AUSTIN POLICE<br>RETIREMENT SYSTEM<br>\section*{ACTUARIAL VALUATION}<br>AS OF DECEMBER 31, 2013

July 11, 2014
Mr. Sam Jordan, CEO
Austin Police Retirement System
2520 South IH 35, Suite 100
Austin, TX 78704
Re: Austin Police Retirement System
Dear Mr. Jordan:
We are pleased to present to the Board this report of the annual actuarial valuation of the Austin Police Retirement System. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year(s).

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects applicable laws and regulations issued to date at the state and federal level. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

In conducting the valuation, we have relied on personnel, plan design, financial reports, and asset information supplied by the System, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster \& Foster Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Austin, nor does anyone at Foster \& Foster Inc. act as a member of the Board of Trustees of the Austin Police Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster \& Foster Inc.

By:


Bradley R. Heihrichs, FSA, EA, MAAA
Enrolled Actuary \#11-6901

## BRH/lke

Enclosures

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## SUMMARY OF REPORT

The regular annual actuarial valuation of the Austin Police Retirement System, performed as of December 31, 2013, has been completed and the results are presented in this Report.

The pension costs, compared with those developed in the December 31, 2012 actuarial valuation report, are as follows:

|  | New Assums <br> Valuation Date | Old Assums <br> $12 / 31 / 13$ | Old Assums |
| :--- | :---: | :---: | :---: |
| Normal Cost <br> $\%$ of Total Annual Payroll | $21.775 \%$ | $22.324 \%$ | $\underline{12 / 31 / 12}$ |

As can be seen above, the funding period required to amortize the Unfunded Actuarial Accrued Liability initially increased from 29.4 to 32.4 years since the prior valuation. This increase is the result of a $6.8 \%$ investment return (Actuarial Asset Basis) that fell short of the $8.0 \%$ assumption, combined with the utilization of a more conservative approach in the manner that the present value of future salaries are calculated. The increase in the funding period was partially offset by favorable employee turnover experience, and average increases in compensation that were lower than the assumed rate.

In addition, the Board of Trustees approved reducing the general wage inflation assumption from $4.0 \%$ to $3.75 \%$ per year for purposes of projecting future individual salary increases. As shown, this resulted in a 3.5 year reduction in the required funding period. The details of the impact associated with implementing this assumption change are displayed in the comparative summary section of this report.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

## Respectfully submitted,

## FOSTER \& FOSTER INC.



## CHANGES SINCE PRIOR REPORT

## 1. Benefit Provisions

There have been no changes in benefits since the prior valuation.

## 2. Actuarial Assumptions/Methods

As approved by the Board of Trustees, there has been one change to the actuarial assumptions since the prior valuation, as follows:

- The expected increase in salary due to general wage increases has been lowered from $4.0 \%$ to $3.75 \%$ per year.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (Exclusive of Retiree Death Benefit Fund)

|  | New Assums | Old Assums | Old Assums |
| :--- | ---: | ---: | ---: |
| Valuation Date | $\underline{12 / 31 / 2013}$ | $\underline{12 / 31 / 2013}$ | $\underline{12 / 31 / 2012}$ |

A. Participant Data
Actives
Service Retirees +
Beneficiaries
QDRO
Disability Retirees
Terminated Vested

Total
Total Annual Payrol

Payroll Under Assumed Ret. Age
$145,794,226$
147,138,718
141,561,047

Annual Rate of Payments to:
Service
Benefi
QDRO
Disabil
Termi

Assets
Actuarial Value
Market Value
C. Liabilities
$604,841,897$
$594,421,396$
604,841,897
558,475,643
Market Value
$38,015,613$
$1,963,282$
404,654
136,509
690,455

38,015,613
35,193,018
Beneficiaries
1,963,282
1,916,217
QDRO
Disability Retirees
690,455
404,654 355,420
136,509
136,509
690,455
601,903
B. Assets

Present Value of Benefits
Active Members
Retirement Benefits

| $776,861,808$ |
| ---: |
| $1,578,491$ |
| $14,450,551$ |
| $15,854,778$ |
| $3,311,001$ |
| $409,602,939$ |
| $16,565,761$ |
| $4,231,168$ |
| $1,576,892$ |
| $2,653,245$ |
| $1,246,686,634$ |


| $793,234,565$ |
| ---: |
| $1,592,402$ |
| $14,712,995$ |
| $16,073,636$ |
| $3,318,373$ |
| $409,602,939$ |
| $16,565,761$ |
| $4,231,168$ |
| $1,576,892$ |
| $2,653,245$ |
| $1,263,561,976$ |

