



**Office of the Washington State Auditor**  
**Pat McCarthy**

## **Financial Schedule Audit Report**

# **Tacoma Employees' Retirement System**

**Pierce County**

**For the period January 1, 2016 through December 31, 2016**

**Published July 31, 2017**

**Report No. 1019564**





**Office of the Washington State Auditor**  
**Pat McCarthy**

July 31, 2017

The Honorable Mayor and Members of the Board of Administration

Tacoma Employees' Retirement System  
Tacoma, Washington

**Report on Financial Statements**

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

Sincerely,

Pat McCarthy  
State Auditor  
Olympia, WA

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**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, 2016 through December 31, 2016**

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, 2016, and the related notes to the Schedule, and have issued our report thereon dated July 18, 2017.

**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 financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.

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

## PURPOSE OF THIS REPORT

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the 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.



Pat McCarthy

State Auditor

Olympia, WA

July 18, 2017

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

## **Tacoma Employees' Retirement System Pierce County January 1, 2016 through December 31, 2016**

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

### **REPORT ON THE FINANCIAL STATEMENTS**

We have audited the accompanying Schedule of Pension Amounts by Employer of the Tacoma Employees' Retirement System, Pierce County, Washington, as of and for the year ended December 31, 2016, and the related notes to the Schedule, as listed on page 9.

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

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, 2016, 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, 2016, and our report thereon, dated May 25, 2017, 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 July 18, 2017 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 black ink that reads "Pat McCarthy". The signature is written in a cursive style with a large, stylized initial "P".

Pat McCarthy

State Auditor

Olympia, WA

July 18, 2017



## FINANCIAL SECTION

**Tacoma Employees' Retirement System  
Pierce County  
January 1, 2016 through December 31, 2016**

### FINANCIAL SCHEDULE

Schedule of Pension Amounts by Employer – 2016

Notes to the Schedule – 2016

Schedule of Pension Amounts by Employer

Employer	Contributions	2016 Percentage of Total	Net Pension Liability	Deferred Outflows of Resources	Deferred Inflows of Resources	Pension Expense	Differences Between Expected and Actual Experience Assumptions		Net Difference Between Projected and Actual Investment Earnings		Proportionate Share** of 2016 Collective Pension from Changes in Proportionate**		Total Employer Pension Expense	
							Beginning	Ending Net Pension Liability**	Expected	Actual	Expected	Actual		Share** of 2016
City of Tacoma	\$23,616,255	92.48208%	\$86,584,348	\$92,880,523	\$0	\$30,847,444	\$42,267,470	\$45,304	(\$9,991,309)	\$0	(\$21,332)	\$47,331,044	\$12,634	\$47,343,678
South Sound 911	34,683	0.13582%	155,932	136,405	0	45,303	62,074	1,086	(29,359)	0	(4,399)	69,511	(568)	68,943
Pierce Transit	69,705	0.27297%	206,402	274,443	0	91,048	124,755	8,874	(59,006)	0	0	139,701	2,170	141,871
Tacoma-Pierce County Health Department	18,5391	7.0913%	6,530,420	7,139,763	0	2,371,255	3,249,117	17,806	(153,674)	0	(47,359)	3,638,356	(14,236)	3,624,120
Grand Total	25,536,034	100.00000%	93,477,102	100,430,834	0	33,365,050	45,703,416	73,070	(216,644)	0	(73,070)	51,178,612	0	51,178,612

\*\*Based on unrounded contributions from 2015.

\*\*\*Based on unrounded contributions from 2016.

\*\*\*\*Equal to the sum of all years by employer in the final column of page 9, based on unrounded amounts.

