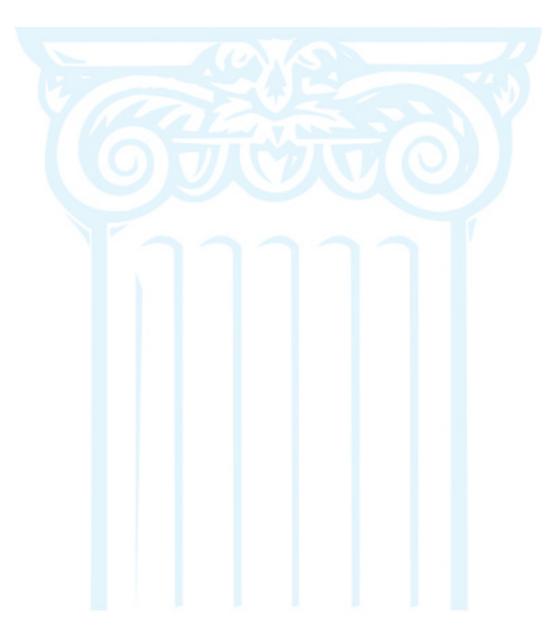
# 2015 ANNUAL REPORT COMPREHENSIVE ANNUAL FINANCIAL REPORT



# **City of Austin Employees' Retirement System** For the years ended December 31, 2015 and 2014

Austin, Texas

# City of Austin Employees' Retirement System 2015 Annual Report



Comprehensive Annual Financial Report for the years ended December 31, 2015 and 2014

# **Our Mission**

The mission of the City of Austin Employees' Retirement System is to provide reliable retirement benefits.

We Value:

Accessibility Accountability Cooperation Ethical Behavior Fairness Innovation Integrity Open Communication Respect Responsiveness

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INTRODUCTORY SECTION



City of Austin Employees' Retirement System

June 8, 2016 Board of Trustees City of Austin Employees' Retirement System Austin, Texas

Ladies and Gentlemen:

It is our pleasure to submit to you the Comprehensive Annual Financial Report (CAFR) of the City of Austin Employees' Retirement System (COAERS or System) for the year ended December 31, 2015. COAERS' management is responsible for the accuracy, completeness, and fair presentation of information, and all disclosures in this report.

### **Plan Profile and Demographic Highlights**

COAERS was established in 1941 and has provided retirement benefits to eligible City of Austin employees since that time. Though originally created by city ordinance, COAERS is now governed by state law and administered by an eleven-member board of trustees.

The Plan provides retirement, disability and death benefits to eligible employees of the City of Austin. Both the City of Austin, as employer, and its employees make contributions to COAERS. Retirement benefits are determined by formula considering final average compensation, as defined, and multiplied by the number of years of creditable service. Disability retirement is available pursuant to specific criteria established by statute. A death benefit of \$10,000 is payable upon the death of a retired member of COAERS. Vesting occurs at five years of creditable service.

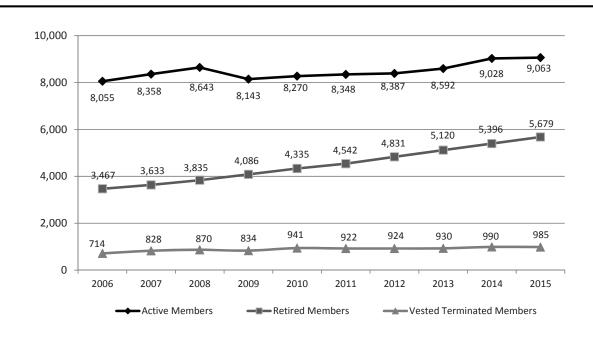
Membership in COAERS is comprised of two benefit tiers: Group A and Group B.

Group A members qualify for normal retirement benefits at age 62, age 55 with 20 years of creditable service, or any age with 23 years of creditable service. Benefits are determined using a multiplier of 3%.

Group B members qualify for normal retirement benefits at age 65 with five years of creditable service or at age 62 with 30 years of creditable service. Benefits are determined using a multiplier of 2.5%. Reduced early retirement benefits are available for Group B members at age 55 with 10 years of creditable service.

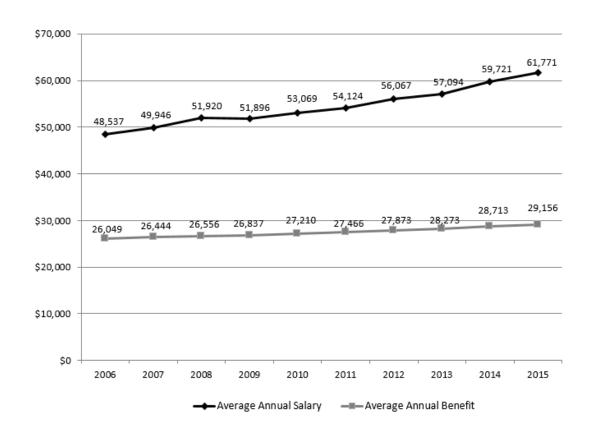
Additional information concerning current COAERS plan provisions is contained in the Summary of Plan Provisions later in this section of the report.

The following charts depict COAERS membership and changes in average salaries and benefits.



**Membership Profile** 

### Average Salary and Average Benefit



**Introductory Section** 

#### **Audited Financial Statements and Summary**

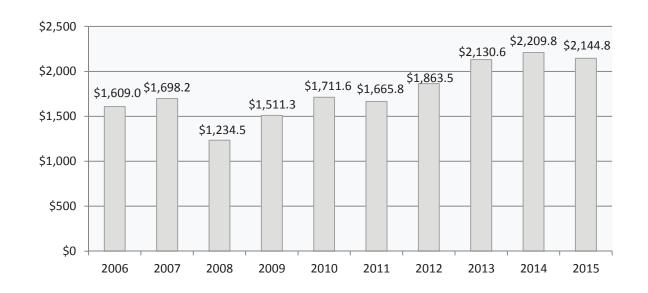
The financial statements included in this CAFR have been prepared by COAERS' management in accordance with generally accepted accounting principles and presented in accordance with guidelines established by the Governmental Accounting Standards Board (GASB). The governing statute requires an annual audit of COAERS' accounts by a Certified Public Accountant. The Board of Trustees has retained KPMG LLP as independent external auditor since 1997. KPMG's 2015 financial audit was conducted in accordance with generally accepted auditing standards and resulted in an unmodified opinion on the financial statements. The Financial Section contains KPMG's audit opinion letter and additional information including Management's Discussion and Analysis (MD&A) that provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

The **Additions to Fiduciary Net Position** consist of employer and employee contributions, investment income, and realized and unrealized gain or loss on investments. The **Deductions from Fiduciary Net Position** consist of annuity payments, refunds to terminating members, Deferred Retirement Option Program (DROP) disbursements, retiree lump-sum annuity disbursements, death benefits and administrative expenses. There was a net decrease of \$65.0 million, resulting in total assets held in trust of \$2.1 billion. The table below shows the changes in Fiduciary Net Position.

Additions		Deductions	
Employer contributions	\$ 100,636,633	Retiree annuity payments	\$ 160,219,441
Employee contributions	54,065,793	Refunds to terminating members	4,052,435
Interest, dividends, net securities		DROP disbursements	2,639,850
lending & other income	39,446,065	Retiree lump-sum annuities	891,739
		Death benefits	1,865,525
Depreciation in plan investments		General & administrative expenses	2,421,332
(net of investment fees)	(87,053,726)		
Total Additions	\$ 107,094,765	Total Deductions	\$ 172,090,322

### **Changes in Fiduciary Net Position**

The following chart shows the **Total Net Position** at the end of each year since 2006. Net Position decreased by \$65.0 million during 2015, resulting in Total Net Position Restricted for Pensions of \$2,144,824,122 at December 31, 2015.



**Total Net Position Restricted for Pensions** 

#### **Internal Controls**

The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived, and second, the valuation of costs and benefits requires estimates and judgments by management. A framework of internal controls have been established by COAERS' management to provide reasonable assurance that assets are properly safeguarded, that financial records are fairly and accurately maintained, and that the governing statute and policies are correctly followed. Recognizing, however, that even sound internal controls have their inherent limitations, the Board of Trustees has also authorized an "extended audit" since 1997. This annual review of internal controls, and compliance with operating policies and procedures, is currently conducted by Padgett Stratemann & Co. Audit findings are reported, and actions of management to implement recommendations are reviewed with the Board of Trustees.

#### Investments

Essential to COAERS' mission is the responsibility to ensure long-term assets will meet longterm liabilities. This ensures retirement and other benefits will be available for both current and future members. Investments are made with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. Funds of COAERS are invested solely in the interest of the membership and their beneficiaries, and for the exclusive purpose of providing benefits to such membership and their beneficiaries and defraying reasonable expenses of administering COAERS. The Board of Trustees has established an investment policy and guidelines which provide for the delegation of investment authority to professional investment advisors. COAERS' assets are strategically allocated to maximize returns and reduce risk by using diverse and complementary portfolio structures. COAERS Board has consistently followed a long-range, conservative investment philosophy. COAERS employs a full-time Chief Investment Officer to oversee the investment portfolio and assist the Board in devising and implementing strategic investment decisions. The Board also retains Summit Strategies Group to provide independent investment consulting services and long-range asset liability analysis.

At December 31, 2015, the investment portfolio of COAERS consisted of 17 mandates managed by 15 investment management firms. The strategic portfolio allocation from the most recent asset liability study, which was conducted in 2012, was adopted late in 2012, and was incrementally implemented through 2015.

COAERS' investments generated a return of -1.97% (net of fees) for 2015, down from 4.72% in 2014. Additional information regarding the investments of the pension trust funds can be found in the Investment Section of this report.

Investment Style	2015
Domestic Fixed Income	24.50%
International Equities	30.00%
U.S. Equities - Large Cap	26.25%
U.S. Equities - Non-Large Cap	3.75%
Alternative Investments	10.00%
Real Estate	5.50%
	100.00%

### **Portfolio Allocation**

During 2015, the Board restructured the US Equity portfolio, funding a Scientific Beta Factor Index, paring back the current large cap US manager accounts, and consolidating the US small cap portfolio into a Russell 2000 Index Fund. The Board also increased the allocation to the Master Limited Partnership asset class from 1.5% to 4.0% of the total portfolio. New allocation targets were set for U.S Equities Large Cap, U.S. Equities Non-Large Cap, International Equities, Real Estate, and Alternative Investments.

### **Funding Overview**

COAERS is funded by investment income and employer and employee contributions. City employees provide regular contributions equal to 8% of base compensation. The City of Austin contributes 18% of base compensation. Contributions by the City of Austin consist of the statutory base contribution amount of 8% plus an additional 10% pursuant to a supplemental funding plan first established in 2005 and amended in 2010. Using the entry age actuarial cost method (EAN), COAERS' 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 COAERS' unfunded actuarial accrued liability (UAAL), if any, and the number of years needed to amortize COAERS' UAAL is determined using a level percentage of payroll method. In consultation with its actuary, the Board adopted the use of the Individual Normal Cost EAN method means that the normal cost will decline over time and the percentage of pay contributed towards the unfunded liability will increase over time. To better model how this financing will pay off the unfunded liabilities of COAERS' funding period.

In March of 2016, the Board initiated an Actuarial Experience Study with its actuary Gabriel Roeder Smith & Company (GRS). Based upon the findings and recommendations of GRS, the Board adopted new actuarial assumptions used for the December 31, 2015 actuarial valuation. Most notably, the Board reduced its nominal investment return assumption from 7.75% to 7.50% to better forecast possible future investment returns. The new assumptions combined with market losses have increased the period of the Plan's amortization period of unfunded actuarial accrued liability from 24 to 33 years. The overall funded position of COAERS is now 68.0%, down from 70.9% in 2014. The actuarial accrued liability and the actuarial value of assets of COAERS, as of December 31, 2015, amounted to \$3.4 billion and \$2.3 billion, respectively. A detailed discussion of funding is provided in the Actuarial Section of this report.

#### **Major Initiative**

In 2012, COAERS launched a Service Delivery & Technology initiative to pursue updated technology for major operational areas, specifically focused in the short-term on pension administration software. Working with consultant LRWL, Inc., a review of the current business processes and technology was completed in 2013. An RFP for a pension administration system and related technologies was issued in February 2014, and a service provider was approved by the Board in September 2014. Product design and implementation are estimated to continue through 2018. Currently, the initiative is on schedule.

#### **Organizational Change**

Mr. Kirk Stebbins, Chief Investment Officer, resigned effective September 30, 2015. After an extensive search, COAERS hired Mr. David T. Veal to fill the vacancy. Mr. Veal began employment on April 18, 2016.

#### Awards

For the seventeenth consecutive year, COAERS was awarded a Certificate of Achievement for Excellence in Financial Reporting for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2014, by the Government Finance Officers' Association of the United States and Canada (GFOA). COAERS is pleased to have achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Comprehensive Annual Financial Report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current Comprehensive Annual Financial Report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

For 2015, COAERS earned the Public Pension Coordinating Council Recognition Award for Funding and Administration. This is the sixth consecutive year that COAERS has met the administrative standards and the fourth year that the funding standards have been achieved. This award is in recognition of meeting professional standards for plan administration as set forth by the Council. The standards reflect minimum expectations for public retirement system management and administration, serving as a benchmark by which to measure public defined benefit plans.

#### Acknowledgments

This report reflects the combined efforts of the COAERS' staff under the leadership of the Board of Trustees. We express our gratitude to the staff, advisors, and members of the Board who have contributed to the preparation of this report and to the continued successful operation of the City of Austin Employees' Retirement System.

Respectfully Submitted,

Sam R.

Sam Jones 2015 Board Chair

CT.L

Christopher D. Hanson Executive Director

Klouna Klarow/Saufin

Donna Durow Boykin, CPA Chief Financial Officer



**Government Finance Officers Association** 

Certificate of Achievement for Excellence in Financial Reporting

Presented to

# City of Austin Employees' Retirement System Texas

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2014

Executive Director/CEO



# Public Pension Coordinating Council

# Public Pension Standards Award For Funding and Administration 2015

Presented to

# City of Austin Employees' 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 Hulinkle

Alan H. Winkle Program Administrator

### COAERS 2015 Comprehensive Annual Financial Report

### **COAERS 2015 BOARD OF TRUSTEES**



Sam Jones 2015 Board Chair



Jim Williams 2015 Board Vice Chair



Reagan David Trustee



Francine Gertz Trustee



Elizabeth S. Gonzales Trustee



Chris Noak Trustee



Leslie Pool Trustee



Julia Robbins Trustee



Anthony B. Ross, Sr. Trustee



Russ Sartain Trustee



Ed Van Eenoo Trustee

**Note:** Michael Benson was elected to fill Active Member Place 6, succeeding Julia Robbins. He assumed office in 2016.



## **COAERS STAFF**

Christopher D. Hanson Executive Director

Russell Nash Chief Operations Officer

Donna Durow Boykin Chief Financial Officer

David Veal Chief Investment Officer

Michelle Mahaini Senior Services Officer

Teresa Cantu Senior Member Services Specialist

Bertie Corsentino Accountant

Cathy Edwards Accountant

Laura L. Fugate Member Services Specialist

Sarah McCleary Executive Assistant

Catherine Pezulich Member Services Specialist

Lovie Robinson-Laurant Member Services Coordinator

Bobbie Simpson Office Coordinator

Lee Wilson Member Services Coordinator























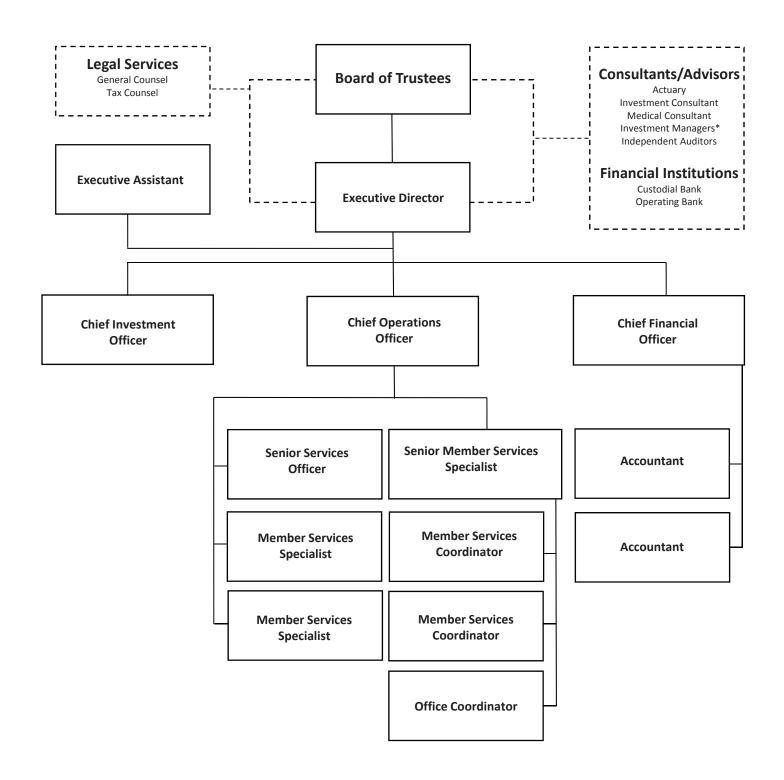






**Introductory Section** 

## **ORGANIZATIONAL CHART**



For more information on Investment professionals who provide services to COAERS, refer to the Asset Allocation on page 61 and the Investment Expenses table under Other Supplementary Information on page 55.

### **PROFESSIONAL SERVICE PROVIDERS**

**Investment Consultant** Summit Strategies Group

**Custodial Bank** The Northern Trust Company

**Independent Auditors** KPMG LLP Padgett Stratemann & Co LLP

Actuary Gabriel Roeder Smith & Company

**General Counsel** Knight & Partners

Tax Counsel Strasburger & Price LLP

**Operating Bank** JPMorgan Chase Bank

### **INVESTMENT MANAGERS**

Fixed Income		US Equity
Agincourt Capital Management LLC		Aronson + Johnson + Ortiz LP
Northern Trust Investments - Aggregate Bond Index		INTECH Investment Management LLC
		Northern Trust Investments - Russell 2000 Index
International Equity	Northern Trust	Investments - Scientific Beta MBMS EW Account
1607 Capital Partners LLC		Westfield Capital Management Company LP
City of London Investment Manageme	nt Co LTD	
Dimensional Fund Advisors LP		
Mondrian Investment Partners LTD		Alternative Investments
Northern Trust Investments - Emerging	g Markets Index	AQR GRP EL Fund LP
Sprucegrove Investment Management	LTD	CoreCommodity Management LLC
Walter Scott & Partners LTD		Harvest Fund Advisors LLC

**Real Estate** Principal Global Investors LLC

**Introductory Section** 

## SUMMARY OF PLAN PROVISIONS

### CITY OF AUSTIN EMPLOYEES' RETIREMENT SYSTEM (COAERS)

### Introduction

This is a general overview of the City of Austin Employees' Retirement System (COAERS 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.

### **Membership Requirements**

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

### **Membership Requirements**

City of Austin regular employees working 30 or more hours per week become Members of COAERS on the date of employment as mandated by Statute. Members do not include:

- Temporary employees
- Part-time employees working less than 30 hours per week
- Civil service employees of the Fire Department and the Police Department
- The Mayor and members of the City Council

### Contributions

**Employee:** Members of COAERS contribute 8% of their base pay, calculated on a 40-hour work week. Contributions are made through payroll deduction each pay period (every two weeks). Overtime and special pay are not included.

**Employer:** By State Statute the employer contributes an amount equal to 8% of the employee's base compensation or a higher rate established by the employer. The current employer contribution, established by a City Council Resolution, is 18% of compensation. The employer contribution will remain at this level until the Resolution is amended or repealed.

### **RETIREMENT BENEFITS**

### **Retirement Eligibility**

Members are eligible for retirement when they meet one of the following age and service requirements for the membership "Group" to which they belong:

### **Group A Members (Normal Retirement)**

- Age 62,
- Age 55 with 20 years of Creditable Service, or
- Any age with 23 years Creditable Service

#### **Group B Members (Normal Retirement)**

- Age 65 with 5 years of Creditable Service (excluding Supplementary Service Credit), or
- Age 62 with 30 years of Creditable Service (excluding Supplementary Service Credit)

### Group B Members (Early Retirement – Reduced Benefits)

• Age 55 with at least 10 years of Creditable Service (excluding Supplementary Service Credit)

### Vesting

Members become vested with COAERS when they have five years of Creditable Service. Members who leave active membership before attaining retirement eligibility must have five years of Creditable Service to be considered vested. Verified service credit with a participating proportionate retirement system(s) or in the limited proportionate service arrangement between COAERS and the Travis County Healthcare District may also be combined with COAERS service credit in determining vested status and eligibility to receive a future benefit. The Member is not entitled to receive the employer contribution at any time. Instead, vesting means that a Member is entitled to receive a lifetime benefit as long as their contributions are on deposit in the System upon reaching retirement eligibility.

### **Creditable Service**

Creditable Service is a combination of Membership Service and other types of Creditable Service described below.

Current Active-Contributing/Vested Members, as of October 1, 1995, were granted service credit for the period between their date of hire and their date of participation, up to six months. All Members hired after October 1, 1995 become Members on their date of hire or on their date of regular employment at 30 or more hours per calendar week.

### **Types of Creditable Service**

**Membership Service** – The employment period during which a Member makes payroll contributions to the System is considered the "Membership Service" period.

**Reinstated Membership Service (Prior City of Austin Service)** – When Members leave City employment, withdraw their deposits, and later return to City employment or employment with a participating proportionate system, they may purchase and reinstate the earlier time with the City. To purchase this service, they must become a Member of COAERS or another proportionate system. The cost to purchase prior service credit is based on the amount previously withdrawn, plus interest, as required by law.

**Non-Contributory Service Credit** – Members may purchase service credit for the following non-contributory categories:

- Non-contributory service, such as temporary or part-time service (less than 30 hours per week)
- Approved leave of absence
- Workers' compensation leave due to an injury sustained in the course and scope of employment with the employer

### **Credit for Federal Active Duty Military Service**

**Prior Federal Active Duty Military Service** – Members may establish up to 48 months Creditable Service for prior military service. Military service eligible for purchase is full-time active duty service in the armed forces of the United States performed before the first day of the most recent period of active membership in COAERS. Military service in the reserves, a service academy, or for less than 90 consecutive days is not eligible for purchase. To purchase prior military service, Members must present an original DD214 showing honorable discharge.

**Military Leave of Absence** – Members may establish Creditable Service for an authorized leave of absence from employment for military service. The Member may establish such Creditable Service during the authorized leave of absence by continuing to make retirement contributions during the period of service. Alternatively, if the Member returns to employment within the applicable period (that varies from 14 to 90 days, depending on the length of service) after the completion of the military service, the Member and the employer may secure such Creditable Service by making a lump-sum payment within five years of the date the Member returns to employment and Active-Contributing Member status.

**Supplementary Service Credit (Previously known as Permissive Time)** – Group A members may purchase up to five years of Creditable Service to advance their retirement eligibility date and/or increase the amount of their monthly annuity upon retirement. Group B members may purchase up to five years of Creditable Service only to increase the amount of their annuity but not to advance their retirement eligibility. Only Vested Active-Contributing or inactive Members are eligible to purchase Supplementary Service Credit, provided they have five years of membership

### **Introductory Section**

service. Age, salary, earliest retirement date, and a combination of actuarial data determine the cost. There may be federal limitations on certain purchases.

**Sick Leave Conversion** – Retiring Members may convert sick leave hours to increase Creditable Service time. Employees eligible to be paid by the City of Austin for up to 720 hours of sick leave upon retirement cannot convert the eligible hours to Creditable Service. Converted sick leave hours cannot be used to reach retirement eligibility. Sick leave must be converted in pay period (80-hour) increments. Both the Member and the employer must pay the current contribution rate at the time of retirement to convert hours.

**Service prior to 1941** – Additional service credit is allowed for Members with service performed before 1941, when the System came into existence. Two percent is applied for the number of years (prior to 1941) times the average salary for the years 1946 through 1950.

### **Proportionate Service**

In 1991 the Texas Legislature established a Proportionate Retirement Program for the benefit of members of participating public retirement systems. A member of two or more of the following participating retirement systems may be eligible for proportionate benefits:

- City of Austin Employees' Retirement System
- City of Austin Police Retirement System
- El Paso City Employees' Pension Fund
- El Paso Firemen and Policemen's Pension Fund
- Employees Retirement System of Texas
- Judicial Retirement System of Texas I & II
- Texas Municipal Retirement System
- Texas County and District Retirement System
- Teacher Retirement System of Texas
- Other Texas retirement systems covering municipal employees who have qualified plans and have elected to participate in the 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 retire in another system based on the combined service of two or more systems in order to satisfy the length of service requirements used to determine eligibility for service retirement. Members must qualify for retirement eligibility independently in each system. Retirement benefits will be paid separately from each system and will be determined based on the actual amount of Creditable Service earned in and the benefit structure of each plan. Military service may only be used once in determining the amount of the member's combined service credit. Proportionate participation is generally based on funded service.

A limited proportionate service arrangement was also established in 2007 for those individuals who have membership in COAERS and a retirement system within the Travis County Healthcare District (District) organization. This arrangement, effective with employees transitioning into the District effective March 1, 2009, is similar to the general proportionate program except that it applies only between these two retirement systems. Participation in the District retirement system can be used to establish retirement eligibility with COAERS.

### **Calculation of Retirement Benefits**

#### Factors used to calculate COAERS retirement benefits:

Total Creditable Service – Total years and months of Creditable Service, including:

- Regular membership service
- Reinstated membership service
- Military service purchased
- Non-contributory service purchased

- Supplementary service purchased
- Converted sick leave
- Up to one six-month probationary period granted at retirement to Active-Contributing/Vested Members hired on or before October 1, 1995
- Note: Proportionate service is only used to reach eligibility; it is not used to calculate retirement benefits.

### Multiplier for Group A Members – 3.0%

#### Multiplier for Group B Members – 2.5%

**Average Final Compensation** – The average base salary for the highest 36 months of contributory service during the last 10 years of salary prior to retirement.

### **Retirement Date**

The effective date of retirement is always the last day of the month.

### **Retirement Options**

COAERS provides several options for payment of monthly benefits. All payment options are actuarially equivalent to the basic Member Only Life Annuity benefit.

The options that include benefits to a survivor are calculated according to the ages of both the Member and the surviving beneficiary included in the plan. The Member's benefits are reduced if an option is chosen that provides survivor benefits. This reduction is applied to the Member's basic Life Annuity benefit according to the option the Member chooses. Some restrictions may apply to non-spouse survivor benefits.

If the Member is married, spousal consent is required. A Member cannot change options or the survivor beneficiary after retirement. Even if a Retiree and the beneficiary spouse later divorce, the survivor beneficiary cannot be changed. Only the survivor beneficiary named at retirement will receive survivor benefits.

Life Annuity – A basic monthly benefit payable for the life of the Retiree.

**Option I: 100% Joint and Survivor** – A reduced monthly benefit payable throughout the Retiree's life. At the Retiree's death, the survivor beneficiary will continue to receive the Retiree's benefit for the remainder of his/her life.

**Option II: 50% Joint and Survivor** – A reduced monthly benefit payable throughout the Retiree's life. At the Retiree's death, the survivor beneficiary will continue to receive 50% of the Retiree's benefit for the remainder of his/her life.

