





UTAH RETIREMENT SYSTEMS

A Component Unit of the State of Utah

2015 COMPREHENSIVE ANNUAL FINANCIAL REPORT

for the Year Ended December 31, 2015

Noncontributory Retirement System • Contributory Retirement System

Public Safety Retirement System • Firefighters Retirement System

Judges Retirement System • Utah Governors and Legislators Retirement Plan

Tier 2 Public Employees Contributory Retirement System

Tier 2 Public Safety and Firefighter Contributory Retirement System

401(k) and 457 Plans • Roth and Traditional IRAs • Health Reimbursement Arrangement (HRA)

Prepared by: Finance Department • Utah Retirement Systems

560 East 200 South • Salt Lake City, Utah 84102-2044 • www.urs.org

Daniel D. Andersen, Executive Director • Robert K. Kellersberger, Finance Director

TABLE OF CONTENTS

INTRODUCTORY SECTION

- 6 Letter of Transmittal
- 10 Board President's Letter
- 11 Utah State Retirement Board, Membership Council, and Executive Director
- 12 Organization Chart and Administrative Staff
- 12 Professional Consultants

Systems' Highlights:

- 14 Noncontributory Retirement System
- 16 Contributory Retirement System
- 18 Public Safety Retirement System
- 20 Firefighters Retirement System
- 22 Judges Retirement System
- 24 Utah Governors and Legislators Retirement Plan
- 26 Tier 2 Public Employees Contributory Retirement System
- Tier 2 Public Safety and Firefighter Contributory Retirement System
- 30 Defined Contribution Savings Plans

FINANCIAL SECTION

- 32 Independent Auditors' Report
- 34 Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters
- 37 Management's Discussion and Analysis

Basic Financial Statements:

- 52 Statements of Fiduciary Net Position Pension (and Other Employee Benefit) Trust Funds
- 54 Statements of Changes in Fiduciary Net Position Pension (and Other Employee Benefit) Trust Funds
- 57 Notes to the Basic Financial Statements

Required Supplementary Information:

- 86 Schedule of Changes in the Employers' Net Pension Liability
- 90 Schedules of Employers' Net Pension Liability
- 91 Schedules of Employer Contributions
- 92 Schedule of Investment Returns
- 94 Notes to Required Supplementary Information

Supplementary Financial Supporting Schedules:

Individual Retirement Systems' Schedules by Division

Noncontributory Retirement System:

- 96 Schedules of Fiduciary Net Position Pension Trust Fund by Division
- 97 Schedules of Changes in Fiduciary Net Position Pension Trust Fund by Division
- 98 Schedules of Changes in the Employers' Net Pension Liability by Division
- 100 Schedules of Net Pension Liability by Division
- 101 Schedules of Employer Contributions by Division

Contributory Retirement System:

- 102 Schedules of Fiduciary Net Position Pension Trust Fund by Division
- 103 Schedules of Changes in Fiduciary Net Position Pension Trust Fund by Division
- 104 Schedules of Changes in the Employers' Net Pension Liability by Division
- 106 Schedules of Net Pension Liability by Division
- 107 Schedules of Employer Contributions by Division

Public Safety Retirement System:

- 108 Schedules of Fiduciary Net Position Pension Trust Fund by Division
- 110 Schedules of Changes in Fiduciary Net Position Pension Trust Fund by Division
- 112 Schedules of Changes in the Employers' Net Pension Liability by Division
- 116 Schedules of Net Pension Liability by Division
- 117 Schedules of Employer Contributions by Division

Firefighters Retirement System:

- 118 Schedules of Fiduciary Net Position Pension Trust Fund by Division
- 119 Schedules of Changes in Fiduciary Net Position Pension Trust Fund by Division
- 120 Schedules of Changes in the Employers' Net Pension Liability by Division
- 122 Schedules of Net Pension Liability by Division
- 123 Schedules of Employer Contributions by Division
- 124 Schedules of Administrative and Investment Expenses

Table of Contents (Concluded)

INVESTMENT SECTION

Defined Benefits Investments:

- 127 Report on Investment Activity
- 130 Outline of Investment Policies
- 130 2015 Investment Summary
- 131 Asset Allocation
- 132 10-Year Total Pension Investment Rates of Return
- 133 Comparative Investment Results
- 134 List of Largest Assets Held
- 134 Schedules of Fees and Commissions
- 135 Investment Professionals

Defined Contribution Savings Plans Investments:

- 137 Investment Highlights
- 139 Plans Comparative Annualized Rates of Return
- 141 List of Largest Assets Held
- 141 Schedules of Fees and Commissions
- 142 Investment Professionals

ACTUARIAL SECTION

- 145 Actuary's Certification Letter
- 148 Summary of Actuarial Assumptions and Methods
- 154 Calculation of Actuarial Value of Assets
- 154 Actuarial Value of Assets by System
- 154 Analysis of Financial Experience
- 155 Member and Employer Contribution Rates
- 158 Schedules of Funding Progress
- 160 Solvency Tests
- 162 Schedules of Active Member Valuation Data
- 164 Schedules of Retirants and Beneficiaries

Summaries of Plan Provisions:

- 167 Noncontributory Retirement System
- 168 Contributory Retirement System
- 169 Public Safety Retirement System
- 170 Firefighters Retirement System
- 172 Judges Retirement System
- 172 Utah Governors and Legislators Retirement Plan
- 173 Tier 2 Public Employees Contributory Retirement System
- 174 Tier 2 Public Safety and Firefighter Contributory Retirement System
- 176 Changes in Plan Provisions
- 179 Defined Contribution Savings Plans

STATISTICAL SECTION

- 184 Schedules of Changes in Fund Balance **Defined Benefit Systems**
- 188 Schedules of Changes in Fund Balance **Defined Contribution Plans**
- 190 Schedules of Benefit Deductions by Type
- 192 Schedules of Retired Members by Type of Benefit Option
- 194 Schedules of Average Benefit Payments
- 198 Schedules of Active Members by Age and Gender

- 199 Schedules of Retirees by Age and Gender
- 200 Schedules of Principal Participating Employers
- 204 Schedule of Utah Retirement Office Employees
- 207 Schedule of Participating Employers
- 213 Utah Retirement Systems A Highlight History

GASB 68 SCHEDULES OF EMPLOYER ALLOCATIONS AND PENSION REPORTING SECTION

- 218 Independent Auditors' Report for Agent Pans
- 220 Public Safety Retirement System Schedule of Changes in Fiduciary Net Position by Employer — Pension Trust Fund by Division
- 222 Independent Auditors' Report for Cost Sharing Plans

Noncontributory Retirement System:

- 224 Local Government Division
- 236 State and School Division

Contributory Retirement System:

- 240 Local Government Division
- 244 State and School Division

Public Safety Retirement System:

- 246 Other Division A with Social Security
- 250 State of Utah
- 250 Salt Lake City
- 250 Ogden City
- 250 Provo City
- 252 Logan City
- 252 Bountiful City
- 252 Other Division B without Social Security

Firefighters Retirement System:

- 254 Other Division A with Social Security
- 256 Other Division B without Social Security
- 256 Judges Retirement System
- 256 Utah Governors and Legislators Retirement Plan
- 258 Tier 2 Public Employees Contributory **Retirement System**
- 272 Tier 2 Public Safety and Firefighter **Contributory Retirement System**

276 Utah Retirement Systems

Schedule of Employer Allocations and Pension Amounts

- 278 Notes to the Public Safety Retirement System Schedule of Changes in Fiduciary Net Position — Pension Trust Fund by Division and Schedules of Employer Allocations and Pension Amounts
- 288 Aggregation of Funds with a Net Pension Asset
- 304 Aggregation of Funds with a Net Pension Liability

320 SYSTEMS AND PLANS STATISTICAL HIGHLIGHTS

UTAH RETIREMENT SYSTEMS

ADDITIONS BY SOURCE

(in millions)



2015

UTAH RETIREMENT SYSTEMS

COMPREHENSIVE ANNUAL FINANCIAL REPORT

INTRODUCTORY Section

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- **Board President's Letter** 10
- Utah State Retirement Board, Membership Council, and Executive Director 11
 - Organization Chart and Administrative Staff 12
 - **Professional Consultants** 12
 - Systems' Highlights 14

UTAH RETIREMENT SYSTEMS

LETTER OF TRANSMITTAL

UTAH STATE RETIREMENT BOARD

UTAH RETIREMENT SYSTEMS

560 East 200 South Salt Lake City, Utah 84102-2044 801-366-7700 800-365-8772 801-366-7734 FAX

DANIEL D. ANDERSEN **EXECUTIVE DIRECTOR**

April 27, 2016

Utah State Retirement Board 560 East 200 South Salt Lake City, UT 84102-2044

Dear Board Members:

We are pleased to present the 2015 Comprehensive Annual Financial Report of the Utah Retirement Systems (Systems), including the 401(k), 457, Roth and traditional IRAs, and the Health Reimbursement Arrangement (Plans). Together, the Systems and Plans constitute a component unit of the State of Utah, administered by the Utah State Retirement Board (Board) for calendar year 2015.

The financial reporting entity of the Systems and Plans include the Public Employees Noncontributory and Contributory Retirement Systems, for both government and public education employees, the Public Safety, Firefighters, and Judges Retirement Systems, the Utah Governors and Legislators Retirement Plan, the Tier 2 Public Employees Contributory, and Tier 2 Public Safety and Firefighter Contributory Retirement Systems, and the 401(k), 457, Roth and traditional IRAs, and Health Reimbursement Arrangement (HRA).

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the management of the Systems and Plans. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the fiduciary funds.

For financial reporting purposes, the Systems and Plans adhere to accounting principles generally accepted in the United States of America. The Systems and Plans apply all applicable pronouncements of the Governmental Accounting Standards Board (GASB). Investments of the Systems and Plans are presented at fair value.

The Utah Retirement Systems and 401(k), 457, Roth and traditional IRAs, and HRA were established by legislation and authorized as indicated in the notes to the basic financial statements on page 57. The Summaries of Plan Provisions are presented on pages 167 through 182. The number of active and retired members and beneficiaries for each system is presented in the Systems' Highlights on pages 14 through 30. The purpose of the Systems and Plans is to provide benefits for all eligible State, local government, and most public education employees whose employers have elected to participate. Services provided by the staff are performed to meet that objective.

Management's Discussion and Analysis

The Management's Discussion and Analysis (MD&A) beginning on page 37 provides an overview and analysis of the Systems and Plans Basic Financial Statements. This letter of transmittal is intended to complement the MD&A and should be read in conjunction with it.

Financial Information

Management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with generally accepted accounting principles. The concept of reasonable assurance recognizes the cost of a control should not exceed the benefits likely to be derived. This system includes written policies and procedures and an internal audit department that reports to the Board. Discussion and analysis of net position and related additions and deductions are presented in the MD&A beginning on page 37.

Actuarial

The actuarial assumptions and contribution rates were based on the recommendations of our actuary. See the Actuarial Section of this report and the notes to the basic financial statements for explanations of these rates. Rate changes resulted from actuarial assumption modifications, economic conditions, actuarial experience gains and losses, and benefit enhancements in the Systems.

The Utah Retirement Systems are maintained on an actuarially sound basis as certified in this report by our actuary, thus protecting participants' future benefits. We anticipate investment earnings on a long-term basis will continue to meet or exceed the actuarially assumed earning rate. We expect all systems to continue towards fully funded positions in accordance with actuarial assumptions.

An actuarial valuation of the Systems is performed annually. An assumption experience study is performed at least every third year. The actuarial firm Gabriel, Roeder, Smith & Company completed the actuarial reviews and valuations and served as technical advisor to the Systems. Actuarial certification and supporting statistics are included in the Actuarial and Statistical Sections of this report.

Investments

The economic condition of the Systems is based primarily upon investment earnings. For 2015 the Systems experienced a 1.92% rate of return. The Systems' investments were evaluated at year end by Callan Associates Inc., Investment Measurement Service. A comparative analysis of rates of return is presented on page 133 of this report.

The investment portfolio mix at fair value as of the end of 2015 was 16% debt securities, 34% equities, 12% private equity, 15% real assets, 8% short-term, and 15% absolute return. See MD&A and Investment Section for more detailed analysis and information. The Systems' investment outlook is long term, allowing the portfolio to take advantage of the favorable risk-return characteristics of equities by placing more emphasis on this category.

The Board utilizes internal and external portfolio managers employing both passive (indexed) and active strategies. The portfolio is broadly diversified among equities, debt securities, real assets, absolute return, and private equity with additional diversification achieved through domestic and international investing.

The investment policy is to minimize credit and market risks while maintaining a competitive yield on its portfolio. Accordingly, deposits are either insured by federal depository insurance or collateralized. All collateral on deposits is held in the counterparties' joint custody accounts at the Federal Reserve Bank. On occasion, deposits may be significantly greater than collateral due to investment purchase "fails," receipt of interest earnings on the 15th of each month, and proceeds from investment sales and maturities. Of approximately \$31.6 billion in both the Defined Benefit and Defined Contribution investments at fair value as of December 31, 2015, none of the investments were in the category of highest custodial credit risk as defined by GASB.

Funding

In setting contribution rates, the Board's principal objectives are to set rates so the unfunded actuarial accrued liability (UAAL) will be amortized over a reasonable period of time from the most recent valuation date and the set rates so they remain relatively level over time. The Board's funding policy requires the employer contribution rate be at least equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate that results in the amortization of the UAAL. Under this policy, the objective of maintaining a relatively level contribution rate over time is achieved in normal conditions such as consistent financial markets.

In determining the contribution rates, the actuary uses an actuarial value of assets that is based on a 5-year smoothed expected rate of return, wherein the excess or shortfall of investment income over or under the actuarial assumed income rate (currently 7.5%) is recognized over a 5-year period.

Funds are derived from the excess of additions, which include contributions and investment earnings, over deductions that are comprised of benefits and administrative expenses. Funds are accumulated to meet future benefit obligations to retirees and beneficiaries. This accumulated balance is referred to as the "net position restricted for pensions" in the Combined Statements of Fiduciary Net Position in the Financial Section of the report. The total pension liability is not reported in the basic financial statements, but is disclosed in Note 5 to the basic financial statements and in the required supplementary information. The total pension liability is determined by the actuary and is a measure of the present value of actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries, and employees for service earned to date. The net pension liability is measured as the total pension liability less the amount of the pension plan's fiduciary net position. The net pension liability is an accounting measurement for financial statement purposes.

Independent Audit

An annual audit of the Systems and Plans was conducted by the independent accounting firm of Deloitte & Touche LLP. The auditors' report on the basic financial statements is included in the Financial Section of this report.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Utah Retirement Systems for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2014. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such financial reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. The Utah Retirement Systems has received a Certificate of Achievement for the last 31 years. We believe our current report continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to the GFOA.

In addition, the Utah Retirement Systems was awarded the Public Pension Coordinating Council Public Pension Standards 2015 Award. This award is in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

Acknowledgments

The compilation of this report reflects the combined efforts of the staff under the leadership of the Utah State Retirement Board. The report is intended to provide extensive and reliable information for making management decisions, determining compliance with legal provisions, and determining responsible stewardship for the assets contributed by the Systems' members and their employers.

We would like to take this opportunity to express our gratitude to the Board, the staff, the advisors, and the many people who have worked so diligently to assure the successful operation and financial soundness of the Utah Retirement Systems.

Sincerely yours,

Robert K. Kellersberger, CGFM

Finance Director

Daniel D. Andersen **Executive Director**

BOARD PRESIDENT'S LETTER

UTAH STATE RETIREMENT BOARD

UTAH RETIREMENT SYSTEMS

560 East 200 South Salt Lake City, Utah 84102-2044 801-366-7700 800-365-8772 801-366-7734 FAX

DANIEL D. ANDERSEN **EXECUTIVE DIRECTOR**

April 27, 2016

Utah State Retirement Board 560 East 200 South Salt Lake City, UT 84102-2044

Dear Members of the Retirement Systems:

In a world of 24-hour news cycles, political pundits, and volatile financial markets, it might sometimes seem you have a lot to worry about.

But here's one thing that should never cause you worry – the outlook for your URS pension. As board members and trustees of Utah Retirement Systems, it's our responsibility to safeguard this benefit for current and future retirees from Utah's public sector.

I'm pleased to confidently report the outlook remains as solid as ever. Even in a turbulent year, when the Dow Jones industrial average was down 2.23%, URS returned 1.92% in 2015. This is a testament to URS' diverse investment strategy, which seeks to maximize long-term returns with prudent amounts of risk and downside protection.

Assets of URS Defined Benefit Systems increased \$118 million, ending 2015 with a total of \$26.7 billion. At year's end, the Plans Fiduciary Net Position, as a percentage of the Total Pension Liability, was 85.7%. Many experts consider a funding ratio of about 80% or better to be sound for government pensions, and ours remains among the most well-funded statewide plans in the country.

Members continued to make wise contributions to URS Defined Contribution Retirement Savings Plans in 2015. Assets in URS plans reached an all-time high of \$4.6 billion. I'm pleased to see members capitalize on the magic of compounding savings. The key is to start early. Don't let another year slip away without starting to save or increasing your contributions. Educate yourself about the plans and funds available to you at www.urs.org.

A lot of good people are looking out for your best interests. I want to thank those who serve on the Membership Advisory Council. This important group keeps the Board and Legislature apprised of members' interests and concerns. See page 11 for a list of representatives. You are well-served by this group.

I also want to recognize my fellow Board members, each of whom makes a valuable contribution to the success of URS. We meet several times during the year, and Board members spend considerable time preparing for these meetings. I want to thank them for their commitment to URS and their fiduciary duty.

So, worry about other things if you must. But rest easy URS will provide its promised benefits to current and future retirees.

Sincerely,

Sheri K. Nelson

President, Utah State Retirement Board

RETIREMENT BOARD



Pictured Left to Right

Ryan G. Hessenthaler Appointed August 19, 2015

Term Expires July 1, 2019 Represents Investment Community

Laura O. Houston Appointed July 2, 2014 Term Expires July 1, 2018

Represents Investment Community

Roger G. Donohoe Appointed December 17, 2014 Term Expires July 1, 2020 **Represents Education Employees** President

Sheri K. Nelson

Appointed September 15, 2010 Term Expires July 1, 2019 Represents Public Employees

Edward T. Alter Appointed February 2, 2012 Term Expires July 1, 2019 Represents Investment Community

David C. Damschen

State Treasurer Member Since December 10, 2015 Ex-officio Member

Vice President

William W. Wallace Appointed September 18, 2013 Term Expires July 1, 2019 Represents Investment Community

Executive Director



Daniel D. Andersen

Membership Council

Executive Committee Members: Chairperson

Mr. Michael McDonough Represents Utah Education Association

Mr. Marty Peterson......Represents Professional Firefighters of Utah Ms. Amy Ehresman Represents Utah School Employees' Association Mr. Tom Hardy......Represents Utah League of Cities and Towns

Senior Trooper Arlow Hancock......Represents Utah Peace Officers' Association

Council Members:

Mr. Fred Ash Represents Utah Retired School Employees' Association

Mr. Stuart Bailey Represents Utah Education Association

Mr. Terron Barney Represents Utah Public Employees' Association

Representative Brad Dee...... Represents Utah Association of Counties

Honorable

Kimberly K. Hornack......Represents Utah Judicial Council

Ms. Debra McBride Represents Utah Association of Retired Public Employees

Mr. Michael Harman......Represents Utah Education Association

Mr. Richard Petersen Represents Utah School Employees' Association

UTAH RETIREMENT SYSTEMS

ORGANIZATION CHART

As of December 31, 2015

Administrative Staff

Daniel D. Andersen **Executive Director**

Todd W Rupp, CPA **Deputy Executive Director**

Steven M. West, CPA, CFE Director, Internal Audit

Bruce H. Cundick, CFA Chief Investment Officer

Jeff J. Allen **Shared Services Director**

Jayne R. Knecht Director, Human Resources

W. Kendall Rima Chief Information Officer

Robert K. Kellersberger, CGFM Director, Finance

Matthew K. Judd Director, Records Management

Craige D. Stone Director, Defined Contribution Savings Plans

Judy C. Lund Director, Retirement

Ed K. Archer, CIA, CISA Chief Compliance Officer — Investments

Ryan C. Ashcraft Manager, Retirement Planning

Professional Consultants

Actuary

Gabriel, Roeder, Smith & Company 5605 N. MacArthur Blvd., Suite 870 Irving, TX 75038-2631

Auditor

Deloitte & Touche LLP Certified Public Accountants 299 South Main, Suite 1900 Salt Lake City, UT 84111

Legal Counsel

Howard, Larsen, Hansen & Eves, LLC 560 East 200 South, Suite 230 Salt Lake City, UT 84102

MEMBERSHIP COUNCIL



Equity Investments

Debt Securities

Real Assets

Other Consultants

C Young Company

1850 SE 1st Terrace

Groom Law Group

Ice Miller, LLP

Suite 2900

Washington, DC 20006

One American Square

Indianapolis, IN 46282

1701 Pennsylvania Ave. NW

Cape Coral, FL 33990

Private Equity

Absolute Return



Purchasing



HUMAN RESOURCES

Jayne R. Knecht

Human Resources

Safety/Security



INFORMATION OFFICER

W. Kendall Rima

Server Hardware and Software

Applications Development Helpdesk/ Workstation

Support Process Automation

Workflow Networking and

Telecommunications

Web Service

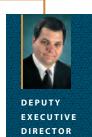
Information Security

UTAH STATE RETIREMENT BOARD



EXECUTIVE DIRECTOR

Daniel D. Andersen



Todd W Rupp

PROFESSIONAL SERVICES

Actuary • Auditor **Legal Consultants Investment Advisors Proxy Voting**

Detail for professional service providers is shown to the left.

Investment professionals are presented on pages 135 and 142.





DIRECTOR FINANCE

Robert K. Kellersberger

Financial Reporting and Accounting

Budgets

Tax Reporting

Cash Management and Disbursements

Accounts Payable

Payroll

Risk Management



DIRECTOR RECORDS MANAGEMENT

Matthew K. Judd

Records Management

Employer Contributions Reporting

Member Account Management

Defined Contribution Daily Trade Reconciliation

Employer Compliance and Auditing



DEFINED CONTRIBUTION **SAVINGS PLANS**

Craige D. Stone

401(k) Plan

457 Plan

Traditional IRA

Roth IRA

Health Reimbursement Arrangement (HRA)



DIRECTOR RETIREMENT

Judy C. Lund

Retirement Benefits

Death Benefits

Redeposits and Purchases

Refunds

Branch Office



COMPLIANCE OFFICER INVESTMENTS

Ed K. Archer

Investment Compliance

Proxy Voting



MANAGER RETIREMENT PLANNING

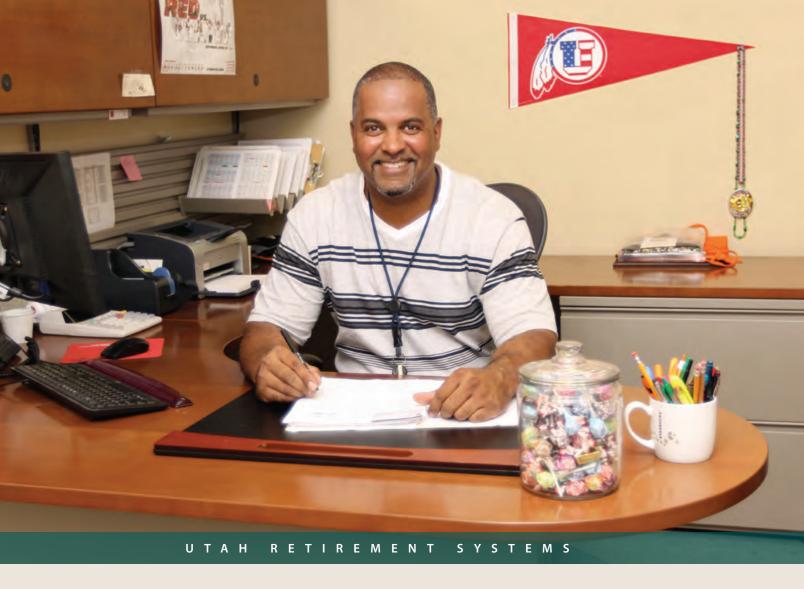
Ryan C. Ashcraft

Member Education

Retirement Planning

Seminars

Stakeholder Relations



NONCONTRIBUTORY

Retirement System Highlights

The Public Employees Noncontributory Retirement System includes eligible public employees of the State of Utah and its political subdivisions and public education employees of those entities covered by the System.

Composite Picture

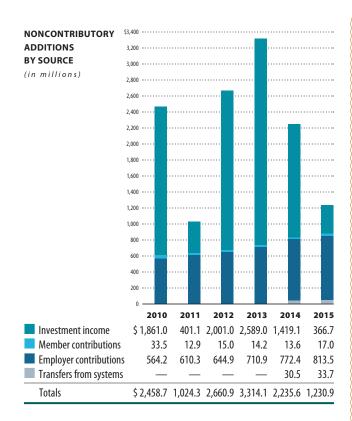
Total Membership	156,081
Active	68,273
Terminated Vested	39,066
Retired	48,742
2015 Active Members	68,273
2015 Active Members	•
	49.2

2015 Retirees Number	3,268
Average Age	59.5
Average Years of Service	22.1
Final Average Annual Salary	\$49,001
Average Annual Benefit	\$21,533
Average Annual Denefit	

Average Annual Benefit — **All Retirees**\$21,363

Pictured: Michael Jones, Case Manager/Activities Coordinator, Housing Authority of Salt Lake City

Noncontributory Retirement System Highlights (Concluded)





Age	Years of Service	Allowance Reduction
Any age	30	None
Any age	25	Full actuarial before age 60
60-61	20	3% each year before age 65
62-64	10	3% each year before age 65
65	4	None

Service Benefit Formula

Number of years of service x 2.00% x FAS.*

*FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

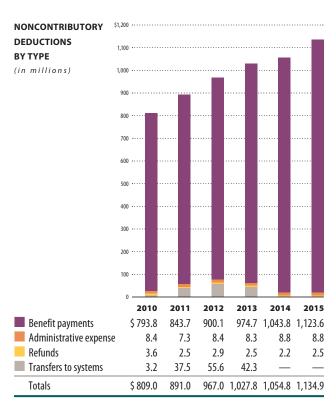
Cost-of-Living Allowance

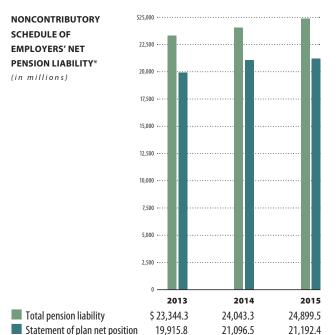
Up to 4% annually on original retirement benefit.

Contribution Rates (as of 12-31-2015)

Employer rate for the State and School Division (Level A) is 22.19% of covered salary and 18.47% for the Local Government Division (Level B).

For more detail see Summary of Plan Provisions on page 167.





\$ 3,428.5

Net pension liability

3,707.1

2,946.8

^{*}Additional years will be added as they become available.



CONTRIBUTORY

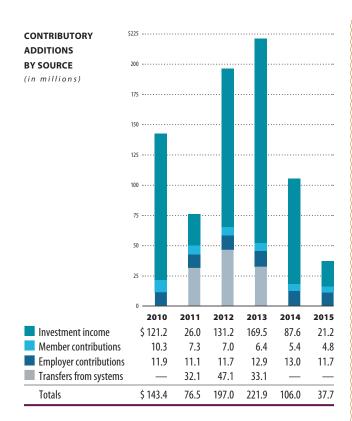
Retirement System Highlights

The Public Employees Contributory Retirement System includes eligible public employees of the State of Utah and its political subdivisions and public education employees of those entities covered by the System.

Composite Picture			
Total Membership	6,170	2015 Retirees Number	178
Active	943	Average Age	51.5
Terminated Vested	1,005	Average Years of Service	31.2
Retired	4,222	Final Average Annual Salary	\$53,462
2015 Active Members	943	Average Annual Benefit	\$30,584
Average Age	57.2	Average Annual Benefit —	
Average Years of Service Average Annual Salary		All Retirees	\$17,497
•		1	

Pictured: Annette Damavandi, Head Baker, Southern Utah University Food Services/Chartwells Dining, Cedar City

Contributory Retirement System Highlights (Concluded)



DEDUCTIONS BY TYPE (in millions) 2010 2011 2012 2013 2014 2015 Benefit payments \$67.6 68.4 70.9 74.2 77.0 81.4 Administrative expense 0.5 0.4 0.5 0.5 0.5 0.5 Refunds 1.9 2.4 1.6 1.9 2.0 1.2 Transfers to systems 3.9 38.0 41.5 Totals \$73.6 70.7 117.9 73.4 76.6 124.6

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	30	None
60-61	20	3% each year before age 65
62-64	10	3% each year before age 65
65	4	None

Service Benefit Formula

- 1. Number of years of service before 7-1-75 x 1.25% x FAS.*
- 2. Number of years of service after 6-30-75 x 2.00% x FAS.*
- 3. Plan 1 allowance = total of 1 and 2.

Cost-of-Living Allowance

Up to 4% annually on original retirement benefit.

Contribution Rates (as of 12-31-2015)

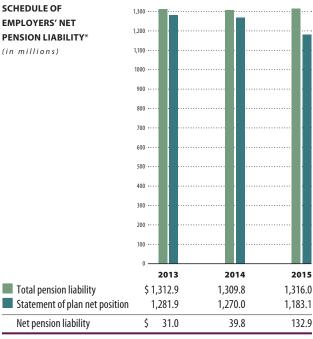
Member rate is 6% of covered salary. Employer rate for State and School Division (Level A) is 17.70% of covered salary and 14.46% for the Local Government Division (Level B).

For more detail see Summary of Plan Provisions on page 168.

CONTRIBUTORY **SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY*** (in millions)

Net pension liability

CONTRIBUTORY



^{*}Additional years will be added as they become available.

^{*}FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.



PUBLIC SAFETY

Retirement System Highlights

The Public Safety Retirement System includes eligible state and local government employees directly involved in law enforcement. The Public Safety System consists of the Noncontributory and Contributory divisions.

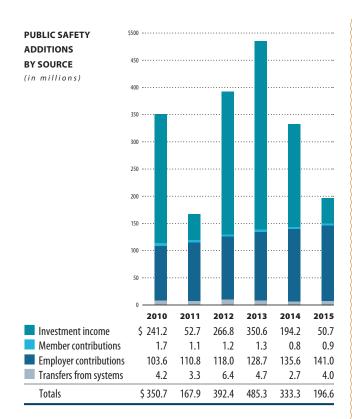
Composite Picture

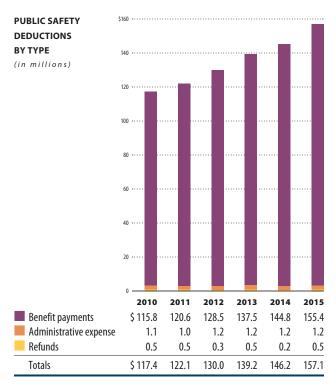
Total Membership	14,741
Active	6,399
Terminated Vested	3,178
Retired	5,164
2015 Active Members	6,399
2015 Active Members	
	42.6

2015 Retirees Number	248
Average Age	48.8
Average Years of Service	23.5
Final Average Annual Salary	\$58,050
Average Annual Benefit	\$31,726
Average Annual Benefit —	
All Retirees	\$27 550

Pictured: Jayson Despain, K9 Officer, with Paige (dog), and Kurt Yates, Sergeant, Hurricane Police Department

Public Safety Retirement System Highlights (Concluded)





Service Retirement

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

Service Benefit Formula

- 1. 2.5% x FAS* x years of service up to 20 years.
- 2. 2.0% x FAS* x years of service over 20 years.
- 3. Monthly benefit = total of 1 and 2.

Cost-of-Living Allowance

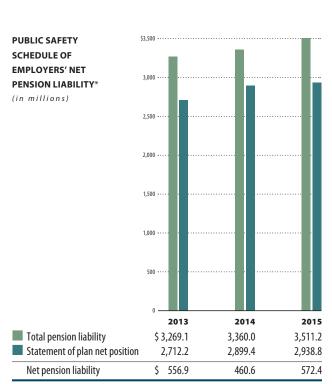
Up to 2.5% or 4% (depending on employer) annually on original retirement benefit.

Contribution Rates (as of 12-31-2015)

Noncontributory — Employer rates range from 32.20% to 48.68% of covered salary.

Contributory — Member rates range from 10.50% to 12.29% of covered salary. Employer rates range from 22.29% to 31.80% of covered salary.

For more detail see Summary of Plan Provisions on page 169.



^{*}Additional years will be added as they become available.

^{*} FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.



FIREFIGHTERS

Retirement System Highlights

The Firefighters Retirement System includes eligible state and local government employees directly involved in fire fighting and whose duties are classified as hazardous.

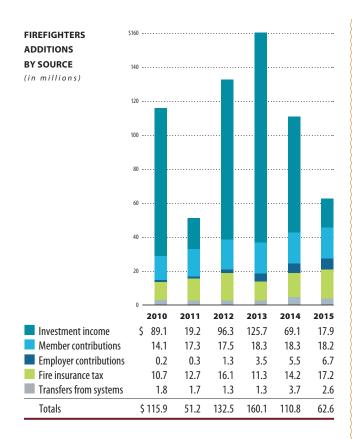
Composite Picture

Total Membership	3,275
Active	1,735
Terminated Vested	207
Retired	1,333
2015 Active Members	1,735
2015 Active Members	•
	42.7

2015 Retirees Number	47
Average Age	49.9
Average Years of Service	28.3
Final Average Annual Salary	\$52,945
Average Annual Benefit	\$38,876
Average Annual Benefit —	
All Retirees	\$33,319

Pictured: Jennifer Hoover, Firefighter, Salt Lake City Department of Airports

Firefighters Retirement System Highlights (Concluded)



Service Retirement

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

Service Benefit Formula

- 1. 2.5% x FAS* x years of service up to 20 years.
- 2. 2.0% x FAS* x years of service over 20 years.
- 3. Monthly benefit = total of 1 and 2.

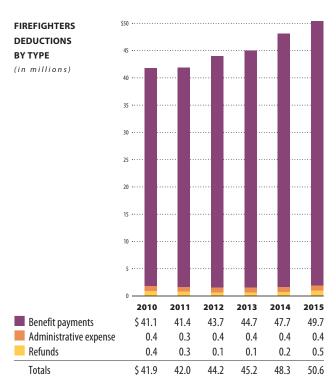
Cost-of-Living Allowance

Up to 4% (depending on employer) on original retirement benefit.

Contribution Rates (as of 12-31-2015)

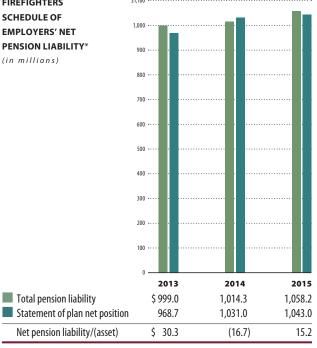
Member rate for Division A (with Social Security) is 15.05% of covered salary and 16.71% for Division B (without Social Security). Employer rate for Division A is 3.99% of covered salary and 6.76% for Division B.

For more detail see Summary of Plan Provisions on page 170.



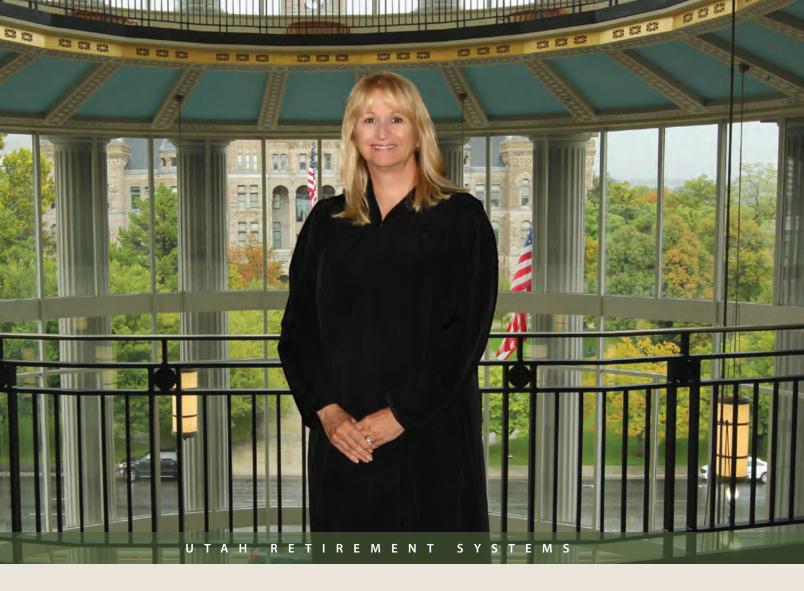
FIREFIGHTERS SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY* (in millions)

Total pension liability



*Additional years will be added as they become available.

^{*}FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.



JUDGES

Retirement System Highlights

The Judges Retirement System includes justices and judges of the courts of record as authorized in state statutes.

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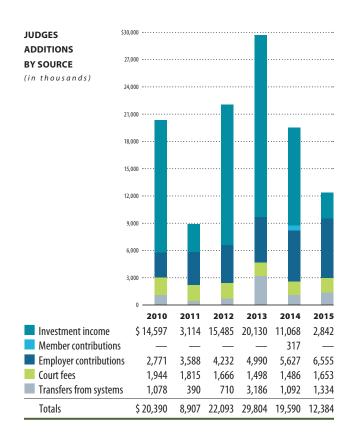
Total Membership	256
Active	
Terminated Vested	4
Retired	
2015 Active Members	112
Average Age	56.3
Average Years of Service	
Average Annual Salary	

2015 Retirees Number	9
Average Age	
Average Years of Service	21.7
Final Average Annual Salary	\$128,290
Average Annual Benefit	\$90,703

Average Annual Benefit — **All Retirees**.....\$81,633

Pictured: Katie Bernards-Goodman, Judge, Third District Court

Judges Retirement System Highlights (Concluded)



Service Retirement

Age	Years of Service	Allowance Reduction
Any age	25	None
55	20	Full actuarial reduction
62	10	None
70	6	None

Service Benefit Formula

- 1. 5.00% x FAS* x years of service up to 10 years.
- 2. 2.25% x FAS* x years of service between 10 and 20 years.
- 3. 1.00% x FAS* x years of service over 20 years.
- 4. Monthly benefit = total of 1, 2, and 3.

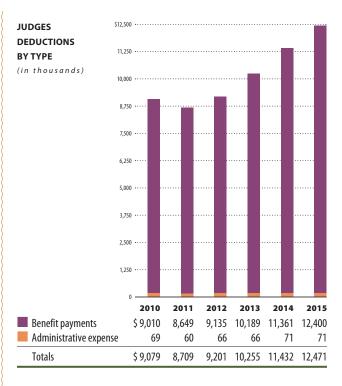
Cost-of-Living Allowance

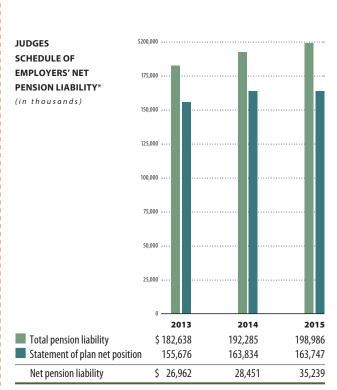
Up to 4% compounded annually.

Contribution Rates (as of 12-31-2015)

Employer rate is 41.58% of covered salary.

For more detail see Summary of Plan Provisions on page 172.





^{*}Additional years will be added as they become available.

^{*}FAS (Final Average Salary) = highest two years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.



UTAH GOVERNORS AND LEGISLATORS

Retirement Plan Highlights

The Utah Governors and Legislators Retirement Plan includes governors and legislators of the State of Utah.

Composite Picture

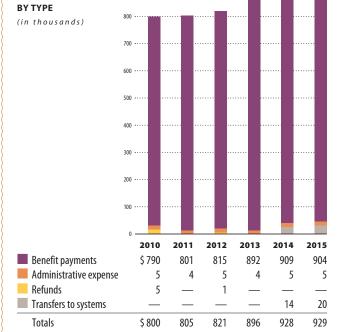
Total Membership	415
Active	
Terminated Vested	81
Retired	
2015 Active Members	93
Average Age	53.3
Average Years of Service	
Average Annual Salary	

2015 Retirees Number	11
Average Age	39.4
Average Years of Service	11.1
Final Average Annual Salary	N/A
Average Annual Benefit	\$3,267
Average Annual Benefit —	
All Retirees	\$3,311

Pictured: Kraig Powell, Utah House of Representatives, District 54, Summit County

Utah Governors and Legislators Retirement Plan Highlights (Concluded)





Service Retirement

Age	Years of Service	Allowance Reduction
65	4	None
62	10	each year before age 65

Service Benefit Formula

Governors — \$500*per month per term.

*Increased semi annually up to 2% based on the CPI. The amount as of 12-31-15 is \$1,340.

Legislators —

\$10**per month each year of service as a legislator.

Cost-of-Living Allowance

Up to 4% annually on original retirement benefit.

Contribution Rates (as of 12-31-2015)

There was a 2015-16 appropriation payable by June 30, 2016, to the Utah Governors and Legislators Retirement Plan of \$421,429.

For more detail see Summary of Plan Provisions on page 172.



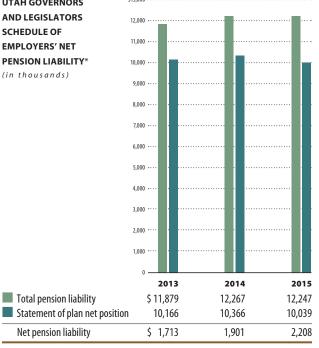
Total pension liability

Net pension liability

UTAH GOVERNORS

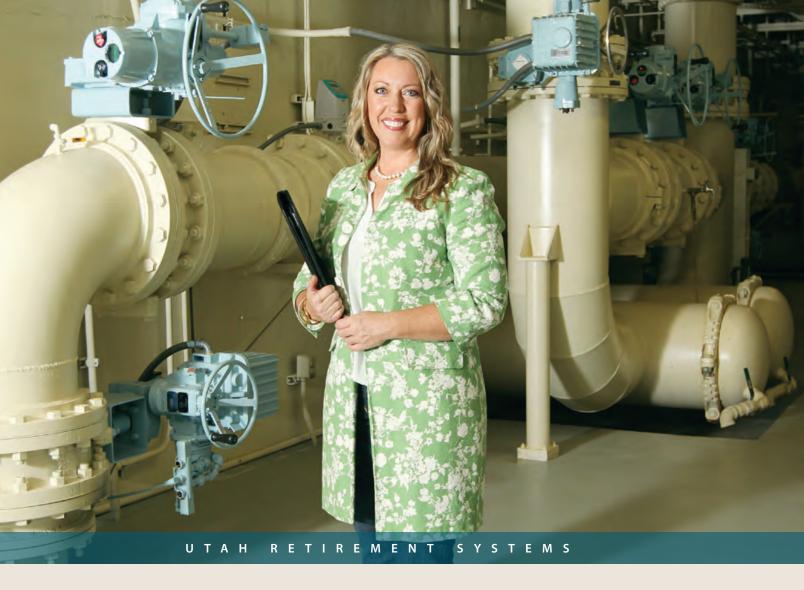
AND LEGISLATORS

DEDUCTIONS



^{*}Additional years will be added as they become available.

^{**}Increased semi annually up to 2% based on the CPI. The amount as of 12-31-15 is \$29.20.



TIER 2 PUBLIC EMPLOYEES

Contributory Retirement System Highlights

The Tier 2 Public Employees Contributory Retirement System includes eligible employees of the State of Utah and its political subdivisions and public education employees of those entities covered by the System.

Composite Picture

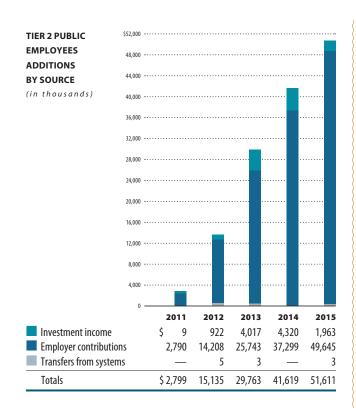
Total Membership	21,838
Active	21,778
Terminated Vested	59
Retired	1
2015 Active Members	21,778
2015 Active Members Average Age	
	35.7

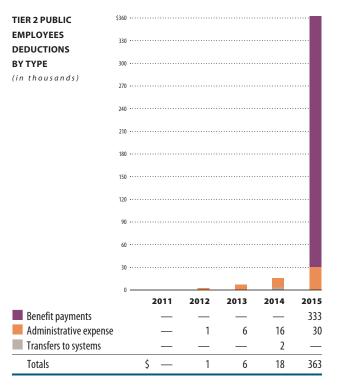
2015 Retirees Number	1
Average Age	70.0
Average Years of Service	4.1
Final Average Annual Salary	\$1,480
Average Annual Benefit	\$865
Average Annual Benefit —	

All Retirees\$865

Pictured: Karry Rathje, Public Information Manager, Washington County Water Conservancy District

Tier 2 Public Employees Contributory Retirement System Highlights (Concluded)





Service Retirement

Age	Years of Service	Allowance Reduction
Any age	35	None
60-61	20	Full actuarial before age 65
62-64	10	Full actuarial before age 65
65	4	None

Service Benefit Formula

Number of years of service x 1.50% x FAS.*

*FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

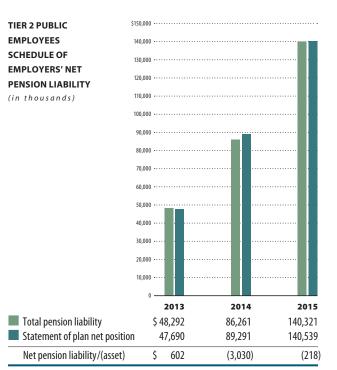
Up to 2.5% annually on original retirement benefit.

Contribution Rates (as of 12-31-2015)

Employer rates range from 14.91% to 18.24% of covered salary.

(Includes active member death benefit and *Tier 1 amortization rate.)*

For more detail see Summary of Plan Provisions on page 173.



Additional years will be added as they become available.



TIER 2 PUBLIC SAFETY AND FIREFIGHTER

Contributory Retirement System Highlights

The Tier 2 Public Safety and Firefighter Contributory Retirement System includes eligible state and local government employees directly involved in law enforcement or directly involved in fire fighting and whose duties are classified as hazardous.

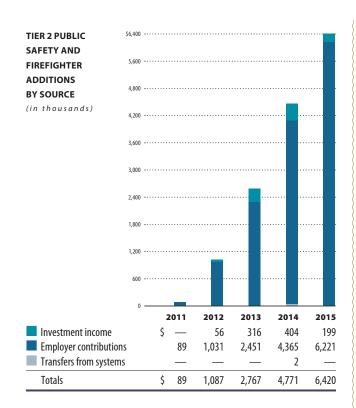
Composite Picture

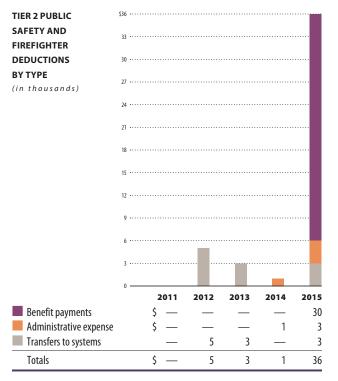
Total Membership	1,824
Active	1,824
Terminated Vested	
Retired	
2015 Active Members	1,824
Average Age	30.4
Average Years of Service	1.7
Average Annual Salary	627.051

2015 Retirees Number	
Average Age	
Average Years of Service	
Final Average Annual Salary	N/A
Average Annual Benefit	\$—
Average Annual Benefit — All Retirees	\$

Pictured Left: Officer Cody Miskin, Unified Police Department, SLC • Right: Kirk McAllister, Firefighter, St. George Fire Department

Tier 2 Public Safety and Firefighter Contributory Retirement System Highlights (Concluded)





Service Retirement

Age	Years of Service	Allowance Reduction
Any age	25	None
60-61	20	Full actuarial before age 65
62-64	10	Full actuarial before age 65
65	4	None

Service Benefit Formula

Number of years of service x 1.50% x FAS.*

*FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

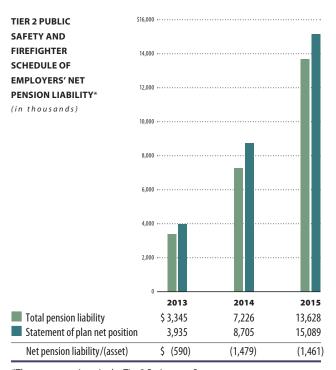
Up to 2.5% annually on original retirement benefit.

Contribution Rates (as of 12-31-2015)

Employer rates range from 10.75% to 37.02% of covered salary.

(Includes active member death benefit and Tier 1 amortization rate.)

For more detail see Summary of Plan Provisions on page 174.



^{*}There are no retirees in the Tier 2 Retirement Systems. Additional years will be added as they become available.

UTAH RETIREMENT SYSTEMS

DEFINED CONTRIBUTION SAVINGS PLANS

Highlights

The purpose of the Defined Contribution Savings Plans (401(k), 457, Roth and traditional IRAs) is to allow public employees throughout Utah to adequately prepare themselves for retirement by investing a portion of their income in one or more of these retirement plans.

It has long been recognized that for employees to experience the comfortable and rewarding retirement they desire, they cannot rely entirely upon Social Security and their employer-provided retirement. Employees should take the initiative to personally put aside a portion of their salary into some type of long-term savings plan.

Each year the number of employees participating in these plans increases. Individuals may participate in more than one plan. As of December 31, 2015, the number of participants by investment plan was as shown in the upper right table.

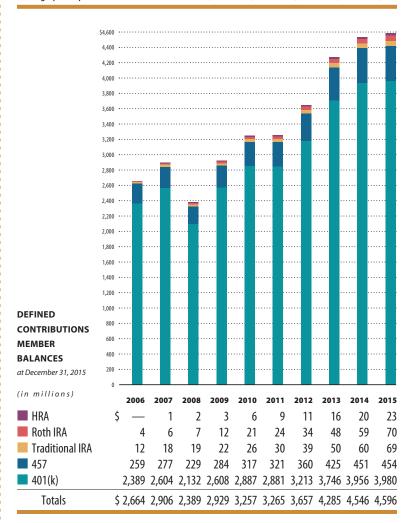
Annualized rates of returns for the Investment Funds are shown on pages 139 and 140.

The Plans provided the following benefits:

- Convenient, automatic payroll deduction
- 20 investment options
- Brokerage window option
- Tax-deferred and/or tax-free savings
- Increase or decrease contributions as often as every pay period
- Flexible payout options when eligible
- Upon death, funds transfer to beneficiaries (except HRA)
- No sales commissions
- Low investment and administrative fees
- Plan loans (401(k) and 457)
- Hardship and emergency withdrawals
- Local customer service and counseling.

MEMBERSHIP INFORMATION

at December 31, 2015	401(k)	457	Roth IRA	Traditional IRA	HRA
Number of active employees	104.006	00 727	200 054	200 054	2 701
eligible to participate	104,096	98,737	208,854	208,854	2,701
Employee contributions (excluding employer contributions):					
Number of employees contributing	40,550	8,249	5,414	390	N/A
Percent of eligible employees contributing	39.0%	8.4%	2.6%	0.2%	N/A
Average % of salary deferred by employees	5.6%	6.1%	3.7%	2.4%	N/A
Total participants	161,398	17,004	7,359	1,584	2,701
Average participant account balance	\$24,662	\$26,721	\$9,473	\$43,552	\$8,617



2015

UTAH RETIREMENT SYSTEMS

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FINANCIAL Section

pendent Auditors' Report on Internal Control Over I Reporting and on Compliance and Other Matters	34
Management's Discussion and Analysis	37
Basic Financial Statements	52
Required Supplementary Information	86
ividual Retirement Systems' Schedules by Division	96
adular of Administrative and Investment Evnences	12

Independent Auditors' Report 32

INDEPENDENT AUDITORS' REPORT

Deloitte.

INDEPENDENT AUDITORS' REPORT

Deloitte & Touche LLP 299 South Main Street Suite 1900 Salt Lake City, UT 84111 United States of America

Tel 801-328-4706 Fax: 801-366-7900 www.deloitte.com

Utah State Retirement Board:

Report on the Financial Statements

We have audited the accompanying financial statements of the defined benefit pension plans and of the total combined defined contribution plans of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which comprise the statements of fiduciary net position of the pension (and other employee benefit) trust funds as of December 31, 2015, and the related statements of changes in fiduciary net position of the pension (and other employee benefit) trust funds for the year then ended, and the related notes to the financial statements, which collectively comprise Utah Retirement Systems' basic financial statements as listed in the foregoing table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the pension (and other employee benefit) trust funds of the defined benefit pension plans and of the total combined defined contribution plans of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, at December 31, 2015, and the changes in fiduciary net position of the pension (and other employee benefit) trust funds for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Independent Auditors' Report (Continued)

Emphasis of Matter

As discussed in Note 3 to the financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include private equities, absolute returns, and investments in real assets. Such investments totaled \$11.5 billion (33.9% of total assets) at December 31, 2015. Where a publicly listed price is not available, the management of Utah Retirement Systems uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of the investments. Our opinion is not modified with respect to this matter.

Report on Summarized Comparative Information

We have previously audited Utah Retirement Systems' 2014 basic financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated April 30, 2015, which included an emphasisof-matter paragraph regarding the fair value of investments where a publicly listed price is not available. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2014 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the Schedules of Changes in the Employers' Net Pension Liability, of Employers' Net Pension Liability, of Employer Contributions, and of Investment Returns, listed in the foregoing table of contents, be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers

it to be an essential part of the 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 responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Utah Retirement Systems' basic financial statements. The additional combining information for the total combined defined contribution plans is presented for purposes of additional analysis of the financial statements rather than to present the fiduciary net position and the changes in fiduciary net position of the individual plans, and is not a required part of the financial statements. The supplementary financial supporting schedules listed in the foregoing table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The additional combining information and the supplementary financial supporting schedules 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

Independent Auditors' Report (Continued)

reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional combining information and the supplementary financial supporting schedules are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The Introductory Section, Investment Section, Actuarial Section, and Statistical Section listed in the foregoing table of contents 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.

Other Reporting Required by **Government Auditing Standards**

In accordance with Government Auditing Standards, we have also issued our report dated April 27, 2016 on our consideration of Utah Retirement Systems' internal control over financial reporting and on our tests of their compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Utah Retirement Systems' internal control over financial reporting and compliance.

April 27, 2016

Deloitte.

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT **AUDITING STANDARDS**

Utah State Retirement Board:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of the defined benefit pension plans and of the total combined defined contribution plans of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which comprise the statements of fiduciary net position of the pension (and other employee benefit) trust funds as of December 31, 2015, and the related statements of changes in fiduciary net position of the pension (and other employee benefit) trust funds for the year then ended, and the related notes to the financial statements, which collectively comprise Utah Retirement Systems' basic financial statements, and have issued our report thereon dated April 27, 2016, which included an emphasis-of-matter paragraph regarding the fair value of investments where a publicly listed price is not available.

Deloitte & Touche LLP

Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters (Concluded)

Deloitte & Touche LLP 299 South Main Street Suite 1900 Salt Lake City, UT 84111 United States of America

Tel 801-328-4706 Fax: 801-366-7900 www.deloitte.com

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Utah Retirement Systems' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Utah Retirement Systems' internal control. Accordingly, we do not express an opinion on the effectiveness of Utah Retirement Systems' internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Utah Retirement Systems' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and Utah Retirement Systems' policies regarding purchasing, personnel, budgeting, and investments, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Deloitte & Touche LLP

April 27, 2016





Pictured top: Todd and Jennifer Hoover, Firefighters, Salt Lake City Fire Department Bottom, left to right: Annette Damavandi, Head Baker, Southern Utah University Food Services/Chartwells Dining, Cedar City; Michael Jones, Case Manager/Activities Coordinator, Housing Authority of Salt Lake City; Michelle Carter, Secondary Reading Teacher, Beaver and Milford High Schools, Beaver County School District



UTAH RETIREMENT SYSTEMS

MANAGEMENT'S DISCUSSION **AND ANALYSIS**

Introduction

This section presents management's discussion and analysis of the Utah Retirement Systems' (URS) financial position and performance for the year ended December 31, 2015. It is presented as a narrative overview and analysis. Please read it in conjunction with the Letter of Transmittal included in the Introductory Section, the financial statements and other information that are presented in the Financial Section of this Comprehensive Annual Financial Report. URS is responsible for administering retirement and defined contribution benefits for state, local government, and public education employees in the state of Utah.

URS is composed of eight defined benefit pension systems (Systems) and five defined contribution plans (Plans). The eight defined benefit pension systems are the Public Employees Noncontributory Retirement System (Noncontributory System), the Public Employees Contributory Retirement System (Contributory System), the Public Safety Retirement System (Public Safety System), the Firefighters Retirement System (Firefighters System), the Judges Retirement System (Judges System), the Utah Governors and Legislators Retirement Plan (Governors and Legislators Plan), Tier 2 Public Employees Contributory Retirement System (Tier 2 Public Employees System), and the Tier 2 Public Safety and Firefighter Contributory Retirement System (Tier 2 Public Safety and Firefighter System). The five defined contribution plans (Plans) are the 401(k), 457, Roth and traditional IRAs, and Health Reimbursement Arrangement. All of these Systems and Plans are defined as pension (and other employee benefit) trust funds, which are fiduciary funds. Throughout this discussion and analysis units of measure (i.e., billions, millions, thousands) are approximate, being rounded up or down to the nearest tenth of the respective unit value.

Financial Highlights

- The URS Defined Benefit Pension Systems' combined total net position increased by \$118 million, or 0.4% during calendar year 2015. The increase was primarily due to the increase in the markets.
- The URS Defined Benefit Pension Systems' rate of return on investments during calendar year 2015 was 1.92% compared with the calendar year 2014 rate of return of 7.52%. The decrease in rate of return was due primarily to the decrease in market performance in 2015.
- The URS Defined Benefit Pension Systems had a Net Pension Liability of \$4.5 billion and the Net Pension Liability as a percentage of covered payroll was 94.7% as of December 31, 2015.
- The Defined Contribution Plans' combined total net position increased \$50 million during calendar year 2015 primarily due to investment gains.
- The Defined Contribution Plans' rates of return for investment options ranged from a high of 9.0% to a low of negative 4.6% compared to prior year investment option returns of a high of 13.0% and a low of negative 3.9%.

Overview of the **Financial Statements**

The URS 2015 financial statements, notes to the financial statements, and required supplementary information were prepared in conformity with GASB Statement No. 67, Financial Reporting for Pension Plans. This discussion and analysis is intended to serve as an introduction to the URS financial reporting, which is comprised of the following components:

- 1) basic financial statements,
- 2) notes to the basic financial statements.
- 3) required supplementary information, and
- 4) other supplementary schedules.

Collectively, this information presents the combined net position held in trust for pension benefits for each of the funds administered by URS as of December 31, 2015. This financial information also summarizes the combined changes in net position held in trust for pension benefits for the year then ended. The information in each of these components is briefly summarized as follows:

1) Basic Financial Statements

For the calendar year ended December 31, 2015, basic financial statements are presented for the fiduciary funds administered by URS. Fiduciary funds are used to account for resources held for the benefit of the participants outside of URS. The fiduciary funds are comprised of 13 pension (and other employee benefit) trust funds that consist of eight defined benefit systems and five defined contribution plans.

• The Statements of Fiduciary Net Position are presented for the pension trust funds at December 31, 2015, with combined total comparative information at December 31, 2014. These financial statements reflect the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the years reported. • The Statements of Changes in Fiduciary Net Position are presented for the pension trust funds for the year ended December 31, 2015, with combined total comparative information for the year ended December 31, 2014. These financial statements reflect the changes in the resources available to pay benefits to members, including retirees and beneficiaries, for calendar years 2015 and 2014.

2) Notes to the Basic Financial Statements

The Notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. Information in the Notes to the Basic Financial Statements is described as follows:

- Note 1 provides a general description of URS, as well as a description of each of the Systems and Plans administered by URS and a summary of benefits. Information regarding employer and member participation in the Systems and Plans administered by URS is also provided.
- Note 2 provides a summary of significant accounting policies including the basis of accounting, investment accounting policies, management's use of estimates, information regarding the implementation of new accounting pronouncements, and other significant accounting policies.
- Note 3 describes deposits, investment risk disclosures, fair value measurements and related disclosures, and additional information about cash, securities lending, and derivatives.
- Note 4 explains property and equipment of URS including depreciation and net carrying amounts.
- Note 5 provides information about net pension liability of employers.
- Note 6 provides information about contributions to the defined benefit systems administered by URS.
- Note 7 explains transfers to or from affiliated systems.
- Note 8 describes supplemental benefits.
- Note 9 provides information about litigation.
- Note 10 describes commitments for investment funding.
- Note 11 provides information about pension plan participation.

Management's Discussion and Analysis (Continued)

- Note 12 provides information about URS postemployment benefits.
- Note 13 describes compensated absences and insurance reserves.
- Note 14 describes required supplementary information.
- Note 15 provides information about risk management of URS.
- Note 16 provides information about real estate liabilities.

3) Required Supplementary Information

The required supplementary information consists of four schedules of changes of employers' net pension liability, employers' net pension liability, employer contributions, and the money-weighted rate of investment returns of the defined benefit pension systems administered by URS.

4) Other Supplementary Schedules

Other schedules include more detailed information pertaining to the Systems and Plans as well as schedules of administrative expenses.

Financial Analysis of the Systems — **Defined Benefit Plans**

Investments

Investments of the URS Defined Benefit Systems are combined in a commingled investment pool as authorized by state statute. Each system owns an equity position in the pool and receives proportionate investment income from the pool in accordance with each respective ownership percentage.

Each system's allocated share of each type of investment in the pool is shown in the Statements of Net Position. Investment gains or losses are reported in the Statements of Changes in Fiduciary Net Position. The rate of return on investments is therefore approximately the same for each of the systems.

Systems' Total Investments — As of December 31, 2015, URS Defined Benefit Systems had total net position of \$26.7 billion, an increase of \$118 million from calendar year 2014 investment totals. The combined investment portfolio experienced a return of 1.92% compared with the URS investment benchmark return of 1.28%. Investment results over time compared with URS benchmarks are presented on page 133 in the Investment Section.

Because the investment gain in all of the retirement systems was about 1.92% of net position, further investment performance will not be evaluated in each respective system.

Equity Securities — As of December 31, 2015, URS Defined Benefit Systems held \$9.2 billion in U.S. and international equity securities, a decrease of \$383.3 million from year 2014. Equity securities had a return of negative 1.66% for calendar year 2015 compared with the URS benchmark return of negative 2.19%.

Debt Securities — As of December 31, 2015, URS Defined Benefit Systems held \$4.3 billion in U.S. debt and international debt securities, an increase of \$68.9 million from year 2014. Debt securities returned 0.66% in calendar year 2015 compared with the URS benchmark return of 0.31%.

Real Assets — As of December 31, 2015, URS Defined Benefit Systems held \$4.0 billion in real assets investments, an increase of \$245.0 million from year 2014. Real assets investments returned 8.03% in calendar year 2015 compared with the URS benchmark return of 5.39%.

Private Equity — As of December 31, 2015, URS Defined Benefit Systems held \$3.2 billion in private equity investments, an increase of \$44.4 million from year 2014. Private equity investments returned 12.19% in calendar year 2015. The URS benchmark for private equity investments was 3.88%.

Short Term — As of December 31, 2015, URS Defined Benefit Systems held \$2.2 billion in short-term investments, an increase of \$657.7 million from year 2014. Short-term investments returned 0.10% in calendar year 2015 which compared with the URS benchmark return of 0.05%.

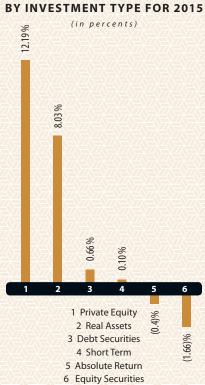
Absolute Return — As of December 31, 2015, URS Defined Benefit Systems held \$4.1 billion in absolute return investments, a decrease of \$502.1 million from year 2014. Absolute return investments returned a negative 0.40% in calendar year 2015 compared with the URS benchmark return of 5.05%.

INVESTMENTS AT FAIR VALUE 2 0 3 6

DEFINED BENEFIT SYSTEMS

- 1 Equity Securities (33.9%)
- 2 Debt Securities (15.8%)
- 3 Absolute Return (15.3%)
 - 4 Real Assets (14.9%)
- 5 Private Equity (11.9%)
- 6 Short Term (8.2%)

DEFINED BENEFIT SYSTEMS INVESTMENT RATES OF RETURN









Securities Lending — The Systems earn additional investment income by lending investment securities to brokers. This is done on a pooled basis by URS' custodial bank, The Northern Trust Company (TNT). The brokers provide collateral to TNT and generally use the borrowed securities to cover short sales and failed trades. TNT invests the cash collateral received from the brokers in order to earn interest. As of December 31, 2015, the Systems had \$1.9 billion on loan secured by collateral of \$2.0 billion. For calendar year 2015, net securities lending income to the Systems amounted to \$9.1 million, an increase of \$278 thousand over calendar year 2014. The increase in security lending revenue for year 2015 represents mainly an increase in demand by brokers to borrow available securities.

Analysis of the **Defined Benefit Systems**

Noncontributory System

The Noncontributory System provides retirement benefits to covered State of Utah, local government, and public education employees. Benefits of the system are funded by employer contributions and by earnings on investments. The system net position as of December 31, 2015, totaled \$21.2 billion, an increase of \$95.9 million (0.5%) from \$21.1 billion as of December 31, 2014.

Additions to the Noncontributory System net position include employer contributions, investment income, and transfers. For the calendar year 2015, member and employer contributions increased from \$786.0 million for calendar year 2014 to \$830.5 million, an increase of \$44.5 million (5.7%). Contributions increased because salaries increased. The system recognized a net investment gain of \$366.7 million for calendar year 2015 compared with net investment gain of \$1.4 billion for calendar year 2014. The decrease in investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Noncontributory System net position include retirement benefits, administrative expenses, and transfers. For the calendar year 2015, benefits amounted to \$1.1 billion, an increase of \$80.1 million (7.7%) over calendar year 2014. The increase in benefit payments was due to an increased number of benefit recipients and benefit increases. For the calendar year 2015, the costs of administering the system totaled \$8.8 million, a decrease of \$31 thousand (0.04%) from calendar year 2014.

At December 31, 2015, the Noncontributory Retirement System total pension liability was \$24.9 billion. The Plan's fiduciary net position was \$21.2 billion leaving a net pension liability of \$3.7 billion. The Plan fiduciary net position as a percentage of the total pension liability was 85.1%.

Contributory System

The Contributory System provides retirement benefits to covered State of Utah, local government, and public education employees. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2015, totaled \$1.18 billion, a decrease of \$86.9 million (6.8%) from \$1.27 billion as of December 31, 2014.

Additions to the Contributory System net position include employer and member contributions, investment income, and transfers. For calendar year 2015, member and employer contributions decreased from \$18.4 million for calendar year 2014 to \$16.5 million, a decrease of \$1.9 million (10.5%). Contributions decreased because of the number of active members. For the most part, the Contributory System is a closed system. For this reason both the numbers of active members and retired individuals are declining. The system recognized a net investment gain of \$21.3 million for calendar year 2015 compared with net investment gain of \$87.6 million for the calendar year 2014. The decrease in investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Contributory System net position include retirement benefits, administrative expenses, and transfers. For calendar year 2015, benefits amounted to \$82.6 million, an increase of \$3.2 million (4.0%) from calendar year 2014. The increase in benefit payments was due to the increase in the number of retired members in the system. For calendar year 2015, the costs of administering the system totaled \$478 thousand, a decrease of \$16 thousand (3.2%) from calendar year 2014.

■ STATEMENTS OF FIDUCIARY NET POSITION — DEFINED BENEFIT PENSION PLANS

December 31

(dollars in thousands)

	Noncontributory System				Contrib	utory System	Public Safety System			
	2015	2014	2013	2015	2014	2013	2015	2014	2013	
Assets:										
Cash and receivables	\$ 264,655	347,450	245,005	13,175	18,980	13,558	33,339	44,454	31,195	
Investments at fair value Invested securities	21,506,695	21,401,055	20,445,304	1,202,149	1,289,979	1,317,984	2,985,545	2,943,857	2,785,821	
lending collateral	1,602,253	1,812,356	1,591,294	89,560	109,243	102,581	222,424	249,302	216,825	
Property and equipment	2,488	2,954	4,533	139	178	293	345	408	617	
Total assets	23,376,091	23,563,815	22,286,136	1,305,023	1,418,380	1,434,416	3,241,653	3,238,021	3,034,458	
Liabilities:										
Securities lending liability Investment accounts	1,602,253	1,812,356	1,591,294	89,560	109,243	102,581	222,424	249,302	216,825	
and other payables	581,401	654,947	779,027	32,372	39,146	49,890	80,390	89,333	105,449	
Total liabilities	2,183,654	2,467,303	2,370,321	121,932	148,389	152,471	302,814	338,635	322,274	
Net position restricted for pensions	\$ 21,192,437	21,096,512	19,915,815	1,183,091	1,269,991	1,281,945	2,938,839	2,899,386	2,712,184	

(dollars in thousands)

		Tier 2 Public Employees System			Tier 2 Public Safety and Firefighter System			Total Defined Benefit Pension Plans			
	2015	2014	2013	2015	2014	2013	2015	2014	2013	Percent Change	Percent Change
Assets:											
Cash and receivables	\$ 3,973	3,375	2,549	271	233	155	329,458	433,607	305,614	(24)%	42%
Investments at fair value	140,329	88,592	46,906	15,226	8,737	3,928	27,086,314	26,955,610	25,765,142	0	5
Invested securities											
lending collateral	10,454	7,502	3,651	1,134	740	306	2,017,935	2,282,747	2,005,347	(12)	14
Property and equipment	16	12	10	2	1	1	3,133	3,722	5,711	(16)	(35)
Total assets	154,772	99,481	53,116	16,633	9,711	4,390	29,436,840	29,675,686	28,081,814	(1)	6
Liabilities:											
Securities lending liability	10,454	7,502	3,651	1,134	740	306	2,017,935	2,282,747	2,005,347	(12)	14
Investment accounts and other payables	3,779	2,688	1,775	410	266	149	732,065	823,815	980,395	(11)	(16)
and other payables	راارد	2,000	1,773		200		732,003	023,013	700,373		(10)
Total liabilities	14,233	10,190	5,426	1,544	1,006	455	2,750,000	3,106,562	2,985,742	(11)	4
Total position restricted											
for pensions	\$ 140,539	89,291	47,690	15,089	8,705	3,935	26,686,840	26,569,124	25,096,072	0%	6%

		Firefig	hters System		Ju	dges System	Utah Governors and Legislators Retirement Plan			
	2015	2014	2013	2015	2014	2013	2015	2014	2013	
	11,916	16,416	10,987	1,904	2,542	1,877	225	157	288	
1,	059,550	1,046,228	995,121	166,303	166,317	159,815	10,517	10,845	10,263	
	78,936	88,601	77,452	12,390	14,085	12,439	784	918	799	
	123	145	220	19	23	35	1	1	2	
1,	150,525	1,151,390	1,083,780	180,616	182,967	174,166	11,527	11,921	11,352	
	78,936	88,601	77,452	12,390	14,085	12,439	784	918	799	
	28,530	31,750	37,667	4,479	5,048	6,051	704	637	387	
	107,466	120,351	115,119	16,869	19,133	18,490	1,488	1,555	1,186	
1,	043,059	1,031,039	968,661	163,747	163,834	155,676	10,039	10,366	10,166	

At December 31, 2015, the Contributory Retirement System total pension liability was \$1.31 billion. The Plan's fiduciary net position was \$1.18 billion leaving a net pension liability of \$133 million. The Plan fiduciary net position as a percentage of the total pension liability was 89.9%.

Public Safety System

The Public Safety System provides retirement benefits to eligible public safety employees of the State of Utah, local governments, and higher education. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2015, amounted to \$2.9 billion, an increase of \$39.5 million (1.4%) from \$2.9 billion as of December 31, 2014.

Additions to the Public Safety System net position include employer contributions, investment income, and transfers. For calendar year 2015, member and employer contributions increased from \$136.4 million for calendar year 2014 to \$141.9 million, an increase of \$5.5 million (4.0%). Contributions increased because salaries increased. The system recognized a net investment gain of \$50.7 million for calendar year 2015 compared with net investment gain of \$194.2 million for calendar year 2014. The decrease in the investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Public Safety System net position include retirement benefits and administrative expenses. For calendar year 2015, benefits amounted to \$155.9 million, an increase of \$11.0 million (7.6%) over calendar year 2014. The increase in benefit payments was due to an increased number of benefit recipients and benefit increases. For calendar year 2015, the costs of administering the system totaled \$1.2 million, an increase of \$6 thousand (0.5%) from calendar year 2014.

At December 31, 2015, the Public Safety Retirement System total pension liability was \$3.5 billion. The Plan's fiduciary net position was \$2.9 billion leaving a net pension liability of \$572 million. The Plan fiduciary net position as a percentage of the total pension liability was 83.7%.

Firefighters System

The Firefighters System provides retirement benefits to covered firefighters of the State of Utah and local governments. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2015, amounted to \$1.0 billion, an increase of \$12.0 million (1.2%) from \$1.0 billion as of December 31, 2014.

■ STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION — **DEFINED BENEFIT PENSION PLANS**

Year Ended December 31

(dollars in thousands)

	Noncontributory System				Contribu	tory System	Public Safety System			
	2015	2014	2013	2015	2014	2013	2015	2014	2013	
Additions:										
Contributions	\$ 830,469	786,007	725,141	16,490	18,415	19,250	141,929	136,423	130,002	
Investment income	366,748	1,419,053	2,588,981	21,251	87,577	169,510	50,654	194,222	350,563	
Transfers from affiliated systems	33,648	30,467	_	_	_	33,094	4,023	2,746	4,676	
Total additions	1,230,865	2,235,527	3,314,122	37,741	105,992	221,854	196,606	333,391	485,241	
Deductions:										
Pension benefits	1,123,647	1,043,798	974,684	81,390	77,015	74,158	155,387	144,763	137,486	
Refunds	2,496	2,204	2,454	1,215	2,433	1,922	533	199	467	
Administrative expenses	8,797	8,828	8,329	478	494	480	1,233	1,227	1,161	
Transfers to affiliated systems	_	_	42,277	41,558	38,004	_	_	_	_	
Total deductions	1,134,940	1,054,830	1,027,744	124,641	117,946	76,560	157,153	146,189	139,114	
Increase (decrease) in net position										
restricted for pensions	\$ 95,925	1,180,697	2,286,378	(86,900)	(11,954)	145,294	39,453	187,202	346,127	

(dollars in thousands)

	Tier 2 Public Employees System		and	Tier 2 Pub I Firefighte		Total D	efined Benefit	Pension Plans	Percent	2014 Percent	
	2015	2014	2013	2015	2014	2013	2015	2014	2013	Change	Change
Additions: Contributions	\$ 49,645	37,299	25,743	6,221	4,365	2,451	1,095,466	1,028,318	942,431	6.5%	9.1%
Investment income	1,963	4,320	4,017	199	404	316	461,772	1,786,431	3,260,548	(74.2)	(45.2)
Transfers from affiliated systems	3	_	3	_	2	_	41,581	38,020	42,280	9.4	(10.1)
Total additions	51,611	41,619	29,763	6,420	4,771	2,767	1,598,819	2,852,769	4,245,259	(44.0)	(32.8)
Deductions:											
Retirement benefits	333	_	_	30	_	_	1,423,762	1,325,556	1,242,156	7.4	6.7
Refunds	_	_	_	_	_	_	4,772	5,129	4,949	(7.0)	3.6
Administrative expense	30	16	6	3	1	_	10,988	11,012	10,401	(0.2)	5.9
Transfers to affiliated systems	_	2	_	3	_	3	41,581	38,020	42,280	9.4	(10.1)
Total deductions	363	18	6	36	1	3	1,481,103	1,379,717	1,299,786	7.3	6.1
Increase in net position restricted for pensions	\$ 51,248	41,601	29,757	6,384	4,770	2,764	117,716	1,473,052	2,945,473	(92.0)%	(50.0)%

Management's Discussion and Analysis (Continued)

	Firefigh	nters System		Jud	lges System	Legislators Retirement Plan			
2015	2014	2013	2015	2014	2013	2015	2014	2013	
42,083	37,968	33,104	8,208	7,430	6,488	421	411	252	
17,934	69,070	125,685	2,842	11,068	20,130	181	717	1,346	
2,573	3,713	1,302	1,334	1,092	3,186	_	_	19	
62,590	110,751	160,091	12,384	19,590	29,804	602	1,128	1,617	
49,671	47,710	44,747	12,400	11,361	10,189	904	909	892	
528	293	106	_	_		_	_	_	
371	370	355	71	71	66	5	5	4	
_	_			_		20	14		
50,570	48,373	45,208	12,471	11,432	10,255	929	928	896	
12,020	62,378	114,883	(87)	8,158	19,549	(327)	200	721	

Additions to the Firefighters System net position consist of employer contributions, including insurance premium taxes, investment income, and transfers. For calendar year 2015, member and employer contributions increased from \$38.0 million for calendar year 2014 to \$42.1 million, an increase of \$4.1 million (10.8%). Contributions increased because insurance premium taxes increased. The system recognized a net investment gain of \$17.9 million for calendar year 2015 compared with net investment gain of \$69.1 million for calendar year 2014. The decrease in investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Firefighters System net position include retirement benefits and administrative expenses. For calendar year 2015, benefits amounted to \$50.2 million, an increase of \$2.2 million (4.6%) over calendar year 2014. The increase in benefit payments was due to an increased number of benefit recipients and benefit increases. For calendar year 2015, the costs of administering the system totaled \$371 thousand, an increase of \$1 thousand (0.3%) from calendar year 2014.

At December 31, 2015, the Firefighters Retirement System total pension liability was \$1.1 billion. The Plan's fiduciary net position was \$1.0 billion leaving a net pension liability of \$15.2 million. The Plan fiduciary net position as a percentage of the total pension liability was 98.6%.

Utah Governors and

Judges System

The Judges System provides retirement benefits to judges in the State of Utah who are eligible to participate in the system. Benefits of the system are funded by employer contributions and by earnings on investments. The system net position as of December 31, 2015, amounted to \$163.7 million, a decrease of \$87 thousand (0.1%) from \$163.8 million as of December 31, 2014.

Additions to the Judges System net position consist of employer contributions, including court fees, investment income, and transfers. For calendar year 2015, employer contributions increased from \$7.4 million for calendar year 2014 to \$8.2 million, an increase of \$778 thousand (10.5%). Contributions increased because court fees increased. The system recognized a net investment gain of \$2.8 million for the calendar year 2015 compared with net investment

Management's Discussion and Analysis (Continued)

gain of \$11.1 million for calendar year 2014. The decrease in investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Judges System net position held in trust for benefits include retirement benefits and administrative expenses. For calendar year 2015, benefits amounted to \$12.4 million, an increase of \$1.0 million (9.1%) over calendar year 2014. The increase in benefit payments was due to an increase in the benefit of current year retirees. For calendar year 2015, the costs of administering the system totaled \$71 thousand, a slight decrease over the preceding year.

At December 31, 2015, the Judges System total pension liability was \$199.0 million. The Plan's fiduciary net position was 163.7 million leaving a net pension liability of \$35.2 million. The Plan fiduciary net position as a percentage of the total pension liability was 82.3%.

Utah Governors and Legislators Retirement Plan

The Governors and Legislators Retirement Plan provides retirement benefits to governors and legislators of the State of Utah. Benefits of the system are funded by employer contributions and by earnings on investments. The system net position as of December 31, 2015, amounted to \$10.0 million, a decrease of \$327 thousand (3.2%) from \$10.4 million as of December 31, 2014.

Additions to the Governors and Legislators Retirement Plan net position include investment income and transfers. For calendar year 2015 employer contributions amounted to \$421 thousand. The Plan recognized a net investment gain of \$181 thousand for calendar year 2015 compared with net investment gain of \$717 thousand for calendar year 2014. The decrease in investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Governors and Legislators Retirement Plan net position include retirement benefits and administrative expenses. For calendar year 2015, retirement benefits amounted to \$904 thousand, a decrease of \$5 thousand (0.6%) from calendar year 2014. The decrease in benefit payments was due to a decrease in the number of benefit recipients. For calendar year 2015, the costs of administering the system totaled \$5 thousand, a slight decrease over the preceding year.

At December 31, 2015, the Governors and Legislators Retirement Plan total pension liability was \$12.2 million. The Plan's fiduciary net position was \$10.0 million leaving a net pension liability of \$2.2 million. The Plan fiduciary net position as a percentage of the total pension liability was 82.0%.

Tier 2 Public Employees System

The Tier 2 Public Employees System provides retirement benefits to eligible State of Utah, local governments, and public education employees who started employment July 1, 2011, or after. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2015, amounted to \$140.5 million. an increase of \$51.2 million (57.4%) from \$89.3 million as of December 31, 2014.

Additions to the Tier 2 Public Employees System net position consist of employer contributions, investment income, and transfers. For calendar year 2015, member and employer contributions increased from \$37.3 million for calendar year 2014, to \$49.6 million, an increase of \$12.3 million (33.1%). Contributions increased because membership increased. The system recognized a net investment gain of \$2.0 million for calendar year 2015 compared with an investment gain of \$4.3 million for calendar year 2014. The decrease in the investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Tier 2 Public Employees System net position for benefits include retirement benefits and administrative expenses. For calendar year 2015 the system paid \$333 thousand in retirement benefits and 0 in 2014. The costs of administering the system totaled \$30 thousand, an increase of \$14 thousand (88%) from calendar year 2014.

At December 31, 2015, the Tier 2 Public Employees Retirement System total pension liability was \$140.3 million. The Plan's fiduciary net position was \$140.5 million leaving a net pension asset of \$217 thousand. The Plan's fiduciary net position as a percentage of the total pension liability was 100.2%.

Tier 2 Public Safety and Firefighter System

The Tier 2 Public Safety and Firefighter System provides retirement benefits to eligible state and local government employees directly involved in law enforcement or fire fighting and are in a position of hazardous duty who started employment July 1, 2011, or after. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2015, amounted to \$15.1 million, an increase of \$6.9 million (73.3%) from \$8.7 million as of December 31, 2014.

Additions to the Tier 2 Public Safety and Firefighter System net position consist of employer contributions, investment income, and transfers. For calendar year 2015, member and employer contributions increased from \$4.4 million for calendar year 2014, to \$6.2 million in 2015, an increase of \$1.9 million (42.5%). Contributions increased because membership increased. The system recognized a net investment gain of \$199 thousand for calendar year 2015 compared with net investment gain of \$404 thousand for calendar year 2014. The decrease in the investment gain for 2015 compared to 2014 was due to the lower rate of return realized in 2015.

Deductions from the Tier 2 Public Safety and Firefighter System net position include retirement benefits and administrative expenses. For calendar years 2015 the system paid 30 thousand in retirement benefits and 0 in 2014. The costs of administering the system totaled \$3 thousand.

At December 31, 2015, the Tier 2 Public Safety and Firefighter Retirement System total pension liability was \$13.6 million. The Plan's fiduciary net position was \$15.1 million leaving a net pension asset of \$1.5 million. The Plan's fiduciary net position as a percentage of the total pension liability was 110.7%.

Actuarial Valuations and Funding Progress

Actuarial valuation of each defined benefit system is performed annually. As of January 1, 2015, the date of the most recent actuarial valuation, the average funded ratio of the Systems was 85.5%. This was an increase from the Systems' January 1, 2014, valuation average funded ratio of 81.7%, an increase in funded status of 3.8%. The funded ratio increase for all systems was the result of higher than expected investment returns over the previous five years.

In determining contribution rates an actuarial value of assets is used rather than a market value of assets. The actuarial value of assets is based on a smoothed expected income investment rate. Investment income in excess or shortfall of the expected rate on fair value is smoothed over a 5-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.

As of January 1, 2014, the Systems' underfunded actuarial accrued liability was \$5.3 billion. This was a net decrease in the unfunded position of \$1.1 billion compared to January 1, 2013. As of January 1, 2014, the difference between the actuarial value of assets and market value of assets was \$1.1 billion in actuarially deferred gains. These actuarially deferred gains will be recognized by the actuary over the next four years.

Every three years in conjunction with the actuarial valuation the actuary performs an experience study. Based upon the 2014 experience study, the actuary recommended some changes in the actuarial assumptions that were adopted by the Board. Some of the changes were to decrease the wage inflation assumption from 3.75% to 3.50%, decrease the payroll growth assumption from 3.50% to 3.25%, and new mortality assumptions.

STATEMENTS OF FIDUCIARY NET POSITION — DEFINED CONTRIBUTION SAVINGS PLANS

December 31

(dollars in thousands)

			401(k) Plan			457 Plan	Roth IRA Plan			
	2015	2014	2013	2015	2014	2013	2015	2014	2013	
Assets:										
Cash and receivables	\$ 96,857	96,894	89,559	10,247	10,244	10,044	238	170	51	
Investments at fair value	3,896,025	3,873,336	3,666,358	444,668	441,353	415,510	69,664	58,835	47,735	
Total assets	3,992,882	3,970,230	3,755,917	454,915	451,597	425,554	69,902	59,005	47,786	
Liabilities:										
Investment accounts and other payables	12,477	13,479	9,636	558	623	986	188	163	23	
Total liabilities	12,477	13,479	9,636	558	623	986	188	163	23	
Net position restricted for pensions	\$ 3,980,405	3,956,751	3,746,281	454,357	450,974	424,568	69,714	58,842	47,763	

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION — DEFINED CONTRIBUTION SAVINGS PLANS

Year Ended December 31

(dollars in thousands)

			401(k) Plan			457 Plan	Roth IRA Plan			
	2015	2014	2013	2015	2014	2013	2015	2014	2013	
Additions:										
Contributions	\$ 271,097	255,044	230,086	26,968	26,711	25,696	14,073	11,664	9,113	
Investment income	10,658	213,230	532,216	259	23,342	60,421	(308)	2,816	6,870	
Total additions	281,755	468,274	762,302	27,227	50,053	86,117	13,765	14,480	15,983	
Deductions:										
Refunds	251,436	251,496	223,523	23,082	22,920	21,314	2,781	3,310	1,908	
Administrative expenses	6,665	6,308	5,372	762	727	616	112	91	62	
Total deductions	258,101	257,804	228,895	23,844	23,647	21,930	2,893	3,401	1,970	
Increase (decrease) in net position restricted for pensions	\$ 23,654	210,470	533,407	3,383	26,406	64,187	10,872	11,079	14,013	

Analysis of the Defined Contribution Savings Plans

401(k) Defined Contribution Plan

The 401(k) Plan was established under section 401(k) of the Internal Revenue Code. This plan provides supplemental and primary retirement benefits for plan participants. The plan is funded by contributions and by investment earnings. The plan net position as of December 31, 2015, amounted to \$4.0 billion, an increase of \$23.7 thousand (0.6%) over net position as of December 31, 2014.

Additions to the 401(k) Plan net position include contributions and investment income. For calendar year 2015, contributions increased from those of calendar year 2014 from \$255.0 million to \$271.1 million or an increase of \$16.1 million (6.3%). Contributions increased because of increased participation. The plan recognized a net investment gain of \$10.7 million for calendar year 2015 compared with a net investment gain of \$213.2 million for the calendar year 2014.

Deductions from the 401(k) Plan net position include participant and beneficiary refunds (including rollovers) and administrative expenses. For calendar year 2015, refunds amounted to \$251.4 million, a decrease of \$60 thousand (0.0%) over calendar year 2014. The decrease in refunds was due to a decrease in withdrawals for calendar year 2015. For calendar year 2015, the costs of administering the plan amounted to \$6.7 million, an increase of \$357 thousand over calendar year 2014.

Management's Discussion and Analysis (Concluded)

Traditional IRA Plan				Health Reimbursement Arrangement (HRA)			Total Defined Con	tribution Plans	2015 Percent	2014 Percent
2015	2014	2013	2015	2014	2013	2015	2014	2013	Change	Change
121	6	15	255	1,948	1,586	107,718	109,262	101,255	(1.4)%	7.9 %
69,108	59,873	49,874	23,156	18,082	14,662	4,502,621	4,451,479	4,194,139	1.1	6.1
69,229	59,879	49,889	23,411	20,030	16,248	4,610,339	4,560,741	4,295,394	1.1	6.2
243	57	37	137	150	64	13,603	14,472	10,746	(6.0)	34.7
243	57	37	137	150	64	13,603	14,472	10,746	(6.0)	34.7
68,986	59,822	49,852	23,274	19,880	16,184	4,596,736	4,546,269	4,284,648	1.1 %	6.1%

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Traditional IRA Plan			1	Health Reimbursement Arrangement (HRA)			Total Defined Contribution Plans			
2015	2014	2013	2015	2014	2013	2015	2014	2013	Percent Change	Percent Change
17,206	14,930	11,213	6,318	6,393	6,750	335,662	314,742	282,858	6.6%	11.3%
211	2,645	5,050	35	24	30	10,855	242,057	604,587	(95.5)	(60.0)
17,417	17,575	16,263	6,353	6,417	6,780	346,517	556,799	887,445	(37.7)	(37.3)
8,148	7.514	4,940	2,924	2,690	2.041	288,371	287.930	253.726	0.2	13.5
105	91	66	35	31	24	7,679	7,248	6,140	5.9	18.0
8,253	7,605	5,006	2,959	2,721	2,065	296,050	295,178	259,866	0.3	13.6
9,164	9,970	11,257	3,394	3,696	4,715	50,467	261,621	627,579	(80.7)%	(58.3)%

Benefit obligations of the 401(k) Defined Contribution Plan are equal to the member account balances, which are equal to net position of the plan.

457 Defined Contribution Plan

The 457 Plan was established under Section 457(b) of the Internal Revenue Code. This plan provides supplemental retirement benefits for plan participants. The plan is funded by contributions and by investment earnings. The plan net position as of December 31, 2015, amounted to \$454.4 million, an increase of \$3.4 million (0.8%) over net position as of December 31, 2014.

Additions to the 457 Plan net position include contributions and investment income. For calendar year 2015, contributions increased from those of calendar year 2014 from \$26.7 million to \$27.0 million or an increase of

\$257 thousand (1.0%). Contributions increased because of increased participation. The plan recognized a net investment gain of \$259 thousand for calendar year 2015 compared with a net investment gain of \$23.3 million for the calendar year 2014.

Deductions from the 457 Plan net position include participant and beneficiary refunds (including rollovers) and administrative expenses. For calendar year 2015, refunds amounted to \$23.1 million, an increase of \$162 thousand (0.7%) over calendar year 2014. The increase in refunds was due to an increase in withdrawals for calendar year 2015. For calendar year 2015, the costs of administering the plan amounted to \$762 thousand, an increase of \$35 thousand over calendar year 2014.

Benefit obligations of the 457 Defined Contribution Plan are equal to the member account balances, which are equal to net position of the plan.

Roth IRA Plan

The Roth IRA is a "deemed IRA" authorized by section 408(q) of the Internal Revenue Code, and governed by section 408A of the code. This plan allows participants to make after-tax contributions, while the earnings may be withdrawn tax free (for qualified distributions). The plan net position as of December 31, 2015, amounted to \$69.7 million, an increase of \$10.9 million (18.5%) over net position as of December 31, 2014.

Additions to the Roth IRA Plan include contributions, transfers from other Roth IRAs, conversions from traditional IRAs, rollovers from other retirement plans, and investment earnings. For calendar year 2015, contributions increased from those of calendar year 2014 from \$11.7 million to \$14.1 million (20.7%). Contributions increased because of increased participation. The plan recognized a net investment loss of \$308 thousand for calendar year 2015 compared with a net investment gain of \$2.8 million for calendar year 2014.

Deductions from the Roth IRA Plan net position include participant and beneficiary refunds, transfers and rollovers, and administrative expenses. For calendar year 2015, refunds amounted to \$2.8 million, a decrease of \$529 thousand (negative 15.9%) over calendar year 2014. For calendar year 2015, the costs of administering the plan amounted to \$112 thousand, an increase of \$21 thousand over calendar year 2014.

Traditional IRA Plan

The traditional IRA is a "deemed IRA" authorized by section 408(g) of the Internal Revenue Code, and governed by section 408 of the code. This plan allows participants to make after-tax contributions and possibly deduct all or a portion of the contributions from their current taxable income. This plan also allows participants to consolidate many other eligible plan assets when they become eligible for roll over (such as 401(k), 457, and other IRAs). Participants may also convert traditional IRA funds into a Roth IRA. The plan net position as of December 31, 2015, amounted to \$69.0 million, an increase of \$9.2 million (15.3%) over net position as of December 31, 2014.

Additions to the traditional IRA Plan include contributions, rollovers, and investment earnings. For calendar year 2015, contributions increased from those of calendar year 2014 from \$14.9 million to \$17.2 million (15.2%). Contributions increased because of increased participation. The plan

recognized a net investment gain of \$211 thousand for calendar year 2015 compared with a net investment gain of \$2.6 million for calendar year 2014.

Deductions from the traditional IRA Plan net position include participant and beneficiary refunds, rollovers and transfers, and administrative expenses. For calendar year 2015, refunds amounted to \$8.1 million, an increase of \$634 thousand (8.4%) over calendar year 2014. For calendar year 2015, the costs of administering the plan amounted to \$105 thousand, an increase of \$14 thousand over calendar year 2014.

Health Reimbursement Arrangement

The Health Reimbursement Arrangement (HRA) is a tax-advantaged health savings plan for State employees funded by employer contributions to pay for qualified healthcare expenses incurred after retirement. No employee contributions are permitted. The plan net position as of December 31, 2015, amounted to \$23.3 million, an increase of \$3.4 million (17.1%) over the net position as of December 31, 2014.

Additions to the HRA include contributions and investment earnings. For calendar year 2015, contributions decreased from those of calendar year 2014 from \$6.4 million to \$6.3 million (1.2%).

Deductions from the HRA net position include participant, spouse, and dependent refunds and administrative expense. For calendar year 2015 refunds amounted to \$2.9 million, an increase of \$234 thousand (8.7%) over calendar year 2014. The increase in refunds was due to an increase in withdrawals for calendar year 2015.

The costs of administering the plan was \$35 thousand for calendar year 2015 compared to \$31 thousand for year 2014.

Benefit obligations of the HRA are equal to the member account balance, which are equal to net position of the plan.

GASB 68 Employer Allocations and Pension Reporting

URS has included information regarding employer's proportion share of the net pension liability, deferred outflows of resources, deferred inflows of resources, and pension expense. This section is where employers and auditors are able to get information regarding their pension disclosures for financial statement purposes.

DEFINED CONTRIBUTION COMPARATIVE **ANNUALIZED RATES OF RETURN**

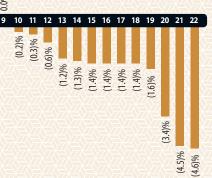
December 31, 2015

Investment Option	2015	2014
Income Fund	1.6%	1.6%
Bond Fund	(0.3)	5.9
Balanced Fund	\(\) 21.3\\\	9.0
Large Cap Stock Value Fund	(4.5)	10.3
Large Cap Stock Index Fund	(5) 70.8	13.0
Large Cap Stock Growth Fund	9.0	11.8
International Fund	(4.6)	(3.9)
Small Cap Stock Fund	(3.4)	4.3
Target Retired Fund	0.3	$\times \times \times$
Target Date 2010 Fund	0.0	$\times \times \times$
Target Date 2015 Fund	0.3	$\times \times \times$
Target Date 2020 Fund	0.1	$\times \times \times$
Target Date 2025 Fund	(0.2)	$\times \times \times$
Target Date 2030 Fund	(0.6)	$\times \times \times$
Target Date 2035 Fund	(1.2)	X
Target Date 2040 Fund	(1.3)	\times
Target Date 2045 Fund	(1.4)	X
Target Date 2050 Fund	(1.4)	$\times\!$
Target Date 2055 Fund	(1.4)	$\times\!$
Target Date 2060 Fund	(1.4)	$\times\!$
Tier 2 DC Nonvested	(1.6)	4.7
HRA Fund	0.0	0.0

DEFINED CONTRIBUTION SAVINGS PLANS INVESTMENT OPTION RATES OF RETURN FOR 2015

(in percents)

1-Large Cap Stock Growth Fund 10-Target Date 2025 Fund 2-Income Fund 11-Bond Fund 3-Balanced Fund 12-Target Date 2030 Fund 4-Large Cap Stock Index Fund 13-Target Date 2035 Fund 5-Target Retired Fund 14-Target Date 2040 Fund 6-Target Date 2015 Fund 15-Target Date 2045 Fund 7-Target Date 2020 Fund 16-Target Date 2050 Fund 8-Target Date 2010 Fund 17-Target Date 2060 Fund 9-HRA Fund 18-Target Date 2055 Fund 19-Tier 2 DC Nonvested 20-Small Cap Stock Fund 21-Large Cap Stock Value Fund 22-International Fund









UTAH RETIREMENT SYSTEMS

BASIC FINANCIAL STATEMENTS

Statements of Fiduciary Net Position — Pension (and Other Employee Benefit) Trust Funds

December 31, 2015 With Comparative Totals for December 31, 2014

(in thousands)

	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Utah Governors and Legislators Retirement Plan	Tier 2 Public Employees System	
Assets:								
Cash	\$ 2,158	2	20	2	1	1	2	
Receivables:								
Member contributions	_	94	10	280	_	_	_	
Employer contributions	33,259	266	1,486	_	_	112	2,475	
Court fees and fire insurance tax	_	_		340	130	_	_	
Investments	229,238	12,813	31,823	11,294	1,773	112	1,496	
Total receivables	262,497	13,173	33,319	11,914	1,903	224	3,971	
Investments at fair value:								
Short-term securities	1,770,475	98,963	245,776	87,224	13,690	866	11,552	
Debt securities	3,399,620	190,027	471,934	167,486	26,288	1,662	22,182	
Equity investments	7,299,702	408,028	1,013,339	359,627	56,446	3,570	47,630	
Absolute return	3,288,234	183,800	456,471	161,998	25,427	1,608	21,455	
Private equity	2,552,474	142,675	354,333	125,751	19,737	1,248	16,655	
Real assets	3,196,190	178,656	443,692	157,464	24,715	1,563	20,855	
Total investments	21,506,695	1,202,149	2,985,545	1,059,550	166,303	10,517	140,329	
Invested securities lending collateral	1,602,253	89,560	222,424	78,936	12,390	784	10,454	
Property and equipment at cost,								
net of accumulated depreciation	2,488	139	345	123	19	1	16	
Total assets	23,376,091	1,305,023	3,241,653	1,150,525	180,616	11,527	154,772	
Liabilities:								
Securities lending liability	1,602,253	89,560	222,424	78.936	12,390	784	10,454	
Disbursements in excess		,	•	•	•		•	
of cash balance	29,275	1,637	4,064	1,442	226	14	191	
Compensated absences,	•	,	•	•				
post-employment benefits								
and insurance reserve	15,944	891	2,213	785	123	8	104	
Investment accounts payable	304,196	16,876	41,910	14,874	2,335	569	1,970	
Real estate liabilities	231,986	12,968	32,203	11,429	1,795	113	1,514	
Total liabilities	2,183,654	121,932	302,814	107,466	16,869	1,488	14,233	
Net position restricted for pensions	\$ 21,192,437	1,183,091	2,938,839	1,043,059	163,747	10,039	140,539	

The accompanying notes are an integral part of the financial statements.

ibution Plans	Contribution Plans	Defined Co				Defined Benefit Pension Plans –				
	Total Defined	Health					Total	Tier 2 Public Safety and		
Contribution Plans 2015 2014		Reimbursement Arrangement	IRA Plan	Roth IRA Plan	457 Plan	401(k) Plan	Defined Benefit Pension Plans	Firefighter System		
	40.04=					44.0=4				
12,967 15,155 19,504	12,967	255	121	238	477	11,876	2,188	2		
— 384 512	_	_	_	_	_	_	384	_		
— 37,705 40,078	_	_	_	_	_	_	37,705	107		
— 470 1,206	_	_		_	_	_	470	<u> </u>		
94,751 383,462 481,569	94,751	_	_	_	9,770	84,981	288,711	162		
94,751 422,021 523,365	94,751	_	_	_	9,770	84,981	327,270	269		
23,156 2,252,955 1,590,146	23,156	23,156	_	_	_	_	2,229,799	1,253		
1,636,773 5,918,379 5,917,609	1,636,773	_	37,494	19,626	151,112	1,428,541	4,281,606	2,407		
2,691,513 11,885,023 12,254,654	2,691,513	_	29,345	46,895	278,856	2,336,417	9,193,510	5,168		
— 4,141,321 4,643,417		_	_	_		_	4,141,321	2,328		
— 3,214,680 3,170,276		_	_	_	_		3,214,680	1,807		
151,179 4,176,577 3,830,987	151,179	_	2,269	3,143	14,700	131,067	4,025,398	2,263		
4,502,621 31,588,935 31,407,089	4,502,621	23,156	69,108	69,664	444,668	3,896,025	27,086,314	15,226		
— 2,017,935 2,282,747	_	_	_	_	_	_	2,017,935	1,134		
— 3,133 3,722	_	_	_	_	_	_	3,133	2		
4,610,339 34,047,179 34,236,427	4,610,339	23,411	69,229	69,902	454,915	3,992,882	29,436,840	16,633		
— 2,017,935 2,282,747	_	_	_	_	_	_	2,017,935	1,134		
1,875 38,745 41,766	1,875	_	106	18	126	1,625	36,870	21		
— 20,079 20,004	_	_	_		_	_	20,079	11		
11,728 394,672 395,156	11,728	137	137	170	432	10,852	382,944	214		
— 292,172 381,361	_	_	_	_	_	_	292,172	164		
13,603 2,763,603 3,121,034	13,603	137	243	188	558	12,477	2,750,000	1,544		
4,596,736 31,283,576 31,115,393	4,596,736	23,274	68,986	69,714	454,357	3,980,405	26,686,840	15,089		

Utah Retirement Systems

Basic Financial Statements (Continued)

Statements of Changes in Fiduciary Net Position — Pension (and Other Employee Benefit) Trust Funds

Year Ended December 31, 2015 With Comparative Totals for Year Ended December 31, 2014

(in thousands)

Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Utah Governors and Legislators Retirement Plan	Tier 2 Public Employees System	
\$ 17,020 813,449 —	4,7/1 11,719 —	905 141,024 —	18,175 6,690 17,218	6,555 1,653	421 —	49,645 —	
830,469	16,490	141,929	42,083	8,208	421	49,645	
38,208	2,213	5,276	1,869	296	19	237	
364,237	21,106	50,307	17,810	2,823	180	1,913	
402,445	23,319	55,583	19,679	3,119	199	2,150	
42,927	2,487	5,929	2,099	333	21	225	
359,518	20,832	49,654	17,580	2,786	178	1,925	
8,310	481	1,149	407	64	4	44	
1,080	62	149	53	8	1	6	
7,230	419	1,000	354	56	3	38	
366,748	21,251	50,654	17,934	2,842	181	1,963	
33,648	_	4,023	2,573	1,334	_	3	
1,230,865	37,741	196,606	62,590	12,384	602	51,611	
042 501	67 F10	127 205	20.240	10.252	721	222	
180,056	13,785 95	27,807 295	10,095 236	2,148 —	173	— —	
2,496 8,797 —	1,215 478 41,558	1,233 —	371 —	71 —	5 20	30	
1,134,940	124,641	157,153	50,570	12,471	929	363	
95,925	(86,900)	39,453	12,020	(87)	(327)	51,248	
21,096,512	1,269,991	2,899,386	1,031,039	163,834	10,366	89,291	
\$ 21,192,437	1,183,091	2,938,839	1,043,059	163,747	10,039	140,539	
	\$ 17,020 813,449 — 830,469 38,208 364,237 402,445 42,927 359,518 8,310 1,080 7,230 366,748 33,648 1,230,865 943,591 180,056 — 2,496 8,797 — 1,134,940 95,925 21,096,512	\$ 17,020 4,771 813,449 11,719 — 830,469 16,490 38,208 2,213 364,237 21,106 402,445 23,319 42,927 2,487 359,518 20,832 8,310 481 1,080 62 7,230 419 366,748 21,251 33,648 — 1,230,865 37,741 943,591 67,510 180,056 13,785 — 95 2,496 1,215 8,797 478 — 41,558 1,134,940 124,641	\$ 17,020	\$ 17,020 4,771 905 18,175 813,449 11,719 141,024 6,690 — — 17,218 830,469 16,490 141,929 42,083 38,208 2,213 5,276 1,869 364,237 21,106 50,307 17,810 402,445 23,319 55,583 19,679 42,927 2,487 5,929 2,099 359,518 20,832 49,654 17,580 8,310 481 1,149 407 1,080 62 149 53 7,230 419 1,000 354 366,748 21,251 50,654 17,934 33,648 — 4,023 2,573 1,230,865 37,741 196,606 62,590 943,591 67,510 127,285 39,340 180,056 13,785 27,807 10,095 — 95 295 236 2,496 1,215 533 528 8,797 478 1,233 371 — 41,558 — — 1,134,940 124,641 157,153 50,570 95,925 (86,900) 39,453 12,020 21,096,512 1,269,991 2,899,386 1,031,039	\$ 17,020 4,771 905 18,175 — 813,449 11,719 141,024 6,690 6,555 — 17,218 1,653 830,469 16,490 141,929 42,083 8,208 38,208 2,213 5,276 1,869 296 364,237 21,106 50,307 17,810 2,823 402,445 23,319 55,583 19,679 3,119 42,927 2,487 5,929 2,099 333 359,518 20,832 49,654 17,580 2,786 8,310 481 1,149 407 64 1,080 62 149 53 8 7,230 419 1,000 354 56 366,748 21,251 50,654 17,934 2,842 33,648 — 4,023 2,573 1,334 1,230,865 37,741 196,606 62,590 12,384 943,591 67,510 127,285 39,340 10,252 180,056 13,785 27,807 10,095 2,148 95,246 1,215 533 528 — 95 295 236 — 95 295 236 — 95 295 236 — 1,134,940 124,641 157,153 50,570 12,471 95,925 (86,900) 39,453 12,020 (87) 21,096,512 1,269,991 2,899,386 1,031,039 163,834 12,006,512 1,269,991 2,899,386 1,031,039 163,834	Noncontributory System Contributory System Public Safety System Fireflighters System Judges System Retirement Plan \$ 17,020 4,771 905 18,175 — — 813,449 11,719 141,024 6,690 6,555 421 830,469 16,490 141,929 42,083 8,208 421 38,208 2,213 5,276 1,869 296 19 364,237 21,106 50,307 17,810 2,823 180 402,445 23,319 55,583 19,679 3,119 199 42,927 2,487 5,929 2,099 333 21 359,518 20,832 49,654 17,580 2,786 178 8,310 481 1,149 407 64 4 1,080 62 149 53 8 1 7,230 419 1,000 354 56 3 36,748 21,251 50,654 17,934 2,842	System System System System Retirement Plan System \$ 17,020 4,771 905 18,175 — — — 813,449 11,719 141,024 6,690 6,555 421 49,645 — — — 17,218 1,653 — — 830,469 16,490 141,929 42,083 8,208 421 49,645 38,208 2,213 5,276 1,869 296 19 237 364,237 21,106 50,307 17,810 2,823 180 1,913 402,445 23,319 55,583 19,679 3,119 199 2,150 42,927 2,487 5,929 2,099 333 21 225 359,518 20,832 49,654 17,580 2,786 178 1,925 8,310 481 1,149 407 64 4 44 1,080 62 149 53 8

The accompanying notes are an integral part of the financial statements.

	efit Pension Plans			Add	itional Combin	ing Information			
Tier 2 Public Safety and	Total					Health	Total Defined	Total Pe	nsion Trust Funds
Firefighter System	Defined Benefit Pension Plans	401(k) Plan	457 Plan	Roth IRA Plan	Traditional IRA Plan	Reimbursement Arrangement	Contribution Plans	2015	2014
_	40,871	271,097	26,968	14,073	17,206		329,344	370,215	346,849
6,221	1,035,724	_	_	_	_	6,318	6,318	1,042,042	980,571
	18,871							18,871	15,640
6,221	1,095,466	271,097	26,968	14,073	17,206	6,318	335,662	1,431,128	1,343,060
21	48,139	10,513	226	(251)	274	35	10,797	58,936	1,565,564
197	458,573	3,494	403	_	_	_	3,897	462,470	503,089
218	506,712	14,007	629	(251)	274	35	14,694	521,406	2,068,653
23	54,044	3,349	370	57	63		3,839	57,883	48,991
195	452,668	10,658	259	(308)	211	35	10,855	463,523	2,019,662
5	10,464	_		_				10,464	9,968
1	1,360	_	_	_	_	_	_	1,360	1,142
4	9,104							9,104	8,826
199	461,772	10,658	259	(308)	211	35	10,855	472,627	2,028,488
_	41,581	_	_		_	_	_	41,581	38,020
6,420	1,598,819	281,755	27,227	13,765	17,417	6,353	346,517	1,945,336	3,409,568
30	1,189,072	_		_	_	_	_	1,189,072	1,100,225
_	234,064	_		_	_	_	_	234,064	224,609
-	626		_		_	_	_	626	722
_	4,772	251,436	23,082	2,781	8,148	2,924	288,371	293,143	293,059
3	10,988	6,665	762	112	105	35	7,679	18,667	18,260
3	41,581	_	_				_	41,581	38,020
36	1,481,103	258,101	23,844	2,893	8,253	2,959	296,050	1,777,153	1,674,895
6,384	117,716	23,654	3,383	10,872	9,164	3,394	50,467	168,183	1,734,673
8,705	26,569,124	3,956,751	450,974	58,842	59,822	19,880	4,546,269	31,115,393	29,380,720
		, -, -	,	,-	,- =	.,	,	, -,	
15,089	26,686,840	3,980,405	454,357	69,714	68,986	23,274	4,596,736	31,283,576	31,115,393











UTAH RETIREMENT SYSTEMS

NOTES TO BASIC FINANCIAL STATEMENTS

December 31, 2015

Note 1

Description of Systems and Plans

A brief description of the Utah Retirement Systems (Systems), 401(k), 457, Roth and traditional IRAs (Plans), and Health Reimbursement Arrangement (HRA) follows. For a more complete description of plan provisions, membership and benefit statistics, see the Systems Highlights on pages 14 through 30 and Summaries of Plan Provisions on pages 167 through 182.

A) General Information and Reporting Entity

General — The Utah Retirement Systems are comprised of the following pension trust funds:

- i) the **Public Employees Noncontributory Retirement** System (Noncontributory System); the Public **Employees Contributory Retirement System** (Contributory System); and the Firefighters Retirement System are multiple-employer, cost-sharing, public employee retirement systems;
- ii) the **Public Safety Retirement System** is a mixed agent and cost-sharing, multiple-employer retirement system;
- iii) the Judges Retirement System and the Utah Governors and Legislators Retirement Plan are singleemployer service-employee retirement systems;
- iv) the Tier 2 Public Employees Contributory Retirement System and the Tier 2 Public Safety and Firefighter Contributory Retirement System are multipleemployer, cost-sharing public employee retirement systems; and

v) five defined contribution plans comprised of the 401(k) Plan, 457 Plan, Roth and traditional IRAs, and HRA.

These Systems and Plans cover employees of the State of Utah and participating local government and public education entities.

Reporting Entity — These basic financial statements cover all of the foregoing retirement systems and defined contribution plans administered by the Utah State Retirement Board (Board), the sole governing body for these Systems and Plans.

The Systems are established and governed by the respective sections of Title 49 of the Utah Code Annotated 1953, as amended. The Systems' defined benefit plans are amended statutorily by the State Legislature. The Utah State Retirement Office Act in Title 49 provides for the administration of the Systems and Plans under the direction of the Board, whose members are appointed by the Governor. The Plans are established under the authority of the same sections of the Utah Code Annotated 1953, as amended, as well as under Sections 401(k), 457, 408, and 408A of the Internal Revenue Code. The Plans may be

SUMMARY OF BENEFITS BY SYSTEM

	Noncontributory System	Contributory System	Public Fire- Safety fighters System System	Judges System	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Final average salary is	Highest 3 years	Highest 5 years	Highest 3 years	Highest 2 years	Highest 5 years	Highest 5 years
Years of service required and/ or age eligible for benefit	30 years any age 25 years any age* 20 years age 60* 10 years age 62* 4 years age 65	30 years any age 20 years age 60* 10 years age 62* 4 years age 65	20 years any age 10 years age 60 4 years age 65	25 years any age 20 years age 55* 10 years age 62 6 years age 70	35 years any age 20 years age 60* 10 years age 62* 4 years age 65	25 years any age 20 years age 60* 10 years age 62* 4 years age 65
Benefit percent per year of service**	2.0% per year all years	1.25% per year to June 1975 2.0% per year July 1975 to present	2.5% per year up to 20 years 2.0% per year over 20 years	5.0% first 10 years 2.25% second 10 years 1.0% over 20 years	1.5% per year all years	1.5% per year all years

Note: The Utah Governors and Legislators Retirement Plan benefits are explained in the second paragraph of section B) below. *With actuarial reductions.

amended by the Board within the parameters of the Internal Revenue Code. The Systems and Plans are fiduciary funds defined as pension (and other employee benefit) trust funds. Utah Retirement Systems is a component unit of the State of Utah.

B) Retirement and Death Benefits

Retirement Systems' benefits are specified by the statute listed in note 1(A). The Retirement Systems are defined benefit plans wherein benefits are based on age and/or years of service and highest average salary. Various plan options within the Systems may be selected by retiring members. Some options require actuarial reductions based on attained age, age of spouse, and similar actuarial factors. A brief summary of eligibility and benefits of the various Systems is shown in the table above.

The Utah Governors and Legislators Retirement Plan provides the following benefits. Former governors at age 65 receive \$1,340 per month per term. Legislators receive a benefit at age 65 with four or more years of service at the rate of \$29.20 per month per year of service. Retirement at age 62 with 10 or more years of service will receive an actuarial reduction. Both the governors' and legislators' benefits are adjusted based on the CPI limited to 4% of the base benefit per year.

Death benefits for active and retired employees are in accordance with retirement statutes. Upon termination of employment, members of the Systems may leave their retirement account intact for future benefits based on vesting qualification or withdraw the accumulated funds in their individual member account and forfeit service credits and rights to future benefits upon which the contributions were based.

C) Defined Contribution Plans

The 401(k), 457, Roth and traditional IRAs, and HRA administered by the Board are defined contribution plans. These Plans are available as supplemental plans to the basic retirement benefits of the Retirement Systems and as a primary retirement plan for some Tier 2 participants. Contributions may be made into the Plans subject to plan and Internal Revenue Code limitations by employees of employers sponsoring the Plans. Employer contributions may be made into the 401(k) and 457 Plans at rates determined by the employers and according to Utah Title 49. There are 381 employers participating in the 401(k) Plan and 162 employers participating in the 457 Plan. There are 161,398 plan participants in the 401(k) Plan, 17,004 participants in the 457 Plan, 7,359 participants in the Roth IRA, 1,584 participants in the traditional IRA, and 2,701 participants in the HRA.

^{**}For members and retirees in the systems, prior to January 1, 1989, there may be a 3% benefit enhancement.

DEFINED CONTRIBUTION PLANS

	401(k)	457	Roth IRA	Traditional IRA	HRA
Number of participating employers	381	162	N/A	N/A	N/A
Total participants	161,398	17,004	7,359	1,584	2,701

After termination of employment, benefits are paid out to individuals in lump sum, or as periodic benefit payments, at the option of the participant based on individual account balances and plan provisions. The Defined Contribution Plans account balances are fully vested to the participants at the time of deposit except for Tier 2 required employer contributions and associated earnings during the first four years of employment.

Investments in the vested portion of the Defined Contribution Plans are individually directed and controlled by plan participants who direct the investment of their funds among several investment options of varying degrees of risk and earnings potential. Participants may transfer their funds between these options no more frequently than every seven days. There is also a 2% trading fee for investment transfers between core fund options more frequently than every 30 days. Investments of the Plans are reported at fair value.

D) Contributions

As a condition of participation in the Defined Benefit Systems, employers and/or employees are required to contribute certain percentages of salaries and wages as authorized by statute and specified by the Board. Employee contributions may be paid in part or in whole by the employer. Contributions in some Systems are also augmented by fees or insurance premium taxes. Contribution rates are listed in note 6.

Employee (member) contributions are placed into member accounts, and in Systems where it is authorized, interest is credited to member accounts. Upon termination of employment, a member may withdraw his or her account balance including interest that has been credited. Upon withdrawal a member forfeits the service credit that corresponds to the member contributions withdrawn. The noncontributory retirement systems have no required member contributions flowing into them. However, where members had a balance transferred in or purchased service credit in the system, these balances and on-going interest, where authorized, are credited to individual member accounts that may be withdrawn upon the termination of employment.

In the 401(k) and 457 Defined Contribution Plans, voluntary deferral of compensation within the limits of plan provisions may be made by employees. In addition to employee voluntary deferrals, employer contributions may be made into the Plans on behalf of employees. The recognition of deferred compensation, employer contributions, and earnings on the accounts are deferred for income tax purposes until actually paid to the participant or beneficiary. The employee may also contribute to the Roth and traditional deemed IRAs where earnings may grow tax deferred and possibly tax free.

E) Covered Employees

The Public Employees Noncontributory Retirement System (Noncontributory System) was established on July 1, 1986, and is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. All eligible employees of the State and School entities hired subsequent to that date are automatically members of the Noncontributory System until July 1, 2011, when Tier 2 came into effect. Local government entities had the option of adopting the new System or remaining with the Contributory System. All Contributory System members whose employers adopted the Noncontributory System were given the opportunity to transfer to the new System during limited window periods. All eligible new hires subsequent to adoption of the noncontributory plans are automatically members of that plan.

The Public Employees Contributory Retirement System (Contributory System) includes eligible public employees of the State of Utah and its political subdivisions including public education employees of those entities covered by the System. The System is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. Members of this System are those who did not elect to transfer to the Public Employees Noncontributory Retirement System during the period when they were eligible to transfer or whose employers are not participants in the Noncontributory System.

PARTICIPATING MEMBERSHIP BY SYSTEM

	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	oran Governors and Legislators Retirement Plan	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Number of participating:								
Employers	451	158	131	60	1	1	465	149
Members:								
Active	68,273	943	6,399	1,735	112	93	21,778	1,824
Terminated vested	39,066	1,005	3,178	207	4	81	_	59
Retirees and beneficiaries:								
Service benefits	47,723	4,055	5,056	1,285	139	241	1	_
Disability benefits	1,019	167	108	48	1	_	_	_

The **Public Safety Retirement System** includes eligible State and local government employees directly involved in law enforcement (e.g., game wardens, prison guards, police officers, and highway patrol officers) and is comprised of eight divisions, the State of Utah, Division A with Social Security, Salt Lake City, Ogden, Provo, Logan, Bountiful, and Division B without Social Security. These divisions are not separate plans. The Public Safety System consists of both contributory and noncontributory divisions. The noncontributory divisions were authorized by the Legislature effective July 1, 1989.

The Firefighters Retirement System includes eligible State and local government employees directly involved in fire fighting and is comprised of two divisions, Division A with Social Security and Division B without Social Security. These divisions are not separate plans.

The Judges Retirement System includes justices and judges of the court as authorized by state statutes.

The Utah Governors and Legislators Retirement Plan includes only governors and legislators of the State.

The **Tier 2 Public Employees Contributory Retirement System** includes eligible public employees entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

The Tier 2 Public Safety and Firefighter Contributory **Retirement System** includes eligible public safety and firefighters entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

The **Defined Contribution Plans** may be utilized by employers adopting the Plans and by their employees.

As of December 31, 2015, participating members by System are included in the table above.

Note 2

Summary of Significant Accounting Policies

The following are the significant accounting policies followed by the Systems and Plans:

Hack Carrage

A) Method of Accounting

The Systems and Plans maintain records and accounts, and prepare financial statements using fund accounting principles and the accrual basis of accounting, under which benefits and expenses are recognized when due and payable and revenues are recorded in the accounting period in which they are earned and become measurable in accordance with the terms of each System and Plan.

For financial reporting purposes, Utah Retirement Systems adheres to accounting principles generally accepted in the United States of America. The Systems and Plans apply all applicable pronouncements of the Governmental Accounting Standards Board (GASB).

GASB Statement No. 67, Financial Reporting for Pensions, addresses accounting and financial reporting requirements for pension plans. Significant requirements include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The total pension liability, determined in accordance with GASB Statement No. 67, is presented in Note 5 and in the Required Supplementary Information on page 86.

Notes to the Basic Financial Statements (Continued)

December 31, 2015

GASB Statement No. 72, Fair Value Measurement and Application, which was adopted during the year ended December 31, 2015, addresses accounting and reporting issues related to fair value measurements. This Statement requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. Comprehensive footnote disclosure regarding this Statement is found in Note 3 beginning on page 63.

The financial statements include certain prior year summarized comparative information in total, but not by system or plan. Such information does not include sufficient detail to constitute a presentation in conformity with Generally Accepted Accounting Principles (GAAP). Accordingly, such information should be read in conjunction with the Systems' financial statements for the year ended December 31, 2014, from which the summarized information was derived.

