on actuarial value	5.9%	5.4%
Actuarial Information on AVA (smoothed)		
• Normal cost %[2]	22.291%	21.767%
• Total normal cost	$ 38,228,170	$ 35,674,878
• Actuarial accrued liability	$ 1,185,017,294	$ 1,109,862,137
• Unfunded actuarial accrued liability (UAAL)	$ 405,532,952	$ 376,756,708
• Funded ratio	65.8%	66.1%
• Funding period (years)	35	28
Actuarial Information on MVA		
• Unfunded actuarial accrued liability (UAAL)	$ 415,542,551	$ 423,841,875
• Funded ratio	64.9%	61.8%
• Funding period (years)	37	Not Available

Notes:

[1] December 31, 2016 results are based on the information provided in the prior actuary's actuarial valuation reports (a reasonable approach was taken to estimate certain results that were not included in prior reports)

[2] Includes load for assumed PRP administrative expenses and normal cost associated with the Retiree Death Benefit Fund

The following chart illustrates the recent history and outlook of the funded status of APRS over the next five years:



12/31/	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Funded Ratio	66.3%	67.3%	66.5%	66.1%	65.8%	65.9%	66.2%	67.4%	68.6%	69.3%
UAAL (millions)	$308	$317	$349	$377	$406	$427	$445	$453	$457	$468

The projections beyond 2017 are based on the same assumptions, methods and provisions used for the December 31, 2017 valuation. Additionally, the market value of assets is expected to earn 7.70% per year.

Based on current expectations and assumptions, APRS's UAAL is projected to continue to increase for more than a decade. However, the funded ratio is expected to start improving over time assuming all assumptions are met.

SECTION B

DISCUSSION

Discussion

Introduction

The results of the December 31, 2017 actuarial valuation of the Austin Police Retirement System (APRS) are presented in this report.

The primary purposes of this actuarial valuation report are to determine the adequacy of the current City contribution rate, describe the current financial condition of APRS, analyze the changes in the condition of APRS, and provide various summaries of the data.

The total contribution rate for the current fiscal year exceeds the normal cost by 12.022% of payroll, which, on an actuarial value of assets basis, is expected to amortize the unfunded liability in approximately 35 years. In the prior valuation, the total contribution rate was expected to amortize the unfunded liability in approximately 28 years. This increase in the funding period was due to increases in the normal cost rate determined by GRS versus the prior actuary and increases in the unfunded liabilities of the system since the prior year. APRS experienced losses on both the actuarial liabilities and the actuarial value of assets.

The Retiree Death Benefit Fund was established in 2003 as a separate account within the system to advance fund and to pay the $10,000 post-retirement lump sum death benefits for retirees. Table 12 outlines the portion of the City contribution rate that should be allocated to the Retiree Death Benefit Fund such that the Retiree Death Benefit Plan will be fully funded 18 years following December 31, 2017. With the exception of Table 12, the amounts outlined in this report represent the total assets and liabilities of APRS, inclusive of the Retiree Death Benefit Plan.

All of the tables referenced in the following discussion appear in Section C of this report.

Plan Provisions

There were no changes to the plan provisions during the past year. The current plan provisions are outlined in Section D of this report.

Actuarial Assumptions and Methods

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees effective with the December 31, 2016 actuarial valuation. The current actuarial assumptions and methods are outlined in Section E of this report. In order to assess the reasonableness of the assumptions in our first actuarial valuation for APRS, we have relied on the analysis prepared by the prior actuary. We have also recommended that the Board conduct a five-year experience study to review the actuarial assumptions prior to the next actuarial valuation.

Funding Adequacy

The City currently contributes 21.313% of payroll and members contribute 13.00% of payroll.

The unfunded actuarial accrued liability (UAAL) of APRS increased from $377 million as of December 31, 2016 to $406 million as of December 31, 2017. Additionally, the funded ratio of APRS—actuarial value of assets divided by the actuarial accrued liability—decreased from 66.1% to 65.8% as of

December 31, 2017. The funded status is one of many metrics used to show trends and develop future expectations about the health of a retirement system. The funded status measure itself is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations or assessing the need for or the amount of future contributions since it does not reflect normal cost contributions, the timing of amortization payments, or future experience other than expected.

The valuation shows that the total normal cost for funding purposes is 22.291% of payroll. The total contribution rate is currently 34.313% of payroll. Thus, the total contribution rate for the current fiscal year exceeds the normal cost by 12.022% of payroll which will be available to amortize the unfunded liability. On an actuarial value of assets basis, the current contribution rate is expected to amortize the unfunded liability in approximately 35 years.

The Texas Pension Review Board adopted their Pension Funding Guidelines on January 26, 2017. These Guidelines state that "actual contributions made to the plan should be sufficient to cover the normal cost and to amortize the unfunded actuarial accrued liability over as brief a period as possible, but not to exceed 30 years, with 10-25 years being a more the preferable target range." The City's current contribution rate of 21.313% is expected to amortize the unfunded liability in approximately 35 years. For informational purposes, this report provides an actuarially determined City contribution rate required to amortize the unfunded actuarial accrued liability over a 20-year, 30-year, and a 40-year period, which are 26.052%, 22.269%, 20.488%, respectively.

System Assets

This report contains several tables that summarize key information with respect to the APRS assets.

The total market value of assets increased from $686 million as of December 31, 2016 to $769 million as of December 31, 2017. Table 5 reconciles the changes in the fund during the year. Total contributions increased from $56.1 million to $59.5 million.

Table 6 shows the development of the actuarial value of assets. The actuarial value of asset method recognizes the difference between the actual and expected market value of assets over a five-year period. The total actuarial value of assets is $779 million, which is greater than the market value of assets of $769 million. This indicates that there are currently deferred losses to be recognized in the future.

When measured on a market value, the approximate investment return net of administrative expenses for the fiscal year ending December 31, 2017 was 11.7%. When measured on an actuarial value, the net investment return was 5.9%, which is lower than the assumed return of 7.70%. APRS experienced a $13 million actuarial asset loss over the past year. Table 7 shows a history of investment return rates. The APRS five-year average market return is 6.3% and the five-year average actuarial return is 5.8%.

Table 8 provides a history of the contributions paid into APRS and the administrative expenses and benefit payments that have been paid out of APRS. This table shows that APRS continues to receive more contributions than it pays out in administrative expenses and benefit payments, or $1.4 million (or 0.2% of assets) for the year ending December 31, 2017 and $3.9 million (or 0.6% of assets) for the year ending December 31, 2016. While APRS is still in a positive cashflow position, the ratio of outflows to inflows has continued to increase. If this trend continues APRS will soon be in a negative cashflow position. Negative cashflow is expected for a pre-funded pension program. The entire reason for setting aside assets is to have the ability to use investment earnings to pay for benefits. If the cashflow was always going to be positive there would be no reason to pre-fund the system. Table 11 provides a history of contribution rates, as a percent of payroll, paid into the trust by the City and members.

Data

The valuation was based upon information as of December 31, 2017 furnished by APRS staff, concerning system benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by APRS staff. The tables in Section F show key census statistics for the various groups included in the valuation.