**Option III: 66 2/3% Joint and Survivor** – A reduced monthly benefit payable throughout the Retiree's life. At the Retiree's death, the survivor beneficiary will continue to receive 66 2/3% of the Retiree's benefit for the remainder of his/her life.

**Option IV: Joint and 66 2/3% Last Survivor** – A reduced monthly benefit payable until the death of either the Retiree or the survivor beneficiary. After death of the Retiree or the survivor beneficiary, the last survivor of the two will receive 66 2/3% of the Retiree's benefit for the remainder of his/her life.

**Option V: Fifteen Year Certain and Life Annuity (180 payments)** – A monthly benefit payable to the Retiree. If the Retiree's death occurs before 180 payments are made, the Retiree's beneficiary, spouse (if applicable), or estate will receive remaining monthly payments until all 180 payments have been made. If the Retiree is still living after receiving 180 payments, payments to the retiree will continue until the Retiree's death.

**Option VI: Actuarial Equivalent of Life Annuity** – This option allows Members to develop their own benefit payment plan with the assistance and approval of the System's actuary. Members have flexibility to design a retirement benefit that is most appropriate for the needs of both the Member and the Member's beneficiary, subject to limitations established in Board policy. All options are subject to approval by the Board of Trustees.

A "Pop-up" benefit is provided for Retirees choosing Options I, II, or III as well as Retirees who selected any Joint and Survivor option other than Joint and Last Survivor option. The "Pop-up" increases the Retiree's benefits to the Member Only Life Annuity level if the survivor beneficiary predeceases the Retiree on or after October 1, 1999.

### **Introductory Section**

### **Lump-Sum Payments**

**Backward DROP Program** – The Backward Deferred Retirement Option Program (Back DROP) allows a Member to receive a lump-sum payment in addition to receiving a monthly annuity.

Members who have already reached retirement eligibility, excluding proportionate service, and who continue to work and contribute to COAERS beyond retirement eligibility, may elect to receive a lump-sum amount and have their retirement calculated as though they had retired at an earlier date. The Back DROP period can be no earlier than:

- The day of first retirement eligibility,
- The date of the last purchase of Creditable Service of any type other than Sick Leave Conversion, or
- 60 months (in one-month increments) prior to the retirement date.

The lump-sum amount is 90% of the sum of the monthly annuity payments, based on the Member Only Life Annuity benefit, the participant would have received if the Member had retired at the earlier date. The lump-sum amount may be rolled over to other qualified plans, paid in one lump-sum to the Member, or a combination of both.

Cost-of-living adjustments, interest, and Member or employer contributions do not increase the monthly amount credited to the Back DROP.

**Partial Lump-Sum Payment** – As an alternative to the Back DROP, a retiree may select a retirement option and request a one-time lump-sum payment to be paid at the same time as the Member's first annuity payment. The Member's annuity amount will be actuarially reduced for the lump-sum payment. Members may select a partial lump-sum distribution, or both a partial lump-sum distribution and a Back DROP, not to exceed 60 months of annuity payments under a basic Member Only Life Annuity benefit

### **IRS Section 415 Restoration of Retirement Income Plan**

Certain highly compensated Members may have their retirement annuity limited because of Section 415(b)(1) of the Internal Revenue Code. A plan amendment, effective January 1, 2000, provides for COAERS to pay a benefit that exceeds the limitation imposed by the Internal Revenue Code from a separate, non-qualified, and unfunded "Restoration of Retirement Income Plan". Additional details are made available to affected Members during the retirement process.

### **Retirees Returning to Work**

The retirement allowance of a retired member who resumes employment with an employer within 90 days after retirement and has not attained age 55, or who resumes employment after retirement as a regular full-time employee of an employer is subject to suspension. Suspension also occurs if a retired member resumes employment with an employer in a position that is not required to participate in another retirement system maintained by an employer, and works for, or is compensated by, an employer for more than 1,508 hours in any rolling 12-month period after the member resumes employment with the employer.

### **DISABILITY RETIREMENT BENEFITS**

### **Disability Retirement Requirements**

Members may apply for disability retirement benefits if:

- They are mentally or physically incapacitated for the performance of all employment duties, AND
- The incapacity is likely to be permanent.

### **Disability Retirement Eligibility**

Active-Contributing Members with less than five years Creditable Service may only apply for disability retirement if the disability is a result of an on-the-job accident or injury. Active-Contributing Members with five or more years of Creditable Service may apply for disability retirement even if the disability is not job related. Members who are already eligible to retire may not apply for disability retirement.

Members are considered to remain in the same membership category in effect on the date of termination for 90 days following termination. Members are allowed to apply for disability retirement for up to 90 days following termination for inability to perform all employment duties.

Disability Retirees are periodically required to provide proof of continued disability and are annually required to provide employment and income documentation to the COAERS Board of Trustees.

### **Disability Retirement Options**

A Member approved for disability retirement may choose a Member Only Life Annuity benefit or a benefit described in Options I, II, III, or IV. Disability Retirees are not eligible for any type of lump-sum payment.

### **DEATH AND SURVIVOR BENEFITS**

### **Retired Members**

Upon the death of a Retiree, a death benefit of \$10,000 is paid by COAERS to the designated beneficiary(ies) of the deceased. This \$10,000 death benefit is paid to the beneficiary(ies) in addition to any of the following benefits that are applicable:

- If the Retired Member chose the Member Only Life Annuity option, the monthly benefit stops the month following the death of the Retiree. However, if death occurs before the Retiree's accumulated deposits have been paid out, the Retiree's remaining deposits will be paid in a lump-sum to the Retiree's designated beneficiary(ies), spouse (if applicable), or estate.
- If the Retired Member chose an option providing benefits to a survivor beneficiary, upon the Retiree's death, such benefits will be paid to the designated survivor. If the survivor beneficiary does not survive the Retiree, monthly benefits cease. However, if the survivor beneficiary does not survive the Retiree, and the Retiree's deposits have not been paid out, the Retiree's remaining deposits will be paid in a lump-sum to the Retiree's designated beneficiary(ies), spouse (if applicable), or estate.

### **Active Members**

### Not Eligible to Retire

Upon the death of an Active Member who was not yet eligible for retirement, the designated beneficiary(ies) is entitled to a lump-sum payment of the Member's accumulated deposits (contributions and interest) plus a death benefit from COAERS equal to the Member's deposits (excluding any purchases for non-contributory time, prior military service purchases, or Supplementary Service Credit).

### **Eligible to Retire**

If the Active Member was eligible for retirement prior to death and had not yet retired:

- A surviving spouse may choose any retirement option that would have been available to the Member, except for Member Only Life Annuity, and receive the \$10,000 death benefit. Alternatively, a surviving spouse may choose to receive a one-time lump-sum payment of the Member's accumulated deposits and a death benefit from COAERS equal to the Member's deposits (excluding any purchases for Noncontributory time, prior military service purchases, or Supplementary Service Credit).
- If there is no spouse, the deceased Member's designated beneficiary may elect to receive payments under Option V, Fifteen Year Certain and Life Annuity, and receive the \$10,000 death benefit. The non-spouse beneficiary may otherwise choose to receive a one-time lump-sum payment as described above.

The \$10,000 death benefit is not paid to beneficiaries electing a one-time lump-sum payment.

### **Inactive Vested Members**

Beneficiaries of Inactive Vested Members receive the same death benefits as beneficiaries of Active Members as described above.

### **OTHER INFORMATION**

### **Compliance with Applicable Law**

Article 6243n of Vernon's Texas Civil Statutes, the Internal Revenue Code, and other state and federal laws are applicable to the operation and management of, and the benefits provided by, the System. Such laws place restrictions and limitations on retirement systems, including COAERS, and directly or indirectly affect Member benefits and options. Deposits or retirement benefits may not be transferred or assigned except pursuant to a Qualified Domestic Relations Order (QDRO). All QDROs are subject to approval and must meet all statutory requirements. In addition, funds actually due and payable to a Member, beneficiary, or alternate payee may be subject to IRS levy. The Internal Revenue Code also sets limits which affect purchases of service credit, final average salary, and monthly benefits for certain individuals.

### **Determining Interest on Members' Contributions**

The Board of Trustees annually determines the amount of interest paid on Members' accumulated deposits, taking into consideration the average yield of the 10-year U.S. Treasury note during the 12-month period ending on October 31st and recommendations of the System's actuary. Retirement interest is accrued on the last day of the calendar year based on the amount that each Member had in the System on the first day of the calendar year. The money must remain on deposit for the entire calendar year in order to accrue interest.

### **Prohibition on COAERS Loans and Withdrawals**

Plan provisions do not allow Active Members to make a partial withdrawal of deposits or to receive loans from their retirement funds.

# **HISTORY OF BENEFIT CHANGES**

### January 1, 1941

City Council established the City of Austin Employees' Retirement System.

Original City Ordinance provided a maximum annuity of \$100 per month at age 65.

Contributions to retirement system set at 4.0%.

No survivor options, no early retirement eligibility, no vesting, no disability benefits, and no death benefits.

### 1951

Established two options for survivor benefits:

Option I – 100% Joint and Survivor

Option II – 66 2/3% Joint and Survivor

Established eligibility for early retirement.

Established a provision for vested benefits after 15 years of Creditable Service.

Established disability retirement benefits.

Increased contribution rate to 5.0%.

### **1962**

System changed from a money purchase plan to a formula based plan with a multiplier of 1.125%.

Established additional options for survivor benefits:

Option III – 50% Joint and Survivor

Option IV – 66 2/3% Joint and Last Survivor

### 1967

Multiplier increased from 1.125% to 1.25%. Set Active Member death benefits at \$2,000.

### 1969

Established provisions for cost-of-living adjustment (COLA).

Set Retired Member death benefits at \$2,000.

### 1971

Increased multiplier from 1.25% to 1.5%.

Established a provision for unreduced retirement benefits at age 62 (lowered from age 65) with any number of years of service.

Provided free health insurance benefits, ages 62 - 65.

Increased contribution rate to 6.0%.

### **1972**

Established a provision for vested eligibility after 10 years of Creditable Service.

Established a provision for regular employees working 30 or more hours per week to make retirement contributions.

Established a provision for Members eligible for early retirement benefits to choose Option I to provide survivor benefits.

### **1973**

Increased multiplier from 1.5% to 1.75%.

Established a provision for Final Average Earnings based on highest 60 months of contributing service.

Allowed Members eligible for retirement to select option to provide survivor benefit before actually retiring.

Established disability retirement for line-of-duty disabilities regardless of Creditable Service. Disability retirement available for any disability after 10 years of service. Disability retirement benefits based on age and years of service at time of disability retirement; no penalty based on age.

### December 1977

Elimination of \$2,000 death benefit for Active Members; continued for Retirees.

Established a provision for Active Members' designated beneficiaries to receive contributions and interest plus an equal amount from the System if Member dies prior to retirement eligibility.

### September 1978

Established additional retirement options.

### December 1979

Discontinued medical insurance payment for Retirees who were ages 62 - 65.

### July 1981

Established a provision for contributions to be required after age 62 until retirement. Members older than age 62 have option to make up missed contributions to benefit from higher salary averaging for retirement benefits.

Reduced Final Average Earnings period from 60 to 36 months.

### October 1982

Increased contribution rate to 6.6%, matched by City.

### November 1982

Established retirement benefits for Members age 55 or older with 20 years service.

### **March 1984**

Adopted unisex option factors. The sex of the Member and the beneficiary no longer considered in the determination of any System benefits.

### December 1984

Increased Member contribution rate from 6.6% to 7.0%, matched by the City.

Increased multiplier from 1.75% to 1.85%.

Established a provision for a surviving spouse to select an optional benefit if Active Member dies who was already eligible to retire and had not yet selected a benefit option.

Implemented employer "pick up" of member contributions pursuant to 414(h)(2) of the Internal

Revenue Code. Member contributions after January 1, 1985 not taxed until time when benefits are paid to the Member.

Limited "Prior Service" Purchase – Former Members who forfeited membership service by taking a refund when they left City employment may purchase their prior Creditable Service. Current Members allowed six months to reinstate former credit by repaying withdrawn deposits plus interest. Only former Members who had been reemployed by the City before December 20, 1984 are eligible.

Established that the 36 months of salary used to calculate monthly benefits need not be consecutive. Highest 36 months of salary during last 10 years of Creditable Service would be averaged to determine Final Average Earnings.

### **March 1985**

Granted a special one-time benefit increase based on year of retirement.

### October 1985

Increased multiplier from 1.85% to 2.0%.

### February 1986

Change in composition of Board of Trustees; replaced Council Member position with Retired Member Trustee to be appointed by the City Council.

### May 1987

Established that Members laid-off during the period from September 30, 1986 through October 1, 1989, and who were eligible for retirement would receive an unreduced current service annuity.

### October 1987

Reduced Member and City contribution rates to the System temporarily from 7.0% to 6.2% of basic compensation for the period from October 1, 1987 to September 30, 1988.

### **March 1988**

Established survivor benefit options for Disability Retirees effective March 13, 1988.

### August 1988

Established vesting eligibility at five years of Creditable Service.

Extension of "Prior Service Purchases" – Former Members who forfeited membership service by taking a refund of their retirement contributions when they left City employment, who have returned to City employment, may purchase and reinstate their prior Creditable Service.

For purposes of calculating benefits and determining eligibility, three years were added to both age and service for all Members retiring between September 1, 1988 and December 31, 1988.

### September 1988

Restored Member and employer contribution rates to 7.0% from 6.2% of basic earnings effective September 30, 1988.

### December 1989

Amended ordinance for Retiree Member Trustee position of the Board to be elected by Retired Members to a four-year term, instead of appointment by the City Council.

### January 1990

Granted a special one-time benefit increase ranging from 0.5% to 15% based on date benefit commenced.

### February 1990

Established unreduced retirement benefits for Members at any age with 30 years Creditable Service.

Increased multiplier from 2.0% to 2.1%.

### October 1990

Adopted limits on income of Social Security disability benefits for System Disability Retirees.

### **August 1991**

Established System governance by Article 6243n of Texas State Law effective August 26, 1991. All changes to the System made by the Texas State Legislature.

Became a member of Proportionate Retirement Program with five other statewide retirement systems. Membership service may be combined with other participating systems for meeting service requirements for retirement eligibility.

### July 1993

Increased multiplier from 2.1% to 2.2%, with commensurate increase for members retired before December 1, 1989.

Established a provision for unreduced retirement benefits for Members at any age with 25 years of service.

Allowed purchases for up to 24 months of former active duty U.S. military service.

### October 1995

Increased multiplier from 2.2% to 2.3%, with commensurate increase for previous Retirees.

Established that new City of Austin employees hired after October 1, 1995 become Members of COAERS at date of employment. Current employees as of October 1, 1995 are given retirement service credit for up to one six-month probationary period at time of retirement.

Change in composition of Board of Trustees; Director of Finance Designee replaced with additional Retired Member Trustee to be elected by Retired Members.

Increased death benefit for Retirees from \$2,000 to \$10,000.

### October 1997

Increased multiplier from 2.3% to 2.6%, with commensurate increase for previous Retirees.

Established a provision for unreduced retirement benefits for Members at age 55 with 20 years service.

Increased purchases of former active duty U.S. military service from 24 to 48 months.

Allowed new purchase option of Creditable Service for non-contributory time including time while on workers' compensation, leaves of absence, part-time and temporary service. Allowed for the City of Austin to purchase service credit for Members in order to qualify an employee for unreduced retirement benefit at age 55.

### October 1999

Increased multiplier from 2.6% to 2.7%, with commensurate increase for previous Retirees.

Increased Member contribution rate from 7.0% to 8.0% following vote by Active Members.

Established a provision for unreduced retirement benefits for Members at any age with 23 years of service.

Set new limits on Retirees returning to work for the City.

Added "pop-up" benefit for Retirees choosing Options I, II, or III (Joint and Survivor Annuities) to increase Retiree benefits if the survivor beneficiary predeceased the Retiree on, or after, October 1, 1999.

Granted Board authority to authorize certain benefit improvements subject to statutory guidelines.

Gave Board the ability to grant an additional payment to Members receiving monthly annuity payments in the form of an additional lump-sum benefit payment. The additional payment would be a percentage of the current monthly payment with a maximum percentage of 100%.

Established a provision for disability retirement benefits for off-the-job injury/illness after five years Creditable Service (previously 10 years).

Removed limitations on employer purchases of Creditable Service for a Member.

### January 2000

Established Restoration of Retirement Income Plan to restore retirement income otherwise limited by Section 415 of the Internal Revenue Code.

### April 2000

Increased multiplier from 2.7% to 2.98%, with commensurate increase for previous Retirees.

Increased employer contribution rate from 7.0% to 8.0%, matching Member contribution rate.

### July 2000

Extended "pop-up" benefit to Retirees who selected the actuarial equivalent of Life Annuity option with underlying options of I, II, or III.

### January 2002

Increased multiplier from 2.98% to 3.0%, with commensurate increase for previous Retirees.

Established a provision for purchases of Permissive Time to Active/Inactive Vested Members, based on EGTRRA federal law with a minimum purchase of one month and a maximum of 60 months (five years) or the number of months needed to reach first eligibility for retirement, whichever is less.

Amended Proportionate Retirement Program provided by Texas Government Code 803 to allow former members of participating proportionate systems to reestablish Creditable Service previously forfeited in that system without returning to membership in that system.

### **April 2002**

Established Sick Leave Conversion benefit. Allows Members to convert sick leave balances to Creditable Service at time of retirement with purchase paid by Member and City of Austin.

Established Backward DROP (Deferred Retirement Option Program) benefit up to five years for Members working beyond retirement eligibility.

### January 2003

Extended "pop-up" benefit to any Joint and Survivor option other than Joint and Last Survivor.

Amended Permissive Time resolution removing provision which restricted Members from purchasing Permissive Time in excess of the amount needed to reach first eligibility for retirement.

### May 2005

City Council adopted a Supplemental Funding Plan providing additional City contributions in Resolution No. 20050512-045. The Plan is structured to increase City contributions to achieve a 30-year amortization period as follows: 1% in fiscal year 2007, 2% in fiscal year 2008, 3% in fiscal year 2009, and 4% in fiscal year 2010 and thereafter, if necessary. If during any calendar year, COAERS earns greater than a 12% time weighted rate of return net of fees, the increase is delayed one budget cycle. Any future benefit enhancements or cost of living adjustments require a recommendation from the City Manager and approval by the City Council. In addition, if the CPI index exceeds 3.0% in any calendar year, an actuarial study is to be performed to determine the additional subsidy needed if a cost of living adjustment were to be provided.

### October 2006

City Council adopted a budget including a Supplement Funding Plan contribution subsidy of 1% for fiscal year 2007.

### September 2007

Established a limited proportionate service arrangement exclusively for those individuals who have membership in COAERS and a retirement system within the Travis County Healthcare District (District) organization. This arrangement, effective with employees transitioning into the District effective March 1, 2009, is similar to the general proportionate program except that it applies only between these two retirement systems.

### October 2007

Scheduled increase in City Supplemental Funding Plan contribution subsidy postponed due to time weighted rates of investment returns (net of fees) exceeding 12%.

### October 2008

City Council adopted a budget including a Supplement Funding Plan contribution subsidy of 2% for fiscal year 2009.

### March 2009

City of Austin Police Retirement System joins the Proportional Retirement Program.

### October 2009

City Council adopts a budget increasing Supplemental Funding Plan City contributions from 2% to 4% for fiscal year 2010.

### September 2010

City Council approves an Amended Supplemental Funding Plan establishing the City's total employer contribution to the System as follows:

- 14% of compensation effective October 1, 2010 for fiscal year 2010-11;
- 16% of compensation effective October 1, 2011 for fiscal year 2011-12; and
- 18% of compensation effective October 1, 2012 for fiscal year 2012-13, and each fiscal year thereafter.

The City's total employer contribution levels remain in effect until the Amended Supplemental Funding Plan is amended or repealed.

The Amended Supplemental Funding Plan also requires any future benefit enhancements or cost of living adjustments otherwise permitted under the System's governing documents to be recommended by the City Manager and approved by the City Council. Finally, the Amended Supplemental Funding Plan stated that it was the City and the System's intention to seek legislative amendments to state law to improve the overall financial condition of the System by establishing reasonable but different benefit levels for employees of the City who became members of the System on or after January 1, 2012.

### March 2011

The Board, through policy, increased the waiting period for certain retirees returning to work from 60 to 90 days.

### June 2011

Article 6243n was amended establishing a new benefit tier for employees hired on and after January 1, 2012. The following provisions apply to those employees:

• Normal retirement eligibility at age 65 with 5 years of service credit; or at age 62 with 30 years of service credit;

- Early reduced retirement eligibility at age 55 with 10 years of service credit;
- An annuity formula multiplier of 2.5%;
- The purchase of nonqualified permissive service (supplementary service credit) for annuity calculations only and not for eligibility purposes;

Unrelated to the new benefit tier, Article 6243n was amended to revise the rules for retirees returning to work. The revised rules require the Board to suspend the retirement allowance of a retired member who resumes employment with an employer in a position that is not required to participate in another retirement system maintained by an employer, and who is not a regular fulltime employee of an employer, if the member works for, or is compensated by, an employer for more than 1,508 hours in any rolling 12-month period after the member resumes employment with the employer.

### November 2014

The Board implemented a Funding Policy which established certain actuarial methods for funding and created long-term funding goals to ensure that COAERS is well funded into the future and to specify under what conditions future benefit enhancements would be considered.





**KPMG LLP** Suite 1900 111 Congress Avenue Austin, TX 78701-4091

## **Independent Auditors' Report**

The Board of Trustees The City of Austin Employees' Retirement System

### **Report on the Financial Statements**

We have audited the accompanying statements of fiduciary net position of the City of Austin Employees' Retirement System (COAERS), as of December 31, 2015 and 2014, and the related statements of changes in fiduciary net position for the years then ended and the related notes to the financial statements, which collectively comprise COAERS' basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; 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.

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

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

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the City of Austin Employees' Retirement System as of December 31, 2015 and 2014, and the changes in fiduciary net position for the years then ended in accordance with U.S. generally accepted accounting principles.

KPMG LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss entity.





#### **Other Matters**

#### Required Supplementary Information

U.S. generally accepted accounting principles require that the Management's Discussion and Analysis, the Schedule of Changes in Net Pension Liability and Related Ratios, and the Schedule of Investment Returns on pages 29–32 and 53–54 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's response 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.

#### Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise COAERS' basic financial statements. The Introductory Section on pages 1–26, Other Supplementary Information – Investment, General & Administrative, and Consultant Expenses on page 55, the Investment Section on pages 57–66, the Actuarial Section on pages 67–112, and the Statistical Section on pages 113–124 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Other Supplementary Information – Investment, General & Administrative, and Consultant Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such statements directly to the underlying accounting and other records used to prepare the basic financial statements directly to the underlying accounting and other records used to prepare the basic financial statements directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, Other Supplementary Information – Investment, General & Administrative, and Consultant Expenses are fairly stated in all material respects in relation to the basic financial statements as whole.

The Introductory and Investment and Statistical Sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

KPMG LIP

Austin, Texas June 8, 2016 COAERS 2015 Comprehensive Annual Financial Report

## CITY OF AUSTIN EMPLOYEES' RETIREMENT SYSTEM

Management's Discussion and Analysis (unaudited)

December 31, 2015 and 2014

This section of the City of Austin Employees' Retirement System's (COAERS, or, the System) financial report presents our discussion and analysis of the System's financial performance during calendar years 2015 and 2014. We encourage readers to consider the information presented here in conjunction with our financial statements that follow.

### **Financial Highlights**

- Net position held in trust by the System decreased by \$65.0 million, or -2.9%, in 2015, and increased by \$79.2 million, or 3.7%, in 2014. All changes primarily correlate with investment returns.
- Contributions increased by \$10.7 million, or 7.5%, in 2015, and by \$9.8 million, or 7.3%, in 2014. The 2015 increase was due to a \$4.0 million increase in the City's supplemental funding, an increase of \$6.3 million in employee and City contributions based on payroll, and an increase of \$0.4 million in employee creditable service purchases. The 2014 increase was due to a \$3.7 million increase in the City's supplemental funding, an increase of \$6.0 million in employee and City contributions based on payroll, and an increase of \$0.1 million in employee creditable service purchases.
- The amount of benefits paid to retired members and beneficiaries, and refunded to terminating employees, increased approximately \$7.8 million, or 4.8% during 2015, and by approximately \$10.3 million, or 6.8%, during 2014. This is the result of increases in the number of System retirees and the average annuity payment. Benefit payments exceeded employee and City contributions by \$15.0 million in 2015, and by \$17.9 million in 2014.
- The System's rate of return on investments for the year ended December 31, 2015, was -1.55% gross of fees, and -1.97% net of fees, on a market value basis, which was less than the return of 5.09% gross of fees, and 4.72% net of fees, for the year ended December 31, 2014. The actuarial assumed rate of return is 7.50%.

### **Overview of the Financial Statements**

This discussion and analysis is intended to assist the reader in a better understanding of the purpose and meaning of each of the key components of COAERS' financial statements, which are comprised of the following:

- Statement of Fiduciary Net Position
- Statement of Changes in Fiduciary Net Position
- Notes to the Financial Statements

Collectively, this information presents the net position held in trust for pension benefits as of the end of each year, and summarizes the changes in net position held in trust for pension benefits for the year. The information available in each of these components is briefly summarized below:

• Financial Statements

The *Statement of Fiduciary Net Position* presents the System's assets and liabilities and the resulting net position, which is held in trust for pension benefits. This statement reflects a year-end comparison of the Plan's investments, at fair value, along with cash and short-term investments, receivables and other assets and liabilities, to the previous year.

(Continued)



Management's Discussion and Analysis (unaudited)

December 31, 2015 and 2014

The *Statement of Changes in Fiduciary Net Position* provides a view of current year additions to and deductions from the plan.

These two statements report the System's net fiduciary position held in trust for pension benefits (net position restricted for pensions) – the difference between assets and liabilities – as one way to measure the COAERS' financial position. Over time, increases and decreases in net position are one indicator of whether its financial health is improving or deteriorating.

• Notes to the Financial Statements provide important background and detailed information about COAERS, the plan, and the financial statements.

#### **Financial Analysis**

Detenio		, 2010, 2014, 2010	·	
Assets		2015	2014	2013
Cash and receivables	\$	24,550,092	29,427,801	27,598,892
Investments		2,125,761,049	2,195,189,470	2,113,757,425
Invested securities lending collateral		147,167,478	177,128,773	187,326,074
Capital assets, net		2,099,727	1,149,272	948,937
Total assets	_	2,299,578,346	2,402,895,316	2,329,631,328
Liabilities				
Total liabilities		154,754,224	193,075,637	198,986,878
Net position restricted for pensions	\$	2,144,824,122	2,209,819,679	2,130,644,450

Summary of Fiduciary Net Position December 31, 2015, 2014, 2013

**Assets**. As shown in the table above, assets decreased \$103.3 million in 2015, and increased \$73.2 million in 2014, due to the changes in the value of investments.

- During 2015, there was a \$4.9 million decrease in the net amount of cash and receivables; this was attributable to an increase of \$5.9 million in cash held by the System, and a \$10.8 million decrease in receivables which included an \$8.0 million decrease in trades pending settlement. In 2014, there was a \$1.8 million increase in the net amount of cash and receivables at year end; this resulted from a \$0.3 million decrease in the amount of cash, and a \$2.1 million increase in receivables which included a \$2.6 million increase in trades pending settlement.
- In 2015, investments decreased by \$69.4 million, and in 2014, investments increased by \$81.4 million, reflective of the changes in the financial markets.
- The 2015 decrease in invested securities lending collateral of \$30.0 million reflected the net change in the number of securities on loan at year end; in 2014, the decrease was \$10.2 million.
- In both 2015 and 2014, the increase in capital assets reflects the continued development of the new pension administration system.