763,007,423
Vested Benefits
Death Benefits
Disability Benefits
Refund of Contributions
Service Retirees + DROP
Beneficiaries
QDRO
Disability Retirees
Terminated Vested
Total
$1,246,686,634$
$1, \overline{263,561,976}$
1,576,678
14,023,341
15,479,539
3,177,242
379,302,484
15,910,016
3,736,704
1,589,185
1,798,204
$1, \overline{199,600,816}$

| Valuation Date | New Assums 12/31/2013 | Old Assums $\underline{12 / 31 / 2013}$ | Old Assums $\underline{12 / 31 / 2012}$ |
| :---: | :---: | :---: | :---: |
| C. Liabilities - (Continued) |  |  |  |
| Present Value of Future Salaries | 1,607,918,167 | 1,635,619,798 | 1,682,723,298 |
| Normal Cost (Entry Age Normal) |  |  |  |
| Retirement Benefits | 28,232,155 | 28,976,799 | 27,412,662 |
| Vested Benefits | 130,716 | 131,907 | 129,014 |
| Death Benefits | 658,332 | 670,525 | 628,536 |
| Disability Benefits | 981,039 | 992,092 | 933,921 |
| Refund of Contributions | 488,679 | 489,248 | 457,658 |
| Total Normal Cost | 30,490,921 | 31,260,571 | 29,561,791 |
| Present Value of Future Normal Costs | 335,642,480 | 349,090,483 | 343,023,990 |
| Actuarial Accrued Liability |  |  |  |
| Retirement Benefits | 460,859,526 | 464,289,317 | 439,356,351 |
| Vested Benefits | 703,721 | 701,456 | 721,723 |
| Death Benefits | 7,459,487 | 7,484,536 | 7,015,678 |
| Disability Benefits | 6,588,624 | 6,571,116 | 6,366,009 |
| Refund of Contributions | 802,791 | 795,063 | 780,472 |
| Inactives | 434,630,005 | 434,630,005 | 402,336,593 |
| Total Actuarial Accrued Liability | 911,044,154 | $\overline{914,471,493}$ | $\overline{856,576,826}$ |
| Unfunded Actuarial Accrued Liability (UAAL) | 306,202,257 | 309,629,596 | 298,101,183 |
| D. Actuarial Present Value of Accrued Benefits |  |  |  |
| Vested Accrued Benefits |  |  |  |
| Inactives | 434,630,005 | 434,630,005 | 402,336,593 |
| Actives | 136,872,536 | 136,667,075 | 138,294,726 |
| Member Contributions | 139,714,509 | 139,714,509 | 129,963,192 |
| Total | 711,217,050 | 711,011,589 | 670,594,511 |
| Non-vested Accrued Benefits | 26,535,280 | 26,509,367 | 21,034,476 |
| Total Present Value Accrued Benefits | $\overline{737,752,330}$ | $\overline{737,520,956}$ | $\overline{691,628,987}$ |


| New Assums | Old Assums | Old Assums |
| ---: | ---: | ---: |
| $12 / 31 / 2013$ | $\underline{12 / 31 / 2013}$ | $\underline{12 / 31 / 2012}$ |


| Valuation Date | 12/31/2013 | 12/31/2013 | 12/31/2012 |
| :---: | :---: | :---: | :---: |
| E. Pension Cost |  |  |  |
| Normal Cost (with interest) |  |  |  |
| \% of Payroll Under Assumed Ret. Age* | 21.775 | 22.324 | 21.743 |
| Expected Member Contributions \% of Total Annual Payroll | 13.000 | 13.000 | 13.000 |
| City Normal Cost Rate |  |  |  |
| \% of Total Annual Payroll | 8.775 | 9.324 | 8.743 |
| Funding Period to Amortize UAAL ** | 28.9 years | 32.4 years | 29.4 years |
| F. 30-Year Funding Cost |  |  |  |
| Normal Cost (with interest) |  |  |  |
| \% of Payroll Under Assumed Ret. Age* | 21.775 | 22.324 | 21.743 |
| Payment Required to Amortize |  |  |  |
| Unfunded Actuarial Accrued |  |  |  |
| Liability over 30 years |  |  |  |
| \% of Total Annual Payroll | 12.506 | 12.646 | 12.655 |
| Total 30-Year Funding Cost |  |  |  |
| \% of Total Annual Payroll | 34.281 | 34.970 | 34.398 |

F. 30-Year Funding Cost\% of Payroll Under Assumed Ret. Age*21.77522.32421.743Payment Required to AmortizeUnfunded Actuarial AccruedLiability over 30 years\% of Total Annual Payroll12.50634.97034.398

* Contributions developed above include $0.025 \%$ of payroll for assumed additional administrative expenses forparticipation in the Proportionate Retirement Program
** The period required to amortize the UAAL was calculated based on the City's currently scheduled annualcontribution rate to the Fund of $21.63 \%$ of total payroll, less the calculated contribution rate required to fundthe Retiree Death Benefit Fund.


## COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (Retiree Death Benefit Fund)

| Valuation Date | New Assums 12/31/2013 | Old Assums 12/31/2013 | Old Assums 12/31/2012 |
| :---: | :---: | :---: | :---: |
| Present Value of Benefits |  |  |  |
| Active Members | 1,108,914 | 1,108,914 | 1,078,255 |
| Retired and Terminated Vested Members | 1,900,139 | 1,900,139 | 1,768,327 |
| Total | 3,009,053 | 3,009,053 | 2,846,582 |
| Present Value of Future Normal Costs | 461,737 | 467,799 | 473,410 |
| Normal Cost | 43,669 | 43,836 | 41,981 |
| Actuarial Accrued Liability | 2,547,316 | 2,541,254 | 2,373,172 |
| Asset Value of Fund | 689,006 | 689,006 | 601,764 |
| Unfunded Actuarial Accrued Liability (UAAL) | 1,858,310 | 1,852,248 | 1,771,408 |
| Payment Required to Amortize Unfunded Actuarial Accrued Liability over 22 years (as of $12 / 31 / 13$ ) |  |  |  |
|  |  |  |  |
| \% of Total Annual Payroll | 0.090 | 0.090 | 0.087 |
| Normal Cost (with interest) |  |  |  |
| \% of Total Annual Payroll | 0.031 | 0.031 | 0.031 |
| Total Required City Contribution Rate |  |  |  |
| Allocated to the Retiree Death Benefit Fund \% of Total Annual Payroll | 0.121 | 0.121 | 0.118 |

* The Retiree Death Benefit Fund was established effective September 1, 2003. The Fund operates as a separate account within the system that is used to advance fund and to pay the $\$ 10,000$ post-retirement lump sum death benefits for retirees.


## GAIN/LOSS ANALYSIS <br> (Exclusive of Retiree Death Benefit Fund)

## a. Total Gain/(Loss)

1. UAAL, Beginning of Year ..... 298,101,183
2. Normal Cost Applicable for Year ..... 29,561,791
3. Interest on (1) and (2) ..... 26,213,038
4. Contributions During Year ..... 50,475,335
5. Interest on (4) ..... 1,980,172
6. Expected UAAL, End of Year: (1) $+(2)+(3)-(4)-(5)$ ..... 301,420,505
7. Actual UAAL, End of Year (Before Assumption Change) ..... 309,629,596
Total Actuarial Gain/(Loss)$(8,209,091)$
b. Gain/(Loss) on Assets
8. Actuarial Value of Assets (AVA), Beginning of Year ..... 558,475,643
9. Contributions Less Benefit Payments ..... 7,714,635
10. Expected Investment Earnings ..... 44,980,700
11. Expected AVA, End of Year: (1) $+(2)+(3)$ ..... 611,170,978
12. Actual Actuarial Value of Assets, End of Year ..... 604,841,897
Gain/(Loss) on Assets ..... $(6,329,081)$
c. Gain/(Loss) on Liabilities
13. Expected Actuarial Accrued Liability: $a(6)+b(4)$ ..... 912,591,483
14. Actual Actuarial Accrued Liability (Before Assumption Change) ..... 914,471,493
Gain/(Loss) on Liabilities$(1,880,010)$
$\left.\begin{array}{ll}\text { Mortality Rates - All Lives } & \begin{array}{l}\text { RP-2000 Combined Healthy without projection - Sex } \\ \text { Distinct. Based on a study of over 650 public safety } \\ \text { funds, this table reflects a 10\% margin for future } \\ \text { mortality improvements. }\end{array} \\ \text { Interest Rate } & \begin{array}{l}\text { 8.0\% per year, compounded annually, net of all } \\ \text { expenses. }\end{array} \\ \text { Core Inflation } & \begin{array}{l}\text { 3.75\% per year. }\end{array} \\ \text { Payroll Growth } & \begin{array}{l}\text { 3.5\% per year for amortization of the Unfunded } \\ \text { Actuarial Accrued Liability. }\end{array} \\ \text { Administrative Expenses (PRP) } & \begin{array}{l}\text { 0.025\% of payroll for assumed additional } \\ \text { administrative expenses for participation in the }\end{array} \\ \text { Prop Election } & \begin{array}{l}\text { Proportionate Retirement Program. }\end{array} \\ \text { 75\% of those assumed to retire who are eligible for at } \\ \text { least a 12-month DROP lump sum will make such an } \\ \text { election (RETRO) or will have made such an election } \\ \text { (FORWARD). See following tables for allocation }\end{array}\right\}$

Disability Rates

Salary Increases
Pre-Retirement Death Payment Form

See following tables. $55 \%$ of disablements are assumed to be service related.