SECTION C

TABLES

Table 1
Development of Employer Cost
(Inclusive of the Retiree Death Benefit Fund)

	December 31, 2017	December 31, 2016[1]
1. Payroll		
a. Annualized Payroll on Valuation Date	$ 162,490,560	$ 163,894,324
b. Projected Contributory Payroll	171,495,984	163,894,324
2. Total Normal Cost Rate		
a. Gross normal cost rate	22.274%	21.750%
b. PRP Administrative expenses	0.017%	0.017%
c. Total (Item 2a + Item 2b)	22.291%	21.767%
3. Actuarial Accrued Liability for Active Members		
a. Present value of future benefits for active members	$ 915,492,433	
b. Less: present value of future normal costs	(327,352,075)	
c. Actuarial accrued liability	$ 588,140,358	
4. Total Actuarial Accrued Liability for:		
a. Retirees and beneficiaries	$ 578,971,295	
b. Inactive members	17,905,641	
c. Active members (Item 3c)	588,140,358	
d. Total	$ 1,185,017,294	$ 1,109,862,137
5. Actuarial Value of Assets	$ 779,484,342	$ 733,105,429
6. Unfunded Actuarial Accrued Liability (UAAL) (Item 4d - Item 5)	$ 405,532,952	$ 376,756,708
7. City Contribution Rate Needed to Fund Normal Cost and Amortize the UAAL:		
a. Over 20 Years	26.052%	24.407%
b. Over 30 Years	22.269%	20.566%
c. Over 40 Years	20.488%	18.765%
8. Allocation of Contribution Rate		
a. City contribution rate	21.313%	21.313%
b. Member rate	13.000%	13.000%
c. Total contribution rate	34.313%	34.313%
d. Total normal cost rate	22.291%	21.767%
e. Available contribution rate to amortize UAAL	12.022%	12.546%
f. Total contribution rate	34.313%	34.313%
9. Funding period based on statutory contribution rates and Actuarial Value of Assets (years)	35	28

Notes:

[1] December 31, 2016 results are based on the information provided in the prior actuary's actuarial valuation reports (a reasonable approach was taken to estimate certain results that were not included in prior reports)

Table 2

Actuarial Present Value of Future Benefits

(Inclusive of the Retiree Death Benefit Fund)

		December 31, 2017
1.	Active Members (not in DROP at the valuation date)	
	a. Service Retirement	$ 818,329,780
	b. Disability Benefits	7,760,465
	c. Death Before Retirement	13,250,042
	d. Termination	12,424,558
	e. Total	$ 851,764,845
2.	Active DROP Members	$ 63,727,588
3.	Inactive Members	
	a. Vested Terminated	$ 17,560,422
	b. Non-Vested Terminated	345,219
	c. Total	$ 17,905,641
4.	Annuitants	
	a. Service Retirement	$ 549,747,093
	b. Disability Retirement	737,229
	c. Beneficiaries and QDROs	28,486,973
	d. Total	$ 578,971,295
5.	Total Actuarial Present Value of Future Benefits	$ 1,512,369,369

Table 3
Analysis of Normal Cost
(Inclusive of the Retiree Death Benefit Fund)

		December 31, 2017	December 31, 2016[1]
1.	Gross Normal Cost Rate		
	a. Service Retirement	20.792%	
	b. Disability Benefits	0.350%	
	c. Death Before Retirement	0.435%	
	d. Termination	0.697%	
	e. Total	22.274%	21.750%
2.	PRP Administrative Expenses	0.017%	0.017%
3.	Total Normal Cost	22.291%	21.767%
4.	Less: Member Rate	13.000%	13.000%
5.	Employer Normal Cost Rate	9.291%	8.767%

Notes:

[1] December 31, 2016 results are based on the information provided in the prior actuary's actuarial valuation reports

Table 4
Historical Summary of Active Member Data

Valuation as of December 31[1],	Active Members		Covered Payroll		Average Salary			
	Number[2]	Percent Increase	$ Amount (thousands)	Percent Increase	$ Amount	Percent Increase	Average Age	Average Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2011	1,679		133,709		79,636		39.7	11.7
2012	1,709	1.8%	140,273	4.9%	82,079	3.1%	39.6	11.5
2013	1,732	1.3%	145,871	4.0%	84,221	2.6%	39.9	11.6
2014	1,777	2.6%	150,860	3.4%	84,896	0.8%	40.0	11.7
2015	1,761	-0.9%	151,855	0.7%	86,232	1.6%	40.1	11.1
2016	1,837	4.3%	158,761	4.5%	86,424	0.2%	39.8	10.8
2017	1,866	1.6%	162,491	2.3%	87,080	0.8%	40.3	11.7

Notes:

[1] Information prior to December 31, 2017 is based on the information provided in the prior actuary's actuarial valuation reports

[2] Information for December 31, 2017 includes all active members
Information prior to December 31, 2017 includes only active members not in DROP at the valuation date

Table 5
Reconciliation of Plan Net Assets

		Total	Pension	RDBF
1.	Market value of assets at beginning of year	$ 686,020,262	$ 684,935,746	$ 1,084,516
2.	Revenue for the year			
	a. Contributions for the year			
	i. Member Contributions - Payroll	$ 21,436,998	$ 21,436,998	$ 0
	ii. Member Contributions - Service Credit Purchases	2,914,966	2,914,966	0
	iii. City Contributions - Pension	34,382,346	34,382,346	0
	iv. City Contributions - Retiree Death Benefit	244,003	0	244,003
	v. City Contributions - Proportionate Retirement	514,855	514,855	0
	vi. Total	$ 59,493,168	$ 59,249,165	$ 244,003
	b. Net Investment income for the year	$ 82,072,002	$ 82,063,938	$ 8,064
	c. Total revenue	$ 141,565,170	$ 141,313,103	$ 252,067
3.	Disbursements for the year			
	a. Retirement and disability benefits	$ 49,064,793	$ 49,064,793	$ 0
	b. Lump Sum DROP Distributions	1,088,485	1,088,485	0
	c. Lump Sum PROP Distributions	4,756,155	4,756,155	0
	d. Retiree Death Benefits	109,203	0	109,203
	e. Refund of Member Contributions	1,529,368	1,529,368	0
	f. Administrative expenses	1,562,685	1,561,861	824
	g. Total disbursements	$ 58,110,689	$ 58,000,662	$ 110,027
4.	Increase in net assets (Item 2c - Item 3g)	$ 83,454,481	$ 83,312,441	$ 142,040
5.	Market value of assets at end of year (Item 1 + Item 4)	$ 769,474,743	$ 768,248,187	$ 1,226,556
6.	Actual net investment income (Item 2b - Item 3f)	$ 80,509,317	$ 80,502,077	$ 7,240
7.	Expected net income at 7.70%			
	a. Market value of assets at beginning of year	$ 52,823,560		
	b. Contributions for the year	2,290,487		
	c. Disbursements (excluding admin)	(2,177,098)		
	d. Total	$ 52,936,949		
8.	Excess investment income (Item 6 - Item 7d)	$ 27,572,368		
9.	Estimated dollar weighted market yield	11.7%	11.7%	0.6%
10.	Actuarial Value of Assets			
	a. Actuarial value of assets at the beginning of year	$ 733,105,429	$ 732,020,913	$ 1,084,516
	b. Actuarial value of assets at the end of year	$ 779,484,342	$ 778,257,786	$ 1,226,556
	c. Investment income for the year	$ 43,433,749	$ 43,426,509	$ 7,240
	d. Estimated dollar weighted actuarial yield	5.9%	5.9%	0.6%
	e. Expected return on the actuarial value of assets	$ 56,562,507		
	f. Asset gain/(loss) (Item 10c - Item 10e)	$ (13,128,758)		