**Liabilities.** Liabilities decreased \$38.3 million in 2015, and in 2014, decreased \$5.9 million. These fluctuations were primarily due to changes in trades pending settlement and in securities lending collateral. See further discussion in footnote 3.

Management's Discussion and Analysis (unaudited)

December 31, 2015 and 2014

		2015	2014	2013
Additions:				
Contributions	\$	154,702,426	143,959,262	134,161,929
Investment income (depreciation)		(40,810,744)	106,077,708	293,289,672
Investment expenses		6,799,215	6,377,080	6,216,050
Net investment income (depreciation)		(47,609,959)	99,700,628	287,073,622
Other income		2,298	3,471	995
Total additions	_	107,094,765	243,663,361	421,236,546
Deductions:				
Benefit payments and contribution refunds		169,668,990	161,856,915	151,518,750
General and administrative expenses		2,421,332	2,631,217	2,561,407
Total deductions	_	172,090,322	164,488,132	154,080,157
Net increase (decrease) in net position	_	(64,995,557)	79,175,229	267,156,389
Net position restricted for pensions:				
Beginning of year		2,209,819,679	2,130,644,450	1,863,488,061
End of year	\$	2,144,824,122	2,209,819,679	2,130,644,450

### Summary of Changes in Fiduciary Net Position Years Ended December 31, 2015, 2014, and 2013

Additions. Additions needed to fund benefits are accumulated through contributions and returns on invested funds. Contributions from COAERS members and the City of Austin for 2015 and 2014 totaled \$154.7 million and \$144.0 million, respectively. The 2015 contributions represent an increase of \$10.7 million, or approximately 7.5% above 2014; 2014 contributions represent an increase of \$9.8 million, or approximately 7.3% above 2013. The increase in 2015 was due to both an increase in base salaries on which employee and employer contributions are made and the increase of payroll being contributed under the Supplemental Funding Plan. The increase in 2014 was due to both an increase in base salaries on which employee and employer contributions are made and the increased percentage of payroll being contributed under the Supplemental Funding Plan.

In 2015, COAERS had a net investment loss on the market value of its securities of \$47.6 million, a decrease of \$147.3 million from 2014. In 2014, the net investment gain on the market value of securities was \$99.7 million, a decrease of \$187.4 million from 2013. Interest, dividends and net securities lending income generated 2015 income of \$39.4 million, a slight increase from the 2014 income of \$38.3 million. Investment managers' fees are based on their cumulative performance; in 2015, fees increased by \$0.5 million; in 2014, fees increased \$0.2 million compared to 2013. The total rate of return (net of fees) for the System's investment portfolio in 2015 was -1.97%; in 2014 it was 4.72%.

**Deductions.** The expenses paid by COAERS include benefit payments, refunds of member contributions, and administrative expenses.

Management's Discussion and Analysis (unaudited)

December 31, 2015 and 2014

Benefits paid in 2015 were \$165.6 million, an increase of \$7.9 million from payments made in 2014, which is consistent with an increase in the number of retirees to 5,679 in 2015. Refunds to terminating employees decreased by \$0.1 million. Administrative expenses in 2015 were \$2.4 million, with a decrease of \$0.2 million, or 8.0% over 2014.

Benefits paid in 2014 were \$157.7 million, an increase of \$10.9 million from payments made in 2013, which is consistent with the 2014 increase in the number of retirees to 5396, from 5,120 in 2013. Refunds to terminating employees decreased by \$0.6 million. Administrative expenses in 2014 were \$2.6 million, an increase of 2.7% from those of 2013.

**Overall Analysis.** Overall, as of December 31, 2015, net position decreased by \$65.0 million, or 2.9%, from the prior year; over the five-year period ending December 31, 2015, net position increased by 25.31%.

#### **Request for Information**

This financial report is designed to provide a general overview of the finances of the City of Austin Employees' 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 Chief Financial Officer, City of Austin Employees' Retirement System, 418 E. Highland Mall Blvd, Austin, Texas 78752.

(Continued)

Statement of Fiduciary Net Position

December 31, 2015

	Retirement Plan	Restoration Plan	Total
Assets			
Cash and cash equivalents (note 3) \$	15,603,891	20,000	15,623,891
Receivables			
Interest and dividends receivable	4,891,797	-	4,891,797
Trades pending settlement	1,780,279	-	1,780,279
Employer contributions receivable	1,563,160	_	1,563,160
Employee contributions receivable	690,965	-	690,965
Total receivables	8,926,201		8,926,201
Investments, at fair value (note 3):			
Domestic fixed income	445,288,505	-	445,288,505
Real estate commingled fund	190,104,785	-	190,104,785
U.S. denominated equities	917,039,246	-	917,039,246
International equities	366,774,762	-	366,774,762
Alternative investments	174,046,277	-	174,046,277
Short-term investment funds	32,507,474	_	32,507,474
Total investments	2,125,761,049		2,125,761,049
Invested securities lending collateral (note 3)	147,167,478	-	147,167,478
Capital assets, net (note 6)	2,099,727	-	2,099,727
Total assets	2,299,558,346	20,000	2,299,578,346
Liabilities			
Payables			
Accrued expenses	1,366,492	-	1,366,492
Trades pending settlement	4,380,628	-	4,380,628
Securities lending transactions (note 3)	147,167,478	-	147,167,478
Refunds and death benefits payable	1,839,626	_	1,839,626
Total liabilities	154,754,224		154,754,224
Net position restricted for pensions \$	2,144,804,122	20,000	2,144,824,122

#### Statement of Fiduciary Net Position

December 31, 2014

	_	Retirement Plan	Restoration Plan	Total
Assets				
Cash and cash equivalents (note 3)	\$	9,724,027	20,000	9,744,027
Receivables				
Interest and dividends receivable		4,515,752	-	4,515,752
Trades pending settlement		9,747,100	-	9,747,100
Employer contributions receivable		3,753,824	-	3,753,824
Employee contributions receivable	_	1,667,098	-	1,667,098
Total receivables	_	19,683,774	-	19,683,774
Investments, at fair value (note 3):				
Domestic fixed income		467,862,632	-	467,862,632
Real estate commingled fund		167,102,368	-	167,102,368
U.S. denominated equities		988,415,316	-	988,415,316
International equities		382,095,151	-	382,095,151
Alternative investments		157,531,105	-	157,531,105
Short-term investment funds	_	32,182,898	-	32,182,898
Total investments	_	2,195,189,470		2,195,189,470
Invested securities lending collateral (note 3)	_	177,128,773		177,128,773
Capital assets, net (note 6)	_	1,149,272	-	1,149,272
Total assets	_	2,402,875,316	20,000	2,402,895,316
Liabilities				
Payables				
Accrued expenses		1,724,073	-	1,724,073
Trades pending settlement		12,518,866	-	12,518,866
Securities lending transactions (note 3)		177,128,773	-	177,128,773
Refunds and death benefits payable	-	1,703,925		1,703,925
Total liabilities	_	193,075,637		193,075,637
Net position restricted for pensions	\$	2,209,799,679	20,000	2,209,819,679

#### Statement of Changes in Fiduciary Net Position

Year ended December 31, 2015

		Retirement Plan	Restoration Plan	Total
Additions:				
Contributions: Employer contributions (note 5) Employee contributions (note 5)	\$	100,484,694 54,065,793	151,939	100,636,633 54,065,793
		154,550,487	151,939	154,702,426
Investment income: Net decrease in fair value of investments Interest Dividends Less investment expense other than from securities lending	_	(80,513,971) 10,996,045 27,841,730 (6,539,755)	- - - -	(80,513,971) 10,996,045 27,841,730 (6,539,755)
Net loss from investing, other than from securities lending		(48,215,951)		(48,215,951)
Securities lending activity: Securities lending income Less: Securities lending expense	_	865,452 (259,460)		865,452 (259,460)
Net income from securities lending		605,992		605,992
Net investment depreciation		(47,609,959)		(47,609,959)
Other income		2,298		2,298
Total additions		106,942,826	151,939	107,094,765
Deductions: Retirement annuities Contributions refunded to terminating employees DROP disbursements Retiree lump-sum annuity Death benefits		160,067,502 4,052,435 2,639,850 891,739 1,865,525	151,939 - - - -	160,219,441 4,052,435 2,639,850 891,739 1,865,525
Total benefit payments, including refunds of member contributions		169,517,051	151,939	169,668,990
General and administrative expenses		2,421,332		2,421,332
Total deductions		171,938,383	151,939	172,090,322
Net decrease in net position		(64,995,557)	-	(64,995,557)
Net position restricted for pensions:				
Beginning of year		2,209,799,679	20,000	2,209,819,679
End of year	\$	2,144,804,122	20,000	2,144,824,122

Statement of Changes in Fiduciary Net Position

Year ended December 31, 2014

	_	Retirement Plan	Restoration Plan	Total
Additions:				
Contributions: Employer contributions (note 5) Employee contributions (note 5)	\$	93,331,482 50,489,091		93,470,171 50,489,091
	_	143,820,573	138,689	143,959,262
Investment income: Net increase in fair value of investments Interest Dividends Less investment expense other than from securities lending		67,472,997 12,035,176 25,437,822 (6,079,324)		67,472,997 12,035,176 25,437,822 (6,079,324)
Net income from investing, other than from securities lending		98,866,671		98,866,671
Securities lending activity: Securities lending income Less: Securities lending expense	_	1,131,713 (297,756)	-	1,131,713 (297,756)
Net income from securities lending		833,957	-	833,957
Net investment appreciation		99,700,628	-	99,700,628
Other income		3,471	_	3,471
Total additions		243,524,672	138,689	243,663,361
Deductions: Retirement annuities Contributions refunded to terminating employees DROP disbursements Retiree lump-sum annuity Death benefits	_	150,196,015 4,154,419 4,213,792 825,088 2,328,912	138,689 - - - -	150,334,704 4,154,419 4,213,792 825,088 2,328,912
Total benefit payments, including refunds of member contributions		161,718,226	138,689	161,856,915
General and administrative expenses		2,631,217	-	2,631,217
Total deductions	_	164,349,443	138,689	164,488,132
Net increase in net position	_	79,175,229	-	79,175,229
Net position restricted for pensions:				
Beginning of year		2,130,624,450	20,000	2,130,644,450
End of year	\$	2,209,799,679	20,000	2,209,819,679

Notes to Financial Statements

December 31, 2015 and 2014

## (1) Plan Description

*Plan administration.* The City of Austin Employees' Retirement System (COAERS, or, the System) administers the City of Austin Employees' Retirement (the Plan), a single-employer defined benefit pension plan that provides pensions for eligible employees of the City of Austin.

The System was created under Article 6243n, Vernon's Texas Civil Statutes (the Pension Statute), as amended.

The Pension Statute grants the authority to establish and amend the benefit terms to the Texas State Legislature.

Management of the Plan is vested in the eleven-member COAERS Board of Trustees, which is composed of:

- 4 active members elected by the active membership
- 2 retired members elected by the retired membership
- 2 City Council Appointed Citizen Members
- 1 Board Appointed Citizen Member
- 1 City Manager of the City of Austin or Designee
- 1 City Council Member

*Plan membership.* Participating employees include all regular, full time employees who work at least 30 hours per week, except for civil service firefighters and civil service police officers. At December 31, 2015, 2014, and 2013, membership consisted of the following:

015	2014	2013
,679	5,396	5,120
,389	2,303	2,818
,063	9,028	8,592
,131	16,727	16,530
	5,679 2,389 2,063	3,679         5,396           2,389         2,303           9,063         9,028

*Benefits provided.* The System provides service retirement, death, disability, and withdrawal benefits. Benefits vest with five years of creditable service.

Membership in the System is comprised of two benefit tiers: Group A and Group B.

Group A members continue under the plan originated in 1941. Participants may retire at age 62, at age 55 with 20 years of service, or at any age with 23 years of service. Prior to October 1, 1999, the monthly benefit was equal to 2.6% of the highest 36-month average annual salary of the last ten years multiplied by years and months of service. Effective October 1, 1999, the monthly benefit multiplier was increased to 2.7%. Effective April 1, 2000, the monthly benefit multiplier was increased to 2.98%. Effective January 1, 2002, the monthly benefit multiplier was increased to 3.0%. Effective January 1, 2001, the System approved a 3.5% ad hoc retiree increase and a 2.5% increase effective January 1, 2002.

Group B members are employees who were hired on and after January 1, 2012, with the following provisions:

- Normal retirement eligibility at age 65 with 5 years of service credit; or at age 62 with 30 years of service credit;
- Early reduced retirement eligibility at age 55 with 10 years of service credit;
- An annuity formula multiplier of 2.5%;
- The purchase of nonqualified permissive service (supplementary service credit) for annuity calculations only, not for eligibility purposes.

## **Financial Section**

Notes to Financial Statements

December 31, 2015 and 2014

The following apply to both Group A and Group B:

- Effective in 2002, a Member may elect to retroactively participate in the System's Backward DROP (Deferred Retirement Option Program). This program benefits retiring employees by allowing a lumpsum payment in lieu of additional creditable service time after reaching retirement eligibility. The Member would receive a lump-sum payment equal to 90% of the sum of the monthly annuities the participant would have received if the member had retired at the DROP entry date. While the nomenclature used in the Pension Statute resembles that of an arrangement requiring additional disclosures under GASB 67, the COAERS Backward Drop benefit is technically different.
- The lump-sum death benefit payable upon the death of a retiree is \$10,000.
- There is no guaranteed cost of living increase.

*Contributions.* Prior to October 1, 1999, active member contributions to the Plan were 7%. Effective October 1, 1999, active member contributions increased to 8%. Currently, all Participants are required to contribute 8% of their base compensation to the Plan. The City of Austin (the City) also contributes 8% of base compensation. The benefit and contribution provisions of this plan are governed by state law. Amendments may be made by the Legislature of the State of Texas. Should the Plan fully terminate at some future time, the retirement allowance of a member would be determined by reference to the member's average final compensation as if the member had attained normal retirement age on that date.

Pursuant to the 2005 COAERS Supplemental Funding Plan and beginning in October 2006, the City contributed an additional 4% subsidy for their 2010 fiscal year ended September 30, 2010. An Amended Supplemental Funding Plan (ASFP), adopted by the City Council in October 2010, incrementally increased the supplemental contribution to the Plan from 6% of base compensation to 10% of base compensation effective October 1, 2012 for fiscal year 2012-13, and each fiscal year thereafter.

Under the terms of the Plan, the System's employees obtain membership in the Plan on the same basis as City employees. Accordingly, the System contributes 8% of base employee compensation to the Plan, plus a 10% subsidy, as described above, for its fourteen current employees; System employees also contribute 8% of their base compensation to the Plan. Since there is only one Plan, all actuarial calculations are provided on an aggregate basis. The System's annual pension cost for its employees and related contributions made for the past three years are:

	Annual pension cost	Contributions made
2015	\$ 215,235	215,235
2014	213,231	213,231
2013	206,117	206,117

The System participates in the Proportionate Retirement Program through which a member of the System may meet requirements for service retirement eligibility by combining COAERS membership service with service credit from the following participating entities: City of Austin Police Retirement System, The El Paso City Employees' Pension Fund and Firemen and Policemen's Pension Fund, Employees' Retirement System of Texas, Judicial Retirement System of Texas I & II, Texas Municipal Retirement System, Texas County and District Retirement System, Teacher Retirement System of Texas, or any other Texas retirement systems covering municipal employees who have qualified plans and have elected to participate in the Proportionate Retirement Program. A limited proportionate service arrangement was established in 2007 between COAERS and individuals who have membership in a retirement system within the Travis County Healthcare District.

COAERS 2015 Comprehensive Annual Financial Report

#### CITY OF AUSTIN EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

December 31, 2015 and 2014

#### **Restoration Plan**

On November 23, 1999, the Board adopted a resolution to establish a "Restoration of Retirement Income Plan for Certain Participants in the City of Austin Employees' Retirement System" (Restoration Plan).

This Restoration Plan is effective as of January 1, 2000, and is intended to be a "qualified governmental excess benefit arrangement" within the meaning of Section 415(m) of the Internal Revenue Code, and shall be construed, interpreted and administered in accordance with such provision. The Restoration Plan shall be administered as an unfunded plan which is not intended to meet the qualification requirements of Section 401 of the Internal Revenue Code. Eligible members are those who are members in the Plan whose pension or pension-related benefits under the Plan are limited due to the provision of Section 415 of the Internal Revenue Code.

All benefits payable under this Restoration Plan shall be paid by the City of Austin Employees' Retirement System from contributions provided by the employer and not from the Fund or any other trust unless such trust is maintained solely for the purpose of providing benefits from this Restoration Plan. No contribution receivable is due for the years ended December 31, 2015 and 2014, for this Restoration Plan. Assets remaining in this plan as of December 31, 2015 and 2014, were \$20,000.

The Restoration Plan's annual pension cost and related contributions for the past three years are:

	2015	2014	2013
Annual pension cost	\$ 151,939	138,689	156,063
Contributions made	151,939	138,689	156,063

At December 31, 2015, 2014, and 2013, membership in the Restoration Plan included the following:

	2015	2014	2013
Retirees and beneficiaries currently receiving benefits	12	11	11
Terminated members entitled to but not yet receiving benefits	-	-	-
Current employees	-		
Total	12	11	11

#### **Other Information**

The System is required by the Pension Statute to maintain two separate funds in its internal accounting records. The first fund, defined in the statute as "Fund 1", shall be maintained to account for all accumulated deposits (contributions and interest) of Members who have not withdrawn from the System. The second fund, defined as "Fund 2", shall be maintained to account for all other net assets of the System less the amount held in "Fund 3"; this third fund is maintained to account for accumulated contributions by the employer for the Internal Revenue Code Section 415 Restoration Plan as adopted by Board Resolution on November 23, 1999. At December 31, 2015, the balances of Fund 1, Fund 2, and Fund 3 were \$471,178,600, \$1,673,625,522, and \$20,000, respectively. At December 31, 2014, the balances of Fund 1, Fund 2, and Fund 3 were \$453,397,848, \$1,756,401,831, and \$20,000, respectively.

Notes to Financial Statements

December 31, 2015 and 2014

### (2) Summary of Significant Accounting Policies and System Asset Matters

The System is not included in any other governmental "reporting entity" as defined by the Governmental Accounting Standards Board (GASB). The System has no component units and is not a component unit of any other entity.

### (a) Basis of Accounting

The System's financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Contributions are recognized when due pursuant to formal commitments, as well as statutory or contractual requirements; accordingly, contributions are recognized as revenues in the period in which the employer reports compensation for their employees. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

GASB Statement No. 67, *Financial Reporting for Pension Plans*, was issued June 2012 and is effective for fiscal years beginning after June 15, 2013. This statement amends GASB Statement No. 25 and GASB Statement No. 50, as they relate to pension plans administered through trusts that meet certain criteria. This statement establishes standards for financial reporting and amends note disclosure and required supplemental information requirements for defined benefit pension plans administered through qualified trusts. The requirements of this statement were implemented in 2014.

### (b) Cash and Cash Equivalents

Cash and cash equivalents include demand deposit accounts and money market checking accounts. As of December 31, 2015 and 2014, the book balances of the demand deposit accounts totaled \$15,623,591 and \$9,743,727, respectively.

#### (c) Method Used to Value Investments

Plan investments are reported at fair value. Fair value is the amount at which an investment could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. Refer to Note 4(c) for more detail regarding the System's policy on accounting for investments.

#### (d) Contributions Receivable

The employee and City contributions for the years ended December 31, 2015 and 2014 that were not deposited with the System by year-end and are shown as contributions receivable.

#### (e) Capital Assets

Capital assets are recorded at cost. The System capitalizes all computers and electronic equipment purchased as well as any other assets greater than \$1,000. Depreciation is computed using the straight-line method over the assets' estimated useful lives of:

Furniture and fixtures	3-12 years
Building	40 years

#### (f) System Expenses

Substantially all System administrative costs are the responsibility of the System. The administrative costs are funded through the investment income.

#### (g) Use of Estimates

The preparation of financial statements in conformity with United States Generally Accepted Accounting Principles (GAAP) 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 revenues and expenses during the reporting period. Actual results could differ from those estimates.

Notes to Financial Statements

December 31, 2015 and 2014

#### (3) Deposit and Investment Risk Disclosure

Deposit and investment resources are exposed to risks that have the potential to result in losses that could impact delivery of System services. The Board has adopted a Statement of Investment Policies and Objectives (Investment Policy) to set forth the factors involved in the management of investment assets for the System. This policy is included in every investment management agreement. The document is designed to mitigate risk by requiring that investing be done in compliance with policy guidelines by qualifying the broker and financial institution with whom the System will transact, and by establishing sufficient collateralization, portfolio diversification, and limiting maturity. The System's Board, in accordance with the power and authority conferred under the Texas Statutes, has employed The Northern Trust Company as custodian of the assets of the System. The following summary of total investments by type as of December 31, 2015 and 2014, presents the System's investment mixes.

		2015	2014
Summary of investments by type:	, i		
Domestic fixed income:			
Commercial mortgage-backed securities	\$	13,255,653	11,827,119
Corporate bonds		142,739,670	138,731,284
Government agencies		7,176,171	6,766,690
Government bonds		31,969,895	53,654,404
Government mortgage-backed securities		48,974,089	56,850,286
Other fixed income:			
NT Collective Aggregate Bond Index Fund - Non-Lending		201,173,027	200,032,849
		445,288,505	467,862,632
Real estate commingled fund		190,104,785	167,102,368
US denominated equities		917,039,246	988,415,316
International equities		366,774,762	382,095,151
Alternative investments		174,046,277	157,531,105
Short-term investment funds		32,507,474	32,182,898
Investments at fair value on balance sheet		2,125,761,049	2,195,189,470
Receivables and pending trades, net		2,291,448	1,743,986
Total investments (per investment consultant)	\$	2,128,052,497	2,196,933,456
	1		

#### 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. While the Board has no formal policy specific to custodial credit risk, operating bank account deposits in excess of Federal Deposit Insurance Corporation (FDIC) insured amounts are backed by US government, treasury and agency securities, repurchase agreements, and pledged securities held as collateral.

As of December 31, 2015 and 2014, the System's operating bank balances of \$15,623,591 and \$9,743,727, respectively, were not exposed to custodial credit risk.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial risk if the securities are uninsured, are not registered in the name of the System, and are held by the counterparty, its trust or agent, but not in the System's name. 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. At December 31, 2015 and 2014, the System was not exposed to credit risk through security lending.

Borrowers of System securities through the Northern Trust Securities Lending Program are required to fully collateralize their obligation to return such securities when the loans are called. Proceeds from loaned securities are invested in a short-term fixed income portfolio, Northern Trust Collective SL Core STIF Fund.

**Financial Section** 

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Notes to Financial Statements

December 31, 2015 and 2014

#### 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. The System is authorized to invest in the following as of December 31, 2015:

#### (a) Fixed Income Investments

Fixed income investment may be no less than twenty-one and one-half percent (21.5%) and no more than twenty-seven and one-half percent (27.5%) of the investment portfolio measured at fair value. No single issuer's securities shall represent more than six percent (6%) of the market value of any manager's portfolio. This restriction applies to asset-backed securities, non-agency mortgage-backed securities (including commercial mortgage-backed securities) and taxable municipal securities. The total holdings of an agency-issued mortgage-backed security of the same coupon and maturity series of the same agency shall not exceed twenty percent (20%) of the portfolio (agency-issued mortgage-backed securities include Government National Mortgage Association (GNMA) securities).

Section 144(a) securities shall be limited to no more than five percent (5%) of the portfolio at market value of any manager's portfolio. This does not apply to obligations of the US government (Treasury bonds, bills and notes).

The assets of the System are to be invested only in the following fixed income securities:

- 1. United States Treasury notes, bonds, and bills;
- 2. United States government agency obligations;
- 3. Investment grade corporate bonds (however, the average rating of all corporate bonds held in any investment portfolio, taken together, may not fall below AA);
- 4. Preferred stocks;
- 5. Investment grade foreign bonds payable in United States dollars;
- 6. Cash equivalents in the form of commercial paper rated as A1 by Moody's or P1 by Standard & Poor's;
- 7. Other corporate obligations with an equivalent or higher rating than items 1 through 6 above; or,
- 8. Obligations backed by United States government and investment grade municipal funds.

#### (b) Domestic Equity Investments

Domestic equity investments should total no less than twenty-five percent (25%), and no more than thirty-five (35%), of the total investment portfolio measured at fair value. No single company's securities shall represent more than six percent (6%) of the market value of any manager's portfolio.

#### (c) International Equity Investments

International equity investments should total no less than 25% and no more than 35% of total value of the System's investments at fair value. No single company's securities shall represent more than six percent (6%) of the market value of any manager's portfolio.

#### (d) Real Estate Open-End Commingled Fund

While not exposed to concentration of credit risk, total investments in real estate open-end commingled funds may be up to 8.25% of the total investment portfolio measured at fair value, if, when combined with fixed income, the aggregate does not exceed 35.0% of the portfolio.

Notes to Financial Statements

December 31, 2015 and 2014

#### (e) Other Investment Information

As of December 31, 2015 and 2014, the following was the composition of the System's portfolio:

	2015	2014
Alternative investments	8.19%	7.18%
Commercial mortgage-backed securities	0.62%	0.54%
Corporate bonds	6.72%	6.32%
Government agencies	0.34%	0.31%
Government bonds	1.51%	2.44%
Government mortgage-backed securities	2.30%	2.59%
Other fixed income:		
NT Collective Aggregate Bond Index Fund - Non-Lending	9.46%	9.11%
Real estate commingled fund	8.94%	7.61%
U.S. denominated equities *	43.14%	45.03%
International equities *	17.25%	17.40%
Short-term investment funds	1.53%	1.47%
	100.00%	100.00%

\* The asset allocation policy noted in footnote 3 (a to d) is based on the type of portfolio managers. The composition percentages in this table reflect the classification of investments for GASB 40 presentation purposes. Certain amounts have been reclassed from international to U.S. equities as they are denominated in U.S. dollars.

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The System does not have a formal policy regarding interest rate risk, i.e., maturities of investments by type, but its Investment Policy requires fixed income managers to disclose their credit exposure and portfolio duration in their quarterly reports. The System monitors credit exposure using segmented time distribution. Mortgage obligations are sensitive to changes in prepayments, which may arise from a change in interest rates.

