

# CITY OF TUCSON, ARIZONA



## Tucson Supplemental Retirement System

A Component Unit of the City of Tucson

## Comprehensive Annual Financial Report

Fiscal Year July 1, 2013 - June 30, 2014

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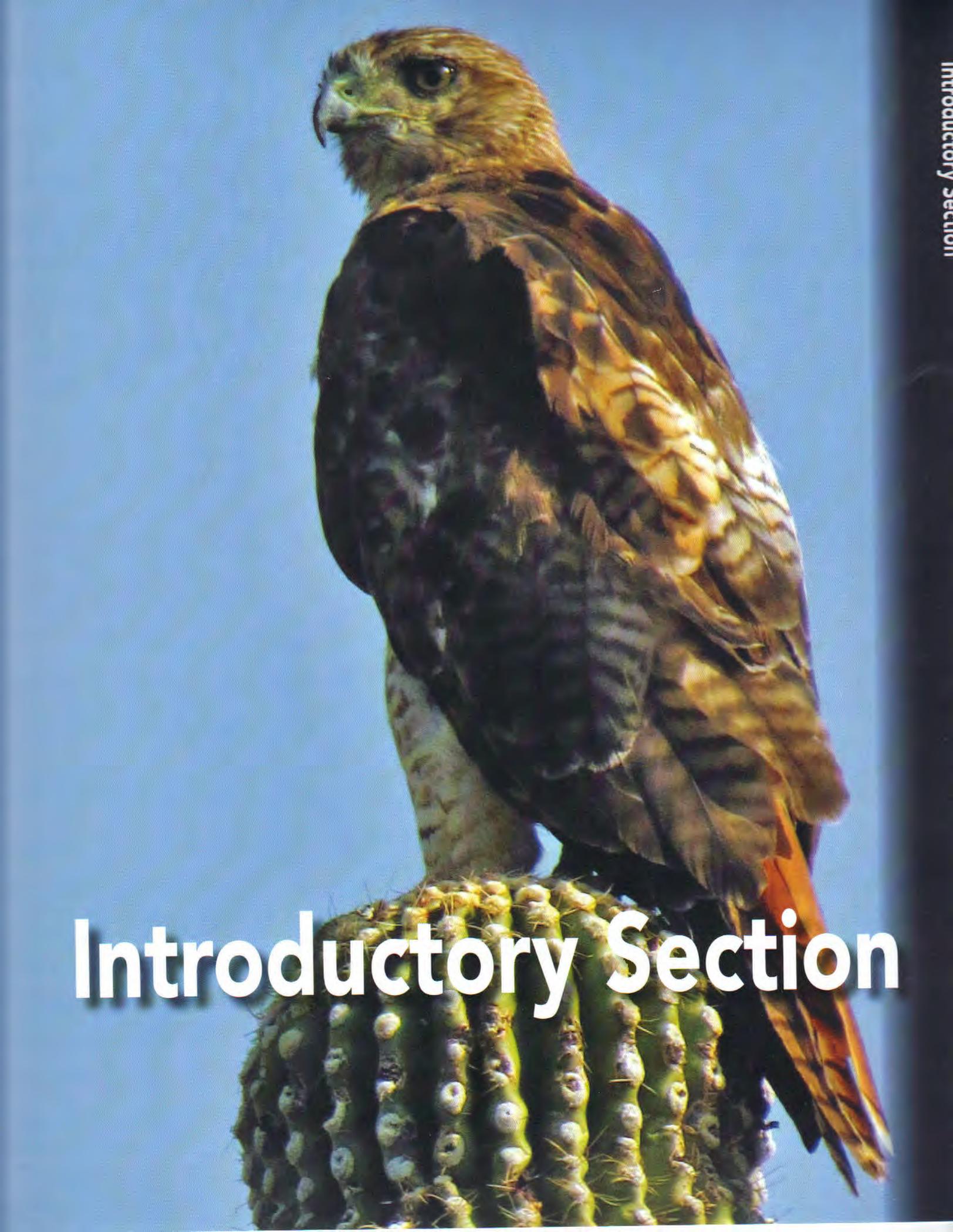
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A detailed photograph of a hawk perched on a cactus. The hawk is shown in profile, facing left, with its head turned slightly towards the viewer. Its feathers are a mix of brown, tan, and dark spots, giving it a mottled appearance. The hawk's beak is sharp and hooked. It is perched on a green cactus with small, white, rounded protrusions. The background is a clear, bright blue sky. The text "Introductory Section" is overlaid in large, white, bold letters across the bottom half of the image.

# Introductory Section



Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

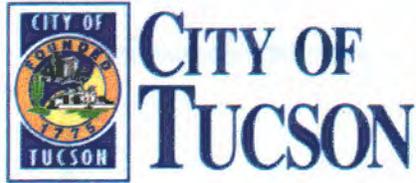
Presented to

**Tucson Supplemental Retirement  
System, Arizona**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2013**

Executive Director/CEO



December 30, 2014

To the Chairman and Members of the Retirement Board,  
Tucson Supplemental Retirement System

The Comprehensive Annual Financial Report (CAFR) of the Tucson Supplemental Retirement System ("TSRS" or the "System") for the year ended June 30, 2014, is herewith submitted. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation rests with the management of TSRS. A narrative introduction to financial statement highlights, overview and analysis for fiscal year 2014 can be found in the Management's Discussion and Analysis beginning on page 3 of the Financial Section.

The Tucson Supplemental Retirement System was established in 1953 to provide a monthly retirement supplement to social security benefits and to the personal retirement savings of its members. The benefits provided to members are supported by payroll contributions made by active members, City contributions and investment returns from retirement system asset portfolio.

For the second consecutive year, the Plan's investment experience was outstanding; resulting in an increase to the Plan's actuarial basis funded ratio, rising from 63.3% to 64.8% for the year ended June 30, 2014.

In the spring of 2014, the TSRS Board commissioned the Plan's actuary to complete its regular five year historical experience study based on the June 30, 2013 valuation data, and requested the actuary to collaborate with the Plan's investment consultant to determine if their capital market assumptions matched the longer term funding liability projections. In concluding this study, the Actuary included a recommendation to change the Plan's investment return assumption, reducing it from 7.75% to 7.25%. The projected increase to the Plan's liabilities from this assumption using current funding policies and asset allocations were expected to add \$45.6 million to the unfunded actuarial accrued liability. In spite of this significant single year liability increase caused by a lower investment assumption, the Plan's investment returns experience and actuarial gains realized for the year ended June 30, 2014 served as an additional cushion, offsetting a majority of this liability to a net increase of only \$8.2 million.

The TSRS Board has recommended several changes during the past few year's specifically aimed at improving the financial sustainability of the Plan; in 2011 the Board implemented a reduced cost Tier II plan design for all for all new employees hired after June 30, 2011; in 2013, the Board adopted a funding policy that changed the amortization period from 15 to 20 years, and in the Spring of 2014, the Board added a rounding policy designed to pay-off the unfunded liability sooner which reduces carrying costs and increases the stability of future contribution rates for both the Employer and Employees.

Record keeping is the responsibility of the Human Resource Department, Employee Benefits and Retirement Section. Preparation of financial statements and control over

investment responsibilities for TSRS are performed by the Accounting and Treasury Divisions of the City's Finance Department. TSRS uses the accrual basis of accounting. This CAFR was prepared in conformance with principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board (GASB). Internal control is the responsibility of management, with an objective that they are responsible for an accounting of their stewardship of the resources entrusted to their care. Internal accounting controls provide reasonable, but not absolute, assurance that the financial statements are free of any material misstatements because the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance the financial statements are free of any material misstatement.

Annually, the budget for the System must be approved by the Board of Trustees. The budget is also included in the City of Tucson annual budget which is recommended by the City Manager for adoption by the Mayor and Council.

Provisions of the Tucson City Code require unanimous approval of all System expenses by the Board of Trustees. Quarterly, the Board of Trustees reviews the financial report and expenses listing and ratifies all expenses.

Contributions to the System are based on principles of level-cost financing with current service financed as a level percent of payroll on a current basis and prior service amortized as a level percent of payroll over a fixed period of twenty years beginning July 1, 2013.

### **Major Initiatives**

During the fiscal year ended June 30, 2014, the TSRS Board of Trustees adopted funding policy changes as described in some detail above. Similar to previous years, tight budgets continue to be the norm, restricting the number of employees hired since 2008, by reducing the number of employees hired to replace those from attrition.

### **Funding Status**

Analysis of the funding progress for TSRS measures the net assets available for benefits against the actuarial accrued liability to arrive at the plan's percent funded ratio. As of June 30, 2014, the system's funded ratio increased to 63.3% to a 64.8% funded level on an actuarial basis; on a market basis, the Plan's funded ratio increased from 67.6% to 72.7%. The actuarial accrued liability increased from \$948,562,453 to \$1,012,393,337; an increase of 6.73%; the actuarial value of assets allocated to funding and available for benefits increased by 9.27% from \$600,330,066 to \$655,997,802. The unfunded actuarial accrued liability increased by \$8,163,148, or 2.3% in the current plan year. Elements associated with the changes in accrued actuarial liability include experience gains attributable to pay increases of \$2,106,148, investment experience of \$37,505,177 and retirement incidence of \$1,934,088. These actuarial experience gains were offset by actuarial losses from retiree mortality of \$1,924,486; employee turnover, pre-retirement mortality, data and other factors totaling \$2,310,163.

### **Investment Activities**

Net investment income amounted to \$119,900,230. The net investment income or loss is comprised of bond interest, dividend income, real estate income, security lending income, investment expenses and realized and unrealized gains and losses on securities. The

rate of return for the total fund for the year was 19.6% (gross of fees). For the last five and ten years, the System had annualized returns of 14.1% and 7.5%, respectively.

TSRS asset allocation targets are 46% U.S. equities, 15% foreign equities, 8% real estate, 26% fixed income and 5% infrastructure. These percentages reflect the current diversification posture as of June 30, 2014 and represent the board's prudent judgment in the pursuit of maximum returns at acceptable levels of risk.

Every five years the System's investment consultant and actuary complete an asset/liability and experience study. These were both completed during the plan year ended June 30, 2014, based on data from the June 30, 2013 plan year end. As a result of these studies, a significant reallocation of assets were recommended by the investment consultant and approved in principle by the TSRS Board of Trustees. It is expected that a new investment policy will be approved and implemented during the plan year ended June 30, 2015, which will reduce target allocations to U.S. equities by 12% and increase target allocations to international equities, fixed income and real estate by 10%, 1% and 1%, respectively. As of June 30, 2014, complete details of this new policy remain to be worked out.

In accordance with current investment policy, the System's asset classes were rebalanced throughout the fiscal year. Due to ongoing liquidity requirements needed to pay retiree pensions, \$24.9 million was moved out of various asset classes, in monthly increments, to the City's investment pool account. This amount was utilized throughout the fiscal year to make up the shortfall between pension contributions and distributions. This movement of funds had a "self-balancing" effect between equities, fixed income, real estate and infrastructure which helped to keep those asset classes within their current target allocation percentage ranges.

Effective July 1, 2014 Callan Associates, Inc. replaced Hewitt EnnisKnupp (formally Hewitt Investment Group) as the System's investment consultant. As of June 30, 2014, BNY Mellon continues to serve as the System's master custodian.

### **Professional Services**

The Retirement Board retains money managers and other professionals to prudently discharge its fiduciary responsibility for the proper administration of the System. Opinions of the independent auditors and the actuary are included in this report. The professionals retained by the Board are listed on page viii of this report.

### **Acknowledgments**

This report is intended to provide information as a means for making management decisions, complying with statutory provisions, and demonstrating responsible stewardship for assets of the System. The preparation of this report reflects the combined efforts of all TSRS staff, the City of Tucson Finance Department, and others that have worked diligently to assure the successful operation of TSRS. Special words of appreciation are due to: David Roels, Principal Accountant, Allan Bentkowski, CPA, Finance Manager, Michael Jesse, Lead Analyst and Bob Szelewski, Management Analyst. The direction and support extended by the Board of Trustees is also greatly appreciated.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Tucson Supplemental Retirement System for its comprehensive annual financial report for the fiscal year ended June 30, 2013. This was the 18<sup>th</sup> consecutive year that the Tucson Supplemental Retirement System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

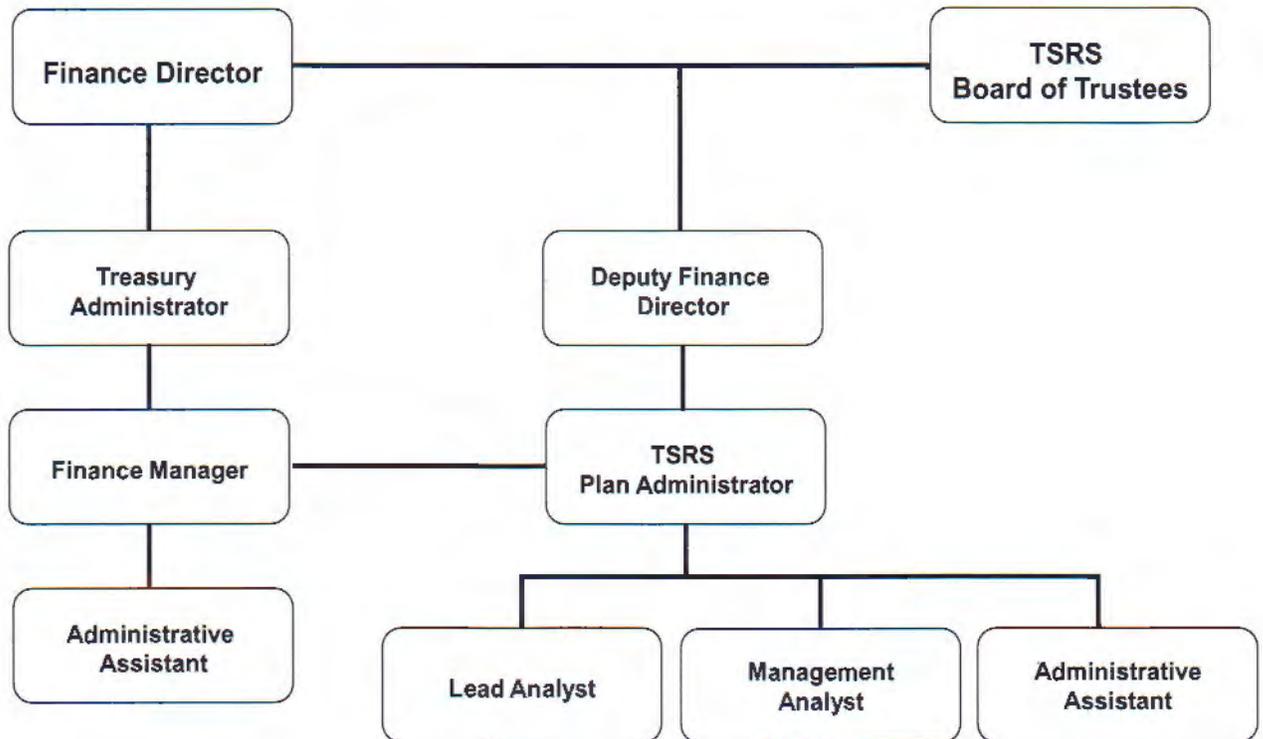
A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael A. Hermanson". The signature is fluid and cursive, with a large loop at the end.

Michael A. Hermanson, CPA  
Plan Administrator  
Tucson Supplemental Retirement System

## Organization Chart



## Administrative Organization

### BOARD OF TRUSTEES

Robert Fleming  
Chairman

Kevin Larson  
City Manager's Appointee

Silvia Amparano  
Finance Director

Curry Hale  
Interim Human Resources Director

Eric Kay  
Employee Representative

Karen Tenace  
Employee Representative

John O'Hare  
Retiree Representative

### FINANCE DEPARTMENT

Karen Tenace, Deputy Director

### TREASURY DIVISION STAFF

Silvia Navarro,  
Treasury Administrator

Allan Bentkowski, CPA  
Finance Manager

Deborah Gagnier-Campbell  
Administrative Assistant

### RETIREMENT STAFF

Michael A. Hermanson, CPA  
Plan Administrator

Michael Jesse  
Lead Finance Analyst

Bob Szelewski  
Management Analyst

Administrative Assistant - Vacant

### ACCOUNTING

David Roels  
Principal Accountant

### LEGAL

David Deibel  
Principal Assistant City Attorney

### External Counsel

Yoder & Langford, P.C.  
Phoenix, AZ

### ACTUARY

Gabriel, Roeder, Smith & Company  
Denver, CO

### AUDITOR

CliftonLarsonAllen LLP  
Tucson, AZ

### INVESTMENT MANAGERS

Aberdeen Asset Management  
Philadelphia, PA

Alliance Capital Management Corporation  
New York, NY

BlackRock Institutional Trust Company, N.A.  
San Francisco, CA

Causeway Capital Management  
Los Angeles, CA

Pyramis Global Advisors  
Smithfield, RI

JP Morgan Asset Management  
San Francisco, CA

LaSalle Investment Management  
Chicago, IL

Pacific Investment Management Company  
Newport Beach, CA

Champlain Investment Partners  
Burlington, VT

Macquarie Capital (USA), Inc.  
New York, NY

SteelRiver Infrastructure  
New York, NY

T. Rowe Price Associates  
Baltimore, MD

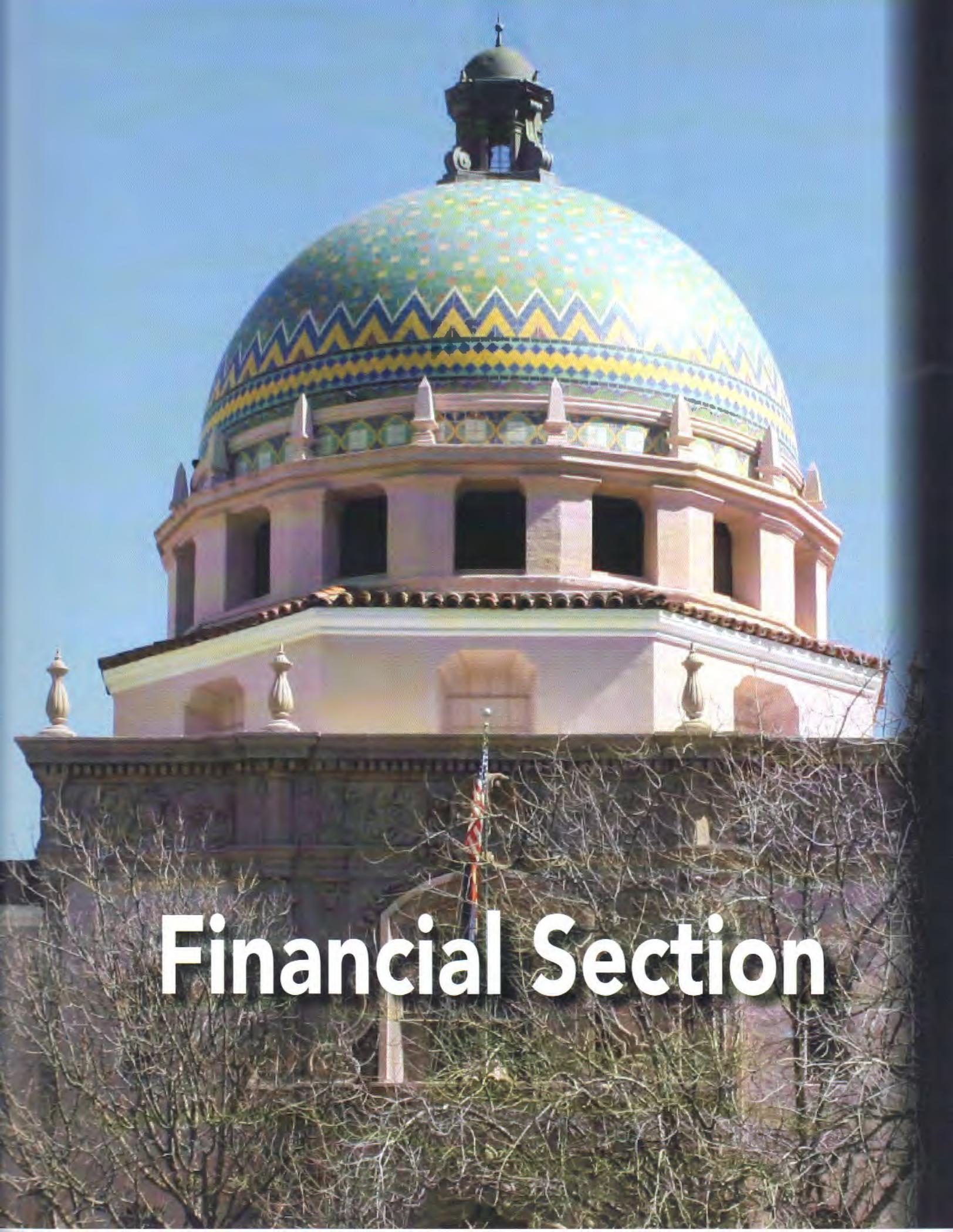
### INVESTMENT CONSULTANT

Callan Associates, Inc.  
San Francisco, CA

### CUSTODIAN BANK

BNY Mellon – New York, NY





# Financial Section



CliftonLarsonAllen

CliftonLarsonAllen LLP  
www.CLAconnect.com**INDEPENDENT AUDITORS' REPORT**

The Board of Trustees  
Tucson Supplemental Retirement System  
Tucson, Arizona

**Report on the Financial Statements**

We have audited the accompanying statement of fiduciary net position of Tucson Supplemental Retirement System (the System), as of June 30, 2014 and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

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

Management is responsible for the preparation and fair presentation of these financial statements in accordance with 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 opinions 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

**Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Tucson Supplemental Retirement System as of June 30, 2014, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.