B) Investments

By state statute all of the investment assets of the various Systems are pooled and invested in the common Utah State Retirement Investment Fund (Investment Fund). Each of the Systems has equity in the Investment Fund based on funds contributed and earnings allocated. Earnings of the Investment Fund are allocated based on the average month-end balances of each of the respective Systems. Individual investments in the Investment Fund are not specifically identified to the respective Systems (see note 3). For financial statement presentation, the Investment Fund assets, liabilities, revenues, and expenses have been allocated to and presented in each respective system in the basic financial statements as required for investment pools.

Investments are presented at fair value. The defined contribution investments are classified by investment manager classification. The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available. Many factors are considered in arriving at that value. Corporate debt securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

The fair value of real estate investments has been estimated based on independent appraisals and/or property cash flow. Short-term securities are reported at market value when published market prices and quotations are available, or at cost plus accrued interest, which approximates market or fair value. For alternative investments (private equity, absolute return, and real assets) where no readily ascertainable market value exists, management, in consultation with their investment advisors, value these investments in good faith based upon audited financials, cash-flow analysis, purchase and sales of similar investments, other practices used within the industry, or other information provided by the underlying investment advisors. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

Approximately 10.7% of the investments held in trust for pension benefits are invested in debt securities of the U.S. Government and its instrumentalities. Of the 10.7%, approximately 2.9% are U.S. Government debt securities and approximately 7.8% are debt securities of the U.S. Government instrumentalities. The Systems and Plans have no investments of any commercial or industrial organization whose market value equals 5.0% or more of the Systems' or Plans' fiduciary net positions for pension benefits.

Investment policy. The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the URS Board. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan. The following was the URS Board's adopted asset allocation policy as of December 31, 2015:

Asset Class	Target Allocation
Debt securities	20%
Equities	40
Real assets	13
Private equity	9
Absolute return	18
Cash and cash equivalents	
Total	100%

Rate of return. For the year ended December 31, 2015, the annual money-weighted rate of return on pension plan investment, net of pension plan investment expense, was 2.02%. The money weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

C) Property and Equipment

Property and equipment are recorded at cost (see note 4), are depreciated utilizing the straight-line method, and are included in the assets of the Investment Fund. The schedule below summarizes the estimated useful life by class. The Systems' policy is to capitalize all acquisitions of furniture and equipment with a unit cost of \$5,000 and computer software of \$1,000,000 or more.

Buildings	40 years
Building improvements	10 years
Furniture and equipment	3-10 years
Computer software	5 years

D) Administrative Expenses

Expenses for the administration of the Systems and Plans are budgeted and approved by the Board. Systems' expenses are paid from investment earnings. Plan expenses are paid from Plan assets.

E) Federal Tax Status

The Systems and Plans are exempt from Federal income taxes under the Internal Revenue Code.

F) Use of Estimates

Management of the Systems and Plans have made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these financial statements in conformity with accounting principles generally accepted in the United States of America. Actual results could differ from these estimates.

G) Subsequent Events

The Systems and Plans have performed an evaluation of subsequent events through April 27, 2016, the date the basic financial statements were available to be issued. No material events were identified by the Systems and Plans.

Note 3

Deposits and Investment Risk Disclosures

A) Deposits

Custodial Credit Risk for Deposits is the risk that in the event of a bank failure, the Systems' and Plans' deposits may not be returned to them. The deposits are held in one financial institution with an insured balance of \$250,000. Deposits in the bank in excess of \$250,000 are uninsured and uncollateralized, because they are not required to be by state statute.

The Systems and Plans do not have a deposit policy for custodial credit risk. Deposits are presented in the basic financial statements at cost plus accrued interest that is also the market or fair value. As of December 31, 2015, the carrying amount of deposits totaled approximately \$(23,590,000) and the corresponding bank balance was \$49,090 of which \$0 was exposed to custodial credit risk.

CASH DEPOSITS	(in thousands)
Cash	\$ 15,155
Disbursements in excess of cash balances	(38,745)
Total	\$ (23,590)

B) Investments

The table on page 63 shows the Systems' and Plans' investments by type.

	(in thousands)	12/31/2015	12/31/2014
Private equity		\$ 3,214,680	3,170,276
Absolute return		4,141,321	4,643,417
Real assets		 4,176,577	3,830,987
		\$ 11,532,578	11,644,680

The investments listed above are not listed on national exchanges, over-the-counter markets, nor do they have quoted market prices available.

INVESTMENTS			
at December 31, 2015	(in thousand	(in thousands)	
	Defined Benefit	Defined Contribution	Total All Systems and Plans
Short-term securities pools	\$ 2,229,799	23,156	2,252,955
Debt securities .	3,640,548	1,636,773	5,277,321
Equity securities	7,893,471	2,691,513	10,584,984
Absolute return	4,141,321	_	4,141,321
Private equity	3,214,680	_	3,214,680
Real assets	4,025,398	151,179	4,176,577
Investments held by			
broker-dealers under			
securities lending program:	444.050		444.050
Debt	641,058	_	641,058
Equities	1,300,039	_	1,300,039
Total investments	\$ 27,086,314	4,502,621	31,588,935
Securities lending collateral			
pool (not categorized)	\$ 2,017,935	_	2,017,935

The Systems and Plans value these investments in good faith at the Systems' and Plans' pro-rata interest in the net assets of these investments based upon audited financial statements or other information provided to the Systems and Plans by the underlying investment managers. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

C) Fair Value Measurements

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

- Level 1 Unadjusted quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; guoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

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

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Systems and Plans assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table on pages 64 and 65 shows the fair value leveling of the investments for the Systems and Plans.

Short-term securities generally include investments in money market-type securities reported at cost plus accrued interest, which approximates market or fair value.

Equity and derivative securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Debt and debt derivative securities classified in Level 2 and Level 3 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price feed by the applicable day's Index Ratio. Level 2 debt securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Level 3 debt securities use proprietary information or single source pricing. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

Real assets classified in Level 1 are valued using prices quoted in active markets for those securities. Real assets classified in Level 3 are real estate investments generally valued using the income approach by internal manager reviews or independent external appraisers. The Systems and Plans policy is to obtain an external appraisal a minimum of every three years for properties or portfolios that the Systems and Plans have some degree of control or discretion. In practice, some investments are appraised annually. Appraisals are performed by an independent appraiser with preference for Member Appraisal Institute (MAI) designated appraisers. The appraisals are performed using generally accepted valuation approaches applicable to the property type.

INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE

2,071,478

\$ 16,950,040

24,907

6,271,256

8,377,979

2,046,571

2,300,805

\$ 2,255,637

1,440,600

797,657

17,380

(in thousands) **Defined Benefit Defined Contribution** Fair Value Measures Using Fair Value Measures Using **Quoted Prices Quoted Prices** Significant Significant Other Observable Other Significant Observable Unobservable Markets for Significant Markets for Significant Identical Unobservable Identical Assets Inputs Inputs Inputs Inputs 12/31/15 Level 1 Level 2 Level 3 12/31/15 Level 1 Level 2 Level 3 Investments by fair value level Short-term securities \$ 2,228,843 2,228,843 \$ 23,156 23,156 Debt securities Asset backed securities 320,466 237,282 83,184 20,453 17,229 3,224 Commercial mortgage-backed 218,411 137,239 5,846 81,172 6,810 964 758,206 280,587 Corporate bonds 751,923 6,283 284,126 3,539 Corporate convertible bonds 870 870 Fixed income other 43,886 43,826 60 Government agencies 68,375 68,357 86,920 86,920 18 1,049,900 1,049,522 378 183,715 179,697 4,018 Government bonds Government mortgage backed securities 719,295 701,163 18,132 Gov't-issued commercial mortgage-backed 41,953 41,953 72,097 72,550 453 Index linked government bonds 1,029,226 1,017,836 11,390 25,867 25,867 Municipal/provincial bonds 4,081 21,787 18,972 14,891 21,787 232 Non-government backed C.M.O.s 60,319 16,519 43,800 612 380 Total debt securities 4,285,993 4,036,685 249,308 746,726 729,354 17,372 **Equity investments Basic materials** 46 46 Consumer goods 1,901,389 1,899,245 281 1,863 321,563 321,563 Energy 498,176 498,153 23 55,768 55,768 Equity other 1,946 1,804 142 44,477 849 43,620 **Financials** 1,708,220 1,702,404 4,015 1,801 163,642 163,642 Health care 928,712 928,629 55 214,368 214,368 28 Industrials 1,076,773 1,076,538 165 70 107,342 107,342 Information technology 1,360,656 1,360,304 51 301 335,285 335,285 Materials 451,026 450,346 7 673 28,572 28,572 Real estate investment trusts 31,334 31,334 Self directed brokerage window 1,527 139,380 137,853 Technology 6 6 1,087 Telecommunication services 207,776 206,689 20,142 20,142 Utilities 229,000 228,960 19 21 23,882 23,882 Total equity investments 8,363,726 8,353,072 5,728 4,926 1,485,755 1,440,600 45,147 8 Real assets Agriculture 17,314 17,314 Commodities 24,907 24,907 Real estate 2,029,257 2,029,257

Total investments by fair value level

Total real assets

Notes to the Basic Financial Statements (Continued)

December 31, 2015

Investments and Derivative Instruments Measured at Fair Value (Continued)

(in thousands)

		(in thous	ands)							
					efined Benefit					Contribution
			Quoted Prices	Fair Value M	easures Using			Quoted Price		easures Using
			in Active Markets for Identical Assets	Inputs	Significant Unobservable Inputs			in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
		12/31/15	Level 1	Level 2	Level 3	1	12/31/15	Level 1	Level 2	Level 3
Investments measured at the net asset valu	e (N	AV)								
Equity investments		F7F 40 4					126 275			
Co-mingled international equity fund Co-mingled U.S. small cap equity fund	\$	575,484 253,993					426,275 431,824			
Co-mingled 0.3. Small cap equity fund		233,993					332,519			
Co-mingled Russell 1000 Growth equity fund		_					15,140			
Total equity investments measured at the NAV	1	829,477				1,2	205,758	-		
Absolute return								-		
Directional		772,744					_			
Equity long/short		271,203					_	-		
Event driven		1,004,565					_	-		
Multistrategy		1,011,413					_	-		
Relative value		1,081,396					_	-		
Total absolute return measured at the NAV		4,141,321						- -		
Private equity — private equity partnerships		3,214,680						- -		
Real assets										
Co-mingled commodities fund		_					42,905			
Co-mingled real estate equity fund		742.025					108,274	ŀ		
Energy Minerals		742,935 188,200					_	•		
Real estate		854,885								
Royalty		7,519								
Timber		187,292					_	-		
Total real assets measured at the NAV		1,980,831					151,179	-)		
Total investments measured at the NAV		10,166,309					 356,937	-		
Total investments measured at fair value		27,116,349					 612,574	-		
Synthetic guaranteed investments							· ·	•		
contracts measured at contract value	\$					\$ 8	890,128	3		
Investments derivative instruments										
Short-term securities — options	\$	956	_	629	327			_	_	_
Debt securities										
Options		554	_	554	_	\$	38		38	_
Swaptions		(3,098)		(3,098)			(83		(83)	
Swap liabilities		(3,977)	_	(3,977)	_		(338		(338)	_
Swap assets		2,134		2,134			302		302	
Total debt security derivatives		(4,387)		(4,387)			\$(81) —	(81)	
Equity investments – options		307	307					<u> </u>		
Real assets — swap liabilities		(26,911)		(26,911)						_
Total investment derivative instruments	\$	(30,035)	307	(30,669)	327	\$	(81) —	(81)	
Invested securities lending collateral										
Debt securities	\$	943,548		943,548	_	\$	_		_	_
Equity investments		1,074,387	1,074,387					<u> </u>		
Total invested securities lending collateral	\$	2,017,935	1,074,387	943,548		\$	_		_	

INVESTMENTS MEASURED AT THE NAV — DEFINED BENEFIT

(in thousands)					
	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period	
Equity investments					
Co-mingled international equity fund	\$ 575,484	\$ —	Daily	None	
Co-mingled U.S. small cap equity fund	253,993	_	Daily	None	
Total equity investments	829,477	_			
Absolute return					
Directional	772,744	47,585	Monthly, Quarterly	3-60 days	
Equity long/short	271,203		Monthly, Quarterly, Annually	30-90 days	
Event driven	1,004,565		Monthly, Quarterly, Semi-annually, Annually, Bi-annually	60-120 days	
Multistrategy	1,011,413		Monthly, Quarterly, Semi-annually, Annually	45-90 days	
Relative value	1,081,396	8,378	Weekly, Monthly, Quarterly	5-90 days	
Total absolute return	4,141,321	55,963			
Private equity – partnerships	3,214,680	1,463,144	Not eligible	N/A	
Real assets					
Energy	742,935	671,779	Not eligible	N/A	
Minerals	188,200	106,127	Not eligible	N/A	
Real estate*	854,885	183,162	Not eligible	N/A	
Royalty	7,519		Not eligible	N/A	
Timber*	187,292	_	Not eligible	N/A	
Total real assets	1,980,831	961,068			
Total investments measured at the NAV	\$ 10,166,309	\$ 2,480,175			

^{*}See redemption descriptions for these investment types on page 67.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the table above and on page 67.

Synthetic guaranteed investment contracts that are fully benefit-responsive are measured at contract value and do not participate in fair value changes.

Defined Benefit

- Co-Mingled International Equity Fund and Co-Mingled **Small Cap Fund.** This type consists of one institutional investment fund that invests in international equities diversified across all sectors and one fund that invests in U.S. small cap equities. The fair values of the investments in these types have been determined using the NAV per share of the investments.
- Absolute Return Funds. The fair values of the investments in this type have been determined using the NAV per share of the investments. Directional funds include investments in six funds whose investments are more directional in nature, although they can shift opportunistically between having a directional bias and a non-directional bias. One fund, which represents 3% of the portfolio, is restricted from redemption for 2.5 years.

Equity long/short funds include investments in four funds in which the equity securities maintain some level of market exposure (either net long or net short); however the level of market exposure may vary through time. Event driven funds include investments in 12 funds whose investments focus on identifying and analyzing securities that can benefit from the occurrence of an extraordinary corporate transaction or event (e.g., restructurings, takeovers, mergers, spin-offs, bankruptcy, etc.). Two funds are in the process of redemption totaling \$25.3 million or 3% over the next 2 to 10 years. Multi-strategy funds include investments in 10 funds. Investments in these funds represent a mix of the other absolute return strategies. Relative value funds include investments in 13 funds. These funds seek returns by capitalizing on the mispricing of related securities or financial instruments. It is anticipated five of these funds representing \$161.8 million or 15% will be redeemed over the next 1 to 10 years. One fund, which represents 4.0% of the value in this type, is restricted from redemption for 6 months as of December 31, 2015. All other funds currently have no redemption restrictions other than the restrictions noted above.

INVESTMENTS MEASURED AT THE NAV — DEFINED CONTRIBUTION

(in thousands)		11-61-1		D. J
	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Equity securities				
Co-mingled large cap equity fund	\$ 426,275	\$ —	Daily	None
Co-mingled international equity fund	431,824	_	Daily	None
Co-mingled U.S. small cap equity fund	332,519	_	Daily	None
Co-mingled Russell 1000 Growth equity fund	15,140	_	Daily	None
Total equity securities	1,205,758	_		
Real assets				
Co-mingled real estate equity fund	108,274	_	Quarterly	90 days
Co-mingled commodities fund	42,905	_	Daily	None
Total real assets	151,179	_		
Total investments measured at the NAV	\$ 1,356,937	\$ —		

- Private Equity Partnerships. This type includes investments in limited partnerships. Generally speaking, the types of partnership strategies included in this portfolio: venture capital, growth equity, buyouts, special situations, mezzanine, and distressed debt. These investments have an approximate life of 10 years and are considered illiquid. Redemptions are restricted over the life of the partnership. During the life of the partnerships, distributions are received as underlying partnership investments are realized. The majority of the private equity partnership investments are managed by two gatekeepers. Both gatekeepers manage discretionary accounts for URS. The gatekeepers are required to manage the private equity portfolio in accordance with guidelines established by URS. The Systems and Plans have no plans to liquidate the total portfolio. As of December 31, 2015, it is probable all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the Systems and Plans ownership interest in partners' capital.
- Energy, Mineral, and Royalty Funds. Investments in *Energy funds* consist of 16 private equity partnerships that invest primarily in oil and gas related investments. Mineral funds include four private equity partnerships that invest 74% equity securities related to mineral mining, 12% in commodities, and 14% in other mining investments. Royalty funds include one private equity partnership that invests primarily in drug royalties. These investments have an approximate life of 10 years and are considered illiquid. Redemption restrictions are in place over the life of the partnership. During the life of the partnerships distributions are received as underlying partnership investments are realized.

- As of December 31, 2015, it is probable that all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the Systems and Plans ownership interest in partners' capital. The fair values of these investments have been determined using estimates provided by the underlying partnerships using recent observable transactions information for similar investments.
- **Real Estate and Timber Funds.** *Real estate funds* include 15 investments that are invested primarily in apartments and retail space in the United States. Timber funds include two funds that invest in timber related resources. Investments in these types can never be redeemed with the funds. Instead, the nature of these investments are that distributions from each investment will be received as the underlying investments are liquidated. Because it is probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the Systems and Plans ownership interest in partners' capital.

Defined Contribution

• **Co-Mingled Funds.** The fair values of the investments of this type have been determined using the NAV per share of the investments. The co-mingled real estate equity fund is comprised of institutional quality commercial real estate across a broad range of real estate asset types. The co-mingled commodities fund invests mainly in bulk goods and raw materials. The other funds invest in securities indicative of their name.

CREDIT RISK DEBT SECURITIES AT FAIR VALUE

at December 31, 2015 (in thousar Quality	,	Defined Benefit Plans	Defined Contribution Plans	Total All Systems
	AAA	\$ 769,507	187,534	957,041
	AA+	395,671	27,745	423,416
	AA	93,191	43,062	136,253
	AA-	86,161	_	86,161
	A+	114,322	32,234	146,556
	Α	237,445	43,290	280,735
	A-	119,211	55,553	174,764
	BBB+	328,839	167,108	495,947
	BBB	180,227	103,574	283,801
	BBB-	267,190	57,817	325,007
	BB+	9,191	19,752	28,943
	BB	21,266	16,830	38,096
	BB-	2,482	10,834	13,316
	B+	3,034	12,770	15,804
	В	24,639	6,591	31,230
	B-	9,807	3,341	13,148
	CCC+	4,312	_	4,312
	\mathbb{CC}	6,020	4,749	10,769
	CCC-	699	_	699
	CC	1,008	_	1,008
	D	6,372	_	6,372
	NR	65,709	201,878	267,587
Total credit risk debt securities		2,746,303	994,662	3,740,965
U.S. Government and Agencies				
Federal Home Loan Mortgage Corp	Not Rated	179,304	227,452	406,756
Federal National Mortgage Corp	Not Rated	428,744	118,756	547,500
Government National Mortgage Association	Not Rated	166,137	89,256	255,393
United States Treasury	Not Rated	728,309	178,610	906,919
Other government and agencies	Not Rated	32,809	28,037	60,846
Total unrated government and agencies		1,535,303	642,111	2,177,414
Total debt securities investments		\$ 4,281,606	1,636,773	5,918,379

CUSTODIAL CREDIT RISK

Exposed to Custodial Credit Risk Type of Investment	(in thousands) Fair Value
Cash and cash equivalents	\$ 54,338
·	
Exposure to Custodial Credit Risl Not Determined	((in thousands) Fair Value

D) Credit Risk Debt Securities

The Systems and Plans expect their domestic debt securities investment managers to maintain diversified portfolios by sector and by issuer by using the following guidelines:

- U.S. Government and Agency Securities — no restriction.
- Total portfolio quality will maintain a minimum overall rating of "A" (S&P) or equivalent rating.
- Securities with a quality rating of below BBB- are considered below investment grade. No more than 5% of an investment manager's assets at market with a single issuer of 1% of the total portfolio can be below investment grade.
- Upon approval, a domestic debt securities investment manager may invest up to 10% of the portfolio in non-U.S. dollar denominated bonds.
- The international debt securities investment managers may hold up to 25% of the market value of their portfolios in securities rated below investment grade (S&P index below BBB- or Moody's index below Baa3). The remaining assets will have an investment grade rating.

The Systems' weighted quality rating average of the domestic debt securities, excluding pooled investments, as of December 31, 2015, was AAA, and the fair value of below grade investments was \$431,284,000 or 7.29%.

E) Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the Systems and Plans will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. The Systems and Plans do not have an investment policy

Notes to the Basic Financial Statements (Continued)

December 31, 2015

regarding custodial credit risk. As of December 31, 2015, the table on the bottom of page 68 represents the investments that have custodial credit risk. The \$54,337,909 frictional cash and cash equivalents subject to custodial credit risk are in foreign banks in the Systems' and Plans' name. Because it is in foreign banks, it is subject to custodial credit risk. URS does not have an investment policy regarding custodial credit risk for frictional cash in foreign banks.

F) Concentrations of Credit Risk

The Systems and Plans expect investment managers to maintain diversified portfolios by sector and by issuer using the following guidelines:

- AAA/Aaa Debt Securities no more than 5% of an investment manager's assets at market with a single issuer.
- AA-/Aa3 Debt Securities or higher no more than 4% of an investment manager's assets at market with a single issuer.
- A-/A3 Debt Securities or higher no more than 3% of an investment manager's assets at market with a single issuer.
- BBB-/Baa3 Debt Securities or higher no more than 2% of an investment manager's assets at market with a single issuer.
- For Debt Securities no individual holding will constitute more than 10% of the market value of outstanding debt of a single issuer with the exception of the U.S. Government or its agencies, or collateralized mortgage obligations.
- For Domestic Equity Securities no individual holdings will constitute more than 4% of the securities of any single issuer. Also, no more than 8% of an investment manager's assets will be invested in the equity or Real Estate Investment Trust (REIT) securities of any single issuer at market; or if specifically authorized in the manager's contract, the exposure of the portfolio to any single issuer will not exceed the greater of 5% of the portfolio value or 2% of the portfolio value plus the benchmark weight measured at the time of purchase.
- For International Equity Securities no more than 8% of an investment manager's assets will be invested in the equity or REIT securities of any single issuer at market; or if specifically authorized in the manager's contract, the exposure of the portfolio to any single issuer will not exceed the greater of 5% of the portfolio value or 2% of the portfolio value plus the benchmark weight measured at the time of purchase.

As of December 31, 2015, there were no single issuer investments that exceeded the above guidelines.

G) Interest Rate Risk

The Systems and Plans manage their exposure to fair value loss arising from increasing interest rates by complying with the following policy:

- For domestic debt securities managers, an individual debt securities investment manager's portfolio will have an effective duration between 75 - 125% of the effective duration of the appropriate index.
- The international debt securities investment managers will maintain an effective duration of their portfolio between 80 - 120% of the appropriate index.
- The global debt securities investment managers will maintain an effective duration of their portfolio between 75 - 125% of the appropriate index.
- The global debt inflation-linked debt securities invest managers will maintain an effective duration of their portfolio between 80 - 120% of the appropriate index.

Duration is a measure of a debt investment's exposure to fair value changes arising from changes in interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price.

The Systems compare an investment's effective duration against the Barclays Capital US Aggregate Index for domestic debt securities, the Barclays Capital Global Aggregate Index (USD hedged) for global debt securities and the Barclays Capital World Government Inflation-Linked Investment Bond Index (USD hedged) for inflation-linked debt securities. The index range as of December 31, 2015, was 4.26 - 7.10 for domestic debt securities, 4.92 - 8.20 for global debt securities, and 9.46 - 14.20 for inflation-linked debt securities.

The Plans compare an investment's effective duration against the Barclays Capital US Aggregate Index for domestic debt securities, the Barclays Capital Global Aggregate Index ex-U.S. (unhedged) for international debt securities and the Barclays Capital Global Inflation Linked Bond Index 1 - 10 Year (USD Hedged) for inflation-linked debt securities. The index range as of December 31, 2015, was 4.26 - 7.10 for domestic debt securities, 6.12 - 9.18 for international debt securities and 3.89 - 5.83 for inflationlinked debt securities.

DEBT SECURITIES INVESTMENTS

at December 31, 2015

(dollars in thousands)

	Be	Defined nefit Plans	Contrib		
Investment	Fair Value	Effective Weighted Duration	Fair Value	Effective Weighted Duration	Total All Systems and Plans
Asset backed securities	\$ 320,466	1.58	\$ 20,453	1.65	\$ 340,919
Commercial mortgage-backed	218,411	3.07	6,810	7.09	225,221
Corporate bonds	758,206	5.79	284,126	9.25	1,042,332
Corporate convertible bonds	870	_	_	_	870
Fixed income derivatives	(2,544)	_	(45	<u> </u>	(2,589)
Fixed income other	_	_	43,886	<u> </u>	43,886
Government agencies	68,375	5.67	86,920	7.36	155,295
Government bonds	1,049,900	7.45	183,715	10.87	1,233,615
Government mortgage backed securities	719,295	3.62	_	_	719,295
Gov't-issued commercial					
mortgage-backed	41,953	6.31	72,550		114,503
Index linked government bonds	1,029,226	11.68	25,867		1,055,093
Municipal/provincial bonds	18,972	12.99	21,787		40,759
Non-government backed C.M.O.s	60,319	2.38	612		60,931
Swaps	(1,843)		(36	<u> </u>	(1,879)
Total measured at fair value	4,281,606	6.91	746,645	7.35	5,028,251
Synthetic guaranteed investment contracts measured at contract value	_	_	890,128		890,128
Total	\$ 4,281,606	6.91	1,636,773	7.35	\$ 5,918,379

As of December 31, 2015, no individual debt security investment manager's portfolio was outside of the policy guidelines. As of December 31, 2015, the table on page 70 shows the investments by investment type, amount, and the effective weighted duration.

H) Foreign Currency Risk

The Systems and Plans expect the International Securities Investment Managers to maintain diversified portfolios by sector and by issuer using the following guidelines:

 International investment managers invest in fixed income instruments and equity instruments of corporations headquartered outside of the United States unless specifically authorized within the investment managers' contract.

- Domestic investment managers are allowed to invest in international corporations traded in American Depository Receipts (ADR).
- Portfolios should be adequately diversified to limit foreign currency and security risk.

Risk of loss arises from changes in currency exchange rates. The Systems' and Plans' exposure to foreign currency risk is shown on page 71.

I) Securities Lending

The Systems and Plans participate in a securities lending program as authorized by Board policy, whereby securities are transferred to an independent broker or dealer in exchange for collateral in the form of cash, government securities, and irrevocable bank letters of credit, equal to approximately 103% of the

market value of the domestic securities on loan and 107% of the market value of the international securities on loan, with a simultaneous agreement to return the collateral for the same securities in the future. The custodial bank is the agent for the securities lending program. Securities under loan are maintained in the financial records, and corresponding liabilities are recorded for the market value of the collateral received.

At December 31, 2015, there was no credit risk exposure to borrowers because the collateral exceeded the amount borrowed. The securities on loan at year end were \$1,941,097,553 and the collateral received for those securities on loan was \$2,017,935,908. Under the terms of the lending agreement, the Systems and Plans are indemnified against loss should the lending agent be unable to recover borrowed securities and distributions due to borrower insolvency or failure of the lending agent to properly evaluate the credit worthiness of the borrower. In addition, the Systems and Plans are indemnified against loss should the lending agent fail to demand adequate and appropriate collateral on a timely basis. All securities loaned can be terminated on demand by either the Systems and Plans or the borrower. Cash collateral is invested in the lending agent's short-term investment pool.

The short-term investment pool guidelines specify that a minimum of 20% of the invested cash collateral is to be available each business day and the dollar weighted average maturity of holdings should not exceed 60 days. The relationship between the maturities of the short-term investment pool and the Systems' and Plans' loans is affected by the maturities of the securities loans made by other entities that use the agent's

Notes to the Basic Financial Statements (Continued)

December 31, 2015

FOREIGN CURRENCY RISK

International Investment Securities at Fair Value at December 31, 2015

(in tho	usands)		Defined B	enefit Plans		Defi	ned Contrib	ution Plans	Total
Currency S	hort-Term	Debt	Equity	Total	Short-Term	Debt	Equity	Total	All Systems and Plans
Argentine peso Australian dollar Bermudian dollar	\$ — 2,734 —	— 145,416 880	12,602 148,672 2,077	12,602 296,822 2,957	102 —	21,993 —	=	22,095 —	12,602 318,917 2,957
Brazilian real British pound Cambodian riel	1,000 6,957 —	5,155 293,716 —	50,249 603,440 58	56,404 904,113 58	270 —	12,949 36,317 —	11,104 —	12,949 47,691 —	69,353 951,804 58
Canadian dollar Cayman Islands dollar Chilean peso	769 — 264	89,913 21,682 2,119	213,624 125 13,299	304,306 21,807 15,682	167 — —	6,816 — 1,361	4,658 —	11,641 — 1,361	315,947 21,807 17,043
Chinese renminbi Colombian peso Czech koruna	— 175 68	1,461 4,756	199,792 4,113 1,033	201,253 9,044 1,101			6,924 —	6,924	208,177 9,044 1,101
Danish krone Egyptian pound	32 363	1,946	81,563	83,541 363	<u> </u>	264 —	3,838	4,102	87,643 363
European Euro	22,253	471,055	883,934	1,377,242	180	81,206	13,006	94,392	1,471,634
Georgian lari Gibraltar pound Hong Kong dollar			32 198 99,752	32 198 102,148					32 198 102,148
Hungarian forint Icelandic krona Indian rupee	138 — 1,019	2,478 865	4,747 — 102,851	4,885 2,478 104,735		223 922 —		223 922 —	5,108 3,400 104,735
Indonesian rupiah International region Israeli new shekel	266 — 223	 1,862	12,550 461,926 17,890	12,816 461,926 19,975		_ _ _	431,824 —	431,824 —	12,816 893,750 19,975
Jamaican dollar Japanese yen Macanese pataca	— 10,880 —	969 (3,992) —	635,051 612	969 641,939 612	797 —	299 7,281 —		299 8,078 —	1,268 650,017 612
Malaysian ringgit Mexican peso Moroccan dirham	400 280 21	12,110 11,938	27,246 36,862 —	27,646 49,252 11,959	424 —	— 14,506 1,954	_ _ _	14,930 1,954	27,646 64,182 13,913
Multi-National agencies region New Zealand dollar Norwegian krone	184 170	8,123 11,214 12,174	6,117 13,284	8,123 17,515 25,628	<u> </u>	226 653 606	<u> </u>	226 653 731	8,349 18,168 26,359
Panamanian balboa Papua New Guinean kina Peruvian nuevo sol	 26	875 — 5,111	— 180 1,716	875 180 6,853		 163	— — 114	— — 277	875 180 7,130
Philippine peso Polish zloty Russian ruble	23 282 —	350 —	10,310 6,674 23,972	10,333 7,306 23,972	<u></u>				10,333 7,323 23,972
Serbian dinar Singapore dollar South African rand	— 785 454	1,639 25,140 3,569	— 31,677 41,079	1,639 57,602 45,102		230 1,383 —		230 1,407 —	1,869 59,009 45,102
South Korean won Swedish krona Swiss franc	520 1,525 1,067	14,910 11,749 11,051	113,718 74,089 250,948	129,148 87,363 263,066	<u> </u>	2,047 972 —	_ _ _	2,047 1,001 4	131,195 88,364 263,070
New Taiwan dollar Thai baht Turkish new lira	1,830 444 79	 1,984	79,283 13,991 11,019	81,113 14,435 13,082			_		81,113 14,435 13,082
United Arab Emirates dirham Uruguayan peso Vietnamese dong	30 	— 663 —	6,747 — —	6,777 663	_ _ _				6,777 663 266
Total securities subject	\$ 57,657	1,172,881	4,299,102	5,529,640	2,035	192,637	471,572	666,244	6,195,884

FUTURES

(in thousands)

			Notional N	Narket Value
	Defined	l Benefit Plans	Defined Contri	bution Plans
	2015	2014	2015	2014
Cash & Cash				
Equivalents				
Long	\$ 242,960	218,339	13,644	_
Short	(383,018)	(790,191)	(19,734)	_
Equity				
Long	374,599	235,072	34,536	31,921
Short	(24,667)	(1,043)	_	_
Fixed Income				
Long	206,812	280,211	16,733	33,572
Short	(359,225)	(372,928)	(31,533)	(50,701)
Total Futures	\$ 57,461	(430,540)	13,646	14,792

pool, which the Systems and Plans cannot determine. Because the securities lending collateral is in a pool maintained by the custodial bank, the Systems and Plans do not have the ability to pledge or sell the securities, and it is not necessary to report the total income and expenses of securities lending.

J) Derivative Financial Instruments

The Systems and Plans invest in derivative financial investments as authorized by Board policy. Derivatives are financial arrangements between two parties whose payments are based on, or "derived" from, the performance of some agreed-upon benchmark. All derivatives are considered investments. The fair value of all derivative financial instruments is reported in the Statements of Fiduciary Net Position. Within the investment asset class, swaptions are recorded in debt securities. By policy, portfolio liabilities associated with investments will be backed by cash equivalents or deliverable securities. URS does not have a policy regarding master netting arrangements. As of December 31, 2015, the Systems and Plans had five types of derivative financial instruments: futures, currency forwards, options, swaps, and Synthetic Guaranteed Investment Contracts (SGIC).

Futures represent commitments to purchase (asset) or sell (liability) securities at a future date and at a specified price. Futures contracts are traded on organized exchanges (exchange traded) thereby minimizing the Systems' and Plans' credit risk. The net change in the futures contracts

OPTIONS

(in thousands)

				Ma	rket Value
		Defined B	enefit Plans	Defined Contribu	tion Plans
		2015	2014	2015	2014
Cash & Equivalents	5				
Call	\$	118	500	3	58
Put		838	148	60	_
Equity					
Call		_	_	38	_
Put		307	_	_	_
Debt Securities					
Call		554	(202)	_	(11)
Put		_	270	_	15
Swaptions					
Call		(1,581)	(2,526)	(59)	(35)
Put		(1,517)	770	(24)	6
Total Options	\$	(1,281)	(1,040)	18	33

value is settled daily in cash with the exchanges. Net gains or losses resulting from the daily settlements are included with trading account securities gains in the Statements of Changes in Fiduciary Net Position. As of December 31, 2015, the Systems' and Plans' investments had the notional future balances as shown above.

Currency Forwards

Currency forwards represent forward foreign exchange contracts that are entered into in order to hedge the exposure to changes in foreign currency exchange rate on the foreign currency denominated portfolio holdings. A forward foreign exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in the net realized gains or losses on foreign currency related transactions in the Statements of Changes in Fiduciary Net Position. As of December 31, 2015, the Systems' and Plans' investments included the currency forwards balances on page 73.

Options

Options represent or give buyers the right, but not the obligation, to buy (call) or sell (put) an asset at a preset price over a specified period. The option's price is usually a small percentage of the underlying asset's value. As a writer of financial options, the Systems and Plans receive a premium at the outset of the agreement and bear the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the Systems and Plans pay a premium at the outset of

Notes to the Basic Financial Statements (Continued)