As of December 31, 2015, the System had the following investments and maturities:

Investment type	Fair value	Less than 1 year	1 to 6 years	6 to 10 years	10+ years
Commercial mortgage-backed					
securities \$	13,255,653	-	-	-	13,255,653
Corporate bonds	142,739,670	1,470,280	96,365,143	27,844,546	17,059,701
Government agencies	7,176,171	-	6,684,270	-	491,901
Government bonds	31,969,895	-	14,233,266	5,668,068	12,068,561
Government mortgage-backed					
securities	48,974,089	-	791,764	618,696	47,563,629
Other fixed income:					
NT Collective Aggr Bond Index Fund	201,173,027	1,146,686	90,326,689	80,589,915	29,109,737
\$	445,288,505	2,616,966	208,401,132	114,721,225	119,549,182

As of December 31, 2014 the System had the following investments and maturities:

			Less than 1			
Investment type		Fair value	year	1 to 6 years	6 to 10 years	10+ years
Commercial mortgage-backed						
securities	\$	11,827,119	-	-	-	11,827,119
Corporate bonds		138,731,284	4,418,412	91,223,282	25,420,373	17,669,217
Government agencies		6,766,690	-	6,766,690	-	-
Government bonds		53,654,404	-	42,797,357	2,627,896	8,229,151
Government mortgage-backed						
securities		56,850,286	-	2,171,941	394,109	54,284,236
Other fixed income:						
NT Collective Aggr Bond Index Fund	_	200,032,849		105,937,397	64,770,636	29,324,816
	\$	467,862,632	4,418,412	248,896,667	93,213,014	121,334,539

(Continued)

Notes to Financial Statements

December 31, 2015 and 2014

### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the System. To control credit risk, credit quality guidelines are incorporated into the Investment Policy, as follows:

- Fixed income securities shall not be rated lower than investment grade (Baa3 by Moody's or BBB- by Standard & Poor's or Fitch) by either rating agency unless specific written permission is granted by the Board to a manager. The average rating of all corporate bonds held in any investment portfolio, taken together, may not fall below AA.
- Split-rated securities in which the middle rating is below investment grade shall not comprise more than five percent (5%) of the market value of any manager's portfolio unless specific authority has been granted.
- Unless specific authority has been granted by the Board, in the event of a bond's downgrade below investment grade by Moody's, Standard & Poor's, and Fitch, the Board shall be notified in writing and the manager shall include a recommended course of action in response to the event in the way it deems most prudent for the Fund in the long term.
- The issues of individual entities rated AAA to Aa3 (Moody's) or AA- (Standard & Poor's, and Fitch) may have a seven percent (7%) position at market value.
- Issues of individual entities rated below Aa3 (Moody's) or AA- (Standard & Poor's and Fitch) may have a three percent (3%) position at market value.
- The ratings issue does not apply to direct obligations of the US government and its agencies, but the securities issued by any one issuer shall not otherwise, in the aggregate, exceed the foregoing limitations.
- If specific managers are given international flexibility, the same quality restrictions apply.
- Money market instruments shall have a minimum quality rating comparable to an A3 (Moody's) or A- (Standard & Poor's and Fitch) bond rating and commercial paper shall be rated A1/P1 unless held in a diversified short-term commingled fund.

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2015, are as follows:

Standard & Poor's Quality Rating	 Total fair value	Commercial mortgage- backed	Corporate bonds	US govt & agencies	Municipal Bonds	NT Collective Aggregate Bond Index Fund
AAA	\$ 202,396,550	5,235,107	1,029,285	48,974,089	-	147,158,069
AA	29,160,569	5,999,113	11,172,492	5,008,260	-	6,980,704
А	77,301,961	2,021,433	48,520,360	491,901	4,360,524	21,907,743
BBB	108,799,937	-	82,017,533	1,676,010	-	25,106,394
BB	20,117	-	-	-	-	20,117
Total credit risk						
of debt securities	\$ 417,679,134	13,255,653	142,739,670	56,150,260	4,360,524	201,173,027
US govt & agencies*	29,609,371					
	\$ 447,288,505					

Notes to Financial Statements

December 31, 2015 and 2014

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at December 31, 2014, are as follows:

Standard & Poor's Quality Rating	Total fair value	Commercial mortgage- backed		orporate bonds	US gov agenci		Municipal Bonds	NT Collective Aggregate Bond Index Fund
AAA	\$ 206,288,825	3,354,549	)	-	56,850,	286	-	146,083,990
AA	29,438,595	4,570,843	1	0,605,738	5,027,	,890	1,852,912	7,381,212
А	86,094,872	3,901,727	5	5,541,304		-	2,627,896	24,023,945
BBB	96,646,328	-	- 7:	2,363,826	1,738,	800	-	22,543,702
BB	220,416	-		220,416		-	-	-
Total credit risk								
of debt securities	\$ 418,689,036	11,827,119	138	3,731,284	63,616,	976	4,480,808	200,032,849
US govt & agencies*	49,173,596							
	\$ 467,862,632							

\* Obligations of the US government or obligations explicitly guaranteed by the US government are not considered to have credit risk and do not have purchase limitations.

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit.

The System's currency risk exposure, or exchange rate risk, primarily resides within the System's international equity investment holdings. The System's Investment Policy is to allow its external managers to decide what action to take regarding their respective portfolio's foreign currency exposures using currency forward contracts.

The System's exposure to foreign currency risk includes the following international securities (all equity) as of December 31, 2015 and December 31, 2014.

Currency		2015 Fair value	2014 Fair value
British Pound Sterling	\$	104,100,729	118,427,580
EURO Currency		73,275,485	74,578,694
Japanese Yen		57,770,062	54,834,879
Swiss Franc		34,778,103	29,750,277
Hong Kong Dollar		30,103,082	32,622,349
Singapore Dollar		20,205,787	22,981,767
Australian Dollar		15,854,309	17,044,011
Canadian Dollar		11,249,424	12,652,414
Danish Krone		6,273,636	6,346,181
Swedish Krona		4,956,013	3,965,571
New Zealand Dollar		3,211,060	2,589,681
South African Rand		2,302,364	2,997,151
Norwegian Krone		2,219,214	2,438,250
Malaysian Ringgit		475,494	449,905
Hungarian Forint	_	-	416,441
Total securities subject to foreign currency risk	\$	366,774,762	382,095,151

Notes to Financial Statements

December 31, 2015 and 2014

#### Foreign Currency Options

The System periodically invests in foreign currency options in order to hedge the value of a portion of its investments denominated in foreign currencies. Financial options are an agreement giving one party the right, but not the obligation, to buy or sell a specific amount of an asset for a specified price on or before a specified expiration date. The foreign currency options held by the System entitle the System to convert the value of certain foreign equities into US dollars at an agreed rate. At December 31, 2015 and 2014, the System held no foreign currency options.

#### Securities Lending

The System is authorized under its Investment Policy to participate in securities lending programs through Northern Trust Investments Inc. under which, for an agreed-upon fee, System-owned investments are loaned to a borrowing financial institution. Under this agreement, when the loan closes, the borrowed securities are returned to the System and the collateral is returned to the borrower. The lending agreement requires securities on loan to be collateralized by cash, US government securities, or irrevocable letters of credit with a total market value of at least 102% of the loaned System securities. For global securities pledged as collateral, total market value shall not be less than 105%. The System cannot sell or pledge the non-cash collateral of \$13,001,680 unless a default of the securities lending agreement has occurred.

Cash collateral can be invested in a short-term investment pool or in term loans. The term loans can be terminated on demand by either lender or borrower. At December 31, 2015 and 2014, System investments in possession of a borrowing financial institution were collateralized by cash and irrevocable letters of credit. The cash collateral was invested in a short-term investment pool with an average weighted maturity approximating the maturity of the security loans. There were no significant violations of legal or contractual provisions, and no borrower or lending agent default for fiscal years 2015 and 2014.

As of December 31, 2015 and 2014, the System owned the following securities that were in possession of a borrowing financial institution:

ving infancial institut	 20	15	201	4
	Market value of loaned securities	Cash collateral received	Market value of loaned securities	Cash collateral received
US agencies US corporate fixed US equities Global stocks US government fixed	\$ 0 3,790,316 107,692,311 8,160,699 23,315,204	0 3,896,783 110,773,477 8,655,822 23,841,396	1,007,672 9,010,683 145,302,332 8,341,102 8,402,269	1,030,307 9,259,736 149,443,026 8,836,229 8,559,475
Total	\$ 142,958,530	147,167,478	172,064,058	177,128,773

Cash collateral received from borrowers of securities is invested in accordance with COAERS' securities lending agreement. As of December 31, 2015 and 2014, cash collateral was invested in the following categories:

Investment Category	_	2015	2014
Cash and other liquid assets	\$	25,401,107	73,738,708
Asset-backed securities		18,189,900	20,352,096
Commercial paper		25,769,025	15,853,025
Repurchase agreements		7,726,293	3,206,031
Certificates of deposit		26,460,713	18,208,838
US govt & agencies		1,677,709	1,753,575
Domestic corporate fixed-income securities		41,942,731	44,016,500
Total cash collateral received	\$_	147,167,478	177,128,773

#### (Continued)

Notes to Financial Statements

December 31, 2015 and 2014

#### (4) **Pension Plan Investments**

#### (a) Investment Policy

The Board has the authority to establish the investment policy and the asset allocation policy. The general investment objective is to obtain a reasonable long term total return consistent with the degree of risk assumed, while emphasizing the preservation of capital.

#### (b) Asset Allocation

The System's asset allocation policy as of December 31, 2015 and 2014, as adopted by the Board of Trustees, is as follows:

	2015	2014
US equities	30.00%	31.01%
International equities	30.00%	31.55%
Fixed income	24.50%	24.50%
Real estate	5.50%	5.44%
Alternative investments -		
Risk Parity	5.00%	5.00%
Master Limited Partnerships	4.00%	1.50%
Commodities	1.00%	1.00%
	100.00%	100.00%

During 2015, the Board restructured the US Equity portfolio by consolidating the small cap holdings of two investment managers into the Northern Trust Investments – Russell 2000 Index Fund. Concurrently, large cap holdings were reallocated to fund implementation of a factor investing strategy with the addition of Northern Trust Investments – Scientific Beta MBMS EW Account; the alternative investments allocation in master limited partnerships managed by Harvest Fund Advisors LLC was increased. Aside from the incorporation of these new mandates, there were no significant modifications to the investment policy.

#### (c) Method Used to Value Investments

- The System's equity and fixed income investments are reported at fair value based on independent pricing services.
- Short-term cash investments are reported at cost, which approximates fair value.
- International securities are reported at fair value in U.S. dollars converted at current exchange rates.
- Investments that do not have an established market are valued based on the net asset value provided by independent audits.
- The System's real estate commingled fund is an open-end investment fund that includes properties that are valued monthly; all properties within this fund are appraised externally by nationally recognized appraisers.
- The System's exposure to international emerging markets comes through three funds: one managed by City of London Investment Management, another by Dimensional Fund Advisors, and a third by Northern Trust Investments Inc. (the Trustee) Collective Emerging Markets Index Fund. These investments are commingled arrangements where assets are pooled with other institutional investors and then unitized with the value of the units determined by the fair value of the entire pool.
- The System also invests in the Northern Trust Investments Inc. (the Trustee) Collective Aggregate Bond Index Fund that may hold units of participation in any fixed income collective fund established and maintained by the Trustee or any of its affiliates. The Trustee values its securities at fair value; any securities for which no current market quotation is readily available are valued at fair value as determined in good faith by the Trustee.
- Investment income is recognized in the period earned and purchases and sales of investments are recorded on a trade-date basis. Net appreciation/depreciation in Plan investments includes both realized and unrealized gains and losses. (Continued)

Notes to Financial Statements

December 31, 2015 and 2014

#### (d) Rate of Return

For the year ended December 31, 2015, the annual money-weighted rate of return on System investments net of pension plan investment expense was -1.90%, a decline from 5.02% at December 31, 2014. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

#### (e) Concentrations

If the pension plan held investments (other than those issued or explicitly guaranteed by the U.S. government, commingled funds, and other pooled investments) in any one organization representing 5% or more of the pension plan's fiduciary net position, the pension plan should disclose this information. At December 31, 2015 and 2014, there are no holdings that exceeded this disclosure trigger.

## (5) Contributions and Funding Policy

As of December 31, 2015 and 2014, the System's funding policy, as guided by state law, requires contributions equal to 8% of base compensation by the participants and by the City.

While the contribution requirements 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 participants and the City provides an adequate financing arrangement. Using the entry age actuarial cost method, the System's normal cost is determined as a percentage of payrolls. The excess of the total contribution rate over the normal cost rate is used to amortize the System's unfunded actuarial accrued liability, if any exists, and the number of years needed to amortize the System's unfunded actuarial accrued liability is determined using a level percentage of payroll method.

The funding objective of the System is for contribution rates to be sufficient to cover the normal cost of the Plan and to amortize any unfunded actuarial accrued liabilities over a period not to exceed 30 years.

In 2005, the City of Austin City Council approved a Supplemental Funding Plan (SFP) relating to the System. The basic elements of this plan provided for an initial 1% contribution from the City beginning in October 2006, and increasing 1% each year until reaching a cap of 4%. This additional funding would continue as long as necessary and in an amount necessary, up to 4%, to sustain a 30-year funding period. While compliance with the SFP continued into 2010, the negative impact of 2008 capital markets on the Plan rendered the effect of SFP, the contributions of which had reached the 4% maximum, inadequate to achieve the System's funding goal.

An Amended Supplemental Funding Plan, adopted by the City Council in October 2010, increased the total employer contribution to the System to 14% of base compensation effective October 1, 2010. The Amended Supplemental Funding Plan also increases future employer contributions as follows: 16% of base compensation effective October 1, 2011 for fiscal year 2011-12; and 18% of base compensation effective October 1, 2012 for fiscal year 2012-13, and each fiscal year thereafter.

Notes to Financial Statements

December 31, 2015 and 2014

### (6) Capital Assets

The following summarizes the capital asset account balances as of December 31, 2015 and December 31, 2014, and changes to the accounts during the years then ended:

	Balance December 31, 2013	Net Change	Balance December 31, 2014	Net Change	Balance December 31, 2015
Capital assets not being depreciated:					
Land	\$ 249,964	-	249,964	-	249,964
Capital assets being depreciated:					
Building	1,198,925	-	1,198,925	-	1,198,925
Furniture and fixtures	399,060	(99,023)	300,037	3,406	303,443
Work in Progress	-	228,917	228,917	992,727	1,221,644
Total capital assets being depreciated	1,597,985	129,894	1,727,879	996,133	2,724,012
Less accumulated depreciation:					
Building	529,869	29,973	559,842	29,973	589,815
Furniture and fixtures	369,143	(100,414)	268,729	15,705	284,434
Total accumulated depreciation	899,012	(70,441)	828,571	45,678	874,249
Total capital assets, net of accumulated					
depreciation	\$ 948,937	200,335	1,149,272	950,455	2,099,727

## (7) Federal Income Taxes

The Plan is a Public Employee Retirement System and is exempt from federal income taxes. A favorable determination letter from the Internal Revenue Service was issued in February 2014.

### (8) Risk Management

The System is exposed to various risks of loss related to torts, errors and omission, violation of civil rights, theft of, damage to, and destruction of assets, and natural disaster. These risks are covered by insurance purchased by the System. This coverage is in compliance with the workers' compensation laws of the State of Texas with no accident or aggregate deductibles. Property physical damage is insured to replacement value with a \$5,000 deductible and a building limit of \$2,086,000 with contents coverage of \$704,000. Automobile limits are set at \$1,000,000 per occurrence. Insurance coverage by major category of risk has remained relatively constant as compared to the prior fiscal year. Insurance settlements have not exceeded insurance coverage for any of the past three years. The System obtains Workers Compensation and Employers Liability coverage through Texas Mutual Insurance Company.

The System maintains a pension and welfare fund fiduciary responsibility insurance policy with an aggregate limit of liability of \$20,000,000, and officers and directors liability coverage of \$5,000,000.

Notes to Financial Statements

December 31, 2015 and 2014

## (9) Health Plan for Retired COAERS Employees

#### (a) Plan Description

The City of Austin Employees' Retirement System (COAERS) participates in the healthcare plan administered by the City of Austin (the City). The City provides healthcare insurance for eligible retirees and their dependents through their group health insurance plan covering both active and retired members. The authority to amend and establish benefit provisions to the healthcare plan resides with the City. Any reports regarding the healthcare plan are available from the City.

#### (b) Funding Policy

Benefit provisions are established and amended by the City Council; rates are actuarially determined by a third-party actuary. COAERS, as the employer, has fewer than twenty current and potential plan members. COAERS does not participate in plan design or administration, and is subject to the terms and conditions set by the City. Both COAERS and the four members currently participating in the plan, pay monthly premiums based on the City's assumptions and actuarial data. COAERS contributed the required amounts for fiscal years 2015, 2014, and 2013, which were approximately \$18,400, \$9,700, and \$9,430, respectively. In addition, the Plan members receiving this benefit contributed approximately \$935 per month in 2015, \$300 per month in 2014, and \$290 per month in 2013, for individual coverage; dependent coverage paid by these members was approximately \$1,240 per month in 2015, \$800 in 2014, and \$770 in 2013.

### (10) Net Pension Liability

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets. The components of COAERS' net pension liability at December 31, 2015 and 2014, were as follows:

FY Ending	Total Pension	E.1	· · · · N · / D · · · · ·	Net Pension	Fiduciary Net Position as a % of Total Pension
December 31	Liability	F1d	uciary Net Pension	Liability	Liability
2014 2015	\$ 3,094,055,712 3,391,796,116	\$	2,209,799,679 2,144,804,122	\$ 884,256,033 1,246,991,994	71.42% 63.24%

The Schedule of Net Pension Liability presents multi-year trend information (beginning with FY 2014) to illustrate changes in the plan fiduciary net positions over time, relative to the total pension liability. In addition to the above, this information is presented in the Required Supplementary Information section beginning on page 53.

Notes to Financial Statements

December 31, 2015 and 2014

#### (a) Actuarial Methods and Assumptions Used to Determine Contribution Rates

The total pension liability was determined by an actuarial valuation as of December 31, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Cost Method	Entry Age Normal
Inflation	3.25%
Salary Increases	4.50% to 6.00%
Mortality	Experience-based table of rates that are gender specific. Mortality RP-2000 Mortality Table with White Collar adjustment and multipliers of 110% for males and 120% for females. Generational mortality improvements in accordance with Scale AA are projected from the year 2000.

The actuarial assumptions used in the December 31, 2015 valuation were based on the results of an actuarial experience study recently updated for December 31, 2015, pursuant to an experience study of the five-year period ended December 31, 2011. The Plan does not require regular ad hoc post-employment benefits, and none have been made since 2002.

#### (b) Single Discount Rate

The Single Discount Rate of 7.50% used to measure the total pension liability was changed from the previous 7.75% rate established in 2002. This Single Discount Rate was based on the expected rate of return on pension plan investments of 7.50%. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made in accordance with the Supplemental Funding Plan. Based on these 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.

Asset Class	2015
US equity	3.82%
International equity	6.41%
Fixed income	1.75%
Real estate	4.75%
Risk parity	5.00%
Master limited partnerships	8.75%
Commodities	5.00%
Cash	0.50%

## **Financial Section**

Notes to Financial Statements

December 31, 2015 and 2014

#### (c) Sensitivity of the Net Pension Liability to Changes in the Discount Rate

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.50%, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

# Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

Current Single Discount						
1% Decrease		Rate Assumption		1% Increase		
6.50%		7.50%		8.50%		
\$ 1,654,882,675	\$	1,246,991,994	\$	906,948,563		

## (11) Commitments and Contingencies

In 2014, the System entered into a long-term agreement with Levi, Ray, & Shoup for the development and installation of a new pension administration system. Contract work began in 2014 and is scheduled to continue through 2018 at an approximate cost of \$5 million.

(Continued)

#### COAERS 2015 Comprehensive Annual Financial Report

#### **CITY OF AUSTIN EMPLOYEES' RETIREMENT SYSTEM**

**Required Supplementary Information** 

December 31, 2015

## Schedule of Changes in the Net Pension Liability and Related Ratios

Fiscal year ending December 31,	2015	5 2014	
Total Pension Liability			
Service Cost	\$ 93,506,590	\$ 89,235,267	
Interest on the Total Pension Liability	236,843,912	222,709,911	
Benefit Changes	-	-	
Difference between Expected and Actual Experience	13,413,789	33,911,010	
Assumption Changes	123,493,165	-	
Benefit Payments	(165,464,616)	(157,563,807)	
Refunds	(4,052,436)	(4,154,419)	
Net Change in Total Pension Liability	297,740,404	184,137,962	
Total Pension Liability - Beginning	3,094,055,712	2,909,917,750	
Total Pension Liability - Ending (a)	\$3,391,796,116	\$ 3,094,055,712	
Plan Fiduciary Net Position			
Employer Contributions	\$ 100,484,694	\$ 93,331,482	
Employee Contributions	54,065,793	50,489,091	
Pension Plan Net Investment Income	(47,607,661)	99,704,100	
Benefit Payments	(165,464,616)	(157,563,807)	
Refunds	(4,052,436)	(4,154,419)	
Pension Plan Administrative Expense	(2,421,331)	(2,631,218)	
Other			
Net Change in Plan Fiduciary Net Position	(64,995,557)	79,175,229	
Plan Fiduciary Net Position - Beginning	2,209,799,679	2,130,624,450	
Plan Fiduciary Net Position - Ending (b)	\$2,144,804,122	\$ 2,209,799,679	
Net Pension Liability - Ending (a) - (b)	1,246,991,994	884,256,033	
Plan Fiduciary Net Position as a Percentage			
of Total Pension Liability	63.24 %	71.42 %	
Covered Employee Payroll	\$ 558,248,300	\$ 518,508,233	
Net Pension Liability as a Percentage			
of Covered Employee Payroll	223.38 %	170.54 %	

#### Notes to Schedule:

1) No significant factors noted to disclose.

2) Single Discount Rate of 7.5% used to calculate total pension liability for 2015, a reduction from 7.75% used for 2014.

3) Schedule will be built out to 10 years.

4) Covered payroll is imputed from the actual employer contributions during the calendar year. See accompanying Independent Auditor's Report.

Required Supplementary Information

December 31, 2015

## **Schedule of Investment Returns**

	Annual
Year	Return *
2015	-1.90%
2014	5.02%

\* Annual money-weighted rate of return, net of investment expenses

Note: Schedule will be built out to 10 years.

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# **OTHER SUPPLEMENTARY INFORMATION**

Investment Expenses			Consultant Expenses			2014	
Custodial & Transaction Fees		2015	2014			2015	2014
The Northern Trust Company		<b>\$</b> 166,270	151,540	Actuary Gabriel Roeder Smith & Co	÷	60.027	CC 745
Investment transaction fees		64,727	55,080	Gabriel Roeder Smith & Co	\$	60,927	66,745
		230,997	206,620				
Investment Manager Fees				Attorney		E 010	1 212
1607 Capital Partners LLC		911,692	991,099	Strasburger & Price LLP Knight & Partners		5,812	1,312
Agincourt Capital Management LLC		356,233	556,200			44,651	60,170
AQR Capital Management LLC		419,653	526,804	McKamie Krueger LLP		-	5,911
Aronson + Johnson + Ortiz LP		346,395	217,178			50,463	67,393
Columbus Circle Investors		266,347	346,220				
CoreCommodity Management LLC		60,222	39,269	Auditing			
Harvest Fund Advisors LLC		314,953	196,353	KPMG LLP		62,472	45,600
INTECH Investment Management LL	C	876,204	300,282	Padgett Stratemann Co LLP		19,500	27,065
Mondrian Investment Partners LTD		803,359	812,534			81,972	72,665
Northern Trust Investments LTD		200,571	194,106				
Sprucegrove Investment Mgmt LTD		579,329	597,977	Banking Services			
Walter Scott & Partners LTD		594,886	594,054	JPMorgan Chase		-	144
Westfield Capital Management Co L	Р	359,021	265,107	National Payment Corporation		1,079	1,200
Prior-year accrual-to-actual variance		(107)	3,101			1,079	1,344
	-	6,088,758					
Investment Consulting Fees		0,000,000	0,010,201	Computer Services			
Summit Strategies Group		220,000	220,000	Austin Web Design		1,200	1,080
Legal Fees				Levi Ray & Shoup		80,934	74,940
Jackson Walker LLP		-	12,420	mindSHIFT Technologies		33,136	34,913
Total		\$ 6,539,755	6,079,324	Other		11,745 <b>127,015</b>	7,635 <b>118,568</b>
Note: These expenses are presented on an	accrua	l basis; list does no	ot reflect fees				
directly charged against commingled funds				Other Consultants			
General & Adminis	trat	ive Exper	ises	Robert A. Dennison MD		-	4,095
		2015	2014	Jonathan Decherd MD		5,477	2,047
Actuary	\$	60,927	66,745	Harold Skaggs MD		1,023	-
Attorney		50,463	67,393	LRWL Inc		-	165,060
Auditing		81,972	72,665	Other		-	600
Banking services		1,079	1,344			6,500	171,802
Computer services		127,015	118,568				
Consultants		6,500	171,802	Total	\$	327,956	498,517
Administrative		1,836,559	1,856,514				
Depreciation		47,864	49,612				
Insurance		154,448	153,292				
Member communications		26,263	33,161				
Continuing education & site visits		28,242	40,121	See accompanying	indep	oendent audito	ors' report.
Total	\$ _	2,421,332	2,631,217				

**Financial Section** 

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January 1, 2016

The Board of Retirement City of Austin Employees' Retirement System 418 E. Highland Mall Boulevard Austin, TX 78752-3720

The COAERS investment portfolio experienced strong returns in 2012 (+13.8%) and 2013 (+16.0%). In 2014, the COAERS' investment portfolio saw a systematic slow-down of returns across asset classes and the fund returned 5.1%, gross of fees, for the fiscal year ending December 31, 2014. 2015 offered a continuation of that theme, losing 1.6%, gross of fees, for the fiscal year ending December 31. The fund decreased from a beginning value of \$2.2 billion to its current value of \$2.1 billion as a result of outflows of \$33 million and an investment loss of \$66 million. The S&P 500 and MSCI EAFE Indices posted returns of 1.4% and -0.8%, respectively, as a strong dollar aided US equities but was a headwind for international corporations.

As detailed earlier, the COAERS' investment portfolio lost 1.6% for the year ending December 31, 2015. The fund outperformed the Policy Index, but underperformed the Passive Index and ranked in the 87th percentile as part of the Investment Metrics sample. Specifically, the investment portfolio was ahead of its Policy Index return by 0.4% but underperformed the Passive Index return by 0.4%. The underperformance versus the Passive Index is largely attributable to COAERS' exposure to MLPs and commodities. The underperformance versus peers is driven by asset allocation; COAERS has a higher international equity weighting versus peers, which saw negative returns in 2015. Domestic equity was positive with a 0.2% return in 2015 and real estate continued its strong run, returning 14.7%. Longer-term results are strong and positive on a relative basis. For the 10-year period, the fund returned 5.9% annualized, exceeding the index by 0.9% and ranking above median versus the peer sample. All rates of return were calculated using a time-weighted rate of return and are reported gross of fees.

Starting in 2014 and into 2015, the Board explored factor investing as part of the US Equity asset class review. During the 4th quarter, the Board began implementing the approved allocation to Scientific Beta. The new investment makes up 15.6% of the portfolio as of December 31.

The results for 2015 fell short of the actuarial assumption for long-term investment results and are a reminder of the current lower expected return environment. Major central banking policy actions continued to be a primary economic focus and theme for the year ending December 31, 2015, as economic growth prospects throughout the world continued to diverge. The Federal Open Market Committee (FOMC) decided in December the economic outlook was encouraging enough to raise short-term interest rates from zero to 25 basis points. Oil prices fell 31% during the year. Price action in 2015 brings oil's total drop since June of 2014 to 61%. The global supply-demand imbalance has been exacerbated by increased production by OPEC countries in an attempt to push higher-cost producers (e.g., US shale) out of the market. Looking forward, global uncertainties continue with changing monetary policy around the globe, inflation uncertainty, and fluctuating commodity prices.

