



Washington State Auditor's Office

Government that works for citizens

Financial Schedule Audit Report

Tacoma Employees' Retirement System

Pierce County

For the period January 1, 2015 through December 31, 2015

Published August 29, 2016

Report No. 1017274





Washington State Auditor's Office

August 29, 2016

The Honorable Mayor and Members of the Board of Administration
Tacoma Employees' Retirement System
Tacoma, Washington

Report on Financial Schedule

Please find attached our report on the Tacoma Employees' Retirement System's financial Schedule.

Sincerely,

TROY KELLEY
STATE AUDITOR
OLYMPIA, WA

TABLE OF CONTENTS

Independent Auditor's Report On Internal Control Over Financial Reporting And On Compliance And Other Matters Based On An Audit Of The Schedule Of Pension Amounts By Employer Performed In Accordance With Government Auditing Standards.....	4
Independent Auditor's Report On The Schedule Of Pension Amounts By Employer.....	6
Financial Section.....	9
About The State Auditor's Office.....	23

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL
OVER FINANCIAL REPORTING AND ON COMPLIANCE AND
OTHER MATTERS BASED ON AN AUDIT OF THE SCHEDULE OF
PENSION AMOUNTS BY EMPLOYER PERFORMED IN
ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

**Tacoma Employees' Retirement System
Pierce County
January 1, 2015 through December 31, 2015**

The Honorable Mayor and Members of the Board of Administration
Tacoma Employees' Retirement System
Tacoma, Washington

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the Schedule of Pension Amounts by Employer of the Tacoma Employees' Retirement System, a fiduciary fund of the City of Tacoma, Pierce County, Washington, as of and for the year ended December 31, 2015, and the related notes to the Schedule, and have issued our report thereon dated August 3, 2016.

INTERNAL CONTROL OVER FINANCIAL REPORTING

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

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

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

COMPLIANCE AND OTHER MATTERS

As part of obtaining reasonable assurance about whether the Retirement System's Schedule is free from material misstatement, we performed tests of the Retirement System's compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of Schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.

The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

PURPOSE OF THIS REPORT

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Retirement System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Retirement System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose. However, this report is a matter of public record and its distribution is not limited. It also serves to disseminate information to the public as a reporting tool to help citizens assess government operations.



TROY KELLEY
STATE AUDITOR
OLYMPIA, WA

August 3, 2016

INDEPENDENT AUDITOR'S REPORT ON THE SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Tacoma Employees' Retirement System Pierce County January 1, 2015 through December 31, 2015

The Honorable Mayor and Members of the Board of Administration
Tacoma Employees' Retirement System
Tacoma, Washington

REPORT ON THE SCHEDULE

We have audited the accompanying Schedule of Pension Amounts by Employer of the Tacoma Employees' Retirement System, a fiduciary fund of the City of Tacoma, Pierce County, Washington, as of and for the year ended December 31, 2015, and the related notes to the Schedule, as listed on page 9.

Management's Responsibility for the Financial Schedule

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant

to the Retirement System's preparation and fair presentation of the Schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Retirement System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule.

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

Opinion

In our opinion, the Schedule referred to above presents fairly, in all material respects, the beginning employer net pension liability, ending employer net pension liability, deferred outflows, and deferred inflows of resources, and the proportionate share of net pension liability of the Tacoma Employees' Retirement System, as of December 31, 2015, and the employer pension expense, and the employer contributions, percentage of contributions, and proportionate share of pension expenses for the year then ended in accordance with accounting principles generally accepted in the United States of America.

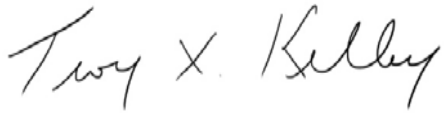
Other Matters

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Governmental Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Tacoma Employees Retirement System, a fiduciary fund of the City of Tacoma, as of and for the year ended December 31, 2015, and our report thereon, dated June 20, 2016, expressed an unmodified opinion on those financial statements.

OTHER REPORTING REQUIRED BY GOVERNMENT AUDITING STANDARDS

In accordance with *Government Auditing Standards*, we have also issued our report dated August 3, 2016 on our consideration of the Retirement 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 results 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 Retirement System's internal control over financial reporting and compliance.

A handwritten signature in cursive script that reads "Troy X. Kelley".