December 31, 2015

CURRENCY FORWARDS	(in thousan	ds)		Define	d Benefit Plans
Currency	Notional Cost	ending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Fair Value 2015	Fair Value 2014
Australian dollar	\$ (74,423)	9,328	(84,050)	(74,722)	(83,891)
Brazilian real	43	42	_	42	_
British pound sterling	(241,907)	57,702	(294,815)	(237,113)	(260,997)
Canadian dollar	(14,143)	38,399	(52,173)	(13,774)	(31,541)
Danish krone Egyptian pound	(1,817)	_	(1,863)	(1,863)	(2,728) (10)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(272,005)	06 200	(462,025)	(276 527)	
Euro Hong Kong dollar	(372,095) 4,765	86,288 5,125	(462,825) (360)	(376,537) 4,765	(415,599) 920
Indian rupee	13,042	13,113	(500)	13,113	6,105
Japanese yen	(81,177)	78,906	(160,770)	(81,864)	(97,278)
Mexican peso	27,703	30,139	(3,171)	26,968	(19,403)
New Taiwan dollar	(12,930)	_	(12,961)	(12,961)	_
New Zealand dollar	(17,677)	2,491	(20,668)	(18,177)	(39,042)
Norwegian krone	(2,296)	6,471	(8,781)	(2,310)	(5,577)
Polish zloty	<del>_</del>		<del>-</del>	<u> </u>	(14,458)
Russian ruble	6,646	6,334	(10.257)	6,334	_
Singapore dollar South African rand	(10,411)	_	(10,367)	(10,367)	(6,433)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(22.551)		(22.626)	(22,425)	
South Korean won Swedish krona	(22,551) 767	201 18,570	(22,626) (17,951)	(22,425) 619	(12,581) (9,875)
Swiss franc	(919)	9,237	(10,152)	(915)	(1,768)
		~~~~~			
Thai baht United States dollar	799,380	1,106,073	(306,693)	799,380	(165) 1,019,265
Total forwards subject to foreign currency risk	\$ —	1,468,419	(1,470,226)	(1,807)	24,944
Total forwards subject to foreign currency fisk	,	1,700717	(1,470,220)	.,,,	tribution Plans
					tilbution rians
	F	ending Foreign	Pending Foreign		
Currency	Notional Cost	ending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Fair Value 2015	Fair Value 2014
Currency Australian dollar Brazilian real	Notional	Exchange	Exchange		
Australian dollar	Notional Cost	Exchange	Exchange Sales	2015	(14,589)
Australian dollar Brazilian real	Notional Cost \$ (13,956)	Exchange Purchases —	Exchange Sales (14,027)	(14,027)	(14,589) (103)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone	\$ (13,956) (7,035) (2,292) (253)	Exchange Purchases ———————————————————————————————————	(14,027) — — ————————————————————————————————	(14,027) ————————————————————————————————————	(14,589) (103) (12,525) (4,396) (193)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro	\$ (13,956) (7,035) (2,292)	Exchange Purchases ———————————————————————————————————	(14,027) ————————————————————————————————————	(14,027) — (6,937) (2,301)	(14,589) (103) (12,525) (4,396) (193) (51,991)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar	\$ (13,956) (7,035) (2,292) (253) (60,014)	Exchange Purchases	(14,027) — — ————————————————————————————————	2015 (14,027) — (6,937) (2,301) (259) (60,013)	(14,589) (103) (12,525) (4,396) (193) (51,991)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861	Exchange Purchases	Exchange Sales  (14,027)  (8,464)  (3,992)  (259)  (61,380)  —	(14,027) (6,937) (2,301) (259) (60,013) — 1,871	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen	\$ (13,956) — (7,035) (2,292) (253) (60,014) — 1,861 (12,715)	Exchange Purchases	(14,027) — (8,464) (3,992) (259) (61,380) — (15,860)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849)	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643	Exchange Purchases	(14,027) — (8,464) (3,992) (259) (61,380) — (15,860) (117)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen	\$ (13,956) — (7,035) (2,292) (253) (60,014) — 1,861 (12,715)	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (15,860) (117) (1,849)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849)	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar New Zealand dollar	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565)	Exchange Purchases	Exchange Sales  (14,027)  (8,464)  (3,992) (259) (61,380)  (15,860)  (117) (1,849) (1,769)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602)	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565) 272	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (15,860) (117) (1,849)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849)	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar Norwegian krone	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565)	Exchange Purchases	Exchange Sales  (14,027)  (8,464)  (3,992) (259) (61,380)  (15,860)  (117) (1,849) (1,769)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602)	(14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388) — (3,666)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar New Zealand dollar Norwegian krone Polish zloty Russian ruble Singapore dollar	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565) 272	Exchange Purchases	Exchange Sales  (14,027)  (8,464)  (3,992) (259) (61,380)  (15,860)  (117) (1,849) (1,769)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602) 263 —	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388) — (3,666) — (2,034) —
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar New Zealand dollar Norwegian krone Polish zloty Russian ruble Singapore dollar South African rand	\$ (13,956)	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (117) (1,849) (1,769) (660) (1,454)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602) 263 — 904 (1,454) —	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388) — (3,666) — (2,034) — (1,852) (912)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar Norwegian krone Polish zloty Russian ruble Singapore dollar South African rand South Korean won	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565) 272 948 (1,460) (2,059)	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (15,860) (117) (1,849) (1,769) (660) (1,454) (2,054)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602) 263 — 904 (1,454) — (2,054)	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388) — (2,034) — (1,852) (912)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar Norwegian krone Polish zloty Russian ruble Singapore dollar South African rand South Korean won Swedish krona	\$ (13,956)	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (15,860) (117) (1,849) (1,769) (660) (1,454) (2,054) (749)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602) 263 — 904 (1,454) —	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388) — (3,666) — (2,034) — (1,852) (912)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar Norwegian krone Polish zloty Russian ruble Singapore dollar South African rand South Korean won Swedish krona Swiss franc	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565) 272 948 (1,460) (2,059) (72)	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (15,860) (117) (1,849) (1,769) (660) (1,769) (1,454) (2,054) (749) (493)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602) 263 — 904 (1,454) — (2,054) — (76) —	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,666) — (2,034) — (1,852) (912) (922) (2,844)
Australian dollar Brazilian real British pound sterling Canadian dollar Danish Krone Euro Hong Kong dollar Indian rupee Japanese yen Mexican peso New Taiwan dollar Norwegian krone Polish zloty Russian ruble Singapore dollar South African rand South Korean won Swedish krona	\$ (13,956) (7,035) (2,292) (253) (60,014) 1,861 (12,715) 2,643 (1,845) (1,565) 272 948 (1,460) (2,059)	Exchange Purchases	(14,027) (8,464) (3,992) (259) (61,380) (15,860) (117) (1,849) (1,769) (660) (1,454) (2,054) (749)	2015 (14,027) — (6,937) (2,301) (259) (60,013) — 1,871 (12,849) 2,572 (1,849) (1,602) 263 — 904 (1,454) — (2,054)	2014 (14,589) (103) (12,525) (4,396) (193) (51,991) (3,733) 960 (6,554) (3,388) — (2,034) — (1,852) (912)

#### **FIXED INCOME PORTFOLIO DEFINED BENEFIT SWAPS**

(in thousands)

Counterparty	Notional Amount	/ Utah Rate	Counterparty Rate	Maturity Date	Credit Rating	Fair Value 2015	Fair Value 2014
Barclays	\$ 19,240	US CPI***	1.852%	3/10/16	BBB	\$ —	475
Barclays	19,240	US CPI***	1.852%	3/10/16	BBB	409	—
Bank of America	51,380	0.660%	LIBOR**	7/21/16	BBB+	(111)	(111)
JP Morgan Chase	344,500	4.740%	TIIE*	1/10/17	A-	(258)	(263)
Barclays	635,300	4.420%	TIIE*	11/9/17	BBB		208
JP Morgan Chase	20,200	BRL****	11.98%	2/1/17	A-		(110)
Barclays	19,240	2.066%	US CPI***	3/10/18	BBB	(770)	(639)
Barclays	200	1.540%	LIBOR**	8/1/18	BBB	—	(2)
Barclays	26,100	LIBOR**	1.69%	8/31/18	BBB	—	358
Barclays	3,000	LIBOR**	1.69%	8/31/18	BBB	_	41
Bank of America	42,400	1.830%	LIBOR**	1/10/19	BBB+	_	(786)
Goldman Sachs Bank	15,600	1.690%	LIBOR**	2/28/19	BBB+	_	(56)
Goldman Sachs Bank Goldman Sachs Bank Goldman Sachs Bank	18,400 29,100 31,320	1.670% 1.650% 1.660%	LIBOR** LIBOR** LIBOR**	2/28/19 11/30/19 5/31/20	BBB+ BBB+ BBB+	— (139) 51	(50) —
Bank of America	6,435	1.0%	N/A	6/20/20	BBB+	(250)	_
Bank of America	6,435	5.0%	N/A	6/20/20	BBB+	(375)	_
Bank of America	12,870	N/A	5.0%	6/20/20	BBB+	500	_
JP Morgan Chase	133,900	TIIE*	6.735%	2/1/24	A-	_	511
Barclays	9,500	2.620%	LIBOR**	7/2/24	BBB	_	(423)
Barclays	229,100	TIIE*	6.165%	10/31/24	BBB	_	68
Barclays	15,500	2.80%	LIBOR**	2/25/25	BBB	(1,038)	(264)
Barclays	18,400	LIBOR**	2.160%	9/25/25	BBB	94	
Goldman Sachs Bank	3,600	3.06%	LIBOR**	2/15/40	BBB+	—	
Goldman Sachs Bank	3,800	3.05%	LIBOR**	2/15/40	BBB+	_	(265)
Barclays	2,900	3.05%	LIBOR**	2/15/40	BBB	_	(202)
Barclays	2,700	3.06%	LIBOR**	2/15/40	BBB	_	(198)
Barclays	5,420	2.56%	LIBOR**	5/15/41	BBB	53	
Barclays	2,650	LIBOR**	2.66%	5/15/41	BBB	22	
Barclays	5,290	2.60%	LIBOR**	5/15/41	BBB	13	
Barclays	1,755	LIBOR****	2.50%	12/4/44	BBB	_	173
Barclays	1,755	LIBOR****	2.50%	12/5/44	BBB	_	175
Barclays	1,760	LIBOR****	2.49%	12/8/44	BBB	_	164
Barclays	4,105	LIBOR****	2.42%	12/9/44	BBB	—	283
Barclays	2,360	LIBOR****	2.37%	12/11/44	BBB	—	120
Barclays	768,830	LIBOR****	1.50%	3/12/45	BBB	478	—
Goldman Sachs Bank	800	LIBOR**	2.96%	6/15/45	BBB+	(453)	
Goldman Sachs Bank	800	LIBOR**	2.96%	6/15/45	BBB+	513	
Barclays	768,830	1.31%	LIBOR****	8/12/45	BBB	(175)	
Barclays	3,460	LIBOR**	2.55%	12/4/45	BBB	(47)	
Morgan Stanley	6,470	3.0%	N/A	1/17/47	BBB+	(360)	
Total Swaps	\$ 3,294,645					\$ (1,843)	(793)

^{*}Banco de Mexico Interbank Rate (1 Month)

^{**}Three Month London Interbank Offered Rate (LIBOR)

^{***}United States Consumer Price Index

^{****}Brazilian Interbank Offered Rate (Daily)

^{*****}Six Month London Interbank Offered Rate (LIBOR)

#### ■ FIXED INCOME PORTFOLIO DEFINED CONTRIBUTION SWAPS

(in thousands)

Counterparty	Notional Amount	Utah Rate	Counterparty Rate	Maturity Date	Credit Rating	Fair Value 2015	Fair Value 2014
Barclays	\$ 1,020	US CPI***	1.852%	3/10/16	BBB	\$ 22	25
JP Morgan Chase	2,100	EURIBOR****	1.907%	4/11/16	A-	44	81
Bank of America	9,350	0.66%	LIBOR**	7/21/16	BBB+	2	3
Goldman Sachs Bank	3,100	BRL^^	LIBOR**	1/2/17	BBB+	_	(17
Goldman Sachs Bank	3,100	BRL^^	LIBOR**	1/2/17	BBB+	(39)	
JP Morgan Chase	49,400	4.74%	TIIE*	1/10/17	A-	_	(33
Citibank	4,700	0.836%	LIBOR**	11/8/17	BBB+	21	52
Goldman Sachs Bank	90,200	4.415%	TIIE*	11/9/17	BBB+	_	36
Barclays	1,020	2.066%	US CPI***	3/10/18	BBB	(41)	(34
Credit Suisse First Boston	400	LIBOR**	1.69%	8/31/18	BBB+	<del>-</del>	3
Bank of America	2,600	1.83%	LIBOR**	1/10/19	BBB+	(34)	_
Bank of America	5,100	1.83%	LIBOR**	1/10/19	BBB+	<del>_</del>	(53
Credit Suisse First Boston	1,782	1.0%	N/A	6/20/20	BBB+	(69)	_
Bank of America	1,782	N/A	5.0%	6/20/20	BBB+	66	_
JP Morgan Chase	5,450	1.761%	LIBOR**	8/11/22	Α-	47	146
JP Morgan Chase	19,500	TIIE*	6.7350%	1/2/24	A-	_	69
Credit Suisse First Boston	500	2.62%	LIBOR**	7/2/24	BBB+	_	(16
Goldman Sachs Bank	3,250	TIIE*	6.16%	10/31/24	BBB+	_	13
Credit Suisse First Boston	600	2.80%	LIBOR**	2/25/25	BBB+	(35)	<del>_</del>
Credit Suisse First Boston	800	LIBOR**	2.16%	9/25/05	BBB+	_	_
Credit Suisse First Boston	100	3.06%	LIBOR**	2/15/40	BBB+	_	(7
Credit Suisse First Boston	100	3.05%	LIBOR**	2/15/40	BBB+	_	(7
Credit Suisse First Boston	140	LIBOR**	2.66%	5/15/41	BBB+	1	_
Credit Suisse First Boston	360	2.56%	LIBOR**	5/15/41	BBB+	4	
Credit Suisse First Boston	397	2.60%	LIBOR**	5/15/41	BBB+	1	_
Citigroup Global Markets	1,200	2.8413%	LIBOR**	4/17/43	BBB-	(34)	(36
JP Morgan Chase	90,000	JPYLIBOR^	1.675%	11/4/43	A-	95	70
Credit Suisse First Boston	240	LIBOR**	2.55%	12/4/45	BBB+	(4)	_
Goldman Sachs Bank	910	3.0%	N/A	1/17/47	BBB+	(51)	
Total Swaps	\$ 299,201					\$ (4)	295

^{*}Banco de Mexico Interbank Rate (1 Month) **Three Month London Interbank Offered Rate (LIBOR)

the agreement and the counter-party bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As of December 31, 2015, the Systems' and Plans' investments had the option balances shown on page 72.

### **Swaps**

The Systems and Plans have entered into various inflation, credit default and interest rate swap agreements in an

attempt to manage their exposure to inflation, credit and interest rate risk. Interest rate and inflation risk represents the exposure to fair value losses arising from inflation and the future changes in prevailing market interest rates. Credit risk is an investor's risk of loss arising from a borrower who does not make payments as promised. Swaps represent an agreement between two or more parties to exchange sequences of cash flows over a period in the future. In the most common type of interest rate swap arrangement,

^{***}United States Consumer Price Index

^{****}Euro Interbank Offered Rate

[^]Six Month Japanese London Interbank Offered Rate ^^Brazilian Interbank Offered Rate (Daily)

#### REAL ESTATE PORTFOLIO DEFINED BENEFIT INTEREST RATE SWAPS

(	in thousands)		_				
Counterparty	Notional Amount	Utah Rate	Counterparty Rate	Maturity Date	Credit Rating	Fair Value 2015	Fair Value 2014
Merrill Lynch	\$ 35,309	5.273%	LIBOR*	2/1/15	BBB+ \$	_	(160)
Morgan Stanley	32,600	5.046%	LIBOR*	9/1/15	BBB+	_	(1,060)
Morgan Stanley	32,900	4.868%	LIBOR*	1/4/16	BBB+	(144)	(1,523)
Morgan Stanley	133,704	5.292%	LIBOR*	5/2/16	BBB+	(2,762)	(8,702)
Morgan Stanley	17,250	5.464%	LIBOR*	7/1/16	BBB+	(507)	(1,287)
Merrill Lynch	7,640	5.430%	LIBOR*	7/1/16	BBB+	(223)	(566)
Morgan Stanley	44,277	5.342%	LIBOR*	9/1/16	BBB+	(1,620)	(3,529)
National Australia Bank	11,801	5.125%	LIBOR*	12/1/16	AA-	(539)	(1,008)
National Australia Bank	985	5.110%	LIBOR*	12/1/16	AA-	(45)	(84)
National Australia Bank	5,080	4.970%	LIBOR*	1/3/17	AA-	(242)	(434)
Morgan Stanley	4,486	4.690%	LIBOR*	3/1/18	BBB+	(376)	(500)
Morgan Stanley	71,700	4.722%	LIBOR*	10/1/20	BBB+	(11,140)	(12,175)
Morgan Stanley	43,660	5.294%	LIBOR*	11/1/21	BBB+	(9,313)	(9,939)
Total Real Estate Interest Rate Sv	waps \$ 441,392					\$ (26,911)	(40,967)

^{*}One Month London Interbank Offered Rate (LIBOR)

one party agrees to pay fixed interest payments on designated dates to a counterparty, who in turn agrees to make return interest payments that float with some reference rate. The real estate interest rate swaps allowed the Systems to effectively convert most of their long-term variable interest rate credit facility loans into fixed interest rate loans, thereby mitigating some of their interest rate risk. All swap instruments contain collateral clauses. As of December 31, 2015, Barclays Bank PLC had collateral held for \$845,418, Goldman Sachs Bank had collateral held for \$2,116,363, Royal Bank of Canada had collateral held for \$942,096, and UBS Securities had collateral held for \$508,307. Gains and losses on swaps are determined based on market values and are recorded in the Statements of Changes in Fiduciary Net Position. Swap market values are determined by an independent third party. As of December 31, 2015, the Systems' and Plans' investments had the swap market value balances as shown in the tables on pages 74 through 75.

#### **Derivative Credit Risk**

Derivatives that are exchange traded are not subject to credit risk. No derivatives held are subject to custodial credit risk. The maximum loss that would be recognized as of December 31, 2015, if all counterparties fail to perform as contracted was \$15,487,206. This maximum exposure is reduced by \$19,969,251 of liabilities,

#### CREDIT RISK DERIVATIVES AT FAIR VALUE

(in thousands)

Quality Rating	Forwards	Options	Swaps	Total
AA+	\$ 20	_	_	20
AA	573	137	_	710
AA-	(270)	(441)	(826)	(1,537)
A+	(695)	_	_	(695)
A	4,889	455	_	5,344
A-	317	_	(72)	245
BBB+	(7,219)	(1,903)	(26,644)	(35,766)
BBB	86	182	(380)	(112)
BBB-	_	_	(65)	(65)
BB+	221	_	_	221
NA	_	307	_	307
Total subject to credit risk	\$ (2,078)	(1,263)	(27,987)	(31,328)

resulting in no net exposure to credit risk. Credit ratings for the wrap contracts associated with the SGICs are noted in the top table on page 77. As of December 31, 2015, the counterparties' credit ratings for currency forwards, options, and swaps are subject to credit risk.

#### **Synthetic Guaranteed Investment Contracts**

In the Utah Retirement Systems Defined Contribution Plans, members are able to participate in Synthetic Guaranteed Investment Contracts (SGICs). The SGICs are fully benefit

#### SYNTHETIC GUARANTEED INVESTMENT CONTRACTS UNDERLYING INVESTMENTS

	(in thousands) 1-5 Yr. Government/Credit Bond				Intermediate Government/Credit Bond		Met LifeSeparate Account			Total Underlying Investments		
Underlying Investments	Fair Value	Market Value	Durations		Fair Value	Market Value	Durations	Fair Value	Market Value	Durations	Fair Value	Market Value
Asset-backed securities	\$ 48,396	48,283	0.54	\$	16,145	16,388	0.52	\$ 41,303	41,184	0.51	\$ 105,844	105,855
Agencies	45,326	45,193	2.27		26,487	26,971	2.44	17,080	17,312	2.50	88,893	89,476
Corporates	121,626	120,514	3.25		89,564	90,582	4.69	79,681	80,388	1.65	290,871	291,484
Government												
mortgage-backed securities	104,831	104,533	2.26		50,525	51,483	2.19	31,364	31,913	2.11	186,720	187,929
United States treasuries	53,616	53,448	3.72		52,709	53,450	6.39	25,765	25,944	2.58	132,090	132,842
Commercial												
mortgage-backed securities	29,621	31,230	0.63		22,287	24,140	1.18	18,077	21,142	0.68	69,985	76,512
Cash	9,014	9,014	_		6,094	6,094	_	617	617	_	15,725	15,725
Total	\$ 412,430	412,215		\$ 2	263,811	269,108		\$ 213,887	218,500		\$ 890,128	899,823

responsive, which means that Utah Retirement Systems is prohibited from assigning and selling the contract or its proceeds to a third party without the consent of the issuer. Prospective interest crediting rate adjustments are provided to plan participants. The SGICs provide assurance that the probability of future rate adjustments resulting in an interest crediting rate less than zero is remote. The underlying investments are high credit quality averaging AA- and therefore credit loss is remote. The terms of the SGICs require all plan participants to initiate transactions within the fund at contract value. The contract value is the fair value (cost plus accrued interest). The fair value of these contracts as of December 31, 2015, was \$890,128 and the market value was \$899,823.

## K) Investment Payables

The investment accounts payable are comprised of investment advisor fees payable of \$8,735,000, administrative expenses payable of \$13,561,000, investment purchases payable of \$371,944,000, and various real estate payables of \$432,000.

# L) Investment Compliance Officer

The Systems and Plans have an investment compliance officer on staff who reports his/her findings directly to the Board. The investment compliance officer monitors all of the investments made by the investment managers to determine the investments were made in accordance with the investment policies that were approved by the Board.

#### **WRAP CONTRACTS**

	(in thou	•			
Contract Issuer	Fair Value	Market Value	Rate	Duration	Quality Rating
American General	\$ 59,528	59,591	1.9%	2.37	A+
Lincoln National Life	94,059	93,929	1.7	2.37	AA-
MetLife	213,851	218,500	1.3	1.58	AA-
Transamerica	64,474	64,631	1.9	2.37	AA-
Transamerica	120,042	123,134	2.9	3.67	AA-
Pacific Life	194,388	194,064	1.7	2.37	A+
Royal Bank of Canada	143,786	145,974	2.1	3.67	AA-
Subtotal wrap					
contracts	890,128	899,823			
Merrill Lynch					
repurchase	42,900	42,900			
Total	\$ 933,028	942,723			

#### Note 4

# **Property and Equipment**

Property and equipment consist of the amounts shown in the following table as of December 31, 2015 and 2014. There were no significant leases as of December 31, 2015 or 2014.

#### PROPERTY AND EQUIPMENT (in thousands) 2015 2014 1.780 Land \$ 1,780 Buildings and building improvements 17,828 17,724 Furniture and equipment 3,758 3,222 Computer software 2,388 2,388 Total property and equipment 25,754 25,114 Less accumulated depreciation: Buildings and building improvements 9,059 8,813 Furniture and equipment 2,473 2,667 Computer software 1,194 716 Total accumulated depreciation 12,726 12,196 Less operating reserves 9,895 9,196 Net property and equipment \$ 3,133 3,722

#### Note 5

# **Net Pension Liability of Employers**

The net pension liability (i.e., the retirement system's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) as of December 31, 2015, is as shown below.

Actuarial valuation of the ongoing Systems involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in 2014 and the next experience study is scheduled to be conducted in 2017. The Schedule of Employers' Net Pension Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The Total Pension Liability as of December 31, 2015, is based on the results of an actuarial valuation date of January 1, 2015, and rolled-forward using generally accepted actuarial procedures.

Plan Fiduciary

Net Pension

Liability/(Asset)

# NET PENSION LIABILITY OF EMPLOYERS

(dollars in thousands)  System	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers' Net Pension Liability/(Asset) (1) - (2)	Net Position as a % of the Total Pension Liability (2) / (1)	(5) Projected Covered Employee Payroll	as a % of Covered Employee Payroll (3) / (5)
Noncontributory Retirement System	\$ 24,899,572	\$ 21,192,437	\$ 3,707,135	85.1%	\$ 3,458,286	107.2%
Contributory Retirement System	1,316,041	1,183,091	132,950	89.9	82,426	161.3
Public Safety Retirement System	3,511,275	2,938,839	572,436	83.7	355,171	161.2
Firefighters Retirement System	1,058,264	1,043,059	15,205	98.6	111,133	13.7
Judges Retirement System	198,986	163,747	35,239	82.3	15,832	222.6
Utah Governors and Legislators Retirement Plan	12,247	10,039	2,208	82.0	943	234.1
Tier 2 Public Employees System	140,321	140,539	(218)	100.2	637,560	(0.0)
Tier 2 Public Safety and Firefighter System	13,628	15,089	(1,461)	110.7	53,276	(2.7)
Total	\$ 31,150,334	\$ 26,686,840	\$ 4,463,494	85.7%	\$ 4,714,627	94.7%

#### SUMMARY OF ACTUARIAL ASSUMPTIONS

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter
Valuation date	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age
Actuarial assumptions:								
Investment rate of return	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Projected salary increases	3.50-10.50%	3.50-10.50%	3.50-8.00%	3.50-9.25%	3.50%	None	3.50-10.50%	3.50-9.25%
Inflation rate	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%
Post-retirement			2.50% or					
cost-of-living adjustment	2.75%	2.75%	2.75% Depending on employer	2.75%	2.75%	2.75%	2.50%	2.50%

Note: All post-retirement cost-of-living adjustments are noncompounding and are based on the original benefit except for Judges, which is a compounding benefit. The cost-of-living adjustments are also limited to the actual CPI increase for the year, although unused CPI increases not met may be carried forward to subsequent years.

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

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term

expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Systems target asset allocation as of December 31, 2015, are summarized in the bottom left table.

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine

#### TARGET ALLOCATIONS

	<b>Expected Return Arithmetic Basis</b>							
- Asset Class	Target Asset Allocation	Real Return Arithmetic Basis	Long-term Expected Portfolio Real Rate of Return*					
Equity securities	40%	7.06%	6 2.82%					
Debt securities	20	0.80	0.16					
Real assets	13	5.10	0.66					
Private equity	9	11.30	1.02					
Absolute return	18	3.15	0.57					
Cash and cash equivale	ents 0	0.00	0.00					
Totals	100%		5.23%					
Inflation			2.75					
Expected arithmetic nominal return								

^{*}The total URS Defined Benefit long-term expected rate of return is 7.50%, It is comprised of a 2.75% inflation rate, 0.35% for administrative and investment expenses, and a real long-term expected rate of return of 5.10%.

### CHANGES IN DISCOUNT RATE

(dollars in thousands)

System	Net Pension Liability/(Asset) 1% Decrease (6.50%)	Net Pension Liability/(Asset) Current Discount Rate (7.50%)	Net Pension Liability/(Asset) 1% Increase (8.50%)
Noncontributory Retirement System	\$ 6,881,192	3,707,135	1,048,015
Contributory Retirement System	265,467	132,950	21,006
Public Safety Retirement System	1,058,858	572,436	173,734
Firefighters Retirement System	159,176	15,205	(103,336)
Judges Retirement System	55,879	35,239	17,504
Utah Governors and Legislators Retirement P	lan 3,434	2,208	1,256
Tier 2 Public Employees System	40,032	(218)	(30,724)
Tier 2 Public Safety and Firefighter System	2,484	(1,461)	(4,490)
Total	\$ 8,466,522	4,463,494	1,122,965

#### Notes to the Basic Financial Statements (Continued)

December 31, 2015

the discount rate assumed contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates under Utah State Code. Based on those assumptions, the Systems' fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

In accordance with GASB Statement No. 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the table on page 79 presents the net pension liability/(asset) of the participating employers calculated using the discount rate of 7.50%, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1.00% lower (6.50%) or 1.00% higher (8.50%) than the current rate.

#### Note 6

# **Employer Contribution** Requirements

Employer contribution rates consist of (1) an amount for normal cost, the estimated amount necessary to finance benefits earned by the members during the current year, and (2) an amount for amortization of the unfunded or excess funded actuarial accrued liability over a closed 20-year amortization period. The rates are determined using the entry age actuarial cost method.

The schedule above summarizes contribution rates in effect as of December 31, 2015. Contributions made by employers and members were in accordance with actuarially computed funding requirements. Fire insurance premium taxes and court fees are considered as part of employer contributions in the schedule shown on page 81 for the Firefighters and Judges Systems, respectively. These contribution rates also include rates for a 3% benefit enhancement that is funded by the State. For contribution rate purposes the actuary evaluates the assets of the Systems based on a 5-year smoothed expected return wherein 20% of a year's excess or shortfall of expected return is recognized each year for five years.

#### **CONTRIBUTION RATES**

December 31, 3015	Contribution Rates	ates as a Percent of Covered Payroll				
System	Member	Employer	Other			
Noncontributory	_	18.47 - 22.19%				
Contributory	6.00%	14.46 - 17.70	_			
Public Safety:						
Noncontributory	_	32.20 - 48.68	_			
Contributory	10.50 - 12.29	22.19 - 31.80	_			
Firefighters:						
Division A	15.05	3.82	11.71%			
Division B	16.71	6.59	11.71			
Judges:						
Noncontributory	_	40.01	11.90			
Governors and Legislators		\$421,429				
Tier 2 Public Employees	_	14.94 - 18.27				
Tier 2 Public Safety and Firefi	ghter —	10.80 - 37.07				

#### REQUIRED CONTRIBUTIONS

(dollars in thousands)		Contribut	ion Requirements			
	Normal Cost	Unfunded Cost (Assets in Excess)	Total Required Contributions	Total Actual Contributions	Member Contributions Made	Employer Contributions Made
Noncontributory Retirement System	\$ 515,249	315,220	830,469	830,469	17,020	813,449
Contributory Retirement System	8,682	7,808	16,490	16,490	4,771	11,719
Public Safety Retirement System	88,738	53,191	141,929	141,929	905	141,024
Firefighters Retirement System	35,869	6,214	42,083	42,083	18,175	23,908
Judges Retirement System	5,088	3,120	8,208	8,208	_	8,208
Utah Governors and Legislators Retirement Plan	421	_	421	421	_	421
Tier 2 Public Employees System	49,645	_	49,645	49,645	_	49,645
Tier 2 Public Safety and Firefighter System	6,221	_	6,221	6,221	_	6,221
Total	\$ 709,913	385,553	1,095,466	\$1,095,466	40,871	1,054,595

The actual contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems. Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Information with regard to contributions to the Systems, for the year ended December 31, 2015, is indicated in the schedule on pages 80 and shown above.

Member contributions in the 401(k), 457, Roth and traditional IRAs, total \$329,344,000, that in combination with the member contributions made in the Retirement Systems total \$370,215,000.

#### Note 7

# Transfers To or From Affiliated Systems

Asset transfers to or from affiliated systems are for the purpose of spreading employer contribution costs across same employer and same class of employee group and to record transfers of benefits and corresponding assets where employees transfer from one system to another. Benefit transfers usually are between contributory and noncontributory systems as allowed during authorized transfer windows established by statute or as otherwise authorized.

#### Note 8

# **Supplemental Benefits**

In the past, the Utah State legislature appropriated funds as supplemental retirement benefits to be paid to qualified participants who have previously retired under the Contributory System. These benefits, already granted, are now and will continue to be funded through contribution rates unless otherwise provided by the legislature.

#### Note 9

# Litigation

The Systems and Plans are involved in various claims and legal actions arising in the ordinary course of business. In the opinion of management and legal counsel, the ultimate disposition of these matters will not have a material adverse effect on the Systems' and Plans' financial position as a whole.

#### Note 10

## Commitments

As of December 31, 2015, the Systems had committed to fund certain private equity partnerships, absolute return, and real asset funds projects for an amount of \$8,749,711,026. Funding of \$6,269,535,597 had been provided by December 31, 2015, leaving an unfunded commitment of \$2,480,175,429 as of December 31, 2015.

#### Note 11

# Pension Plan Participation

### **Defined Benefit Plans**

Utah Retirement Systems (URS) contributes to the State and School Noncontributory Retirement System, a cost-sharing multiple-employer defined benefit pension plan administered by Utah Retirement Systems (Systems). The Systems provide refunds, retirement benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries in accordance with retirement statutes.

The Systems are established and governed by the respective sections of Chapter 49 of the Utah Code Annotated 1953 as amended. The Utah State Retirement Act in Chapter 49 provides for the administration of the Utah Retirement Systems and Plans under the direction of the Utah State Retirement Board (Board) whose members are appointed by the governor. The Systems issue a publicly available financial report that includes financial statements and required supplementary information for the State and School Noncontributory Retirement System. A copy of the report may be obtained by writing to the Utah Retirement Systems, 560 East 200 South, Salt Lake City, UT 84102-2044 or by calling 1-800-365-8772.

Funding Policy: In the State and School Noncontributory Retirement System, the Utah Retirement Systems is required to contribute 22.19% of its annual covered salary. The contribution rates are the actuarial determined rates. The contributions were equal to the requirements of the Systems, are authorized by statute, and specified by the Board.

The Utah Retirement Systems' contributions to the State and School Noncontributory Retirement System for the years ended December 31, 2015, 2014, and 2013, were \$2,681,089, \$2,510,743, and \$2,094,707, respectively. The contributions were equal to the required contributions for each year.

Employees hired beginning July 1, 2011, are automatically enrolled in the Tier 2 Public Employees Retirement System. The Utah Retirement Systems' contributions to the Tier 2 Public Employees Retirement Systems for years ended December 31, 2015, 2014, and 2013, were \$399,721, \$251,304, and \$113,945, respectively. The contributions were equal to the required contributions for each year.

## **Defined Contribution Plans**

Utah Retirement Systems also participates in four defined contribution plans, the 401(k), 457, Roth and traditional IRAs.

#### 401(k) Plan

The Utah Retirement Systems offers its employees a 401(k) Plan to supplement retirement benefits accrued by participants in the Systems and may also be used as a primary retirement benefit. Employees covered by the State and School Noncontributory Retirement System have a contribution of 1.5% of covered salaries automatically made by Utah Retirement Systems. In addition, URS will match up to \$26 of employee contributions each pay period. Employees participating in the Systems can make additional contributions through payroll deduction to the 401(k) Plan up to specified limits. Contributions and earnings may be withdrawn by the employee upon termination or may be used as supplemental income during retirement. The employer 401(k) contributions for the years ended December 31, 2015, 2014, 2013, were \$764,166, \$631,803, and \$473,082, respectively; the employee contributions for the years ended December 31, 2015, 2014, 2013, were \$638,355, \$557,139, and \$434,250, respectively. The 401(k) Plan funds are fully vested to the participants at the time of deposit except for employer required contributions and earnings for Tier 2. Plan assets are administered and held by Utah Retirement Systems.

#### 457 Plan

The Utah Retirement Systems also offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all employees, permits them to defer a portion of their salary until future years. Employees are eligible to voluntarily participate from the date of employment and are vested immediately upon participating. Employee contributions to the Section 457 Plan for the years ended December 31, 2015, 2014, 2013, were \$422,398, \$386,146, and \$323,326, respectively.

#### **Roth and Traditional IRAs**

Utah Retirement Systems offers its employees two payroll deducted IRAs authorized by section 408 of the Internal Revenue Code. Employees are eligible to participate from the date of employment and are vested immediately upon participating. For the years ended December 31, 2015, 2014, and 2013, the Roth IRA employee contributions were \$152,088, \$122,138, and \$95,806, respectively. For the years ended December 31, 2015, 2014, and 2013, the traditional IRA employee contributions were \$2,235, \$690, and \$3,300, respectively.

#### Note 12

# Post-Employment Healthcare Plan

## Plan Description

The Utah Retirement Office contributes to a noncontributory defined benefit post-employment healthcare plan to provide post-employment insurance benefits for retired employees of the Utah Retirement Office. This plan was established in 2005. The Utah Retirement Employees Post-Employment Healthcare Plan, (UREPEHP), is an agent multiple-employer post-employment healthcare plan administered by the Utah Retirement Office.

Assets and liabilities of the plan are identified separately for each employer. Plan assets may be used only for the payment of benefits to the members of that system, in accordance with the terms of the plan. UREPEHP issues a publicly available financial report that includes financial statements and required supplementary information for UREPEHP. A copy of the report may be obtained by writing the Utah Retirement Office, 560 East 200 South, Salt Lake City, UT 84102-2044 or by calling 1-800-365-8772.

## **Funding Policy**

The contribution requirements of Utah Retirement Employees Post-Employment Healthcare Plan are determined by the Plan and approved by the Board. Utah Retirement Office is required to contribute the annual required contribution (ARC), an actuarially determined rate in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over an open 20-year period using the level dollar amount. The current dollar amount is \$0. Since the funded ratio exceeds 110% and the plan is closed to new entrants, there are no actuarial required contributions.

### **Annual Costs**

For the year ended December 31, 2015, the annual cost (expense) of \$0 for UREPEHP was equal to the ARC. The net Other Post-Employment Benefits (OPEB) obligation for 2015 was as follows:

Year Ended	Annual Required Contributions	Percentage Contributed	Net OPEB Obligation
12/31/06	\$ 294,000	100%	\$ —
12/31/07	387,000	100	_
12/31/08	219,000	100	_
12/31/09	220,000	100	_
12/31/10	313,000	100	_
12/31/11	285,000	100	_
12/31/12	285,000	100	_
12/31/13	285,000	100	_
12/31/14	285,000	100	_
12/31/15	0	100	_

#### SCHEDULE OF FUNDING PROGRESS

(dollars in thousands)

Division		r value of ass (1) Actuarial Value of	(2) Accrued Liability (AAL)	AAL (UAAL)	(4) Funding Ratios Ratios	(5) Annual Covered	(6) UAAL as a % of Covered Payroll
	Date	Assets	Entry Age	(2) - (1)	(1) / (2)	Payroll	(3)/(5)
URS Employees	12/31/06	\$ 4,085	5,495	1,410	74.3%	\$ 8,463	16.7%
	12/31/07	4,559	5,990	1,431	76.1	9,131	15.7
	12/31/08	4,206	7,008	2,802	60.0	8,673	32.3
	12/31/09	4,654	7,539	2,885	61.7	8,678	33.2
	12/31/10	4,811	7,382	2,571	65.2	8,366	30.7
	12/31/11	4,838	7,615	2,777	63.5	7,835	35.4
	12/31/12	4,886	7,838	2,952	62.3	7,538	39.2
	12/31/13	5,325	5,660	335	94.1	7,189	4.7
	12/31/14	5,794	5,750	(44)	100.8	6,955	(0.6)
	12/31/15	5,942	5,308	(634)	111.9	7,841	(0.1)

#### SCHEDULE OF **REQUIRED CONTRIBUTIONS**

January 1, 2015

	(dollars	in thousai	nds)
Year Ended*	Annual Required Contributions	Percentage Contributed	Net OPEB Obligation
12/31/06	\$ 294	1009	6 \$—
12/31/07	387	100	_
12/31/08	219	100	_
12/31/09	220	100	_
12/31/10	313	100	_
12/31/11	285	100	_
12/31/12	285	100	_
12/31/13	285	100	_
12/31/14	285	100	_
12/31/15	0	100	_

## **Funded Status and Funding Progress**

The funded status of the plan as of January 1, 2015, the date of the most recent actuarial valuation, was as follows:

Actuarial accrued liability (AAL) Actuarial value of plan assets	\$ 5,226,973 5,794,000
Unfunded (overfunded) actuarial accrued liability (UAAL)	(567,027)
Funded ratio (actuarial value of plan assets/AAL)	111%
Covered salaries and wages (active) (plan members)	\$ 7,841,350
UAAL as a percentage of covered salaries and wages	(7)%

Actuarial valuations of the ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status and the annual required contributions are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress shown above, presented as required supplementary information, shows the actuarial value of plan assets compared to the actuarial accrued liabilities for benefits.

## **Actuarial Methods and Assumptions**

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities consistent with the long-term perspective of the calculations.

In the January 1, 2015, actuarial valuation, the entry age actuarial cost method was used. The actuarial assumptions included a 7.5% investment rate of return (net of administrative expenses) and an annual healthcare cost trend rate of 7.5%, reduced by decrements to an ultimate rate of 4.5% after 15 years. Both rates include a 2.75% inflation assumption. The actuarial value of UREPEHP assets is based on smoothed expected income investment rate. Investment income in excess or shortfall of the expected rate on fair value is smoothed over a 5-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year. The actuarial accrued liability was computed using likely health benefits to be paid to retirees and to be paid active employees after their service that was discounted using the investment return, health cost increase, and various mortality assumptions.

#### Note 13

# Compensated Absences, Post-Employment Benefits, and Insurance Reserve

The compensated absences liability for Utah Retirement Office employees as of December 31, 2015, was \$5,227,795. This represents the amount of unused leave to be paid to employees upon termination. As of December 31, 2015, the insurance reserve was \$5,000,000. The insurance reserve coverage is explained in Note 15, Risk Management.

#### Note 14

# Required Supplementary Information

Required supplementary information is included immediately following the notes to the financial statements on pages 86 through 92. Other supplementary information presented in succeeding sections of this report is for the benefit of statement users and is not a required part of the basic financial statements.

#### Note 15

# Risk Management

Most risks of loss to which the Systems, Plans, and Investment Fund are exposed, other than routine investment losses, are covered under commercial insurance policies. Risks in excess of coverage limits or large deductible, and otherwise uninsured losses, are retained by the Systems, Plans or Investment Fund through the insurance reserve. There have been no reductions of insurance coverage from coverages of the previous year in any of the categories of risk. Coverages are increased or decreased commensurate with real estate acquisitions or dispositions. During the past three calendar years, no loss settlements exceeded insurance coverages beyond immaterial deductible amounts. The insurance reserve was established by the Board from investment earnings as authorized by statute.

#### Note 16

# **Real Estate Liabilities**

The real estate liabilities consist of two credit facility (lines of credit) loans and two private placement notes. These loans and notes bear various interest rates and are scheduled to be repaid over the next two years. The rest of the liabilities are unsecured. As mentioned in Note 3, page 75, the Systems and Plans entered into various interest rate swap agreements that effectively changed credit facility liabilities from variable interest rates to fixed interest rates. As of December 31, 2015, there are \$290 million in credit facility debt and \$2.2 million in private placement notes. Using interest rates as of December 31, 2015, principal and interest requirements of the debt and net swap payments for the terms of the debt and swaps are shown below.

#### REAL ESTATE LIABILITIES

(in thousands)

	Initial Affected Balance	Maturity Date	Annual Payment
BNP Paribas Credit Facility	\$ 170,000	Monthly	\$ 85,000
The Northern Trust	120,000	8/1/16	120,000
Private Placement Notes:			
State Farm Life Insurance Co	. 2,118	7/1/16	2,118
State Farm Life & Accident			
Assurance Co.	54	7/1/16	54
Total	\$ 292,172		

iotai	\$ 292,172		
Year Ending December 31,	Total Principal Payments	Total Interest Payments	Total Swap Payments
2016	\$ 207,172	965	10,478
2017	85,000	154	5,392
2018	_	_	5,233
2019	_	_	5,201
2020	_	_	2,124
Thereafter	_	_	1,770

BNP Paribas Credit Facility is a term loan with two remaining annual principal payments.

Loan and swap interest payments are calculated using the One Month LIBOR rate at December 31, 2015.

## UTAH RETIREMENT SYSTEMS

# REQUIRED SUPPLEMENTARY **INFORMATION**

# Schedule of Changes in the Employers' Net Pension Liability

Year Ended December 31

(in thousands)

		Nonconti	ributory System	Contributory System		
	2015	2014	2013	2015	2014	2013
Total pension liability						
Service cost	\$ 394,798	407,992	441,320	8,672	9,580	10,997
Interest	1,775,819	1,699,693	1,646,213	95,463	93,819	93,750
Benefit changes	_	_	23,123	_	_	721
Difference between actual						
and expected experience	(188,166)	(204,823)	(208,501)	(15,289)	(22,839)	(20,520)
Assumption changes	_	(157,921)	_	_	(4,233)	_
Benefit payments	(1,123,647)	(1,043,798)	(974,684)	(81,390)	(77,015)	(74,158)
Refunds	(2,496)	(2,204)	(2,454)	(1,215)	(2,433)	(1,922)
Net change in total pension liability	856,308	698,939	925,017	6,241	(3,121)	8,868
Total pension liability — beginning	24,043,264	23,344,325	22,419,308	1,309,800	1,312,921	1,304,053
Total pension liability — ending (a)	24,899,572	24,043,264	23,344,325	1,316,041	1,309,800	1,312,921
Disc C.L. Stranger						
Plan fiduciary net position	17.020	12.507	14200	4 771	F 461	6 276
Contributions — member	17,020	13,587	14,208	4,771	5,461	6,376
Contributions — employer	813,449	772,420	710,933	11,719	12,954	12,874
Court fees and fire insurance tax	266.740	1 410 053	2.500.001	21 251	07.577	160 510
Net investment income	366,748	1,419,053	2,588,981	21,251	87,577	169,510
Benefit payments	(1,123,647)			(81,390)	(77,015)	(74,158)
Refunds	(2,496)	(2,204)		(1,215)	(2,433)	(1,922)
Administrative expense	(8,797)	(8,828)		(478)	(494)	(480)
Net transfers with affiliated systems	33,648	30,467	(42,277)	(41,558)	(38,004)	33,094
Net change in plan fiduciary net position	95,925	1,180,697	2,286,378	(86,900)	(11,954)	145,294
Plan fiduciary net position — beginning	21,096,512	19,915,815	17,629,437	1,269,991	1,281,945	1,136,651
Plan fiduciary net position — ending (b)	21,192,437	21,096,512	19,915,815	1,183,091	1,269,991	1,281,945
Net pension liability/(asset) — ending (a-b)	\$ 3,707,135	2,946,752	3,428,510	132,950	39,809	30,976
Plan fiduciary net position as a percentage of the total pension liability	85.1%	87.7%	85.3%	89.9%	97.0%	97.6%
Projected covered employee payroll	\$ 3,458,286	3,570,912	3,705,771	82,426	90,623	98,023
Net pension liability/(asset) as a percentage of covered employee payroll	107.2%	82.5%	92.5%	161.3%	43.9%	31.6%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

	Public 5	Safety System		Firefigl	hters System		Jud	ges System			Governors lators Plan
2015	2014	2013	2015	2014	2013	2015	2014	2013	2015	2014	2013
75,352	76,681	81,736	27,182	27,266	29,577	4,794	4,895	4,537	99	106	100
248,980	236,803	229,965	75,212	71,490	70,259	14,136	13,641	12,924	890	884	860
_	_	_		_	_	_	_	_	_	_	_
(4= 4 4 1)	(0= 00=)	(00.000)	(0.070)	(4 = 0 == )	(40.000)			(= 40)	(4.0.7)		(222)
(17,164)		(29,228)	(8,259)	(15,077)	(13,083)	171	2,602	(569)	(105)	307	(233)
— (155,387)	(52,410) (144,763)	(137,486)	— (49,671)	(20,372) (47,710)	— (44,747)	(12,400)	(130) (11,361)	(10 100)	(904)	(909)	(892)
(533)		(137,466)	(49,671)	(47,710)	(106)	(12,400)	(11,301)	(10,189)	(904)	(909)	(092)
							0.647	( 702		200	(165)
151,248	90,887	144,520	43,936	15,304	41,900	6,701	9,647	6,703	(20)	388	(165)
3,360,027	3,269,140	3,124,620	1,014,328	999,024	957,124	192,285	182,638	175,935	12,267	11,879	12,044
3,511,275	3,360,027	3,269,140	1,058,264	1,014,328	999,024	198,986	192,285	182,638	12,247	12,267	11,879
905	835	1,258	18,175	18,300	18,325	_	317	_	_	_	_
141,024	135,588	128,744	6,690	5,514	3,494	6,555	5,627	4,990	421	411	252
· —	· —	· —	17,218	14,154	11,285	1,653	1,486	1,498	_	_	_
50,654	194,222	350,563	17,934	69,070	125,685	2,842	11,068	20,130	181	717	1,346
(155,387)	(144,763)	(137,486)	(49,671)	(47,710)	(44,747)	(12,400)	(11,361)	(10,189)	(904)	(909)	(892)
(533)	(199)	(467)	(528)	(293)	(106)	_	_	_	_	_	_
(1,233)	(1,227)	(1,161)	(371)		(355)	(71)	(71)	(66)	(5)	(5)	(4)
4,023	2,746	4,676	2,573	3,713	1,302	1,334	1,092	3,186	(20)	(14)	19
39,453	187,202	346,127	12,020	62,378	114,883	(87)	8,158	19,549	(327)	200	721
2,899,386	2,712,184	2,366,057	1,031,039	968,661	853,778	163,834	155,676	136,127	10,366	10,166	9,445
2,938,839	2,899,386	2,712,184	1,043,059	1,031,039	968,661	163,747	163,834	155,676	10,039	10,366	10,166
572,436	460,641	556,956	15,205	(16,711)	30,363	35,239	28,451	26,962	2,208	1,901	1,713
83.7%	86.3%	83.0%	98.6%	101.6%	97.0%	82.3%	85.2%	85.2%	82.0%	84.5%	85.6%
355,171	360,750	365,998	111,133	111,305	110,741	15,832	16,072	15,195	943	928	390
161.2%	127.7%	152.2%	13.7%	(15.0)%	27.4%	222.6%	177.0%	177.4%	234.1%	204.8%	439.2%

Continued on page 88.

# Schedules of Changes in the Employers' Net Pension Liability (Concluded)

Year Ended December 31

(in thousands)

	(in thousa	nds)				
	Tier 2 Public Employees System			Public Sa	Tier 2 hter System	
	2015	2014	2013	2015	2014	2013
Total pension liability						
Service cost	\$ 51,005	39,283	29,318	5,466	3,579	2,151
Interest	8,370	4,648	2,351	746	379	159
Benefit changes	_	_	(119)	_	_	(7)
Difference between actual						
and expected experience	(4,982)	(4,577)	(4,459)	220	50	106
Assumption changes	_	(1,385)	_	_	(127)	_
Benefit payments	(333)	_	_	(30)	_	_
Refunds	_	_	_	_	_	_
Net change in total pension liability	54,060	37,969	27,091	6,402	3,881	2,409
Total pension liability — beginning	86,261	48,292	21,201	7,226	3,345	936
Total pension liability — ending (a)	140,321	86,261	48,292	13,628	7,226	3,345
Plan fiduciary net position Contributions — member	_	_	_	_	_	_
Contributions — employer	49,645	37,299	25,743	6,221	4,365	2,451
Court fees and fire insurance tax	_	_			_	
Net investment income	1,963	4,320	4,017	199	404	316
Benefit payments	(333)	· —	· —	(30)	_	_
Refunds		_	_	_	_	_
Administrative expense	(30)	(16)	(6)	(3)	(1)	_
Net transfers with affiliated systems	3	(2)	3	(3)	2	(3)
Net change in plan fiduciary net position	51,248	41,601	29,757	6,384	4,770	2,764
Plan fiduciary net position — beginning	89,291	47,690	17,933	8,705	3,935	1,171
Plan fiduciary net position — ending (b)	140,539	89,291	47,690	15,089	8,705	3,935
Net pension liability/(asset) — ending (a-b)	\$ (218)	(3,030)	602	(1,461)	(1,479)	(590)
Plan fiduciary net position as a percentage of the total pension liability	100.2%	103.5%	98.8%	110.7%	120.5%	117.6%
Projected covered employee payroll	\$ 637,560	492,882	353,227	53,276	35,019	20,215
Net pension liability/(asset) as a percentage of covered employee payroll	(0.0)%	(0.6)%	0.2%	(2.7)%	(4.2)%	(2.9)%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

2014	2015
569,382	567,368
2,121,357	2,219,616
_	_
(269,582)	(233,574)
(236,578)	_
(1,325,556)	(1,423,762)
(5,129)	(4,772)
853,894	1,124,876
29,171,564	30,025,458
30,025,458	31,150,334
38,500	40,871
974,178	1,035,724
15,640	18,871
1,786,431	461,772
(1,325,556)	(1,423,762)
(5,129)	(4,772)
(11,012)	(10,988)
1 472 052	117716
1,4/3,052	117,716
25,096,072	26,569,124
26,569,124	26,686,840
3,456,334	4,463,494
88.5%	85.7%
4,678,491	4,714,627
73.9%	94.7%
	569,382 2,121,357 — (269,582) (236,578) (1,325,556) (5,129) 853,894 29,171,564 30,025,458  38,500 974,178 15,640 1,786,431 (1,325,556) (5,129) (11,012) — 1,473,052 25,096,072 26,569,124 3,456,334  88.5% 4,678,491

Required Supplementary Information (Continued)

# Schedules of Employers' Net Pension Liability

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Plan Liability	(5) Projected Covered Employee Payroll	(6) Net Pension Liability/(Asset) as a Percentage of Covered Employee Payroll
Noncontributory	12/31/13	\$ 23,344,325	19,915,815	3,428,510	85.3%	\$ 3,705,771	92.5%
Retirement	12/31/14	24,043,264	21,096,512	2,946,752	87.7	3,570,912	82.5
System	12/31/15	24,899,572	21,192,437	3,707,135	85.1	3,458,286	107.2
Contributory	12/31/13	\$ 1,312,921	1,281,945	30,976	97.6%	\$ 98,023	31.6%
Retirement	12/31/14	1,309,800	1,269,991	39,809	97.0	90,623	43.9
System	12/31/15	1,316,041	1,183,091	132,950	89.9	82,426	161.3
Public Safety	12/31/13	\$ 3,269,140	2,712,184	556,956	83.0%	\$ 365,998	152.2%
Retirement	12/31/14	3,360,027	2,899,386	460,641	86.3	360,750	127.7
System	12/31/15	3,511,275	2,938,839	572,436	83.7	355,171	161.2
Firefighters	12/31/13	\$ 999,024	968,661	30,363	97.0%	\$ 110,741	27.4%
Retirement	12/31/14	1,014,328	1,031,039	(16,711)	101.6	111,305	(15.0)
System	12/31/15	1,058,264	1,043,059	15,205	98.6	111,133	13.7
Judges	12/31/13	\$ 182,638	155,676	26,962	85.2%	\$ 15,195	177.4%
Retirement	12/31/14	192,285	163,834	28,451	85.2	16,072	177.0
System	12/31/15	198,986	163,747	35,239	82.3	15,832	222.6
Utah Governors	12/31/13	\$ 11,879	10,166	1,713	85.6%	\$ 390	439.2%
and Legislative	12/31/14	12,267	10,366	1,901	84.5	928	204.8
Retirement Plan	12/31/15	12,247	10,039	2,208	82.0	943	234.1
Tier 2 Public	12/31/13	\$ 48,292	47,690	602	98.8%	\$ 353,227	0.2%
Employees	12/31/14	86,261	89,291	(3,030)	103.5	492,882	(0.6)
Retirement System	12/31/15	140,321	140,539	(218)	100.2	637,560	(0.0)
Tier 2 Public Safety	12/31/13	\$ 3,345	3,935	(590)	117.6%	\$ 20,215	(2.9)%
and Firefighter	12/31/14	7,226	8,705	(1,479)	120.5	35,019	(4.2)
Retirement System	12/31/15	13,628	15,089	(1,461)	110.7	53,276	(2.7)
All Retirement	12/31/13	\$ 29,171,564	25,096,072	4,075,492	86.0%	\$ 4,669,560	87.3%
Systems	12/31/14	30,025,458	26,569,124	3,456,334	88.5	4,679,491	73.9
•	12/31/15	31,150,334	26,686,840	4,463,494	85.7	4,714,627	94.7

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information (Continued)

# **Schedules of Employer Contributions**

(dollars in thousands)

System	Year Ended December 31	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Employee Payroll	Contributions as a Percentage of Covered Payroll**
Noncontributory Retirement System	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 440,421 487,803 522,733 535,298 564,154 610,270 644,907 710,933 772,420 813,449	440,421 487,803 522,733 535,298 564,154 610,270 644,907 710,933 772,420 813,449	- - - - - - - - - -	3,326,392 3,582,495 3,871,636 3,955,040 3,888,179 3,900,106 3,794,929 3,705,771 3,570,912 3,458,286	13.24% 13.62 13.50 13.53 14.51 15.65 16.99 19.18 21.63 23.52
Contributory Retirement System	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 10,737 11,208 11,037 10,865 11,851 11,125 11,705 12,874 12,954 11,719	10,737 11,208 11,037 10,865 11,851 11,125 11,705 12,874 12,954 11,719		133,812 132,899 133,110 127,804 116,395 110,103 103,074 98,023 90,623 82,426	8.02% 8.43 8.29 8.50 10.18 10.10 11.36 13.13 14.29 14.22
Public Safety Retirement System	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 70,466 81,166 93,899 98,729 103,586 110,829 117,975 128,744 135,588 141,024	70,466 81,166 93,899 98,729 103,586 110,829 117,975 128,744 135,588 141,024		316,662 339,187 365,043 373,959 363,037 374,293 366,471 365,998 360,750 355,171	22.25% 23.93 25.72 26.40 28.53 29.61 32.19 35.18 37.59 39.71
Firefighters Retirement System	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 9,518 13,797 10,219 16,159 10,915 13,005 17,321 14,779 19,668 23,908	9,518 13,797 10,219 16,159 10,915 13,005 17,321 14,779 19,668 23,908	- - - - - - - - - - - - - - - - - - -	88,682 95,767 102,252 107,625 105,275 110,751 110,608 110,741 111,305 111,133	10.73% 14.41 9.99 15.01 10.37 11.74 15.66 13.35 17.67 21.51
Judges Retirement System	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 2,718 3,210 3,802 4,184 4,715 5,403 5,898 6,488 7,113 8,208	2,718 3,210 3,802 4,184 4,715 5,403 5,898 6,488 7,113 8,208	- - - - - - - -	12,195 13,322 14,404 14,434 14,234 14,981 14,885 15,195 16,072 15,832	22.20% 24.10 26.40 28.99 33.12 36.07 39.62 42.70 44.26 51.84

^{*}Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

Continued on page 92.

^{**}Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

# Required Supplementary Information (Concluded)

# Schedules of Employer Contributions (Concluded)

(dollars in thousands)

System	Year Ended December 31	Actuarial Determined ontribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Employee Payroll	Contributions as a Percentage of Covered Payroll**
Utah Governors and Legislative Retirement Plan	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 153 214 252 411 421	153 214 252 411 421	——————————————————————————————————————	860 947 910 910 910 910 910 390 928 943	0.00% 0.00 0.00 0.00 0.00 16.81 23.52 64.62 44.29 44.64
Tier 2 Public Employees Retirement System [†]	2011 2012 2013 2014 2015	\$ 2,790 14,208 25,743 37,299 49,645	2,790 14,208 25,743 37,299 49,645	_ _ _ _	36,821 203,779 353,227 492,882 637,560	7.58% 6.97 7.29 7.57 7.79
Tier 2 Public Safety and Firefighter Retirement System [†]	2011 2012 2013 2014 2015	\$ 89 1,031 2,451 4,365 6,221	89 1,031 2,451 4,365 6,221	_ _ _ _	855 10,237 20,215 35,019 53,276	10.41% 10.07 12.12 12.46 11.68
All Retirement Systems	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 533,860 600,127 656,112 691,230 695,221 753,664 813,259 902,264 989,818 1,054,595	533,860 600,127 656,112 691,230 695,221 753,664 813,259 902,264 989,818 1,054,595	- - - - - - -	3,879,513 4,202,348 4,692,044 4,933,389 4,488,030 4,548,820 4,604,893 4,669,560 4,678,491 4,714,627	13.76% 14.28 13.98 14.01 15.49 16.57 17.66 19.32 21.16 22.37

[†]Additional years will be displayed as they become available.

# Schedule of Investment Returns

Year Ended December 31

	2015	2014	2013
Annual money weighted rate of return, net of investment expense	2.02%	7.94%	14.55%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

^{*}Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

^{**}Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.











## UTAH RETIREMENT SYSTEMS

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

December 31, 2015

#### Note 1

# Schedules of Changes in the Employer Net Pension Liability

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

### Note 2

# Schedules of **Employer Contributions**

The required employer contributions and percent of those contributions actually made are presented in the schedule.

The actuarially determined contribution rates determined by an actuarial valuation are effective for the fiscal year beginning 18 months after the valuation date. For example, the actuarially determined contribution rate determined by the January 1, 2015 valuation is effective for the fiscal year beginning July 1, 2017.

The Board certifies the contribution rates that employers are contractually required to contribute to the retirement system. Per 49-11-301(5) of the Utah Code, if the funded ratio of the plan is less than 110%, then the Board is permitted to maintain the prior year's contribution rate if the actuarially determined contribution is lower. The Board has historically followed this policy. The projected covered payroll is an estimated payroll figure based upon the January 1, 2015, census data.

The actual contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems. Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

#### Note 3

# **Actuarial Assumptions**

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

#### **ADDITIONAL ACTUARIAL INFORMATION**

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter	
Valuation date	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	
Amortization method	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Dollar Amount	Level Percent of Payroll	Level Percent of Payroll	
Amortization period	Open Group	Open Group	Open Group	Open Group	Open Group	Open Group	Open Group	Open Group	
	20-Year Open Period	20-Year Open Period	20-Year Open Period	20-Year Open Period	20-Year Open Period	20-Year Closed Period	20-Year Open Period	20-Year Open Period	
Actuarial asset valuation method (All Systems under same method)	:	pected investme			excess or shortfal ars. One-fifth of t				
Actuarial assumptions: Investment rate of return	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	
Projected salary increases*	3.50-10.50%	3.50-10.50%	3.50-8.00%	3.50-9.25%	3.50%	None	3.50-10.50%	3.50-9.25%	
Inflation rate	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	
Post-retirement cost-of-living adjustment	2.75%	2.75%	2.50% or 2.75% Depending on employer	2.75%	2.75%	2.75%	2.50%	2.50%	
Mortality: (Non-educators)	Male: RP-2000 with white collar adjustments, projected with Scale AA for the year 2000.  Female: 120% of constructed mortality table based on actual experience of female educators, projected with Scale AA from the year 2000.								
Mortality: (Educators)	projected wit Female: 1009	th Scale AA from	the year 2000. mortality table	•	erience of male e	·			

 $Note: All\ post-retirement\ cost-of-living\ adjustments\ are\ noncompounding\ and\ are\ based\ on\ the\ original\ benefit\ except\ for\ Judges,\ which\ is$ a compounding benefit. The cost-of-living adjustments are also limited to the actual CPI increase for the year, although unused CPI increases not met may be carried forward to subsequent years.

^{*}Composed of 2.75% inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.

# Schedules of Fiduciary Net Position — Pension Trust Fund by Division

December 31, 2015 With Comparative Totals for December 31, 2014

(in thousands)

	Local	State and		Total All Divisions	
	Government	School	2015	2014	
Assets:					
Cash	\$ 1	2,157	2,158	5,480	
Receivables:					
Employer contributions	3,728	29,531	33,259	35,272	
Investments	44,099	185,139	229,238	306,698	
Total receivables	47,827	214,670	262,497	341,970	
Investments at fair value:					
Short-term securities	340,588	1,429,887	1,770,475	1,248,117	
Debt securities	653,988	2,745,632	3,399,620	3,344,609	
Equity investments	1,404,251	5,895,451	7,299,702	7,603,384	
Absolute return	632,561	2,655,673	3,288,234	3,686,581	
Private equity	491,022	2,061,452	2,552,474	2,516,999	
Real assets	614,854	2,581,336	3,196,190	3,001,365	
Total investments	4,137,264	17,369,431	21,506,695	21,401,055	
Invested securities lending collateral	308,227	1,294,026	1,602,253	1,812,356	
Property and equipment at cost,					
net of accumulated depreciation	479	2,009	2,488	2,954	
Total assets	4,493,798	18,882,293	23,376,091	23,563,815	
Liabilities:					
Securities lending liability	308,227	1,294,026	1,602,253	1,812,356	
Disbursements in excess of cash balance	5,632	23,643	29,275	33,159	
Compensated absences, post-employment					
benefits and insurance reserve	3,067	12,877	15,944	15,882	
Investment accounts payable	58,078	246,118	304,196	303,129	
Real estate liabilities	44,627	187,359	231,986	302,777	
Total liabilities	419,631	1,764,023	2,183,654	2,467,303	
Net position restricted for pensions	\$ 4,074,167	17,118,270	21,192,437	21,096,512	

# Schedules of Changes in Fiduciary Net Position — Pension Trust Fund by Division

Year Ended December 31, 2015 With Comparative Totals for Year Ended December 31, 2014

(in thousands)

		Local	State and		Total All Divisions	
		Government	School	2015	2014	
Additions:						
Contributions:						
Member	\$	5,481	11,539	17,020	13,587	
Employer		167,015	646,434	813,449	772,420	
Total contributions		172,496	657,973	830,469	786,007	
Investment income:						
Net appreciation in fair value of investments		7,282	30,926	38,208	1,051,239	
Interest, dividends, and other investment income		69,416	294,821	364,237	396,557	
Total income from investment activity		76,698	325,747	402,445	1,447,796	
Less investment expenses		8,181	34,746	42,927	35,752	
Net income from investment activity		68,517	291,001	359,518	1,412,044	
Income from security lending activity		1,584	6,726	8,310	7,917	
Less security lending expense		206	874	1,080	908	
Net income from security lending activity		1,378	5,852	7,230	7,009	
Net investment income		69,895	296,853	366,748	1,419,053	
Transfers from affiliated systems		27,420	6,228	33,648	30,467	
Total additions		269,811	961,054	1,230,865	2,235,527	
Deductions:						
Retirement benefits		152,315	791,276	943,591	871,999	
Cost-of-living benefits		25,600	154,456	180,056	171,799	
Refunds		248	2,248	2,496	2,204	
Administrative expenses		1,622	7,175	8,797	8,828	
Total deductions		179,785	955,155	1,134,940	1,054,830	
Increase from operations		90,026	5,899	95,925	1,180,697	
Net position restricted for pensions beginning of year	3	3,984,141	17,112,371	21,096,512	19,915,815	
Net position restricted for pensions end of year	\$ 4	4,074,167	17,118,270	21,192,437	21,096,512	

# Schedules of Changes in the Employers' Net Pension Liability by Division

Year Ended December 31

(in thousands)

		Lo	cal Government
	2015	2014	2013
Total pension liability			
Service cost	\$ 91,304	93,436	100,789
Interest	328,120	310,587	297,617
Benefit changes	_	_	6,063
Difference between actual			
and expected experience	(19,610)	(16,109)	(39,370)
Assumption changes	_	(52,889)	_
Benefit payments	(177,915)	(159,967)	(149,891)
Refunds	(248)	(235)	(620)
Net change in total pension liability	221,651	174,823	214,588
Total pension liability — beginning	4,418,365	4,243,542	4,028,954
Total pension liability — ending (a)	4,640,016	4,418,365	4,243,542
Plan fiduciary net position			
Contributions — member	5,481	3,859	2,637
Contributions — employer	167,015	157,930	147,105
Net investment income	69,895	266,210	478,461
Benefit payments	(177,915)	(159,967)	(149,891)
Refunds	(248)	(235)	(620)
Administrative expense	(1,622)	(1,604)	(1,497)
Net transfers with affiliated systems	27,420	14,058	(5,302)
Net change in plan fiduciary net position	90,026	280,251	470,893
Plan fiduciary net position — beginning	3,984,141	3,703,890	3,232,997
Plan fiduciary net position — ending (b)	4,074,167	3,984,141	3,703,890
Net pension liability — ending (a-b)	\$ 565,849	434,224	539,652
Plan fiduciary net position as a percentage			
of the total pension liability	87.8%	90.2%	87.3%
Projected covered employee payroll	\$ 826,998	845,364	864,838
Net pension liability as a percentage of covered employee payroll	68.4%	51.4%	62.4%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

	:	State and School	Total All Div				
2015	2014	2013		2015	2014	2013	
			Ī				
303,494	314,556	340,531		394,798	407,992	441,320	
1,447,699	1,389,106	1,348,596		1,775,819	1,699,693	1,646,213	
_	_	17,060		_	_	23,123	
(168,556)	(188,714)	(169,131)		(188,166)	(204,823)	(208,501)	
_	(105,032)			_	(157,921)	_	
(945,732)	(883,831)	(824,793)		(1,123,647)	(1,043,798)	(974,684)	
(2,248)	(1,969)	(1,834)		(2,496)	(2,204)	(2,454)	
634,657	524,116	710,429		856,308	698,939	925,017	
19,624,899	19,100,783	18,390,354		24,043,264	23,344,325	22,419,308	
20,259,556	19,624,899	19,100,783		24,899,572	24,043,264	23,344,325	
11,539	9,728	11,571		17,020	13,587	14,208	
646,434	614,490	563,828		813,449	772,420	710,933	
296,853	1,152,843	2,110,520		366,748	1,419,053	2,588,981	
(945,732)	(883,831)	(824,793)		(1,123,647)	(1,043,798)	(974,684)	
(2,248)	(1,969)	(1,834)		(2,496)	(2,204)	(2,454)	
(7,175)	(7,224)	(6,832)		(8,797)	(8,828)	(8,329)	
6,228	16,409	(36,975)		33,648	30,467	(42,277)	
5,899	900,446	1,815,485		95,925	1,180,697	2,286,378	
17,112,371	16,211,925	14,396,440		21,096,512	19,915,815	17,629,437	
17,118,270	17,112,371	16,211,925		21,192,437	21,096,512	19,915,815	
3,141,286	2,512,528	2,888,858		3,707,135	2,946,752	3,428,510	
84.5%	87.2%	84.9%		85.1%	87.7%	85.3%	
2,631,288	2,725,548	2,840,933		3,458,286	3,570,912	3,705,771	
119.4%	92.2%	101.7%	_	107.2%	82.5%	92.5%	

# Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Plan Liability	(5) Projected Covered Employee Payroll	(6) Net Pension Liability/(Asset) as a Percentage of Covered Employee Payroll
Noncontributory	12/31/13	\$ 4,243,542	3,703,890	539,652	87.3%	\$ 864,838	62.4%
Local Government	12/31/14	4,418,365	3,984,141	434,224	90.2	845,364	51.4
	12/31/15	4,640,016	4,074,167	565,849	87.8	826,998	68.4
Noncontributory	12/31/13	\$ 19,100,783	16,211,925	2,888,858	84.9%	\$ 2,840,933	101.7%
State and School	12/31/14	19,624,899	17,112,371	2,512,528	87.2	2,725,548	92.2
	12/31/15	20,259,556	17,118,270	3,141,286	84.5	2,631,288	119.4
Total	12/31/13	\$ 23,344,325	19,915,815	3,428,510	85.3%	\$ 3,705,771	92.5%
Noncontributory	12/31/14	24,043,264	21,096,512	2,946,752	87.7	3,570,912	82.5
Retirement System	12/31/15	24,899,572	21,192,437	3,707,135	85.1	3,458,286	107.2

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

# Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Employee Payroll	Contributions as a Percentage of Covered Payroll**
Noncontributory	2013	\$ 147,105	147.105	_	864,838	17.01%
Local Government	2014	157,930	157,930	_	845,364	18.68
	2015	167,015	167,015	_	826,998	20.20
Noncontributory	2013	\$ 563,828	563,828	_	2,840,933	19.85%
State and School	2014	614,490	614,490	_	2,725,548	22.55
	2015	646,434	646,434	_	2,631,288	24.57
Total Noncontributory	2013 2014	\$ 710,933 772,420	710,933 772,420	_	3,705,771 3,570,912	19.18% 21.63
Retirement System	2015	813,449	813,449	_	3,458,286	23.52

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

^{*}Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

^{**}Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

# Schedules of Fiduciary Net Position — Pension Trust Fund by Division

December 31, 2015 With Comparative Totals for December 31, 2014

(in thousands)

	Local	Charles and	Total All Divisions		
	Local Government	State and School	2015	2014	
Assets:					
Cash	\$ 1	1	2	2	
Receivables:					
Member contributions	38	56	94	129	
Employer contributions	101	165	266	362	
Investments	4,547	8,266	12,813	18,487	
Total receivables	4,686	8,487	13,173	18,978	
Investments at fair value:					
Short-term securities	35,119	63,844	98,963	75,233	
Debt securities	67,435	122,592	190,027	201,601	
Equity investments	144,797	263,231	408,028	458,304	
Absolute return	65,225	118,575	183,800	222,214	
Private equity	50,631	92,044	142,675	151,716	
Real assets	63,400	115,256	178,656	180,911	
Total investments	426,607	775,542	1,202,149	1,289,979	
Invested securities lending collateral	31,782	57,778	89,560	109,243	
Property and equipment at cost,					
net of accumulated depreciation	49	90	139	178	
Total assets	463,125	841,898	1,305,023	1,418,380	
Liabilities:					
Securities lending collateral liability	31,782	57,778	89,560	109,243	
Disbursements in excess of cash balance	581	1,056	1,637	1,998	
Compensated absences, post-employment					
benefits and insurance reserve	316	575	891	957	
Investment accounts payable	5,989	10,887	16,876	17,940	
Real estate liabilities	4,602	8,366	12,968	18,251	
Total liabilities	43,270	78,662	121,932	148,389	
Net position restricted for pensions	\$ 419,855	763,236	1,183,091	1,269,991	

# Schedules of Changes in Fiduciary Net Position — Pension Trust Fund by Division

Year Ended December 31, 2015 With Comparative Totals for Year Ended December 31, 2014

(in thousands)

	Local Government		Ct. t	Total All Divisions		
			State and School	2015	2014	
Additions:						
Contributions:						
Member	\$ 2,5	72	2,199	4,771	5,461	
Employer	6,3	84	5,335	11,719	12,954	
Total contributions	8,9	56	7,534	16,490	18,415	
Investment income:						
Net appreciation in fair value of investments	7	91	1,422	2,213	64,878	
Interest, dividends, and other investment income	7,5	45	13,561	21,106	24,474	
Total income from investment activity	8,3	36	14,983	23,319	89,352	
Less investment expenses	8	89	1,598	2,487	2,207	
Net income from investment activity	7,4	47	13,385	20,832	87,145	
Income from securities lending activity	1	72	309	481	488	
Less security lending expense		22	40	62	56	
Net income from security lending activity	1	50	269	419	432	
Net investment income	7,5	97	13,654	21,251	87,577	
Total additions	16,5	53	21,188	37,741	105,992	
Deductions:						
Retirement benefits	22,9	60	44,550	67,510	62,560	
Cost-of-living benefits	3,6	76	10,109	13,785	14,328	
Supplemental retirement benefits		16	79	95	127	
Refunds	6	23	592	1,215	2,433	
Administrative expenses	1	76	302	478	494	
Transfers to affiliated systems	21,9	93	19,565	41,558	38,004	
Total deductions	49,4	44	75,197	124,641	117,946	
Decrease from operations	(32,8	91)	(54,009)	(86,900)	(11,954)	
Net position restricted for pensions beginning of year	452,7	46	817,245	1,269,991	1,281,945	
Net position restricted for pensions end of year	\$ 419,8	55	763,236	1,183,091	1,269,991	

# Schedules of Changes in the Employers' Net Pension Liability by Division

Year Ended December 31

(in thousands)

	Local Government			
	2015	2014	2013	
Total pension liability				
Service cost	\$ 5,360	5,679	6,352	
Interest	35,298	34,255	33,840	
Benefit changes	_		415	
Difference between actual				
and expected experience	(4,833)	(8,465)	(8,020)	
Assumption changes	_	(2,914)	_	
Benefit payments	(26,652)	(23,177)	(21,607)	
Refunds	(623)	(1,294)	(855)	
Net change in total pension liability	8,550	4,084	10,125	
Total pension liability — beginning	481,590	477,506	467,381	
Total pension liability — ending (a)	490,140	481,590	477,506	
Plan fiduciary net position				
Contributions — member	2,572	3,103	3,418	
Contributions — employer	6,384	7,410	6,963	
Net investment income	7,597	30,871	58,533	
Benefit payments	(26,652)	(23,177)	(21,607)	
Refunds	(623)	(1,294)	(855	
Administrative expense	(176)	(179)	(172	
Net transfers with affiliated systems	(21,993)	(10,140)	5,790	
Net change in plan fiduciary net position	(32,891)	6,594	52,070	
Plan fiduciary net position — beginning	452,746	446,152	394,082	
Plan fiduciary net position — ending (b)	419,855	452,746	446,152	
Net pension liability/(asset) — ending (a-b)	\$ 70,285	28,844	31,354	
Plan fiduciary net position as a percentage				
of the total pension liability	85.7%	94.0%	93.4%	
Projected covered employee payroll	\$ 48,590	51,420	54,445	
Net pension liability as a percentage of covered employee payroll	144.6%	56.1%	57.6%	

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

	State and School			Total All Divisions			
2015	2014	2013	2015	2014	2013		
3,312	3,901	4,645	8,672	9,580	10,997		
60,165	59,564	59,910	95,463	93,819	93,750		
_	_	306	_	_	721		
(10,456)	(14,374)	(12,500)	(15,289)	(22,839)	(20,520)		
_	(1,319)			(4,233)			
(54,738)	(53,838)	(52,551)	(81,390)	(77,015)	(74,158)		
(592)	(1,139)	(1,067)	(1,215)	(2,433)	(1,922)		
(2,309)	(7,205)	(1,257)	6,241	(3,121)	8,868		
828,210	835,415	836,672	1,309,800	1,312,921	1,304,053		
825,901	828,210	835,415	1,316,041	1,309,800	1,312,921		
2,199	2,358	2,958	4,771	5,461	6,376		
5,335	5,544	5,911	11,719	12,954	12,874		
13,654	56,706	110,977	21,251	87,577	169,510		
(54,738)	(53,838)	(52,551)	(81,390)	(77,015)	(74,158)		
(592)	(1,139)	(1,067)	(1,215)	(2,433)	(1,922)		
(302)	(315)	(308)	(478)	(494)	(480)		
(19,565)	(27,864)	27,304	(41,558)	(38,004)	33,094		
(54,009)	(18,548)	93,224	(86,900)	(11,954)	145,294		
817,245	835,793	742,569	1,269,991	1,281,945	1,136,651		
763,236	817,245	835,793	1,183,091	1,269,991	1,281,945		
62,665	10,965	(378)	132,950	39,809	30,976		
92.4%	98.7%	100.0%	89.9%	97.0%	97.6%		
33,836	39,203	43,578	82,426	90,623	98,023		
185.2%	28.0%	(0.9)%	161.3%	43.9%	31.6%		

# Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Plan Liability	(5) Projected Covered Employee Payroll	(6) Net Pension Liability/(Asset) as a Percentage of Covered Employee Payroll
Contributory	12/31/13	\$ 477,506	446,152	31,354	93.4%	\$ 54,445	57.6%
<b>Local Government</b>	12/31/14	481,590	452,746	28,844	94.0	51,420	56.1
	12/31/15	490,140	419,855	70,285	85.7	48,590	144.6
Contributory	12/31/13	\$ 835,415	835,793	(378)	100.0%	\$ 43,578	(0.9)%
State and School	12/31/14	828,210	817,245	10,965	98.7	39,203	28.0
	12/31/15	825,901	763,236	62,665	92.4	33,836	185.2
Total	12/31/13	\$ 1,312,921	1,281,945	30,976	97.6%	\$ 98,023	31.6%
Contributory	12/31/14	1,309,800	1,269,991	39,809	97.0	90,623	43.9
Retirement System	12/31/15	1,316,041	1,183,091	132,950	89.9	82,426	161.3

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

## **Contributory Retirement System**

# Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Employee Payroll	Contributions as a Percentage of Covered Payroll**
Contributory	2013	\$ 6,963	6,963	_	54,445	12.79%
Local Government	2014	7,410	7,410	_	51,420	14.41
	2015	6,384	6,384	_	48,590	13.14
Contributory	2013	\$ 5,911	5,911	_	43,578	13.56%
State and School	2014	5,544	5,544	_	39,203	14.14
	2015	5,335	5,335	_	33,836	15.77
Total	2013	\$ 12,874	12,874	_	98,023	13.13%
Contributory	2014	12,954	12,954	_	90,623	14.29
Retirement System	2015	11,719	11,719	_	82,426	14.22

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

^{*}Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

^{**}Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

# Schedules of Fiduciary Net Position — Pension Trust Fund by Division

December 31, 2015 With Comparative Totals for December 31, 2014

	(in thousands) State of Utal Public Safety		Salt Lake City	
Assets: Cash	\$ 2	2 4	2	
Receivables:				
Member contributions	_	- 10		
Employer contributions	66	5 1,324	_	
Investments	10,869	· · · · · · · · · · · · · · · · · · ·	2,615	
Total receivables	10,935	14,410	2,615	
Investments at fair value:				
Short-term securities	83,946	100,989	20,198	
Debt securities	161,191	193,917	38,784	
Equity investments	346,111	416,381	83,278	
Absolute return	155,910	187,564	37,514	
Private equity	121,024	145,595	29,120	
Real assets	151,545	182,313	36,464	
Total investments	1,019,727	7 1,226,759	245,358	
Invested securities lending collateral	75,970	91,394	18,279	
Property and equipment at cost,				
net of accumulated depreciation	118	3 142	28	
Total assets	1,106,752	1,332,709	266,282	
Liabilities:				
Securities lending liability	75,970	91,394	18,279	
Disbursements in excess of cash balance	1,388		334	
Compensated absences, post-employment				
benefits and insurance reserve	756	909	182	
Investment accounts payable	14,315	17,221	3,444	
Real estate liabilities	10,999	13,233	2,647	
Total liabilities	103,428	3 124,427	24,886	
Net position restricted for pensions	\$ 1,003,324	1,208,282	241,396	

				Other Division B		Total All Divisions		
0gden	Provo	Logan	Bountiful	(without Social Security)	2015	2014		
2	2	2	2	4	20	20		
_	_	_	_	_	10	11		
_	_	_	_	96	1,486	2,234		
606	469	267	193	3,728	31,823	42,189		
606	469	267	193	3,824	33,319	44,434		
4,678	3,621	2,061	1,491	28,792	245,776	171,688		
8,982	6,953	3,957	2,864	55,286	471,934	460,072		
19,285	14,929	8,496	6,149	118,710	1,013,339	1,045,895		
8,687	6,725	3,827	2,770	53,474	456,471	507,113		
6,744	5,220	2,971	2,150	41,509	354,333	346,230		
8,444	6,537	3,720	2,692	51,977	443,692	412,859		
56,820	43,985	25,032	18,116	349,748	2,985,545	2,943,857		
4,233	3,277	1,865	1,350	26,056	222,424	249,302		
7	5	3	2	40	345	408		
61,668	47,738	27,169	19,663	379,672	3,241,653	3,238,021		
4,233	3,277	1,865	1,350	26,056	222,424	249,302		
77	60	34	25	476	4,064	4,562		
42	33	19	13	259	2,213	2,185		
798	617	351	254	4,910	41,910	40,938		
613	474	270	195	3,772	32,203	41,648		
5,763	4,461	2,539	1,837	35,473	302,814	338,635		
55,905	43,277	24,630	17,826	344,199	2,938,839	2,899,386		

# Schedules of Changes in Fiduciary Net Position — Pension Trust Fund by Division

Year Ended December 31, 2015 With Comparative Totals for Year Ended December 31, 2014

	(in thousands)  State of Utah Public Safety	Other Division A (with Social Security)	Salt Lake City	
Additions:				
Contributions:				
Member	\$ 115	701	_	
Employer	47,449	51,677	14,100	
Total contributions	47,564	52,378	14,100	
Investment income:				
Net appreciation in fair value of investments	1,807	2,177	435	
Interest, dividends, and other investment income	17,231	20,756	4,149	
Total income from investment activity	19,038	22,933	4,584	
Less investment expenses	2,031	2,446	489	
Net income from investment activity	17,007	20,487	4,095	
Income from security lending activity	393	474	95	
Less security lending expense	51	62	12	
Net income from security lending activity	342	412	83	
Net investment income	17,349	20,899	4,178	
Transfers from (to) affiliated systems	2,301	(10,067)	657	
Total additions	67,214	63,210	18,935	
Deductions:				
Retirement benefits	48,351	45,148	13,208	
Cost-of-living benefits	10,770	9,671	3,826	
Supplemental retirement benefits	150	90	42	
Refunds	18	208	_	
Administrative expenses	431	485	116	
Total deductions	59,720	55,602	17,192	
Increase (decrease) from operations	7,494	7,608	1,743	
Net position restricted for pensions beginning of year	995,830	1,200,674	239,653	
Net position restricted for pensions end of year	\$ 1,003,324	1,208,282	241,396	

				Total All Divisions		
0gden	Provo	Logan	Bountiful	(without Social Security)	2015	2014
5.0				22	005	025
56 2,729	 2,314	1,044	883	33 20,828	905 141,024	835 135,588
2,785	2,314	1,044	883	20,861	141,929	136,423
102	78	45	32	600	5,276	143,881
969	744	429	308	5,721	50,307	54,276
1,071	822	474	340	6,321	55,583	198,157
114	88	51	36	674	5,929	4,896
957	734	423	304	5,647	49,654	193,261
22	17	10	7	131	1,149	1,085
3	2	1	1	17	149	124
19	15	9	6	114	1,000	961
976	749	432	310	5,761	50,654	194,222
(66)	66	(247)	35	11,344	4,023	2,746
3,695	3,129	1,229	1,228	37,966	196,606	333,391
3,185	2,192	1,179	1,127	12,895	127,285	118,030
899	541	263	230	1,607	27,807	26,407
6	6	_	1	_	295	326
_	_	_	_	307	533	199
26	20	11	9	135	1,233	1,227
4,116	2,759	1,453	1,367	14,944	157,153	146,189
(421)	370	(224)	(139)	23,022	39,453	187,202
56,326	42,907	24,854	17,965	321,177	2,899,386	2,712,184
55,905	43,277	24,630	17,826	344,199	2,938,839	2,899,386

# Schedules of Changes in the Employers' Net Pension Liability by Division

Year Ended December 31

(in thousands)

				Other Division A (with Social Security)			
		2015	2014	2013	2015	2014	2013
Total pension liability							
Service cost	\$	23,270	24,190	26,013	29,942	30,473	32,564
Interest		87,273	83,519	81,713	98,538	93,276	90,791
Benefit changes		_	_	_	_	_	_
Difference between actual							
and expected experience		(14,298)	(12,067)	(2,099)	(12,388)	(16,141)	(25,616)
Assumption changes			(17,596)	_	_	(21,812)	_
Benefit payments		(59,271)	(55,075)	(52,432)	(54,909)	(51,394)	(48,824)
Refunds		(18)	(12)	(2)	(208)	(115)	(97)
Net change in total pension liability		36,956	22,959	53,193	60,975	34,287	48,818
Total pension liability — beginning	1	1,181,654	1,158,695	1,105,502	1,326,432	1,292,145	1,243,327
Total pension liability — ending (a)	1	1,218,610	1,181,654	1,158,695	1,387,407	1,326,432	1,292,145
Plan fiduciary net position							
Contributions — member		115	152	103	701	597	714
Contributions — employer		47,449	45,810	43,393	51,677	49,156	46,421
Net investment income		17,349	66,949	121,520	20,899	80,565	146,201
Benefit payments		(59,271)			(54,909)	(51,394)	(48,824)
Refunds		(18)			(208)	(115)	(97)
Administrative expense		(431)			(485)	(482)	(458)
Net transfers with affiliated systems		2,301	1,124	757	(10,067)	(6,061)	(3,111)
Net change in plan fiduciary net position		7,494	58,514	112,926	7,608	72,266	140,846
Plan fiduciary net position — beginning		995,830	937,316	824,390	1,200,674	1,128,408	987,562
Plan fiduciary net position — ending (b)	•	1,003,324	995,830	937,316	1,208,282	1,200,674	1,128,408
Net pension liability — ending (a-b)	\$	215,286	185,824	221,379	179,125	125,758	163,737
Plan fiduciary net position as a percentage		00.00	0.1.22	00.007	<b>6</b> - 10:	00.70	07.00
of the total pension liability		82.3%	84.3%	80.9%	87.1%	90.5%	87.3%
Projected covered employee payroll	\$	108,967	113,111	115,960	141,681	143,924	146,190
Net pension liability as a percentage of covered employee payroll		197.6%	164.3%	190.9%	126.4%	87.4%	112.0%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

	S	alt Lake City			Ogden			Provo			Logan
2015	2014	2013	2015	2014	2013	2015	2014	2013	2015	2014	2013
5,963	5,878	6,209	1,164	1,170	1,304	1,099	1,141	1,181	485	524	580
23,023	22,171 —	21,719 —	5,359 —	5,185 —	5,028 —	3,916 —	3,748 —	3,680 —	2,201 —	2,110 —	2,029 —
2,063	(1,430)	(3,743)	(1,153)	559	(713)	636	(638)	561	278	232	(701)
_	(4,551)	_	_	(822)	_	_	(859)	_	_	(420)	_
(17,076)	(16,398)	(15,737)	(4,090)	(3,956)	(3,864)	(2,739)	(2,503)	(2,281)	(1,442)	(1,366)	(1,320)
_	_	(15)		_			(11)	(204		_	
13,973	5,670	8,433	1,280	2,136	1,755	2,912	878	2,937	1,522	1,080	588
312,529	306,859	298,426	72,920	70,784	69,029	53,031	52,153	49,216	29,822	28,742	28,154
326,502	312,529	306,859	74,200	72,920	70,784	55,943	53,031	52,153	31,344	29,822	28,742
_	4	13	56	_	_	_	_	_	_	35	49
14,100	13,519	12,426	2,729	2,791	2,525	2,314	2,255	2,158	1,044	989	944
4,178	16,113	29,378	976	3,803	6,973	749	2,877	5,204	432	1,671	3,047
(17,076)	(16,398)	(15,737) (15)	(4,090)	(3,956)	(3,864)	(2,739)	(2,503)	(2,281) (204)	(1,442)	(1,366)	(1,320)
(116)	(116)	(110)	(26)	(27)	(26)	(20)	(11) (19)	(19)	(11)	(11)	(10)
657	620	447	(66)	107	535	66	145	16	(247)	100	88
1,743	13,742	26,402	(421)	2,718	6,143	370	2,744	4,874	(224)	1,418	2,798
239,653	225,911	199,509	56,326	53,608	47,465	42,907	40,163	35,289	24,854	23,436	20,638
241,396	239,653	225,911	55,905	56,326	53,608	43,277	42,907	40,163	24,630	24,854	23,436
85,106	72,876	80,948	18,295	16,594	17,176	12,666	10,124	11,990	6,714	4,968	5,306
73.9%	76.7%	73.6%	75.3%	77.2%	75.7%	77.4%	80.9%	77.0%	78.6%	83.3%	81.5%
28,275	27,821	28,016	5,517	5,518	5,831	5,213	5,424	5,295	2,306	2,459	2,584
301.0%	261.9%	288.9%	331.6%	300.7%	294.6%	243.0%	186.7%	226.4%	291.2%	202.0%	205.3%

Continued on page 114.

# Schedules of Changes in the Employers' Net Pension Liability by Division (Concluded)

Year Ended December 31

(in thousands)

			Bountiful	Other Divi	sion B (with So	cial Security)
	2015	2014	2013	2015	2014	2013
Total pension liability						
Service cost	\$ 380	383	390	13,049	12,922	13,495
Interest	1,682	1,635	1,580	26,988	25,159	23,425
Benefit changes	_	_	_	_	_	_
Difference between actual						
and expected experience	652	297	(147)	7,046	3,963	3,230
Assumption changes	_	(229)	_	_	(6,121)	_
Benefit payments	(1,358)	(1,419)	(1,369)	(14,502)	(12,652)	(11,659)
Refunds	_	_	_	(307)	(61)	(149)
Net change in total pension liability	1,356	667	454	32,274	23,210	28,342
Total pension liability — beginning	22,919	22,252	21,798	360,720	337,510	309,168
Total pension liability — ending (a)	24,275	22,919	22,252	392,994	360,720	337,510
Plan fiduciary net position						
Contributions — member	_	_	_	33	47	379
Contributions — employer	883	822	716	20,828	20,246	20,161
Net investment income	310	1,220	2,271	5,761	21,024	35,969
Benefit payments	(1,358)	(1,419)	(1,369)	(14,502)	(12,652)	(11,659)
Refunds	_	_	_	(307)	(61)	(149)
Administrative expense	(9)	(9)	(8)	(135)	(129)	(117)
Net transfers with affiliated systems	35	14	99	11,344	6,697	5,845
Net change in plan fiduciary net position	(139)	628	1,709	23,022	35,172	50,429
Plan fiduciary net position — beginning	17,965	17,337	15,628	321,177	286,005	235,576
Plan fiduciary net position — ending (b)	17,826	17,965	17,337	344,199	321,177	286,005
Net pension liability — ending (a-b)	\$ 6,449	4,954	4,915	48,795	39,543	51,505
Plan fiduciary net position as a percentage						
of the total pension liability	73.4%	78.4%	77.9%	87.6%	89.0%	84.7%
Projected covered employee payroll	\$ 1,776	1,795	1,749	61,436	60,698	60,373
Net pension liability as a percentage						
of covered employee payroll	363.1%	276.0%	281.0%	79.4%	65.1%	85.3%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

	Tota	al All Divisions
2015	2014	2013
75,352	76,681	81,736
248,980	236,803	229,965
_	_	_
(17,164)	(25,225)	(29,228
_	(52,410)	
(155,387)	(144,763)	(137,486)
(533)	(199)	(467
151,248	90,887	144,520
3,360,027	3,269,140	3,124,620
3,511,275	3,360,027	3,269,140
905	835	1,258
141,024	135,588	128,744
50,654	194,222	350,563
(155,387)	(144,763)	(137,486)
(533)	(199)	(467
(1,233)	(1,227)	(1,161
4,023	2,746	4,676
39,453	187,202	346,127
2,899,386	2,712,184	2,366,057
2,938,839	2,899,386	2,712,184
572,436	460,641	556,956
83.7%	86.3%	83.0%
355,171	360,750	365,998
161 20/	137 70/	152.20/
161.2%	127.7%	152.2%

# Schedules of Net Pension Liability by Division

	(dollars in	thousands)			(3)		(6)
System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Plan Liability	(5) Projected Covered Employee Payroll	(6) Net Pension Liability/(Asset) as a Percentage of Covered Employee Payroll
Public Safety	12/31/13	\$ 1,158,695	937,316	221,379	80.9%	\$ 115,960	190.9%
State of Utah	12/31/14	1,181,654	995,830	185,824	84.3	113,111	164.3
	12/31/15	1,218,610	1,003,324	215,286	82.3	108,967	197.6
Public Safety	12/31/13	\$ 1,292,145	1,128,408	163,737	87.3%	\$ 146,190	112.0%
Other Division A	12/31/14	1,326,432	1,200,674	125,758	90.5	143,924	87.4
(with Social Security)	12/31/15	1,387,407	1,208,282	179,125	87.1	141,681	126.4
Public Safety	12/31/13	\$ 306,859	225,911	80,948	73.6%	\$ 28,016	288.9%
Salt Lake City	12/31/14	312,529	239,653	72,876	76.7	27,821	261.9
	12/31/15	326,502	241,396	85,106	73.9	28,275	301.0
Public Safety	12/31/13	\$ 70,784	53,608	17,176	75.7%	\$ 5,831	294.6%
Ogden	12/31/14	72,920	56,326	16,594	77.2	5,518	300.8
	12/31/15	74,200	55,905	18,295	75.3	5,517	331.6
Public Safety	12/31/13	\$ 52,153	40,163	11,990	77.0%	\$ 5,295	226.4%
Provo	12/31/14	53,031	42,907	10,124	80.9	5,424	186.7
	12/31/15	55,943	43,277	12,666	77.4	5,213	243.0
Public Safety	12/31/13	\$ 28,742	23,436	5,306	81.5%	\$ 2,584	205.3%
Logan	12/31/14	29,822	24,854	4,968	83.3	2,459	202.0
	12/31/15	31,344	24,630	6,714	78.6	2,306	291.2
Public Safety	12/31/13	\$ 22,252	17,337	4,915	77.9%	\$ 1,749	281.0%
Bountiful	12/31/14	22,919	17,965	4,954	78.4	1,795	275.9
	12/31/15	24,275	17,826	6,449	73.4	1,776	363.1
Public Safety	12/31/13	\$ 337,510	286,005	51,505	84.7%	\$ 60,373	85.3%
Other Division B	12/31/14	360,720	321,177	39,543	89.0	60,698	65.1
(without Social Security)	12/31/15	392,994	344,199	48,795	87.6	61,436	79.4
Total	12/31/13	\$ 3,269,140	2,712,184	556,956	83.0%	\$ 365,998	152.2%
Public Safety	12/31/14	3,360,027	2,899,386	460,641	86.3	360,750	127.7
Retirement System	12/31/15	3,511,275	2,938,839	572,436	83.7	355,171	161.2

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

# Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended		Actuarial etermined ntribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Employee Payroll	Contributions as a Percentage of Covered Payrol **
Public Safety	2013	\$	43,393	43,393	_	115,960	37.42%
State of Utah	2014	•	45,810	45,810	_	113,111	40.50
	2015		47,449	47,449	_	108,967	43.54
Public Safety	2013	\$	46,421	46,421	_	146,190	31.75%
Other Division A	2014		49,156	49,156	_	143,924	34.15
(with Social Security)	2015		51,677	51,677	_	141,681	36.47
Public Safety	2013	\$	12,426	12,426	_	28,016	44.35%
Salt Lake City	2014		13,519	13,519	_	27,821	48.59
	2015		14,100	14,100	_	28,275	49.87
Public Safety	2013	\$	2,525	2,525	_	5,831	43.30%
Ogden	2014		2,791	2,791	_	5,518	50.58
	2015		2,729	2,729	_	5,517	49.47
Public Safety	2013	\$	2,158	2,158	_	5,295	40.76%
Provo	2014		2,255	2,255	_	5,424	41.57
	2015		2,314	2,314		5,213	44.39
Public Safety	2013	\$	944	944	_	2,584	36.53%
Logan	2014		989	989	_	2,459	40.22
	2015		1,044	1,044		2,306	45.27
Public Safety	2013	\$	716	716	_	1,749	40.94%
Bountiful	2014		822	822	_	1,795	45.79
	2015		883	883		1,776	49.72
Public Safety	2013	\$	20,161	20,161	_	60,373	33.39%
Other Division B	2014		20,246	20,246	_	60,698	33.36
(without Social Security)	2015		20,828	20,828		61,436	33.90
Total	2013	\$	128,744	128,744		365,998	35.18%
Public Safety	2014		135,588	135,588	_	360,750	37.59
Retirement System	2015		141,024	141,024	_	355,171	39.71

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

^{*}Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

^{**}Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

# Schedules of Fiduciary Net Position — Pension Trust Fund by Division

December 31, 2015 With Comparative Totals for December 31, 2014

(in thousands)

	Division A	Division B		<b>Total All Divisions</b>	
	(with Social Security)	(without Social Security)	2015	2014	
Assets:					
Cash	\$ 1	1	2	2	
Receivables:					
Member contributions	37	243	280	372	
Fire insurance tax	66	274	340	1,048	
Investments	1,917	9,377	11,294	14,994	
Total receivables	2,020	9,894	11,914	16,414	
Investments at fair value:					
Short-term securities	14,806	72,418	87,224	61,017	
Debt securities	28,430	139,056	167,486	163,507	
Equity investments	61,045	298,582	359,627	371,704	
Absolute return	27,498	134,500	161,998	180,225	
Private equity	21,346	104,405	125,751	123,048	
Real assets	26,729	130,735	157,464	146,727	
Total investments	179,854	879,696	1,059,550	1,046,228	
Invested securities lending collateral	13,399	65,537	78,936	88,601	
Property and equipment at cost,					
net of accumulated depreciation	21	102	123	145	
Total assets	195,295	955,230	1,150,525	1,151,390	
Liabilities:					
Securities lending collateral liability	13,399	65,537	78,936	88,601	
Disbursements in excess of cash balance	245	1,197	1,442	1,621	
Compensated absences, post-employment					
benefits and insurance reserve	133	652	785	777	
Investment accounts payable	2,525	12,349	14,874	14,550	
Real estate liabilities	1,940	9,489	11,429	14,802	
Total liabilities	18,242	89,224	107,466	120,351	
Net position restricted for pensions benefits	\$ 177,053	866,006	1,043,059	1,031,039	

# Schedules of Changes in Fiduciary Net Position — Pension Trust Fund by Division

Year Ended December 31, 2015 With Comparative Totals for Year Ended December 31, 2014

(in thousands)

	Division A (with	Division B (without		Total All Divisions	
	Social Security)	Social Security)	2015	2014	
Additions:					
Contributions:					
Member	\$ 4,063	14,112	18,175	18,300	
Employer	1,055	5,635	6,690	5,514	
Fire insurance tax	4,170	13,048	17,218	14,154	
Total contributions	9,288	32,795	42,083	37,968	
Investment income:					
Net appreciation in fair value of investments	311	1,558	1,869	51,167	
Interest, dividends, and other investment income	2,961	14,849	17,810	19,302	
Total income from investment activity	3,272	16,407	19,679	70,469	
Less investment expenses	349	1,750	2,099	1,740	
Net income from investment activity	2,923	14,657	17,580	68,729	
Income from securities lending activity	68	339	407	385	
Less security lending expense	9	44	53	44	
Net income from security lending activity	59	295	354	341	
Net investment income	2,982	14,952	17,934	69,070	
Transfers from affiliated systems	1,784	789	2,573	3,713	
Total additions	14,054	48,536	62,590	110,751	
Deductions:					
Retirement benefits	5,370	33,970	39,340	37,597	
Cost-of-living benefits	859	9,236	10,095	9,844	
Supplemental retirement benefits	14	222	236	269	
Refunds	190	338	528	293	
Administrative expenses	60	311	371	370	
Total deductions	6,493	44,077	50,570	48,373	
Increase from operations	7,561	4,459	12,020	62,378	
Net position restricted for pensions beginning of year	169,492	861,547	1,031,039	968,661	
Net position restricted for pensions end of year	\$ 177,053	866,006	1,043,059	1,031,039	

# Schedules of Changes in the Employers' Net Pension Liability by Division

Year Ended December 31

(in thousands)

	Other Division A (with Social Security)		
	2015	2014	2013
Total pension liability			
Service cost	\$ 6,584	6,636	7,158
Interest	12,290	11,387	10,840
Benefit changes	, <u> </u>	, <u> </u>	· —
Difference between actual			
and expected experience	(985)	(1,199)	(1,812)
Assumption changes	_	(4,028)	_
Benefit payments	(6,243)	(5,432)	(4,889)
Refunds	(190)	(72)	_
Net change in total pension liability	11,456	7,292	11,297
Total pension liability — beginning	163,786	156,494	145,197
Total pension liability — ending (a)	175,242	163,786	156,494
Plan fiduciary net position	4.062	2.002	2.077
Contributions — member	4,063	3,983	3,977
Contributions — employer	1,055	888	745
Fire insurance tax	4,170	3,398	2,748
Net investment income	2,982	11,118	19,648
Benefit payments	(6,243)	(5,432)	(4,889)
Refunds	(190)	(72)	_
Administrative expense	(60)	(58)	(54)
Net transfers with affiliated systems	1,784	664	796
Net change in plan fiduciary net position	7,561	14,489	22,971
Plan fiduciary net position — beginning	169,492	155,003	132,032
Plan fiduciary net position — ending (b)	177,053	169,492	155,003
Net pension liability/(asset) — ending (a-b)	\$ (1,811)	(5,706)	1,491
Dian fiducian and modified as a page 14-11-1			
Plan fiduciary net position as a percentage	101 00/	102.50/	00.00/
of the total pension liability	101.0%	103.5%	99.0%
Projected covered employee payroll	\$ 26,672	26,873	26,521
Net pension liability as a percentage			

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Other D	Division B (without S	Social Security)		al All Divisions	
2015	2014	2013	2015	2014	2013
20,598	20,630	22,419	27,182	27,266	29,577
62,922	60,103	59,419	75,212	71,490	70,259
_	_	_	_	_	_
(7,274)	(13,878)	(11,271)	(8,259)	(15,077)	(13,083)
_	(16,344)	_	_	(20,372)	_
(43,428)	(42,278)	(39,858)	(49,671)	(47,710)	(44,747)
(338)	(221)	(106)	(528)	(293)	(106)
32,480	8,012	30,603	43,936	15,304	41,900
850,542	842,530	811,927	1,014,328	999,024	957,124
883,022	850,542	842,530	1,058,264	1,014,328	999,024
14,112	14,317	14,348	18,175	18,300	18,325
5,635	4,626	2,749	6,690	5,514	3,494
13,048	10,756	8,537	17,218	14,154	11,285
14,952	57,952	106,037	17,934	69,070	125,685
(43,428)	(42,278)	(39,858)	(49,671)	(47,710)	(44,747)
(338)	(221)	(106)	(528)	(293)	(106)
(311)	(312)	(301)	(371)	(370)	(355)
789	3,049	506	2,573	3,713	1,302
4,459	47,889	91,912	12,020	62,378	114,883
861,547	813,658	721,746	1,031,039	968,661	853,778
866,006	861,547	813,658	1,043,059	1,031,039	968,661
17,016	(11,005)	28,872	15,205	(16,711)	30,363
98.1%	101.3%	96.6%	98.6%	101.6%	97.0%
84,461	84,432	84,220	111,133	111,305	110,741
20.1%	(13.0)%	34.3%	13.7%	(15.0)%	27.4%
	(,-3	2 1.2 / 3	, ,	(,,)	,•

# Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Plan Liability	(5) Projected Covered Employee Payroll	(6) Net Pension Liability/(Asset) as a Percentage of Covered Employee Payroll
Firefighters	12/31/13	\$ 156,494	155,003	1,491	99.0%	\$ 26,521	5.6%
Division A	12/31/14	163,786	169,492	(5,706)	103.5	26,873	(21.2)
(with Social Security)	12/31/15	175,242	177,053	(1,811)	101.0	26,672	(6.8)
Firefighters	12/31/13	\$ 842,530	813,658	28,872	96.6%	\$ 84,220	34.3%
Division B	12/31/14	850,542	861,547	(11,005)	101.3	84,432	(13.0)
(without Social Security)	12/31/15	883,022	866,006	17,016	98.1	84,461	20.1
Total	12/31/13	\$ 999,024	968,661	30,363	97.0%	\$ 110,741	27.4%
Firefighters	12/31/14	1,014,328	1,031,039	(16,711)	101.6	111,305	(15.0)
Retirement System	12/31/15	1,058,264	1,043,059	15,205	98.6	111,133	13.7

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

# Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Employee Payroll	Contributions as a Percentage of Covered Payroll**
Firefighters	2013	\$ 3,493	3,493	_	26,521	13.17%
Division A	2014	5,514	5,514	_	26,873	20.52
(with Social Security)	2015	5,225	5,225	_	26,672	19.59
Firefighters	2013	\$ 11,286	11,286	_	84,220	13.40 %
Division B	2014	14,154	14,154	_	84,432	16.76
(without Social Security)	2015	18,683	18,683	_	84,461	22.12
Total	2013	\$ 14,779	14,779	_	110,741	13.35 %
Firefighters	2014	19,668	19,668	_	111,305	17.67
Retirement System	2015	23,908	23,908	_	111,133	21.51

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

^{*}Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

^{**}Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

# **All Retirement Systems**

# Schedules of Administrative and Investment **Expenses**

Year Ended December 31, 2015

	Total
	Total
Personal services:	444.050
Salaries and wages	\$11,259
Employee benefits	5,799
Total personal services	17,058
Professional services:	
Audit	491
Actuarial services	262
General counsel	1,834
Banking services	70
Security handling expense Investment advisor fees	1,144 48,550
Other consulting services	2,169
-	
Total professional services	54,520
Communications:	104
Telephone	194 501
Postage	
Total communications	695
Rentals:	
Office space	915
Office equipment rental	410
Total rentals	1,325
Miscellaneous:	
Data processing	473
Professional development	260
Contractual services	164
Supplies and maintenance	199 560
Insurance and bonding premiums Office supplies	72
Other	538
Depreciation expense	686
Total miscellaneous	2,952
Total administrative and investment expenses	
	\$76,550
Allocation of administrative expenses:	¢ 0.707
Noncontributory Retirement System	\$ 8,797 478
Contributory Retirement System	1,233
Public Safety Retirement System Firefighters Retirement System	371
Judges Retirement System	71
Utah Governors and Legislators Retirement Plan	5
Tier 2 Public Employees Retirement System	30
Tier 2 Public Safety and Firefighter Retirement System	3
401(k) Plan	6,665
457 Plan	762
Roth IRA Plan	112
Traditional IRA Plan	105
Health Reimbursement Arrangement (HRA)	35
Total administrative expenses	18,667
Investment administrative expense	9,333
Investment advisor fees:	2,333
Investment Fund	44,711
401(k) Plan	3,349
457 Plan	370
Roth IRA Plan	57
Traditional IRA Plan	63
Health Reimbursement Arrangement (HRA)	_
Total investment expenses	57,883
Total administrative and investment expense allocations	\$76,550
Total daministrative and investment expense anotations	۷,۰,۰,۰

# 2015

## UTAH RETIREMENT SYSTEMS

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

# INVESTMENT Section

## DEFINED BENEFIT INVESTMENTS

127	Report on Investment Activity
130	Outline of Investment Policies and Investment Summary
130	2015 Investment Summary
131	Asset Allocation
132	10-Year Total Pension Investment Rates of Return
133	Comparative Investment Results
134	List of Largest Assets Held and Schedules of Fees and Commissions
135	Investment Professionals — Defined Benefit Investments
	DEFINED CONTRIBUTION SAVINGS PLANS
137	Investment Highlights
139	Plans Comparative Annualized Rates of Return
141	List of Largest Assets Held and Schedules of Fees and Commissions
142	Investment Professionals — Defined Contribution Plans

#### **UTAH RETIREMENT SYSTEMS**

# 10-YEAR INVESTMENT COMPARISON

(in millions)





## UTAH RETIREMENT SYSTEMS

# **DEFINED BENEFIT INVESTMENTS**

# Report on Investment Activity

UTAH STATE RETIREMENT BOARD

#### **UTAH RETIREMENT SYSTEMS**

560 East 200 South Salt Lake City, Utah 84102-2044 801-366-7700 800-365-8772 801-366-7734 FAX

DANIEL D. ANDERSEN **EXECUTIVE DIRECTOR** 

April 27, 2016

Utah State Retirement Board 560 East 200 South Salt Lake City, UT 84102-2044

Dear Members of the Utah Retirement Systems:

The economic year 2015 was somewhat of a continuation of the economic year 2014 with world-wide market impacts resulting from issues such as plunging oil prices, an increase in U.S. interest rates, China's troubled economy, volatility in stock markets, decreases in commodity prices, mega-mergers, lackluster global economic growth, the strength of the dollar, and a number of geopolitical concerns. The world is also experiencing technological changes, aging populations, and high debt loads portending the high growth rates of the past may not return.

The markets in 2015 contracted compared to 2014. We stated we had concerns last year the markets were becoming somewhat overvalued. It now appears that that was the case, as the domestic equity market barely increased over 1% and the global equity markets were negative.

In the United States, the domestic equity market was positive in 2015 as compared to other markets. The equity market operated in a backdrop of low inflation, low interest rates, and low energy prices. Also, the unemployment rate continued to decline and wage growth increased. However, the Standard & Poors (S&P) 500 index returned only 1.4% for the year compared with 13.7% of the last year. The S&P 500 is indicative of large company stocks and most of the performance was attributed to this area. The small company stocks, as measured by the Russell 2000, were a negative (4.4%) as compared to a 4.9% a year ago. Very small company stocks, as measured by the Russell Microcap were also a negative (5.2%) as compared to a 3.7% a year ago. Equity markets continue to be poised for a correction going into 2016.

As in 2014, both developed and emerging international markets did not fare well given the headwind of the strong U.S. dollar. The developed international market, as measured by the Europe Australia Asia Far East index (EAFE), returned 5.33% in local currency, but negative (0.8%) versus a negative (4.9%) for the previous year in dollar terms. Emerging Markets, as measured by the Morgan Stanley Capital International (MSCI) Emerging Markets Net Index, returned another disappointing negative year posting (14.6%) versus (1.8%) for the previous year. Emerging markets have yet to regain their peak set in 2007.

## Defined Benefit Investments (Continued)

Global bonds, as measured by the Barclays Global Aggregate, returned a negative (3.2%) compared to 0.6% the previous year. Yet the hedged bond index for global bonds returned 1.02%. Thus global bonds were overwhelmed by the strength of the U.S. dollar. The domestic bond market as measured by the Barclays Aggregate returned 0.6% as compared to a 6.0% the previous year. Interest rates were only slightly positive for 2015. The 10-year Treasury note stood at 2.17% at the beginning of the year and ended the year at 2.27%. Given the Fed's desire to raise rates, the market was somewhat surprised in the almost flat change in long-term rates.

Private real estate continued to do well with another positive year of 13.3% versus 11.8% for the previous year, as measured by the National Council of Real Estate Investment Fiduciaries (NCREIF). However, public real estate as measured by the National Association of Real Estate Investment Trusts (NAREIT) Equity Index returned 2.8% compared to last year's return of 27.2%. The lower return can partially be attributed to its significant correlation to small company stocks, which experienced negative returns in 2015.

As we stated in our 2014 letter, we again believe there is a possibility of a market correction. We try to position the portfolio in such a way to protect principal as much as possible in negative equity markets. Since the Great Recession of 2008, we believe our current investment strategy is best and it has proven to be successful, given the added protection we have built into the portfolio to protect, as much as possible, against a negative equity market. Although URS may lose money in negative equity markets, it expects to lose less than most of its peers because of how the portfolio is structured. By losing less money in negative equity markets, the compounding effect going forward is much greater and produces more wealth to the portfolio in the long run. However, positioning the portfolio to protect in negative equity markets, with a more diversified portfolio, may also cause the portfolio to lag our peer group in very strong equity markets. However, because public equity is still our largest asset class, we will still do well.

The URS asset allocation takes a long-term perspective and is designed to anticipate a variety of different economic environments and generate the target actuarial assumed rate of return over the long run. The URS asset allocation is not designed to outperform our peer group. However, over the past five years, when equity markets have been relatively strong, our diversified portfolio has outperformed over 70% of our peer group. In negative global equity markets, such as

2008, 2011, and 2015, we have been either in the top decile of our peer group or just below it. We have been able to add value with a lower risk and more diversified portfolio.

Specifically, our alternative investments in private markets achieved a 5.8% return and added positive diversification for 2015. They outperformed global equity by 8%. Certainly we were disappointed the global equity markets performed poorly, but satisfied that our diversifying alternative assets added significant value above the global equity markets.

It is difficult to be a short-term investor when the market is yielding such limited worthwhile opportunities. Being patient and always having a long-term bias will generally produce the returns necessary to meet our long-term goals and objectives. We still expect markets to be volatile and in this very low interest rate environment we are not willing to add additional risk to the portfolio that we do not believe will be rewarded. We believe the URS asset allocation is the best model at present to meet the long-term obligations of the Fund, protect the members' benefits, and minimize risk and volatility to the contribution rates and budgets of participating employers.

We also want to emphasize we paid nearly \$333 million in benefits net of contributions from our investment portfolio alone in 2015. Over the past 10 years, that number has been \$2.6 billion. We are proud this money is being paid to our beneficiaries, throughout the state, to help them in their retirement years. These retirees, in turn, will pay that money back into local economies, and the Utah economy as a whole, producing a multiplier effect that benefits all Utah citizens.

Fair value rates of return consist of cash income plus gains and losses due to changes in fair value, whether realized or unrealized. Performance calculations are prepared using time-weighted rate of return methodology based upon market values.

We end with the same comment as last year because it is still equally applicable: "If one chases returns in good times, one cannot simultaneously build protection for bad times. We still strongly believe we have a solid diversified portfolio that will be able to meet our long-term obligations."

Brue H. Cundik

Bruce H. Cundick Chief Investment Officer









# **Outline of Investment Policies**

The governing body of the Utah Retirement Systems (Systems) is the seven member Utah State Retirement Board (Board).

The Board is composed of the Utah State Treasurer, who serves as an ex-officio member, and six trustees who are appointed by the Governor. Four board members are appointed for their investment expertise, and two members are appointed to represent employee and employer interests.

The Board has statutory authority to pool pension assets in the Utah Retirement Investment Fund (Fund). Statutes also establish that this Fund will be invested in accordance with the "prudent person rule." The prudent person rule requires all members of the Board and investment staff to discharge their duties solely in the interest of Systems' participants and beneficiaries and with the care, skill, prudence, and diligence that they would exercise in the conduct of their own affairs. To this end, a Statement of Investment Policy and Performance Objectives has been created for the Fund and adopted by the Board. The purpose of this Statement is to:

- Outline the expected return and risk profile for the Fund;
- Establish the target asset allocation mix and acceptable rebalancing ranges;
- Describe plan and manager policies and objectives for performance evaluation;
- Communicate investment performance standards to investment managers.

The primary investment objectives are to preserve Fund assets and generate an appropriate level of risk-adjusted return to meet future pension obligations. The Systems periodically complete an asset allocation and liability study to determine the optimal portfolio diversification to meet those obligations.

# 2015 Investment Summary

(dollars in thousands)	2015 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2015 Ending Fair Value Balance	Percent of Total Fair Value
Short-term securities	\$ 1,572,064	100,296,633	(99,602,624)	(36,274)	2,229,799	8.23%
Debt securities	4,212,687	28,535,993	(28,345,423)	(121,651)	4,281,606	15.81
Equities	9,576,809	2,011,672	(1,718,939)	(676,032)	9,193,510	33.94
Absolute return	4,643,417	600,586	(1,047,267)	(55,415)	4,141,321	15.29
Private equity	3,170,276	576,736	(435,283)	(97,049)	3,214,680	11.87
Real assets	3,780,357	746,546	(616,035)	114,530	4,025,398	14.86
Totals	\$ 26,955,610	132,768,166	(131,765,571)	(871,891)	27,086,314	100.00%

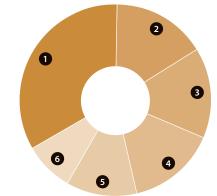
#### Defined Benefit Investments (Continued)

The Systems' investment portfolio includes strategic, long-term commitments in the following asset classes: Equities, Debt Securities, Real Assets, Private Equity, and Absolute Return. Asset allocation is reviewed in conjunction with the plan liabilities at least every five years.

The Board's policy is to establish a long-term strategic asset allocation that manages overall expected portfolio risk (volatility) and maximizes expected return without unduly constraining the discretionary, tactical decision-making process of the investment managers.

## YEAR-END ASSET ALLOCATION AT FAIR VALUE





- 1 Equities (33.9%) 2 Debt Securities (15.8%) 3 Absolute Return (15.3%)
- 4 Real Assets (14.9%) 5 Private Equity (11.9%) 6 Short-Term Securities (8.2%)

Director, supported by the Board, staff, and consultant, selects appropriate money management experts to invest the Fund assets. This selection process includes the creation of specific search criteria, completion and documentation of analysis, and due diligence on potential candidates, and interviews completed by the staff and/or Board. It is not the staff or Board's intention to be involved with the day-to-day decisions made by external investment managers. Internal investment staff also manages segments of the portfolio.

To implement the asset allocation plan, the Executive

All managers must acknowledge a co-fiduciary status to the Fund. All managers are expected to communicate with the staff at least quarterly.

Managers' portfolios are evaluated both against appropriate market indices and similar manager style groups. The investment policy outlines appropriate benchmarks.

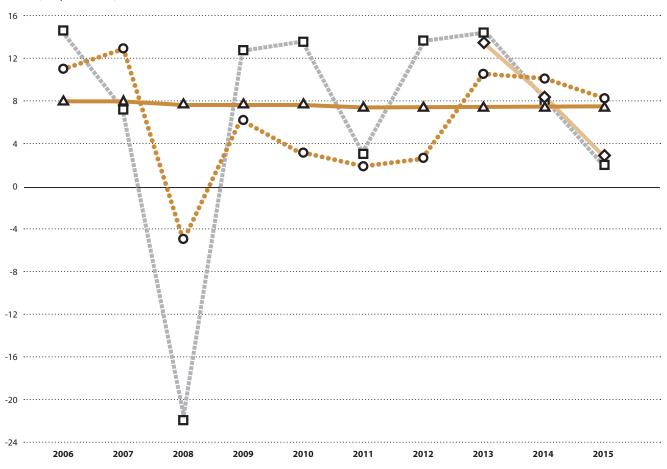
Investment return calculations are prepared using a time-weighted rate of return.

The allocation of assets as reported to the board are as follows: Equity securities 37.8%, Debt securities 20.8%, Absolute return 15.5%, Private equity 12.1% and Real assets 13.9%. These allocation percentages differ from investment asset percentages presented in the MD&A and Statement of Fiduciary Net Position as a result of different methodologies used for categorizing investment assets for investment purposes versus financial statement presentation purposes.

December 31,	2007	2008	2009	2010	2011	2012	2013	2014	2015
Equities securities	39.1%	29.2	37.3	35.8	35.2	36.2	37.5	35.5	33.9
Debt securities	23.3	26.1	23.7	21.0	19.4	17.9	16.0	15.7	15.8
Private equity	5.0	8.2	7.4	8.8	10.8	11.3	11.0	11.8	11.9
Real assets	16.4	18.7	14.7	14.4	13.9	13.5	12.2	14.0	14.9
Short-term securities	6.6	5.9	4.2	5.0	4.9	5.9	6.6	5.8	8.2
Absolute return	9.6	11.9	12.7	15.0	15.8	15.2	16.7	17.2	15.3
Total portfolio	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# 10-Year Total Pension Investment Rates of Return

(in percents)



(dollars in millions)

	Total Investment Portfolio Fair Value	(1) Smooth Expected Rate of Return	(2) Fair Value Rate of Return	(3) Actuarial Assumed Interest Rate	(4) Money Weighted Rate of Return
2006	\$21,861	11.10%	14.77%	8.00%	_
2007	22,979	13.04	7.15	8.00	_
2008	17,565	(5.03)	(22.30)	7.75	_
2009	19,058	6.11	12.88	7.75	_
2010	20,992	2.87	13.73	7.75	_
2011	20,796	1.34	2.89	7.50	_
2012	22,871	2.66	13.10	7.50	_
2013	25,765	11.03	14.89	7.50	14.55%
2014	26,955	10.20	7.52	7.50	7.94
2015	27,086	7.84	1.92	7.50	2.02

- (1) Smoothed Expected Rate of Return consists of investment income in excess or shortfall of the expected 7.50% on fair value smoothed over a 5-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.
- (2) Fair Value Rate of Return consists of cash income plus gains and losses due to changes in fair value, whether realized or unrealized (before deduction of investment fees). (For 2015, 1.74% net of fees.)
- (3) Actuarial Assumed Interest Rate is the assumed rate of return on the fair value of assets, and is used in establishing retirement contribution rates and in determining current benefit reserve requirements.
- (4) Money Weighted Rate of Return is calculated as the internal rate of return on pension plan investments, net of investment expenses.

# Comparative Investment Results (1)(2)(3)

Year Ended December 31, 2015

Investment Option Comparative Index	1 Year	3 Year	5 Year	10 Year
Global Equity		<b>8.82</b> % 7.95	<b>8.04</b> % 6.12	<b>5.72</b> % 4.84
Fund Benchmark	0.31	<b>1.85</b> 1.53	<b>4.01</b> 3.50	<b>5.19</b> 4.74
Real Assets*		<b>10.85</b> 5.72	<b>10.92</b> 6.41	<b>5.11</b> 6.84
Private Equity**  Private Equity Benchmark	12.19	<b>17.23</b> 18.13	<b>16.01</b> 15.64	<b>12.84</b> 10.90
Absolute Return		<b>4.84</b> 5.05	<b>4.42</b> 5.07	<b>3.56</b> 6.24
Short Term		<b>0.07</b> 0.05	<b>0.10</b> 0.07	<b>1.95</b> 1.24
Fund Benchmark	1.28	<b>7.95</b> 6.84	<b>7.89</b> 7.00	<b>6.02</b> 6.11
3% Barclays Capital Global Aggregate Bond Index 1% Russell 3000 Index + 2.0%				
CAI Public Fund —Very Large Database Median	1.00	7.91	7.57	6.02
Inflation	0.38	0.72	1.40	1.83

⁽¹⁾ Investment measurement services provided by Callan Associates Inc.

⁽²⁾ Total rates of return include cash income plus gains and losses due to changes in fair value, whether realized or unrealized.

⁽³⁾ Investment return calculations were prepared using a time-weighted return.

^{*}The non real estate portion of Real Assets only reflects returns for Years 1 and 3. Years 5 and 10 are for real estate only using a NCREIF Total Index Benchmark.

^{**}The 10-year benchmark consists of 85% Russell 3000 Index + 3.5% and 15% Russell 3000 Index +2.0% prior to 9/30/2008.

# List of Largest Assets Held*

December 31, 2015

#### LARGEST EQUITY HOLDINGS

(By Fair Value)

Description	Shares	Fair Value
Apple Inc.	809,995	\$ 85,260,074
Alphabet	99,329	77,278,955
Microsoft Corp.	1,168,429	64,824,441
Nestle, SA	771,570	57,463,080
Wells Fargo & Co.	949,463	51,612,809
Amazon	69,898	47,243,359
JP Morgan Chase	699,093	46,161,111
Exxon Mobile Corp.	587,821	45,820,647
Facebook	410,225	42,934,149
Pfizer Inc.	1,322,593	42,693,302

## LARGEST DEBT SECURITIES HOLDINGS

(By Fair Value)

Description	Par Value	Fair Value
US Treasury Notes 12-15-2015 1.25% Due 12-15-2018 \$	61,920,000	61,789,411
US Treasury Notes DTD 11-30-2015 2% Due 11-30-2022	61,905,000	61,566,442
US Treasury Bonds 00245 2.875% Due 08-15-2045	50,555,000	49,099,572
US Treasury Notes DTD 10-31-2015 1.375% Due10-31-2020	49,285,000	48,414,824
US Treasury Notes 0.125% Infl Indx 04-15-2020	41,930,000	42,042,530
US Treasury Notes Inflation Linked 0.375% DTD 07/15/2015 07-15-2025	6 38,690,000	37,568,897
Government of United Kingdom 1.875% I/L STK 11-22-2022 GBP	15,734,624	34,706,535
Republic of Italy 2.35% IDX/LKD NTS 9-15-2024 Eur1000	26,456,000	33,405,601
US Treasury Notes DTD 01/15/2013 Tips 01-15-2023	31,826,000	31,442,362
US Treasury Notes DTD 11/15/2015 1.25% Due 11-15-2018	30,470,000	30,422,406

^{*}A complete list of public traded securities is available upon request.

# **Schedules of Fees** and Commissions

Year Ended December 31, 2015

#### **BROKER COMMISSION FEES**

Broker	Total Commission Fees
Instinet	\$ 285,290
BNY	283,410
Frank Russell SEC/Broadcourt	192,503
JP Morgan	182,064
Citation Group	134,317
Goldman Sachs	99,309
Jefferies	98,593
Investment Technology Group	95,171
Merrill Lynch	91,306
National Financial Services	75,035
Westminster	67,007
Citigroup Global Markets	66,257
UBS	62,160
Citibank	60,889
Sanford C Bernstein	57,195
CLSA	54,599
Stifel Nicolaus & Company	51,314
All others	790,451
Total	\$ 2,746,870

## SCHEDULE OF INVESTMENT **FEES AND COMMISSIONS**

Investment advisor fees:	
Equity securities	\$ 2,921,916
Debt securities	7,003,151
Private equity	8,081,767
Absolute return	25,380,626
Short-term	356,167
Real assets	967,373
Total investment advisor fees	44,711,000
Investment brokerage fees	2,746,870
Total fees and commissions	\$ 47,457,870
The state of the s	

Utah Retirement Systems uses a commission recapture program as part of its trading strategies. During the year ending December 31, 2015, Utah Retirement Systems recaptured approximately \$168,671 from the gross commission charges. This recaptured sum was used to cover or offset the \$126,688 in investment expenses that otherwise would have been paid for with investment funds.

# **Investment Professionals**

**Abbott Capital** Management, LLC 1290 Avenue of the Americas 9th Floor New York, NY 10104

**AEW Capital** Management L.P. World Trade Center East Two Seaport Lane Boston, MA 02110-2021

BlackRock Asset Management 40 East 52nd Street New York, NY 10022

BlackRock Realty Advisors One Boston Place 32nd Floor Boston, MA 02108

**Brandes Investment** Partners L.P. 11988 El Camino Real Suite 500 San Diego, CA 92130

CB Richard Ellis Global Investors 515 South Flower Street 31st Floor Los Angeles, CA 90071

CDAM LLP One Sansome Street Suite 1895 San Francisco, CA 94104

**Collier Companies** 220 N. Main Street Gainesville, FL 32601

Cottonwood Partners 2750 E. Cottonwood Parkway Suite 560 Cottonwood Heights, UT 84121 Dimensional Fund Advisors, Inc. 1299 Ocean Avenue 11th Floor Santa Monica, CA 90401

The Forest Company Heritage Hall, PO Box 225 Le Marchant Street, St. Peter Port Guernsey, GV1 4HY, Channel Islands

Founders Properties, LLC 10350 Bren Road West Hopkins, MN 55343-9014

Goldman, Sachs & Co./ Whitehall 85 Broad Street New York, NY 10004

Hancock Natural Resources Group 99 High Street Boston, MA 02110

Hart Realty Advisors, Inc. One Mill Pond Lane Simsbury, CT 06070

International Value Advisors 645 Madison Avenue 12th Floor New York, NY 10022

iStorage 132 West Plant Street Suite 210 Winter Garden, FL 34787

JP Morgan Fleming Asset Management 227 West Monroe Chicago, IL 60606

Longview Partners L.P. Thames Court 1 Oueenhithe London EC4V 3RL **United Kingdom** 

Portfolio Advisors 9 Old Kings Highway South Darien, CT 06820

Real Estate Capital Partners 114 West 47th Street New York, NY 10036

Sasco Capital 10 Sasco Hill Road Fairfield, CT 06824

Schneider Capital Management 460 East Swedesford Road Suite 1080 Wayne, PA 19087

Silchester International Investors, Inc. 780 Third Avenue 42 Floor

New York, NY 10017

Standish Investment Management 201 Washington Street Suite 2900 Boston, MA 02108

The Praedium Group, LLC 825 Third Avenue 36th Floor New York, NY 10022

**Torchlight Investors** 230 Park Avenue New York, NY 10169 **TIAA-CREF Asset Management** One Financial Plaza Hartford, CT 06103

**USAA Real Estate Company** 9830 Colonnade Blvd. Suite 600 San Antonio, TX 78230

Wasatch Advisors, Inc. 150 Social Hall Avenue Suite 400 Salt Lake City, UT 84111

WCM Investment Management 281 Brooks Street Laguna Beach, CA 92651

# Utah Retirement **Systems** Consultants

Albourne America LLC 655 Montgomery Street San Francisco, CA 94111

Callan Associates, Inc. 101 California Street Suite 3500 San Francisco, CA 94111

**Russell Implementation** Services, Inc. 1301 Second Avenue 18th Floor Seattle, WA 98101

The Northern Trust Company 50 South LaSalle Street Chicago, IL 60675









## Utah Retirement Systems

# **DEFINED CONTRIBUTION SAVINGS PLANS INVESTMENTS**

# Investment **Highlights**

Utah Retirement Systems' 401(k), 457, Roth and traditional IRAs are tax-advantaged retirement savings plans authorized under sections 401(k),

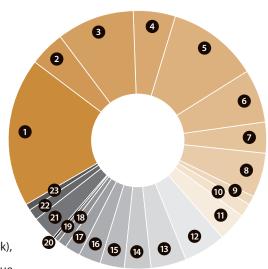
457(b), and 408 of the Internal Revenue

Code. These plans are available to employees of the state, local government, and public education employers throughout Utah.

The participants of the plans had a choice of 20 core investment funds and a brokerage window in which their monies may be invested. Each participant may choose one or a combination of the core funds. The table to the far right shows the total investments in the various investment options. The asset graph to the left of the table shows the asset distribution as of December 31, 2015.

## Investment and Administrative Expenses

There are no front-end load, redemption, or other hidden fees associated with these plans. All costs reflected in the table on page 138 are deducted from earnings prior to posting to participant accounts and do not appear as separate items on participant statements.



- 1 Income Fund (18.82%) 2 Bond Fund (4.51%)
  - 3 Balanced Fund (9.74%)
- 4 Large Cap Stock Value Fund (5.34%) 5 Large Cap Stock Index Fund (11.47%) 6 Large Cap Stock Growth Fund (6.78%)
  - 7 International Fund (3.81%) 8 Small Cap Stock Fund (5.72%)
  - 9 Target Retired Fund (0.96%)
  - 10 Target Date 2010 Fund (1.79%)
  - 11 Target Date 2015 Fund (3.56%)
  - 12 Target Date 2020 Fund (5.31%)
  - 13 Target Date 2025 Fund (4.48%)
  - 14 Target Date 2030 Fund (3.26%)
  - 15 Target Date 2035 Fund (3.09%)
  - 16 Target Date 2040 Fund 2.87%)
  - 17 Target Date 2045 Fund (2.12%)
  - 18 Target Date 2050 Fund (0.99%)
  - 19 Target Date 2055 Fund (0.20%)
  - 20 Target Date 2060 Fund (0.07%)
  - 21 Brokerage Window (3.10%)
  - 22 Tier 2 DC Nonvested (1.50%) 23 HRA Fund (0.51%)

## **DEFINED CONTRIBUTION SAVINGS PLANS INVESTMENTS**

December 31, 2015

(in thousands)

Investment Options		Total
Income Fund	\$	847,472
Bond Fund		203,230
Balanced Fund		438,559
Large Cap Stock Value Fund		240,363
Large Cap Stock Index Fund		516,368
Large Cap Stock Growth Fund	l	305,317
International Fund		171,493
Small Cap Stock Fund		257,410
Target Retired Fund		43,011
Target Date 2010 Fund		80,693
Target Date 2015 Fund		160,233
Target Date 2020 Fund		239,095
Target Date 2025 Fund		201,798
Target Date 2030 Fund		146,828
Target Date 2035 Fund		139,213
Target Date 2040 Fund		129,413
Target Date 2045 Fund		95,383
Target Date 2050 Fund		44,518
Target Date 2055 Fund		9,009
Target Date 2060 Fund		3,310
Brokerage Window		139,380
Tier 2 Nonvested		67,369
HRA Fund		23,156
Totals	\$4	,502,621

## **2015 INVESTMENT SUMMARY AND INVESTMENT AND ADMINISTRATIVE FEES**

(dollars in thousands)

Fund	2015 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2015 Ending Fair Value	Percent of Total In Fair Value	vestment Fees	Admin- istrative Fees	Total Fees
Income Fund	\$ 835,138	65,938	57,460	3,856	847,472	18.82%	0.29%	0.16%	0.45%
Bond Fund	228,078	16,627	33,695	(7,780)	203,230	4.51	0.12	0.16	0.28
Balanced Fund	448,186	16,793	19,869	(6,551)	438,559	9.74	0.27	0.16	0.43
Large Cap Stock Value Fund	276,331	12,263	22,898	(25,333)	240,363	5.34	0.42	0.16	0.58
Large Cap Stock Index Fund	541,653	14,402	43,348	3,661	516,368	11.47	0.03	0.16	0.19
Large Cap Stock Growth Fund	259,291	43,739	13,916	16,203	305,317	6.78	0.31	0.16	0.47
International Fund	181,770	16,575	14,434	(12,418)	171,493	3.81	0.06	0.16	0.22
Small Cap Stock Fund	280,066	13,027	15,814	(19,869)	257,410	5.72	0.37	0.16	0.53
Short Horizon Fund *	218,288	_	218,288	_	_	0.00	_	_	
Medium Horizon Fund *	442,728	_	442,728	_	_	0.00	_	_	_
Long Horizon Fund *	538,509	_	538,509	_	_	0.00	_	_	_
Target Date Retired Fund	_	53,500	10,429	(60)	43,011	0.96	0.19	0.16	0.35
Target Date 2010 Fund	_	98,179	17,532	46	80,693	1.79	0.20	0.16	0.36
Target Date 2015 Fund	_	188,813	29,063	483	160,233	3.56	0.22	0.16	0.38
Target Date 2020 Fund	_	254,321	15,024	(202)	239,095	5.31	0.22	0.16	0.38
Target Date 2025 Fund	_	213,153	10,293	(1,062)	201,798	4.48	0.22	0.16	0.38
Target Date 2030 Fund	_	154,395	6,397	(1,170)	146,828	3.26	0.23	0.16	0.39
Target Date 2035 Fund	_	145,947	4,950	(1,784)	139,213	3.09	0.22	0.16	0.38
Target Date 2040 Fund	_	135,071	3,647	(2,011)	129,413	2.87	0.22	0.16	0.38
Target Date 2045 Fund	_	98,918	2,088	(1,447)	95,383	2.12	0.22	0.16	0.38
Target Date 2050 Fund	_	45,975	871	(586)	44,518	0.99	0.22	0.16	0.38
Target Date 2055 Fund	_	9,357	219	(129)	9,009	0.20	0.22	0.16	0.38
Target Date 2060 Fund	_	4,260	864	(86)	3,310	0.07	0.22	0.16	0.38
Brokerage Window	133,992	30,427	15,473	(9,566)	139,380	3.10	N/A	N/A	N/A
Tier 2 Nonvested	49,367	27,293	7,945	(1,346)	67,369	1.50	0.18	0.16	0.34
HRA Fund	18,082	8,046	2,972	_	23,156	0.51	0.37	0.16	0.53
Total	\$ 4,451,479	1,667,019	1,548,726	(67,151)	4,502,621	100.00%			

^{*}These funds were closed on January 1, 2015, and transferred to the appropriate Target Date Fund based upon the member's age.

The administrative fee for the brokerage window account is a flat rate of \$25 per quarter. Investment fees and broker commissions are paid by the participant according to the trading and securities selected within the brokerage window.

By administering the defined contribution plans internally rather than through a third party, expenses are kept at very low levels to maximize earnings to each participant. The table above shows these expenses to be nominal when compared to much higher fees on most annuities, mutual funds, and insurance contracts.

An annual account maintenance fee of \$15 is assessed to inactive accounts with combined 401(k), 457, Roth and traditional IRA balances of less than \$5,000. There is a \$60 one-time service fee for loans, and a 2% fee for short-term trading (more frequently than 30 days).

The investments described are not FDIC insured; not deposits or obligations of, or guaranteed by, any financial institution; and not guaranteed by the Utah Retirement Systems or any government agency.

The past performance of any of these funds does not guarantee future results.

# **Defined Contribution Plans** Comparative Annualized Rates of Return

Year Ended December 31, 2015

Investment Option			A	nnualized
Comparative Index	1-Year	3-Year	5-Year	10-Year
Income Fund Treasury Bills Index	<b>1.58</b> % 0.05	<b>1.68</b> % 0.05	<b>1.76</b> % 0.07	<b>2.79</b> % 1.24
Bond Fund Barclays Capital Aggregate Bond Index	( <b>0.27</b> ) 0.55	<b>2.02</b> 1.44	<b>3.74</b> 3.25	<b>5.19</b> 4.51
Balanced Fund	<b>1.29</b> 1.00	<b>10.80</b> 9.55	<b>9.55</b> 8.88	<b>6.75</b> 6.55
<b>Large Cap Stock Value Fund</b> Russell 1000 Value Index	<b>(4.55)</b> (3.83)	<b>13.93</b> 13.08	<b>11.53</b> 11.27	<b>5.57</b> 6.16
Large Cap Stock Index Fund Large Cap Stock Blended Index (2)	<b>0.80</b> 0.92	<b>14.73</b> 15.01	<b>12.13</b> 12.37	<b>7.00</b> 7.21
Russell 1000 Growth Index	<b>8.97</b> 5.67	<b>18.37</b> 16.83	<b>14.30</b> 13.53	<b>8.29</b> 8.53
International Fund International Blended Index ⁽³⁾	<b>(4.58)</b> (4.60)	<b>2.03</b> 2.02	<b>1.31</b> 1.30	<b>1.55</b> 1.88
Small Cap Stock Fund	<b>(3.44)</b> (4.41)	<b>12.64</b> 11.65	<b>10.28</b> 9.19	<b>7.58</b> 6.80
Target Retired Fund Target Retired Index (4)	<b>0.32</b> (0.12)	N/A	N/A	N/A —
Target Date 2010 Fund Target Date 2010 Index (5)	<b>0.00</b> 0.16	N/A	N/A —	N/A —
Target Date 2015 Fund Target Date 2015 Index (6)	<b>0.29</b> 0.68	N/A	N/A —	N/A —
Target Date 2020 Fund	<b>0.15</b> 0.47	N/A	N/A	N/A
		Co	ontinued on p	page 140.

#### Past performance does not guarantee future results.

All fund returns are reported net of investment and administrative fees. All returns for periods greater than one year are annualized.

Investment return calculations were prepared using a time-weighted return. Comparative indexes below reflect current asset allocation targets.

- (1) Balanced Index: 60% S&P 500 Index, 40% Barclays Capital Aggregate Bond Index through 1/1/2015, 60% Russell 1000 Index, 40% Barclays Capital
- (2) Large Cap Stock Blended Index: S&P 500 Index through 6/30/11, Russell 1000 Index thereafter
- International Blended Index: MSCI EAFE Index through 3/31/11, then MSCI ACWI ex US IMI Index thereafter
- (4) Target Retired Index: 25% 90-Day T-Bills, 20% Barclays Capital U.S. Aggregate Bond Index, 14% Russell 1000 Index, 4% MSCI ACWI ex. U.S. IMI, 1% Russell 2000 Index, 10% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 3% Dow Jones UBS Commodity Index, 20% Barclays Capital Global Inflation-Linked Bond Index 1-10 Year (U.S. Dollar Hedged), 3% NFI-ODCE (Value Weighted)
- (5) Target Date 2010 Index: 20% 90-Day T-Bills, 21% Barclays Capital U.S. Aggregate Bond Index, 18% Russell 1000 Index, 5% MSCI ACWI ex. U.S. IMI, 1% Russell 2000 Index, 10% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 3% Dow Jones UBS Commodity Index, 17% Barclays Capital Global Inflation-Linked Bond Index 1-10 Year (U.S. Dollar Hedged), 5% NFI-ODCE (Value Weighted)
- (6) Target Date 2015 Index: 15% 90-Day T-Bills, 19% Barclays Capital U.S. Aggregate Bond Index, 21% Russell 1000 Index, 8% MSCI ACWI ex. U.S. IMI, 2% Russell 2000 Index, 10% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 3% Dow Jones UBS Commodity Index, 12% Barclays Capital Global Inflation-Linked Bond Index 1-10 Year (U.S. Dollar Hedged), 10% NFI-ODCE (Value Weighted)
- (7) Target Date 2020 Index: 10% 90-Day T-Bills, 18% Barclays Capital U.S. Aggregate Bond Index, 1.5% Russell 1000 Value Index, 23% Russell 1000 Index, 1.5% Russell 1000 Growth Index, 13% MSCI ACWI ex. U.S. IMI, 3% Russell 2000 Index, 10% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 3% Dow Jones UBS Commodity Index, 7% Barclays Capital Global Inflation-Linked Bond Index 1-10 Year (U.S. Dollar Hedged), 10% NFI-ODCE (Value Weighted)

## **Defined Contribution Plans** Comparative Annualized Rates of Return (Concluded)

Year Ended December 31, 2015

Investment Option				Annualized
Comparative Index	1-Year	3-Year	5-Year	10-Year
Target Date 2025 Fund Target Date 2025 Index ⁽⁸⁾	<b>(0.25)</b> (0.10)	N/A	N/A	N/A
Target Date 2030 Fund Target Date 2030 Index (9)	<b>(0.64)</b> (0.64)	N/A	N/A	N/A
Target Date 2035 Fund	<b>(1.15)</b> (1.36)	N/A	N/A	N/A —
Target Date 2040 Fund	<b>(1.29)</b> (1.86)	N/A	N/A	N/A —
Target Date 2045 Fund	<b>(1.40)</b> (1.86)	N/A	N/A	N/A —
Target Date 2050 Fund Target Date 2050 Index ⁽¹³⁾	<b>(1.40)</b> (1.86)	N/A	N/A	N/A —
Target Date 2055 Fund	<b>(1.40)</b> (1.86)	N/A	N/A	N/A —
Target Date 2060 Fund Target Date 2060 Index ⁽¹⁵⁾	<b>(1.40)</b> (1.86)	N/A	N/A	N/A —
Tier 2 Nonvested Fund Tier 2 Nonvested Index ⁽¹⁶⁾	<b>(1.57)</b> (1.71)	<b>5.06</b> 4.89	N/A	N/A —
HRA Fund Treasury Bills Index	<b>0.00</b> 0.05	<b>0.00</b> 0.05	<b>0.00</b> 0.07	<b>N/A</b> N/A

#### Past performance does not guarantee future results.

- Target Date 2025 Index: 5% 90-Day T-Bills, 13% Barclays Capital U.S. Aggregate Bond Index, 3% Russell 1000 Value Index, 25% Russell 1000 Index, 3% Russell 1000 Growth Index, 19% MSCI ACWI ex. U.S. IMI, 5% Russell 2000 Index, 8% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 3% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 2% Barclays Capital Global Inflation-Linked Bond Index 1-10 Year (U.S. Dollar Hedged), 10% NFI-ODCE (Value Weighted)
- Target Date 2030 Index: 9% Barclays Capital U.S. Aggregate Bond Index, 5% Russell 1000 Value Index, 23% Russell 1000 Index, 5% Russell 1000 Growth Index, 27% MSCI ACWI ex. U.S. IMI, 8% Russell 2000 Index, 5% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 10% NFI-ODCE (Value Weighted)
- (10) Target Date 2035 Index: 4% Barclays Capital U.S. Aggregate Bond Index, 7.5% Russell 1000 Value Index, 22% Russell 1000 Index, 7.5% Russell 1000 Growth Index, 32% MSCI ACWI ex. U.S. IMI, 9% Russell 2000 Index, 3% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 7% NFI-ODCE (Value Weighted)
- (11) Target Date 2040 Index: 3% Barclays Capital U.S. Aggregate Bond Index, 10% Russell 1000 Value Index, 20% Russell 1000 Index, 10% Russell 1000 Growth Index, 33% MSCI ACWI ex. U.S. IMI, 10% Russell 2000 Index, 2% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 4% NFI-ODCE (Value Weighted)
- (12) Target Date 2045 Index: 3% Barclays Capital U.S. Aggregate Bond Index, 10% Russell 1000 Value Index, 20% Russell 1000 Index, 10% Russell 1000

- Growth Index, 33% MSCI ACWI ex. U.S. IMI, 10% Russell 2000 Index, 2% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 4% NFI-ODCE (Value Weighted)
- (13) Target Date 2050 Index: 3% Barclays Capital U.S. Aggregate Bond Index, 10% Russell 1000 Value Index, 20% Russell 1000 Index, 10% Russell 1000 Growth Index, 33% MSCI ACWI ex. U.S. IMI, 10% Russell 2000 Index, 2% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 4% NFI-ODCE (Value Weighted)
- (14) Target Date 2055 Index: 3% Barclays Capital U.S. Aggregate Bond Index, 10% Russell 1000 Value Index, 20% Russell 1000 Index, 10% Russell 1000 Growth Index, 33% MSCI ACWI ex. U.S. IMI, 10% Russell 2000 Index, 2% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 4% NFI-ODCE (Value Weighted)
- (15) Target Date 2060 Index: 3% Barclays Capital U.S. Aggregate Bond Index, 10% Russell 1000 Value Index, 20% Russell 1000 Index, 10% Russell 1000 Growth Index, 33% MSCI ACWI ex. U.S. IMI, 10% Russell 2000 Index, 2% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 4% Dow Jones UBS Commodity Index, 4% NFI-ODCE (Value Weighted)
- (16) Tier 2 Nonvested Index: 30% Barclays Capital U.S. Aggregate Bond Index, 23% Russell 1000 Index, 18% MSCI ACWI ex. U.S. IMI, 5% Russell 2000 Index, 10% Barclays Global Aggregate ex. U.S. Bond Index (Hedged), 4% Russell Fundamental U.S. Select Real Estate Index, 5% Dow Jones UBS Commodity Index, 5% Barclays Capital Global Inflation-Linked Bond Index 1-10 Year (U.S. Dollar Hedged)

# List of Largest Assets Held

December 31, 2015

#### LARGEST EQUITY HOLDINGS

(By Fair Value)

Description	Shares	Fair Value
Alphabet Inc.	56,954	\$ 44,718,549
Apple Inc.	383,726	40,390,999
Amazon Inc.	47,423	32,052,731
Microsoft Corp.	503,830	27,952,488
Facebook Inc.	261,065	27,323,063
Visa Inc.	308,138	23,896,102
Mastercard Inc.	229,760	22,369,434
Home Depot Inc.	140,090	18,526,903
Allergan Inc.	57,760	18,050,000
Celegene Corp.	145,875	17,469,990

#### LARGEST DEBT SECURITIES HOLDINGS

(By Fair Value)

Description	Par Value	Fair Value
US Treasury Note 2% Due 2-15-2023	\$ 29,550,010	\$ 29,378,019
US Treasury Note .75% Due 2-28-2018	21,370,000	21,188,013
US Treasury Note 1.5% Due 12-31-2018	18,545,000	18,629,027
US Treasury Note 2% Due 10-31-2021	16,800,000	16,846,586
US Treasury Note 2% Due 2-15-2025	16,420,000	16,051,190
US Treasury Note 1% Due 8-15-2018	13,465,000	13,428,553
Federal Home Loan Bank 1.125% Due 4-28-2018	12,580,000	12,547,204
Federal Home Loan Bank 1.25% Due 6-8-2018	11,895,000	11,885,651
Federal Home Loan Mortgage Corp. 4283A	10,702,000	11,645,026
Federal Home Loan Mortgage Corp. 1.375% Due 5-1-2020	11,410,000	11,233,955

A complete list of public traded securities is available upon request.

# **Schedules of Fees** and Commissions

Year Ended December 31, 2015

#### SUMMARY OF BROKER COMMISSIONS

Broker	Total Commission Fees
Frank Russell SEC/Broadcourt	\$ 59,739
Jefferies	29,141
Investment Technology Group	11,676
Bear Sterns	11,319
Morgan Stanley	5,415
Knight Equity Markets	3,747
Credit Suisse First Boston	3,607
All Others	29,701
Total	\$ 154,345

#### SCHEDULE OF INVESTMENT FEES

Investment advisor fees:	
Debt securities	\$1,619,606
Equity investments	2,110,645
Real Assets	108,434
Total investment advisor fees	3,838,685
Investment brokerage fees	154,345
Total investment advisor fees	\$3,993,030

Utah Retirement Systems uses a commission recapture program as part of its trading strategies. During the year ending December 31, 2015, Utah Retirement Systems recaptured \$43,286 from the gross commission charges. This recaptured sum was used to cover or offset the \$46,323 in investment expenses that otherwise would have been paid for with investment funds.

# **Investment Professionals**

# **Defined Contribution** Plans Investment **Professionals**

**Ameriprise Trust Company** 940 Ameriprise Financial Center Minneapolis, MN 55474

AQR 2 Greenwich Plaza 3rd Floor Greenwich, CT 06830

BlackRock Asset Management 40 East 52nd Street New York, NY 10019

**Charles Schwab** 101 Montgomery Street San Francisco, CA 94104

Dimensional Fund Advisors, Inc. 6300 Bee Cave Road Austin, TX 78746

Dodge & Cox Investment Managers 555 California Street 40th Floor San Francisco, CA 94104

Jennison Associates, LLC 466 Lexington Avenue New York, NY 10017

Standish 201 Washington Street Suite 2900 Boston, MA 02108

The Northern Trust Company 50 South LaSalle Street Chicago, IL 60675

The Prudential Insurance Company of America 751 Broad Street Newark, NJ 07102

**Utah Retirement Systems** 560 East 200 South Salt Lake City, UT 84102

Waddell & Reed Asset Management Group 6300 Lamar Avenue Shawnee Mission, KS 66201

# 2015

#### UTAH RETIREMENT SYSTEMS

#### COMPREHENSIVE ANNUAL FINANCIAL REPORT

# ACTUARIAL Section

Calculation of Actuarial Value of Assets	15
Actuarial Value of Assets by System	15
Analysis of Financial Experience	15
Member and Employer Contribution Rates	15
Schedules of Funding Progress	15
Solvency Tests	16
Schedules of Active Member Valuation Data	16
Schedules of Retirants and Beneficiaries	16
ed Benefit Systems Summaries of Plan Provisions	16
Changes in Plan Provisions	17

Defined Contribution Savings Plans Summary of Plan Provisions 179

Defin

**Summary of Actuarial Assumptions and Methods** 

**Actuary's Certification Letter** 145

148

### **FUNDING PROGRESS WITH FUNDING RATIOS**

(dollars in billions)



# **ACTUARY'S CERTIFICATION LETTER**



5605 N. MacArthur Blvd. Suite 870 Irving, TX 75038-2631

469.524.0000 phone 469.524.0003 fax www.gabrielroeder.com

August 13, 2015

**Utah State Retirement Board** 540 East 200 South Salt Lake City, UT 84102

Dear Members of the Board:

#### **Subject: Actuarial Valuation as of January 1, 2015**

This report describes the current actuarial condition of the Utah Retirement Systems (URS), determines the calculated employer contribution rates, and analyzes changes in these contribution rates. In addition, the report provides various summaries of the data. A separate report is issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67 and 68. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of January 1, the first day of the URS plan year. This report was prepared at the request of the Board and is intended for use by the URS staff and those designated or approved by the Board. This report may be provided to parties other than URS staff only in its entirety and only with the permission of the Board.

Under URS statutes, the Board of Trustees must certify employer contribution rates annually. These rates are determined actuarially, based on the Board's funding policy, although, as discussed below, under certain circumstances the Board may choose not to reduce the current rate if it is greater than the actuarially calculated rate. Contribution rates determined by a given actuarial valuation become effective eighteen months after the valuation date. In other words, the rates determined by this January 1, 2015 actuarial valuation will be used by the Board when certifying the employer contribution rates for the year beginning July 1,

2016 and ending June 30, 2017. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated rates before certifying them in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

#### Financing objectives and funding policy

In setting contribution rates, the Board's principal objectives are:

- To set rates so that the unfunded actuarial accrued liability (UAAL) will be amortized over a reasonable period from the current valuation date
- To set rates so that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that the employer contribution rate be at least equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate which results in the amortization of the UAAL in installments that increase at the assumed rate of growth in payroll for URS over a time period that does not exceed 20 years.

Under this policy, the objective of maintaining a relatively level contribution rate over time is achieved in normal conditions such as consistent financial markets.

#### Actuary's Certification Letter (Continued)

Section 49-11-301(5) of the Utah Code allows the Board to set the employer contribution rate at the prior year's rate, if the rate otherwise would decrease and if the funded ratio is less than 110%. In such a case, the rate set by the Board would be higher than the actuarially determined contribution rate. The purpose of this legislation is to enhance the Board's ability to maintain more level contribution rates while targeting a 100% - 110% funded level. The Board has historically followed this policy, so the recommended contribution rate may be greater than the actuarially determined rate.

#### **Progress toward realization** of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches at least 100%.

For all systems on a combined basis, the funded ratio increased from 81.7% to 85.5%. This increase was due to the recognition of favorable investment and liability experience. Absent unfavorable actuarial experience, we expect the funded ratio to continue to gradually increase in future years.

If market value had been used in the calculation instead of actuarial value, the aggregate funded ratio for all funds combined would have been 89.1% compared to 87.6% in the prior year. The increase in the funded ratio on a market value basis is largely attributable a combination of liability gains and the Board's funding policy in maintaining current contribution levels.

#### **Benefit provisions**

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2015, or which were adopted by the end of the 2015 legislative session and are effective on or before July 1, 2015. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

#### **Assumptions and methods**

The actuarial assumptions and methods used to perform this valuation remain unchanged from the prior valuation, including the use of a 7.50% investment return assumption. The actuary reviews the investment return assumption each year and provides consultation to the Board regarding its appropriateness. The Board has the authority to change this assumption each year. It is our opinion that a 7.50% investment return assumption continues to be appropriate for performing the January 1, 2015 actuarial valuation.

The demographic assumptions are reviewed in detail every three years. The next experience analysis to review the demographic assumptions is scheduled for 2017.

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 and calculated contribution rates.

It is our opinion that the assumptions used to perform this valuation are internally consistent and are reasonable based on past and anticipated future experience of the System.

#### Data

Member data for retired, active and inactive members was supplied as of December 31, 2014 by the URS staff. The staff also supplied asset information as of December 31, 2014. We did not audit this data, but we did apply a number of tests to the data and concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by URS.

#### Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of URS as of January 1, 2015.

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

The undersigned are independent actuaries and consultants. Mr. White is an Enrolled Actuary and a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. Both consultants below are experienced in performing valuations for large public retirement systems.

Sincerely,

Daniel J. White, FSA, EA, MAAA, Senior Consultant

I While

Lewis Ward, Consultant



#### UTAH RETIREMENT SYSTEMS

# **SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS**

as of January 1, 2015

- a) The actuarial valuation was prepared using the entry age actuarial cost method. As described in the certification letter, the contribution rates are set based on the board's funding policy, which states the contribution rate will not be less than the amount needed to amortize the unfunded actuarial accrued liability of each System over a 20-year period from the valuation date (January 1, 2015).
  - In calculating this minimum, amortization payments are designed to remain level as a percent of payroll, and payroll is assumed to increase 3.25% per year. Under this method, actuarial gains and losses are identified and amortized as part of the unfunded actuarial accrued liability over a period that does not exceed 20 years.
- b) The future investment earnings of the assets of the Systems are assumed to accrue at an annual rate of 7.50%, compounded annually. This rate is made up of a 2.75% assumed inflation rate and a 4.75% assumed real rate of return. This assumption was adopted January 1, 2011.
- c) The total rates of assumed annual salary increase are shown on the actuarial schedule on page 153. The rates include increases due to promotion and longevity and a 3.50% per annum rate of increase in the general wage level of the membership. Salaries of judges are assumed to increase at 3.50%. All of these assumptions were adopted January 1, 2014.
- d) Post-retirement benefit increases are based on the consumer price index (CPI), limited by the provisions of each System. For members of the Public Safety Retirement System, annual increases are assumed to be 2.5% or 2.75%. All other Systems' annual increases are assumed to be 2.75%. Increases are based on the member's original retirement allowance except in the Judges Retirement System where increases are compounded. For current retirees who have received cumulative COLAs less than the total of annual CPI increases since retirement, higher COLAs are assumed, subject to the annual maximum (2.5% or 4% for Public Safety and 4% for all other Systems), as long as the member has "banked" CPI increases left.
- e) Tables of mortality rates for male members retired for service and beneficiaries (except educators) were developed from a standard mortality table. Mortality rates for male retired educators were developed from actual experience of that group. Mortality rates for female members retired for service and beneficiaries

#### Summary of Actuarial Assumptions and Methods (Continued)

as of January 1, 2015

#### RETIRED MEMBER MORTALITY

#### Class of Member

#### **Educators**

Men EDUM (90%) Women EDUF (100%)

#### **Public Safety and Firefighters**

RP 2000mWC (100%) Men Women EDUF (120%)

#### **Local Government, Public Employees**

of male educators multiplied by given percentage

RP 2000mWC (100%) EDUF (120%) Women

EDUM = Constructed mortality table based on actual experience

EDUF = Constructed mortality table based on actual experience of female educators multiplied by given percentage

RP 2000mWC = RP 2000 Combined mortality table for males with white collar adjustments multiplied by given percentage

were developed from actual experience of the female educators. The mortality basis is dependent upon the member's class and gender as shown above. These base rates are adjusted for future improvement in mortality using published Scale AA projected from the year 2000. With the exception of the female educators, these rates were adopted January 1, 2011, the female educators assumptions was adopted January 1, 2014. Mortality rates for active members use the RP 2000 employees mortality tables as the underlying assumption with scaling factors applied based on employee group and gender. The assumptions were adopted effective January 1, 2014.

- Mortality among disabled members is based on a special 1981 Disability Table developed from the Systems' experience. The rates for males and females are also adjusted for future improvement in mortality using published Scale AA projected from the year 2000.
- g) Other demographic assumptions regarding retirement, mortality, disablement, and termination from employment are illustrated in the following actuarial schedules.

The retirement assumptions illustrated are for members of the Systems who are eligible to retire with 30 years of service (35 years of service for Tier 2). For public employees the rates vary by age and eligibility for reduced or unreduced retirement. For Public Safety, Firefighters, and Judges the rates vary by age and service groupings.

Rates of assumed termination from employment are assumed to vary by years of service. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately. Vested members are assumed to withdraw their contributions and forfeit the right to further benefits at the rates illustrated.

- h) The Retirement Board uses the expected rate of return method for calculating the actuarial value of assets. This method is based on the total earnings of the commingled investments and spreads the excess/ shortfall of actual investment returns over or under the expected return over five years. One-fifth of the excess/ shortfall is recognized each year. The actuarial values of assets under this method were calculated and reported to us by the Systems' staff.
- All of the actuarial assumptions were renewed or adopted by the Retirement Board in 2014, as recommended by the actuary. The assumptions for Tier 2 members are the same as the Tier 1 members, except for retirement rates.

# Summary of Actuarial Assumptions and Methods (Continued)

as of January 1, 2015

Public Safety	as or samuary 1, 2015					I	Percent Retiring	Withir	Next Y	ear Among Ac	tive Members		
Sales and School Division   Publish Educator   English Educator								El	igible fo				
Peter Imper						Male		10:		Female			
Time   1		Retirement	State and Sch				State and Sch				Legislators		
Noncontributory   51   20.00   15.00   15.00   30.00   16.00   20.00   0.00   A			Educators				Educators						
## Retirement Systems   52   20.00   15.00   15.00   30.00   16.00   20.00   0.00   No.00   No			20.00%	1	5.00%	15.00%	30.00%	1	7.00%	20.00%	6 0.00%	ó	
Retirement Systems	Noncontributory	51	20.00	1	5.00	15.00	30.00	10	5.00	20.00	0.00		
Adapted January 1, 2014	and Contributory	52	20.00	1	5.00	15.00	30.00	10	5.00	20.00	0.00		
S	Retirement Systems	53	20.00	1	5.00	15.00	14.00	10	5.00	20.00	0.00		
Section	Adopted January 1, 2014	54	12.00	1	5.00	15.00	14.00	10	5.00	20.00	0.00		
S7		55	12.00	1	6.00	15.00	14.00	10	5.00	25.00	0.00		
12.00		56	12.00	1	6.00	15.00	18.00	10	5.00	25.00	0.00		
Section		57	12.00					10	5.00		0.00		
12.00			12.00	1	6.00	15.00				25.00	0.00		
February   Color   C													
February   Color   C													
62   30.00   33.00   23.00   35.00   30.00   30.00   100.00													
63   30.00   33.00   23.00   35.00   30.00   30.00   100.00													
Ferrosephage   Continue													
February   Color   C													
Fercent Retiring Within Next Year Among Active Members Eligible for Retirement System   Adopted January 1, 2014   Age   Retirement Age   Ret													
Tier 1			30.00			22.00							
Tier 1		69	25.00	2	2.00	22.00	23.00	2	2.00	25.00	100.00		
Tier 1		70	20.00	2	2.00	22.00	23.00	2	2.00	20.00	100.00		
Tier 1		71	20.00	2	2.00	18.00	23.00	2	2.00	15.00	100.00		
Tier 1		72	20.00	2	2.00	18.00	23.00	2	2.00	15.00	100.00		
Percent Retiring Within Next Year Among Active Members Eligible for Retirement Age   Reti		73	20.00	2	2.00	18.00	23.00	2	2.00	15.00	100.00		
Percent Retiring Within Next Year Among Active Members Eligible for Retirement Age   Reti		74	20.00	2	2.00	18.00	23.00	2	2.00	15.00	100.00		
Retirement   Retirement   Age		75	100.00										
Tier 1						Perc	ent Retiring Wit	hin Ne	ct Year <i>l</i>	Among Active	Members Eligik	ole for I	Retirement
Public Safety			Retire				Retirer				Retir		
Retirement System	Tier 1	45	20.00%	50	20.00	0% 55	20.00%	59	20.00	0% 63	35.00%	67	50.00%
Retirement System	Public Safety	46	20.00	51	20.00	56	20.00	60	20.00	64	35.00	68	50.00
Adopted January 1, 2014  48 20.00 54 20.00  Percent Retiring Within Next Year Among Active Members Eligible for Retirement Age  Retirement Age  Retirement System  Adopted January 1, 2014  48 15.00 50 10.00%  50 20.00 50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50 20.00%  50	-	47	20.00	52	20.00	57	20.00	61	20.00	) 65		69	50.00
Age   20.00   54   20.00   20.00   54   20.00	•												
Retirement Age	,op.co. 30au., 1,201.						_0.00	-	55.55				
Retirement Age						Perce	ent Retirina Wit	hin Ne	ct Year A	Amona Active	Members Eligib	ole for I	Retirement
Tier 1		Retirement	Retire	ment									
Firefighters		Age		Age				Age		Age		Age	
Retirement System													50.00%
Adopted January 1, 2014  48 15.00 53 15.00 58 20.00 62 25.00 66 50.00 70 100.00 49 15.00  Percent Retiring Within Next Year Among Active Members Eligible for Retirement Age Retirement Ag	_	46						60				68	50.00
Percent Retiring Within Next Year Among Active Members Eligible for Retirement Age   Reti	Retirement System	47	15.00	52	15.00	57	20.00	61	22.50	65	50.00	69	50.00
Percent Retiring Within Next Year Among Active Members Eligible for Retirement Age   Reti	Adopted January 1, 2014	48	15.00	53	15.00	58	20.00	62	25.00	) 66	50.00	70	100.00
Retirement Age         Retirem		49	15.00	54	15.00	)							
Age         Age <td></td> <td></td> <td></td> <td></td> <td></td> <td>Perce</td> <td>ent Retiring Wit</td> <td>hin Ne</td> <td>ct Year <i>l</i></td> <td>Among Active</td> <td>Members Eligik</td> <td>ole for I</td> <td>Retirement</td>						Perce	ent Retiring Wit	hin Ne	ct Year <i>l</i>	Among Active	Members Eligik	ole for I	Retirement
Judges     45     10.00%     50     10.00%     55     10.00%     59     10.00%     63     20.00%     67     20.00       Retirement System     46     10.00     51     10.00     56     10.00     60     10.00     64     20.00     68     20.00       Adopted January 1, 2014     47     10.00     52     10.00     57     10.00     61     10.00     65     20.00     69     20.00       48     10.00     53     10.00     58     10.00     62     20.00     66     20.00     70     100.00			Retire				Retirer				Retir		_
Retirement System       46       10.00       51       10.00       56       10.00       60       10.00       64       20.00       68       20.00         Adopted January 1, 2014       47       10.00       52       10.00       57       10.00       61       10.00       65       20.00       69       20.00         48       10.00       53       10.00       58       10.00       62       20.00       66       20.00       70       100.00	ludaes		10 00%		10.00		10.00%		10.00		20.00%		20 000
Adopted January 1, 2014 47 10.00 52 10.00 57 10.00 61 10.00 65 20.00 69 20.00 48 10.00 53 10.00 58 10.00 62 20.00 66 20.00 70 100.00	-												
48 10.00 53 10.00 58 10.00 62 20.00 66 20.00 70 100.00	•												
	лаортеа запиагу 1, 2014												
49 10.00 54 10.00							10.00	62	20.00	) 66	20.00	/0	100.00

### Summary of Actuarial Assumptions and Methods (Continued)

as of January 1, 2015

				P	ercent Retiring	Within Next	Year Among Acti	ve Members
						Eligible f	or Retirement	
				Male			Female	Governors
		State and Sch	nool Division	Local	State and Sch	nool Division	Local	and Legislators
	Retirement Age	Educators	Public Employees	Government Division	Educators	Public Employees	Government Division	Retirement Plan
Tier 2	50	20.00%	15.00%	15.00%	30.00%	17.00%	6 20.00%	0.00%
Public Employees	51	20.00	15.00	15.00	30.00	16.00	20.00	0.00
Retirement System	52	20.00	15.00	15.00	30.00	16.00	20.00	0.00
Adopted January 1, 2014	53	20.00	15.00	15.00	14.00	16.00	20.00	0.00
	54	12.00	15.00	15.00	14.00	16.00	20.00	0.00
	55	12.00	16.00	15.00	14.00	16.00	25.00	0.00
	56	12.00	16.00	15.00	18.00	16.00	25.00	0.00
	57	12.00	16.00	15.00	18.00	16.00	25.00	0.00
	58	12.00	16.00	15.00	18.00	20.00	25.00	0.00
	59	12.00	16.00	15.00	18.00	20.00	25.00	0.00
	60	23.00	20.00	20.00	30.00	30.00	30.00	0.00
	61	23.00	20.00	20.00	30.00	30.00	30.00	0.00
	62	30.00	33.00	23.00	35.00	30.00	30.00	100.00
	63	30.00	33.00	23.00	35.00	30.00	30.00	100.00
	64	30.00	30.00	23.00	30.00	30.00	30.00	100.00
	65	30.00	22.00	23.00	30.00	26.00	25.00	100.00
	66	30.00	22.00	30.00	30.00	26.00	25.00	100.00
	67	30.00	22.00	22.00	30.00	22.00	25.00	100.00
	68	30.00	22.00	22.00	23.00	22.00	25.00	100.00
	69	25.00	22.00	22.00	23.00	22.00	25.00	100.00
	70	20.00	22.00	22.00	23.00	22.00	20.00	100.00
	71	20.00	22.00	18.00	23.00	22.00	15.00	100.00
	72	20.00	22.00	18.00	23.00	22.00	15.00	100.00
	73	20.00	22.00	18.00	23.00	22.00	15.00	100.00
	74	20.00	22.00	18.00	23.00	22.00	15.00	100.00
	75	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Retirement rates at the age the member is first eligible for an unreduced retirement benefit prior to age 65 is increased by 30%.

Public Safety and Firefighter	Retirement Age	Retii	rement Age	Reti	Pero rement Age		ithin Ne rement Age		g Active rement Age	Members Eligi Reti	ble for F rement Age	Retirement
Retirement System	45	12.00%	50	12.00%	55	12.00%	59	12.00%	63	35.00%	67	50.00%
	46	12.00	51	12.00	56	12.00	60	25.00	64	35.00	68	50.00
Public Safety	47	12.00	52	12.00	57	12.00	61	30.00	65	50.00	69	50.00
Adopted January 1, 2014	48	12.00	53	12.00	58	12.00	62	35.00	66	50.00	70	100.00
	49	12.00	54	12.00								
					Perc	ent Retiring W	/ithin Ne	xt Year Amon	g Active	Members Eligi	ble for F	Retirement
	Retirement Age	Retii	rement Age	Reti	Pero rement Age		/ithin Ne rement Age		g Active rement Age		ble for F rement Age	Retirement
Firefighters		Retii 9.00%		Retin	rement		rement		rement		rement	
Firefighters Adopted January 1, 2014	Age		Age		rement Age	Reti	rement Age	Reti	rement Age	Reti	rement Age	
	Age 45	9.00%	Age 50	9.00%	rement Age	12.00%	rement Age	12.00%	rement Age	Reti	rement Age 67	60.00%
_	45 46	9.00% 9.00	50 51	9.00% 9.00	rement Age 55 56	12.00% 12.00	rement Age 59 60	12.00% 40.00	rement Age 63 64	40.00% 40.00	rement Age 67 68	60.00% 60.00

				n of Employment Male			Female	Governors
		State and Sch	nool Division		State and Sch	ool Division		and
	Years of Service	Educators	Public Employees	Local - Government Division	Educators	Public Employees	Local Government Division	Legislators Retirement Plan
Noncontributory	0	15.00%	28.00%	19.00%	18.00%	30.00%	24.00%	10.00%
and Contributory	1	13.00	24.50	15.00	17.00	22.50	18.00	10.00
Retirement Systems	2	9.00	15.00	11.00	13.50	17.00	14.00	10.00
Adopted January 1, 2014	3	7.50	12.00	9.00	12.50	14.00	12.00	10.00
	4	6.50	10.00	8.00	10.00	11.00	11.00	10.00
	5	5.00	9.00	7.00	8.00	9.50	9.75	10.00
	6	4.00	7.50	6.00	7.50	8.50	8.00	10.00
	7	3.50	6.50	5.50	5.50	7.50	7.50	10.00
	8	3.25	5.50	4.75	4.50	6.50	6.50	10.00
	9	3.00	5.00	4.00	4.50	6.00	6.00	10.00
	10	2.75	4.25	3.50	4.00	5.50	5.50	10.00
	11	2.50	4.00	3.25	3.00	4.75	5.00	10.00
	12	2.25	3.75	3.00	2.50	4.50	4.50	10.00
	13	2.25	3.50	3.00	2.00	4.25	4.00	10.00
	14	2.00	3.00	3.00	2.00	3.75	3.75	10.00
	15	1.75	2.50	2.75	2.00	3.50	3.50	10.00
	16	1.75	2.25	2.75	2.00	3.00	3.25	10.00
	17	1.75	2.25	2.75	1.75	2.75	3.25	10.00
	18	1.75	2.00	2.50	1.50	2.75	3.00	10.00
	19	1.50	2.00	2.50	1.25	2.75	2.75	10.00
	20	1.00	2.00	2.00	1.25	2.75	2.50	10.00
	21	1.00	2.00	2.00	1.25	2.50	2.50	10.00
	22	1.00	2.00	1.75	1.25	2.25	2.25	10.00
	23	1.00	1.50	1.50	1.25	2.00	2.00	10.00
	24	1.00	1.50	1.25	1.25	2.00	2.00	10.00
	25+	0.00	0.00	0.00	0.00	0.00	0.00	10.00

				Ot	her Terminatio	n of Employn	nent of Active I	Members Sep	arating Within	Next Year
	Years of Ser	vice	Years of Serv	/ice	Years of Serv	/ice	Years of Serv	/ice	Years of Serv	ice
Public Safety	0	12.00%	5	4.50%	9	3.25%	13	2.25%	17	1.50%
Retirement System	1	6.50	6	4.25	10	3.00	14	1.50	18	1.50
Adopted January 1, 2014	2	5.50	7	4.00	11	2.75	15	1.50	19	1.50
	3	5.25	8	3.50	12	2.50	16	1.50	20+	0.00
	4	5.00								

				Ot	her Terminatio	n of Employn	nent of Active I	Members Sep	arating Within	Next Year
	Years of Serv	rice	Years of Serv	/ice	Years of Serv	/ice	Years of Serv	rice	Years of Serv	ice
Firefighters	0	6.00%	5	2.00%	9	1.50%	13	0.50%	17	0.50%
Retirement System	1	3.50	6	1.50	10	1.50	14	0.50	18	0.50
Adopted January 1, 2014	2	3.00	7	1.50	11	1.50	15	0.50	19	0.50
	3 4	2.50 2.50	8	1.50	12	0.50	16	0.50	20+	0.00

Other Termination of Employment of Active Members Separating Within Next Year

**Judges Retirement System** Adopted January 1,1993

None assumed.

											Total A		ase in Salary
	Years of Service			Local ernment Division	Public Safety Retirement System	Firefighters Retirement System	Year: Serv			State and pol Division Public Employees	Local Government Division	Public Safety Retirement	Firefighters
All Retirement	0	10.50%	8.75%	9.25%				13	5.00%				
_	1	9.50	8.00	7.75	7.00	8.75		14	4.75	4.30 ⁷	4.50	4.50	
Systems	2	8.50	7.00	7.00	6.75	8.50		15	4.50	4.00	4.50	4.50	
Adopted	3	8.00	6.25	6.50	6.50	8.25		16	4.25	4.00	4.25	4.50	
January 1, 2014	4	7.75	6.00	6.00	6.25	8.00		17	4.00	4.00	4.25	4.25	4.50
	5	7.50	5.50	5.75	6.00	7.75		18	4.00	4.00	4.25	4.25	4.25
	6	7.50	5.25	5.50	6.00	7.75		19	4.00	4.00	4.25	4.25	
	7	7.25	5.00	5.25	5.75	7.25		20	4.00	3.75	4.00	4.25	4.25
	8	7.00	5.00	5.00	5.50	7.00		21	4.00	3.75	3.75	4.00	4.00
	9	6.75	4.75	5.00	5.50	6.75		22	4.00	3.75	3.75	4.00	3.75
	10	6.25	4.75	4.75	5.25	6.25		23	4.00	3.75	3.50	3.75	3.75
	11	5.75	4.50	4.50	5.00	5.50		24	3.75	3.50	3.50	3.75	3.75
	12	5.50	4.50	4.50	4.75	5.25	:	25+	3.50	3.50	3.50	3.50	3.50
							F	Probab	ility of Mo	ortality With		Year for Acti	ve Members
			Male			Female					Male		Female
			Loca Governmen		,	Local Sovernment				Gover	Local		Local Government
	Age	Educators	and Publi Employee	c	ucators	and Public Employees		Age	Educat	and	Public	Educators	and Public Employees
Noncontributory	20	0.01739			.0067%	0.0096%		50	0.10			0.0587%	0.08389
and Contributory	25	0.0188	0.0301		.0072	0.0104		55	0.15			0.0884	0.1263
<b>Retirement Systems</b>	30	0.0222	0.0355		.0092	0.0132		60	0.24			0.1376	0.1966
Adopted January 1, 2014	35	0.0387	0.0618		.0166	0.0238		65	0.378			0.2037	0.2911
,	40 45	0.0540 0.0754	0.0863 0.1206		.0247 .0393	0.0353 0.0562		70	0.49	51 0.	7938	0.2665	0.3807
						Р	ercent Ele	cting a	a Refund o	f Contributi	ons Upon To	ermination \	While Vested
									Male		-		Female
				Years of Service	Educat				Local nment ivision	Educato	rs Emi		Local Government Division
Noncontributory and	d Con	tributory		Service	Educat	ors Empl	oyees		nment ivision	Educato		ployees	Government Division
		tributory		Service 0-3	10	ors Empl	oyees 100%		nment ivision	10	0%	100%	Government Division 100 ⁰
<b>Retirement Systems</b>		tributory		Service	10	ors Empl	oyees		nment ivision	10		ployees	Government Division
		tributory		O-3 4	1(	00% 75	100% 86		nment ivision 100% 75	10 6		100% 80	Government Division 100° 77
Noncontributory and Retirement Systems Adopted January 1, 1993		tributory		0-3 4 5	10	00% 75 73	100% 86 83		100% 75 73	10 6 6 5	00% 55 64	100% 80 79	Government Division 100° 77 75
<b>Retirement Systems</b>		tributory		0-3 4 5 10	10	00% 75 73	100% 86 83 73		100% 75 73 61	10 6 6 5	00% 5 4 3	100% 80 79 64	Government Division 1009 77 75 61
<b>Retirement Systems</b>		tributory		0-3 4 5 10 15	10	00% 75 73 54	100% 86 83 73 63		100% 75 73 61 49	10 6 6 5	00% 55 64 63 62	100% 80 79 64 52	1009 77 75 61
<b>Retirement Systems</b>		tributory		0-3 4 5 10 15 19	10	00% 75 73 54 33	100% 86 83 73 63 29 0	Di	100% 75 73 61 49 23 0	10 6 5 3 ortality With	0% .5 .4 .3 .2 .8 .0	100% 80 79 64 52 22 0	Government Division 1009 77 75 61 40 13 0
<b>Retirement Systems</b>		tributory		0-3 4 5 10 15 19	10	00% 75 73 54 33 9	100% 86 83 73 63 29 0	Di	100% 75 73 61 49 23 0	10 6 5 3 ortality With	0% .5 .4 .3 .2 .8 .0	100% 80 79 64 52 22 0	1009 77 75 61 40
Retirement Systems Adopted January 1, 1993 Public Safety Retirer	ment !	System		0-3 4 5 10 15 19 20 Age	0.0276	00% 75 73 54 33 9 0	100% 86 83 73 63 29 0	Probab	100% 75 73 61 49 23 0	10 6 5 3 ortality With Publ Age	100% 15 14 13 12 8 0 10 10 11 11 10 10 10 10 10 10 10 10 1	100% 80 79 64 52 22 0 Year for Acti	Government Division  1009 77 75 61 40 13 0  ve Members s Employees
Retirement Systems Adopted January 1, 1993  Public Safety Retirer and Firefighters Reti	ment !	System		0-3 4 5 10 15 19 20 Age 20 25	0.0276 0.0301	00% 75 73 54 33 9 0	100% 86 83 73 63 29 0	Probab 06189 0863	100% 75 73 61 49 23 0	ortality With Publ Age 50 0 55 0	100% 15 14 13 12 8 0 10 the Next 10 c Safety and	100% 80 79 64 52 22 0 Year for Acti	Government Division 1009 77 75 61 40 13 0 ve Members s Employees
Retirement Systems Adopted January 1, 1993  Public Safety Retirer and Firefighters Reti	ment !	System		0-3 4 5 10 15 19 20 Age	0.0276	00% 75 73 54 33 9 0	100% 86 83 73 63 29 0	Probab	100% 75 73 61 49 23 0	ortality With Publ Age 50 0 55 0	100% 15 14 13 12 8 0 10 10 11 11 10 10 10 10 10 10 10 10 1	100% 80 79 64 52 22 0 Year for Acti	Government Division  1009 77 75 61 40 13 0  ve Members s Employees
<b>Retirement Systems</b>	ment !	System		0-3 4 5 10 15 19 20 Age 20 25 30	0.0276 0.0301 0.0355	00% 75 73 54 33 9 0  Aq 6% 3  Refund of Cor	100% 86 83 73 63 29 0	Di Probab 06189 0863 1206 s Upon	100% 75 73 61 49 23 0	ortality With Publ Age 50 0 55 0 60 0	00% 55 44 3 2 8 0 in the Next ic Safety and .1710% .2423 .3902	100% 80 79 64 52 22 0 Year for Acti	Government Division  1000 77 75 61 40 13 0  ve Members s Employees
Retirement Systems Adopted January 1, 1993  Public Safety Retirer and Firefighters Reti	ment :	System		0-3 4 5 10 15 19 20 Age 20 25 30	0.0276 0.0301 0.0355	00% 75 73 54 33 9 0  Aq 6% 3  Refund of Cor Public Saf	100% 86 83 73 63 29 0	Di Doctor Discoversion of the property of the	100% 75 73 61 49 23 0	ortality With Publ Age 50 0 55 0 60 0 ion While V	00% 55 44 3 2 8 0 in the Next ic Safety and .1710% .2423 .3902	100% 80 79 64 52 22 0 Year for Acti	Government Division  1000 77 75 61 40 13 0  ve Members s Employees
Retirement Systems Adopted January 1, 1993  Public Safety Retirer and Firefighters Reti Adopted January 1, 2008	ment ! ireme	System nt System		0-3 4 5 10 15 19 20 Age 20 25 30	0.0276 0.0301 0.0355	00% 75 73 54 33 9 0  Aq 6% 3  Refund of Cor Public Saf	100% 86 83 73 63 29 0  Fige 35 0.0 64 0.0 65 0.1 65 0.1	Di Doctor Discoversion of the property of the	nment ivision  100% 75 73 61 49 23 0  sility of Mo	ortality With Publ Age 50 0 55 0 60 0 ion While Volument Emplo	00% 55 44 3 2 8 0 in the Next ic Safety and .1710% .2423 .3902	100% 80 79 64 52 22 0 Year for Acti	Government Division  1000 77 75 61 40 13 0  ve Members s Employees
Retirement Systems Adopted January 1, 1993  Public Safety Retirer and Firefighters Reti	ment sireme	System nt System System		0-3 4 5 10 15 19 20 Age 20 25 30	0.0276 0.0301 0.0355 at Electing a ears of Servi 0-3 4	00% 75 73 54 33 9 0	100% 86 83 73 63 29 0  Fige 35 0.0 64 0.0 65 0.1 65 0.1	Di Doctor Discoversion of the property of the	nment ivision  100% 75 73 61 49 23 0  iility of Mo	ortality With Publ Age 50 00 55 00 60 00 ion While Voment Employervice	10% 15 14 13 12 18 10 11 11 11 11 11 11 11 11 11	100% 80 79 64 52 22 0 Year for Acti	Government Division  100° 77 75 61 40 13 0  ve Members s Employees
Retirement Systems Adopted January 1, 1993  Public Safety Retirer and Firefighters Reti Adopted January 1, 2008  Public Safety Retirer	ment ! ireme } ment !	System nt System System		0-3 4 5 10 15 19 20 Age 20 25 30	0.0276 0.0301 0.0355 at Electing a ears of Servi 0-3	00% 75 73 54 33 9 0   Refund of Cor Public Saf	100% 86 83 73 63 29 0  Fige 35 0.0 64 0.0 65 0.1 65 0.1	Di Doctor Discoversion of the property of the	nment ivision  100% 75 73 61 49 23 0  willity of Mo	ortality With Publ Age 50 0 55 0 60 0 ion While Volument Emplo	10% 15 14 13 12 18 10 11 11 11 11 11 11 11 11 11	100% 80 79 64 52 22 0 Year for Acti	1009 77 75 61 40 13 0 ve Members s Employees

# Calculation of Actuarial Value of Assets

January 1, 2015			(dollars in	thousands)	: D	ecember 31, 2	015		(dollars in	thousands)
1. Fair value	of assets			\$ 26,569,124	1	. Fair value	of assets			\$ 26,686,840
	smooth assess)/shortfall o	of expect			2	on (exc	o smooth assees)/shortfall onent income for	of expect		
Year	Total Excess/ (Shortfall)	% Deferred	Amount Deferred			Year	Total Excess/ (Shortfall)	% Deferred	Amount Deferred	
a. 2014	\$ (95,447)	80%	\$ (76,356)		: -	a. 2015	\$(1,529,412)	80%	\$(1,223,531)	
b. 2013	1,600,276	60%	960,164		:	b. 2014	(95,447)	60%	(57,270)	
c. 2012	1,017,197	40%	406,880		:	c. 2013	1,600,276	40%	640,108	
d. 2011	(977,081)	20%	(195,465)		:	d. 2012	1,017,197	20%	203,437	
e. 2010	955,219	0%	_			e. 2011	(977,081)	0%	_	
f. Total de	eferred gains	(losses)	1,095,223		-	f. Total d	leferred gains	(losses)	(437,256)	
g. Total d	eferred gains			(1,095,223)	_	g. Total	deferred losse	S		437,256
	alue of asset for benefits*	S		\$ 25,473,901	3		value of asset for benefits*	S		\$ 27,124,096

^{*}Actuarial value of assets cannot exceed 125% of the fair value of assets or below 75% of the fair value of assets.

# **Actuarial Value of Assets by System**

January 1, 2015

Calculation of Net Assets Available Based	(in thousand	ds)				Governors	Tier 2 Public	Tier 2 Public Safety and	
on Five-Year Expected Investment Income	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	and Legislators	Employees System	Firefighter System	Total All Systems
Net assets available for benefits at fair value	\$ 21,096,512	1,269,991	2,899,386	1,031,039	163,834	10,366	89,291	8,705	26,569,124
2. Adjustments to smooth asset values based on (excess)/shortfall of expected investment									
income on fair value for	: (442,490)	71,188	(88,985)	(29,273)	(2,464)	193	(56,227)	(6,913)	(554,972)
3. Actuarial value of assets available	¢ 24 520 000	1.100.000	2 000 274	1.060.212	166 200	10.172	145.510	15.610	27.12.1.006
for benefits (1-2)	\$ 21,539,002	1,198,803	2,988,371	1,060,312	166,298	10,173	145,518	15,618	27,124,096

# **Analysis of Financial Experience**

(i)	January 1, 2014 Unfunded Actuarial Accrued Liability	Amortization Payments	Liability (Gain) Loss	Asset (Gain) Loss	Changes in Actuarial Assumptions	Change in Benefit Provisions	Asset Transfers	January 1, 2015 Unfunded Actuarial Accrued Liability
Noncontributory	4,380,072	(63,623)	(174,644)	(498,595)	_	_	(15,630)	3,627,580
Contributory	120,849	(100)	(7,147)	(32,513)	_	_	15,630	96,719
Public Safety	660,797	(12,422)	(18,716)	(66,914)	_	_	_	562,745
Firefighters	59,947	(6,604)	(11,401)	(24,102)	_	_	_	17,840
Judges	39,992	370	(933)	(3,940)	_	_	_	35,489
<b>Utah Governors and Legislators</b>	2,729	(113)	(28)	(273)	_	_	_	2,315
Tier 2 Public Employees	(3,913)	(293)	(2,572)	(341)	_	_	_	(7,119)
Tier 2 Public Safety and Firefight	<b>er</b> (553)	(41)	(613)	(27)	_	_	_	(1,234)

# Member and Employer Contribution Rates

As of December 31

				Contributory	N	loncontributory
System	Year	Member	Employer	Employer	Employer	Employer
Noncontributory			State and School	Local Government	State and School	Local Government
and Contributory	2006	6.00%	9.73%	7.58%	14.22%	11.59%
Retirement Systems	2007	6.00	9.73	7.61	14.22	11.62
	2008	6.00	9.73	7.61	14.22	11.62
	2009	6.00	9.73	7.65	14.22	11.66
	2010	6.00	11.83	9.36	16.32	13.37
	2011	6.00	12.37	9.76	16.86	13.77
	2012	6.00	14.27	12.03	18.76	16.04
	2013	6.00	15.97	13.28	20.46	17.29
	2014	6.00	17.70	14.46	22.19	18.47
	2015	6.00	17.70	14.46	22.19	18.47
		(with S	Division A ocial Security)	(without S	Division B ocial Security)	All Divisions Fire Insurance
		Member	Employer	Member	Employer	Premium Tax
Firefighters	2006	10.84%	—%	8.72%	—%	12.08%
Retirement System	2007	12.76		9.30		11.50
·	2008	13.14	_	9.68	_	11.12
	2009	13.49	_	9.68	_	12.34
	2010	15.05		16.18		11.87
	2011	15.05	0.50	16.18	_	12.29
	2012	15.05	2.66	16.71	2.08	11.84
	2013	15.05	2.96	16.71	4.46	11.75
	2014	15.05	3.82	16.71	6.59	11.71
	2015	15.05	3.99	16.71	6.76	11.54
					Judges	C
			Contributory No	oncontributory		Governors and Legislators
		Member	Employer	Employer	Court Fees	Appropriation
Judges	2006	2.00%	7.79%	9.79%	18.04%	\$ —
Retirement System	2007	2.00	10.38	12.38	15.45	_
	2008	2.00	11.51	13.51	14.32	_
Utah Governors	2009	2.00	15.09	17.09	13.83	_
and Legislators	2010	_	_	23.72	14.08	_
Retirement Plan	2011	_	_	25.82	14.26	153,000
	2012	_	_	32.87	14.02	214,000
	2013	_	_	35.66	12.74	252,000
	2014	_	_	40.01	11.90	411,489
	2015	_	_	41.58	10.33	421,429

# Member and Employer Contribution Rates (Continued)

As of December 31

			State	e of Utah		Othe	2.5% COLA Division A al Security)	(		0% COLA Division A Security)			Bountiful
System	Year	Me	mber E	mployer	-	/lember	Employer	Me	mber l	Employer	Me	mber	Employer
Public Safety	2006		_	23.46%		_	22.38%		_	_		_	19.99%
Retirement	2007		_	26.75		_	22.61		_	_		_	22.47
System	2008		_	26.75		_	22.61		_	_		_	22.47
Noncontributory	2009		_	30.18		_	23.34		_	25.90%	<u>.</u>	_	23.07
Division A	2010		_	32.75		_	26.13		_	28.82		_	27.73
	2011			34.12		_	27.07		_	28.82		_	29.19
	2012			37.29		_	30.45		_	33.65		_	37.16
	2013		_	39.31		_	32.14		_	34.17		_	42.79
	2013			41.35			34.04			35.71			47.33
	2015		_	41.35		_	34.04		_	35.71		_	47.33
Public Safety	2006	1	2.29%	15.46%		12.29%	11.01%						
Retirement	2007		2.29%	15.46%		12.29%	11.01%			_			
System	2007		2.29 2.29	15.46		12.29	11.22			_			_
Contributory	2008		2.29	19.01		12.29	12.47	1.	— 2.29%	 15.01%	_	_	_
Division A											)	_	_
DIVISIONA	2010		2.29	21.68		12.29	14.86		2.29	18.34		_	_
	2011		2.29	22.88		12.29	15.78		2.29	18.34		_	_
	2012		2.29	25.52		12.29	19.08		2.29	22.34		_	_
	2013		2.29	27.63		12.29	20.83		2.29	22.75		_	_
	2014		2.29	29.70		12.29	22.75		2.29	24.33		_	_
	2015	- 1	2.29	29.70		12.29	22.75	1.	2.29	24.33			
		Salt	Lake City		Ogden		Logan		Provo	Other D	5% COLA Division B : Soc Sec)	Other	1.0% COLA Division B ut Soc Sec)
	Year	Member E	mployer	Member E	mployer	Member	Employer	Member E	mployer	Member E	mployer	Member	Employer
Public Safety	2006	_	35.71%	_	24.30	% —	25.48%	_	_	_	25.49%	_	_
Retirement	2007	_	35.71	_	30.44	_	25.48	_	_	_	25.49	_	_
System	2008	_	35.71	_	31.47	_	25.48	_	29.84%	<u> </u>	25.49	_	_
Noncontributory	2009	_	35.71	_	33.11	_	27.74	_	30.91	_	26.21	_	28.73%
Division B	2010	_	36.31	_	34.93	_	31.49	_	32.98	_	28.24	_	32.70
	2011	_	36.71	_	36.13	_	31.91	_	33.05	_	28.64	_	32.70
	2012	_	41.95	_	42.21		38.18	_	38.54	_	32.20	_	36.97
	2013	_	44.83	_	44.98		39.84	_	39.97	_	32.20	_	37.45
	2014	_	46.67	_	48.68	_	41.92	_	42.16	_	32.20	_	38.94
	2015	_	46.67	_	48.68	_	41.92	_	42.16	_	32.20	_	38.94
Public Safety	2006	13.74%	22.99%	_	_	11.13	3% 14.61%	13.54%	15.57%	10.50%	6 15.69%	10.509	 % —
Retirement	2007	13.74	22.99	_	_	11.13			16.30	10.50	15.69	10.50	_
System	2008	13.74	22.99	_	_	11.13		_	_	10.50	15.69	10.50	_
Contributory								_	_	10.50	16.67	10.50	19.17%
Contributory	2009	_	_	_	_	11.13	17.01						
Division B	2009 2010	_	_	_	_	11.13 11.13		_	_		18.98		23.22
	2010		_	_ _ _		11.13	20.95	_	_	10.50	18.98	10.50	23.22 23.22
	2010 2011	_	_	_ _ _	_	11.13 11.13	20.95 21.36	_	_	10.50 10.50	18.98 19.48	10.50 10.50	23.22
	2010 2011 2012	_ _ _	_	_ _ _ _	_ _ _	11.13 11.13 11.13	20.95 21.36 27.95		_	10.50 10.50 10.50	18.98 19.48 22.29	10.50 10.50 10.50	23.22 27.29
	2010 2011 2012 2013	_	_ _ _	_ _ _ _	_ _ _	11.13 11.13 11.13 11.13	20.95 21.36 27.95 29.76	_	_ _ _	10.50 10.50 10.50 10.50	18.98 19.48 22.29 22.29	10.50 10.50 10.50 10.50	23.22 27.29 27.49
	2010 2011 2012	_ _ _ _	_		_ _ _	11.13 11.13 11.13	20.95 21.36 27.95 29.76 31.80	_ _ _	_	10.50 10.50 10.50	18.98 19.48 22.29	10.50 10.50 10.50	23.22 27.29

### Member and Employer Contribution Rates (Concluded)

As of December 31

Contain	Vasa	Contributory		Noncontributory			
System	Year	Employer Local	Employer State	Employer Local			
Tier 2 Public Employees		Government	and School	Government			
Contributory	2011	12.40%	12.74%	10.33%	)		
Retirement System*	2012	14.51	15.06	12.74			
	2013	15.75	16.75	13.99			
	2014	16.70	18.27	14.94			
	2015	16.67	18.24	14.91			
Tier 2 Public Safety and				2.5% COLA	4% COLA		
Firefighter Contributory				Other Division A	Other Division A		
Retirement System*	V	State of Utah	Bountiful	(with Soc Sec)	(with Soc Sec)		
	Year	Employer	Employer	Employer	Employer		
Public Safety	2011	22.06%	18.15%	16.27%	17.18%		
Noncontributory	2012	25.46	25.89	19.25	21.94		
Division A	2013	27.40	31.38	20.85	22.37		
	2014	29.26	35.68	22.55	23.71		
	2015	29.21	35.63	22.50	23.66		
Public Safety	2011	_	_	16.27	17.47		
Contributory	2012	_	_	19.25	21.94		
Division A	2013	_	_	20.85	22.37		
	2014	_	_	22.55	23.71		
	2015	_	_	22.50	23.66		
						2.5% COLA	4.% COLA
		Salt Lake City	Ogden	Logan	Provo	Other Division B (without Soc Sec)	Other Division B (without Soc Sec)
	Year	Employer	Employer	Employer	Employer	Employer	Employer
Public Safety	2011	25.82%	25.21%	21.15%	22.01%	17.72%	20.899
Noncontributory	2012	30.47	30.78	26.59	27.08	20.71	25.05
Division B	2013	32.37	33.47	28.19	28.19	20.51	25.38
	2014	34.97	37.07	30.13	30.36	20.55	26.72
	2015	34.92	37.02	30.08	30.31	20.39	26.67
Public Safety	2011	_	_			17.72	21.06
Contributory	2012	_	_		_	20.71	25.05
Division B	2013	_	_		_	20.77	25.38
	2014	_	_		_	20.55	26.72
	2015	_	_	_	_	20.50	26.67
		Other Division (with Social Securit	(wit	Other Division B h Social Security)			
	Year	Employ	er	Employer			
Firefighters	2011	10.6		10.64%			
	2012	11.1		11.10			
	2013	11.0		11.02			
	2014	10.8		10.80			
	2015	10.7	5	10.75			

^{*}Includes active member death benefit and Tier 1 amortization rate. Does not include the 401(k) component of the contribution rate.

# **Schedules of Funding Progress**

(dollars in thousands)

	( = = : : = : : :	,					
				Based on Actuarial Va			
System	Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Unfunded AAL (UAAL) Actuarial Value of Assets (2) - (1)	(4) Funded Ratios Based on Actuarial Value of Assets (1) / (2)	(5) Projected Annual Covered Payroll	(6) UAAL as a % of Covered Payroll (3) / (5)
Noncontributory	1/01/07	\$ 14,446,928	15,084,061	637,133	95.8%	\$ 3,326,392	19.2%
Retirement	1/01/08	16,199,077	17,025,185	826,108	95.1	3,582,495	23.1
System	1/01/09	15,839,461	18,306,590	2,467,129	86.5	3,871,636	63.7
	1/01/10	16,619,831	19,384,503	2,764,672	85.7	3,955,040	69.9
	1/01/11	16,852,691	20,388,759	3,536,068	82.7	3,888,179	90.9
	1/01/12	16,805,952	21,260,843	4,454,891	79.0	3,900,106	114.2
	1/01/13	16,969,392	22,200,896	5,231,504	76.4	3,794,929	137.9
	1/01/14	18,601,513	22,981,585	4,380,072	80.9	3,705,771	118.2
	1/01/15	20,240,645	23,868,225	3,627,580	84.8	3,570,912	101.6
	12/31/15	21,539,002	24,899,570	3,360,568	86.5	3,458,286	97.2
Contributory	1/01/07	\$ 1,004,452	1,062,967	58,515	94.5%	133,812	43.7%
Retirement	1/01/08	1,102,107	1,170,251	68,144	94.2	132,899	51.3
System	1/01/09	1,097,711	1,218,572	120,861	90.1	133,110	90.8
	1/01/10	1,116,736	1,236,009	119,273	90.4	127,804	93.3
	1/01/11	1,132,661	1,251,412	118,751	90.5	116,395	102.0
	1/01/12	1,135,251	1,269,042	133,791	89.5	110,103	121.5
	1/01/13	1,133,433	1,280,836	147,403	88.5	103,074	143.0
	1/01/14	1,165,002	1,285,851	120,849	90.6	98,023	123.3
	1/01/15	1,198,862	1,295,581	96,719	92.5	90,623	106.7
	12/31/15	1,198,803	1,316,042	117,239	91.1	82,426	142.2
Public Safety	1/01/07	\$ 1,809,198	1,968,982	159,784	91.9%	316,662	50.5%
Retirement	1/01/08	2,038,613	2,247,826	209,213	90.7	339,187	61.7
System	1/01/09	2,017,576	2,473,667	456,091	81.6	365,043	124.9
	1/01/10	2,137,027	2,650,675	513,648	80.6	373,959	137.4
	1/01/11	2,194,015	2,844,101	650,086	77.1	363,037	179.1
	1/01/12	2,222,202	2,948,481	726,279	75.4	374,293	194.0
	1/01/13	2,283,911	3,093,227	809,316	73.8	366,471	220.8
	1/01/14	2,530,709	3,191,506	660,797	79.3	365,998	180.5
	1/01/15	2,781,314	3,344,059	562,745	83.2	360,750	156.0
	12/31/15	2,988,371	3,511,275	522,904	85.1	355,172	147.2
Firefighters	1/01/07	\$ 705,051	643,765	(61,286)	109.5%	88,682	(69.1)%
Retirement	1/01/08	787,663	732,829	(54,834)	107.5	95,767	(57.3)
System	1/01/09	765,871	776,622	10,751	98.6	102,252	10.5
	1/01/10	802,576	833,844	31,268	96.3	107,625	29.1
	1/01/11	810,216	872,133	61,917	92.9	105,275	58.8
	1/01/12	810,764	903,399	92,635	89.7	110,751	83.6
	1/01/13	824,060	944,791	120,731	87.2	110,608	109.2
	1/01/14	903,627	963,574	59,947	93.8	110,741	54.1
	1/01/15	988,806	1,006,646	17,840	98.2	111,305	16.0
	12/31/15	1,060,312	1,058,265	(2,047	100.2	111,133	(1.8)
		• •				•	. ,

 ${\it See accompanying notes to required supplementary information.}$ 

# Schedules of Funding Progress (Concluded)

(dollars in thousands)

	, , , , , ,		,	В	ased on Actuarial Val	ue of Assets			
System	Date	Ac	(1) tuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Unfunded AAL (UAAL) Actuarial Value of Assets (2) - (1)	(4) Funded Ratios Based on Actuarial Value of Assets (1) / (2)		(5) Projected Annual Covered Payroll	(6) UAAL as a % of Covered Payroll (3) / (5)
luduaa	1/01/07	Ļ	116 070	117 127	240	00.90/	<u>,</u>	12.105	2.00%
Judges Retirement	1/01/07 1/01/08	\$	116,879 129,847	117,127 135,379	248 5,532	99.8% 95.9	\$	12,195 13,322	2.0% 41.5
System	1/01/09		126,120	145,965	19,845	86.4		14,404	137.8
System:	1/01/10		131,491	158,303	26,812	83.1		14,434	185.8
	1/01/11		131,869	167,581	35,712	78.7		14,234	250.9
	1/01/12		130,561	167,982	37,421	77.7		14,981	249.8
	1/01/13		131,217	174,923	43,706	75.0		14,885	293.6
	1/01/14		145,121	185,113	39,992	78.4		15,195	263.2
	1/01/15		156,956	192,445	35,489	81.6		16,072	230.8
	12/31/15		166,298	198,987	32,689	83.6		15,832	206.5
Governors and	1/01/07	\$	10,983	9,212	(1,771)	119.2%	\$	860	(205.9)%
Legislators	1/01/08		11,736	9,862	(1,874)	119.0		947	(197.9)
Retirement Plan	1/01/09		10,841	10,982	141	98.7		910	15.5
	1/01/10		10,769	11,305	536	95.3		910	58.9
	1/01/11		10,197	11,513	1,316	88.6		910	144.6
	1/01/12		9,565	12,029	2,464	79.5		910	270.8
	1/01/13		9,077	11,925	2,848	76.1		910	313.0
	1/01/14		9,457	12,186	2,729	77.6		390	699.7
	1/01/15		9,908	12,223	2,315	81.1		928	249.5
	12/31/15		10,173	12,249	2,076	83.1		943	220.1
Tier 2 Public	1/01/12	\$	2,833	3,055	222	92.7%	\$	36,821	0.6%
Employees	1/01/13		17,818	16,755	(1,063)	106.3		203,779	(0.5)
Contributory	1/01/14		46,241	42,328	(3,913)	109.2		353,227	(1.1)
Retirement	1/01/15		88,743	81,624	(7,119)	108.7		492,882	(1.4)
System*	12/31/15		145,518	140,320	(5,198)	103.7		637,560	(0.8)
Tier 2 Public	1/01/12	\$	90	101	11	89.1 %	\$	855	1.3 %
Safety and	1/01/12	Ų	1,161	1,042	(119)	111.4	ڔ	10,237	(1.2)
Firefighter	1/01/13		3,822	3,269	(553)	116.9		20,215	(2.7)
Contributory Retirement	1/01/15		8,666	7,432	(1,234)	116.6		35,019	(3.5)
System*	12/31/15		15,618	13,627	(1,991)	114.6		53,276	(3.7)
All	1/01/07	\$ 1	8,093,491	18,886,114	792,623	95.8 %	\$ 3	3,878,603	20.4
Retirement	1/01/08	2	20,269,043	21,321,332	1,052,289	95.1	4	4,164,617	25.3
Systems	1/01/09	1	9,857,580	22,932,398	3,074,818	86.6	4	4,487,355	68.5
	1/01/10	2	20,818,430	24,274,639	3,456,209	85.8	4	4,579,772	75.5
	1/01/11	2	21,131,649	25,535,499	4,403,850	82.8	4	4,488,030	98.1
	1/01/12	2	21,117,218	26,564,932	5,447,714	79.5	4	4,548,820	119.8
	1/01/11	2	21,370,069	27,724,395	6,354,326	77.1	4	4,604,893	138.0
	1/01/14	2	23,405,492	28,665,412	5,259,920	81.7	4	4,669,560	112.6
	1/01/15	2	25,473,901	29,808,235	4,334,334	85.5		4,678,491	92.6
	12/31/15	2	27,124,096	31,150,335	4,026,239	87.1	4	4,714,628	85.4

^{*}New system additional years will be added as they become available.

See accompanying notes to required supplementary information.

# **Solvency Tests**

				Actuarial A	<b>.</b>					
		(1) Active Members	(2) Retired and	(3) Active Member (Employer	(4) Total Actuarial Accrued	Actuarial Value	Lia	bilities Co	ctuarial Ac overed by	Assets
System	Date	Contributions	Beneficiaries	Financed Portion)	Liabilities	of Assets	(1)	(2)	(3)	(4)
Noncontributory	1/01/07	\$ 756,008	6,285,758	8,042,295	15,084,061	14,446,928	100%	100%	92%	96%
Retirement	1/01/08	728,986	7,020,899	9,275,300	17,025,185	16,199,077	100	100	91	95
System	1/01/09	699,314	7,671,008	9,936,268	18,306,590	15,839,461	100	100	75	87
	1/01/10	618,209	8,347,578	10,418,716	19,384,503	16,619,831	100	100	73	8
	1/01/11	575,867	8,958,451	10,854,441	20,388,759	16,852,691	100	100	67	83
	1/01/12	539,951	9,875,383	10,845,509	21,260,843	16,805,952	100	100	59	79
	1/01/13	498,575	10,075,732	11,626,589	22,200,896	16,969,392	100	100	55	76
	1/01/14	455,136	10,798,876	11,727,573	22,981,585	18,601,513	100	100	63	81
	1/01/15	411,752	11,446,753	12,009,720	23,868,225	20,240,645	100	100	70	85
	12/31/15	382,627	12,664,634	11,852,309	24,899,570	21,539,002	100	100	72	87
Contributory	1/01/07	\$ 316,492	436,812	309,663	1,062,967	1,004,452	100%	100%	81%	94%
Retirement	1/01/08	324,856	468,966	376,429	1,170,251	1,102,107	100	100	82	94
System	1/01/09	334,732	520,848	362,992	1,218,572	1,097,711	100	100	67	90
•	1/01/10	318,205	556,495	361,309	1,236,009	1,116,736	100	100	67	90
	1/01/11	307,896	591,899	351,617	1,251,412	1,132,661	100	100	66	91
	1/01/12	308,962	630,747	329,333	1,269,042	1,135,251	100	100	59	89
	1/01/13	294,317	669,744	316,775	1,280,836	1,133,433	100	100	53	88
	1/01/14	286,020	717,842	281,989	1,285,851	1,165,002	100	100	57	91
	1/01/15	272,720	766,078	256,783	1,295,581	1,198,862	100	100	62	93
	12/31/15	238,924	832,784	244,334	1,316,042	1,198,803	100	100	52	91