The long-term results of the fund are positive and the hard work of the Board and staff over the past few years has benefited the System and its members. We believe the fund is in a good position to capture consistent, quality results in the years to come. All of us at Summit Strategies Group have enjoyed our COAERS' experience and look forward to continued service and success. Thank you.

Sincerely,

Eric J. Ralph, CFA Managing Director

**Investment Section** 

## **OUTLINE OF INVESTMENT POLICIES**

The City of Austin Employees' Retirement System Board of Trustees, which has the fiduciary duty of overseeing the pension fund investments, has adopted a Statement of Investment Policy. This summary includes the major elements of this annually reviewed document. A copy, in its entirety, is available upon request.

## **INVESTMENT GOALS**

The purpose of the Fund is to accumulate the financial reserves necessary to provide for the retirement and pensioning of eligible members of the City of Austin Employees' Retirement System and their beneficiaries. Given this purpose, the System's liquidity requirement, and the source and predictability of contributions, the Board elects to assume normal pension fund risk in pursuing an investment program. A primary objective of the investment management of the Fund is to emphasize consistency of growth in a manner that protects the Fund from excessive volatility in market value from year to year.

The Board, with consultation, advice, and assistance from the investment consultant, will use the Fund's asset allocation as the primary tool to achieve this goal. As this is a long-term projection and investments are subject to short-term volatility, the main investment review focus of the Board will be to emphasize total return of the Fund versus its absolute and relative targets, each asset segment's composite performance versus appropriate market benchmarks, and each money manager's performance versus a specified asset class style benchmark and style peer comparison over relevant time periods. Each manager is expected to maintain a consistent philosophy and style, perform well versus others utilizing the same style, add incremental value after costs and provide investment management in compliance with this document and the manager's contract with the System.

## **INVESTMENT PHILOSOPHY**

The Fund is a permanent one.

The benefit obligations of the System must be met on a timely and regular basis.

There is currently no expectation of a need for significant liquidity from the Fund's portfolio.

The Fund shall be considered a total return fund, with appropriate recognition given to both current income and capital appreciation. Taxes shall not be a consideration. As such, market value will be the only relevant basis for investment value.

In the long run, ownership (equity investment) is a prudent investment vehicle for preservation of real values. The purpose of fixed income investments is to protect principal and provide a measure of stability to the portfolio.

Diversification is integral to the Fund's design and, as a result, investments that improve fund diversification will be considered.

As a long-term fund with a commitment to funding the full benefits of the participants, cash flow considerations shall take precedence over the liability stream when considering overall asset allocation of Fund assets.

## **IDENTIFICATION OF DUTIES**

There are several parties acting as fiduciaries regarding the investment program for the Fund. The Statement of Investment Policy sets out specific duties and responsibilities for the investment-related parties as they carry out their specific roles towards achieving the objectives of the Fund.

Listed below are the investment vehicles specifically permitted under the current Statement of Investment Policies and Objectives. They are categorized as equity or fixed income to indicate how they are classified for purposes of the asset-mix guidelines in a subsequent section. Unless given authorization in writing, managers are allowed to invest only in the security types listed below for the asset class for which they have been hired.

Equities	Fixed Income	Real Estate
Common Stocks	Domestic and Yankee Bonds	Open-ended Commingled Funds
Convertible Bonds	Mortgages and Mortgage-Backed Securities	
Preferred Stocks	Asset-Backed Securities	
	Cash-Equivalent Securities	
	Money Market Funds, Bank STIF and STEP Funds	

- 1. The above assets can be held in commingled (mutual) funds as well as privately managed separate accounts. If held in a commingled account or mutual fund, the prospectus or Declaration of Trust takes precedence over the Investment Policy.
- 2. Private placement bonds are not permitted. Section 144(a) fixed income securities are allowable.
- 3. Investments may not be made in any investment that is prohibited by the Internal Revenue Service, the Department of Labor or statutory restriction.
- 4. For purposes of definition, cash equivalent securities are any fixed income investment with less than one year to maturity or reset date.
- 5. The securities representing equity of any one company shall not exceed 6% of the market value of any manager's portfolio. Fixed income securities of any one corporation shall not exceed 6% at market. This restriction also applies to asset-backed securities, non-agency mortgage-backed securities (including commercial mortgage-backed securities) and taxable municipals. The total holdings of an agency-issued mortgage-backed security of the same coupon and maturity series of the same agency shall not exceed 20% of the portfolio (agency-issued mortgage backed securities to include GNMA's). The direct debt of the federal government (treasury bonds, bills and notes) shall not be restricted as a percentage of the portfolio.
- 6. Quantitative investment styles that are index based may deviate from the above position limits provided they are following a pre-established investment process and relative position limitation (i.e. index weight plus 1%) and they will monitor the account and promptly inform COAERS if the diversification restriction noted above in the Policy is exceeded.
- 7. Derivatives are permissible for the purpose of equitizing cash (e.g. an overlay program, reducing cash exposure, or in portfolio transition).
- 8. Equity managers may invest in depository receipts as long as the underlying security is permissible within these guidelines and the investment does not expose the Fund to any greater risk than the risk from holding the underlying security.
- 9. Domestic equity managers are allowed to invest in dollar-denominated, SEC registered stock of foreign domiciled companies traded on the NYSE, AMEX or OTC markets. Concentration restrictions for the above securities are the same as for any other security.
- 10. Investment managers may be hired to manage accounts using primarily closed-end funds. In such accounts, closed-end funds are permissible holdings.
- 11. Risk parity and commodities investment managers are authorized to manage portfolios that gain exposure to asset classes by investing in futures and other derivative instruments.
- 12. Investment Managers may be hired to manage accounts using primarily master limited partnership units. In such accounts, master limited partnership units are permissable holdings.

## TOTAL PENSION FUND INVESTMENT OBJECTIVES

Both relative and absolute results will be considered in the evaluation of the total Fund's performance. The following are the performance expectations for the Fund:

- The Fund's total return after fees should exceed the total return of an index composed of a mix of asset class benchmarks in proportions set out in the Statement of Investment Policy.
- The time period for this objective is on the market cycle or five years, whichever is shorter.

## **ASSET ALLOCATION**

The Trustees believe that the level of risk assumed in the Fund is a function, in large part, of the Fund's asset allocation. The proportion of assets allocated for equity investments is the most important determinant of volatility of future returns. As indicated by long-term historical data, the risk of equity ownership has been rewarded with a higher rate of return.

Based on its determination of the appropriate risk posture for the Fund and its long-term return expectations, the Board and investment consultant have established the following asset mix guidelines for the Fund:

ASSET ALLOCATION						
ASSET CLASS	12/31/15	Minimum	Target	Maximum		
COMMON STOCKS	61.20%	55.00%	60.00%	65.00%		
Domestic Large Cap	27.05%	21.25%	26.25%	30.00%		
Domestic Non-Large Cap	5.47%	2.50%	3.75%	5.00%		
International	28.68%	25.00%	30.00%	35.00%		
FIXED INCOME AND REAL ESTATE	30.10%	25.00%	30.00%	35.00%		
Fixed Income	21.17%	21.50%	24.50%	27.50%		
Real Estate	8.93%	2.75%	5.50%	8.25%		
ALTERNATIVES	8.34%	7.00%	10.00%	13.00%		
CASH	0.36%	0.00%	0.00%	0.00%		

Periodic asset/liability studies provide the basis for changes to the portfolio allocation policy. Guidelines will be amended when a proposed investment strategy is adopted. During times of phased transition to a new allocation, current values may deviate from the established strategic mix. The Board will review its asset allocations at least every four years, or sooner, if a material event in either the liability structure of the plan or the capital markets warrants a sooner look.

Market movements also may cause a portfolio to differ from its strategic mix. Therefore, a range has been set for the actual asset allocation of the System's assets to allow for the fluctuations that are inherent in marketable securities. Rebalancing will take place when such triggering event effects variances beyond their recommended range.

		12/31/2015			
INVESTMENT POLICY	12/31/2015	% OF FUND	ASSET	ASSET ALLOCATION	VARIANCE FROP
REBALANCING GUIDELINES:	VALUE		TARGET %	TARGET AMOUNT	AMOUNT
Common Stocks	\$ 1,302,393,207	61.20%	60.00%	1,276,831,49	25,561,709
Domestic Large Cap Equities	575,664,941	27.05%	26.25%	558,613,781	17,051,160
Domestic Non-Large Cap Equities	116,465,644	5.47%	3.75%	79,801,968	36,663,676
International Equities	610,262,622	28.68%	30.00%	638,415,749	(28,153,127)
Alternative Investments	177,348,485	8.34%	10.00%	212,805,250	(35,456,765)
Subtotal for Rebalancing	648,310,805	30.46%	30.00%	638,415,749	9,895,056
Fixed Income	450,465,723	21.17%	24.50%		(70,907,139)
Real Estate	190,104,795	8.93%	5.50%	117,042,887	73,061,908
Cash	7,740,287	0.36%	0.00%	-	7,740,287
TOTAL	\$ 2,128,052,497	100.00%	100.00%		
ASSET CLASS / MANAGER					
US EQUITIES (Large)	\$ 575,664,941	27.05%	26.25%	558,613,781	17,051,160
INTECH INVESTMENT MANAGEMENT LLC (large cap - core)	124,968,350	5.87%	5.75%	122,363,018	2,605,332
WESTFIELD CAPITAL MGMT COMPANY LP (large cap - growth)	60,393,636	2.84%	2.75%	58,521,444	1,872,192
ARONSON+JOHNSON+ORTIZ LP (large cap - value)	58,385,275	2.74%	2.75%	58,521,444	(136,169)
NTI SCIENTIFIC BETA MBMS EW INDEX ACCOUNT (factor index)	331,917,680	15.60%	15.00%	319,207,875	12,709,805
US EQUITIES (Non-Large)	116,465,644	5.47%	3.75%	79,801,968	36,663,676
NTI RUSSELL 2000 INDEX FUND - LENDING (small index)	116,465,644	5.47%	3.75%	79,801,968	36,663,676
INTERNATIONAL EQUITIES	610,262,622	28.68%	30.00%	638,415,749	(28,153,126)
WALTER SCOTT & PARTNERS LTD (devlp mkt - growth)	124,468,519	5.85%	6.00%	127,683,150	(3,214,631)
SPRUCEGROVE INVESTMENT MGMT LTD (devlp mkt - value)	117,589,213	5.53%	6.00%	127,683,150	(10,093,937)
1607 CAPITAL PARTNERS LLC (non-correlated alpha)	84,383,964	3.97%	3.75%	79,801,968	4,581,996
MONDRIAN INVESTMENT PARTNERS LTD (devlp mkt - small cap)	107,561,156	5.05%	4.25%	90,442,231	17,118,925
CITY OF LONDON INVESTMENT MGMT CO LTD (emerging markets)	57,450,466	2.70%	3.00%	63,841,575	(6,391,109)
NTI EMERG MKTS INDEX FUND - NON-LENDING (emerging markets)	74,334,359	3.49%	4.00%	85,122,100	(10,787,741)
DIMENSIONAL FUND ADVISORS LP (emerging markets)	44,474,945	2.09%	3.00%	63,841,575	(19,366,630)
ALTERNATIVE INVESTMENTS	177,348,485	8.34%	10.00%	212,805,250	(35,456,765)
AQR GRP EL FUND LP	96,302,166	4.53%	5.00%	106,402,625	(10,100,459)
HARVEST FUND ADVISORS LLC (MLP portfolio)	67,374,953	3.17%	4.00%	85,122,100	(17,747,147)
CORECOMMODITY MANAGEMENT LLC (commodities)	13,671,366	0.64%	1.00%	21,280,525	(7,609,159)
DOMESTIC FIXED INCOME	450,465,723	21.17%	24.50%	521,372,862	(70,907,139)
AGINCOURT CAPITAL MANAGEMENT LLC (core)	249,292,606	11.72%	18.40%	391,561,660	(142,269,054)
NTI AGGREGATE BOND INDEX FUND - NON-LENDING (core index)	201,173,117	9.45%	6.10%	129,811,202	71,361,915
REAL ESTATE	190,104,795	8.93%	5.50%	117,042,887	73,061,908
PRINCIPAL GLOBAL INVESTORS LLC	190,104,795	8.93%	5.50%	117,042,887	73,061,908
CASH	7,740,287	0.36%	0.00%	0	7,740,287
CASH	7,740,287	0.36%	0.00%	0	7,740,287
TOTAL	\$ 2,128,052,497	100.00%			
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Reconciliation to statement of Net Position:					

## City of Austin Employees' Retirement System **Asset Allocation**

**ASSET ALLOCATION** 

Investments Total investments (per investment consultant)

Interest and dividends receivable Trades pending settlement (net)

4,891,797 (2,600,349) 2,125,761,049 2,128,052,497

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## SCHEDULE OF INVESTMENT RESULTS

	Balance	Balance	2015 Gross	2015 Mgmt Fees	After-F	ees Return	(%)
	12/31/14	12/31/15	Return (%)	(Cash Basis)	2015	3 Years	<u>(70)</u> 5 Year:
	\$471,189,063	\$450,465,723	0.8 %	\$515,470	0.7 %	1.4 %	3.4 %
Agincourt Capital Mgmt LLC	\$271,156,124	\$249,292,606	0.9 %	\$434,697	0.8 %	1.5 %	3.5 %
Barclays Aggregate			0.5 %		0.5 %	1.4 %	3.2 %
NTI Aggregate Bond Index Fund	\$200,032,939	\$201,173,117	0.6 %	\$80,773	0.5 %	1.4 %	3.2 9
Barclays Aggregate			0.5 %		0.5 %	1.4 %	3.2 9
NTERNATIONAL	\$648,636,891	\$610,262,622	(5.3)%	\$4,145,977	(5.9)%	0.8 %	1.3 '
Walter Scott & Partners LTD	\$123,931,757	\$124,468,519	0.9 %	\$594,858	0.4 %	3.1 %	3.7
MSCI EAFE			(0.4)%		(0.8)%	5.0 %	3.6 9
Sprucegrove Investment Mgmt LTD MSCI EAFE	\$128,269,148	\$117,589,213	(7.9)% (0.4)%	\$584,945	(8.3)% (0.8)%	1.0 % 5.0 %	1.7 ° 3.6 °
Mondrian Investment Partners LTD	¢101000000	¢407 504 450		\$700.004			
Mondrian Investment Partners LTD MSCI World ex US Small Cap	\$104,200,039	\$107,561,156	4.0 % 5.8 %	\$799,891	3.2 % 5.5 %	5.0 % 7.8 %	5.7 4.4
	PRE 466 240	\$94 393 064		\$060 300		6.4 %	4.9
1607 Capital Partners LLC 90% MSCI EAFE/10% Emerging Mkts	\$85,466,349	\$84,383,964	(0.1)% (2.3)%	\$960,399	(1.2)% (2.3)%	0.4 % 3.8 %	2.8
	\$64,549,943	\$57,450,466		\$788,059	(10.8)%	(2.6)%	
City of London Investment Mgmt Co LTD MSCI Emerging Markets	\$04,349,943	\$57,450,400	(9.7)% (14.6)%	\$788,039	(10.8)%	(6.8)%	(3.7) (4.8)
Dimensional Fund Advisors LP	\$54,753,643	\$44,474,945	(18.3)%	\$318,899	(18.8)%	(9.3)%	(7.9)
MSCI Emerging Markets	ψ0 <del>4</del> ,700,040	ψ <del>1</del> 4,474,343	(14.6)%	ψ310,033	(14.9)%	(6.8)%	(4.8)
NTI Emerging Markets Index Fund	\$87,466,012	\$74,334,359	(15.0)%	\$98,926	(15.1)%	· · /	, ,
MSCI Emerging Markets	\$01,400,012	φ14,004,000	(14.6)%	φ00,020	(14.9)%	-	
DOMESTIC EQUITY	\$746,567,775	\$692,130,585	0.2 %	\$2,613,875	(0.2)%	14.4 %	11.5
JS EQUITIES LARGE	\$569,476,236	\$575,664,941	1.4 %	\$1,711,930	1.1 %	15.7 %	12.8
INTECH Investment Management LLC	\$283,436,257	\$124,968,350	3.1 %	\$865,021	2.7 %	16.2 %	13.5
S&P 500			1.4 %		1.4 %	15.1 %	12.6
Westfield Capital Mgmt Co LP	\$143,038,270	\$60,393,636	4.4 %	\$510,439	4.0 %	17.4 %	
Russell 1000 Growth			5.7 %		5.7 %	16.8 %	
Aronson+Johnson+Ortiz LP	\$143,001,709	\$58,385,275	(0.5)%	\$336,470	(0.8)%	14.8 %	12.6
Russell 1000 Value			(3.8)%		(3.8)%	13.1 %	11.3
NTI Scientific Beta MBMS EW Index Account	\$0	\$331,917,680	-	-	-	-	
Russell 3000 Index			-		-	-	
IS EQUITIES NON-LARGE	\$177,091,539	\$116,465,644	(3.8)%	\$901,945	(4.3)%	10.1 %	7.8
NTI Russell 2000 Index Fund	\$0	\$116,465,644	-	-	-	-	
Russell 2000 Index			-		-	-	
AQR Capital Management LLC	\$89,412,165	\$0	-	\$549,209	-	-	
Russell 2000 Value			-		-	-	
Columbus Circle Investors	\$87,679,374	\$0	-	\$352,736	-	-	
Russell 2000 Growth			-		-	-	
RISK PARITY	\$106,328,492	\$96,302,166	(9.1)%	\$401,510	(9.4)%	-	
AQR GRP EL Fund LP	\$106,328,492	\$96,302,166	(9.1)%	\$401,510	(9.4)%	-	
60% MSCI ACWI (Net) / 40% Barclays Global Agg	\$34,687,319	\$67,374,953	- (31.0)%	\$247,753	(2.5)% (31.5)%	-	
Harvest Fund Advisors LLC	\$34,687,319	\$67,374,953	(31.0)%	\$247,753	(31.5)%	-	
Alerian MLP			-		(32.6)%	-	
COMMODITIES	\$18,190,668	\$13,671,366	(24.8)%	\$65,041	(25.1)%	-	
CoreCommodity Management LLC	\$18,190,668	\$13,671,366	(24.8)%	\$65,041	(25.1)%	-	
Bloomberg Commodity Index Total Return REAL ESTATE	\$167 102 378	\$190,104,795	- 14.7 %	\$1,422,910	(24.7)% 13.8 %	- 13.5 %	13.6
Principal Global Investors LLC	<b>\$167,102,378</b> \$167,102,378	\$190,104,795	14.7 %	\$1,422,910	13.8 %	13.5 % 13.5 %	13.6
NCREIF Property	\$101,102,010	Q.00,104,100	13.3 %	ψ·,. <u>-</u> 2,010	13.3 %	12.0 %	12.2
CASH	\$4,230,870	\$7,740,287	0.3 %	\$0	0.3 %	0.8 %	0.6
90 Day T-Bills			0.0 %		0.0 %	0.0 %	0.1
otal Fund	\$2,196,933,456	\$2,128,052,497	(1.5)%	\$9,412,536	(2.0)%	5.8 %	5.8

## Schedule of Investment Results

Calculated using time-weighted rate of return based on market rate of return.

\* Policy Allocation: 22.75% S&P 500, 9.75% Russell 2500, 32.50% MSCI AC World ex US, 30% Barclays Aggregate, 5% NCREIF, 1/10 thru 9/12

22.75% S&P 500, 9.75% Russell 2000, 32.50% MSCI AC World ex US, 30% Barclays Aggregate, 5% NCREIF, 10/12 to 12/12

24.50% S&P 500, 8.00% Russell 2000, 32.50% MSCI AC World ex US, 30% Barclays Aggregate, 5% NCREIF, 01/13 to 03/14

27.00% S&P 500, 8.00% Russell 2000, 31.00% MSCI AC World ex US, 25% Barclays Aggregate, 5% NCREIF, 2.5% Risk Parity, 1.5% Alerian MLP, 03/14 to 05/14

27.00% S&P 500, 8.00% Russell 2000, 31.00% MSCI AC World ex US, 22.5% Barclays Aggregate, 5% NCREIF, 5% Risk Parity, 1.5% Alerian MLP, 05/14 to 08/14

27.00% S&P 500, 8.00% Russell 2000, 31.00% MSCI AC World ex US, 21.5% Barclays Aggregate, 5% NCREIF, 5% Risk Parity, 1.5% Alerian MLP, 1.0% Bloomberg Commodity, 08/14 to 09/14 25.00% S&P 500, 6.00% Russell 2000, 31.00% MSCI AC World ex US, 24.5% Barclays Aggregate, 6% NCREIF, 5% Risk Parity, 1.5% Alerian MLP, 1.0% Bloomberg Commodity, 09/14 to 9/15 30.00% Russell 3000, 30.00% MSCI AC World ex US, 24.5% Barclays Aggregate, 5.5% NCREIF, 5% Risk Parity, 4.0% Alerian MLP, 1.0% Bloomberg Commodity, 9/15 to Present

## LARGEST PORTFOLIO HOLDINGS

## TOP TEN EQUITY HOLDINGS

Shares	Stock	Fair Value	% of Fund
77,030	Novartis AG CHF0.50 (REGD)	\$ 6,679,525	0.31%
61,932	Apple Inc Com	6,518,962	0.31%
78,590	Nestle SA CHF0.10 (REGD)	5,853,031	0.28%
496,000	China Mobile Ltd HKD0.10	5,599,892	0.26%
160,300	Honda Motor Co NPV	5,210,300	0.25%
115,571	Total EUR2.5	5,180,605	0.24%
92,700	Jardine Matheson Hldgs USD0.25	4,517,271	0.21%
91,600	Denso Corp NPV	4,430,182	0.21%
77,773	Microsoft Corp Com	4,314,846	0.20%
144,645	CRH Ord EUR0.32	4,195,314	0.20%
	Top 10 Equity Holdings	\$ 52,499,928	2.47%
	Total COAERS Investment Portfolio 12-31-2015	\$ 2,128,052,497	100.00%

Full listing available upon request.

## TOP TEN BOND HOLDINGS

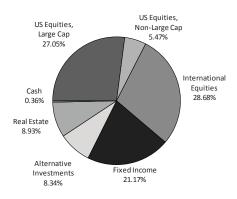
Par	Bond	Fair Value	% of Fund
\$ 11,950,000	US Treasury Notes Dtd 00306 2.625% Due 08-15- 2020 REG	\$ 12,413,529	0.58%
9,430,000	US Treasury Sec 4.5% Due 08-15-2039 REG	12,068,561	0.57%
9,073,508	GNMA II Gtd CTF Multi Issuer Gold Pool #MA0783 3.5% 02-20-2043	9,487,478	0.45%
5,401,909	FNMA Pool #AB2092 4% Due 01-01-2041 BEO	5,744,347	0.27%
5,000,000	Fannie Mae 1.125% Due 4-27-2017	5,008,260	0.23%
4,684,145	Federal Home Loan Mtg Corp Pool #C0-4444 3% 01- 01-2043 BEO	4,687,298	0.22%
3,900,000	Bear Stearns Cos Inc 6.41% Due 10-02-2017	4,200,015	0.20%
4,019,428	Federal Home Loan Mtg Corp Pool #C0-9022 3% 01- 01-2043 BEO	4,022,145	0.19%
3,462,120	FNMA Gtd Mtg Pool #AH2366 3.5% 01-01-2026 BEO	3,632,740	0.17%
3,413,680	Federal Home Loan Mtg Corp Pool #G0-8627 3.5% 02-01-2045 BEO	3,516,862	0.16%
	Top 10 Bond Holdings	\$ 64,781,235	3.04%
	Total COAERS Investment Portfolio 12-31-2015	\$ 2,128,052,497	100.00%

**Investment Section** 

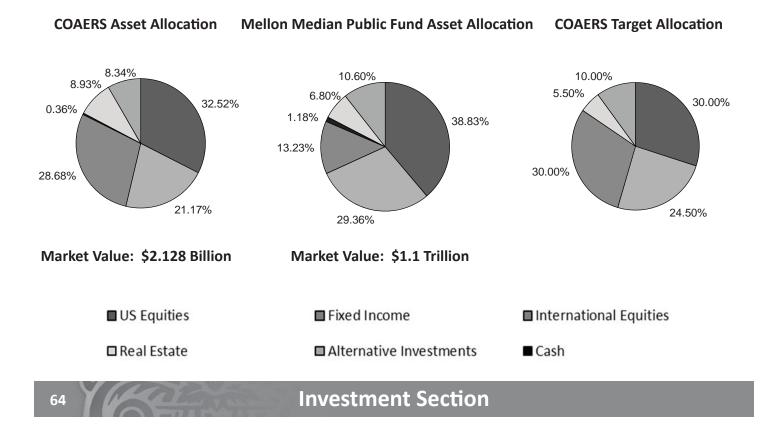
## **INVESTMENT SUMMARY AT FAIR MARKET VALUE**

## **COAERS Investment Portfolio**

		Percentage of
Asset Class	Fair Value	<b>Total Fair Value</b>
US Equities, Large Cap	\$575,664,941	27.05%
US Equities, Non-Large Cap	116,465,644	5.47%
International Equities	610,262,622	28.68%
Fixed Income	450,465,723	21.17%
Alternative Investments	177,348,485	8.34%
Real Estate	190,104,795	8.93%
Cash	7,740,287	0.36%
	\$2,128,052,497	100.00%



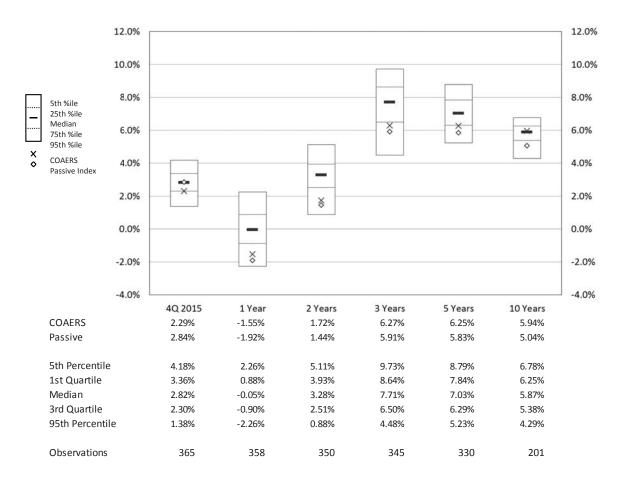
## **ALLOCATION BY SECTOR**



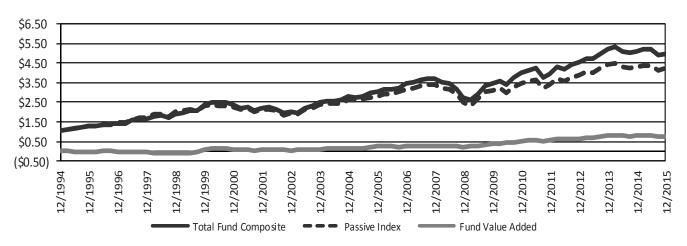
## **BROKER COMMISSIONS OVER \$10,000**

Broker Name	# of Shares Traded		Commission Paid		Cost per Share
Barclays Capital LE	523,644	\$	14,403	\$	0.028
Canaccord Genuity Limited	1,190,756	Ŷ	10,033	Ŷ	0.008
Cowen LLC	397,995		15,920		0.040
Credit Suisse First Boston Corporation	3,012,897		25,695		0.009
Crest Depository Limted	1,651,134		13,777		0.008
Deutsche Bank Securities Inc	3,856,584		23,664		0.006
Guzman And Company	889,512		17,682		0.020
Instinet	1,546,053		30,233		0.020
Instinet Europe Limited	515,825		12,584		0.024
J.P. Morgan Securities LLC 57079	2,781,970		33,736		0.012
J.P. Morgan Securities PLC	1,280,165		15,529		0.012
Jefferies & Company	7,460,709		17,099		0.002
Lynch Jones & Ryan	526,167		21,039		0.040
Merlin Securities LLC	1,094,524		14,418		0.013
Northern Trust Company	17,836,400		178,364		0.010
Piper Jaffray Inc	511,277		20,451		0.040
Rosenblatt Securities LLC 501	531,944		11,099		0.021
SG Cowen And Company	973,760		14,874		0.015
Stifel Nicolaus And Company	2,000,546		21,382		0.011
UBS Warburg LLC	651,018		18,305		0.028
Weeden & Co	629,544		17,373		0.028
150 Minor Brokers	102,778,434		327,873	_	0.003
Total Broker Commissions	152,640,858	\$	875,533	\$	0.006

## TOTAL FUND AND PASSIVE INDEX VS. MELLON PUBLIC FUND UNIVERSE



## TOTAL GROWTH OF \$1.00 VS. PASSIVE INDEX



Note: Passive Index is currently comprised of 32.5% R3000, 32.5% MSCI AC World ex USA, and 35% Barclays Aggregate. Time weighted rates of return.