See following tables.
Married: Joint and $100 \%$ to Survivor Single: 15 -Year Certain and Life Annuity

## Retirement Rates

| For Entry Ages Under 32 $^{1}$ |  |  |  |  |  |  | For Entry Ages 33 and Above |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| APRS <br> Service | 22 \& Un- <br> der | $23-27$ | $28-32$ | AGE | $33-37$ | $38-42$ | 43 \& Over |  |  |  |
| $\mathbf{0 - 2 2}$ | 0.05 | 0.05 | 0.05 | $\mathbf{3 3 - 3 7}$ | 0.10 |  |  |  |  |  |
| $\mathbf{2 3}$ | 0.15 | 0.15 | 0.225 | $\mathbf{3 8 - 4 2}$ | 0.10 | 0.10 |  |  |  |  |
| $\mathbf{2 4}$ | 0.10 | 0.10 | 0.15 | $\mathbf{4 3 - 4 7}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{2 5}$ | 0.10 | 0.10 | 0.15 | $\mathbf{4 8}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{2 6}$ | 0.15 | 0.15 | 0.25 | $\mathbf{4 9}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{2 7}$ | 0.15 | 0.15 | 0.25 | $\mathbf{5 0}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{2 8}$ | 0.25 | 0.25 | 0.25 | $\mathbf{5 1}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{2 9}$ | 0.25 | 0.25 | 0.30 | $\mathbf{5 2}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 0}$ | 0.30 | 0.30 | 0.40 | $\mathbf{5 3}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 1}$ | 0.30 | 0.30 | 0.50 | $\mathbf{5 4}$ | 0.10 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 2}$ | 0.30 | 0.30 | $1.00^{2}$ | $\mathbf{5 5}$ | 0.20 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 3}$ | 0.30 | 0.30 |  | $\mathbf{5 6}$ | 0.25 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 4}$ | 0.40 | 0.40 |  | $\mathbf{5 7}$ | 0.30 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 5}$ | 0.40 | 0.50 |  | $\mathbf{5 8}$ | 0.35 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 6}$ | 0.40 | 0.50 |  | $\mathbf{5 9}$ | 0.50 | 0.10 | 0.10 |  |  |  |
| $\mathbf{3 7}$ | 0.50 | $1.00^{2}$ |  | $\mathbf{6 0}$ | 1.00 | 0.50 | 0.10 |  |  |  |
| $\mathbf{3 8}$ | 0.50 |  |  | $\mathbf{6 1}$ |  | 0.35 | 0.10 |  |  |  |
| $\mathbf{3 9}$ | 0.50 |  |  | $\mathbf{6 2}$ |  | 0.35 | 0.80 |  |  |  |
| $\mathbf{4 0}$ | 0.50 |  |  | $\mathbf{6 3}$ |  | 0.35 | 0.40 |  |  |  |
| $\mathbf{4 1}$ | 0.50 |  |  | $\mathbf{6 4}$ |  | 0.35 | 0.40 |  |  |  |
| $\mathbf{4 2}$ | $1.00^{2}$ |  |  | $\mathbf{6 5}$ |  | 1.00 | 1.00 |  |  |  |

${ }^{1}$ Rates are based on APRS service only and apply after a Member is eligible for retirement with combined APRS and Proportionate Retirement Program (PRP) service. Entry ages are determined based on APRS service only.
${ }^{2} 100 \%$ retirement rate will be effective at age 60 , if earlier.
${ }^{3}$ Rates are based on age and apply after a Member is eligible for retirement with combined APRS and PRP service. Entry ages are determined based on APRS service only.

## Termination Rates

Combined Years of Service ${ }^{1}$ Probability of Termination During Year00.05
1 ..... 0.02
2 ..... 0.02
3 ..... 0.02
4 ..... 0.02
5 ..... 0.02
6 ..... 0.02
7 ..... 0.02
8 ..... 0.02
9 ..... 0.02
10 ..... 0.01
11 ..... 0.01
12 ..... 0.005
13 ..... 0.005
14 ..... 0.005
15 \& Above ..... 0
${ }^{1}$ APRS service combined with Proportionate Retirement Program service.