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Board of Trustees  
Tucson Supplemental Retirement System

### **Other Matters**

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3-7 and the required supplementary information on pages 25-28 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's 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*

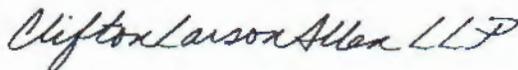
Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Tucson Supplemental Retirement System's basic financial statements. The supporting schedules of administrative expenses and investment services expense are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supporting schedules of administrative expenses and investment services expense are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such 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 supporting schedules of administrative expenses and investment services expense are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory section, the investment section, the actuarial section, and the statistical section 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 it.

#### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated December 29, 2014, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the result of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.



Tucson, Arizona  
December 29, 2014

## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

We are pleased to provide this overview and analysis of the financial activities of the Tucson Supplemental Retirement System (TSRS) for the plan year ended June 30, 2014. We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in our Letter of Transmittal, which begins on page ii of this report.

### *Financial Highlights*

- The net position of TSRS as of the close of the plan year ended June 30, 2014 was \$735,736,500 (net position held in Trust for Pension Benefits). The net position is available to meet TSRS's ongoing obligations to plan participants and their beneficiaries.
- TSRS's increase in total net position held in trust for pension benefits was \$94,690,310, an increase of 56.1% over the prior year, primarily as a result of increases in the fair value of the System's assets.
- TSRS's funding objective is to establish and receive contributions, which will remain approximately level from year to year and thereby minimize inter-generational cost transfers. As of June 30, 2014, the date of our last actuarial valuation, the funded ratio for TSRS was 64.8% on an actuarial basis, 72.7% using the market value basis.
- Revenues (Additions to Plan Net Position) for the year were \$161,428,062, which includes member and employer contributions plus transfers from other systems and contributions from other sources totaling \$41,527,832, investment earnings income and securities lending income of \$12,859,344 and a net gain in fair value of investments of \$111,063,362 reduced by investment expenses of \$4,022,476.
- Expenses (Deductions from Plan Net Position) increased from \$65,511,953 in the prior year to \$66,737,752 or approximately 1.9%. The net increase in deductions resulted from an increase in pension benefits paid of \$1,285,594, offset by a net decrease in refunds and transfers of \$106,282 and increased administrative expenses of \$46,487; bringing the total increase in expenses to \$1,225,799.

### *Overview of the Financial Statements*

The following discussion and analysis are intended to serve as an introduction to TSRS's financial statements, which are comprised of these components:

1. Statement of Fiduciary Net Position
2. Statement of Changes in Fiduciary Net Position
3. Notes to the Financial Statements

Please note, however, that this report also contains other supplementary information in addition to the basic financial statements themselves, including details of the system's investments, actuarial analysis, and various statistical information found in sections under those names.

*The Statement of Fiduciary Net Position* is a snapshot of account balances at year-end. It indicates the assets available for future payments to retirees and any current liabilities that are owed at this time.

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

Both statements comply with applicable Governmental Accounting Standards Board (GASB) Statements. These pronouncements require certain disclosures and require state and local governments to report using the full accrual method of accounting. TSRS complies with all material requirements of these pronouncements.

The Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position report information about TSRS's activities. These statements include all assets, deferred outflows, liabilities and deferred inflows, using the full accrual basis of accounting, which is similar to the accounting used by most private-sector companies. All of the current year's revenues and expenses were taken into account regardless of when cash is received or paid. All investment gains and losses are shown at trade date, not settlement date. In addition, both realized and unrealized gains and losses are shown on investments, and all capital assets (fixed assets) are depreciated over their useful lives.

These two statements report TSRS's net position held in trust for pension benefits (net position) – the difference between assets and liabilities – is one way to measure the system's financial position. Over time, increases and decreases in TSRS's net position is one indicator of whether its financial condition is improving or deteriorating. (See TSRS's financial statements on pages 8 and 9 of this report).

*Notes to the Financial Statements* provide additional information that is essential to a full understanding of the data provided in the financial statements. (See Notes to Financial Statements on pages 10-24 of this report).

*The Required Supplementary Information* that follows immediately after the notes to financial statements provides new information and schedules due to the GASB 67 implementation. These schedules will start with one year as of June 30, 2014, but eventually will need to build up to ten years of information. Also provided is the schedule of required contributions made by the employer. See the Required Supplementary Information beginning on page 25 of this report.

### Financial Analysis

As previously noted, net position may serve over time as a useful indication of TSRS's financial position (see table on page 5). The total assets of TSRS exceeded its liabilities at the close of the plan year ended June 30, 2014 with \$735,736,500 in net position held in trust for payment of ongoing obligations to plan participants and their beneficiaries.

Net Position of the Plan

<b>Assets</b>	<b>6/30/14</b>	<b>6/30/13</b>	<b>% change</b>
Cash, Cash Equivalents and Receivables	6,040,327	8,335,168	-27.5%
Investments	731,839,755	637,607,058	14.8%
Securities Lending Cash Collateral	13,985,775	23,753,680	-41.1%
Capital Assets, Net	-	12,678	-100.0%
<b>Total Assets</b>	<b>\$ 751,865,857</b>	<b>\$ 669,708,584</b>	<b>12.3%</b>
<b>Liabilities</b>			
Accounts Payable and Other Payables	518,017	334,479	54.9%
Due to Securities Lending Borrowers	13,985,775	23,753,680	-41.1%
Due to Brokers	1,625,565	4,574,235	-64.5%
<b>Total Liabilities</b>	<b>\$ 16,129,357</b>	<b>\$ 28,662,394</b>	<b>-43.7%</b>
<b>Total Net Position</b>	<b>\$ 735,736,500</b>	<b>\$ 641,046,190</b>	<b>14.8%</b>

At June 30, 2014, the Total Net Position of Assets held in the Trust of \$735,736,500 was available for payment of pension benefits, as shown in the Statement of Plan Position on page 8. This amount represents an increase of 14.8% from June 30, 2013. The increase was attributable primarily to exceptional investment performance experienced in the financial markets during this plan year.

Additions to Plan Net Position

	<b>6/30/14</b>	<b>6/30/13</b>	<b>% change</b>
Employer Contributions	34,189,288	34,523,315	-1.0%
Employee Contributions	6,636,833	9,200,262	-27.9%
Purchase of Service Credit	701,711	1,014,301	-30.8%
Net gain (loss) in Fair Value of Investments	111,063,362	73,705,613	50.7%
Investment and securities lending income (net)	8,836,868	7,731,311	14.3%
<b>Total Additions</b>	<b>\$ 161,428,062</b>	<b>\$ 126,174,802</b>	<b>27.9%</b>

Employer contributions decreased by \$334,027; or 1.0%, and employee contributions decreased by \$2,563,430, or 27.9%. A total of \$701,711 was received from employees purchasing service credits; which was \$312,590 less than the prior fiscal year by 30.8%. There were no transfers into the Plan from other systems during this fiscal year. Net gain in Fair Value of Investments increased by \$37,357,749, or 50.7% over the prior year; and income from investment and securities lending increased for the current year by \$1,105,557 or 14.3%, resulting primarily from higher dividends and interest income received during the fiscal year.

Deductions from Plan Net Position

The principal purpose for which the System was created was to provide supplemental retirement annuities, survivor benefits, and total and permanent disability benefits to qualified members and their beneficiaries. The costs of such programs include recurring benefit payments as required by the plan design, refunds of contributions to terminated employees, the cost of administering the System and expenses incurred in the investment of the Systems assets.

Total deductions for fiscal year 2014 were \$66,737,752 representing an increase of 1.9% from fiscal year 2013 expenses. The largest contributors to the increase in deductions for this year were attributed to new retirements; which increased the amount of retirement benefit payments paid by \$1,285,594, for a 2.1% increase. Additional deductions realized from a resurgence of transfers to other systems in the amount of \$440,915; which did not occur in 2013, but were partially offset by lower member contribution refunds realized of \$2,084,024, or a 20.8% reduction during fiscal 2014.

#### Deductions from Plan Net Position

	06/30/14	06/30/13	% change
Retirement Benefits	63,477,074	62,191,480	2.1%
Refund of Contributions	2,084,024	2,631,221	-20.8%
Transfers to Other Retirement Plans	440,915	-	100.0%
Administrative Expenses	735,739	689,252	6.7%
<b>Total Deductions</b>	<b>\$ 66,737,752</b>	<b>\$ 65,511,953</b>	<b>1.9%</b>
<b>Net Increase/(Decrease) in Plan Position</b>	<b>\$ 94,690,310</b>	<b>\$ 60,662,849</b>	<b>56.1%</b>

#### Reserves

The System places an amount into a separate Reserve for Employee Contributions for all amounts contributed by members. Deductions are made from this account when the member retires, transfers balances to other retirement systems, or when a member terminates employment and requests a refund. As of the plan year ended June 30, 2014, the balance in this reserve account increased by \$4,076,403 to \$142,418,791.

Upon retirement, the system places an amount in Reserves for Retirement Benefits equivalent to the present value of the actuarial benefit selected by the member. When the present value is determined, amounts are added to this reserve from amounts in the Reserve for Employee Contributions and from the Unreserved Net Position balance to fully fund the expected liability. As a result of the change in market value of the system assets, the reserve increased for the plan year ended June 30, 2014 by \$38,252,725 to \$647,811,688.

The impact of gains or losses recognized during the plan year ended June 30, 2014 affects the amount remaining in the Unreserved Net Position. Employer funding is added to the Unreserved Net Position balance. At retirement, amounts needed to fully fund retirement benefits are transferred from the Unreserved Net Position to the Reserves for Retirement Benefits. As a result of the change in market values of the system's assets, the Unreserved Net Position increased by \$52,361,182 to a negative ending balance of \$54,493,979.

#### TSRS's Fiduciary Responsibilities

TSRS's Board of Trustees and management staff are fiduciaries of the pension trust fund. Under the City of Tucson Code the assets can only be used for the exclusive benefit of plan participants and their beneficiaries.

Requests for Information

This financial report is designed to provide the Retirement Board of Trustees, our membership, taxpayers, investment managers and other interested parties with a general overview of TSRS's finances and to account for the money it receives. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Tucson Supplemental Retirement System  
Attention: TSRS Plan Administrator  
City Hall, 5<sup>th</sup> floor – Finance Administration Office  
255 West Alameda Street  
Tucson, Arizona 85701  
(520) 791-4598

**Tucson Supplemental Retirement System  
Statement of Fiduciary Net Position  
June 30, 2014**

**Assets**

Cash Deposits/Pooled Investments	\$	988,589
Receivables:		
Accounts Receivable		
Employer Contributions (Note 3)		1,322,557
Employee Contributions (Note 3)		259,957
Due From Brokers		1,910,819
Interest and Dividends		1,558,405
Total Receivables		<u>5,051,738</u>
Investments, at Fair Value (Notes 4, 5, and 6):		
Short Term Investments		9,965,208
U.S. Treasuries, Agencies & Other Governmental Bonds		63,032,989
Corporate Bonds & Other Fixed Income Instruments		49,297,425
U.S. Equity & Comingled Equity Funds		362,939,416
International Bonds & Other Fixed Income Instruments		45,719,564
International Equity & Comingled Equity Funds		102,838,872
Real Estate & Comingled Real Estate Funds		54,642,201
Infrastructure Investment Funds		43,404,080
Total Investments, at Fair Value		<u>731,839,755</u>
Securities Lending Collateral at Fair Value		13,985,775
Total Assets		<u>751,865,857</u>
<b>Liabilities</b>		
Accounts Payable		457,076
Accrued Payroll Liabilities		12,766
Due to Other Agencies		48,175
Due to Brokers		1,625,565
Obligations under Securities Lending (Note 5)		13,985,775
Total Liabilities		<u>16,129,357</u>
<b>Net Position Held in Trust for Pension Benefits</b>	<b>\$</b>	<b><u>735,736,500</u></b>

See Accompanying Notes to Financial Statements

**Tucson Supplemental Retirement System  
Statement of Changes in Fiduciary Net Position  
Year Ended June 30, 2014**

**Additions**

Contributions (Note 3):	
City	\$ 34,189,288
Employee	6,636,833
Purchase of Service	701,711
Total Contributions	<u>41,527,832</u>
Income from Investment Activity	
Net Gain in Fair Value of Investments	111,063,362
Interest	5,901,539
Dividends	6,786,728
Miscellaneous Income	91,630
	<u>123,843,259</u>
Investment Expenses	(4,022,476)
Net Income from Investment Activity	119,820,783
Income from Securities Lending Activity	
Gross Income	134,036
Management Fees	(54,589)
Net Income from Securities Lending Activity	<u>79,447</u>
Net Investment Income	<u>119,900,230</u>
Total Additions	<u>161,428,062</u>
<b>Deductions</b>	
Benefits	63,477,074
Refunds	2,524,939
Administrative Expenses	735,739
Total Deductions	<u>66,737,752</u>
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<u>\$ 94,690,310</u>
<b>Net Position Held in Trust for Pension Benefits (Note 7):</b>	
July 1, 2013	641,046,190
June 30, 2014	<u>\$ 735,736,500</u>

See Accompanying Notes to Financial Statements

**Tucson Supplemental Retirement System  
Notes to Financial Statements  
Year Ended June 30, 2014**

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND DISCUSSION OF PLAN NET POSITION**

**A. Reporting Entity** - Due to the extent of the System's financial and operational relationship with the City of Tucson, the System is considered a component unit of the City's financial reporting entity and is included in its Comprehensive Annual Financial Report as a pension trust fund.

**B. Basis of Accounting** - The System's financial statements are prepared using the accrual basis of accounting using the economic resources measurement focus. Employee and employer contributions are recognized when due, pursuant to formal commitments. Benefits and refunds are recognized when due and payable in accordance with the plan provisions.

**C. Investments** - Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate investments is based on independent appraisals. Investments that do not have an established market are reported at estimated fair value, which is determined by the System custodian in consultation with the System's investment managers.

The cost of common stock sold is determined on the average cost method. Realized and unrealized gains or losses are reflected in revenues.

**D. Deposits** - In accordance with the City Charter and state statutes, the System is authorized to deposit money in certificates of deposit and interest-bearing accounts provided that deposits in excess of the insured amount are collateralized. State statutes require collateral pledged for deposits to be held in the System's name by a bank other than the pledging bank or by the pledging bank's trust department.

**E. Capital Assets** - Capital assets of the System currently include moveable equipment items and the capitalized cost of pension administration software, stated at historical cost net of accumulated depreciation. The straight-line method of depreciation for capitalized equipment and software is used over an estimated useful life of 6 years. The capitalization threshold is \$5,000.

**F. Benefit Changes** - The TSRS Board of Trustees shall determine, pursuant to its formal policy and in its discretion whether the System shall fund an annual supplemental post-retirement benefit payment to retired members and beneficiaries.

**G. Administrative Costs** - All costs of administering the plan are financed by the employer and member contributions made, based upon recommended contribution rates in effect for the year, applied on active member covered payroll.

**I. Net Pension Liability** – The components of the net pension liability as of June 30, 2014 are as follows:

Total Pension Liability	\$	1,041,572,523
Plan's Fiduciary Net Position		735,736,500
Net Pension Liability		305,836,023
• Plan Fiduciary Net Position as a Percentage of Total Pension Liability		
		70.64%
• Covered Employee Payroll	\$	126,639,423
• Net Pension Liability as a Percentage of Covered Employee Payroll		
		241.50%

**J. Adoption of GASB Statement 67** – The System adopted Governmental Accounting Standards Board (GASB) Statement Number 67, "Financial Reporting for Pension Plans" during the fiscal year. The adoption of GASB 67 replaces the requirements of Statements No. 25, Financial Reporting for Defined Benefit Pension Plans and Statement Number 50, Pension Disclosures. The financial reporting and disclosures are intended to provide decision-useful information, supporting assessments of accountability and inter-period equity, and create additional transparency.

**K. Tax Status of the Plan** – The System applied for an IRS determination letter in November 2008, and received a favorable determination (qualified status) from the IRS July 19, 2012.

## 2. DESCRIPTION OF THE PLAN

**A. Authorization, Purpose, and Administration of the System** - The Tucson Supplemental Retirement System (the "System" or "TSRS") is a single-employer defined benefit plan for City of Tucson ("City") employees. It was established in the City Charter to provide its members with a supplement to the retirement and disability benefits of the social security system. The System is governed by a seven member Board of Trustees: a chairman who is appointed by the Mayor and Council, the City's directors of human resources and of finance, two members elected by the membership of the System, a retired member elected by the System's retirees, and one member appointed by the City Manager. Benefit provisions and changes in benefits or funding are recommended by the Board of Trustees and must be approved by Mayor and Council.

**B. Plan Membership** - The System covers substantially all City of Tucson, Arizona, employees, except for appointed officials and staff who may elect not to join, and commissioned police and fire personnel and elected officials, who are covered under other plans. Employees participate in the System immediately upon beginning employment with the City. Employee membership data as of June 30, 2014 is as follows:

<b>Membership – number of:</b>	
Retirees and Beneficiaries	2,764
Inactive, Non-retired Members (56 non vested)	323
Active plan participants	2,714
<b>Total Membership</b>	<b>5,801</b>

## **C. Plan Benefits**

### **1. Retirement Benefits**

- Tier I benefit plan: Any employee hired prior to July 1, 2011, who has attained the earlier of age 62, or a combination of the employee's age and years of creditable service equaling the sum of 80, is entitled to receive monthly retirement benefits calculated at 2.25% of average final monthly compensation multiplied by the number of years of creditable service. Employees hired after July 1, 2009 receive the same benefit, but are required to have a minimum of five years accrued service. Average final monthly compensation is defined as the highest compensation of 36 consecutive months during the 120 months immediately preceding retirement. Accrued unused sick leave and vacation leave at the final salary is included in the member's service period and is substituted for an equal number of hours at the beginning of the 36 month period for determining the average final salary calculation.

- Tier II benefit plan: Any employee hired after June 30, 2011, who has attained the minimum retirement age of age 60, and who also has a combination of employee age and years of service equaling the sum of 85, is entitled to receive monthly retirement benefits calculated at 2.00% of average final monthly compensation multiplied by the number of years of creditable service. Average final monthly compensation is defined as the highest compensation of 60 consecutive months during the 120 months immediately preceding retirement. Accrued unused sick leave and vacation leave at the final salary is not included for member service credits or as a substitution for an equal number of hours at the beginning of the 60 month period final average salary calculation.

An employee who retires after attaining age 55 with 20 or more years of creditable service under Tier I; or after attaining age 60 with 20 or more years of credited service under Tier II, is entitled to early retirement benefits reduced to the actuarial equivalent of the amount to which the employee would have been entitled upon attaining normal retirement.

An employee is always fully vested in his/her individual contributions. Upon termination of employment for reasons other than retirement, employees having five or more years of creditable service (terminated vested participants) may leave their contributions in the System as a deferred retirement, and begin drawing a retirement allowance when they reach either their normal or early retirement eligibility date.

2. Disability Benefits - Employees with ten or more years of accrued service, who are not yet eligible to retire and who have a total and permanent disability may apply for disability retirement.

3. Death Benefits - The beneficiary of an employee who pre-selected a retirement option and died while eligible to retire, shall receive a benefit based upon the selected option if the member has made such an election by June 30, 2009.