Public Safety	1/01/07	\$ 90,849	1,006,399	871,734	1,968,982	1,809,198	100%	100%	82%	92%
Retirement	1/01/08	90,962	1,076,782	1,080,082	2,247,826	2,038,613	100	100	81	91
System	1/01/09	87,976	1,254,909	1,130,782	2,473,667	2,017,576	100	100	60	82
-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1/01/10	81,677	1,345,480	1,223,518	2,650,675	2,137,027	100	100	58	81
	1/01/11	76,375	1,455,233	1,312,493	2,844,101	2,194,015	100	100	50	77
	1/01/11	77,231	1,501,102	1,370,148	2,948,481	2,222,202	100	100	47	75
	1/01/12	74,661	1,593,128	1,425,438	3,093,227	2,283,911	100	100	43	74
	1/01/13	74,001	1,682,390	1,435,104	3,191,506	2,530,709	100	100	54	7 <del>-</del> 79
	1/01/14		1,769,909			2,781,314	100	100	63	83
	12/31/15	70,992 66,377	1,901,291	1,503,158 1,543,607	3,344,059 3,511,275	2,988,371	100	100	66	85
Firefighters	1/01/07	\$84,670	355,518	203,577	643,765	705,051	100%	100%	130%	110%
Retirement	1/01/08	86,624	389,586	256,619	732,829	787,663	100	100	121	107
System	1/01/09	94,583	437,796	244,243	776,622	765,871	100	100	96	99
2,300111	1/01/09	96,734	467,284	269,826	833,844	802,576	100	100	88	96
	1/01/10	103,678	495,985	272,470	872,133	810,216	100	100	77	93
	1/01/11	116,966	516,105	272,470	903,399	810,764	100	100	66	90
	1/01/13	127,442	532,366	284,983	944,791	824,060	100	100	58 71	87
	1/01/14	141,471	544,643	307,460	993,574	903,627	100	100	71	91
	1/01/15	152,667	566,583	287,396	1,006,646	988,806	100	100	94	98
	12/31/15	163,041	594,595	300,629	1,058,265	1,060,312	100	100	101	100

# Solvency Tests (Concluded)

				Actuarial Ac	crued Liabilities					
Sustan	Data	(1) Active Members	(2) Retired and	(3) Active Member (Employer	(4) Total Actuarial Accrued	Actuarial Value	Lia	rtion of Adbilities Co	overed by	Assets
System	Date	Contributions	Beneficiaries	Financed Portion)	Liabilities	of Assets	(1)	(2)	(3)	(4)
Judges	1/01/07	\$ 8,209	56,363	52,555	117,127	116,879	100%	100%	100%	100%
Retirement	1/01/08	7,342	62,724	65,313	135,379	129,847	100	100	92	96
System	1/01/09	7,738	69,534	68,693	145,965	126,120	100	100	71	86
	1/01/10	5,802	81,582	70,919	158,303	131,491	100	100	62	83
	1/01/11	4,309	93,548	69,724	167,581	131,869	100	100	49	79
	1/01/12	4,376	97,460	66,146	167,982	130,561	100	100	47	78
	1/01/13	4,102	98,499	72,322	174,923	131,217	100	100	40	75
	1/01/14	3,567	111,132	70,414	185,113	145,121	100	100	43	78
	1/01/15	3,374	120,460	68,611	192,445	156,956	100	100	48	82
	12/31/15	2,605	128,765	67,617	198,987	166,298	100	100	52	84
Utah	1/01/07	\$ 159	5,142	3,911	9,212	10,983	100%	100%	145%	119%
Governors	1/01/08	145	5,123	4,594	9,862	11,736	100	100	141	119
and	1/01/09	119	6,508	4,355	10,982	10,841	100	100	97	99
Legislators	1/01/10	119	6,508	4,678	11,305	10,769	100	100	89	95
Retirement	1/01/11	102	6,315	5,096	11,513	10,197	100	100	74	89
Plan	1/01/12	107	6,482	5,440	12,029	9,565	100	100	55	80
	1/01/13	104	6,396	5,425	11,925	9,077	100	100	48	76
	1/01/14	94	7,037	5,055	12,186	9,457	100	100	46	78
	1/01/15	62	7,201	4,960	12,223	9,908	100	100	37	81
	12/31/15	66	7,468	4,715	12,249	10,173	100	100	37	83
Tier 2										
Public	1/01/12	\$ —	_	3,055	3,055	2,833	100%	100%	100%	93%
Employees	1/01/13	_	_	16,755	16,755	17,818	100	100	106	106
Contributory	1/01/14	_	_	42,328	42,328	46,241	100	100	109	109
Retirement	1/01/15	_	_	81,624	81,624	88,743	100	100	109	109
System*	12/31/15	_	12	140,308	140,320	145,518	100	100	104	104
Tier 2										
Public	1/01/12\$	\$ —	_	101	101	90	100%	100%	100%	89%
Safety and Firefighter	1/01/13	<b>–</b>	_	1,042	1,042	1,161	10070	100	100	100
Contributory	1/01/13	_	_	3,269	3,269	3,822	100	100	100	117
Retirement	1/01/14	_	_	7,432	7,432	8,666	100	100	100	117
System*	12/31/15		_	13,627	13,627	15,618	100	100	100	115
Jysteili	12/31/13	_		13,027	13,027	13,010	100	.00	100	115

^{*}New systems' additional years will be added as they become available.

# Schedules of Active Member Valuation Data

		Number of			Activ	e Members	Inflation
System	Year	Participating Employers	Active Members	Projected Annual Payroll	Average Pay	Percent Increase	Increase (CPI)
Noncontributory	2006	409	87,219	\$ 3,326,392,000	37,786	0.41%	2.50%
Retirement	2007	411	89,605	3,582,495,000	39,584	4.76	4.20
System	2008	416	93,576	3,871,636,000	40,531	2.39	0.10
	2009	416	92,766	3,955,040,000	41,945	3.49	2.70
	2010	419	92,392	3,881,790,000	41,854	(0.22)	1.50
	2011	430	87,901	3,900,106,000	43,308	3.47	3.20
	2012	436	82,259	3,794,929,000	44,828	3.51	2.10
	2013	439	76,845	3,675,331,000	46,294	3.27	1.50
	2014	437	71,827	3,570,912,000	47,994	3.67	1.60
	2015	451	68,273	3,458,286,000	50,002	4.18	0.10
Contributory	2006	161	3,010	\$ 133,812,000	43,005	2.99%	2.50%
Retirement	2007	160	2,852	132,899,000	44,865	4.33	4.20
System	2008	158	2,743	133,110,000	46,830	4.38	0.10
	2009	160	2,515	127,804,000	47,941	2.37	2.70
	2010	159	2,330	116,395,000	47,620	(0.67)	1.50
	2011	159	2,137	110,103,000	48,806	2.49	3.20
	2012	159	1,937	103,074,000	50,504	3.48	2.10
	2013	159	1,733	94,895,000	51,680	2.33	1.50
	2014	159	1,503	90,623,000	54,003	4.49	1.60
	2015	158	943	82,426,000	56,747	5.08	0.10
Public Safety	2006	123	7,474	\$ 316,662,000	42,356	3.98%	2.50%
Retirement	2007	126	7,587	339,187,000	43,899	3.64	4.20
System	2008	128	7,894	365,043,000	45,964	4.70	0.10
	2009	130	7,695	373,959,000	47,145	2.57	2.70
	2010	130	7,624	363,037,000	46,898	(0.52)	1.50
	2011	130	7,619	374,293,000	47,329	0.92	3.20
	2012	130	7,313	366,471,000	48,416	2.30	2.10
	2013	130	7,019	363,389,000	49,825	2.91	1.50
	2014	131	6,672	360,751,000	51,603	3.57	1.60
	2015	131	6,399	355,172,000	53,488	3.65	0.10
Firefighters	2006	52	1,684	\$ 88,682,000	51,549	2.14%	2.50%
Retirement	2007	51	1,771	95,767,000	52,247	1.36	4.20
System	2008	52	1,849	102,252,000	54,111	3.57	0.10
	2009	55	1,907	107,625,000	54,466	0.66	2.70
	2010	56	1,887	105,275,000	54,741	0.50	1.50
	2011	57	1,932	110,751,000	55,240	0.91	3.20
	2012	57	1,884	110,608,000	56,507	2.29	2.10
	2013	58	1,845	112,158,000	58,193	2.98	1.50
	2014	59	1,787	111,305,000	60,081	3.24	1.60
	2015	60	1,735	111,133,000	62,628	4.24	0.10

### Schedules of Active Member Valuation Data (Concluded)

		Number of				Activ	e Members	Inflation
System	Year	Participating Employers	Active Members		Projected Annual Payroll	Average Pay	Percent Increase	Increase (CPI)
Judges	2006	1	106	\$	12,195,000	112,350	1.64%	2.50%
Retirement	2007	1	108		13,322,000	120,184	6.97	4.20
System	2008	1	106		14,404,000	128,706	7.09	0.10
	2009	1	104		14,434,000	131,742	2.36	2.70
	2010	1	109		14,234,000	133,692	1.48	1.50
	2011	1	111		14,918,000	132,615	(0.80)	3.20
	2012	1	111		14,885,000	132,644	0.02	2.10
	2013	1	112		14,942,000	139,135	4.89	1.50
	2014	1	114		15,195,000	136,234	(2.09)	1.60
	2015	1	112		15,832,000	145,112	6.52	0.10
Utah Governors	2006	1	96	\$	8,600	7,649	(14.58)%	2.50%
and Legislators	2007	1	97		947,000	9,109	19.08	4.20
Retirement Plan	2008	1	93		910,000	9,785	7.42	0.10
	2009	1	119		910,000	7,647	(21.85)	2.70
	2010	1	125		910,000	7,280	(4.80)	1.50
	2011	1	115		910,000	7,913	8.70	3.20
	2012	1	113		910,000	8,053	1.77	2.10
	2013	1	99		975,000	10,172	26.31	1.50
	2014	1	105		1,032,000	9,526	(6.35)	1.60
	2015	1	93		943,000	10,099	6.02	0.10
Tier 2 Public	2011	456	4,777	\$	36,821,000	7,708	100.00%	1.50%
Employees	2012	461	10,356	2	.03,779,000	27,030	250.68	2.10
Contributory	2013	461	13,718	3	49,257,000	30,279	12.02	1.50
Retirement	2014	463	17,225	3	53,227,000	32,388	6.97	1.60
System*	2015	465	21,778	6	37,560,000	34,031	5.07	0.10
Tier 2								
Public Safety	2011	145	99	\$	855,000	8,636	100.00%	1.50%
and Firefighter	2012	145	477		10,237,000	33,394	286.68	2.10
Contributory	2013	145	885		24,656,000	33,902	1.52	1.50
Retirement	2014	149	1,331		35,019,000	35,871	5.81	1.60
System*	2015	149	1,824		53,276,000	37,051	3.29	0.10

# Schedules of Retirants and Beneficiaries

			Added to Rolls	1	Removed from Rolls		Rolls End of Year	% Increase in Annual	Average Annual
System	Year	Number	Allowances	Number	Allowances	Number	Allowances	Allowances	Allowances
Noncontributory	2006	2,728	\$ —	284	\$ —	28,154	\$ 533,248,000	13.53%	\$ 18,387
Retirement	2007	2,131	84,779,000	320	8,501,000	29,965	609,526,000	14.30	19,138
System	2008	2,082	75,142,000	316	24,876,000	31,731	659,792,000	8.25	19,616
	2009	2,540	84,601,000	370	21,340,000	33,901	723,053,000	9.59	20,039
	2010	2,697	101,281,000	459	30,530,000	36,139	793,804,000	9.79	20,432
	2011	2,629	92,161,000	552	42,268,000	38,216	843,697,000	6.29	20,618
	2012	2,745	99,170,000	505	42,739,000	40,456	900,128,000	6.69	20,841
	2013	3,366	118,337,000	715	43,781,000	43,107	974,684,000	8.28	21,063
	2014	3,680	123,894,000	866	54,780,000	45,921	1,043,798,000	7.09	21,170
	2015	3,399	140,471,000	578	60,622,000	48,742	1,123,647,000	7.65	21,363
Contributory	2006	187	\$ —	510	\$ —	5,852	\$ 58,546,000	2.53%	\$ 9,503
Retirement	2007	197	7,748,000	497	4,616,000	5,552	61,678,000	5.35	10,287
System	2008	151	6,547,000	464	6,129,000	5,239	62,096,000	0.68	11,067
	2009	181	8,434,000	449	5,681,000	4,971	64,849,000	4.43	11,961
	2010	218	9,641,000	425	6,925,000	4,764	67,565,000	4.19	12,890
	2011	177	8,271,000	389	7,461,000	4,552	68,375,000	1.20	13,777
	2012	184	9,403,000	366	6,928,000	4,370	70,850,000	3.62	14,863
	2013	222	9,875,000	340	6,567,000	4,252	74,158,000	4.67	15,996
	2014	209	10,036,000	146	7,179,000	4,315	77,015,000	3.85	16,341
	2015	187	11,793,000	280	7,418,000	4,222	81,390,000	5.68	17,497
Public Safety	2006	212	\$ —	31	\$ —	3,449	\$ 82,499,000	11.42%	\$ 22,977
Retirement	2007	190	10,541,000	25	1,176,000	3,614	91,864,000	11.35	23,575
System	2008	197	16,691,000	45	9,611,000	3,766	98,944,000	7.71	24,391
	2009	170	11,925,000	105	4,597,000	3,831	106,272,000	7.41	25,710
	2010	212	14,221,000	31	4,662,000	4,012	115,831,000	8.99	26,497
	2011	157	11,329,000	44	6,591,000	4,125	120,569,000	4.09	27,182
	2012	195	13,695,000	28	5,725,000	4,292	128,539,000	6.61	27,693
	2013	230	15,532,000	41	6,585,000	4,481	137,486,000	6.96	28,233
	2014	562	15,463,000	135	8,185,000	4,908	144,764,000	5.29	27,226
	2015	268	18,681,000	12	8,058,000	5,164	155,387,000	7.34	27,550
Firefighters	2006	44	\$ —	5	\$ —	1,013	\$ 29,497,000	8.17%	\$ 26,430
Retirement	2007	53	5,023,000	3	584,000	1,063	33,936,000	15.05	27,513
System	2008	33	3,457,000	13	2,038,000	1,083	35,355,000	4.18	29,169
	2009	38	4,503,000	9	1,547,000	1,112	38,311,000	8.36	30,158
	2010	44	5,173,000	7	2,354,000	1,149	41,130,000	7.36	31,044
	2011	32	3,171,000	8	2,897,000	1,173	41,404,000	0.67	31,874
	2012	35	4,114,000	4	1,843,000	1,204	43,675,000	5.48	32,584
	2013	46	4,552,000	20	3,480,000	1,230	44,747,000	2.45	33,292
	2014	119	4,664,000	51	1,701,000	1,298	47,710,000	6.62	32,763
	2015	55	4,788,000	20	2,827,000	1,333	49,671,000	4.11	33,319

### Schedules of Retirants and Beneficiaries (Concluded)

			Added to Rolls		oved from Rolls		Rolls End of Year	% Increase in Annual	Average Annual
System	Year	Number	Allowances	Number	Allowances	Number	Allowances	Allowances	Allowances
Judges	2006	3	\$ —	2	\$ —	89	\$ 5,251,000	10.43%	\$ 57,325
Retirement	2007	7	1,254,000	_	170,000	96	6,335,000	20.64	60,717
System	2008	3	583,000	2	338,000	97	6,580,000	3.87	63,084
	2009	10	1,015,000	_	_	107	7,595,000	15.43	65,133
	2010	8	1,415,000	_	_	115	9,010,000	18.63	68,784
	2011	5	629,000	4	991,000	116	8,648,000	(4.02)	72,696
	2012	4	783,000	3	296,000	117	9,135,000	5.63	74,705
	2013	11	1,898,000	4	844,000	124	10,189,000	11.54	76,264
	2014	14	1,840,000	6	668,000	132	11,361,000	11.50	79,202
	2015	9	1,711,000	1	672,000	140	12,400,000	9.15	81,633
Utah Governors	2006	3	\$ —	11	\$ —	222	\$ 758,000	0.40%	\$ 2,983
and Legislators	2007	6	57,000	8	57,000	220	758,000	_	2,966
Retirement Plan	2008	8	70,000	6	65,000	222	763,000	0.66	2,941
	2009	5	73,000	3	52,000	224	784,000	2.75	3,030
	2010	5	60,000	9	54,000	220	790,000	0.77	3,076
	2011	7	56,000	7	47,000	220	799,000	1.14	3,151
	2012	8	52,000	4	37,000	224	814,000	1.88	3,160
	2013	21	119,000	6	41,000	239	892,000	9.58	3,167
	2014	9	80,000	12	63,000	236	909,000	1.91	3,287
	2015	12	73,000	7	78,000	241	904,000	(0.55)	3,311
Tier 2 Public	2011	_	_	_	_	_	_	_	_
Employees	2012	_	_	_		_	_	_	_
Contributory	2013	_	_	_		_	_	_	_
Retirement	2014	_	_	_	_	_	_	_	_
System	2015	1	\$ 401,000	_	\$ 68,000	1	\$ 333,000	_	\$ 865
Tier 2		_	_	_	_	_	_	_	_
Public Safety	2011	_	_	_	_	_	_	_	_
and Firefighter	2012	_	_	_	_	_	_	_	_
Contributory	2013	_	_	_	_	_	_	_	
Retirement	2014	_	_	_	_	_	_	_	_
System*	2015	_	\$ 30,000	_	_	_	\$ 30,000	_	_

^{*}There are currently no retirees in the system.







#### UTAH RETIREMENT SYSTEMS

# DEFINED BENEFIT SYSTEMS **SUMMARY OF** PLAN PROVISIONS

### Noncontributory Retirement System

#### **Membership Eligibility**

The Public Employees Noncontributory Retirement System was established on July 1, 1986. All eligible employees of the State and School entities hired subsequent to that date are automatically members of the Noncontributory System. Local government entities had the option of adopting the new System or remaining with the Contributory System. An employee is qualified for membership in the Noncontributory System if his or her employer participates in the System and the employee initially began full-time employment prior to July 1, 2011, and works at least 20 hours per week and receives benefits normally provided by his or her employer as approved by the Retirement Board, and teachers who teach half-time.

#### Vesting

Retirement benefit becomes vested upon the member's completion of four years of qualifying service.

#### **Service Retirement**

Age	Years of Service	Allowance Reduction†
Any age	30	None
Any age	25	Full actuarial before age 60
60-61	20	3% each year before age 65
62-64	10	3% each year before age 65
65	4	None

[†] With fewer than 30 years of service from any combination of Utah Retirement Systems, retiring before age 65 will reduce the monthly benefit approximately 7% for every year under age 60 and 3% for each year between ages 60 and 65.

#### **Service Benefit Formula**

Number of years of service x 2.0% x FAS.*

#### **Cost-of-Living Allowance**

Up to 4% annually on the original retirement benefit. Eligible after one year.

#### **Death Benefits**

An active member's death benefit consists of a payment equal to 75% of the highest annual salary with a minimum of \$1,000 and a refund of transferred contributions plus interest, if applicable. The spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications or has 15 or more years of service credit.

An inactive member's death benefit for someone with fewer than 10 years of service consists of a refund of transferred contributions plus interest, if applicable. For those with 10 or more years of service credited to their account prior to July 1, 1987, and who have not withdrawn their contributions. the benefit is the same as for active members.

^{*} FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

#### Summary of Plan Provisions (Continued)

Noncontributory Retirement System (Concluded)

A retired member's death benefit depends on the retirement option selected at retirement. No death benefit is available without a reduced retirement benefit.

#### Refunds

A terminated member who transferred from the Contributory Retirement System is eligible for a 100% refund of transferred member contributions plus interest. There is a 60-day refund processing period after the last day of paid employment.

#### **Redeposits**

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

#### Contribution Rates (as of 12-31-2015)

Employer rate for State and School (Level A) is 22.19% of covered salary and 18.47% for Local Government (Level B).

#### Interest

Up to 7.50% on member accounts transferred from the Contributory Retirement System.

## Contributory Retirement System

#### **Membership Eligibility**

The Public Employees Contributory Retirement System includes eligible public employees of the State of Utah and its political subdivisions including public education employees of those entities covered by the System. An employee is qualified for membership in the Contributory System if his or her employer participates in the System and the employee initially began full-time employment prior to July 1, 2011, and works at least 20 hours per week and receives benefits normally provided by his or her employer as approved by the Retirement Board, and teachers who teach half-time.

#### Vesting

Retirement benefit becomes vested upon the member's completion of four years of qualifying service. Eligible member contributions and interest thereon vest immediately.

#### **Service Retirement**

Age	Years of Service	Allowance Reduction†
Any age	30	None
60-61	20 3	% each year before age 65
62-64	10 3	% each year before age 65
65	4	None

[†] With fewer than 30 years of service from any combination of Utah Retirement Systems, retiring before age 65 will reduce the monthly benefit by 3% for each year between ages 60 and 65.

#### **Service Benefit Formula**

- 1) Number of years of service before 7-1-75 x 1.25% x FAS.*
- 2) Number of years of service after 6-30-75 x 2.0% x FAS.*
- 3) Plan 1 allowance = total of 1 and 2.
- * FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

#### **Cost-of-Living Allowance**

Up to 4% annually on the original retirement benefit. Eligible after one year.

#### **Death Benefits**

An active member's death benefit consists of a payment equal to 75% of the highest annual salary with a minimum of \$1,000 and a refund of contributions plus interest. The spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications, or has 25 years of service.

An inactive member's death benefit for someone with fewer than 10 years of service consists of a refund of contributions plus interest. For those with 10 or more years of service credited to their account prior to July 1, 1987, and who have not withdrawn their contributions, the benefit is the same as for active members.

A retired member's death benefit depends on the retirement option selected at retirement. No death benefit is available without a reduced retirement benefit.

#### Summary of Plan Provisions (Continued)

Contributory Retirement System (Concluded)

#### Refunds

A terminated member is eligible for a 100% refund of member contributions plus interest. There is a 60-day refund processing period after the last day of paid employment.

#### **Redeposits**

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

#### Contribution Rates (as of 12-31-2015)

Member contribution rate is 6.00%* of covered salary. Employer rate for State and School (Level A) is 17.70% of covered salary and 14.46% for Local Government (Level B).

*Employers have the option of paying all or part of member contributions on behalf of their employees.

#### Interest

Up to 7.50% on member accounts.

### **Public Safety Retirement System**

#### **Membership Eligibility**

The Public Safety Retirement System includes eligible State and local government employees directly involved in law enforcement. The Public Safety System consists of the Contributory and Noncontributory divisions. Employees are qualified for membership in the Public Safety System if the employee initially began employment prior to July 1, 2011, and: (1) they are regularly scheduled to work and be compensated for 2,080 hours a year in a recognized public safety department; (2) they have completed a certified training program; (3) their primary duty is as a peace officer, correctional officer, special function officer, certified dispatcher whose employer elected coverage in the Public Safety System, or full-time member of the Board of Pardons and Parole; and (4) in the course of employment their life or personal safety is at risk.

#### Vesting

Retirement benefit becomes vested upon the member's completion of four years of service credit. Eligible member contributions vest immediately.

#### **Service Retirement**

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

#### **Service Benefit Formula**

- 1) 2.5% x FAS* x years of service up to 20 years.
- 2) 2.0% x FAS* x years of service over 20 years.
- 3) Monthly benefit = total of 1 and 2.
- *FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

#### **Cost-of-Living Allowance**

Up to 2.5% annually on original retirement benefit. Employers have the option to provide an enhanced cost-ofliving (COLA) benefit to their public safety retirees that will raise the maximum COLA from 2.5% to 4% based on the CPI. Eligible after one year.

#### **Death Benefits**

#### **Division A (with Social Security)**

If death is in the line of duty, the benefit to the surviving spouse is a lump-sum payment equal to six months of the final average salary plus a monthly benefit of 30% of the final average salary. In the noncontributory system only, if the member has 20 years of service credit, the spouse's benefit is the same as for a retired member. If death is not in the line of duty, the benefit is \$1,000 or a refund of contributions for members with fewer than 10 years of service. For more than 10 years of service, the benefit to the surviving spouse is \$500 plus a monthly benefit of 2% of the final average salary for each year of service to a maximum of 30% of the final average salary. If there is no spouse, the settlement is a 100% refund of vested contributions payable to the beneficiary, or \$500, whichever is greater. Dependent children receive no additional benefits. A retired member's death benefit to the surviving spouse is 65% of the monthly benefit unless the member selects a reduced monthly benefit at the time of retirement to provide a 75% spousal benefit.

#### Summary of Plan Provisions (Continued)

Public Safety Retirement System (Concluded)

#### **Division B (without Social Security)**

If death is in the line of duty, the benefit to the surviving spouse is a lump-sum payment equal to six months of the final average salary plus a monthly benefit of 37.5% of the final average salary. Each unmarried child under 18 or dependent unmarried mentally or physically disabled child receives \$50 per month if the member has two or more years of service. If death is not in the line of duty and the member has less than two years of service, the spouse at the time of death will receive a refund of contributions plus 50% of the last 12 months of salary. For members with more than two years of service, the benefit is the same as that for death in the line of duty. If there is no spouse, the settlement is a 100% refund of vested contributions payable to the beneficiary, or \$500, whichever is greater. A retired member's death benefit to a surviving spouse is 65% of the monthly benefit unless the member selects a reduced monthly benefit at the time of retirement to provide a 75% spousal benefit. An unmarried child under 18 or dependent unmarried mentally or physically disabled child receives \$50 per month.

#### Refunds

A terminated member is eligible for a 100% refund of member contributions. There is a 60-day refund processing period after the last day of paid employment.

#### Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

#### Contribution Rates (as of 12-31-2015)

#### **Noncontributory Option**

Employer rates for Division A are: State units 41.35%: Bountiful 47.33%; other law enforcement units with a 2.5% COLA 34.04% and units with a 4.0% COLA 35.71% of salary. Employer rates for Division B are: Salt Lake City 46.67%; Ogden 48.68%; Provo 42.16%; Logan 41.92%; other law enforcement units with a 2.5% COLA 32.30% and units with a 4.0% COLA 38.94% of salary.

#### **Contributory Option**

Member rates in Division A are: State units 12.29%; all other law enforcement units with a 2.5% COLA 12.29% and units with a 4.0% COLA 12.29% of covered salary. Member rates in Division B are: Logan 11.13% and other law enforcement units with a 2.5% COLA 10.5% and units with a 4.0% COLA 10.5% of salary.*

Employer rates for Division A are: State units 29.70%; all other law enforcement units with a 2.5% COLA 22.75% and units with a 4.0% COLA 24.33% of covered salary. Employer rates for Division B are: Logan 31.80% and other law enforcement units with a 2.5% COLA 22.29% and units with a 4.0% COLA 28.95%. of salary.

*Employers have the option of paying all or part of member contributions on behalf of their employees.

#### Interest

Up to 7.50% on member accounts.

### Firefighters Retirement System

#### **Membership Eligibility**

The Firefighters Retirement System includes eligible State and local government employees directly involved in fire fighting and whose duties are classified as hazardous. If an employer does not classify the duties as hazardous, the employee will be enrolled in either the Public Employees Contributory or Noncontributory Retirement System. Employees are qualified for membership in the Firefighters System if they initially began employment prior to July 1, 2011, and are regularly scheduled to work and be compensated for 2,080 hours a year in a regular constituted fire department and are regularly assigned to hazardous duty, or are the State Fire Marshall or a Deputy State Fire Marshall. Although volunteer firefighters who are on the rolls of a legally organized volunteer fire department do not contribute to the System and are not eligible for service retirement benefits, they or their beneficiaries receive benefits based on the salary of the lowest paid firefighters in a first-class city if they are disabled or killed in the line of duty.

#### Vesting

Retirement benefit becomes vested upon the member's completion of four years of service credit. Eligible member contributions vest immediately.

#### Summary of Plan Provisions (Continued)

Firefighters Retirement System (Concluded)

#### **Service Retirement**

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

#### **Service Benefit Formula**

- 1) 2.5% x FAS* x years of service up to 20 years.
- 2) 2.0% x FAS* x years of service over 20 years.
- 3) Monthly benefit = total of 1 and 2.
- *FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

#### **Cost-of-Living Allowance**

Up to 4.0% annually on original retirement benefit. Eligible after one year.

#### **Disability Benefits**

If disability is in the line of duty, the benefit is 50% of the final average salary with no minimum age or service requirements. If disability is not in the line of duty, the benefit is a refund of contributions for members with fewer than five years of service. For members with more than five vears of service, the benefit is the same as that for disability incurred in the line of duty. Benefits are suspended while receiving Workers Compensation.

#### **Death Benefits**

#### Division A (with Social Security)

If death is in the line of duty, the benefit to the surviving spouse is a lump-sum payment equal to six months of the final average salary plus a monthly benefit of 30% of final average salary. If death is in the line of duty, and the member has 20 or more years of service credit, the spouse's benefit is the same as for a retired member.

If death is not in the line of duty, the benefit is \$1,000 or a refund of contributions for members with fewer than 10 years of service. For members with more than 10 years of service, the benefit to the surviving spouse consists of \$500 plus a monthly benefit of 2% of the final average salary for each year of service to a maximum of 30% of the final average salary. If there is no spouse, the settlement is a 100% refund of vested contributions payable to the beneficiary, or \$500, whichever is greater.

#### **Division B (without Social Security)**

If death is in the line of duty, the benefit to the surviving spouse is a lump-sum payment equal to six months of the final average salary plus a monthly benefit of 37.5% of the final average salary. Each unmarried child under 21 or dependent unmarried mentally or physically disabled child receives \$75 per month if the member had five or more years of service. If death is in the line of duty, and the member has 20 or more years of service credit, the spouse's benefit is the same as for a retired member.

If death is not in the line of duty, the benefit is a refund of contributions plus 50% of the last 12 months of salary for members with fewer than five years of service. For members with more than five years of service, the benefit is the same as that for death in the line of duty. If there is no spouse, the settlement is a 100% refund of vested contributions payable to the beneficiary, or \$500, whichever is greater. Total benefits cannot exceed 75% of the final average salary.

A retired member's death benefit to a surviving spouse is 75% of the monthly benefit with a minimum monthly payment of \$350. An unmarried child under 21 or dependent unmarried mentally or physically disabled child receives \$75 per month.

#### Refunds

A terminated member is eligible for a 100% refund of member contributions. There is a 60-day refund processing period after the last day of paid employment.

#### **Redeposits**

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

#### Contribution Rates (as of 12-31-2015)

Member rate in Division A is 15.05% of covered salary. Member rate in Division B is 16.71% of covered salary.* Employer rate in Division A is 3.99% and in Division B is 6.76% of covered salary. A fire insurance premium tax equal to 11.54% of salaries is also an additional part of the employer contribution rates. Fire insurance premium taxes are collected by the Utah State Treasurer for the Firefighters Retirement System to help fund retirement benefits.

* Employers have the option of paying all or part of member contributions on behalf of their employees.

Member contributions receive no interest.

#### Summary of Plan Provisions (Continued)

### **Judges Retirement System**

#### **Membership Eligibility**

The Judges Retirement System includes justices and judges of the courts of record as authorized in state statutes.

#### Vesting

Retirement benefit becomes vested upon the member's completion of 6 years of service credit. Eligible member contributions and interest thereon vest immediately.

#### **Service Retirement**

Age	Years of Service	Allowance Reduction
Any age	25	None
55	20	Full actuarial reduction
62	10	None
70	6	None

#### **Service Benefit Formula**

- 1) 5.00% x FAS* x years of service up to 10 yrs.
- 2) 2.25% x FAS* x years of service between 10 and 20 yrs.
- 3) 1.00% x FAS* x years of service over 20 yrs.
- 4) Monthly benefit = total of 1, 2, and 3.

#### **Cost-of-Living Allowance**

Up to 4% compounded annually, beginning one year after retirement.

#### **Death Benefits**

An active or inactive member's death benefit to the surviving spouse consists of a refund of member contributions and interest plus 65% of the member's most recent 12 months' compensation prior to death, or a monthly allowance equal to 65% of the amount computed for a service retirement with no early retirement reduction.

A retired member's death benefit to the surviving spouse is 65% of the member's monthly benefit at the time of death. If the member elected a reduced monthly benefit, the surviving spouse will receive a death benefit of 75% of the member's monthly benefit.

#### Refunds

A terminated member is eligible for a 100% refund of member contributions plus interest. There is a 60-day refund processing period after the last day of paid employment.

#### Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

#### Contribution Rates (as of 12-31-2015)

Employer rate includes 41.58% of covered salary and 10.33% from court fees.

#### **Interest**

Up to 7.50% on member accounts.

# **Utah Governors and Legislators Retirement System**

#### **Membership Eligibility**

The Utah Governors and Legislators Retirement Plan includes only governors and legislators of the State of Utah.

#### **Vesting**

Retirement benefit becomes vested upon the member's completion of four years of service credit.

#### **Service Retirement**

Age Year	s of Servic	e Allowance Reduction
65	4	None
62	10	3% each year before age 65

#### **Service Benefit Formula**

Governors: \$500 per month per term increased semi-annually up to 2% based on the CPI. The amount as of 12-31-15 is \$1,340.

**Legislators:** \$10 per month per each year of service as a legislator increased semi-annually up to 2% based on the CPI. The amount as of 12-31-15 is \$29.20.

#### **Cost-of-Living Allowance**

Up to 4% annually on the original retirement benefit. Eligible after one year.

An additional \$3.50 per month, for each year of service, is payable to elected and appointed legislators and governors who were members of this Plan before March 1, 2000.

^{*}FAS (Final Average Salary) = highest two years' earnings in judicial service converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

#### Summary of Plan Provisions (Continued)

Utah Governors and Legislators Retirement System (Concluded)

#### **Death Benefits**

An active or retired member's death benefit to a spouse consists of a monthly pension equal to 50% of the retirement allowance paid, or to which the member would have been entitled to upon reaching age 65, if the member has four or more years of service as a governor or legislator. The deceased member and surviving spouse must have been married at least six months.

#### Contribution Rates (as of 12-31-2015)

There was a 2015-16 appropriation payable by June 30, 2016, to the Utah Governors and Legislators Retirement Plan of \$421,429.

# Tier 2 Public Employees Contributory Retirement System

#### **Membership Eligibility**

The Tier 2 Public Employees Contributory Retirement System, brought about by SB 63, became effective on July 1, 2011. All eligible employees beginning employment on or after July 1, 2011, who have no previous service credit with any of the Utah Retirement Systems, are members of the Tier 2 Retirement System. A person initially entering full-time employment with a participating employer on or after July 1, 2011, must make an election to participate in either the Tier 2 Hybrid Public Employees Retirement System or the Tier 2 Defined Contribution (DC) Plan, within one year of his or her employment date. The election made is irrevocable. If no election is made, the employee automatically becomes a member of the Tier 2 Hybrid Public Employees Retirement System.

An employee is qualified for membership in the Tier 2 Public Employees Retirement System if his or her employer participates in this system, and one of the following: the employment, contemplated to continue during a fiscal or calendar year, normally requires an average of 20 hours or more per week and the employee receives benefits normally provided by the employer as approved by the Retirement Board; the employee is a classified school employee whose employment normally requires an average of 20 hours or more per week regardless of benefits; the employee is a teacher who teaches half-time or more and receives benefits normally provided by the employer as approved by the Retirement Board; the employee is an appointed officer* whose position is full time as certified by the participating employer; the employee is in a probationary status and meets eligibility requirements; the employee performs services through an employee leasing or similar arrangement and meets eligibility requirements.

#### Vesting

Retirement benefit is vested upon the member's completion of four years of qualifying service credit.

#### **Service Retirement**

#### Applies only to the Tier 2 Hybrid Retirement System

Age	Years of Service	Allowance Reduction†
Any age	35	None
60-61	20	Full actuarial before age 65
62-64	10	Full actuarial before age 65
65	4	None

[†] When fewer than 35 years of service from any combination of Utah Retirement Systems, the allowance will be reduced by approximately 7% for each year between ages 60 and 63 and approximately 9% for each year between ages 64 and 65.

#### **Service Benefit Formula**

#### Applies only to the Tier 2 Hybrid Retirement System

Service benefit formula is based upon number of years of service credit x 1.5% x highest five years' earnings converted to a monthly average.

#### **Cost-of-Living Allowance**

The Tier 2 Hybrid Retirement System has a COLA up to 2.5% on the retirement allowance. There is no COLA in the Tier 2 Defined Contribution Plan.

^{*}Appointed officers are employees appointed to a position for a definite and fixed term of office, and the position is recorded in the employer's charter, creation document, or similar document.

#### Summary of Plan Provisions (Continued)

Tier 2 Public Employees Contributory Retirement System (Concluded)

#### **Death Benefits**

#### Death Benefits for Non-Retired Members — Applies only to the Tier 2 Hybrid Public Employees Retirement System

The spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications or has 15 or more years of service credit. If there are any member contributions in the employee's Tier 2 Hybrid Public Employees Retirement Account and the surviving spouse does not qualify for a career benefit, the beneficiary(ies) will receive a refund of the employee's contributions plus interest.

#### Death Benefits — Applies to both the Hybrid Public **Employees Retirement System and the DC Plan**

If an employee is a non-retired member who is employed by a participating employer at the time of his or her death, his or her beneficiary(ies) will receive a payment representing 75% of the employee's highest annual salary. If the employee has less than 12 months of service, the benefit is prorated. The minimum insurance payment is \$1,000.

#### Death Benefits for Non-Retired Members in the Tier 2 Retirement Plan

After death, any money vested in the employee's URS Savings Plans (401(k), 457, IRAs) is payable to his or her beneficiary(ies).

#### Refunds

If the employee has a balance in his or her Tier 2 Defined Contribution account, he or she may be able to withdraw funds under certain circumstances. When an employee has four years of eligible employment, the employer contributions in his or her 401(k) account become vested and he or she is able to take a refund of the account upon termination of employment.

If the employee terminates employment prior to the vesting period and subsequently enters employment with a URS participating employer within 10 years of the previous termination date, all employer contributions will be reinstated upon completion of the vesting period. If he or she is not re-employed and eligible to participate in the DC Plan within 10 years of the previous termination date, the funds are forfeited. If the employee makes personal deferrals (i.e., payroll deductions) to the DC Plan, those deferrals are vested immediately and may be taken as a refund when terminating employment.

#### Contribution Rates* (as of 12-31-2015)

Range from 16.69% to 18.45% of salary for local government employers. The rate for State and School Employers is 20.02%.

* Includes 401(k) portion of the contribution rate.

# Tier 2 Public Safety and Firefighter **Contributory Retirement System**

#### **Membership Eligibility**

The Tier 2 Public Safety and Firefighter Contributory Retirement System, brought about by SB 63, became effective on July 1, 2011. All eligible employees beginning employment on or after July 1, 2011, who have no previous service credit with any of the Utah Retirement Systems, are members of the Tier 2 Public Safety and Firefighter Retirement System. A person initially entering full-time employment with a participating employer on or after July 1, 2011, must make an election to participate in either the Tier 2 Public Safety and Firefighter Retirement System or the Tier 2 Defined Contribution (DC) Plan, within one year of his or her employment date. The election made is irrevocable. If no election is made, the employee automatically becomes a member of the Tier 2 Hybrid Public Safety and Firefighter Retirement System.

#### **Membership Eligibility**

An employee qualifies for membership if: The employment normally requires an average of 2,080 hours of regularly scheduled employment per year in a recognized public safety department, as a law enforcement officer, correctional officer, special function officer, or full-time member of the Board of Pardons and Parole, and in the course of employment the employee's life or personal safety is at risk, and he or she has completed a certified training program, which is documented with our office, OR, if the employment normally requires an average of 2,080 hours of regularly scheduled employment per year in a regularly constituted fire department, the employee has been trained in firefighter techniques, and is assigned to a position of hazardous duty.

If the employee doesn't meet the eligibility requirements outlined in the previous explanation, based on the employer's participation, the employee will be enrolled in the Tier 2 Public Employees Contributory Retirement System as long as eligibility requirements are met.

#### Summary of Plan Provisions (Concluded)

#### Vesting

Retirement benefit is vested upon the member's completion of four years of qualifying service credit.

#### **Service Retirement**

#### Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

Age	Years of Service	Allowance Reduction†
Any age	25	None
60-61	20	Full actuarial before age 65
62-64	10	Full actuarial before age 65
65	4	None

[†] When fewer than 25 years of service from any combination of Utah Retirement Systems, the allowance will be reduced by approximately 7% for each year between ages 60 and 63 and approximately 9% for each year between ages 64 and 65.

#### **Service Benefit Formula**

#### Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

Service benefit formula is based upon number of years of service credit x 1.5% x highest five years' earnings converted to a monthly average.

#### **Cost-of-Living Allowance**

The Tier 2 Hybrid Public Safety and Firefighter Retirement System has a COLA up to 2.5% on the retirement allowance. There is no COLA in the Tier 2 Defined Contribution Plan.

#### **Death Benefits**

#### Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

An active member's death benefit consists of a payment equal to 75% of the highest annual salary with a minimum of \$1,000. The spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications or has 15 or more years of service credit. If there are any member contributions in the employee's Tier 2 Hybrid Public Employees Retirement Account and the surviving spouse does not qualify for a career benefit, the beneficiary(ies) will receive a refund of the employee's contributions plus interest.

#### Line-of-Duty Death — Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

If he or she has accrued less than 20 years of public safety or firefighter service credit, his or her spouse at the time of death will receive a lump-sum payment equal to six months of the final average salary and an allowance equal to 30% of the employee's final average salary.

If deceased has accrued 20 or more years of public safety or firefighter service credit, the employee will be considered retired with an option one allowance calculated without an actuarial reduction and his or her spouse at the time of your death will receive the allowance that would have been payable to the employee.

#### Death Benefit — Applies to both the Hybrid Public Safety and Firefighter Retirement System and the Tier 2 DC Plan

If an employee is a non-retired member who is employed by a participating employer at the time of his or her death, his or her beneficiary(ies) will receive a payment representing 75% of the employee's highest annual salary. If the employee has less than 12 months of service, the benefit is prorated. The minimum insurance payment is \$1,000.

#### Death Benefits for Non-Retired Members in the Tier 2 DC Plan

After death, any money vested in the employee's URS Savings Plans (401(k), 457, IRAs) is payable to his or her beneficiary(ies).

#### Refunds

If the employee has a balance in his or her Tier 2 Defined Contribution account, he or she may be able to withdraw funds under certain circumstances. When an employee has four years of eligible employment, the employer contributions in his or her 401(k) account becomes vested and he or she is able to take a refund of the account upon termination of employment.

If the employee terminates employment prior to the vesting period and subsequently enters employment with a URS participating employer within 10 years of the previous termination date, all employer contributions will be reinstated upon completion of the vesting period. If he or she is not re-employed and eligible to participate in the DC Plan within 10 years of the previous termination date, the funds are forfeited. If the employee makes personal deferrals (i.e., payroll deductions) to the DC Plan, those deferrals are vested immediately and may be taken as a refund when terminating employment.

#### **Contribution Rates*** (as of 12-31-2015)

Public Safety rates range from a low of 21.83% to a high of 38.35% of salary. The Firefighter rate is 12.08% of salary.

*Includes 401(k) portion of the contribution rate.



#### UTAH RETIREMENT SYSTEMS

# **CHANGES IN PLAN PROVISIONS**

The following retirement-related bills were passed by the 2015 Utah Legislature:

### **Public Safety and Firefighters Retirement Systems**

#### **H.B. 27: Department of Corrections Retirement Amendments**

Provides that an employee of the Department of Corrections shall continue to earn public safety service credit in the Public Safety Retirement System if the employee's position is no longer covered for new employees of the department and the employee continues to meet the eligibility requirements of the system.

#### **H.B. 115: Public Safety Retirement for Dispatchers**

Requires the state to cover its certified dispatchers under the public safety retirement systems and other participating employers may elect to cover their certified dispatchers under the public safety retirement systems.

#### **H.B. 133: Firefighter Retirement Amendments**

Allows the state fire marshal or a deputy state fire marshal to participate in a firefighters' retirement system.

#### H.B. 288: Line-of-duty Death Benefits for Peace Officers and Firefighters

Increases the lump-sum death benefit payable to the surviving spouses of public safety members and firefighters who die in the line-of-duty. Also requires local government employers to provide continuing health coverage for the surviving spouse and children and allows government employers to enter cost-sharing agreements to provide such coverage.

#### General

#### S.B. 11: Utah Retirement Systems Revisions

Addresses issues relating to the Tier 2 systems established by the Legislature in the 2010 General Session that have subsequently arisen, including: (1) clarifying that the maximum number of positions an employer may exclude from membership in systems; (2) modifying the Tier 2 election period; (3) clarifying system membership for legislators and full-time elected officials with previous service credit; (4) clarifying the effect of member exclusions from membership in systems; and (5) providing defined contribution plan death benefits.

#### **H.B. 12: Utah Retirement Systems Amendments**

The annual administrative and technical amendments to Title 49 recommended to the Legislature by URS includes:

- (1) allowing eligible retired firefighters and public safety officers to pay the premiums for health insurance directly from the retirement plan to qualify for favorable federal income tax benefits;
- (2) clarifying that a member may receive service credit for military service covered under the provisions of the federal Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA);
- (3) clarifying that the "amortization rate" contributed by a participating employer who reemploys a qualifying retiree means the amortization rate to be applied to the system that would have covered the retiree if the retiree's reemployed position were deemed to be an eligible, full-time position within that system; and
- (4) clarifying that "Benefits normally provided" specifically includes employer contributions to a health savings account, health reimbursement account, health reimbursement arrangement, or medical expense reimbursement plan.

#### **Changes in Plan Provisions**

(Concluded)

#### **H.B. 151: Affiliated Emergency Service Worker Postretirement Employment Amendments**

Provides that reemployment as an "affiliated emergency service worker" (Such as a volunteer firefighter or reserve law enforcement officer) is not subject to postretirement reemployment provisions under certain conditions, including maximum payments of \$500 per month; and provides that a member is not required to cease employment as an "affiliated emergency service worker" of a participating employer to be eligible to retire.

#### S.B. 236: Justice Court Judges **Retirement Amendments**

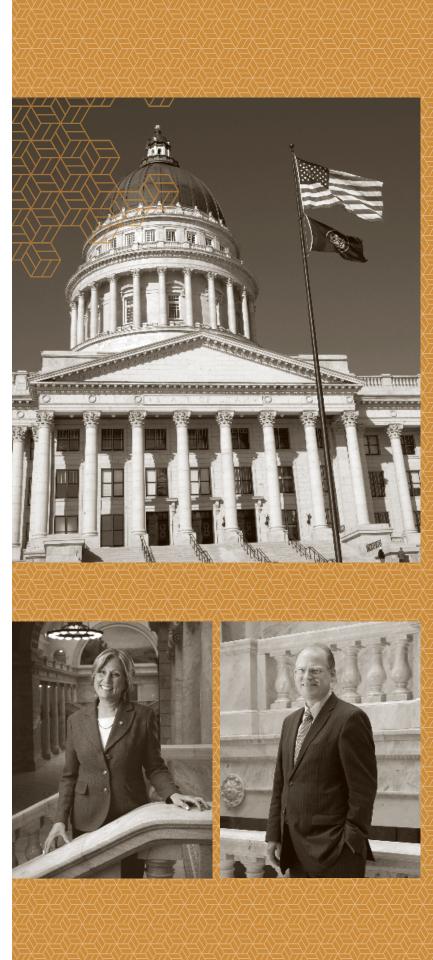
Clarifies the retirement allowance computation for justice court judges and establishes the full-time or part-time service status of a justice court judge for retirement purposes, based on employer certification and combined workload for multiple employers.

#### S.B. 239: Retirement **Participation Modifications**

Allows certain withdrawing entities to make an election to withdraw from participation in URS for current and future employees no later than January 1, 2017. Before a withdrawal, the entity and URS shall enter into an agreement on costs that arise out of the election of nonparticipation and arrangements for the payment of such costs.

#### H.B. 347: Retirement **Window Amendments**

Provides a six-month conversion window allowing local government units that had not previously done so to transfer participation from the Contributory Public Employees Retirement System to the Noncontributory Public Employees Retirement System. The employees of the employers that elect to transfer during the window may elect to join the noncontributory system.











## UTAH RETIREMENT SYSTEMS

# **DEFINED CONTRIBUTION SAVINGS PLANS SUMMARY OF PLAN PROVISIONS**

## Introduction

The 401(k), 457, Roth and traditional IRAs administered by the Board are Defined Contribution Savings Plans. These Plans are generally supplemental plans to the basic retirement benefits of the Retirement Systems, but may also be used as a primary retirement plan. These Plans are voluntary tax-advantaged retirement savings programs authorized under sections 401(k), 457(b), and 408 of the Internal Revenue Code and are available to state, local government, and education employees throughout Utah whose employers have adopted the plans.

## **Employer Contributions**

In addition to accepting employee contributions, the 401(k) and 457 Plans also accept employer contributions on behalf of their employees. All state and public education employees participating in the Noncontributory Retirement System receive an amount equal to 1.5% of their salary in the 401(k) Plan and Tier 2 Public Employees and Tier 2 Public Safety and Firefighter Retirement Systems participants also receive contributions according to their retirement plan. In addition, some employers match a portion of their employees' elective deferrals.

## Social Security Substitute

Organizations that have exempted themselves from Social Security coverage and have part-time, temporary, or seasonal employees, who are not participating in a qualifying retirement system, must cover these employees with a substitute plan.

Employers may use the 401(k)/457 Plans as a qualifying retirement system for these employees, but must contribute a minimum of 7.5% of salary to the Plan(s) on their behalf for it to be considered a "qualifying system." The employer may

contribute the 7.5% themselves, or they may require their employees to pay a portion or all of it.

## **Summary of Plan Provisions**

### **Deferral Limits**

- 401(k) Limited in 2015 to an annual maximum of \$18,000. Employer contributions and employee deferrals combined could not exceed the lesser of \$53,000 or 100% of compensation.
- **457** Limited to an annual maximum of \$18,000 or 100% of includable compensation.
- Roth and Traditional IRA Limited to an annual maximum of \$5,500 into all IRAs owned by the participant.

## **Coordination of Deferrals**

- **401(k)** Deferrals to the 401(k) and 403(b) plans must be coordinated.
- 457 Contributions to the 457 must be coordinated with all 457(b) plans.
- Roth and Traditional IRA All Roth and traditional IRA contributions must be coordinated.

## **Defined Contribution Savings Plans**

## Summary of Plan Provisions (Continued)

## **Catch-up Provisions**

- 401(k) An additional \$6,000 for participants 50 or older during the year.
- 457 An additional \$6,000 for participants age 50 or older during the year. There is an additional "special catch-up" provision that allows participants to double their contributions to a 457(b) plan during the three years immediately preceding the year they qualify for retirement. However, the special catch-up is limited to unused deferrals allowed in previous years.
- Roth and Traditional IRA An additional \$1,000 for participants 50 or older.

#### Withdrawals

- 401(k) Vested balances upon termination of employment, age 59½, retirement, disability, death, or hardship caused by immediate and heavy financial needs. (Hardships from employee deferrals only.)
- **457** Allowable upon termination of employment, age 70 1/2, retirement, death, or severe unforeseeable financial emergencies.
- Roth and Traditional IRA Allowable at any time, but with possible tax penalties if withdrawn prior to age 59½.

#### Rollovers

- 401(k) Allowable from other eligible retirement plans, or to other eligible retirement plans upon termination of employment or other qualifying events. May be either a direct rollover by the Plan or an indirect rollover by the participant within 60 days after distribution.
- **457** Allowable to other eligible retirement plans or from another 457(b) plan.
- **Roth and Traditional IRA** Allowable from other eligible retirement plans or to other eligible plans (depending on acceptance of receiving plan).

#### Vesting

- **401(k)** Employee and other employer contributions are fully vested. Tier 2 employer required contributions are vested after four years of eligible service (except for elected officials).
- 457 Fully vested.

Roth and Traditional IRA — Fully vested.

#### Loans

401(k) and 457 — Available up to 50% of member account balance, to a maximum of \$50,000 during a 12-month period. Only one outstanding loan allowed, per plan. Tier 2 employer required contributions are not eligible.

Roth and Traditional IRA — Not available.

## **Short-Term Trading Fees**

Each time money managers purchase or redeem stocks and bonds there are trading costs involved. Because of the costs generated by frequent or short-term trading, it became necessary to impose a short-term trading fee. Individuals who transfer any or all of their current account between core investment options more often than once every 30 days, are charged 2% of the amount transferred for each additional trade. Each transfer starts a new 30-day period.

## **Investment Transfer Options**

Changes in deferral amounts and in the investment options for future contributions may be made at any time. Participants may make one transfer of accumulated balances within each plan no more frequently than every seven calendar days.

## 2015 Core Investment Options

## **Income Fund**

The Income Fund is a stable value option and the most conservative of the investment choices. Approximately 95% of its assets are invested in investment grade bonds, which are "wrapped" with book value contracts. The contracts are financial agreements from creditworthy banks and insurance companies, protecting against changes in interest rates and allowing the returns to be smoothed over the duration of the portfolio. The remaining 5% is invested in short-term instruments for liquidity.

### **Bond Fund**

The Bond Fund invests in a diversified portfolio consisting of U.S. government securities, mortgage and asset-backed securities, corporate bonds, and short-term funds.

#### **Balanced Fund**

The Balanced Fund invests in a portfolio consisting of approximately 60% stocks and 40% bonds.

## **Defined Contribution Savings Plans**

## Summary of Plan Provisions (Concluded)

## **Large Cap Stock Value Fund**

The Large Cap Stock Value Fund invests in a diversified portfolio of common stocks that appear to be undervalued by the stock market, but have a favorable outlook for long-term growth.

## **Large Cap Stock Index Fund**

The Large Cap Stock Index Fund invests in stocks included in the Russell 1000 Index and is similarly weighted. This fund represents a broad range of industries in the U.S. economy.

## **Large Cap Stock Growth Fund**

The Large Cap Stock Growth Fund emphasizes capital appreciation and seeks to identify companies with future relative earnings strength at a reasonable valuation.

#### **International Fund**

The International Fund tracks the performance of the MSCI All Country World Index - ex. U.S. - Investable Market Index (ACWI ex. U.S. IMI) as closely as possible. The index is designed as a measure of the global stock market performance of developed and emerging markets that excludes the United States.

## **Small Cap Stock Fund**

The Small Cap Stock Fund invests in a broad cross-section of U.S. small companies whose size (market capitalization) falls within the smallest 10% of the market universe. The market universe is comprised of companies listed on the NYSE and NASDAO.

## **Brokerage Window**

The brokerage window is a self-directed brokerage account available through Charles Schwab. The brokerage account offers a wide variety of investment options with varying degrees of risk. The brokerage window allows the participant to choose from mutual funds, stocks, bonds, and exchange traded funds (ETFs).

## **Real Assets**

## **U.S. REITS**

U.S. REITS, real estate investment trusts, are an actively managed portfolio of real estate properties and mortgage related investments within the U.S. market. REITs increase diversification within the Target Date Funds and also add long-term inflation protection.

#### **Commodities**

Commodities are bulk goods and raw materials, such as grains, metals, livestock, oil, cotton, coffee, sugar, and cocoa; goods used to produce consumer products. Commodities are bought and sold on the cash market, and they are also traded on the futures exchanges in the form of futures contracts. In addition to their diversification benefits, commodities are used as a long-term hedge against inflation.

#### **Private Real Estate**

Private Real Estate is a fund of funds that allows investors to gain exposure to portfolios of direct real estate investments. The fund will invest primarily in existing private real estate funds, publicly traded real estate securities, and other real estate related investments. These portfolios are comprised of institutional quality commercial real estate across a broad range of real estate asset types.

## International Bonds

#### **International Bonds**

International Bonds are used to diversify the bond investments within the Target Date Funds. An international bond is a bond issued outside of the United States by a government or non-U.S. corporation.

## **Global Inflation-Linked Bonds**

Global Inflation-linked bonds are debt instruments created to protect investors from the effects of inflation through inflation-linked bonds issued primarily by developed countries. An example of inflation-linked bonds are TIPS (Treasury Inflation-Protected Securities), which are issued by the U.S. Government and are designed to reduce the risk of inflation by indexing the principal of the bond to an inflation rate.

## **Defined Contribution Savings Plans**

## Summary of Plan Provisions (Continued)

#### TARGET DATE FUNDS ASSET ALLOCATION

IARGEI DAIE FUNDS	ASSEI AL	LOCAI	ION								Target Dat	e Funds
Asset Classes	Retired	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
URS Income Fund	25%	20%	15%	10%	5%	_	_	_	_	_	_	_
URS Bond Fund	20	21	19	18	13%	9%	4%	3%	3%	3%	3%	3%
URS Large Cap Stock Value Fund	_	_	_	1.5	3	5	7.5	10	10	10	10	10
URS Large Cap Stock Index Fund	14	18	21	23	25	23	22	20	20	20	20	20
URS Large Cap Stock Growth Fund	_	_	_	1.5	3	5	7.5	10	10	10	10	10
URS International Stock Fund	4	5	8	13	19	27	32	33	33	33	33	33
URS Small Cap Stock Fund	1	1	2	3	5	8	9	10	10	10	10	10
International Bonds	10	10	10	10	8	5	3	2	2	2	2	2
U.S. Real Estate Investment Trusts	_	_	_	_	3	4	4	4	4	4	4	4
Commodities	3	3	3	3	4	4	4	4	4	4	4	4
Global Inflation-Linked Bonds	20	17	12	7	2	_	_	_	_	_	_	_
Private Real Estate	3	5	10	10	10	10	7	4	4	4	4	4
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

## **URS Target Date Funds**

The URS Target Date Funds offer a one-fund approach to investing in the URS Savings Plans. A Target Date Fund will give participants a diversified portfolio through a single investment option. The funds will gradually adjust throughout the participant's career and into retirement. The investment mix – which includes stocks, bonds, and real assets is automatically reallocated to be weighted more conservatively as the participant ages and enters into retirement.

## Health Reimbursement Arrangement

The Health Reimbursement Arrangement (HRA) is a tax-advantaged health savings plan funded by employer contributions to pay for qualified healthcare expenses incurred after retirement.

**Eligibility** — Benefits are eligible for the retiree, spouse, and dependents as defined by the Internal Revenue Service.

**Contributions** — HRA rules require all contributions be made by the employer and are determined by the employer's personnel policies. Contributions are generally from unused sick leave or other leave.

**Eligible Expenses** — Money is available for the member, his or her spouse, and dependents to pay qualified medical expenses. For a comprehensive list of eligible expenses, see IRS Publication 502, Medical and Dental Expenses.

**Refunds, Administration and Fees** — Contributions are placed in a money market account managed by Northern Trust investment management. Administrative and money management fees totaling 0.53% are deducted from earnings. There is also a \$2.50 monthly fee for the benefits card and claims processing.

The historical rates of returns for each investment fund are found on pages 139 and 140.

## 2015

## UTAH RETIREMENT SYSTEMS

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

# STATISTICAL Section

Schedules of Changes in Fund Balance — Defined Benefit Systems 184

This schedule provides readers with information regarding the participating

This summary provides readers with historical highlights of the Utah Retirement Systems.

Schedules of Participating Employers 207

employers and the systems in which they participate.

Utah Retirement Systems — a Highlight History

	These schedules allow readers to view changes in net assets and benefits over a 10-year period.
188	Schedules of Changes in Fund Balance — Defined Contribution Plans These schedules allow readers to view changes in net assets and refunds over a 10-year period.
190	Schedules of Benefit Deductions by Type These schedules provide readers with information regarding the type of benefit deductions for the last 10 years.
192	Schedules of Retired Members by Type of Benefit Option These schedules provide readers with information regarding benefit payments by years of service.
194	Schedules of Average Benefit Payments These schedules provide readers with information regarding benefit payments by years of service.
198	Schedules of Active Members by Age and Gender These schedules provide readers with information regarding members by age and gender.
199	Schedules of Retirees by Age and Gender These schedules provide readers with information regarding retirees by age and gender.
200	Schedules of Principal Participating Employers  These schedules provide readers with information regarding the largest participating employers.
204	Schedule of Utah Retirement Office Employees This schedule provides readers with information regarding the number of Utah Retirement Systems' employees.

# Schedules of Changes in Fund Balance — Defined Benefit Systems

Year Ended December 31

	(dolla	rs in thousan	d s )		Total Employer Contributions	Contributions		
System	Year	Beginning Net Position	Member Contributions	Employer Contributions	Court Fees/ Fire Insurance Tax	as a Percent of Covered Payroll	Net Investment Income	
Noncontributory	2006	\$ 13,892,439	22,646	440,421	_	13.24%	\$ 2,006,738	
Retirement	2007	15,818,483	18,245	487,803	_	14.20	1,041,414	
System	2008	16,751,804	14,110	522,733	_	13.50	(3,888,624)	
	2009	12,714,371	14,109	535,298	_	13.53	1,667,478	
	2010	14,152,562	33,528	564,154	_	14.51	1,860,976	
	2011	15,802,205	12,879	610,270	_	15.65	401,105	
	2012	15,935,472	15,014	644,907	_	16.99	2,000,995	
	2013	17,629,437	14,208	710,933	_	19.18	2,588,981	
	2014	19,915,815	13,587	772,420	_	21.63	1,419,053	
	2015	21,096,512	17,020	813,449	_	23.26	366,748	
Contributory	2006	\$ 1,018,525	9,534	10,737	_	8.02%	\$ 144,012	
Retirement	2007	1,115,416	9,700	11,208	_	8.56	71,640	
System	2008	1,131,316	9,410	11,037	_	8.29	(261,227)	
	2009	835,370	8,655	10,865	_	8.50	112,626	
	2010	937,587	10,299	11,851	_	10.18	121,153	
	2011	1,007,248	7,300	11,125	_	10.10	26,009	
	2012	1,013,050	6,962	11,705	_	11.36	131,169	
	2013	1,136,651	6,376	12,874	_	13.13	169,510	
	2014	1,281,945	5,461	12,954	_	14.29	87,577	
	2015	1,269,991	4,771	11,719	_	16.50	21,251	
Public Safety	2006	\$ 1,736,451	4,567	70,466	_	22.25%	\$ 250,813	
Retirement	2007	1,981,492	4,343	81,166	_	24.46	130,655	
System	2008	2,106,302	2,159	93,899	_	25.72	(491,024)	
	2009	1,614,057	1,556	98,729	_	26.40	213,627	
	2010	1,824,758	1,713	103,586	_	28.53	241,203	
	2011	2,058,019	1,070	110,829	_	29.61	52,655	
	2012	2,103,751	1,155	117,975	_	32.19	266,753	
	2013	2,366,057	1,258	128,744	_	35.18	350,563	
	2014	2,712,184	835	135,588	_	37.59	194,222	
	2015	2,899,386	905	141,024	_	39.51	50,654	
Firefighters	2006	\$ 686,062	7,761	_	9,518	10.73%	\$ 98,566	
Retirement	2007	773,776	9,194	_	13,797	14.41	50,738	
System	2008	814,674	10,428	_	10,219	9.99	(188,095)	
	2009	612,699	11,273	_	16,159	15.01	79,811	
	2010	682,219	14,112	238	10,677	10.37	89,122	
	2011	756,260	17,328	316	12,689	11.74	19,218	
	2012	765,524	17,503	1,264	16,057	15.66	96,255	
	2013	853,778	18,325	3,494	11,285	13.35	125,685	
	2013	968,661	18,300	5,514	14,154	17.67	69,070	
	2015	1,031,039	18,175	6,690	17,218	21.08	17,934	
	2013	1,051,059	10,173	0,090	17,210	21.00	17,957	

Transfers from Systems	Total Additions	Benefit Payments	Refunds	Administrative & Actuarial Expense	Transfers to Systems	Total Deductions	Changes in Net Position	Ending Net Position
112	2,469,917	533,248	2,763	7,862	_	543,873	1,926,044	15,818,483
7,173	1,554,635	609,526	3,443	8,345	_	621,314	933,321	16,751,804
	(3,351,781)	659,792	2,514	8,809	14,537	685,652	(4,037,433)	12,714,371
_	2,216,885	723,052	2,882	8,340	44,420	778,694	1,438,191	14,152,562
_	2,458,658	793,804	3,620	8,389	3,202	809,015	1,649,643	15,802,205
_	1,024,254	843,696	2,514	7,304	37,473	890,987	133,267	15,935,472
_	2,660,916	900,133	2,858	8,397	55,563	966,951	1,693,965	17,629,437
_	3,314,122	974,684	2,454	8,329	42,277	1,027,744	2,286,378	19,915,815
30,467	2,235,527	1,043,798	2,204	8,828	_	1,054,830	1,180,697	21,096,512
33,648	1,230,865	1,123,647	2,496	8,797	_	1,134,940	95,925	21,192,437
_	164,283	58,546	1,789	576	6,481	67,392	96,891	1,115,416
_	92,548	61,678	2,318	588	12,064	76,648	15,900	1,131,316
9,008	(231,772)	62,096	1,473	605	_	64,174	(295,946)	835,370
37,633	169,779	64,849	2,158	555	_	67,562	102,217	937,587
_	143,303	67,565	1,632	535	3,910	73,642	69,661	1,007,248
32,064	76,498	68,375	1,872	449	_	70,696	5,802	1,013,050
47,098	196,934	70,855	1,975	503	_	73,333	123,601	1,136,651
33,094	221,854	74,158	1,922	480	_	76,560	145,294	1,281,945
_	105,992	77,015	2,433	494	38,004	117,946	(11,954)	1,269,991
_	37,741	81,390	1,215	478	41,558	124,641	(86,900)	1,183,091
3,284	329,130	82,499	562	1,028	_	84,089	245,041	1,981,492
2,323	218,487	91,864	723	1,090	_	93,677	124,810	2,106,302
3,727	(391,239)	98,944	899	1,163	_	101,006	(492,245)	1,614,057
4,578	318,490	106,272	390	1,127	_	107,789	210,701	1,824,758
4,248	350,750	115,831	512	1,146	_	117,489	233,261	2,058,019
3,303	167,857	120,570	536	1,019	_	122,125	45,732	2,103,751
6,411	392,294	128,532	292	1,164	_	129,988	262,306	2,366,057
4,676	485,241	137,486	467	1,161	_	139,114	346,127	2,712,184
2,746	333,391	144,763	199	1,227	_	146,189	187,202	2,899,386
4,023	196,606	155,387	533	1,233	_	157,153	39,453	2,938,839
1,825	117,670	29,497	114	345	_	29,956	87,714	773,776
1,709	75,438	33,936	248	356	_	34,540	40,898	814,674
1,491	(165,957)	35,355	284	379	_	36,018	(201,975)	612,699
1,173	108,416	38,311	231	354	_	38,896	69,520	682,219
1,784	115,933	41,130	401	361	_	41,892	74,041	756,260
1,699	51,250	41,406	268	312	_	41,986	9,264	765,524
1,325	132,404	43,660	133	357	_	44,150	88,254	853,778
1,302	160,091	44,747	106	355	_	45,208	114,883	968,661
3,713	110,751	47,710	293	370	_	48,373	62,378	1,031,039
2,573	62,590	49,671	528	371	_	50,570	12,020	1,043,059

Continued on page 186.

## Schedules of Changes in Fund Balance — Defined Benefit Systems (Concluded)

Year Ended December 31

	(dollar	s in thousan	ds)		Total Employer Contributions			
System	Year	Beginning Net Position	Member Contributions	Employer Contributions	Court Fees/ Fire Insurance Tax	Contributions as a Percent of Covered Payroll	Net Investment Income	
Judges	2006	\$ 113,353	10	995	1,723	22.29%	\$ 16,287	
Retirement	2007	128,299	13	1,360	1,850	24.10	8,401	
System	2008	134,364	138	1,730	2,072	26.40	(31,053)	
	2009	100,895	67	2,083	2,101	28.99	13,214	
	2010	111,726	_	2,771	1,944	33.12	14,597	
	2011	123,037	_	3,588	1,815	36.22	3,114	
	2012	123,235	_	4,232	1,666	39.62	15,485	
	2013	136,127	_	4,990	1,498	42.70	20,130	
	2014	155,676	317	5,627	1,486	44.26	11,068	
	2015	163,834	_	6,555	1,653	49.78	2,842	
Utah Governors	2006	\$ 11,319	_	_	_	_	\$ 1,589	
and Legislators	2007	12,163	_	_	_	_	780	
Retirement Plan	2008	12,196	_	_	_	_	(2,763)	
	2009	8,675	_	_		_	1,098	
	2010	8,993	_	_	_	_	1,142	
	2011	9,337	_	153		26.94%	231	
	2012	8,933	_	214	_	46.22	1,100	
	2013	9,445	_	252	_	64.62	1,346	
	2014	10,166	_	411	_	44.29	717	
	2015	10,366	_	421	_	44.50	181	
Tier 2	2011	\$ —	_	2,790	_	7.58%	\$ 9	
Public Employees	2012	2,799	_	14,208	_	6.97	922	
Contributory	2013	17,933	_	25,743	_	7.29	4,017	
Retirement	2014	47,690	_	37,299	_	7.57	4,320	
System*	2015	89,291	_	49,645	_	7.64	1,963	
Tier 2								
Public Safety	2011	\$ —	_	89	_	10.41%	\$ —	
and Firefighter	2012	89	_	1,031	_	10.07	56	
Contributory	2013	1,171	_	2,451	_	12.12	316	
Retirement	2014	3,935	_	4,365	_	12.46	404	
System*	2015	8,705	_	6,221	_	10.38	199	

^{*}Additional years will be added as they become available.

Transfers from Systems	Total Additions	Benefit Payments	A: Refunds	dministrative & Actuarial Expense	Transfers to Systems	Total Deductions	Changes in Net Position	Ending Net Position
1,242	20,257	5,251	_	60	_	5,311	14,946	128,299
841	12,465	6,335	_	65	_	6,400	6,065	134,364
294	(26,819)	6,580	_	70	_	6,650	(33,469)	100,895
1,027	18,492	7,595	_	66	_	7,661	10,831	111,726
1,078	20,390	9,010	_	69	_	9,079	11,311	123,037
390	8,907	8,649	_	60	_	8,709	198	123,235
710	22,093	9,135	_	66	_	9,201	12,892	136,127
3,186	29,804	10,189	_	66	_	10,255	19,549	155,676
1,092	19,590	11,361	_	71	_	11,432	8,158	163,834
1,334	12,384	12,400	_	71	_	12,471	(87)	163,747
18	1,607	758	_	5	_	763	844	12,163
18	798	758	2	5	_	765	33	12,196
17	(2,746)	763	7	5	_	775	(3,521)	8,675
9	1,107	784	_	5	_	789	318	8,993
2	1,144	790	5	5	_	800	344	9,337
17	401	801	_	4	_	805	(404)	8,933
19	1,333	815	1	5	_	821	512	9,445
19	1,617	892	_	4	_	896	721	10,166
_	1,128	909	_	5	14	928	200	10,366
_	602	904	_	5	20	929	(327)	10,039
_	2,799	_	_	_	_	_	2,799	2,799
5	15,135	_	_	1	_	1	15,134	17,933
3	29,763	_	_	6	_	6	29,757	47,690
_	41,619	_	_	16	2	18	41,601	89,291
3	51,611	333	_	30	_	363	51,248	140,539
_	89	_	_	_	_	_	89	89
_	1,087	_	_	_	5	5	1,082	1,171
_	2,767	_	_	_	3	3	2,764	3,935
2	4,771	_	_	1	_	1	4,770	8,705
_	6,420	30	_	3	3	36	6,384	15,089

# Schedules of Changes in Fund Balance — Defined Contribution Plans

Year Ended December 31

(in thousands)

	(In thous					
System	Year	Beginning Net Position	Contributions	Net Investment Income / (Loss)	Total Additions	
401(k) Plan	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 2,104,462 2,388,556 2,604,148 2,131,945 2,607,287 2,886,677 2,881,007 3,212,874 3,746,281 3,956,751	193,515 225,975 229,981 222,369 222,474 210,592 218,888 230,086 255,044 271,097	226,668 137,399 (554,176) 386,989 254,289 (14,864) 313,374 532,216 213,230 10,658	420,183 363,374 (324,195) 609,358 476,763 195,728 532,262 762,302 468,274 281,755	
457 Plan	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 230,031 258,815 277,063 229,469 283,619 316,874 321,356 360,381 424,568 450,974	23,282 26,303 29,021 26,617 26,522 26,441 24,501 25,696 26,711 26,968	24,210 14,025 (57,267) 41,581 27,628 (2,422) 35,065 60,421 23,342 259	47,492 40,328 (28,246) 68,198 54,150 24,019 59,566 86,117 50,053 27,227	
Roth IRA Plan	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 1,027 3,588 6,336 7,088 12,248 20,571 24,400 33,750 47,763 58,842	2,351 2,745 3,346 3,623 8,116 6,619 7,685 9,113 11,664 14,073	283 208 (2,051) 2,008 1,827 (508) 3,256 6,870 2,816 (308)	2,634 2,953 1,295 5,631 9,943 6,111 10,941 15,983 14,480 13,765	
Traditional IRA Plan	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 6,556 12,428 17,840 19,194 22,471 26,251 30,013 38,595 49,852 59,822	6,069 7,390 7,433 3,161 6,097 7,346 9,799 11,213 14,930 17,206	1,061 650 (3,488) 2,803 1,692 (55) 2,811 5,050 2,645 211	7,130 8,040 3,945 5,964 7,789 7,291 12,610 16,263 17,575	
HRA Plan	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ — 129 685 1,546 2,988 6,275 9,113 11,469 16,184 19,880	161 664 1,129 1,974 4,274 4,264 4,092 6,750 6,393 6,318	2 19 23 7 11 17 22 30 24 35	163 683 1,152 1,981 4,285 4,281 4,114 6,780 6,417 6,353	
All Defined Contribution Plans	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	\$ 2,342,076 2,663,516 2,906,072 2,389,242 2,928,613 3,256,648 3,265,889 3,657,069 4,284,648 4,546,269	225,378 263,077 270,910 257,744 267,483 255,262 264,965 282,858 314,742 335,662	252,224 152,301 (616,959) 433,388 285,447 (17,832) 354,528 604,587 242,058 10,855	477,602 415,378 (346,049) 691,132 552,930 237,430 619,493 887,445 556,800 346,517	

Refunds	Administrative	Total	Changes in	Ending
	Expenses	Deductions	Net Position	Net Position
130,718	5,371	136,089	284,094	2,388,556
142,180	5,602	147,782	215,592	2,604,148
141,904	6,104	148,008	(472,203)	2,131,945
127,675	6,341	134,016	475,342	2,607,287
190,963	6,410	197,373	279,390	2,886,677
194,933	6,465	201,398	(5,670)	2,881,007
194,538	5,857	200,395	331,867	3,212,874
223,523	5,372	228,895	533,407	3,746,281
251,496	6,308	257,804	210,470	3,956,751
251,436	6,665	258,101	23,654	3,980,405
18,138	570	18,708	28,784	258,815
21,489	591	22,080	18,248	277,063
18,683	665	19,348	(47,594)	229,469
13,349	699	14,048	54,150	283,619
20,184	711	20,895	33,255	316,874
18,811	726	19,537	4,482	321,356
19,877	664	20,541	39,025	360,381
21,314	616	21,930	64,187	424,568
22,920	727	23,647	26,406	450,974
23,082	762	23,844	3,383	454,357
67 192 524 445 1,582 2,230 1,538 1,908 3,310 2,781	6 13 19 26 38 52 53 62 91	73 205 543 471 1,620 2,282 1,591 1,970 3,401 2,893	2,561 2,748 752 5,160 8,323 3,829 9,350 14,013 11,079 10,872	3,588 6,336 7,088 12,248 20,571 24,400 33,750 47,763 58,842 69,714
1,232 2,592 2,545 2,635 3,954 3,469 3,967 4,940 7,514 8,148	26 36 46 52 55 60 61 66 91	1,258 2,628 2,591 2,687 4,009 3,529 4,028 5,006 7,605 8,253	5,872 5,412 1,354 3,277 3,780 3,762 8,582 11,257 9,970 9,164	12,428 17,840 19,194 22,471 26,251 30,013 38,595 49,852 59,822 68,986
34	—	34	129	129
126	1	127	556	685
288	3	291	861	1,546
533	6	539	1,442	2,988
987	11	998	3,287	6,275
1,426	17	1,443	2,838	9,113
1,736	22	1,758	2,356	11,469
2,041	24	2,065	4,715	16,184
2,690	31	2,721	3,696	19,880
2,924	35	2,959	3,394	23,274
150,189	5,973	156,162	321,440	2,663,516
166,579	6,243	172,822	242,556	2,906,072
163,944	6,837	170,781	(516,830)	2,389,242
144,637	7,124	151,761	539,371	2,928,613
217,670	7,225	224,895	328,035	3,256,648
220,869	7,320	228,189	9,241	3,265,889
221,656	6,657	228,313	391,180	3,657,069
253,726	6,140	259,866	627,579	4,284,648
287,922	7,256	295,178	261,622	4,546,270
288,371	7,679	296,050	50,467	4,596,736

# Schedules of Benefit Deductions by Type

Year Ended December 31

(in thousands)

System	Year	Service and Disability Benefits	Cost-of- Living Benefits	Supplemental Benefits	Total Benefits
Noncontributory	2006	\$ 450,659	82,589	_	533,248
Retirement	2007	513,917	95,609	_	609,526
System	2008	551,391	108,401	_	659,792
	2009	599,456	123,596	_	723,052
	2010	661,718	132,086	_	793,804
	2011	709,359	134,337	_	843,696
	2012	753,155	146,978	_	900,133
	2013	812,550	162,134	_	974,684
	2014	871,999	171,799	_	1,043,798
	2015	943,591	180,056	_	1,123,647
Contributory	2006	\$ 39,635	18,002	909	58,546
Retirement	2007	43,248	17,694	736	61,678
System	2008	44,218	17,309	569	62,096
	2009	47,319	17,086	444	64,849
	2010	50,822	16,389	353	67,564
	2011	52,933	15,160	282	68,375
	2012	55,884	14,746	225	70,855
	2013	59,203	14,778	177	74,158
	2014	62,560	14,328	127	77,015
	2015	67,510	13,785	95	81,390
Public Safety	2006	\$ 69,721	12,237	541	82,499
Retirement	2007	77,605	13,743	516	91,864
System	2008	83,142	15,317	485	98,944
	2009	88,632	17,186	454	106,272
	2010	96,331	19,068	433	115,832
	2011	99,685	20,482	403	120,570
	2012	105,780	22,372	380	128,532
	2013	112,470	24,662	354	137,486
	2014	118,030	26,407	326	144,763
	2015	127,285	27,807	295	155,387
Firefighters	2006	\$ 23,122	5,806	569	29,497
Retirement	2007	26,952	6,461	523	33,936
System	2008	27,792	7,093	470	35,355
	2009	30,097	7,792	422	38,311
	2010	32,490	8,242	401	41,133
	2011	32,716	8,313	377	41,406
	2012	34,445	8,871	344	43,660
	2013	34,951	9,485	311	44,747
	2014	37,597	9,844	269	47,710
	2015	39,340	10,095	236	49,671

## Schedules of Benefit Deductions by Type (concluded)

Year Ended December 31

(in thousands)

System	Year	Service and Disability Benefits	Cost-of- Living Benefits	Supplemental Benefits	Total Benefits
Judges	2006	\$ 4,167	1,084	_	5,251
Retirement	2007	5,105	1,230	_	6,335
System	2008	5,201	1,379	_	6,580
	2009	6,046	1,549	_	7,595
	2010	7,317	1,693	_	9,010
	2011	6,974	1,675	_	8,649
	2012	7,364	1,771	_	9,135
	2013	8,248	1,941	_	10,189
	2014	9,305	2,056	_	11,361
	2015	10,252	2,148	_	12,400
Utah Governors	2006	\$ 594	164	_	758
and Legislators	2007	596	162	_	758
Retirement Plan	2008	606	157	_	763
	2009	619	165	_	784
	2010	625	165	_	790
	2011	639	162	_	801
	2012	647	168	_	815
	2013	718	174	_	892
	2014	734	175	_	909
	2015	731	173	_	904
Tier 2	2011	\$ —	_	_	_
Public Employees	2012	_	_	_	_
Contributory	2013	_	_	_	_
Retirement	2014	_	_	_	_
System*	2015	333	_	_	333
Tier 2					
Public Safety	2011	\$ —	_	_	_
and Firefighter	2012	_	_	_	_
Contributory	2013	_	_	_	_
Retirement	2014	_	_	_	_
System*	2015	30	_	_	30

^{*}Additional years will be added as they become available.

## Schedules of Retired Members by Type of Benefit Option

Year Ended December 31, 2015

	Amount of					Number of Retirees by Benefit Option						
System	Monthly Benefit	1	2	3	4	5	6	7	8	9		
Noncontributory	\$ 1-1,000	8,877	682	3,129	369	3,228	863	_	_	_		
Retirement	1,001-2,000	4,349	709	2,294	399	2,684	1,003	_	_	_		
System	2,001-3,000	2,795	725	2,173	292	2,635	818	_	_	_		
	3,001-4,000	2,017	632	1,723	223	1,775	547	_	_	_		
	4.001-5,000	693	189	773	123	579	197	_	_	_		
	over-5,000	295	96	472	62	228	94	_	_	_		
Contributory	\$ 1-1,000	672	263	311	67	315	121	_	_	_		
Retirement	1,001-2,000	397	197	267	36	259	68	_		_		
System	2,001-3,000	186	145	186	30	185	44	_		_		
	3,001-4,000	88	60	59	13	76	26	_	_	_		
	4.001-5,000	23	16	27	5	13	12	_		_		
	over-5,000	12	13	21	2	5	2	_	_	_		
Public Safety	\$ 1-1,000	_	_	_	_	_	_	_	547	129		
Retirement	1,001-2,000	_	_	_	_	_	_	_	896	269		
System	2,001-3,000	_	_	_	_	_	_	_	1,354	582		
	3,001-4,000	_	_	_	_	_	_	_	607	226		
	4.001-5,000	_	_	_	_	_	_	_	238	132		
	over-5,000	_	_	_	_	_	_	_	133	51		
Firefighters	\$ 1-1,000	_	_	_	_	_	_	_	_	75		
Retirement	1,001-2,000	_	_	_	_	_	_	_	_	216		
System	2,001-3,000	_	_	_	_	_	_	_	_	406		
	3,001-4,000	_	_	_	_	_	_	_	_	349		
	4,001-5,000	_	_	_	_	_	_	_	_	178		
	over-5,000	_	_	_	_	_	_	_	_	109		

- 1– A maximum monthly benefit for the retiree's life. No benefit to a beneficiary.
- 2- A reduced lifetime benefit to the retiree. A beneficiary receives the balance in retiree's account after the monthly annuity payments are deducted.
- 3- A reduced lifetime benefit to a retiree and a lifetime benefit equal to the retiree's benefit payable to the retiree's lawful spouse at the time of retirement.
- 4- A reduced lifetime benefit to the retiree and a lifetime benefit equal to half of the retiree's benefit to the retiree's lawful spouse at the time of retirement.
- 5- Approximately 95% of the benefit in type 3 and the same lifetime benefit for retiree's lawful spouse at the time of retirement. Benefit reverts to 100% at time of spouse's death.

- 6- Approximately 98% of the benefit in type 4 and a lifetime benefit for equal to half of the retiree's for retiree's lawful spouse at the time of the retirement. Benefit reverts to 100% at time of spouse's death.
- 7– Normal retirement for age and service and a lifetime benefit of 65% of the retiree's benefit to the retiree's lawful spouse at the time of the retiree's death.
- 8- Normal retirement for age and service and a lifetime benefit of 75% of the retiree's benefit to the retiree's lawful spouse at the time of the retiree's death.
- 9- Normal retirement for age and service and a lifetime benefit of 75% of the retiree's benefit to the retiree's lawful spouse at the time of the retirement.

## Schedules of Retired Members by Type of Benefit Option (Concluded)

Year Ended December 31, 2015

	Amount of	Amount of						Number of Retires					
System	Monthly Benefit	1	2	3	4	5	6	7	8	9			
Judges	\$ 1-1,000	_	_		_	_	_	_	_	_			
Retirement	1,001-2,000	_	_	_	_	_	_	_	4	1			
System	2,001-3,000	_	_	_	_	_	_	_	8	4			
	3,001-4,000		_	_	_		_	_	3	1			
	4.001-5,000	_	_	_	_	_	_	_	4	4			
	over-5,000	_	_	_	_	_	_	_	57	54			
Utah	\$ 1-1,000	_	_	3	231	1	1	_	_	_			
Governors	1,001-2,000		_	_	5		_			_			
and Legislators	2,001-3,000		_	_	_	_	_	_	_	_			
Retirement	3,001-4,000		_	_	_		_			_			
Plan*	4.001-5,000		_	_	_		_		_	_			
	over-5,000	_	_	_	_	_	_	_	_	_			
Tier 2 Public	\$ 1-1,000	_	_	_	_	1	_	_	_				
Employees	1,001-2,000	_	_	_	_	_	_	_	_	_			
Retirement	2,001-3,000		_	_	_	_	_		_	_			
System	3,001-4,000	_	_	_	_	_	_	_	_	_			
	4.001-5,000	_	_	_	_	_	_	_	_	_			
	over-5,000	_	_	_	_	_	_	_	_	_			
Tier 2 Public	\$ 1-1,000	_	_	_	_	_	_	_	_	_			
Public Safety	1,001-2,000	_		_	_	_		_	_	_			
and Firefighter	2,001-3,000	_	_	_	_	_	_	_	_	_			
Retirement	3,001-4,000	_	_	_	_	_	_	_	_	_			
System**	4,001-5,000	_	_	_	_	_	_	_	_	_			
-	over-5,000	_	_	_	_	_	_	_	_	_			

^{*} Governors & Legislative Pension Plan provides a normal lifetime pension to the retiree and 50% of the retiree's benefit to the retirees lawful spouse at the time of death if the retiree had four or more years of service.

^{**}There are currently no retirees in the system.

# Schedules of Average Benefit Payments

December 31

						Υ	ears of Credi	ted Service
System			4-10	11-15	16-20	21-25	26-30	31-
Noncontributory	2010	Average Monthly Benefit	\$ 368	738	1,181	1,593	2,577	3,368
Retirement		Monthly Final Average Salary	2,565	3,148	3,747	4,117	4,783	5,475
System		Number of Active Retired	463	324	418	385	642	465
	2011	Average Monthly Benefit	\$ 366	730	1,190	1,599	2,547	3,444
		Monthly Final Average Salary	2,682	3,093	3,650	4,112	4,866	5,589
		Number of Active Retired	528	391	425	412	486	387
	2012	Average Monthly Benefit	\$ 334	774	1,228	1,629	2,502	3,419
		Monthly Final Average Salary	2,526	3,182	3,860	4,119	4,774	5,516
		Number of Active Retired	629	422	423	441	463	367
	2013	Average Monthly Benefit	\$ 366	811	1,290	1,626	2,522	3,532
		Monthly Final Average Salary	2,611	3,405	3,990	4,102	4,841	5,611
		Number of Active Retired	719	484	479	535	607	541
	2014	Average Monthly Benefit	\$ 373	837	1,274	1,742	2,610	3,743
		Monthly Final Average Salary	2,498	3,300	3,792	4,093	4,809	5,687
		Number of Active Retired	665	410	468	434	588	467
	2015	Average Monthly Benefit	\$ 376	811	1,294	1,742	2,692	3,736
		Monthly Final Average Salary	2,587	3,275	3,675	4,148	4,907	5,530
		Number of Active Retired	704	443	468	514	737	533
Contributory	2010	Average Monthly Benefit	\$ 441	696	792	1,112	2,234	2,824
Retirement		Monthly Final Average Salary	2,393	3,159	2,502	2,851	4,271	4,857
System		Number of Active Retired	10	10	13	24	114	47
	2011	Average Monthly Benefit	\$ 290	415	1,135	1,326	2,054	2,609
		Monthly Final Average Salary	1,992	1,862	2,877	3,389	4,035	4,337
		Number of Active Retired	12	6	14	16	90	39
	2012	Average Monthly Benefit	\$ 371	561	1,252	1,452	2,126	2,712
		Monthly Final Average Salary	2,294	2,224	3,966	3,952	4,092	4,455
		Number of Active Retired	7	9	8	9	100	51
	2013	Average Monthly Benefit	\$ 600	796	797	1,454	2,085	2,817
		Monthly Final Average Salary	4,494	3,238	2,447	3,446	4,034	4,743
		Number of Active Retired	7	9	12	9	109	76
	2014	Average Monthly Benefit	\$ 300	735	1,219	1,376	2,066	2,840
		Monthly Final Average Salary	2,098	3,447	4,234	3,650	3,993	4,359
		Number of Active Retired	11	8	3	8	75	79
	2015	Average Monthly Benefit	\$ 482	699	1,208	1,612	2,311	3,297
		Monthly Final Average Salary	3,043	3,010	3,801	3,855	4,228	4,801
		Number of Active Retired	5	9	6	11	71	85

## Schedules of Average Benefit Payments (Continued)

December 31

_							ears of Credi	
System			4-10	11-15	16-20	21-25	26-30	31-
Public Safety	2010	Average Monthly Benefit	\$ 766	1,591	2,124	2,632	3,616	4,211
Retirement		Monthly Final Average Salary	3,711	4,711	4,565	4,988	5,807	6,016
System		Number of Active Retired	7	9	92	53	35	16
	2011	Average Monthly Benefit	\$ 661	1,494	2,132	2,612	3,371	4,766
		Monthly Final Average Salary	2,874	3,715	4,582	5,015	5,431	6,190
		Number of Active Retired	9	9	62	47	15	15
	2012	Average Monthly Benefit	\$ 717	1,397	2,187	2,498	3,613	3,969
		Monthly Final Average Salary	3,396	4,489	4,706	4,890	5,827	5,486
		Number of Active Retired	12	13	69	69	17	15
	2013	Average Monthly Benefit	\$ 413	1,339	2,156	2,509	3,676	4,584
		Monthly Final Average Salary	2,676	4,287	4,709	4,813	5,716	6,178
		Number of Active Retired	7	8	88	76	25	24
	2014	Average Monthly Benefit	\$ 617	1,301	2,206	2,828	3,518	4,179
		Monthly Final Average Salary	3,125	3,855	4,665	5,007	5,307	5,574
		Number of Active Retired	16	14	80	96	18	23
	2015	Average Monthly Benefit	\$ 586	2,070	2,358	2,768	3,683	3,900
		Monthly Final Average Salary	2,796	4,799	4,557	4,919	5,368	5,373
		Number of Active Retired	13	12	115	77	31	20
Firefighters	2010	Average Monthly Benefit	\$ —	2,946	2,725	3,062	3,575	4,166
Retirement		Monthly Final Average Salary	_	5,891	5,620	5,735	5,978	5,845
System		Number of Active Retired	_	1	12	5	14	12
	2011	Average Monthly Benefit	\$ —	2,554	2,686	3,112	3,852	4,228
		Monthly Final Average Salary	_	5,980	5,527	5,574	6,408	5,757
		Number of Active Retired	_	2	6	9	10	5
	2012	Average Monthly Benefit	\$ 1,731	2,094	2,398	3,315	4,288	4,871
		Monthly Final Average Salary	4,364	4,188	5,094	6,274	6,739	6,487
		Number of Active Retired	4	3	7	6	6	9
	2013	Average Monthly Benefit	\$ 1,800	2,301	2,248	3,078	3,706	4,425
		Monthly Final Average Salary	3,600	4,602	5,337	5,893	5,747	6,012
		Number of Active Retired	1	3	4	10	18	10
	2014	Average Monthly Benefit	\$ 2,052	2,929	2,844	3,332	3,801	6,065
		Monthly Final Average Salary	3,661	5,227	5,292	5,560	6,169	7,451
		Number of Active Retired	1	4	14	13	9	10
	2015	Average Monthly Benefit	\$ 807	1,697	2,407	2,635	5,034	4,238
		Monthly Final Average Salary	1,239	4,780	4,870	5,025	6,771	5,484
		Number of Active Retired	6	2	12	10	11	14

Continued on page 196.

## Schedules of Average Benefit Payments (Continued)

December 31

							١	ears of Cred	ited Service
System			4-	10	11-15	16-20	21-25	26-30	31-
Judges Retirement System	2010	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ - - -	_ _ _	6,564 12,076 1	7,389 10,969 1	8,036 11,136 4	_ _ _	9,027 11,151 3
	2011	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ - - -		5,647 10,666 3	_ _ _	_ _ _	8,743 11,013 1	
	2012	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ - - -	_	_ _ _	6,768 11,064 2	_ _ _	_ _ _	9,697 11,068 2
	2013	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ - - -	_	_ _ _	7,204 11,151 2	8,215 11,163 4	6,647 11,688 1	11,006 11,132 4
	2014	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ - - -	_	_ _ _	9,263 11,201 2	8,850 11,149 2	9,836 11,225 2	9,180 11,180 1
	2015	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 3,74 9,55		4,162 7,570 1	7,807 11,635 3	_ _ _	8,884 11,252 1	12,033 11,690 2
Utah Governors and Legislators Retirement	2010	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 19 -	90 — 3	324 — 1	_ _ _	465 — 1	_ _ _	
Plan	2011	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 17 -	72 — 3	380 — 1	435 — 2	627 — 1	_ _ _	_ _ _
	2012	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 15 -	58 — 6	320 — 2	_ _ _	_ _ _	_ _ _	_ _ _
	2013	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 21 - 1	16 — 13	314 — 3	475 — 4	555 — 1	_ _ _	_ _ _
	2014	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 25	56 — 4	342 — 2	_ _ _	846 — 1	_ _ _	
	2015	Average Monthly Benefit Monthly Final Average Salary Number of Active Retired	\$ 22	23 — 7	347 — 4	319 — 1	_ _ _	_ _ _	

## Schedules of Average Benefit Payments (Continued)

December 31

							Ye	ars of Credite	d Service
System				4-10	11-15	16-20	21-25	26-30	31
Tier 2	2011	Average Monthly Benefit	\$	_	_	_	_	_	_
Public Employees		Monthly Final Average Salary		_	_	_	_	_	_
Contributory Retirement		Number of Active Retired		_	_	_	_	_	_
System	2012	Average Monthly Benefit	\$	_	_	_	_	_	_
•		Monthly Final Average Salary		_	_	_	_	_	_
		Number of Active Retired		_	_	_	_	_	_
	2013	Average Monthly Benefit	\$	_	_	_	_	_	_
		Monthly Final Average Salary		_	_	_	_	_	_
		Number of Active Retired		_	_	_	_	_	
	2014	Average Monthly Benefit	\$	_	_		_	_	
		Monthly Final Average Salary	•	_	_	_	_	_	
		Number of Active Retired		_	_		_	_	
	2015	Average Monthly Benefit	\$	72	_	_	_	_	_
		Monthly Final Average Salary	1	,479	_	_	_	_	_
		Number of Active Retired		1	_	_	_	_	_
Tier 2	2011	Average Monthly Benefit	\$						
Public Safety	2011	Monthly Final Average Salary	¥	_	_	_	_	_	
and Firefighter		Number of Active Retired		_	_		_		
Contributory		Number of Active Netired							
Retirement	2012	Average Monthly Benefit	\$	_	_		_	_	_
System*		Monthly Final Average Salary		_	_	_	_	_	_
		Number of Active Retired		_	_		_	_	_
	2013	Average Monthly Benefit	\$	_	_	_	_	_	_
		Monthly Final Average Salary		_	_	_	_	_	_
		Number of Active Retired		_	_	_	_	_	_
	2014	Average Monthly Benefit	\$	_	_	_	_	_	_
		Monthly Final Average Salary		_	_	_	_	_	_
		Number of Active Retired		_	_		_	_	
	2015	Average Monthly Benefit	\$	_	_	_	_	_	_
		Monthly Final Average Salary	•	_	_		_	_	_
		Number of Active Retired		_	_	_	_		

^{*}There are currently no retirees in the system.

# Schedules of Active Members by Age and Gender

Year Ended December 31, 2015

System	Ages	Male	Female	Total	System	Ages	Male	Female	Total
Noncontributory	Under 20	_	_	_	Judges	Under 20	_	_	_
Retirement	20 to 29	648	1,200	1,848	Retirement	20 to 29	_	_	_
System	30 to 39	5,830	8,022	13,852	System	30 to 39	1	_	1
	40 to 49	7,175	11,467	18,642		40 to 49	14	12	26
	50 to 54	3,749	6,882	10,631		50 to 54	17	3	20
	55 to 59	3,773	7,616	11,389		55 to 59	15	7	22
	60 to 69	3,737	7,457	11,194		60 to 69	34	6	40
	70 and Older	332	385	717		70 and Older	2	1	3
	Total	25,244	43,029	68,273		Total	83	29	112
Contributory	Under 20	3	3	6	Utah Governors	Under 20	_	_	_
Retirement	20 to 29	116	241	357	and Legislators	20 to 29	_	_	_
System	30 to 39	119	144	263	Retirement Plan	30 to 39	6	3	9
	40 to 49	50	115	165		40 to 49	24	5	29
	50 to 54	20	38	58		50 to 54	11	2	13
	55 to 59	22	28	50		55 to 59	11	2	13
	60 to 69	22	19	41		60 to 69	24	2	26
	70 and Older	2	1	3		70 and Older	3	_	3
	Total	354	589	943		Total	79	14	93
Public Safety	Under 20	2	_	2	Tier 2	Under 20	74	94	168
Retirement	20 to 29	855	113	968	<b>Public Employees</b>	20 to 29	2,894	5,775	8,669
System	30 to 39	2,137	255	2,392	Contributory	30 to 39	2,740	3,422	6,162
	40 to 49	1,798	250	2,048	Retirement	40 to 49	1,161	2,706	3,867
	50 to 54	429	81	510	System	50 to 54	415	835	1,250
	55 to 59	236	55	291		55 to 59	397	545	942
	60 to 69	158	24	182		60 to 69	347	308	655
	70 and Older	5	1	6		70 and Older	47	18	65
	Total	5,620	779	6,399		Total	8,075	13,703	21,778
Firefighters	Under 20	_		_	Tier 2	Under 20	2	_	2
Retirement	20 to 29	155	7	162	Public Safety	20 to 29	899	116	1,015
System	30 to 39	683	23	706	and Firefighter	30 to 39	607	64	671
	40 to 49	563	24	587	Contributory	40 to 49	97	19	116
	50 to 54	150	3	153	Retirement	50 to 54	10	3	13
	55 to 59	81	_	81	System	55 to 59	4	1	5
	60 to 69	44	1	45		60 to 69	2	_	2
	70 and Older	1	_	1		70 and Older		_	
	Total	1,677	58	1,735		Total	1,621	203	1,824

# Schedules of Retirees by Age and Gender

Year Ended December 31, 2015

System	Ages	Male	Female	Total	System	Ages	Male	Female	Total
Noncontributory	Under 55	179	276	455	Judges	Under 55	_	_	_
Retirement	55 to 59	631	982	1,613	Retirement	55 to 59	_	1	1
System	60 to 64	2,100	3,760	5,860	System	60 to 64	11	5	16
•	65 to 69	4,553	8,643	13,196	•	65 to 69	25	7	32
	70 to 74	4,017	6,879	10,896		70 to 74	24	5	29
	75 to 79	2,902	4,805	7,707		75 to 79	14	4	18
	80 to 84	2,079	3,256	5,335		80 to 84	10	6	16
	85 to 89	1,102	1,765	2,867		85 to 89	7	12	19
	90 to 94	294	473	767		90 to 94	4	3	7
	95 to 100	14	31	45		95 to 100		2	2
	Over 100		1	1		Over 100	_	_	_
-		17,871	30,871	48,742		Total	95	45	140
Contributory	Under 55	42	42	84	Utah Governors	Under 55	1	1	2
Retirement	55 to 59	119	118	237	and Legislators	55 to 59		1	1
System	60 to 64	220	269	489	Retirement Plan	60 to 64	7	3	10
-,	65 to 69	299	439	738		65 to 69	30	13	43
	70 to 74	215	398	613		70 to 74	18	12	30
	75 to 79	147	318	465		75 to 79	32	11	43
	80 to 84	92	267	359		80 to 84	27	18	45
	85 to 89	125	328	453		85 to 89	15	28	43
	90 to 94	137	362	499		90 to 94	15	5	20
	95 to 100	56	210	266		95 to 100	2	2	4
	Over 100	4	15	19		Over 100	_	_	_
-	Total	1,456	2,766	4,222		Total	147	94	241
Public Safety	Under 55	706	221	927	Tier 2	Under 55	_		
Retirement	55 to 59	500	145	645	Public Employees	55 to 59	_	_	
System	60 to 64	710	214	924	Contributory	60 to 64	_	_	
Jystein .	65 to 69	835	207	1,042	Retirement	65 to 69	_	_	
	70 to 74	522	151	673	System	70 to 74	1	_	1
	75 to 79	318	131	449	System	75 to 79		_	
	80 to 84	185	121	306		80 to 84			
	85 to 89	67	77	144		85 to 89	_	_	
	90 to 94	22	23	45		90 to 94	_	_	
	95 to 100	2	5	7		95 to 100	_	_	
	Over 100	1	1			Over 100	_	_	
-	Total	3,868	1,296	5,164		Total			1
Five Embters					Tion 3		•		
Firefighters	Under 55	120	44	164 155	Tier 2	Under 55	_	_	_
Retirement	55 to 59	131	24	155	Public Safety	55 to 59	_	_	
System	60 to 64	216	36	252	and Firefighter	60 to 64		_	
	65 to 69	228	41	269	Contributory	65 to 69	_	_	
	70 to 74	169	35	204	Retirement	70 to 74	_	_	_
	75 to 79	100	32	132	System*	75 to 79	_	_	_
	80 to 84	44	29	73		80 to 84	_	_	_
	85 to 89	24	39	63		85 to 89	_	_	_
	90 to 94	8	9	17		90 to 94	_	_	_
	95 to 100	1	3	4		95 to 100	_	_	_
	Over 100					Over 100			_
	Total	1,041	292	1,333		Total	_	_	_

^{*}There are no retirees in this system.

# **Schedules of Principal Participating Employers**

Year Ended December 31

			2015			2014			2013			2012	
			Percent			Percent	-		Percent			Percent	
System/	Active		of Total Active	Active		of Total Active	Active		of Total Active	Active		of Total Active	
Employer	Members	Rank	Member	Members	Rank	Member		Rank	Members		Rank	Members	
Noncontributory													
Retirement System													
State of Utah	11,788	1	17.27%		1		13,510	1		14,450	1	17.57%	
Davis School District	4,090	2	5.99	4,338	2	6.04	4,624	3	6.02	4,871	3	5.92	
Granite School District Alpine School District	4,044	3 4	5.92 5.44	4,337	3 4	6.04 5.48	4,702	2 4		5,012	2 4		
Jordan School District	3,711 2,635	5	3. <del>44</del> 3.86	3,938 2,747	5	3.82	4,280 2,943	5	3.83	4,659 3,099	5	5.66 3.77	
Weber School District	2,286	6	3.35	2,747	6	3.29	2,503	6	3.26	2,660	6	3.23	
Salt Lake County	2,194	7	3.21	2,352	7	3.27	2,476	7	3.22	2,605	8	3.17	
Canyons School District	1,880	8	2.75		_		2,076	10	2.70	2,281	10	2.77	
Nebo School District	1,868	9	2.74	1,941	10	2.70		_			_		
University of Utah	1,864	10	2.73	2,039	8	2.84	2,290	8	2.98	2,646	7	3.22	
Salt Lake School District	_	_	_	1,977	9	2.75	2,144	9	2.79	2,343	9	2.85	
Other	31,913		46.74	33,248		46.29	35,297	_	45.93	37,633		45.75	
Total Noncontributory System										-			
active members	68,273		100.00%	71,827		100.00%	76,845		100.00%	82,259		100.00%	
Contributory													
Retirement System													
State of Utah	152	1	16.13%	186	1	12.38%	237	1	13.68%	269	1	13.89%	
DDI Vantage	70	2	7.42	70	5	4.66	76	6	4.39	85	6	4.39	
University of Utah	60	3	6.36	68	6	4.52	75	7	4.33	84	7	4.34	
Salt Lake City Corp.	53	4	5.62	73	4	4.86	84	4		93	4	4.80	
Granite School District	53	4	5.62	67	8	4.46	81	5	4.67	91	5	4.70	
University of Utah Hospital	42	6	4.45	47	9	3.13	50	9	2.89	56	9	2.89	
Salt Lake County	37	7	3.92	45	10	2.99	47	10	2.71	52	10		
Davis School District	30	8	3.18	_	_	_	_	_	_	_	_	_	
Salt Lake School District	25	9	2.65	_	_	4.52		_	4 21	— 77	_	2.00	
Duchesne County	24	10	2.55	68	6	4.52	73	8	4.21	77 177	8	3.98	
South Jordan City	_	_		153	2	10.18 9.05	167	2	9.64 8.42	177 158	2		
Uintah County Other	— 397	_	42.10	136 590	3	39.25	146 697	_	40.22%		5	8.16 41.04	
	391		72.10			39.23	- 097		<del>-10.22</del> /0			71.07	
Total Contributory System active members	943		100.00%	1,503		100.00%	1,733		100.00%	1,937		100.00%	
D. L.C. C. C.													
Public Safety Retirement System													
State of Utah	2,006	1	31.35%	2,076	1	31.12%	2,211	1	31.50%	2,317	1	31.68%	
Salt Lake City Corp.	412		6.44	423	3	6.34	432			452			
Salt Lake County	397	3	6.20	424		6.35	459			494			
Unified Police Department	359		5.61	365	4	5.47	378			377	4		
Utah County	236		3.69	239		3.58	237	5	3.38	239	5		
Weber County Corp.	211	6	3.30	221	6	3.31	228	6	3.25	237	6		
Davis County .	163	7	2.55	179		2.68	193	7	2.75	201	7	2.75	
West Valley City	145	8	2.27	169		2.53	162		2.31	172			
Washington County	109	9	1.70	113	9	1.69	120		1.71	129			
Ogden City Corp.	97	10	1.52	110	10	1.65	116	10		122	10		
Sandy City		_		_	_			_	— 25 200/		_		
Other	2,264		35.38	2,353		35.27	2,483		35.38%	2,573		35.18	
Total Public Safety System			100 555			400.000			400 555	<b>,</b>		400	
active members	6,399		100.00%	6,672		100.00%	7,019		100.00%	7,313		100.00%	

Additional information will be added when it becomes available.

		2011			2010			2009			2008			2007			2006
Active Members	Rank	Percent of Total Active Members	Active Members		Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members									
15,273	1	17.38%		1	17.39%		1	17.72%		1	18.14%		1	18.91%	-	1	19.11%
5,113 5,400	3 2	5.82 6.14	5,330 5,781	4	5.77 6.26	5,433 6,148	4 2	5.86 6.63	5,501 6,130	4	5.88 6.55	5,391 5,922	4 2	6.02 6.61	5,187 5,363	4	5.95 6.15
5,095	4	5.80	5,551	3	6.01	5,487	3	5.91	5,354	5	5.72	4,910	5	5.48	4,697	5	5.39
3,239	6	3.68	3,366	6	3.64	3,560	6	3.84	5,819	3	6.22	5,705	3	6.37	5,448	2	6.25
2,784	8	3.17	2,861	8	3.10	2,875	8	3.10	2,859	9	3.06	2,793	9	3.12	2,670	9	3.06
2,813	7	3.20	2,869	7	3.11	2,968	7	3.20	3,084	7	3.30	2,981	7	3.33	2,909	7	3.34
2,460	10	2.80	2,637	10	2.85	2,572 —	10	2.77	2,465	10	2.63	2,330	10	2.60	2,917	10	3.34
3,895	5	4.43	4,217	5	4.56	4,274	5	4.61	4,406	6	4.71	4,453	6	4.97	4,480	6	5.14
2,520	9	2.87	2,683	9	2.90	2,842	9	3.06	2,950	8	3.15	2,805	8	3.13	2,689	8	3.08
39,309		44.72	41,026		44.40	40,172		43.30	38,029		40.64	35,367		39.47	34,195		39.19
87,901		100.00%	92,392		100.00%	92,766		100.00%	93,576		100.00%	89,605		100.00%	87,219		100.00%
293	1	13.71%	325	1	13.95%	387	1	15.39%	435	1	15.86%	473	1	16.58%	508	1	16.88%
94	7	4.40	91	8	3.91	82	8	3.26	76	10	2.77	_	_	_	_	_	_
153	4	7.16	162	4	6.95	178	4	7.08	195	3	7.11	207	3	7.26	214	3	7.11
104	5	4.87	112	6	4.81	128	6	5.09	137	6	4.99	144	6	5.05	156	6	5.18
102	6	4.77 —	114	5 —	4.89 —	131	5 —	5.21 —	141 —	5 —	5.14 —	150	5 —	5.26 —	162 —	5 —	5.38
59 —	9	2.76	61	9	2.62	80	9	3.18	90	8	3.28	97 —	7	3.40	107	7	3.55
55	10	2.57	58	10	2.49	67	10	2.66	_	_	_	78	10	2.73	83	9	2.76
82	8	3.84	104	7	4.46	90	7	3.58	87	7	3.17	85	8	2.98	79	10	2.62
196	2	9.17	203	2	8.71	208	2	8.27	212	2	7.73	207	2	7.26	216	2	7.18
168 831	3	7.86 38.89	187 913	3	8.03 39.18	193 971	3	7.67 38.61	191 1,179	4	6.96 42.98	188 1,223	4	6.59 42.88	185 1,300	4	6.15 43.19
051		30.09			39.10				1,179		72.50	1,225		72.00	1,500		73.19
2,137		100.00%	2,330		100.00%	2,515		100.00%	2,743		100.00%	2,852		100.00%	3,010		100.00%
2 200	1	21 270/	2.200	1	21 220/	2 440	1	21.010/	2.502	1	22.040/	2 444	4	22 240/	2.460	4	22.020/
2,390 463	3	31.37% 6.08	2,380 480	1	31.22% 6.30	2,448 480	1	31.81% 6.24	2,592 479	3	32.84% 6.07	2,444 472	1	32.21% 6.22	2,468 448	1	33.02% 5.99
540	2	7.09	547	2	7.17	828	2	10.76	860	2	10.89	783	2	10.32	763	2	10.21
329	4	4.32	293	4	3.84	_	_	_	_	_	_	_	_	_	_	_	_
236	6	3.10	233	6	3.06	238	5	3.09	244	5	3.09	233	5	3.07	223	5	2.98
249	5	3.27	246	5	3.23	252	4	3.27	266	4	3.37	275	4	3.62	291	4	3.89
208	7	2.73	209	7	2.74	209	6	2.72	208	6	2.63	206	6	2.72	199	6	2.66
177 129	8 9	2.32 1.69	177 126	8 9	2.32 1.65	175 123	7 8	2.27 1.60	176 120	7 9	2.23 1.52	169 113	7 9	2.23 1.49	159 107	7 10	2.13 1.43
129	10	1.69	119	10	1.56	117	9	1.52	120	8	1.52	122	8	1.49	114	8	1.43
	_			_		109	10	1.42	115	10	1.46	108	10	1.42	109	9	1.46
2,771		36.37	2,814		36.91	2,716		35.30	2,712		34.36	2,662		35.09	2,593		34.70
7,619		100.00%	7 624		100.00%	7 695		100.00%	7 894		100.00%	7,587		100.00%	7 474		100.00%
,,017		100.00/0	,,024		700.00 /0	.,000		. 55.55 /0	,,c,,-		. 55.56 /0	.,507		. 55.56 /0	,,,,,		. 55.55 /0

Continued on page 202.

## Schedules of Principal Participating Employers (Continued)

Year Ended December 31

			2015			2014			2013			2012	
System/	Active	Dl.	Percent of Total Active	Active	pl.	Percent of Total Active	Active	pl.	Percent of Total Active	Active	Dl.	Percent of Total Active	
Employer	Members	капк	Member	Members	капк	Member	Members	капк	Members	Members	капк	Members	
Firefighters Retirement System													
Unified Fire Authority	386	1	22.25%	395	1	22.10%	398	1	21.57%	404	1	21.44%	
Salt Lake City Corp.	295	2	17.00	302	2	16.90	309	2	16.75	309	2	16.40	
Ogden City Corp.	85	3	4.90	90	3	5.04	102	3	5.53	109	3	5.79	
West Valley City	80	4	4.61	87	4	4.87	89	4	4.82	92	4	4.88	
Provo City	67	5	3.86	70	5	3.92	72	5	3.90	74	5	3.93	
City of West Jordan	66	6	3.80	66	7	3.69	68	8	3.69	72	6	3.82	
Park City Fire Service	65	7	3.75	68	6	3.81	71	6	3.85	72	6	3.82	
Sandy City	59	8	3.40	64	8	3.58	69	7	3.74	69	8	3.66	
Weber Fire District	53	9	3.05	_	_	_	_	_	_	56	10	2.97	
Orem City	52	10	3.00	56	9	3.13	62	9	3.36	67	9	3.56	
Murray City	_	_	_	51	10	2.85	55	10	2.98	_	_	_	
South Davis Metro Fire Agency	_	_	_	_	_		_	_		_	_	_	
Other	527		30.37	538		30.11	550		29.81	560		29.75	
Total Firefighters System													
active members	1,735		100.00%	1,787		100.00%	1,845		100.00%	1,884		100.00%	
Judges Retirement System													
State of Utah	112	1	100.00%	114	1	100.00%	112	1	100.00%	111	1	100.00%	
Utah Governors and Legislators Retirement Plan													
State of Utah	93	1	100.00%	105	1	100.00%	99	1	100.00%	113	1	100.00%	
Tier 2 Public Employees Contributory Retirement System													
State of Utah	3,642	1	16.72%	2,772	1	16.09%	2,173	1	15.84%	1,523	1	14.71%	
University of Utah	1,458	2	6.69	1,223	2	7.10	944	3	6.88	738	3	7.13	
Alpine School District	1,232	3	5.66	1,090	3	6.33	1,080	2	7.87	1,072	2		
Granite School District	1,028	4	4.72	829	4	4.81	664	4	4.84	638	4	6.16	
Davis School District	980	5	4.50	778	5	4.52	591	7	4.31	463	5	4.47	
Jordan School District	962	6	4.42	755	6	4.38	661	5	4.82	417	6	4.03	
Canyons School District	781	7	3.59	614	7	3.56	593	6	4.32	387	7	3.74	
Salt Lake County	655	8	3.01	484	9	2.81	378	9	2.76	307	_	J./ <del>T</del>	
Nebo School District	624	9	2.87	549	8	3.19	403	8	2.94	327	8	3.16	
Salt Lake City District	479	10	2.20	J+3	_	J.19	363	10	2.65	302		2.92	
Washington School District	<del>4</del> /9			360	10	2.09	203		2.03	502	_	۷.۶۷	
Provo School District	_	_		300	-10	2.09	_	_	_	310	9	2.99	
Other	9,937	_	45.63	— 7,771	_	45.11	5,868	_	42.78	4,179	9	40.34	
	7,73/		+5.05	7,771		+J.11	3,000		72.70	4,179		+0.0+	
Total Tier 2 Public Employees System active members	21,778		100.00%	17,225		100.00%	13,718		100.00%	10,356		100.00%	

Additional information will be added when it becomes available.

Active Members		Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members												
404	1	20.91%	356	1	18.87%	365	1	19.14%	352	1	19.04%	344	1	19.42%	229	2	13.60%
314	2	16.25	312	2	16.53	309	2	16.20	324	2	17.52	322	2	18.18	330	1	19.60
110	3	5.69	111	3	5.88	113	3	5.93	111	3	6.00	110	3	6.21	106	3	6.29
96	4	4.97	100	4	5.30	97	4	5.09	97	4	5.25	92	4	5.19	88	4	5.23
78	5	4.04	64	9	3.39	76	6	3.99	75	6	4.06	74	6	4.18	77	5	4.57
73	7	3.78	73	6	3.87	70	8	3.67	72	8	3.89	70	8	3.95	73	7	4.33
74	6	3.83	77	5	4.08	80	5	4.20	80	5	4.33	81	5	4.57	75	6	4.45
70	8	3.62	70	7	3.71	72	7	3.78	75	7	4.06	73	7	4.12	72	8	4.28
_	_	_	_	_	_	_	_	_	55	10	2.97	_	_	_	_	_	_
68	9	3.52	68	10	3.60	69	9	3.62	66	9	3.57	58	9	3.27	54	9	3.21
56	10	2.90	60	10	3.18	59	10	3.09	_	_	_	_	_	_	51	10	3.03
_	_	_	_	_	_	_	_	_	_	_	_	52	10	2.94	_	_	_
589		30.49	596		31.58	597		31.31	542		29.31	495		27.95	529		31.41
1,932		100.00%	1,887		100.00%	1,907		100.00%	1,849		100.00%	1,771		100.00%	1,684		100.00%
111	1	100.00%	109	1	100.00%	104	1	100.00%	106	1	100.00%	108	1	100.00%	106	1	100.00%
115	1	100.00%	125	1	100.00%	119	1	100.00%	97	1	100.00%	97	1	100.00%	105	1	100.00%
600	1	12.56%															
323	4	6.76															

- 1	12.50%
4	6.76
2	12.02
3	7.03
6	4.92
5	4.98
8	3.71
_	_
9	3.45
10	3.45
_	_
7	3.89
	37.22
	100.00%
	4 2 3 6 5 8 — 9 10

Continued on page 204.

## Schedules of Principal Participating Employers (Concluded)

Year Ended December 31

			2015			2014			2013			2012	
System/ Employer	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	
Tier 2 Public Safety and Firefighter Contributory Retirement System													
State of Utah	523	1	28.67%	371	1	27.87%	274	1	30.96%	144	1	30.19%	
Salt Lake County	132	2	7.24	122	2	9.17	93	2	10.51	46	2	9.64	
Salt Lake City Corp.	58	3	3.18	51	3	3.83	38	3	4.29	34	3	7.13	
Unified Fire Authority	44	4	2.41	40	4	3.01	13	7	1.47	_	_	_	
Davis County ,	43	5	2.36	31	5	2.33	22	4	2.49	12	4	2.52	
Weber County Corp.	39	6	2.14	22	7	1.65	15	6	1.69	_	_	_	
West Valley City	32	7	1.75	22	7	1.65	_	_	_	_	_	_	
Cache County	31	8	1.70	26	6	1.95	22	4	2.49	8	6	1.68	
Unified Police Department	29	9	1.59	20	10	1.50	_	_	_	_	_	_	
Ogden City Corp.	29	9	1.59	21	9	1.58	11	9	1.24	_	_	_	
Park City Fire Service				_	_		12	8	1.36	_	_	_	
Iron County				_	_	_	11	9	1.24	_	_	_	
Murray City				_	_	_	_	_	_	9	5	1.89	
Duchesne County				_	_		_	_	_	8	6	1.68	
Utah County				_	_	_	_	_	_	7	8	1.47	
Layton City				_	_	_	_	_	_	6	9	1.26	
St. George City				_	_	_	_	_	_	_	_	_	
Grand County				_	_	_	_	_	_	_	_	_	
Other	864		47.37	605		45.45	374		42.26	197		41.28	
Total Tier 2 Public Safety and Firefighter System active members	1,824		100.00%	1,331		100.00%	885		100.00%	477		100.00%	

Additional information will be added when it becomes available.

# Schedule of Utah Retirement Office Employees

Year Ended December 31

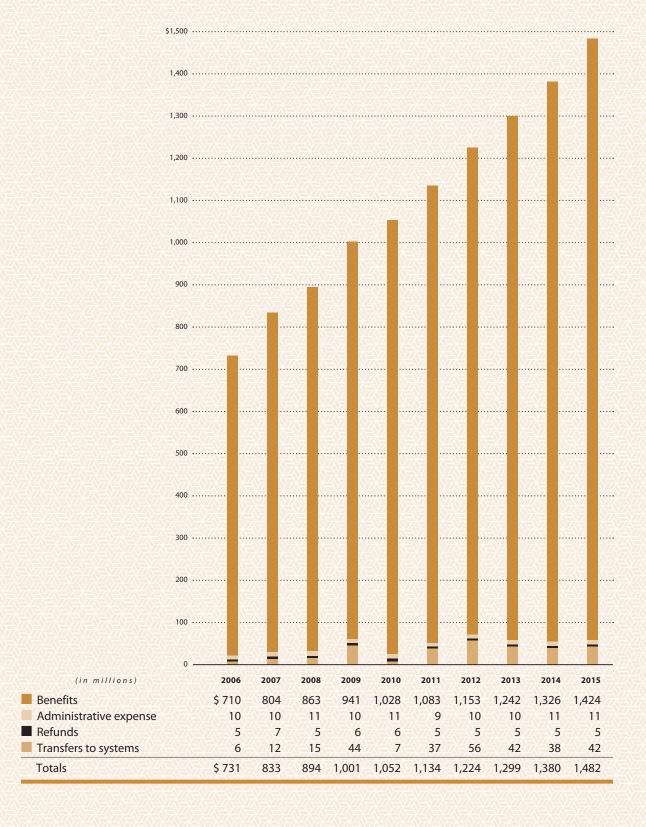
Year	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Number of employees	169	162	168	163	161	161	165	164	156	154

		2011
Active Members	Rank	Percent of Total Active Members
3	9	3.03%
17	1	17.17
6	3	6.06
_	_	_
4	5	4.04
_	_	_
4	8	4.04
_	_	_
_	_	_
4	7	4.04
8	2	8.08
_	_	_
_	_	_
_	_	_
5	4	5.05
_	_	_
4	6	4.04
3	10	3.03
_	_	
99		100.00%

## **UTAH RETIREMENT SYSTEMS**

## **DEDUCTIONS BY TYPE**

(in millions)



## **Schedules of Participating Employers**

N / Public Employees Retirement System — Noncontributory • C / Public Employees Retirement System — Contributory  $\textcolor{red}{\textbf{PS} \, / \, \text{Public Safety Retirement System} \, \bullet \, \textcolor{red}{\textbf{F} \, / \, \text{Firefighters Retirement System}} \, \bullet \, \textcolor{red}{\textbf{T} \, / \, \text{Tier 2 Retirement Systems}}$ **D** / 457 Plan • **K** / 401(k) Plan

Employer	N	c	PS		F '	ГС	)	K	Employer	N	c	PS	F	т	D	K
School Districts and Education Em	plo	ye	rs						Ogden School District	N	C			Т	D	K
									Ogden-Weber Applied Technical Center	N	C			Τ		K
Academy for Math, Engineering	NI					г		V	Ogden Weber/NEA/UEA Uniserv							K
and Science Charter School (AMES)						Γ		K	Park City School District		C			Τ	D	K
Active Re-Entry Incorporated						[ 		K	Piute School District		C			Т		K
Alpine School District		C						K	Provo School District	N	C			Τ	D	K
Alpine Unisery						Γ C		K	Recreation and Habilitation Services	N				Τ		K
American Leadership Academy						Γ		K	Rich School District	N	C			Τ		K
Beaver School District						Γ_		K	Salt Lake Arts Academy	N				Τ		
Bonneville Unisery		_				Γ		K	Salt Lake Community College	Ν	C			Τ	D	Κ
Box Elder School District		C				Γ [		K	Salt Lake School District	Ν	C			Τ	D	Κ
Bridgerland Applied Technology Center		_				Γ		K	San Juan School District	Ν	C			Τ	D	Κ
Cache School District		C				Γ		K	Sevier School District	Ν	C			Т	D	Κ
Canyons School District						Γ		K	Snow College	Ν	C			Т	D	Κ
Carbon School District	. N	C				Γ		K	Soldier Hollow Charter School					Т		Κ
Color Country Uniserv	. N					Γ	)	K	South Sanpete School District		C			Т	D	Κ
Daggett School District	. N	C				Γ	)	K	South Summit School District					Т		Κ
Davis Applied Technology College	. N				-	Γ		K	Southern Utah University		C	PS		T		K
Davis School District		C			-	Γ	)	K	Southwest Applied Technology Center					T		K
Davis Uniserv	. N				-	Γ	)	K	Southwest Educational Development Center					Ť		K
Dixie Applied Technology College	. N				-	Γ		K	Space Dynamics Lab/USU					Ť		K
Dixie State University	. N	C	PS	,	-	Γ		K	Success Academy					T		K
Duchesne School District	. N	C			-	ГΩ	)	K	Summit Academy Charter School					T		K
East Hollywood High School	. N				-	Γ		K	Summit Academy High School					T		K
Educators Mutual Insurance	. N	C			-	ГΩ	)	K	Tintic School District		C			T		K
Emery School District	. N	C			-	ГΩ	)	K	Tooele Applied Technology College		_			T		K
Fast Forward Charter High School	. N				-	Γ		Κ	Tooele School District		C				D	K
Garfield School District		C			-	Γ		Κ	Tuacahn High School		_			T	D	K
Grand School District	. N	C			-	Γ		Κ	Uintah Basin Applied Technology Center		C				D	K
Granite School District	. N	C			-	ГΩ	)	K	Uintah School District		C					K
Granite Uniserv					-	ГΩ	)	K	University of Utah		C	DC		T	U	K
High Desert Uniserv					-	ГΩ	)	K	Utah County Academy of Sciences		_	13		T T		K
High School Activity Association		C			-	Γ		K	Utah Education Association		C				D	
Intech Collegiate High School					-	Γ		K	Utah School Boards Association		C			T T	U	K
Iron School District		C			-	ГС		K						T		K
Itineris High School						Γ		K	Utah School Boards Risk Man Mut Ins Assn					-	_	
Jordan School District		C				Г [		K	Utah School Employee Association Utah State University		_	DC				K
Jordan Uniserv					-	ГС		K	•		C	P3				K
Juab School District		C			-	ГС		K	Utah Uniserv		C					K
Kane School District						Г С		K	Utah Valley University		C				D	
Liberty Academy Charter School						г -		K	Wasatch School District		C			-		K
Logan School District		C				Г С		K	Wasatch Unisery					-		K
Master Academy, Inc						Γ		K	Washington School District		C				D	
Millard School District		C				Г		K	Wayne School District		_				D	
						Г		K	Weber County School District		C			Т	D	
Monticello Academy Morgan School District						Г [		K	Weber State University		C			Т		K
Mountainland Applied Technology Center						, г Г		K	Woodland Peaks Uniserv	N				Т		
						-			and the second							
Murray School District		C				Г () Г ()		K	State and Other Employers							
Nebo School District		C						K	Heber Valley Historic Railroad	N				Т		Κ
Noah Webster Academy, Inc		_				[ 		K	State of Utah (also participates in the	. •				•		
North Sanpete School District								K	Judges Retirement System and the Utah							
North Summit School District	. N	C				Γ	J	K	Governors and Legislators Retirement Plan)	N	c	PS	F	т	D	K
Northern Utah Academy of Math,									Utah Communications Authority		_	rJ		T	U	K
Engineering and Science						_			Utah Dairy Council					T		r
Charter School (NUAMES)	. N				-	Γ		K			_					ν
									Utah Housing Corporation	N	C			Τ		K

## Schedule of Participating Employers (Continued)

Employer	N	С	PS	F	т	D	К	Employer	N	c	PS	F	т	D	К
Utah Retirement Systems	N				Т	D	Κ	Clearfield City	N		PS	F	Т	D	K
Utah Safety Council					Т		Κ	Cleveland Town					Т		
Utah State Fair Corporation					Т		Κ	Clinton City		C	PS	F	Т	D	Κ
Workers Compensation Fund		C			Т	D		Coalville City		_		-	Т	_	K
Counties and County Organization					·		•••	Corinne CityCottonwood Heights City		C	PS		T	D	K
Counties and County Organization	3							Daniel Town			F 3		T	D	K
Beaver County			PS		Т					C			T		K
Box Elder County		_	PS		Т		K	Delta City		C			T		K
Cache County	. N	C	PS	F	Т	D	K	Draper City					T		K
Carbon County	N	C	PS		Т	D	K	Duchesne City				F	T		
Daggett County	N		PS		Т		K	Eagle Mountain City			DC	Г		_	V
Davis County	. N		PS		Т	D	Κ	East Carbon City			PS		T	D	K
Duchesne County	N	C	PS		Τ	D	Κ	Elk Ridge Town		_			T		K
Emery County	N	C	PS		Т	D	K	Emery Town		C	DC		T		K
Garfield County	N	C	PS		Т	D	Κ	Enoch City			PS		T		K
Grand County	N	C	PS		Τ		Κ	Enterprise City					T		K
Iron County		C	PS		Т	D	Κ	Ephraim City			PS		T		K
Juab County	N	C	PS		Т			Escalante Town			PS		T		
Kane County	N		PS		Т			Eureka City					T		
Millard County		C	PS		Т	D	Κ	Fairview City			PS	_	T		K
Morgan County			PS		Т		Κ	Farmington City			PS	F	Τ	_	
Piute County			PS		Т		Κ	Farr West City					Т	D	K
Rich County		C	PS		Т			Ferron City					Т		K
Salt Lake County			PS	F	Т		Κ	Fillmore City					Т	D	K
San Juan County		Č	PS		Т		K	Fountain Green City			PS		Т		
Sanpete County			PS		Т		K	Francis Town					Т		K
Sevier County		C				D		Fruit Heights City	N				Τ		Κ
Summit County			PS		Ť			Garden City	N				Τ		Κ
Tooele County			PS	F	Ť		Κ	Garland City		C	PS		Τ		K
Uintah County			PS	•	T		K	Genola Town					Τ		
Unified Fire Authority		_	PS	F	Ť		IX	Goshen Town	N				Τ		
Utah County		c	PS	•	T			Grantsville City	Ν		PS		Τ	D	K
Wasatch County		_	PS		Ť		Κ	Green River City	Ν				Τ		Κ
Wasatch Co. Fire District			Γ3	F	T		K	Gunnison City	Ν		PS		Τ	D	Κ
Washington County			PS	'		D		Harrisville City	Ν	C	PS		Τ		Κ
,			PS		T	D	IX	Heber City	Ν		PS		Τ	D	Κ
Wabar County		_	PS			D	V	Helper City	Ν		PS		Τ		Κ
Weber County			P3	_				Herriman City	Ν				Τ		Κ
Weber Fire District	. IN	C		F	ı	D	ĸ	Highland City	Ν				Τ	D	Κ
Cities and Towns								Hinckley Town	Ν				Τ		Κ
Cities and rowns								Holden Town	Ν				Τ		
Alpine City	N				Т		K	Holladay City	Ν				Τ		Κ
Alta Town	N				Т		Κ	Hooper City	Ν				Т		Κ
American Fork City	N		PS	F	Т			Huntington City					Т	D	Κ
Annabella Town	N				Т		Κ	Hurricane City	Ν		PS	F	Τ		Κ
Apple Valley Town	N				Т		Κ	Hyde Park City	Ν				Т		Κ
Aurora City	N				Т		Κ	Hyrum City	Ν				Т		Κ
Ballard City	N				Т		Κ	lvins City			PS	F	Т		Κ
Beaver City					Т		Κ	Kamas City			PS		Т	D	Κ
Bicknell Town	N				Т			Kanab City			PS	F	Т		Κ
Big Water Municipal Corp			PS		Т		Κ	Kaysville City		C	PS	•	T		-
Blanding City			PS		Т		Κ	LaVerkin City			PS		Т		Κ
Bluffdale City		C	PS		Ť	D	K	Layton City	Ν	C		F	Ť	D	•
Bountiful City		Č		F	T		K	Lehi City			PS	F	Ť		
Brian Head Town		C		•	T			Levan Town				•	Ť		
Brigham City			PS	F	T		Κ	Lewiston City					T		K
3 , ,		_	, ,	'	T	U	1	Lindon City			PS		T		K
Cadar City			PS	F	T		K	•		_	PS	Е	T	D	K
Codar Hills City			r۵	٢	T		ľ	Long Rook Safety District		C		F F	T	U	
Centerfield City			DC		T			Lone Peak Safety District		_	PS	Г			K
Centerfield City		_	PS				1/	Manila Town		C			T		K
Centerville City	. IV	C	PS		ı	D	ĸ	Manti City	IN				Τ		K

## Schedule of Participating Employers (Continued)

Employer	N	С	PS	F	Т	D	К	Employer	N	c	PS	F	Т	D	K
Mantua City	N		PS		Т		K	South Salt Lake City	N		PS	F	Т	D	K
Mapleton City	N		PS		Т		Κ	South Weber City	Ν				Т		Κ
Marriott/Slaterville City					Т		Κ	Spanish Fork City	N		PS		Т		
Mayfield Town					Т		K	Spring City		C	PS		Т		
Meadow Town					Ť		K	Springdale Town		_	PS		T		K
Mendon City					Ť		1	Springville City		c	PS	F	Ť		
Midvale City		_	PS	_	T	D		St. George City			PS	'	T	D	K
•			F 3	Г			V			C	Γ3		T	D	K
Midway City		C	DC		T		K	Stockton Town			DC			_	1/
Milford City			PS		T	_	K	Sunset City		C		_	T	D	K
Millville City					Т	D	K	Syracuse City			PS	F	T	D	K
Minersville Town					Т		K	Taylorsville City			PS		Т		K
Moab City	N	C	PS		Т	D	K	Tooele City	N	C	PS		Т	D	
Monroe City	N				Τ		K	Torrey Town	N				Τ		K
Monticello City	N		PS		Τ			Tremonton City	N	C	PS		Τ	D	Κ
Morgan City	N				Τ		K	Uintah City	Ν				Τ		Κ
Moroni City	N		PS		Т			Vernal City	Ν	C	PS		Т		Κ
Mt Pleasant City		C	PS		Т		K	Vineyard Town					Т		Κ
Murray City			PS	F	Ť	D	K	Washington City				F	T		K
Myton City		_	. •	•	•	_	••	Washington Terrace City			PS	F	Ť	D	K
Naples City		$\mathcal{C}$	PS		Т		K	Wellington City			PS	•	Ť		
Nephi City		C	PS		T		K	Wellsville City			, ,		T		
Nibley City			r٥		T	U	K	Wendover City			PS		T		Κ
			ъ.	_	 			•					-	D	
North Logan City			PS	F	  -		K	West Bountiful City		C	PS		T		K
North Ogden City		C	PS	F		_		West Haven City		_		_	T	_	K
North Salt Lake City			PS		Т	D	K	West Jordan City		C	PS	F		D	
Oakley City		C			Т		K	West Point City					Т		K
Ogden City	N	C	PS	F	Τ	D	K	West Valley City		C	PS	F	Т		
Orangeville City	N				Τ		Κ	Willard City	N		PS		Τ		
Orderville Town	N				Τ			Woods Cross City	Ν	C	PS		Τ	D	Κ
Orem City	N	C	PS	F	Τ	D	K								
Panguitch City					Т		K	Other Government Entities							
Paragonah Town		C			Т			Ash Cusal Cossial Comics District	N.I				_	_	V
Park City			PS		Т			Ash Creek Special Service District					T	D	K
Parowan City			PS		T		K	Ashley Valley Sewer Management Board					T		
Payson City		_	PS	F	Ť		K	Ashley Valley Improvement District					Т		
· ·			PS	'	T		K	Bear Lake Special Service District					Т		K
Perry City			F 3		T		K	Bear River Association of Governments	N				Т	D	K
Plain City			DC	_			I.	Bear River Health Department	Ν	C			Τ	D	Κ
Pleasant Grove City		_	PS	F	T	_	.,	Bear River Mental Health	Ν				Τ	D	Κ
Pleasant View City			PS	_	T	D	K	Bear River Water District	Ν				Τ		Κ
Price City		C	PS	F	T		K	Beaver Housing Authority	N				Τ		Κ
Providence City					Т		K	Beaver Valley Hospital					Т		Κ
Provo City	N	C	PS	F	Τ	D	K	Benchland Water Company					Т		Κ
Randolph Town	N				Τ			Bona Vista Water Improvement					T	D	K
Redmond Town	N				Τ			Bountiful Irrigation District					Ť		K
Richfield City	N	C	PS		Τ	D		Box Elder County Mosquito District					, T	U	K
Richmond City					Т		Κ						т Т		K
Riverdale City		C	PS	F	Т		K	Cache Metro Planning Organization	IN				Τ		
Riverton City				F		D	K	Carbon County Recreation and					_		.,
Roosevelt City		_	PS				K	Transportation Special Service District		_			T		K
· · · · · · · · · · · · · · · · · · ·		_	PS				K	Castle Valley Special Service District		C			Т		K
Roy City		C		Г				Cedar City Housing Authority					Т		
Salem City			PS		T	D	K	Cedar Mountain Fire Protection District	Ν			F	Τ		K
Salina City		_	PS	_	T	_	.,	Central Iron County Water Conservancy Dist	Ν				Τ		Κ
Salt Lake City			PS				K	Central Davis Sewer District					Т	D	Κ
Sandy City		C	PS	F	Т	D		Central Utah Counseling Center					Т		Κ
Santa Clara City	N		PS	F	Т		K	Central Utah Public Health					T		K
Santaquin City	N		PS		Т		Κ	Central Utah Water District					Ť	D	K
Saratoga Springs Town			PS	F	Т		Κ	Central Weber Sewer District		C			T		K
Smithfield City			PS	F	Т		Κ			_			т Т	U	K
South Jordan City		C	PS	F	Т		K	Children's Aid Society—Utah					T	_	
South Ogden City		_	PS				K	Cottonwood Heights P&R Services					T	D	K
Journ Oguen City	IN		1 )	'	'		IV.	Cottonwood Improvement District	N				Τ	D	K

## Schedule of Participating Employers (Continued)

Employer	N	C	PS	F	Т	D	K	Employer	N	C	PS	F	Т	D	K
Council on Aging —								Provo River Water Users	N				Т	D	K
Golden Age Center Special Service District	N				Т		K	Roosevelt City Housing Authority					Ť		11
Davis & Weber Counties Canal Company		C			Ť		K	Roy Water Conservancy District					Ť		K
Davis Behavioral Health		_			Ť	D	K	Salt Lake City Library					T		K
Davis County Housing Authority		C			T	D	K	Salt Lake City Mosquito Abatement					T		K
Davis County Mosquito Abatement		_			Ť		K	Salt Lake City Sub. Sanitation #1	N				Ť		K
Davis County Solid Waste Management					Ť	D	K	San Juan Mental Health/Substance Abuse Dist					Ť		K
DDI Advantage		C			Ť	D	K	Sandy Suburban Improvement District					, T		K
Duchesne County Mosquito District		C			Ť		IX	Six-County Association of Governments		C				D	K
Duchesne County Water Conservancy District		_			Ť			Six-County Infrastructure Coalition		_			Ť	0	K
East Duchesne Culinary Water Imp District					T		K	Snyderville Basin Water Reclamation District		C				D	K
Emery County Care and Rehabilitation Center	14	C			Ť	D	K	Solid Waste Management Special Serv Dist #1		_			T	0	K
Emery County Recreation Special Service Dist	N	_			Ť	D	K	Solitude Improvement District					Ť		K
Emery Water Conservancy District					Ť		K	South Davis County Sewer Improvement Dist		C				D	K
Five-County Association of Governments		C			Ť	D	K	South Davis County Water Improvement Dist		_			Ť		K
Four Corners Regional Care Center		C			T	D	K	South Davis Metro Fire Agency				F	Ť		K
Fox Hollow Golf Course		_			Ť		K	South Davis Recreation Center				•	Ť		1
Garden City Fire District				F	Ť		K	South Ogden Conservancy District						D	Κ
Grand County Cemetery Maintenance District					Ť		K	South Utah Valley Animal	14				'		11
Grand County Water Sewer/Service					Ť		1	Services Special Service District	N				Т		
Granger-Hunter Improvement District					Ť	D	K	South Utah Valley Electric Service District					T		K
Gunnison Valley Hospital		C			Ť	D	K	South Utah Valley Solid Waste					Ť		K
Heber Light & Power		_			Ť	D	K	South Valley Sewer District		C				D	K
Heber Valley Special District					Ť	D	IX	South Valley Water Reclamation Facility		_			T	0	K
Hooper Water Improvement District					Ť			Southeastern Utah Assoc. of Governments		C				D	K
Housing Authority of Carbon County					Ť		K	Southeastern Utah Health		C			Ť	0	K
Housing Authority of Ogden City					Ť		IX	Southern Salt Lake Valley Mosquito Abatement		_			T		K
Housing Authority of Ogder City		C			Ť		K	Southern Utah Valley Power System					Ť		K
Housing Authority of Salt Lake City		_			Ť		IX	Southwest Behavioral Health Center					, T		K
Hurricane Valley Fire Spec. Service District	14			F	Ť		Κ	Southwest Mosquito Abatement and	IN				'		IX
Impact Mitigation Special Service District	N			•	Ť		K	Control District	N				Т		
Jordan Valley Water Conservancy District		C			Ť	D	K	Southwest Utah Public Health Department		C			-	D	K
Jordanelle Special Service District		_			Ť		K	St. George Housing Authority		_			Ť		K
Kane Water Conservancy District					Ť		1	Summit Mosquito Abatement District					Ť		K
Kearns Improvement District		C			Ť		K	Taylor West Weber Water Improvement Dist					•		1
Leeds Area Special Service District		_		F	Ť		1	Taylorsville – Bennion Improvement					Т	D	K
Maesar Water Improvement District					Ť		K	Timber Lakes Special Service District					Ť		K
Magna Mosquito Abatement					Ť		K	Timpanogos Special Service District		C			Ť		1
Metro Water District—SLC/Sandy					Ť	D	K	Tooele County Housing		_			Ť		K
Midvalley Improvement District					Ť	K		Tooele Valley Mosquito Abatement District					T		K
Military Installation Development Authority					T		K	Trans-Jordan Cities					Ť	D	
Millard County Care and Rehabilitation, Inc					Ť			Tridell-Lapoint Water District					Ť		K
Moab Valley Fire Protection				F	T		K	Uintah Animal Control and					•		
Mountain Regional Water Special Service Dist				•	T		K	Shelter Special Service District	N				Т		K
Mountainland Association of Governments		C			Ť	D	K	Uintah Basin Assistance Council					Ť		
Mt. Olympus Improvement District		_			T	_	K	Uintah Basin Association of Government					Ť		
Nebo Credit Union					T		K	Uintah County Care Center					T		K
North Davis County Sewer District		C			Ť			Uintah County Mosquito Abatement					Ť		K
North Davis Fire District		_		F	Ť			Uintah Fire Suppression Special Service Dist	14			F	Ť		K
North East Counseling Center				•	Ť		K	Uintah Highlands Improvement District	N			•	Ť		
North Emery Water Users Special Service Dist					T			Uintah Recreation District					Ť		K
North Fork Special Service District					Ť			Uintah Transportation Special Service Dist					Ť		K
North Pointe Solid Waste Special Service Dist					Ť		K	Uintah Water Conservancy District					Ť		11
North Toolle County Fire Protection	14						1	Unified Police Department			PS		T		K
Service District	N			F	Т			Upper Country Water District			13		'		IX
North View Fire District				F	T			Utah Association of Counties					Т		K
Oguirrh Recreation and Parks District				'	T		K	Utah Counties Indemnity Pool					, T		K
Park City Fire Service District				F	T		K	Utah County Housing Authority		C			, T	D	11
Price River Water Improvement				'	T	D	K	Utah Local Governments Trust		_			T	J	K
Provo Housing Authority					T	U	11	Utah Lake Commission					T		K
1 10 vo i lousing Authority	1 1				'			Otan Lake Commission	1.4				'		11

## Schedule of Participating Employers (Concluded)

Employer	N	C	PS	F	T	D	K
Utah League of Cities & Towns		C			Т		
Utah Municipal Power Agency					Т		Κ
Utah Public Employees Association	Ν	C			Т		Κ
Utah Telecommunication Open							
Infrastructure Agency (UTOPIA)	Ν				Т		Κ
Utah Valley Dispatch Special Services Dist	Ν				Т		Κ
Utah Zoological Society		C			Т		Κ
Valley Emergency Communication Center					Т	D	Κ
Wasatch Front Regional Council		C			Т	D	Κ
Wasatch Front Waste and Recycling District	Ν				Т		
Wasatch Integrated Waste Management					Т	D	Κ
Wasatch Mental Health Special Services Dist	Ν	C			Т	D	Κ
Washington County Solid Waste #1	Ν				Т		Κ
Washington County Water District	Ν	C			Т		Κ
Waste Management Service District #5	Ν				Т		Κ
Weber Area Dispatch 911 & Emergency							
Services District	Ν				Т		Κ
Weber Basin Water Conservancy	Ν				Т	D	Κ
Weber County Mosquito Abatement	Ν				Т	D	Κ
Weber Human Services	Ν				Т	D	Κ
Weber River Water Users		C			Т	Κ	
Western Kane County Special Service							
District #1	Ν				Т		Κ
White City Water Improvement District	Ν				Т		Κ

## **Total Participating Employers**

Noncontributory	451
Contributory	158
Public Safety	131
Firefighters	60
Judges	1
Governor and Legislators	1
Tier 2 Public Employees	465
Tier 2 Public Safety and Firefighter	149
457 Plan	160
401(k) Plan	382

#### **Employer**

#### **Inactive Units with Retirees**

American Fork Hospital Bay Area Refuse Disposal Bear River Town Bingham City **Box Elder County Nursing Home** Carbon County Hospital Carbon Nursing Home Cedar City Library Central Utah Ed Ser Circleville Coalville Health Center College of Eastern Utah Copperton Improvement District Cottage Program Davis County Department of Human Services Department of Employment Security Dixie Center at St. George Dixie Hospital East Layton **Emery Medical Center** Four Corners Regional Hospital Genola Golden Hours Homemaker **Grand County Road Special** Service District Hiawatha Town Honeyville Town I W Allen Hospital Juab County Hospital Kanosh Town Corporation Leeds Town Marysvale Town Metro Water District — Orem Metro Water District — Provo Midvale Wastewater Treatment Midway Sanitation District Milford Valley Hospital Morgan County Historical Society Morgan County Library Mountain America Credit Union Nebo Credit Union **New Harmony Town** Northern Utah Crime Payson City Hospital Pioneer Care Center Randolph Town Reg 2 Law Enforcement Plan Agency

Salt Lake County Fair

Salt Lake School District Credit Union San Juan County Hospital Six-County Economic Development **Snow College South** South Davis Fire Department Southeastern Utah Economic Development Statewide Assn of Prosec Sugarhouse Park Authority Summit Employment Summit Park Water Special Service District Thomas Edison Charter School Timpanogos Academy **Tooele Council of Aging Tooele Valley Hospital** Trail Incorporated Twin Creeks Special Service District U of U Research Institute U S H Patients Funds **Uintah Basin Counseling** Uintah Basin Dist Health **Uintah Basin Medical Center Uintah County Council on Aging Uintah County Hospital USU Comm Credit Union USU Community Credit Union** Ut Assn of Sec Sch Princ **Utah College of Applied** Technology Utah County Council of Govt Utah Industries for the Blind Utah Partnership for **Education Economics** Utah Technology Corporation Valley Mental Health Washington County Association for Retarded Citizens Wasatch County Hospital **Wasatch County Special** Service District #1 Weber County Hospital Weber Economic Development Corp Weber River Water Quality West Millard Hospital West Millard Recreation Woodland Hills City









### UTAH RETIREMENT SYSTEMS

# A HIGHLIGHT HISTORY 1907-2015

- 1907 | The Legislature authorizes the organization of local teacher retirement associations.
- 1908 | Salt Lake City institutes the first teacher retirement commission. Odden follows in 1933 and Provo in 1934.
- 1919 | First statewide pension plan for all full-time paid and volunteer firemen. Actuarially unsound, the system would be transferred to the Retirement Office in 1965.
- 1921 | First police pension plans in Salt Lake, Ogden, Provo, and Logan. Actuarially unsound, these plans would be transferred to the Public Safety Retirement System in 1969.
- 1927 The Prison and Industrial School Guards Retirement System is enacted. Industrial school guards join the teachers retirement system in 1937. Prison guards transfer to the Public Safety Retirement System in 1970.
- 1934 The Utah Education Association prepares a teacher retirement plan to present to the Legislature. This plan will form much of the basis for a new retirement system.
- **1937** First statewide teachers retirement system. Seven member board hires Ray L. Lillywhite as the first executive secretary.
- 1943 Utah Supreme Court rules that a retiree's statutory retirement benefit cannot be reduced, affirming the principle of vested rights. The Court would later affirm that a vested retirement benefit may not be reduced without providing a "substantial substitute."

- 1947 The State Officers' and Employees' Retirement System is created with a 3% contribution rate each by employee and employer.
  - Teachers in local systems are required to join the State Teachers Retirement System.
- 1948 The Utah Supreme Court permits service credit for prior service in parochial schools.
- 1949 The State Officers and Employees Retirement System is renamed The Public Employees Retirement System; it will cover all public employees and judges. Retirement benefit ceiling is \$100 a month.
- 1952 Ray Lillywhite resigns; Leonard W. McDonald is hired as second executive secretary of the Teachers Retirement System.
- 1953 The short-lived Teachers Retirement System is liquidated in favor of Social Security.
- 1954 The Teachers Retirement System is replaced by the Utah School Employees Retirement System and integrated with Social Security to preserve its solvency. Local teacher retirement associations are terminated.

## A Highlight History 1907-2015 (Continued)

- 1957 Minimum monthly retirement benefit is \$85.
- 1959 The Utah State Public Employees Association is formed with the intent to produce a comprehensive plan for a statewide public employee retirement system.
- 1961 The Public Employees Retirement System is created with a seven member board.
  - The public employees and teachers retirement systems retain separate boards but unite under a single administrator and office.
- 1963 Creation of a single board for all retirement systems is the crowning achievement in Utah public retirement history and the birth of today's Utah Retirement Systems.
- 1967 The heretofore separate school and public retirement systems are consolidated into a single Utah State Retirement System.
- 1969 | The Utah Public Safety Retirement Act covers all public safety employees engaged full time in hazardous duty. Benefits were uniform in each jurisdiction, but contribution rates varied.
- 1971 Members gain a salary deferral program.
- 1975 Current service formula rises from 1.25% to 2%. The cost-of-living ceiling rises to 4%.
- 1976 Leonard W. McDonald retires. Bert D. Hunsaker becomes executive director.
- 1977 | Governor Scott Matheson dedicates the new Leonard W. McDonald Building for the Utah Retirement Systems.
- 1979 Board gains custody of the retirement fund and greater investment authority.
- 1982 The court affirms that the Board is independent of the executive department and has authority to hire its own legal counsel.
- 1983 The Retirement Board sees its first actuarial surplus as new investments prove their worth; hires a fulltime investment manager.

- 1986 | Public Employees Noncontributory Retirement System debuts: employers pay all contributions; 3-year final average salary; State and education employers pay 1.5% of salary into URS' 401(k) Plan. Employees forfeit access to contributions, but the new system portends a superior career retirement.
- **1987** A "25-and-out" retirement incentive plan permits public employees to retire after 25 years with no actuarial reduction; and increases to 2% the value of each year of service. Over 3000 employees take advantage of its 6-month window.
- 1989 The U.S. Supreme Court rules that if federal retirement benefits are taxable, then state-provided retirement benefits cannot be exempt. Legislature grants a 3% substantial substitute benefit for affected members.

Bert Hunsaker steps down. Dee Williams becomes executive director.

The Public Safety Noncontributory Retirement System is created.

The Systems' assets nearly quadruple from \$1 billion to \$3.85 billion during the 1980s.

- 1990 Public Employees Noncontributory Retirement members receive 2% for all years of service.
- 1994 URS begins dividing pension, death, and DC benefits after court rules that a former spouse may be awarded death and retirement benefits, whether or not the spouse remarries.
- 1995 Members with 25 years of service in the Public Employees Noncontributory System may buy future service credit to permit immediate retirement.
- **1996** URS recovers 100% of member assets originally invested in Guaranteed Investment Contracts that failed when Confederation Life Insurance Company of Canada was declared insolvent in August 1994.

# A Highlight History 1907-2015 (Concluded)

1997 Judges Noncontributory Retirement System is created.

> The URS DC video receives a Telly Award — the commercial equivalent of an "Oscar" for motion pictures; URS' publication for retirees, Cycles, places second worldwide among corporate and institutional newsletters.

Legislature affirms the Board's authority to define provisions and terms of the retirement code.

1998 The 401(k) Plan launches a bold marketing program to help members better map a retirement investment strategy. Investment options are enhanced and expanded.

> State employees at retirement may defer 25% of accumulated sick leave to the 401(k) Plan, convert it to paid-up health or Medicare supplement insurance or take it as cash.

1999 | Members may buy up to five years of future service credit, even if it exceeds the years required to retire.

> Leonard W. McDonald, director of the Utah Retirement Systems 1952-1976 and to whom much of the structure of the Systems can be attributed, dies.

Dee Williams retires. Robert V. Newman becomes executive director.

Systems' assets rise from \$3.85 billion to over \$13 billion during the 1990s.

- 2000 | 401(k) Plan participants may now apply for a fixed rate loan for any purpose of up to 50% of his or her 401(k) account balance.
- **2001** A value stock fund joins the menu of DC investment options.

URS website calculators invite members to estimate pension benefits and compute potential 401(k)/457 earnings.

2002 The Olympic Winter Games are staged in Salt Lake City. URS adopts telecommuting.

> 457 Plan permits deferrals up to 100% of includable compensation; offers a new catch-up feature; drops irrevocable withdrawal decisions; allows rollovers to any acceptant 457, 403(b), 401(k), or IRA; allows use for URS pension redeposits or to buy URS service credit.

> Internet-based personal retirement account manager, myURS, lets members view and transfer account balances, alter deferrals, estimate payouts, integrate Social Security, and more.

- 2003 To protect 401(k) and 457 investors from the costs of others' adverse trading activities, URS restricts frequent trading privileges. Systems' assets are \$14.2 billion.
- **2004** Ray L. Lillywhite, executive secretary of the Teachers Retirement System from 1937 to 1952, dies.
- 2005 | Legislature repeals 1998 benefit allowing 25% of a state employee's accumulated sick leave to be converted to other retirement benefits.
- 2006 Members gain a partial lump-sum payment option (PLSO) at retirement.
- **2007** Retirement Systems' assets reached \$23.9 billion.

Members of the Public Safety Contributory Retirement System gain a window to convert to the Public Safety Noncontributory System.

- 2008 The Retirement Systems pay over \$1,000,000,000 in annual benefits.
- 2009 New online enrollment feature at urs.org offers simple, convenient way to enroll for benefits electronically.

IRS Private Letter Ruling confirms URS 457 Plan is an eligible deferred compensation plan as defined in IRC Section 457(b).

**2010** Retirees who resume work for a URS employer within a year after retiring will be returned to active status to earn further service credit and may thereafter choose between retirement allowance options.

#### A Highlight History 1907-2015 (Continued)

2011 URS creates the Tier 2 Retirement System for members initially entering full-time employment with a participating employer on or after July 1, 2011. These employees choose to participate in either the Tier 2 Hybrid Retirement System or the Tier 2 Defined Contribution (DC) Plan.

> The URS Defined Contribution Department introduces a new and expanded set of asset classes within the Horizon Funds. The changes bring a broader, more diversified mix of securities to the Horizon Funds and offer inflation protection as well as exposure to real estate and commodities.

- **2012** Legislative bills brought about four noteworthy changes for the Utah Retirement Systems. First, executive director of the Department of Corrections is now allowed to exempt from the Noncontributory Retirement System. Second, Tier 2 firefighters, including volunteers, are covered under the PEHP long-term disability policy. Third, certain Tier 2 Retirement Systems at-will employees are allowed to exempt from the 4-year vesting requirements. And fourth, new legislators and governors will not receive post-retirement health benefits.
- 2013 Robert V. Newman retires. Daniel D. Andersen becomes executive director.
- 2014 URS received a No-Action Letter from the Utah Division of Securities in preparation for its new Investment Advice Program to be offered in 2015.

After the close of business on December 31, 2014, all assets held in the DC Plan Horizon Funds were transferred into the new Target Date Funds. The assets were allocated according to the Target Date that corresponded with the participant's age.

**2015** URS rolled out its retirement planning advisory program. In 2015, advisors conducted more than 1,600 sessions across the state. In satisfaction surveys, 98% of members were at least satisfied with their session, with 85% giving the highest satisfaction rating.

# 2015

# UTAH RETIREMENT SYSTEMS

#### COMPREHENSIVE ANNUAL FINANCIAL REPORT

# GASB SCHEDULES OF EMPLOYER ALLOCATION AND PENSION REPORTING

# Section

218	Independent Auditor's Report for Agent Plans
220	Public Safety Retirement System Schedule of Changes in Fiduciary Net Position — Pension Trust Fund by Division
222	Independent Auditor's Report for Cost Sharing Plans
224	Noncontributory Retirement System Local Government Division
236	Noncontributory Retirement System State and School Division
240	Contributory Retirement System Local Government Division
244	Contributory Retirement System State and School Division
246	Public Safety Retirement System Other Division A with Social Security
250	Public Safety Retirement System State of Utah / Public Safety Retirement System Salt Lake City Public Safety Retirement System Ogden City / Public Safety Retirement System Provo City
252	Public Safety Retirement System Logan City / Public Safety Retirement System Bountiful City Public Safety Retirement System Other Division B without Social Security
254	Firefighters Retirement System Other Division A with Social Security
256	Firefighters Retirement System Other Division B without Social Security Judges Retirement System / Utah Governors and Legislators Retirement Plan
258	Tier 2 Public Employees Contributory Retirement System
272	Tier 2 Public Safety and Firefighter Contributory Retirement System
276	Utah Retirement Systems Schedule of Employer Allocations and Pension Amounts
278	Notes to the Public Safety Retirement System Schedule of Changes in Fiduciary Net Position — Pension Trust Fund by Division and Schedules of Employer Allocations and Pension Amounts
288	Aggregation of Funds with a Net Pension Asset
304	Aggregation of Funds with a Net Pension Liability
320	Systems and Plans Statistical Highlights

UTAH RETIREMENT SYSTEMS

# INDEPENDENT AUDITORS' REPORT **FOR AGENT PLANS**

# Deloitte.

#### INDEPENDENT AUDITORS' REPORT

Deloitte & Touche LLP 299 South Main Street Suite 1900 Salt Lake City, UT 84111 United States of America

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**Utah State Retirement Board:** 

#### **Report on the Schedule**

We have audited the fiduciary net position as of December 31, 2015, and the changes in fiduciary net position for the year then ended, included in the accompanying Schedule of Changes in Fiduciary Net Position by Employer— Pension Trust Fund by Division ("Schedule") of the Public Safety Retirement System of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, and the related notes.

#### Management's Responsibility for the Schedule

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

#### **Auditors' Responsibility**

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

An audit involves performing procedures to obtain audit evidence about the amounts in the Schedule. The procedures selected depend on the auditor's judament, including the assessment of the risks of material misstatement of the fiduciary net position and the changes in fiduciary net position included in the Schedule, 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 fiduciary net position and the changes in fiduciary net position included in the Schedule 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 fiduciary net position and the changes in fiduciary net position included in the Schedule.

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 Schedule referred to above presents fairly, in all material respects, the fiduciary net position of the Public Safety Retirement System of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, as of December 31, 2015, and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

### Independent Auditors' Report for Agent Plans (Concluded)

#### **Other Matters**

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, the financial statements of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which includes the Public Safety Retirement System, as of and for the year ended December 31, 2015, and our report thereon, dated April 27, 2016, expressed an unmodified opinion on those financial statements and included an emphasis-ofmatter paragraph regarding the fair value of investments where a publicly listed price is not available.

Our audit of the financial statements of Utah Retirement Systems was conducted for the purpose of forming an opinion on the financial statements as a whole. The individual employer information presented in each of the individual columns of the accompanying Schedule is presented for purposes of additional analysis and is not a required part of the financial statements. The individual employer information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Each column of individual employer information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional

procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the individual employer information presented in each individual column of the accompanying Schedule is stated fairly, in all material respects, in relation to the financial statements of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which includes the Public Safety Retirement System, as a whole. We do not express an opinion on the fiduciary net position or changes in fiduciary net position of each individual employer.

#### **Restrictions on Use**

Our report is intended solely for the information and use of Utah Retirement Systems' management, the Utah State Retirement Board, the participating employers of the Public Safety Retirement System of Utah Retirement Systems and their auditors and is not intended to be used by anyone other than these specified parties.

April 27, 2016

Deloitte : Touche LLP

# **Public Safety Retirement System**

# Schedule of Changes in Fiduciary Net Position — Pension Trust Fund by Division

Year Ended December 31, 2015 With Comparative Totals for Year Ended December 31, 2014

(in thousands)

Salt Lake City         Ogden         Provo           Additions:           Contributions:           Member         \$ —         56         —           Employer         14,100         2,729         2,314           Total contributions         14,100         2,785         2,314           Investment income:           Net appreciation in fair value of investments         435         102         78           Interest, dividends, and other investment income         4,149         969         744           Total income from investment activity         4,584         1,071         822           Less investment expenses         489         114         88           Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions </th <th></th> <th></th> <th></th> <th></th> <th></th>					
Contributions:         Member         \$ —         56 —         —           Employer         14,100         2,729         2,314           Total contributions         14,100         2,785         2,314           Investment income:         ***         ***           Net appreciation in fair value of investments income         4,149         969         744           Total income from investment activity         4,584         1,071         822           Less investment expenses         489         114         88           Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits		Salt Lake City	Ogden	Provo	
Member Employer         \$ —         56 mode         —           Employer         14,100         2,729         2,314           Total contributions         14,100         2,785         2,314           Investment income:         3         102         78           Net appreciation in fair value of investments (dividends, and other investment income         4,149         969         744           Total income from investment activity         4,584         1,071         822           Less investment expenses         489         114         88           Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:         18,935         3,695         3,129           Deductions:         18,935         3,695	Additions:				
Employer	Contributions:				
Total contributions	Member	\$ —	56	_	
Investment income:   Net appreciation in fair value of investments   435   102   78   110   744   149   969   744   149   969   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   744   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   149   14	Employer	14,100	2,729	2,314	
Net appreciation in fair value of investments Interest, dividends, and other investment income         435         102         78           Interest, dividends, and other investment income         4,149         969         744           Total income from investment activity         4,584         1,071         822           Less investment expenses         489         114         88           Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         — <td< td=""><td>Total contributions</td><td>14,100</td><td>2,785</td><td>2,314</td><td></td></td<>	Total contributions	14,100	2,785	2,314	
Interest, dividends, and other investment income	Investment income:				
Total income from investment activity         4,584         1,071         822           Less investment expenses         489         114         88           Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743 </td <td>Net appreciation in fair value of investments</td> <td>435</td> <td>102</td> <td>78</td> <td></td>	Net appreciation in fair value of investments	435	102	78	
Less investment expenses         489         114         88           Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year	Interest, dividends, and other investment income	4,149	969	744	
Net income from investment activity         4,095         957         734           Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:         Retirement benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Total income from investment activity	4,584	1,071	822	
Income from security lending activity         95         22         17           Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:         8         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Less investment expenses	489	114	88	
Less security lending expense         12         3         2           Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Net income from investment activity	4,095	957	734	
Net income from security lending activity         83         19         15           Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Income from security lending activity	95	22	17	
Net investment income         4,178         976         749           Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Less security lending expense	12	3	2	
Transfers from (to) affiliated systems         657         (66)         66           Total additions         18,935         3,695         3,129           Deductions:           Retirement benefits         13,208         3,185         2,192           Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Net income from security lending activity	83	19	15	
Total additions       18,935       3,695       3,129         Deductions:         Retirement benefits       13,208       3,185       2,192         Cost-of-living benefits       3,826       899       541         Supplemental retirement benefits       42       6       6         Refunds       —       —       —         Administrative expenses       116       26       20         Total deductions       17,192       4,116       2,759         Increase (decrease) from operations       1,743       (421)       370         Net position restricted for pensions beginning of year       239,653       56,326       42,907	Net investment income	4,178	976	749	
Deductions:         Retirement benefits       13,208       3,185       2,192         Cost-of-living benefits       3,826       899       541         Supplemental retirement benefits       42       6       6         Refunds       —       —       —         Administrative expenses       116       26       20         Total deductions       17,192       4,116       2,759         Increase (decrease) from operations       1,743       (421)       370         Net position restricted for pensions beginning of year       239,653       56,326       42,907	Transfers from (to) affiliated systems	657	(66)	66	
Retirement benefits       13,208       3,185       2,192         Cost-of-living benefits       3,826       899       541         Supplemental retirement benefits       42       6       6         Refunds       —       —       —         Administrative expenses       116       26       20         Total deductions       17,192       4,116       2,759         Increase (decrease) from operations       1,743       (421)       370         Net position restricted for pensions beginning of year       239,653       56,326       42,907	Total additions	18,935	3,695	3,129	
Cost-of-living benefits         3,826         899         541           Supplemental retirement benefits         42         6         6           Refunds         —         —         —           Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Deductions:				
Supplemental retirement benefits       42       6       6         Refunds       —       —       —         Administrative expenses       116       26       20         Total deductions       17,192       4,116       2,759         Increase (decrease) from operations       1,743       (421)       370         Net position restricted for pensions beginning of year       239,653       56,326       42,907	Retirement benefits	13,208	3,185	2,192	
Refunds         —         —         —         —         —         —         Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Cost-of-living benefits	3,826	899	541	
Administrative expenses         116         26         20           Total deductions         17,192         4,116         2,759           Increase (decrease) from operations         1,743         (421)         370           Net position restricted for pensions beginning of year         239,653         56,326         42,907	Supplemental retirement benefits	42	6	6	
Total deductions 17,192 4,116 2,759  Increase (decrease) from operations 1,743 (421) 370  Net position restricted for pensions beginning of year 239,653 56,326 42,907	Refunds	_	_	_	
Increase (decrease) from operations 1,743 (421) 370  Net position restricted for pensions beginning of year 239,653 56,326 42,907	Administrative expenses	116	26	20	
Net position restricted for pensions beginning of year 239,653 56,326 42,907	Total deductions	17,192	4,116	2,759	
	Increase (decrease) from operations	1,743	(421)	370	
Net position restricted for pensions end of year \$ 241,396 55,905 43,277	Net position restricted for pensions beginning of year	239,653	56,326	42,907	
	Net position restricted for pensions end of year	\$ 241,396	55,905	43,277	

	ost Sharing Plans	c			
Total All Divisions	Other Division B	Other Division A		Agent Plans	
Total All Divisions 2015 2014	(without — Social Security)	(with Social Security)	State of Utah Public Safety	Bountiful	Logan
2013 2014	Jocial Security)	Security)	rublic Salety	Dountilui	Logan
905 835	33	701	115	_	_
141,024 135,588	20,828	51,677	47,449	883	1,044
141,929 136,423	20,861	52,378	47,564	883	1,044
5,276 143,881	600	2,177	1,807	32	45
50,307 54,276	5,721	20,756	17,231	308	429
55,583 198,157	6,321	22,933	19,038	340	474
5,929 4,896	674	2,446	2,031	36	51
49,654 193,261	5,647	20,487	17,007	304	423
1,149 1,085	131	474	393	7	10
149 124	17	62	51	1	1
1,000 961	114	412	342	6	9
50,654 194,222	5,761	20,899	17,349	310	432
4,023 2,746	11,344	(10,067)	2,301	35	(247)
196,606 333,391	37,966	63,210	67,214	1,228	1,229
127,285 118,030	12,895	45,148	48,351	1,127	1,179
27,807 26,407	1,607	9,671	10,770	230	263
295 326	_	90	150	1	<del>-</del>
533 199	307	208	18	_	<del>_</del>
1,233 1,227	135	485	431	9	11
157,153 146,189	14,944	55,602	59,720	1,367	1,453
39,453 187,202	23,022	7,608	7,494	(139)	(224)
2,899,386 2,712,184	321,177	1,200,674	995,830	17,965	24,854
2,938,839 2,899,386	344,199	1,208,282	1,003,324	17,826	24,630

UTAH RETIREMENT SYSTEMS

# INDEPENDENT AUDITORS' REPORT FOR COST SHARING PLANS

# Deloitte.

#### INDEPENDENT AUDITORS' REPORT

Deloitte & Touche LLP 299 South Main Street Suite 1900 Salt Lake City, UT 84111 United States of America

Tel 801-328-4706 Fax: 801-366-7900 www.deloitte.com

Utah State Retirement Board:

#### **Report on the Schedules**

We have audited the employer allocations and the total for all entities of the columns titled employer contributions, net pension liability/(asset), total deferred outflows of resources, total deferred inflows of resources, and total employer net pension expense excluding that attributable to employer-paid member contributions (specific column totals) included in the accompanying schedules of employer allocations and pension amounts of the Noncontributory Retirement System, Contributory Retirement System, Public Safety Retirement System, Firefighters Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan, Tier 2 Public Employees Contributory Retirement System, and Tier 2 Public Safety and Firefighters Contributory Retirement System ("Defined Benefit Pension Plans") of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, as of and for the year ended December 31, 2015, and the related notes.

#### Management's Responsibility for the Schedules

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

#### **Auditors' Responsibility**

Our responsibility is to express an opinion on the employer allocations and the specified column totals included in the schedules of employer allocations and pension amounts based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the employer allocations and the specified column totals included in the schedules of employer allocations and pension amounts are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the employer allocations and the disclosures and specified column totals included in the schedules of employer allocations and pension amounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the employer allocations and the specified column totals included in the schedules of employer allocations and pension amounts, 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 employer allocations and the specified column totals included in the schedules of employer allocations and pension amounts 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.

### Independent Auditors' Report for Cost Sharing Plans (Concluded)

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 employer allocations and the specified column totals included in the schedules of employer allocations and pension amounts.

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 schedules referred to above present fairly, in all material respects, the employer allocations and the employer contributions, net pension liability/(asset), total deferred outflows of resources, total deferred inflows of resources, and total employer net pension expense excluding that attributable to employer-paid member contributions for the total of all participating entities for the Noncontributory Retirement System, Contributory Retirement System, Public Safety Retirement System, Firefighters Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan, Tier 2 Public Employees Contributory Retirement System, and Tier 2 Public Safety and Firefighters Contributory Retirement System of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, as of and for the year ended December 31, 2015, in accordance with accounting principles generally accepted in the United States of America.

#### **Other Matter**

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, the financial statements of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which includes the Defined Benefit Pension Plans, as of and for the year ended December 31, 2015, and our report thereon, dated April 27, 2016, expressed an unmodified opinion on those financial statements and included an emphasis-of-matter paragraph regarding the fair value of investments where a publicly listed price is not available.

#### **Restrictions on Use**

Our report is intended solely for the information and use of Utah Retirement Systems' management, the Utah State Retirement Board, the employers of the Defined Benefit Pension Plans of Utah Retirement Systems and their auditors and is not intended to be used by anyone other than these specified parties.

April 27, 2016

Deloitte & Touche LLP

and Pension Amounts	and Pension Amounts									
at December 31, 2015				Net Pension	Net Pension	Differences Between	Between Projected and Actual Investment			
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Liability/(Asset) 1.00% Decrease (6.50%)	Liability/(Asset) 1.00% Increase (8.50%)	Expected and Actual Experience	Earnings on Pension Plan Investments			
4 Corners Comm Behavior Health	\$ 368,658	0.2240815%	\$ 1,267,962	2,679,078	89,963	_	428,190			
Alpine City American Fork City	133,304 768,579	0.0810261 0.4671654	458,485 2,643,449	968,733 5,585,345	32,530 187,555	_	154,830 892,691			
Annabella Town	13,586	0.0082580	46,728	98,731	3,315	_	15,780			
Ash Creek Special Service District	129,732	0.0788552	446,201	942,779	31,658		150,682			
Ashley Valley Improvement District Ashley Valley Sewer Management Board	143,219 67,769	0.0870529 0.0411918	492,588 233,083	1,040,789 492,482	34,950 16,537	_	166,346 78,712			
Ballard Town	31,421	0.0190986	108,069	228,339	7,668	_	36,495			
Bear Lake Special Service District Bear River Association of Governments	19,704 222,922	0.0119766 0.1354986	67,769 766,717	143,190 1,619,997	4,808 54,399	_	22,886 258,920			
Bear River Health Department	719,561	0.4373706	2,474,856	5,229,124	175,593		835,757			
Bear River Mental Health	590,954	0.3591997	2,032,527	4,294,527	144,210	_	686,383			
Bear River Water District Beaver City	29,152 194,061	0.0177196 0.1179560	100,266 667,452	211,852 1,410,261	7,114 47,356	_	33,860 225,398			
Beaver County	339,405	0.2063003	1,167,347	2,466,489	82,824	_	394,212			
Beaver Housing Authority	15,313	0.0093074	52,666	111,278	3,737	_	17,785			
Beaver Valley Hospital Benchland Water Company	671,417 54,027	0.4081075 0.0328393	2,309,271 185,821	4,879,260 392,621	163,845 13,184	_	779,839 62,752			
Bicknell Town	5,375	0.0032669	18,486	39,058	1,312	_	6,243			
Blanding City	134,996	0.0820545	464,304	981,029	32,943		156,795			
Bluffdale City Bona Vista Water Improvement	103,016 91,966	0.0626162 0.0558995	354,313 316,307	748,628 668,324	25,139 22,442	_	119,651 106,816			
Bountiful Irrigation District	81,410	0.0494835	280,002	591,616	19,866	_	94,556			
Box Elder County Mosquito District	37,579	0.0228414 0.4375286	129,248	273,088	9,170 175,657	_	43,647			
Brigham City	719,821	0.4076091	2,475,750	5,231,013 4,873,301	175,657 163,645		836,059 778,887			
Cache County	922,572	0.5607670	3,173,092	6,704,429	225,134	_	1,071,551			
Cache Metro Planning Organization	13,677	0.0083134	47,041	99,394	3,338	_	15,886			
Carbon County Carbon County Recreation/Transportation Special Service District	800,695 7,839	0.4866865 0.0047645	2,753,909 26,960	5,818,736 56,964	195,392 1,913	_	929,993 9,104			
Castle Dale City	17,369	0.0105572	59,738	126,220	4,238		20,173			
Castle Valley Special Service District	84,550	0.0513918 0.4165971	290,800	614,431	20,633	_	98,203			
Cedar City Cedar City Housing Authority	685,384 27,600	0.4103971	2,357,309 94,928	4,980,760 200,574	167,253 6,735	_	796,061 32,057			
Centerfield City	17,776	0.0108050	61,140	129,183	4,338		20,647			
Centerville City Central Davis Sewer District	326,628 174,791	0.1985342 0.1062433	1,123,403 601,176	2,373,639 1,270,226	79,707 42,654	_	379,372 203,017			
Central Iron County Water Conservancy	20,785	0.0126339	71,489	151,049	5,072	_	24,142			
Central UT Public Health	250,668	0.1523635	862,147	1,821,631	61,170	_	291,146			
Central Utah Watay District	442,788	0.2691398	1,522,924	3,217,787	108,053		514,290			
Central Utah Water District Central Weber Sewer District	1,166,156 240,902	0.7066246	4,010,875 828,559	8,474,581 1,750,663	284,575 58,787	_	1,354,470 279,804			
City of Aurora	12,308	0.0074809	42,331	89,440	3,003	_	14,295			
City of Bountiful City of Cedar Hills	1,381,333 183,096	0.8396157 0.1112910	4,750,954 629,739	10,038,294 1,330,575	337,085 44,681	_	1,604,394 212,662			
City of Draper	942,948	0.5731519	3,243,172	6,852,501	230,106		1,095,217			
City of Duchesne	49,226	0.0299212	169,309	357,732	12,013	_	57,175			
City of Enterprise City of Green River	59,409 45,197	0.0361107 0.0274720	204,332 155,450	431,733 328,450	14,498 11,029	_	69,003 52,495			
City of Harrisville	86,541	0.0526020	297,648	628,900	21,118		100,515			
City of Helper	43,092 176,220	0.0261929	148,212	313,158	10,516	_	50,051			
City of Holladay City of Kanab	176,220 90,483	0.1071115 0.0549982	606,089 311,207	1,280,606 657,549	43,003 22,080	_	204,676 105,094			
City of Milford	37,424	0.0227477	128,718	271,967	9,133	_	43,468			
City of Moab	358,515	0.2179161	1,233,075	2,605,366	87,488		416,409			
City of Monticello City of Naples	69,728 12,044	0.0423826 0.0073204	239,821 41,422	506,719 87,521	17,016 2,939	_	80,987 13,988			
City of North Salt Lake	411,994	0.2504222	1,417,011	2,994,003	100,538	_	478,523			

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Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
		420 400	55.044		70.724	<b>65.040</b>	101 706	266.074	(47.004)		240.000
_	22.267	428,190	55,961		70,726	65,019	191,706	266,071	(17,991)	_	248,080
_	33,267	188,097	20,235	_	25,574	_	45,809	96,209	9,205		105,414
_	55,660	948,351	116,669	_	147,450	_	264,119	554,705	15,401	_	570,106
_	171	15,951	2,062	_	2,606		4,668	9,805	47	_	9,852
	1,714	152,396	19,693		24,889		44,582	93,631	474		94,105
_	7,917	174,263	21,740	_	27,476	_	49,216	103,365	2,191	_	105,556
_	743	79,455	10,287	_	13,001	_	23,288	48,910	206	_	49,116
_	2,918	39,413	4,770	_	6,028	_	10,798	22,677	807		23,484
_	2,200	25,086	2,991	_	3,780	_	6,771	14,221	609	_	14,830
_	6,151	265,071	33,839	_	42,767	_	76,606	160,889	1,702	_	162,591
	50,602	886,359	109,228		138,046		247,274	519,327	14,002		533,329
<u> </u>	50,002	686,383	89,706	_	113,373	105,171	308,250	426,508	(29,101)	_	397,407
_	3,670	37,530	4,425	_	5,593	-	10,018	21,040	1,015	_	22,055
_		225,398	29,458		37,230	16,590	83,278	140,059	(4,591)	_	135,468
_	36,511	430,723	51,521	_	65,114	_	116,635	244,958	10,103	_	255,061
	~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	247		~~~~~
_	892	18,677	2,324	_	2,938	_	5,262	11,051		_	11,298
	8,390 3,886	788,229 66,638	101,920 8,201	_	128,810 10,365	_	230,730 18,566	484,580 38,993	2,322 1,075	_	486,902 40,068
	719	6,962	816		1,031	_	1,847	3,879	1,073	_	4,078
		156,795	20,492		25,899	41,275	87,666	97,430	(11,421)		86,009
		~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~	~~~~~		
<del>-</del>	233,985	353,636	15,638	_	19,763	_	35,401	74,349	64,744	_	139,093
_	15,199	122,015	13,960	_	17,643	42.500	31,603	66,374	4,206	_	70,580
_		94,556	12,358	_	15,618	12,588	40,564	58,756	(3,483)		55,273
_	321 38,778	43,968 874,837	5,704 109,267	_	7,209 138,096	_	12,913 247,363	27,122 519,514	89 10,730	_	27,211 530,244
	30,770	0/4,03/	~~~~~		130,090		247,303	~~~~~	10,730		330,244
_	_	778,887	101,795	_	128,653	63,528	293,976	483,988	(17,578)	_	466,410
_	35,935	1,107,486	140,044	_	176,994	_	317,038	665,846	9,943	_	675,789
_	698	16,584	2,076	_	2,624		4,700	9,871	193	_	10,064
_	_	929,993	121,544	_	153,612	61,512	336,668	577,884	(17,020)	_	560,864
_		9,104	1,190	<del>-</del>	1,504	420	3,114	5,657	(116)		5,541
_	240	20,413	2,637	_	3,332	_	5,969	12,535	66	_	12,601
_	959	99,162	12,834	_	16,221	_	29,055	61,022	265	_	61,287
_	_	796,061	104,040	_	131,490	85,289	320,819	494,661	(23,600)	_	471,061
_	2,771	34,828	4,190	_	5,295	_	9,485	19,920	767	_	20,687
_	_	20,647	2,698	_	3,410	814	6,922	12,830	(225)	_	12,605
_	4,038	383,410	49,581		62,663		112,244	235,736	1,117	_	236,853
_		203,017	26,533		33,533	14,832	74,898	126,152	(4,104)	_	122,048
_	2,336	26,478	3,155	_	3,988	,	7,143	15,001	646	_	15,647
_	20,377	311,523	38,051	_	48,090	_	86,141	180,914	5,638	_	186,552
_	32,586	546,876	67,214	_	84,948	_	152,162	319,572	9,017	_	328,589
		1,354,470	177,020	·····	223,725	93,267	494,012	841,647	(25,807)		815,840
_	_	279,804	36,568	_	46,217	49,930	132,715	173,866	(13,816)	_	160,050
<u> </u>	498	14,793	1,868	_	2,361	49,930	4,229	8,883	138	_	9,021
<u> </u>	470	1,604,394	209,683	_	265,006	129,325	604,014	996,946	(35,785)	_	961,161
_	12,139	224,801	27,793	_	35,127	_	62,920	132,145	3,359	_	135,504
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	190,002	125 102	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
	10 700	1,095,217	143,137		180,903	125,102	449,142	680,551	(34,616)	_	645,935
	10,788	67,963 69,003	7,472 9,018	_	9,444 11,398	2,423	16,916 22,839	35,528 42,877	2,985 (671)	_	38,513 42,206
		52,495	6,861	_	8,671	12,923	28,455	32,620	(3,576)	_	29,044
<u> </u>	6,535	107,050	13,137	_	16,603	12,723	29,740	62,459	1,808	_	64,267
	~~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	7 100	50,051	6,541	_	8,267	5,027	19,835	31,101	(1,391)	_	29,710
_	7,189	211,865	26,750		33,807	_	60,557	127,182	1,989	_	129,171
_	592 2.345	105,686	13,735	_	17,359	_	31,094	65,304	164	_	65,468
_	2,345	45,813 416,409	5,681 54,422	_	7,180 68,780	98,357	12,861 221,559	27,010 258,750	649 (27.216)	_	27,659 231,534
		410,407	~~~~~			70,33/	۷۲۱٫۶۶۶	۷۵,۲۵۷	(27,216)		~~~~~
_	10,771	91,758	10,585	_	13,377	_	23,962	50,324	2,980	_	53,304
_	27,355	41,343	1,828	_	2,311	_	4,139	8,692	7,569	_	16,261
_	40,650	519,173	62,540	_	79,040	_	141,580	297,347	11,248	_	308,595

# Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
City of Orem City of Riverton City of Santa Clara City of Saratoga Springs City of South Jordan	\$ 1,893,278 901,579 229,881 439,052 708,401	1.1507910% 0.5480067 0.1397285 0.2668688 0.4305872	\$ 6,511,735 3,100,888 790,652 1,510,073 2,436,472	13,758,650 6,551,869 1,670,569 3,190,635 5,148,023	462,014 220,011 56,097 107,141 172,870		2,199,008 1,047,168 267,003 509,951 822,795	
City of South Salt Lake City of St George City of Taylorsville City of Uintah City of Washington Terrace	763,195 3,457,805 317,791 13,899 146,915	0.4638931 2.1017576 0.1931631 0.0084485 0.0892990	2,624,933 11,892,767 1,093,011 47,806 505,297	5,546,222 25,128,235 2,309,423 101,009 1,067,643	186,241 843,803 77,550 3,392 35,851		886,438 4,016,178 369,109 16,144 170,638	~~
City of Wendover City of West Haven City of West Jordan City of Woodland Hills Clearfield City	32,378 96,944 2,019,157 13,259 508,714	0.0196805 0.0589255 1.2273040 0.0080590 0.3092115	111,362 333,429 6,944,683 45,602 1,749,669	235,297 704,503 14,673,425 96,352 3,696,877	7,901 23,657 492,732 3,235 124,141		37,607 112,599 2,345,214 15,400 590,862	
Cleveland Town Clinton City Coalville City Cottonwood Heights City Cottonwood Heights Parks & Recreation Services	3,007 273,908 41,882 256,076 143,292	0.0018280 0.1664893 0.0254570 0.1556506 0.0870972	10,344 942,077 144,048 880,747 492,838	21,855 1,990,516 304,359 1,860,930 1,041,318	734 66,841 10,220 62,490 34,967		3,493 318,139 48,645 297,428 166,431	~~~
Cottonwood Improvement District Council On Aging — Golden Age Special Service District Daggett County Davis Behavioral Health Inc Davis County Housing Authority	371,128 57,853 129,810 1,359,144 31,701	0.2255828 0.0351647 0.0789024 0.8261286 0.0192691	1,276,457 198,979 446,468 4,674,637 109,034	2,697,027 420,423 943,343 9,877,044 230,378	90,566 14,118 31,677 331,670 7,736		431,059 67,195 150,772 1,578,622 36,821	
Davis County Mosquito Abatement Davis County Delta City Duchesne County Water Conservancy District Duchesne County	35,785 4,445,878 99,572 22,883 112,526	0.0217513 2.7023380 0.0605229 0.0139091 0.0683964	123,079 15,291,143 342,468 78,704 387,020	260,055 32,308,665 723,601 166,295 817,735	8,733 1,084,921 24,298 5,584 27,459		41,564 5,163,807 115,651 26,578 130,696	~~~
E Duchesne Culinary Water Improvement District Eagle Mountain City East Carbon City Elk Ridge City Emery County	10,982 474,155 58,323 24,116 500,352	0.0066754 0.2882055 0.0354507 0.0146585 0.3041292	37,773 1,630,807 200,597 82,945 1,720,911	79,810 3,445,733 423,842 175,254 3,636,114	2,680 115,707 14,233 5,885 122,100	_ _ _ _	12,756 550,722 67,742 28,010 581,150	
Emery County Recreation Special Service District Emery Water Conservancy District Enoch City Ephraim City Escalante City	4,465 40,286 72,894 149,634 31,916	0.0027140 0.0244872 0.0443071 0.0909519 0.0193998	15,357 138,560 250,711 514,650 109,774	32,448 292,765 529,728 1,087,405 231,941	1,090 9,831 17,788 36,515 7,789	_ _ _ _ _	5,186 46,792 84,665 173,797 37,070	
Eureka City Corporation Fairview City Farmington City Farr West City Ferron City	16,365 60,800 386,269 57,682 26,892	0.0099473 0.0369563 0.2347858 0.0350611 0.0163455	56,287 209,117 1,328,532 198,393 92,491	118,928 441,843 2,807,057 419,184 195,424	3,994 14,837 94,261 14,076 6,562	_ _ _ _	19,008 70,619 448,644 66,997 31,234	
Fillmore City Five-County Association of Governments Fountain Green City Fox Hollow Golf Course Francis City	56,406 256,915 19,300 23,715 19,517	0.0342850 0.1561607 0.0117309 0.0144147 0.0118629	194,001 883,633 66,379 81,565 67,126	409,905 1,867,029 140,253 172,340 141,831	13,765 62,695 4,710 5,787 4,763	_ _ _ _	65,514 298,402 22,416 27,545 22,668	
Fruit Heights City Garfield County Genola Town Grand County Cemetery Maintenance District Grand County	63,386 343,595 15,068 10,325 652,187	0.0385280 0.2088471 0.0091585 0.0062756 0.3964191	218,010 1,181,758 51,823 35,510 2,243,132	460,634 2,496,938 109,497 75,030 4,739,515	15,468 83,847 3,677 2,519 159,152		73,622 399,079 17,501 11,992 757,504	
Grand Water/Sewer Service Granger-Hunter Improvement District Grantsville City	36,881 713,142 176,233	0.0224172 0.4334689 0.1071196	126,847 2,452,778 606,135	268,016 5,182,476 1,280,703	9,000 174,027 43,006		42,836 828,301 204,691	. ~

	Deferred Outflow	s of Resources	Irces Deferred intlows of Keso					erred Inflows of Resources to Employer-Paid Member Contribution				
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
	_	2,199,008	287,395	_	363,222	72,228	722,845	1,366,431	(19,986)	_	1,346,445	
	77,949	1,125,117	136,858		172,966	72,220	309,824	650,694	21,569	_	672,263	
	— CFC,11	267,003	34,895	_	44,102	15,105	94,102	165,911	(4,179)	_	161,732	
<u> </u>	7,265	517,216	66,647	_	84,231	_	150,878	316,876	2,010	_	318,886	
_	1,609,025	2,431,820	107,534	_	135,905	_	243,439	511,272	445,220	_	956,492	
_		886,438	115,851		146,418	86,105	348,374	550,819	(23,825)		526,994	
_	103,972	4,120,150	524,887	_	663,373		1,188,260	2,495,593	28,769	_	2,524,362	
_	_	369,109	48,240	_	60,968	33,796	143,004	229,359	(9,352)	_	220,007	
_	1,059	17,203	2,110	_	2,667	_	4,777	10,032	293	_	10,325	
<u> </u>	5,330	175,968	22,301	_	28,185	_	50,486	106,032	1,475	_	107,507	
<u> </u>	482	38,089	4,915	_	6,212	_	11,127	23,368	133	_	23,501	
_	_	112,599	14,716	_	18,599	7,802	41,117	69,967	(2,159)	_	67,808	
_	190,858	2,536,072	306,503	_	387,371	_	693,874	1,457,281	52,811	_	1,510,092	
_	1,108	16,508 590,862	2,013 77,222	_	2,544 97,596	92,438	4,557 267,256	9,569 367,153	307 (25,578)	_	9,876 341,575	
		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~	~~~~~		~~~~~	
_	_	3,493	457	_	577	3,307	4,341	2,171	(915)	_	1,256	
-	273	318,139	41,579	_	52,549	5,794	99,922	197,687	(1,603)		196,084	
	46,180	48,918 343,608	6,358 38,872	_	8,035 49,128	_	14,393 88,000	30,227 184,817	76 12,778	_	30,303 197,595	
<u> </u>	36,623	203,054	21,751	_	27,490	_	49,241	103,418	10,134	_	113,552	
·····	~~~~~~	~~~~~~	~~~~~	~~~~~	~~~~~		~~~~	~~~~	~~~~		~~~~~	
_	25,444	456,503 67,195	56,336 8,782	_	71,200 11,099	1,907	127,536 21,788	267,853 41,754	7,040 (528)	_	274,893 41,226	
		150,772	19,705		24,904	31,659	76,268	93,687	(8,760)		84,927	
_	72,117	1,650,739	206,315	_	260,749		467,064	980,932	19,955		1,000,887	
_	72,005	108,826	4,812	_	6,082	_	10,894	22,880	19,924	_	42,804	
_		41,564	5,432		6,865	11,297	23,594	25,827	(3,126)		22,701	
_	74,491	5,238,298	674,874	_	852,933	,	1,527,807	3,208,712	20,612	_	3,229,324	
_	_	115,651	15,115	_	19,103	22,061	56,279	71,864	(6,104)	_	65,760	
_	255 505	26,578	3,474	_	4,390	5,681	13,545	16,515	(1,572)	_	14,943	
	255,585	386,281	17,081	-	21,588		38,669	81,213	70,721		151,934	
_	746	13,502	1,667	_	2,107	_	3,774	7,926	206	_	8,132	
_	10 500	550,722	71,976	_	90,966	207,027	369,969	342,211	(57,285)	_	284,926	
_	10,588	78,330 28,010	8,853 3,661	_	11,189 4,627	26,374	20,042 34,662	42,094 17,405	2,930 (7,298)	_	45,024 10,107	
<u> </u>	_	581,150	75,952	_	95,992	84,451	256,395	361,118	(23,368)	_	337,750	
	1,005	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~		~~~~~	
_	1,095 2,321	6,281 49,113	678 6,115	_	857 7,729	_	1,535 13,844	3,223 29,076	303 642	_	3,526 29,718	
<u> </u>	2,321	84,665	11,065		13,985	204	25,254	52,610	(56)	_	52,554	
_	_	173,797	22,714	_	28,707	5,378	56,799	107,995	(1,488)	_	106,507	
_	_	37,070	4,845	_	6,123	5,483	16,451	23,035	(1,517)	_	21,518	
		19,008	2,484		3,140	610	6,234	11,811	(169)		11,642	
_	11,899	82,518	9,229	_	11,664	_	20,893	43,881	3,293		47,174	
_	4,113	452,757	58,635	_	74,105	_	132,740	278,781	1,138	_	279,919	
_	8,893	75,890	8,756	_	11,066		19,822	41,631	2,461	_	44,092	
		31,234	4,082		5,159	5,924	15,165	19,408	(1,639)		17,769	
_	_	65,514	8,562	_	10,821	2,470	21,853	40,709	(683)	_	40,026	
-	427	298,402	38,999	_	49,289	50,300	138,588	185,423	(13,918)	_	171,505	
_	437 345	22,853 27,890	2,930 3,600		3,703 4,550	_	6,633 8,150	13,929 17,116	121 95	_	14,050 17,211	
_	938	23,606	2,963	_	3,744	_	6,707	14,086	259	_	14,345	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	6,332	79,954	9,622		12,161	~~~~~~	21,783	45,748	1,752		47,500	
<u> </u>	0,332	399,079	52,157	_	65,918	5,860	123,935	247,982	(1,621)	_	246,361	
_	3,126	20,627	2,287	_	2,891		5,178	10,875	865	_	11,740	
<u> </u>	3,862	15,854	1,567	_	1,981	_	3,548	7,452	1,069	_	8,521	
_	_	757,504	99,001	_	125,121	76,274	300,396	470,702	(21,105)	_	449,597	
		42,836	5,598		7,075	6,970	19,643	26,618	(1,929)		24,689	
_	_	828,301	108,253	_	136,815	16,891	261,959	514,694	(4,674)	_	510,020	
_	_	204,691	26,752	_	33,810	23,491	84,053	127,192	(6,500)	_	120,692	

# Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Gunnison City Gunnison Valley Hospital Heber City Heber Light & Power Heber Valley Special Service District	\$ 46,399 825,971 320,023 483,259 36,986	0.0282027% 0.5020500 0.1945194 0.2937394 0.0224810	\$ 159,585 2,840,843 1,100,685 1,662,120 127,208	337,186 6,002,419 2,325,639 3,511,895 268,779	11,323 201,561 78,095 117,929 9,026	_ _ _ _ _	53,892 959,351 371,701 561,297 42,958	
Herriman City Highland City Hinckley Town Hooper City Hooper Water Improvement District	711,872 218,039 12,991 53,176 70,766	0.4326968 0.1325309 0.0078960 0.0323220 0.0430134	2,448,409 749,924 44,679 182,894 243,391	5,173,245 1,584,516 94,403 386,436 514,260	173,717 53,208 3,170 12,976 17,269		826,826 253,249 15,088 61,763 82,193	
Housing Authority of Carbon County Housing Authority of Salt Lake County Housing Authority of SLC Housing Authority Ogden City Huntington City	53,481 517,233 543,899 125,236 34,251	0.0325071 0.3143896 0.3305983 0.0761223 0.0208189	183,941 1,778,969 1,870,686 430,737 117,803	388,649 3,758,785 3,952,574 910,104 248,907	13,051 126,220 132,727 30,561 8,358	_ _ _ _	62,117 600,757 631,729 145,460 39,782	
Hurricane City Hurricane Valley Fire Special Service District Hyde Park City Hyrum City Impact Mitigation Special Service District	547,435 8,143 75,022 236,663 30,372	0.3327473 0.0049493 0.0456004 0.1438508 0.0184610	1,882,846 28,006 258,029 813,978 104,461	3,978,267 59,173 545,190 1,719,854 220,716	133,590 1,987 18,307 57,753 7,412	_ _ _ _	635,836 9,457 87,136 274,880 35,277	
Iron County Ivins City Jordan River Commission Jordan Valley Water Conservancy Jordanelle Special Service District	752,575 269,888 15,580 1,435,163 230,996	0.4574379 0.1640461 0.0094698 0.8723349 0.1404063	2,588,406 928,253 53,585 4,936,095 794,487	5,469,045 1,961,306 113,219 10,429,479 1,678,672	183,650 65,860 3,802 350,221 56,370	_ _ _ _	874,103 313,470 18,096 1,666,916 268,298	
Juab County Kamas City Kane County Kane County Water Conservancy District Kaysville City	261,880 41,275 438,279 70,522 610,810	0.1591787 0.0250880 0.2663992 0.0428652 0.3712689	900,711 141,960 1,507,416 242,552 2,100,820	1,903,112 299,948 3,185,021 512,489 4,438,824	63,906 10,072 106,953 17,209 149,055	_ _ _ _ _	304,169 47,940 509,053 81,910 709,445	
Kearns Improvement District Layton City Lehi City Lewiston City Lindon City	299,132 1,221,342 1,376,757 40,052 307,375	0.1818215 0.7423685 0.8368340 0.0243448 0.1868318	1,028,834 4,200,682 4,735,214 137,755 1,057,185	2,173,825 8,875,624 10,005,036 291,062 2,233,727	72,997 298,042 335,968 9,774 75,008		347,437 1,418,567 1,599,078 46,520 357,011	
Logan City Lone Peak Public Safety District Maeser Water Improvement District Magna Mosquito Abatement Manti City	2,175,313 27,103 57,444 11,994 91,722	1.3222202 0.0164742 0.0349160 0.0072901 0.0557514	7,481,765 93,219 197,572 41,251 315,469	15,808,226 196,963 417,449 87,159 666,554	530,838 6,614 14,018 2,927 22,383	_ _ _ _ _	2,526,586 31,480 66,720 13,930 106,533	
Mapleton City Marriott-Slaterville City Mayfield Town Mendon City Metro Water District SLC/Sandy	241,447 27,295 6,326 8,256 698,654	0.1467588 0.0165908 0.0038452 0.0050182 0.4246631	830,433 93,879 21,758 28,395 2,402,950	1,754,622 198,357 45,973 59,997 5,077,195	58,920 6,661 1,544 2,015 170,492	_ _ _ _ _	280,436 31,703 7,348 9,589 811,475	
Midvale City Midvalley Improvement District Midway City Military Installation Development Millard County Care & Rehabilitation Inc	609,950 88,867 114,782 42,058 201,006	0.3707456 0.0540158 0.0697679 0.0255638 0.1221775	2,097,859 305,648 394,781 144,652 691,340	4,432,567 645,803 834,132 305,636 1,460,732	148,845 21,686 28,010 10,263 49,051	_ _ _ _	708,445 103,217 133,317 48,849 233,465	
Millard County Millville City Minersville Town Monroe City Morgan City Corporation	715,521 28,227 24,390 74,573 136,643	0.4349152 0.0171571 0.0148252 0.0453277 0.0830558	2,460,962 97,083 83,888 256,486 469,970	5,199,768 205,127 177,247 541,930 993,000	174,608 6,888 5,952 18,198 33,345		831,065 32,785 28,329 86,615 158,709	
Morgan County Moroni City Mount Pleasant City	255,922 18,074 88,461	0.1555571 0.0109856 0.0537694	880,218 62,162 304,253	1,859,813 131,342 642,857	62,452 4,410 21,587		297,249 20,992 102,746	

	Deferred Outflov	vs of Resources	urces Deferred Inflows of Reso					of Resources to Employer-Paid Member Contributions				
Changes of Assumptions		Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
	_	53,892	7,043		8,902	1,149	17,094	33,487	(318)	_	33,169	
_	117,187	1,076,538	125,381	_	158,461	1,149	283,842	596,126	32,426	_	628,552	
	9,930	381,631	48,579	_	61,396	_	109,975	230,969	2,748	_	233,717	
_		561,297	73,358	_	92,712	101,124	267,194	348,781	(27,981)	_	320,800	
	_	42,958	5,614	_	7,096	375	13,085	26,694	(104)	_	26,590	
	123,991	950,817	108,060	~~~~~~	136,571	~~~~~	244,631	513,777	34,309		548,086	
$\equiv$	123,991	253,249	33,098		41,830	17,100	92,028	157,365	(4,732)	_	152,633	
_	2,593	17,681	1,972	_	2,492		4,464	9,376	718	_	10,094	
_	_	61,763	8,072	_	10,202	14,462	32,736	38,379	(4,002)	_	34,377	
_	_	82,193	10,742	_	13,576	306	24,624	51,073	(85)		50,988	
_		62,117	8,118		10,260	6,593	24,971	38,598	(1,824)		36,774	
_	6,141	606,898	78,515	_	99,230		177,745	373,301	1,699	_	375,000	
_		631,729	82,563	_	104,346	113,040	299,949	392,547	(31,278)	_	361,269	
_	_	145,460	19,011	_	24,026	78	43,115	90,386	(21)	_	90,365	
		39,782	5,199		6,571	4,970	16,740	24,720	(1,375)		23,345	
_	21,710	657,546	83,099	_	105,024	_	188,123	395,099	6,007	_	401,106	
_	18,495	27,952	1,236	_	1,562	_	2,798	5,877	5,118	_	10,995	
_	_	87,136	11,388	_	14,393	4,688	30,469	54,145	(1,297)	_	52,848	
	_	274,880 35,277	35,925 4,610	_	45,403 5,827	3,168 1,284	84,496 11,721	170,806 21,920	(877) (355)	_	169,929 21,565	
~~~~~	~~~~~	~~~~~	~~~~	~~~~~	~~~~	~~~~	~~~~~	~~~~~	~~~~~		~~~~~	
_	44 176	874,103	114,239	_	144,380	146,167	404,786	543,154	(40,445)	_	502,709	
_	44,176 1,261	357,646 19,357	40,968 2,365	_	51,778 2,989	_	92,746 5,354	194,786 11,244	12,224 349	_	207,010 11,593	
_		1,666,916	2,303	_	275,333	31,988	525,175	1,035,796	(8,851)	_	1,026,945	
_	_	268,298	35,065	_	44,316	7,230	86,611	166,716	(2,001)	_	164,715	
<u>-</u>		304,169	39,753	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	50,241	34,488	124,482	189,006	(9,543)		179,463	
_	2,942	50,882	6,265	_	7,918	J-1,-100	14,183	29,789	814	_	30,603	
_	19,716	528,769	66,530	_	84,083	_	150,613	316,318	5,456		321,774	
_	2,702	84,612	10,705	_	13,529	_	24,234	50,897	748	_	51,645	
_	73,345	782,790	92,720		117,183		209,903	440,839	20,295		461,134	
_	_	347,437	45,408	_	57,388	17,262	120,058	215,892	(4,776)	_	211,116	
_		1,418,567	185,397	_	234,312	68,100	487,809	881,476	(18,843)	_	862,633	
_	27,198	1,626,276	208,989	_	264,128	_	473,117	993,643	7,526	_	1,001,169	
_	4,655 19,665	51,175 376,676	6,080 46,659	_	7,684 58,969	_	13,764 105,628	28,907 221,841	1,288 5,441	_	30,195 227,282	
-	19,003	~~~~	~~~~~	·····	~~~~~		~~~~~	~~~~~	~~~~	·····	~~~~~	
_	_	2,526,586	330,208	_	417,330	35,087 9,275	782,625	1,569,983	(9,709)	_	1,560,274	
_	_	31,480 66,720	4,114 8,720	_	5,200 11,020	10,134	18,589 29,874	19,561 41,459	(2,566) (2,804)	_	16,995 38,655	
_	_	13,930	1,821	_	2,301	6,759	10,881	8,656	(1,870)	_	6,786	
_	11,633	118,166	13,923	_	17,597		31,520	66,198	3,219	_	69,417	
	5,932	286,368	36,651		46,321		82,972	174,259	1,641		175,900	
_		31,703	4,143	_	5,237	259	9,639	19,700	(72)	_	19,628	
_	_	7,348	960	_	1,214	125	2,299	4,566	(34)		4,532	
_	123	9,712	1,253	_	1,584	_	2,837	5,959	34	_	5,993	
	16,243	827,718	106,054		134,036		240,090	504,238	4,494		508,732	
_	5,642	714,087	92,589	_	117,018	_	209,607	440,217	1,561	_	441,778	
_	10,258	113,475	13,490	_	17,049	_	30,539	64,137	2,838	_	66,975	
	27,771 3,571	161,088 52,420	17,424 6,384	_	22,021 8,069	_	39,445 14,453	82,841 30,354	7,684 988	_	90,525 31,342	
_	18,164	251,629	30,512	_	38,563	_	69,075	145,072	5,026	_	150,098	
		831,065	108,614	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	137,271	32,079	277,964	516,411	(8,876)		507,535	
_	1,060	33,845	4,285	_	5,415	J2,079 —	9,700	20,372	293	_	20,665	
_	3,809	32,138	3,702	_	4,679	_	8,381	17,603	1,054	_	18,657	
_	4,343	90,958	11,320	_	14,307	_	25,627	53,821	1,202	_	55,023	
	3,489	162,198	20,742		26,215		46,957	98,619	965		99,584	
-	_	297,249	38,848	_	49,098	10,545	98,491	184,706	(2,918)	_	181,788	
_	1,781	22,773	2,744	_	3,467	_	6,211	13,044	493	_	13,537	
_	7,144	109,890	13,428		16,971		30,399	63,845	1,977		65,822	