TROY KELLEY
STATE AUDITOR
OLYMPIA, WA

August 3, 2016

FINANCIAL SECTION

**Tacoma Employees' Retirement System
Pierce County
January 1, 2015 through December 31, 2015**

FINANCIAL SCHEDULE

Schedule of Pension Amounts by Employer – 2015
Notes to the Schedule – 2015

Schedule of Pension Amounts by Employer

	Proportionate Share		Net Pension Liability		Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense		
	2015 Employer Contributions	Rounded Percentage of Total Contributions	Beginning Net Pension Liability**	Ending Net Pension Liability**	Differences Between Expected and Actual Experience	Changes in Assumptions	Net Difference Between Projected and Actual Investment Earnings	Changes in Employer Proportion	Differences Between Expected and Actual Experience	Changes in Assumptions	Net Difference Between Projected and Actual Investment Earnings	Changes in Employer Proportion	Proportionate Share** of 2015 Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion***	Total Employer Pension Expense
Employer															
City of Tacoma	\$ 22,746,593	92.62626%	\$ (9,606,514)	\$ 86,594,348	\$ -	\$ -	\$ 76,312,466	\$ 62,727	\$ (5,795,258)	\$ -	\$ -	\$ (1,091)	\$ 35,107,633	\$ 17,182	\$ 35,124,815
South Sound 911	40,965	0	(16,961)	155,932	-	-	137,433	1,496	(10,437)	-	-	-	63,226	410	63,636
Pierce Transit	54,224	0	(21,186)	206,402	-	-	181,916	1,996	(13,815)	-	-	-	83,691	524	84,215
Tacoma-Pierce County Health Department	1,715,608	0	(722,874)	6,530,420	-	-	5,795,687	446	(437,094)	-	-	(65,574)	2,647,910	(18,116)	2,629,794
Grand Total	\$ 24,557,390	100.00000%	\$ (10,367,535)	\$ 93,477,102	\$ -	\$ -	\$ 82,387,502	\$ 66,665	\$ (6,256,604)	\$ -	\$ -	\$ (66,665)	\$ 37,902,460	\$ -	\$ 37,902,460

*Based on unrounded contributions from 2014.

**Based on unrounded contributions from 2015.
See accompanying notes to the schedule.

Notes to the Schedules

Note 1: Plan Description

The Tacoma Employees' Retirement System (the System) is a cost-sharing, multiple-employer defined benefit public employee pension plan, covering a majority of the employees of the City of Tacoma, and three Member Public Agencies. The Member Public Agencies are Tacoma-Pierce County Health Department, certain employees of the Pierce Transit and the South Sound 911 (formerly known as Law Enforcement Support Agency) who established membership in the System when these agencies were still City of Tacoma departments.

It has been administered in accordance with Chapter 1.30 of the Tacoma Municipal Code and Chapter 41.28 the Revised Code of Washington.

Note 2: Presentations and Allocations

A. Allocation Method

The employer contributions received and accrued within the calendar years ended December 31, 2015 and December 31, 2014, are used as the basis for determining each employer's proportionate share of the collective pension amounts reported in the *Schedule Pension Amounts by Employer*.

B. Net Pension Liability

Components of the calculation of net pension liability (NPL) or assets for the participating employers are calculated in accordance with GASB Statement No. 67, are shown in the table below.

Net Pension Liability

	December 31, 2014	December 31, 2015
Net Pension Liability		
Total pension liability	\$1,468,179,273	\$1,542,248,437
Fiduciary net position	1,478,546,808	1,448,771,335
Net pension liability	(10,367,535)	93,477,102
Fiduciary net position as a % of total pension liability	100.71%	93.94%
Covered payroll	221,332,333	227,383,241
Net pension liability as a % of covered payroll	-4.68%	41.11%

C. Amortization Schedules

Milliman, TERS actuary, calculated the amortization schedule of the deferred inflows and outflows of resources for years ended December 31.