The spousal beneficiary of an employee who died while eligible to receive benefits but who had not pre-selected a benefit option by June 30, 2009, may choose to receive a benefit equal to a 100% joint and survivor annuity based on the member's years of credited service and average final monthly compensation at the time of the member's death, or

may elect to receive a lump sum payment of twice the members account balance plus interest, measured on the date of death.

The named beneficiary of an employee who is other than the spouse of the employee who died while eligible to receive benefits but who had not pre-selected a benefit option by June 30, 2009, may choose to receive a benefit equal to a 15 year term certain benefit to the named beneficiary, or the beneficiary may elect to receive a lump sum payment of twice the members account balance plus interest, measured on the date of death.

Multiple designated beneficiaries of an employee who died while eligible to receive benefits but who had not pre-selected a benefit option by June 30, 2009, receive a lump sum payment of twice the members account balance plus interest, measured on the date of death.

The beneficiary of an employee who was not eligible for any retirement benefits, but had more than five years of creditable service, may receive a lump sum payment of twice the member account balance plus interest, measured on the date of death.

### 3. CONTRIBUTIONS AND RESERVES

#### A. Funding Requirements

1. *Employee Contributions* - Employee contributions are 5% of active member covered payroll for employees hired prior to July 1, 2006. Employees hired after June 30, 2006 are paying an amount equal to 40% of the actuarially required contribution rate determined annually by the system Actuary. For the fiscal year ended June 30, 2013, the employee contribution rate was 13.97%. All member contributions are made by payroll deductions applied to regular pay, based on the approved contribution rates established by the system Actuary, applied as a percent of payroll.

Effective July 1, 2013, the funding policy changed for employees hired after June 30, 2006; requiring a contribution rate that is equal to a range of between 50% and 100% of the normal cost of the members benefit Tier. For Tier I members (hired between July 1, 2006 and June 30, 2011), the contribution rate is 6.715%. For Tier II members (hired after July 1, 2011), the contribution rate is 5.06%. A reserve is established for contributions and earnings allocations, less amounts transferred to the reserve for retirement benefits which includes retirement and disability and amounts reserved for terminated employees. If an employee leaves covered employment before attaining five years service credit, the accumulated contributions plus interest are refunded to the employee or his designated beneficiary. There are no long-term contracts for employee contributions to the plan, and all contributions are made on a bi-weekly basis.

2. *Employer Contributions* - Employer contributions are based on the annual required contribution rate determined by the Actuary, and are equal to the difference between the recommended total contribution rate and the employee rates, based on a level percentage of payroll method. The contribution rate is determined by the actuary at a level necessary to finance employee participation in the System and to fund the costs of administering the System. The annual rate determined by the Actuary is recommended to the Board of Trustees and considered for approval and adoption. There are no long-term contracts for employer contributions to the plan, and all contributions are made on a bi-weekly basis.

## B. Net Position

Two general types of net position reserves are maintained within the System. The Reserve for Employee Contributions contains the employee contributions for all contributing members of the System, plus allocated interest earnings. At the time an employee retires or defers retirement, the actuarial value of the individual's retirement benefits is transferred to the Reserve for Retirement Benefits, which is decreased by payments to retirees and increased by interest earnings. The reserves are fully funded.

Earnings of the System are allocated semi-annually (at June 30 and December 31) to the reserves which comprise net position. At the year ended June 30, 2014, allocations were based on rates of return of 6.00% per annum. Any unallocated earnings remain in unreserved net position.

The net position at June 30, 2014, consisted of the following components:

Reserved for employee contributions	\$ 142,418,791
Reserved for retirement benefits	647,811,688
Unreserved net position (deficit)	<u>-54,493,979</u>
Net Position	<u>\$ 735,736,500</u>

## 4. INVESTMENTS

The System is governed by a Board of Trustees. The Board of Trustees is required by City Code in making investment decisions, to exercise the judgment and care under the circumstances then prevailing which persons of ordinary prudence, discretion and intelligence exercise in management of their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income there from, as well as the probable safety of the capital. Investments of the System are held separately from those of other City funds by investment custodians. Quoted market prices have been used to value investments as of June 30, 2014.

For those investments that do not have established market exchanges, the fair value is estimated as objectively as possible by third party appraisals. Real Estate and Infrastructure investment managers utilize third party appraisals to determine fair market value of assets under investment. Infrastructure investments pertain to forms of "real" property used for general public purposes that typically involve partnerships between governmental and private entities. Examples of infrastructure investments are toll roads, bridges, pipelines, airports, shipping ports, etc. The System currently participates in two pooled infrastructure funds as well as three real estate funds.

The System's investments at June 30, 2014 are listed below. These investments are either held by the System or its agent in the System's name and are insured, registered or collateralized. A portion of these investments is subject to credit risk (including custodial credit risk and concentrations of credit risk), interest rate risk and/or foreign currency risk. The Government Accounting Standards Board (GASB) Statement 40 requires the System to disclose such risks which are all discussed in the sections that follow.

All System investments are reflected in the following schedule with the exception of amounts held in the City's investment pool account and certain deposits of \$147,937. The City maintains an investment pool account for City funds. Bi-weekly contributions for the

Tucson Supplemental Retirement System are held in the City's investment pool account and are used to pay recurring expenditures. The \$988,589 cash balance in the investment pool account, as well as, current deposits to the City's investment pool account are invested in money market funds consisting of U.S. Treasuries and Agencies and separately held issues of federal agency and U.S. corporate bonds with ratings no lower than A2 as reported by Moody's.

<u>Investments - Including Securities Lending</u>	<u>Fair Value</u>
U.S. Issues not on Securities Loan:	
U.S. Treasuries, Agencies & Other Governmental Bonds	\$ 63,032,989
Corporate Bonds & Other Fixed Income Instruments	44,821,039
U.S. Equity & Comingled Equity Funds	354,896,884
Non-U.S. Issues not on Securities Loan:	
International Bonds & Other Fixed Income Instruments	45,103,508
International Equity & Comingled Equity Funds	102,387,104
Subtotal	<u>610,241,524</u>
Investments Held by Broker-Dealers Under Securities Loans with Cash Collateral:	
U.S. Corporate Bonds & Other Fixed Income Instruments	4,476,386
U.S. Equity & Commingled Equity Funds	8,042,532
International Bonds & Other Fixed Income Instruments	616,056
International Equity & Commingled Equity Funds	451,768
Subtotal	<u>13,586,742</u>
Securities Lending Short-Term Collateral Investment Pool	13,985,775
Money Market Funds/Short-Term Investments	9,817,271
Real Estate & Comingled Real Estate Funds	54,642,201
Infrastructure Investment Funds	43,404,080
Subtotal	<u>121,849,327</u>
Total Investments	<u>\$ 745,677,593</u>

*Investment Policy* – TSRS Investment Policy and asset class allocations are established by the TSRS Board of Trustees and may be amended by majority vote of its members. The TSRS Board establishes investment policies to pursue an investment strategy that reduces risk through prudent diversification of the portfolio across a broad selection of distinct asset classes.

*Long-term Expected Return on Plan Assets* - Expected rates of return are determined using a building-block method in which best-estimated 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 were adopted by the Plan's trustees after considering input from the Plan's investment consultant and actuary. For each major asset class that is included in the Plan's adopted target

asset allocation as of June 30, 2014, these best estimates are summarized in the table shown on the following page:

*Long term expected return on Plan Assets:*

Asset Class	Target Allocation	Expected Arithmetic Returns
Large Cap U.S. Equities	36%	8.90%
Small/Mid Cap U.S. Equities	10%	10.15%
International Equities	15%	9.25%
Fixed Income	26%	3.05%
Real Estate	8%	7.35%
Infrastructure	5%	8.90%
Total	100%	
Weighted Average Arithmetic Returns, in proportion to asset allocation		7.43%

*Concentrations* – TSRS did not hold investments (other than those explicitly guaranteed by the U.S. Government) in any one organization that represent 5 percent or more of the Plan's fiduciary net position at June 30, 2014.

*Rate of Return* – For the year ended June 30, 2014, the annual money-weighted rate of return on the Plan's investments, net of pension plan investment expenses, was 19.11%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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

Below is a table providing the sensitivity of the net pension liability to changes in the discount rate. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is 1 percentage-point lower or 1 percentage-point higher than the single discount rate:

1% Decrease	Current Single Rate Assumption	1% Increase
<b>5.96%</b>	<b>6.96%</b>	<b>7.96%</b>
\$ 417,908,032	\$ 305,836,023	\$ 210,695,011

**Credit Risk** – As defined by GASB Statement 40, credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Associated with credit risk is concentration of credit risk and custodial credit risk. Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party.

The System presently maintains two externally managed fixed income (bond) accounts which are exposed to some form of credit risk. The assets in the first account are actively managed while the assets in the second account are invested in a commingled bond index fund (passively managed).

The TSRS Board has given the actively managed account manager discretion to invest in a broad array of public and private asset classes, instruments and investment vehicles in order to meet or exceed the agreed upon investment return custom benchmark. However, the following specific investment policy guidelines pertain to this manager:

- The maximum position in a single issuer (excluding obligations of U.S. Government and its Agencies) should not exceed 5% of the portfolio's assets at current market value
- The portfolio should maintain an average quality of at least "BB+"
- Money market instruments must be rated in one of the two highest categories by a nationally recognized rating agency
- The minimum rating of individual issues should be CCC (based on market value) as rated by Moody's, Standard & Poor's or Fitch

The passive fund is expected to replicate, as close as possible, the characteristics, quality and performance of its underlying index, the BC Aggregate Bond Index.

The System currently does not have a policy regarding custodial credit risk for deposits or investments as defined in the Credit Risk section above. As of June 30, 2014 the System was exposed to custodial credit risk for deposits in the amount of \$9,765 and custodial credit risk for investments of \$243,000.

The System had the following credit risk structure as of June 30, 2014:

<u>Investment Type</u>	<u>Holdings</u>	<u>Average Credit Rating (1)</u>	<u>Fair Value</u>	<u>Percent of Grand Total</u>
Cash and Cash Equivalents:				
Cash & Short Term Investment Funds	4	Aa2	\$ 9,817,271	
Subtotal	4		9,817,271	5.85%
U.S. Treasury Bills, Notes & Bonds	2	Aaa	1,002,777	0.60%
U.S. Agency & Other Governmental Obligations:				
Municipal Bonds	4	Ba3	1,749,985	
BlackRock U.S. Debt Fund	1	Aa2	60,280,227	
Subtotal	5		62,030,212	36.95%
U.S. Corporate & Other Fixed Income Instruments:				
Asset Backed Securities	2	Ba1	175,563	
Collateralized Mortgage Obligations	5	Baa2	839,583	
Fixed Income Swaps & Options	81	Baa2	(4,259) (2)	
Futures	4	Aaa	20,044	
Banking & Finance	12	Ba2	4,743,698	
Health Care	3	Ba1	1,328,710	
Oil, Gas & Chemicals	11	Ba2	1,550,299	
Food, Beverage & Tobacco	2	Baa2	1,082,780	
Transportation	2	Baa2	642,221	
Utilities	7	Ba1	2,000,619	
Other Corporate Issues	31	Ba1	13,813,349	
PIMCO Private Mortgage Sector Fund	1	Aa1	23,104,818	
Subtotal	161		49,297,425	29.37%
International Bonds & Other Fixed Income Instruments	182	Ba1	45,719,564	27.23%
Total	354		\$ 167,867,249	100%

Footnotes

(1) Per Moody's Investors Service, Inc. (Moody's)

(2) A negative value in any of the instruments noted above is the result of netting long and short positions against each other. This strategy is utilized as a means to mitigate interest rate risk from holding long positions in mortgages and / or corporate bonds.

**Interest Rate Risk** – As defined by the Government Accounting Standards Board (GASB) in Statement 40, interest rate risk is the risk that changes in interest rates will adversely affect the fair value of investments. For fixed income securities, there is an inverse relationship between the change in interest rates and their fair value. For example, in a rising interest rate environment the value of fixed income securities will tend to fall by varying degrees depending on the length of their maturities. In general, the value of fixed income securities with a longer duration will tend to decrease more than shorter duration securities in a rising interest rate environment.

The System's investment policy regarding interest rate risk for the actively managed fixed income account, is to limit duration to within 30% of the custom benchmark which is defined as 25% BC Mortgage Index, 25% BC Credit Index, 25% BC High Yield Index and 25% JPM EMBI Global Index. The passive fund should match, as close as possible, the maturity structure and duration of the BC Aggregate Bond Index.

The System had the following maturity structure as of June 30, 2014:

### Maturity Structure

Investment Type	Investment Maturities (in Years)				Fair Value
	Less Than 1	1 - 5	6 - 10	More Than 10	
Cash & Short Term Investment Funds	\$ 9,817,271	\$ -	\$ -	\$ -	\$ 9,817,271
U.S. Treasury Issues	153,960	-	-	848,817	1,002,777
U.S. Agency & Other Governmental Obligations	-	-	-	1,749,985	1,749,985
BlackRock U.S. Debt Fund	-	-	60,280,227	-	60,280,227
U.S. Corporate & Other Fixed Income Instruments	1,434,072	32,457,973	7,333,512	8,071,868	49,297,425
International Bonds & Other Fixed Income Instruments	553,350	19,214,886	19,046,633	6,904,695	45,719,564
<b>TOTAL</b>	<b>\$ 11,958,653</b>	<b>\$ 51,672,859</b>	<b>\$ 86,660,372</b>	<b>\$ 17,575,365</b>	<b>\$ 167,867,249</b>

**Effective Duration:**

Active Account	4.6 years
Passive Account	5.11 years

**Note:** The information indicated has been presented using the specific identification method

**Foreign Currency Risk** – As defined by the Governmental Accounting Standards Board (GASB) in Statement 40, foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit.

The TSRS Board has given the System's international equity managers discretion to invest in a broad array of common and preferred stocks, convertibles and warrants of companies headquartered outside of the United States in order to meet or exceed their agreed upon investment return benchmarks. However, the following specific investment policy guidelines pertain to these managers:

- Investments in any single country market should not exceed more than 4 times the weight of the country in the benchmark index or 50% of portfolio assets, whichever is lower
- If a country has a greater than 50% weight in the index, the maximum exposure to that country in the portfolio may be as high as its weight in the index
- No more than 35% of each manager's portfolio should be invested in "emerging markets" (i.e., markets that are not included in the Morgan Stanley Capital International Europe, Australia and Far East Index)
- Managers are permitted to enter into hedging strategies, including cross-currency hedges, using forward currency exchange contracts and currency options
- Derivatives should not be used for the purpose of speculation or for leveraging the portfolio

**Foreign Currency Risk** (continued from previous page)

The TSRS fund had the following foreign currency risk exposure as of June 30, 2014:

**Foreign Currency Risk Exposure**

Currency Type	Cash & Cash Equivalents (1)	Fixed Income (1)	Equity	Real Estate	Infra- structure	Foreign Exchange Contracts (2)	Fair Value	Percent of Total
Australian Dollar	\$ (16,823)	\$ 321,714	\$ -	\$ -	\$ -	\$ (310,997)	\$ (6,106)	-0.001%
Canadian Dollar	475	-	802,521	-	-	-	802,996	0.110%
Euro Currency Unit	172,615	10,665,573	21,297,530	-	24,159,130	(11,045,696)	45,249,152	6.183%
Hong Kong Dollar	-	-	4,277,872	-	-	-	4,277,872	0.585%
Japanese Yen	188,013	(91,852)	7,804,830	-	-	-	7,900,991	1.080%
Mexican New Peso	27	-	-	-	-	-	27	0.000%
Polish Zloty	15,214	-	-	-	-	-	15,214	0.002%
British Pound Sterling	228,466	5,547,433	10,951,653	-	-	(5,890,385)	10,837,167	1.481%
S. African Comm Rand	11,142	-	-	-	-	-	11,142	0.002%
Singapore Dollar	-	-	828,613	-	-	-	828,613	0.113%
South Korean Won	-	-	2,897,405	-	-	-	2,897,405	0.396%
Swiss Franc	-	-	7,668,469	-	-	-	7,668,469	1.048%
Currency Subtotals	599,129	16,442,868	56,528,893	-	24,159,130	(17,247,078)	80,482,942	10.999%
U.S. Dollar	(16,528,893)	167,558,494	409,045,046	54,642,202	19,244,951	17,364,991	651,326,791	89.001%
<b>TOTAL</b>	<b>\$ (15,929,764)</b>	<b>\$ 184,001,362</b>	<b>\$ 465,573,939</b>	<b>\$ 54,642,202</b>	<b>\$ 43,404,081</b>	<b>\$ 117,913</b>	<b>\$ 731,809,733</b>	<b>100%</b>
	-2.18%	25.14%	63.62%	7.47%	5.93%	0.02%	100%	

**Footnotes:**

(1) A negative value in the instruments noted above is the result of netting long and short positions against each other. This strategy is utilized as a means to mitigate interest rate risk obtained from holding long positions in mortgages and/or corporate bonds.

(2) A negative currency position is obtained by accepting an obligation to deliver the designated currency to a counterparty at a specified date in the future. This position is favorable for portfolio returns if the currency depreciates in value versus the U.S. dollar over the period of the contract.

## 5. SECURITIES LENDING

The Board of Trustees for the Tucson Supplemental Retirement System permits the custodian bank, BNY Mellon, to lend securities to broker-dealers and other entities. Each loan is executed with a simultaneous agreement to return the collateral for the same securities in the future. The custodian bank lends U.S. securities for collateral initially valued at 102% of the fair value of the securities plus any accrued interest. Non-U.S. securities are loaned for collateral initially valued at 105% of the fair value of the securities plus any accrued interest. Collateral is marked-to-market daily. As of June 30, 2014, the carrying amount and fair value of securities on loan was \$13,586,742. If the fair value of the pledged collateral falls below the specified levels, additional collateral is required to be pledged by the close of the next business day.

In the event of a borrower's default, the custodian bank is obligated to indemnify the lender if, and to the extent that, the fair value of the collateral is insufficient to replace the loaned securities. BNY Mellon's responsibilities include performing appropriate borrower and collateral investment credit analysis, demanding adequate types and levels of collateral, and complying with applicable Department of Labor and Federal Financial Institutions Examination Council regulations covering securities lending.

Although the average term of the security loans is one week, each loan can be terminated at will by either the lender or the borrower. Cash collateral is invested in a short-term investment pool, which on average had a weighted maturity of 30 days. The relationship between the maturities of the investment pool and the security loans are affected by the maturities of the loans made by other entities that use the agent's pool.

The lender cannot pledge or sell collateral securities received until, and unless, a borrower defaults. There were no significant violations of legal or contractual provisions and no borrower or lending agent default losses known to the securities lending agent. As of June 30, 2014, the lenders had no credit risk exposure to borrowers because the fair value of collateral held exceeded the fair value of securities loaned.

## 6. DERIVATIVES

The Tucson Supplemental Retirement System permits the limited use of derivatives by its international equity and external fixed income managers. Examples of derivative instruments permitted, but not limited to, are forward foreign currency exchange contracts, financial futures, options, swaps and swaptions. All derivative instruments utilized are considered "Investment Derivative Instruments" as defined in GASB 53 "Accounting and Financial Reporting for Derivative Instruments." The statement addresses the recognition, measurement, and disclosure regarding derivative instruments entered into by the System.

The following table is a summary of the various derivative instruments utilized by the System's external fixed income manager as of June 30, 2014. Changes in Fair Value is included as part of the overall Increase (Decrease) in Fair Value of Investments in the Statement of Changes in Plan Net Position. Fair Value is included as part of investments listed under Corporate Bonds & Other Fixed Income Instruments in the Statement of Plan Net Position.

Investment Derivative Instrument	Notional Amount (1)	Changes in Fair Value	Fair Value	Principal Risk
Government Futures	20,700,000	\$ 20,043	\$ 25,921,039	Interest Rate
Currency Forwards (Net)	11,275,351	\$ 49,643	\$ 16,425,197	Foreign Currency
OTC Swaptions	(4,400,000)	\$ 12,727	\$ (6,624)	Credit
Credit Default Swaps	14,620,000	\$ 373,727	\$ 388,001	Credit
Interest Rate Swaps	(305,100,000)	\$ (167,730)	\$ (359,889)	Interest Rate

**Footnotes:**

(1) The Notional amount is the number of currency units (stated in U.S. and/or foreign currencies), shares or other units specified in the derivative instrument. It is a stated amount on which payments depend.

Whenever possible, the investment manager will base the valuation of derivatives on market information; however, where market quotes are not readily available, an independent third party pricing vendor will be utilized. Exchange traded derivatives are an example of derivatives where market quotes are available, whereas over-the counter (OTC) derivatives are not traded over standardized markets.