## COAERS 2015 Comprehensive Annual Financial Report



Gabriel Roeder Smith & Company Consultants & Actuaries 5605 N. MacArthur Blvd. Suite 870 Irving, TX 75038-2631 469.524.0000 phone 469.524.0003 fax www.gabrielroeder.com

June 1, 2016

Mr. Christopher Hanson Executive Director City of Austin Employees' Retirement System 418 E. Highland Mall Blvd. Austin, TX 78752

Dear Mr. Hanson:

## Subject: Actuarial Valuation as of December 31, 2015

We are pleased to present our report on the actuarial valuation of the City of Austin Employees' Retirement System (COAERS or the System). Based upon this actuarial valuation as of December 31, 2015, it is our opinion that these results reasonably reflect the funded status of the System.

As you know, the employee and employer contribution rates are set by statute. It is expected that these contribution rates will remain level as a percentage of payroll. The System's recently adopted funding policy is for the contribution rates to be sufficient to cover the normal cost of the plan and to amortize any unfunded actuarial accrued liabilities over a period not to exceed 25 years.

Currently, the total contribution rate is sufficient to amortize the System's unfunded liabilities in approximately 33 years. Therefore, the Board's funding policy is not currently being met. As of the prior valuation, the total contribution rate was sufficient to amortize the unfunded liabilities in less than 25 years. This significant change is due to both unfavorable investment experience during 2015, as well as an increase in liabilities as a result of the adoption of new actuarial assumptions.

In 2010 the City of Austin adopted the Amended Supplemental Funding Plan (ASFP). The ASFP provides for an additional City contribution rate of up to a maximum of 10.0% above the base 8.0% rate. The City is now contributing an additional 10.0%, or a total rate of 18.0%. The additional contribution rate is intended to stay in place until the ASFP is amended or repealed.

We certify that the information presented herein is accurate and fairly portrays the actuarial position of COAERS as of December 31, 2015. All of the supporting schedules and tables contained in this actuarial valuation report were prepared by Gabriel, Roeder, Smith & Company, including various accounting and statistical tables which should help you compare the results of this plan year with prior years. The information presented in the trend data schedules of this report has been prepared by Gabriel, Roeder, Smith & Company. The information for years 1993 through 2000 was prepared by Watson Wyatt & Company. Information in these schedules prior to 1993 was determined by another actuarial firm.

GRS provided COAERS with the information used in preparing the following trend schedules in the financial section of the CAFR: Notes to the Financial Statements - Schedule of Net Pension



## COAERS 2015 Comprehensive Annual Financial Report

Mr. Christopher Hanson June 1, 2016 Page 2

Liability, and Sensitivity of the Net Pension Liability to Changes in the Discount Rate; Required Supplementary Information - Schedule of Changes in the Net Pension Liability and Related Ratios. GRS provided no additional assistance in the preparation of any other schedules in the financial section of the CAFR.

Actuarial assumptions and methods are set by the Board of Trustees, based upon recommendations made by the plan's actuary. An experience investigation was performed for the five year period ending December 31, 2015. As a result of that study, revised assumptions were adopted by the Board effective with the valuation as of December 31, 2015. This actuarial valuation report is the first to reflect those changes. We believe the assumptions are internally consistent, reasonable, and, where appropriate, based on the actual experience of COAERS.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations are intended to provide information for rational decision making.

Member data for retired, active and inactive participants was supplied as of December 31, 2015, by the COAERS staff. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data. Asset information was also supplied by the COAERS staff.

The last actuarial valuation of COAERS was prepared as of December 31, 2014 by Gabriel, Roeder, Smith & Company. Valuations are prepared annually as of December 31<sup>st</sup>.

The undersigned are independent actuaries and consultants. Mr. Falls is an Enrolled Actuary and a Member of the American Academy of Actuaries and he meets the Qualification Standards of the American Academy of Actuaries. Both Mr. Falls and Mr. Ward are experienced in performing valuations for large public retirement systems.

We would like to thank you and your staff for your assistance in providing all necessary information to complete this valuation. Your courteous help is very much appreciated. We look forward to discussing this actuarial valuation report with you at your convenience. Please do not hesitate to let us know if you have any questions or need additional information.

Sincerely,

ewis Ward

Lewis Ward Consultant zz1 J:\3004\2016\Val\Val2016.docx

ye Lalls

R. Ryan Falls, F.S.A, E.A., M.A.A.A. Senior Consultant

## COAERS 2015 Comprehensive Annual Financial Report

## Section 8

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В	Introduction	71
С	Funded Status of the Plan	72
D	Change in Assets	74
Е	Actuarial Gains and Losses	75
F	Historical Comparisons and Statistical Summaries	76
G	Summary and Closing Comments	77
Н	Actuarial Tables	79
Ι	Statistical Tables	113



## **EXECUTIVE SUMMARY**

The key results from the valuation of the City of Austin Employees' Retirement System as of December 31, 2015 may be summarized as follows:

		De	cember 31, 2015	Dee	cember 31, 2014
			(1)		(2)
٠	Members				
	— Actives		9,063		9,028
	-Retirees (including disabled) and beneficiaries		5,679		5,396
	Vested - terminated		<u>985</u>		<u>990</u>
	— Total		15,727		15,414
٠	Covered payroll	\$	559,829,504	\$	539,158,693
٠	Normal cost as % of payroll*		18.49%		16.75%
٠	Actuarial accrued liability	\$	3,391,796,116	\$	3,094,055,712
٠	Actuarial value of assets	\$	2,308,087,140	\$	2,193,881,221
٠	Unfunded actuarial accrued liability (UAAL)	\$	1,083,708,976	\$	900,174,491
٠	Estimated yield on assets				
	— Actuarial value basis		5.91%		8.04%
	— Market value basis		-2.27%		4.58%
٠	Contribution rate				
	— Employee		8.00%		8.00%
	— Employer		18.00%		18.00%
٠	Benefit and refund payments	\$	169,517,052	\$	161,718,226
٠	Amortization period of unfunded actuarial accrued		33 years		24 years
	liability				
٠	Funding Policy employer contribution rate		19.84%		17.63%
•	Funded ratio		68.0%		70.9%

\* Includes 0.51% of payroll for administrative expenses beginning in December 31, 2015 valuation.

Gabriel Roeder Smith & Company

## **INTRODUCTION**

This December 31, 2015 actuarial valuation of the City of Austin Employees' Retirement System has been prepared by Gabriel, Roeder, Smith & Company. The primary purpose of the valuation is to value the liabilities of the System as of December 31, 2015, determine the funding period of any unfunded liability for the plan year beginning January 1, 2016, and to provide certain required disclosure information. We are pleased to have the privilege of working for the Board and look forward to discussing the results with you at your convenience.

Section C of this report provides the current funded status of the plan and reviews the valuation results. Assets are discussed in Section D, while Section E contains an analysis of the actuarial gains and losses during the past year.

Section F discusses some of the historical comparisons and statistical summaries for the plan. Section G provides a summary of the valuation results along with other comments.

Various tables supporting the report are contained in Sections H and I, including any change in benefit provisions since the last valuation.



## FUNDED STATUS OF THE PLAN

The funded status of the plan is shown in Table 1, Table 2, and Table 3. Table 1 summarizes the various cost items from the current year's and prior year's actuarial valuations, while Table 2 provides an allocation of the normal cost by its various components. Table 3 shows the components of the actuarial liability.

Reviewing the composition of normal cost of the System, Table 2 indicates that the employer normal cost as of December 31, 2015, is 18.49% of pay. This compares with 16.75% of pay as of the last valuation on December 31, 2014. This normal cost is developed based on the Individual Entry Age Normal (EAN) actuarial cost method. As may be seen in Item 1, the normal cost for the retirement benefits is 14.97% of pay. The normal cost for the deferred termination benefits is 1.07% and 1.26% for refunds of terminated employees (both vested and non-vested). The normal cost for disability benefits is 0.19%, and the normal cost for death benefits is 0.49%. In addition, beginning with the December 31, 2015 valuation the cost of anticipated administrative expenses is being added to the normal cost rate. This adds 0.51% of pay to the normal cost rate as of December 31, 2015.

Table 1 illustrates a number of the key actuarial items for the 2015 valuation. As mentioned above, the total normal cost rate is 18.49% of covered payroll. The actuarial accrued liability is \$3,391.8 million as shown in Item 5 and as detailed in Table 3. The actuarial value of assets equals \$2,308.1 million, as shown in Item 6. Item 7 of Table 1 shows that the plan has an \$1,083.7 million unfunded liability (i.e. liabilities exceed plan assets) as of the valuation date. As of the last valuation (December 31, 2014), the System was underfunded by \$900.2 million. The increase in the unfunded liability is described in greater detail in Section E and Table 6.

On October 1, 2012, the City began contributing 18% of payroll and the employees are contributing 8% of payroll. Combining the employees' contributions with the City contribution, the System will have 26.00% of payroll to fund benefits. The current normal cost of the plan is 18.49%, which means that the System is currently receiving contributions in excess of the normal cost equal to 7.51% of pay (26.00% less 18.49%). These excess contributions are available to amortize any unfunded actuarial accrued liability. Based on these contribution rates, if all assumptions are exactly met then the current unfunded liability will be fully amortized over the next 33 years.

Under the Amended Supplemental Funding Plan (ASFP) the total City contribution rate is 18.0% of pay. The additional contribution is intended to stay in place until the ASFP is amended or repealed.

## FUNDED STATUS OF THE PLAN (Continued)

The normal cost was determined using the Individual Entry Age Normal (EAN) actuarial cost method. This method determines the normal cost for all employees on an individual basis, based on the benefits applicable to each individual member. Because employees hired on or after January 1, 2012 (Group B) have a less valuable benefit tier than employees hired prior to that date (Group A), the normal cost for Group B is less than the normal cost of Group A. With the application of the Individual EAN method, the normal cost is equal to the average of the individual members' normal costs. Since the current group of employees is primarily Group A, this means that the average normal costs for the group will decline over time as Group B employees replace Group A employees.

Because the contributions to the System are a fixed percentage of payroll, this means that the percentage of payroll that will go to pay off the unfunded liability will increase in the future as the average normal cost decreases. This result makes it difficult to calculate the funding period using a mathematical formula since the amount of contributions to pay off the unfunded liability will not be either a constant dollar amount or a constant percentage of payroll in the future. For this reason we are using an open group projection to determine when the System is expected to pay off its unfunded liability. The open group projection assumes a constant active population and that there will be no actuarial gains or losses on liabilities or the actuarial value of assets. Based on the open group projection the funding period of the System as of the valuation date is 33 years.



City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

## **CHANGE IN ASSETS**

Table 4 shows the development of the actuarial value of assets. Item 11 of Table 4 shows that the actuarial value of assets as of December 31, 2015 is \$2,308.1 million. Table 4 also shows the development of the gain/(loss) on the actuarial value of assets for the prior plan year. As shown in Item 12, the System had a loss on an actuarial asset basis of \$40.8 million in 2015. This compares to the \$5.3 million gain in 2014.

The method for determining the actuarial value of assets offsets excesses or shortfalls in the current year's investment income dollar-for-dollar against prior years' deferred gains or losses. Any remaining amounts from the current or prior years continue to be recognized over a five-year period. Since the current year provided a shortfall in investment income and the prior years have net deferred excess income, we will offset the current year's shortfall against the prior years' excess income. The significant loss in 2015 immediately offset the \$15.9 million deferred gain remaining from 2013, leaving \$204.1 million in deferred losses to be recognized over five years. As a result, one-fifth of this deferred loss, or \$40.8 million, was recognized in the current year's actuarial value of assets, with the remainder to be deferred to future valuations.

The total deferral of all excess/(shortfall) investment income for the year (shown in Table 4, Column 6 of Item 8) is (\$163.3) million.

An analysis of the change in the System's market value of assets for the last two plan years and an estimate of the return on assets for the System are included in Table 5. The estimated average annual rate of return for the year ending December 31, 2015, assuming that income, revenue, and expenditures are evenly distributed throughout the year is -2.27% on a market value of assets basis. The rate of return for the year ending December 31, 2015, on an actuarial value basis was 5.91%. This compares with the actuarial assumed investment return at the beginning of the year of 7.75%. Note that these returns will be compared to the newly adopted investment return assumption of 7.50% in the next actuarial valuation.

## ACTUARIAL GAINS AND LOSSES

An important part of the change in unfunded actuarial accrued liability from year to year is due to the impact of actuarial gains and losses of the System. This section summarizes the combined asset and liability experience changes since the prior valuation on December 31, 2014.

As can be seen in Item 7 of Table 6, the expected value of the unfunded actuarial accrued liability as of December 31, 2015, was an underfunded position of \$914.0 million. This expected value reflects an assumed investment return assumption of 7.75% on the beginning of year unfunded actuarial accrued liability, normal cost, and contributions during 2015.

Since the actual unfunded actuarial accrued liability as of December 31, 2015 is \$1,083.7 million, it represents a total unexpected net increase for the period of \$169.7 million, as shown in Item 9 of Table 6. That is, the unfunded actuarial accrued liability is greater than expected. The net increase in the unfunded actuarial accrued liability includes an asset loss of \$40.8 million as shown in Table 4, and an unexpected increase on the liability side equal to \$128.9 million. This increase included an experience liability loss of \$5.4 million, which is broken out by source in Items 15-22 of Table 6. As can be seen on Table 6, the largest liability loss was due to higher than expected salary increases and the largest liability gain was due to favorable retirement patterns. The remaining increase of \$123.5 million is due to changes in assumptions. Please refer to our Actuarial Experience Study report dated May 2016 for more detail on assumption changes.

Please see Table 12 for a more detailed description of the assumptions and methods.



City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

## HISTORICAL COMPARISONS AND STATISTICAL SUMMARIES

Various statistical data on the System is shown in the tables contained in Section I. In addition, Tables 7 through 10 of Section H contain certain actuarial trend information which may be of interest.

Table 7 relates the size of the unfunded actuarial accrued liability (UAAL) to three different measurements. In Columns 3 and 4 the UAAL is related to the covered payroll of the System. Columns 5 and 6 relate the UAAL to the actuarial value of assets, while Columns 7 and 8 relate the UAAL to the total actuarial liabilities of the System.

Tables 8 through 10 provide information which should be included in your annual report. Table 8 provides a schedule of active member valuation data. Table 9 provides a schedule of retirees and beneficiaries added to and removed from payment rolls. Solvency test results are presented in Table 10.

## SUMMARY AND CLOSING COMMENTS

It is our opinion that the results of this valuation provide a reasonable reflection of the funded status of the System. The System's contributions are currently sufficient to amortize the unfunded liability of the System.

As previously mentioned, in 2010 the City of Austin adopted an Amended Supplemental Funding Plan (ASFP) which provides for an additional contribution from the City, above the 8.0% base rate, which has resulted in a gradual increase the City's total contribution rate to the System to 18.0%. This additional contribution is intended to remain in place until the ASFP is either amended or repealed.

The overall funded position of the System decreased from 70.9% at the prior valuation to 68.0% at this valuation. Using an open group projection, we have determined that the System is expected to be fully funded in 33 years, assuming all valuation assumptions are realized in the future. The increase in the funding period is primarily due to the change in actuarial assumptions, which increased both the normal cost and the actuarial accrued liability of the System. Of course this could change with the addition of any unfunded liabilities (such as cost of living adjustments) or if there is a significant downturn in the financial markets.



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## **ACTUARIAL TABLES**

Table Number	Content of Tables	Page
1	Summary of Cost Items	80
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## SUMMARY OF COST ITEMS

	 December 31,	2015	 December 31,	2014
	Cost Item	Cost as % of Pay	Cost Item	Cost as % of Pay
	 (1)	(2)	 (3)	(4)
1. Participants				
a. Active	9,063		9,028	
b. Terminated vested	985		990	
c. Retired participants and beneficiaries	5,569		5,293	
d. Disabled	 110		 103	
e. Total	15,727		15,414	
2. Covered Payroll	\$ 559,829,504		\$ 539,158,693	
3. Averages for Active Participants				
a. Average age	45.0		44.8	
b. Average years of service	9.5		9.3	
c. Average pay	\$ 61,771		\$ 59,721	
4. Total Normal Cost				
a. Normal Cost Rate	17.98%		16.75%	
b. Administrative Expenses	 0.51%		 N/A	
c. Total	18.49%		16.75%	
5. Actuarial Accrued Liability				
a. Active participants	\$ 1,546,255,969		\$ 1,443,506,239	
b. Terminated vested participants	65,134,127		61,948,270	
c. Refunds of terminated nonvested participants	8,731,210		8,280,861	
d. Retired participants and beneficiaries	1,753,547,784		1,564,739,947	
e. Disabled participants	 18,127,026		 15,580,395	
f. Total	\$ 3,391,796,116	605.86%	\$ 3,094,055,712	573.87%
6. Actuarial Assets	\$ 2,308,087,140	412.28%	\$ 2,193,881,221	406.91%
7. Unfunded Actuarial Accrued Liability (UAAL)	\$ 1,083,708,976	193.58%	\$ 900,174,491	166.96%
8. Relative Size of UAAL				
a. As percent of actuarial assets	46.95%		41.03%	
b. As percent of covered payroll	193.58%		166.96%	
9. Funding period using open group projection	33		24	
10. Employer contribution rate to satisfy funding policy*	19.84%		17.63%	
	• .•			

\* employer rate that produces fully funded plan in 25-years in open group projection

Gabriel Roeder Smith & Company

## **Actuarial Section**

## ANALYSIS OF NORMAL COST BY COMPONENT

	Cost as a	% of Pay
Benefit Component (1)	December 31, 2015 (2)	December 31, 2014 (3)
1. Retirement Benefits	14.97%	13.45%
2. Termination - Deferred Benefits	1.07%	1.17%
3. Termination - Refund Benefits	1.26%	1.53%
4. Disability Benefits	0.19%	0.36%
5. Death Benefits	0.49%	0.24%
6. Administrative Expenses	0.51%	<u>N/A</u>
7. Normal Cost	18.49%	16.75%



AND CALCULATION OF ACTUAMAL			December 31, 201	
		(1)		(2)
A. Present Value of Future Benefits				
1. Active participants				
a. Retirement benefits	\$	2,154,224,609	\$	1,943,470,317
b. Deferred termination benefits		79,113,538		84,034,828
c. Refund of nonvested terminations		41,832,471		40,787,979
d. Disability benefits		13,719,309		25,574,220
e. Death benefits		53,501,019		24,276,835
f. Total	\$	2,342,390,946	\$	2,118,144,179
2. Retired participants				
a. Service retirements and beneficiaries	\$	1,753,547,784	\$	1,564,739,947
b. Disability retirements		18,127,026		15,580,395
c. Total	\$	1,771,674,810	\$	1,580,320,342
3. Inactive participants				
a. Vested terminations with deferred benefits	\$	65,134,127	\$	61,948,270
b. Nonvested terminations with refunds payable		8,731,210		8,280,861
c. Total	\$	73,865,337	\$	70,229,131
4. Total actuarial present value of future benefits	\$	4,187,931,093	\$	3,768,693,652
B. Normal Cost Rate		18.49%		16.75%
C. Present Value of Future Normal Costs	\$	796,134,977	\$	674,637,940
D. Actuarial Accrued Liability for Active Members				
1. Present value of future benefits (Item A.1.f.)	\$	2,342,390,946	\$	2,118,144,179
2. Less present value of future normal costs (Item C)		796,134,977		674,637,940
3. Actuarial accrued liability	\$	1,546,255,969	\$	1,443,506,239

## ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS AND CALCULATION OF ACTUARIAL ACCRUED LIABILITY

Gabriel Roeder Smith & Company

Mar

## **DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

	De	Year Ending cember 31, 2015
1. Actuarial value of assets at beginning of year	\$	2,193,881,221
<ul><li>2. Net new investments</li><li>a. Contributions</li><li>b. Benefits and refunds paid</li><li>c. Subtotal</li></ul>	\$ \$ \$	154,550,487 (169,517,052) (14,966,565)
3. Assumed investment return rate for fiscal year		7.75%
4. Expected net investment income	\$	169,993,239
5. Expected actuarial value at end of year (Item 1+ Item 2 + Item 4)	\$	2,348,907,895
6. Market value of assets at end of year	\$	2,144,804,122
7. Difference (Item 6 - Item 5)	\$	(204,103,773)

8. Development of amounts to be recognized as of December 31, 2015:

	Fiscal Year End	of E	maining Deferrals (xcess (Shortfall)) vestment Income (1)		Offsetting of ains/(Losses) (2)		Net Deferrals Remaining (3) = (1) + (2)	Years Remaining (4)	t	ecognized for his valuation 5) = (3) / (4)	 Remaining after this valuation (6) = (3) - (5)
	2011	\$	0	\$	0	\$	0	1	\$	0	\$ 0
	2012		0		0		0	2		0	0
	2013		15,918,458		(15,918,458)		0	3		0	0
	2014		0		0		0	4		0	0
	2015		(220,022,231)		15,918,458		(204,103,773)	5		(40,820,755)	 (163,283,018)
	Total	\$	(204,103,773)	\$	0	\$	(204,103,773)		\$	(40,820,755)	\$ (163,283,018)
	-		al value of plan ass assets corridor	ets, e	nd of year (Item	5 +	Item 8: Column 5	)			\$ 2,308,087,140
			value, end of year								\$ 1,715,843,298
			et value, end of yea								\$ 2,573,764,946
<ul><li>11. Final actuarial value of plan net assets, end of year</li><li>(Item 9, but recognize 1/3 of any deferred gains or losses outside of Item 10)</li></ul>							\$ 2,308,087,140				
12. Asset gain (loss) for year (Item 11 - Item 5)							\$ (40,820,755)				
13. Asset gain (loss) as % of final actuarial value of assets							(1.77%)				
14.Rat	io of actu	arial v	alue to market valu	ıe							107.6%

Notes: Remaining deferrals in Column (1) for prior years are from Column (6) in last year's report. The number in the current year is the difference between the remaining deferrals for prior years and Item 7 (which is the difference between the market value of assets and the expected actuarial value of assets). Column 2 is a direct offset of the current year's excess/(shortfall) return against prior years' excess/(shortfall) of the opposite type.