Schedule of Deferred Inflows and Outflows of Resources

	Original Amount	Date Established	Original Recognition Period*	Amount Recognized in 12/31/2014		Balance of Deferred Outflows 12/31/2014	Amount Recognized in 12/31/2015		Balance of Deferred Inflows 12/31/2015	Amount Recognized in 12/31/2016		Amount Recognized in 12/31/2017		Amount Recognized in 12/31/2018		Amount Recognized in 12/31/2019		Amount Recognized in 12/31/2020		Thereafter in Expense
				Expense	NA		Expense	NA		Expense	NA	Expense	NA	Expense	NA	Expense	NA	Expense	NA	
Investment (gains) or losses	\$111,614,878 (\$11,507,332)	12/31/2015 12/31/2014	5.0 5.0	NA (\$2,301,466)	NA (\$9,205,866)	NA (6,904,400)	\$22,322,976 (2,301,466)	NA (2,301,466)	\$0 (6,904,400)	\$22,322,976 (2,301,466)	NA (2,301,466)	\$22,322,976 (2,301,466)	\$22,322,976 (2,301,466)	\$22,322,976 (2,301,466)	\$22,322,976 (2,301,466)	\$22,322,974 (2,301,468)	\$22,322,974 (2,301,468)	\$0 (2,301,468)	\$0 (2,301,468)	\$0
						Total	20,021,510	20,021,510	(6,904,400)	20,021,510	20,021,510	20,021,510	20,021,510	20,021,510	20,021,510	20,021,508	20,021,508	0	0	0
Economic/demographic (gains) or losses	(2,708,626) (6,285,151)	12/31/2015 12/31/2014	5.5 5.6	NA (1,122,348)	NA (5,162,803)	NA (4,040,455)	(492,477) (1,122,348)	NA (1,122,348)	(2,216,149) (4,040,455)	(492,477) (1,122,348)	NA (1,122,348)	(492,477) (1,122,348)	(492,477) (1,122,348)	(492,477) (1,122,348)	(492,477) (1,122,348)	(492,477) (1,122,348)	(492,477) (1,122,348)	(246,241) (673,411)	(246,241) (673,411)	0
					Total	(6,256,604)	(1,614,825)	(1,614,825)	(6,256,604)	(1,614,825)	(1,614,825)	(1,614,825)	(1,614,825)	(1,614,825)	(1,614,825)	(1,614,825)	(1,614,825)	(246,241)	(246,241)	0
Assumption changes or inputs	0 0	12/31/2015 12/31/2014	0.0 0.0	NA 0	NA 0	NA 0	0 0	NA 0	0 0	0 0	NA 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
					Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*Investment (gains)/losses are recognized in pension expense over a period of five years; economic/demographic (gains)/losses and assumption changes or inputs are recognized over the average remaining service life for all active and inactive members. The economic/demographic (gains)/losses recognition period decreased from 5.6 for bases established on 12/31/2014 to 5.5 for bases established on 12/31/2015. This decline is primarily due to increases in the number of inactive members, who are considered to have zero years of future service, as a portion of the population.

Deferred Outflows/(Inflows) for Employer-Specific Adjustments per Paragraph 54 of GASB 68

Employer	Beginning of Measurement Period for Initial Recognition	Proportion at Measurement Beginning Date	Proportion at Measurement End Date	Total Net Pension Liability (NPL) at Measurement Beginning Date	Net Balance of Deferred Outflow at Measurement Beginning Date	Net Balance of Deferred (Inflow) at Measurement Beginning Date	Original Balance of Outflow/(Inflow) due to change in Proportionate Share *	Original Amortization Period	Remaining Amortization Period	Measurement Date Balance of Outflow/(Inflow) due to change in Proportionate Share	Outflow/(Inflow) Recognized in Measurement Period Expense due to change in Proportionate Share
City of Tacoma	12/31/2014	92.65958%	92.62626%	(10,367,535)	0	(14,388,669)	(1,333)	5.5	4.5	(1,091)	(242)
City of Tacoma	12/31/2013	91.78634%	92.65958%	11,173,966	0	0	97,576	5.6	3.6	62,727	17,424
South Sound 911	12/31/2014	0.16359%	0.16681%	(10,367,535)	0	(14,388,669)	129	5.5	4.5	105	23
South Sound 911	12/31/2013	0.14424%	0.16359%	11,173,966	0	0	2,103	5.6	3.6	1,390	386
Pierce Transit	12/31/2014	0.20435%	0.22081%	(10,367,535)	0	(14,388,669)	658	5.5	4.5	539	120
Pierce Transit	12/31/2013	0.18407%	0.20435%	11,173,966	0	0	2,266	5.6	3.6	1,467	405
Tacoma-Pierce County Health Department	12/31/2014	6.97248%	6.88612%	(10,367,535)	0	(14,388,669)	546	5.5	4.5	447	99
Tacoma-Pierce County Health Department	12/31/2013	7.88535%	6.87248%	11,173,966	0	0	(102,005)	5.6	3.6	(65,574)	(18,215)
Grand Total	12/31/2014	100.00000%	100.00000%	(10,367,535)	0	(14,388,669)	0	5.5	4.5	0	0
Grand Total	12/31/2013	100.00000%	100.00000%	11,173,966	0	0	0	5.6	3.6	0	0

* Based on unrounded contributions.