## 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, 2016 and December 31, 2015, 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

Net Pension Liability	December 31, 2015	December 31, 2016
Total pension liability	\$1,542,248,437	\$1,648,094,551
Fiduciary net position	1,448,771,335 *	1,547,663,717
Net pension liability	93,477,102	100,430,834
Fiduciary net position as a % of total pension liability	93.94%	93.91%
Covered payroll	\$227,383,241	\$236,444,759
Net pension liability as a % of covered payroll	41.11%	42.48%

*\*Based on original disclosure. The December 31, 2015 Fiduciary Net Position was later adjusted by (\$76,147) after last year's Milliman financial reporting valuation was issued.*



**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	Balance of Deferred Outflow at Measurement Beginning Date	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	Outflow/(Inflow) due to change in Proportionate Share	Measurement Date	Balance of Outflow/(Inflow) due to change in Proportionate Share	Measurement Date	Outflow/(Inflow) due to change in Proportionate Share
City of Tacoma	12/31/2015	92.62626%	92.48208%	93,477,102	\$89,291,902	(\$13,161,004)	(\$25,011)	5.5	4.5	4.5		(\$20,463)		(\$4,548)
City of Tacoma	12/31/2014	92.65958%	92.62626%	(10,367,535)	0	(14,368,669)	(1,333)	5.5	3.5	3.5		(848)		(242)
City of Tacoma	12/31/2013	91.78634%	92.65958%	11,173,966	0	0	97,576	5.6	2.6	2.6		45,303		17,424
South Sound 911	12/31/2015	0.16681%	0.13582%	93,477,102	89,291,902	(13,161,004)	(5,376)	5.5	4.5	4.5		(4,399)		(977)
South Sound 911	12/31/2014	0.16359%	0.16681%	(10,367,535)	0	(14,368,669)	129	5.5	3.5	3.5		82		23
South Sound 911	12/31/2013	0.14424%	0.16359%	11,173,966	0	0	2,163	5.6	2.6	2.6		1,004		386
Pierce Transit	12/31/2015	0.22081%	0.27297%	93,477,102	89,291,902	(13,161,004)	9,048	5.5	4.5	4.5		7,403		1,645
Pierce Transit	12/31/2014	0.20435%	0.22081%	(10,367,535)	0	(14,368,669)	658	5.5	3.5	3.5		419		120
Pierce Transit	12/31/2013	0.18407%	0.20435%	11,173,966	0	0	2,266	5.6	2.6	2.6		1,052		405
Tacoma-Pierce County Health Department	12/31/2015	6.98612%	7.10913%	93,477,102	89,291,902	(13,161,004)	21,339	5.5	4.5	4.5		17,459		3,880
Tacoma-Pierce County Health Department	12/31/2014	6.97248%	6.98612%	(10,367,535)	0	(14,368,669)	546	5.5	3.5	3.5		347		99
Tacoma-Pierce County Health Department	12/31/2013	7.88535%	6.97248%	11,173,966	0	0	(102,005)	5.6	2.6	2.6		(47,359)		(18,215)
Grand Total	12/31/2015	100.00000%	100.00000%	93,477,102	89,291,902	(13,161,004)	0	5.5	4.5	4.5		0		0
Grand Total	12/31/2014	100.00000%	100.00000%	(10,367,535)	0	(14,368,669)	0	5.5	3.5	3.5		0		0
Grand Total	12/31/2013	100.00000%	100.00000%	11,173,966	0	0	0	5.6	2.6	2.6		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 three years, the remainder of the original balance is  $\$97,576 - 3 \times \$17,424 = \$45,304$ . The

In the most recent year for the City of Tacoma, the NPL and the deferred outflows/(inflows) are included with the calculation. For the City of Tacoma, the most recent balance of outflow/(inflow) due to change in proportionate share is equal to  $(92.48208\% - 92.62626\%) \times \$93,477,102 + (92.48208\% - 92.62626\%) \times \$89,291,902 + (92.48208\% - 92.62626\%) \times \$13,161,004 = (\$134,775) + \$128,741 + (\$18,976) = (\$25,010)$ . The  $(\$25,010)$  in the exhibit is different by a dollar due to rounding. That amount is being recognized over 5.5 years based on the average remaining service life as of the beginning of the period. The amount recognized in each year is  $(\$25,010) / 5.5 = (\$4,548)$ .