## Disability Rates

Age
20
22
24
26
28

## 30

## 32

## 34

## 36

## 38

## 40

## 42

44

## 46

48
50
50
52
54
56
58
58
60
62 \& Above62 \& Above
Probability of Disablement During Year
0.00014
0.00016
0.00018
0.00021
0.00025
0.00031
0.00040
0.00049
0.00054
0.00062
0.00092
0.00132
0.00173
0.00255
0.00334
0.00379
0.00404
0.00456
0.00532
0.00660
0.009110

## Salary Increases

Years of Service Increase in Salary ${ }^{1}$
0 ..... 18.0\%
1 ..... 11.2
2 ..... 5.8
3 ..... 0.9
4 ..... 0.9
5 ..... 7.1
6 ..... 0.5
7 ..... 0.5
8 ..... 0.5
9 ..... 7.1
10 ..... 0.3
11 ..... 0.3
12 ..... 0.3
13 ..... 7.1
14 ..... 0.2
15 ..... 7.2
16 ..... 0.2
17 ..... 0.1
18 ..... 0.1
19 ..... 0.1
20 ..... 0.1
21 ..... 0.1
22 ..... 0.1
23 ..... 0.1
24 ..... 0.1
25 \& Above ..... 0.0
${ }^{1}$ Expected increases in salary as shown above are in addition to $3.75 \%$ (previously 4.0\%) increase per yeardue to general wage increases.

## Retirement Option Election

| Service at Termination | No DROP | RETRO DROP | FORWARD DROP |
| :---: | :---: | :---: | :---: |
| of Employment | Elected ${ }^{1}$ | Elected | Elected |
| 23 or less | 100\% | 0\% | 0\% |
| 24 | 25 | 75 | 0 |
| 25 | 25 | 65 | 10 |
| 26 | 25 | 60 | 15 |
| 27 | 25 | 55 | 20 |
| 28 | 25 | 55 | 20 |
| 29 | 25 | 55 | 20 |
| 30 | 25 | 55 | 20 |
| 31 | 25 | 55 | 20 |
| 32 | 25 | 55 | 20 |
| 33 | 25 | 60 | 15 |
| 34 | 25 | 65 | 10 |
| 35 | 25 | 75 | 0 |
| 36 | 25 | 75 | 0 |
| 37 | 25 | 75 | 0 |
| 38 | 25 | 75 | 0 |
| 39 | 25 | 75 | 0 |
| 40 | 25 | 75 | 0 |
| 41 | 25 | 75 | 0 |
| 42 | 25 | 75 | 0 |

${ }^{1}$ Police officers elect a type of service retirement benefit that does not include payment of a lump sum distribution.

## VALUATION NOTES

Total Annual Payroll is the annual rate of pay as of the valuation date of all active participants.

Payroll under Assumed Retirement Age is the annual rate of pay as of the valuation date of all active participants who are not subject to a $100 \%$ probability of retirement on the valuation date.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation. The funding span utilized in determination of the normal cost rate for each benefit is to the last age at which that benefit is payable.
(a) The normal cost accrual rate equals:
(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age .
(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

## STATEMENT OF FIDUCIARY NET POSITION

## DECEMBER 31, 2013

ASSETSMARKET VALUE
Cash and Cash Equivalents:
Short Term Investments ..... 8,627,567.48
Checking Account ..... $119,553.73$
Prepaid Expenses ..... 5,467.00
Total Cash and Equivalents ..... 8,752,588.21
Receivables:
Member Contributions ..... 881,414.79
Member Buy-Back Contributions ..... 10,157.01
City Contributions ..... 1,466,538.60
Investment Income ..... 2,638,959.91
Total Receivable ..... $4,997,070.31$
Investments:
Partnership Interests ..... 39,800,964.00
Corporate Bonds ..... 31,313,961.00
Corporate Stocks ..... 262,015,944.83
International Stocks ..... 32,018,930.00
International Government Securities ..... 36,834,768.79
Real Estate Interests ..... $129,019,250.00$
Mutual Funds:
Alternatives ..... 51,580,614.00
Total Investments ..... $582,584,432.62$
Retiree Death Benefit Fund ..... 689,005.84
Net Fixed Assets ..... 528,700.69
Total Assets ..... 597,551,797.67
LIABILITIES
Payables:
Refunds of Member Contributions ..... 126,060.46
Other ..... 2,315,335.19
Total Liabilities ..... $2,441,395.65$
NET POSITION RESTRICTED FOR PENSIONS ..... $595,110,402.02$

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED DECEMBER 31, 2013 Market Value Basis

ADDITIONS
Contributions:Member18,731,630.86
Buy-Back ..... 736,328.70
City30,136,241.70
City for Proportionate Retirement Program ..... 871,133.99
City for Retiree Death Benefit ..... 153,388.67
Total Contributions ..... 50,628,723.92
Investment Income:
Net Increase in Fair Value of Investments ..... 46,660,294.84
Interest \& Dividends ..... $5,189,718.18$
Less Investment Expense ${ }^{1}$ ..... (2,325,862.97)
Net Investment Income ..... 49,524,150.05
Total Additions ..... $100,152,873.97$
DEDUCTIONS
Distributions to Members:
Benefit Payments ..... 36,291,927.75
Lump Sum DROP and PROP Distributions ..... 5,515,025.38
Retiree Death Benefits ..... 64,565.22
Refunds of Member Contributions ..... 953,746.74
Total Distributions ..... 42,825,265.09
Administrative Expense ..... 1,114,855.97
Total Deductions ..... 43,940,121.06
Net Increase in Net Position ..... 56,212,752.91
NET POSITION RESTRICTED FOR PENSIONS
Beginning of the Year ..... 538,897,649.11
End of the Year ..... 595,110,402.02
${ }^{1}$ Investment Related expenses include investment advisory, custodial and performance monitoring fees.