## **CHANGE IN NET POSITION**

		Va	luation Period Er	nding December 3	1,
			2015	2014	
			(1)	(2)	
1.	Assets in plan at beginning of year (A)	\$	2,209,799,679	\$ 2,130,624,450	)
2.	Employer contributions	\$	100,484,694	93,331,482	2
3.	Employee contributions	\$	54,065,793	50,489,091	1
4.	Benefit payments made*	\$	165,464,616	157,563,807	7
5.	Refunds of contributions	\$	4,052,436	4,154,419	)
6.	Expenses paid from trust	\$	2,421,331	2,631,218	3
7.	Investment return	\$	(47,607,661)	99,704,100	)
8.	Other	_	0	(	<u>)</u>
9.	Assets in plan at end of year ( <b>B</b> ) (1 + 2 + 3 - 4 - 5 - 6 + 7 + 8)	\$	2,144,804,122	\$ 2,209,799,679	Ð
10.	Approximate rate of return on average invested assets				
	a. Net investment income $(7 - 6 = \mathbf{I})$	\$	(50,028,992)	\$ 97,072,882	2
	b. Estimated yield based on (2I/(A + B - I))		-2.27%	4.589	%

\* Notes: Benefit payments exclude any distributions from the 415 Restoration Plan Columns may not add due to rounding

## CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF DECEMBER 31, 2015

CALCULATION OF TOTAL ACTUARIAL GAIN OR LOSS		2015		2014
1. Unfunded actuarial accrued liability (UAAL) as of prior year	\$	900,174,491	\$	861,988,246
2. Actual normal cost paid during year (includes service purchases)		100,724,677		94,355,684
3. Subtotal (1 + 2)	\$	1,000,899,168	\$	956,343,930
4. Interest at prior valuation's rate of 7.75%		73,666,604		70,460,372
5. Contributions during year		(154,550,487)		(143,820,573)
6. Interest on contributions for one-half year		(5,988,831)		(5,573,047)
7. Expected UAAL as of December 31st $(3+4+5+6)$	\$	914,026,454	\$	877,410,682
8. Actual UAAL as of December 31st		1,083,708,976		900,174,491
9. Unexpected Change in UAAL for the period (8 - 7)	\$	169,682,522	\$	22,763,809
SOURCE OF CHANGE IN UAAL				
10. Asset (gain)/loss (See Table 4)	\$	40,820,755	\$	(5,306,152)
11. Total unanticipated increase/(decrease) in liabilities for the	Ψ	128,861,767	Ψ	28,069,961
period (9-10)				
12. Increase/(decrease) due to benefit enhancements		0		0
13. Increase/(decrease) due to assumption & method changes		123,493,165		0
14. Liability experience (gain)/loss (11 - 12 - 13)	\$	5,368,602	\$	28,069,961
SOURCE OF LIABILITY (GAINS) AND LOSSES				
15. Salary Increases	\$	(3,150,463)	\$	25,904,267
16. Service Retirement		(8,506,247)		(8,536,142)
17. Withdrawal		6,452,073		6,632,481
18. Disability Retirement		287,312		199,202
19. Active Mortality		232,809		(333,920)
20. Retiree Mortality		(1,495,240)		134,277
21. Rehires		2,002,408		1,756,367
22. Other (Data) including proportionate program		9,545,950		2,313,429
23. Total Liability Experience Gain/(Loss)	\$	5,368,602	\$	28,069,961



**RELATIVE SIZE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY** 

## Percent of Actuarial Accrued Liability (8.5%) (5.8%)(1.5%) 3.6% 13.1% 21.7% 34.1% 28.2% 30.4% 34.3% 36.1% 13.1% 19.2%22.0% 24.1%29.1% 32.0% 29.6% Actuarial Accrued Liability 8 Relative to Total 2,723,844,815 3,094,055,712 1,044,488,860 1,212,618,545 1,360,269,609 1,551,830,802 1,794,181,675 1,974,010,618 2,112,811,292 2,968,379,692 3,391,796,116 877,817,668 1,440,198,646 1,678,181,243 2,330,936,980 2,909,917,750 2,246,903,861 2,460,664,794 Actuarial Accrued Liability 6 of Present Percent (%6.7) (5.5%) (1.5%)3.7% 15.1% 15.1% 51.7% 39.4% 43.8% 52.1% 56.4% 42.1% 47.0% Assets 23.7% 28.3% 31.8% 27.8% 41.0%6 Value of Present Assets Relative to Actuarial 1,481,377,439 1,672,470,344 1,711,577,229 1,897,722,867 1,105,121,657 1,230,971,746 1,311,288,668 1,250,851,348 1,348,790,502 1,356,797,448 1,653,533,484 1,790,902,641 2,047,929,504 2,308,087,140 952,634,480 1,398,798,722 1,497,783,958 2,193,881,221 Present Assets 6 Percent of (24.8%) Covered (34.1%) (6.8%) Payroll 170.7% 15.5% 58.8% 64.9% 98.4% 113.4% 121.8% 110.0%170.6% 155.8% 206.5% 227.7% 175.7% 167.0% 193.6% 4 Covered Payroll Relative to 438,877,002 244,538,110 422,539,199 451,831,198 470,231,969 539,158,693 322,007,672 312,790,966 448,740,469 490,553,170 219,326,742 268,635,564 316,793,390 326,590,164 348,619,141 390,963,991 417,450,797 559,829,504 Covered Payroll 6 Actuarial Accrued (Overfunded) (74,816,812) 658,466,636 932,942,173 (60,632,797) 189,347,298 321,383,795 749,087,565 1,070,656,825 861,988,246 ,083,708,976 (18,353,201) 203,040,300 395,382,953 476,226,660 459,277,808 765,526,422 48,980,941 900,174,491 Unfunded/ Liability 0 Valuation 31-Dec as of 2010 2002 2011 2015 1998 1999 2000 2003 2004 2005 2006 2007 2008 2009 2012 2013 2014 2001 Ξ

## SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Year Ending	Active	Percent		Percent	Average	Percent
31-Dec	Participants	Change	Covered Payroll	Change	Salary	Change
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1998	6,311	-7.2%	219,326,742	0.1%	34,753	7.8%
1999	6,512	3.2%	244,538,110	11.5%	37,552	8.1%
2000	6,894	5.9%	268,635,564	9.9%	38,967	3.8%
2001	7,713	11.9%	316,793,390	17.9%	41,073	5.4%
2002	7,647	-0.9%	322,007,672	1.6%	42,109	2.5%
2003	7,432	-2.8%	312,790,966	-2.9%	42,087	-0.1%
2004	7,489	0.8%	326,590,164	4.4%	43,609	3.6%
2005	7,638	2.0%	348,619,141	6.7%	45,643	4.7%
2006	8,055	5.5%	390,963,991	12.1%	48,537	6.3%
2007	8,358	3.8%	417,450,797	6.8%	49,946	2.9%
2008	8,643	3.4%	448,740,469	7.5%	51,920	4.0%
2009	8,142	-5.8%	422,539,199	-5.8%	51,896	0.0%
2010	8,270	1.6%	438,877,002	3.9%	53,069	2.3%
2011	8,348	0.9%	451,831,198	3.0%	54,124	2.0%
2012	8,387	0.5%	470,231,969	4.1%	56,067	3.6%
2013	8,592	2.4%	490,553,170	4.3%	57,094	1.8%
2014	9,028	5.1%	539,158,693	9.9%	59,721	4.6%
2015	9,063	0.4%	559,829,504	3.8%	61,771	3.4%

# SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

	Add	Added to Rolls	Remove	Removed from Rolls	Rolls	Rolls-End of Year		
Year Ending December 31	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
(1)	(2)	(3)	(4)	(5)	(9)	(1)	(8)	(6)
2001	224	5,278,490	95	2,046,233	2,592	65,647,094	7.9%	25,327
2002	309	7,754,803	118	2,534,050	2,783	72,520,159	10.5%	26,058
2003	271	7,706,066	59	1,502,757	2,995	78,596,302	8.4%	26,243
2004	227	5,619,478	85	1,741,624	3,137	82,121,249	4.5%	26,178
2005	258	6,699,023	98	2,438,555	3,297	85,324,686	3.9%	25,879
2006	259	6,788,190	89	1,883,938	3,467	90,312,037	5.8%	26,049
2007	289	8,523,459	123	2,262,126	3,633	96,071,149	6.4%	26,444
2008	290	8,299,468	88	2,056,217	3,835	101,840,870	6.0%	26,556
2009	331	9,953,411	80	1,630,148	4,086	109,656,152	7.7%	26,837
2010	341	10,495,807	92	2,029,423	4,335	117,954,059	7.6%	27,210
2011	324	9,851,119	117	2,785,375	4,542	124,748,580	5.8%	27,466
2012	405	13,035,228	116	3,011,032	4,831	134,653,163	7.9%	27,873
2013	387	12,451,142	98	2,176,950	5,120	144,755,297	7.5%	28,273
2014	397	12,737,257	121	2,568,479	5,396	154,937,553	7.0%	28,713
2015	411	13,547,663	128	2,980,334	5,679	165,579,191	6.9%	29,156

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**Actuarial Section** 

## COAERS 2015 Comprehensive Annual Financial Report

# City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

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·	Aggr	Aggregated Accrued Liabilities for	oilities for				
	Active and		Active and Inactive		Portions	Portions of Accrued Liabilities Covered	lities Covered
	Inactive		Members			by Reported Assets	sets
	Members	Retirees and	(Employer	Reported			
	Contributions	Beneficiaries	Financed Portion)	Assets	(5)/(2)	[(5)-(2)]/3	[(5)-(2)-(3)]/(4)
	(2)	(3)	(4)	(5)	(9)	(1)	(8)
	248,579,180	654,307,118	457,383,311	1,311,288,668	100.0%	100.0%	89.3%
	265,812,595	718,187,586	456,198,465	1,250,851,348	100.0%	100.0%	58.5%
	252,182,701	777,100,825	522,547,276	1,348,790,502	100.0%	100.0%	61.1%
	261,905,526	812,266,336	604,009,381	1,356,797,448	100.0%	100.0%	46.8%
	280,994,642	848,185,652	665,001,381	1,398,798,722	100.0%	100.0%	40.5%
December 31, 2006	295,166,238	904,166,079	774,678,301	1,497,783,958	100.0%	100.0%	38.5%
December 31, 2007	333,340,167	968,493,997	810,977,128	1,653,533,484	100.0%	100.0%	43.4%
December 31, 2008	357,423,035	1,025,407,475	864,073,351	1,481,377,439	100.0%	100.0%	11.4%
December 31, 2009	362,288,592	1,109,773,550	858,874,838	1,672,470,344	100.0%	100.0%	23.3%
December 31, 2010	377,651,365	1,195,328,215	887,685,214	1,711,577,229	100.0%	100.0%	15.6%
December 31, 2011	413,944,399	1,267,467,354	1,042,433,062	1,790,902,641	100.0%	100.0%	10.5%
December 31, 2012	417,481,360	1,375,244,710	1,175,653,622	1,897,722,867	100.0%	100.0%	8.9%
December 31, 2013	436,164,975	1,478,146,019	995,606,756	2,047,929,504	100.0%	100.0%	13.4%
December 31, 2014	453,220,166	1,580,320,342	1,060,515,204	2,193,881,221	100.0%	100.0%	15.1%
December 31, 2015	471,000,910	1,771,674,810	1,149,120,396	2,308,087,140	100.0%	100.0%	5.7%

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## COAERS 2015 Comprehensive Annual Financial Report

City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015 SCHEDULE OF FUNDING PROGRESS

UAAL as % of Payroll (4)/(6) (34.1%) (24.8%) (6.8%)15.5% 98.4% 58.8% 64.9% 113.4% 170.6% 155.8% 170.7% 206.5% 227.7% 175.7% 121.8% 110.0% 167.0% 6 Covered Annual 490.6 Payroll 219.3 244.5 268.6 316.8 322.0 312.8 326.6 348.6 391.0 417.5 448.7 422.5 438.9 451.8 470.2 539.2 9 Funded Ratio 108.5% 105.8% 101.5% 96.4% 65.7% 63.9% 86.9% 86.9% 80.8% 78.0% 75.9% 78.3% 65.9% 71.8% 69.6% 70.4% 70.9% (2)/(3)3 Unfunded Actuarial Accrued Liability (UAAL) (3) - (2) (60.6)(18.4)49.0 189.3 203.0 321.4 395.4 476.2 459.3 765.5 658.5 932.9 862.0 (74.8) 900.2 749.1 1,070.7 4 Actuarial Accrued Liability (AAL) 877.8 1,212.6 1,974.0 2,246.9 1,044.5 1,360.3 1,440.2 ,551.8 1,678.2 1,794.2 2,112.8 2,330.9 2,460.7 2,723.8 2,968.4 2,909.9 3,094.1  $\widehat{\mathbb{C}}$ of Assets (AVA) Actuarial Value 952.6 1,653.5 1,105.1 ,231.0 1,311.3 ,250.9 1,348.8 1,356.8 1,398.8 1,497.8 1,481.4 1,672.5 1,711.6 1,790.9 1,897.7 2,047.9 2,193.9 0 December 31, 2003 December 31, 2004 December 31, 2005 December 31, 2006 December 31, 2007 December 31, 2008 December 31, 2009 December 31, 2010 December 31, 2012 December 31, 2013 December 31, 2014 December 31, 1998 December 31, 1999 December 31, 2000 December 31, 2002 December 31, 2001 December 31, 2011 Valuation Date Ξ

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## COAERS 2015 Comprehensive Annual Financial Report

193.6%

559.8

68.0%

1,083.7

3,391.8

2,308.1

December 31, 2015

Note: Dollar amount in millions.

## **Actuarial Section**

## STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS (Effective as of December 31, 2015)

## A. ACTUARIAL ASSUMPTIONS

## 1. <u>Investment Return Rate</u> (adopted effective December 31, 2015)

7.50% per annum, compounded annually, composed of an assumed inflation rate of 2.75% and a real rate of return of 4.75%, net of investment expenses.

## 2. Mortality

a. <u>Nondisabled Annuitants</u> (adopted effective December 31, 2015)

Healthy retirees and beneficiaries – The RP-2014 Combined Healthy Mortality Tables with Blue Collar Adjustments. Generational mortality improvements in accordance with Scale BB from the table's base year of 2014 (see Item 21 for further discussion of mortality improvement).

b. <u>Disabled Annuitants</u> (adopted effective December 31, 2015)

Disabled annuitants – The RP-2014 Combined Healthy Mortality Tables with Blue Collar Adjustments, set forward three years. Generational mortality improvements in accordance with Scale BB from the table's base year of 2014; minimum 3% rate of mortality at all ages (see Item 21 for further discussion of mortality improvement).

c. Active Members (adopted effective December 31, 2015)

Active employees – The RP-2014 Employee Mortality Tables with Blue Collar Adjustments. Generational mortality improvements in accordance with Scale BB from the table's base year of 2014 (see Item 21 for further discussion).



## STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS (EFFECTIVE AS OF December 31, 2015) (Continued)

3. <u>Retirement Rates</u>: (adopted effective December 31, 2015) The following rates of retirement are assumed for members eligible for normal retirement.

Age	Rates of I	Retirement
	Males	Females
44 & under	22.0%	25.0%
45	22.0%	23.0%
46	22.0%	23.0%
47	22.0%	23.0%
48	22.0%	23.0%
49	22.0%	23.0%
50	22.0%	26.0%
51	22.0%	26.0%
52	22.0%	26.0%
53	22.0%	26.0%
54	22.0%	26.0%
55	22.0%	26.0%
56	22.0%	26.0%
57	22.0%	26.0%
58	22.0%	26.0%
59	22.0%	26.0%
60	22.0%	21.0%
61	22.0%	21.0%
62	27.0%	24.0%
63	22.0%	21.0%
64	22.0%	21.0%
65	22.0%	24.0%
66	30.0%	24.0%
67	30.0%	24.0%
68	22.0%	21.0%
69	22.0%	21.0%
70	22.0%	20.0%
71	22.0%	20.0%
72	22.0%	20.0%
73	22.0%	20.0%
74 & older	100.0%	100.0%

Group B members are assumed to retire at twice the applicable rate upon the first year they attain eligibility for normal retirement. Early retirement rates (of 1% at age 55 increasing by 1% every two years to 5% at ages 63 and 64) apply for Group B members.

## STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS (EFFECTIVE AS OF December 31, 2015) (Continued)

4. <u>Rates of Decrement Due to Withdrawal</u> (adopted effective December 31, 2015)

Rates of withdrawal are comprised of a select period for the first three years of employment and ultimate rates based on years of service from retirement after the end of the select period. The following rates during the select period apply at all ages during the applicable year of employment:

Years of Employment	Males	Females
1	0.125	0.175
2	0.115	0.160
3	0.090	0.140



## STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS (EFFECTIVE AS OF December 31, 2015) (Continued)

After the select period ends, rates of withdrawal are based on the number of years from employment. The rates are shown below for males and females

Years from Eligibility for Unreduced Retirement	Rates of Withdrawal After Select Period		
	Males	Females	
1	0.0090	0.0086	
2	0.0122	0.0160	
3	0.0146	0.0201	
4	0.0166	0.0237	
5	0.0182	0.0238	
6	0.0198	0.0239	
7	0.0212	0.0261	
8	0.0225	0.0282	
9	0.0237	0.0302	
10	0.0248	0.0320	
11	0.0323	0.0422	
12	0.0348	0.0444	
13	0.0399	0.0465	
14	0.0401	0.0525	
15	0.0430	0.0575	
16	0.0430	0.0575	
17	0.0430	0.0575	
18	0.0430	0.0575	
19	0.0430	0.0575	
20	0.0430	0.0575	
21	0.0450	0.0600	
22	0.0450	0.0600	
23	0.0450	0.0600	
24	0.0450	0.0600	
25	0.0450	0.0600	
26	0.0470	0.0650	
27	0.0470	0.0650	
28	0.0470	0.0650	
29	0.0470	0.0650	
30	0.0470	0.0650	
31+	0.0500	0.0700	

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5. <u>Disability Rates</u>\* (adopted effective December 31, 2015)

Sample rates are shown below:

Age	Rates of Decrement <u>Due to Disability</u> Males and Females
20	0.000004
25	0.000025
30	0.000099
35	0.000259
40	0.000494
45	0.000804
50	0.001188
55	0.001647
60	0.002180

- \* Rates are for disability due to all causes, occupational disability rates are assumed to be 10% of all causes.
- 6. <u>Rates of Salary Increase</u> (adopted effective December 31, 2015)

Years of Service	Promotional Rate of Increase	Total Annual Rate of Increase Including 2.75% Inflation Component and 1.25% Productivity Component
1 - 7	2.25%	6.25%
8	2.00%	6.00%
9	1.50%	5.50%
10	1.25%	5.25%
11 - 15	1.00%	5.00%
16 - 19	0.75%	4.75%
20 or more	0.00%	4.00%

7. <u>Backward Deferred Retirement Option Program (Back DROP) Participation</u> (adopted effective December 31, 2015)

It was assumed that 20% of retiring active members with at least 20 years of service would elect a Back DROP. It is assumed that all members who Back DROP will elect to revert to the date that would provide the greatest actuarial value to the member.



8. <u>Married Percentage</u>: (adopted effective December 31, 1997)

100% of the active members are assumed to be married.

- 9. There Will Be No Recoveries Once Disabled: (adopted effective December 31, 1997)
- 10. Spousal Age Difference: (adopted effective December 31, 2012)

Males are assumed to be three years older than their spouses.

11. Normal Form of Payment: (adopted effective December 31, 1997)

It is assumed that all retiring members will elect the Life-only form of payment with a guaranteed return of accumulated employee contributions.

12. Crediting Rate on Employee Contributions: (adopted effective December 31, 2002)

It is assumed that the interest credit rate on employee contributions will be 6.0%.

13. Individual Salaries Used to Project Benefits: (adopted effective December 31, 1997)

Rates of pay as of the valuation date are reported for all employees.

14. Pay Increase Timing: (adopted effective December 31, 1997)

Middle of calendar year.

15. Decrement Timing: (adopted effective December 31, 1997)

Decrements of all types are assumed to occur mid-year.

16. Eligibility Testing: (adopted effective December 31, 2002)

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

17. <u>Decrement Relativity</u>: (adopted effective December 31, 2002)

Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

18. <u>Incidence of Contributions</u>: (adopted effective December 31, 2002)

Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report and the actual payroll payable at the time contributions are made.

19. Benefit Service: (adopted December 31, 1997)

All members are assumed to accrue one year of eligibility service each year.

20. Mortality Improvement:

The base mortality tables are anchored at the year 2014. To account for future mortality improvement, the base mortality rates shown in Item 2 are projected forward using scale BB for all future years.

21. Service Purchases (military, permissive, and sick leave conversion):

No service purchases of any type are assumed. Any gains or losses due to these purchases are recognized in the valuation following the purchase.

### ACTUARIAL VALUE OF ASSETS

The actuarial value of assets is equal to the market value of assets less a five-year phase in of the excess/(shortfall) between expected investment return and actual income. The expected investment return each year is calculated based on the actuarial value of assets with the difference from actual income smoothed in over five years in 20% increments. If the current year's difference is opposite sign of the prior years' deferred excesses/(shortfalls), then the prior years' bases (starting with the oldest) are reduced dollar for dollar along with the current year's base. Any remaining bases are then recognized over five years (20% per year) from their initial creation.

If the resulting preliminary asset value is less than 80% or more than 120% of the market value of assets, then 1/3 of the amount outside of the 80% - 120% corridor is recognized in the final actuarial value of assets.



### B. <u>ACTUARIAL FUNDING METHOD</u>

The actuarial accrued liability is determined using the Entry Age Normal actuarial cost method. This method assigns the System's total actuarial present value of future benefits to various periods. The actuarial accrued liability is assigned to years prior to the valuation and the normal cost is assigned to the year following the valuation. The remaining costs are assigned to future years.

The normal cost is determined on an individual basis using the Individual Entry Age Normal cost method. The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs where future normal costs are based on the benefit provisions that are applicable to each individual member. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of assets.

### C. FUNDING PERIOD

The funding period is determined using an open group projection. In the open group projection, the demographic assumptions are applied to the current active employees and any employees that are assumed to leave employment are replaced one-for-one with a new employee. Over time this results in the change of the employee group from mostly Group A members to Group B members. The projection is built to assume no gains or losses on the actuarial accrued liability or the actuarial value of assets. The funding period is the length of time it takes in the open group projection for the actuarial value of assets to exceed the actuarial accrued liability.

In the projection, new members' pay are assumed to increase at 4.00% year over year, i.e., a new employee in 2015 is assumed to be hired at a salary that is 4.00% greater than a new employee hired in 2014. The 4.00% growth rate is equal to our wage inflation assumption of 4.00% (ultimate salary increase assumption showing in Item A.6.)

### D. CHANGES IN ASSUMPTIONS AND METHODS

New assumptions were adopted effective December 31, 2015. Please refer to the Actuarial Experience Study report dated May 2016 for more detail on assumption changes.

### SUMMARY OF BENEFIT PROVISIONS OF THE RETIREMENT PLAN AS OF DECEMBER 31, 2015

### A. <u>EFFECTIVE DATE</u>

January 1, 1941.

### B. ELIGIBILITY AND PARTICIPATION

Any regular and permanent employee of the City of Austin, excluding all civil service commissioned police officers and firefighters, the Mayor and members of the City Council and all part-time employees who work less than 75 percent of a normal work week.

Members originally hired prior to January 1, 2012 are classified as Group A members and members hired on or after January 1, 2012 are classified as Group B members.

Unless noted otherwise, the provisions for Group A and Group B are the same.

### C. <u>MEMBERSHIP SERVICE</u>

The period of time during which an eligible employee pays into and keeps on deposit the contribution prescribed to be paid by the employee into the System.

### D. AVERAGE FINAL COMPENSATION

The average of the monthly compensation for the 36 calendar months of highest compensation during the last 120 months prior to termination. The monthly compensation used in the determination of benefits cannot exceed the compensation limits of Internal Revenue Code §401(a)(17) for the applicable period. The limit for 2011 is up to \$20,416.67 for persons who first become members after 1995 (members hired prior to 1996 have no limit on their compensation).

### E. <u>CITY AND MEMBER CONTRIBUTION RATES</u>

The City currently contributes a base rate of 8.00% of pay for each active member. Under the Amended Supplemental Funding Plan, the City is providing an additional contribution for each active member. Beginning October 1, 2012, this additional contribution became 10% of pay, for a total city contribution of 18%. Each active member contributes 8.00% of pay. These employee contributions are made under a pre-tax 401(h) pick-up arrangement.



### F. <u>RETIREMENT BENEFITS</u>

### 1. Normal Retirement

a. <u>Eligibility</u>:

Group A – A participant may retire upon attaining age 62, or any age with 23 years of service, or attaining age 55 with 20 years of service.

Group B – A participant may retire upon attaining age 62 with 30 years of service, or attaining age 65 with 5 years of service.

b. Monthly Benefit:

Group A – 3.00% of average final compensation times years of service.

Group B - 2.50% of average final compensation times years of service.

- c. <u>Payment Form</u>: Benefits are paid as a monthly life annuity to the participant, with a provision that should the participant die prior to receiving monthly payments whose sum is greater than or equal to the participant's accumulated employee contributions, then the participant's beneficiary shall receive a lump-sum equal to the excess of the participant's accumulated employee contributions with interest over the sum of the monthly payments received.
- d. Optional Forms of Payment:
  - i) Joint and contingent annuity with either 100%, 66 2/3%, or 50% of the reduced retirement income payable for the life of the contingent annuitant upon the death of the retiring participant, with the provision that, should the contingent annuitant predecease the participant, the monthly annuity will revert to the amount that would have been payable under the normal form of payment,
  - ii) Joint and 66 2/3% last survivor provides a reduced retirement income payable as long as both the member and the joint annuitant are alive, and upon the death of either the member or the joint annuitant, the benefit reduces to 2/3 of such amount for the remainder of the life of the last survivor,

- iii) Period certain and life annuity with 15 years of payments guaranteed, or
- e. <u>Deferred Retirement Option Program (DROP)</u>: A member may elect to retroactively participate in the System's DROP (i.e. a Backward DROP). The member would receive a lump-sum payment equal to 90% of the sum of the monthly annuities the participant would have received if the member had retired at the DROP entry date. No Cost of Living Adjustments (COLAs) are included but changes in the benefit multiplier are reflected. The maximum period a member may retroactively elect under the DROP is 60 months.
- 2. Early Retirement:
  - a. <u>Eligibility</u>:

Group A – Currently there are no reduced retirement benefits under the plan.

Group B - A participant may retire with a reduced benefit upon attaining age 55 with 10 years of service.

b. Monthly Benefit:

Group A – Not applicable.

Group B – The same formula benefit as determined under normal retirement multiplied by an actuarial equivalent early retirement reduction factor.

### G. **DISABILITY RETIREMENT**

- 1. <u>Eligibility</u>: If the employee is terminated by reason of a total and permanent disability which prevents the employee from engaging in any employment duties. If the employee has less than five years of service, the disability must be job related.
- 2. <u>Monthly Benefit</u>: Same as Normal Retirement benefit using pay and service at date of disability.
- 3. <u>Form of Payment</u>: The normal form of payment that is available to a member taking normal retirement and the optional forms of payments described in F.1.d.i) and F.1.d.ii) above.



### H. <u>VESTING OF BENEFITS</u>

1. Vesting

An employee is vested according to the following schedule:

Years of	Vested
Vesting Service	Percentage
Less than 5	0%
5 or more	100%

### Benefits Upon Vesting

A vested participant is entitled to the retirement benefit payable at normal retirement earned to the date of participant's termination multiplied by his/her vested percentage, or a refund of the employee's accumulated employee contributions with interest.

### I. <u>DEATH IN SERVICE</u>

- 1. <u>Eligibility:</u> All active members.
- 2. <u>Benefit:</u> The amount of the benefit payable to the beneficiary is:
  - a. Employee eligible for retirement at date of death:

The surviving spouse, if any, may elect to receive an annuity equal to the monthly benefit as if the member had retired under any retirement option that would have been available to the member at the end of the month in which the member died. If there is no surviving spouse, then the beneficiary may elect to receive a 15 years certain and life annuity. The surviving spouse or beneficiary, instead of electing the annuity, may elect to receive a death benefit equal to twice the member's accumulated employee contributions with interest.

b. Employee not eligible for retirement at date of death:

A refund of the member's accumulated deposits (with interest) plus a death benefit from COA ERS equal to the member's accumulated deposits (with interest), but excluding any purchases for non-contributory time, prior military service purchases, or Supplementary Service Credit.

### J. <u>RETIREE LUMP-SUM DEATH BENEFIT</u>

Upon death of a retired member, a \$10,000 lump-sum death benefit is payable. This benefit is also payable upon the death of an active member eligible for retirement whose surviving spouse or beneficiary elects to receive an annuity.

### K. COST-OF-LIVING ADJUSTMENT (COLA)

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 maximum adjustment which can be approved is 6%. 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 Code. 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.

### L. <u>LUMP-SUM ADDITIONAL BENEFIT PAYMENT</u>

Once each year the Board may approve a lump-sum additional benefit payment to be paid to those members and beneficiaries currently in payment status. The additional payment would be equal to a percentage of the member's monthly annuity with a maximum percentage of 100%.

### M. LEGISLATED PLAN CHANGES ENACTED BY 1995 LEGISLATURE

### 1. 2.3% Multiplier

The benefit multiplier was increased from 2.2% per year of service to 2.3% per year of service effective October 1995.

### 2. <u>2.3% Retiree Gross-up</u>

Effective October 1995, current retirees received an increase in their benefit amount to bring their retirement benefit amount up to what it would be currently if they had retired under the 2.3% multiplier.



### 3. <u>\$10,000 Retiree Lump-Sum Death Benefit</u>

The lump-sum death benefit payable upon the death of a retiree was increased from \$2,000 to \$10,000.

4. Plan Participation Begins at Date of Hire

The six-month service requirement for participation was eliminated. Current active members were granted service for the period between their date of hire and their date of participation, up to six months.

### N. LEGISLATED PLAN CHANGES ENACTED BY 1997 LEGISLATURE

1. <u>2.6% Multiplier</u>

The benefit multiplier was increased from 2.3% per year of service to 2.6% per year of service effective October 1997.

### 2. 2.6% Retiree Gross-up

Effective October 1997, current retirees received an increase in their benefit amount to bring their retirement benefit amount up to what it would be currently if they had retired under the 2.6% multiplier.

3. Military Service Purchase

Increased the number of months of military service that may be purchased from 24 to 48.

4. Noncontributory Service Purchase

Allowed an employee to purchase noncontributory service for the following periods of time: (1) while employee was on workers' compensation leave, (2) while employee was on an authorized leave of absence, and (3) while employee performed service for the employer in a position for which the service was not otherwise creditable. The employee pays the full actuarial cost of the service purchase.

### 5. Employer Purchase of Creditable Service

Allowed the employer to purchase the amount of service required to qualify an employee for an unreduced retirement benefit at age 55. To be eligible for the purchase, the employee must never have been a highly compensated employee within the meaning of IRC Section 414(q). The cost of the service purchase is the full actuarial cost of both the benefit and the retirement eligibility.