In addition to the principal risks noted above, Forward Foreign Currencies, Credit Default Swaps and Interest Rate Swaps are also subject to counterparty risk. In general, counterparty risk is the risk of loss of an amount expected to be delivered under an agreement in the event of the default or bankruptcy of the counterparty. Generally, counterparty risk is controlled through dealing with a number of different counterparties reasonably deemed to be creditworthy by the investment manager and using agreements with counterparties that permit netting of obligations. Counterparty risk with swaps is limited by execution under standardized International Swap and Derivatives Association Agreements. These contracts allow for the mutual exchange of collateral should an overall unsecured market value exceed a certain threshold (e.g., \$250,000).

Credit, interest rate and foreign currency risks are addressed in previous sections of Note 4. These risks, applicable to other fixed income and foreign investments, are not substantially different from principal risks associated with derivative instruments.

## 7. FUNDED STATUS

As of June 30, 2014, the most recent actuarial valuation date, the plan was 64.8% funded on an actuarial value basis. The actuarial accrued liability for benefits was \$1,012.4 million and the actuarial value of assets was \$655.9 million, resulting in an unfunded actuarial accrued liability (UAAL) of \$356.4 million. The covered payroll (annual payroll of active employees covered by the plan) was \$126.6 million, and the ratio of UAAL to the covered payroll was 281.4 percent.

## 8. ACTUARIAL METHODS AND ASSUMPTIONS

The total pension liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	3.00% - 6.50%
Investment Rate of Return	7.25%

Mortality rates were based on the RP-2000 Combined Mortality Table for males and females, projected with Scale BB to 2020. The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for period July 1, 2008 – June 30, 2013.

*Additional Details:* In the June 30, 2014 actuarial valuation, the level-percent contribution requirements and actuarial present values are calculated using the entry age actuarial cost method. The actuarial assumptions included (a) 7.25 percent investment rate of return (net of administrative expenses); (b) projected salary increases at 3.00% compounded annually; and (c) additional projected salary increases of 0.00% to 3.50% attributable to seniority / merit. The assumptions do not include postretirement benefit increases or inflation assumptions, because there is no guarantee or requirement that future increases will be granted.

The projection of benefits for financial accounting purposes also does not explicitly incorporate the potential effects of legal or contractual funding limitations, since they do not apply. The actuarial value of assets was determined using techniques that spread the effects of short term volatility in the market value of assets over a five-year smoothing period, which was first adopted for the plan year ended June 30, 2009. The Unfunded Actuarial Accrued Liability is being amortized as a level percentage of payroll on an open period of 20 years; the new amortization period was first adopted for the plan year ended June 30, 2013. There were no benefit changes during the year ended June 30, 2014.

The assumptions are selected based upon the recommendation of the plan's actuary and adopted by the Board of Trustees.

*Measurement of Net Pension Liability:* The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirements.

A single discount rate of 7.250% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.250%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investment was applied to all period of projected benefit payments to determine the total pension liability.

**REQUIRED SUPPLEMENTARY INFORMATION****Schedule of Changes in Net Pension Liability and Related Ratios**

	<u>2014</u>
<b>Total Pension Liability</b>	
Service Cost	\$ 14,825,019
Interest Cost	66,915,612
Differences Between Expected and Actual Experience	325,890
Changes of Assumptions	76,945,563
Benefit Payments, Including Refunds of Member Contributions	(66,002,013)
<b>Net Change in Total Pension Liability</b>	<u>93,010,071</u>
<b>Total Pension Liability - Beginning</b>	<u>948,562,453</u>
<b>Total Pension Liability - Ending</b>	<u>\$ 1,041,572,524</u>
<b>Plan Fiduciary Net Position</b>	
Contributions - Employer	\$ 34,189,288
Contributions - Member	7,338,543
Net Investment Income	119,729,154
Benefit Payments, Including Refunds of Member Contributions	(66,002,013)
Administrative Expense	(735,739)
Other	171,077
<b>Net Change in Plan Fiduciary Net Position</b>	<u>94,690,310</u>
<b>Plan Fiduciary Net Position - Beginning</b>	<u>641,046,190</u>
<b>Plan Fiduciary Net Position - Ending</b>	<u>\$ 735,736,500</u>

**Schedule of Investment Returns****2014**

Annual money weighted rate of return, net of investment expense 13.60%

Schedule of Contributions**Schedule of Employer Contributions**

Fiscal Year Beginning July 1,	Actuarial Valuation Date June 30,	Actuarially Determined Rate	Actual Contribution Rate	Actual Contribution	Rate Deficiency (Excess)	Contribution Deficiency (Excess)	Covered Payroll at Val Date	Covered Payroll during FY
2003	2002	11.17%	11.17%	\$18,457,476	100.0	n/a	153,580,185	153,580,185
2004	2003	14.06	14.06	21,657,270	100.0	n/a	143,164,205	143,164,205
2005	2004	14.83	14.83	23,643,630	100.0	n/a	149,781,753	149,781,753
2006	2005	15.04	15.04	25,958,330	100.0	n/a	162,149,200	162,149,200
2007	2006	15.21	15.21	25,232,745	100.0	n/a	155,855,162	155,855,162
2009	2007	14.67	14.67	24,358,460	100.0	n/a	159,249,822	159,249,822
2010	2008	16.84	16.84	27,601,156	100.0	n/a	153,982,399	153,982,399
2011	2009	18.02	18.02	28,756,890	100.0	n/a	149,924,649	149,924,649
2012	2010	23.38	23.38	34,824,621	100.0	n/a	141,459,257	141,459,257
2013	2011	28.77	28.77	34,523,315	100.0	n/a	121,631,362	121,631,362
2014	2012	27.09	27.09	33,863,319	100.0	\$(94,382)	125,003,023	125,857,903

Note: this schedule presents information required by GASB 67 for fiscal years beginning July 1, 2014. Accordingly, the prior year information concerning contribution deficiency or (excess) was not provided.

Summary of Actuarial Methods and Assumptions**NOTES TO SCHEDULE OF CONTRIBUTIONS**

Valuation Date:	July 1, 2014
Notes	Actuarially determined contribution rates are calculated for the fiscal year beginning one year after the valuation date (one year lag).
<b>Methods and Assumptions Used to Determine Contribution Rates:</b>	
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Open
Remaining Amortization Period	20 years
Asset Valuation Method	5 Year smoothed market
Inflation	3.00%
Salary Increases	3.00% to 6.50% including inflation
Investment Rate of Return	7.25%
Retirement Age	Age-based table of rates that are specific to the type of eligibility condition. Last updated for the 2009 valuation pursuant to an experience study of the period 2009 - 2013.
Mortality	Pre and Post-retirement: RP-2000 Combined Mortality Table for males and females projected with Scale BB to 2020.  Disabled retirement: RP-2000 Disabled Mortality Table for males and females
Other Information:	
Notes	There were no benefit changes during the year.

**Supporting Schedules**  
**June 30, 2014**  
**Schedule of Administrative Expenses**

**Personal Services**

Staff Salaries	\$ 197,302
Fringe Benefits	95,506
Total Personal Services	<u>292,808</u>

**Professional Services**

Accounting	175,380
Actuary	49,066
Physician Services	12,280
Legal	36,708
Total Professional Services	<u>273,434</u>

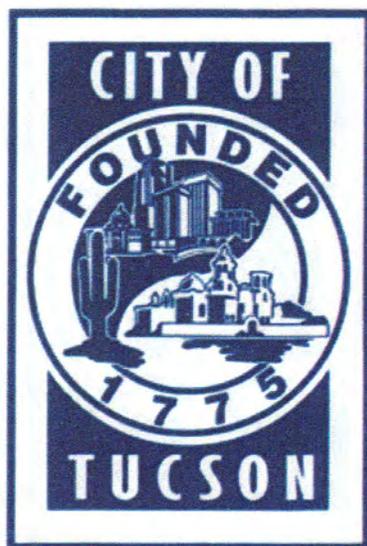
**Other Administrative Expenses**

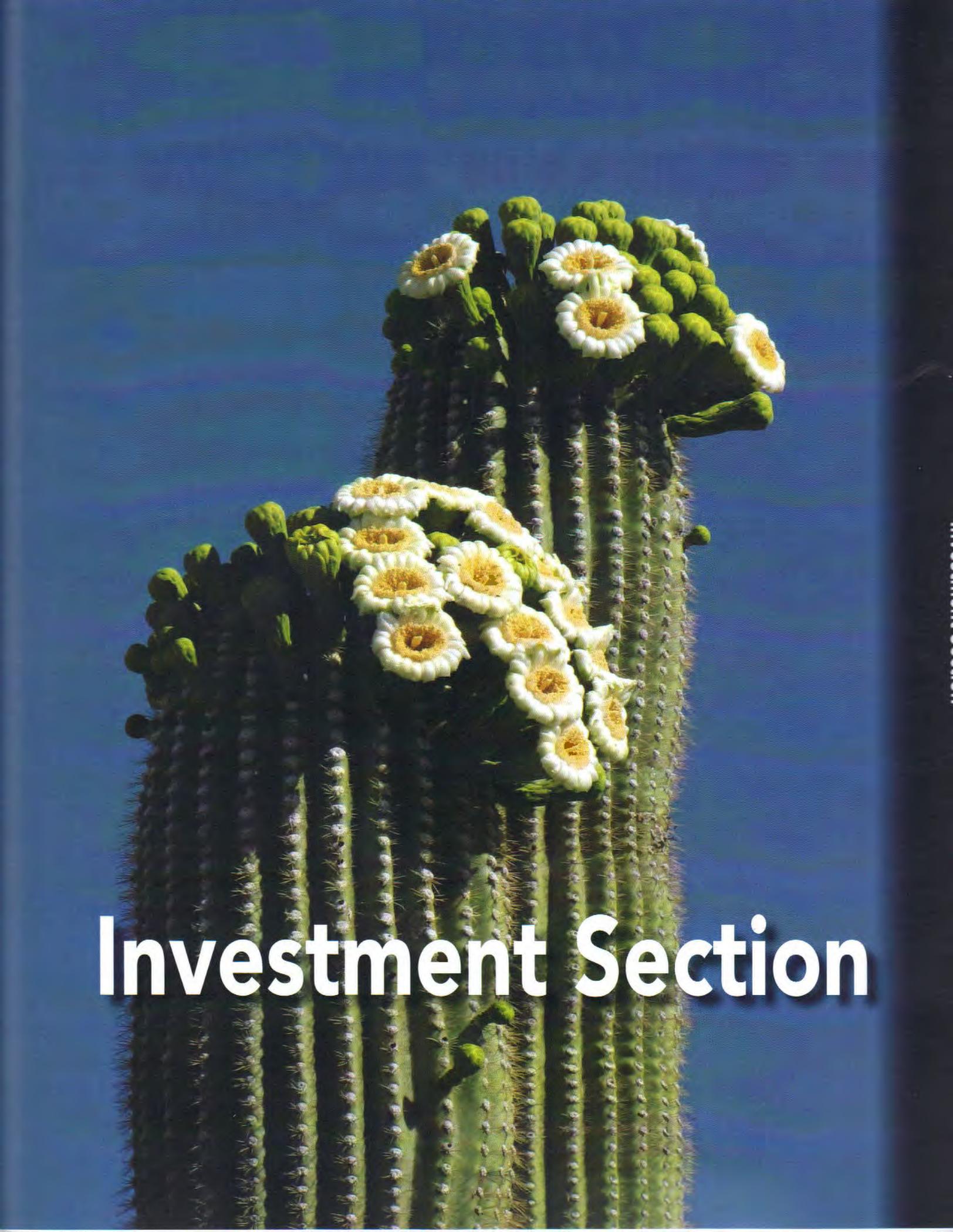
Computer Software Maint. & Hosting	41,000
Depreciation	12,678
Insurance	21,390
Moving Related Expenses	34,567
Office furniture, file cabinets	26,190
Other	6,495
Postage	9,241
Printing and Supplies	12,842
Professional Development	4,394
Temporary Staff	700
Total Other Administrative Expense	<u>169,497</u>

<b>Total Administrative Expenses</b>	<b><u><u>\$ 735,739</u></u></b>
--------------------------------------	---------------------------------

**Schedule of Investment Services Expense**

Trust & Custody	\$ 308,646
Investment Consultant	192,700
Investment Management	3,521,130
<b>Total Investment Expenses</b>	<b><u><u>\$ 4,022,476</u></u></b>





# Investment Section

# Callan

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December 23, 2014

The Board of Trustees  
Tucson Supplemental Retirement System  
255 W. Alameda Street  
Tucson, AZ 85701

Dear Board Members,

This letter reviews the general economic environment, capital markets and investment performance of the Tucson Supplemental Retirement System ("TSRS") for the fiscal year ended June 30, 2014.

#### Economic Overview as of June 30, 2014

Equity markets (as measured by the MSCI All Country World Index), especially in the U.S. (Russell 3000 Index), soared in the last half of 2013 and continued to climb through the end of the fiscal year. The regime change at the Fed went smoothly as the new Chair, Janet Yellen, has continued the measured pace of tapering monthly bond purchases from \$85 billion at the start of the year to \$45 billion in June. The Fed has consistently reduced monthly purchases in increments of \$10 billion each meeting and the program is widely expected to be wound down by October. The Fed continues to maintain its zero-interest rate policy with expectations that the federal funds rate will be close to 0% until mid-2015.

The U.S. unemployment rate fell to 6.1% in June from the 7.6% mark at the start of the fiscal year. The job market started to heat up over the last half of the fiscal year with over 233,000 jobs, on average, being added to payrolls during that time. Although many feared high inflation due to quantitative easing, it remained benign through the fiscal year, never topping 2.1%.

U.S. GDP grew at a rate of 2.6% during the fiscal year, toward the top end of expectations. However, economic growth was anything but linear as GDP contracted 2.1% on an annualized basis during the first calendar quarter of 2014 then finished the fiscal year by expanding 4.6%. Many economists believe an unusually harsh winter pushed consumer and business purchases from the first quarter into the second, leading to uneven growth. The Eurozone economy has stagnated with annualized GDP growth increasing 0.8% and 0.2% in the first and second calendar quarters of 2014, respectively. Additionally, unemployment ended the fiscal year at 11.6% and consistently low inflation (+0.5%) fueled fears of deflation. Japan's economic growth for the first calendar quarter of 2014 came in at an annualized rate of 6.1%, but contracted in the following quarter by 6.8% as a significant consumption tax increase enacted on April 1 led to a rush of consumer spending before the hike went into effect.

#### Domestic Equity Overview

The fiscal year ended June 30, 2014 brought strong returns across the broad domestic equity market. The S&P 500 Index, a broad market indicator for the U.S. large capitalization stock market, finished the fiscal year with a return of +24.61%. Small and mid cap stocks performed better than large cap stocks during the fiscal year. The Russell 2500, a gauge of small and mid cap stock performance, outperformed its large cap peer (the S&P 500 Index), +25.58% to +24.61%. Growth stocks held up better than value stocks during fiscal year 2014. The Russell 1000 Value Index advanced 23.81% versus a gain of 26.92% for the Russell 1000 Growth Index.

During the fiscal year ended June 30, 2014 the TSRS domestic equity investments returned 26.67%

# Callan

Tucson Supplemental Retirement System  
December 4, 2014 2

## International Equity Overview

International equity markets, as represented by the MSCI ACWI ex-U.S. Index, rose in fiscal year 2014. The index returned +21.75% during the fiscal year, besting the +13.63% mark in fiscal year 2013. Value outperformed growth in international markets as the MSCI ACWI ex US Value Index returned 24.84% versus the 19.74% gain for the MSCI ACWI ex US Growth Index. Emerging market returns trailed developed market returns in fiscal year 2014 as the MSCI Emerging Markets Index only gained 14.68%. Overall, it was a strong fiscal year for international stock markets.

For the fiscal year of 2014, the international equity asset class returned 21.26% for TSRS.

## Domestic Fixed Income Overview

The U.S. bond market, as measured by the Barclays Capital Aggregate Bond Index returned 4.37% during fiscal year 2014. The yield curve flattened during the year, boosting longer duration bond prices. The Barclays Capital Government Index rose 2.08% over the fiscal year. The falling yields of long duration bonds boosted the Barclays Capital Government Long Index up 6.44% during the fiscal year. The Barclays Capital Credit Index rose 7.44% for the trailing twelve-months as company balance sheets continued to improve. Mortgage backed securities had solid returns with the Barclays Capital Mortgage Index up 4.66%. High yield bonds performed well as the Barclays Capital High Yield Index returned +11.72% for the year ended June 30, 2014.

For the fiscal year 2014, TSRS' domestic fixed income investments returned 7.64%.

## Real Estate Overview

The NFI-ODCE Value Weight Index, a measure of 33 open-end commingled funds pursuing a core investment strategy, gained 12.75% during the 2014 fiscal year. The index was positive in each of the four quarters, extending its positive streak to eighteen (18) straight quarters. The FTSE NAREIT Equity Index, a measure of the public securities real estate market, gained 13.21% during the fiscal year.

During the year ended June 30, 2014 TSRS' real estate portfolio returned 13.27%

## Infrastructure Overview

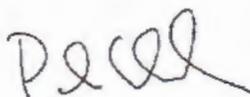
As of mid-2014, there were 149 private infrastructure funds raising capital worldwide, which is comparable to the 144 funds in the market during the same period last year. Just ten of these funds held a first close in the first half of the 2014 calendar year. Many of these closings were very large in size as a total of \$17.5 billion in institutional investor capital was secured by private infrastructure fund managers. This represents a 13.6% increase over the \$15.4 billion raised during the first half of 2013. As such, momentum in the current fundraising market is still positive, but is slowing down compared to the rapid increase in 2013. Fund managers face plenty of competition as they are still marketing to a small and highly selective investor pool given the relatively small allocations to infrastructure that most investors have in place. At the deal level, energy related investments represent the largest portion of trades at 47% followed by transportation at 22%.

Over the one-year period ended June 30, 2014, the infrastructure investment program for TSRS returned 16.31%.

## Total Fund Review

The Tucson Supplemental Retirement System gained 19.64% for the fiscal year, well above the benchmark return of 16.97% and ranked in the 2nd percentile versus other public defined benefit plans.

Cordially,



Paul Erendson  
Senior Vice President



Gordon Weightman, CFA  
Vice President

## Outline of Investment Policies

The asset allocation policy includes a 61% allocation to equity securities: 36% to large U.S. stocks; split among S&P 500 index, enhanced index, large capitalization growth and value accounts; 10% to mid-cap and small-cap U.S. stock accounts; and 15% to foreign stock accounts. There is also an allocation of 26% to fixed income, 8% to equity real estate and 5% to infrastructure.

The Board has set an asset allocation target range on each asset class, sub-class, and manager. The Board of Trustees has adopted a policy of rebalancing the portfolio when the actual allocation falls above or below the target range.

Over the long term, asset allocation policy will be the primary determinant of the returns generated by the TSRS pension fund and the associated volatility of returns. In particular, the level of equity exposure is the key element within the TSRS pension investment policies.

In developing asset allocation policies for its pension plan, the Board examined asset and liability projections to evaluate possible results over the next ten years. These projections examined the risk/return tradeoffs of alternative asset classes, as well as alternative levels of equity exposure. Through incorporating the results of these projections with its risk posture, as well as considering typical practices and practical investment issues, the Board has developed the following asset mix guidelines:

	Percent of Total Pension Fund		
	Minimum	Target	Maximum
<b>Equities:</b>			
Large Capitalization	31%	36%	41%
Small/Mid Capitalization	6%	10%	14%
International	13%	15%	17%
<b>Total Equities</b>	<b>56%</b>	<b>61%</b>	<b>66%</b>
<b>Fixed Income</b>	<b>21%</b>	<b>26%</b>	<b>31%</b>
<b>Real Estate</b>	<b>6%</b>	<b>8%</b>	<b>10%</b>
<b>Infrastructure</b>	<b>3%</b>	<b>5%</b>	<b>7%</b>

Separate target ranges are also set for each investment manager within an asset class and are monitored in conjunction with the overall asset allocation. TSRS monitors its asset mix and rebalances its portfolio mix at any time that a primary asset class (i.e., equities, fixed-income, and real estate), secondary asset class (i.e., domestic equities, international equities), portfolio style, or manager reaches the minimum or maximum allocation specified. Staff is authorized to direct rebalancing and report to the Board.