## ACTUARIAL ASSET VALUATION <br> December 31, 2013

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, $20 \%$ of the gain or loss is recognized. In the second year $40 \%$, in the third year $60 \%$, in the fourth year $80 \%$, and in the fifth year $100 \%$ of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than $80 \%$ nor greater than $120 \%$ of Market Value of Assets.

| Gains/(Losses) Not Yet Recognized |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan Year |  | Amounts Not Yet Recognized by Valuation Year |  |  |  |  |
| Ending | Gain/(Loss) | 2014 | 2015 | 2016 | 2017 | 2018 |
| 12/31/2010 | 16,389,018 | 3,277,804 | 0 | 0 | 0 | 0 |
| 12/31/2011 | $(56,982,781)$ | $(22,793,112)$ | $(11,396,556)$ | 0 | 0 | 0 |
| 12/31/2012 | 8,502,880 | 5,101,728 | 3,401,152 | 1,700,576 | 0 | 0 |
| 12/31/2013 | 4,991,349 | 3,993,079 | 2,994,809 | 1,996,540 | 998,270 | 0 |
| Total |  | $(10,420,501)$ | $(5,000,595)$ | 3,697,116 | 998,270 | 0 |
| Development of Investment Gain/Loss |  |  |  |  |  |  |
| Market Value | ets, including R | Death Benefit | und, 12/31/20 |  | 538,897,649 |  |
| Contributions | Benefit Payment |  |  |  | 7,803,459 |  |
| Expected Inves | Earnings* |  |  |  | 43,417,945 |  |
| Actual Net Inv | nt Earnings |  |  |  | 48,409,294 |  |
| 2014 Actuarial | tment Gain/(Lo |  |  |  | 4,991,349 |  |
| *Expected Investment Earnings $=0.08 * 538,897,649+\left[(1+0.08){ }^{\wedge} 0.5-1\right] * 7,803,459$ |  |  |  |  |  |  |
| Development of Actuarial Value of Assets |  |  |  |  |  |  |
| (1) Market Va | Assets, includi | tiree Death Be | fit Fund, 12/3 |  | 595,110,402 |  |
| (2) Gains/(Los | Not Yet Recogniz |  |  |  | (10,420,501) |  |
| (3) Actuarial | of Assets, 12/31/21 | 3, (1)-(2) |  |  | 605,530,903 |  |
| (A) $12 / 31 / 2012$ | arial Assets, in | Retiree Deat | Benefit Fund: |  | 559,077,407 |  |
| (I) Net Investment Income: |  |  |  |  |  |  |
| 1. Interest, | nds and Misc In |  |  |  | 6,911,061 |  |
| 2. Realized | (Losses) |  |  |  | 27,223,004 |  |
| 3. Change in | urial Value |  |  |  | 7,869,448 |  |
| 4. Investme | Administrative | enses |  |  | $(3,440,719)$ |  |
|  | Total |  |  |  | 38,562,795 |  |
| (B) $12 / 31 / 2013$ Actuarial Assets, including Retiree Death Benefit Fund: 605,530,903 |  |  |  |  |  |  |
| Actuarial Asse | of Return = 2 L | B-I): |  |  | 6.8\% |  |
| Market Value | ets Rate of Retu |  |  |  | 8.9\% |  |
| 12/31/2013 Limited Actuarial Assets, including Retiree Death Benefit Fund: |  |  |  |  | 605,530,903 |  |
| 12/31/2013 | ed Net Actuaria | ets, excluding | tiree Death Be | Fund: | 604,841,897 |  |

# CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS <br> DECEMBER 31, 2013 <br> Actuarial Asset Basis 

## REVENUES

| Contributions: |  |  |
| :---: | :---: | :---: |
| Member | 18,731,630.86 |  |
| Buy-Back | 736,328.70 |  |
| City | 30,136,241.70 |  |
| City for Proportionate Retirement Program | 871,133.99 |  |
| City for Retiree Death Benefit | 153,388.67 |  |
| Total Contributions |  | 50,628,723.92 |
| Earnings from Investments: |  |  |
| Interest \& Dividends | 5,189,718.18 |  |
| Miscellaneous Income | 1,721,343.24 |  |
| Net Realized Gain (Loss) | 27,223,004.08 |  |
| Change in Actuarial Value | 7,869,448.45 |  |
| Total Earnings and Investment Gains |  | 42,003,513.95 |
| EXPENDITURES |  |  |
| Distributions to Members: |  |  |
| Benefit Payments | 36,291,927.75 |  |
| Lump Sum DROP and PROP Distributions | 5,515,025.38 |  |
| Retiree Death Benefits | 64,565.22 |  |
| Refunds of Member Contributions | 953,746.74 |  |
| Total Distributions |  | 42,825,265.09 |
| Expenses: |  |  |
| Investment Related ${ }^{1}$ | 2,325,862.97 |  |
| Administrative | 1,114,855.97 |  |
| Total Expenses |  | 3,440,718.94 |
| Change in Net Assets for the Year |  | 46,366,253.84 |
| Net Assets Beginning of the Year |  | 558,475,643.34 |
| Net Assets End of the Year ${ }^{2}$ |  | 604,841,897.18 |

Net Assets End of the Year ${ }^{2}$ $604,841,897.18$
${ }^{1}$ Investment Related expenses include investment advisory, custodial and performance monitoring fees.
${ }^{2}$ Net Assets may be limited for actuarial consideration, and exclude the Retiree Death Benefit Fund of $\$ 689,005.84$.

## VALUATION PARTICIPANT RECONCILIATION

## 1. Active lives

a. Number in prior valuation 12/31/12 1709
b. Terminations
i. Vested (partial or full) with deferred 6 benefits
ii. Non-vested or full lump sum distribution 18 received
c. Deaths
i. Beneficiary receiving benefits 0
ii. No future benefits payable 1
d. Disabled 0
e. Retired 37
f. DROP 3
g. Continuing participants 1644
h. New entrants 88
i. Total active life participants in valuation 1732
2. Non-Active lives (including beneficiaries receiving benefits)

|  | Service <br> Retirees, DROP Participants | Receiving Death Benefits | Receiving Disability Benefits | Receiving <br> QDRO <br> Benefits | Vested Deferred | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Number prior valuation | 575 | 44 | 4 | 25 | 23 | 671 |
| b. In | 40 | 4 | 0 | 2 | 6 | 52 |
| c. Out | 9 | 2 | 0 | 0 | 3 | 14 |
| d. Number current valuation | 606 | 46 | 4 | 27 | 26 | 709 |

## STATISTICAL DATA

|  | $12 / 31 / 2011$ |  | $12 / 31 / 2012$ |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | $12 / 31 / 2013$ |  |  |
| Actives | 1,679 |  | 1,709 |  |
| Average Current Age | 39.7 |  | 39.6 |  |
| Average Age at Employment | 28.0 |  | 28.9 |  |
| Average Past Service | 11.7 |  | 11.5 | 28.9 |
| Average Annual Salary | $\$ 79,636$ |  | $\$ 82,079$ | $\$ 84,221$ |

## AGE AND SERVICE DISTRIBUTION

## PAST SERVICE

| AGE | 0 | 1 | 2 | 3 | 4 | $5-9$ | $10-14$ | $15-19$ | $20-24$ | $25-29$ | $30+$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $15-19$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $20-24$ | 6 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| $25-29$ | 22 | 37 | 43 | 8 | 18 | 23 | 0 | 0 | 0 | 0 | 0 | 151 |
| $30-34$ | 38 | 28 | 37 | 12 | 45 | 157 | 15 | 2 | 0 | 0 | 0 | 334 |
| $35-39$ | 11 | 15 | 12 | 12 | 24 | 81 | 165 | 26 | 0 | 0 | 0 | 346 |
| $40-44$ | 3 | 4 | 5 | 3 | 27 | 53 | 134 | 145 | 17 | 0 | 0 | 391 |
| $45-49$ | 1 | 0 | 1 | 1 | 16 | 24 | 65 | 90 | 91 | 2 | 0 | 291 |
| $50-54$ | 0 | 0 | 0 | 0 | 9 | 6 | 20 | 26 | 59 | 35 | 0 | 155 |
| $55-59$ | 0 | 0 | 0 | 0 | 7 | 2 | 3 | 6 | 20 | 9 | 3 | 50 |
| $60-64$ | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| $65+$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Creditable Service

## Earnings

Average Final Compensation

## Member Contributions

City Contributions

## Normal Retirement

Date

Benefit

Form of Benefit

## Vesting

Schedule
Benefit Amount

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

Base pay, plus longevity pay.
Average Earnings for the highest 36 months over the last 120 months of service.
$13.0 \%$ of Earnings.
21.63\%, effective October 1, 2012.

Earlier of age 62, age 55 and 20 years of Creditable Service, or 23 years of Creditable Service, regardless of age (excluding military service).
$3.20 \%$ of Average Final Compensation times Creditable Service.