### O. LEGISLATED PLAN CHANGES ENACTED BY 1999 LEGISLATURE

### 1. <u>2.7% Multiplier</u>

The benefit multiplier was increased from 2.6% per year of service to 2.7% per year of service effective October 1999.

### 2. <u>2.7% Retiree Gross-up</u>

Effective October 1999, current retirees received an increase in their benefit amount to bring their retirement benefit amount up to what it would be currently if they had retired under the 2.7% multiplier.

### 3. 23 & Out Provision

The service requirement at which a participant may retire with an unreduced retirement benefit was decreased from 25 years of Creditable Service to 23 years of Creditable Service.

### 4. Pop-Up Provisions for Certain Joint and Survivor Payment Options

Certain optional forms of payment which extend coverage to a joint annuitant (Options I, II, and III) were amended so that, should the contingent annuitant predecease the participant, the monthly annuity will revert to the amount that would have been payable under the normal form of payment.

### 5. <u>LUMP-SUM ADDITIONAL BENEFIT PAYMENT</u>

The Board was given the ability to make an additional payment to members and beneficiaries in payment status in the form of a lump-sum additional benefit payment. The additional payment would be a percentage of the current monthly payment with a maximum percentage of 100%.



### 6. EMPLOYER PURCHASE OF CREDITABLE SERVICE

Limitations on employer purchases of Creditable Service for a Member before actual retirement were removed.

### P. BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2000

1. <u>"415 Restoration of Retirement Income Plan"</u>

Certain highly compensated members may have their retirement annuity limited because of Section 415(b)(1) of the Internal Revenue Code. A plan amendment effective January 1, 2000, provides for COA ERS to pay a benefit payment that exceeds the maximum benefit limitation imposed by the Internal Revenue Code from a separate, non-qualified, pay-as-you-go "Restoration of Retirement Income Plan."

### 2. <u>2.98% Multiplier</u>

The benefit multiplier was increased from 2.7% per year of service to 2.98% per year of service effective April 2000.

### 3. <u>2.98% Retiree Gross-up</u>

Effective April 2000, current retirees received an increase in their benefit amount to bring their retirement benefit amount up to what it would be currently if they had retired under the 2.98% multiplier.

### 4. <u>"Pop-up" Benefit Amendment</u>

The "pop-up" benefit is extended to retirees who selected the actuarial equivalent of Life Annuity option with underlying options of I, II, or III.

### Q. BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2001

None

### R. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2002</u>

### 1. <u>3.00% Multiplier</u>

Benefit multiplier was increased from 2.98% per year of service to 3.00% per year of service effective January 2002.

### 2. <u>3.00% Retiree Gross-up</u>

Effective January 2002, current retirees received an increase in their benefit amount to bring their retirement benefit amount up to what it would be currently if they had retired under the 3.00% multiplier.

### 3. Deferred Retirement Option Program

A "Backward" DROP was added as an optional benefit effective in 2002. The retiring member may elect to retroactively participate in a DROP. The member would receive a lump-sum payment equal to 90% of the sum of the monthly annuities the participant would have received if the member had retired at the DROP entry date. No COLAs are included but changes in the benefit multiplier are reflected.

### 4. Purchase of Permissive Time

A member may purchase up to five years of Permissive Time. The purchase price charged to the member is the anticipated actuarial cost to the System for the additional service. Minimum purchase is one month with a maximum of 60 months (5 years) or the number of months needed to reach first eligibility for retirement whichever is less.

### 5. Conversion of Unused Sick Leave

At retirement an employee may elect to purchase Creditable Service for unused sick leave. The Board requires payment by the Member, and then by the City of the equivalent amount of retirement contributions that would have been made had the sick hours been exercised as sick hours. An employee must already be eligible for retirement to purchase the service.



### S. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2003</u>

### 1. <u>"Pop-up" Benefit Amendment</u>

"Pop-up" benefit was extended to any Joint and Survivor option (including level income options), other than Joint and Last Survivor.

2. <u>Permissive Time Amendment</u>

Permissive Time resolution was amended removing the provision that restricts members from purchasing Permissive Time in excess of the amount needed to reach first retirement eligibility.

- T. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2004</u> None
- U. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2005</u> None
- V. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2006</u> None
- W. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2007</u> None
- X. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2008</u> None
- Y. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2009</u> None
- Z. <u>BENEFIT ENHANCEMENTS ENACTED BY THE BOARD OF TRUSTEES IN 2010</u> None

### AA. LEGISLATED PLAN CHANGES ENACTED BY THE 2011 LEGISLATURE

### 1. Retirement Provisions

For members hired on or after January 1, 2012 (Group B members), changed the eligibility for normal retirement to age 65 with 5 years of service, or age 62 with 30 years of service. Also for members hired on or after January 1, 2012, added an eligibility for early retirement upon age 55 with 10 years of service.

### 2. Benefit Multiplier

For members hired on after January 1, 2012, the benefit multiplier was changed to 2.5% per year of service. Early retirement benefits would be reduced on an actuarially equivalent basis.

### BB. BENEFIT ENHANCEMENTS ENACTED IN 2012

None

### CC. BENEFIT ENHANCEMENTS ENACTED IN 2013

None

### DD. BENEFIT ENHANCEMENTS ENACTED IN 2014

None



### **DEFINITION OF TERMS**

### 1. Actuarial Cost Method

A method for determining the actuarial present value of future benefits and allocating such value to time periods in the form of a normal cost and an actuarial accrued liability.

### 2. Present Value of Future Benefits

This is computed by projecting the total future benefit cash flow from the System, using actuarial assumptions, and then discounting the cash flow to the valuation date.

### 3. Normal Cost

Computed differently under different actuarial cost methods, the normal cost generally represents the value of the portion of the participant's anticipated retirement, termination, and/or death and disability benefits accrued during a year.

### 4. Actuarial Accrued Liability

Computed differently under different actuarial cost methods. Generally actuarial accrued liability represents the value of the portion of the participant's anticipated retirement, termination, and/or death and disability benefits accrued as of the valuation date.

### 5. Entry Age Actuarial Cost Method

A method under which a participant's actuarial present value of future benefits is allocated on a level basis over the earnings of the participant between his/her entry into the System and his/her assumed exit.

### 6. Unfunded Actuarial Accrued Liability

The difference between total actuarial present value of future benefits over the sum of the tangible assets of the System and the actuarial present value of the members' future normal costs. The System is underfunded if the difference is positive and overfunded if the difference is negative.

### 7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to the System, as valued by the actuary for purposes of the actuarial valuation.

### DEFINITION OF TERMS (Continued)

### 8. Actuarial Gain or Loss

From one valuation to the next, if the experience of the plan differs from that anticipated by the actuarial assumptions, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the assets in the trust had a yield of 12% based on actuarial value, while the assumed yield on the actuarial value of assets was 7.75%.



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City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

The Statistical Section provides additional historical perspective, context, and detail to assist the reader in using the information in the financial statements and note disclosures to understand and assess the economic condition of the City of Austin Employees' Retirement System (COAERS). In compliance with *GASB Statement No. 44, Economic Condition Reporting: The Statistical Section*, schedules are classified into the following categories: Demographic and Economic Information, Operating Information, and Financial Trends.

### STATISTICAL TABLES

Table Number	Content of Tables	Page
	<b>Demographic and Economic Information</b> – Designed to assist the reader in understanding the environment in which COAERS operates.	
15A	Distribution of All Active Participants by Age and Length of Service	114
15B	Distribution of Group A Active Participants by Age and Length of Service	115
15C	Distribution of Group B Active Participants by Age and Length of Service	116
16	Distribution of All Active Participants by Service and Current Rate of Pay	117
	<b>Operating Information</b> – Provides contextual information to help the reader understand how COAERS' financial information relates to the services it provides and the activities it performs.	
17	Schedule of Average Benefit Payments	118
18	Retired Members by Type of Benefit	119
19	Schedule of Participating Employers	120
	<b>Financial Trends</b> – Schedules to help users understand and assess changes in COAERS' financial position over time.	
20	Change in Net Position, Last Ten Fiscal Years	121
21	Benefit and Refund Deductions from Net Position by Type, Last Ten Fiscal Years	122
<b>G G</b>		

*Sources:* Schedules and data are provided by the consulting actuary, Gabriel Roeder Smith & Company, unless otherwise noted.

**TABLE 15A** 

City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

### DISTRIBUTION OF ALL ACTIVE PARTICIPANTS BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2015

Average Annual Salary	37,243	43,547	50,844	57,702	62,837	66,553	66,929	68,795	71,249	72,961	61,771
A A S	↔										$\boldsymbol{\diamond}$
Number of Employ ees	145	631	1,057	1,213	1,332	1,363	1,273	1,137	675	237	9,063
35+	0	0	0	0	0	0	0	7	4	7	13
30-34	0	0	0	0	0	1	17	27	23	9	74
25-29	0	0	0	0	1	27	67	73	46	14	228
20-24	0	0	0	1	60	171	181	148	70	26	657
15-19	0	0	∞	88	214	255	262	227	147	42	1,243
10-14	0	ω	67	200	294	237	204	227	126	56	1,414
5-9	0	74	318	388	326	346	271	228	136	58	2,145
4	7	41	74	61	52	39	47	36	33	7	392
ε	9	63	90	88	79	63	43	26	16	4	478
7	17	123	148	104	93	67	54	50	31	S	
-	52	169	187	166	129	105	80	59	27	9	980
0	68	158	165	117	84	52	47	34	16	9	747
Attained Age	Under 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & Over	All Ages

Gabriel Roeder Smith & Company

**Statistical Section** 

### COAERS 2015 Comprehensive Annual Financial Report

**TABLE 15B** 

### DISTRIBUTION OF GROUP A ACTIVE PARTICIPANTS BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2015

Average Annual Salary	36,015	47,091	54,010	61,461	65,330	68,800	68,741	70,543	72,573	74,924	66,662
A A N	\$										Ś
Number of Employ ees	0	118	468	742	950	1,073	1,048	67	582	212	6,162
35+	0	0	0	0	0	0	0	0	4	7	13
30-34	0	0	0	0	0	1	17	27	23	9	74
25-29	0	0	0	0	1	27	67	73	46	14	228
20-24	0	0	0	1	60	171	181	148	70	26	657
15-19	0	0	8	88	214	255	262	227	147	42	1,243
10-14	0	ς	67	200	294	237	204	227	126	56	1,414
5-9	0	73	315	388	326	341	271	225	135	54	2,128
4	7	40	74	60	52	39	44	36	31	7	385
${\mathfrak c}$	0	1	σ	σ	0	0	1	0	0	0	14
7	0	0	0	7	1	0	0	0	0	0	ς
-	0	1	1	0	0	0	1	0	0	0	ŝ
0	0	0	0	0	0	0	0	0	0	0	0
Attained Age	Under 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & Over	All Ages

Gabriel Roeder Smith & Company

**Statistical Section** 

### COAERS 2015 Comprehensive Annual Financial Report

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COAERS 2015 Comprehensive Annual Financial Report

DISTRIBUTION OF	ON OF		PB ACT A	CTIVE PARTICIPANTS BY A AS OF DECEMBER 31, 2015	RTICI	PANT BER 31	S BY A I, 2015	AGEA	ND LE	ILSN	GROUP B ACTIVE PARTICIPANTS BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2015	ICE	E A verage
6		ε	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Number of Employees	A1 Sč	Annual Salary
52 1		7 6	0	0	0	0	0	0	0	0	143	S	37,261
168 123		.3 62	1	1	0	0	0	0	0	0	513		42,732
186 148	~~	8 87	0	ε	0	0	0	0	0	0	589		48,328
166 102	2	85	1	0	0	0	0	0	0	0	471		51,781
129 92	Š	LL	0	0	0	0	0	0	0	0	382		56,636
105 67	Ľ	61	0	3	0	0	0	0	0	0	290		58,241
79 54	7	42	б	0	0	0	0	0	0	0	225		58,490
59 50	õ	24	0	ω	0	0	0	0	0	0	170		58,850
27 31	1	16	7	1	0	0	0	0	0	0	93		62,961
6	41	5 4	0	4	0	0	0	0	0	0	25		56,308
977 689	~	) 464	L	17	0	0	0	0	0	0	2,901	\$	51,381

### DISTRIBUTION OF ALL ACTIVE PARTICIPANTS BY SERVICE AND CURRENT RATE OF PAY AS OF DECEMBER 31, 2015

Completed Years of Service	Number of Employees	al Average Salary
0	747	\$ 48,529
1	980	51,128
2	692	53,102
3	478	53,152
4	392	58,135
5-9	2,145	61,937
10-14	1,414	66,202
15-19	1,243	69,845
20-24	657	75,389
25-29	228	81,837
30-34	74	78,453
35+	13	 96,507
All Years	9,063	\$ 61,771

**TABLE 17** 

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

Retirement Effective Dates			Years C	Years Creditable Service	rvice		
January 1, 2010 to December 31, 2015	0-4	5-9	10-14	15-19	20-24	25-29	30+
Period 01/01/2010 to 12/31/2010							
Average Monthly Benefit	\$257	\$740	\$1,600	\$2,089	\$3,134	\$4,115	\$5,936
Average Final Salary	\$44,138	\$44,485	\$55,981	\$53,598	\$58,538	\$66,432	\$84,299
Number of Active Retirees	22	40	35	31	96	64	15
Period 01/01/2011 to 12/31/2011							
Average Monthly Benefit	\$206	\$798	\$1,409	\$2,431	\$3,273	\$4,622	\$4,891
Average Final Salary	\$39,835	\$47,423	\$53,714	\$61,051	\$63,401	\$73,660	\$67,047
Number of Active Retirees	22	42	32	32	98	50	6
Period 01/01/2012 to 12/31/2012							
Average Monthly Benefit	\$263	\$890	\$1,591	\$2,366	\$3,158	\$4,669	\$4,490
Average Final Salary	\$41,271	\$50,472	\$55,358	\$57,742	\$61,017	\$74,302	\$60,811
Number of Active Retirees	12	46	52	33	109	73	17
Period 01/01/2013 to 12/31/2013							
Average Monthly Benefit	\$249	\$701	\$1,541	\$2,325	\$3,330	\$4,714	\$5,418
Average Final Salary	\$38,808	\$43,790	\$54,621	\$57,891	\$64,170	\$76,055	\$71,320
Number of Active Retirees	19	43	43	47	140	46	17
Period 01/01/2014 to 12/31/2014							
Average Monthly Benefit	\$304	\$934	\$1,748	\$2,059	\$3,457	\$4,653	\$5,142
Average Final Salary	\$41,458	\$54,808	\$61,215	\$55,462	\$66,771	\$74,120	\$70,799
Number of Active Retirees	23	51	50	39	115	56	22
Period 01/01/2015 to 12/31/2015							
Average Monthly Benefit	\$342	\$826	\$1,856	\$2,469	\$3,650	\$4,597	\$5,533
Average Final Salary	\$45,450	\$49,458	\$65,657	\$66,219	\$71,037	\$70,821	\$76,571
Number of Active Retirees	30	44	49	51	112	54	25

Gabriel Roeder Smith & Company

### **Statistical Section**

**TABLE 18** 

### City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

## **RETIRED MEMBERS BY TYPE OF BENEFIT (AS OF DECEMBER 31, 2015)**

	6					2	4	15	14	13	18	103	169	st death benefit
	×				0		1		1	1		20	25	fit upon fir onthly
	7			6	13	11	6	10	11	17	Г	93	180	y benefit benefit thly benefit y benefit ir tember's ir tember's ir
	9				1	0	13	14	22	27	23	90	192	nefit: ed month ad month luced mor ced month secont of n srcent of n
elected <sup>b</sup>	n					4	4	13	20	18	24	95	178	ionthly be oer's reducer's 66-2/3 pe
Option Selected <sup>b</sup>	4				4	5	9	10	5	4	4	35	73	t of member's m at of memb t of memb cent of memb at of memb at of member at the of member of member at the of member of member at the of member of member at the of member of member at the of methe at the
0	e			c	8	15	23	16	22	27	21	208	343	Option Selected: Inmodified Plan: life annuity he following options reduce the retired member's monthly benefit: Option 1 - Beneficiary receives 100 percent of member's reduced monthly benefit Option 2 - Beneficiary receives 50 percent of member's reduced monthly benefit Option 3 - Beneficiary receives 66-2/3 percent of member's reduced monthly benefit Option 4 - Survivor receives 66-2/3 percent of member's reduced monthly benefit option 5 - Level income option payable for life of retiree Option 6 - Level income option, beneficiary receives 66-2/3 percent of member's monthly benefit Option 7 - Life annuity with 15 years guaranteed Option 8 - Other participant created actuarial equivalent forms of payment
	7			9	16	21	31	21	31	37	45	274	482	annuity s reduce th y receives y receives receives receives receives ty with 15 icipant cre
	1			53	96	107	111	112	148	137	156	1,249	2,169	elected: I Plan: life : ng options Beneficiar Beneficiar Beneficiar Survivor r Level incc Life annui Other part
	Unmod.	200	006	108	126	137	138	102	111	111	120	915	2,853	<sup>b</sup> Option Selected: Unmodified Plan: life annuity The following options reduce the retired member's monthly benefit: Option 1 - Beneficiary receives 100 percent of member's reduced m Option 2 - Beneficiary receives 50 percent of member's reduced m Option 3 - Beneficiary receives 66-2/3 percent of member's reduced m Option 4 - Survivor receives 66-2/3 percent of member's reduced m Option 5 - Level income option payable for life of retiree Option 7 - Life annuity with 15 years guaranteed Option 8 - Other participant created actuarial equivalent forms of p
	4			17	15	14	14	Г	б	0	С	8	81	
Type of Retirement <sup>a</sup>	e			2	12	13	16	18	16	8	12	13	110	
e of Reti	6			6	26	36	54	45	55	40	39	138	442	a service
Typ	1			151	213	241	256	243	311	344	364	2,923	5,046	e ant or death i
Number of Retired	Members -			179	266	304	340	313	385	392	418	3,082	5,679	age and servic normal retireme ee
Amount of	fit	Dofermed	neieiten	\$1-250	251-500	501-750	751-1,000	1,001-1,250	1,251-1,500	1,501-1,750	1,751-2,000	Over \$2,000	Total	Notes: <sup>a</sup> Type of Retirement 1. Normal retirement for age and service 2. Beneficiary payment, normal retirement or death in service 3. Disability retirement 4. QDRO - alternate payee

\*The number of Retired Members and the number of options selected are not equal due to the inclusion of 985 deferred vested members in the Unmodified option selection.

City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

### SCHEDULE OF PARTICIPATING EMPLOYERS

The City of Austin and the City of Austin Employees' Retirement System are the only participating employers in the plan.

**TABLE 20** 

City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

### CHANGE IN NET POSITION, LAST TEN FISCAL YEARS

					Fiscal Year	Year				
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Additions										
Member Contributions	\$35,791	\$39,971	\$41,263	\$38,752	\$40,629	\$41,503	\$43,922	\$47,449	\$50,489	\$54,066
Employer Contributions	30,610	36,521	40,786	45,263	53,576	66,718	76,217	86,713	93,470	100,637
Investment Income (net of expenses)	179,952	114,931	(435,867)	310,844	230,102	(21,964)	220,199	287,075	99,704	(47,608)
Total additions to plan net assets	246,353	191,423	(353,818)	394,859	324,307	\$86,257	\$340,338	\$421,237	\$243,663	\$107,095
Deductions										
Benefit Payments	90,116	94,627	100,707	108,090	115,665	123,558	131,606	141,923	152,664	162,085
Refunds	4,196	4,438	4,285	4,858	4,205	3,801	4,916	4,738	4,154	4,052
Administrative Expenses	1,671	1,776	1,883	2,032	2,113	2,218	2,280	2,561	2,631	2,421
Lump-sum Payments	2,178	1,328	3,022	3,095	2,013	2,483	3,843	4,858	5,039	3,532
Total deductions from plan net assets	98,161	102,169	109,897	118,075	123,996	132,060	142,645	154,080	164,488	172,090
Change in net assets	\$148,192	\$89,254	(\$463,715)	\$276,784	\$200,311	(\$45,803)	\$197,693	\$267,157	\$79,175	(\$64,995)
Notes: Dollar amounts in thousands Columns may not add due to rounding										

COAERS 2015 Comprehensive Annual Financial Report

Includes contributions to and benefit payments from 415 Restoration Plan

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City of Austin Employees' Retirement System Actuarial Valuation - December 31, 2015

# **BENEFIT AND REFUND DEDUCTIONS FROM NET POSITION BY TYPE, LAST TEN FISCAL YEARS**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Type of Benefit Age and service benefits: Retirees <sup>a</sup>	\$88,513	\$93,049	\$99,219	\$106,148	\$114,244	\$121,366	\$130,019	\$139,667	\$150,335	\$160,219
Beneficiaries <sup>a</sup> Lump-sum payments	\$2,178	\$1,328	\$3,022	\$3,095	\$2,011	\$2,483	\$3,843	\$4,858	\$5,039	\$3,532
In service death benefits: <sup>b</sup>	\$1,603	\$1,578	\$1,489	\$1,942	\$1,421	\$2,192	\$1,587	\$2,256	\$2,329	\$1,866
Disability benefits: <sup>c</sup>										
Total benefits	\$92,294	\$95,955	\$103,730	\$111,185	\$117,676	\$126,041	\$135,449	\$146,781	\$157,703	\$165,617
<b>Type of Refund</b> Death <sup>b</sup> Separation	\$4.196	\$4.438	\$4.285	<b>\$4.858</b>	\$4.205	\$3.801	\$4.916	\$4.738	\$4.154	\$4.052
Total refunds	\$4,196	\$4,438	\$4,285	\$4,858	\$4,205	\$3,801	\$4,916	\$4,738	\$4,154	\$4,052
Notes: Dollar amounts in thousands <sup>a</sup> Someonion of one benefic for beneficionies not	ousands	the test of te	eldeliane vitnemue	d						
be begregation of death benefits between refunds and in service death benefits not currently available	benefits betwee	en refunds and	l in service dea	th benefits not	currently avails	able				

<sup>c</sup> Segregation of disability benefits from age and service benefits not currently available

Includes benefit payments from 415 Restoration Plan

Excludes administrative expenses

Gabriel Roeder Smith & Company

**Statistical Section** 

### HISTORY OF CONTRIBUTIONS AND BENEFIT RATES

	Employer	Member	Interest Paid on	Benefits	Cost of Living
Year	<b>Contribution Rate</b>	<b>Contribution Rate</b>	Member Deposits	Multiplier	Adjustment
1941	4.00%	4.00%	-	N/A	-
1942	н	н	-	н	-
1943	н	н	-	н	-
1944	н	н	-	н	-
1945	н	н	2.00%	п	-
1946	н	н	2.00%	п	-
1947	н	н	2.00%	п	-
1948	н	н	2.00%	н	-
1949	п	п	2.00%	п	-
1950	н	н	2.00%	п	-
1951	5.00%	5.00%	2.00%	п	-
1952	п	п	2.00%	п	-
1953	п	п	1.91%	п	-
1954	п	н	2.46%	п	-
1955	п	н	2.52%	п	-
1956	п	н	2.60%	п	-
1957	п	п	2.00%		-
1958	п	п	2.62%	н	-
1959	п	п	2.79%	н	-
1960	п	н	3.27%	п	-
1961	п	н	2.77%	п	-
1962	п	п	3.65%	1.125%	-
1963	п	н	3.76%	п	-
1964	п	п	3.31%		-
1965	п	н	3.25%	п	-
1966	п	н	3.56%	п	-
1967	п	п	3.68%	1.25%	-
1968	п	н	4.25%	п	-
1969	п	п	4.66%		0.50% <sup>a</sup>
1970	п	п	4.98%	п	1.50%
1971	6.00%	6.00%	5.43%	1.50%	2.00%
1972	п	п	6.04%	11	3.00%
1973	п	п	6.22%	1.75%	3.00%
1974	п	п	6.33%	11	3.00%
1975	п	п	6.82%		3.00%
1976	п	п	6.94%		3.00%
1977	н	п	6.51%		3.00%
1978	п	п	6.66%		3.00%
1979	н	п	7.84%		3.00%
1980	н	н	8.01%	н	3.00%

**Statistical Section** 

### HISTORY OF CONTRIBUTIONS AND BENEFIT RATES, CONTINUED

	Employer	Member	Interest Paid on	Benefits	Cost of Living
Year	Contribution Rate	<b>Contribution Rate</b>	Member Deposits	Multiplier	Adjustment
1981	6.00%	6.00%	8.14%	"	3.00%
1982	6.60%	6.60%	8.21%	н	3.00%
1983	н	н	8.39%	н	3.00%
1984	7.00%	7.00%	8.29%	1.85%	3.00%
1985	н	н	8.22%	2.00%	3.00%
1986	н	н	8.00%	н	3.00%
1987	6.20%	6.20%	8.00%	н	1.50%
1988	7.00%	7.00%	8.00%	п	3.00%
1989	н	н	8.00%	н	3.00%
1990	н	н	8.00%	2.10%	3.00%
1991	н	н	6.50%	н	3.00%
1992	н	н	6.00%	н	4.00%
1993	Ш	н	5.00%	2.20%	3.10%
1994	Ш	н	6.00%		6.00%
1995	Ш	п	6.75%	2.30%	6.00%
1996	Ш	н	6.75%		6.00%
1997	п	п	6.75%	2.60%	6.00%
1998	п	п	5.00%		5.00%
1999	п	8.00%	6.25%	2.70%	3.00%
2000	8.00%	п	5.75%	2.98%	0.00%
2001	п	п	4.25%		3.50%
2002	Ш	п	3.75%	3.00%	2.50%
2003	п	п	3.75%		0.00%
2004	п	п	3.75%		0.00%
2005	п	п	4.50%		0.00%
2006	9.00% <sup>b</sup>	п	4.50%		0.00%
2007	Ш	п	4.50%	п	0.00%
2008	10.00% <sup>b</sup>	п	4.00%	п	0.00%
2009	12.00% <sup>b</sup>	п	3.25%		0.00%
2010	12.00% °	п	2.75%		0.00%
2011	14.00% <sup>c</sup>	п	2.25%	н	0.00%
2012	16.00% <sup>c</sup>	п	1.85%	3.00%/2.50% <sup>d</sup>	0.00%
2013	18.00% <sup>c</sup>	п	2.17%	3.00%/2.50% <sup>d</sup>	0.00%
2014	п	п	2.63%	3.00%/2.50% <sup>d</sup>	0.00%
2015	п	н	2.14%	3.00%/2.50% <sup>d</sup>	0.00%

<sup>a</sup> In 1969, the adjustment was 1.5% prorated for 4 months, 4/12 x 1.5% or .05%.

<sup>b</sup> Includes City of Austin subsidy payment, effective at beginning of their fiscal year, October 1, pursuant to Supplemental Funding Plan.

<sup>c</sup> Increased to 14.00% effective October 1, 2010; increased to 16.00% effective October 1, 2011; increased to 18.00% effective October 1, 2012 and thereafter; pursuant to Amended Supplemental Funding Plan.

<sup>d</sup> The multiplier was set at 2.50% for those hired on and after January 1, 2012. The multiplier remained at 3.00% for those hired before January 1, 2012.

**Notes**: The System was a money purchase plan until 1962 when a formula for computing benefits was introduced with a multiplier of 1.125%. Special adjustments based on years of retirement granted by City Council in 1985 and 1990 are not reflected in table. **Source:** Information derived from COAERS internal sources.