Schedule of Employer Allocations and Pension Amounts (Continued)

	Employer	Employer Allocation	Net Pension Liability/(Asset)	Net Pension Liability/(Asset) 1.00% Decrease	Net Pension Liability/(Asset) 1.00% Increase	Differences Between Expected and Actual	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	
Participating Employer Mountain Regional Water Special Service District	Contributions \$ 281,678	0.1712125%	(7.50% Discount) \$ 968,804	(6.50%)	(8.50%)	Experience	Investments 327,164	
MountainInand Association of Governments Mt Olympus Improvement District Murray City Myton City	352,053 299,968 2,322,511 12,360	0.2139885 0.1823294 1.4116916 0.0075127	1,210,851 1,031,708 7,988,038 42,511	2,558,408 2,179,897 16,877,930 89,820	85,911 73,201 566,759 3,016	_ _ _	408,903 348,407 2,697,554 14,356	
Ne Counseling Center Nebo Credit Union Nephi City Nibley City Corporation No Emery Water Users Special Service District	366,181 115,227 259,372 91,355 8,605	0.2225760 0.0700383 0.1576538 0.0555285 0.0052302	1,259,443 396,311 892,082 314,207 29,595	2,661,078 837,365 1,884,880 663,889 62,531	89,359 28,119 63,294 22,293 2,100	_ _ _ _ _	425,313 133,834 301,255 106,108 9,994	
North Davis County Sewer District North Davis Fire District North Fork Special Service District North Logan City North Ogden City	468,692 9,371 26,035 195,251 268,410	0.2848849 0.0056958 0.0158248 0.1186791 0.1631476	1,612,017 32,230 89,544 671,544 923,168	3,406,032 68,098 189,198 1,418,906 1,950,563	114,374 2,287 6,353 47,647 65,500		544,377 10,884 30,239 226,780 311,753	
North Pointe Solid Waste North View Fire District Ogden City Corp Oquirrh Rec And Parks District Orangeville City	158,948 7,945 2,213,907 143,135 17,634	0.0966131 0.0048290 1.3456789 0.0870015 0.0107183	546,684 27,325 7,614,506 492,297 60,649	1,155,089 57,735 16,088,694 1,040,174 128,146	38,788 1,939 540,256 34,929 4,303	_ _ _ _	184,615 9,228 2,571,413 166,248 20,481	
Orderville Town Panguitch City Corporation Park City Park City Fire Service Parowan City	13,039 31,328 1,913,349 61,168 185,952	0.0079254 0.0190424 1.1629907 0.0371795 0.1130271	44,846 107,751 6,580,767 210,380 639,562	94,755 227,667 13,904,507 444,511 1,351,332	3,182 7,645 466,912 14,927 45,378	_ _ _ _ _	15,144 36,387 2,222,320 71,045 215,980	
Payson City Perry City Piute County Plain City Pleasant Grove City	732,904 66,979 84,499 49,985 505,798	0.4454812 0.0407121 0.0513609 0.0303823 0.3074393	2,520,749 230,369 290,625 171,918 1,739,641	5,326,093 486,747 614,062 363,245 3,675,689	178,850 16,345 20,620 12,198 123,429		851,255 77,795 98,144 58,057 587,475	
Pleasant View City Price City Price River Water Improvement Providence City Provo City Corp	126,045 470,494 255,397 87,882 3,590,224	0.0766137 0.2859802 0.1552377 0.0534176 2.1822455	433,518 1,618,215 878,410 302,263 12,348,206	915,980 3,419,128 1,855,994 638,651 26,090,533	30,758 114,814 62,324 21,446 876,117	_ _ _ _	146,399 546,470 296,639 102,074 4,169,980	
Provo Housing Authority Provo River Water Users Recreation & Habilitation Services Redmond Town Richfield City	117,676 157,723 10,443 15,818 187,476	0.0715272 0.0958685 0.0063476 0.0096145 0.1139533	404,736 542,471 35,918 54,404 644,803	855,166 1,146,186 75,891 114,949 1,362,405	28,716 38,489 2,548 3,860 45,749	_ _ _ _	136,679 183,192 12,129 18,372 217,750	
Richmond City Riverdale City Roosevelt City Roosevelt City Housing Roy City	46,731 310,723 224,944 7,026 593,691	0.0284044 0.1888669 0.1367274 0.0042707 0.3608630	160,726 1,068,701 773,670 24,166 2,041,938	339,598 2,258,059 1,634,688 51,060 4,314,413	11,404 75,825 54,893 1,715 144,877	_ _ _ _ _	54,277 360,899 261,268 8,161 689,561	
Roy Water Conservancy District S Utah Valley Electric Service District S Utah Valley Solid Waste Salem City Salina City	74,508 136,413 202,414 249,764 60,227	0.0452882 0.0829159 0.1230331 0.1518143 0.0366079	256,263 469,178 696,181 859,039 207,145	541,458 991,328 1,470,962 1,815,064 437,677	18,182 33,289 49,395 60,950 14,697	_ _ _ _ _	86,540 158,441 235,100 290,097 69,953	
Salt Lake City Corp Salt Lake City Public Library Salt Lake County Service Area 3 Salt Lake County San Juan County	17,128,181 772,383 29,450 22,848,049 712,666	10.4110220 0.4694774 0.0179006 13.8877298 0.4331797	58,910,626 2,656,531 101,290 78,583,536 2,451,141	124,472,300 5,612,987 214,016 166,039,186 5,179,018	4,179,765 188,483 7,187 5,575,573 173,911		19,894,074 897,109 34,206 26,537,593 827,749	
San Juan Mental Health Sandy City Sandy Suburban Improvement District	124,198 2,586,067 205,854	0.0754911 1.5718891 0.1251241	427,165 8,894,513 708,013	902,558 18,793,222 1,495,961	30,308 631,074 50,234		144,253 3,003,670 239,095	

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Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
<u> </u>			•					· ·			
_	26,112	353,276	42,758	_	54,039	_	96,797	203,295	7,225	_	210,520
_	2,692 12,712	411,595	53,441 45,534	_	67,541	_	120,982	254,086 216,495	745	_	254,831 220,013
_	12,713	361,120 2,697,554	45,554 352,552	_	57,548 445,569	2,752	103,082 800,873	1,676,220	3,518 (761)	_	1,675,459
_	_	14,356	1,876	_	2,371	5,196	9,443	8,920	(1,438)	_	7,482
~~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	
_	_	425,313 133,834	55,586 17,491	_	70,251 22,106	33,167 23,707	159,004 63,304	264,283 83,162	(9,177) (6,560)	_	255,106 76,602
_	_	301,255	39,372	_	49,760	44,633	133,765	187,196	(12,350)	_	174,846
_	21,844	127,952	13,868	_	17,526	_	31,394	65,934	6,044	_	71,978
_	44	10,038	1,306	_	1,651	_	2,957	6,210	12	_	6,222
_	14,763	559,140	71,146	_	89,918		161,064	338,268	4,085	_	342,353
_	·—	10,884	1,422	_	1,798	1,296	4,516	6,763	(358)	_	6,405
_	_	30,239	3,952	_	4,995	3,351	12,298	18,790	(927)	_	17,863
_	22,721	249,501	29,639	_	37,458	15.064	67,097	140,918	6,287	_	147,205
		311,753	40,744		51,494	15,064	107,302	193,719	(4,168)		189,551
_	_	184,615	24,128	_	30,494	15,327	69,949	114,717	(4,241)	_	110,476
_	209	9,437	1,206	_	1,524	_	2,730	5,734	58	_	5,792
_	80,580	2,651,993 166,248	336,066 21,728	_	424,734 27,460	3,506	760,800 52,694	1,597,837 103,304	22,297 (970)	_	1,620,134 102,334
_	565	21,046	2,677	_	3,383	3,300 —	6,060	12,727	156	_	12,883
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~			~~~~	~~~~~		~~~~~
_	99	15,243 36,387	1,979 4,756	_	2,501 6,010	21,564	4,480 32,330	9,410 22,611	27 (5,967)	_	9,437 16,644
_	192,194	2,414,514	290,442	_	367,072	21,304	657,514	1,380,916	53,180	_	1,434,096
_	2,222	73,267	9,285	_	11,735	_	21,020	44,146	615	_	44,761
_	13,712	229,692	28,227	_	35,675	_	63,902	134,207	3,794	_	138,001
	59,868	911,123	111,253	<u>-</u>	140,606		251,859	528,957	16,566		545,523
_	13,787	91,582	10,167	_	12,850	_	23,017	48,341	3,815	_	52,156
_		98,144	12,827	_	16,211	38,150	67,188	60,985	(10,556)	_	50,429
_	21,906	79,963	7,588	_	9,590	_	17,178	36,075	6,061	_	42,136
	15,156	602,631	76,779	-	97,036		173,815	365,048	4,194		369,242
_	32,165	178,564	19,133	_	24,181		43,314	90,970	8,900	_	99,870
_		546,470 296,639	71,420 38,769	_	90,263 48,997	29,420 17,539	191,103 105,305	339,568 184,327	(8,141) (4,853)	_	331,427 179,474
_	_	102,074	13,340	_	16,860	6,265	36,465	63,427	(1,734)	_	61,693
_		4,169,980	544,988	_	688,778	136,615	1,370,381	2,591,163	(37,802)	_	2,553,361
	~~~~~	136,679	17,863	~~~~~	22,576	10,026	50,465	84,930	(2,774)		82,156
_	1,004	184,196	23,942	_	30,259	10,020	54,201	113,833	278	_	114,111
_	2,013	14,142	1,585	_	2,003	_	3,588	7,537	557	_	8,094
_	1,081	19,453	2,401	_	3,035	—	5,436	11,416	299	_	11,715
		217,750	28,458		35,967	19,626	84,051	135,306	(5,430)		129,876
_	9,533	63,810	7,094	_	8,965	_	16,059	33,727	2,638	_	36,365
_	5,994	366,893	47,167	_	59,612	_	106,779	224,257	1,659	_	225,916
_	9,058	270,326 8,161	34,146 1,067	_	43,155 1,348	 299	77,301 2,714	162,348 5,071	2,506 (83)	_	164,854 4,988
_	31,339	720,900	90,121	_	113,898		204,019	428,483	8,672	_	437,155
	~~~~~	~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	7,128 25,393	93,668 183,834	11,310 20,707	_	14,294 26,171	_	25,604 46,878	53,774 98,453	1,972 7,026	_	55,746 105,479
_	23,393	235,100	30,726	_	38,833	9,634	79,193	146,088	(2,666)	_	143,422
_	11,559	301,656	37,914	_	47,917		85,831	180,262	3,198	_	183,460
_	· —	69,953	9,142	_	11,554	10,557	31,253	43,468	(2,921)	_	40,547
	195,022	20,089,096	2,600,019		3,286,009		5,886,028	12,361,879	53,963		12,415,842
_		897,109	117,246	_	148,180	13,083	278,509	557,450	(3,620)	_	553,830
_	92	34,298	4,470	_	5,650		10,120	21,255	25	_	21,280
_	 60 122	26,537,593	3,468,287	_	4,383,352	1,281,753	9,133,392	16,490,069	(354,663)	_	16,135,406
	68,133	895,882	108,181		136,724		244,905	514,351	18,852		533,203
_	24,862	169,115	18,853	_	23,827	_	42,680	89,637	6,879	_	96,516
_	208,317 3,696	3,211,987 242,791	392,559 31,248	_	496,132 39,493	_	888,691 70,741	1,866,436 148,570	57,642 1,023	_	1,924,078 149,593
	2,070	Z4Z,/91	31,2 4 0	_	37, 4 73		/0,/41	140,370	1,023		147,273

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Sanpete County	\$ 333,497	0.2027093%	\$ 1,147,028	2,423,556	81,383	_	387,350	
Santaquin City	196,898	0.1196808	677,212	1,430,882	48,049	_	228,694	
Sevier County Six County Infrastructure Coal	509,591 25,589	0.3097444 0.0155535	1,752,684 88,009	3,703,248 185,955	124,355 6,244	_	591,880 29,721	
Six-County Association of Governments	171,146	0.1040276	588,639	1,243,735	41,764	_	198,783	
SLC Mosquito Abatement	81,760	0.0496959	281,204	594,155	19,952	_	94,962	~~~
Smithfield City Corp	222,852	0.1354559	766,475	1,619,486	54,382	_	258,838	
Snyderville Basin Water Reclamation District So Davis Metro Fire Agency	472,971 16,326	0.2874858 0.0099232	1,626,734 56,150	3,437,128 118,640	115,418 3,984	_	549,347 18,962	
So Davis Recreation Center	84,480	0.0033232	290,562	613,928	20,616	_	98,122	
So Salt Lake Valley Mosquito Abatement	34,272	0.0208318	117,876	249,061	8,363		39,807	~~~
So Utah Valley Animal Services Special Service District	10,351	0.0062915	35,600	75,220	2,526	_	12,022	
So Utah Valley Power Systems	16,061	0.0097623	55,240	116,716	3,919	_	18,654	
Solid Waste Special Service District #1 Solitude Improvement District	35,494 10,713	0.0215744 0.0065115	122,078 36,845	257,940 77,850	8,662 2,614	_	41,226 12,443	
South Davis Sewer District	291,827	0.1773809	1,003,707	2,120,734	71,214	·····	338,951	~~~
South Davis Water District	61,670	0.1773007	212,108	448,164	15,049	_	71,629	
South Ogden City	305,583	0.1857427	1,051,023	2,220,706	74,571	_	354,930	
South Ogden Conservancy District South Valley Sewer District	241,575 474,316	0.1468363 0.2883037	830,871	1,755,548 3,446,907	58,951 115,747	_	280,585	
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South Valley Water Reclamation South Weber City	458,555 94,115	0.2787236 0.0572056	1,577,154 323,697	3,332,369 683,940	111,901 22,967	_	532,604 109,312	
South Weber City Southeastern Utah Association of Governments	126,539	0.0372030	435,216	919,569	30,879	_	146,972	
Southeastern Utah Health	197,064	0.1197815	677,782	1,432,086	48,089	_	228,886	
Spanish Fork City	1,279,767	0.7778810	4,401,629	9,300,205	312,300		1,486,427	~~~
Springville City	1,342,000	0.8157080	4,615,673	9,752,458	327,486	_	1,558,709	
St George Housing Authority Summit County	24,858 1,880,710	0.0151092 1.1431519	85,495 6,468,509	180,643 13,667,318	6,066 458,947	_	28,872 2,184,411	
Summit County Summit Mosquito Abatement District	7,693	0.0046762	26,460	55,908	1,877	_	8,936	
Sunset City .	82,975	0.0504348	285,385	602,989	20,248		96,374	
Sw Behavioral Health Center	986,025	0.5993357	3,391,333	7,165,549	240,618	_	1,145,251	
Sw Mosquito Abatement/Control	18,246	0.0110904	62,755	132,595	4,453	_	21,192	
SW UT Public Health Department Syracuse City Corp	374,977 321,437	0.2279223 0.1953789	1,289,695 1,105,549	2,724,998 2,335,915	91,505 78,440	_	435,529 373,343	
Taylor West Weber Water Improvement District	21,217	0.0128960	72,972	154,182	5,177	_	24,643	
Taylorsville—Bennion Improvement	342,709	0.2083086	1,178,711	2,490,500	83,631	_	398,050	~~~
Timber Lakes Water Special Service District	32,572	0.0197985	112,030	236,707	7,949	_	37,832	
Timpanogos Special Service District Tooele City	352,226	0.2140932 0.3975560	1,211,443	2,559,660	85,953 159,609	_	409,104 759,676	
Tooele County	654,058 1,371,792	0.8338165	2,249,565 4,718,139	4,753,108 9,968,960	334,756	_	1,593,312	
Tooele County Housing	41,768	0.0253881	143,658	303,536	10,193		48,513	~~~
Tooele Valley Mosquito Abatement	3,569	0.0021696	12,277	25,939	871	_	4,146	
Torrey Town	1,953	0.0011870	6,717	14,192	477	_	2,268	
Town of Alta Town of Apple Valley	74,405 5,560	0.0452258 0.0033798	255,910 19,125	540,712 40,408	18,157 1,357	_	86,420 6,458	
Town of Brian Head	43,908	0.0266886	151,017	319,084	10,715	·····	50,998	~~~
Town of Daniel	1,500	0.0200000	5,159	10,900	366	_	1,742	
Town of Garden City	31,564	0.0191853	108,560	229,376	7,702	_	36,661	
Town of Goshen Town of Levan	5,768 22,786	0.0035058 0.0138502	19,838 78,371	41,915 165,590	1,407 5,561	_	6,699 26,466	
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Town of Mantua Town of Randolph	12,896 8,885	0.0078385 0.0054008	44,354 30,560	93,716 64,571	3,147 2,168	_	14,978 10,320	
Town of Springdale	109,228	0.0663921	375,679	793,772	26,655	_	126,866	
Trans-Jordan Čities	233,689	0.1420432	803,750	1,698,243	57,027	_	271,426	
Tremonton City	215,419	0.1309382	740,912	1,565,473	52,568		250,205	~~~
Tridell-Lapoint Water Uintah Animal Control/Shelter	7,406 55,950	0.0045014 0.0340081	25,471 192,434	53,818 406,595	1,807 13,653	_	8,602 64,985	
Uintah Basin Association of Governments	33,930 182,179	0.0340061	626,586	1,323,913	13,033 44,457	_	211,598	
			,	, ,	,		,	

		Deletted Outilo	ws or nesources				Deletted lillion	ws or resources		to Lilipit	yer-r ara membe	er Contributions
									N	let Amortization		
		Changes in Proportion and Differences Between Employer Contributions and Proportionate	Total Deferred	Differences Between Expected	Net Difference Between Projected and Actual Investment Earnings on		Changes in Proportion and Differences Between Employer Contributions and Proportionate	Total Deferred	Proportionate Share of Allocable Plan Gross	of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate	Proportionate Share of	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid
	Changes of	Share of	Outflows of	and Actual	Pension Plan	Changes of	Share of	Inflows of	Pension	Share of	Nonemployer	Member
/	Assumptions	Contributions	Resources	Experience	Investments	Assumptions	Contributions	Resources	Expense	Contributions	Contributions	Contributions
	_		387,350	50,624	_	63,981	24,783	139,388	240,694	(6,857)	_	233,837
	_	23,384	252,078	29,889	_	37,775		67,664	142,107	6,470	_	148,577
	_	14,546	606,426	77,355	_	97,764	_	175,119	367,785	4,025	_	371,810
	_	58,121	87,842	3,884	_	4,909	_	8,793	18,468	16,082		34,550
	_	_	198,783	25,980	_	32,834	41,767	100,581	123,521	(11,557)	_	111,964
~~~~	~~~~~	11,303	106,265	12,411		15,685	_	28,096	59,008	3,127		62,135
	_	9,330	268,168	33,828	_	42,754	_	76,582	160,838	2,582		163,420
	_	31,977	581,324	71,796	_	90,739		162,535	341,356	8,848	_	350,204
	_	206	19,168	2,478	_	3,132	_	5,610	11,783	57	_	11,840
	_	_	98,122	12,824	_	16,207	1,700	30,731	60,972	(470)	_	60,502
~~~~~		1,185	40,992	5,202		6,575	_	11,777	24,735	328		25,063
	_	412	12,434	1,571		1,986		3,557	7,470	114	_	7,584
	_	85	18,739	2,438	_	3,081	_	5,519	11,592	24	_	11,616
	_	3,049	44,275	5,388	_	6,809		12,197	25,617	844	_	26,461
	_	_	12,443	1,626	_	2,055	452	4,133	7,732	(125)	_	7,607
~~~~~		18,685	357,636	44,299		55,986		100,285	210,619	5,170		215,789
	_	3,418	75,047	9,361	_	11,831	_	21,192	44,509	946	_	45,455
	_	12,261	367,191	46,387	_	58,626		105,013	220,548	3,393	_	223,941
	_	<i>_</i>	280,585	36,670	_	46,346	29,454	112,470	174,351	(8,150)	_	166,201
	_	24,295	575,205	72,000	_	90,997	_	162,997	342,327	6,722	_	349,049
~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	32,355	564,959	69,608		87,973	_	157,581	330,952	8,953		339,905
	_	30,864	140,176	14,286	_	18,056	_	32,342	67,925	8,540		76,465
	_	<i>_</i>	146,972	19,208	_	24,276	62,282	105,766	91,326	(17,234)	_	74,092
	_	_	228,886	29,914	_	37,806	57,538	125,258	142,227	(15,921)		126,306
	_	59,118	1,545,545	194,266	_	245,521	_	439,787	923,643	16,358	_	940,001
~~~~~			1,558,709	203,713		257,460	22,207	483,380	968,558	(6,145)		962,413
	_	584	29,456	3,773		4,769		8,542	17,940	161		18,101
	_	161,498	2,345,909	285,488	_	360,811		646,299	1,357,360	44,687	_	1,402,047
	_	_	8,936	1,168	_	1,476	6,477	9,121	5,552	(1,792)	_	3,760
		9,221	105,595	12,595		15,919		28,514	59,885	2,552		62,437
	_	<del>_</del>	1,145,251	149,676	_	189,167	24,723	363,566	711,641	(6,841)	_	704,800
	_	2,482	23,674	2,770	_	3,500	_	6,270	13,169	687	_	13,856
	_	_	435,529	56,921	_	71,939	54,872	183,732	270,631	(15,183)	_	255,448
	_	_	373,343	48,793	_	61,667	25,471	135,931	231,990	(7,048)	_	224,942
		1,533	26,176	3,221		4,070	_	7,291	15,313	424		15,737
	_	6,597	404,647	52,022	_	65,748	_	117,770	247,342	1,825	_	249,167
	_	592	38,424	4,944	_	6,249	_	11,193	23,508	164	_	23,672
	_	55,923	465,027	53,467	_	67,574	_	121,041	254,211	15,474	_	269,685
	_		759,676	99,285	_	125,480	5,509	230,274	472,052	(1,524)	_	470,528
		149,294	1,742,606	208,235		263,176		471,411	990,060	41,310		1,031,370
	_		48,513	6,340	_	8,013	349	14,702	30,145	(97)	_	30,048
	_	_	4,146	542	_	685	9,644	10,871	2,576	(2,668)	_	(92)
	_	4 700	2,268	296	_	375	2,089	2,760	1,409	(578)	_	831
	_	1,708	88,128	11,295	_	14,275		25,570	53,700	473	_	54,173
		12,630	19,088	844		1,067		1,911	4,013	3,495		7,508
	_	99,731	150,729	6,665	_	8,424	_	15,089	31,690	27,596	_	59,286
	_	3,407	5,149	228	_	288	20.700	516	1,083	943	_	2,026
	_	_	36,661	4,791	_	6,055	20,788	31,634	22,780	(5,752)	_	17,028
	_	4,649	6,699 31,115	876 3,459	_	1,107 4,372	1,958	3,941 7,831	4,163 16,446	(542) 1,286	_	3,621 17,732
~~~~~	~~~~~	~~~~~	~~~~	~~~~~	~~~~~	~~~~~		·····	~~~~~	~~~~~	~~~~~	~~~~~
	_	_	14,978	1,958	_	2,474	5,163	9,595	9,307	(1,429)	_	7,878
	_	10 461	10,320 137,327	1,349	_	1,705	195	3,249	6,413	(54)	_	6,359
	_	10,461 15,860	287,286	16,581 35,473	_	20,955 44,833	_	37,536 80,306	78,833 168,660	2,895 4,388	_	81,728 173,048
		3,931	254,136	32,700	_	41,328	_	74,028	155,474	1,088	_	156,562
~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~	~~~~~	~~~~~	~~~~~	~~~~~
	_	995	9,597 64,985	1,124 8,493	_	1,421 10,734	3,326	2,545 22,553	5,345 40,381	275 (920)	_	5,620 39,461
	_	_	211,598	27,654	_	34,951	5,320 6,413	69,018	131,484	(1,775)	_	129,709
			271,570	27,031		3 1/23 1	0,113	07,010	.51,101	(1,,,3)		.27,107

# Schedule of Employer Allocations and Pension Amounts (Concluded)

at December 31, 2015

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Betweenen Projected and Actual Investment Earnings on Pension Plan Investments	
Uintah Basin Asst Council Uintah County Care Center Special Service District Uintah County Uintah Fire Suppression Special Service District Uintah Highlands Improvement District	\$ 10,362 442,967 412,338 6,937 9,726	0.0062983% 0.2692485 0.2506316 0.0042164 0.0059120	\$ 35,639 1,523,539 1,418,196 23,858 33,453	75,301 3,219,086 2,996,506 50,411 70,683	2,529 108,097 100,622 1,693 2,374	_ _ _ _	12,035 514,498 478,924 8,057 11,297	
Uintah Mosquito Abatement District Uintah Recreation District Uintah Transportation Special Service District Uintah Transportation Special Service Uintah United Fire Authority Unified Fire Authority	29,400 194,227 6,868 88,633 438,077	0.0178703 0.1180573 0.0041745 0.0538737 0.2662765	101,119 668,026 23,621 304,844 1,506,722	213,654 1,411,472 49,910 644,104 3,183,554	7,174 47,397 1,676 21,629 106,903		34,148 225,592 7,977 102,945 508,819	~~~~~
Unified Police Department Upper Country Water District UT Municipal Power Agency UT Public Employees Association Utah Association of Counties	1,005,245 19,254 260,167 38,603 140,733	0.6110182 0.0117029 0.1581374 0.0234643 0.0855418	3,457,438 66,221 894,818 132,772 484,037	7,305,223 139,918 1,890,662 280,535 1,022,722	245,309 4,698 63,488 9,420 34,343		1,167,574 22,363 302,179 44,837 163,459	
Utah County Housing Authority Utah Counties Indemnity Pool Utah County Utah Lake Commission Utah Local Governments Trust	162,517 69,769 5,268,451 3,800 225,064	0.0987827 0.0424078 3.2023221 0.0023098 0.1368004	558,961 239,964 18,120,296 13,070 774,083	1,181,028 507,020 38,286,385 27,616 1,635,561	39,659 17,026 1,285,652 927 54,922		188,761 81,036 6,119,210 4,414 261,407	
Utah Valley Dispatch Special Service District Utah Zoological Society UTOPIA Valley Emergency Comm Center Valley Mental Health	274,836 734,082 347,754 774,533 1,477,649	0.1670534 0.4461971 0.2113754 0.4707846 0.8981595	945,269 2,524,800 1,196,065 2,663,928 5,082,223	1,997,260 5,334,652 2,527,166 5,628,616 10,738,233	67,068 179,137 84,862 189,008 360,589		319,217 852,623 403,910 899,607 1,716,263	
Vernal City Vineyard Town W Kane County Special Service District # 1 Wasatch County Wasatch County Fire District	399,300 44,077 30,133 1,249,586 10,766	0.2427067 0.0267916 0.0183160 0.7595361 0.0065440	1,373,353 151,600 103,641 4,297,825 37,029	2,901,758 320,316 218,983 9,080,877 78,239	97,441 10,756 7,353 304,935 2,627	= = = =	463,780 51,195 34,999 1,451,372 12,505	
Wasatch Front Regional Council Wasatch Front Waste/Recycling Wasatch Integrated Waste Management Wasatch Mental Health Special Service District Washington City	291,953 499,696 585,545 2,236,386 741,119	0.1774581 0.3037300 0.3559117 1.3593425 0.4504741	1,004,144 1,718,652 2,013,922 7,691,821 2,549,002	2,121,657 3,631,341 4,255,216 16,252,054 5,385,787	71,245 121,940 142,890 545,742 180,854	= = = =	339,099 580,387 680,100 2,597,522 860,796	
Washington County Solid Waste Washington County Water Conservancy District Washington County Waste Management Service District #5 Wayne County	102,046 31,059 1,796,080 24,095 117,719	0.0620264 0.0188787 1.0917112 0.0146457 0.0715533	350,976 106,825 6,177,433 82,872 404,883	741,576 225,710 13,052,302 175,101 855,478	24,902 7,579 438,295 5,880 28,727		118,524 36,075 2,086,114 27,986 136,729	
Weber Area Dispatch 911 Weber Basin Water Conservancy Weber County Mosquito Abatement Weber County Corp Weber Fire District	502,415 838,031 95,145 3,572,089 98	0.3053828 0.5093803 0.0578319 2.1712229 0.0000595	1,728,004 2,882,321 327,241 12,285,835 337	3,651,102 6,090,059 691,428 25,958,749 711	122,604 204,503 23,218 871,692 24		583,546 973,358 110,509 4,148,917 114	
Weber Human Services Wellington City Wellsville City Corp West Bountiful City West Point City	1,634,043 15,541 54,580 39,980 128,171	0.9932205 0.0094460 0.0331753 0.0243008 0.0779062	5,620,125 53,450 187,722 137,506 440,831	11,874,765 112,935 396,638 290,536 931,432	398,753 3,792 13,319 9,756 31,277		1,897,912 18,050 63,394 46,436 148,868	
West Valley City White City Water Improvement District Willard City Corp Woods Cross City	2,754,969 73,108 35,623 140,663	1.6745525 0.0444374 0.0216525 0.0854994	9,475,433 251,448 122,520 483,797	20,020,647 531,286 258,873 1,022,215	672,291 17,841 8,693 34,326		3,199,846 84,914 41,375 163,378	
Grand Total	\$ 164,519,693	100.0000000%	\$ 565,848,640	1,195,581,952	40,147,500		191,086,655	
No Proportionate Share for 2015 Canyonlands Health Care Sunnyside City	\$ <u> </u>	0.0000000% 0.0000000	\$ <u> </u>	_	_	_		
Grand Total	\$ 164,519,693	100.0000000%	\$ 565,848,640	1,195,581,952	40,147,500	_	191,086,655	

Net

Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Outflows of	Differences Between Expected and Actual	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Inflows of	Proportionate Share of Allocable Plan Gross Pension	et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Proportionate Share of Nonemployer	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member
Assumptions	Contributions	Resources	Experience	Investments	Assumptions	Contributions	Resources	Expense	Contributions	Contributions	Contributions
_	_	12,035	1,573	_	1,988	710	4,271	7,478	(196)	_	7,282
_	33,657	548,155	67,241	_	84,982	_	152,223	319,701	9,313	_	329,014
_	936,564	1,415,488	62,592	_	79,106	_	141,698	297,596	259,149	_	556,745
_	_	8,057	1,053	_	1,331	1,224	3,608	5,006	(339)	_	4,667
_	434	11,731	1,476	_	1,866	_	3,342	7,020	120	_	7,140
_		34,148	4,463	_	5,640	3,911	14,014	21,219	(1,082)		20,137
_	_	225,592	29,483	_	37,262	14,687	81,432	140,179	(4,064)	_	136,115
_	_	7,977	1,043	_	1,318	34,819	37,180	4,957	(9,634)	_	(4,677)
_	14,064	117,009	13,454	_	17,004	<i></i>	30,458	63,969	3,892	_	67,861
_	71,155	579,974	66,499	_	84,044	_	150,543	316,172	19,689	_	335,861
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1,167,574	152,594	~~~~~~	192,854	41,178	386,626	725,513	(11,394)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	714,119
	523	22,886	2,923	_	3,694	41,170	6,617	13,896	145	_	14,041
		302,179	39,493		49,913	2,243	91,649	187,770	(621)	_	187,149
_	_	44,837	5,860	_	7,406	14,277	27,543	27,861	(3,950)	_	23,911
_	77,940	241,399	21,363	_	26,999		48,362	101,571	21,566	_	123,137
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	100.761	24.670	~~~~~	21 170	11 077	(7.7)(	117 202	(2.206)	~~~~~~	114 007
<del>_</del>	3,407	188,761 84,443	24,670 10,591	_	31,179 13,385	11,877	67,726 23,976	117,293 50,354	(3,286) 943	_	114,007 51,297
	25,385	6,144,595	799,739	_	1,010,742		1,810,481	3,802,385	7,024		3,809,409
	23,303	4,414	577	_	729	24,722	26,028	2,743	(6,841)	_	(4,098)
_		261,407	34,164	_	43,178	58,166	135,508	162,435	(16,095)	_	146,340
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	210 217	41 710	~~~~~		40.450	124.006	100.356	(11 102)	~~~~~	107.162
_	 F 201	319,217 857,924	41,719 111,432	_	52,727 140,832	40,450	134,896	198,356 529,807	(11,193)	_	187,163
_	5,301	403,910	52,788	_	66,716	87,319	252,264 206,823	250,984	1,467 (24,161)	_	531,274 226,823
	_	899,607	117,572		148,593	15,109	281,274	559,002	(4,181)	_	554,821
		1,716,263	224,304	_	283,484	4,246,421	4,754,209	1,066,460	(1,174,992)	_	(108,532)
·····		~~~~~	~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	12,666	476,446	60,613	_	76,605	_	137,218	288,186	3,505	_	291,691
_	38,195	89,390	6,691	_	8,456	_	15,147	31,812	10,569	_	42,381
_	108 103,253	35,107 1,554,625	4,574 189,684	_	5,781 239,731	_	10,355 429,415	21,748 901,861	30 28,570	_	21,778 930,431
	103,233	12,505	1,634		2,065	689	4,388	7,770	(191)	_	7,579
·····		~~~~~	~~~··~~	~~~~~	~~~~~	~~~~~	~~~~	~~~···~	~~~~~	~~~~~	~~~~~
_	21,916	361,015	44,318	_	56,011	21 000	100,329	210,711	6,064	_	216,775
_	_	580,387	75,853	_	95,866	31,990	203,709	360,644	(8,852)	_	351,792
_	79,280	680,100 2,676,802	88,884 339,478	_	112,336 429,046	40,834	242,054 768,524	422,604 1,614,061	(11,299) 21,937	_	411,305 1,635,998
	79,200	860,796	112,500	_	142,182	54,818	309,500	534,886	(15,168)		519,718
		~~~~~	~~~~	~~~~~	~~~~~	J-1,010	~~~~	~~~~	~~~~~		~~~~~
_	2,797	121,321	15,490	_	19,577	_	35,067	73,649	774	_	74,423
_	70,546	106,621	4,715	_	5,959	13.000	10,674	22,416	19,520	_	41,936
_		2,086,114	272,641	_	344,5/5	12,868	630,084	1,296,280	(3,561)	_	1,292,/19
_	527 —	28,513 136,729	3,658 17,870	_	4,623 22,584	9,424	8,281 49,878	17,390 84,961	146 (2,608)	_	17,536 82,353
		~~~~~	~~~~~		~~~~~	××××××××××××××××××××××××××××××××××××××	49,070	04,901	(2,006)		~~~~~
_	56,990	640,536	76,265	_	96,387	_	172,652	362,607	15,769	_	378,376
_	66,555	1,039,913	127,211	_	160,775		287,986	604,830	18,416	_	623,246
_		110,509	14,443	_	18,253	14,229	46,925	68,669	(3,937)	_	64,732
_	88,432	4,237,349	542,235	_	685,299	_	1,227,534	2,578,075	24,469	_	2,602,544
	222	336	15		19		34	71	61		132
_	_	1,897,912	248,044	_	313,488	21,104	582,636	1,179,334	(5,840)	_	1,173,494
_	. —	18,050	2,359	_	2,981	6,591	11,931	11,216	(1,824)	_	9,392
_	1,737	65,131	8,285	_	10,471	_	18,756	39,392	481	_	39,873
_	90,807	137,243 148,868	6,069 19,456	_	7,670 24,589	942	13,739 44,987	28,854 92,505	25,127 (261)	_	53,981 92,244
		~~~~~	الر4,71		~~~~~	J4Z	~~~~~	72,303	(201)		~~~~~
_	. =	3,199,846	418,198	_	528,535	158,429	1,105,162	1,988,336	(43,838)	_	1,944,498
_	1,177	86,091	11,098	_	14,026		25,124	52,764	326	_	53,090
_	7.00	41,375	5,407	_	6,834	13,084	25,325	25,710	(3,620)	_	22,090
	7,696	171,074	21,352		26,986		48,338	101,521	2,130	_	103,651
_	7,798,222	198,884,877	24,973,717	_	31,562,790	9,679,920	66,216,427	118,738,378	(520,669)	_	118,217,709
_	_		_	_	_	69,067	69,067	_	(19,111)	_	(19,111)
<u> </u>	_	_	_	_	_	3,353	3,353	_	(928)	_	(928)
_	7 700 222							110 720 270			
	7,798,222	198,884,877	24,973,717	_	31,562,790	9,752,340	66,288,847	118,738,378	(540,708)	_	118,197,670