## Investment Objectives

### Total Pension Fund Performance Objectives:<sup>1</sup>

The TSRS Pension Fund's return will be, in part, a function of the capital market environment in which the plan's investment managers operate. Therefore, regardless of whether or not the market environment permits the achievement of substantial real returns, the TSRS expects any active investment managers that it retains to produce results that are above average relative to other actively-managed funds and relative to passive alternatives. Investment managers should cover the fees paid and provide a return increment that justifies the risk assumed in active management.

On a rolling three-year basis, the annualized total return of the portfolio should exceed the annualized total return of the following custom index:

- Standard & Poor's 500 Stock Index (36% weight)
- Russell 2500 Stock Index (10% weight)
- MSCI All Country World, ex-U.S. Stock Index (15% weight)
- Barclays Capital Aggregate Bond Index (23% weight)
- Barclays Capital High Yield Bond Index (3% weight)
- NCREIF ODCE Real Estate Index (8% weight)
- CPI + 4% (5% weight)

<sup>1</sup> The investment objectives defined herein assume that performance comparisons will be based on a before-fee analysis, unless otherwise indicated.

**Individual Managers Performance Objectives**

On a rolling three-year basis, the annualized total return earned by an actively managed portfolio should place the account in a competitive ranking (i.e., top 40%) relative to a peer group of managers. In addition, the managers should outperform the following market index benchmarks:

*T. Rowe Price (Large Cap Growth Equity)*

- Exceed the annualized total return of the Russell 1000 Growth Index

*BlackRock Value (Russell 1000 Value Index)*

- Match the annualized total return of the Russell 1000 Value Index

*Alliance Capital (S&P 500 Index)*

- Match the annualized total return of the S&P 500 Index

*PIMCO StocksPlus (Enhanced Index)*

- Exceed the annualized total return of the S&P 500 Index

*Champlain Investment Partners (Mid Cap Core Equity)*

- Exceed the annualized total return of the Russell Mid Cap Index

*Pyramis Global Advisors (Small Cap Equity)*

- Exceed the annualized total return of the Russell 2000 Stock Index

*Aberdeen Asset Management (International Core Equity)*

- Exceed the annualized total return of the MSCI AC World ex-U.S. Index

*Causeway Capital Management (International Value Equity)*

- Exceed the annualized total return of the MSCI EAFE Index

*PIMCO (Custom Fixed Income)*

- Exceed the annualized total return of a customized fixed income benchmark composed of 25% BC Mortgage, 25% BC Credit, 25% BC High Yield and 25% JP Morgan EMBI index

*BlackRock U.S. Debt Index Fund (U.S. Investment Grade Fixed Income)*

- Match the annualized total return of the BC Aggregate Bond Index

*JP Morgan Strategic Property Fund (Core Real Estate)*

- Exceed the annualized total return of the NCREIF ODCE Real Estate Index

*LaSalle Income & Growth Fund IV (Value Added Real Estate)*

- Exceed the annualized total return of the NCREIF ODCE Real Estate Index

*JP Morgan Income & Growth Fund (Value Added Real Estate)*

- Exceed the annualized total return of the NCREIF ODCE Real Estate Index

*Macquarie European Infrastructure Fund 3 (European Infrastructure)*

- Exceed the annualized total return of the CPI + 4%

*SteelRiver Infrastructure Fund North America (North America Infrastructure)*

- Exceed the annualized total return of the CPI + 4%

**Investment Results by Year**  
**Last Ten Fiscal Years Ended June 30, 2014**

<u>Year Ended</u>	<u>Annual Return</u>	<u>3-Year Annualized Return</u>	<u>5-Year Annualized Return</u>	<u>10-Year Annualized Return</u>
6/30/14	19.6%	12.1%	14.1%	7.5%
6/30/13	14.8%	13.2%	5.0%	7.4%
6/30/12	2.4%	12.1%	1.2%	6.2%
6/30/11	23.2%	2.8%	4.0%	5.1%
6/30/10	11.6%	-5.6%	1.8%	2.1%
6/30/09	-21.0%	-4.1%	1.3%	2.0%
6/30/08	-4.6%	7.3%	9.8%	5.5%
6/30/07	17.2%	12.3%	11.5%	7.8%
6/30/06	10.7%	12.5%	6.2%	7.8%
6/30/05	9.3%	10.0%	2.4%	8.4%

**Schedule of Investment Results  
For Period Ended June 30, 2014**

	<u>One Year</u>	<u>Annualized Returns (1)</u>	
		<u>Three Years</u>	<u>Five Years</u>
<b>TOTAL PORTFOLIO</b>			
TSRS	19.64%	12.05%	14.11%
Custom Benchmark (2)	16.97%	10.80%	13.32%
<b>EQUITY FUNDS</b>			
Alliance S&P 500 Index	24.50%	16.54%	18.79%
S & P 500 Index	24.61%	16.58%	18.83%
PIMCO StocksPlus	27.61%	18.90%	23.18%
S & P 500 Index	24.61%	16.58%	18.83%
BlackRock Russell 1000 Value Index	23.88%	16.98%	19.35%
Russell 1000 Value Index	23.81%	16.92%	19.23%
T. Rowe Price Large Cap Growth (Inception date: 2/12)	32.80%	18.91%	21.24%
Russell 1000 Growth Index	26.92%	16.26%	19.24%
Champlain Investment Partners (Inception date 7/10)	26.20%	16.05%	20.29%
Russell Mid Cap Index	26.85%	16.09%	22.07%
Pyramis Small Cap	23.59%	17.22%	23.82%
Russell 2000 Index	23.64%	14.57%	20.21%
Causeway International Value Equity	23.76%	10.44%	15.93%
MSCI EAFE Index	23.57%	8.10%	11.77%
Aberdeen EAFE Plus Equity (Inception date: 4/12)	18.20%	8.12%	14.40%
MSCI All Country World ex-U.S. Index	21.75%	5.73%	11.11%
<b>FIXED INCOME FUNDS</b>			
BlackRock U.S. Debt Fund (Inception date: 1/12)	4.49%	3.80%	4.99%
Barclays Aggregate Bond Index	4.37%	3.66%	4.85%
PIMCO Custom Fixed Income	9.60%	7.44%	8.42%
Custom Index (3)	8.48%	6.14%	7.10%
<b>REAL ESTATE FUNDS</b>			
JPM Strategic Property Fund	14.08%	13.38%	10.33%
NCREIF ODCE Index	12.75%	12.45%	10.00%
LaSalle Income & Growth Fund IV	10.87%	3.99%	-0.32%
NCREIF ODCE Index	12.75%	12.45%	10.00%
JPM Income and Growth Fund	11.66%	18.30%	14.06%
NCREIF ODCE Index	12.75%	12.45%	10.00%

Notes: All data provided by independent investment consultant, Callan Associates, Inc.

(1) Geometrically compounded, time-weighted rates of return (all returns reported gross of fees)

(2) Custom Benchmark = 36% S&P 500 Index + 10% Russell 2500 + 15% MSCI ACWI ex-U.S.+ 26%, Barclays Capital Aggregate + 8% NCREIF ODCE + 5% CPI+4%

(3) Custom Index = 25% Barclays Capital Mortgage + 25% Barclays Capital Credit + 25% Barclays Capital High Yield + 25% JP Morgan EMBI Global

**Schedule of Investment Results**  
**For Period Ended June 30, 2014 (Continued)**

	<u>One Year</u>	<u>Annualized Returns (1)</u>	
		<u>Three Years</u>	<u>Five Years</u>
<b>INFRASTRUCTURE FUNDS</b>			
Macquarie European Infrastructure Fund 3 CPI + 4%	14.63% 6.05%	9.29% 5.79%	8.37% 6.16%
SteelRiver Infrastructure Fund North America CPI + 4%	18.46% 6.05%	9.29% 5.79%	11.09% 6.16%

Notes: All data provided by independent investment consultant, Callan Associates, Inc.

(1) Geometrically compounded, time-weighted rates of return (all returns are reported gross of fees)

**Asset Summary**  
**By Manager and Type of Investment** *(in thousands)*  
**June 30, 2014**

Manager	Style	Large U.S. Stocks	Small/Mid U.S. Stocks	Foreign Stocks	Fixed Income	Real Estate	Infra-structure	Short Term	Total
Alliance Capital	S & P 500 Index	\$ 85,201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140	\$ 85,341
T. Rowe Price	Large Cap Growth	75,616	-	-	-	-	-	543	76,159
BlackRock Russell Value	Large Cap Value Index	79,520	-	-	-	-	-	-	79,520
PIMCO StocksPlus	Enhanced Index	43,435	-	-	-	-	-	-	43,435
Champlain Investments	Mid-Cap Core	-	40,263	-	-	-	-	1,504	41,767
Pyramis Global Advisors	Small-Cap Core	-	38,773	-	-	-	-	544	39,317
Causeway Capital	Foreign Stocks-Value	-	-	56,660	-	-	-	2,759	59,419
Aberdeen Asset Mgmt	Foreign Stocks-Core	-	-	46,310	-	-	-	-	46,310
BlackRock U.S. Debt	U.S. Gov/Credit Bonds	-	-	-	60,280	-	-	-	60,280
PIMCO Custom Fixed Income	U.S. & Foreign Bonds	-	-	-	97,616	-	-	3,953	101,569
JPM Strategic Property Fund	Core Real Estate	-	-	-	-	37,651	-	-	37,651
LaSalle Income & Growth Fund	Value Added Real Estate	-	-	-	-	2,676	-	-	2,676
JPM Income & Growth Fund	Value Added Real Estate	-	-	-	-	14,315	-	-	14,315
Macquarie (MEF3)	European Infrastructure	-	-	-	-	-	24,159	-	24,159
SteelRiver IFNA	North American Infrastructure	-	-	-	-	-	19,245	-	19,245
Liquidity Fund	Cash & Cash Equivalents	-	-	-	-	-	-	2,185	2,185
<b>TOTAL</b>		<b>\$ 283,772</b>	<b>\$ 79,036</b>	<b>\$ 102,970</b>	<b>\$ 157,896</b>	<b>\$ 54,642</b>	<b>\$ 43,404</b>	<b>\$ 11,628</b>	<b>\$ 733,348</b>

**Notes:**

- (1) The Asset Summary does not include the City pooled investment account. (2) Assets are reflected on a trade date basis. (3) Short-term investments have been adjusted for the net impact of unsettled transactions in order to report on a trade date basis. (4) Each asset class includes receivables and payables.

**Manager and Asset Diversification** (in thousands)

June 30, 2014

<b>Manager</b>	<b>Actual</b>		<b>Target</b>	
	<b>Amount</b>	<b>Percentage</b>	<b>Amount</b>	<b>Percentage</b>
Alliance Capital	\$ 85,341	11.6%	\$ 80,668	11.0%
T. Rowe Price	76,159	10.4%	73,335	10.0%
BlackRock Russell Value	79,520	10.8%	73,335	10.0%
PIMCO StocksPlus	43,435	5.9%	36,667	5.0%
<b>Large U.S. Stocks</b>	<b>284,455</b>	<b>38.7%</b>	<b>264,005</b>	<b>36.0%</b>
Champlain Investment Partners	41,767	5.7%	36,667	5.0%
Pyramis Global Advisors	39,317	5.4%	36,667	5.0%
<b>Small/Mid-Cap U.S. Stocks</b>	<b>81,084</b>	<b>11.1%</b>	<b>73,334</b>	<b>10.0%</b>
Causeway Capital	59,419	8.1%	55,001	7.5%
Aberdeen Asset Management	46,310	6.3%	55,001	7.5%
<b>Foreign (International) Stocks</b>	<b>105,729</b>	<b>14.4%</b>	<b>110,002</b>	<b>15.0%</b>
<b>Total Equities</b>	<b>471,268</b>	<b>64.2%</b>	<b>447,341</b>	<b>61.0%</b>
BlackRock U.S. Debt	60,280	8.2%	73,334	10.0%
PIMCO Custom Fixed Income	101,569	13.9%	117,336	16.0%
<b>Fixed Income (Bonds)</b>	<b>161,849</b>	<b>22.1%</b>	<b>190,670</b>	<b>26.0%</b>
JPM Strategic Property Fund	37,651	5.1%	36,667	5.0%
LaSalle Income & Growth Fund	2,676	0.4%	11,000	1.5%
JPM Income & Growth Fund	14,315	2.0%	11,000	1.5%
<b>Real Estate</b>	<b>54,642</b>	<b>7.5%</b>	<b>58,667</b>	<b>8.0%</b>
Macquarie (MEIF3)	24,159	3.3%	18,335	2.5%
SteelRiver IFNA	19,245	2.6%	18,335	2.5%
<b>Infrastructure</b>	<b>43,404</b>	<b>5.9%</b>	<b>36,670</b>	<b>5.0%</b>
Liquidity Fund	2,185	0.3%	-	0.0%
<b>Total</b>	<b>\$ 733,348</b>	<b>100%</b>	<b>\$ 733,348</b>	<b>100%</b>

**Asset Allocation by Asset Class  
Last Five Fiscal Years**

<u>Asset Class</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
<b>U.S. Stocks</b>	50%	48%	46%	46%	46%
<b>Foreign (International) Stocks</b>	14%	14%	13%	15%	13%
<b>Total Equities</b>	64%	62%	59%	61%	59%
<b>Fixed Income (Bonds)</b>	22%	24%	26%	28%	29%
<b>Real Estate</b>	8%	8%	8%	6%	6%
<b>Infrastructure</b>	6%	6%	7%	6%	5%
<b>Cash</b>	0%	0%	0%	1%	1%
	100%	100%	100%	100%	100%

**Ten Largest Bond Holdings**  
**(By Market Value)**  
**June 30, 2014**  
*(dollars in thousands)*

<u>Par Value</u>	<u>Bond</u>	<u>Coupon Rate</u>	<u>Due</u>	<u>Rating</u> <u>(1)</u>	<u>Fair</u> <u>Value</u>
\$ 1,300	GAZPROM OAO VIA GAZ CAPITAL SA	9.250%	04/23/19	Baa1	\$ 1,578
1,000	HYPO ALPE-ALDRIA-BANK INTERNATIONAL	4.375%	01/24/17	Caa1	1,308
1,200	ROCKIES EXPRESS PIPELINE 144A	6.850%	07/15/18	Ba2	1,296
1,000	HCA INC	6.500%	02/15/20	Ba3	1,125
1,000	INTERNATIONAL LEASE FINAN 144A	6.750%	09/01/16	Ba1	1,108
1,000	RBSCF TRUST 2010 RR4 CMLA 144A	Variable	12/16/49	Aaa	1,073
1,000	SCF CAPITAL LTD 144A	5.375%	10/27/17	Ba3	1,010
990	HEINZ 3/13 (usd) COV-LITE TLB2	0.000%	06/05/20	Ba2	997
883	CSMC SERIES 201-UD UD1 A 144A	Variable	12/16/49	Aaa	936
800	TNK-BP FINANCE SA	7.875%	03/13/18	Baa1	913

(1) Per Moody's Investors Service, Inc.

**Ten Largest Stock Holdings**  
**(By Market Value)**  
**June 30, 2014**  
*(dollars in thousands)*

<u>Shares</u>	<u>Stock</u>	<u>Fair</u> <u>Value</u>
10,458	GOOGLE, INC	\$ 6,065
12,325	AMAZON.COM, INC	4,003
37,150	GILEAD SCIENCES, INC	3,080
2,406	THE PRICELINE GROUP INC	2,894
13,280	VISA INC	2,798
29,465	APPLE INC	2,738
20,034	THE BOEING CO	2,549
12,450	MCKESSON CORP	2,318
100,918	REED ELSEVIER NV EURO .07	2,314
29,300	DANAHER CORP	2,306

A complete list of portfolio holdings is available by contacting the City of Tucson, Treasury Division, 255 W. Alameda, 5-west, Tucson, AZ 85701-1303

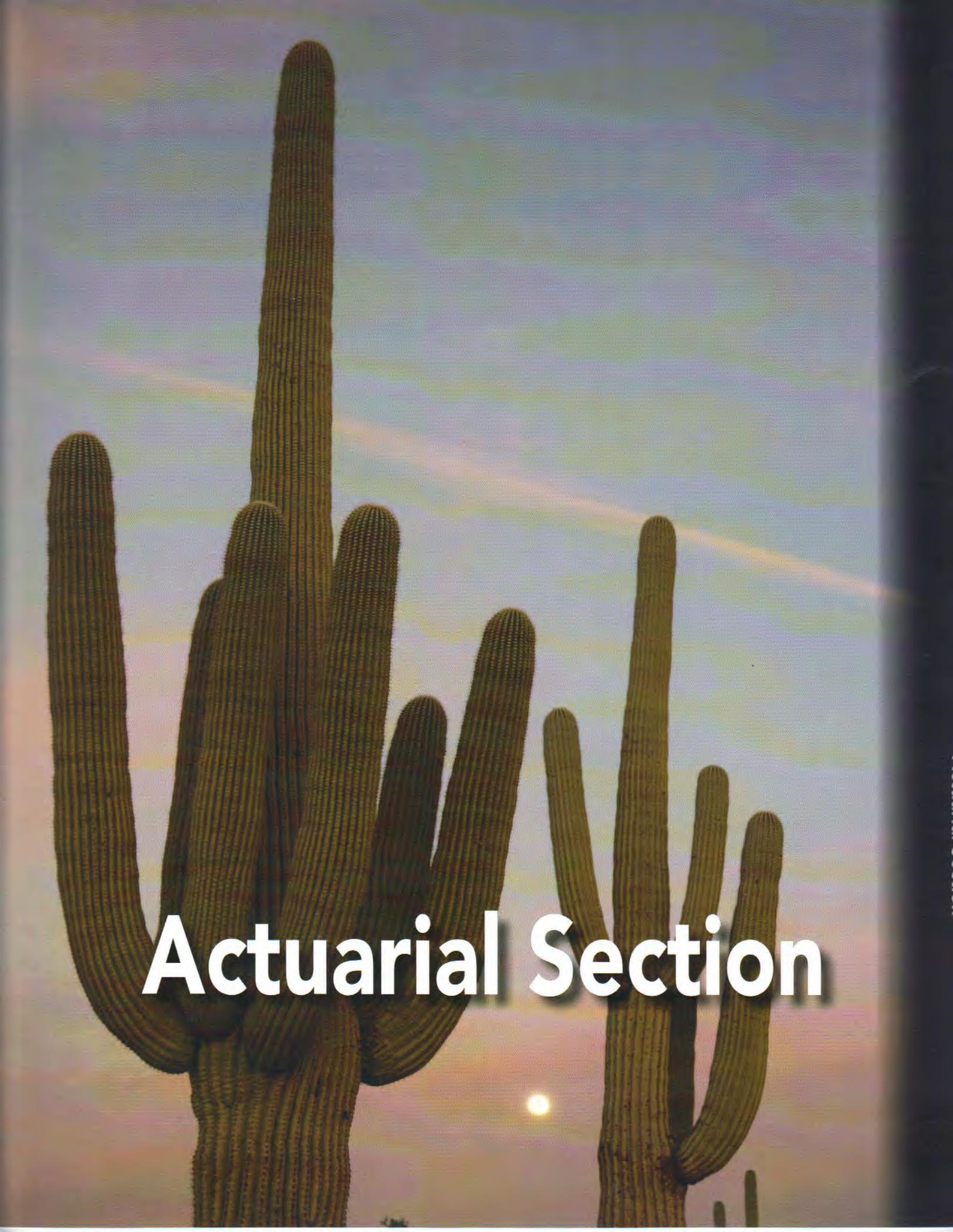
## Schedule of Fees June 30, 2014

	<u>Assets Under Management</u>	<u>Fees</u>
<b>Investment Manager Fees</b>		
<i>Fixed Income Managers</i>		
BlackRock U.S. Debt	\$ 60,280,227	\$ 32,312
PIMCO (Custom Fixed Income)	101,568,313	464,613
<b>Total Fixed Income</b>	<b>\$ 161,848,540</b>	<b>\$ 496,925</b>
<i>Equity Managers</i>		
Alliance Capital Management	\$ 85,340,868	\$ 31,817
BlackRock Russell Value Index	79,520,136	29,606
T. Rowe Price	76,158,518	371,517
Causeway Capital Management	59,418,726	366,926
Pyramis Global Advisors	39,317,282	278,240
Aberdeen Asset Management	46,309,980	344,970
PIMCO StocksPlus	43,435,171	251,629
Champlain Investment Partners	41,767,111	327,625
<b>Total Equity</b>	<b>\$ 471,267,792</b>	<b>\$ 2,002,330</b>
Liquidity Account	2,184,915	-
<i>Real Estate Managers</i>		
JPM Strategic Property Fund	\$ 37,650,927	\$ 358,842
JPM Income & Growth Fund	14,315,158	174,988
LaSalle Income & Growth Fund IV	2,676,116	17,139
<b>Total Real Estate</b>	<b>\$ 54,642,201</b>	<b>\$ 550,969</b>
<i>Infrastructure Managers</i>		
Macquarie (MEIF3)	\$ 24,159,130	\$ 220,856
SteelRiver IFNA	19,244,951	250,050
<b>Total Infrastructure</b>	<b>\$ 43,404,081</b>	<b>\$ 470,906</b>
<b>Total Assets (Trade date basis)</b>	<b>\$ 733,347,529</b>	
<b>Total Investment Management Fees</b>		<b>\$ 3,521,130</b>
<b>Other Investment Service Fees</b>		
<i>Custodian Fees</i>		
BNY Mellon		\$ 308,646
<i>Security Lending - Bank &amp; Administration Fees</i>		
BNY Mellon		54,589
<i>Consulting and Performance Management</i>		
Hewitt EnnisKnupp		192,700
<b>Total Other Investment Service Fees</b>		<b>\$ 555,935</b>