The collective NPL as of 12/31/2013 was \$11,173,966. The deferred outflow/(inflow) due to the change in the proportionate share for the City of Tacoma is equal to the beginning of period NPL times the increase in the proportionate share during the year. The proportionate share for the City of Tacoma for 12/31/2013, based on 2013 contributions was 91.78634%. The proportionate share for 12/31/2014, based on 2014 contributions was 92.65958%. The original balance of the outflow due to change in proportionate share = $(92.65958\% - 91.78634\%) \times \$11,173,966 = \$97,576$. That amount was then established and recognized over 5.6 years based on the average remaining service life as of the beginning of that measurement period. This means that $\$97,576 / 5.6 = \$17,424$ is recognized each year as seen in the final column. After two years, the remainder of the original balance is $\$97,576 - 2 \times \$17,424 = \$62,728$. The \$62,727 in the exhibit is different by a dollar due to rounding.

In the following year, there is also the net balance of deferred inflows to include with the calculation. For the City of Tacoma, the most recent balance of outflow/(inflow) due to change in proportionate share is equal to $(92.62626\% - 92.65958\%) \times (\$10,367,535) + (92.62626\% - 92.65958\%) \times \$14,388,669 = \$3,454 + (\$4,787) = (\$1,333)$. That amount will be recognized over 5.5 years based on the average remaining service life as of the beginning of the new period. The amount recognized in the first year is $(\$1,333) / 5.5 = (\$242)$.

City of Tacoma's Amortization Schedule

As of December 31, 2015, the deferred inflows and outflows of resources for City of Tacoma are as follows:

Deferred Inflows / Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	(\$5,795,258)	\$0
Changes of assumptions	0	0
Net difference between projected and actual earnings	0	76,312,466
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	(1,091)	62,727
Total	(5,796,349)	76,375,193

Other amounts currently reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows*:

Year ended December 31:	
2016	\$17,066,607
2017	17,066,607
2018	17,066,605
2019	19,607,230
2020	(228,205)
Thereafter	0

The amount reported as deferred outflows of resources resulting from employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2016.

**Note that additional future deferred inflows and outflows of resources may impact these numbers.*

South Sound 911's Amortization Schedule

As of December 31, 2015, the deferred inflows and outflows of resources for South Sound 911 are as follows:

Deferred Inflows / Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	(\$10,437)	\$0
Changes of assumptions	0	0
Net difference between projected and actual earnings	0	137,433
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	0	1,496
Total	(10,437)	138,929

Other amounts currently reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows*:

Year ended December 31:	
2016	\$31,114
2017	31,114
2018	31,114
2019	35,548
2020	(398)
Thereafter	0

The amount reported as deferred outflows of resources resulting from employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2016.

**Note that additional future deferred inflows and outflows of resources may impact these numbers.*

Pierce Transit's Amortization Schedule

As of December 31, 2015, the deferred inflows and outflows of resources for Pierce Transit are as follows:

Deferred Inflows / Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	(\$13,815)	\$0
Changes of assumptions	0	0
Net difference between projected and actual earnings	0	181,916
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	0	1,996
Total	(13,815)	183,912

Other amounts currently reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows*:

Year ended December 31:	
2016	\$41,167
2017	41,167
2018	41,167
2019	47,079
2020	(483)
Thereafter	0

The amount reported as deferred outflows of resources resulting from employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2016.

**Note that additional future deferred inflows and outflows of resources may impact these numbers.*

Tacoma-Pierce County Health Department's Amortization Schedule

As of December 31, 2015, the deferred inflows and outflows of resources for Tacoma-Pierce County Health Department are as follows:

Deferred Inflows / Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	(\$437,094)	\$0
Changes of assumptions	0	0
Net difference between projected and actual earnings	0	5,755,687
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	(65,574)	446
Total	(502,668)	5,756,133

Other amounts currently reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows*:

Year ended December 31:	
2016	\$1,267,797
2017	1,267,797
2018	1,267,797
2019	1,467,229
2020	(17,155)
Thereafter	0

The amount reported as deferred outflows of resources resulting from employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2016.