### **Noncontributory Retirement System State and School Division**

and Pension Amount	S						Net Difference Between
at December 31, 2015 Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments
Active Re Entry Inc Alpine School District Alpine Uniserv American Leadership Academy Ames Charter School	\$ 68,584 45,090,758 20,372 865,137 325,054	0.0107108% 7.0418611 0.0031814 0.1351091 0.0507639	\$ 336,457 221,205,023 99,937 4,244,164 1,594,639	608,974 400,372,738 180,882 7,681,776 2,886,237	107,951 70,972,655 32,064 1,361,721 511,633	_ _ _ _	87,085 57,254,687 25,867 1,098,521 412,742
Beaver School District Box Elder School District Bridgerland Applied Technology Center Cache School District Canyons School District	1,250,028 7,902,237 1,064,592 11,151,497 24,612,391	0.1952179 1.2340989 0.1662583 1.7415385 3.8437375	6,132,353 38,766,581 5,222,649 54,706,712 120,742,802	11,099,328 70,166,047 9,452,798 99,017,082 218,539,912	1,967,538 12,438,086 1,675,664 17,552,407 38,739,795	_ _ _ _	1,587,242 10,033,988 1,351,783 14,159,785 31,251,964
Carbon School District Color Country Uniserv Daggett School District Davis Applied Technology College Davis School District	2,665,478 1,571 293,828 741,184 47,008,849	0.4162699 0.0002453 0.0458874 0.1157513 7.3414109	13,076,230 7,706 1,441,455 3,636,080 230,614,740	23,667,482 13,947 2,608,978 6,581,167 417,403,971	4,195,451 2,472 462,484 1,166,620 73,991,721	_ _ _ _	3,384,532 1,994 373,093 941,130 59,690,213
Davis Uniserv Dixie Applied Technology College Dixie State University Duchesne School District East Hollywood High School	19,476 50,415 1,154,574 3,461,773 160,728	0.0030415 0.0078734 0.1803108 0.5406280 0.0251011	95,542 247,326 5,664,079 16,982,674 788,497	172,928 447,651 10,251,768 30,737,998 1,427,151	30,654 79,353 1,817,295 5,448,816 252,986	   	24,729 64,016 1,466,038 4,395,640 204,087
Educators Mutual Insurance Emery School District Fast Forward Charter HS Garfield School District Grand School District	1,386,841 2,466,787 155,171 961,388 1,465,423	0.2165841 0.3852401 0.0242332 0.1501408 0.2288563	6,803,527 12,101,495 761,234 4,716,352 7,189,032	12,314,127 21,903,249 1,377,805 8,536,420 13,011,876	2,182,882 3,882,711 244,239 1,513,221 2,306,569	   	1,760,963 3,132,240 197,031 1,220,738 1,860,743
Granite School District Granite Uniserv Heber Valley Historic Railroad High Desert Uniserv High School Activities Association	50,496,274 43,058 48,109 1,571 121,297	7.8860449 0.0067244 0.0075132 0.0002453 0.0189430	247,723,254 211,233 236,011 7,706 595,054	448,369,734 382,323 427,171 13,947 1,077,025	79,480,912 67,773 75,723 2,472 190,920	   	64,118,424 54,674 61,087 1,994 154,018
Intech Collegiate High School Iron School District Itineris High School Jordan School District Jordan Uniserv	95,302 6,256,978 223,910 32,989,032 45,296	0.0148833 0.9771574 0.0349682 5.1519245 0.0070740	467,527 30,695,312 1,098,451 161,836,702 222,215	846,206 55,557,356 1,988,155 292,918,319 402,200	150,004 9,848,455 352,433 51,924,591 71,297		121,010 7,944,894 284,313 41,888,334 57,516
Juab School District Kane School District Liberty Academy Charter Logan School District Millard School District	1,609,364 1,181,593 108,552 4,120,087 3,027,575	0.2513357 0.1845304 0.0169527 0.6434373 0.4728189	7,895,174 5,796,628 532,533 20,212,208 14,852,596	14,289,967 10,491,678 963,864 36,583,334 26,882,637	2,533,132 1,859,823 170,861 6,484,998 4,765,390		2,043,515 1,500,346 137,836 5,231,543 3,844,310
Monticello Academy Morgan School District Mountainland ATC Murray School District Nebo School District	298,823 1,515,971 302,552 4,686,507 21,336,631	0.0466674 0.2367505 0.0472498 0.7318957 3.3321593	1,465,957 7,437,011 1,484,252 22,990,940 104,672,666	2,653,326 13,460,709 2,686,439 41,612,733 189,453,573	470,346 2,386,132 476,216 7,376,542 33,583,763		379,435 1,924,928 384,170 5,950,765 27,092,517
Noah Webster Academy Inc North Sanpete School District North Summit School District Nuames Charter School Ogden School District	183,718 1,884,748 994,286 334,742 9,657,761	0.0286915 0.2943422 0.1552784 0.0522769 1.5082606	901,282 9,246,131 4,877,739 1,642,167 47,378,785	1,631,287 16,735,149 8,828,524 2,972,260 85,753,811	289,172 2,966,580 1,565,001 526,882 15,201,274		233,280 2,393,184 1,262,509 425,044 12,263,092
Ogden Weber/NEA/UEA Uniserv Ogden-Weber Applied Technology Center Park City School District Piute School District Provo School District	16,670 832,344 5,867,185 409,871 10,181,411	0.0026034 0.1299879 0.9162832 0.0640098 1.5900394	81,780 4,083,292 28,783,079 2,010,731 49,947,691	148,019 7,390,605 52,096,287 3,639,347 90,403,434	26,239 1,310,106 9,234,924 645,134 16,025,496		21,167 1,056,882 7,449,949 520,439 12,928,004

								N	let Amortization		
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
	10.576	07.664	25.020		6.630		22.550	64.604	2.010		64.702
_	10,576	97,661	25,939	_	6,620	_	32,559	61,684	3,019	_	64,703
_	846,629	58,101,316 25,867	17,053,846 7,705	_	4,352,501 1,966	56,429	21,406,347 66,100	40,554,091 18,322	241,687 (16,109)	_	40,795,778 2,213
	39,189	1,137,710	327,205		83,510	J0,429 —	410,715	778,094	11,187		789,281
	37,107	412,742	122,939		31,377	12,337	166,653	292,349	(3,522)	_	288,827
		~~~~~	~~~~	~~~~~	~~~~~	~~~~~	~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	38,054	1,625,296	472,775		120,662		593,437	1,124,260	10,863	_	1,135,123
_	247,684	10,033,988 1,599,467	2,988,717 402,641	_	762,784 102,763	584,760 —	4,336,261 505,404	7,107,178 957,482	(166,931) 70,706	_	6,940,247 1,028,188
	772,860	14,932,645	4,217,625	_	1,076,427	_	5,294,052	10,029,523	220,628	_	10,250,151
_	417,795	31,669,759	9,308,691	_	2,375,774	_	11,684,465	22,136,091	119,268	_	22,255,359
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	215 440	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	_	3,384,532 1,994	1,008,115 594	_	257,292 152	315,440 8,352	1,580,847 9,098	2,397,299 1,413	(90,049) (2,384)	_	2,307,250 (971)
_	_	373,093	111,129	_	28,363	49,839	189,331	264,266	(14,228)	_	250,038
_	72,902	1,014,032	280,324	_	71,545		351,869	666,612	20,811	_	687,423
_	_	59,690,213	17,779,290	_	4,537,649	1,863,625	24,180,564	42,279,199	(532,008)	_	41,747,191
_		24,729	7,366		1,880	30,711	39,957	17,516	(8,767)		8,749
_	5,469	69,485	19,068	_	4,866		23,934	45,343	1,561		46,904
	_	1,466,038	436,673	_	111,448	15,520	563,641	1,038,410	(4,431)	_	1,033,979
_	156,883	4,552,523	1,309,283	_	334,157	_	1,643,440	3,113,478	44,785	_	3,158,263
_	_	204,087	60,789	_	15,515	18,711	95,015	144,557	(5,342)	_	139,215
<u> </u>	_	1,760,963	524,519	_	133,868	184,283	842,670	1,247,308	(52,607)	_	1,194,701
_	_	3,132,240	932,967		238,113	300,556	1,471,636	2,218,598	(85,800)	_	2,132,798
_	1,756	198,787	58,688	_	14,978	_	73,666	139,559	501	_	140,060
_	171,995	1,392,733	363,608	_	92,800	_	456,408	864,661	49,099	_	913,760
	16,002	1,876,745	554,240		141,454		695,694	1,317,984	4,568		1,322,552
_	_	64,118,424	19,098,274	_	4,874,282	3,614,094	27,586,650	45,415,747	(1,031,714)	_	44,384,033
<del>-</del>	25,761	80,435	16,285	_	4,156	_	20,441	38,726	7,354	_	46,080
_	29,017	90,104 1,994	18,195 594	_	4,644 152	8,352	22,839 9,098	43,269 1,413	8,284 (2,384)	_	51,553 (971)
	11,911	165,929	45,876	_	11,708	0,332	57,584	109,093	3,400	_	112,493
	~~~~~	~~~~~	~~~~	~~~~~	~~~~		~~~~	~~~··~	~~~~		
_	45,185	166,195	36,044	_	9,199	_	45,243	85,713	12,899		98,612
	46,816 24,562	7,991,710 308,875	2,366,461 84,685	_	603,971 21,613	_	2,970,432 106,298	5,627,451 201,382	13,364 7,012	_	5,640,815 208,394
_	60,592	41,948,926	12,476,833	_	3,184,351	_	15,661,184	29,669,943	17,297	_	29,687,240
_	1,091	58,607	17,132	_	4,372	_	21,504	40,739	311	_	41,050
	149,397	2,192,912	608,680	~~~~~~	155,348		764,028	1,447,443	42,648		1,490,091
_	33,884	1,534,230	446,892	_	114,056	_	560,948	1,062,711	9,673	_	1,072,384
_		137,836	41,056	_	10,478	12,720	64,254	97,631	(3,631)	_	94,000
_	440,936	5,672,479	1,558,264	_	397,702	_	1,955,966	3,705,557	125,874	_	3,831,431
-	261,967	4,106,277	1,145,064		292,244		1,437,308	2,722,965	74,784		2,797,749
_	_	379,435	113,018	_	28,845	38,684	180,547	268,758	(11,043)	_	257,715
_	_	1,924,928	573,358	_	146,333	154,494	874,185	1,363,447	(44,103)	_	1,319,344
_	52,976	437,146	114,429	_	29,205		143,634	272,112	15,123	_	287,235
_	1 254 042	5,950,765	1,772,491	_	452,377	125,545	2,350,413	4,214,989	(35,839)		4,179,150
	1,354,943	28,447,460	8,069,760		2,059,573		10,129,333	19,189,911	386,795		19,576,706
_	13,871	247,151	69,485	_	17,734		87,219	165,234	3,960		169,194
_	_	2,393,184	712,832	_	181,930	3,123	897,885	1,695,117	(892)		1,694,225
_	129,689	1,262,509 554,733	376,050 126,603	_	95,976 32,312	52,853	524,879 158,915	894,249 301,063	(15,088) 37,022	_	879,161 338,085
_	291,348	12,554,440	3,652,677	_	932,240	_	4,584,917	8,686,076	83,171	_	8,769,247
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	269	21,436 1,056,882	6,305 314,802	_	1,609 80,344	22,071	7,914 417,217	14,993 748,601	77 (6,301)	_	15,070 742,300
_	282,944	7,732,893	2,219,037	_	566,345	22,071	2,785,382	5,276,877	80,772	_	5,357,649
_	4,645	525,084	155,018	_	39,564	_	194,582	368,633	1,326	_	369,959
_	_	12,928,004	3,850,727	_	982,787	514,769	5,348,283	9,157,040	(146,951)	_	9,010,089

# **Noncontributory Retirement System State and School Division**

# Schedule of Employer Allocations and Pension Amounts (Concluded)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Rich School District Salt Lake Arts Academy Salt Lake Community College Salt Lake School District San Juan School District	\$ 611,227 219,828 3,735,895 24,321,885 3,480,123	0.0954558% 0.0343307 0.5834378 3.7983689 0.5434938	\$ 2,998,540 1,078,426 18,327,452 119,317,645 17,072,697	5,427,244 1,951,910 33,171,996 215,960,431 30,900,936	962,068 346,008 5,880,282 38,282,539 5,477,699	_ _ _ _	776,115 279,130 4,743,710 30,883,089 4,418,941	
Sevier School District Snow College Soldier Hollow Charter School South Sanpete School District South Summit School District	3,716,709 875,594 154,933 2,690,254 1,296,297	0.5804416 0.1367422 0.0241961 0.4201391 0.2024438	18,233,333 4,295,464 760,069 13,197,772 6,359,340	33,001,644 7,774,628 1,375,696 23,887,469 11,510,164	5,850,084 1,378,181 243,865 4,234,447 2,040,366	_ _ _ _	4,719,349 1,111,799 196,729 3,415,991 1,645,993	
Southern Utah University Southwest Applied Technology Southwest Educ Development Center Space Dynamics Lab / USU State of Utah	2,328,336 279,834 75,137 516,396 152,649,467	0.3636182 0.0437018 0.0117342 0.0806460 23.8393944	11,422,289 1,372,799 368,605 2,533,322 748,863,647	20,673,912 2,484,714 667,161 4,585,217 1,355,414,924	3,664,791 440,456 118,265 812,805 240,269,592	_ _ _ _ _	2,956,441 355,323 95,406 655,702 193,829,026	
Success Academy Summit Academy High School Summit Academy Inc Tintic School District Tooele Applied Technology College	152,470 188,485 631,609 334,965 200,558	0.0238114 0.0294359 0.0986390 0.0523118 0.0313212	747,984 924,666 3,098,533 1,643,263 983,889	1,353,823 1,673,610 5,608,229 2,974,245 1,780,801	239,987 296,675 994,151 527,234 315,676	_ _ _ _	193,601 239,332 801,996 425,327 254,661	
Tooele School District Tuacahn High School Uintah Basin Applied Technology Center Uintah School District University of Utah	9,537,717 241,881 588,147 5,159,939 23,756,666	1.4895131 0.0377748 0.0918514 0.8058319 3.7100982	46,789,872 1,186,615 2,885,316 25,313,488 116,544,809	84,687,901 2,147,728 5,222,312 45,816,457 210,941,703	15,012,324 380,720 925,741 8,121,721 37,392,887	_ _ _ _ _	12,110,663 307,132 746,809 6,551,912 30,165,394	
University of Utah Hospital UT School Board Risk Management Utah County Academy of Sciences Utah Communications Authority Utah Dairy Council	8,666,930 129,491 206,530 335,073 99,360	1.3535216 0.0202227 0.0322539 0.0523286 0.0155172	42,517,990 635,253 1,013,187 1,643,791 487,440	76,955,955 1,149,784 1,833,831 2,975,200 882,247	13,641,709 203,818 325,077 527,403 156,393	_ _ _ _	11,004,968 164,423 262,244 425,464 126,164	
Utah Education Association Utah Housing Corporation Utah Retirement Systems Utah Safety Council Utah School Boards Association	306,605 989,497 4,951,833 73,962 95,440	0.0478828 0.1545306 0.7733318 0.0115506 0.0149049	1,504,136 4,854,249 24,292,566 362,837 468,206	2,722,429 8,786,007 43,968,628 656,722 847,434	482,595 1,557,464 7,794,163 116,415 150,222	_ _ _ _ _	389,317 1,256,429 6,287,666 93,914 121,186	
Utah School Employees Association Utah State Fair Corp Utah State University Utah Valley University Valley Emergency Comm Center	81,185 94,147 9,003,341 5,198,575 0	0.0126787 0.0147030 1.4060592 0.8118658 0.00000000	398,274 461,863 44,168,346 25,503,030	720,861 835,955 79,943,038 46,159,521	127,785 148,187 14,171,219 8,182,534	_ _ _ _ _	103,086 119,544 11,432,131 6,600,971	
Wasatch School District Wasatch Uniserv Washington School District Wayne School District Weber County School District	5,171,825 11,469 19,958,248 522,581 23,979,392	0.8076882 0.0017911 3.1168961 0.0816119 3.7448814	25,371,799 56,264 97,910,633 2,563,663 117,637,449	45,921,999 101,835 177,214,547 4,640,134 212,919,340	8,140,430 18,052 31,414,194 822,540 37,743,456		6,567,005 14,563 25,342,294 663,555 30,448,203	
Weber State University West Valley City Woodland Peaks Uniserv Workers Compensation Fund	3,617,472 0 28,224 5,843,567	0.5649436 0.0000000 0.0044078 0.9125947	17,746,496 — 138,462 28,667,213	32,120,488 — 250,610 51,886,573	5,693,885 — 44,425 9,197,749		4,593,341 — 35,838 7,419,960	
Grand Total	\$ 640,324,454	100.0000000%	\$ 3,141,286,375	5,685,609,704	1,007,867,858	_	813,061,867	

	Deferred Outfloy	ws of Resources				Deterred Intio	ws of Resources		to Empio	yer-Paid Membe	er Contributions
Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Outflows of	Differences Between Expected and Actual	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	<b>Changes of</b>	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Inflows of	Proportionate Share of Allocable Plan Gross Pension	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Proportionate Share of Nonemployer	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member
Assumptions	Contributions	Resources	Experience	Investments	Assumptions	Contributions	Resources	Expense	Contributions	Contributions	Contributions
_	22,415	798,530	231,173	_	59,000		290,173	549,730 197,711	6,399	_	556,129 197,975
<del>-</del>	925	280,055	83,141	_	21,219	_	104,360		264		
<del>_</del>	930,644	5,674,354 30,883,089	1,412,959 9,198,818	_	360,617 2,347,732	182,136	1,773,576 11,728,686	3,360,019 21,874,813	265,671 (51,994)	_	3,625,690 21,822,819
_	65,490	4,484,431	1,316,223	_	335,928	102,130	1,652,151	3,129,982	18,696		3,148,678
<del>-</del> -	05,490		~~~~~	~~~~~~	~~~~~		1,032,131	~~~~~	10,090		~~~~~
_	37,363	4,756,712	1,405,702	_	358,765	_	1,764,467	3,342,764	10,666	_	3,353,430
<del>-</del>	56,642	1,168,441	331,160	_	84,519	_	415,679	787,499	16,170	_	803,669
<del>-</del>	_	196,729	58,598	_	14,955	70,379	143,932	139,345	(20,091)	_	119,254
_	_	3,415,991	1,017,485	_	259,684	172,322	1,449,491	2,419,582	(49,193)	_	2,370,389
		1,645,993	490,275		125,128	88,793	704,196	1,165,874	(25,348)		1,140,526
_	102,720	3,059,161	880,604	<del>-</del>	224,749	_	1,105,353	2,094,078	29,323	_	2,123,401
_	102,669	457,992	105,836	_	27,012	_	132,848	251,679	29,309	_	280,988
_	36,961	132,367	28,418	_	7,253	_	35,671	67,577	10,551	_	78,128
_	127,706	783,408	195,307	_	49,846	_	245,153	464,440	36,456	_	500,896
_	_	193,829,026	57,733,792	_	14,734,879	5,981,043	78,449,714	137,291,110	(1,707,406)	_	135,583,704
_	9,385	202,986	57,666		14,718		72,384	137,130	2,679		139,809
	20,591	259,923	71,287	_	18,194	_	89,481	169,521	5,878	_	175,399
	362,679	1,164,675	238,882	_	60,968	_	299,850	568,062	103,534	_	671,596
_	56,166	481,493	126,688	_	32,333	_	159,021	301,264	16,034	_	317,298
_	74,766	329,427	75,853	_	19,359	_	95,212	180,379	21,343	_	201,722
	~~~~	~~~~~	~~~~	~~~~~	~~~~		~~~~~	~~~~	~~~~~	~~~~~	~~~~~
_	_	12,110,663	3,607,275	_	920,652	445,700	4,973,627	8,578,109	(127,234)	_	8,450,875
_	62,624	369,756	91,482	_	23,348	245 200	114,830	217,545	17,877	_	235,422
_	_	746,809	222,444	_	56,772	245,389	524,605	528,972	(70,051)	_	458,921
-	_	6,551,912	1,951,548	_	498,076	197,768	2,647,392 11,888,724	4,640,787	(56,457)	_	4,584,330
		30,165,394	8,985,045		2,293,173	610,506	11,000,724	21,366,462	(174,281)		21,192,181
-	_	11,004,968	3,277,933	_	836,598	591,147	4,705,678	7,794,933	(168,754)	_	7,626,179
_	_	164,423	48,975	_	12,499	57,119	118,593	116,463	(16,306)	_	100,157
_	31,790	294,034	78,112	_	19,936	_	98,048	185,750	9,075	_	194,825
_	370,371	795,835	126,728	_	32,344	_	159,072	301,361	105,730	_	407,091
_		126,164	37,579		9,591	14,360	61,530	89,364	(4,099)		85,265
_	_	389,317	115,962	_	29,596	12,251	157,809	275,757	(3,497)	_	272,260
_	202,980	1,459,409	374,239	_	95,514		469,753	889,942	57,945	_	947,887
_		6,287,666	1,872,840	_	477,988	179,567	2,530,395	4,453,619	(51,261)	_	4,402,358
_	42,043	135,957	27,973	_	7,139	· —	35,112	66,520	12,002	_	78,522
_	· —	121,186	36,096	_	9,213	28,311	73,620	85,837	(8,082)	_	77,755
·····	~~~~~	102 006	20 705	~~~~~	7 027	60 070	107 521	72 017	(10 401)	~~~~~	E2 276
_	_	103,086 119,544	30,705 35,607	_	7,837 9,088	68,979 6,491	107,521 51,186	73,017 84,675	(19,691) (1,853)	_	53,326 82,822
_	518,593	11,950,724	3,405,167	_	869,070	0,491	4,274,237	8,097,497	148,043	_	8,245,540
_	1,045,503	7,646,474	1,966,161	_	501,806	_	2,467,967	4,675,537	298,459	_	4,973,996
_		7,040,474	1,200,101	_	J01,000 —	_	2,407,507	4,075,557 —	230,433	_	
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~		4.005.115
_	539,362	7,106,367	1,956,044	_	499,224	_	2,455,268	4,651,478	153,971	_	4,805,449
_	211	14,774	4,338	_	1,107	_	5,445	10,315	60	_	10,375
_	884,341	26,226,635	7,548,440	_	1,926,521	_	9,474,961	17,950,210	252,453	_	18,202,663
_	8,972	672,527	197,646	_	50,443	20 152	248,089	470,003	2,561 (11,177)	_	472,564
		30,448,203	9,069,283		2,314,672	39,152	11,423,107	21,566,779	(11,177)		21,555,602
_	302,007	4,895,348	1,368,170	_	349,186	_	1,717,356	3,253,511	86,214	_	3,339,725
_	_	_	_	_	_	_	_	_	_	_	_
_	2,976	38,814	10,675	_	2,724	_	13,399	25,385	850	_	26,235
_	147,434	7,567,394	2,210,105	_	564,065	_	2,774,170	5,255,635	42,088	_	5,297,723
	12,225,930	825,287,797	242,178,102		61,808,954	16,978,684	320,965,740	575,900,182	(1 356 767)		574,543,415
_	12,223,730	الاا, 201, 201	۷۹۷,۱/0,102	_	01,000,704	10,7/0,004	JZU,7UJ,/4U	107,107 טטל, כ זכ	(1,356,767)		JI 4,CPC,F1C

and Pension Amounts											
at December 31, 2015							Between Projected				
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments				
Bluffdale City	\$ 104,520	1.6964176%	\$ 1,192,335	2,099,814	430,463	_	354,372				
Box Elder County	23,583	0.3827646	269,028	473,783	97,126	_	79,957				
Brigham City Carbon County	7,158 32,809	0.1161826 0.5325152	81,659 374,281	143,810 659,144	29,481 135,125	_	24,270 111,239				
Castle Valley Special Service District	10,588	0.1718433	120,781	212,706	43,605	_	35,897				
Centerville City	25,755	0.4180201	293,807	517,422	106,072	_	87,322	~~~			
City of Bountiful	8,958	0.1454001	102,195	179,975	36,895	_	30,373				
City of Naples City of Orem	42,711 146,926	0.6932287 2.3846854	487,239 1,676,087	858,074 2,951,747	175,906 605,110	_	144,811 498,147				
City of South Jordan	685,215	11.1214144	7,816,735	13,766,009	2,822,041	_	2,323,199				
City of St George	22,387	0.3633464	255,380	449,748	92,199		75,901	~~~			
City of West Jordan	25,500	0.4138862	290,902	512,305	105,023	_	86,458				
Clinton City	30,574	0.4962308	348,778	614,231	125,918	_	103,660				
Corinne City Davis & Weber Counties Canal Company	16,496 102,879	0.2677415 1.6697802	188,183 1,173,612	331,409 2,066,842	67,939 423,704	_	55,930 348,807				
Davis County Housing Authority	64,641	1.0491596	737,406	1,298,642	266,223		219,163	~~~			
DDI Vantage	514,492	8.3504846	5,869,175	10,336,172	2,118,922	_	1,744,368				
Duchesne County Mosquito District	9,197	0.1492651	104,912	184,759	37,876	_	31,181				
Duchesne County	485,215	7.8753074	5,535,195	9,748,000	1,998,347	_	1,645,106				
Emery County Care & Rehabilitation Center	83,849	1.3609080	956,520	1,684,522	345,328		284,286	~~~			
Emery County	22,252	0.3611572	253,841	447,038	91,643	_	75,444				
Emery Town Five-County Association of Governments	5,444 10,809	0.0883631 0.1754427	62,106 123,311	109,375 217,162	22,422 44,518	_	18,459 36,649				
Garfield County	8,711	0.1413764	99,367	174,995	35,874	_	29,533				
Garland City	25,279	0.4102906	288,375	507,855	104,111		85,707				
Grand County	22,704	0.3685023	259,003	456,130	93,507	_	76,978				
Gunnison Valley Hospital	8,480	0.1376395	96,741	170,369	34,926	_	28,752				
Honeyville City Housing Authority of SLC	12,113 9,981	0.1965940 0.1619929	138,177 113,857	243,343 200,514	49,885 41,105	_	41,067 33,839				
Iron County	6,664	0.1081528	76,016	133,871	27,444	_	22,592				
Jordan Valley Water Conservancy	36,086	0.5856885	411,654	724,961	148,618	_	122,347	~~~			
Juab County	9,549	0.1549810	108,929	191,834	39,326	_	32,375				
Kaysville City Kearns Improvement District	11,902 41,833	0.1931699 0.6789726	135,770 477,219	239,104 840,428	49,017 172,288	_	40,352 141,833				
Laverkin City	77,962	1.2653731	889,373	1,566,270	321,086	_	264,329				
Layton City	46,691	0.7578119	532,631	938,014	192,294	_	158,303	~~~			
Logan City	11,934	0.1936970	136,141	239,757	49,150	_	40,462				
Millard County	6,821	0.1107027	77,808	137,027	28,091	_	23,125				
Mountainland Association of Governments  Murray City	16,021 85,614	0.2600327 1.3895583	182,765 976,657	321,867 1,719,986	65,983 352,598	_	54,319 290,271				
North Davis County Sewer District	13,859	0.2249335	158,096	278,421	57,077		46,987	~~~			
North Logan City	11,901	0.1931606	135,764	239,093	49,014	_	40,350				
Oakley City	19,969	0.3241156	227,806	401,188	82,244	_	67,706				
Ogden City Corp Park City	112,015 131,652	1.8180614	1,277,832	2,250,384 2,644,901	461,330	_	379,782 446,363				
~~···	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2.1367876	1,501,851	·····	542,206	~~~~~	~~~~~	~~~			
Provo City Corp Provo Housing Authority	65,415 18,286	1.0617200 0.2967837	746,235 208,596	1,314,190 367,357	269,410 75,308	_	221,787 61,996				
Rich County	81,805	1.3277328	933,203	1,643,458	336,910	_	277,356				
Riverdale City	6,774	0.1099487	77,278	136,094	27,899	_	22,968				
Roy City	11,027	0.1789819	125,798	221,543	45,416		37,388	~~~			
Salt Lake City Corp	584,010	9.4787995	6,662,216	11,732,792	2,405,230	_	1,980,066				
Salt Lake County San Juan County	359,283 6,946	5.8313486 0.1127453	4,098,589 79,244	7,218,003 139,555	1,479,695 28,609	_	1,218,135 23,552				
Sandy City	110,134	1.7875300	1,256,373	2,212,592	453,583	_	373,405				
South Davis Sewer District	42,230	0.6854172	481,749	848,405	173,924	_	143,180				

	Changes in					Changes in		N	let Amortization of Deferred Amounts from Changes in		
	Proportion and Differences			Net Difference		Proportion and Differences			Proportion and Differences		Total Employer
	Between Employer			Between Projected		Between Employer		Proportionate	Between Employer		Net Pension Expense
	Contributions		Differences	and Actual		Contributions		Share of	Contributions		Excluding That
	and	Total	Between	Investment		and	Total	Allocable	and	Proportionate	Attributable to Employer-Paid
Changes of	Proportionate Share of	Deferred Outflows of	Expected and Actual	Earnings on Pension Plan	Changes of	Proportionate Share of	Deferred Inflows of	Plan Gross Pension	Proportionate Share of	Share of Nonemployer	Member
Assumptions	Contributions	Resources	Experience	Investments	Assumptions	Contributions	Resources	Expense	Contributions	Contributions	Contributions
_	_	354,372	61,245	_	6,260	95,535	163,040	438,615	(86,301)	_	352,314
_	14,664	94,621	13,819	_	1,412	_	15,231	98,965	13,246	_	112,211
_	4,542	28,812	4,194	_	429	_	4,623	30,039	4,103	_	34,142
_	· —	111,239	19,225		1,965	26,278	47,468	137,684	(23,738)	_	113,946
_	8,366	44,263	6,204	_	634	_	6,838	44,431	7,557	_	51,988
_	14,124	101,446	15,091	_	1,543	_	16,634	108,081	12,759	_	120,840
_	6,174	36,547	5,249	_	537	_	5,786	37,594	5,577	_	43,171
_	_	144,811	25,027	_	2,558	29,534	57,119	179,237	(26,679)	_	152,558
_	71,064	569,211	86,093	_	8,800		94,893	616,569	64,195	_	680,764
		2,323,199	401,509		41,040	866,113	1,308,662	2,875,480	(782,397)		2,093,083
_	16,606	92,507	13,118	_	1,341	_	14,459	93,944	15,000	_	108,944
_	15,527	101,985	14,942	_	1,527	_	16,469	107,012	14,026	_	121,038
_	17,659	121,319	17,915	_	1,831		19,746	128,302	15,952	_	144,254
_	11,006 58,868	66,936 407,675	9,666 60,283	_	988 6,162	_	10,654 66,445	69,225 431,727	9,943 53,178	_	79,168 484,905
	20,000	~~~~	~~~~~	·····	~~~~~		~~~~~	~~~~~	~~~~~	<del>-</del>	~~~~~
_	222.707	219,163	37,877	_	3,872	13,588	55,337	271,264	(12,275)	_	258,989
_	322,787 9,402	2,067,155 40,583	301,472 5,389	_	30,815 551	_	332,287 5,940	2,159,047 38,593	291,587 8,493	_	2,450,634 47,086
	89,686	1,734,792	284,317	_	29,062		313,379	2,036,188	81,017		2,117,205
_	20,134	304,420	49,132	_	5,022	_	54,154	351,867	18,188	_	370,055
·····	458	75,902	13,039		1,333		14,372	93,378	413		93,791
_	_	18,459	3,190	_	326	2,288	5,804	22,847	(2,067)	_	20,780
<del>-</del>	6,392	43,041	6,334	_	647	_	6,981	45,361	5,774	_	51,135
_	2,896	32,429	5,104	_	522	_	5,626	36,553	2,616	_	39,169
_	19,746	105,453	14,812		1,514		16,326	106,082	17,837		123,919
_	14,554	91,532	13,304	_	1,360	_	14,664	95,278	13,147	_	108,425
_	6,168	34,920	4,969	_	508	_	5,477	35,587	5,572	_	41,159
_	5,774	46,841	7,097	_	725	_	7,822	50,830	5,216	_	56,046
_	1,267	35,106	5,848	_	598	_	6,446	41,884	1,144	_	43,028
	4,340	26,932	3,905		399		4,304	27,963	3,920		31,883
_	23,180	145,527	21,145	_	2,161	_	23,306	151,432	20,939	_	172,371
_	7.541	32,375	5,595	_	572	1,829	7,996	40,071	(1,653)	_	38,418
_	7,541 26,839	47,893 168,672	6,974 24,512	_	713 2,506	_	7,687 27,018	49,945 175,551	6,812 24,245	_	56,757 199,796
_	46,426	310,755	45,683	_	4,670	_	50,353	327,167	41,939	_	369,106
·····		158,303	27,359		2,796	15,281	45,436	195,935	(13,804)		182,131
_	2,966	43,428	6,993	_	715		7,708	50,081	2,680	_	52,761
_	1,461	24,586	3,997	_	409		4,406	28,623	1,320	_	29,943
_	12,819	67,138	9,388	_	960	_	10,348	67,232	11,580	_	78,812
_	16,437	306,708	50,166		5,128	_	55,294	359,275	14,848	_	374,123
_	_	46,987	8,121	_	830	15,339	24,290	58,157	(13,857)	_	44,300
_	7,977	48,327	6,974		713	_	7,687	49,942	7,206	_	57,148
_	12,623	80,329	11,701	_	1,196	_	12,897	83,801	11,403	_	95,204
_	35,067	414,849	65,636	_	6,709	_	72,345	470,066	31,677	_	501,743
	71,704	518,067	77,143		7,885		85,028	552,474	64,773	<del>-</del>	617,247
_	10 471	221,787	38,331		3,918	46,936	89,185	274,511	(42,399)		232,112
_	10,471	72,467	10,715	_	1,095	_	11,810	76,734	9,459	_	86,193
_	46,469	323,825 22,968	47,934 3,969	_	4,900 406	286	52,834 4,661	343,290 28,428	41,978 (258)	_	385,268 28,170
_	7,308	44,696	6,462	_	660		7,122	46,276	6,602	_	52,878
	35,069	2,015,135	342,207		34,979		377,186	2,450,776	31,679		2,482,455
_	87,015	1,305,150	210,525		21,519	_	232,044	1,507,715	78,605	_	1,586,320
_	4,309	27,861	4,070	_	416	_	4,486	29,151	3,893	_	33,044
_	34,488	407,893	64,534	_	6,596	_	71,130	462,172	31,155	_	493,327
_	29,340	172,520	24,745	_	2,529	_	27,274	177,217	26,505	_	203,722

# Schedule of Employer Allocations and Pension Amounts (Concluded)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Southeastern Utah Association of Governments	\$ 1,898	0.0308101%	\$ 21,655	38,137	7,818	_	6,436	
Spring City	20,689	0.3357934	236,014	415,643	85,207	_	70,145	
Springville City	10,010	0.1624709	114,193	201,105	41,227	_	33,939	
Sunset City	1,110	0.0180151	12,662	22,299	4,571	_	3,763	
Timpanogos Special Service District	12,902	0.2094082	147,183	259,204	53,137	_	43,744	
Tooele City	7,562	0.1227386	86,267	151,925	31,145	_	25,639	
Tooele County	7,332	0.1189963	83,637	147,293	30,195	_	24,858	
Town of Brian Head	36,254	0.5884290	413,580	728,353	149,313	_	122,919	
Town of Manila	13,191	0.2140978	150,480	265,009	54,327	_	44,724	
Town of Paragonah	4,511	0.0732236	51,466	90,636	18,580		15,296	
Uintah County	915,910	14.8657144	10,448,432	18,400,674	3,772,152	_	3,105,365	
Utah County Housing Authority	10,217	0.1658279	116,553	205,261	42,079	_	34,640	
Utah County	98,690	1.6017960	1,125,829	1,982,692	406,453	_	334,606	
Utah League Cities/Towns	66,726	1.0829946	761,188	1,340,523	274,808	_	226,231	
Vernal City	31,718	0.5147974	361,828	637,213	130,629		107,538	
Washington County Water Conservancy District	216,346	3.5114195	2,468,017	4,346,411	891,017	_	733,515	
Weber County Corp	33,465	0.5431501	381,755	672,307	137,823	_	113,461	
Weber Fire District	8,022	0.1302079	91,517	161,170	33,040	_	27,200	
Weber River Water Users	8,826	0.1432460	100,681	177,309	36,348	_	29,923	
West Bountiful City	53,402	0.8667448	609,195	1,072,851	219,935		181,058	
West Valley City	95,559	1.5509782	1,090,112	1,919,790	393,558	_	323,990	
Woods Cross City	11,275	0.1829928	128,617	226,507	46,434	_	38,226	
Grand Total	\$ 6,161,225	100.0000000%	\$ 70,285,442	123,779,302	25,374,840	_	20,889,420	
No Proportionate Share for 2015								
Cache County	0	0.0000000%	_	_	_	_	_	
Midway City	0	0.0000000	_	_	_	_	_	
Mount Pleasant City	0	0.0000000	_	_	_	_	_	
Pleasant View City	0	0.0000000	_	_	_	_	_	
Sevier County	0	0.0000000	_	_	_	_		
South Valley Sewer District	0	0.0000000	_	_	_	_	_	
Southeastern Utah Health	0	0.0000000	_	_	_	_	_	
Valley Mental Health	0	0.0000000	_	_	_	_	_	
Grand Total	\$ 6,161,225	100.0000000%	\$ 70,285,442	123,779,302	25,374,840	_	20,889,420	

	Deferred Outflow	s of Resources	ces Deferred Inflows of Resources							oense Excluding That Attributable oyer-Paid Member Contribution		
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
_	_	6,436	1,112	_	114	3,290	4,516	7,966	(2,972)	_	4,994	
	3,119	73,264	12,123		1,239	J,270	13,362	86,821	2,818	_	89,639	
<u></u>	3,117	33,939	5,866		600	9,763	16,229	42,007	(8,820)	_	33,187	
	_	3,763	650		66	23,404	24,120	4,658	(21,141)	_	(16,483)	
_	8,136	51,880	7,560	_	773		8,333	54,143	7,350	_	61,493	
		25,639	4,431		453	14,229	19,113	31,734	(12,854)		18,880	
<u></u>	4,839	29,697	4,296		439	14,227	4,735	30,767	4,372	_	35,139	
	4,039	122,919	21,244		2,171	75,729	99,144	152,140	(68,410)	_	83,730	
	7,421	52,145	7,729	_	790	73,729	8,519	55,356	6,704	_	62,060	
_	2,586	17,882	2,644	_	270	_	2,914	18,932	2,336	_	21,268	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~	~~~~	~~~~~	E4 0F0	194.460		~~~~			3,676,943	
_	4,850	3,105,365 39,490	536,686 5,987	_	54,859 612	184,469	776,014 6,599	3,843,581 42,875	(166,638) 4,381	_	47,256	
_			,	_		_				_		
_	40,563 47,753	375,169 273,984	57,829 39,099	_	5,911 3,996	_	63,740	414,150 280,012	36,642	_	450,792 323,149	
	1,243	108,781	18,585	_	1,900	_	43,095 20,485	133,103	43,137 1,123	_	134,226	
	~~~~	~~~~		~~~~~	~~~~	~~~~~	~~~~~	~~~~				
_	69,222	802,737	126,770	_	12,958	12.610	139,728	907,890	62,531	_	970,421	
_		113,461	19,609	_	2,004	13,619	35,232	140,433	(12,302)	_	128,131	
_	5,371	32,571	4,701	_	480	_	5,181	33,666	4,851	_	38,517	
_	3,890	33,813 181,058	5,172 31,291	_	529 3,198	44,693	5,701 79,182	37,037 224,100	3,514 (40,373)	_	40,551 183,727	
	~~~~~	~~~~		~~~~~	~~~~	·····	~~~~~	~~~~	~~~~~	~~~~~	~~~~~	
<u>-</u>	7,655 6,379	331,645 44,605	55,994 6,606	_	5,723 675	_	61,717 7,281	401,011 47,313	6,915 5,762	_	407,926 53,075	
	0,379	44,003	0,000		0/3		7,201	47,313	3,702		33,073	
<u> </u>	1,474,740	22,364,160	3,610,232		369,022	1,482,204	5,461,458	25,855,344	(6,743)	_	25,848,601	
_	_	_	_	_	_	33,151	33,151	_	(29,946)	_	(29,946)	
_	_	_	_	_	_	11,792	11,792	_	(10,653)	_	(10,653)	
_	_		_	_	_	10,353	10,353	_	(9,352)	_	(9,352)	
_	_	_	_	_	_	32,087	32,087	_	(28,985)	_	(28,985)	
						8,015	8,015		(7,241)		(7,241)	
_	_	_	_	_	_	6,048	6,048	_	(5,464)	_	(5,464)	
_	_	_	_	_	_	1,627	1,627	_	(1,469)	_	(1,469)	
						.,	.,=-/		(.,.57)		(.,)	
_	_	_	_	_	_	6,436	6,436	_	(5,813)	_	(5,813)	

Contributory Retirement System State and School Division

and Pension Amounts							Net Difference	
at December 31, 2015						Differences	Between Projected and Actual	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Between Expected and Actual Experience	Investment Earnings on Pension Plan Investments	
Alpine School District Box Elder School District Cache School District Carbon School District Davis School District	\$ 213,001 38,385 75,627 13,750 304,518	3.7988725% 0.6845906 1.3488090 0.2452257 5.4310774	\$ 2,380,572 429,000 845,234 153,671 3,403,396	5,382,525 969,979 1,911,093 347,454 7,695,154	(165,955) (29,906) (58,923) (10,713) (237,258)	_ _ _ _ _	1,443,237 260,084 512,428 93,164 2,063,330	
Dixie State University Duchesne School District Educators Mutual Insurance Emery School District Granite School District	15,752 44,483 34,723 16,860 558,106	0.2809442 0.7933442 0.6192791 0.3007010 9.9537964	176,054 497,151 388,073 188,435 6,237,568	398,063 1,124,069 877,441 426,056 14,103,278	(12,273) (34,657) (27,053) (13,136) (434,834)	_ _ _ _	106,734 301,401 235,271 114,240 3,781,565	
Iron School District Jordan School District Juab School District Kane School District Logan School District	11,404 116,580 7,281 4,028 22,543	0.2033902 2.0792025 0.1298566 0.0718430 0.4020582	127,455 1,302,937 81,375 45,021 251,951	288,178 2,945,969 183,990 101,792 569,666	(8,885) (90,830) (5,673) (3,138) (17,564)	_ _ _ _	77,270 789,914 49,334 27,294 152,747	
Millard School District Murray School District Nebo School District North Sanpete School District Ogden-Weber Applied Technology Center	37,963 8,627 10,176 4,294 29,055	0.6770692 0.1538696 0.1814883 0.0765787 0.5181869	424,287 96,423 113,730 47,988 324,723	959,322 218,014 257,146 108,502 734,206	(29,578) (6,722) (7,928) (3,345) (22,637)		257,227 58,457 68,950 29,093 196,865	
Park City School District Provo School District Salt Lake Community College Salt Lake School District San Juan School District	29,257 83,238 74,581 287,136 14,599	0.5218030 1.4845473 1.3301447 5.1210614 0.2603679	326,989 930,295 833,538 3,209,124 163,160	739,329 2,103,417 1,884,648 7,255,900 368,909	(22,795) (64,853) (58,108) (223,715) (11,374)		198,239 563,997 505,338 1,945,552 98,917	
Sevier School District Snow College Southern Utah University State of Utah Tooele School District	8,080 7,250 5,734 1,823,293 9,434	0.1441120 0.1293011 0.1022645 32.5183745 0.1682473	90,308 81,027 64,084 20,377,708 105,433	204,189 183,203 144,896 46,074,447 238,385	(6,296) (5,649) (4,467) (1,420,571) (7,350)		54,750 49,123 38,851 12,354,115 63,919	
Uintah School District University of Utah University of Utah Hospital Utah Housing Corporation Utah State University	42,093 613,591 503,898 85,429 77,248	0.7507234 10.9433764 8.9870126 1.5236271 1.3777110	470,442 6,857,690 5,631,731 954,784 863,346	1,063,681 15,505,389 12,733,467 2,158,788 1,952,043	(32,796) (478,064) (392,600) (66,560) (60,186)		285,209 4,157,518 3,414,272 578,844 523,409	
Utah Valley University Washington School District Weber County School District Weber State University Workers Compensation Fund	152,571 36,596 6,570 79,949 99,260	2.7210978 0.6526865 0.1171831 1.4258809 1.7702942	1,705,182 409,007 73,433 893,531 1,109,359	3,855,454 924,775 166,034 2,020,294 2,508,284	(118,872) (28,513) (5,119) (62,290) (77,336)		1,033,777 247,963 44,519 541,709 672,556	
Grand Total	\$ 5,606,961	100.0000000%	\$ 62,665,215	141,687,429	(4,368,522)	_	37,991,182	
No Proportionate Share for 2015 Daggett School District Ogden School District	\$ 0 0	0.0000000% 0.0000000	=	=	_	_ 	_ 	
Grand Total	\$ 5,606,961	100.0000000%	\$ 62,665,215	141,687,429	(4,368,522)	_	37,991,182	

	Deferred Outflow	s of Resources				Deferred Inflow	s of Resources			ense Excluding Th oyer-Paid Membe	
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
· ·			•								
-	_	1,443,237	_	_	_	_	_	819,746	12,769	_	832,515
_	_	260,084	_	_	_	_	_	147,726	(13,877)		133,849
_	_	512,428	_	_	_	_	_	291,055	8,923		299,978
_	_	93,164	_	_	_	_	_	52,916	22	_	52,938
		2,063,330		~~~~~~	·····			1,171,954	30,239		1,202,193
_	_	106,734	_	_	_	_	_	60,624	259	_	60,883
_	_	301,401	_	_	_	_	_	171,193	10,377	_	181,570
_	_	235,271	_	_	_	_	_	133,632	9,298	_	142,930
_	_	114,240	_	_	_	_	_	64,887	2,049	_	66,936
_	_	3,781,565	_	_	_	_	_	2,147,897	(40,025)	_	2,107,872
		77,270						43,889	2,984		46,873
	_	789,914			_	_		448,664	(6,158)		442,506
_	_	49,334		_	_	_	_	28,021	(17,456)		10,565
		27,294		_	_			15,503	1,111		16,614
		152,747		_	_			86,759	6,010		92,769
~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	_	257,227	_	_	_	_	_	146,103	4,798		150,901
_	_	58,457	_	_	_	_	_	33,203	2,372		35,575
_	_	68,950	_	_	_	_	_	39,163	(20,738)		18,425
_	_	29,093	_	_	_	_	_	16,525	(7,424)		9,101
_	_	196,865	_	_	_	_	_	111,818	7,441	_	119,259
		198,239				_		112,598	8,595	_	121,193
_	_	563,997		_	_	_	_	320,346	8,002	_	328,348
_	_	505,338	_	_	_	_	_	287,028	20,821	_	307,849
_	_	1,945,552	_	_	_	_	_	1,105,057	9,345	_	1,114,402
_	_	98,917	_	_	_	_	_	56,184	(184)	_	56,000
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~	~~~~~	~~~~~
_	_	54,750	_	_	_	_	_	31,097	(2,591)	_	28,506
_	_	49,123	_	_	_	_	_	27,901	(5,795)	_	22,106
_	_	38,851	_	_	_	_	_	22,067	1,125	_	23,192
_	_	12,354,115	_	_	_	_	_	7,017,033	(38,561)	_	6,978,472
		63,919						36,306	2,498		38,804
_	_	285,209	_	_	_	_	_	161,996	6,966	_	168,962
_	_	4,157,518	_	_	_	_	_	2,361,435	43,847	_	2,405,282
_	_	3,414,272	_	_	_	_	_	1,939,278	109,606	_	2,048,884
_	_	578,844	_	_	_	_	_	328,778	25,983	_	354,761
_	_	523,409	_	_	_	_	_	297,292	12,437		309,729
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~~	~~~~~	~~~~~	26 607		~~~~~
_	_	1,033,777	_	_	_	_	_	587,177 140,841	36,607 10,404	_	623,784
_	_	247,963 44,519	_	_	_	_	_			_	151,245
<del></del>	_	541,709	_	_	_	_	_	25,287 307,686	(9,069) 23,439	_	16,218 331,125
_	_	672,556	_	_	_	_	_	382,006	23,439	_	403,623
		072,330						302,000	21,017		403,023
_	_	37,991,182	_	_	_	_	_	21,578,671	278,068	_	21,856,739
									/a -a=:		/2
_	_	_	_	_	_	_	_	_	(2,685)	_	(2,685)
									(3,740)	_	(3,740)

37,991,182

21,850,314

271,643

21,578,671

# **Public Safety Retirement System** Other Division A with Social Security

and Pension Amou	unts						Net Difference	
at December 31, 2015							Between Projected	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments	
American Fork City	\$ 525,335	1.0209030%	\$ 1,828,694	3,872,402	164,738	_	583,961	
Beaver County	742,569	1.4430605	2,584,884	5,473,694	232,860	_	825,437	
Big Water Municipal Corp Blanding City	4,061 59,354	0.0078915 0.1153445	14,136 206,611	29,933 437,515	1,273 18,613	_	4,514 65,978	
Box Elder County	1,060,838	2.0615641	3,692,779	7,819,750	332,665	<u> </u>	1,179,223	
Brigham City	414,733	0.8059659	1,443,687	3,057,121	130,055	_	461,016	
Cache County Carbon County	1,562,350 683,740	3.0361706 1.3287368	5,438,545 2,380,102	11,516,544 5,040,051	489,932 214,412	_	1,736,702 760,043	
Cedar City	499,595	0.9708819	1,739,093	3,682,667	156,667		555,348	
Centerfield City	16,639	0.0323347	57,920	122,649	5,218	_	18,496	
Centerville City	297,486	0.5781148	1,035,549	2,192,856	93,288	_	330,684	
City of Draper City of Harrisville	567,447 77,443	1.1027396 0.1504968	1,975,284 269,578	4,182,818 570,852	177,944 24,285	_	630,772 86,085	
City of Helper	77,443	0.1304908	257,522	545,324	23,199		82,235	
City of Kanab	80,683	0.1567939	280,857	594,737	25,301		89,687	
City of Moab	161,947	0.3147178	563,739	1,193,761	50,785	_	180,020	.000
City of Monticello	17,985	0.0349505 0.1716517	62,605	132,571	5,640 27,699	_	19,992	
City of Naples City of North Salt Lake	88,328 334,045	0.1710317	307,471 1,162,812	651,095 2,462,345	104,752	_	98,185 371,323	
City of South Jordan	814,414	1.5826797	2,834,977	6,003,286	255,389	_	905,299	
City of South Salt Lake	966,738	1.8786968	3,365,218	7,126,113	303,156	_	1,074,622	~~~
City of St George	1,702,035	3.3076262	5,924,790	12,546,207	533,736	_	1,891,976	
Clearfield City Clinton City	402,991 194,443	0.7831462 0.3778680	1,402,812 676,857	2,970,564 1,433,297	126,373 60,975	_	447,963 216,142	
Daggett County	151,093	0.2936244	525,955	1,113,751	47,381	_	167,954	
Davis County	3,564,171	6.9263829	12,406,892	26,272,567	1,117,677	_	3,961,920	~~~
Duchesne County	463,294	0.9003360	1,612,728	3,415,078	145,283	_	514,996	
East Carbon City Emery County	32,241 546,748	0.0626552 1.0625155	112,231 1,903,232	237,658 4,030,243	10,110 171,453	_	35,839 607,763	
Enoch City	67,655	0.1314769	235,508	498,707	21,216	_	75,205	
Ephraim City	57,737	0.1122023	200,983	425,596	18,106	_	64,180	
Escalante City Fairview City	2,805 0	0.0054509 0.0000000	9,764	20,676	880	_	3,118	
Farmington City	247,225	0.4804408	860,590	1,822,367	77,526	_	274,814	
Fountain Green City	12,643	0.0245703	44,012	93,198	3,965	_	14,054	~~~
Garfield County	394,590	0.7668210	1,373,569	2,908,640	123,738	_	438,625	
Garland City Grand County	45,837 273,856	0.0890773 0.5321942	159,560 953,294	337,880 2,018,674	14,374 85,878	_	50,953 304,417	
Grantsville City	150,785	0.2930256	524,882	1,111,480	47,284	_	167,612	
Gunnison City	50,056	0.0972755	174,245	368,977	15,697		55,642	~~~
Heber City	269,493	0.5237153	938,106	1,986,512	84,509	_	299,567	
Hurricane City Iron County	302,653 908,577	0.5881566 1.7656705	1,053,536 3,162,760	2,230,946 6,697,391	94,908 284,918	_	336,428 1,009,971	
lvins City	181,071	0.3518822	630,309	1,334,730	56,782		201,278	
Juab County	236,233	0.4590799	822,327	1,741,343	74,080	_	262,596	~~~
Kamas City	32,802	0.0637445	114,182	241,790	10,286	_	36,462	
Kane County Kaysville City	460,267 464,611	0.8944527 0.9028963	1,602,190 1,617,314	3,392,762 3,424,789	144,334 145,696	_	511,631 516,460	
Laverkin City	62,454	0.3028303	217,402	460,367	19,585	_	69,424	
Layton City	1,262,652	2.4537571	4,395,296	9,307,383	395,951	_	1,403,559	~~.
Lehi City	673,837	1.3094920	2,345,629	4,967,054	211,306	_	749,035	
Lindon City Mapleton City	271,990 112,290	0.5285686 0.2182172	946,799 390,882	2,004,921 827,723	85,293 35,213	_	302,343 124,821	
Millard County	744,743	1.4472857	2,592,452	5,489,721	233,542	_	827,853	
Morgan County	146,972	0.2856158	511,610	1,083,374	46,088	_	163,373	

	Deferred Outilo	W3 OT INCOUNTED				Deterred IIIIIo	ws or resources		to Emple	yer-Paid Membe	Contributions
	Changer !-					Change:		N	et Amortization of Deferred Amounts from		_
	Changes in Proportion and Differences Between Employer			Net Difference Between Projected		Changes in Proportion and Differences Between Employer		Proportionate	Changes in Proportion and Differences Between Employer		Total Employer Net Pension Expense
	Contributions	T . 1	Differences	and Actual		Contributions	Ŧ.,	Share of	Contributions		Excluding That
	and Proportionate	Total Deferred	Between Expected	Investment		and Proportionate	Total Deferred	Allocable Plan Gross	and Proportionate	Proportionate Share of	Attributable to Employer-Paid
Changes of		Outflows of	and Actual	Earnings on Pension Plan	Changes of	Share of	Inflows of	Pension	Share of	Nonemployer	Member
Assumptions		Resources	Experience	Investments	Assumptions	Contributions	Resources	Expense	Contributions	Contributions	Contributions
_	22,396	606,357	185,734	_	122,373	_	308,107	527,156	7,365	_	534,521
<del>_</del>	72,126 4,477	897,563 8,991	262,538 1,436	_	172,976 946	_	435,514 2,382	745,142 4,075	23,718 1,472	_	768,860 5,547
_	5,442	71,420	20,985	_	13,826	_	34,811	59,560	1,789	_	61,349
_	53,327	1,232,550	375,063		247,115	_	622,178	1,064,514	17,536	_	1,082,050
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_		461,016	146,630	_	96,609	31,691	274,930	416,170	(10,421)	_	405,749
_	84,150	1,820,852	552,375	_	363,939	_	916,314	1,567,764	27,672	_	1,595,436
-	186,161	946,204	241,739	_	159,273	26.007	401,012	686,109	61,217	_	747,326
_	_	555,348	176,634	_	116,377	26,807	319,818	501,327	(8,815) (629)	_	492,512
		18,496	5,883		3,876	1,913	11,672	16,696	~~~~~		16,067
_	38,202	368,886	105,177	_	69,297		174,474	298,517	12,562	_	311,079
_	_	630,772	200,623	_	132,183	24,337	357,143	569,413	(8,003)	_	561,410
_	_	86,085	27,380	_	18,040	10,689	56,109	77,711	(3,515)	_	74,196
_	7 244	82,235	26,156	_	17,233	14,958	58,347	74,236	(4,919)	_	69,317
	7,344	97,031	28,526		18,795		47,321	80,962	2,415		83,377
_	_	180,020	57,257	_	37,725	33,771	128,753	162,508	(11,105)	_	151,403
_	_	19,992	6,359	_	4,189	1,270	11,818	18,047	(418)	_	17,629
_	_	98,185	31,229	_	20,576	35,903	87,708	88,634	(11,806)	_	76,828
_	7,289	378,612	118,103	_	77,814	_	195,917	335,203	2,397	_	337,600
	57,565	962,864	287,939		189,712		477,651	817,236	18,930		836,166
_	_	1,074,622	341,794	_	225,195	133,892	700,881	970,088	(44,029)	_	926,059
_	28,363	1,920,339	601,761	_	396,478	_	998,239	1,707,933	9,327	_	1,717,260
_	_	447,963	142,479	_	93,874	108,491	344,844	404,387	(35,676)	_	368,711
_	19,129	235,271	68,746	_	45,294	_	114,040	195,117	6,290	_	201,407
		167,954	53,419		35,196	61,668	150,283	151,617	(20,279)		131,338
-	33,195	3,995,115	1,260,126	_	830,250	_	2,090,376	3,576,522	10,916	_	3,587,438
_	<i></i>	514,996	163,799	_	107,921	5,354	277,074	464,899	(1,761)	_	463,138
_	_	35,839	11,399	_	7,510	28,108	47,017	32,353	(9,243)	_	23,110
_	43,977	651,740	193,305	_	127,361	_	320,666	548,643	14,461	_	563,104
_	22,130	97,335	23,920	_	15,760	_	39,680	67,890	7,277	_	75,167
_	10,281	74,461	20,413	_	13,449	_	33,862	57,937	3,381	_	61,318
_		3,118	992	_	653	16,114	17,759	2,815	(5,299)	_	(2,484)
_	_	·—	_	_	_	· —	·—	·_	· · · · ·	_	``_
_	_	274,814	87,407	_	57,589	4,265	149,261	248,081	(1,403)	_	246,678
		14,054	4,470		2,945	369	7,784	12,687	(121)		12,566
_	13,793	452,418	139,509	_	91,917	_	231,426	395,957	4,536	_	400,493
_	_	50,953	16,206	_	10,677	35,856	62,739	45,996	(11,791)	_	34,205
_	_	304,417	96,823	_	63,793	14,542	175,158	274,805	(4,782)	_	270,023
_	_	167,612	53,311	_	35,124	31,756	120,191	151,307	(10,443)	_	140,864
		55,642	17,697		11,660	1,632	30,989	50,229	(537)		49,692
-	39,247	338,814	95,280		62,777	_	158,057	270,427	12,906	_	283,333
_	40,457	376,885	107,004	_	70,501	_	177,505	303,702	13,304	_	317,006
_	_	1,009,971	321,231	_	211,647	143,158	676,036	911,726	(47,076)	_	864,650
_	2,777	204,055	64,018	_	42,179	_	106,197	181,699	913	_	182,612
		262,596	83,521		55,029	11,964	150,514	237,052	(3,934)		233,118
_	24,245	60,707	11,597	_	7,641	_	19,238	32,915	7,973	_	40,888
_	27,659	539,290	162,729	_	107,216	_	269,945	461,862	9,095	_	470,957
_	36,932	553,392	164,265	_	108,228	_	272,493	466,222	12,145	_	478,367
_	6,210	75,634	22,081	_	14,548	_	36,629	62,670	2,042	_	64,712
_	_	1,403,559	446,415	_	294,126	26,648	767,189	1,267,027	(8,763)		1,258,264
_	62,301	811,336	238,238		156,966		395,204	676,172	20,487		696,659
_	1,603	303,946	96,163	_	63,358	_	159,521	272,933	527	_	273,460
_	_	124,821	39,701	_	26,157	27,637	93,495	112,679	(9,088)	_	103,591
_	21,376	849,229	263,307	_	173,483	_	436,790	747,324	7,029	_	754,353
_	_	163,373	51,962	_	34,236	14,493	100,691	147,481	(4,766)	_	142,715

Public Safety Retirement System Other Division A with Social Security

Schedule of Employer Allocations and Pension Amounts (Concluded)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Mount Pleasant City	\$ 68,580	0.1332742%	\$ 238,728	505,524	21,506	_	76,233	
Murray City	1,243,626	2.4167832	4,329,066	9,167,137	389,985	_	1,382,410	
Nephi City	119,662	0.2325444	416,545	882,068	37,525	_	133,016	
North Logan City	90,605	0.1760763	315,397	667,878	28,413	_	100,716	
North Ogden City	230,204	0.4473629	801,339	1,696,899	72,189		255,893	
Park City	582,317	1.1316373	2,027,047	4,292,430	182,607	_	647,301	
Parowan City	56,114	0.1090479	195,332	413,631	17,597	_	62,376	
Payson City	301,519	0.5859524	1,049,588	2,222,585	94,552	_	335,167	
Perry City	58,215	0.1131310	202,646 154,126	429,119 326,375	18,255 13,885	_	64,711 49,218	
Piute County	44,276	0.0860440	~~~~		~~~~~		49,210	
Pleasant Grove City	383,738	0.7457315	1,335,793	2,828,645	120,335	_	426,562	
Pleasant View City	109,087	0.2119931	379,733	804,114	34,208	_	121,261	
Price City Rich County	275,374 90,977	0.5351433 0.1767989	958,576 316,691	2,029,860 670,619	86,354 28,529	_	306,104 101,130	
Richfield City	176,267	0.1707969	613,584	1,299,313	55,275	_	195,937	
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Riverdale City	375,677	0.7300668	1,307,733	2,769,227 1,145,326	117,807 48,724		417,601	
Roosevelt City Roy City	155,376 592,778	0.3019487 1.1519670	540,866 2,063,462	4,369,543	185,887	_	172,716 658,930	
Salem City	136,499	0.2652626	475,152	1,006,172	42,804	_	151,731	
Salina City	39,298	0.0763687	136,796	289,675	12,323	_	43,683	
Salt Lake County	7,718,657	14.9999446	26,868,671	56,896,517	2,420,464	~~~~~	8,580,034	~~~~~
San Juan County	7,718,057 341,545	0.6637367	1,188,919	2,517,630	107,104	_	379,660	
Sanpete County	407,232	0.7913890	1,417,577	3,001,829	127,703	_	452,678	
Santaquin City	181,193	0.3521190	630,734	1,335,628	56,820	_	201,414	
Sevier County	689,583	1.3400914	2,400,440	5,083,121	216,244	_	766,538	
Smithfield City Corp	82,331	0.1599960	286,593	606,883	25,818		91,518	~~~~~~
South Ogden City	401,032	0.7793397	1,395,993	2,956,125	125,758	_	445,786	
Spanish Fork City	593,744	1.1538440	2,066,825	4,376,663	186,190	_	660,004	
Springville City	402,949	0.7830661	1,402,668	2,970,260	126,360	_	447,917	
Stockton Town	4,186	0.0081355	14,573	30,859	1,313	_	4,654	
Summit County	1,400,583	2.7218026	4,875,432	10,324,110	439,204	_	1,556,882	
Sunset City	82,471	0.1602697	287,083	607,921	25,862	_	91,675	
Syracuse City Corp	265,682	0.5163099	924,841	1,958,423	83,314	_	295,331	
Tooele City	463,365	0.9004734	1,612,974	3,415,599	145,305	_	515,075	
Tooele County	825,881	1.6049646	2,874,895	6,087,815	258,985		918,046	~~~~~
Town of Brian Head	82,790	0.1608895	288,194	610,272	25,962	_	92,029	
Town of Springdale	54,602	0.1061094	190,069	402,485	17,122	_	60,695	
Tremonton City	104,737	0.2035400	364,591	772,051	32,844	_	116,426	
Uintah County Unified Fire Authority	872,063 48,349	1.6947110 0.0939590	3,035,653 168,304	6,428,234 356,397	273,467 15,162	_	969,382 53,745	
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Vernal City	388,006	0.7540264	1,350,651	2,860,109	121,674	_	431,306	
Washington City	727,845	1.4144483	2,533,632	5,365,165	228,243	_	809,070	
Washington City Washington County	198,894 2,059,244	0.3865187 4.0018025	692,352 7,168,234	1,466,110 15,179,297	62,371 645,752	_	221,090 2,289,048	
Wayne County	47,568	0.0924404	165,584	350,637	14,917	_	52,876	
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Weber County Corp Wellington City	4,166,043 28,219	8.0960212 0.0548400	14,502,008 98,232	30,709,139 208,014	1,306,416 8,849	_	4,630,958 31,369	
West Bountiful City	116,602	0.2265962	405,891	859,505	36,565	_	129,614	
Willard City Corp	31,760	0.0617199	110,556	234,111	9,959	_	35,304	
Grand Total	\$ 51,457,903	100.0000000%	\$ 179,125,130	379,311,499	16,136,521	_	57,200,416	
No Dronortionato Chara for 2015								
No Proportionate Share for 2015 City of Taylorsville	0	0.0000000%		_	_	_	_	
· ·								
Grand Total	\$ 51,457,903	100.0000000%	\$ 179,125,130	379,311,499	16,136,521		57,200,416	

Deferred	Outflows of	Resources

	Deferred Outflow	vs or nesources				Deletted Illilo	ws or resources		to Empire	yer-Paid Mellibe	Continuutions
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions			let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
Assumptions	20	csources	Experience		. 105411111111111111111111111111111111111	20	csources	rybelise	20	2011/10/10/10/10	
_ _ _	34,839 1,649	76,233 1,417,249 134,665	24,247 439,689 42,307	_ _ _	15,975 289,694 27,875	2,301 — —	42,523 729,383 70,182	68,818 1,247,935 120,077	(757) 11,456 542	_ _ _	68,061 1,259,391 120,619
_	8,986	109,702	32,034	_	21,106	_	53,140	90,919	2,955	_	93,874
<del>-</del>	22,736	278,629	81,389		53,624		135,013	231,001	7,476		238,477
_	111,567	758,868	205,880	_	135,647	_	341,527	584,335	36,687	_	621,022
_	3,604	65,980	19,839	_	13,071	_	32,910	56,308	1,185	_	57,493
_	78,512	413,679	106,603	_	70,237	_	176,840	302,564	25,818	_	328,382
_	26,428	91,139	20,582	_	13,561	2 220	34,143	58,417	8,691	_	67,108
		49,218	15,654		10,314	2,328	28,296	44,430	(766)		43,664
_	 23,180	426,562 144,441	135,672 38,568	_	89,389 25,411	24,294 —	249,355 63,979	385,068 109,465	(7,989) 7,622	_	377,079 117,087
_		306,104	97,359	_	64,146	27,414	188,919	276,328	(9,015)	_	267,313
_	36,806	137,936	32,165	_	21,192	1 021	53,357	91,292	12,103	_	103,395
		195,937	62,320		41,060	1,021	104,401	176,877	(336)		176,541
_	_	417,601	132,822	_	87,511	21,925	242,258	376,979	(7,210)	_	369,769
_		172,716	54,934	_	36,194	15,810	106,938	155,915	(5,199)	_	150,716
_	11 402	658,930	209,579	_	138,084	97,187	444,850	594,832 136,972	(31,959)	_	562,873
_	11,402	163,133 43,683	48,260 13,894	_	31,796 9,154	4,459	80,056 27,507	39,434	3,750 (1,466)	_	140,722 37,968
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~
_	_	8,580,034	2,728,960	_	1,798,014	603,686	5,130,660	7,745,401	(198,516)	_	7,546,885
_		379,660	120,754		79,561	32,087	232,402	342,729	(10,552)	_	332,177
_	56,798	452,678 258,212	143,978 64,061	_	94,862 42,208	23,030	261,870 106,269	408,643 181,821	(7,573) 18,677	_	401,070 200,498
<u> </u>	J0,790 —	766,538	243,805	_	160,634	40,970	445,409	691,973	(13,473)	_	678,500
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~	~~~~	~~~~~	~~~~			~~~~~	~~~~~		~~~~~
_		91,518	29,108	_	19,178	58,206	106,492	82,616	(19,140)	_	63,476
_	81,173	445,786 741,177	141,786 209,920	_	93,418 138,309	44,333	279,537 348,229	402,422 595,801	(14,578) 26,693	_	387,844 622,494
_	— —	447,917	142,464	_	93,864	70,670	306,998	404,346	(23,239)	_	381,107
_	_	4,654	1,480	_	975	6,829	9,284	4,201	(2,246)	_	1,955
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	106,738	1,663,620	495,181		326,256	i	821,437	1,405,436	35,100		1,440,536
	100,/38	91,675	495,181 29,158	_	19,211	31,153	79,522	82,757	(10,244)	_	72,513
_	16,722	312,053	93,933	_	61,889	J 1, 155 —	155,822	266,603	5,499	_	272,102
_		515,075	163,824	_	107,938	88,915	360,677	464,970	(29,239)	_	435,731
_	_	918,046	291,993	_	192,383	41,903	526,279	828,743	(13,779)	_	814,964
	3,508	95,537	29,271		19,285		48,556	83,077	1,154		84,231
_	39,981	100,676	19,305	_	12,719	_	32,024	54,791	13,147	_	67,938
_	251	116,677	37,030	_	24,398	_	61,428	105,100	83	_	105,183
_	142,947	1,112,329	308,321	_	203,141	_	511,462	875,085	47,006	_	922,091
_	134	53,879	17,094	_	11,263	_	28,357	48,517	44	_	48,561
_	_	431,306	137,181	_	90,383	70,000	297,564	389,351	(23,019)	_	366,332
_	10,806	819,876	257,332	_	169,547	_	426,879	730,368	3,554	_	733,922
_	9,008	230,098	70,320	_	46,331	_	116,651	199,584	2,962	_	202,546
_	67,049	2,356,097	728,053	_	479,687	_	1,207,740	2,066,380	22,048	_	2,088,428
_		52,876	16,818		11,081	1,138	29,037	47,733	(374)		47,359
_	105,725	4,736,683	1,472,920	—	970,452	_	2,443,372	4,180,479	34,766	_	4,215,245
_	_	31,369	9,977	_	6,574	551	17,102	28,317	(181)	_	28,136
_	41,711	171,325	41,225	_	27,162	_	68,387	117,006	13,716	_	130,722
	4,669	39,973	11,229		7,398		18,627	31,870	1,535		33,405
_	2,019,082	59,219,498	18,193,132		11,986,774	2,157,494	32,337,400	51,636,220	(45,515)		51,590,705
						26 (20	26 620		(0.757)		(0.757)
						26,630	26,630		(8,757)		(8,757)
_	2,019,082	59,219,498	18,193,132	_	11,986,774	2,184,124	32,364,030	51,636,220	(54,272)	_	51,581,948

Public Safety Retirement System State of Utah

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015

Participating Employer		Employer tributions	Employer Allocation Percentage	Liabili	t Pension ty/(Asset) Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
Dixie State University	\$	93,475	0.1937159%	\$	417,044	730,082	158,909	_	91,853	
Snow College	,	16,334	0.0338498	,	72,874	127,574	27,768	_	16,050	
Southern Utah University		98,519	0.2041688		439,548	769,477	167,484	_	96,810	
State of Utah	4	7,196,616	97.8090451	210),569,677	368,625,402	80,234,935	_	46,377,541	~~~~~~
University of Utah		683,116	1.4156717	3	3,047,750	5,335,422	1,161,307	_	671,261	
Utah State University		165,775	0.3435487		739,614	1,294,776	281,821	_	162,898	
Grand Total	\$ 4	8,253,836	100.0000000%	\$ 215	,286,507	376,882,733	82,032,224	_	47,416,413	

Difference

Difference

Net Difference

Net Difference

Public Safety Retirement System Salt Lake City

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015 Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
Salt Lake City Corporation	\$ 14,100,050	100.0000000%	\$ 85,106,335	127,725,232	49,927,244	1,519,423	11,415,593	

Public Safety Retirement System Ogden City

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015 Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
Ogden City Corp	\$ 2,729,287	100.0000000%	\$ 18,295,061	27,952,249	10,340,322	254,988	2,664,761	

Public Safety Retirement System Provo City

at December 31, 2015 Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
Provo City Corp	\$ 2,314,112	100.0000000%	\$ 12,665,826	20,111,408	6,544,597	498,666	2,043,324	

That Attributable ber Contributions				ws of Resources	Deferred Inflo				s of Resources	Deferred Outflow	
	Proportionate Share of Nonemployer Contributions	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Allocable Plan Gross Pension Expense	Total Deferred Inflows of Resources	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Differences Between Expected and Actual Experience	Total Deferred Outflows of Resources	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Changes of Assumptions
71,046 21,574	_	2,907 9,667	68,139 11,907	49,686 8,683	_	17,418 3,044	_	32,268 5,639	99,870 42,712	8,017 26,662	=
75,593		3,777	71,816	52,367		18,358		34,009	107,227	10,417	
34,450,249 648,167 122,137	_ _ _	46,216 150,209 1,295	34,404,033 497,958 120,842	25,087,070 363,107 88,117	 	8,794,597 127,292 30,891	_ _ _	16,292,473 235,815 57,226	46,505,005 1,085,536 166,470	127,464 414,275 3,572	_ _ _
35,388,766	_	214,071	35,174,695	25,649,030	_	8,991,600	_	16,657,430	48,006,822	590,409	_
That Attributable ber Contributions				ws of Resources	Deferred Inflo				s of Resources	Deferred Outflow	
	Proportionate Share of	Changes in Proportion and Differences Between Employer Contributions and Proportionate	Proportionate Share of Allocable Plan Gross	Total Deferred	Changes in Proportion and Differences Between Employer Contributions and Proportionate		Net Difference Between Projected and Actual Investment Earnings on	Differences Between Expected	Total Deferred	Changes in Proportion and Differences Between Employer Contributions and Proportionate	
Employer-Paid Member Contributions	Nonemployer Contributions	Share of Contributions	Pension Expense	Inflows of Resources	Share of Contributions	Changes of Assumptions	Pension Plan Investments	and Actual Experience	Outflows of Resources	Share of Contributions	Changes of Assumptions
Member									Outflows of	Share of	
Member Contributions 12,497,324 That Attributable ber Contributions Total Employer Net Pension Expense	Contributions — ense Excluding T	Pension Exp to Empl Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer	Expense 12,497,324 Proportionate	Resources	Contributions Deferred Inflo Changes in Proportion and Differences Between Employer	Assumptions	Net Difference Between Projected	714,533	Outflows of Resources 12,935,016	Changes in Proportion and Differences Between Employer	
Member Contributions 12,497,324 That Attributable ber Contributions Total Employer Net Pension Expense Excluding That Attributable to	ense Excluding T oyer-Paid Memb Proportionate	Pension Exp to Empl Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions	Expense 12,497,324 Proportionate Share of Allocable	Resources 2,990,033 ws of Resources	Contributions Deferred Inflo Changes in Proportion and Differences Between Employer Contributions and	Assumptions	Net Difference Between Projected and Actual Investment	T14,533 Differences Between	Outflows of Resources 12,935,016 s of Resources Total	Changes in Proportion and Differences Between Employer Contributions and	
Member Contributions 12,497,324 That Attributable ber Contributions Total Employer Net Pension Expense Excluding That Attributable to	Contributions — ense Excluding T oyer-Paid Memb	Pension Exp to Empl Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions	Expense 12,497,324 Proportionate Share of	Resources 2,990,033	Deferred Inflo Changes in Proportion and Differences Between Employer Contributions	Assumptions	Net Difference Between Projected and Actual	714,533 Differences	Outflows of Resources 12,935,016	Changes in Proportion and Differences Between Employer Contributions	
Member Contributions 12,497,324 That Attributable ber Contributions Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member	ense Excluding Toyer-Paid Memb Proportionate of Nonemployer	Pension Exp to Empl Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Proportionate Share of Allocable Plan Gross Pension	Resources 2,990,033 was of Resources Total Deferred Inflows of	Contributions Deferred Inflo Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Assumptions 2,275,500 Changes of	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	T14,533 Differences Between Expected and Actual	Outflows of Resources 12,935,016 75 of Resources Total Deferred Outflows of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Assumptions — Changes of
Member Contributions 12,497,324 That Attributable per Contributions Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions 2,653,462	ense Excluding Toyer-Paid Memb Proportionate Share of Nonemployer Contributions ense Excluding T	Pension Exp to Empl Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Allocable Plan Gross Pension Expense	Resources 2,990,033 Total Deferred Inflows of Resources 1,191,979	Deferred Inflo Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Assumptions 2,275,500 Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Differences Between Expected and Actual Experience	Outflows of Resources 12,935,016 Total Deferred Outflows of Resources 2,919,749	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Assumptions — Changes of
Member Contributions 12,497,324 That Attributable ber Contributions Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions 2,653,462	ense Excluding Toyer-Paid Memb Proportionate Share of Nonemployer Contributions ense Excluding T	Pension Exp to Empl Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Proportionate Share of Contributions	Proportionate Share of Allocable Plan Gross Pension Expense 2,653,462	Resources 2,990,033 ws of Resources Total Deferred Inflows of Resources	Deferred Inflo Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Assumptions 2,275,500 Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Differences Between Expected and Actual Experience	Outflows of Resources 12,935,016 Total Deferred Outflows of Resources 2,919,749	Changes in Proportion and Differences Between Employer Contributions and Proportionate Contributions Contributions Contributions	Assumptions — Changes of
Member Contributions 12,497,324 That Attributable per Contributions Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions 2,653,462	ense Excluding Toyer-Paid Memb Proportionate Share of Nonemployer Contributions ense Excluding T	Pension Exp to Employer Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions Pension Exp to Employer Contributions Proportionate Share of Contributions Pension Exp to Employer Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Proportionate Share of Allocable Plan Gross Pension Expense 2,653,462	Resources 2,990,033 Total Deferred Inflows of Resources 1,191,979	Deferred Inflo Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Assumptions 2,275,500 Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Differences Between Expected and Actual Experience	Outflows of Resources 12,935,016 Total Deferred Outflows of Resources 2,919,749	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Assumptions — Changes of

Public Safety Retirement System Logan City

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments	
Logan City	\$ 1,044,198	100.0000000%	\$ 6,714,361	10,903,805	3,291,296	268,832	1,172,511	

Net Difference Between

Net Difference

Net Difference

Public Safety Retirement System Bountiful City

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015 Participating Employer	Con	Employer tributions	Employer Allocation Percentage	Lia	Net Pension bility/(Asset) 0% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
City of Bountiful	\$	883,475	100.0000000%	\$	6,448,887	9,518,574	3,903,949	674,195	851,078	

Public Safety Retirement System Other Division B without Social Security

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015 Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
City of Orem	\$ 1,599,847	7.6878583%	\$ 3,751,301	8,183,928	119,759	655,260	1,211,671	
City of Saratoga Springs	290,736	1.3970959	681,715	1,487,245	21,763	119,079	220,194	
City of West Jordan	1,888,248	9.0737310	4,427,539	9,659,226	141,347	773,382	1,430,096	
Cottonwood Heights City	494,637	2.3769143	1,159,818	2,530,288	37,027	202,592	374,622	
Lone Peak Public Safety District	333,943	1.6047187	783,025	1,708,265	24,998	136,775	252,917	
Sandy City	1,691,893	8.1301718	3,967,128	8,654,782	126,649	692,960	1,281,383	~~~~~~
Unified Police Department	6,958,232	33.4368840	16,315,572	35,594,445	520,868	2,849,931	5,269,931	
Utah County	4,143,821	19.9125957	9,716,378	21,197,483	310,191	1,697,213	3,138,392	
West Valley City	3,219,413	15.4704722	7,548,837	16,468,725	240,993	1,318,597	2,438,276	
Woods Cross City	189,280	0.9095581	443,820	968,249	14,169	77,524	143,354	
Grand Total	\$ 20,810,051	100.0000000%	\$ 48,795,133	106,452,636	1,557,764	8,523,313	15,760,836	

	Deferred Outflows of Resources				Deferred Inflows of Resour				Pension Expense Excluding That Attribu to Employer-Paid Member Contribu		
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
_	_	1,441,343	_	_	240,128	_	240,128	1,504,822	_	_	1,504,822

	Deferred Outflows	s of Resources				Deferred Inflo	ws of Resources		Pension Expense Excluding T to Employer-Paid Membe			
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Pension Net Expense Excluding That Attributable to Employer-Paid Member Contributions	
	_	1,525,273	_	_	131,136	_	131,136	1,083,884	_	_	1,083,884	

	Deferred Outflow	vs of Resources				Deferred Inflo	ws of Resources		hat Attributable er Contributions		
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
_	_	1,866,931	_	_	319,507	57,446	376,953	684,832	(11,933)	_	672,899
_	_	339,273	_	_	58,063	19,304	77,367	124,453	(4,010)	_	120,443
_	259,830	2,463,308	_	_	377,104		377,104	808,285	53,974	_	862,259
_	67,909	645,123	_	_	98,784	_	98,784	211,735	14,107	_	225,842
		389,692			66,692	19,657	86,349	142,948	(4,083)		138,865
_	_	1,974,343	_	_	337,889	50,391	388,280	724,233	(10,468)	_	713,765
_	_	8,119,862	_	_	1,389,634	247,649	1,637,283	2,978,545	(51,444)	_	2,927,101
_	106,561	4,942,166	_	_	827,566	_	827,566	1,773,807	22,136	_	1,795,943
_	_	3,756,873	_	_	642,952	60,027	702,979	1,378,104	(12,469)	_	1,365,635
_	5,320	226,198	_	_	37,801	_	37,801	81,023	1,105	_	82,128
_	439,621	24,723,770	_	_	4,155,992	454,474	4,610,466	8,907,965	(3,085)	_	8,904,880

Firefighters Retirement System Other Division A with Social Security

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015 Participating Employer	Em Contrib	ployer outions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)		Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Between Projected and Actual Investment Earnings on Pension Plan Investments	
American Fork City Brigham City Cache County Cedar City City of Kanab		15,922 3,564 7,395 17,211 2,236	1.5158354% 0.3392657 0.7039769 1.6384771 0.2128539	\$ (27,455) (6,145 (12,750) (29,676) (3,855)	83,642 173,557 403,947	(353,284) (79,070) (164,070) (381,867) (49,608)	_ _ _ _	125,903 28,179 58,471 136,089 17,679	
City of Santa Clara City of South Jordan City of South Salt Lake City of St George City of Washington Terrace	1	2,242 91,933 00,866 53,649 1,863	0.2134537 8.7521498 9.6025888 5.1075179 0.1773189	(3,866 (158,519 (173,922 (92,507 (3,212	2,157,739 2,367,404 1,259,198	(49,748) (2,039,793) (2,237,998) (1,190,368) (41,326)		17,729 726,939 797,575 424,222 14,728	
Clinton City Farmington City Hurricane Valley Fire Special Service District Ivins City Layton City		15,477 10,213 12,392 2,647 14,542	1.4734620 0.9723325 1.1797390 0.2519685 10.9046373	(26,687 (17,611 (21,367 (4,564 (197,504	239,717 290,851 62,120	(343,408) (226,614) (274,952) (58,724) (2,541,456)	_ _ _ _	122,383 80,760 97,987 20,928 905,721	
Leeds Area Special Service District Lehi City Moab Valley Fire Protection Murray City N Tooele County Fire Protection Service District		1,451 56,913 4,379 21,309 2,356	0.1381396 5.4181698 0.4168751 11.5488265 0.2242620	(2,502 (98,134 (7,550 (209,172 (4,062	1,335,785 102,776 2,847,226	(32,195) (1,262,769) (97,158) (2,691,592) (52,267)		11,474 450,024 34,625 959,226 18,627	
North Davis Fire District North Logan City North View Fire District Payson City Pleasant Grove City		33,045 4,386 16,264 3,400 23,375	3.1459623 0.4175805 1.5483430 0.3236973 2.2253273	(56,980) (7,563) (28,044) (5,863) (40,305)	102,950 381,726 79,804	(733,204) (97,322) (360,860) (75,442) (518,639)		261,298 34,684 128,603 26,886 184,832	
Price City Riverdale City Roy City Smithfield City Corp So Davis Metro Fire Agency		2,781 21,567 47,000 7,195 23,693	0.2647589 2.0532168 4.4745102 0.6850098 11.7758300	(4,795 (37,188 (81,042 (12,407 (213,283	506,196 1,103,137 168,881	(61,705) (478,527) (1,042,838) (159,650) (2,744,499)		21,990 170,537 371,645 56,896 978,078	
South Ogden City Springville City State of Utah Syracuse City Corp Uintah Fire Suppression Special Service District		23,032 5,503 41,003 19,286 4,652	2.1927169 0.5238695 3.9035416 1.8360255 0.4428775	(39,714 (9,488 (70,701 (33,254 (8,021	129,154 962,372 452,650	(511,039) (122,094) (909,767) (427,908) (103,218)		182,123 43,512 324,221 152,497 36,785	
Wasatch County Fire District Washington City		26,485 9,175	2.5213771 0.8735054	(45,667 (15,821	215,352	(587,637) (203,581)		209,421 72,552	
Grand Total	\$ 1,0.	50,401	100.0000000%	(1,811,196)	24,653,812	(23,306,197)		8,305,829	
No Proportionate Share for 2015 Hurricane City North Fork Special Service District	\$	0	0.0000000% 0.0000000		_	_ 		_ 	
Grand Total	\$ 1,0	50,401	100.0000000%	\$ (1,811,196)	24,653,812	(23,306,197)	_	8,305,829	

Net Difference

Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
_		125,903	26,615	_	45,774	1,402	73,791	23,075	(216)	(63,214)	(40,355)	
_	_	28,179	5,957	_	10,245	4,468	20,670	5,165	(688)	(14,148)	(9,671)	
_	_	58,471	12,361	_	21,258	52	33,671	10,717	(8)	(29,358)	(18,649)	
<u> </u>	2,517	138,606	28,769	_	49,478	_	78,247	24,942	388	(68,329)	(42,999)	
_	367	18,046	3,737	_	6,428	_	10,165	3,240	57	(8,877)	(5,580)	
_		17,729	3,748		6,446	3,039	13,233	3,249	(468)	(8,902)	(6,121)	
_	3,989	730,928	153,671	_	264,292	_	417,963	133,233	615	(364,988)	(231,140)	
_	6,684	804,259	168,604	_	289,973	_	458,577	146,179	1,030	(400,453)	(253,244)	
_	437	424,659	89,679	_	154,234	_	243,913	77,751	67	(212,997)	(135,179)	
_	_	14,728	3,113	_	5,355	132	8,600	2,699	(20)	(7,395)	(4,716)	
_		122,383	25,871		44,495	2,655	73,021	22,430	(409)	(61,447)	(39,426)	
_	_	80,760	17,072	_	29,362	2,583	49,017	14,802	(398)	(40,549)	(26,145)	
_	_	97,987	20,714	_	35,625	16,796	73,135	17,959	(2,588)	(49,198)	(33,827)	
_	1,417	22,345	4,424	_	7,609		12,033	3,836	218	(10,508)	(6,454)	
_	4,082	909,803	191,465	_	329,292	_	520,757	166,000	629	(454,752)	(288,123)	
_	1,526	13,000	2,425		4,171		6,596	2,103	235	(5,761)	(3,423)	
_	.,525	450,024	95,133	_	163,615	2,016	260,764	82,480	(311)	(225,952)	(143,783)	
_	1,024	35,649	7,320	_	12,589		19,909	6,346	158	(17,385)	(10,881)	
_	3,326	962,552	202,776	_	348,745	_	551,521	175,806	512	(481,616)	(305,298)	
_	1,607	20,234	3,938	_	6,772	_	10,710	3,414	248	(9,352)	(5,690)	
·····	472	261,770	55,237		95,000		150,237	47,891	73	(131,195)	(83,231)	
_	_	34,684	7,332	_	12,610	342	20,284	6,357	(53)	(17,414)	(11,110)	
_	898	129,501	27,186	_	46,756	_	73,942	23,570	138	(64,570)	(40,862)	
_	_	26,886	5,684	_	9,775	160	15,619	4,928	(25)	(13,499)	(8,596)	
_	3,126	187,958	39,073	_	67,199	_	106,272	33,876	482	(92,802)	(58,444)	
_		21,990	4,649		7,995	8	12,652	4,030	(1)	(11,041)	(7,012)	
_	1,314	171,851	36,051	_	62,002	_	98,053	31,256	202	(85,625)	(54,167)	
_	135	371,780	78,564	_	135,119	_	213,683	68,115	21	(186,599)	(118,463)	
_	1,412	58,308	12,027	_	20,686	_	32,713	10,428	218	(28,567)	(17,921)	
_	1,981	980,059	206,761	_	355,596	_	562,357	179,259	305	(491,081)	(311,517)	
_	_	182,123	38,500	_	66,214	221	104,935	33,379	(34)	(91,442)	(58,097)	
_	_	43,512	9,198	_	15,819	580	25,597	7,975	(89)	(21,847)	(13,961)	
_	_	324,221	68,539	_	117,877	18,791	205,207	59,423	(2,895)	(162,788)	(106,260)	
_	29	152,526	32,237	_	55,443	_	87,680	27,950	5	(76,567)	(48,612)	
_	16	36,801	7,776	_	13,374	_	21,150	6,742	3	(18,469)	(11,724)	
_		209,421	44,271		76,139	1,762	122,172	38,383	(271)	(105,148)	(67,036)	
_	_	72,552	15,337	_	26,378	119	41,834	13,297	(18)	(36,427)	(23,148)	
_	36,361	8,342,190	1,755,814	_	3,019,740	55,128	4,830,682	1,522,285	(2,891)	(4,170,262)	(2,650,868)	
	30,301	0,5 .2,170	.,, 55,011		5,017,110	33,120	.,030,002	.,522,203	(2,001)	(.,,202)	(2,000,000)	
	12.624	12 (24							2.404		2 404	
_	13,634	13,634	_	_	_	_	_	_	2,101	_	2,101	
	1,022	1,022							158		158	
_	51,018	8,356,847	1,755,814	_	3,019,740	55,128	4,830,682	1,522,285	(633)	(4,170,262)	(2,648,610)	

Firefighters Retirement System Other Division B without Social Security

Schedule of Employer Allocations and Pension Amounts

and Pension Amounts at December 31, 2015							Net Difference Between Projected	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments	
City of Orem	\$ 220,684	3.9201431%	\$ 667,045	5,273,477	(3,137,290)	_	1,609,218	
City of Saratoga Springs	21,153	0.3757619	63,939	505,485	(300,722)	_	154,250	
City of West Jordan	307,634	5.4646755	929,860	7,351,221	(4,373,379)	_	2,243,248	
Logan City	165,450	2.9389845	500,093	3,953,597	(2,352,069)	_	1,206,453	
Lone Peak Public Safety District	33,069	0.5874324	99,956	790,229	(470,122)	_	241,141	
Ogden City Corp	307,915	5.4696817	930,712	7,357,956	(4,377,386)	_	2,245,303	~~~~~~
Park City Fire Service	314,263	5.5824400	949,898	7,509,641	(4,467,626)	_	2,291,591	
Provo City Corp	285,491	5.0713442	862,931	6,822,102	(4,058,596)	_	2,081,786	
Salt Lake City Corp	1,449,832	25.7542172	4,382,293	34,645,231	(20,611,098)	_	10,572,102	
Sandy City	277,515	4.9296581	838,822	6,631,502	(3,945,205)	_	2,023,624	
Unified Fire Authority	1,712,002	30.4112930	5,174,732	40,910,048	(24,338,158)	_	12,483,829	~~~~~~
Weber Fire District	171,223	3.0415428	517,544	4,091,561	(2,434,147)	_	1,248,553	
West Valley City	363,261	6.4528256	1,098,002	8,680,506	(5,164,196)	_	2,648,884	
Grand Total	\$ 5,629,493	100.0000000%	\$ 17,015,827	134,522,556	(80,029,994)	_	41,049,982	

Judges Retirement System

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Between Projected and Actual Investment Earnings on Pension Plan Investments	
State of Utah	\$ 6,554,874	100.0000000%	\$ 35,239,076	55,879,242	17,503,626	1,307,551	7,771,704	

Net

Difference

Utah Governors and Legislators Retirement Plan

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015 Participating Employer	Employer tributions	Employer Allocation Percentage	Lia	Net Pension ability/(Asset) 60% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Pifference Between Projected and Actual Investment Earnings on Pension Plan Investments	
State of Utah	\$ 421,429	100.0000000%	\$	2,207,830	3,434,235	1,256,050	_	477,806	

	Pension Expense Excluding That Attribu irces Deferred Inflows of Resources to Employer-Paid Member Contribu					vs of Resources	Deferred Outflov				
Tota Employe Net Pensioi Expens Excluding Tha Attributable t Employer-Pai Membe Contribution	Proportionate Share of Nonemployer Contributions	et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Allocable Plan Gross Pension Expense	Total Deferred Inflows of Resources	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Differences Between Expected and Actual Experience	Total Deferred Outflows of Resources	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Changes of Assumptions
(144,296 (11,999	(511,511) (49,030)	(4,139) 1,435	371,354 35,596	1,096,236 102,967	22,033	451,150 43,245	=	623,053 59,722	1,609,218 161,888	 7,638	
(184,289 (107,383 (20,148	(713,045) (383,486) (76,650)	11,088 (2,307) 855	517,668 278,410 55,647	1,497,438 817,623 160,969	12,278 —	628,902 338,233 67,605		868,536 467,112 93,364	2,302,267 1,206,453 245,691	59,019 — 4,550	=
(201,883 (201,474	(713,698) (728,411)	(6,327) (1,887)	518,142 528,824	1,532,487 1,539,751	33,678 10,043	629,478 642,455		869,331 887,253	2,245,303 2,291,591		
(182,213 (920,452 (174,223	(661,722) (3,360,478) (643,235)	(899) 333 2,026	480,408 2,439,693 466,986	1,394,441 7,057,206 1,350,832	4,784 — —	583,636 2,963,924 567,330	_ _ _	806,021 4,093,282 783,502	2,081,786 10,573,875 2,034,408	1,773 10,784	=
(1,082,394 (107,433 (237,975	(3,968,146) (396,868) (841,982)	4,897 1,310 (7,268)	2,880,855 288,125 611,275	8,333,343 833,448 1,806,898	38,686	3,499,881 350,036 742,623		4,833,462 483,412 1,025,589	12,509,893 1,255,527 2,648,884	26,064 6,974 —	
(3,576,162	(13,048,262)	(883)	9,472,983	27,523,640	121,503	11,508,498		15,893,639	41,166,785	116,803	
		to Emplose et Amortization of Deferred		ows of Resources	Deferred Inflo				vs of Resources	Deferred Outflov	
Tota Employee Net Pension Expense Excluding Tha Attributable to Employer-Paid Membe Contribution	Proportionate Share of Nonemployer Contributions	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Proportionate Share of Allocable Plan Gross Pension	Total Deferred Inflows of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Changes of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Differences Between Expected and Actual	Total Deferred Outflows of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Changes of Assumptions
Employe Net Pension Expense Excluding Tha Attributable to Employer-Paid	Share of	et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate	Proportionate Share of Allocable Plan Gross	Total Deferred	Changes in Proportion and Differences Between Employer Contributions and Proportionate	Changes of Assumptions 58,962	Difference Between Projected and Actual Investment Earnings on Pension Plan	Between Expected	Total Deferred	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Changes of Assumptions —
Employe Net Pension Expense Excluding Tha Attributable to Employer-Pair Membe Contribution 6,522,258 and Attributable Tota Employe Net Pension Expense Excluding Tha	Share of Nonemployer Contributions (1,653,457)	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Pension Exp to Employer Amounts from Changes in Proportion and Differences Between Employer Contributions	Proportionate Share of Allocable Plan Gross Pension Expense 8,175,715	Total Deferred Inflows of Resources 58,962	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Deferred Inflo Changes in Proportion and Differences Between Employer Contributions	Assumptions	Difference Between Projected and Actual Investment Earnings on Pension Plan Investments Net Difference Between Projected and Actual	Between Expected and Actual Experience	Total Deferred Outflows of Resources 9,079,255	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Deferred Outflow Changes in Proportion and Differences Between Employer Contributions	
Employe Net Pension Expense Excluding Tha Attributable te Employer-Pair Membe Contribution: 6,522,258 hat Attributable er Contribution: Tota Employe Net Pension Expense	Share of Nonemployer Contributions (1,653,457) ense Excluding T pyer-Paid Member Proportionate Share of	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Pension Exp to Empl let Amortization of Deferred Amounts from Changes in Proportion and Differences Between	Proportionate Share of Allocable Plan Gross Pension Expense 8,175,715	Total Deferred Inflows of Resources 58,962	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Deferred Inflo	Assumptions	Difference Between Projected and Actual Investment Earnings on Pension Plan Investments Net Difference Between Projected	Between Expected and Actual Experience	Total Deferred Outflows of Resources 9,079,255	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions Deferred Outflow Changes in Proportion and Differences Between Employer	

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015							Difference Between	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	
4 Corners Comm Behavior Health Alpine City Alpine School District Alpine Uniserv American Fork City	\$ 45,591 9,435 3,021,679 2,785 49,007	0.0848775% 0.0175649 5.6255129 0.0051843 0.0912367	\$ (185) (38) (12,280) (11) (199)	33,978 7,032 2,252,021 2,075 36,524	(26,078) (5,397) (1,728,410) (1,593) (28,032)	_ _ _ _	4,804 994 318,414 293 5,164	
American Leadership Academy Ames Charter School Ashley Valley Improvement District Ballard Town Bear River Association of Governments	89,553 5,097 8,397 1,579 13,714	0.1667228 0.0094898 0.0156336 0.0029402 0.0255317	(364) (21) (34) (6) (56)	66,743 3,799 6,258 1,177 10,221	(51,225) (2,916) (4,803) (903) (7,844)	_ _ _ _	9,437 537 885 166 1,445	
Bear River Health Department Bear River Mental Health Bear River Water District Beaver City Beaver County	77,907 69,264 5,866 14,140 33,569	0.1450403 0.1289498 0.0109200 0.0263241 0.0624955	(317) (281) (24) (57) (136)	58,063 51,622 4,372 10,538 25,018	(44,563) (39,619) (3,355) (8,088) (19,201)	_ _ _ _	8,210 7,299 618 1,490 3,537	
Beaver School District Beaver Valley Hospital Benchland Water Company Blanding City Bluffdale City	37,308 30,558 2,526 5,733 40,025	0.0694578 0.0568902 0.0047024 0.0106732 0.0745151	(152) (124) (10) (23) (163)	27,806 22,774 1,882 4,273 29,830	(21,341) (17,479) (1,445) (3,279) (22,894)		3,931 3,220 266 604 4,218	~
Bona Vista Water Improvement Bountiful Irrigation District Box Elder County Mosquito District Box Elder County Box Elder School District	2,973 2,731 2,437 47,286 331,211	0.0055352 0.0050851 0.0045378 0.0880331 0.6166209	(12) (11) (10) (192) (1,346)	2,216 2,036 1,817 35,242 246,847	(1,701) (1,562) (1,394) (27,048) (189,454)		313 288 257 4,983 34,902	~
Bridgerland Applied Technology Center Brigham City Cache County Cache School District Canyons School District	25,856 43,749 56,818 488,373 1,913,978	0.0481371 0.0814488 0.1057798 0.9092118 3.5632870	(105) (178) (231) (1,985) (7,779)	19,270 32,606 42,346 363,978 1,426,465	(14,790) (25,025) (32,500) (279,351) (1,094,801)		2,725 4,610 5,987 51,463 201,688	
Carbon County Carbon School District Castle Dale City Castle Valley Special Service District Cedar City	75,320 149,528 2,481 2,958 54,369	0.1402243 0.2783794 0.0046180 0.0055063 0.1012189	(306) (608) (10) (12) (221)	56,135 111,442 1,849 2,204 40,520	(43,083) (85,531) (1,419) (1,692) (31,099)		7,937 15,757 261 312 5,729	~
Cedar City Housing Authority Centerville City Central Davis Sewer District Central Iron County Water Conservancy Central UT Public Health	4,439 8,813 6,648 7,916 20,621	0.0082649 0.0164082 0.0123762 0.0147373 0.0383910	(18) (36) (27) (32) (84)	3,309 6,569 4,954 5,900 15,369	(2,539) (5,041) (3,803) (4,528) (11,795)	_ _ _ _	468 929 701 834 2,173	~
Central Utah Counseling Center Central Utah Water District Central Weber Sewer District City of Bountiful City of Cedar Hills	18,597 71,122 39,337 120,863 14,431	0.0346229 0.1324100 0.0732342 0.2250127 0.0268669	(76) (289) (160) (491) (59)	13,860 53,007 29,317 90,078 10,755	(10,638) (40,682) (22,501) (69,134) (8,255)		1,960 7,495 4,145 12,736 1,521	
City of Draper City of Duchesne City of Enterprise City of Green River City of Harrisville	61,632 1,356 334 2,404 3,601	0.1147405 0.0025240 0.0006220 0.0044748 0.0067037	(250) (6) (1) (10) (15)	45,933 1,010 249 1,791 2,684	(35,253) (775) (191) (1,375) (2,060)	_ _ _ _	6,495 143 35 253 379	
City of Helper City of Holladay City of Kanab City of Milford City of Moab	5,616 5,044 6,708 5,261 21,290	0.0104557 0.0093905 0.0124891 0.0097947 0.0396361	(23) (20) (27) (21) (87)	4,186 3,759 5,000 3,921 15,867	(3,212) (2,885) (3,837) (3,009) (12,178)		592 532 707 554 2,243	
City of Monticello City of Naples City of North Salt Lake	10,055 6,943 27,220	0.0187199 0.0129262 0.0506753	(41) (28) (111)	7,494 5,175 20,286	(5,752) (3,972) (15,570)	_ _ _ _	1,060 732 2,868	~

Net

	Deferred Outflow	vs or nesources				Deterred lillio	ws or resources		to Lilipit	byer-Paid Mellibe	Contributions
								N	et Amortization of Deferred Amounts from		
	Changes in Proportion and Differences Between Employer Contributions and Proportionate	Total Deferred	Differences Between Expected	Net Difference Between Projected and Actual Investment Earnings on		Changes in Proportion and Differences Between Employer Contributions and Proportionate	Total Deferred	Proportionate Share of Allocable Plan Gross	Changes in Proportion and Differences Between Employer Contributions and Proportionate	Proportionate Share of	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid
Changes of Assumptions	Share of Contributions	Outflows of Resources	and Actual Experience	Pension Plan Investments	Changes of Assumptions	Share of Contributions	Inflows of Resources	Pension Expense	Share of Contributions	Nonemployer Contributions	Member Contributions
	3,354	8,158	7,064	_	967	_	8,031	43,584	312	_	43,896
_	687	1,681	1,462	_	200	_	1,662	9,019	64	_	9,083
_	203,436 215	521,850 508	468,209 431	_	64,062 59	_	532,271 490	2,888,628 2,662	18,944 20	_	2,907,572 2,682
	3,619	8,783	7,594		1,039		8,633	46,849	337		47,186
_	6,500 369	15,937 906	13,876 790	_	1,899 108	_	15,775 898	85,610 4,873	605 34	_	86,215 4,907
_	464	1,349	1,301	_	178	_	1,479	8,028	43	_	8,071
_	96 1,065	262 2,510	245 2,125	_	33 291	_	278 2,416	1,510 13,110	9 99	_	1,519 13,209
·····	5,907	14,117	12,072		1,652		13,724	74,476	550		75,026
_	4,887	12,186	10,732	_	1,468	_	12,200	66,214	455	_	66,669
_	485 1,093	1,103 2,583	909 2,191	_	124 300	_	1,033 2,491	5,607 13,517	45 102	_	5,652 13,619
_	2,412	5,949	5,201	_	712	_	5,913	32,091	225	_	32,316
_	2,739	6,670	5,781	_	791	_	6,572	35,666	255	_	35,921
_	2,214 172	5,434 438	4,735 391	_	648 54	_	5,383 445	29,212 2,415	206 16	_	29,418 2,431
_	439	1,043	888	_	122	_	1,010	5,481	41	_	5,522
	2,887	7,105	6,202	-	849	-	7,051	38,263	269		38,532
_	287 201	600 489	461 423	_	63 58	_	524 481	2,842 2,611	27 19	_	2,869 2,630
_	161	418	378	_	52	_	430	2,330	15	_	2,345
_	3,485 23,098	8,468 58,000	7,327 51,321	_	1,003 7,022	_	8,330 58,343	45,204 316,627	325 2,151	_	45,529 318,778
	2,394	5,119	4,006		548		4,554	24,718	223		24,941
_	2,912 4,044	7,522 10,031	6,779 8,804	_	928 1,205	_	7,707 10,009	41,823 54,317	271 377	_	42,094 54,694
_	34,278	85,741	75,673	_	10,354	_	86,027	466,869	3,192	_	470,061
	125,001	326,689	296,571		40,578		337,149	1,829,702	11,640		1,841,342
_	5,658 10,149	13,595 25,906	11,671 23,169	_	1,597 3,170	_	13,268 26,339	72,003 142,944	527 945	_	72,530 143,889
_	151 178	412 490	384 458	_	53 63	_	437 521	2,371	14	_	2,385
_	3,963	9,692	8,424	_	1,153	_	9,577	2,827 51,975	17 369	_	2,844 52,344
_	288	756	688		94		782	4,244	27		4,271
_	531 392	1,460 1,093	1,366 1,030	_	187 141	_	1,553 1,171	8,425 6,355	49 37	_	8,474 6,392
_	485	1,319	1,227	_	168	_	1,395	7,567	45	_	7,612
	1,263	3,436	3,195		437		3,632	19,713	118		19,831
_	980 5,683	2,940 13,178	2,882 11,020	_	394 1,508	_	3,276 12,528	17,778 67,991	91 529	_	17,869 68,520
_	2,665	6,810	6,095	_	834	_	6,929	37,605	248	_	37,853
_	8,783 1,024	21,519 2,545	18,728 2,236	_	2,562 306	_	21,290 2,542	115,541 13,796	818 95	_	116,359 13,891
	4,537	11,032	9,550		1,307		10,857	58,918	422		59,340
_	137	280 35	210 52	_	29 7	 81	239 140	1,296 319	13 (8)	_	1,309 311
_	172	425	372	_	51	—	423	2,298	16	_	2,314
	263	642	558		76		634	3,442	25		3,467
_	388 392	980 924	870 782	_	119 107	_	989 889	5,369 4,822	36 36	_	5,405 4,858
_	544	1,251	1,039	_	142	_	1,181	6,413	51	_	6,464
_	339 1,709	893 3,952	815 3,299	_	112 451	_	927 3,750	5,029 20,353	32 159	_	5,061 20,512
	768	1,828	1,558		213		1,771	9,612	72		9,684
_	666	1,398	1,076	_	147	_	1,223	6,637	62	_	6,699
	1,670	4,538	4,218		577		4,795	26,021	156	_	26,177

Schedule of Employer Allocations and Pension Amounts (Continued)

		Employer	Net Pension	Net Pension Liability/(Asset)	Net Pension Liability/(Asset)	Differences Between Expected	Net Difference Between Projected and Actual Investment Earnings on	
Participating Employer	Employer Contributions	Allocation Percentage	Liability/(Asset) (7.50% Discount)	1.00% Decrease (6.50%)	1.00% Increase (8.50%)	and Actual Experience	Pension Plan Investments	
City of Orem City of Riverton City of Santa Clara City of Saratoga Springs City of South Jordan	\$ 139,099 75,391 16,525 47,613 128,393	0.2589627% 0.1403570 0.0307646 0.0886421 0.2390321	\$ (565) (306) (67) (194) (522)	103,669 56,188 12,316 35,485 95,690	(79,565) (43,124) (9,452) (27,235) (73,441)	_ _ _ _	14,658 7,944 1,741 5,017 13,530	
City of South Salt Lake City of St George City of Taylorsville City of Uintah City of Washington Terrace	79,793 351,392 30,868 3,479 7,656	0.1485526 0.6541921 0.0574684 0.0064765 0.0142525	(324) (1,428) (125) (14) (31)	59,469 261,888 23,006 2,593 5,706	(45,642) (200,997) (17,657) (1,990) (4,379)		8,408 37,028 3,253 367 807	~~~~~
City of Wendover City of West Haven City of West Jordan Clearfield City Cleveland Town	4,630 8,714 145,295 50,947 2,065	0.0086196 0.0162232 0.2704988 0.0948483 0.0038449	(19) (35) (590) (207) (8)	3,451 6,495 108,287 37,970 1,539	(2,648) (4,984) (83,109) (29,142) (1,181)		488 918 15,311 5,369 218	~~~~
Clinton City Coalville City Color Country Uniserv Cottonwood Heights City Cottonwood Heights Parks & Recreation Service	11,242 7,136 1,314 21,974 8,928	0.0209288 0.0132859 0.0024463 0.0409095 0.0166216	(46) (29) (5) (89) (36)	8,378 5,319 979 16,377 6,654	(6,430) (4,082) (752) (12,569) (5,107)	_ _ _ _	1,185 752 138 2,316 941	
Cottonwood Imp District Council On Aging — Golden Age Special Service District Daggett County Daggett School District Davis & Weber Counties Canal Company	8,084 4,012 12,489 13,846 3,362	0.0150509 0.0074683 0.0232503 0.0257774 0.0062588	(33) (16) (51) (56) (14)	6,025 2,990 9,308 10,319 2,506	(4,624) (2,295) (7,144) (7,920) (1,923)	_ _ _ _	852 423 1,316 1,459 354	
Davis Applied Technology College Davis Behavioral Health Inc Davis County Housing Authority Davis County Mosquito Abatement Davis County	17,510 132,481 7,961 1,913 248,449	0.0325978 0.2466415 0.0148213 0.0035619 0.4625418	(71) (538) (32) (8) (1,010)	13,050 98,736 5,933 1,426 185,166	(10,016) (75,779) (4,554) (1,094) (142,114)	_ _ _ _	1,845 13,960 839 202 26,181	
Davis School District DDI Vantage Delta City Dixie State University Duchesne County	2,187,382 92,541 9,658 53,050 75,870	4.0722871 0.1722845 0.0179797 0.0987636 0.1412494	(8,890) (376) (39) (216) (308)	1,630,229 68,969 7,198 39,537 56,545	(1,251,189) (52,934) (5,524) (30,345) (43,398)		230,498 9,752 1,018 5,590 7,995	
Duchesne School District Eagle Mountain City East Carbon City East Hollywood High School Educators Mutual Insurance	307,772 51,233 5,302 29,523 27,658	0.5729846 0.0953808 0.0098704 0.0549641 0.0514922	(1,251) (208) (22) (120) (112)	229,379 38,183 3,951 22,003 20,614	(176,047) (29,305) (3,033) (16,887) (15,821)	_ _ _ _	32,432 5,399 559 3,111 2,915	
Elk Ridge City Emery County Care & Rehabilitation Center Emery County Emery County Recreation Special Service District Emery School District	12,125 16,099 29,866 5,617 82,891	0.0225731 0.0299720 0.0556020 0.0104569 0.1543201	(49) (65) (121) (23) (337)	9,037 11,998 22,259 4,186 61,778	(6,935) (9,209) (17,083) (3,213) (47,414)	_ _ _ _	1,278 1,696 3,147 592 8,735	
Emery Water Conservancy District Enoch City Ephraim City Fairview City Farmington City	7,483 6,880 11,593 2,077 41,327	0.0139309 0.0128077 0.0215828 0.0038674 0.0769399	(30) (28) (47) (8) (168)	5,577 5,127 8,640 1,548 30,801	(4,280) (3,935) (6,631) (1,188) (23,639)	_ _ _ _	789 725 1,222 219 4,355	
Fast Forward Charter High School Ferron City Fillmore City Five-County Association of Governments Fruit Heights City	12,917 3,122 4,609 31,340 3,882	0.0240487 0.0058122 0.0085807 0.0583467 0.0072274	(52) (13) (19) (127) (16)	9,627 2,327 3,435 23,358 2,893	(7,389) (1,786) (2,636) (17,927) (2,221)		1,361 329 486 3,303 409	
Garfield County Garfield School District Garland City	12,312 24,307 997	0.0229216 0.0452531 0.0018567	(50) (99) (4)	9,176 18,116 743	(7,043) (13,904) (570)		1,297 2,561 105	

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Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
	10.002	25.244	24 552		2.040		24.502	422.074	225		122.060
_	10,683	25,341	21,553	_	2,949	_	24,502	132,974	995	_	133,969
	5,118 1,117	13,062 2,858	11,682 2,561	_	1,598 350	_	13,280 2,911	72,072 15,797	477 104	_	72,549 15,901
	3,858	2,838 8,875	7,378	_	1,009		8,387	45,517	359	_	45,876
<u> </u>	9,487	23,017	19,895	_	2,722	_	22,617	122,740	883	_	123,623
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~
_	5,462	13,870	12,364	_	1,692	_	14,056	76,280	509	_	76,789
_	24,602 2,017	61,630 5,270	54,448 4,783	_	7,450 654		61,898 5,437	335,919 29,509	2,291 188	_	338,210 29,697
	214	581	539	_	74		613	3,326	20	_	3,346
_	522	1,329	1,186	_	162	_	1,348	7,318	49	_	7,367
	706	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~	77	~~~~~	~~~~~
_	286 610	774 1,528	717 1,350	_	98 185	_	815 1,535	4,426 8,330	27 57	_	4,453 8,387
_	11,238	26,549	22,513	_	3,080	_	25,593	138,898	1,046	_	139,944
_	3,664	9,033	7,894	_	1,080	_	8,974	48,703	341	_	49,044
_	165	383	320	_	44	_	364	1,974	15	_	1,989
	785	1,970	1,742	~~~~~	238		1,980	10,747	73		10,820
_	560	1,312	1,106	_	151	_	1,257	6,822	52	_	6,874
_	111	249	204	_	28	_	232	1,256	10	_	1,266
_	1,642	3,958	3,405	_	466	_	3,871	21,007	153	_	21,160
_	578	1,519	1,383		189		1,572	8,535	54		8,589
_	557	1,409	1,253	_	171	_	1,424	7,728	52	_	7,780
_	245	668	622	_	85	_	707	3,835	23	_	3,858
_	824	2,140	1,935	_	265 294	_	2,200	11,939	77	_	12,016
_	996 226	2,455 580	2,145 521	_	71	_	2,439 592	13,236 3,214	93 21	_	13,329 3,235
	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	1,399 9,383	3,244 23,343	2,713 20,528	_	371 2,809	_	3,084 23,337	16,739 126,647	130 874	_	16,869 127,521
	540	1,379	1,234	_	169		1,403	7,611	50	_	7,661
_	56	258	296	_	41	_	337	1,829	5	_	1,834
_	17,431	43,612	38,497	_	5,267	_	43,764	237,509	1,623	_	239,132
_	152,335	382,833	338,935		46,374		385,309	2,091,067	14,185		2,105,252
_	6,286	16,038	14,339	_	1,962	_	16,301	88,466	585	_	89,051
_	744	1,762	1,496	_	205	_	1,701	9,232	69	_	9,301
_	3,575	9,165	8,220	_	1,125	_	9,345	50,714	333	_	51,047
_	5,081	13,076	11,756		1,609		13,365	72,530	473		73,003
_	21,384	53,816	47,689	_	6,525	_	54,214	294,220	1,991	_	296,211
_	3,636	9,035	7,939	_	1,086	_	9,025	48,977	339	_	49,316
_	316	875 5 147	822 4 575	_	112	_	934 5 201	5,068	29	_	5,097
	2,036 1,460	5,147 4,375	4,575 4,286	_	626 586	_	5,201 4,872	28,223 26,441	190 136	_	28,413 26,577
	~~~~	~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
	1,022 1,025	2,300 2,721	1,879 2,495	_	257 341	_	2,136 2,836	11,591 15,390	95 95	_	11,686 15,485
	2,197	5,344	4,628	_	633	_	5,261	28,551	205	_	28,756
_	350	942	870	_	119	_	989	5,369	33	_	5,402
_	5,801	14,536	12,844	_	1,757	_	14,601	79,241	540	_	79,781
_	461	1,250	1,159	_	159		1,318	7,153	43	_	7,196
_	469	1,194	1,066	_	146	_	1,212	6,577	44	_	6,621
_	829	2,051	1,796	_	246	_	2,042	11,082	77	_	11,159
_	204	423	322	_	44	_	366	1,986	19	_	2,005
	3,048	7,403	6,404		876		7,280	39,508	284		39,792
_	870	2,231	2,002	_	274	_	2,276	12,349	81	_	12,430
_	278	607	484	_	66	_	550	2,984	26	_	3,010
_	365 2,018	851 5,321	714 4.856	_	98 664	_	812 5 520	4,406 29,960	34 188	_	4,440 30 148
	2,018	633	4,856 602	_	664 82	_	5,520 684	3,711	188 21	_	30,148 3,732
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	835 1.456	2,132	1,908	_	261 515	_	2,169 4 281	11,770	78 136	_	11,848
_	1,456 101	4,017 206	3,766 155	_	515 21	_	4,281 176	23,237 953	136 9	_	23,373 962
	101	200	100		۷۱		1/0	,,,,	,		702

Schedule of Employer Allocations and Pension Amounts (Continued)

						Differences	Net Difference Between Projected and Actual	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Between Expected and Actual Experience	Investment Earnings on Pension Plan Investments	
Grand County Cemetery Maintenance District Grand County Grand School District Grand Water/Sewer Service Granger-Hunter Improvement District	\$ 4,415 58,292 131,801 2,428 34,328	0.0082194% 0.1085237 0.2453760 0.0045203 0.0639096	\$ (18) (237) (536) (10) (140)	3,290 43,445 98,230 1,810 25,584	(2,525) (33,343) (75,391) (1,389) (19,636)	_ _ _ _	465 6,143 13,889 256 3,617	
Granite School District Grantsville City Gunnison City Gunnison Valley Hospital Heber City	2,610,443 11,279 2,599 41,487 43,734	4.8599077 0.0209987 0.0048386 0.0772378 0.0814209	(10,609) (46) (11) (169) (178)	1,945,532 8,406 1,937 30,920 32,595	(1,493,181) (6,452) (1,487) (23,731) (25,016)		275,079 1,189 274 4,372 4,609	
Heber Light & Power Heber Valley Historic Railroad Herriman City High Desert Uniserv Highland City	26,981 13,990 61,871 1,314 13,839	0.0502315 0.0260447 0.1151862 0.0024463 0.0257634	(110) (57) (251) (5) (56)	20,109 10,426 46,112 979 10,314	(15,433) (8,002) (35,390) (752) (7,916)		2,843 1,474 6,520 138 1,458	~~~~~
Hooper City Hooper Water Improvement District Housing Authority of Salt Lake County Housing Authority of SLC Housing Authority Ogden City	6,595 2,636 86,038 50,791 6,623	0.0122784 0.0049077 0.1601784 0.0945589 0.0123304	(27) (11) (350) (206) (27)	4,915 1,965 64,123 37,854 4,936	(3,772) (1,508) (49,214) (29,053) (3,788)		695 278 9,066 5,352 698	~~~~~
Huntington City Hurricane City Hurricane Valley Fire Special Service District Hyde Park City Hyrum City	806 27,592 950 3,189 4,714	0.0015011 0.0513689 0.0017688 0.0059368 0.0087766	(3) (112) (4) (13) (19)	601 20,564 708 2,377 3,513	(461) (15,783) (543) (1,824) (2,697)	_ _ _ _	85 2,908 100 336 497	
Intech Collegiate High School Iron County Iron School District Itineris High School Ivins City	16,906 67,233 262,117 12,896 21,617	0.0314749 0.1251687 0.4879874 0.0240090 0.0402451	(69) (273) (1,065) (52) (88)	12,600 50,108 195,352 9,611 16,111	(9,670) (38,457) (149,932) (7,377) (12,365)	_ _ _ _	1,782 7,085 27,621 1,359 2,278	
Jordan River Commission Jordan School District Jordan Valley Water Conservancy Jordanelle Special Service District Juab County	1,042 2,260,071 61,743 13,735 7,132	0.0019392 4.2076149 0.1149477 0.0255708 0.0132784	(4) (9,185) (251) (56) (29)	776 1,684,404 46,016 10,237 5,316	(596) (1,292,768) (35,317) (7,856) (4,080)	_ _ _ _	110 238,158 6,506 1,447 752	
Juab School District Kane County Kane County Water Conservancy District Kane School District Kaysville City	67,679 79,317 8,277 80,196 33,469	0.1259995 0.1476653 0.0154095 0.1493029 0.0623104	(275) (322) (34) (326) (136)	50,440 59,114 6,169 59,769 24,944	(38,713) (45,369) (4,734) (45,873) (19,145)	_ _ _ _	7,132 8,358 872 8,451 3,527	
Kearns Improvement District Laverkin City Layton City Lehi City Lewiston City	14,267 2,550 101,183 78,161 1,347	0.0265604 0.0047470 0.1883733 0.1455133 0.0025072	(58) (10) (411) (318) (5)	10,633 1,900 75,410 58,252 1,004	(8,161) (1,458) (57,877) (44,708) (770)	_ _ _ _	1,503 269 10,662 8,236 142	
Liberty Academy Charter Lindon City Logan City Logan School District Maeser Water Improvement District	61,750 15,366 142,736 286,317 644	0.1149619 0.0286081 0.2657340 0.5330405 0.0011994	(251) (62) (580) (1,164) (3)	46,022 11,452 106,379 213,388 480	(35,321) (8,790) (81,645) (163,774) (369)	_ _ _ _	6,507 1,619 15,041 30,171 68	
Manti City Mapleton City Metro Water District SLC/Sandy Midvale City Midvalley Improvement District	5,879 6,040 21,507 57,852 6,911	0.0109451 0.0112444 0.0400407 0.1077038 0.0128656	(24) (25) (87) (235) (28)	4,382 4,501 16,029 43,116 5,150	(3,363) (3,455) (12,302) (33,091) (3,953)		620 636 2,266 6,096 728	
Midway City Millard County Care & Rehabilitation Inc Millard County	17,904 29,246 24,261	0.0333319 0.0544486 0.0451672	(73) (119) (99)	13,344 21,797 18,081	(10,241) (16,729) (13,877)		1,887 3,082 2,557	

Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Changes of Assumptions Changes of Contributions Changes of Assumptions Changes of Assumptions Changes of Contributions Changes of Contributions	Employer-Paid Member contributions - 4,263 - 56,133 - 126,894 - 2,344 - 33,057 - 2,512,570 - 10,864 - 2,499 - 39,904 - 42,099 - 25,975 - 13,471 - 59,573
— 447 912 684 — 94 — 778 4,221 42 — — 4,366 10,509 9,032 — 1,236 — 10,268 55,726 407 — — 9,636 23,525 20,423 — 2,794 — 23,217 125,997 897 — — 246 502 376 — 51 — 427 2,321 23 — — 2,577 6,194 5,319 — 728 — 6,047 32,817 240 — — 183,311 458,390 404,488 — 55,344 — 459,832 2,495,500 17,070 — — 868 2,057 1,748 — 239 — 1,987 10,783 81 — — 155 429 403 — 55 — 458 2,485 14 — — 2,609 6,981 6,428 — 880 — 7,308 39,661	56,133 126,894 2,344 33,057 2,512,570 10,864 2,499 39,904 42,099 25,975 13,471 59,573 1,266
— 4,366 10,509 9,032 — 1,236 — 10,268 55,726 407 — — 9,636 23,525 20,423 — 2,794 — 23,217 125,997 897 — — 246 502 376 — 51 — 427 2,321 23 — — 2,577 6,194 5,319 — 728 — 6,047 32,817 240 — — 183,311 458,390 404,488 — 55,344 — 459,832 2,495,500 17,070 — — 868 2,057 1,748 — 239 — 1,987 10,783 81 — — 155 429 403 — 55 — 458 2,485 14 — — 2,609 6,981 6,428 — 880 — 7,308 39,661 243 —	56,133 126,894 2,344 33,057 2,512,570 10,864 2,499 39,904 42,099 25,975 13,471 59,573 1,266
— 868 2,057 1,748 — 239 — 1,987 10,783 81 — — 155 429 403 — 55 — 458 2,485 14 — — 2,609 6,981 6,428 — 880 — 7,308 39,661 243 —	10,864 2,499 39,904 42,099 25,975 13,471 59,573 1,266
155 429 403 55 458 2,485 14 2,609 6,981 6,428 880 7,308 39,661 243	10,864 2,499 39,904 42,099 25,975 13,471 59,573 1,266
	13,471 59,573 1,266
— 1,950 4,793 4,181 — 572 — 4,753 25,793 182 —	13,471 59,573 1,266
— 1,038 2,512 2,168 — 297 — 2,465 13,374 97 — — 4,578 11,098 9,587 — 1,312 — 10,899 59,147 426 — — 111 249 204 — 28 — 232 1,256 10 — — 492 1,950 2,144 — 293 — 2,437 13,229 46 —	13,213
<u> </u>	6,351
	2,539 82,844 48,867
_ 7 92 125 <u>_ 17 _ 142 771 1 _ </u>	772
/ 92 125 1/ 142 //1 1 2,140 5,048 4,275 585 4,860 26,377 199 96 196 147 20 167 908 9	
323 659 494 68 562 3,048 30 262 759 730 100 830 4,507 24	3,010
— 1,311 3,093 2,620 — 358 — 2,978 16,162 122 — — 4,126 11,211 10,418 — 1,425 — 11,843 64,273 384 — — 17,348 44,969 40,615 — 5,557 — 46,172 250,575 1,615 — — 936 2,295 1,998 — 273 — 2,271 12,328 87 —	64,657 - 252,190 - 12,415
— 1,701 3,979 3,350 — 458 — 3,808 20,665 158 —	20,823
— 105 215 161 — 22 — 183 996 10 — — 150,986 389,144 350,198 — 47,915 — 398,113 2,160,556 14,060 — — 4,578 11,084 9,567 — 1,309 — 10,876 59,024 426 — — 1,285 2,732 2,128 — 291 — 2,419 13,130 120 — — 260 1,012 1,105 — 151 — 1,256 6,818 24 —	59,450
— 5,074 12,206 10,487 — 1,435 — 11,922 64,699 473 — — 5,541 13,899 12,290 — 1,682 — 13,972 75,824 516 —	65,172 - 76,340
— 564 1,436 1,283 — 175 — 1,458 7,913 52 — — 5,776 14,227 12,426 — 1,700 — 14,126 76,665 538 — — 2,432 5,959 5,186 — 710 — 5,896 31,996 226 —	
— 887 2,390 2,211 — 302 — 2,513 13,638 83 — — 168 437 395 — 54 — 449 2,438 16 — — 7,269 17,931 15,678 — 2,145 — 17,823 96,727 677 — — 5,416 13,652 12,111 — 1,657 — 13,768 74,719 504 —	97,404
— 136 278 209 — 29 — 238 1,287 13 — — 4,567 11,074 9,568 — 1,309 — 10,877 59,031 425 —	1,300
— 1,074 2,693 2,381 — 326 — 2,707 14,690 100 — — 10,478 25,519 22,117 — 3,026 — 25,143 136,451 976 — — 20,049 50,220 44,365 — 6,070 — 50,435 273,709 1,867 — — — 68 100 — 14 57 171 616 (5) —	14,790 137,427 275,576
— 197 817 911 — 125 — 1,036 5,620 18 — — 533 1,169 936 — 128 — 1,064 5,774 50 — — 1,455 3,721 3,333 — 456 — 3,789 20,560 135 — — 3,868 9,964 8,964 — 1,227 — 10,191 55,305 360 — — 392 1,120 1,071 — 147 — 1,218 6,606 37 —	5,824 20,695 55,665
— 1,404 3,291 2,774 — 380 — 3,154 17,116 131 — — 1,825 4,907 4,532 — 620 — 5,152 27,959 170 — — 1,776 4,333 3,759 — 514 — 4,273 23,193 165 —	- 17,247 - 28,129

Schedule of Employer Allocations and Pension Amounts (Continued)

						Differences	Net Difference Between Projected and Actual	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Between Expected and Actual Experience	Investment Earnings on Pension Plan Investments	
Millard School District Minersville Town Monroe City Monticello Academy Morgan City Corporation	\$ 113,761 354 1,394 46,814 3,497	0.2117907% 0.0006595 0.0025949 0.0871541 0.0065101	\$ (462) (1) (6) (190) (14)	84,785 264 1,039 34,890 2,606	(65,072) (203) (797) (26,778) (2,000)	_ _ _ _	11,988 37 147 4,933 368	
Morgan County Morgan School District Moroni City Mount Pleasant City Mountain Regional Water Special Service District	19,101 80,422 3,504 11,491 21,336	0.0355607 0.1497234 0.0065239 0.0213930 0.0397209	(78) (327) (14) (47) (87)	14,236 59,938 2,612 8,564 15,901	(10,926) (46,002) (2,004) (6,573) (12,204)		2,013 8,475 369 1,211 2,248	
Mountainland Association of Governments Mt Olympus Improvement District Murray City Murray School District Ne Counseling Center	26,217 13,835 129,336 204,276 36,065	0.0488088 0.0257577 0.2407870 0.3803034 0.0671420	(107) (56) (526) (830) (147)	19,539 10,311 96,393 152,244 26,878	(14,996) (7,914) (73,981) (116,846) (20,629)		2,763 1,458 13,629 21,526 3,800	~~~~~
Nebo Credit Union Nebo School District Nephi City Nibley City Corporation No Emery Water Users Special Service District	5,362 1,342,352 12,364 16,912 4,324	0.0099833 2.4990808 0.0230178 0.0314853 0.0080497	(22) (5,455) (50) (69) (18)	3,997 1,000,439 9,215 12,604 3,222	(3,067) (767,830) (7,072) (9,674) (2,473)	_ _ _ _	565 141,452 1,303 1,782 456	
Noah Webster Academy Inc North Davis County Sewer District North Fork Special Service District North Logan City North Ogden City	29,501 14,461 432 12,898 26,093	0.0549220 0.0269226 0.0008044 0.0240126 0.0485772	(120) (59) (2) (52) (106)	21,987 10,778 322 9,613 19,447	(16,874) (8,272) (247) (7,378) (14,925)	_ _ _ _	3,109 1,524 46 1,359 2,750	
North Pointe Solid Waste North Sanpete School District North Summit School District Nuames Charter School Ogden City Corp	18,032 73,904 23,263 30,001 206,536	0.0335711 0.1375877 0.0433096 0.0558532 0.3845126	(73) (300) (95) (122) (839)	13,439 55,079 17,338 22,359 153,929	(10,315) (42,273) (13,307) (17,161) (118,140)	_ _ _ _	1,900 7,788 2,451 3,161 21,764	
Ogden School District Ogden Weber/NEA/UEA Uniserv Ogden-Weber Applied Technology Center Panguitch City Corporation Park City	844,154 5,855 8,914 7,629 326,780	1.5715767 0.0108999 0.0165954 0.0142038 0.6083725	(3,431) (24) (36) (31) (1,328)	629,138 4,363 6,644 5,686 243,545	(482,859) (3,349) (5,099) (4,364) (186,919)	 	88,954 617 939 804 34,435	
Park City Fire Service Park City School District Parowan City Payson City Perry City	10,875 309,642 7,081 63,791 5,776	0.0202460 0.5764658 0.0131829 0.1187609 0.0107532	(44) (1,258) (29) (259) (23)	8,105 230,772 5,277 47,543 4,305	(6,220) (177,116) (4,050) (36,489) (3,304)	_ _ _ _	1,146 32,629 746 6,722 609	
Piute County Piute School District Plain City Pleasant Grove City Pleasant View City	5,022 20,207 1,805 33,873 3,760	0.0093487 0.0376190 0.0033613 0.0630622 0.0069992	(20) (82) (7) (138) (15)	3,742 15,060 1,346 25,245 2,802	(2,872) (11,558) (1,033) (19,376) (2,150)		529 2,129 190 3,569 396	
Price City Price River Water Improvement Providence City Provo City Corp Provo Housing Authority	25,830 5,508 2,567 352,938 12,438	0.0480889 0.0102535 0.0047790 0.6570717 0.0231552	(105) (22) (10) (1,434) (51)	19,251 4,105 1,913 263,041 9,270	(14,775) (3,150) (1,468) (201,882) (7,114)	_ _ _ _	2,722 580 270 37,191 1,311	
Provo River Water Users Provo School District Recreation & Habilitation Services Rich County Rich School District	5,762 896,421 1,624 17,899 19,650	0.0107278 1.6688829 0.0030239 0.0333238 0.0365820	(23) (3,643) (7) (73) (80)	4,295 668,092 1,211 13,340 14,645	(3,296) (512,756) (929) (10,239) (11,240)		607 94,462 171 1,886 2,071	
Richfield City Richmond City Riverdale City	898 2,530 2,530	0.0016723 0.0047110 0.0047096	(4) (10) (10)	669 1,886 1,885	(514) (1,447) (1,447)		95 267 267	

	Deferred Outflow	of Resources Deferred Inflows of Resources to Employer-Paid Member Contrib					er Contributions				
	Changes in Proportion and			Net		Changes in Proportion and			et Amortization of Deferred Amounts from Changes in Proportion and		Total
	Differences Between			Difference Between		Differences Between			Differences Between		Employer Net Pension
	Employer Contributions		Differences	Projected and Actual		Employer Contributions		Proportionate Share of	Employer Contributions		Expense Excluding That
	and Proportionate	Total Deferred	Between Expected	Investment Earnings on		and Proportionate	Total Deferred	Allocable Plan Gross	and Proportionate	Proportionate Share of	Attributable to Employer-Paid
Changes of Assumptions	Share of Contributions	Outflows of Resources	and Actual Experience	Pension Plan Investments	Changes of Assumptions	Share of Contributions	Inflows of Resources	Pension Expense	Share of Contributions	Nonemployer Contributions	Member Contributions
_	8,237	20,225	17,627	_	2,412	_	20,039	108,752	767	_	109,519
_	36 85	73 232	55 216	_	8 30	_	63 246	339 1,332	3	_	342 1,340
_	3,068	8,001	7,254	_	992		8,246	44,753	286		45,039
	308	676	542		74		616	3,343	29		3,372
_	1,241 6,159	3,254 14,634	2,960 12,461	_	405 1,705	_	3,365 14,166	18,260 76,881	116 574	_	18,376 77,455
_	211	580	543	_	74	_	617	3,350	20	_	3,370
_	893	2,104	1,781	_	244	_	2,025	10,985	83	_	11,068
	1,396	3,644	3,306		452		3,758	20,396	130		20,526
	1,952 1,000	4,715 2,458	4,062 2,144	_	556 293	_	4,618 2,437	25,063 13,226	182 93	_	25,245 13,319
_	9,127	22,756	20,041	_	2,742		22,783	123,641	850	_	124,491
_	14,359 2,583	35,885 6,383	31,652 5,588	_	4,331 765	_	35,983 6,353	195,281 34,477	1,337 241	_	196,618 34,718
	483	1,048	831	~~~~~	114	<u>-</u>	945	5,126	45		5,171
_	92,142	233,594	207,997	_	28,459	_	236,456	1,283,246	8,580	_	1,291,826
_	1,136	2,439	1,916	_	262	_	2,178	11,819	106	_	11,925
_	1,095 256	2,877 712	2,621 670	_	359 92	_	2,980 762	16,167 4,133	102 24	_	16,269 4,157
	1,642	4,751	4,571	~~~~~~	625	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	5,196	28,202	153		28,355
_	1,202	2,726	2,241	_	307		2,548	13,824	112		13,936
_	44	90	67	_	9	_	76	413	4	_	417
_	909 1,988	2,268 4,738	1,999 4,043	_	273 553	_	2,272 4,596	12,330 24,944	85 185	_	12,415 25,129
	1,213	3,113	2,794	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	382		3,176	17,238	113		17,351
_	5,635	13,423	11,451	_	1,567	_	13,018	70,650	525	_	71,175
_	1,576 2,297	4,027 5,458	3,605 4,649	_	493 636	_	4,098 5,285	22,239 28,680	147 214	_	22,386 28,894
_	15,066	36,830	32,003	_	4,379	_	36,382	197,442	1,403	_	198,845
_	57,438	146,392	130,802	_	17,897	_	148,699	806,984	5,349	_	812,333
_	347 552	964 1,491	907 1,381	_	124 189	_	1,031 1,570	5,597 8,522	32 51	_	5,629 8,573
_	619	1,423	1,182	_	162	_	1,344	7,293	58	_	7,351
	24,833	59,268	50,635		6,928		57,563	312,391	2,312		314,703
_	788 21,402	1,934 54,031	1,685 47,979	_	231 6,565	_	1,916 54,544	10,396 296,008	73 1,993	_	10,469 298,001
_	593	1,339	1,097	_	150	_	1,247	6,769	55	_	6,824
	4,727 534	11,449 1,143	9,884 895	_	1,352 122	_	11,236 1,017	60,982 5,522	440 50	_	61,422 5,572
_	360	889	778	_	106		884	4,800	34	_	4,834
_	1,606	3,735 274	3,131 280	_	428	_	3,559	19,317	150	_	19,467
	84 2,873	6,442	5,249	_	38 718	_	318 5,967	1,726 32,382	8 268	_	1,734 32,650
_	329	725	583	_	80	_	663	3,594	31	_	3,625
_	1,888	4,610	4,002	_	548	_	4,550	24,693	176	_	24,869
_ _	281 194	861 464	853 398	_	117 54	_	970 452	5,265 2,454	26 18	_	5,291 2,472
_	24,234	61,425	54,688	_	7,483	_	62,171	337,398	2,257	_	339,655
	624	1,935	1,927		264		2,191	11,890	58		11,948
_	226 59,837	833 154,299	893 138,900	_	122 19,005	_	1,015 157,905	5,509 856,950	21 5,572	_	5,530 862,522
_	153	324	252	_	19,005	_	157,905	1,553	3,372 14	_	1,567
_	1,097	2,983	2,774	_	379	_	3,153	17,111	102	_	17,213
	1,110	3,181	3,045	-	417		3,462	18,784	103		18,887
	257	95 524	139 392	_	19 54	37	195 446	859 2,419	(3) 24	_	856 2,443
_	117	384	392	_	54	_	446	2,418	11	_	2,429

Schedule of Employer Allocations and Pension Amounts (Continued)

						Differences	Net Difference Between Projected and Actual	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Between Expected and Actual Experience	Investment Earnings on Pension Plan Investments	
Roosevelt City Roy City S Utah Valley Electric Services District S Utah Valley Solid Waste Salem City	\$ 12,205 41,384 13,240 1,502 8,754	0.0227220% 0.0770444 0.0246482 0.0027958 0.0162981	\$ (50) (168) (54) (6) (36)	9,096 30,843 9,867 1,119 6,525	(6,981) (23,671) (7,573) (859) (5,008)	_ _ _ _	1,286 4,361 1,395 158 923	
Salina City Salt Lake Arts Academy Salt Lake City Corp Salt Lake City Public Library Salt Lake Community College	1,491 27,695 1,384,628 54,044 324,348	0.0027764 0.0515606 2.5777860 0.1006147 0.6038448	(6) (113) (5,627) (220) (1,318)	1,111 20,641 1,031,946 40,278 241,733	(853) (15,842) (792,011) (30,913) (185,528)		157 2,918 145,907 5,695 34,179	
Salt Lake County Salt Lake School District San Juan County San Juan Mental Health San Juan School District	1,703,842 1,121,029 35,425 9,485 210,752	3.1720734 2.0870398 0.0659508 0.0176592 0.3923600	(6,925) (4,556) (144) (39) (857)	1,269,853 835,490 26,402 7,069 157,071	(974,603) (641,232) (20,263) (5,426) (120,551)	_ _ _ _	179,545 118,130 3,733 1,000 22,208	
Sandy City Sandy Suburban Improvement District Sanpete County Santaquin City Sevier County	155,841 3,514 27,968 15,403 25,927	0.2901317 0.0065429 0.0520678 0.0286768 0.0482695	(633) (14) (114) (63) (105)	116,146 2,619 20,844 11,480 19,323	(89,141) (2,010) (15,998) (8,811) (14,831)	_ _ _ _	16,422 370 2,947 1,623 2,732	
Sevier School District Six-County Association of Governments SLC Mosquito Abatement Smithfield City Corp Snow College	140,850 5,593 9,229 21,206 42,211	0.2622230 0.0104119 0.0171819 0.0394788 0.0785855	(572) (23) (38) (86) (172)	104,974 4,168 6,878 15,804 31,460	(80,567) (3,199) (5,279) (12,130) (24,145)	_ _ _ _	14,842 589 973 2,235 4,448	
Snyderville Basin Water Reclamation District So Davis Recreation Center So Salt Lake Valley Mosquito Abatement Soldier Hollow Charter School Solid Waste Special Service District #1	18,838 7,344 4,718 12,599 9,235	0.0350717 0.0136725 0.0087842 0.0234555 0.0171922	(77) (30) (19) (51) (38)	14,040 5,473 3,517 9,390 6,882	(10,776) (4,201) (2,699) (7,207) (5,282)	_ _ _ _ _	1,985 774 497 1,328 973	
South Davis Sewer District South Ogden City South Ogden Conservancy District South Sanpete School District South Summit School District	3,633 19,491 12,526 123,117 67,619	0.0067634 0.0362875 0.0233201 0.2292100 0.1258870	(15) (79) (51) (500) (275)	2,708 14,527 9,336 91,758 50,395	(2,078) (11,149) (7,165) (70,424) (38,678)	_ _ _ _	383 2,054 1,320 12,974 7,125	
South Valley Sewer District South Valley Water Reclamation South Weber City Southeastern Utah Association of Governments Southeastern Utah Health	51,846 32,855 11,078 7,298 8,616	0.0965231 0.0611668 0.0206238 0.0135863 0.0160396	(211) (134) (45) (30) (35)	38,640 24,486 8,256 5,439 6,421	(29,656) (18,793) (6,337) (4,174) (4,928)	_ _ _ _	5,463 3,462 1,167 769 908	
Southern Utah University Southwest Applied Technology Southwest Education Development Center Space Dynamics Lab / USU Spanish Fork City	96,447 30,141 12,738 27,146 92,059	0.1795573 0.0561137 0.0237146 0.0505374 0.1713882	(392) (122) (52) (110) (374)	71,881 22,464 9,493 20,231 68,611	(55,168) (17,241) (7,286) (15,527) (52,658)	_ _ _ _	10,163 3,176 1,342 2,861 9,701	
Springville City St George Housing Authority State of Utah Success Academy Summit Academy High School	65,558 1,209 9,486,382 18,712 66,799	0.1220505 0.0022509 17.6609657 0.0348363 0.1243606	(266) (5) (38,554) (76) (271)	48,860 901 7,070,087 13,946 49,784	(37,499) (692) (5,426,240) (10,703) (38,209)	_ _ _ _	6,908 127 999,641 1,972 7,039	
Summit Academy Inc Summit County Sunset City Sw Behavioral Health Center Sw Mosquito Abatement/Control	140,082 123,521 1,763 136,772 4,922	0.2607936 0.2299607 0.0032813 0.2546317 0.0091642	(569) (502) (7) (556) (20)	104,402 92,059 1,314 101,935 3,669	(80,127) (70,654) (1,008) (78,234) (2,816)		14,761 13,016 186 14,413 519	
SW UT Public Health Department Syracuse City Corp Taylor West Weber Water Improvement District	39,738 34,390 4,524	0.0739813 0.0640237 0.0084224	(162) (140) (18)	29,616 25,630 3,372	(22,730) (19,671) (2,588)		4,187 3,624 477	

	Deferred Outflow	vs of Kesources				Deferred Inflo	ws of Resources		to Emplo	oyer-Paid Membe	er Contributions
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
_	452	1,738	1,891	_	259	_	2,150	11,667	42	_	11,709
_	2,941	7,302	6,412	_	877	_	7,289	39,561	274	_	39,835
_	894	2,289	2,051	_	281		2,332	12,657	83	_	12,740
-	92	250	233	_	32	_	265	1,436	9	_	1,445
	632	1,555	1,356		186		1,542	8,369	59		8,428
-	151	308	231	_	32	_	263	1,426	14	_	1,440
_	1,755 97,339	4,673 243,246	4,291 214,548	_	587 29,355	_	4,878 243,903	26,476 1,323,660	163 9,064	_	26,639 1,332,724
_	3,576	9,271	8,374	_	1,146	_	9,520	51,664	333		51,997
-	23,317	57,496	50,258	_	6,876	_	57,134	310,067	2,171	_	312,238
_	119,955	299,500	264,010		36,123		300,133	1,628,819	11,170	_	1,639,989
_	79,133	197,263	173,703	_	23,767	_	197,470	1,071,668	7,369	_	1,079,037
_	2,970	6,703	5,489	_	751	_	6,240	33,865	277	_	34,142
_	521 14,873	1,521 37,081	1,470 32,656	_	201 4,468	_	1,671 37,124	9,068 201,472	49 1,385	_	9,117 202,857
	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
_	12,487 236	28,909 606	24,148 545	_	3,304 75	_	27,452 620	148,979 3,360	1,163 22	_	150,142 3,382
_	1,823	4,770	4,334	_	593	_	4,927	26,736	170	_	26,906
<del>_</del>	1,005	2,628	2,387	_	327	_	2,714	14,725	94	_	14,819
<del>_</del>	1,905	4,637	4,017	_	550	_	4,567	24,786	177	_	24,963
<del></del>	9,844	24,686	21,825	_	2,986	_	24,811	134,648	917	_	135,565
_	410	999	867	_	119	_	986	5,346	38	_	5,384
_	817 1,560	1,790 3,795	1,430 3,286	_	196 450	_	1,626 3,736	8,823 20,272	76 145	_	8,899 20,417
<u> </u>	3,618	8,066	6,541	_	895	_	7,436	40,353	337	_	40,690
	1,307	3,292	2,919	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	399		3,318	18,009	122		18,131
<u> </u>	502	1,276	1,138	_	156	_	1,294	7,021	47	_	7,068
<del>_</del>	432	929	731	_	100	_	831	4,511	40	_	4,551
_	1,071	2,399	1,952	_	267	_	2,219	12,044	100	_	12,144
	710	1,683	1,431		196		1,627	8,828	66 ~~~~~		8,894
_	231	614	563	_	77	_	640	3,473	21	_	3,494
_	1,348 905	3,402 2,225	3,020 1,941	_	413 266	_	3,433 2,207	18,633 11,975	126 84	_	18,759 12,059
_	9,197	22,171	19,077	_	2,610	_	21,687	117,696	856	_	118,552
_	4,731	11,856	10,478		1,434		11,912	64,641	441		65,082
_	3,674	9,137	8,034	_	1,099	_	9,133	49,563	342	_	49,905
_	2,205	5,667	5,091	_	697	_	5,788	31,408	205	_	31,613
_	678 500	1,845 1,269	1,717 1,131	_	235 155	_	1,952 1,286	10,590 6,976	63 47	_	10,653 7,023
_	566	1,474	1,335		183	_	1,518	8,236	53	_	8,289
	6,570	16,733	14,944		2,045		16,989	92,200	612		92,812
_	1,783	4,959	4,670	_	639	_	5,309	28,814	166	_	28,980
_	994	2,336	1,974	_	270	_	2,244	12,177	93	_	12,270
_	2,180 6,545	5,041 16,246	4,206 14,265	_	576 1,952	_	4,782 16,217	25,950 88,006	203 609	_	26,153 88,615
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_	4,656 76	11,564 203	10,158 187	_	1,390 26	_	11,548 213	62,671 1,156	434	_	63,105 1,163
	652,451	1,652,092	1,469,914	_	201,119	_	1,671,033	9,068,678	60,755	_	9,129,433
_	1,342	3,314	2,899	_	397	_	3,296	17,888	125	_	18,013
_	4,374	11,413	10,350		1,416		11,766	63,858	407		64,265
_	10,641	25,402	21,706	_	2,970	_	24,676	133,914	991	_	134,905
_	8,343	21,359	19,140	_	2,619	_	21,759	118,082	777 17	_	118,859
	179 10,469	365 24,882	273 21,193	_	37 2,900	_	310 24,093	1,685 130,750	17 975	_	1,702 131,725
_	329	848	763	_	104	_	867	4,706	31	_	4,737
	2,686	6,873	6,157	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	842		6,999	37,988	250		38,238
_	2,156	5,780	5,329	_	729	_	6,058	32,875	201	_	33,076
_	289	766	701	_	96	_	797	4,325	27	_	4,352

## Schedule of Employer Allocations and Pension Amounts (Continued)

	Employer	Employer Allocation	Net Pension Liability/(Asset)	Net Pension Liability/(Asset) 1.00% Decrease	Net Pension Liability/(Asset) 1.00% Increase	Differences Between Expected and Actual	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	
Participating Employer  Taylorsville-Bennion Improvement Timber Lakes Water Special Service District Timpanogos Special Service District Tintic School District Tooele Applied Technology College	\$ 10,526 7,129 38,469 2,266 13,510	0.0195960% 0.0132717 0.0716187 0.0042189 0.0251525	\$ (43) (29) (156) (9) (55)	7,845 5,313 28,671 1,689 10,069	(8.50%) (6,021) (4,078) (22,004) (1,296) (7,728)	Experience — — — — — — — — — — — — — — — — — — —	1,109 751 4,054 239 1,424	
Tooele City Tooele County Tooele County Housing Tooele School District Torrey Town	49,355 122,087 12,765 539,828 1,822	0.0918855 0.2272923 0.0237656 1.0050074 0.0033923	(201) (496) (52) (2,194) (7)	36,784 90,990 9,514 402,327 1,358	(28,231) (69,834) (7,302) (308,783) (1,042)		5,201 12,865 1,345 56,885 192	
Town of Alta Town of Apple Valley Town of Brian Head Town of Garden City Town of Mantua	3,316 2,158 2,894 5,184 37	0.0061727 0.0040175 0.0053886 0.0096518 0.0000694	(13) (9) (12) (21)	2,471 1,608 2,157 3,864 28	(1,897) (1,234) (1,656) (2,965) (21)	_ _ _ _	349 227 305 546 4	
Town of Springdale Trans-Jordan Cities Tremonton City Tridell-Lapoint Water Tuacahn High School	4,981 21,512 13,553 9,327 16,659	0.0092723 0.0400499 0.0252327 0.0173643 0.0310138	(20) (87) (55) (38) (68)	3,712 16,033 10,101 6,951 12,416	(2,849) (12,305) (7,753) (5,335) (9,529)	_ _ _ _	525 2,267 1,428 983 1,755	
Uintah Animal Control/Shelter Uintah Basin Applied Technology Center Uintah Basin Association of Governments Uintah Basin Asst Council Uintah County Care Center Special Service District	3,750 95,572 30,644 4,321 63,424	0.0069814 0.1779284 0.0570508 0.0080441 0.1180782	(15) (388) (125) (18) (258)	2,795 71,229 22,839 3,220 47,269	(2,145) (54,668) (17,529) (2,472) (36,279)	_ _ _ _	395 10,071 3,229 455 6,683	
Uintah County Uintah Recreation District Uintah School District Uintah Transportation Special Service District Uintah Water Conservancy District	213,180 24,368 540,616 6,426 3,485	0.3968809 0.0453668 1.0064740 0.0119631 0.0064881	(866) (99) (2,197) (26) (14)	158,880 18,161 402,914 4,789 2,597	(121,940) (13,939) (309,234) (3,676) (1,993)		22,464 2,568 56,968 677 367	
Unified Fire Authority Unified Police Department University of Utah UT Municipal Power Agency UT Public Employees Association	33,789 98,953 3,568,582 8,770 345	0.0629059 0.1842218 6.6436913 0.0163275 0.0006419	(137) (402) (14,503) (36) (1)	25,183 73,748 2,659,621 6,536 257	(19,328) (56,601) (2,041,240) (5,017) (197)		3,561 10,427 376,044 924 36	
UT School Board Risk Management Utah County Academy of Sciences Utah County Housing Authority Utah Communications Authority Utah Counties Indemnity Pool	7,588 21,210 26,501 7,233 2,006	0.0141262 0.0394867 0.0493365 0.0134656 0.0037343	(31) (86) (108) (29) (8)	5,655 15,807 19,751 5,391 1,495	(4,340) (12,132) (15,158) (4,137) (1,147)	_ _ _ _	800 2,235 2,793 762 211	
Utah County Utah Dairy Council Utah Education Association Utah Housing Corporation Utah Lake Commission	335,160 3,538 23,049 91,721 1,241	0.6239731 0.0065863 0.0429106 0.1707590 0.0023100	(1,362) (14) (94) (373) (5)	249,791 2,637 17,178 68,359 925	(191,713) (2,024) (13,184) (52,465) (710)	_ _ _ _	35,318 373 2,429 9,665 131	
Utah League Cities/Towns Utah Local Governments Trust Utah Retirement Systems Utah Safety Council Utah School Boards Association	1,370 16,495 299,427 12,779 4,626	0.0025496 0.0307091 0.5574493 0.0237911 0.0086116	(6) (67) (1,217) (52) (19)	1,021 12,294 223,160 9,524 3,447	(783) (9,435) (171,273) (7,310) (2,646)	_ _ _ _	144 1,738 31,553 1,347 487	
Utah School Employees Association Utah State Fair Corp Utah State University Utah Valley Dispatch Special Service District Utah Valley University	2,125 22,904 761,358 28,534 547,490	0.0039562 0.0426401 1.4174337 0.0531220 1.0192718	(9) (93) (3,094) (116) (2,225)	1,584 17,070 567,431 21,266 408,038	(1,216) (13,101) (435,499) (16,321) (313,166)		224 2,414 80,229 3,007 57,693	
Utah Zoological Society UTOPIA Valley Emergency Communication Center	120,856 78,555 108,250	0.2249990 0.1462471 0.2015308	(491) (319) (440)	90,072 58,546 80,677	(69,130) (44,934) (61,919)		12,735 8,278 11,407	- 300

	Deferred Outflo	ws of Resources				Deferred Inflo	ws of Resources		to Emple	oyer-Paid Membe	er Contributions
								N	et Amortization		
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
_	741	1,850	1,631	_	223	_	1,854	10,062	69	_	10,131
_	560	1,311	1,105	_	151	_	1,256	6,815	52	_	6,867
_	2,723	6,777	5,961	_	816	_	6,777	36,775	254	_	37,029
_	41	280	351	_	48	_	399	2,166	4 64	_	2,170
	692	2,116	2,093		286		2,379	12,915	~~~~		12,979
_	3,202	8,403	7,648	_	1,046	_	8,694	47,182	298	_	47,480
_	9,117 1,063	21,982 2,408	18,917 1,978	_	2,588 271	_	21,505 2,249	116,712 12,203	849 99	_	117,561 12,302
_	36,022	92,907	83,646	_	11,445	_	95,091	516,058	3,354	_	519,412
_	58	250	282	_	39	_	321	1,742	5	_	1,747
	179	528	514		70		584	3,170	17		3,187
_	219	446	334	_	46	_	380	2,063	20	_	2,083
_	176	481	448	_	61	_	509	2,767	16	_	2,783
_	387	933 4	803 6	_	110 1	106	913 113	4,956 36	36 (10)	_	4,992 26
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_	492 1,471	1,017 3,738	772 3,333	_	106 456	_	878 3,789	4,761 20,565	46 137	_	4,807 20,702
_	1,015	2,443	2,100	_	287	_	2,387	12,957	95	_	13,052
_	561	1,544	1,445	_	198	_	1,643	8,916	52	_	8,968
	1,148	2,903	2,581		353		2,934	15,925	107		16,032
_	216	611	581	_	80	_	661	3,585	20	_	3,605
_	6,550 1,947	16,621 5,176	14,809 4,748	_	2,026 650	_	16,835 5,398	91,364 29,295	610 181	_	91,974 29,476
_	327	782	670	_	92	_	762	4,131	30	_	4,161
_	4,236	10,919	9,828	_	1,345	_	11,173	60,632	394	_	61,026
	14,778	37,242	33,032		4,520		37,552	203,793	1,376	_	205,169
_	2,025	4,593	3,776	_	517	_	4,293	23,295	189	_	23,484
_	37,427	94,395	83,768	_	11,462	_	95,230	516,811	3,485	_	520,296
_	630 353	1,307 720	996 540	_	136 74	_	1,132 614	6,143 3,332	59 33	_	6,202 3,365
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2,256	5,817	5,236	~~~~~	716		5,952	32,301	210		32,511
	7,166	17,593	15,333	_	2,098	_	17,431	94,596	667	_	95,263
_	244,832	620,876	552,951	_	75,657	_	628,608	3,411,450	22,798	_	3,434,248
_	541	1,465	1,359	_	186	_	1,545	8,384	50	_	8,434
	15	51	53		7		60	330	1		331
_	591 1,474	1,391 3,709	1,176 3,286	_	161 450	_	1,337 3,736	7,254 20,276	55 137	_	7,309 20,413
_	2,067	4,860	3,200 4,106	_	562	_	4,668	25,334	192	_	25,526
_	621	1,383	1,121	_	153	_	1,274	6,914	58	_	6,972
	136	347	311		43		354	1,918	13		1,931
_	25,152	60,470	51,933	_	7,106	_	59,039	320,402	2,342	_	322,744
_	277	650	548	_	75	_	623	3,382	26	_	3,408
_	2,000 5,987	4,429 15,652	3,571 14,212	_	489 1,945	_	4,060 16,157	22,034 87,683	186 557	_	22,220 88,240
_	125	256	192	_	26	_	218	1,186	12		1,198
	139	283	212	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	29		241	1,309	13	·····	1,322
_	1,630	3,368	2,556	_	350	_	2,906	15,769	152	_	15,921
_	21,306	52,859	46,396	_	6,348		52,744	286,243	1,984	_	288,227
_	521 177	1,868 664	1,980 717	_	271 98	_	2,251 815	12,216 4,422	48 16	_	12,264 4,438
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_	157 1,200	381 3,614	329 3,549	_	45 486	_	374 4,035	2,031 21,895	15 112	_	2,046 22,007
_	51,439	131,668	117,972	_	16,141		134,113	727,834	4,790	_	732,624
_	1,954	4,961	4,421	_	605	_	5,026	27,277	182	_	27,459
	40,811	98,504	84,834		11,607		96,441	523,383	3,800		527,183
_	8,519	21,254	18,727	_	2,562	_	21,289	115,534	793	_	116,327
_ _	6,009 8,435	14,287 19,842	12,172 16,773	_	1,665 2,295	_	13,837 19,068	75,096 103,483	560 785	_	75,656 104,268
	3,133	.,,012	. 0,115		-,2/3		. 2,000		, 03		,200

Schedule of Allocations and Pension Amount (Concluded)

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Valley Mental Health Vernal City Vineyard Town W Kane County Special Service District # 1 Wasatch County	\$ 261,958 28,462 8,823 2,781 122,446	0.4876921% 0.0529886 0.0164267 0.0051780 0.2279597	\$ (1,065) (116) (36) (11) (498)	195,234 21,213 6,576 2,073 91,257	(149,841) (16,280) (5,047) (1,591) (70,039)	_ _ _ _ _	27,604 2,999 930 293 12,903	
Wasatch Front Regional Council Wasatch Front Waste/Recycling Wasatch Integrated Waste Management Wasatch Mental Health Special Service District Wasatch School District	23,132 98,190 35,445 220,728 322,673	0.0430644 0.1828029 0.0659891 0.4109339 0.6007269	(94) (399) (144) (897) (1,311)	17,240 73,180 26,417 164,506 240,485	(13,231) (56,165) (20,275) (126,257) (184,570)		2,438 10,347 3,735 23,260 34,002	
Washington City Washington County Solid Waste Washington County Water Conservancy District Washington County Washington School District	51,927 4,663 15,021 102,538 1,016,172	0.0966741 0.0086820 0.0279640 0.1908972 1.8918256	(211) (19) (61) (417) (4,130)	38,701 3,476 11,195 76,421 757,341	(29,703) (2,667) (8,592) (58,652) (581,254)	_ _ _ _	5,472 491 1,583 10,805 107,081	
Wayne County Wayne School District Weber Area Dispatch 911 Weber Basin Water Conservancy Weber County Corp	10,751 29,219 55,319 35,223 420,453	0.0200152 0.0543973 0.1029889 0.0655762 0.7827648	(44) (119) (225) (143) (1,709)	8,013 21,776 41,229 26,252 313,359	(6,150) (16,713) (31,643) (20,148) (240,500)	_ _ _ _ _	1,133 3,079 5,829 3,712 44,306	
Weber County School District Weber Fire District Weber Human Services Weber State University Wellington City	947,778 3,842 186,176 246,363 6,085	1.7644955 0.0071523 0.3466077 0.4586583 0.0113290	(3,852) (16) (757) (1,001) (25)	706,368 2,863 138,755 183,611 4,535	(542,132) (2,198) (106,493) (140,920) (3,481)		99,873 405 19,619 25,961 641	
West Bountiful City West Point City West Valley City White City Water Improvement District Woods Cross City	18,700 14,939 218,927 5,257 6,451	0.0348135 0.0278119 0.4075811 0.0097865 0.0120101	(76) (61) (890) (21) (26)	13,937 11,134 163,164 3,918 4,808	(10,696) (8,545) (125,227) (3,007) (3,690)		1,971 1,574 23,070 554 680	
Workers Compensation Fund	302,760	0.5636540	(1,230)	225,644	(173,180)		31,904	
Grand Total	\$ 53,713,837	100.000000%	\$ (218,296)	40,032,282	(30,724,480)		5,660,176	
No Proportionate Share for 2015 Active Re Entry Inc City of Aurora Canyonlands Health Care	_ _ _	0.0000000% 0.0000000 0.0000000	_ _ _	_ _ _	_ _ _	_ _ _	_ _ _	
Town of Goshen Utah Association of Counties		0.0000000 0.0000000						
Grand Total	\$ 53,713,837	100.000000%	\$ (218,296)	40,032,282	(30,724,480)	_	5,660,176	

3,723,499

9,383,675

8,322,957

98

1,230

1,138,787

98

51,348,713

9,462,974

(9)

51,695,325

(9)

346,612

Tier 2 Public Safety and Firefighter Contributory Retirement System

Schedule of Employer Allocations and Pension Amounts

at December 31, 2015							Net Difference	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Between Projected and Actual Investment Earnings on Pension Plan Investments	
American Fork City Beaver County Big Water Municipal Corp Blanding City Box Elder County	\$ 96,167 46,957 3,724 3,985 34,239	1.5001408% 0.7324943 0.0580843 0.0621595 0.5340973	\$ (21,918) (10,702) (849) (908) (7,803)	37,257 18,192 1,443 1,544 13,265	(67,359) (32,890) (2,608) (2,791) (23,982)	3,806 1,858 147 158 1,355	8,730 4,263 338 362 3,108	
Brigham City Cache County Carbon County Cedar City Centerville City	11,856 108,549 22,245 14,932 1,436	0.1849499 1.6932880 0.3470058 0.2329357 0.0223997	(2,702) (24,739) (5,070) (3,403) (327)	4,593 42,054 8,618 5,785 556	(8,305) (76,032) (15,581) (10,459) (1,006)	469 4,296 880 591 57	1,076 9,854 2,019 1,356 130	
City of Bountiful City of Draper City of Harrisville City of Helper City of Moab	13,397 24,470 6,822 1,693 13,701	0.2089784 0.3817202 0.1064189 0.0264115 0.2137309	(3,053) (5,577) (1,555) (386) (3,123)	5,190 9,480 2,643 656 5,308	(9,383) (17,140) (4,778) (1,186) (9,597)	530 968 270 67 542	1,216 2,221 619 154 1,244	
City of Monticello City of Naples City of North Salt Lake City of Orem City of Santa Clara	3,607 7,825 10,874 80,731 3,113	0.0562645 0.1220688 0.1696343 1.2593445 0.0485649	(822) (1,783) (2,478) (18,399) (710)	1,397 3,032 4,213 31,277 1,206	(2,526) (5,481) (7,617) (56,547) (2,181)	143 310 430 3,195 123	327 710 987 7,329 283	
City of Saratoga Springs City of South Jordan City of South Salt Lake City of St George City of West Jordan	29,839 64,444 47,516 95,416 129,200	0.4654713 1.0052886 0.7412166 1.4884215 2.0154316	(6,801) (14,688) (10,829) (21,746) (29,446)	11,560 24,967 18,409 36,966 50,055	(20,900) (45,139) (33,282) (66,833) (90,496)	1,181 2,550 1,881 3,776 5,113	2,709 5,850 4,313 8,662 11,729	~~~
Clearfield City Clinton City Cottonwood Heights City Daggett County Davis County	24,800 26,946 24,319 16,182 161,848	0.3868592 0.4203445 0.3793566 0.2524283 2.5247234	(5,652) (6,141) (5,543) (3,688) (36,887)	9,608 10,440 9,422 6,269 62,704	(17,371) (18,874) (17,034) (11,334) (113,364)	981 1,066 962 640 6,405	2,251 2,446 2,208 1,469 14,693	
Dixie State University Duchesne County East Carbon City Emery County Enoch City	3,317 61,610 2,152 6,064 3,737	0.0517351 0.9610731 0.0335636 0.0945982 0.0582976	(756) (14,042) (490) (1,382) (852)	1,285 23,869 834 2,349 1,448	(2,323) (43,154) (1,507) (4,248) (2,618)	131 2,438 85 240 148	301 5,593 195 551 339	
Ephraim City Farmington City Garfield County Grand County Grantsville City	2,177 21,567 19,348 38,087 14,027	0.0339561 0.3364296 0.3018138 0.5941308 0.2188118	(496) (4,915) (4,410) (8,680) (3,197)	843 8,356 7,496 14,756 5,434	(1,525) (15,106) (13,552) (26,677) (9,825)	86 854 766 1,507 555	198 1,958 1,756 3,458 1,273	
Heber City Hurricane City Hurricane Valley Fire Special Service District Iron County Ivins City	27,054 7,079 5,235 51,740 7,031	0.4220258 0.1104233 0.0816561 0.8071150 0.1096770	(6,166) (1,613) (1,193) (11,792) (1,602)	10,481 2,742 2,028 20,045 2,724	(18,950) (4,958) (3,666) (36,241) (4,925)	1,071 280 207 2,048 278	2,456 643 475 4,697 638	
Juab County Kane County Kaysville City Laverkin City Layton City	36,048 16,075 20,944 717 58,388	0.5623285 0.2507627 0.3267187 0.0111914 0.9108140	(8,216) (3,664) (4,773) (164) (13,307)	13,966 6,228 8,114 278 22,621	(25,250) (11,260) (14,670) (503) (40,897)	1,427 636 829 28 2,311	3,272 1,459 1,901 65 5,300	
Lehi City Logan City Lone Peak Public Safety District Mapleton City Millard County	59,086 81,305 46,479 11,545 38,301	0.9216989 1.2683091 0.7250423 0.1800977 0.5974670	(13,466) (18,530) (10,593) (2,631) (8,729)	22,891 31,500 18,007 4,473 14,839	(41,386) (56,949) (32,556) (8,087) (26,827)	2,338 3,218 1,839 457 1,516	5,364 7,381 4,219 1,048 3,477	

	Deferred Outflow	ws of Resources				Deletted Illilo	ws of Resources		to Emple	yer-Paid Meilibe	er Contributions
								N	et Amortization of Deferred Amounts from		
	Changes in Proportion and Differences Between Employer Contributions and Proportionate	Total Deferred	Differences Between Expected	Net Difference Between Projected and Actual Investment Earnings on		Changes in Proportion and Differences Between Employer Contributions and Proportionate	Total Deferred	Proportionate Share of Allocable Plan Gross	Changes in Proportion and Differences Between Employer Contributions and Proportionate	Proportionate Share of	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid
Changes of	Share of	Outflows of	and Actual	Pension Plan	Changes of	Share of	Inflows of	Pension	Share of	Nonemployer	Member
Assumptions	Contributions	Resources	Experience	Investments	Assumptions	Contributions	Resources	Expense	Contributions	Contributions	Contributions
_	2,821	15,357	_	_	1,695	_	1,695	82,338	162	_	82,500
_	65	6,186 485	_	_	827 66	146	827 212	40,204 3,188	4 (8)	_	40,208 3,180
_	_	520	_	_	70	485	555	3,412	(28)	_	3,384
	1,358	5,821			603		603	29,315	78		29,393
_	— 8,468	1,545 22,618	_	_	209 1,913	713	922 1,913	10,151 92,939	(41) 485	_	10,110 93,424
	0,400	2,899	_	_	392	641	1,033	19,046	(37)	_	19,009
_	_	1,947	_	_	263	584	847	12,785	(33)	_	12,752
		187			25	267	292	1,229	(15)		1,214
	1,159	1,746 4,348	_	_	236 431	1,086	1,322 431	11,470 20,951	(62) 66	_	11,408 21,017
_	542	1,431	_	_	120	_	120	5,841	31	_	5,872
_	_	221	_	_	30	218 589	248 830	1,450	(13)	_	1,437
	~~~~~	1,786		~~~~~~	241	209	~~~~~	11,731	(34)		11,697
	399	869 1,020	_	_	64 138	54	64 192	3,088 6,700	23 (3)	_	3,111 6,697
_	479	1,896	_	_	192	_	192	9,311	27	_	9,338
	383	10,907 406	_	_	1,423 55	580	1,423 635	69,121 2,666	22 (33)	_	69,143 2,633
	~~~~~	5,723			526		526	25,548	105		25,653
	1,833 1,810	10,210	_	_	1,136	_	1,136	55,177	103	_	55,281
_		6,194	_	_	837	4,251	5,088	40,683	(244)	_	40,439
_	2,589 4,339	15,027 21,181	_	_	1,681 2,277	_	1,681 2,277	81,695 110,621	148 249	_	81,843 110,870
		3,232		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	437	1,621	2,058	21,233	(93)		21,140
_	2,499	6,011	_	_	475		475	23,071	143	_	23,214
_	1,762	4,932 2,109	_	_	429 285	2,250	429 2,535	20,822 13,855	101 (129)	_	20,923 13,726
_	6,606	27,704	_	_	2,852	2,230	2,852	138,574	378	_	138,952
_	366	798			58		58	2,840	21		2,861
_	3,166	11,197	_	_	1,086		1,086	52,750	181	_	52,931
_ _	1,319	280 2,110	_	_	38 107	400	438 107	1,842 5,192	(23) 76	_	1,819 5,268
_	_	487	_	_	66	445	511	3,200	(25)	_	3,175
_	868	1,152	_	_	38	_	38	1,864	50	_	1,914
_	751 1,008	3,563 3,530	_	_	380 341	_	380 341	18,466	43 58	_	18,509 16,624
_		4,965	_	_	671	1,960	2,631	16,566 32,610	(112)	_	32,498
_	685	2,513			247		247	12,010	39		12,049
_	634	4,161	_	_	477	_	477	23,164	36	_	23,200
_ _	1,141	2,064 682	_	_	125 92	974	125 1,066	6,061 4,482	65 (56)	_	6,126 4,426
_	3,039	9,784	_	_	912	_	912	44,300	174	_	44,474
	835	1,751			124		124	6,020	48		6,068
_	1,202	5,901	_	_	635	_	635	30,864	69	_	30,933
	273	2,368 2,730	_	_	283 369	1,323	283 1,692	13,764 17,933	16 (76)	_	13,780 17,857
_	_	93	_	_	13	133	146	614	(8)	_	606
	2,993	10,604		-	1,029		1,029	49,992	171	-	50,163
_ _	156 103	7,858 10,702	_	_	1,041 1,433	_	1,041 1,433	50,589 69,614	9 6	_	50,598 69,620
_	_	6,058	_	<u> </u>	819	1,030	1,849	39,795	(59)	_	39,736
_	245 401	1,750 5.484	_	_	203	_	203 675	9,885	14	_	9,899
	491	5,484			675		675	32,793	28	_	32,821

Tier 2 Public Safety and Firefighter Contributory Retirement System

Schedule of Employer Allocations and Pension Amounts (Continued)

							Net Difference Between Projected	
Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments	
Moab Valley Fire Protection	\$ 3,543	0.0552693%	\$ (808)	1,373	(2,482)	140	322	
Morgan County	4,327	0.0674993	(986)	1,676	(3,031)	171	393	
Murray City	120,580	1.8809637	(27,481)	46,715	(84,458)	4,772	10,946	
N Tooele County Fire Protection Service District	5,189	0.0809403	(1,183)	2,010	(3,634)	205	471	
Nephi City	9,348	0.1458282	(2,131)	3,622	(6,548)	370	849	
North Davis Fire District	13,548	0.2113441	(3,088)	5,249	(9,490)	536	1,230	
North Logan City	3,851	0.0600659	(878)	1,492	(2,697)	152	350	
North Ogden City	19,572	0.3053124	(4,461)	7,583	(13,709)	775	1,777	
North View Fire District	22,028	0.3436186	(5,020)	8,534	(15,429)	872	2,000	
Ogden City Corp	166,214	2.5928223	(37,882)	64,395	(116,422)	6,578	15,089	
Park City	27,786	0.4334431	(6,333)	10,765	(19,462)	1,100	2,522	
Park City Fire Service	62,706	0.9781738	(14,291)	24,294	(43,922)	2,482	5,692	
Parowan City	3,875	0.0604425	(883)	1,501	(2,714)	153	352	
Payson City	15,758	0.2458146	(3,591)	6,105	(11,037)	624	1,431	
Perry City	4,937	0.0770085	(1,125)	1,913	(3,458)	195	448	
Pleasant Grove City	16,933	0.2641482	(3,859)	6,560	(11,861)	670	1,537	
Pleasant View City	4,346	0.0677873	(990)	1,684	(3,044)	172	394	
Price City	5,836	0.0910380	(1,330)	2,261	(4,088)	231	530	
Provo City Corp	91,349	1.4249791	(20,819)	35,391	(63,984)	3,615	8,293	
Rich County	4,072	0.0635163	(928)	1,577	(2,852)	161	370	
Richfield City	7,290	0.1137150	(1,661)	2,824	(5,106)	289	662	
Riverdale City	4,285	0.0668458	(977)	1,660	(3,001)	170	389	
Roosevelt City	11,470	0.1789186	(2,614)	4,444	(8,034)	454	1,041	
Roy City	64,231	1.0019573	(14,639)	24,884	(44,990)	2,542	5,831	
Salem City	3,593	0.0560458	(819)	1,392	(2,517)	142	326	
Salt Lake City Corp	311,082	4.8526579	(70,899)	120,520	(217,893)	12,312	28,240	
Salt Lake County	512,308	7.9916500	(116,761)	198,479	(358,839)	20,275	46,507	
San Juan County	21,050	0.3283607	(4,797)	8,155	(14,744)	833	1,911	
Sandy City	135,671	2.1163697	(30,921)	52,562	(95,029)	5,369	12,316	
Sanpete County	15,627	0.2437694	(3,562)	6,054	(10,946)	618	1,419	
Sevier County	27,821	0.4339810	(6,341)	10,778	(19,486)	1,101	2,526	
Smithfield City Corp	2,991	0.0466577	(682)	1,159	(2,095)	118	272	
So Davis Metro Fire Agency	58,641	0.9147584	(13,365)	22,719	(41,074)	2,321	5,323	
South Ogden City	19,477	0.3038292	(4,439)	7,546	(13,642)	771	1,768	
Spanish Fork City	16,088	0.2509637	(3,667)	6,233	(11,269)	637	1,460	
Springville City	41,713	0.6507001	(9,507)	16,161	(29,218)	1,651	3,787	
State of Utah	1,656,499	25.8402370	(377,534)	641,764	(1,160,271)	65,558	150,376	
Stockton Town	3,843	0.0599497	(876)	1,489	(2,692)	152	349	
Summit County	29,115	0.4541694	(6,636)	11,280	(20,393)	1,152	2,643	
Sunset City	6,503	0.1014460	(1,482)	2,519	(4,555)	257	590	
Syracuse City Corp	30,905	0.4820934	(7,044)	11,973	(21,647)	1,223	2,806	
Tooele City	34,696	0.5412317	(7,908)	13,442	(24,302)	1,373	3,150	
Tooele County	34,317	0.5353200	(7,821)	13,295	(24,037)	1,358	3,115	
Town of Springdale	1,987	0.0310035	(453)	770	(1,392)	79	180	
Tremonton City	3,181	0.0496153	(725)	1,232	(2,228)	126	289	
Uintah County	91,927	1.4339945	(20,951)	35,614	(64,389)	3,638	8,345	
Unified Fire Authority	162,410	2.5334847	(37,015)	62,921	(113,758)	6,428	14,744	
Unified Police Department	107,928	1.6836008	(24,598)	41,814	(75,597)	4,271	9,798	
University of Utah	25,564	0.3987816	(5,826)	9,904	(17,906)	1,012	2,321	
Utah County	77,372	1.2069467	(17,634)	29,976	(54,194)	3,062	7,024	
Vernal City	4,741	0.0739615	(1,081)	1,837	(3,321)	188	430	
Wasatch County	20,918	0.3263094	(4,767)	8,104	(14,652)	828	1,899	
Wasatch County Fire District	14,101	0.2199607	(3,214)	5,463	(9,877)	558	1,280	
Washington City	34,295	0.5349819	(7,816)	13,287	(24,022)	1,357	3,113	
Washington County	82,899	1.2931737	(18,894)	32,117	(58,066)	3,281	7,526	

Deferred Outflows of Resources

1,838

7.455

10,807

2,985

248

604

1,461

2,625

3,008

2,873

604

4,469

12,073

29,363

70,978

11,923

29,534

70,806

(150)

171

(172)

Tier 2 Public Safety and Firefighter Contributory Retirement System

Schedule of Employer Allocations and Pension Amounts (Concluded)

at December 31, 2015

Participating Employer	Cor	Employer atributions	Employer Allocation Percentage	Lia	Net Pension ability/(Asset) 60% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	
Wayne County Weber County Corp Weber Fire District Wellington City West Bountiful City	\$	3,174 109,003 62,684 61 14,275	0.0495047% 1.7003710 0.9778286 0.0009550 0.2226753	\$	(723) (24,843) (14,286) (14) (3,253)	1,229 42,230 24,285 24 5,530	(2,223) (76,350) (43,906) (43) (9,998)	126 4,314 2,481 2 565	288 9,895 5,690 6 1,296	
West Valley City Woods Cross City		164,653 4,408	2.5684704 0.0687667	~~~	(37,526) (1,005)	63,790 1,708	(115,329) (3,088)	6,516 174	14,947 400	~~~~~
Grand Total	\$	6,410,542	100.0000000%	\$	(1,461,030)	2,483,583	(4,490,177)	253,699	581,947	
No Proportionate Share for 2015 Cedar Mountain Fire Protection District Garden City Fire District			0.0000000% 0.0000000		=	_ _ _				
Grand Total	\$	6,410,542	100.0000000%	\$	(1,461,030)	2,483,583	(4,490,177)	253,699	581,947	

Net

Utah Retirement Systems

Schedule of Employer Allocations and Pension Amounts

Retirement System	Employer Contributions	Net Pension Liability(Asset) (7.5% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Net Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Noncontributory Retirement System	\$ 804,844,147	3,707,135,015	6,881,191,656	1,048,015,358	_	1,004,148,522	_	
Contributory Retirement System	11,768,187	132,950,657	265,466,731	21,006,318	_	58,880,601	_	
Public Safety Retirement System	141,592,911	572,437,240	1,058,858,136	173,733,917	11,739,417	138,524,932	_	
Firefighters Retirement System	6,679,894	15,204,631	159,176,368	(103,336,191)	_	49,355,811	_	~~~~~
Judges Retirement System	6,682,743	35,239,076	55,879,242	17,503,626	1,307,551	7,771,704	_	
Utah Governors and Legislators Retirement Plan	421,429	2,207,830	3,434,235	1,256,050	_	477,806	_	
Tier 2 Public Employees Contributory Retirement System	53,713,837	(218,296)	40,032,282	(30,724,480)	_	5,660,176	_	
Tier 2 Public Safety & Firefighters Contributory Retirement System	6,410,542	(1,461,030)	2,483,583	(4,490,177)	253,699	581,947	_	
Grand Total	\$ 1,032,113,691	4,463,495,123	8,466,522,233	1,122,964,421	13,300,667	1,265,401,499	_	

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	Deferred Outflows of Resources Deferred Inflows of Resources									Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
		414 14,209 8,171 8 1,861 26,106	- - - - -	- - - - -	56 1,921 1,105 1 252 2,901	558 9 1,596 12 1,216	614 1,930 2,701 13 1,468 2,901	2,717 93,328 53,670 52 12,222	(32) (1) (91) (1) (70)	- - - - -	2,685 93,327 53,579 51 12,152			
<u> </u>	221,238	1,056,884			78	174 44,195	252 157,163	3,774 5,488,687	(10)		3,764			
	1,025 1,295 223,558	1,025 1,295 1,059,204	_ _ _	_ _ _	 112,968	— — 44,195	157,163	5,488,687	59 74 10,276	_ _ _	59 74 5,498,963			

D	eferred Outfl	ows of Resources				Deferred Inflo	ows of Resources	Pension Expense Excluding That Attributable es to Employer-Paid Member Contributions				
Proj Co Pro	Changes in portion and Differences Between Employer ontributions and oportionate Share of ontributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources		et Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
2	20,024,151	1,024,172,673	267,151,819	_	93,371,744	26,731,024	387,254,587	694,638,560	(1,897,475)	_	692,741,085	
	1,474,740	60,355,341	3,610,232	_	369,022	1,591,712	5,570,966	47,434,015	165,977	_	47,599,992	
	3,049,111	153,313,460	36,763,697	_	28,670,410	2,638,597	68,072,704	115,577,358	156,713	_	115,734,071	
	167,821	49,523,632	17,649,453	_	14,528,238	176,630	32,354,321	10,995,268	(1,516)	(17,218,524)	(6,224,772)	
	_	9,079,255	_	_	58,962	_	58,962	8,175,715	_	(1,653,457)	6,522,258	
	_	477,806	_	_	_	_	_	271,448	_	_	271,448	
		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	
	3,723,499	9,383,675	8,322,957	_	1,138,787	1,230	9,462,974	51,348,713	346,612	_	51,695,325	
	223,558	1,059,204	_	_	112,968	44,195	157,163	5,488,687	10,276	_	5,498,963	
2	28,662,880	1,307,365,046	333,498,158	_	138,250,131	31,183,389	502,931,678	933,929,764	(1,219,412)	(18,871,981)	913,838,371	



#### UTAH RETIREMENT SYSTEMS

## NOTES TO THE PUBLIC SAFETY SYSTEM SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION - PENSION TRUST FUND BY DIVISION AND SCHEDULES OF EMPLOYER ALLOCATIONS AND PENSION AMOUNTS

December 31, 2015

#### Note 1

## **Description of Systems**

A brief description of the Utah Retirement Systems (Systems) follows. For a more complete description of plan provisions, membership and benefit statistics, see the Systems Highlights on pages 14 through 30 and Summaries of Plan Provisions on pages 167 through 182.

## A) General Information and Reporting Entity

**General** — The Utah Retirement Systems are comprised of the following pension trust funds:

- i) the **Public Employees Noncontributory Retirement** System (Noncontributory System); the Public **Employees Contributory Retirement System** (Contributory System); and the Firefighters Retirement System are multiple-employer, cost-sharing, public employee retirement systems;
- ii) the **Public Safety Retirement System** is a mixed agent and cost-sharing, multiple-employer retirement system;
- iii) the Judges Retirement System and the Utah Governors and Legislators Retirement Plan are singleemployer service-employee retirement systems;
- iv) the Tier 2 Public Employees Contributory Retirement System and the Tier 2 Public Safety and Firefighter Contributory Retirement System are multipleemployer, cost-sharing public employee retirement systems; and

These Systems cover employees of the State of Utah and participating local government and public education entities.

**Reporting Entity** — These Schedules of Employer Allocations and Pension amounts cover all of the foregoing retirement systems administered by the Utah State Retirement Board (Board), the sole governing body for these Systems.

The Systems are established and governed by the respective sections of Title 49 of the Utah Code Annotated 1953, as amended. The Systems' defined benefit plans are amended statutorily by the State Legislature. The Utah State Retirement Office Act in Title 49 provides for the administration of the Systems under the direction of the Board, whose members are appointed by the Governor. The Systems are fiduciary funds defined as pension (and other employee benefit) trust funds. Utah Retirement Systems is a component unit of the State of Utah.

December 31, 2015

#### SUMMARY OF BENEFITS BY SYSTEM

	Noncontributory System	Contributory System	Public Fire- Safety fighters System System	Judges System	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Final average salary is	Highest 3 years	Highest 5 years	Highest 3 years	Highest 2 years	Highest 5 years	Highest 5 years
Years of service required and/ or age eligible for benefit	30 years any age 25 years any age* 20 years age 60* 10 years age 62* 4 years age 65	30 years any age 20 years age 60* 10 years age 62* 4 years age 65	20 years any age 10 years age 60 4 years age 65	25 years any age 20 years age 55* 10 years age 62 6 years age 70	35 years any age 20 years age 60* 10 years age 62* 4 years age 65	25 years any age 20 years age 60* 10 years age 62* 4 years age 65
Benefit percent per year of service**	2.0% per year all years	1.25% per year to June 1975 2.0% per year July 1975 to present	2.5% per year up to 20 years 2.0% per year over 20 years	5.0% first 10 years 2.25% second 10 years 1.0% over 20 years	1.5% per year all years	1.5% per year all years

Note: The Utah Governors and Leaislators Retirement Plan benefits are explained in the second paragraph of section B) below. *With actuarial reductions.

## B) Retirement and Death Benefits

Retirement Systems' benefits are specified by the statute in note 1(A) and are defined benefit plans wherein benefits are based on age and/or years of service and highest average salary. Various plan options within the Systems may be selected by retiring members. Some options require actuarial reductions based on attained age, age of spouse, and similar actuarial factors. A brief summary of eligibility and benefits of the various Systems is shown in the table above.

The Utah Governors and Legislators Retirement Plan provides the following benefits. Former governors at age 65 receive \$1,340 per month per term. Legislators receive a benefit at age 65 with four or more years of service at the rate of \$29.20 per month per year of service. Retirement at age 62 with 10 or more years of service will receive an actuarial reduction. Both the governors' and legislators' benefits are adjusted based on the CPI limited to 4% of the base benefit per year.

Death benefits for active and retired employees are in accordance with retirement statutes. Upon termination of employment, members of the Systems may leave their retirement account intact for future benefits based on vesting qualification or withdraw the accumulated funds in their individual member account and forfeit service credits and rights to future benefits upon which the contributions were based.

### C) Contributions

As a condition of participation in the Defined Benefit Systems, employers and/or employees are required to contribute certain percentages of salaries and wages as authorized by statute and specified by the Board. Employee contributions may be paid in part or in whole by the employer. Contributions in some Systems are also augmented by fees or insurance premium taxes.

#### **CONTRIBUTION RATES**

December 31, 3015	Contribution Rates as a Percent of Covered Payroll								
System	Member	Employer	Other						
Noncontributory	_	18.47 - 22.19%	_						
Contributory	6.00%	14.46 - 17.70	_						
Public Safety:									
Noncontributory	_	32.20 - 48.68	_						
Contributory	10.50 - 12.29	22.19 - 31.80	_						
Firefighters:									
Division A	15.05	3.82	11.719						
Division B	16.71	6.59	11.71						
Judges:									
Noncontributory	_	40.01	11.90						
Governors and Legislators		\$421,429							
Tier 2 Public Employees	_	14.94 - 18.27							
Tier 2 Public Safety and Firefig	ghter —	10.80 - 37.07							

^{**}For members and retirees in the systems, prior to January 1, 1989, there may be a 3% benefit enhancement.

December 31, 2015

#### PARTICIPATING MEMBERSHIP BY SYSTEM

	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Utah Governors and Legislators Retirement Plan	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Number of participating:								
Employers	451	158	131	60	1	1	465	149
Members:								
Active	68,273	943	6,399	1,735	112	93	21,778	1,824
Terminated vested	39,066	1,005	3,178	207	4	81	_	59
Retirees and beneficiaries:								
Service benefits	47,723	4,055	5,056	1,285	139	241	1	_
Disability benefits	1,019	167	108	48	1	_	_	_

Employee (member) contributions are placed into member accounts, and in Systems where it is authorized, interest is credited to member accounts. Upon termination of employment, a member may withdraw his or her account balance including interest that has been credited. Upon withdrawal a member forfeits the service credit that corresponds to the member contributions withdrawn.

The noncontributory retirement systems have no required member contributions flowing into them. However, where members had a balance transferred in or purchased service credit in the system, these balances and on-going interest, where authorized, are credited to individual member accounts that may be withdrawn upon the termination of employment.

## D) Covered Employees

The **Public Employees Noncontributory Retirement** System (Noncontributory System) was established on July 1, 1986, and is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. All eligible employees of the State and School entities hired subsequent to that date are automatically members of the Noncontributory System until July 1, 2011, when Tier 2 came into effect. Local government entities had the option of adopting the new System or remaining with the Contributory System. All Contributory System members whose employers adopted the Noncontributory System were given the opportunity to transfer to the new System during limited window periods. All eligible new hires subsequent to adoption of the noncontributory plans are automatically members of that plan.

The Public Employees Contributory Retirement System (Contributory System) includes eligible public employees of the State of Utah and its political subdivisions including public education employees of those entities covered by the System. The System is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. Members of this System are those who did not elect to transfer to the Public Employees Noncontributory Retirement System during the period when they were eligible to transfer or whose employers are not participants in the Noncontributory System.

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The **Public Safety Retirement System** includes eligible State and local government employees directly involved in law enforcement (e.g., game wardens, prison guards, police officers, and highway patrol officers) and is comprised of eight divisions, the State of Utah, Division A with Social Security, Salt Lake City, Ogden, Provo, Logan, Bountiful, and Division B without Social Security. These divisions are not separate plans. The Public Safety System consists of both contributory and noncontributory divisions. The noncontributory divisions were authorized by the Legislature effective July 1, 1989.

The **Firefighters Retirement System** includes eligible State and local government employees directly involved in fire fighting and is comprised of two divisions, Division A with Social Security and Division B without Social Security. These divisions are not separate plans.

The Judges Retirement System includes justices and judges of the court as authorized by state statutes.

The Utah Governors and Legislators Retirement Plan includes only governors and legislators of the State.

The Tier 2 Public Employees Contributory Retirement **System** includes eligible public employees entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

The Tier 2 Public Safety and Firefighter Contributory Retirement System includes eligible public safety and firefighters entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

As of December 31, 2015, participating members by System are included in the table above.

December 31, 2015

#### NET PENSION LIABILITY BY DIVISION

Noncontributory Retirement System   Local Government   State and School   State and Sch	r ended December 31, 2015						(6)
Local Government   \$ 4,640,016,238   4,074,167,598   565,848,640   87.8%   \$ 826,997,735   State and School   20,259,557,547   17,118,271,172   3,141,286,375   84.5   2,631,288,360   Total   24,899,573,785   21,192,438,770   3,707,135,015   85.1   3,458,286,095   State and School   824,899,573,785   21,192,438,770   3,707,135,015   85.1   3,458,286,095   State and School   825,903,304   763,238,089   62,665,215   92.4   33,835,985   Total   1,316,044,868   1,183,094,211   132,950,657   89.9   82,426,338   Public Safety Retirement System   1,218,611,023   1,003,324,516   215,286,507   82.3   108,966,987   Other Division A (with Social Security)   1,387,408,005   1,208,282,875   179,125,130   87.1   141,680,931   Salt Lake City   326,503,586   241,397,251   85,106,335   73.9   28,275,530   Ogden   74,198,987   55,903,926   18,295,061   75.3   5,517,486   Provo   55,943,252   43,277,426   12,665,826   77.4   5,213,125   Logan   31,343,079   24,628,718   6,714,361   78.6   2,305,903   Bountiful   24,275,064   17,826,177   6,448,887   73.4   1,775,931   Other Division B (without Social Security)   392,993,433   344,198,300   48,795,133   87.6   61,435,806   Total   3,511,276,429   2,938,839,189   572,437,240   83.7   355,171,699   Sirefighters Retirement System   Division B (without Social Security)   883,020,100   866,004,273   17,015,827   98.1   84,461,071   Total   1,058,262,318   1,043,057,687   15,204,631   98.6   111,132,623   Judges Retirement System   198,987,491   163,748,415   35,239,076   82.3   15,831,547   Sirefighters Retirement System		(1) Total Pension	Plan Fiduciary	Employers Net Pension Liability/	Plan Fiduciary Net Position as a Percentage of the Total	Projected Covered Employee	Net Pension Liability/ (Asset) as a Percentage of Covered Employee Payroll
State and School         20,259,557,547         17,118,271,172         3,141,286,375         84.5         2,631,288,360           Total         24,899,573,785         21,192,438,770         3,707,135,015         85.1         3,458,286,095           Contributory Retirement System         490,141,564         419,856,122         70,285,442         85.7         48,590,353           State and School         825,903,304         763,238,089         62,665,215         92.4         33,835,985           Total         1,316,044,868         1,183,094,211         132,950,657         89.9         82,426,338           Public Safety Retirement System         State of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Oden         74,198,987         55,903,926         18,295,061         75.3         55,74,86           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718 </td <td>butory Retirement System</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	butory Retirement System						
Total         24,899,573,785         21,192,438,770         3,707,135,015         85.1         3,458,286,095           Contributory Retirement System         Local Government         490,141,564         419,856,122         70,285,442         85.7         48,590,353           State and School         825,903,304         763,238,089         62,665,215         92.4         33,835,985           Total         1,316,044,868         1,183,094,211         132,950,657         89.9         82,426,338           Public Safety Retirement System         State of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Prove         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064 <td< td=""><td>Government</td><td>\$ 4,640,016,238</td><td>4,074,167,598</td><td>565,848,640</td><td>87.8%</td><td>\$ 826,997,735</td><td>68.4%</td></td<>	Government	\$ 4,640,016,238	4,074,167,598	565,848,640	87.8%	\$ 826,997,735	68.4%
Contributory Retirement System	and School	20,259,557,547	17,118,271,172	3,141,286,375	84.5	2,631,288,360	119.4
Local Government State and School         490,141,564 825,903,304         419,856,122 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,285,442 70,28	otal	24,899,573,785	21,192,438,770	3,707,135,015	85.1	3,458,286,095	107.2
State and School         825,903,304         763,238,089         62,665,215         92.4         33,835,985           Total         1,316,044,868         1,183,094,211         132,950,657         89.9         82,426,338           Public Safety Retirement System         State of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189	ory Retirement System						
Total         1,316,044,868         1,183,094,211         132,950,657         89.9         82,426,338           Public Safety Retirement System         5tate of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division B (without Social Security)	Government	490,141,564	419,856,122	70,285,442	85.7	48,590,353	144.6
Public Safety Retirement System           State of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552	and School	825,903,304	763,238,089	62,665,215	92.4	33,835,985	185.2
State of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         175,242,218         17,7053,414         (1,811,1	otal	1,316,044,868	1,183,094,211	132,950,657	89.9	82,426,338	161.3
State of Utah         1,218,611,023         1,003,324,516         215,286,507         82.3         108,966,987           Other Division A (with Social Security)         1,387,408,005         1,208,282,875         179,125,130         87.1         141,680,931           Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         175,242,218         17,7053,414         (1,811,1	ety Retirement System						
Salt Lake City         326,503,586         241,397,251         85,106,335         73.9         28,275,530           Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415		1,218,611,023	1,003,324,516	215,286,507	82.3	108,966,987	197.6
Ogden         74,198,987         55,903,926         18,295,061         75.3         5,517,486           Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	Division A (with Social Security)	1,387,408,005	1,208,282,875	179,125,130	87.1	141,680,931	126.4
Provo         55,943,252         43,277,426         12,665,826         77.4         5,213,125           Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	ake City	326,503,586	241,397,251	85,106,335	73.9	28,275,530	301.0
Logan         31,343,079         24,628,718         6,714,361         78.6         2,305,903           Bountiful         24,275,064         17,826,177         6,448,887         73.4         1,775,931           Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	1	74,198,987	55,903,926	18,295,061	75.3	5,517,486	331.6
Bountiful Other Division B (without Social Security)         24,275,064 392,993,433         17,826,177 344,8887 33.4         1,775,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,931 375,9		55,943,252	43,277,426	12,665,826	77.4	5,213,125	243.0
Other Division B (without Social Security)         392,993,433         344,198,300         48,795,133         87.6         61,435,806           Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	I	31,343,079	24,628,718	6,714,361	78.6	2,305,903	291.2
Total         3,511,276,429         2,938,839,189         572,437,240         83.7         355,171,699           Firefighters Retirement System         Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	iful	24,275,064	17,826,177	6,448,887	73.4	1,775,931	363.1
Firefighters Retirement System           Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	Division B (without Social Security)	392,993,433	344,198,300	48,795,133	87.6	61,435,806	79.4
Division A (with Social Security)         175,242,218         177,053,414         (1,811,196)         101.0         26,671,552           Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	otal	3,511,276,429	2,938,839,189	572,437,240	83.7	355,171,699	161.2
Division B (without Social Security)         883,020,100         866,004,273         17,015,827         98.1         84,461,071           Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	rs Retirement System						
Total         1,058,262,318         1,043,057,687         15,204,631         98.6         111,132,623           Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	on A (with Social Security)	175,242,218	177,053,414	(1,811,196)	101.0	26,671,552	(6.8)
Judges Retirement System         198,987,491         163,748,415         35,239,076         82.3         15,831,547	on B (without Social Security)	883,020,100	866,004,273	17,015,827	98.1	84,461,071	20.1
	otal	1,058,262,318	1,043,057,687	15,204,631	98.6	111,132,623	13.7
6 H. H. D. C. A. D. M. A. D. M. A. D. A.	tirement System	198,987,491	163,748,415	35,239,076	82.3	15,831,547	222.6
Governors and Legislators Ketirement Plan 12,247,645 10,039,815 2,207,830 82.0 943,349	and Legislators Retirement Plan	12,247,645	10,039,815	2,207,830	82.0	943,349	234.0
Tier 2 Public Employees Retirement System 140,320,321 140,538,621 (218,300) 100.2 637,559,954	lic Employees Retirement System	140,320,321	140,538,621	(218,300)	100.2	637,559,954	0.0
Tier 2 Public Safety and Firefighter Retirement System 13,628,121 15,089,153 (1,461,032) 110.7 53,276,317	ic Safety and Firefighter Retirement System	13,628,121	15,089,153	(1,461,032)	110.7	53,276,317	(2.7)
Grand Total \$31,150,340,978 26,686,845,861 4,463,495,117 85.7% \$4,714,627,922	Grand Total	\$ 31,150,340,978	26,686,845,861	4,463,495,117	85.7%	\$4,714,627,922	94.7%

#### Note 2

## **Basis of Presentation**

The Schedules of Employer Allocations and Pension Amounts by Employer for the Noncontributory Retirement System, Contributory Retirement System, Public Safety Retirement System, Firefighters Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan, Tier 2 Public Employees Contributory Retirement System and the Tier 2 Public Safety and Firefighter Retirement System present amounts that are

considered elements of the financial statements of the Systems or of its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the Systems or of its participating employers. The amounts presented in the Schedules were prepared in accordance with accounting principles generally accepted in the United State of America. Such preparation requires management of the Systems to make a number of estimates and assumptions related to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates. The following are the significant accounting policies followed by the Systems:

December 31, 2015

## A) Allocation Percentage Methodology

Each employer's proportion is equal to the ratio of the employer's actual contributions to the Systems during the plan year over the total of all employer contributions to the Systems during the plan year. This allocation method is a reasonable representation of each employer's proportionate share of the projected long-term contribution effort to the System and satisfies applicable requirements within Governmental Accounting Standards Board Statement Number 68 (GASB No. 68). The Systems used updated procedures to roll forward the total pension liability from January 1, 2015, to December 31, 2015. This is the second year of implementation and therefore there is a change in allocation percentage from December 31, 2014, to December 31, 2015. This change in proportion is reflected is the deferred outflows and deferred inflows of resources.

## B) Collective Net Pension Liability of Participating Employers and **Actuarial Information**

The components of the current-year pension liability/(asset) of the employers as of December 31, 2015, were as shown in the schedule on the top of page 281.

## C) Actuarial Assumptions

Actuarial valuation of the ongoing Systems involve estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in 2014 and the next experience study is scheduled to be conducted in 2017. The Schedule of Employers' Net Pension Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The total pension liability as of December 31, 2015, is based on the results of an actuarial valuation date of January 1, 2015, and rolled-forward using accepted actuarial procedures.

A summary of the actuarial assumptions, as of the latest actuarial valuation, is as shown in the table on page 283. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Systems target asset allocation, as of December 31, 2015, are summarized in the table below.

#### **TARGET ALLOCATIONS**

	Expected Return Arithmetic Ba			
Asset Class	Target Asset Allocation	Real Return Arithmetic Basis	Long-term Expected Portfolio Real Rate of Return*	
Equity securities	40%	7.06%	2.82%	
Debt securities	20	0.80	0.16	
Real assets	13	5.10	0.66	
Private equity	9	11.30	1.02	
Absolute return	18	3.15	0.57	
Cash and cash equivalents	0	0.00	0.00	
Totals 100% 5.				
Inflation			2.75%	
Expected arithmetic nominal return				

*The total URS Defined Benefit long-term expected rate of return is 7.50%. It is comprised of a 2.75% inflation rate, 0.35% for administrative and investment expenses, and a real long-term expected rate of return of 5.10%.

#### D) Discount Rate

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates under Utah State Code.

Based on those assumptions, the Systems' fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

December 31, 2015

#### SUMMARY OF ACTUARIAL ASSUMPTIONS

		Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter
Valuation date		1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15	1/1/15
Actuarial cost method		Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age
						Level Percent of Payroll	Level Percent of Payroll		
Amortization period Open Group Op						Open Group 20-Year Open Period			
meth	rial asset valuation od (All Systems r same method)	:	oected investme		ments with the e hed over five yea				
Actuarial assumptions:  Investment rate of return 7.50% 7.50% 7.50% 7.50% 7.50% 7.50% 7.50% 7.50%					7.50%				
Projected salary increases*		3.50-10.50%	3.50-10.50%	3.50-8.00%	3.50-9.25%	3.50%	None	3.50-10.50%	3.50-9.25%
	Inflation rate	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%
Post-retirement cost-of-living adjustment         2.75%         2.75%         2.75%         2.75%         2.75%         2.75%         2.75%         2.75%         2.75%         2.5%						2.50%	2.50%		
Morta	Mortality: (Non-educators)  Male: RP-2000 with white collar adjustments, projected with Scale AA for the year 2000.  Female: 120% of constructed mortality table based on actual experience of female educators, projected with Scale AA from the year 2000.					cale AA			
Morta	Mortality: (Educators)  Male: 90% of constructed mortality table based on actual experience of male educators, projected with Scale AA from the year 2000.  Female: 100% of constructed mortality table based on actual experience of female educators, projected with Scale AA from the year 2000.								

 $Note: All\ post-retirement\ cost-of-living\ adjustments\ are\ noncompounding\ and\ are\ based\ on\ the\ original\ benefit\ except\ for\ Judges,\ which\ is$ a compounding benefit. The cost-of-living adjustments are also limited to the actual CPI increase for the year, although unused CPI increases not met may be carried forward to subsequent years.

*Composed of 2.75% inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.

December 31, 2015

#### CHANGES IN DISCOUNT RATE

Year ended December 31, 2015

Noncontributory Retirement System   Local Government   \$ 1,195,581,952   565,848,640   40,147,500   5,685,609,704   3,141,286,375   1,007,867,858   Total   6,881,191,657   3,707,135,015   1,048,015,358   Contributory Retirement System   Local Government   123,779,302   70,285,442   25,374,840   State and School   141,687,429   62,665,215   (4,368,522)   Total   265,466,731   132,950,657   21,006,318   Public Safety Retirement System   State of Utah   376,882,733   215,286,507   82,032,224   Other Division A (with Social Security)   379,311,499   179,125,130   16,136,521   Salt Lake City   127,725,232   85,106,335   49,927,244   Ogden   27,952,249   18,295,061   10,340,322   Provo   20,111,408   12,665,826   6,544,597   Logan   10,903,805   6,714,361   3,291,296   Bountiful   9,518,574   6,448,887   3,903,949   Other Division B (without Social Security)   106,452,636   48,795,133   1,557,764   Total   1,058,858,137   572,437,240   173,733,916   Firefighters Retirement System   Division B (without Social Security)   24,653,812   (1,811,196)   (23,306,197)   Division B (without Social Security)   134,522,556   17,015,827   (80,029,994)   Total   159,176,368   15,204,631   (103,336,190)   Judges Retirement System   55,879,242   35,239,076   17,503,626   Governors and Legislators Retirement Plan   3,434,235   2,207,830   1,256,050   Tier 2 Public Employees Retirement System   40,032,279   (218,300)   (30,724,482)   Tier 2 Public Safety and Firefighter Retirement System   2,483,584   (1,461,032)   (4,490,170)   Grand Total   \$8,466,522,232   4,463,495,117   1,122,964,425	System	Net Pension Liability/(Asset) 1% Decrease (6.5%)	Net Pension Liability/(Asset) Current Discount Rate (7.5%)	Net Pension Liability/(Asset) 1% Increase (8.5%)
State and School         5,685,609,704         3,141,286,375         1,007,867,858           Total         6,881,191,657         3,707,135,015         1,048,015,358           Contributory Retirement System	Noncontributory Retirement System			
Total 6,881,191,657 3,707,135,015 1,048,015,358  Contributory Retirement System	Local Government	\$ 1,195,581,952	565,848,640	40,147,500
Contributory Retirement System	State and School	5,685,609,704	3,141,286,375	1,007,867,858
Local Government         123,779,302         70,285,442         25,374,840           State and School         141,687,429         62,665,215         (4,368,522)           Total         265,466,731         132,950,657         21,006,318           Public Safety Retirement System         376,882,733         215,286,507         82,032,224           Other Division A (with Social Security)         379,311,499         179,125,130         16,136,521           Salt Lake City         127,725,232         85,106,335         49,927,244           Ogden         27,952,249         18,295,061         10,340,322           Provo         20,111,408         12,665,826         6,544,597           Logan         10,903,805         6,714,361         3,291,296           Bountiful         9,518,574         6,448,887         3,903,949           Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         15	Total	6,881,191,657	3,707,135,015	1,048,015,358
State and School         141,687,429         62,665,215         (4,368,522)           Total         265,466,731         132,950,657         21,006,318           Public Safety Retirement System	Contributory Retirement System			
Total 265,466,731 132,950,657 21,006,318  Public Safety Retirement System	Local Government	123,779,302	70,285,442	25,374,840
Public Safety Retirement System	State and School	141,687,429	62,665,215	(4,368,522)
State of Utah         376,882,733         215,286,507         82,032,224           Other Division A (with Social Security)         379,311,499         179,125,130         16,136,521           Salt Lake City         127,725,232         85,106,335         49,927,244           Ogden         27,952,249         18,295,061         10,340,322           Provo         20,111,408         12,665,826         6,544,597           Logan         10,903,805         6,714,361         3,291,296           Bountiful         9,518,574         6,448,887         3,903,949           Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System         24,653,812         (1,811,196)         (23,306,197)           Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan	Total	265,466,731	132,950,657	21,006,318
Other Division A (with Social Security)         379,311,499         179,125,130         16,136,521           Salt Lake City         127,725,232         85,106,335         49,927,244           Ogden         27,952,249         18,295,061         10,340,322           Provo         20,111,408         12,665,826         6,544,597           Logan         10,903,805         6,714,361         3,291,296           Bountiful         9,518,574         6,448,887         3,903,949           Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System         24,653,812         (1,811,196)         (23,306,197)           Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees	Public Safety Retirement System			
Salt Lake City         127,725,232         85,106,335         49,927,244           Ogden         27,952,249         18,295,061         10,340,322           Provo         20,111,408         12,665,826         6,544,597           Logan         10,903,805         6,714,361         3,291,296           Bountiful         9,518,574         6,448,887         3,903,949           Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System         24,653,812         (1,811,196)         (23,306,197)           Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety an	State of Utah	376,882,733	215,286,507	82,032,224
Ogden         27,952,249         18,295,061         10,340,322           Provo         20,111,408         12,665,826         6,544,597           Logan         10,903,805         6,714,361         3,291,296           Bountiful         9,518,574         6,448,887         3,903,949           Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System         Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Other Division A (with Social Security)	379,311,499	179,125,130	16,136,521
Provo         20,111,408         12,665,826         6,544,597           Logan         10,903,805         6,714,361         3,291,296           Bountiful         9,518,574         6,448,887         3,903,949           Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System         Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Salt Lake City	127,725,232	85,106,335	49,927,244
Logan Bountiful Other Division B (without Social Security)         10,903,805 9,518,574 106,452,636         6,714,361 48,795,133         3,291,296 3,903,949 1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System Division A (with Social Security)         24,653,812 134,522,556         (1,811,196) 17,015,827         (23,306,197) (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System Governors and Legislators Retirement Plan 3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System Retirement System         40,032,279         (218,300)         (30,724,482)           Retirement System         2,483,584         (1,461,032)         (4,490,170)	Ogden	27,952,249	18,295,061	10,340,322
Bountiful Other Division B (without Social Security)         9,518,574 (4,448,887)         3,903,949 (4,490,170)           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System Division A (with Social Security)         24,653,812 (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter Retirement System         2,483,584         (1,461,032)         (4,490,170)	Provo	20,111,408	12,665,826	6,544,597
Other Division B (without Social Security)         106,452,636         48,795,133         1,557,764           Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Logan	10,903,805	6,714,361	3,291,296
Total         1,058,858,137         572,437,240         173,733,916           Firefighters Retirement System	Bountiful	9,518,574	6,448,887	3,903,949
Firefighters Retirement System	Other Division B (without Social Security)	106,452,636	48,795,133	1,557,764
Division A (with Social Security)         24,653,812         (1,811,196)         (23,306,197)           Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Total	1,058,858,137	572,437,240	173,733,916
Division B (without Social Security)         134,522,556         17,015,827         (80,029,994)           Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Firefighters Retirement System			
Total         159,176,368         15,204,631         (103,336,190)           Judges Retirement System         55,879,242         35,239,076         17,503,626           Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Division A (with Social Security)	24,653,812	(1,811,196)	(23,306,197)
Judges Retirement System       55,879,242       35,239,076       17,503,626         Governors and Legislators Retirement Plan       3,434,235       2,207,830       1,256,050         Tier 2 Public Employees Retirement System       40,032,279       (218,300)       (30,724,482)         Tier 2 Public Safety and Firefighter         Retirement System       2,483,584       (1,461,032)       (4,490,170)	Division B (without Social Security)	134,522,556	17,015,827	(80,029,994)
Governors and Legislators Retirement Plan         3,434,235         2,207,830         1,256,050           Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Total	159,176,368	15,204,631	(103,336,190)
Tier 2 Public Employees Retirement System         40,032,279         (218,300)         (30,724,482)           Tier 2 Public Safety and Firefighter         2,483,584         (1,461,032)         (4,490,170)	Judges Retirement System	55,879,242	35,239,076	17,503,626
Tier 2 Public Safety and Firefighter Retirement System 2,483,584 (1,461,032) (4,490,170)	Governors and Legislators Retirement Plan	3,434,235	2,207,830	1,256,050
Retirement System 2,483,584 (1,461,032) (4,490,170)	Tier 2 Public Employees Retirement System	40,032,279	(218,300)	(30,724,482)
	Tier 2 Public Safety and Firefighter			
Grand Total \$8,466,522,232 4,463,495,117 1,122,964,425	Retirement System	2,483,584	(1,461,032)	(4,490,170)
	Grand Total	\$ 8,466,522,232	4,463,495,117	1,122,964,425

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

## E) Sensitivity to the Discount Rate

The table above presents the currentperiod net pension liability/(asset) of the employers calculated using the current-period discount rate assumption of 7.5%, as well as what the net pension liability/(asset) would be if it were calculated using a 1.00% point lower (6.5%) or a 1.00% point higher (8.5%) than the current assumption.

#### Note 3

## **Deferred Outflows** of Resources and Deferred Inflows of Resources

Deferred outflows of resources and deferred inflows of resources represent the inflows or outflows that have been deferred or delayed until a future period. What is being deferred is the recognition of those outflows and inflows as revenues and expenses.

## A) Difference **Between Expected** and Actual Experience

The difference between expected and actual experience with regard to economic and demographic factors is amortized over the average remaining service lives of the members (active and inactive members). The first year of amortization is recognized as a pension expense with the remaining years shown as either a deferred inflow or deferred outflow of resources. The collective amounts of the difference between the expected and actual experience for the year ended December 31, 2015, are shown in the table to the right.

## B) Changes in **Assumptions**

The changes in assumptions about future economic or demographic factors or other inputs is amortized over the average remaining service lives of the members (active and inactive members). The first year of amortization is recognized as a pension expense with the remaining years shown as either a deferred inflow or deferred outflow of resources.

December 31, 2015

#### DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

December 31, 2015

System	Deferred Outflows	Deferred Inflows
Noncontributory Retirement System		
Local Government	\$ —	24,973,717
State and School	_	242,178,102
Total	_	267,151,819
Contributory Retirement System		
Local Government	_	3,610,232
State and School	_	
Total	_	3,610,232
Public Safety Retirement System		
State of Utah	_	16,657,430
Other Division A (with Social Security)	_	18,193,132
Salt Lake City	1,519,423	714,533
Ogden	254,988	816,719
Provo	498,666	381,883
Logan	268,832	_
Bountiful	674,195	_
Other Division B (without Social Security)	8,837,142	
Total	12,053,246	36,763,697
Firefighters Retirement System		
Other Division A (with Social Security)	_	1,755,814
Other Division B (without Social Security)	_	15,893,639
Total	_	17,649,453
Judges Retirement System	1,307,551	_
Governors and Legislators Retirement Plan	_	_
Tier 2 Public Employees Retirement System	_	8,322,955
Tier 2 Public Safety and Firefighter		
Retirement System	253,707	
Grand Total	\$ 13,614,504	333,498,156

The following changes in assumptions were adopted and impacted the net pension liability/(asset) during the year ended December 31, 2015, from the latest actuarial study as follows:

- Decrease the wage inflation assumption for all employee groups from 3.75% to 3.50%. Modify the rate of salary increases for most of the groups.
- Decrease the payroll growth assumption from 3.5% to 3.25%.
- Improve the post-retirement mortality assumption for female educators.

#### **CHANGES IN ASSUMPTIONS**

December 31, 2015

System	Deferred Outflows	Deferred Inflows	
Noncontributory Retirement System			
Local Government	\$ —	31,562,790	
State and School	_	61,808,954	
Total	_	93,371,744	
Contributory Retirement System			
Local Government	_	369,022	
State and School	_	_	
Total	_	369,022	
Public Safety Retirement System			
State of Utah	_	8,991,600	
Other Division A (with Social Security)	_	11,986,774	
Salt Lake City	_	2,275,500	
Ogden	_	375,260	
Provo	_	514,020	
Logan	_	240,128	
Bountiful	_	131,136	
Other Division B (without Social Security)	_	4,155,992	
Total	_	28,670,410	
Firefighters Retirement System			
Other Division A (with Social Security)	_	3,019,740	
Other Division B (without Social Security)	_	11,508,498	
Total	_	14,528,238	
Judges Retirement System	_	58,962	
Governors and Legislators Retirement Plan	_	_	
Tier 2 Public Employees Retirement System	_	1,138,778	
Tier 2 Public Safety and Firefighter Retirement System	_	112,968	
Grand Total	\$ —	138,250,131	

- Minor adjustments to the pre-retirement mortality assumption.
- Modify the retirement rates for most groups. The changes generally result in an overall decrease in rates at which active members are assumed to retire.
- Modify the termination rates that generally resulted in overall increase in rates at which active members assumed to terminate for most groups.
- Modify the disability rates for some groups. The rates of disability incidence were generally decreased for those groups.

December 31, 2015

#### NET DIFFERENCE BETWEEN PROJECTED AND ACTUAL INVESTMENT EARNINGS ON PLAN INVESTMENTS

December 31, 2015 Deferred Deferred System Outflows Noncontributory Retirement System Local Government \$ 191,086,655 State and School 813,061,867 Total 1,004,148,522 **Contributory Retirement System Local Government** 20,889,420 State and School 37,991,182 Total 58,880,602 **Public Safety Retirement System** State of Utah 47,416,413 Other Division A (with Social Security) 57,200,416 Salt Lake City 11,415,593 **Ogden** 2,664,761 Provo 2,043,324 Logan 1,172,511 Bountiful 851,078 Other Division B (without Social Security) 15,760,836 Total 138,524,932 Firefighters Retirement System Other Division A (with Social Security) 8,305,829 Other Division B (without Social Security) 41,049,982 49,355,811 7,771,704 Judges Retirement System Governors and Legislators Retirement Plan 477,806 Tier 2 Public Employees Retirement System 5,660,176 Tier 2 Public Safety and Firefighter Retirement System 581,947 \$1,265,401,500 **Grand Total** 

## C) Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments

The difference between the System's expected rate of return of 7.5% and actual investment earnings on pension plan investments is amortized over a five-year closed period in accordance with GASB Statement No. 68. The first year of amortization is recognized as pension expense with the remaining years shown as either a deferred outflow or deferred inflow of resources. The collective amounts of the difference between expected and actual experience for the year ended December 31, 2015, is \$1,265,401,495. These amounts are reported as a deferred outflow of resources.

#### PROPORTIONATE SHARE OF GROSS PENSION EXPENSE

December 31, 2015

System	
Noncontributory Retirement System	
Local Government	\$ 118,738,378
State and School	575,900,182
Total	694,638,560
Contributory Retirement System	
Local Government	25,855,344
State and School	21,578,671
Total	47,434,015
Public Safety Retirement System	
State of Utah	35,174,696
Other Division A (with Social Security)	51,636,221
Salt Lake City	12,497,324
Ogden	2,653,462
Provo	2,118,986
Logan	1,504,822
Bountiful	1,083,884
Other Division B (without Social Security)	8,907,964
Total	115,577,359
Firefighters Retirement System	
Other Division A (with Social Security)	1,522,285
Other Division B (without Social Security)	9,472,983
Total	10,995,268
Judges Retirement System	8,175,715
Governors and Legislators Retirement Plan	271,448
Tier 2 Public Employees Retirement System	51,348,713
Tier 2 Public Safety and Firefighter Retirement System	5,488,686
Grand Total	\$ 933,929,764

## D) Changes in Proportion and Differences Between Contributions and **Proportionate Share of Contributions**

The change in employer proportionate share is the amount of difference between the employer proportionate share of the net pension liability/(asset) in the prior year compared to the current year. The difference between the employer contributions and proportionate share of contributions is the difference between the total amount of the employer contributions and the amount of the proportionate share of the employer contributions. The change in proportionate share and the difference between employer contributions and proportionate share of contributions is amortized over the average remaining service lives of the members (active

#### Notes to the Schedules of Employer Allocations and Pension Amounts (Concluded)

December 31, 2015

and inactive members). The first year of amortization is recognized as pension expense with the remaining years shown as either a deferred outflow or deferred inflow of resources

#### E) Proportionate Share of Allocable Gross Pension Expense

The collective gross pension expense includes certain current period changes in the collective net pension liability/(asset), projected earnings on pension plan investments and amortization of deferred inflows of resources and deferred outflows of resources for the current period. The collective pension expense for the period ending December 31, 2015, is as shown in the top-right table on page 286.

### F) Net Amortization of Deferred **Amounts from Changes in Proportion** and Differences Between Employer **Contributions and Proportionate** Share of Contributions

The change in the employer's proportion of the collective net pension liability/(asset), since the prior measurement date (December 31, 2014), the net effect of the change on the employer's proportionate share of the collective net pension liability/(asset), and collective deferred outflows of resources and deferred inflows of resources related to pensions, determined at the beginning of the measurement period, is recognized in the employer's pension expense, beginning in the current period, using average remaining services lives for both active and inactive members. The table to the right illustrates the average remaining service lives for the cost sharing retirement plans.

### G) Proportionate Share of Nonemployer Contributions

The Firefighters Retirement System collects fire insurance premium tax. Fire insurance premium taxes are collected by the Utah State Treasurer and are used to help fund the Firefighters Retirement System. The proportionate share of nonemployer contributions is based upon the same methodology used to calculate each employer's proportionate share of the net pension liability/(asset) and was equal to \$17,218,524 in calendar year 2015 and was used to offset gross pension plan expense in the Firefighters Retirement System.

#### NET AMORITIZATION OF DEFERRED **AMOUNTS FROM CHANGES IN PROPORTION** AND DIFFERENCES BETWEEN EMPLOYER **CONTRIBUTIONS AND PROPORTIONATE SHARE OF CONTRIBUTIONS**

Year ended December 31, 2015

Cost Sharing Retirement System	Average Remaining Service Lives
Noncontributory Retirement System	
Local Government	4.61
State and School	4.50
Contributory Retirement System	
Local Government	2.11
State and School	1.00
Public Safety Retirement System	
State of Utah	3.76
Other Division A (with Social Security)	4.04
Other Division B (without Social Security)	5.81
Firefighters Retirement System	
Other Division A (with Social Security)	7.49
Other Division B (without Social Security)	6.32
Tier 2 Public Employees Retirement System	11.74
Tier 2 Public Safety and Firefighter Retirement	System 18.45

The Judges Retirement System collects court fees from the Utah Judiciary System and is used to help fund the retirement system. The Judges Retirement System collected \$1,653,457 in court fees in calendar year 2015 and was used to offset gross pension plan expense.

#### H) Total Employer Net Pension Plan Expense

This amount is equal to the gross pension expense less net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate of contributions and any proportionate share of nonemployer contributions.

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

# Schedule of Employer Allocations and Pension Amounts

and Dancian Amounts												
and Pension Amounts						Net Difference						
at December 31, 2015 Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions					
4 Corners Comm Behavior Health	N/A	\$ (185)	33,978	(26,078)	_	4,804	_					
Active Re Entry Inc Alpine City Alpine School District Alpine Uniserv	N/A N/A N/A N/A	(38) (12,280) (11)	7,032 2,252,021 2,075	(5,397) (1,728,410) (1,593)	_ _ _	994 318,414 293	_ _ _					
American Fork City American Leadership Academy Ames Charter School Annabella Town Ash Creek Special Service District	N/A N/A N/A N/A N/A	(49,572) (364) (21) —	447,492 66,743 3,799 —	(448,675) (51,225) (2,916) —	3,806 — — —	139,797 9,437 537 —	_ _ _ _					
Ashley Valley Improvement District Ashley Valley Sewer Management Board	N/A N/A	(34)	6,258	(4,803)	_	885	_					
Ballard Town Bear Lake Special Service District	N/A N/A N/A	(6)	1,177	(903)	_	166	_					
Bear River Association of Governments	N/A	(56)	10,221	(7,844)	_	1,445	_					
Bear River Health Department Bear River Mental Health	N/A N/A	(317) (281)	58,063 51,622	(44,563) (39,619)	_	8,210 7,299	_					
Bear River Water District Beaver City	N/A N/A	(24) (57)	4,372 10,538	(3,355) (8,088)	_	618 1,490	_					
Beaver County	N/A	(10,838)	43,210	(52,091)	1,858	7,800						
Beaver Housing Authority Beaver School District	N/A N/A	(152)	27,806	(21,341)	_	3,931	_					
Beaver Valley Hospital Benchland Water Company	N/A N/A	(124) (10)	22,774 1,882	(17,479) (1,445)	_	3,220 266	_					
Bicknell Town	N/A											
Big Water Municipal Corp Blanding City	N/A N/A	(849) (931)	1,443 5,817	(2,608) (6,070)	147 158	338 966	_					
Bluffdale City Bona Vista Water Improvement	N/A N/A	(163) (12)	29,830 2,216	(22,894) (1,701)		4,218 313						
Bountiful Irrigation District	N/A	(11)	2,036	(1,562)		288						
Box Elder County Mosquito District Box Elder County	N/A N/A	(10) (7,995)	1,817 48,507	(1,394) (51,030)	1,355	257 8,091	_					
Box Elder School District Bridgerland Applied Technology Center	N/A N/A	(1,346) (105)	246,847 19,270	(189,454) (14,790)	_	34,902 2,725	_					
Brigham City Street Control of the C	N/A	(9,025)	120,841	(112,400)	469	33,865						
Cache County Cache Metro Planning Organization	N/A N/A	(37,720)	257,957	(272,602)	4,296	74,312	_					
Cache School District Canyons School District	N/A N/A	(1,985) (7,779)	363,978 1,426,465	(279,351) (1,094,801)	_	51,463 201,688	_					
Carbon County	N/A	(5,376)	64,753	(58,664)	880	9,956						
Carbon County Recreation/Transportation Special Service District Carbon School District	N/A N/A	(608)	— 111,442	(85,531)	_	 15,757	_					
Castle Dale City Castle Valley Special Service District	N/A N/A	(10) (12)	1,849 2,204	(1,419) (1,692)	_	261 312	_					
Cedar City	N/A	(33,300)	450,252	(423,425)	591	143,174						
Cedar City Housing Authority Centerfield City	N/A N/A	(18)	3,309	(2,539)	_	468	_					
Centerville City Central Davis Sewer District	N/A N/A	(363) (27)	7,125 4,954	(6,047) (3,803)	57	1,059 701	_					
Central Iron County Water Conservancy	N/A	(32)	5,900	(4,528)		834						
Central UT Public Health Central Utah Counseling Center	N/A N/A	(84) (76)	15,369 13,860	(11,795) (10,638)	_	2,173 1,960	_					
Central Utah Water District Central Weber Sewer District	N/A N/A	(289) (160)	53,007 29,317	(40,682) (22,501)	_	7,495 4,145	_					
City of Aurora	N/A					·····						
City of Bountiful City of Cedar Hills	N/A N/A	(3,544) (59)	95,268 10,755	(78,517) (8,255)	530	13,952 1,521	_					
City of Draper City of Duchesne	N/A N/A	(5,827) (6)	55,413 1,010	(52,393) (775)	968	8,716 143	_ _					
City of Enterprise	N/A	(1)	249	(191)	_	35	_					

Deferred Outflows of Resources

Deferred Inflows of Re	COLLECTOR

							N	let Amortization of Deferred		
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
3,354	8,158	7,064	_	967	_	8,031	43,584	312	_	43,896
687 203,436 215	1,681 521,850 508	1,462 468,209 431	_ _ _	200 64,062 59	36 — —	36 1,662 532,271 490	9,019 2,888,628 2,662	(3) 64 18,944 20	_ _ _	(3) 9,083 2,907,572 2,682
6,440 6,500 369	150,043 15,937 906	34,209 13,876 790		48,508 1,899 108	1,402 — —	84,119 15,775 898	152,262 85,610 4,873	283 605 34	(63,214) — — —	89,331 86,215 4,907
464	1,349	1,301	_	178 —	_	1,479	8,028	43	_	8,071
96	262 —	245 —	_	33	_	278	1,510 —	9	_	1,519 —
1,065	2,510	2,125		291		2,416	13,110	99		13,209
5,907 4,887 485 1,093 2,478	14,117 12,186 1,103 2,583 12,136	12,072 10,732 909 2,191 5,201	_ _ _ _	1,652 1,468 124 300 1,539	_ _ _ _	13,724 12,200 1,033 2,491 6,740	74,476 66,214 5,607 13,517 72,295	550 455 45 102 228	_ _ _ _	75,026 66,669 5,652 13,619 72,523
2,739 2,214 172				 791 648 54 		6,572 5,383 445	35,666 29,212 2,415	 255 206 16		35,921 29,418 2,431
— 439 2,887 287 201	485 1,563 7,105 600 489	888 6,202 461 423		66 192 849 63 58	146 485 — —	212 1,565 7,051 524 481	3,188 8,893 38,263 2,842 2,611	(8) 13 269 27 19		3,180 8,906 38,532 2,869 2,630
161 4,843 23,098 2,394 2,912	418 14,289 58,000 5,119 37,246	378 7,327 51,321 4,006 12,736		52 1,606 7,022 548 11,382		430 8,933 58,343 4,554 29,299	2,330 74,519 316,627 24,718 57,139	15 402 2,151 223 (458)	(14,148)	2,345 74,921 318,778 24,941 42,533
12,512	91,120	21,165	_	24,376	52	45,593	157,973	854	(29,358)	129,469
34,278 125,001 5,658	85,741 326,689 16,494	75,673 296,571 11,671	_ _ _	10,354 40,578 1,989	641	86,027 337,149 14,301	466,869 1,829,702 91,049	3,192 11,640 490	_ _ _	470,061 1,841,342 91,539
10,149 151 178 6,481	25,906 412 490 150,246	23,169 384 458 37,193	= = = =	3,170 53 63 50,894		26,339 437 521 88,671	142,944 2,371 2,827 89,702	945 14 17 723	(68,329)	143,889 2,385 2,844 22,096
288	756 —	688	_	94		782 —	4,244 —	27	_	4,271
531 392 485	1,647 1,093 1,319	1,366 1,030 1,227	=	212 141 168	267 — —	1,845 1,171 1,395	9,654 6,355 7,567	34 37 45	_ _ _	9,688 6,392 7,612
1,263 980 5,683 2,665	3,436 2,940 13,178 6,810	3,195 2,882 11,020 6,095 —		437 394 1,508 834 —		3,632 3,276 12,528 6,929 117	19,713 17,778 67,991 37,605 —	118 91 529 248 (11)		19,831 17,869 68,520 37,853 (11)
8,783 1,024 5,696 137	23,265 2,545 15,380 280 35	18,728 2,236 9,550 210 52		2,798 306 1,738 29 7	1,086 — — — 81	22,612 2,542 11,288 239 140	127,011 13,796 79,869 1,296 319	756 95 489 13 (8)		127,767 13,891 80,358 1,309 311

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
City of Green River City of Harrisville City of Helper City of Holladay City of Kanab	N/A N/A N/A N/A N/A	\$ (10) (1,570) (409) (20) (3,882)	1,791 5,327 4,842 3,759 57,477	(1,375) (6,838) (4,398) (2,885) (53,445)	270 67 —	253 998 746 532 18,386	_ _ _ _	
City of Milford City of Moab City of Monticello City of Naples City of North Salt Lake	N/A N/A N/A N/A N/A	(21) (3,210) (863) (1,811) (2,589)	3,921 21,175 8,891 8,207 24,499	(3,009) (21,775) (8,278) (9,453) (23,187)	— 542 143 310 430	554 3,487 1,387 1,442 3,855		
City of Orem City of Riverton City of Santa Clara City of Saratoga Springs City of South Jordan	N/A N/A N/A N/A N/A	(18,964) (306) (4,643) (6,995) (173,729)	134,946 56,188 66,146 47,045 2,278,396	(136,112) (43,124) (61,381) (48,135) (2,158,373)	3,195 — 123 1,181 2,550	21,987 7,944 19,753 7,726 746,319	_ _ _ _ _	
City of South Salt Lake City of St George City of Taylorsville City of Uintah City of Washington Terrace	N/A N/A N/A N/A N/A	(185,075) (115,681) (125) (14) (3,243)	2,445,282 1,558,052 23,006 2,593 49,422	(2,316,922) (1,458,198) (17,657) (1,990) (45,705)	1,881 3,776 — —	810,296 469,912 3,253 367 15,535	_ _ _ _ _	
City of Wendover City of West Haven City of West Jordan City of Woodland Hills Clearfield City	N/A N/A N/A N/A N/A	(19) (35) (30,036) — (5,859)	3,451 6,495 158,342 — 47,578	(2,648) (4,984) (173,605) — (46,513)	5,113 — 981	488 918 27,040 — 7,620		
Cleveland Town Clinton City Coalville City Color Country Uniserv Corinne City	N/A N/A N/A N/A N/A	(8) (32,874) (29) (5)	1,539 382,083 5,319 979	(1,181) (368,712) (4,082) (752)	1,066 — —	218 126,014 752 138		
Cottonwood Heights City Cottonwood Heights Parks & Recreation Services Cottonwood Imp District Council On Aging — Golden Age Special Service District Daggett County	N/A N/A N/A N/A N/A	(5,632) (36) (33) (16) (3,739)	25,799 6,654 6,025 2,990 15,577	(29,603) (5,107) (4,624) (2,295) (18,478)	962 — — — 640	4,524 941 852 423 2,785	_ _ _ _ _	
Daggett School District Davis & Weber Counties Canal Company Davis Applied Technology College Davis Behavioral Health Inc Davis County Housing Authority	N/A N/A N/A N/A N/A	(56) (14) (71) (538) (32)	10,319 2,506 13,050 98,736 5,933	(7,920) (1,923) (10,016) (75,779) (4,554)	= = = =	1,459 354 1,845 13,960 839	_ _ _ _ _	
Davis County Mosquito Abatement Davis County Davis School District Davis Uniserv DDI Vantage	N/A N/A N/A N/A N/A	(8) (37,897) (8,890) — (376)	1,426 247,870 1,630,229 — 68,969	(1,094) (255,478) (1,251,189) — (52,934)	6,405	202 40,874 230,498 — 9,752	_ _ _ _ _	
Delta City Dixie Applied Technology College Dixie State University Duchesne County Mosquito District Duchesne County Water Conservancy District	N/A N/A N/A N/A N/A	(39) — (972) —	7,198 — 40,822 —	(5,524) — — (32,668) — —	131 —	1,018 — 5,891 —	_ _ _ _	
Duchesne County Duchesne School District E Duchesne Culinary Water Improvement District Eagle Mountain City East Carbon City	N/A N/A N/A N/A N/A	(14,350) (1,251) — (208) (512)	80,414 229,379 — 38,183 4,785	(86,552) (176,047) — (29,305) (4,540)	2,438 — — — — 85	13,588 32,432 — 5,399 754		
East Hollywood High School Educators Mutual Insurance Elk Ridge City Emery County Care & Rehabilitation Center Emery County	N/A N/A N/A N/A N/A	(120) (112) (49) (65) (1,503)	22,003 20,614 9,037 11,998 24,608	(16,887) (15,821) (6,935) (9,209) (21,331)	    240	3,111 2,915 1,278 1,696 3,698		

Deterred Outflot	ws of Resources				Deletteu IIIII	ows of Resources		to Ell	ipioyer-Paid Memb	er Contributions
Changes in					Changes in		N	let Amortization of Deferred Amounts from Changes in		
Proportion and Differences Between Employer Contributions and	Total	Differences Between	Net Difference Between Projected and Actual Investment		Proportion and Differences Between Employer Contributions and	Total	Proportionate Share of Allocable	Proportion and Differences Between Employer Contributions	Proportionate	Total Employer Net Pension Expense Excluding That Attributable to
Proportionate Share of Contributions	Deferred Outflows of Resources	Expected and Actual Experience	Earnings on Pension Plan Investments	Changes of Assumptions	Proportionate Share of Contributions	Deferred Inflows of Resources	Plan Gross Pension Expense	and Proportionate Share of Contributions	Share of Nonemployer Contributions	Employer-Paid Member Contributions
172	425	372	investments	51	Contributions	423	2,298	16	Contributions	2,314
805	2,073	558	_	196	_	754	9,283	56	_	9,339
388 392	1,201 924	870 782	_	149 107	218	1,237 889	6,819 4,822	24 36	_	6,843 4,858
912	19,298	4,776		6,570		11,346	9,653	107	(8,877)	883
339	893	815	_	112		927	5,029	32	_	5,061
1,709 1,167	5,738 2,697	3,299 1,558	_	692 277	589 —	4,580 1,835	32,084 12,700	125 94	_	32,209 12,794
666 2,150	2,418 6,435	1,076 4,218		285 769	54	1,415 4,987	13,337 35,332	59 183	_	13,396 35,515
11,066	36,248	21,553		4,372		25,925	202,095	1,017	~~~~~	203,112
5,118	13,062	11,682	_	1,598	_	13,280	72,072	477	_	72,549
1,117 5,690	20,993 14,597	6,309 7,378	_	6,851 1,535	3,619	16,779 8,913	21,712 71,065	(397) 464	(8,902)	12,413 71,529
15,286	764,155	173,566	_	268,150	<u> </u>	441,716	311,150	1,602	(364,988)	(52,236)
12,146	824,323	180,968	_	292,502	4,251	477,721	263,142	1,295	(400,453)	(136,016)
27,628 2,017	501,316 5,270	144,127 4,783	_	163,365 654	_	307,492 5,437	495,365 29,509	2,507 188	(212,997) —	284,875 29,697
214 522	581 16,057	539 4,299	_	74 5,517	132	613 9,948	3,326 10,017	20 28	(7,395)	3,346 2,650
286	774	717	·····	98		815	4,426	27	······································	4,453
610	1,528	1,350	_	185	_	1,535	8,330	57	_	8,387
15,577 —	47,730	22,513	_	5,357	_	27,870	249,519	1,295	_	250,814
3,664	12,265	7,894		1,517	1,621	11,032	69,936	248		70,184
165 3,283	383 130,363	320 27,613	_	44 45,208	2,655	364 75,476	1,974 56,248	15 (193)	(61,447)	1,989 (5,392)
560	1,312	1,106	_	151	2,033	1,257	6,822	52	(01,447)	6,874
111 —	249	204	_	28	_	232	1,256	10	_	1,266
3,404	8,890	3,405		895		4,300	41,829	254	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	42,083
578 557	1,519 1,409	1,383 1,253		189 171	_	1,572 1,424	8,535 7,728	54 52	_	8,589 7,780
245	668	622	_	85	_	707	3,835	23	_	3,858
824	4,249	1,935		550	2,250	4,735	25,794	(52)		25,742
996 226	2,455 580	2,145 521	_	294 71	_	2,439 592	13,236 3,214	93 21	_	13,329 3,235
1,399	3,244	2,713	_	371	_	3,084	16,739	130	_	16,869
9,383 540	23,343 1,379	20,528 1,234	_	2,809 169	_	23,337 1,403	126,647 7,611	874 50	_	127,521 7,661
56	258	296		41	_	337	1,829	5		1,834
24,037 152,335	71,316 382,833	38,497 338,935	_	8,119 46,374	_	46,616 385,309	376,083 2,091,067	2,002 14,185	_	378,085 2,105,252
_			_	1,962	_	_	_	585	_	_
6,286	16,038	14,339  1,496		205	·····	16,301 1,701	88,466 9,232	69	~~~~~ <u>~</u> ~~	89,051 9,301
_	_	_	_	_	_	_		_	_	_
3,941	9,963	8,220	_	1,183	_	9,403	53,554	354	_	53,908
8,247 21,384	24,273 53,816	11,756 47,689	_	2,695 6,525	_	14,451 54,214	125,280 294,220	655 1,991	_	125,935 296,211
3,636	9,035	7,939	_	1,086	_	9,025	48,977	339	_	49,316
316	1,155	822		150	400	1,372	6,910	7		6,917
2,036 1,460	5,147 4,375	4,575 4,286	_	626 586	_	5,201 4,872	28,223 26,441	190 136	_	28,413 26,577
1,022	2,300	1,879	_	257	_	2,136	11,591	95	_	11,686
1,025 3,516	2,721 7,454	2,495 4,628	_	341 740	_	2,836 5,368	15,390 33,743	95 280	_	15,485 34,023

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

			Net Pension	Net Pension	Differences Between	Net Difference Between Projected and Actual Investment		
Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Liability/(Asset) 1.00% Decrease (6.50%)	Liability/(Asset) 1.00% Increase (8.50%)	Expected and Actual Experience	Earnings on Pension Plan Investments	Changes of Assumptions	
Emery County Recreation Special Service District Emery School District	N/A N/A	\$ (23) (337)	4,186 61,778	(3,213) (47,414)	_	592 8,735	_	
Emery Town Emery Water Conservancy District Enoch City	N/A N/A N/A	(30) (880)	5,577 6,575	(4,280) (6,553)	148	789 1,064	_ _ _	
Ephraim City Escalante City	N/A N/A	(543)	9,483	(8,156)	<u>86</u>	1,420		~~~~~
Eureka City Corporation Fairview City Farmington City	N/A N/A N/A	(8) (22,694)	1,548 278,874	(1,188) (265,359)	— — 854	219 87,073	_ _ _	
Farr West City Fast Forward Charter High School	N/A N/A	(52)	9,627			— 1,361		~~~~~
Ferron City Fillmore City Five-County Association of Governments	N/A N/A N/A	(13) (19) (127)	2,327 3,435 23,358	(1,786) (2,636) (17,927)		329 486 3,303	_ _ _	
Fountain Green City Fox Hollow Golf Course	N/A N/A							~~~~~
Francis City Fruit Heights City Garfield County	N/A N/A N/A	(16) (4,460)	2,893 16,672	(2,221) (20,595)	— — 766	409 3,053	_ _ _	
Garfield School District Garland City	N/A N/A	(99) (4)	18,116 743	(13,904) (570)		2,561 105		~~~~~
Genola Town Grand County Cemetery Maintenance District Grand County	N/A N/A N/A	(18) (8,917)	3,290 58,201	(2,525) (60,020)	  1,507	465 9,601		
Grand School District Grand Water/Sewer Service	N/A N/A	(536) (10)	98,230 1,810	(75,391) (1,389)		13,889 256		~~~~~
Granger-Hunter Improvement District Granite School District Granite Uniserv	N/A N/A N/A	(140) (10,609) —	25,584 1,945,532 —	(19,636) (1,493,181) —		3,617 275,079 —	_ _ _	
Grantsville City Gunnison City	N/A N/A	(3,243) (11)	13,840 1,937	(16,277) (1,487)	555 —	2,462 274		~~~~
Gunnison Valley Hospital Heber City Heber Light & Power	N/A N/A N/A	(169) (6,344) (110)	30,920 43,076 20,109	(23,731) (43,966) (15,433)	1,071	4,372 7,065 2,843	_ _ _	
Heber Valley Historic Railroad Heber Valley Special Service District	N/A N/A	(57) —	10,426	(8,002)		1,474		~~~~~
Herriman City High Desert Uniserv High School Activities Association	N/A N/A N/A	(251) (5) —	46,112 979 —	(35,390) (752) —		6,520 138 —		
Highland City Hinckley Town	N/A N/A	(56) —	10,314	(7,916) —		1,458		~~~~~
Honeyville City Hooper City Hooper Water Improvement District	N/A N/A N/A	(27) (11)	4,915 1,965	(3,772) (1,508)	_ _ _	695 278		
Housing Authority of Carbon County Housing Authority of Salt Lake County	N/A N/A	(350)	64,123	— (49,214)		9,066		~~~~~
Housing Authority of SLC Housing Authority Ogden City Huntington City	N/A N/A N/A	(206) (27) (3)	37,854 4,936 601	(29,053) (3,788) (461)		5,352 698 85	_ _ _	
Hurricane City Hurricane Valley Fire Special Service District	N/A N/A	(1,725) (22,564)	23,306 293,587	(20,741) (279,161)	280 207	3,551 98,562		~~~~~
Hyde Park City Hyrum City Impact Mitigation Special Service District	N/A N/A N/A	(13) (19) —	2,377 3,513 —	(1,824) (2,697) —		336 497 —	_ _ _	
Intech Collegiate High School Iron County	N/A N/A	(69) (12,065)	12,600 70,153	(9,670) (74,698)	 2,048	1,782 11,782		~~~~~
Iron School District Itineris High School Ivins City	N/A N/A N/A	(1,065) (52) (6,254)	195,352 9,611 80,955	(149,932) (7,377) (76,014)	  278	27,621 1,359 23,844	_ _ _	