**Schedule of Commissions  
June 30, 2014**

<u>Broker Description</u>	<u>Shares</u>	<u>Commissions</u>	<u>Commissions Per Share</u>
MORGAN STANLEY & CO INC, NY	689,508	\$ 9,213	\$ 0.0134
MERRILL LYNCH PIERCE FENNER SMITH INC NY	355,597	8,828	0.0248
CREDIT SUISSE, NEW YORK (CSUS)	496,345	8,757	0.0176
J.P. MORGAN CLEARING CORP, NEW YORK	347,984	8,726	0.0251
GOLDMAN SACHS & CO, NY	322,037	7,659	0.0238
JANNEY MONTGOMERY SCOTT, PHILADELPHIA	238,620	7,213	0.0302
RBC CAPITAL MARKETS LLC, NEW YORK	267,203	5,921	0.0222
JEFFERIES & CO INC, NEW YORK	183,343	4,867	0.0265
STIFEL NICOLAUS	152,280	4,705	0.0309
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	135,055	4,511	0.0334
MERRILL LYNCH INTL LONDON EQUITIES	296,845	4,487	0.0151
BARCLAYS CAPITAL, LONDON (BARCGB33)	247,569	4,121	0.0167
BAIRD, ROBERT W & CO INC, MILWAUKEE	118,430	3,825	0.0323
LIQUIDNET INC, BROOKLYN	148,400	3,710	0.0250
INVESTMENT TECHNOLOGY GROUP, NEW YORK	155,200	3,652	0.0235
BNY CONVERGEX, NEW YORK	127,090	3,463	0.0273
CITIGROUP GLOBAL MARKETS LTD, LONDON	145,047	3,413	0.0235
UBS EQUITIES, LONDON	194,639	3,349	0.0172
DEUTSCHE BK SECS INC, NY (NWSCUS33)	153,918	2,976	0.0193
CITIGROUP GBL MKTS INC, NEW YORK	111,595	2,826	0.0253
UBS WARBURG ASIA LTD, HONG KONG	132,236	1,996	0.0151
BARCLAYS CAPITAL INC./LE, NEW JERSEY	87,110	1,950	0.0224
KEPLER EQUITIES, PARIS	41,399	1,867	0.0451
WILLIAM BLAIR & CO, CHICAGO	42,615	1,573	0.0369
J P MORGAN SECS LTD, LONDON	142,478	1,557	0.0109
SG SEC (LONDON) LTD, LONDON	43,983	1,552	0.0353
BARCLAYS CAPITAL LE, JERSEY CITY	84,037	1,409	0.0168
KNIGHT CLEARING SERVICES LLC, JERSEY CIT	43,014	1,374	0.0319
INSTINET EUROPE LIMITED, LONDON	58,455	1,361	0.0233
BROADCOURT CAP CORP/SUB OF MLPF&S,NY	33,600	1,344	0.0400
MERRILL LYNCH PIERCE FENNER, WILMINGTON	21,100	1,255	0.0595
OPPENHEIMER & CO INC, NEW YORK	39,720	1,225	0.0309
ITG INC, NEW YORK	63,317	1,172	0.0185
BERNSTEIN SANFORD C & CO, NEW YORK	40,310	1,159	0.0288
PULSE TRADING LLC, BOSTON	62,100	1,158	0.0187
UBS SECURITIES LLC, STAMFORD	74,675	1,119	0.0150
VARIOUS BROKERS - LESS THAN \$1000	1,190,398	23,784	
<b>TOTAL</b>	<b>7,087,252</b>	<b>\$ 153,077</b>	
<b>AVERAGE COMMISSION RATE</b>			<b>\$ 0.0216</b>



A photograph of two saguaro cacti against a sunset sky. The cacti are green and ribbed, with several arms reaching upwards. The sky is a mix of orange, yellow, and blue, with a bright sun low on the horizon. The text 'Actuarial Section' is overlaid in white, bold, sans-serif font.

# Actuarial Section



Gabriel Roeder Smith & Company  
Consultants & Actuaries

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Denver, CO 80237-2746

720.274.7270 phone  
303.694.0633 fax  
www.gabrielroeder.com

November 18, 2014

The Board of Trustees  
Tucson Supplemental Retirement System  
City Hall – 255 W. Alameda Street  
Tucson, AZ 85726-7210

**Subject: Certification of July 1, 2014 Actuarial Valuation**

Dear Members of the Board:

At the request of the Board, this letter certifies that the actuarial valuation report describes the current actuarial condition of the Tucson Supplemental Retirement System and determines the calculated employee and employer contribution rates. In addition, the valuation report provides information required by TSRS in connection with Governmental Accounting Standards Board Statement No 25 (GASB 25), and it provides various summaries of data. Valuations are prepared annually as of July 1. This letter was prepared at the request of the Board and is intended for use for the annual Comprehensive Annual Financial Report.

**Funding objective and funding policy**

The funding objective of the Retirement System is to establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Tucson citizens. Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are sufficient to provide for normal cost plus level percent of payroll financing of unfunded actuarial accrued liability (UAAL). The unfunded liability was amortized as a level percent of payroll over 20 years to develop the annual amortization payment amount. The annual required contribution is the sum of the amortization payment and the normal cost for the year. The City contribution is the annual required contribution net of employee contributions (5.00% of pay for those hired before July 1, 2006, 50% of normal cost for their given tier of benefits for those hired on or after July 1, 2006). This funding policy was implemented for the fiscal year beginning July 1, 2013.

**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%.

The funded ratio increased from 63.3% to 64.8%. This increase was primarily due to the positive investment and actuarial experience. We expect the funded ratio to gradually increase in future years.

**Assumptions and methods**

The actuarial assumptions and methods used to perform this valuation have changed from the prior valuation, due to recommendations from the 2013 experience study. These changes can be found in detail in the valuation report.

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.

The actuarial assumptions and methods meet the parameters set forth in Statement No. 25 of the Governmental Accounting Standards Board and meet Actuarial Standards of Practice. In our opinion, the assumptions are reasonably related to past experience and represent our best estimate of future conditions affecting the System.

**Data**

The valuation was based upon information, furnished by your retirement system administrator, concerning Retirement System benefits, financial transactions, individual members, terminated members, retired members, and beneficiaries. Data was checked for completeness and reasonableness but was not otherwise audited.

**Preparation of Schedules**

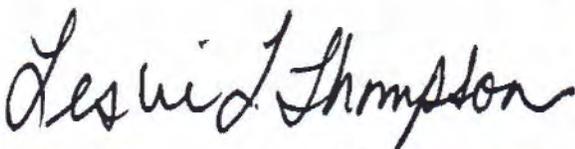
We prepared all of the schedules in the actuarial section with the exception of retirants and beneficiaries added to and removed from rolls. In the Financial Section, GRS prepared the Schedule of Funding Progress, the Schedule of Employer Contributions, and the Summary of Actuarial Methods and Assumptions.

**Certification**

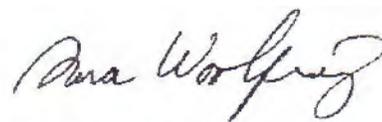
All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Both are Enrolled Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. Both consultants below are experienced in performing valuations for large public retirement systems.

Sincerely,

**Gabriel, Roeder, Smith & Company**

Leslie L. Thompson, FSA, FCA, EA, MAAA  
Senior Consultant



Dana Woolfrey, FSA, FCA, EA, MAAA  
Consultant

## Actuarial Cost Method

**Normal cost contributions** were computed as follows:

The series of contributions, payable from date of employment, sufficient to accumulate at time of retirement was computed as the discounted value of each member's projected pension and potential survivor's pension, using the assumptions summarized on the following pages. Each contribution in the series is a constant percentage of the member's year by year projected compensation (entry-age normal actuarial cost method).

Effective July 1, 2013 the new funding policy requires a computation of normal cost separately for those members in Tier I and Tier II.

**Actuarial accrued liability** was computed and financed as follows:

1. Retirants and beneficiaries. The discounted value of pensions likely to be paid to retired members and their potential survivors were computed using the investment return and mortality assumptions.
2. Active members and former members. The actuarial accrued liability associated with service rendered prior to the valuation date, including experience gains and losses, was computed using the investment return, mortality and other assumptions outlined on the following pages. The computed amount was reduced by applicable valuation assets and the unfunded amount was amortized over 20 years as of June 30, 2014. An open amortization period of 20 years was adopted effective June 30, 2013.

## Actuarial Assumptions

Level-percent contribution requirements and actuarial present values are calculated by using the entry-age actuarial cost method and assumptions concerning future experiences in the financial risk areas of a retirement plan. Actuarial gains and losses are amortized as a level percent-of-payroll over an open period of 20 years effective June 30, 2013. The assumptions are selected based upon the recommendation of the actuary.

The principal areas of risk which require assumptions about future experiences are:

- (i) long-term rates of investment return to be generated by the assets of the system,
- (ii) patterns of pay increases to members,
- (iii) rates of mortality among members, retirants and beneficiaries,

- (iv) rates of withdrawal of active members,
- (v) rates of disability among active members, and
- (vi) the age patterns of actual retirements

Through the valuation process, the monetary effect of each expected assumption against actual experience is projected for the lifetime of each covered member and potential beneficiary.

Actual experience of the system will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time, one or more of the assumptions are modified to reflect experience trends (but not random or temporary year to year fluctuations). The Board of Trustees adopts the assumptions based upon recommendations of the actuary. The demographic assumptions were last revised for the June 30, 2014 actuarial valuation following an actuarial investigation of experience of the Retirement System covering the period July 1, 2008 through June 30, 2013.

**Investment Return** 7.25% a year, compounded annually. This consists of a real rate of return of 4.25% a year plus a long-term rate of inflation of 3.00% a year.

This assumption is used to equate the value of payments due at different points in time. The approximate internal rate of investment return, for the purpose of comparison with the assumed rate is indicated below:

**For years ending June 30,**

	2014	2013	2012	2011	2010	3 Year Avg.	5 Year Avg.
Investment Return Rate <sup>1</sup>	13.8%	4.1%	0.1%	1.8%	-0.4%	5.8%	3.7%
Real Rate of Investment Return	11.4%	2.4%	-2.0%	-1.1%	-1.0%	3.7%	1.7%

<sup>1</sup> Based on actuarial value of assets, not market value

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other plans – to do so will mislead.

**Pay Projections** These assumptions are used to project current pays to those which will determine average final compensation. The assumptions should consist of the same inflation component used for the investment return assumption plus an age graded component to reflect promotion and seniority increments.

<b>Less than Five Years of Service</b>				<b>Five or More Years of Service</b>			
Service	Inflation Component	Merit & Seniority	Total	Sample Ages	Inflation Component	Merit & Seniority	Total
0	3.00%	3.5%	6.50%	20	3.00%	1.50%	4.50%
1	3.00	3.00	6.00	25	3.00	1.50	4.50
2	3.00	2.50	5.50	30	3.00	1.50	4.50
3	3.00	2.00	5.00	35	3.00	1.50	4.50
4	3.00	1.50	4.50	40	3.00	1.00	4.00
				45	3.00	0.50	3.50
				50	3.00	0.25	3.25
				55	3.00	0.25	3.25
				60	3.00	0.25	3.25
				65	3.00	0.00	3.00

The pay increase assumptions will produce 3.00% annual increases in active member payroll (the base rate) given a constant active member group size. This is the same payroll growth assumption used to amortize unfunded actuarial accrued liability.

In addition, an assumption is made that final average compensation will be increased by 2.2% to reflect unused sick leave for service retirements and vested terminations.

***Benefit and Eligibility due to Accrued Sick and Vacation Leave at Retirement and Termination***

Tier I Members are assumed to have an additional 0.019 years per year of benefit and eligibility service at early or normal retirement and termination due to accrued sick and vacation leave. Previously the valuation used a 2.20% load on the present value of benefits for normal retirement, early retirement and vested termination decrements. This method was changed to recognize service levels at termination which correlate to the amount of unused sick and vacation leave available. This assumption was developed using sick and vacation leave and service amounts for active members included in the actuarial valuation as of June 30, 2013.

**Mortality Table for Active Members and Healthy Annuitants** RP-2000 Combined Mortality Table for males and females projected with Scale BB to 2020. Mortality rates were adjusted to include margin for future mortality improvement as described in the table named above.

Sample Ages	Future Life Expectancy (years)		Deaths per 1,000 Lives	
	Men	Women	Men	Women
50	33.0	35.6	2.0	1.6
55	28.4	30.9	3.4	2.5
60	23.9	26.3	5.9	4.1
65	19.7	22.0	10.0	7.6
70	15.8	17.9	16.4	13.2
75	12.3	14.2	28.0	22.1
80	9.1	11.0	47.6	36.0
85	6.5	8.1	81.9	60.8

**Mortality Table for Disabled Annuitants** RP-2000 Disabled Mortality Table for males and females.

Sample Ages	Future Life Expectancy (years)		Deaths per 1,000 Lives	
	Men	Women	Men	Women
50	18.2	25.1	29.0	11.5
55	15.9	21.7	35.4	16.5
60	13.8	18.6	42.0	21.8
65	11.8	15.7	50.2	28.0
70	9.8	12.9	62.6	37.6
75	7.9	10.5	82.1	52.2
80	6.4	8.4	109.4	72.3
85	5.1	6.6	141.6	100.2

**Rates of Retirement** Rates of retirement are used to measure the probabilities of an eligible member retiring during the next year. For those ages 62 and older, the Rule of 80 retirement rates only applies if the Rule of 80 is attained by age 62.

**Tier I Members**  
**Percentage of Those Eligible Retiring During Year**

Retirement Ages	Rule of 80	Age Based	Early
50	27%		
51	27		
52	27		
53	27		
54	27		
55	27		8.5%
56	27		8.5
57	27		8.5
58	27		8.5
59	27		8.5
60	27		
61	27		
62	27	33%	
63	27	16	
64	27	20	
65	27	24	
66	27	35	
67	27	35	
68	27	35	
69	27	35	
70	100	100	

Deferred vested members are assumed to retire at age first eligibility for unreduced benefits.

**Rates of Retirement for Tier II.** For those age 65 and older, the Rule of 85 retirement rates only applies if the Rule of 85 is attained by age 65.

**Tier II Members**  
**Percentage of Those Eligible Retiring During Year**

Retirement Ages	Rule of 80	Age Based	Early
60	27%		8.5%
61	27		8.5
62	27		8.5
63	27		8.5
64	27		8.5
65	27	24%	
66	27	35	
67	27	35	
68	27	35	
69	27	35	
70	100	100	

Deferred vested members are assumed to retire at age first eligibility for unreduced benefits.

**Rates of Separation from Active Membership** This assumption measures the probabilities of a member terminating employment. The rates do not apply to members who are eligible to retire.

Sample Ages	Years of Creditable Service	Probability of Termination During Year
Any	0	18.00%
	1	13.00
	2	10.00
	3	8.00
	4	7.50
25	5 & Over	7.05
30		6.65
35		4.65
40		3.65
45		2.95
50		2.55
55		2.45
60		2.45

**Rates of Disability** This assumption measures the probabilities of a member becoming disabled. The rates do not apply to members who are eligible to retire.

Sample Ages	% of Active Members Becoming Disabled During Next Year
25	0.01%
30	0.07
35	0.09
40	0.14
45	0.17
50	0.25
55	0.36
60	0.48
65	0.63

**Forfeiture of Vested Benefits** The percentages below represent the probability that a vested terminated member will take a refund of contributions rather than receive a deferred annuity benefit.

Sample Ages	% of Vested Terminated Members Choosing Refund at Termination
Under 30	50%
30	45
35	40
40	35
45	30
50	25
55	20
60 and Over	0

**Marital Status** 80% of men and women were assumed married at retirement.

**Spouse Status** Women were assumed to be 3 years younger than men.

**Assumed Age for Commencement for Deferred Benefits** Members electing to receive a deferred benefit are assumed to commence receipt at the earlier of age 62 and eligibility for rule of 80 Tier I and the earlier of age 65 and eligibility for the rule of 85 (but at least 60) for Tier II.

**Active Member Group Size** The number of active members was assumed to remain constant.

**Active Members as of June 30, 2014  
By Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Total No.	Total Valuation Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus		
< 20	-	-	-	-	-	-	-	-	\$ -
20-24	29	-	-	-	-	-	-	29	877,718
25-29	97	19	-	-	-	-	-	116	3,828,780
30-34	128	68	13	-	-	-	-	209	7,494,698
35-39	108	83	62	15	-	-	-	268	10,496,241
40-44	92	98	74	80	11	-	-	355	15,450,178
45-49	73	79	91	105	57	17	1	423	20,308,579
50-54	74	85	71	96	88	58	2	474	23,724,479
55-59	63	69	96	110	86	71	21	516	26,769,049
60	11	13	10	20	12	9	2	77	3,805,187
61	8	11	6	9	7	6	7	54	2,852,406
62	7	7	13	9	5	8	3	52	2,755,307
63	6	4	6	9	3	7	3	38	2,184,978
64	-	6	4	4	5	5	2	26	1,414,440
65	3	5	1	5	6	1	5	26	1,511,808
66	1	3	2	4	3	2	3	18	1,156,070
67	1	4	-	1	3	-	-	9	608,067
68	2	1	1	-	1	1	-	6	301,142
69	1	1	1	1	1	-	1	6	427,498
70	-	2	1	-	1	-	-	4	210,538
71	-	-	1	2	-	1	-	4	231,275
72	-	1	-	-	-	-	-	1	74,776
73	-	-	-	-	-	-	-	-	-
74	-	-	-	-	-	-	-	-	-
75	-	-	-	-	-	-	-	-	-
76	-	-	1	-	-	-	-	1	-
77	-	-	-	-	-	-	-	-	66,685
78	-	-	-	-	-	-	-	-	-
79	-	-	1	-	1	-	-	2	89,523
<b>Totals</b>	<b>704</b>	<b>559</b>	<b>455</b>	<b>470</b>	<b>290</b>	<b>186</b>	<b>50</b>	<b>2,714</b>	<b>\$ 126,639,422</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 47.8 years  
 Service: 12.0 years  
 Annual Pay: \$46,662

**Active Members Included in Valuation  
Comparative Schedule – June 30, 2014**

Valuation Date	Active Members	Annual Payroll	Average			Vested Inactive Members
			Age	Service	Pay	
6-30-89 <sup>1</sup>	3,250	\$81,386,395	41.8	8.6	\$25,042	40
6-30-90	3,246	86,478,158	42.1	8.7	26,641	42
6-30-91	3,195	86,829,527	42.4	9.0	27,177	38
6-30-92	3,149	86,205,432	42.9	9.4	27,375	48
6-30-93	3,224	92,867,286	43.3	9.8	28,805	45
6-30-94	3,287	94,180,104	43.6	10.1	28,652	40
6-30-95	3,284	99,847,171	43.9	10.2	30,404	45
6-30-96	3,378	105,229,504	43.9	10.2	31,151	43
6-30-97	3,430	110,188,751	44.3	10.9	32,125	52
6-30-98	3,484	113,729,143	44.5	11.0	32,643	104
6-30-99	3,550	126,816,830	44.8	10.7	35,723	119
6-30-00	3,600	134,088,074	45.2	11.0	37,247	81
6-30-01	3,669	145,058,897	45.4	11.1	39,536	107
6-30-02	3,626	153,580,185	45.7	11.6	42,355	111
6-30-03	3,364	143,164,205	45.5	11.2	42,558	125
6-30-04	3,476	149,781,753	45.9	11.4	43,090	130
6-30-05	3,609	162,149,200	46.2	11.4	44,929	148
6-30-06	3,247	155,855,162	46.6	12.1	48,000	394 <sup>2</sup>
6-30-07	3,326	159,249,822	46.2	11.4	47,880	223
6-30-08	3,251	153,982,399	45.7	10.6	47,365	202
6-30-09	3,175	149,924,649	46.3	11.2	47,220	205
6-30-10	2,982	141,459,257	47.1	12.1	47,438	215
6-30-11	2,628	121,631,362	47.1	11.9	46,283	208
6-30-12	2,718	125,003,023	47.3	11.9	45,991	229
6-30-13	2,750	125,857,903	47.5	11.8	45,767	256
6-30-14	2,714	126,639,423	47.8	12.0	46,662	266

<sup>1</sup> An amendment eliminated the one-year service requirement for participation in the Retirement System.