Table 6
Development of Actuarial Value of Assets

				Total Assets
1.	Excess (shortfall) on assets for last five years:			
	a. Current year		$	27,572,368
	b. Current year - 1			(13,879,414)
	c. Current year - 2			(52,498,923)
	d. Current year - 3			(13,701,378)
	e. Current year - 4			4,991,349
2.	Deferral of excess (shortfall) on assets:			
	a. Current year	(80% deferral)		22,057,894
	b. Current year - 1	(60% deferral)		(8,327,648)
	c. Current year - 2	(40% deferral)		(20,999,569)
	d. Current year - 3	(20% deferral)		(2,740,276)
	e. Total deferred		$	(10,009,599)
3.	Market value of assets			
	a. Including RDBF assets		$	769,474,743
	b. Excluding RDBF assets		$	768,248,187
4.	Actuarial value of assets			
	a. Including RDBF assets (Item 3a - Item 2e)		$	779,484,342
	b. Excluding RDBF assets		$	778,257,786

Table 7
History of Investment Return Rates

Year Ending December 31,[1]	Market Returns[2]	Actuarial
(1)	(3)	(4)
2008	-26.3%	
2009	8.8%	
2010	11.8%	
2011	-3.5%	
2012	9.7%	-0.4%
2013	8.9%	6.9%
2014	5.7%	6.5%
2015	-0.3%	4.4%
2016	5.7%	5.4%
2017	11.7%	5.9%
Average Returns		
Last Five Years:	6.3%	5.8%
Last Ten Years:	2.6%	N/A

Notes:

[1] Results prior to December 31, 2017 are based on the information provided in the prior actuary's actuarial valuation reports

[2] Net of Administrative Expenses

Table 8
History of Cash Flow
(thousands $)

Year Ending December 31[1],	Contributions	Distributions and Expenditures: Benefit Payments and Refunds	Distributions and Expenditures: Administrative Expenses[2]	Distributions and Expenditures: Total	External Cash Flow for the Year	Market Value of Assets	External Cash Flow as Percent of Market Value
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)
2008	$ 34,943	$ (26,118)		$ (26,118)	$ 8,825	$ 387,120	2.3%
2009	38,448	(28,173)		(28,173)	10,275	432,028	2.4%
2010	40,081	(30,876)		(30,876)	9,205	492,545	1.9%
2011	43,641	(34,863)		(34,863)	8,778	484,089	1.8%
2012	47,302	(40,009)	(1,163)	(41,172)	6,130	538,898	1.1%
2013	50,629	(42,825)	(1,115)	(43,940)	6,689	595,110	1.1%
2014	54,065	(45,403)	(1,327)	(46,730)	7,335	638,019	1.1%
2015	57,948	(50,005)	(1,466)	(51,471)	6,477	644,174	1.0%
2016	56,105	(50,828)	(1,397)	(52,225)	3,880	686,020	0.6%
2017	59,493	(56,548)	(1,563)	(58,111)	1,382	769,475	0.2%

Notes:

[1] Results prior to December 31, 2017 are based on the information provided in the prior actuary's actuarial valuation reports

[2] Information was not provided in the prior actuary's valuation reports

Table 9
Total Experience Gain or Loss
(Inclusive of the Retiree Death Benefit Fund)

Item			Year Ending December 31, 2017
(1)			(2)
A. Calculation of total actuarial gain or loss			
1. Unfunded actuarial accrued liability (UAAL), previous year		$	376,756,708
2. Normal cost for the year			35,893,780
3. Contributions for the year (excluding service purchases)			(56,578,202)
4. Interest at 7.70%			
a. On UAAL		$	29,010,267
b. On normal cost			1,381,911
c. On contributions			(2,178,261)
d. Total		$	28,213,917
5. Expected UAAL, end of year (Sum of Items 1 through 4)			384,286,203
6. Actual UAAL, end of year			405,532,952
7. Total (gain)/loss for the year (Item 6 - Item 5)		$	21,246,749
B. Source of gains and losses	% of AAL		
1. Asset (Gain)/Loss	1.12%	$	13,128,758
2. Demographic (Gains)/Losses	0.69%		8,117,991
3. Total	1.81%	$	21,246,749

Table 10
Funding History
(Inclusive of the Retiree Death Benefit Fund)

Valuation Date December 31[1], (1)	Actuarial Value of Assets (AVA) (2)	Actuarial Accrued Liability (AAL) (3)	Accrued Liability (UAAL) (3) - (2) (4)	Funded Ratio (2)/(3) (5)	Annual Covered Payroll (6)	UAAL as % of Payroll (4)/(6) (7)
2009	$ 518,433,065	$ 735,334,345	$ 216,901,280	70.5%	$ 122,928,285	176.4%
2010	547,364,486	778,005,374	230,640,888	70.4%	127,731,696	180.6%
2011	554,190,027	826,366,581	272,176,554	67.1%	135,264,530	201.2%
2012	559,077,407	858,949,998	299,872,591	65.1%	141,561,047	211.8%
2013	605,530,903	913,591,470	308,060,567	66.3%	147,138,718	209.4%
2014	653,980,764	971,213,766	317,233,002	67.3%	152,544,227	208.0%
2015	690,696,986	1,039,229,249	348,532,263	66.5%	155,832,755	223.7%
2016	733,105,429	1,109,862,137	376,756,708	66.1%	163,894,324	229.9%
2017	779,484,342	1,185,017,294	405,532,952	65.8%	162,490,560	249.6%

Notes:

[1] Results prior to December 31, 2017 are based on the information provided in the prior actuary's actuarial valuation reports

Table 11
Historical Contribution Rates

Valuation as of December 31[1],	Contributions from: City[2]	Members	Total	Total Normal Cost Rate[3]	20-Year Actuarially Determined Contribution[4]	30-Year Actuarially Determined Contribution[5]
2009	18.630%	13.000%	31.630%	22.372%		
2010	19.630%	13.000%	32.630%	22.472%		
2011	20.630%	13.000%	33.630%	23.277%		
2012	21.630%	13.000%	34.630%	21.774%		
2013	21.630%	13.000%	34.630%	21.806%		
2014	21.630%	13.000%	34.630%	21.647%		
2015	21.313%	13.000%	34.313%	22.473%		
2016	21.313%	13.000%	34.313%	21.767%	24.407%	20.566%
2017	21.313%	13.000%	34.313%	22.291%	26.052%	22.269%

Notes:

[1] Results prior to December 31, 2017 are based on the information provided in the prior actuary's actuarial valuation reports

[2] City contribution rates were 18.000% prior to 1/1/2009; 18.250% effective 1/1/2009; 18.630% effective 10/1/2009; 19.630% effective 10/1/2010; 20.630% effective 10/1/2011; 21.630% effective 10/1/2012; 21.313% effective 10/1/2015

[3] Includes load for assumed PRP administrative expenses and normal cost associated with the death benefit fund

[4] Employer contribution rate needed to fund normal cost plus amortize the unfunded accrued liability over 20 years

[5] Employer contribution rate needed to fund normal cost plus amortize the unfunded accrued liability over 30 years

Table 12
Retiree Death Benefit Fund

The Retiree Death Benefit Fund was established effective September 1, 2003. The Fund operates as a separate account within the system that is used to advance fund and to pay the $10,000 post-retirement lump sum death benefits for retirees. The following table illustrates the allocation of the total plan assets and liabilities between the primary pension fund and the Retiree Death Benefit Fund.