**City of Tacoma's Amortization Schedule**

As of December 31, 2016, the deferred inflows and outflows of resources for City of Tacoma were as follows:

<b>Deferred Inflows / Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>
Differences between expected and actual experience	(\$19,991,309)	\$0
Changes of assumptions	0	30,847,444
Net difference between projected and actual earnings	0	42,267,470
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	<u>(21,312)</u>	<u>45,304</u>
Total	(20,012,621)	73,160,218

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.\* Note that the employer reporting date is one year later than the measurement date.

Year ending December 31:	
2017	\$16,549,478
2018	16,549,476
2019	19,086,138
2020	(718,439)
2021	1,680,944
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, 2017.

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

**South Sound 911's Amortization Schedule**

As of December 31, 2016, the deferred inflows and outflows of resources for South Sound 911 were as follows:

<b>Deferred Inflows / Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>
Differences between expected and actual experience	(\$29,359)	\$0
Changes of assumptions	0	45,303
Net difference between projected and actual earnings	0	62,074
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	(4,399)	1,086
<b>Total</b>	<b>(33,758)</b>	<b>108,463</b>

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.\* Note that the employer reporting date is one year later than the measurement date.

Year ending December 31:	
2017	\$23,718
2018	23,718
2019	27,299
2020	(2,014)
2021	1,984
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, 2017.

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

**Pierce Transit's Amortization Schedule**

As of December 31, 2016, the deferred inflows and outflows of resources for Pierce Transit were as follows:

<b>Deferred Inflows / Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>
Differences between expected and actual experience	(\$59,006)	\$0
Changes of assumptions	0	91,048
Net difference between projected and actual earnings	0	124,755
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	0	8,874
<b>Total</b>	<b>(59,006)</b>	<b>224,677</b>

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.\* Note that the employer reporting date is one year later than the measurement date.

Year ending December 31:	
2017	\$50,979
2018	50,979
2019	58,325
2020	(402)
2021	5,790
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, 2017.

*\*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, 2016, the deferred inflows and outflows of resources for Tacoma-Pierce County Health Department were as follows:

<b>Deferred Inflows / Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>
Differences between expected and actual experience	(\$1,536,740)	\$0
Changes of assumptions	0	2,371,255
Net difference between projected and actual earnings	0	3,249,117
Contributions made subsequent to measurement date	NA	TBD
Changes in Employer Proportion	(47,359)	17,806
<b>Total</b>	<b>(1,584,099)</b>	<b>5,638,178</b>

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.\* Note that the employer reporting date is one year later than the measurement date.

Year ending December 31:	
2017	\$1,256,958
2018	1,256,958
2019	1,459,773
2020	(50,938)
2021	131,328
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, 2017.

*\*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.

<b>Measurement Period:</b>	<b>January 1, 2015 to December 31, 2015</b>	<b>January 1, 2016 to December 31, 2016</b>
Service cost	\$39,962,780	\$42,533,534
Interest on total pension liability	105,422,784	115,288,127
Effect of plan changes	0	0
Adjustment on fiduciary net position*	0	76,147
Administrative expenses	1,691,339	1,917,955
Member contributions	(21,258,474)	(22,407,327)
Expected investment return net of investment expenses	(106,322,654)	(104,110,957)
Recognition of Deferred Inflows/Outflows of Resources		
Recognition of economic/demographic gains or losses	(1,614,825)	(5,386,966)
Recognition of assumption changes or inputs	0	7,412,233
Recognition of investment gains or losses	20,021,510	15,855,866
Pension Expense	37,902,460	51,178,612

\* December 31, 2015 Fiduciary Net Position adjusted after last year's Milliman financial reporting valuation was issued.

**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) in the United States.

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, 2015 and December 31, 2016.

**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.

<b>Actuarial Cost Method</b>	Entry Age Normal
<b>Amortization Method</b>	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 01/01/2015:	30
Amortization growth rate:	3.75%
<b>Asset Valuation Method</b>	
Smoothing period:	4 years
Corridor:	None
<b>Inflation</b>	2.75%
<b>Salary Increases</b>	Varies by service; details in funding valuation report
<b>Investment Rate of Return</b>	7.00%
<b>Cost of Living Adjustments</b>	2.125%
<b>Retirement Age</b>	Varies by age, gender, eligibility; details in funding valuation report
<b>Turnover</b>	Varies by service, gender; details in funding valuation report
<b>Mortality</b>	RP-2014 Mortality for Employees, Healthy and Disabled Annuitants. Generational improvements with projection scale based on Social Security Administration Data.
Active Members:	RP-2014 Employee Mortality, sex-distinct
Male Inactive Members and Male Beneficiaries:	RP-2014 50% Blue Collar/50% White Collar Mortality for Healthy Males, RP-2014 Disabled Mortality for males.
Female Inactive Members and Female Beneficiaries:	RP-2014 Blue Collar Mortality for Healthy Females, RP-2014 Disabled Mortality for females.