<sup>2</sup> Includes 136 former Library employees requesting a transfer of service to ASRS.

**Experience Gains (Losses)  
Comparative Schedule**

	Year Ended 6-30-14	Year Ended 6-30-13
(1) UAAL <sup>1</sup> at start of year prior to assumption changes	\$348,232,387	\$343,832,211
(2) UAAL after assumption changes adopted in conjunction with experience study	392,769,801	n/a
(3) + Normal Cost	14,171,031	15,625,430
(4) - Actual contributions	41,527,831	44,737,877
(5) + Interest accrual on (2), (3) and (4)	27,484,127	25,518,888
(6) Expected UAAL before changes	392,897,128	340,238,652
(7) Actual UAAL	356,395,535	348,232,387
(8) Experience gain (loss) (5) - (6)	36,501,593	(7,993,735)
(9) As % of beginning of year AAL <sup>2</sup>	3.8%	(0.8%)

<sup>1</sup> Unfunded actuarial accrued liability

<sup>2</sup> Actuarial accrued liability

## Solvency Test

Valuation Date	Aggregate Accrued Liabilities For			Valuation Assets	Portion of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Active Member Contributions	Retirants and Beneficiaries	Active Member (Employer Financed Portion)				
6-30-94	\$60,424,161	\$95,449,308	\$105,838,311	\$213,540,661	100.0%	100.0%	54.5%
6-30-95	66,316,408	102,511,728	113,211,848	237,712,863	100.0	100.0	60.8
6-30-96	72,294,235	109,572,672	118,739,900	266,740,007	100.0	100.0	71.5
6-30-97	78,991,358	119,508,312	128,878,531	304,684,444	100.0	100.0	82.4
6-30-98	85,106,175	129,345,816	134,514,294	353,056,577	100.0	100.0	103.0
6-30-99	92,367,491	139,805,832	168,050,794	402,875,158	100.0	100.0	101.6
6-30-00	100,413,022	150,527,136	186,809,583	453,953,722	100.0	100.0	108.7
6-30-01	108,696,394	161,740,968	224,921,223	470,671,667	100.0	100.0	89.0
6-30-02	118,913,979	187,508,568	247,524,186	463,101,526	100.0	100.0	63.3
6-30-03	110,195,709	275,193,384	215,784,329	458,856,831	100.0	100.0	34.0
6-30-04	123,643,527	286,698,084	235,009,321	494,986,798	100.0	100.0	36.0
6-30-05	135,346,297	298,395,396	260,129,138	538,788,828	100.0	100.0	40.4
6-30-06	140,387,532	326,828,088	268,577,863	588,227,845	100.0	100.0	45.1
6-30-07	136,028,896	371,497,680	256,012,354	634,763,193	100.0	100.0	49.7
6-30-08	125,331,432	473,240,976	223,632,380	650,227,215	100.0	100.0	23.1
6-30-09	133,633,947	494,923,021	230,928,190	665,298,494	100.0	100.0	15.9
6-30-10	140,224,998	525,200,232	239,055,106	641,818,551	100.0	95.5	0.0
6-30-11	119,049,097	614,497,202	195,062,492	624,664,880	100.0	82.3	0.0
6-30-12	122,240,396	607,450,331	211,247,995	597,106,511	100.0	78.2	0.0
6-30-13	138,342,388	609,558,963	200,661,102	600,330,066	100.0	75.8	0.0
6-30-14	142,418,791	647,811,688	222,162,858	655,997,802	100.0	79.3	0.0

## Comparative Schedule of Annual Pension Benefits Paid

Year Ending June 30	Retired Members	Annual Pensions	% Increase	No. of Active Per Retired	Pensions as % of Active Payroll	Average Monthly Pensions	Actuarial Present Value of Pensions	Expected Removals	
								No.	Pensions
1989*	780	\$5,344,719	17.6%	4.2#	6.6%	\$6,852	\$46,556,352	26.6	\$133,860
1990	832	6,488,714	21.4	3.9	7.5	7,799	57,430,128	28.5	150,864
1991*	918	8,111,103	25.0	3.5	9.3	8,836	72,419,436	29.8	172,608
1992	965	9,010,345	11.1	3.3	10.5	9,337	80,342,604	32.3	208,068
1993*	989	9,704,929	7.7	3.3	10.5	9,813	85,832,484	34.3	235,068
1994	1,035	10,612,612	9.4	3.2	11.3	10,254	95,449,308	35.8	263,340
1995*	1,065	11,429,402	7.7	3.1	11.4	10,732	102,511,728	35.8	270,600
1996	1,105	12,236,298	7.1	3.1	11.6	11,074	109,572,672	37.7	302,952
1997*	1,156	13,391,185	9.4	3.0	12.2	11,594	119,508,312	39.4	325,440
1998	1,208	14,479,476	8.1	2.9	12.7	11,986	129,345,816	42.4	370,344
1999*	1,260	15,721,865	8.6	2.8	12.4	12,478	139,805,832	44.2	402,504
2000*	1,301	16,966,042	7.9	2.8	12.7	13,041	150,527,136	46.2	445,464
2001*	1,355	18,505,247	9.1	2.7	12.8	13,657	161,740,968	47.1	484,776
2002*	1,442@	21,273,162	15.0	2.5	13.9	14,753	187,508,568	53.3	622,236
2003*	1,742~	29,767,500	39.9	1.9	20.8	17,088	275,193,384	58.2	742,908
2004*	1,753	30,491,864	2.4	2.0	20.4	17,394	286,698,084	55.7	717,888
2005*	1,793	32,027,305	5.0	2.0	19.8	17,862	298,395,396	58.3	781,152
2006*	1,878	35,091,468	9.6	1.7	22.5	18,686	326,828,088	61.1	857,760
2007*	2,018 <sup>§</sup>	39,883,032	13.7	1.6	25.0	19,764	371,497,680	66.3	977,328
2008	2,307	49,489,643	24.1	1.4	32.1	21,452	473,240,976	74.4	1,134,019
2009	2,365	50,810,927	2.7	1.3	33.9	21,485	494,923,021	63.8	994,553
2010	2,450	53,115,267	4.5	1.2	37.5	21,680	525,200,232	58.9	948,815
2011	2,709	61,710,576	16.2	1.0	50.7	22,780	614,497,202	63.5	1,059,171
2012	2,704	61,737,864	0.0	1.0	49.4	22,832	607,450,331	66.1	1,125,302
2013	2,719	62,548,233	1.3	1.0	49.7	23,004	609,558,963	69.0	1,200,744
2014	2,764	64,275,837	2.8	1.0	50.8	23,255	647,811,688	70.4	1,219,112

\*Includes ad hoc cost-of-living increases.

#Reflects increase in the number of active members as a result of an amendment which eliminated the one year service requirement for participation in the Retirement System.

@Reflects increase in the number of retirees resulting from a temporary amendment that reduced requirements for retirement eligibility.

~Reflects increase in the number of retirees resulting from temporary amendments that reduced requirements for retirement eligibility and provided added retirement incentives during a limited period.

§Reflects increase in the number of retirees resulting from temporary amendments that provided added retirement incentives during a limited period.

## Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Fiscal Year	Added to Rolls		Removed from Rolls		Rolls End of Year		Average Annual Allowance	Percentage Increase in Allowance
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowance		
6/30/2005	68	\$3,498,948	42	\$485,633	1,793	\$ 32,027,305	\$ 17,862	
6/30/2006	101	2,335,032	53	656,383	1,878	35,091,468	18,686	4.61%
6/30/2007	213	6,055,096	36	403,347	2,018	39,883,032	19,764	5.77%
6/30/2008	313	10,001,857	24	395,246	2,307	49,489,643	21,452	8.54%
6/30/2009	112	2,005,399	54	683,947	2,365	50,810,927	21,485	0.15%
6/30/2010	141	3,089,275	56	784,935	2,450	53,115,267	21,680	0.91%
6/30/2011	332	9,880,306	73	1,284,997	2,709	61,710,576	22,780	5.07%
6/30/2012	64	1,084,848	69	1,057,560	2,704	61,737,864	22,832	0.23%
6/30/2013	96	2,027,292	81	1,216,923	2,719	62,548,233	23,004	0.75%
6/30/2014	114	2,635,101	69	907,497	2,764	64,275,837	23,255	1.09%

## Summary of Benefit Provisions Evaluated or Considered (June 30, 2014)

### **Normal Retirement (NO REDUCTION FACTOR)**

#### **Eligibility:**

**Tier I** – Members hired before July 1, 2011. Age 62, or a combination of age and creditable service equal to 80 (for those hired on or after July 1, 2009, eligibility at age 62 requires a minimum of 5 years of accrued service).

**Tier II** - Members hired on or after July 1, 2011. Age 65, with 5 years of service or a combination of age and creditable service equal to 85 and the attainment of age 60.

**Amount** - Creditable service times 2.25% of average final compensation for Tier I and 2.00% of average final compensation for Tier II.

**Average Final Compensation** – The average monthly creditable compensation for the period of 36 consecutive months during which the member's creditable compensation was the highest during the 120 months immediately preceding the date of retirement for Tier I and 60 consecutive months immediately preceding the date of retirement for Tier II. Effective July 1, 2000, accrued unused sick leave at the final salary may be substituted for an equal number of hours at the beginning of the 36 month period for Tier I.

### **Early Retirement (REDUCTION FACTOR)**

**Eligibility** - Age 55 with 20 or more years of creditable service for Tier I and age 60 with 20 or more years of creditable service for Tier II.

**Amount** - An amount computed as for normal retirement but reduced by 1/2 of 1% per month for each month (6% per year) retirement precedes normal retirement.

### **Deferred Retirement (VESTED TERMINATION)**

Eligibility - 5 or more years of accrued service. Deferred retirement benefits for terminated vested employee becomes automatic at age 62 (age 65 for Tier II) or when a combination of age and creditable service equals 80 (85 with the attainment of age 60 for Tier II), unless the member elects to withdraw the employee contribution account in lieu of a deferred retirement benefit. In addition to the eligibility listed above, the term-vested member may chose an Early Retirement (minimum age of 55 for Tier I and 60 for Tier II and minimum service of 20 yrs) subject to the same reduction – reduced by ½ of 1% per month (6% per year) retirement precedes normal retirement eligibility.

**Amount** - An amount computed as for normal retirement.

### **Disability Retirement**

**Eligibility** – Eligibility requires 10 or more years of credited service and a disability that is total and permanent.

**Amount** - An amount computed as for normal retirement. Disability Retirement Benefits are offset, if the combination of all employer-provided benefits exceeds 100% of the members adjusted income base, then members pension benefit from TSRS is reduced so income does not exceed the 100% maximum allowed.

### ***Pre-Retirement Survivor Benefits***

**Eligibility** - 5 or more years of accrued service and not eligible to retire.

**Amount** - Lump sum payment equal to twice the member's contributions, with interest.

**Eligibility** – After attaining eligibility for retirement, in the event the member dies prior to submitting an application for retirement benefits:

**Amount** – If the member is married, a default provision allows the member's spouse to elect to receive either a lump sum payment of twice the member's contributions account, or receive a lifetime annuity benefit determined as if the member had elected a joint & last survivor benefit of 100% survivor annuity prior to death. If the member is not married and has named a single non-spousal beneficiary, the beneficiary may elect to receive either a lump sum payment of twice the member's contributions account, or receive a 15 year annuity benefit determined as if the member elected payment of a 15 year term certain annuity. If the member has named multiple designated beneficiaries, a lump sum refund of the member's account balance will be paid to the named beneficiaries.

### ***Other Termination Benefits***

**Eligibility** - termination of employment without eligibility for any other benefit.

**Amount** - accumulated contributions and interest in members account at time of termination.

### ***Employee Contributions***

Interest is credited to member accumulated contributions accounts as simple interest two times per year at an annual interest rate of 6%. For those hired prior to July 1, 2006, employee contributions are 5.00% of salary. For those hired between July 1, 2006 and June 30, 2011 (Tier I variable class), and for those hired after July 1, 2011 (Tier II variable class), employee contributions are 50% (up to 100%) of the respective Normal Cost for each class, with a floor of 5.0%. The employee contributions for the Tier I and Tier II variable classes for FY15/16 are 6.62% and 4.91% respectively, before application of the floor or roundup policy.

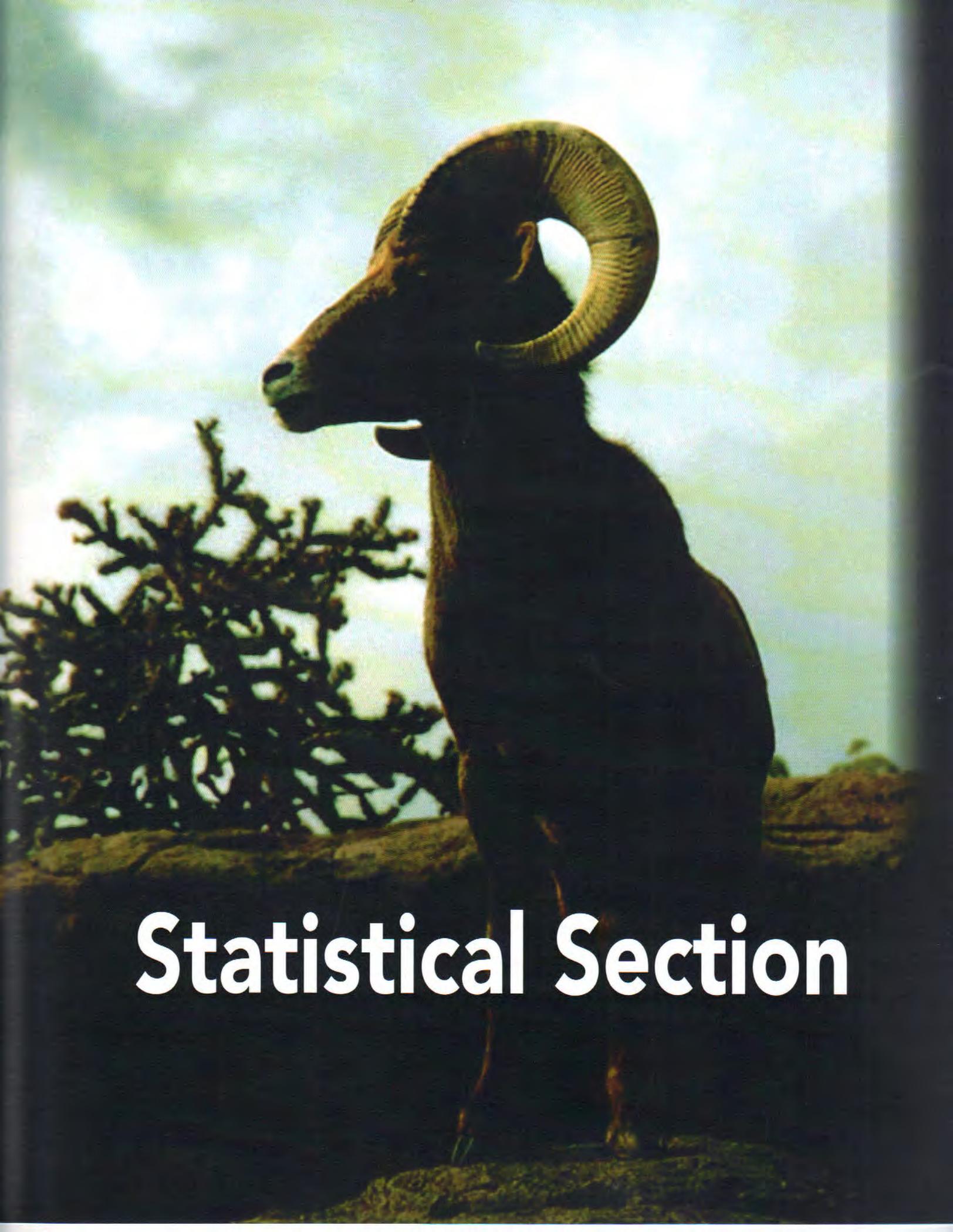
### ***City Contributions***

City Contributions are actuarially determined; which together with employee contributions and investment earnings will fund the obligations of the System in accordance with accepted actuarial principles.

### ***Post-Retirement Adjustments***

The TSRS Board has established formal policies to determine whether the system shall fund an annual supplemental post retirement benefit payment to retired members and beneficiaries.





# Statistical Section

## Discussion of Statistical Section

This section of the Tucson Supplemental Retirement System's comprehensive annual financial report (CAFR) provides detailed financial and non-financial information, often considered relevant to users. The statistical section presents certain information on a trend basis; that is, a summary of information that is provided for each year in a ten-year period. Other non-trend schedules present demographic and participation information for our active and retired membership. Each schedule is defined below with an explanation and an identification of the source of the data.

### Statement of Changes in Plan Net Position

This schedule provides the additions and deductions to the plan for the past ten years. The change in net position is provided to illustrate whether or not sufficient resources are available in the current fiscal year to cover plan benefits. This schedule is developed using the Statements of Changes in Plan Net Position for the past ten years.

### Retired Members by Type of Benefit

This schedule provides the number of retired members by type of benefit. The TSRS plan benefits include payments for normal retirement benefits, disability benefits, survivor benefits, and term certain benefits paid to members, beneficiaries and alternate payees. The schedule is developed using TSRS' database.

### Average Monthly Benefit Payments to New Retirees

This schedule provides the average monthly benefit payments made to new retirees, using six ranges of years of credited service by year. This information is provided to illustrate changes in benefit payments as the amount of service earned increases and indicates the number of employees retired during each of the last 10 years. This schedule is developed using TSRS' database.

### Demographics of Retired and Active Members

This schedule provides the age demographics of all retirees, survivors and beneficiaries of retired members for this year only. Similarly, age demographics for the systems active membership are indicated as well as the relative composition of membership categorized by Tier. This schedule is developed using TSRS' membership database.

### Employee and Employer Contribution Rates

This schedule provides the contribution rates paid by the Plan sponsor and by City employees during the past 10 years. This schedule is a historical summary of the actual rates paid.

### Benefit and Refund Deductions from Net Position by Type

This schedule provides the benefits paid to all service and disability retirees during each of the last 10 years. In addition, the lump sum payments to members elected to participate in the End of Service program since 2007 and refunds associated with member deaths, separation from service and transfers to other retirement systems are summarized. This schedule is developed using the Statements of Changes in Plan Net Position for the past ten years.

### Retiree Benefit and Service Summary

This schedule indicates average retiree benefits paid to retirees, based on the number of years retired, indicating eight age categories and the years of credited service served. This schedule is developed using TSRS' membership database.