	Pension Fund	Retiree Death Benefit Fund
1. Total Actuarial Present Value of Future Benefits		
a. Active Members	$ 914,177,181	$ 1,315,252
b. Inactive Members	17,844,703	60,938
c. Annuitants	576,705,918	2,265,377
d. Total	$ 1,508,727,802	3,641,567
2. Present Value of Future Normal Costs	$ 326,911,098	$ 440,977
3. Actuarial Accrued Liability (item 1 - item 2)	$ 1,181,816,704	$ 3,200,590
4. Valuation Assets	$ 778,257,786	$ 1,226,556
5. Unfunded Actuarial Accrued Liability (UAAL) (item 3 - item 4)	$ 403,558,918	$ 1,974,034
6. City Contribution Rate to be Allocated to the Retiree Death Benefit Fund		
a. Normal Cost Rate		0.033%
b. Payment Required to Amortize UAAL over 18 years (as of 12/31/2017)		0.088%
c. Total Allocated Rate		0.121%

SECTION D

SUMMARY OF PLAN PROVISIONS

Summary of Plan Provisions for Austin Police Retirement System

Creditable Service

Total years and completed months (excluding a month in which service amount to fewer than 15 days) during which a Member makes contributions to the System.

Earnings

Base pay plus longevity pay. Overtime or special pay is not included.

Average Final Compensation

Average Earnings for the highest 36 months over the last 120 months of service.

Member Contributions

13.0% of Earnings.

City Contributions

21.313% effective October 1, 2015.

Normal Retirement

Date:

Earlier of age 62, age 55 and 20 years of Creditable Service, or 23 years of Creditable Service, regardless of age (including Proportionate Service Credit and excluding pre-membership military service).

Benefit:

3.20% of Average Final Compensation <u>times</u> Creditable Service.

Form of Benefit:

Life Annuity. At the death of the member the excess, if any, of the member's accumulated contributions over the amount of payments made to the member will be paid in a lump sum to the member's beneficiary. (Other benefit options available).

Vesting

Schedule:

100% after 10 years of Creditable Service, including Proportionate Service Credit.

Benefit Amount:

Members will receive his (her) accrued benefit payable at the Normal Retirement Date based upon actual Creditable Service prior to termination.

Non-vested members receive a refund of accumulated contributions.

Disability

Eligibility:

10 years of Creditable Service (service requirement is waived if the disability is a direct or proximate result of the performance of the member's employment). Members who are eligible for normal retirement may not apply for disability benefits.

Benefit:

Monthly benefit is calculated in the same manner as the member's normal retirement benefit. Benefit will be calculated with a minimum of 20 years of creditable service if the disability is a direct or proximate result of the performance of the member's employment.

Death Benefits

Before Retirement Eligibility:

Lump sum payment equal to twice the amount of the Member's accumulated contributions subject to a minimum of $10,000.

After Retirement Eligibility (member is married at the time of death):

In lieu of the lump sum benefit described above, the surviving spouse may select a retirement option in the same manner as if the member had retired immediately prior to his death. When monthly benefits are payable in lieu of the lump sum, a $10,000 death benefit will be paid to the surviving spouse.

After Retirement Eligibility (member is not married at the time of death):

In lieu of the lump sum benefit described above, the member's beneficiary may select a Fifteen Year Certain benefit calculated in the same manner as if the member had retired immediately prior to his death. When monthly benefits are payable in lieu of the lump sum, a $10,000 death benefit will be paid to the beneficiary.

Retiree Death Benefit Fund

Effective September 1, 2003, a separate fund (funded as a portion of the City's contribution rate) was established to pay post-retirement lump sum death benefits. Effective September 1, 2007, the amount of these benefits was increased to $10,000.

Proportionate Retirement Program

Effective September 1, 2009, the System and the City began participating in the statewide Proportionate Retirement Program (PRP). Service in other participating public employee retirement systems can be combined with service in the System to satisfy the System's requirements for service retirement eligibility and for eligibility for vested benefits of a terminated Member. The participating systems, in addition to the System, are the six statewide systems, the City of Austin Employees' Retirement System, and the systems for the City of El Paso employees.

Forward DROP

Eligibility:

Completion of 23 years of Creditable Service (including Proportionate Service Credit and excluding military service).

Participation Period:

Not to exceed 60 months. For members with less than 23 years of APRS service as of February 17, 2016, the maximum participation period was extended to 84 months.

Rate of Return:

Effective August 1, 2015, equal to the PROP interest rate (currently 2.25%). Members with 23 years of APRS service as of July 31, 2015 will receive 5.00% interest credit per year. Additionally, members with less than 23 years of APRS service as of February 17, 2016 will not receive interest crediting while in DROP.

DROP Fee/Charge:

For members with less than 23 years of APRS service as of February 17, 2016, a charge for DROP participation will be applied as shown below. The charge will only apply during the period of DROP participation.

Year of DROP Participation	Fee/Charge
1	25%
2	20
3	15
4	10
5	5
6	5
7	5

Form of Distribution:

Cash lump sum (or rollover to PROP account) at termination of employment.

Miscellaneous:

For members with less than 23 years of APRS service as of February 17, 2016, member contributions will continue to be required during the DROP participation period, but these contributions will be retained by the System.

Retro DROP

Eligibility:

Completion of 23 years of Creditable Service (included Proportionate Service Credit and excluding military service). Members with less than 23 years on April 1, 2015 will not be eligible to participate in Retro DROP.

Participation Period:

Not to exceed 36 months.

Rate of Return:

5.0%

Form of Distribution:

Cash lump sum (or rollover to PROP account) at termination of employment.

Post-Retirement Option Plan (PROP)

Retiring members who have participated in DROP may transfer all or a portion of their DROP lump sum into their PROP account for later disbursement.

Retired members may defer receipt of a minimum of $250 of their monthly annuity. These deferred benefits will be accumulated and available for later disbursement. Participants may change their deferral amount twice per calendar year. The interest crediting rate on a member's PROP deferrals is set by the Board. The current crediting rate is 2.25%.

Cost of Living Adjustment

Eligibility:

Normal Retirement.

Amount:

Determined by the actuary if providing a COLA (not to exceed 6.0% per year) will not impair financial stability of the System. Post-Retirement benefit increases will automatically be provided when the System's benefit accrual rate is increased.