\*The actual contribution is used if that rate is greater than the rate necessary to amortize the UAAL in 30 years. Note that a period of 30 years is used for years beginning January 1, 2017 and earlier and a period of 25 years is used beginning January 1, 2018 and later.

**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, 2016. The target asset allocation is based on the Tacoma Employees' Retirement System Investment Policy Statement dated March 2016.

<b>Asset Class</b>	<b>Index</b>	<b>Target Allocation</b>	<b>Long-Term Expected Arithmetic Real Rate of Return</b>
Investment Grade Fixed Income	Barclays Aggregate	15.0%	1.63%
US Inflation-Indexed Bonds	Barclays US TIPS	5.0%	1.21%
High Yield Bonds	BAML High Yield	9.0%	5.00%
Emerging Market Debt	JP Morgan EMBI Plus	5.0%	3.74%
Global Equity	MSCI ACWI NR	41.5%	5.50%
Public Real Estate	FTSE EPRA/NAREIT Developed	2.0%	5.80%
Private Real Estate	NCREIF Property	2.5%	3.56%
Private Equity	Cambridge Private Equity	10.0%	9.04%
Master Limited Partnerships	Alerian MLP	4.0%	4.12%
Timber	NCREIF Timber	2.0%	3.79%
Infrastructure	S&P Global Infrastructure	2.0%	5.03%
Agriculture	NCREIF Farmland	2.0%	4.33%
Assumed Inflation - Mean			2.75%
Assumed Inflation - Standard Deviation			1.85%
Portfolio Arithmetic Real Mean Return			4.76%
Portfolio Median Nominal Geometric Return			6.72%
Portfolio Standard Deviation			11.77%
<b>Long-Term Expected Rate of Return, net of investment expenses</b>			<b>7.00%</b>

**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 recommended in the experience study report dated September 1, 2016 and adopted by the Board for the January 1, 2017 actuarial valuation. Please refer to that report, dated May 1, 2017, 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 0.80% of payroll per year. This assumption was reduced from 0.85% in the previous year as a result of the experience study to better match recent experience. 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 7.00%.
- 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 17.89% (excluding 0.80% administrative expenses), 2.11% of pay is used.

For purposes of determining the GASB discount rate at December 31, 2016, 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 7.00%.

**Note 7: Sensitivity Analysis of NPL**

The following presents the NPL of the System, calculated using the discount rate of 7.00%, as well as what the System's NPL would be if it were calculated using a discount rate that is 1 percentage point lower (6.00%) or 1 percentage point higher (8.00%) than the current rate.

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Total pension liability	\$1,863,258,950	\$1,648,094,551	\$1,468,611,198
Fiduciary net position	1,547,663,717	1,547,663,717	1,547,663,717
Net pension liability	315,595,233	100,430,834	(79,052,519)

**Employer's Proportionate Share of the NPL**

Employer	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
City of Tacoma	\$ 291,869,031	\$ 92,880,523	\$ (73,109,413)
South Sound 911	428,641	136,405	(107,369)
Pierce Transit	861,472	274,143	(215,787)
Tacoma-Pierce County Health Department	22,436,090	7,139,763	(5,619,950)
Total NPL	<u>\$ 315,595,234</u>	<u>\$ 100,430,834</u>	<u>\$ (79,052,519)</u>

**Note 8: Additional Information**

Additional actuarial and pension plan information is included in the TERS 2016 CAFR. All other actuarial data, assumptions and methods relied on for the preparation of GASB 67 and 68 are included in Milliman's 2016 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.

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