Modified Cash Refund (options available).
$100 \%$ after 10 years of Creditable Service.
Member will receive his (her) accrued benefit payable at the Normal Retirement Date based upon actual Creditable Service prior to termination.

Non-vested members receive a refund of accumulated contributions.

## Disability

Eligibility

Benefit

Total and permanent as determined by the Board. Members must have 10 years of Creditable Service if the disability was nonservice related.

Accrued benefit at date of disability, but not less than 64\% of Average Final Compensation for service related disablements.

Form of Benefit

## Death Benefits

Before Retirement Eligibility

After Retirement Eligibility

## Retiree Death Benefit Fund

Cost of Living Adjustment
Eligibility
Amount

Proportionate Retirement Program

Modified Cash Refund (options available).

Twice the amount of the Member's accumulated contributions, subject to a minimum of $\$ 10,000$.

Member's accrued benefit as of the date of death, payable based on optional annuity selected either by Member or beneficiary. Additionally, a lump sum death benefit is payable in the amount of $\$ 10,000$.

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

## Normal Retirement.

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

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

## Forward DROP

## Eligibility

## Participation Period

Rate of Return
Form of Distribution

## Retro DROP

Participation Period

Rate of Return
Form of Distribution

Completion of 23 years of Creditable Service, excluding military service.

Not to exceed 60 months.
5.0\%, compounded annually.

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

Completion of 23 years of Creditable Service, excluding military service.

Upon election to retroactively enter DROP, the Retro DROP period will not exceed 36 months.
$5.0 \%$, compounded annually.
Cash lump sum (or rollover to PROP account) at termination of employment.

## DISCLOSURE INFORMATION PER STATEMENT NO. 25 OF THE

 GOVERNMENTAL ACCOUNTING STANDARDS BOARDThe schedule provided below has been prepared in accordance with the requirements of paragraph 37 of Statement No. 25 of the Governmental Accounting Standards Board.

SCHEDULE OF FUNDING PROGRESS


The schedule provided below has been prepared in accordance with the requirements of paragraph 38 of Statement No. 25 of the Governmental Accounting Standards Board.

## SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER AND OTHER CONTRIBUTING ENTITIES

$\left.\begin{array}{ccccc}\begin{array}{c}\text { Year } \\ \text { Ended } \\ \text { September 30 }\end{array} & \begin{array}{c}\text { Annual Required } \\ \text { Contribution } \\ \text { (\% of Pay) }\end{array} & & \begin{array}{c}\text { City } \\ \text { Contribution } \\ \text { (\% of Pay) }\end{array} & \end{array} \begin{array}{c}\text { Percentage } \\ \text { Contributed }\end{array}\right]$

## DISCLOSURE INFORMATION PER STATEMENT NO. 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

## ANNUAL PENSION COSTS AND RELATED INFORMATION

## THREE YEAR TREND INFORMATION

| Fiscal Year <br> Ending | Annual <br> Pension Cost <br> $(\mathrm{APC})$ | Percentage of <br> APC <br> Contributed | Net Pension <br> Obligation |
| :---: | :---: | :---: | :---: |
| $9 / 30 / 2013$ |  |  |  |
| $9 / 30 / 2012$ | $28,686,821$ | $106.9 \%$ | $(9,028,066)$ |
| $9 / 30 / 2011$ | $26,409,663$ | $105.3 \%$ | $(7,039,826)$ |
|  | $22,269,355$ | $117.3 \%$ | $(5,640,531)$ |

## DEVELOPMENT OF NET PENSION OBLIGATION (NPO)

| Fiscal Year Ending |  | 9/30/2011 | 9/30/2012 | 9/30/2013 |
| :---: | :---: | :---: | :---: | :---: |
| Annual Required |  |  |  |  |
| Contribution (ARC - \%) |  | 16.776\% | 19.698\% | 20.343\% |
| City Contribution Rate (\%) |  | 19.630\% | 20.630\% | 21.630\% |
| Actual Contributions Made (\$) |  | 26,111,254 | 27,808,958 | 30,675,061 |
| City ARC (\$) |  | 22,314,946 | 26,552,635 | 28,849,874 |
| Interest on NPO |  | $(143,891)$ | $(451,242)$ | $(563,186)$ |
| Adjustment to ARC |  | 98,300 | 308,270 | 400,133 |
| Annual Pension Cost |  | 22,269,355 | 26,409,663 | 28,686,821 |
| Contributions Made |  | 26,111,254 | 27,808,958 | 30,675,061 |
| Increase in NPO |  | (-------- | (1,399,------ | (1,------- |
| NPO Beginning of Year |  | $(1,798,632)$ | $(5,640,531)$ | (7,039,826) |
| NPO End of Year | $(1,798,632)$ | $(5,640,531)$ | $\stackrel{--------1}{(7,039,826)}$ | (9,028,066) |