SECTION E

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Assumptions and Methods

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees effective with the December 31, 2016 actuarial valuation. In order to assess the reasonableness of the assumptions in our first actuarial valuation for APRS, we have relied on the analysis prepared by the prior actuary. We have also recommended that the Board conduct a five-year experience study to review the assumptions prior to the next actuarial valuation.

I. Valuation Date

The valuation date is December 31 of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation is used to determine the adequacy of the City contribution rate (established by statute) and to describe the current financial condition of APRS.

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the first step is to determine the contribution rate (level as a percentage of pay) required to provide the benefits to each member, or the normal cost rate. The normal cost rate consists of two pieces: (i) the member's contribution rate, and (ii) the remaining portion of the normal cost rate which is the employer's normal cost rate. The total normal cost rate is based on the benefits payable to each individual active member.

The Unfunded Actuarial Accrued Liability (UAAL) is the liability for future benefits which is in excess of (i) the actuarial value of assets, and (ii) the present value of future normal costs. The employer contribution provided in excess of the employer normal cost is applied to amortize the UAAL.

The funding period is calculated as the number of years required to fully amortize the UAAL, and is calculated assuming: (a) future earnings on actuarial value of assets, net of administrative and investment-related expenses, will equal 7.70% per year, (b) there will be no changes in assumptions, (c) the number of active members will remain unchanged, (d) payroll for covered employees will grow at 4.00% each year, and (e) City contributions will remain the same percentage of payroll as described in Section D of the valuation report.

The Entry Age actuarial cost method is an "immediate gain" method (i.e., experience gains and losses are separately identified as part of the UAAL). However, they are amortized over the same period applied to all other components of the UAAL.

III. *Actuarial Value of Assets*

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

IV. *Actuarial Assumptions*

Investment Return: 7.70% per year, net of all expenses, except as noted below

Administrative Expenses: 0.017% of valuation payroll per year for assumed additional administrative expenses for participation in the Proportionate Retirement Program.

Salary Increases: Salary increases are comprised of a service based component on (determined on service with APRS) shown below and a general wage increase of 3.25%.

Years of APRS Service	Increases in Salary
0	22.5%
1	9.5%
2	4.5%
3-4	0.5%
5	5.0%
6	2.0%
7-8	0.3%
9	6.0%
10-12	0.2%
13	6.5%
14	0.7%
15	6.5%
16 & Above	0.0%

Payroll Growth: 4.00% per year for amortization of the Unfunded Actuarial Accrued Liability.

Decrement and Pay Increase Timing: All decrements – mortality, service retirement, disability retirement, and termination of employment for reasons other than death or retirement – are assumed to occur at the beginning of the valuation year. Pay increases are assumed to occur in the middle of the year.

Marriage Assumptions: 85% of active members are married and female spouses are assumed to be 3 years younger than male spouses

Mortality Decrements:

Mortality Rates – All Lives

RP-2000 Combined Healthy without projection – Sex Distinct. No mortality improvement is assumed before or after the measurement date.

Service Retirement Decrements (Age or service at which member leaves active service):

Active Employees

Service based rates are based on APRS service only and apply after a Member is eligible for retirement with combined APRS and Proportionate Retirement Program (PRP) service. Entry ages are determined based on APRS service only.

Age based rates are based on age and apply after a Member is eligible for retirement with combined APRS and PRP service. Entry ages are determined based on APRS service only.

Base rates for eligible members:

APRS Service	Entry Ages 22 & Under	Entry Ages 23-27	Entry Ages 28-32	**Age**	Entry Ages 33-37	Entry Ages 38-42	Entry Ages 43 & Over
0-22	0.0625	0.125	0.125	**33-37**	0.05		
23	0.1875	0.1875	0.28125	**38-42**	0.05	0.10	
24-25	0.125	0.125	0.1875	**43-51**	0.05	0.10	0.10
26-27	0.1875	0.1875	0.3125	**52**	0.20	0.10	0.10
28	0.3125	0.3125	0.3125	**53**	0.35	0.10	0.10
29	0.3125	0.3125	0.375	**54**	0.75	0.10	0.10
30	0.375	0.375	0.50	**55**	0.20	0.10	0.10
31	0.375	0.375	0.625	**56**	0.25	0.10	0.10
32	0.375	0.375	1.00[1]	**57**	0.30	0.10	0.10
33	0.375	0.375		**58**	0.35	0.10	0.10
34	0.50	0.50		**59**	0.50	0.10	0.10
35-36	0.50	0.625		**60**	1.00	0.50	0.10
37	0.625	1.00[1]		**61**		0.35	0.10
38-41	0.625			**62**		0.35	0.80
42	1.00[1]			**63-64**		0.35	0.40
				65		1.00	1.00

[1]100% retirement rate will be effective at age 60, if earlier.

Disability Retirement Decrements:

Active Employees

- 55% of disablements are assumed to be service related.
- No disablements are assumed after a member reaches retirement eligibility

Age	Probability of Disablement During Year
20	0.000070
22	0.000080
24	0.000090
26	0.000105
28	0.000125
30	0.000155
32	0.000200
34	0.000245
36	0.000270
38	0.000310
40	0.000460
42	0.000660
44	0.000865
46	0.001275
48	0.001670
50	0.001895
52	0.002020
54	0.002280
56	0.002660
58	0.003300
60	0.004555
62 & Above	0

Termination Decrements for Reasons Other Than Death or Retirement:

The below rates are for members not eligible for service retirement. Service includes APRS service (i.e. excludes pre-membership military service) and Proportionate Retirement Program service.

Active Employees

Combined Years of Service	Probability of Termination During Year
0	0.075
1-2	0.030
3-4	0.015
5-6	0.010
7-9	0.005
10-13	0.010
14 & Above	0.005

Withdrawal of Employee Contributions: Members that terminate with a vested benefit will receive his or her accrued benefit payable at the Normal Retirement Date based upon actual Creditable Service prior to termination. Non-vested members receive a refund of accumulated contributions.

DROP Election: For members who had attained 23 years of service before April 1, 2015, 75% of those assumed to retire who are eligible for at least a 12-month DROP lump sum will make such an election (RETRO) or will have made such an election (FORWARD). The following table shows the allocation between RETRO and FORWARD.

Retirement Eligibility Service at Termination of Employment	No DROP Elected	RETRO DROP Elected	FORWARD DROP Elected
23 or less	100%	0%	0%
24	25%	75%	0%
25	25%	65%	10%
26	25%	60%	15%
27-32	25%	55%	20%
33	25%	60%	15%
34	25%	65%	10%
35 or more	25%	75%	0%

For members with less than 23 years of service at April 1, 2015 but with at least 23 years of service at February 17, 2016, 75% of those assumed to retire who are eligible for at least a 12-month DROP lump sum will have made an election to enter the forward DROP plan.

For members with less than 23 years of service as of February 17, 2016, the normal benefit accrual formula was utilized for purposes of determining plan liabilities. This procedure was a result of the prior actuary's determination that the DROP provisions were cost-neutral.

DROP Period Election: Members are assumed to elect the maximum DROP period for which they are eligible.

PROP Investment Accounts: 75% of members with a PROP account at the valuation date will elect to leave their lump sum in APRS until age 60 and 25% of members will elect to receive their PROP balance at the valuation date. No future PROP deferrals are assumed and current active members are not assumed to enter PROP. Average annual rate credited to the PROP accounts will be 2.25%.