**Tucson Supplemental Retirement System**  
**Statement of Changes in Plan Net Position - Last Ten Fiscal Years**

For the Fiscal Years Ending June 30,

	2014	2013	2012	2011	2010
<b>Additions</b>					
City Contributions	\$ 34,189,288	\$ 34,523,315	\$ 27,429,666	\$ 23,432,916	\$ 23,260,609
Employee Contributions	6,636,833	9,200,262	7,685,264	7,562,294	8,041,748
Purchase of Service	701,711	1,014,301	1,280,263	3,772,923	1,556,832
Contributions from Other Sources	-	-	50,000	50,000	50,000
Transfers from Other Systems	-	-	204,404	700,009	1,652,656
<b>Total Contributions</b>	<b>\$ 41,527,832</b>	<b>\$ 44,737,878</b>	<b>\$ 36,649,597</b>	<b>\$ 35,518,142</b>	<b>\$ 34,561,845</b>
<b>Investment Income</b>					
Net Gain (Loss) in Fair Value of Investments	\$ 111,063,362	\$ 73,705,613	\$ 566,661	\$ 106,114,437	\$ 40,143,355
Interest	5,901,539	4,174,559	6,319,874	6,361,246	7,441,435
Dividends	6,786,728	7,158,084	4,981,339	5,589,052	6,743,309
Real Estate Income	-	-	-	-	-
Securities Lending Income	134,036	184,733	157,562	124,158	91,625
Miscellaneous Income	91,630	98,400	16,833	45,681	3,640
<b>Net Income from Investment Activity</b>	<b>\$ 123,977,295</b>	<b>\$ 85,321,389</b>	<b>\$ 12,042,269</b>	<b>\$ 118,234,574</b>	<b>\$ 54,423,364</b>
<b>Less Investment Expenses:</b>					
Securities Lending Fees	\$ 54,589	\$ 78,604	\$ 68,370	\$ 35,027	\$ 25,401
Investment Services	4,022,476	3,805,861	3,460,730	3,871,641	4,096,007
<b>Total Investment Expense</b>	<b>\$ 4,077,065</b>	<b>\$ 3,884,465</b>	<b>\$ 3,529,100</b>	<b>\$ 3,906,668</b>	<b>\$ 4,121,408</b>
<b>Net Investment Gain</b>	<b>\$ 119,900,230</b>	<b>\$ 81,436,924</b>	<b>\$ 8,513,169</b>	<b>\$ 114,327,906</b>	<b>\$ 50,301,956</b>
<b>Total Additions</b>	<b>\$ 161,428,062</b>	<b>\$ 126,174,802</b>	<b>\$ 45,162,766</b>	<b>\$ 149,846,048</b>	<b>\$ 84,863,801</b>
<b>Deductions</b>					
Benefits	\$ 63,477,074	\$ 62,191,480	\$ 61,693,408	\$ 58,247,882	\$ 51,700,541
Refunds	2,524,939	2,631,221	2,247,225	2,350,626	2,110,360
Transfers to Other Systems	-	-	-	2,928,607	898,085
Administrative Expenses	735,739	689,252	550,604	728,642	672,622
<b>Total Deductions</b>	<b>\$ 66,737,752</b>	<b>\$ 65,511,953</b>	<b>\$ 64,491,237</b>	<b>\$ 64,255,757</b>	<b>\$ 55,381,608</b>
<b>Net Change in Plan Net Position</b>	<b>\$ 94,690,310</b>	<b>\$ 60,662,849</b>	<b>\$ (19,328,471)</b>	<b>\$ 85,590,291</b>	<b>\$ 29,482,193</b>

**Tucson Supplemental Retirement System**  
**Statement of Changes in Plan Net Position - Last Ten Fiscal Years**

For the Fiscal Years Ending June 30,

	2009	2008	2007	2006	2005
<b>Additions</b>					
City Contributions	\$ 21,279,535	\$ 23,902,286	\$ 22,670,418	\$ 24,319,911	\$ 21,423,488
Employee Contributions	8,156,115	8,591,124	8,120,057	8,197,437	7,638,608
Purchase of Service	1,565,164	5,186,289	1,008,980	1,157,572	1,972,509
Contributions from Other Sources	140,512	130,784	41,595	-	857,399
Transfers from Other Systems	1,589,190	2,012,917	3,794,093	620,601	-
<b>Total Contributions</b>	<b>\$ 32,730,516</b>	<b>\$ 39,823,400</b>	<b>\$ 35,635,143</b>	<b>\$ 34,295,521</b>	<b>\$ 31,892,004</b>
<b>Investment Income</b>					
Net Gain (Loss) in Fair Value of Investments	\$ (155,121,980)	\$ (50,256,771)	\$ 85,493,111	\$ 48,195,450	\$ 33,977,326
Interest	11,087,144	10,815,803	7,649,621	4,144,414	3,692,702
Dividends	7,219,584	10,009,694	9,537,064	8,187,034	9,779,723
Real Estate Income	-	-	-	-	-
Securities Lending Income	359,394	1,881,706	2,594,083	1,683,061	879,477
Miscellaneous Income	120,820	152,848	6,038	53,855	43,387
<b>Net Income from Investment Activity</b>	<b>\$ (136,335,038)</b>	<b>\$ (27,396,720)</b>	<b>\$ 105,279,917</b>	<b>\$ 62,263,814</b>	<b>\$ 48,372,615</b>
<b>Less Investment Expenses:</b>					
Securities Lending Fees	\$ 197,429	\$ 1,708,227	\$ 2,517,081	\$ 1,618,232	\$ 819,201
Investment Services	4,580,028	4,129,652	3,433,243	3,096,323	2,581,056
<b>Total Investment Expense</b>	<b>\$ 4,777,457</b>	<b>\$ 5,837,879</b>	<b>\$ 5,950,324</b>	<b>\$ 4,714,555</b>	<b>\$ 3,400,257</b>
<b>Net Investment Gain</b>	<b>\$ (141,112,495)</b>	<b>\$ (33,234,599)</b>	<b>\$ 99,329,593</b>	<b>\$ 57,549,259</b>	<b>\$ 44,972,358</b>
<b>Total Additions</b>	<b>\$ (108,381,979)</b>	<b>\$ 6,588,801</b>	<b>\$ 134,964,736</b>	<b>\$ 91,844,780</b>	<b>\$ 76,864,362</b>
<b>Deductions</b>					
Benefits	\$ 51,996,508	\$ 46,211,560	\$ 40,419,922	\$ 33,475,950	\$ 31,357,794
Refunds	1,689,956	1,265,235	1,573,276	1,219,263	1,229,267
Transfers to Other Systems	2,655,061	4,340,520	11,886,941	482,469	209,410
Administrative Expenses	864,382	519,346	485,469	433,350	389,303
<b>Total Deductions</b>	<b>\$ 57,205,907</b>	<b>\$ 52,336,661</b>	<b>\$ 54,365,608</b>	<b>\$ 35,611,032</b>	<b>\$ 33,185,774</b>
<b>Net Change in Plan Net Position</b>	<b>\$ (165,587,886)</b>	<b>\$ (33,321,180)</b>	<b>\$ 221,514,188</b>	<b>\$ 152,793,083</b>	<b>\$ 123,943,207</b>

**Tucson Supplemental Retirement System  
Retired Members by Type of Benefit  
As of June 30, 2014**

Amount of Monthly Benefit	Number of Retirees	Type of Retirement <sup>a</sup>				Option Selected <sup>b</sup>						
		1	2	3	4	1	2	3	4	5	6	7
\$ 1 - \$ 250	46	31	13	1	1	29	-	1	1	8	3	4
\$ 251 - \$ 500	174	99	38	16	21	107	2	2	5	24	7	27
\$ 501 - \$ 750	234	137	53	32	12	131	1	2	3	43	18	36
\$ 751 - \$ 1,000	232	145	48	32	7	124	-	1	-	49	18	40
\$ 1,001 - \$ 1,250	258	187	42	27	2	127	-	-	1	40	35	55
\$ 1,251 - \$ 1,500	231	187	29	13	2	99	1	1	1	45	33	51
\$ 1,501 - \$ 1,750	247	223	12	12	-	114	-	-	2	46	37	48
\$ 1,751 - \$ 2,000	262	241	9	11	1	110	-	3	1	55	40	53
\$ 2,001 - \$ 2,250	196	183	7	6	-	85	-	4	1	49	22	35
\$ 2,251 - \$ 2,500	185	179	2	4	-	77	-	-	1	50	18	39
\$ 2,501 - \$ 2,750	153	147	5	1	-	81	-	2	1	26	16	27
\$ 2,751 - \$ 3,000	108	106	1	1	-	63	-	-	-	13	15	17
\$ 3,001 - \$ 3,250	77	76	1	-	-	38	-	-	2	12	6	19
\$ 3,251 - \$ 3,500	50	49	1	-	-	26	-	-	-	8	8	8
\$ 3,501 - \$ 3,750	59	59	-	-	-	33	-	-	-	9	5	12
\$ 3,751 - \$ 4,000	40	39	1	-	-	24	-	-	1	2	3	10
\$ 4,001 - \$ 4,250	38	37	1	-	-	21	-	-	-	5	3	9
\$ 4,251 - \$ 4,500	31	31	-	-	-	18	-	-	-	5	6	2
\$ 4,501 - and over	143	142	1	-	-	72	-	1	2	25	18	25
	2,764	2,298	264	156	46	1,379	4	17	22	514	311	517

Notes:

<sup>a</sup>Type of retirement

- 1 - Normal retirement for age and service
- 2 - Beneficiary payment, normal retirement
- 3 - Disability retirement
- 4 - Beneficiary payment, disability retirement

<sup>b</sup>Option selected:

- 1 - Single life; beneficiary receives lump sum of member's unused contributions
- 2 - Beneficiary receives remainder of 5 yr term, if applicable
- 3 - Beneficiary receives remainder of 10 yr term, if applicable
- 4 - Beneficiary receives remainder of 15 yr term, if applicable
- 5 - Beneficiary receives 75% of member's reduced benefit
- 6 - Beneficiary receives 50% of member's reduced benefit

**Tucson Supplemental Retirement System**  
**Average Monthly Payments to New Retirees**  
**June 30, 2014**

Retirement Effective Dates For Fiscal Years Ending June 30	Years of Credited Service							
	<5	5-9	10-14	15-19	20-24	25-29	> 30	
2014								
Avg Monthly Benefit	n/a	\$ 635	\$ 1,024	\$ 1,665	\$ 2,364	\$ 2,693	\$ 4,188	
Avg Monthly Final Avg Comp.	n/a	\$ 4,040	\$ 4,005	\$ 4,255	\$ 4,870	\$ 4,617	\$ 6,061	
Number of Active/EOSP retirees	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2013								
Avg Monthly Benefit	\$ 507	\$ 578	\$ 1,275	\$ 1,669	\$ 2,060	\$ 2,956	\$ 3,876	
Avg Monthly Final Avg Comp.	\$ 5,609	\$ 3,077	\$ 4,497	\$ 4,121	\$ 4,041	\$ 4,680	\$ 5,124	
Number of Active/EOSP retirees	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2012*								
Avg Monthly Benefit	\$ 237	\$ 563	\$ 923	\$ 1,829	\$ 1,428	\$ 2,401	\$ 2,745	
Avg Monthly Final Avg Comp.	\$ 2,728	\$ 3,355	\$ 3,240	\$ 4,787	\$ 2,767	\$ 3,869	\$ 3,745	
Number of Active/EOSP retirees	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2011*								
Avg Monthly Benefit	\$ 519	\$ 560	\$ 964	\$ 1,913	\$ 2,303	\$ 2,998	\$ 3,780	
Avg Monthly Final Avg Comp.	\$ 2,865	\$ 3,350	\$ 3,352	\$ 4,774	\$ 4,509	\$ 4,899	\$ 5,044	
Number of Active/EOSP retirees	5	12	18	24	83	107	58	
2010*								
			1-9	10-14	15-19	20-24	25-29	>30
Avg Monthly Benefit			\$ 481	\$ 931	\$ 1,466	\$ 2,374	\$ 2,386	\$ 3,376
Avg Monthly Final Avg Comp.			\$ 3,229	\$ 2,976	\$ 3,841	\$ 5,148	\$ 4,251	\$ 4,871
Number of Active/EOSP retirees			23	16	13	35	23	13
2009*								
Avg Monthly Benefit		\$ 620	\$ 1,117	\$ 1,452	\$ 2,165	\$ 3,475	\$ 2,811	
Avg Monthly Final Avg Comp.		\$ 3,474	\$ 3,823	\$ 3,671	\$ 4,281	\$ 5,775	\$ 3,942	
Number of Active/EOSP retirees		14	13	12	23	15	9	
2008*								
Avg Monthly Benefit		\$ 645	\$ 1,076	\$ 1,502	\$ 2,258	\$ 3,133	\$ 3,944	
Avg Monthly Final Avg Comp.		\$ 4,302	\$ 4,542	\$ 3,869	\$ 5,094	\$ 5,310	\$ 6,222	
Number of Active/EOSP retirees		18	16	27	74	84	63	
2007								
Avg Monthly Benefit		\$ 648	\$ 725	\$ 1,360	\$ 2,010	\$ 2,999	\$ 3,730	
Avg Monthly Final Avg Comp.		\$ 3,947	\$ 2,922	\$ 3,687	\$ 4,258	\$ 5,086	\$ 5,589	
Number of Active Retirees		12	11	33	42	55	48	
2006								
Avg Monthly Benefit		\$ 610	\$ 802	\$ 1,304	\$ 1,974	\$ 3,141	\$ 4,001	
Avg Monthly Final Avg Comp.		\$ 4,046	\$ 2,803	\$ 3,245	\$ 4,006	\$ 4,970	\$ 5,561	
Number of Active Retirees		20	14	25	27	33	20	
2005								
Avg Monthly Benefit		\$ 563	\$ 912	\$ 1,095	\$ 1,803	\$ 3,291	\$ 3,615	
Avg Monthly Final Avg Comp.		\$ 3,518	\$ 3,722	\$ 3,017	\$ 3,884	\$ 5,623	\$ 4,883	
Number of Active Retirees		8	3	10	20	17	10	

\*includes EOSP Participants still employed and alternate payees receiving benefits

**Tucson Supplemental Retirement System  
Demographics of Retired and Active Members  
June 30, 2014**

**Retired Members**

Ages	Retirees			Survivors/Beneficiaries		
	Male	Female	Total	Male	Female	Total
Under 55	22	37	59	2	18	20
55 to 59	132	125	257	2	24	26
60 to 64	337	230	567	5	26	31
65 to 69	412	187	599	3	43	46
70 to 74	250	142	392	1	61	62
75 to 79	178	80	258	3	49	52
80 to 84	112	50	162	2	47	49
85 to 89	47	33	80	3	31	34
90 to 94	16	18	34	4	17	21
95 to 100	6	5	11	0	3	3
101 and over	0	1	1	-	-	-
<b>Total</b>	<b>1,512</b>	<b>908</b>	<b>2,420</b>	<b>25</b>	<b>319</b>	<b>344</b>

**Active Members**

Ages	Active Members			Percentage Distribution		
	Male	Female	Total	Male	Female	Total
Under 20	-	-	-	0.00%	0.00%	0.00%
20 to 29	77	87	164	2.84%	3.21%	6.04%
30 to 39	275	213	488	10.13%	7.85%	17.98%
40 to 49	434	369	803	15.99%	13.60%	29.59%
50 to 59	598	370	968	22.03%	13.63%	35.67%
60 to 69	201	81	282	7.41%	2.98%	10.39%
70 and over	6	3	9	0.22%	0.11%	0.33%
<b>Total</b>	<b>1,591</b>	<b>1,123</b>	<b>2,714</b>	<b>58.62%</b>	<b>41.38%</b>	<b>100.00%</b>

**Composition of Active TSRS Membership by Tier**

	<u>Membership</u>	<u>Payroll</u>	<u>% of Payroll</u>
Tier 1 - Fixed Contribution Rates	1,687	86,046,124	67.95%
Tier 1 - Variable Contribution Rates	404	16,760,682	13.23%
Tier 2 - Variable Contribution Rates	623	23,832,617	18.82%
	<u>2,714</u>	<u>126,639,423</u>	<u>100.00%</u>

**Tucson Supplemental Retirement System  
Employee and Employer Contribution Rates  
Last Ten Fiscal Years as of June 30, 2014**

Fiscal Year	Employee Rate (percentage)		Employer Rate (percentage)		Total Contribution (percentage)
	Fixed	Variable	Fixed	Variable	
02/03	5.0	n/a	8.41	n/a	13.41
03/04	5.0	n/a	11.17	n/a	16.17
04/05	5.0	n/a	14.06	n/a	19.06
05/06	5.0	n/a	14.83	n/a	19.83
06/07*	5.0	7.5	15.04	12.54	20.04
07/08*	5.0	8.084	15.21	12.126	20.21
08/09*	5.0	7.788	14.47	11.682	19.47
09/10*	5.0	8.852	17.13	13.278	22.13
10/11*	5.0	9.428	18.57	14.142	23.57
11/12*	5.0	11.62	24.05	17.43	29.05
12/13*	5.0	13.976	29.94	20.964	34.94
13/14 Tier I	5.0		27.32		32.32
13/14 <sup>1</sup> Tier I		6.715		25.605	32.32
13/14 <sup>1</sup> Tier II		5.06		27.26	32.32

\*Employees hired on or after July 1, 2006 pay a variable rate, which changes annually, to 40% of the actuarially recommended contribution rate (ARC) for the system.

Note 1 – Effective July 1, 2013, variable rates are based on the normal cost for the Benefit Tier of membership

**Tucson Supplemental Retirement System  
Benefit and Refund Deductions from Net Position by Type  
Last Ten Fiscal Years**

	fiscal years ended June 30,									
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
<b>Type of Benefit</b>										
Service Benefits:										
Retirees	\$ 57,542,260	\$ 56,406,478	\$ 48,475,837	\$ 51,377,474	\$ 45,580,606	\$ 40,123,580	\$ 39,940,472	\$ 31,993,340	\$ 28,946,679	\$ 27,440,364
EOSP lump sum <sup>(1)</sup>	-	-	7,656,801	1,517,252	997,448	6,805,342	1,495,136	4,069,547	-	-
Survivors <sup>(2)</sup>	3,533,539	3,397,302	3,166,737	2,951,507	2,757,941	2,700,791	2,499,152	2,236,330	2,229,540	1,860,300
Disability Benefits:										
Retirees	2,082,396	2,066,746	2,056,266	2,057,473	2,015,248	1,969,239	1,999,565	1,847,725	1,763,061	1,717,457
Survivors	318,879	320,954	337,767	344,176	349,299	397,556	277,235	272,980	536,670	339,672
<b>Total Benefits</b>	<b>\$ 63,477,074</b>	<b>\$ 62,191,480</b>	<b>\$ 61,693,408</b>	<b>\$ 58,247,882</b>	<b>\$ 51,700,541</b>	<b>\$ 51,996,508</b>	<b>\$ 46,211,560</b>	<b>\$ 40,419,922</b>	<b>\$ 33,475,950</b>	<b>\$ 31,357,794</b>
<b>Type of Refund</b>										
Death	\$ 212,489	\$ 316,495	\$ 310,994	\$ 305,536	\$ 250,047	\$ 299,778	\$ 96,935	\$ 70,309	\$ 147,588	\$ 86,361
Separation	1,871,535	2,281,823	1,936,231	2,045,089	1,860,312	1,390,177	1,168,300	1,502,967	1,219,264	1,225,670
Transfers	440,915	32,903	-	2,928,607	898,085	2,655,061	4,340,520	11,886,941	482,469	209,410
<b>Total Refunds</b>	<b>\$ 2,524,939</b>	<b>\$ 2,631,221</b>	<b>\$ 2,247,225</b>	<b>\$ 5,279,232</b>	<b>\$ 3,008,445</b>	<b>\$ 4,345,017</b>	<b>\$ 5,605,755</b>	<b>\$ 13,460,218</b>	<b>\$ 1,849,320</b>	<b>\$ 1,521,441</b>

<sup>(1)</sup> EOSP - An End of Service Program benefit option became available for the first time in FY2007, allowing retiring employees to accumulate up to one year's worth of benefit payments during their final year of employment

<sup>(2)</sup> Includes Death in service pension benefits

**Tucson Supplemental Retirement System  
Retiree Benefit and Service Summary**

# yrs Retired	Average Benefit (1)	Total Monthly Benefit pmts	# of Retirees (2)	Age at 6/30/14								Years of Credited Service		
				<55	55-59	60-64	65-69	70-74	75-79	80-84	85 +	<10	10-19	20>
<5	2,204	1,412,899	641	49	167	238	157	22	7	1	0	80	138	423
5 to 9	2,367	1,756,681	742	22	90	224	246	129	27	3	1	76	148	518
10 to 14	1,961	1,184,651	604	5	18	116	204	173	80	6	2	35	147	422
15 to 19	1,356	443,446	327	3	5	16	28	110	95	61	9	33	75	219
20 to 24	1,450	378,492	261	0	2	4	8	17	80	98	52	21	62	178
25 to 29	1,070	134,784	126	0	1	0	2	2	12	34	75	11	44	71
30>	720	45,368	63	0	0	0	0	1	9	8	45	12	24	27
		<u>5,356,321</u>	<u>2764</u>	<u>79</u>	<u>283</u>	<u>598</u>	<u>645</u>	<u>454</u>	<u>310</u>	<u>211</u>	<u>184</u>	<u>268</u>	<u>638</u>	<u>1858</u>

Notes:

- (1) Average Benefit for all retirees is \$1,938 per month
- (2) # of Retirees includes alternate payees and survivors