Deletted Outilo	or mesources				Deserred iiii	iows of Resources		10 2	ipioyei-i ala menin	er continuations
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
350	942	870		119		989	5,369	33	_	5,402
5,801 — 461	14,536 — 1,250	12,844 — 1,159	_	1,757 — 159	_ _ _	14,601 — 1,318	79,241 — 7,153	540 — 43	_	79,781 — 7,196
469	1,681	1,066		212	445	1,723	9,777	18		9,795
1,697 —	3,203	1,796 —	_	284	_	2,080	12,946 —	127 —	_	13,073
204 3,799	423 91,726	322 23,476	_	44 30,618	2,583	366 56,677	1,986 72,776	19 (71)	(40,549)	2,005 32,156
<del></del>	<del>-</del>		<del>-</del>					<del>-</del>	(40,545) —	
870 278	2,231 607	2,002 484	_	274 66	_	2,276 550	12,349 2,984	81 26	_	12,430 3,010
365 2,018	851 5,321	714 4,856		98 664		812 5,520	4,406 29,960	34 188		4,440 30,148
	_	_	_	_	_	_	_	_	_	_
224 1 0 4 2	633	602	_	82	_	684	3,711	21 125	_	3,732
1,843 1,456	5,662 4,017	1,908 3,766	<u>-</u> -	602 515	<u>-</u>	2,510 4,281	28,336 23,237	135 136	<u>-</u>	28,471
101	206	155	_	21	_	176 —	953	9	_	962 —
447 4,366	912 15,474	684 9,032		94 1,907	1,960	778 12,899	4,221 88,336	42 294		4,263 88,630
9,636 246	23,525 502	20,423 376	_	2,794 51	_	23,217 427	125,997 2,321	897 23	_	126,894 2,344
2,577 183,311	6,194 458,390	5,319 404,488	_	728 55,344	_	6,047 459,832	32,817 2,495,500	240 17,070	<u> </u>	33,057 2,512,570
1,552	4,569	1,748		486		2,234	22,793	120		22,913
155 2,609	429 6,981	403 6,428	_	55 880	_	458 7,308	2,485 39,661	14 243	_	2,499 39,904
3,749 1,950	11,885 4,793	6,777 4,181	_	1,404 572	_	8,181 4,753	64,973 25,793	326 182		65,299 25,975
1,038	2,512 —	2,168	_ _	297	<u>_</u>	2,465	13,374	97	_	13,471
4,578 111	11,098 249	9,587 204	_	1,312 28	_	10,899 232	59,147 1,256	426 10	_	59,573 1,266
— 492	1,950	2,144				2,437	13,229		<u>-</u>	13,275
— —			_		_	<u> </u>		<del>-</del>	_	— —
495 201	1,190 479	1,022 408	_	140 56	_	1,162 464	6,305 2,520	46 19	_	6,351 2,539
	— 15,442	— 13,332		— 1,824		 15,156	— 82,250	— 594		— 82,844
3,350 671	8,702 1,369	7,870 1,026	_	1,077 140	_	8,947 1,166	48,555 6,332	312 63	_	48,867 6,395
7 16,915	92 20,746	4,275	<u>-</u>	710		142 4,985	771 32,438	2,365	<u>-</u> -	772 34,803
96 323	98,865 659	20,861 494	<u>-</u> -	35,737 68	17,771 —	74,369 562	23,349 3,048	(2,635) 30	(49,198) —	(28,484) 3,078
262 —	759 —	730 —	_	100	_	830	4,507 —	24 —	<u> </u>	4,531
1,311 7,165	3,093 20,995	2,620 10,418	_	358 2,337	_	2,978 12,755	16,162 108,573	122 558	_	16,284 109,131
17,348 936	44,969 2,295	40,615 1,998	_	5,557 273	_	46,172 2,271	250,575 12,328	1,615 87		252,190 12,415
3,953	28,075	7,774		8,191		15,965	30,521	425	(10,508)	20,438

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

					Differences	Net Difference Between Projected and Actual		
Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Between Expected and Actual Experience	Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Jordan River Commission Jordan School District	N/A N/A	\$ (4) (9,185)	776 1,684,404	(596) (1,292,768)	_	110 238,158	_	
Jordan Uniserv Jordan Valley Water Conservancy Jordanelle Special Service District	N/A N/A N/A	(251) (56)	46,016 10,237	(35,317) (7,856)	_ _ _	6,506 1,447	_	
Juab County Juab School District Kamas City	N/A N/A N/A	(8,245) (275)	19,282 50,440	(29,330) (38,713)	1,427 —	4,024 7,132		~~~~~~
Kane County Kane County Water Conservancy District	N/A N/A	(3,986) (34)	65,342 6,169	(56,629) (4,734)	636	9,817 872		~~~~~
Kane School District Kaysville City Kearns Improvement District	N/A N/A N/A	(326) (4,909) (58)	59,769 33,058 10,633	(45,873) (33,815) (8,161)	829 —	8,451 5,428 1,503	_ _ _	
Laverkin City Layton City	N/A N/A	(174) (211,222)	2,178 2,786,440	(1,961) (2,640,230)	28 2,311	334 921,683	_	~~~~~
Leeds Area Special Service District Lehi City Lewiston City	N/A N/A N/A	(2,502) (111,918) (5)	34,057 1,416,928 1,004	(32,195) (1,348,863) (770)	2,338	11,474 463,624 142	_ _ _	
Liberty Academy Charter Lindon City	N/A N/A	(251) (62)	46,022 11,452	(35,321) (8,790)		6,507 1,619	_ 	~~~~~
Logan City Logan School District Lone Peak Public Safety District	N/A N/A N/A	(19,110) (1,164) (10,593)	137,879 213,388 18,007	(138,594) (163,774) (32,556)	3,218 — 1,839	22,422 30,171 4,219	_ _ _	
Maeser Water Improvement District Magna Mosquito Abatement	N/A N/A	(3)	480	(369)	·-	68		~~~~~
Manti City Mapleton City Marriott-Slaterville City	N/A N/A N/A	(24) (2,656) —	4,382 8,974 —	(3,363) (11,542) —	457 —	620 1,684 —	_ _ _	
Mayfield Town Mendon City	N/A N/A							~~~~~
Metro Water District SLC/Sandy Midvale City Midvalley Improvement District	N/A N/A N/A	(87) (235) (28)	16,029 43,116 5,150	(12,302) (33,091) (3,953)	_ _ _	2,266 6,096 728	_ _ _	
Midway City Military Installation Development	N/A N/A	(73)	13,344	(10,241)		1,887 —		~~~~~
Millard County Care & Rehabilitation Inc Millard County Millard School District	N/A N/A N/A	(119) (8,828) (462)	21,797 32,920 84,785	(16,729) (40,704) (65,072)	1,516 —	3,082 6,034 11,988	_ _ _	
Millville City Minersville Town	N/A N/A	(1)	<u> </u>	(203)		37		~~~~~
Moab Valley Fire Protection Monroe City Monticello Academy	N/A N/A N/A	(8,358) (6) (190)	104,149 1,039 34,890	(99,640) (797) (26,778)	140 —	34,947 147 4,933		
Morgan City Corporation Morgan County	N/A N/A	(14) (1,064)	2,606 15,912	(2,000) (13,957)	— 171	368 2,406		~~~~~
Morgan School District Moroni City Mount Pleasant City	N/A N/A N/A	(327) (14) (47)	59,938 2,612 8,564	(46,002) (2,004) (6,573)	_ _ _	8,475 369 1,211	_ _ _	
Mountain Regional Water Special Service District Mountainland Association of Governments	N/A N/A	(87) (107)	15,901 19,539	(12,204) (14,996)		2,248 2,763		~~~~~
Mountainland ATC Mt Olympus Improvement District Murray City	N/A N/A N/A	(56) (237,179)	10,311 2,990,334	(7,914) (2,850,031)	— 4,772	1,458 983,801	_ _ _	
Murray School District Myton City	N/A N/A	(830)	152,244 —	(116,846)		21,526		~~~~~
N Tooele County Fire Protection Service District Ne Counseling Center Nebo Credit Union	N/A N/A N/A	(5,245) (147) (22)	57,299 26,878 3,997	(55,901) (20,629) (3,067)	205 — —	19,098 3,800 565	_ _ _	
Nebo School District Nephi City	N/A N/A	(5,455) (2,181)	1,000,439 12,837	(767,830) (13,620)	370	141,452 2,152	_	

Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
105 150,986	215 389,144	161 350,198	_	22 47,915	=	183 398,113	996 2,160,556	10 14,060	_	1,006 2,174,616
4,578 1,285	11,084 2,732	9,567 2,128	_ _	1,309 291	_ 	10,876 2,419	59,024 13,130	426 120	_ _	59,450 13,250
1,463 5,074 —	6,914 12,206 —	1,105 10,487 —	_ _	786 1,435 —	_ _	1,891 11,922 —	37,682 64,699	93 473 —	_ _ _	37,775 65,172
5,814 564	16,267 1,436	12,290 1,283		1,965 175		14,255 1,458	89,588 7,913	532 52	_ _	90,120 7,965
5,776 2,432 887 168 14,344	14,227 8,689 2,390 530 938,338	12,426 5,186 2,211 395 207,143	_ _ _ _	1,700 1,079 302 67 332,466	1,323 — 133	14,126 7,588 2,513 595 539,609	76,665 49,929 13,638 3,052 312,719	538 151 83 8 1,477	(454,752)	77,203 50,080 13,721 3,060 (140,556)
1,526 5,572 136 4,567 1,074	13,000 471,534 278 11,074 2,693	2,425 107,244 209 9,568 2,381		4,171 166,313 29 1,309 326	2,016 — — —	6,596 275,573 238 10,877 2,707	2,103 207,788 1,287 59,031 14,690	235 203 13 425 100	(5,761) (225,952) — — —	(3,423) (17,961) 1,300 59,456 14,790
10,581 20,049 — —	36,221 50,220 6,058 68	22,117 44,365 — 100		4,459 6,070 819 14	1,030 57	26,576 50,435 1,849 171	206,065 273,709 39,795 616	982 1,867 (59) (5)		207,047 275,576 39,736 611
197 778 —	817 2,919 —	911 936 —		125 331 —		1,036 1,267 —	5,620 15,659 —	18 64 —		5,638 15,723 —
1,455 3,868 392 1,404	3,721 9,964 1,120 3,291	3,333 8,964 1,071 2,774 —	_ _ _ _	456 1,227 147 380	_ _ _ _	3,789 10,191 1,218 3,154 —	20,560 55,305 6,606 17,116	135 360 37 131	_ _ _ _	20,695 55,665 6,643 17,247 —
1,825 2,267 8,237	4,907 9,817 20,225 —	4,532 3,759 17,627 —	_ _ _ _	620 1,189 2,412 —	_ _ _ _	5,152 4,948 20,039	27,959 55,986 108,752	170 194 767		28,129 56,180 109,519
36 1,024	73 36,111	55 7,320	<u>-</u>	8 12,651	47	20,018	9,380	3 155	(17,385)	(7,850)
85 3,068 308 1,651	232 8,001 676 4,228	216 7,254 542 2,960	_ _ _ _	30 992 74 481	_ _ _ _	246 8,246 616 3,441	1,332 44,753 3,343 21,965	8 286 29 139	— — —	1,340 45,039 3,372 22,104
6,159 211 893 1,396 1,952	14,634 580 2,104 3,644 4,715	12,461 543 1,781 3,306 4,062		1,705 74 244 452 556		14,166 617 2,025 3,758 4,618	76,881 3,350 10,985 20,396 25,063	574 20 83 130 182		77,455 3,370 11,068 20,526 25,245
1,000 14,387 14,359	2,458 1,002,960 35,885	2,144 222,817 31,652		293 353,612 4,331		2,437 576,429 35,983	13,226 402,687 195,281	93 1,473 1,337	(481,616) ———————————————————————————————————	13,319 (77,456) 196,618
3,139 2,583 483 92,142 1,136	22,442 6,383 1,048 233,594 3,658	3,938 5,588 831 207,997 1,916		6,863 765 114 28,459 427		10,801 6,353 945 236,456 2,536	7,857 34,477 5,126 1,283,246 19,823	335 241 45 8,580 95	(9,352) — — — — —	(1,160) 34,718 5,171 1,291,826 19,918

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

			Net Pension	Net Pension	Differences Between	Net Difference Between Projected and Actual Investment		
Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Liability/(Asset) 1.00% Decrease (6.50%)	Liability/(Asset) 1.00% Increase (8.50%)	Expected and Actual Experience	Earnings on Pension Plan Investments	Changes of Assumptions	
Nibley City Corporation No Emery Water Users Special Service District Noah Webster Academy Inc North Davis County Sewer District North Davis Fire District	N/A N/A N/A N/A	\$ (69) (18) (120) (59) (60,068)	12,604 3,222 21,987 10,778 780,849	(9,674) (2,473) (16,874) (8,272) (742,694)		1,782 456 3,109 1,524 262,528		
North Fork Special Service District North Logan City North Ogden City North Pointe Solid Waste North Sanpete School District	N/A N/A N/A N/A	(2) (8,493) (4,567) (73) (300)	322 114,055 27,030 13,439 55,079	(247) (107,397) (28,634) (10,315) (42,273)	152 775 —	46 36,393 4,527 1,900 7,788		
North Summit School District North View Fire District Nuames Charter School Oakley City Ogden City Corp	N/A N/A N/A N/A N/A	(95) (33,064) (122) — (38,721)	17,338 390,260 22,359 — 218,324	(13,307) (376,289) (17,161) — (234,562)	872 — 6,578	2,451 130,603 3,161 — 36,853	_ _ _ _	
Ogden School District Ogden Weber/NEA/UEA Uniserv Ogden-Weber Applied Technology Center Oquirrh Rec And Parks District Orangeville City	N/A N/A N/A N/A N/A	(3,431) (24) (36) —	629,138 4,363 6,644 —	(482,859) (3,349) (5,099) —		88,954 617 939 —		~~~~
Orderville Town Panguitch City Corporation Park City Park City Fire Service Park City School District	N/A N/A N/A N/A N/A	(31) (7,661) (14,335) (1,258)	5,686 254,310 32,399 230,772	(4,364) (206,381) (50,142) (177,116)	 1,100 2,482 	804 36,957 6,838 32,629		
Parowan City Payson City Perry City Piute County Piute School District	N/A N/A N/A N/A N/A	(912) (9,713) (1,148) (20) (82)	6,778 133,452 6,218 3,742 15,060	(6,764) (122,968) (6,762) (2,872) (11,558)	153 624 195 —	1,098 35,039 1,057 529 2,129		
Plain City Pleasant Grove City Pleasant View City Price City Price River Water Improvement	N/A N/A N/A N/A N/A	(7) (44,302) (1,005) (6,230) (22)	1,346 580,433 4,486 86,785 4,105	(1,033) (549,876) (5,194) (80,568) (3,150)	670 172 231	190 189,938 790 25,242 580		
Providence City Provo City Corp Provo Housing Authority Provo River Water Users Provo School District	N/A N/A N/A N/A N/A	(10) (22,253) (51) (23) (3,643)	1,913 298,432 9,270 4,295 668,092	(1,468) (265,866) (7,114) (3,296) (512,756)	3,615 — —	270 45,484 1,311 607 94,462		
Recreation & Habilitation Services Redmond Town Rich County Rich School District Richfield City	N/A N/A N/A N/A N/A	(7) — (1,001) (80) (1,665)	1,211 — 14,917 14,645 3,493	(929) — (13,091) (11,240) (5,620)	161 — 289	171 — 2,256 2,071 757	   	
Richmond City Riverdale City Roosevelt City Roosevelt City Housing Roy City	N/A N/A N/A N/A N/A	(10) (38,175) (2,664) — (95,849)	1,886 509,741 13,540 — 1,158,864	(1,447) (482,975) (15,015) — (1,111,499)	— 170 454 — 2,542	267 171,193 2,327 — 381,837	_ _ _ _ _	
Roy Water Conservancy District S Utah Valley Electric Service District S Utah Valley Solid Waste Salem City Salina City	N/A N/A N/A N/A N/A	(54) (6) (855) (6)	9,867 1,119 7,917 1,111	(7,573) (859) (7,525) (853)	   142 	— 1,395 158 1,249 157		
Salt Lake Arts Academy Salt Lake City Corp Salt Lake City Public Library Salt Lake County Service Area 3 Salt Lake Community College	N/A N/A N/A N/A N/A	(113) (76,526) (220) — (1,318)	20,641 1,152,466 40,278 — 241,733	(15,842) (1,009,904) (30,913) — (185,528)	12,312 — — —	2,918 174,147 5,695 — 34,179		

<b>Deferred Outflows of Resources</b>	Deferred Inflows of Resource

								1	Net Amortization of Deferred		
Proport Diff B Er Contri Propo	inges in ion and erences etween nployer butions and rtionate Share of butions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
	1,095 256 1,642 1,202 527	2,877 712 4,751 2,726 263,591	2,621 670 4,571 2,241 55,237	_ _ _ _	359 92 625 307 95,239	_ _ _ _	2,980 762 5,196 2,548 150,476	16,167 4,133 28,202 13,824 59,491	102 24 153 112 76	(131,195)	16,269 4,157 28,355 13,936 (71,628)
	1,066 1,227 3,123 1,213 5,635	1,112 37,772 8,425 3,113 13,423	67 9,331 4,043 2,794 11,451		9 12,951 898 382 1,567	 342   	76 22,624 4,941 3,176 13,018	413 21,984 41,702 17,238 70,650	162 50 250 113 525	(17,414) ———————————————————————————————————	575 4,620 41,952 17,351 71,175
	1,576 2,043 2,297 —	4,027 133,518 5,458 —	3,605 27,186 4,649 —		493 47,144 636 —		4,098 74,330 5,285 —	22,239 42,430 28,680 —	147 204 214	(64,570) —	22,386 (21,936) 28,894 —
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	23,502 57,438 347 552 —	66,933 146,392 964 1,491	32,003 130,802 907 1,381		7,308 17,897 124 189		39,311 148,699 1,031 1,570	806,984 5,597 8,522	1,886 5,349 32 51		812,333 5,629 8,573
	619 27,321 5,551 21,402	1,423 65,378 14,871 54,031	1,182 50,635 1,685 47,979				1,344 58,053 3,021 54,544	7,293 336,181 64,085 296,008			7,351 338,636 64,431 298,001
	1,067 4,727 534 360 1,606	2,318 40,390 1,786 889 3,735	1,097 15,568 895 778 3,131		218 11,405 209 106 428	877 260 —	1,315 27,850 1,364 884 3,559	10,086 79,402 9,749 4,800 19,317	82 374 35 34 150	(13,499)	10,168 66,277 9,784 4,834 19,467
	84 5,999 329 1,888 281	274 196,607 1,291 27,361 861	280 44,322 583 8,651 853	_ _ _ _ _	38 68,215 157 8,646 117	1,863 476 163	318 114,400 1,216 17,460 970	1,726 80,756 7,315 33,720 5,265	8 642 3 166 26	(92,802) — (11,041)	1,734 (11,404) 7,318 22,845 5,291
	194 25,339 624 226 59,837	464 74,438 1,935 833 154,299	398 54,688 1,927 893 138,900	_ _ _ _ _	54 9,093 264 122 19,005		452 63,781 2,191 1,015 157,905	2,454 415,611 11,890 5,509 856,950	18 2,320 58 21 5,572		2,472 417,931 11,948 5,530 862,522
	153 — 1,546 1,110 —	324 — 3,963 3,181 1,046	252 — 2,774 3,045 139	_ _ _ _	34 — 451 417 147	 794	286 — 3,225 3,462 1,080	1,553 — 20,597 18,784 7,100	14 — 128 103 (47)	_ _ _ _	1,567 —— 20,725 18,887 7,053
	257 1,889 452 — 6,149	524 173,252 3,233 — 390,528	392 36,443 1,891 — 84,976	_ _ _ _	54 62,132 461 — 137,128	188 —	446 98,575 2,540 — 222,104	2,419 37,343 21,487 — 162,670	24 240 31 — 471	(85,625) ————————————————————————————————————	2,443 (48,042) 21,518 — (23,458)
	894 92 1,349 151	2,289 250 2,740 308	2,051 233 1,356 231		281 32 249 32		2,332 265 1,605 263	12,657 1,436 11,445 1,426	— 83 9 100 14		12,740 1,445 11,545 1,440
	1,755 04,087 3,576 —	4,673 290,546 9,271	4,291 214,548 8,374		587 34,837 1,146		4,878 249,385 9,520	26,476 1,590,007 51,664	163 9,451 333		26,639 1,599,458 51,997
	23,317	57,496	50,258		6,876		57,134	310,067	2,171		312,238

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

						Net Difference Between Projected		
Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Salt Lake County Salt Lake School District San Juan County San Juan Mental Health San Juan School District	N/A N/A N/A N/A	\$ (123,686) (4,556) (4,941) (39) (857)	1,468,332 835,490 34,557 7,069 157,071	(1,333,442) (641,232) (35,007) (5,426) (120,551)	20,275 — 833 — —	226,052 118,130 5,644 1,000 22,208		
Sandy City Sandy Suburban Improvement District Sanpete County Santaquin City Sevier County	N/A N/A N/A N/A	(31,554) (14) (3,676) (63) (6,446)	168,708 2,619 26,898 11,480 30,101	(184,170) (2,010) (26,944) (8,811) (34,317)	5,369 — 618 — 1,101	28,738 370 4,366 1,623 5,258	_ _ _ _	
Sevier School District Six County Infrastructure Coal Six-County Association of Governments SLC Mosquito Abatement Smithfield City Corp	N/A N/A N/A N/A	(572) — (23) (38) (13,175)	104,974 — 4,168 6,878 185,844	(80,567) — (3,199) (5,279) (173,875)		14,842 — 589 973 59,403	_ _ _ _	
Snow College Snyderville Basin Water Reclamation District So Davis Metro Fire Agency So Davis Recreation Center So Salt Lake Valley Mosquito Abatement	N/A N/A N/A N/A N/A	(172) (77) (226,648) (30) (19)	31,460 14,040 2,925,908 5,473 3,517	(24,145) (10,776) (2,785,573) (4,201) (2,699)	2,321 —	4,448 1,985 983,401 774 497		
So Utah Valley Animal Services Special Service District So Utah Valley Power Systems Soldier Hollow Charter School Solid Waste Special Service District #1 Solitude Improvement District	N/A N/A N/A N/A N/A		9,390 6,882	(7,207) (5,282)		 1,328 973 		
South Davis Sewer District South Davis Water District South Ogden City South Ogden Conservancy District South Sanpete School District	N/A N/A N/A N/A N/A	(15) — (44,232) (51) (500)	2,708 — 562,661 9,336 91,758	(2,078) — (535,830) (7,165) (70,424)	 771 	383 — 185,945 1,320 12,974		
South Summit School District South Valley Sewer District South Valley Water Reclamation South Weber City Southeastern Utah Association of Governments	N/A N/A N/A N/A N/A	(275) (211) (134) (45) (30)	50,395 38,640 24,486 8,256 5,439	(38,678) (29,656) (18,793) (6,337) (4,174)		7,125 5,463 3,462 1,167 769		~~~~
Southeastern Utah Health Southern Utah University Southwest Applied Technology Southwest Education Development Center Space Dynamics Lab / USU	N/A N/A N/A N/A N/A	(35) (392) (122) (52) (110)	6,421 71,881 22,464 9,493 20,231	(4,928) (55,168) (17,241) (7,286) (15,527)		908 10,163 3,176 1,342 2,861		~~~~
Spanish Fork City Spring City Springville City St George Housing Authority State of Utah	N/A N/A N/A N/A N/A	(4,041) — (19,261) (5) (486,789)	74,844 — 194,175 901 8,674,223	(63,927) ————————————————————————————————————	637 — 1,651 — 65,558	11,161 — 54,207 127 1,474,238		~~~~
Stockton Town Success Academy Summit Academy High School Summit Academy Inc Summit County	N/A N/A N/A N/A N/A	(876) (76) (271) (569) (7,138)	1,489 13,946 49,784 104,402 103,339	(2,692) (10,703) (38,209) (80,127) (91,047)	152 — — — 1,152	349 1,972 7,039 14,761 15,659		~~~~
Summit Mosquito Abatement District Sunset City Sw Behavioral Health Center Sw Mosquito Abatement/Control SW UT Public Health Department	N/A N/A N/A N/A N/A	(1,489) (556) (20) (162)	3,833 101,935 3,669 29,616	(5,563) (78,234) (2,816) (22,730)		— 776 14,413 519 4,187		
Syracuse City Corp Taylor West Weber Water Imp District Taylorsville-Bennion Improvement Timber Lakes Water Special Service District Timpanogos Special Service District	N/A N/A N/A N/A N/A	(40,438) (18) (43) (29) (156)	490,253 3,372 7,845 5,313 28,671	(469,226) (2,588) (6,021) (4,078) (22,004)	1,223 — — — —	158,927 477 1,109 751 4,054		

ferred Outflows of Resources	Deferred Inflows of Resourc
ferred Outflows of Resources	Deferred Inflows of Resource

							Net Amortization of Deferred			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
161,999 79,133 3,249 521 14,873	408,326 197,263 9,726 1,521 37,081	264,010 173,703 5,489 1,470 32,656	_ _ _ _	45,151 23,767 1,122 201 4,468		309,161 197,470 6,611 1,671 37,124	2,067,456 1,071,668 51,888 9,068 201,472	13,579 7,369 293 49 1,385		2,081,035 1,079,037 52,181 9,117 202,857
12,487 236 1,823 1,005 2,819	46,594 606 6,807 2,628 9,178	24,148 545 4,334 2,387 4,017		5,695 75 868 327 1,040	2,986 — 42 —	32,829 620 5,244 2,714 5,057	265,140 3,360 40,116 14,725 48,606	992 22 167 94 230		266,132 3,382 40,283 14,819 48,836
9,844	24,686	21,825		2,986		24,811	134,648	917 —		135,565
410 817 2,972	999 1,790 62,493	867 1,430 15,313	_ _ _	119 196 21,189	 557	986 1,626 37,059	5,346 8,823 33,261	38 76 331	(28,567)	5,384 8,899 5,025
3,618 1,307 5,757 502 432	8,066 3,292 991,479 1,276 929	6,541 2,919 206,761 1,138 731		895 399 356,629 156 100		7,436 3,318 563,390 1,294 831	40,353 18,009 229,467 7,021 4,511	337 122 522 47 40	(491,081) —	40,690 18,131 (261,092) 7,068 4,551
 1,071 710 	2,399 1,683	1,952 1,431	_ _ _ _	267 196		2,219 1,627	12,044 8,828	100 66 —	_ _ _ _	12,144 8,894 —
231 —	614	563	_ _	77	_ _ _	640	3,473	21 —	_ _	3,494
1,679 905 9,197	188,395 2,225 22,171	41,520 1,941 19,077	_ _ _	66,970 266 2,610	221 — —	108,711 2,207 21,687	68,688 11,975 117,696	110 84 856	(91,442) — —	(22,644) 12,059 118,552
4,731 3,674 2,205 678 500	11,856 9,137 5,667 1,845 1,269	10,478 8,034 5,091 1,717 1,131		1,434 1,099 697 235 155		11,912 9,133 5,788 1,952 1,286	64,641 49,563 31,408 10,590 6,976	441 342 205 63 47		65,082 49,905 31,613 10,653 7,023
566 6,570 1,783 994 2,180	1,474 16,733 4,959 2,336 5,041	1,335 14,944 4,670 1,974 4,206		183 2,045 639 270 576		1,518 16,989 5,309 2,244 4,782	8,236 92,200 28,814 12,177 25,950	53 612 166 93 203		8,289 92,812 28,980 12,270 26,153
6,545	18,343	14,265		2,236	218	16,719	101,781	597 —		102,378
7,327 76 709,788	63,185 203 2,249,584	19,356 187 1,538,453	=	17,944 26 348,187	580 — 18,791	37,880 213 1,905,431	106,361 1,156 10,546,390	497 7 61,145	(21,847) — (162,788)	85,011 1,163 10,444,747
1,342 4,374 10,641 8,343	501 3,314 11,413 25,402 25,154	2,899 10,350 21,706 19,140		68 397 1,416 2,970 3,132	715 — — — — 1,633	783 3,296 11,766 24,676 23,905	3,290 17,888 63,858 133,914 143,010	(41) 125 407 991 683		3,249 18,013 64,265 134,905 143,693
679 10,469 329 2,686	1,712 24,882 848 6,873	— 273 21,193 763 6,157		152 2,900 104 842		425 24,093 867 6,999	7,253 130,750 4,706 37,988	— 45 975 31 250		7,298 131,725 4,737 38,238
3,353 289 741 560 2,723	163,503 766 1,850 1,311 6,777	37,566 701 1,631 1,105 5,961	_ _ _ _ _	56,717 96 223 151 816		94,283 797 1,854 1,256 6,777	87,286 4,325 10,062 6,815 36,775	272 27 69 52 254	(76,567) — — — —	10,991 4,352 10,131 6,867 37,029

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Tintic School District Tooele Applied Technology College Tooele City Tooele County Tooele County Housing	N/A N/A N/A N/A	\$ (9) (55) (8,109) (8,317) (52)	1,689 10,069 50,226 104,285 9,514	(1,296) (7,728) (52,533) (93,871) (7,302)	 1,373 1,358 	239 1,424 8,351 15,980 1,345		
Tooele School District Tooele Valley Mosquito Abatement Torrey Town Town of Alta Town of Apple Valley	N/A N/A N/A N/A N/A	(2,194) — (7) (13) (9)	402,327 — 1,358 2,471 1,608	(308,783) — (1,042) (1,897) (1,234)	_ _ _ _	56,885 — 192 349 227	_ _ _ _	
Town of Brian Head Town of Daniel Town of Garden City Town of Goshen Town of Levan	N/A N/A N/A N/A	(12) — (21) —	2,157 — 3,864 —	(1,656) — (2,965) —	= = =	305 — 546 —	_ _ _ _	
Town of Manila Town of Mantua Town of Paragonah Town of Randolph Town of Springdale	N/A N/A N/A N/A N/A		28 — 4,482	(21) — (4,241)		4 — 705	_ _ _ _	
Trans-Jordan Cities Tremonton City Tridell-Lapoint Water Tuacahn High School Uintah Animal Control/Shelter	N/A N/A N/A N/A N/A	(87) (780) (38) (68) (15)	16,033 11,333 6,951 12,416 2,795	(12,305) (9,981) (5,335) (9,529) (2,145)	126 — —	2,267 1,717 983 1,755 395		
Uintah Basin Applied Technology Center Uintah Basin Association of Governments Uintah Basin Asst Council Uintah County Care Center Special Service District Uintah County	N/A N/A N/A N/A N/A	(388) (125) (18) (258) (21,817)	71,229 22,839 3,220 47,269 194,494	(54,668) (17,529) (2,472) (36,279) (186,329)	3,638	10,071 3,229 455 6,683 30,809		~~~~~
Uintah Fire Suppression Special Service District Uintah Highlands Improvement District Uintah Mosquito Abatement District Uintah Recreation District Uintah School District	N/A N/A N/A N/A N/A	(8,021) — — — (99) (2,197)	109,186 — — 18,161 402,914	(103,218) — — (13,939) (309,234)		36,785 — — 2,568 56,968		~~~~~
Uintah Transportation Special Service District Uintah Water Conservancy District Unified Fire Authority Unified Police Department University of Utah	N/A N/A N/A N/A N/A	(26) (14) (37,152) (25,000) (20,329)	4,789 2,597 88,104 115,562 2,669,525	(3,676) (1,993) (133,086) (132,198) (2,059,146)	6,428 4,271 1,012	677 367 18,305 20,225 378,365		~~~~~
University of Utah Hospital Upper Country Water District UT Municipal Power Agency UT Public Employees Association UT School Board Risk Management	N/A N/A N/A N/A N/A	(36) (1) (31)	6,536 257 5,655	(5,017) (197) (4,340)	_ _ _ _	924 36 800	 	
Utah Association of Counties Utah County Academy of Sciences Utah County Housing Authority Utah Communications Authority Utah Counties Indemnity Pool	N/A N/A N/A N/A N/A	(86) (108) (29) (8)	15,807 19,751 5,391 1,495	(12,132) (15,158) (4,137) (1,147)	= = =	2,235 2,793 762 211		
Utah County Utah Dairy Council Utah Education Association Utah Housing Corporation Utah Lake Commission	N/A N/A N/A N/A N/A	(18,996) (14) (94) (373) (5)	279,767 2,637 17,178 68,359 925	(245,907) (2,024) (13,184) (52,465) (710)	3,062 	42,342 373 2,429 9,665 131		
Utah League Cities/Towns Utah Local Governments Trust Utah Retirement Systems Utah Safety Council Utah School Boards Association	N/A N/A N/A N/A N/A	(6) (67) (1,217) (52) (19)	1,021 12,294 223,160 9,524 3,447	(783) (9,435) (171,273) (7,310) (2,646)		144 1,738 31,553 1,347 487		

5,987

125

139

1.630

21,306

521

177

15,652

256

283

3.368

52,859

1,868

664

14,212

192

212

2,556

46,396

1,980

717

Total

2,170

12,979

77,332

146,739

12,302

519,412

1.747

3,187

2,083

2,783

4,992

(4)

26

6,514

20,702

15,807

8,968

16,032

3,605 91,974

29,476

4,161

61,026

284,036

(11,724)

23,484

520,296

6.202

3,365 171,842

187,721

8,434

331

(9)

7,309

20,413

25,526

6,972

1,931

389,021

3,408

22,220

88,240

1,198

1,322

15,921

288,227

12,264

4,438

1,945

26

29

350

6,348

271

98

16,157

218

241

2,906

52,744

2,251

815

87,683

1,186

1,309

15,769

12,216

4,422

286,243

557

12

13

48

16

152

1,984

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Concluded)

Participating Employer	Employer Allocation Percentage	Net Pension ability/(Asset) 0% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Utah School Employees Association Utah State Fair Corp Utah State University Utah Valley Dispatch Special Service District Utah Valley University	N/A N/A N/A N/A	\$ (9) (93) (3,094) (116) (2,225)	1,584 17,070 567,431 21,266 408,038	(1,216) (13,101) (435,499) (16,321) (313,166)	_ _ _ _ _	224 2,414 80,229 3,007 57,693	 	
Utah Zoological Society UTOPIA Valley Emergency Communication Center Valley Mental Health Vernal City	N/A N/A N/A N/A N/A	(491) (319) (440) (1,065) (1,197)	90,072 58,546 80,677 195,234 23,050	(69,130) (44,934) (61,919) (149,841) (19,601)		12,735 8,278 11,407 27,604 3,429		
Vineyard Town W Kane County Special Service District # 1 Wasatch County Wasatch County Fire District Wasatch Front Regional Council	N/A N/A N/A N/A N/A	(36) (11) (5,265) (48,881) (94)	6,576 2,073 99,361 627,079 17,240	(5,047) (1,591) (84,691) (597,514) (13,231)	828 558 —	930 293 14,802 210,701 2,438	_ _ _ _ _	
Wasatch Front Waste/Recycling Wasatch Integrated Waste Management Wasatch Mental Health Special Service District Wasatch School District Wasatch Uniserv	N/A N/A N/A N/A	(399) (144) (897) (1,311)	73,180 26,417 164,506 240,485	(56,165) (20,275) (126,257) (184,570)	_ _ _ _ _	10,347 3,735 23,260 34,002	_ _ _ _ _	
Washington City Washington County Solid Waste Washington County Water Conservancy District Washington County Washington School District	N/A N/A N/A N/A	(23,848) (19) (61) (19,311) (4,130)	267,340 3,476 11,195 108,538 757,341	(257,306) (2,667) (8,592) (116,718) (581,254)	1,357 — — 3,281 —	81,137 491 1,583 18,331 107,081	_ _ _ _ _	
Waste Management Service District #5 Wayne County Wayne School District Weber Area Dispatch 911 Weber Basin Water Conservancy	N/A N/A N/A N/A	— (767) (119) (225) (143)	9,242 21,776 41,229 26,252	(8,373) (16,713) (31,643) (20,148)	126 — —	— 1,421 3,079 5,829 3,712		
Weber County Mosquito Abatement Weber County Corp Weber County School District Weber Fire District Weber Human Services	N/A N/A N/A N/A	(26,552) (3,852) (14,302) (757)	355,589 706,368 27,148 138,755	(316,850) (542,132) (46,104) (106,493)	4,314 — 2,481	54,201 99,873 6,095 19,619		
Weber River Water Users Weber State University Wellington City Wellsville City Corp West Bountiful City	N/A N/A N/A N/A	(1,001) (39) — (3,329)	183,611 4,559 — 19,467	(140,920) (3,524) — (20,694)		25,961 647 — 3,267		
West Point City West Valley City White City Water Improvement District Willard City Corp Woodland Peaks Uniserv	N/A N/A N/A N/A	(61) (38,416) (21) —	11,134 226,954 3,918 —	(8,545) (240,556) (3,007) —	6,516 — — —	1,574 38,017 554 —		
Woods Cross City Workers Compensation Fund	N/A N/A	 (1,031) (1,230)	6,516 225,644	(6,778) (173,180)	174 —	1,080 31,904		
Grand Total		\$ (3,490,522)	67,169,677	(58,520,854)	253,699	14,547,952	_	
No Proportionate Share for 2015 Canyonlands Health Care Cedar Mountain Fire Protection District Garden City Fire District Sunnyside City	N/A N/A N/A N/A	\$ =	=======================================	_ _ _ _	_ _ _	_ _ _	_ _ _	
Grand Total		\$ (3,490,522)	67,169,677	(58,520,854)	253,699	14,547,952		

Deferred Outflov	vs of Resources				Deferred Inflo	ows of Resources	to Employer-Paid Member Contributions					
							N	let Amortization of Deferred Amounts from				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions		
157	381	329	_	45	_	374	2,031	15	_	2,046		
1,200 51,439	3,614 131,668	3,549 117,972		486 16,141	_	4,035 134,113	21,895 727,834	112 4,790	_	22,007 732,624		
1,954	4,961	4,421	_	605	_	5,026	27,277	182	<u> </u>	27,459		
40,811	98,504	84,834	_	11,607	_	96,441	523,383	3,800	_	527,183		
8,519	21,254	18,727	_	2,562	_	21,289	115,534	793	_	116,327		
6,009	14,287	12,172	_	1,665	_	13,837	75,096	560	_	75,656		
8,435 8,533	19,842 36,137	16,773 40,590	_	2,295 5,554	_	19,068 46,144	103,483 250,424	785 795	_	104,268 251,219		
1,505	5,122	40,390	_	687	883	5,980	31,269	90	_	31,359		
668	1,598	1,367		187		1,554	8,435	62		8,497		
167	460	431	_	59	_	490	2,659	16	_	2,675		
10,166	25,796	18,973	_	2,965		21,938	134,964	927	(405.440)	135,891		
1 642	211,259 4,081	44,271 3,584	_	76,387 490	4,388	125,046 4,074	50,456	(422) 153	(105,148)	(55,114)		
1,643	~~~~~	~~~~	·····			~~~~~	22,113	~~~~~		22,266		
6,611 2,601	16,958 6,336	15,215 5,492	_	2,082 751	_	17,297 6,243	93,867 33,885	616 242	_	94,483 34,127		
14,844	38,104	34,202	_	4,680	_	38,882	211,009	1,382	_	212,391		
22,747	56,749	49,998	_	6,841	_	56,839	308,466	2,118	_	310,584		
									-			
6,426	88,920	23,383	_	28,083	119	51,585	92,301	473	(36,427)	56,347		
348 941	839 2,524	723 2,327		99 318	_	822 2,645	4,458 14,359	32 88	_	4,490 14,447		
7,044	28,656	15,888	_	3,635	3,008	22,531	169,001	484	_	169,485		
71,791	178,872	157,456	_	21,544	_	179,000	971,428	6,685	_	978,113		
							-					
786	2,333	1,666	_	284	558	2,508	12,995	41	_	13,036		
2,055	5,134	4,527	_	619	_	5,146	27,932	191	_	28,123		
3,897 2,921	9,726 6,633	8,572 5,458		1,173 747		9,745 6,205	52,883 33,673	363 272	_	53,246 33,945		
2,721		~~~~	~~~~~	~~~~~		~~~~	~~~~~		~~~~~	~~~~~		
32,137	90,652	65,149	_	10,835	9	75,993	495,268	2,992	_	498,260		
66,688	166,561	146,858		20,094	_	166,952	906,046	6,210	_	912,256		
250	8,826	595	_	1,186	1,596	3,377	57,343	(68)	_	57,275		
14,003	33,622	28,848		3,947		32,795	177,979	1,304		179,283		
			_		_	42.207		4.524	_			
16,362 458	42,323 1,107	38,174 943	_	5,223 130	12	43,397 1,085	235,515 5,869	1,524 42	_	237,039 5,911		
		—			———	1,005						
1,369	5,201	2,898	_	648	1,216	4,762	30,098	58	_	30,156		
999	2,573	2,315	_	317	_	2,632	14,281	93	_	14,374		
19,777	64,310	33,923	_	7,542	_	41,465	350,263	1,675	_	351,938		
335	889	815 —	_	111	_	926 —	5,025	31	_	5,056		
_	_	_	_	_	_	_	_	_	_	_		
481	1,735	1,000		215	174	1,389	9,941	35		9,976		
19,975	51,879	46,913	_	6,419	_	53,332	289,429	1,860	_	291,289		
3,995,755	18,797,406	10,078,771	_	4,271,495	99,900	14,450,166	58,359,685	356,183	(4,170,262)	54,545,606		
_	_	_	_	_	653	653	_	(61)	_	(61)		
1,025	1,025	_		_	_	_	_	59	_	59		
1,295	1,295	_	_	_	_	_	_	74 —	_	74 —		
		10.070.771		4 274 105	400 ===	14.450.010	F0 3F0 107		(4 470 2 (2)			
3,998,075	18,799,726	10,078,771	_	4,271,495	100,553	14,450,819	58,359,685	356,255	(4,170,262)	54,545,678		

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts

and Dension Assessments										
and Pension Amounts						Net Difference				
at December 31, 2015					D://	Between Projected				
Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions			
4 Corners Comm Behavior Health	N/A	\$ 1,267,962	2,679,078	89,963	_	428,190	_			
Active Re Entry Inc	N/A	336,457	608,974	107,951	_	87,085	_			
Alpine City Alpine School District	N/A N/A	458,485 223,585,595	968,733 405,755,263	32,530 70,806,700	_	154,830 58,697,924	_			
Alpine Uniserv	N/A	99,937	180,882	32,064	_	25,867	_			
American Fork City	N/A	4,472,143	9,457,747	352,293		1,476,652				
American Leadership Academy	N/A	4,244,164	7,681,776	1,361,721	_	1,098,521	_			
Ames Charter School	N/A	1,594,639	2,886,237	511,633	_	412,742	_			
Annabella Town Ash Creek SS District	N/A N/A	46,728 446,201	98,731 942,779	3,315 31,658	_	15,780 150,682	_			
Ashley Valley Improv Dist	N/A	492,588	1,040,789	34,950		166,346				
Ashley Valley Sewer Mgmt Board	N/A	233,083	492,482	16,537	_	78,712	_			
Ballard Town	N/A	108,069	228,339	7,668	_	36,495	_			
Bear Lake SS District Bear River Assn of Govts	N/A N/A	67,769 766,717	143,190 1,619,997	4,808 54,399	_	22,886 258,920	_			
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Bear River Health Dept Bear River Mental Health	N/A N/A	2,474,856 2,032,527	5,229,124 4,294,527	175,593 144,210	_	835,757 686,383	_			
Bear River Water District	N/A	100,266	211,852	7,114	_	33,860	_			
Beaver City	N/A	667,452	1,410,261	47,356	_	225,398	_			
Beaver County	N/A	3,752,231	7,940,183	315,684		1,219,649				
Beaver Housing Authority Beaver School District	N/A N/A	52,666	111,278	3,737	_	17,785 1,587,242	_			
Beaver Valley Hospital	N/A N/A	6,132,353 2,309,271	11,099,328 4,879,260	1,967,538 163,845	_	779,839	_			
Benchland Water Company	N/A	185,821	392,621	13,184	_	62,752	_			
Bicknell Town	N/A	18,486	39,058	1,312		6,243				
Big Water Municipal Corp	N/A	14,136	29,933	1,273	_	4,514	_			
Blanding City Bluffdale City	N/A N/A	670,915 1,546,648	1,418,544 2,848,442	51,556 455,602	_	222,773 474,023	_			
Bona Vista Water Improve	N/A	316,307	668,324	22,442	_	106,816	_			
Bountiful Irrigation District	N/A	280,002	591,616	19,866	_	94,556	_			
Box Elder Co Mosq Dist	N/A	129,248	273,088	9,170	_	43,647	_			
Box Elder County Box Elder School District	N/A N/A	6,437,557	13,524,546	605,448	_	2,095,239	_			
Bridgerland Applied Tech Ctr	N/A N/A	39,195,581 5,222,649	71,136,026 9,452,798	12,408,180 1,675,664	_	10,294,072 1,351,783	_			
Brigham City	N/A	3,831,797	8,074,232	323,181	_	1,264,173	_			
Cache County	N/A	8,611,637	18,220,973	715,066		2,808,253				
Cache Metro Planning Org	N/A	47,041	99,394	3,338	_	15,886	_			
Cache School District Canyons School District	N/A N/A	55,551,946 120,742,802	100,928,175 218,539,912	17,493,484 38,739,795	_	14,672,213 31,251,964	_			
Carbon County	N/A	5,508,292	11,517,931	544,929	_	1,801,275	_			
Carbon County Rec/Trans SSD	N/A	26,960	56,964	1,913		9,104				
Carbon School District	N/A	13,229,901	24,014,936	4,184,738	_	3,477,696	_			
Castle Dale City Castle Valley SS District	N/A	59,738	126,220	4,238	_	20,173	_			
Cedar City	N/A N/A	411,581 4,096,402	827,137 8,663,427	64,238 323,920	_	134,100 1,351,409	_			
Cedar City Housing Auth	N/A	94,928	200,574	6,735		32,057	<u>-</u>			
Centerfield City	N/A	119,060	251,832	9,556	_	39,143	_			
Centerville City	N/A	2,452,759	5,083,917	279,067	_	797,378	_			
Central Davis Sewer Dist Central Iron Co Water Conserv	N/A N/A	601,176 71,489	1,270,226 151,049	42,654 5,072	_	203,017 24,142	_			
Central UT Public Health	N/A	862,147	1,821,631	61,170		291,146				
Central Utah Counseling Center	N/A N/A	1,522,924	3,217,787	108,053	_	514,290	_			
Central Utah Water Dist	N/A	4,010,875	8,474,581	284,575	_	1,354,470	_			
Central Weber Sewer Dist City of Aurora	N/A N/A	828,559 42,331	1,750,663 89,440	58,787 3,003	_	279,804 14,295	<u> </u>			
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City of Bountiful City of Cedar Hills	N/A N/A	11,302,036 629,739	19,736,843 1,330,575	4,277,929 44,681	674,195 —	2,485,845 212,662	_			
City of Draper	N/A	5,218,456	11,035,319	408,050	_	1,725,989	_			
City of Duchesne	N/A	169,309	357,732	12,013	_	57,175	_			
City of Enterprise	N/A	204,332	431,733	14,498	_	69,003	_			

	Net Amortization of Deferred										
C P	Changes in opportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
	10,576 33,267 846,629	428,190 97,661 188,097 59,544,553 25,867	55,961 25,939 20,235 17,053,846 7,705	_ _ _ _	70,726 6,620 25,574 4,352,501 1,966	65,019 — — — 56,429	191,706 32,559 45,809 21,406,347 66,100	266,071 61,684 96,209 41,373,837 18,322	(17,991) 3,019 9,205 254,456 (16,109)	= = =	248,080 64,703 105,414 41,628,293 2,213
	78,056 39,189 — 171 1,714	1,554,708 1,137,710 412,742 15,951 152,396	302,403 327,205 122,939 2,062 19,693		269,823 83,510 31,377 2,606 24,889	12,337 ———————————————————————————————————	572,226 410,715 166,653 4,668 44,582	1,081,861 778,094 292,349 9,805 93,631	22,766 11,187 (3,522) 47 474		1,104,627 789,281 288,827 9,852 94,105
	7,917 743 2,918 2,200 6,151	174,263 79,455 39,413 25,086 265,071	21,740 10,287 4,770 2,991 33,839		27,476 13,001 6,028 3,780 42,767		49,216 23,288 10,798 6,771 76,606	103,365 48,910 22,677 14,221 160,889	2,191 206 807 609 1,702		105,556 49,116 23,484 14,830 162,591
	50,602 — 3,670 — 108,637	886,359 686,383 37,530 225,398 1,328,286	109,228 89,706 4,425 29,458 314,059		138,046 113,373 5,593 37,230 238,090	105,171 — 16,590	247,274 308,250 10,018 83,278 552,149	519,327 426,508 21,040 140,059 990,100	14,002 (29,101) 1,015 (4,591) 33,820		533,329 397,407 22,055 135,468 1,023,920
	892 38,054 8,390 3,886 719	18,677 1,625,296 788,229 66,638 6,962	2,324 472,775 101,920 8,201 816		2,938 120,662 128,810 10,365 1,031		5,262 593,437 230,730 18,566 1,847	11,051 1,124,260 484,580 38,993 3,879	247 10,863 2,322 1,075 199		11,298 1,135,123 486,902 40,068 4,078
	4,477 5,442 233,985 15,199	8,991 228,215 708,008 122,015 94,556	1,436 41,477 76,883 13,960 12,358		946 39,725 26,023 17,643 15,618	41,275 95,535 — 12,588	2,382 122,477 198,441 31,603 40,564	4,075 156,990 512,964 66,374 58,756	1,472 (9,631) (21,557) 4,206 (3,483)		5,547 147,359 491,407 70,580 55,273
	321 106,769 — 247,684 4,542	43,968 2,202,008 10,294,072 1,599,467 1,268,715	5,704 498,149 2,988,717 402,641 252,619		7,209 386,623 762,784 102,763 225,691	584,760 — 95,219	12,913 884,772 4,336,261 505,404 573,529	27,122 1,682,993 7,254,904 957,482 930,197	89 41,512 (180,809) 70,706 (23,897)		27,211 1,724,505 7,074,095 1,028,188 906,300
	120,086 698 772,860 417,795 186,161	2,928,339 16,584 15,445,073 31,669,759 1,987,436	692,419 2,076 4,217,625 9,308,691 382,508		540,933 2,624 1,076,427 2,375,774 314,850	33,151 — — — 87,790	1,266,503 4,700 5,294,052 11,684,465 785,148	2,233,610 9,871 10,320,578 22,136,091 1,401,677	7,669 193 229,551 119,268 20,458		2,241,279 10,064 10,550,129 22,255,359 1,422,135
	240 9,325	9,104 3,477,696 20,413 143,425 1,351,409	1,190 1,008,115 2,637 19,038 280,674		1,504 257,292 3,332 16,855 247,867	420 315,440 — — 112,096	3,114 1,580,847 5,969 35,893 640,637	5,657 2,450,215 12,535 105,453 995,988	(116) (90,026) 66 7,823 (32,415)		5,541 2,360,189 12,601 113,276 963,573
	2,771 — 56,364 — 2,336	34,828 39,143 853,742 203,017 26,478	4,190 8,581 169,849 26,533 3,155		5,295 7,286 133,503 33,533 3,988	2,726 — 14,832 —	9,485 18,593 303,352 74,898 7,143	19,920 29,526 642,334 126,152 15,001	767 (854) 26,439 (4,104) 646		20,687 28,672 668,773 122,048 15,647
	20,377 32,586 — 498	311,523 546,876 1,354,470 279,804 14,793	38,051 67,214 177,020 36,568 1,868		48,090 84,948 223,725 46,217 2,361	93,267 49,930 —	86,141 152,162 494,012 132,715 4,229	180,914 319,572 841,647 173,866 8,883	5,638 9,017 (25,807) (13,816) 138		186,552 328,589 815,840 160,050 9,021
	6,174 12,139 — 10,788	3,166,214 224,801 1,725,989 67,963 69,003	214,932 27,793 343,760 7,472 9,018		396,679 35,127 313,086 9,444 11,398	129,325 — 149,439 — 2,423	740,936 62,920 806,285 16,916 22,839	2,118,424 132,145 1,249,964 35,528 42,877	(30,207) 3,359 (42,619) 2,985 (671)		2,088,217 135,504 1,207,345 38,513 42,206

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
City of Green River City of Harrisville City of Helper City of Holladay City of Kanab	N/A N/A N/A N/A	\$ 155,450 567,226 405,734 606,089 592,064	328,450 1,199,752 858,482 1,280,606 1,252,286	11,029 45,403 33,715 43,003 47,381		52,495 186,600 132,286 204,676 194,781	_ _ _ _	
City of Milford City of Moab City of Monticello City of Naples City of North Salt Lake	N/A N/A N/A N/A N/A	128,718 1,796,814 302,426 836,132 2,579,823	271,967 3,799,127 639,290 1,596,690 5,456,348	9,133 138,273 22,656 206,544 205,290	_ _ _ _	43,468 596,429 100,979 256,984 849,846	_ _ _ _	
City of Orem City of Riverton City of Santa Clara City of Saratoga Springs City of South Jordan	N/A N/A N/A N/A N/A	12,606,168 3,100,888 790,652 2,255,727 13,088,184	30,167,802 6,551,869 1,670,569 5,183,365 24,917,318	(1,950,407) 220,011 56,097 (171,818) 3,250,300	655,260 — 119,079 —	5,518,044 1,047,168 267,003 884,395 4,051,293	_ _ _ _	
City of South Salt Lake City of St George City of Taylorsville City of Uintah City of Washington Terrace	N/A N/A N/A N/A	5,990,151 18,072,937 1,093,011 47,806 505,297	12,672,335 38,124,190 2,309,423 101,009 1,067,643	489,397 1,469,738 77,550 3,392 35,851	_ _ _	1,961,060 5,984,055 369,109 16,144 170,638	_ _ _ _	
City of Wendover City of West Haven City of West Jordan City of Woodland Hills Clearfield City	N/A N/A N/A N/A N/A	111,362 333,429 12,592,984 45,602 3,152,481	235,297 704,503 32,196,177 96,352 6,667,441	7,901 23,657 (3,634,277) 3,235 250,514	773,382	37,607 112,599 6,105,016 15,400 1,038,825		
Cleveland Town Clinton City Coalville City Color Country Uniserv Corinne City	N/A N/A N/A N/A N/A	10,344 1,967,712 144,048 7,706 188,183	21,855 4,038,044 304,359 13,947 331,409	734 253,734 10,220 2,472 67,939		3,493 637,941 48,645 1,994 55,930		
Cottonwood Heights City Cottonwood Heights P&R Srv Cottonwood Imp District Council On Aging Golden Age SS Daggett County	N/A N/A N/A N/A N/A	2,040,565 492,838 1,276,457 198,979 972,423	4,391,218 1,041,318 2,697,027 420,423 2,057,094	99,517 34,967 90,566 14,118 79,058	202,592 — — — —	672,050 166,431 431,059 67,195 318,726		
Daggett School District Davis & Weber County Canal Co Davis Applied Tech College Davis Behavioral Health Inc Davis Co Housing Authority	N/A N/A N/A N/A N/A	1,441,455 1,173,612 3,636,080 4,674,637 846,440	2,608,978 2,066,842 6,581,167 9,877,044 1,529,020	462,484 423,704 1,166,620 331,670 273,959		373,093 348,807 941,130 1,578,622 255,984		
Davis Co Mosquito Abate Davis County Davis School District Davis Uniserv Ddi Vantage	N/A N/A N/A N/A N/A	123,079 27,698,035 234,018,136 95,542 5,869,175	260,055 58,581,232 425,099,125 172,928 10,336,172	8,733 2,202,598 73,754,463 30,654 2,118,922		41,564 9,125,727 61,753,543 24,729 1,744,368		
Delta City Dixie Applied Tech College Dixie State University Duchesne Co Mosquito Dist Duchesne Co Water Conserv Dist	N/A N/A N/A N/A N/A	342,468 247,326 6,257,177 104,912 78,704	723,601 447,651 11,379,913 184,759 166,295	24,298 79,353 1,963,931 37,876 5,584		115,651 64,016 1,664,625 31,181 26,578	_ _ _ _ _	
Duchesne County Duchesne School District E Duchesne Cul Water Imp Dist Eagle Mountain City East Carbon City	N/A N/A N/A N/A N/A	7,534,943 17,479,825 37,773 1,630,807 312,828	13,980,813 31,862,067 79,810 3,445,733 661,500	2,171,089 5,414,159 2,680 115,707 24,343		2,290,798 4,697,041 12,756 550,722 103,581		
East Hollywood High School Educators Mutual Insurance Elk Ridge City Emery Co Care & Rehab Ctr Emery County	N/A N/A N/A N/A N/A	788,497 7,191,600 82,945 956,520 3,877,984	1,427,151 13,191,568 175,254 1,684,522 8,113,395	252,986 2,155,829 5,885 345,328 385,196		204,087 1,996,234 28,010 284,286 1,264,357		

Deferred Outflow	ws of Resources	rces Deferred Inflows of Resources to Employer-Paid Member Contril						er Contributions		
Changes in Proportion and Differences Between			Net Difference Between		Changes in Proportion and Differences Between		N	et Amortization of Deferred Amounts from Changes in Proportion and Differences Between		Total Employer Net Pension
Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Expense Excluding That Attributable to Employer-Paid Member Contributions
6,535 — 7,189	52,495 193,135 132,286 211,865	6,861 40,517 32,697 26,750	_ _ _	8,671 34,643 25,500 33,807	12,923 10,689 19,985	28,455 85,849 78,182 60,557	32,620 140,170 105,337 127,182	(3,576) (1,707) (6,310) 1,989	_ _ _	29,044 138,463 99,027 129,171
7,103	202,717	42,261		36,154		78,415	146,266	2,579		148,845
2,345	45,813 596,429	5,681 111,679	_	7,180 106,505	 132,128	12,861 350,312	27,010 421,258	649 (38,321)	_	27,659 382,937
10,771 27,355	111,750 284,339	16,944 58,084	_	17,566 25,445	1,270 65,437	35,780 148,966	68,371 276,563	2,563 (30,916)	_	70,934 245,647
47,938	897,784	180,643		156,854	05,457 —	337,497	632,550	13,645		646,195
71,064 77,949 —	6,244,368 1,125,117 267,003	996,541 136,858 34,895	_ _	1,142,679 172,966 44,102	151,706 — 15,105	2,290,926 309,824 94,102	3,039,186 650,694 165,911	28,138 21,569 (4,179)	(511,511) —	2,555,813 672,263 161,732
14,903 1,666,590	1,018,377 5,717,883	126,369 796,982		185,539 366,657	19,304 866,113	331,212 2,029,752	476,925 4,203,988	(565) (318,247)	(49,030)	427,330 3,885,741
148,941	1,961,060 6,132,996 369,109	457,645 1,139,766 48,240	_ _	371,613 1,061,192 60,968	219,996 — 60,426	1,049,254 2,200,958 169,634	1,520,907 4,297,470 229,359	(67,854) 53,097 (18,109)	_ _ _	1,453,053 4,350,567 211,250
1,059 5,330	17,203 175,968	2,110 22,301	_	2,667 28,185	— —	4,777 50,486	10,032 106,032	293 1,475	_	10,325 107,507
482	38,089	4,915		6,212		11,127	23,368	133		23,501
 525,234	112,599 7,403,632	14,716 1,189,981	_	18,599 1,394,904	7,802	41,117 2,584,885	69,967 2,890,246	(2,159) 131,898	(713,045)	67,808 2,309,099
1,108	16,508	2,013	_	2,544	_	4,557	9,569	307	(/15,045)	9,876
	1,038,825	219,701		191,470	200,929	612,100	771,540	(61,254)		710,286
36,788	3,493 674,729	457 128,240	_	577 99,674	3,307 5,794	4,341 233,708	2,171 521,106	(915) 20,639	_	1,256 541,745
273	48,918 1,994	6,358 594	_	8,035 152	— 8,352	14,393 9,098	30,227 1,413	76 (2,384)	_	30,303 (971)
11,006	66,936	9,666	_	988		10,654	69,225	9,943	_	79,168
114,089 36,623	988,731 203,054	38,872 21,751	_	147,912 27,490	_	186,784 49,241	396,552 103,418	26,885 10,134	_	423,437 113,552
25,444	456,503	56,336	_	71,200	_	127,536	267,853	7,040	_	274,893
<u> </u>	67,195 318,726	8,782 73,124	_	11,099 60,100	1,907 93,327	21,788 226,551	41,754 245,304	(528) (29,039)	_	41,226 216,265
	373,093	111,129		28,363	49,839	189,331	264,266	(16,913)		247,353
58,868 72,902	407,675 1,014,032	60,283 280,324	_	6,162 71,545	_	66,445 351,869	431,727 666,612	53,178 20,811	_	484,905 687,423
72,902 72,117	1,650,739	206,324	_	260,749	_	467,064	980,932	19,955	_	1,000,887
72,005	327,989	42,689		9,954	13,588	66,231	294,144	7,649		301,793
107,685	41,564 9,233,412	5,432 1,935,000	_	6,865 1,683,183	11,297	23,594 3,618,183	25,827 6,785,234	(3,126) 31,527	_	22,701 6,816,761
_	61,753,543	17,779,290	_	4,537,649	1,863,625	24,180,564	43,451,153	(501,769)	_	42,949,384
322,787	24,729 2,067,155	7,366 301,472	_	1,880 30,815	30,711	39,957 332,287	17,516 2,159,047	(8,767) 291,587	_	8,749 2,450,634
— 5,469	115,651 69,485	15,115 19,068	_	19,103 4,866	22,061	56,279 23,934	71,864 45,343	(6,104) 1,561		65,760 46,904
8,017	1,672,642	468,941	_	128,866	15,520	613,327	1,167,173	(1,264)	_	1,165,909
9,402	40,583 26,578	5,389 3,474	_	551 4,390	5,681	5,940 13,545	38,593 16,515	8,493 (1,572)	_	47,086 14,943
345,271	2,636,069	465,197		158,571	5,354	629,122	2,582,300	149,977		2,732,277
156,883 746	4,853,924 13,502	1,309,283 1,667	_	334,157 2,107	_	1,643,440 3,774	3,284,671 7,926	55,162 206	_	3,339,833 8,132
_	550,722	71,976	<u> </u>	90,966	207,027	369,969	342,211	(57,285)	_	284,926
10,588	114,169	20,252		18,699	28,108	67,059	74,447	(6,313)		68,134
_	204,087 1,996,234	60,789 524,519	_	15,515 133,868	18,711 184,283	95,015 842,670	144,557 1,380,940	(5,342) (43,309)	_	139,215 1,337,631
20,134	28,010 304,420	3,661 49,132	_	4,627 5,022	26,374	34,662 54,154	17,405 351,867	(7,298) 18,188	_	10,107 370,055
44,435	1,308,792	282,296		224,686	84,451	591,433	1,003,139	(8,493)	_	994,646

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Emery County Recreation SSD Emery School District Emery Town Emery Water Conserv Dist Enoch City	N/A N/A N/A N/A N/A	\$ 15,357 12,289,930 62,106 138,560 486,219	32,448 22,329,305 109,375 292,765 1,028,435	1,090 3,869,575 22,422 9,831 39,004	_ _ _ _ _	5,186 3,246,480 18,459 46,792 159,870	_ _ _ _	
Ephraim City Escalante City Eureka City Corporation Fairview City Farmington City	N/A N/A N/A N/A N/A	715,633 119,538 56,287 209,117 2,189,122	1,513,001 252,617 118,928 441,843 4,629,424	54,621 8,669 3,994 14,837 171,787		237,977 40,188 19,008 70,619 723,458		
Farr West City Fast Forward Charter HS Ferron City Fillmore City Five-County Assn of Govts	N/A N/A N/A N/A N/A	198,393 761,234 92,491 194,001 1,006,944	419,184 1,377,805 195,424 409,905 2,084,191	14,076 244,239 6,562 13,765 107,213		66,997 197,031 31,234 65,514 335,051	_ _ _ _	
Fountain Green City Fox Hollow Golf Course Francis City Fruit Heights City Garfield County	N/A N/A N/A N/A N/A	110,391 81,565 67,126 218,010 2,654,694	233,451 172,340 141,831 460,634 5,580,573	8,675 5,787 4,763 15,468 243,459	_ _ _ _	36,470 27,545 22,668 73,622 867,237	_ _ _ _	
Garfield School District Garland City Genola Town Grand Co Cemetery Mtce Dist Grand County	N/A N/A N/A N/A N/A	4,716,352 447,935 51,823 35,510 3,455,429	8,536,420 845,735 109,497 75,030 7,214,319	1,513,221 118,485 3,677 2,519 338,537	= = = =	1,220,738 136,660 17,501 11,992 1,138,899	_ _ _ _ _	
Grand School District Grand Water/Sewer Service Granger-Hunter Imp Dist Granite School District Granite Uniserv	N/A N/A N/A N/A N/A	7,189,032 126,847 2,452,778 253,960,822 211,233	13,011,876 268,016 5,182,476 462,473,012 382,323	2,306,569 9,000 174,027 79,046,078 67,773		1,860,743 42,836 828,301 67,899,989 54,674		
Grantsville City Gunnison City Gunnison Valley Hospital Heber City Heber Light & Power	N/A N/A N/A N/A N/A	1,131,017 333,830 2,937,584 2,038,791 1,662,120	2,392,183 706,163 6,172,788 4,312,151 3,511,895	90,290 27,020 236,487 162,604 117,929		372,303 109,534 988,103 671,268 561,297		
Heber Valley Historic Railroad Heber Valley SS District Herriman City High Desert Uniserv High School Activities Assn	N/A N/A N/A N/A N/A	236,011 127,208 2,448,409 7,706 595,054	427,171 268,779 5,173,245 13,947 1,077,025	75,723 9,026 173,717 2,472 190,920		61,087 42,958 826,826 1,994 154,018		~~~~
Highland City Hinckley Town Honeyville City Hooper City Hooper Water Improv Dist	N/A N/A N/A N/A N/A	749,924 44,679 138,177 182,894 243,391	1,584,516 94,403 243,343 386,436 514,260	53,208 3,170 49,885 12,976 17,269		253,249 15,088 41,067 61,763 82,193		
Housing Auth of Carbon Co Housing Auth of SL County Housing Authority of SLC Housing Authority Ogden City Huntington City	N/A N/A N/A N/A N/A	183,941 1,778,969 1,984,543 430,737 117,803	388,649 3,758,785 4,153,088 910,104 248,907	13,051 126,220 173,832 30,561 8,358		62,117 600,757 665,568 145,460 39,782		
Hurricane City Hurricane Valley Fire SSD Hyde Park City Hyrum City Impact Mitigation SSD	N/A N/A N/A N/A N/A	2,936,382 28,006 258,029 813,978 104,461	6,209,213 59,173 545,190 1,719,854 220,716	228,498 1,987 18,307 57,753 7,412		972,264 9,457 87,136 274,880 35,277		
Intech Collegiate High School Iron County Iron School District Itineris High School Ivins City	N/A N/A N/A N/A N/A	467,527 5,827,182 30,822,767 1,098,451 1,558,562	846,206 12,300,307 55,845,534 1,988,155 3,296,036	150,004 496,012 9,839,570 352,433 122,642		121,010 1,906,666 8,022,164 284,313 514,748		

Deferred Outflows of Resources

Deferred	Inflows	of Resou	rces

Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
1,095 2,321 22,130	6,281 3,246,480 18,459 49,113 182,000	678 932,967 3,190 6,115 34,985	_ _ _ _	857 238,113 326 7,729 29,745	300,556 2,288 — 204	1,535 1,471,636 5,804 13,844 64,934	3,223 2,283,485 22,847 29,076 120,500	303 (83,751) (2,067) 642 7,221	_ _ _ _	3,526 2,199,734 20,780 29,718 127,721
10,281 11,899 4,113	248,258 40,188 19,008 82,518 727,571	43,127 5,837 2,484 9,229 146,042		42,156 6,776 3,140 11,664 131,694	5,378 21,597 610 — 4,265	90,661 34,210 6,234 20,893 282,001	165,932 25,850 11,811 43,881 526,862	1,893 (6,816) (169) 3,293 (265)		167,825 19,034 11,642 47,174 526,597
8,893 1,756 — 6,392	75,890 198,787 31,234 65,514 341,443	8,756 58,688 4,082 8,562 45,333		11,066 14,978 5,159 10,821 49,936	5,924 2,470 50,300	19,822 73,666 15,165 21,853 145,569	41,631 139,559 19,408 40,709 230,784	2,461 501 (1,639) (683) (8,144)		44,092 140,060 17,769 40,026 222,640
437 345 938 6,332 16,688	36,907 27,890 23,606 79,954 883,925	7,400 3,600 2,963 9,622 196,770		6,648 4,550 3,744 12,161 158,357	369 — — — 5,860	14,417 8,150 6,707 21,783 360,987	26,616 17,116 14,086 45,748 680,492	(0) 95 259 1,752 5,530		26,616 17,211 14,345 47,500 686,022
171,995 19,746 3,126 3,862 14,554	1,392,733 156,406 20,627 15,854 1,153,453	363,608 31,018 2,287 1,567 209,128		92,800 12,191 2,891 1,981 190,274	35,856 — — 90,816	456,408 79,065 5,178 3,548 490,218	864,661 152,078 10,875 7,452 840,785	49,099 6,047 865 1,069 (12,740)		913,760 158,125 11,740 8,521 828,045
16,002 25,761	1,876,745 42,836 828,301 67,899,989 80,435	554,240 5,598 108,253 19,098,274 16,285		141,454 7,075 136,815 4,874,282 4,156	6,970 16,891 3,614,094	695,694 19,643 261,959 27,586,650 20,441	1,317,984 26,618 514,694 47,563,644 38,726	4,568 (1,929) (4,674) (1,071,739) 7,354		1,322,552 24,689 510,020 46,491,905 46,080
123,355 49,176	372,303 109,534 1,111,458 720,444	80,063 24,740 130,350 143,859		68,934 20,562 158,969 124,173	55,247 2,781 —	204,244 48,083 289,319 268,032	278,499 83,716 631,713 501,396	(16,943) (854) 37,998 15,653		261,556 82,862 669,711 517,049
29,017 — 123,991	561,297 90,104 42,958 950,817 1,994	73,358 18,195 5,614 108,060 594		92,712 4,644 7,096 136,571 152	101,124 ————————————————————————————————————	267,194 22,839 13,085 244,631 9,098	43,269 26,694 513,777 1,413	(27,981) 8,284 (104) 34,309 (2,384)		320,800 51,553 26,590 548,086 (971)
11,911 — 2,593 5,774 —	165,929 253,249 17,681 46,841 61,763	45,876 33,098 1,972 7,097 8,072		11,708 41,830 2,492 725 10,202	17,100 — — 14,462	57,584 92,028 4,464 7,822 32,736	109,093 157,365 9,376 50,830 38,379	3,400 (4,732) 718 5,216 (4,002)		112,493 152,633 10,094 56,046 34,377
6,141 1,267	62,117 606,898 666,835 145,460	8,118 78,515 88,411 19,011		13,576 10,260 99,230 104,944 24,026	306 6,593 — 113,040 78	24,624 24,971 177,745 306,395 43,115	51,073 38,598 373,301 434,431 90,386	(85) (1,824) 1,699 (30,134) (21)		36,774 375,000 404,297 90,365
62,167 18,495 —	39,782 1,034,431 27,952 87,136 274,880	5,199 190,103 1,236 11,388 35,925		6,571 175,525 1,562 14,393 45,403	4,970 — 4,688 3,168	365,628 2,798 30,469 84,496	24,720 698,801 5,877 54,145 170,806	(1,375) 19,311 5,118 (1,297) (877)		23,345 718,112 10,995 52,848 169,929
45,185 4,340 46,816 24,562 46,953	35,277 166,195 1,911,006 8,068,980 308,875 561,701	4,610 36,044 439,375 2,366,461 84,685 104,986		5,827 9,199 356,426 603,971 21,613 93,957	1,284 ————————————————————————————————————	45,243 1,085,127 2,970,432 106,298 198,943	21,920 85,713 1,482,843 5,671,340 201,382 376,485	(355) 12,899 (83,601) 16,348 7,012 13,137		21,565 98,612 1,399,242 5,687,688 208,394 389,622

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Jordan River Commission Jordan School District Jordan Uniserv Jordan Valley Water Conserv Jordanelle SS District	N/A N/A N/A N/A	\$ 53,585 163,139,639 222,215 5,347,749 794,487	113,219 295,864,288 402,200 11,154,440 1,678,672	3,802 51,833,761 71,297 498,839 56,370	_ _ _ _	18,096 42,678,248 57,516 1,789,263 268,298	_ _ _ _	
Juab County Juab School District Kamas City Kane County Kane County Water Conserv Dist	N/A N/A N/A N/A N/A	1,831,967 7,976,549 256,142 3,109,606 242,552	3,836,289 14,473,957 541,738 6,577,783 512,489	177,312 2,527,459 20,358 251,287 17,209	_ _ _ _	599,140 2,092,849 84,402 1,020,684 81,910	_ _ _ _ _	
Kane School District Kaysville City Kearns Improvement Dist Laverkin City Layton City	N/A N/A N/A N/A N/A	5,841,649 3,853,904 1,506,053 1,106,775 9,128,609	10,593,470 8,102,717 3,014,253 2,026,637 19,121,021	1,856,685 343,768 245,285 340,671 886,287		1,527,640 1,266,257 489,270 333,753 2,980,429		
Leeds Area SS District Lehi City Lewiston City Liberty Academy Charter Lindon City	N/A N/A N/A N/A N/A	7,080,843 137,755 532,533 2,003,984	14,972,090 291,062 963,864 4,238,648	547,274 9,774 170,861 160,301		2,348,113 46,520 137,836 659,354	_ _ _ _ _	
Logan City Logan School District Lone Peak PS District Maeser Water Improve Dist Magna Mosquito Abatement	N/A N/A N/A N/A N/A	14,832,360 20,464,159 976,200 197,572 41,251	30,905,385 37,153,000 2,695,457 417,449 87,159	1,519,215 6,467,434 (438,510) 14,018 2,927	268,832 — 136,775 —	4,946,012 5,384,290 525,538 66,720 13,930		
Manti City Mapleton City Marriott-Slaterville City Mayfield Town Mendon City	N/A N/A N/A N/A N/A	315,469 1,221,315 93,879 21,758 28,395	666,554 2,582,345 198,357 45,973 59,997	22,383 94,133 6,661 1,544 2,015		106,533 405,257 31,703 7,348 9,589		
Metro Water Dist SLC/Sandy Midvale City Midvalley Improvement District Midway City Military Installation Devel	N/A N/A N/A N/A N/A	2,402,950 2,097,859 305,648 394,781 144,652	5,077,195 4,432,567 645,803 834,132 305,636	170,492 148,845 21,686 28,010 10,263		811,475 708,445 103,217 133,317 48,849		
Millard Co Care & Rehab Inc Millard County Millard School District Millville City Minersville Town	N/A N/A N/A N/A N/A	691,340 5,131,222 15,276,883 97,083 83,888	1,460,732 10,826,516 27,841,959 205,127 177,247	49,051 436,241 4,735,812 6,888 5,952		233,465 1,682,043 4,101,537 32,785 28,329		
Moab Valley Fire Protection Monroe City Monticello Academy Morgan City Corporation Morgan County	N/A N/A N/A N/A N/A	256,486 1,465,957 469,970 1,391,828	541,930 2,653,326 993,000 2,943,187	18,198 470,346 33,345 108,540		86,615 379,435 158,709 460,622		
Morgan School District Moroni City Mount Pleasant City Mountain Regional Water SSD Mountainland Assn of Govt	N/A N/A N/A N/A N/A	7,437,011 62,162 542,981 968,804 1,393,616	13,460,709 131,342 1,148,381 2,046,986 2,880,275	2,386,132 4,410 43,093 68,738 151,894		1,924,928 20,992 178,979 327,164 463,222		
Mountainland ATC Mt Olympus Improvement Dist Murray City Murray School District Myton City	N/A N/A N/A N/A N/A	1,484,252 1,031,708 13,293,761 23,087,363 42,511	2,686,439 2,179,897 27,765,053 41,830,747 89,820	476,216 73,201 1,309,342 7,369,820 3,016		384,170 348,407 4,370,235 6,009,222 14,356		
N Tooele Co Fire Protection SD Ne Counseling Center Nebo Credit Union Nebo School District Nephi City	N/A N/A N/A N/A N/A	1,259,443 396,311 104,786,396 1,308,627	2,661,078 837,365 189,710,719 2,766,948	89,359 28,119 33,575,835 100,819		425,313 133,834 27,161,467 434,271		

Deferred Inflows of Resources	Pension I to Er
	Net Amortization of Deferred
Changes in	Amounts from
Changes in	Changes in

Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	let Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
1,261 60,592 1,091 23,180	19,357 42,738,840 58,607 1,812,443 268,298	2,365 12,476,833 17,132 238,999 35,065	_ _ _ _ _	2,989 3,184,351 4,372 277,494 44,316	31,988 7,230	5,354 15,661,184 21,504 548,481 86,611	11,244 30,118,607 40,739 1,187,228 166,716	349 11,139 311 12,088 (2,001)	_ _ _ _	11,593 30,129,746 41,050 1,199,316 164,715
— 149,397 27,187 47,375 2,702	599,140 2,242,246 111,589 1,068,059 84,612	128,869 608,680 17,862 229,259 10,705		105,842 155,348 15,559 191,299 13,529	48,282 — — — —	282,993 764,028 33,421 420,558 24,234	466,129 1,475,464 62,704 778,180 50,897	(15,130) 25,192 8,787 14,551 748		450,999 1,500,656 71,491 792,731 51,645
33,884 117,818 26,839 52,636	1,561,524 1,384,075 516,109 386,389 2,980,429	446,892 263,959 69,920 67,764 659,171		114,056 226,124 59,894 19,218 531,234	17,262 — 110,030	560,948 490,083 147,076 86,982 1,300,435	1,078,214 957,006 391,443 389,837 2,344,438	10,784 39,251 19,469 43,981 (41,411)		1,088,998 996,257 410,912 433,818 2,303,027
89,499 4,655 — 21,268	2,437,612 51,175 137,836 680,622	447,227 6,080 41,056 142,822		421,094 7,684 10,478 122,327	12,720 —	868,321 13,764 64,254 265,149	 1,669,815 28,907 97,631 494,774	28,013 1,288 (3,631) 5,968		1,697,828 30,195 94,000 500,742
2,966 440,936 4,550 —	5,217,810 5,825,226 666,863 66,720 13,930	804,313 1,558,264 97,478 8,720 1,821		996,406 397,702 139,497 11,020 2,301	47,365 — 28,931 10,134 6,759	1,848,084 1,955,966 265,906 29,874 10,881	3,403,296 3,792,316 218,156 41,459 8,656	(9,336) 131,884 (5,795) (2,804) (1,870)	(383,486) — (76,650) —	3,010,474 3,924,200 135,711 38,655 6,786
11,633 5,932 — — 123	118,166 411,189 31,703 7,348 9,712	13,923 76,352 4,143 960 1,253		17,597 72,478 5,237 1,214 1,584	27,637 259 125	31,520 176,467 9,639 2,299 2,837	66,198 286,938 19,700 4,566 5,959	3,219 (7,447) (72) (34) 34		69,417 279,491 19,628 4,532 5,993
16,243 5,642 10,258 27,771 3,571	827,718 714,087 113,475 161,088 52,420	106,054 92,589 13,490 17,424 6,384		134,036 117,018 17,049 22,021 8,069		240,090 209,607 30,539 51,237 14,453	504,238 440,217 64,137 82,841 30,354	4,494 1,561 2,838 (2,968) 988		508,732 441,778 66,975 79,873 31,342
18,164 22,837 261,967 1,060 3,809	251,629 1,704,880 4,363,504 33,845 32,138	30,512 375,918 1,145,064 4,285 3,702		38,563 311,163 292,244 5,415 4,679	32,079 — — —	69,075 719,160 1,437,308 9,700 8,381	145,072 1,292,358 2,869,068 20,372 17,603	5,026 (527) 79,582 293 1,054		150,098 1,291,831 2,948,650 20,665 18,657
4,343 — 3,489	90,958 379,435 162,198 460,622	11,320 113,018 20,742 90,810			38,684 — 25,038	25,627 180,547 46,957 199,182	53,821 268,758 98,619 332,187	1,202 (11,043) 965 (7,684)		55,023 257,715 99,584 324,503
	1,924,928 22,773 186,123 353,276 478,733	573,358 2,744 37,675 42,758 62,829		146,333 3,467 32,946 54,039 68,501	154,494 — 12,654 —	874,185 6,211 83,275 96,797 131,330	1,363,447 13,044 132,663 203,295 321,318	(44,103) 493 (8,132) 7,225 12,325		1,319,344 13,537 124,531 210,520 333,643
52,976 12,713 51,276 —	437,146 361,120 4,421,511 6,009,222 14,356	114,429 45,534 842,407 1,772,491 1,876		29,205 57,548 740,391 452,377 2,371		143,634 103,082 1,585,550 2,350,413 9,443	272,112 216,495 3,283,430 4,248,192 8,920	15,123 3,518 25,543 (33,467) (1,438)		287,235 220,013 3,308,973 4,214,725 7,482
 1,354,943 1,649	425,313 133,834 28,516,410 435,920	55,586 17,491 8,069,760 81,679		70,251 22,106 2,059,573 77,635	33,167 23,707 — 44,633	159,004 63,304 10,129,333 203,947	264,283 83,162 19,229,074 307,273	(9,177) (6,560) 366,057 (11,808)	_ _ _ _ _	255,106 76,602 19,595,131 295,465

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Nibley City Corporation No Emery Water Users SS Dist Noah Webster Academy Inc North Davis Co Sewer Dist North Davis Fire District	N/A N/A N/A N/A	\$ 314,207 29,595 901,282 1,770,113 32,230	663,889 62,531 1,631,287 3,684,453 68,098	22,293 2,100 289,172 171,451 2,287	_ _ _ _ _	106,108 9,994 233,280 591,364 10,884	= =	
North Fork SS District North Logan City North Ogden City North Pointe Solid Waste North Sanpete School Dist	N/A N/A N/A N/A	89,544 1,122,705 1,724,507 546,684 9,294,119	189,198 2,325,877 3,647,462 1,155,089 16,843,651	6,353 125,074 137,689 38,788 2,963,235	_ _ _ _ _	30,239 367,846 567,646 184,615 2,422,277		
North Summit School District North View Fire District Nuames Charter School Oakley City Ogden City Corp	N/A N/A N/A N/A N/A	4,877,739 27,325 1,642,167 227,806 28,118,111	8,828,524 57,735 2,972,260 401,188 53,649,283	1,565,001 1,939 526,882 82,244 6,964,522	254,988	1,262,509 9,228 425,044 67,706 7,861,259	- - - -	
Ogden School District Ogden Weber/NEA/UEA Uniserv Ogden-Weber Applied Tech Ctr Oquirrh Rec And Parks District Orangeville City	N/A N/A N/A N/A	47,378,785 81,780 4,408,015 492,297 60,649	85,753,811 148,019 8,124,811 1,040,174 128,146	15,201,274 26,239 1,287,469 34,929 4,303	_ _ _ _	12,263,092 21,167 1,253,747 166,248 20,481		
Orderville Town Panguitch City Corporation Park City Park City Fire Service Park City School District	N/A N/A N/A N/A N/A	44,846 107,751 10,109,665 1,160,278 29,110,068	94,755 227,667 20,841,838 7,954,152 52,835,616	3,182 7,645 1,191,725 (4,452,699) 9,212,129		15,144 36,387 3,315,984 2,362,636 7,648,188	_ _ _ _ _	
Parowan City Payson City Perry City Piute County Piute School District	N/A N/A N/A N/A N/A	834,894 3,570,337 433,015 444,751 2,010,731	1,764,963 7,548,678 915,866 940,437 3,639,347	62,975 273,402 34,600 34,505 645,134		278,356 1,186,422 142,506 147,362 520,439	_ _ _ _ _	
Plain City Pleasant Grove City Pleasant View City Price City Price River Water Improve	N/A N/A N/A N/A	171,918 3,075,434 813,251 2,576,791 878,410	363,245 6,504,334 1,720,094 5,448,988 1,855,994	12,198 243,764 64,966 201,168 62,324		58,057 1,014,037 267,660 852,574 296,639		
Providence City Provo City Corp Provo Housing Authority Provo River Water Users Provo School District	N/A N/A N/A N/A N/A	302,263 26,623,198 613,332 542,471 50,877,986	638,651 54,338,233 1,222,523 1,146,186 92,506,851	21,446 3,631,528 104,024 38,489 15,960,643	498,666	102,074 8,516,877 198,675 183,192 13,492,001	_ _ _ _ _	
Recreation & Habilitation Srvs Redmond Town Rich County Rich School District Richfield City	N/A N/A N/A N/A N/A	35,918 54,404 1,249,894 2,998,540 1,258,387	75,891 114,949 2,314,077 5,427,244 2,661,718	2,548 3,860 365,439 962,068 101,024		12,129 18,372 378,486 776,115 413,687	_ _ _ _ _	
Richmond City Riverdale City Roosevelt City Roosevelt City Housing Roy City	N/A N/A N/A N/A N/A	160,726 2,453,712 1,314,536 24,166 4,231,198	339,598 5,163,380 2,780,014 51,060 8,905,499	11,404 221,531 103,617 1,715 376,180	_ _ _ _	54,277 801,468 433,984 8,161 1,385,879	_ _ _ _ _	
Roy Water Conserv Dist S Utah Valley Electric Svc Dst S Utah Valley Solid Waste Salem City Salina City	N/A N/A N/A N/A N/A	256,263 469,178 696,181 1,334,191 343,941	541,458 991,328 1,470,962 2,821,236 727,352	18,182 33,289 49,395 103,754 27,020		86,540 158,441 235,100 441,828 113,636		
Salt Lake Arts Academy Salt Lake City Corp Salt Lake City Public Library Salt Lake Co Serv Area 3 Salt Lake Community College	N/A N/A N/A N/A N/A	1,078,426 155,061,470 2,656,531 101,290 19,160,990	1,951,910 298,575,555 5,612,987 214,016 35,056,644	346,008 35,901,141 188,483 7,187 5,822,174	1,519,423 — — —	279,130 43,861,835 897,109 34,206 5,249,048		

Deferred Outflows of Resources

Doforno	l Inflance of	Resources

Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
21,844 44	127,952 10,038	13,868 1,306	_	17,526 1,651	_	31,394 2,957	65,934 6,210	6,044 12	_	71,978 6,222
13,871 14,763	247,151 606,127 10,884	69,485 79,267 1,422	=	17,734 90,748 1,798	 15,339 1,296	87,219 185,354 4,516	165,234 396,425 6,763	3,960 (9,772) (358)	_ _ _	169,194 386,653 6,405
39,684 22,736 —	30,239 407,530 590,382 184,615 2,422,277	3,952 68,647 122,133 24,128 712,832	_ _ _ _	4,995 59,277 105,118 30,494 181,930	3,351 — 15,064 15,327 3,123	12,298 127,924 242,315 69,949 897,885	18,790 281,779 424,720 114,717 1,711,642	(927) 16,448 3,308 (4,241) (8,316)	_ _ _ _	17,863 298,227 428,028 110,476 1,703,326
	1,262,509 9,437 554,733 80,329 8,231,894	376,050 1,206 126,603 11,701 2,087,752	_ _ _ _	95,976 1,524 32,312 1,196 1,436,181	52,853 — — — — 33,678	524,879 2,730 158,915 12,897 3,557,611	894,249 5,734 301,063 83,801 5,239,507	(15,088) 58 37,022 11,403 47,647	(713,698)	879,161 5,792 338,085 95,204 4,573,456
291,348 269 — — 565	12,554,440 21,436 1,253,747 166,248 21,046	3,652,677 6,305 314,802 21,728 2,677		932,240 1,609 80,344 27,460 3,383	22,071 3,506	4,584,917 7,914 417,217 52,694 6,060	8,686,076 14,993 860,419 103,304 12,727	79,431 77 1,140 (970) 156		8,765,507 15,070 861,559 102,334 12,883
99 — 375,465 2,222 282,944	15,243 36,387 3,691,449 2,364,858 7,931,132	1,979 4,756 573,465 896,538 2,219,037		2,501 6,010 510,604 654,190 566,345	21,564 — 10,043 —	4,480 32,330 1,084,069 1,560,771 2,785,382	9,410 22,611 2,517,725 572,970 5,389,475	27 (5,967) 154,641 (1,272) 89,367	(728,411)	9,437 16,644 2,672,366 (156,713) 5,478,842
17,316 138,380 40,215 — 4,645	295,672 1,324,802 182,721 147,362 525,084	48,066 217,856 30,749 28,481 155,018	_ _ _ _ _	48,746 210,843 26,411 26,525 39,564	40,478	96,812 428,699 57,160 95,484 194,582	190,515 831,521 106,758 105,415 368,633	4,979 42,384 12,505 (11,322) 1,326		195,494 873,905 119,263 94,093 369,959
21,906 15,156 55,344 — —	79,963 1,029,193 323,004 852,574 296,639	7,588 212,451 57,701 168,779 38,769	_ _ _ _ _	9,590 186,425 49,592 154,409 48,997	24,294 32,087 56,834 17,539	17,178 423,170 139,380 380,022 105,305	36,075 750,116 200,435 615,896 184,327	6,061 (3,795) (12,463) (17,155) (4,853)		42,136 746,321 187,972 598,741 179,474
 10,471 1,004 	102,074 9,015,543 209,146 184,196 13,492,001	13,340 1,771,223 28,578 23,942 3,850,727	_ _ _ _ _	16,860 1,790,352 23,671 30,259 982,787	6,265 188,336 10,026 — 514,769	36,465 3,749,911 62,275 54,201 5,348,283	63,427 5,465,068 161,664 113,833 9,477,386	(1,734) (81,100) 6,685 278 (138,949)	(661,722)	61,693 4,722,246 168,349 114,111 9,338,437
2,013 1,081 83,275 22,415	14,142 19,453 461,761 798,530 413,687	1,585 2,401 80,099 231,173 90,778	_ _ _ _	2,003 3,035 26,092 59,000 77,027	20,646	3,588 5,436 106,191 290,173 188,451	7,537 11,416 434,582 549,730 312,183	557 299 54,081 6,399 (5,766)	_ _ _ _	8,094 11,715 488,663 556,129 306,417
9,533 5,994 9,058 — 38,647	63,810 807,462 443,042 8,161 1,424,526	7,094 183,958 89,080 1,067 306,162	_ _ _ _	8,965 147,529 79,349 1,348 252,642	22,210 15,810 299 97,187	16,059 353,697 184,239 2,714 655,991	33,727 629,664 318,263 5,071 1,069,591	2,638 (5,809) (2,693) (83) (16,686)		36,365 623,855 315,570 4,988 1,052,905
7,128 25,393 — 22,961	93,668 183,834 235,100 464,789 113,636	11,310 20,707 30,726 86,174 23,036		14,294 26,171 38,833 79,713 20,708	9,634 — 15,016	25,604 46,878 79,193 165,887 58,760	53,774 98,453 146,088 317,234 82,902	1,972 7,026 (2,666) 6,948 (4,388)	_ _ _ _	55,746 105,479 143,422 324,182 78,514
925 231,864 — 92 930,644	280,055 45,613,122 897,109 34,298 6,179,692	83,141 7,750,041 117,246 4,470 1,412,959		21,219 8,560,412 148,180 5,650 360,617	13,083 ————————————————————————————————————	104,360 16,310,453 278,509 10,120 1,773,576	197,711 29,749,672 557,450 21,255 3,647,047	264 85,975 (3,620) 25 286,492	(3,360,478)	197,975 26,475,169 553,830 21,280 3,933,539

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

	Forelows	Net Pension	Net Pension	Net Pension	Differences Between	Net Difference Between Projected and Actual Investment Earnings on		
Participating Employer	Employer Allocation Percentage	Liability/(Asset) (7.50% Discount)	Liability/(Asset) 1.00% Decrease (6.50%)	Liability/(Asset) 1.00% Increase (8.50%)	Expected and Actual Experience	Pension Plan Investments	Changes of Assumptions	
Salt Lake County Salt Lake School District San Juan County San Juan Mental Health San Juan School District	N/A N/A N/A N/A	\$ 109,550,796 122,526,769 3,719,304 427,165 17,235,857	230,153,706 223,216,331 7,836,203 902,558 31,269,845	9,475,732 38,058,824 309,624 30,308 5,466,325		36,335,762 32,828,641 1,230,961 144,253 4,517,858	_ _ _ _ _	
Sandy City Sandy Suburban Imp Dist Sanpete County Santaquin City Sevier County	N/A N/A N/A N/A N/A	14,956,836 708,013 2,564,605 1,307,946 4,153,124	36,292,098 1,495,961 5,425,385 2,766,510 8,786,369	(2,733,899) 50,234 209,086 104,869 340,599	692,960 — — — —	6,682,082 239,095 840,028 430,108 1,358,418	_ _ _ _	
Sevier School District Six County Infrastructure Coal Six-County Assoc of Govt SLC Mosquito Abatement Smithfield City Corp	N/A N/A N/A N/A N/A	18,323,641 88,009 588,639 281,204 1,053,068	33,205,833 185,955 1,243,735 594,155 2,226,369	5,843,788 6,244 41,764 19,952 80,200	_ _ _	4,774,099 29,721 198,783 94,962 350,356	_ _ _ _ _	
Snow College Snyderville Basin W R D So Davis Metro Fire Agency So Davis Recreation Center So SL Valley Mosq Abate	N/A N/A N/A N/A N/A	4,449,365 1,626,734 56,150 290,562 117,876	8,085,405 3,437,128 118,640 613,928 249,061	1,400,300 115,418 3,984 20,616 8,363		1,176,972 549,347 18,962 98,122 39,807	_ _ _ _ _	
So Utah Valley Animal Svcs SSD So Utah Valley Power Systems Soldier Hollow Charter School Solid Waste SS District #1 Solitude Improvement Dist	N/A N/A N/A N/A N/A	35,600 55,240 760,069 122,078 36,845	75,220 116,716 1,375,696 257,940 77,850	2,526 3,919 243,865 8,662 2,614		12,022 18,654 196,729 41,226 12,443		
South Davis Sewer Dist South Davis Water Dist South Ogden City South Ogden Conserv Dist South Sanpete School Dist	N/A N/A N/A N/A N/A	1,485,456 212,108 2,447,016 830,871 13,197,772	2,969,139 448,164 5,176,831 1,755,548 23,887,469	245,138 15,049 200,329 58,951 4,234,447		482,131 71,629 800,716 280,585 3,415,991		
South Summit School District South Valley Sewer District South Valley Water Reclamation South Weber City Southeastern Utah AOG	N/A N/A N/A N/A	6,359,340 1,631,363 1,577,154 323,697 456,871	11,510,164 3,446,907 3,332,369 683,940 957,706	2,040,366 115,747 111,901 22,967 38,697		1,645,993 550,910 532,604 109,312 153,408	_ _ _ _ _	
Southeastern Utah Health Southern Utah University Southwest Applied Tech Southwest Educ Development Ctr Space Dynamics Lab / USU	N/A N/A N/A N/A N/A	677,782 11,925,921 1,372,799 368,605 2,533,322	1,432,086 21,588,285 2,484,714 667,161 4,585,217	48,089 3,827,808 440,456 118,265 812,805		228,886 3,092,102 355,323 95,406 655,702	_ _ _ _ _	
Spanish Fork City Spring City Springville City St George Housing Auth State of Utah	N/A N/A N/A N/A	6,468,454 236,014 6,132,534 85,495 1,017,257,938	13,676,868 415,643 12,923,823 180,643 1,829,428,250	498,490 85,207 495,073 6,066 337,843,632	1,307,551	2,146,431 70,145 2,040,565 28,872 260,810,192	_ _ _ _ _	
Stockton Town Success Academy Summit Academy High School Summit Academy Inc Summit County	N/A N/A N/A N/A	14,573 747,984 924,666 3,098,533 11,343,941	30,859 1,353,823 1,673,610 5,608,229 23,991,428	1,313 239,987 296,675 994,151 898,151		4,654 193,601 239,332 801,996 3,741,293	_ _ _ _ _	
Summit Mosquito Abatement Dist Sunset City Sw Behavioral Health Center Sw Mosquito Abatement/Control SW UT Public Health Dept	N/A N/A N/A N/A N/A	26,460 585,130 3,391,333 62,755 1,289,695	55,908 1,233,209 7,165,549 132,595 2,724,998	1,877 50,681 240,618 4,453 91,505		8,936 191,812 1,145,251 21,192 435,529		
Syracuse City Corp Taylor West Weber Wtr Imp Dist Taylorsville-Bennion Imp Timber Lakes Water SS Dist Timpanogos SS District	N/A N/A N/A N/A N/A	2,030,390 72,972 1,178,711 112,030 1,358,626	4,294,338 154,182 2,490,500 236,707 2,818,864	161,754 5,177 83,631 7,949 139,090		668,674 24,643 398,050 37,832 452,848		

Deterred Outilo						JW3 OF RESOURCES			proyer-r ara memb	
							N	of Deferred		
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
87,015 72,442 24,862 65,490	36,422,777 32,828,641 1,303,403 169,115 4,583,348	6,407,772 9,198,818 233,005 18,853 1,316,223	=	6,202,885 2,347,732 216,701 23,827 335,928	1,885,438 182,136 32,087 —	14,496,095 11,728,686 481,793 42,680 1,652,151	25,743,185 22,979,870 886,231 89,637 3,186,166	(474,574) (42,649) 12,194 6,879 18,512	_ _ _ _	25,268,611 22,937,221 898,425 96,516 3,204,678
253,590 3,696 80,182 14,546	7,628,632 242,791 840,028 510,290 1,372,964	1,240,595 31,248 194,602 93,950 321,160	_ _ _ _ _	1,407,947 39,493 158,843 79,983 258,398	50,391 — 47,812 — 48,986	2,698,933 70,741 401,257 173,933 628,544	3,519,827 148,570 649,337 323,928 1,059,758	80,355 1,023 (14,430) 25,148 (16,688)	(643,235) — — — —	2,956,947 149,593 634,907 349,076 1,043,070
37,363 58,121 ———————————————————————————————————	4,811,462 87,842 198,783 106,265 359,686	1,405,702 3,884 25,980 12,411 62,936	_ _ _ _ _	358,765 4,909 32,834 15,685 61,932	41,767 — 58,206	1,764,467 8,793 100,581 28,096 183,074	3,373,861 18,468 123,521 59,008 243,454	8,075 16,082 (11,557) 3,127 (16,559)		3,381,936 34,550 111,964 62,135 226,895
83,304 31,977 206 — 1,185	1,260,276 581,324 19,168 98,122 40,992	336,799 71,796 2,478 12,824 5,202	_ _ _ _ _	87,563 90,739 3,132 16,207 6,575	 1,700 	424,362 162,535 5,610 30,731 11,777	827,307 341,356 11,783 60,972 24,735	20,042 8,848 57 (470) 328	_ _ _ _ _	847,349 350,204 11,840 60,502 25,063
412 85 3,049	12,434 18,739 196,729 44,275 12,443	1,571 2,438 58,598 5,388 1,626		1,986 3,081 14,955 6,809 2,055	70,379 — 452	3,557 5,519 143,932 12,197 4,133	7,470 11,592 139,345 25,617 7,732	114 24 (20,091) 844 (125)		7,584 11,616 119,254 26,461 7,607
48,026 3,418 12,261 —	530,157 75,047 812,977 280,585 3,415,991	69,044 9,361 188,173 36,670 1,017,485		58,515 11,831 152,044 46,346 259,684	44,333 29,454 172,322	127,559 21,192 384,550 112,470 1,449,491	387,836 44,509 622,970 174,351 2,419,582	31,675 946 (11,186) (8,150) (49,193)		419,511 45,455 611,784 166,201 2,370,389
24,295 32,355 30,864	1,645,993 575,205 564,959 140,176 153,408	490,275 72,000 69,608 14,286 20,320		125,128 90,997 87,973 18,056 24,390	88,793 6,048 — — 65,573	704,196 169,045 157,581 32,342 110,283	1,165,874 342,327 330,952 67,925 99,292	(25,348) 1,259 8,953 8,540 (20,206)		1,140,526 343,586 339,905 76,465 79,086
113,137 102,669 36,961 127,706	228,886 3,205,239 457,992 132,367 783,408	29,914 914,613 105,836 28,418 195,307	_ _ _ _	37,806 243,107 27,012 7,253 49,846	59,164 — — — —	126,884 1,157,720 132,848 35,671 245,153	142,227 2,187,961 251,679 67,577 464,440	(17,390) 34,225 29,309 10,551 36,456	_ _ _ _	124,837 2,222,186 280,988 78,128 500,896
140,292 3,119 — 584 127,464	2,286,723 73,264 2,040,565 29,456 262,245,207	404,186 12,123 352,043 3,773 74,026,265	_ _ _ _ _	383,830 1,239 351,924 4,769 23,588,438	102,640 	788,016 13,362 806,607 8,542 103,595,746	1,519,444 86,821 1,414,911 17,940 187,159,339	43,051 2,818 (38,203) 161 (1,699,751)	— — — (1,653,457)	1,562,495 89,639 1,376,708 18,101 183,806,131
9,385 20,591 362,679 268,236	4,654 202,986 259,923 1,164,675 4,009,529	1,480 57,666 71,287 238,882 780,669	_ _ _ _ _	975 14,718 18,194 60,968 687,067	6,829 — — — —	9,284 72,384 89,481 299,850 1,467,736	4,201 137,130 169,521 568,062 2,762,796	(2,246) 2,679 5,878 103,534 79,786	_ _ _ _	1,955 139,809 175,399 671,596 2,842,582
9,221 2,482	8,936 201,033 1,145,251 23,674 435,529	1,168 42,403 149,676 2,770 56,921		1,476 35,196 189,167 3,500 71,939	6,477 54,557 24,723 — 54,872	9,121 132,156 363,566 6,270 183,732	5,552 147,300 711,641 13,169 270,631	(1,792) (28,834) (6,841) 687 (15,183)		3,760 118,466 704,800 13,856 255,448
16,722 1,533 6,597 592 64,059	685,396 26,176 404,647 38,424 516,907	142,726 3,221 52,022 4,944 61,027		123,556 4,070 65,748 6,249 68,347	25,471 — — — —	291,753 7,291 117,770 11,193 129,374	498,593 15,313 247,342 23,508 308,354	(1,549) 424 1,825 164 22,824		497,044 15,737 249,167 23,672 331,178

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Continued)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Tintic School District Tooele Applied Tech College Tooele City Tooele County Tooele County Housing	N/A N/A N/A N/A	\$ 1,643,263 983,889 3,948,806 7,676,671 143,658	2,974,245 1,780,801 8,320,632 16,204,068 303,536	527,234 315,676 336,059 623,936 10,193	_ _ _ _	425,327 254,661 1,300,390 2,536,216 48,513	= = = =	
Tooele School District Tooele Valley Mosquito Abtmnt Torrey Town Town of Alta Town of Apple Valley	N/A N/A N/A N/A N/A	46,895,305 12,277 6,717 255,910 19,125	84,926,286 25,939 14,192 540,712 40,408	15,004,974 871 477 18,157 1,357		12,174,582 4,146 2,268 86,420 6,458		
Town of Brian Head Town of Daniel Town of Garden City Town of Goshen Town of Levan	N/A N/A N/A N/A N/A	852,791 5,159 108,560 19,838 78,371	1,657,709 10,900 229,376 41,915 165,590	185,990 366 7,702 1,407 5,561	=	265,946 1,742 36,661 6,699 26,466	_ _ _ _	
Town of Manila Town of Mantua Town of Paragonah Town of Randolph Town of Springdale	N/A N/A N/A N/A N/A	150,480 44,354 51,466 30,560 565,748	265,009 93,716 90,636 64,571 1,196,257	54,327 3,147 18,580 2,168 43,777	= = = =	44,724 14,978 15,296 10,320 187,561	_ _ _ _ _	
Trans-Jordan Cities Tremonton City Tridell-Lapoint Water Tuacahn High School Uintah Animal Control/Shelter	N/A N/A N/A N/A N/A	803,750 1,105,503 25,471 1,186,615 192,434	1,698,243 2,337,524 53,818 2,147,728 406,595	57,027 85,412 1,807 380,720 13,653		271,426 366,631 8,602 307,132 64,985	_ _ _ _ _	
Uintah Basin Applied Tech Ctr Uintah Basin Assn of Govt Uintah Basin Asst Council Uintah Co Care Center SSD Uintah County	N/A N/A N/A N/A N/A	2,885,316 626,586 35,639 1,523,539 14,902,281	5,222,312 1,323,913 75,301 3,219,086 27,825,414	925,741 44,457 2,529 108,097 4,146,241		746,809 211,598 12,035 514,498 4,553,670		
Uintah Fire Suppression SSD Uintah Highlands Improv Dist Uintah Mosquito Abate District Uintah Recreation District Uintah School District	N/A N/A N/A N/A N/A	23,858 33,453 101,119 668,026 25,783,930	50,411 70,683 213,654 1,411,472 46,880,138	1,693 2,374 7,174 47,397 8,088,925		8,057 11,297 34,148 225,592 6,837,121		
Uintah Transportation SSD Uintah Water Conserv Dist Unified Fire Authority Unified Police Department University of Utah	N/A N/A N/A N/A N/A	23,621 304,844 6,849,758 19,773,010 126,450,249	49,910 644,104 44,449,999 42,899,668 231,782,514	1,676 21,629 (24,216,093) 766,177 38,076,130		7,977 102,945 13,046,393 6,437,505 34,994,173		
University of Utah Hospital Upper Country Water Dist UT Municipal Power Agency UT Public Employees Assn UT School Board Risk Mgmt	N/A N/A N/A N/A N/A	48,149,721 66,221 894,818 132,772 635,253	89,689,422 139,918 1,890,662 280,535 1,149,784	13,249,109 4,698 63,488 9,420 203,818		14,419,240 22,363 302,179 44,837 164,423		
Utah Assn of Counties Utah Co Academy of Sciences Utah Co Housing Authority Utah Communications Authority Utah Counties Indemnity Pool	N/A N/A N/A N/A N/A	484,037 1,013,187 675,514 1,643,791 239,964	1,022,722 1,833,831 1,386,289 2,975,200 507,020	34,343 325,077 81,738 527,403 17,026		163,459 262,244 223,401 425,464 81,036		
Utah County Utah Dairy Council Utah Education Association Utah Housing Corporation Utah Lake Commission	N/A N/A N/A N/A N/A	28,962,503 487,440 1,504,136 5,809,033 13,070	61,466,560 882,247 2,722,429 10,944,795 27,616	2,002,296 156,393 482,595 1,490,904 927	1,697,213 — — — — —	9,592,208 126,164 389,317 1,835,273 4,414		
Utah League Cities/Towns Utah Local Governments Trust Utah Retirement Systems Utah Safety Council Utah School Boards Association	N/A N/A N/A N/A	761,188 774,083 24,292,566 362,837 468,206	1,340,523 1,635,561 43,968,628 656,722 847,434	274,808 54,922 7,794,163 116,415 150,222		226,231 261,407 6,287,666 93,914 121,186		

Deferred Outfloo	ws of Resources				Deferred Inflo	ows of Resources		to Em	ıployer-Paid Memb	er Contributions
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
56,166 74,766 — 154,133 —	481,493 329,427 1,300,390 2,690,349 48,513	126,688 75,853 267,540 504,524 6,340	_ _ _ _	32,333 19,359 233,871 455,998 8,013	108,653 41,903 349	159,021 95,212 610,064 1,002,425 14,702	301,264 180,379 968,756 1,849,570 30,145	16,034 21,343 (43,617) 31,902 (97)	_ _ _	317,298 201,722 925,139 1,881,472 30,048
1,708 12,630	12,174,582 4,146 2,268 88,128 19,088	3,607,275 542 296 11,295 844		920,652 685 375 14,275 1,067	445,700 9,644 2,089	4,973,627 10,871 2,760 25,570 1,911	8,614,415 2,576 1,409 53,700 4,013	(124,736) (2,668) (578) 473 3,495		8,489,679 (92) 831 54,173 7,508
103,239 3,407 — 4,649	369,185 5,149 36,661 6,699 31,115	57,180 228 4,791 876 3,459		29,880 288 6,055 1,107 4,372	75,729 —— 20,788 1,958 ——	162,789 516 31,634 3,941 7,831	266,907 1,083 22,780 4,163 16,446	(39,660) 943 (5,752) (542) 1,286	_ _ _	227,247 2,026 17,028 3,621 17,732
7,421 — 2,586 — 50,442	52,145 14,978 17,882 10,320 238,003	7,729 1,958 2,644 1,349 35,886	_ _ _ _ _	790 2,474 270 1,705 33,674	5,163 — 195 —	8,519 9,595 2,914 3,249 69,560	55,356 9,307 18,932 6,413 133,624	6,704 (1,429) 2,336 (54) 16,042	= = = =	62,060 7,878 21,268 6,359 149,666
15,860 4,182 995 62,624	287,286 370,813 9,597 369,756 64,985	35,473 69,730 1,124 91,482 8,493	= - - -	44,833 65,726 1,421 23,348 10,734	3,326	80,306 135,456 2,545 114,830 22,553	168,660 260,574 5,345 217,545 40,381	4,388 1,170 275 17,877 (920)	= = = =	173,048 261,744 5,620 235,422 39,461
33,657 1,079,511	746,809 211,598 12,035 548,155 5,633,181	222,444 27,654 1,573 67,241 907,599		56,772 34,951 1,988 84,982 337,106	245,389 6,413 710 — 184,469	524,605 69,018 4,271 152,223 1,429,174	528,972 131,484 7,478 319,701 5,016,262	(70,051) (1,775) (196) 9,313 139,517		458,921 129,709 7,282 329,014 5,155,779
434 — — —	8,057 11,731 34,148 225,592 6,837,121	1,053 1,476 4,463 29,483 1,951,548		1,331 1,866 5,640 37,262 498,076	1,224 — 3,911 14,687 197,768	3,608 3,342 14,014 81,432 2,647,392	5,006 7,020 21,219 140,179 4,802,783	(339) 120 (1,082) (4,064) (49,490)		4,667 7,140 20,137 136,115 4,753,293
14,064 97,353 — 414,275	7,977 117,009 13,143,746 9,287,436 35,408,448	1,043 13,454 4,917,055 152,594 9,220,860		1,318 17,004 3,595,188 1,582,488 2,420,465	34,819 — — 288,827 610,506	37,180 30,458 8,512,243 2,023,909 12,251,831	4,957 63,969 3,245,544 3,704,058 24,225,855	(9,634) 3,892 24,629 (62,838) 19,775	(3,968,146)	(4,677) 67,861 (697,973) 3,641,220 24,245,630
523 — — —	14,419,240 22,886 302,179 44,837 164,423	3,277,933 2,923 39,493 5,860 48,975	_ _ _ _	836,598 3,694 49,913 7,406 12,499	591,147 — 2,243 14,277 57,119	4,705,678 6,617 91,649 27,543 118,593	9,734,211 13,896 187,770 27,861 116,463	(59,149) 145 (621) (3,950) (16,306)	_ _ _ _	9,675,062 14,041 187,149 23,911 100,157
77,940 31,790 4,850 370,371 3,407	241,399 294,034 228,251 795,835 84,443	21,363 78,112 30,657 126,728 10,591	= = = =	26,999 19,936 31,791 32,344 13,385	11,877 ———————————————————————————————————	48,362 98,048 74,325 159,072 23,976	101,571 185,750 160,168 301,361 50,354	21,566 9,075 1,095 105,730 943	_ _ _ _	123,137 194,825 161,263 407,091 51,297
172,509 — — 202,980 —	11,461,930 126,164 389,317 2,038,253 4,414	857,568 37,579 115,962 374,239 577		1,844,219 9,591 29,596 95,514 729	14,360 12,251 — 24,722	2,701,787 61,530 157,809 469,753 26,028	5,990,342 89,364 275,757 1,218,720 2,743	65,802 (4,099) (3,497) 83,928 (6,841)		6,056,144 85,265 272,260 1,302,648 (4,098)
47,753 — — 42,043 —	273,984 261,407 6,287,666 135,957 121,186	39,099 34,164 1,872,840 27,973 36,096		3,996 43,178 477,988 7,139 9,213	58,166 179,567 — 28,311	43,095 135,508 2,530,395 35,112 73,620	280,012 162,435 4,453,619 66,520 85,837	43,137 (16,095) (51,261) 12,002 (8,082)		323,149 146,340 4,402,358 78,522 77,755

(Employer's Collective Net Pension Liability for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts (Concluded)

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (7.50% Discount)	Net Pension Liability/(Asset) 1.00% Decrease (6.50%)	Net Pension Liability/(Asset) 1.00% Increase (8.50%)	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	
Utah School Employees Assn	N/A	\$ 398,274	720,861	127,785	_	103,086	_	
Utah State Fair Corp	N/A	461,863	835,955	148,187	_	119,544	_	
Utah State University Utah Valley Dispatch SSD	N/A N/A	45,771,306 945,269	83,189,857 1,997,260	14,392,854 67,068	_	12,118,438 319,217	_	
Utah Valley University	N/A	27,208,212	50,014,975	8,063,662	_	7,634,748	_	
Utah Zoological Society	N/A	2,524,800	5,334,652	179,137		852,623		~~~~~~
UTOPIA	N/A	1,196,065	2,527,166	84,862	_	403,910	_	
Valley Emergency Comm Ctr	N/A	2,663,928	5,628,616	189,008	_	899,607	_	
Valley Mental Health Vernal City	N/A N/A	5,082,223 3,085,832	10,738,233 6,399,080	360,589 349,744	_	1,716,263 1,002,624	_	
Vineyard Town	N/A	151,600	320,316	10,756		51,195		~~~~~~
W Kane Co SS Dist # 1	N/A	103,641	218,983	7,353	_	34,999		
Wasatch County	N/A	6,831,457	14,446,042	533,178	_	2,260,442	_	
Wasatch County Fire District	N/A	37,029	78,239	2,627		12,505	_	
Wasatch Front Regional Council	N/A	1,004,144	2,121,657	71,245		339,099		~~~~~
Wasatch Front Waste/Recycling	N/A	1,718,652	3,631,341	121,940	_	580,387	_	
Wasatch Integrated Waste Mgmt Wasatch Mental Health SS Dist	N/A N/A	2,013,922 7,691,821	4,255,216 16,252,054	142,890 545,742	_	680,100 2,597,522		
Wasatch School District	N/A	25,371,799	45,921,999	8,140,430	_	6,567,005	_	
Wasatch Uniserv	N/A	56,264	101,835	18,052	_	14,563	_	
Washington City	N/A	3,241,354	6,851,897	243,225	_	1,081,886	_	~~~~~~
Washington Co Solid Waste	N/A	350,976	741,576	24,902	_	118,524	_	
Washington Co Wat Con Dist Washington County	N/A N/A	2,574,842	4,572,121 28,231,599	898,596	_	769,590	_	
Washington School District	N/A N/A	13,345,667 98,319,640	178,139,322	1,084,047 31,385,681	_	4,375,162 25,590,257	_	
Waste Management Serv Dist #5	N/A	82,872	175,101	5,880		27,986		~~~~~~
Wayne County	N/A	570,467	1,206,115	43,644	_	189,605	_	
Wayne School District	N/A	2,563,663	4,640,134	822,540	_	663,555	_	
Weber Area Dispatch 911 Weber Basin Water Conserv	N/A N/A	1,728,004 2,882,321	3,651,102 6,090,059	122,604 204,503	_	583,546 973,358	_	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~~	~~~~	·····	~~~~~	~~~~~		~~~~~
Weber Co Mosquito Abate Weber County Corp	N/A N/A	327,241 27,169,598	691,428 57,340,195	23,218 2,315,931	_	110,509 8,893,336	_	
Weber County School District	N/A	117,710,882	213,085,374	37,738,337		30,492,722	_	
Weber Fire District	N/A	609,398	4,253,442	(2,401,083)	_	1,275,867	_	
Weber Human Services	N/A	5,620,125	11,874,765	398,753		1,897,912		~~~~~
Weber River Water Users	N/A	100,681	177,309	36,348	_	29,923	_	
Weber State University	N/A	18,640,027	34,140,782 320,949	5,631,595	_	5,135,050	_	
Wellington City Wellsville City Corp	N/A N/A	151,682 187,722	396,638	12,641 13,319	_	49,419 63,394	_	
West Bountiful City	N/A	1,152,592	2,222,892	266,256	_	357,108	_	
West Point City	N/A	440,831	931,432	31,277		148,868	_	~~~~~~
West Valley City	N/A	19,212,384	47,089,668	(3,857,354)	1,318,597	8,610,996	_	
White City Water Imp Dist	N/A	251,448	531,286	17,841	_	84,914	_	
Willard City Corp Woodland Peaks Uniserv	N/A N/A	233,076 138,462	492,984 250,610	18,652 44,425	_	76,679 35,838	_	
Woods Cross City	N/A	1,056,234	2,216,971	94,929	77,524	344,958	~~~~~	~~~~~~
Workers Compensation Fund	N/A	29,776,572	54,394,857	9,120,413	77,32 <del>4</del>	8,092,516	_	
Grand Total	N/A	\$4,466,985,645	8,399,352,556	1,181,485,275	13,046,968	1,250,853,547	_	
No Proportionate Share for 2015								
Canyonlands Health Care	N/A	\$ —	_	_	_	_	_	
Cedar Mountain Fire Protection District	N/A	_	_	_	_	_	_	
Garden City Fire District Sunnyside City	N/A N/A	_	_	_	_	_	_	
Grand Total	N/A	\$4,466,985,645	8,399,352,556	1,181,485,275	12 0.46 060	1,250,853,547		
Grand rotal	IN/A	¿4,400,203,043	0,277,332,330	1,101,703,273	13,040,700	1,430,033,34/	<del>-</del>	

**Deferred Outflows of Resources** 

# Systems and Plans Statistical Highlights

Year Ended December 31, 2015

# **Defined Benefit Systems**

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter	Tier 2 Defined Contribution Only	Averages and Totals All Systems
Membership Informatio	n									
Total Membership	156,081	6,170	14,741	3,275	256	415	21,838	1,824	4,254	208,854
Active	68,273	943	6,399	1,735	112	93	21,778	1,824	4,254	105,411
Terminated vested	39,066	1,005	3,178	207	4	81	59	_	_	43,600
Retired	48,742	4,222	5,164	1,333	140	241	1	_	_	59,843
<b>Total 2015 Active Membe</b>	rs 68,273	943	6,399	1,735	112	93	21,778	1,824	4,254	105,411
Average age	49.2	57.2	42.6	42.7	56.3	53.3	35.7	30.4	36.7	45.5
Average years of service	14.5	27.5	11.5	13.2	9.2	6.3	1.7	1.7	2.5	11.4
Average annual salary	\$ 50,002	56,747	53,488	62,628	145,112	10,099	34,031	37,051	40,409	46,899
2015 Retirees										
Number	3,268	178	248	47	9	11	1	N/A	N/A	3,762
Average age	59.5	51.5	48.8	49.9	66.2	39.4	70.1	N/A	N/A	58.3
Average years of service	22.1	31.2	23.5	28.3	21.7	11.1	4.1	N/A	N/A	22.7
Final average annual salary	\$ 49,001	53,462	58,050	52,945	128,290	N/A	1,480	N/A	N/A	49,896
Average annual benefit	21,533	30,584	-	38,876	90,703	3,267	865	N/A	N/A	21,571
Average annual benefit	,					-,				
—all retirees	\$ 21,363	17,497	27,550	33,319	81,633	3,311	865	N/A	N/A	21,958
Contributions Net Investment income Pension benefits	\$ 830,469 366,748 1,123,647	16,490 21,251 81,390	50,654	42,083 17,934 49,671	8,208 2,842 12,400	421 181 904	49,645 1,963 333	6,221 199 30	N/A N/A N/A	1,095,466 461,772 1,423,762
-		· ·								
Net position	\$ 21,192,437	1,183,091	2,938,839	1,043,059	163,747	10,039	140,539	15,089	N/A	26,686,840
Employers' Net Pension L	iability/(Ass	et) (in th	ousands)							
Total pension liability Plan fiduciary	\$ 24,899,572	1,316,041	3,511,275	1,058,264	198,986	12,247	140,321	13,628	N/A	31,150,334
net position Employers net pension	21,192,437	1,183,091	2,938,839	1,043,059	163,747	10,039	140,539	15,089	N/A	26,686,840
liability/(asset) Plan fiduciary net position as a percentage of total	\$ 3,707,135	132,950	572,436	15,205	35,239	2,208	(218)	(1,461)	N/A	4,463,494
pension liability	85.1%	89.9%	83.7%	98.6%	82.3%	82.0%	100.2%	110.7%	N/A	85.7%
Actuarial Information Funding Progress	(dollars in	thousand	s )							
							1.45.510	15.610	NI/A	
Actuarial value of assets	\$ 21,539.002	1,198.803	2,988.371	1,060.312	166,298	10,173	145,518	15.618	N/A	27,124,096
Actuarial value of assets Actuarial accrued liability Unfunded (overfunded)	\$ 21,539,002 \$ 24,899,572				166,298 198,986	10,173 12,247	145,518 140,321	15,618 13,628	N/A N/A	27,124,096 31,150,334

# $Systems\ and\ Plans\ Statistical\ Highlights\ \textit{(concluded)}$

Year Ended December 31, 2015

# **Defined Contribution Plans**

Defined Contribution Plans		401(k)	457	Roth IRA	Traditional IRA	Health Reimbursen Arrangemer (HRA)	
Membership Information Number of Active Employees Eligible to Participate		104,096	98,737	208,854	208,854	2,701	
Employee contributions (excluding employer contributions):			90,737	200,034	200,034	2,701	
Number of employees contributing		40,550	8,249	5,414	390	N/A	
Percent of eligible employees contributing		39.0%	8.4%	2.6%	0.2%	N/A	
Average percent of salary deferred by employees		5.6%	6.1%	3.7%	2.4%	N/A	
Total participants		161,398	17,004	7,359	1,584	2,701	
Average participant account balance	\$	24,662	26,721	9,473	43,552	8,617	
Financial Information Changes in Fiduciary Net Position Restricted for Pensions (in thousands)							Total
Contributions	s	271,097	26,968	14,073	17,206	6,318	335,662
Net investment income	~	10,657	260	(306)	211	35	10,857
Refunds		251,436	23,082	2,781	8,148	2,924	288,371
Plan net position	\$	3,980,405	454,357	69,714	68,986	23,274	4,596,736



560 East 200 South

Salt Lake City, Utah 84102-2044

www.urs.org



On the Cover:

Karry Rathje, Public Information Manager

Washington County Water Conservancy District