Census Data and Assets

- The valuation was based on members of APRS as of December 31, 2017 and does not take into account future members, with the exception of determining the funding period.
- All census data was supplied by APRS and was subject to reasonable consistency checks.
- There were data elements that were modified for some members as part of the valuation in order to make the data complete. However, the number of missing data items was immaterial.
- Asset data was supplied by APRS.

Other Actuarial Valuation Procedures

- No provision was made in this actuarial valuation for the limitations of Internal Revenue Code Sections 415 or 401(a)17.
- Annualized Payroll on Valuation Date is the annualized payroll of active members on the valuation date. Projected Contributory Payroll for the upcoming fiscal year (used in determining the amortization period) is the estimated pensionable earnings received by all plan members for the just completed calendar year (including earnings for members who are no longer active employees on the valuation date) increased by the assumed payroll growth rate.

SECTION F

DETAILED SUMMARIES OF MEMBERSHIP DATA

Detailed Summaries of Membership Data

Table A

Summary of Active Membership Data

			December 31, 2017
Active members			
a.	Number		1,811
b.	Total payroll at the valuation date	$	156,342,997
c.	Average salary	$	86,330
d.	Average age		39.9
e.	Average benefit service		11.2
Active members currently in DROP			
a.	Number		55
b.	Total payroll at the valuation date	$	6,147,563
c.	Average salary	$	111,774
d.	Average age		54.3
e.	Average benefit service		27.6
f.	Total annual benefits	$	4,684,698
g.	Average annual benefit	$	85,176
h.	Total DROP Balance	$	10,032,229
Vested inactive members			
a.	Number		45
b.	Total annual deferred benefits	$	2,080,565
c.	Average annual deferred benefit	$	46,235
d.	Average age		49.2
Nonvested inactive members			
a.	Number		53
b.	Member contributions due	$	345,219
c.	Average refund due	$	6,514

Table B

Summary of Annuitant Membership Data

			December 31, 2017
Service Retirees			
a.	Number		758
b.	Total annual benefits	$	50,210,187
c.	Average annual benefit	$	66,240
d.	Average age		62.6
e.	Total PROP Balance	$	29,962,326
Disability Retirees			
a.	Number		2
b.	Total annual benefits	$	63,581
c.	Average annual benefit	$	31,791
d.	Average age		52.9
e.	Total PROP Balance	$	0
Beneficiaries			
a.	Number		60
b.	Total annual benefits	$	2,688,642
c.	Average annual benefit	$	44,811
d.	Average age		72.2
e.	Total PROP Balance	$	202,290
QDROs			
a.	Number		47
b.	Total annual benefits	$	653,309
c.	Average annual benefit	$	13,900
d.	Average age		58.2
e.	Total PROP Balance	$	0
Total Members in Payment			
a.	Number		867
b.	Total annual benefits	$	53,615,719
c.	Average annual benefit	$	61,841
d.	Average age		63.0
e.	Total PROP Balance	$	30,164,616

Table C

Status Reconciliation

	Active	Active DROP	Vested Terminated	Non-vested Terminated	Retiree	Disability Retiree	Beneficiary	QDRO
Beginning of Year	**1,837**	**46**	**30**	**6**	**711**	**2**	**53**	**37**
Re-hired	-	-	-	-	-	-	-	-
Termination, non-vested	9	-	1	-	-	-	-	-
Termination, vested	17	-	-	-	-	-	-	-
Entered DROP	18	-	-	-	-	-	-	-
Retirement	45	9	-	-	-	-	-	-
Disability retirement	-	-	-	-	-	-	-	-
Contribution refund	30	-	2	2	-	-	-	-
Death	3	-	-	-	7	-	-	-
Total Out	**122**	**9**	**3**	**2**	**7**	**0**	**0**	**0**
Continuing	**1,715**	**37**	**27**	**4**	**704**	**2**	**53**	**37**
Total In	**96**	**18**	**18**	**49**	**54**	**0**	**7**	**10**
End of Year	**1,811**	**55**	**45**	**53**	**758**	**2**	**60**	**47**

Table D

Active Members – Distribution by Age and Service

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	46 $ 52,718									46 $ 52,718
25 - 29	149 $ 59,434	23 $ 73,669								172 $ 61,337
30 - 34	144 $ 66,138	151 $ 75,814	51 $ 83,482							346 $ 72,917
35 - 39	51 $ 66,766	110 $ 77,557	139 $ 85,898	34 $ 97,353	1 $ 107,691					335 $ 81,474
40 - 44	29 $ 68,379	58 $ 77,606	83 $ 85,715	178 $ 103,990	41 $ 113,459					389 $ 94,500
45 - 49	9 $ 73,152	34 $ 81,924	51 $ 87,221	118 $ 103,676	120 $ 116,201	20 $ 114,540				352 $ 103,298
50 - 54		17 $ 91,492	19 $ 84,560	45 $ 108,125	44 $ 109,455	31 $ 121,321	4 $ 110,816			160 $ 106,549
55 - 59	1 $ 78,300	7 $ 95,176	5 $ 88,916	13 $ 99,871	8 $ 105,432	13 $ 110,619	8 $ 110,428			55 $ 102,770
60 - 64	1 $ 142,297	2 $ 91,249		1 $ 107,799	4 $ 101,631	3 $ 110,509				11 $ 106,423
Over 64										
Total	430 $ 62,957	402 $ 78,021	348 $ 85,665	389 $ 103,665	218 $ 113,622	67 $ 116,736	12 $ 110,558			1,866 $ 87,080

Table E

Annuitants – Distribution by Age and Category

Age	Number	Annual Benefit	Average Annual Benefit
Under 60	333	23,179,455	69,608
60 - 64	213	13,371,394	62,776
65 - 69	160	9,007,117	56,294
70 - 74	78	4,089,741	52,433
75 - 79	39	1,887,972	48,410
Over 79	44	2,080,040	47,274
Total	867	53,615,719	61,841

SECTION G

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.),
b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: That portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Actuarially Determined Contribution (ADC) or ***Annual Required Contribution (ARC):*** A calculated contribution for a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the calculated contribution has a normal cost payment and an amortization payment.

Closed Amortization Period: A specific number of years that is counted down by one each year and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: An employer-sponsored retirement benefit that provides workers, upon attainment of designated age and service thresholds, with a monthly benefit based on the employee's salary and length of service. The value of a benefit from a defined benefit plan is generally not affected by the return on the assets that are invested to fund the benefit.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used it two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or ***Actuarial Valuation Date:*** The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

HISTORICAL INFORMATION AND BENEFITS SECTION

Changes in Plan Provisions

September 1999

Board Membership changed to allow for greater membership participation by adding one active officer and one retired officer position to the Board of Trustees.

July 2000

Benefit formula multiplier was increased from 2.88 percent to 3.0 percent with an equivalent special ad hoc increase granted to retirees.

September 2001

Provision added for retirement eligibility with unreduced benefits to include members who have 23 years of creditable service excluding pre-membership military service.