**Note that additional future deferred inflows and outflows of resources may impact these numbers.*

D. Pension Expense

Components of the pension expense reported in the *Schedule of Pension Amounts by Employer* are presented below.

Pension Expense	January 1, 2014 to December 31, 2014	January 1, 2015 to December 31, 2015
Service cost	\$38,484,316	\$39,962,780
Interest on total pension liability	100,571,822	105,422,784
Effect of plan changes	0	0
Administrative expenses	1,716,124	1,691,339
Member contributions	(20,698,886)	(21,258,474)
Expected investment return net of investment expenses	(99,918,502)	(106,322,654)
Recognition of Deferred Inflows/Outflows of Resources		
Recognition of economic/demographic gains or losses	(1,122,348)	(1,614,825)
Recognition of assumption changes or inputs	0	0
Recognition of investment gains or losses	(2,301,466)	20,021,510
Pension Expense	16,731,060	37,902,460

Note 3: Reconciliation of TERS financial statements and employer records to *Schedule of Proportionate Share by Employer* and *Schedule of Pension Amounts by Employer*

A. Basis of Accounting

TERS' financial statements conform to generally accepted accounting principles (GAAP).

The retirement plan is accounted for in pension trust funds using the flow of economic resources measurement focus and the accrual basis of accounting. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions.

B. Employer Contribution

The employer contributions reported in *TERS' Statement of Changes in Fiduciary Net Position* included in the separately issued CAFR agree with the employer allocation totals in the *Schedule of Proportionate Share by Employer*, which includes the accrual prepared at the plan level.

The employer contributions were used in determining each employer's proportionate share of the collective pension amounts for the calendar years ended December 31, 2014 and December 31, 2015.

Note 4: Actuarial Methods and Assumptions Used for Funding and GASB Valuation

The following actuarial methods and assumptions were used for funding valuation. Please see the actuarial valuation reporting for funding for further details.

Actuarial Cost Method	Entry Age Normal
Amortization Method	Funding is based on statutory contribution rate.
	This amount is compared to a 30-year amortization for the purposes of calculating the Actuarially Determined Contribution. The amortization method for the ADC is as follows*:
Level percent or level dollar:	Level percent
Closed, open, or layered periods:	Open
Amortization period at 01/01/2016:	30
Amortization growth rate:	4.00%
Asset Valuation Method	
Smoothing period:	4 years
Corridor:	None
Inflation	3.00%
Salary Increases	Varies by service; details in funding valuation report
Investment Rate of Return	7.25%
Cost of Living Adjustments	2.125%
Retirement Age	Varies by age, gender, eligibility; details in funding valuation report
Turnover	Varies by service, gender; details in funding valuation report
Mortality	RP-2000 Mortality for Healthy and Disabled Annuitants, with age adjustments. Generational improvements per projection per Scale AA.
Male Members and Male Beneficiaries:	Combined Table for Healthy or Disabled for males set back one year.
Female Members and Female Beneficiaries:	Combined Table for Healthy or Disabled for females set back one year.

* Note that the actual contribution is used if that rate is greater than the rate necessary to amortize the UAAL in 30 years.

Note 5: Long-Term Expected Rate of Return**Long-Term Expected Rate of Return**

The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2015. The target asset allocation is based on the Tacoma Employees' Retirement System Investment Policy Statement dated February 2014.

Asset Class	Index	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Investment Grade Fixed Income	Barclays Aggregate	15.0%	2.00%
US Inflation-Indexed Bonds	Barclays US TIPS	5.0%	1.41%
High Yield Bonds	BAML High Yield	9.0%	4.22%
Emerging Market Debt	JP Morgan EMBI Plus	5.0%	5.06%
Global Equity	MSCI ACWI NR	41.5%	5.72%
Public Real Estate	FTSE EPRA/NAREIT Developed	2.0%	6.07%
Private Real Estate	NCREIF Property	2.5%	3.60%
Private Equity	Cambridge Private Equity	10.0%	9.29%
Master Limited Partnerships	Alerian MLP	4.0%	3.98%
Timber	NCREIF Timber	2.0%	3.73%
Infrastructure	S&P Global Infrastructure	2.0%	5.14%
Agriculture	NCREIF Farmland	2.0%	4.30%
Assumed Inflation - Mean			3.00%
Assumed Inflation - Standard Deviation			1.89%
Portfolio Arithmetic Real Mean Return			4.94%
Portfolio Median Nominal Geometric Return			7.06%
Portfolio Standard Deviation			11.84%
Long-Term Expected Rate of Return, net of investment expenses			7.25%

Note 6: Depletion Date Projection

Milliman has prepared a depletion date projection to determine if the plan's net position is projected to be sufficient to make projected benefit payments using the following techniques and assumptions:

- All demographic assumptions used in the projection are the same as those used for the January 1, 2015 actuarial valuation. Please refer to that report, dated May 6, 2015, for details.
- Current active and future members contribute the required employee contribution amounts.
- The employer contributes the employer contribution rate of 10.80% of members' salaries in 2012 and beyond, per the Tacoma Municipal Code.
- Benefit payments included are for current members and beneficiaries only, and are projected based on the actuarial assumptions and the current plan provisions.
- Total administrative expenses are assumed to be 0.85% of payroll per year. Only the portion of the total administrative expenses attributed to the current membership group is included.
- All cash flows are assumed to occur on average halfway through the year.
- The long-term expected rate of return on pension plan investments, net of investment expense and gross of administrative expense, is 7.25%.
- The actuarial assumptions do not change.
- The plan provisions do not change.

Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

Contributions for new hires are considered based only on the amount by which the total contributions exceed the projected service costs for the new hires. Since the total contribution rate (employer + member) is 20% and service cost rate is 18.02%, 1.98% of pay is used (excluding administrative expenses).

For purposes of determining the GASB discount rate at December 31, 2015, a depletion date projection as of that date has been performed by Milliman. The results of this projection show that no depletion of the fiduciary net position is expected to occur, and therefore the long-term assumed rate of return on plan assets applies for all future projected benefit payments in the determination of the GASB discount rate of 7.25%.

Note 7: Sensitivity Analysis of NPL

The following presents the NPL of the System, calculated using the discount rate of 7.25%, as well as what the System's NPL would be if it were calculated using a discount rate that is 1 percentage point lower (6.25%) or 1 percentage point higher (8.25%) than the current rate.

	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Total pension liability	\$1,738,659,659	\$1,542,248,437	\$1,376,848,160
Fiduciary net position	1,448,771,335	1,448,771,335	1,448,771,335
Net pension liability	<u>\$ 289,888,324</u>	<u>\$ 93,477,102</u>	<u>\$ (71,923,175)</u>

Employer's Proportionate Share of the NPL

Employer	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
City of Tacoma	\$ 268,512,725	\$ 86,584,348	\$ (66,619,750)
South Sound 911	483,572	155,932	(119,978)
Pierce Transit	640,088	206,402	(158,810)
Tacoma-Pierce County Health Department	20,251,937	6,530,420	(5,024,637)
Total NPL	<u>\$ 289,888,322</u>	<u>\$ 93,477,102</u>	<u>\$ (71,923,175)</u>

Note 8: Additional Information

Additional actuarial and pension plan information is included in the TERS 2015 CAFR. All other actuarial data, assumptions and methods relied on for the preparation of GASB 67 and 68 are included in Milliman's 2015 GASB 67 and 68 Disclosure Report.

ABOUT THE STATE AUDITOR'S OFFICE

The State Auditor's Office is established in the state's Constitution and is part of the executive branch of state government. The State Auditor is elected by the citizens of Washington and serves four-year terms.

We work with our audit clients and citizens to achieve our vision of government that works for citizens, by helping governments work better, cost less, deliver higher value, and earn greater public trust.

In fulfilling our mission to hold state and local governments accountable for the use of public resources, we also hold ourselves accountable by continually improving our audit quality and operational efficiency and developing highly engaged and committed employees.

As an elected agency, the State Auditor's Office has the independence necessary to objectively perform audits and investigations. Our audits are designed to comply with professional standards as well as to satisfy the requirements of federal, state, and local laws.

Our audits look at financial information and compliance with state, federal and local laws on the part of all local governments, including schools, and all state agencies, including institutions of higher education. In addition, we conduct performance audits of state agencies and local governments as well as [fraud](#), state [whistleblower](#) and [citizen hotline](#) investigations.

The results of our work are widely distributed through a variety of reports, which are available on our [website](#) and through our free, electronic [subscription](#) service.

We take our role as partners in accountability seriously, and provide training and technical assistance to governments, and have an extensive quality assurance program.

Contact information for the State Auditor's Office	
Public Records requests	PublicRecords@sao.wa.gov
Main telephone	(360) 902-0370
Toll-free Citizen Hotline	(866) 902-3900
Website	www.sao.wa.gov