Post Retirement Option Plan (PROP) provision added for members who select the Retroactive Deferred Retirement Option Plan (DROP) and instead of receiving a single lump-sum payment, elect to receive partial payments from the member's DROP account for each calendar year, in an amount elected by the member.

September 2003

IRS Code adopted to allow the retiree death benefit amount of $7,500 to be distributed to beneficiary of retired member as a tax free lump sum amount.

Permissive Service Credit provision added, which allows members with 20 years of service to purchase additional time at actuarially neutral cost to the System.

April 2006

The PROP Monthly Annuity Deferral Option was added for retiree members.

October 2006

Member contribution rate was increased from 9 percent to 11 percent.

April 2007

Forward Deferred Retirement Option Plan (Forward DROP) provision added for a one-time benefit whereby active police officers can choose to retire, continue working for and receiving a paycheck from APD, while their retirement annuity is deferred into a DROP account on their behalf at the retirement System.

September 2007

Permissive service credit was changed to: (1) allow the purchase by a deceased member's designated beneficiary if there is no surviving spouse; and (2) allow the purchase to be based on deferring the actual date when retirement benefits would begin in order to reduce the member's cost (Deferred Permissive Service).

The retiree death benefit was increased from $7,500 to $10,000.

October 2007

Member contribution rate was increased from 11 percent to 13 percent.

December 2007

Benefit formula multiplier was increased from 3.0 percent to 3.2 percent with an equivalent special ad hoc increase granted to retirees.

January 2009

The City's contribution rate was increased from 18 percent to 18.25 percent to fund APRS participation in Texas Proportionate Retirement System.

March 2009

APRS joined the Texas Proportionate Retirement System, which allows members with service credit in more than one participating retirement system to be eligible to combine their service credits in order to satisfy the length of service requirements used to determine eligibility for service retirement.

September 2009

The City's contribution rate was increased from 18.25 percent to 18.63 percent to fund APRS participation in Texas Proportionate Retirement Program.

October 2010

The City’s contribution rate was increased from 18.63 percent to 19.63 percent.

October 2011

The City's contribution rate was increased from 19.63 percent to 20.63 percent.

October 2012

The City's contribution rate was increased from 20.63 percent to 21.63 percent.

February 20I5

Effective February 18, 2015, the opportunity to purchase permissive service in conjunction with utilizing the Forward or Retro DROP was eliminated.

Effective February 18, 2015, permissive service credit factors shall be determined based on an interest rate that is 50 basis points lower than the valuation assumption and generational mortality.

Effective April 1, 2015, Retro DROP was eliminated for members with less than 23 years of APRS service.

Effective August 1, 20I5, the Forward DROP interest rate will be set annually in the same manner as the PROP interest rate, except for those with 23 years of APRS service as of July 3 I, 2015 who will not be affected.

New hires beginning February 1, 2016 will be required to pay the full actuarial cost to purchase military service. All others will continue to pay 25 percent of the actuarial cost, which will be based on an interest rate that is 50 basis points lower than the valuation assumption and generational mortality.

October 2015

The City's contribution rate was decreased from 21.63 percent to 21.313 percent on October 1, 2015. The change was due to an actuarial study conducted to assess the cost of participation in the Proportionate Retirement Program.

February 2016

A new Forward DROP program was created. Modifications included elimination of interest paid to the account, elimination of member contributions being credited to the account, a graduated fee in each year of the Forward DROP period, and an option to elect up to seven years in the new Forward DROP.

Changes would not apply to members with 23 years of creditable service as of February 17, 2016. Grandfathered members could choose either the old Five Year Forward DROP or the new Seven Year Forward DROP.

Interest Paid on Member Accounts

YEAR	INTEREST PAID
2017	0.0%
2016	0.0%
2015	0.0%
2014	0.0%
2013	0.0%
2012	0.0%
2011	0.0%
2010	0.0%
2009	0.0%
2008	0.0%
2007*	5.0%
2006	0.0%
2005	0.0%
2004	2.0%
2003	2.0%
2002	2.0%

*Beginning in 2007, interest (if granted) is only paid on vested members accounts

Interest Paid On Retirement Contributions.

The Board of Trustees annually determines the amount of interest paid on vested members' accumulated deposits, taking into consideration the performance of the Fund's investments and the actuary's recommendations.

Retirement interest is paid only to vested members' (10 years of service) accounts at the end of the calendar year based on the amount in the member account on the first day of that calendar year.

COLA's Paid to Retirees and Beneficiaries

YEAR	COLA PAID
2017	0.0%
2016	0.0%
2015	0.0%
2014	0.0%
2013	0.0%
2012	0.0%
2011	0.0%
2010	0.0%
2009	0.0%
2008	0.0%
2007	1.0%
2006	0.0%
2005	0.0%
2004	1.75%
2003	3.0%
2002	1.5%

Cost Of Living Adjustments for retirees.

On January 1 of each year the Board may approve a cost-of-living adjustment for those retirees who retired on or before December 31 of the previous year. The amount of the adjustment is set by the Board upon recommendation by the System's actuary that such an adjustment will not make the Fund financially unsound, and the adjustment is not inconsistent with the Plan provisions. The adjustment is prorated for any benefit which has been in effect for less than a year, with the proration being 1/12 for each monthly payment received during the prior year.

Comparative Statement of Membership

Active Members		**2017**	**2016**
Total Number of Active Members, January 1		1,883	1,761
Add:	New Members	114	156
Deduct:	Members Terminated/Refunded	(56)	(22)
	Deceased Members	(3)	(2)
	Members Transferred to Retiree/DROP System	(72)	(56)
TOTAL ACTIVE MEMBERS, DECEMBER 31		1,866	1,837
Vested Terminated			
TOTAL VESTED TERMINATED MEMBERS, DECEMBER 31		45	36
Retired Members			
Total Number of Retired Members, January 1		803	801
Add:	New Retired Members	54	56
Deduct:	Retired Members Deceased	(7)	(8)
TOTAL RETIRED MEMBERS, DECEMBER 31		867	849
TOTAL APRS MEMBERS, DECEMBER 31		**2,831**	**2,722**

Note: In 2017 the System actuary accounted for the Forward DROP members in the active member population while in 2016 the past System actuary accounted for the Forward DROP members in the retiree population.

Summary of Plan Benefits

Introduction

This is a general overview of the Austin Police Retirement System (APRS or System) membership and benefits. In the event of any inconsistency between this general overview and state or federal law as modified, interpreted, and applied from time to time, the state or federal law will govern and control.

APRS is an IRS tax-qualified 401(a) defined benefit plan governed by Texas state law.

Membership Requirements

All cadets upon enrollment in the Austin Police Academy, and commissioned law enforcement officers employed by the City of Austin Police Department, as well as full time employees of the City of Austin Police Retirement System (after serving a 6-month probationary period); become members of the Police Retirement System at the date of employment.

Contributions

Each member of the system contributes 13 percent of base pay bi-weekly and annual longevity pay through payroll deduction. Overtime or special pay is not included. Contributions continue unless a member is on leave of absence, or withdraws by terminating and/or retiring.

The City of Austin contributes 21.313 percent of every member's base pay bi-weekly and 21.313 percent of member’s longevity pay annually.

Creditable Service

Creditable service is service that is used in computing retirement benefits. There are seven types of creditable service:

- Membership Service
- Probationary Service
- Pre-Membership Military Service
- Uniformed Leave of Absence Service
- Reinstated Forfeited Service
- Cadet Service
- Permissive Service Credit
- Deferred Retirement Permissive Service Credit

Proportionate Retirement Program

Participating systems recognize service from other participating systems. A member with service credit in more than one participating retirement system may be eligible to combine that service in order to satisfy the length of service requirements used to determine eligibility for service retirement. Please note that proportionate service counts for eligibility purposes only and does not add to additional service credit years for pension calculation purposes. Participating systems include:

- Austin Police Retirement System
- City of Austin Employees' Retirement System (COAERS)
- The El Paso City Employees' Pension Fund
- El Paso Firemen and Policemen's Pension Fund
- Employees Retirement System of Texas (ERS)
- Judicial Retirement System of Texas I & II
- Teacher Retirement System of Texas (TRS)
- Texas Municipal Retirement System of Texas (TMRS)
- Texas County and District Retirement System (TCDRS)
- Other Texas retirement systems covering municipal employees who have qualified plans and have elected to participate in the Proportionate Retirement Program.

Vesting

When a member reaches ten (10) years of creditable service which may include approved Proportionate Service Credit if applicable, they become a vested member of the retirement system.

Retirement

Members are eligible for normal, unreduced retirement when they meet one of the following age and service requirements, excluding pre-membership military service:

- Age 62
- Age 55 with 20 years of creditable service
- Any age with 23 years creditable service

Retirement Benefit Calculation

The basic retirement benefit Life Annuity is calculated by using the following formula: 3.2 percent times the years of creditable service times the average monthly salary for the highest 36 months of the last ten years of contributing service. The monthly annuity benefit payment begins the month following the member's retirement from the System.

Retirement Benefit Options

The Police Retirement System provides several options under which monthly benefits may be paid. The options below require verifiable information to be submitted to the System for calculation. The options that include benefits to a survivor are figured according to the ages of both member and survivor included in the plan. A member's benefit is permanently reduced if an option is chosen that provides survivor benefits. Please note: A member may not change their chosen option or survivor after they have already retired.

- Life Annuity
- 100% Joint and Survivor Annuity
- 50% Joint and Survivor Annuity
- 66-2/3% Joint and Survivor Annuity
- Joint and 66-2/3% Last Survivor Annuity
- Fifteen Year Certain and Lift Annuity

Retroactive Deferred Retirement Option (Retro DROP)

The retroactive deferred retirement option plan, referred to as Retro DROP, is a one-time benefit paid at retirement to a member with a subsequent associated reduced monthly annuity. To be eligible a member must qualify with a normal service retirement of 23 years at any age, excluding pre-membership military or permissive service credit. The maximum amount of service to be used in computation of the Retro DROP after normal service retirement of 23 years is 36 months. Effective April 1, 2015, the Retro DROP program will only apply to members with 23 years of creditable service as of that date.

Forward Deferred Retirement Option (Forward DROP)

The Forward DROP allows active police officers to freeze their retirement benefit calculation, but continue working and drawing a paycheck from APD, while their retirement annuity is deferred into a DROP account on their behalf at the retirement system. To be eligible a member must qualify with a normal service retirement of 23 years at any age, as of the date of his or her election to participate in the Forward DROP.

- Five-Year Forward DROP for members with 23 years of creditable service as of February 17, 2016:

The maximum amount of service to be used in computation of the Forward DROP after normal service retirement of 23 years, excluding pre-membership service credit and permissive service credit, is sixty (60) months. During the period that a member participates in Forward DROP, retirement contributions shall be made to the member's Forward DROP account. The Forward DROP benefit balance will include the accumulated monthly benefits during Forward DROP participation, member contributions and a 5 percent simple interest calculation on December 31st for balances on deposit as of January 1st of the same calendar year. Effective August 1, 2015, the interest rate for new DROP member's interest will be the same as PROP, which was 2.25 percent in fiscal year 2017 except members with 23 years of service by July 31, 2015.

- Seven-Year Forward DROP for members with 23 years of creditable service after February 17, 2016:

The maximum amount of service to be used in computation of the Forward DROP after normal service retirement of 23 years, excluding pre-membership service credit and permissive service credit, is eighty-four (84) months. During the period that a member participates in Forward DROP, employee contributions will be collected but not credited to the member's Forward DROP account. There will be no interest applied to the member's Forward DROP account. In addition, a fee is applied to the participant's monthly Forward DROP amount.

Post Retirement Option Plan (PROP)

Instead of receiving a single lump-sum payment, a member may elect to receive partial payments from the member's RETRO or Forward DROP account by transferring the funds into a PROP account, in an amount elected by the member.

Post Retirement Option Plan (PROP) Monthly Annuity Deferral Program

The PROP Monthly Annuity Deferral plan allows retired members to defer receipt of a minimum of $250 of their monthly annuity in order to defer the taxation of the deferred payments and to have the monthly benefits accumulate for later disbursement and later taxation in a Post Retirement Option Plan account.

Disability Retirement Benefits

To be eligible for disability retirement, the applicant must be unable to perform employment duties due to medical or emotional restriction's and/or diagnosis. The disability must be considered a permanent job performance disability. The disability must also be subsequent to the member's effective date of membership AND,

- If the member has less than 10 years of creditable service, the disability must have been a direct or proximate result of the performance of the member's employment duties with the City or the System. The disability will be calculated at 20 years of service.
- If the member has 10 years or more of creditable service, the disability does not have to be a direct or proximate result of the performance of the member's employment duties with the City or the System. On-duty disabilities will be calculated at 20 years of service and Off-duty disabilities will be calculated using the actual number of years of service the member has once the disability is granted.
- If the member is retirement eligible, they cannot apply for disability retirement; however, they can apply for normal retirement.

Death and Survivor Benefits

- At the death of an active or vested member, the designated beneficiary(ies) are entitled to a lump sum benefit of twice the members accumulated contributions with a $10,000 minimum payment.
- At the death of an active or vested member who is eligible to retire, the designated survivor will be entitled to receive monthly payments under a retirement option in lieu of a lump sum death benefit. In the event a member who is eligible for service retirement dies without making a written option selection, and the member leaves a surviving spouse, the surviving spouse may select a retirement option in the same manner as the member would have made or may select a lump sum payment equal to twice the members accumulated deposits. If there is no surviving spouse, the deceased member's designated beneficiary may elect to receive payment under Option V, a Fifteen Year Certain and Life Annuity, which will pay monthly benefits for a period of fifteen years, or a lump sum payment equal to twice the member's accumulated deposits. When monthly benefits are payable in lieu of a lump sum, a $10,000 taxable death benefit will be paid to the beneficiary(ies).
- At the death of a retiree, a tax-free death benefit of $10,000 (or a proportionate amount if the member retired under the Proportionate Retirement Program) is paid to the designated beneficiary(ies) or estate. If the member has a PROP or DROP account at the time of their death, those funds are paid to the designated beneficiary(ies) for those programs. If a survivor option was chosen, the elected survivor begins to receive the elected portion of the annuity. If the Life Annuity was chosen, the monthly benefits cease.