



THE CUSTODIANS AND MECHANICS PENSION TRUST FUND OF THE  
CITY OF STAMFORD

GASB 67 AND GASB 68 DISCLOSURE

REPORTING AS OF JUNE 30, 2016





## Table of Contents

Introduction and Certification	1
Money-Weighted Rate of Return	2
Schedule of Investment Returns	3
Contributions Compared to ADEC and Payroll	4
Discount Rate Calculation	5
Target Allocation and Expected Rate of Return	6
Schedule of Changes in Net Pension Liability and Related Ratios	7
Schedule of Net Pension Liability	8
Disclosure Overview	9
Changes in the Net Pension Liability	10
Components of the Pension Expense	11
Pension Expense and Deferred Outflows and Inflows of Resources Related to Pensions	16
Sensitivity of the Net Pension Liability to Changes in the Discount Rate	20
Participant Breakdown	20
Description of Significant Changes Prior to Year End	21
DROP Balances	21
Valuation Date and Roll Forward Process	21
Funding Policy	21
Assumption Section	21
Description of Actuarial Methods	22
Description of Actuarial Assumptions	23
Summary of Plan Provisions	26

**All the items listed below are required by GASB 67 and GASB 68 but are not included in this report:**

Statement of Changes in Fiduciary Net Position  
Statement of Fiduciary Net Position  
Investments That Represent 5% or More of the Plan's Fiduciary Net Position  
Investment Policy  
Pension Board Composition  
Authority to Amend Plan

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## Introduction and Certification

This report presents the results of the June 30, 2016 GASB 67 and GASB 68 Disclosure for the Custodians and Mechanics Pension Trust Fund of the City of Stamford (the Plan). The report is intended to satisfy the requirements of both GASB 67 and GASB 68. This report may not be appropriate for any other purpose.

The report has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with the Actuarial Standards Board Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

In preparing this disclosure report, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Plan Sponsor or Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this disclosure report are based on the Plan as summarized in the Summary of Plan Provisions section of this report and the actuarial methods and assumptions detailed in the Description of Actuarial Methods and Procedures and Description of Actuarial Assumptions sections of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Evan W. Woollacott, Jr., FCA, MAAA, EA  
14-04513

November 28, 2016



### Money-Weighted Rate of Return June 30, 2016

**Beg. Value**      56,961,858                      **Ending Value**      55,125,767

	Date	Employer Contributions	Employee Contributions	Benefit Payments	Admin. Expenses	Net External Cash Flows	Period Invested	Period Weight	Net External Cash Flows w/ Interest
<b>Beg. of Yr.</b>	7/1/2015						12	1.000	55,041,730
<b>July</b>	7/31/2015	1,840,000	37,835	(305,181)	(12,266)	1,560,388	11	0.917	1,512,104
<b>August</b>	8/31/2015	-	46,864	(230,504)	-	(183,640)	10	0.833	(178,467)
<b>September</b>	9/30/2015	-	98,369	(264,365)	(4,387)	(170,383)	9	0.750	(166,057)
<b>October</b>	10/31/2015	-	99,115	(279,284)	(3,237)	(183,406)	8	0.667	(179,261)
<b>November</b>	11/30/2015	-	138,108	(223,021)	(6,250)	(91,163)	7	0.583	(89,358)
<b>December</b>	12/31/2015	-	98,704	(232,349)	-	(133,645)	6	0.500	(131,373)
<b>January</b>	1/31/2016	-	58,421	(221,773)	(12,269)	(175,621)	5	0.417	(173,130)
<b>February</b>	2/29/2016	-	99,545	(227,059)	-	(127,514)	4	0.333	(126,065)
<b>March</b>	3/31/2016	-	202,992	(253,602)	(2,094)	(52,704)	3	0.250	(52,254)
<b>April</b>	4/30/2016	-	99,321	(227,519)	(15,666)	(143,864)	2	0.167	(143,044)
<b>May</b>	5/31/2016	-	139,444	(224,573)	(3,204)	(88,333)	1	0.083	(88,081)
<b>June</b>	6/30/2016	32,461	81,484	(240,517)	25,595	(100,977)	0	0.000	(100,977)
<b>End of Yr.</b>	6/30/2016	1,872,461	1,200,202	(2,929,747)	(33,778)				55,125,767

**Money-Weighted Rate of Return**

**-3.37%**



### Schedule of Investment Returns Last 3 Fiscal Years

	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	-3.37%	0.73%	16.34%



### Contributions Compared to ADEC and Payroll Schedule of Contributions Last 3 Fiscal Years

	2016	2015	2014
Actuarially Determined Employer Contribution (ADEC)	\$ 1,840,000	\$ 1,669,000	\$ 1,584,000
Contributions in relation to the ADEC	<u>1,872,461</u>	<u>1,669,000</u>	<u>1,584,000</u>
Contribution deficiency (excess)	<u>\$ (32,461)</u>	<u>\$ -</u>	<u>\$ -</u>
Covered-employee payroll	\$ 20,527,753	\$ 19,929,857	\$ 19,177,570
Contributions as a percentage of covered-employee payroll	9.12%	8.37%	8.26%



## Discount Rate Calculation

The long-term expected rate of return on investments may be used to discount liabilities to the extent that the plan's fiduciary net position and future contributions are projected to be sufficient to cover expected benefit payments and administrative expenses for current plan members. Projections of the plan's fiduciary net position incorporate all cash flows for contributions from the employer and employee and administrative expenses. Professional judgment should be applied to the projections of contributions in circumstances where (a) contributions amounts are established by statute or contract or (b) a formal written policy exists. Consideration should also be given to the most recent five-year contribution history as key indicators of future contributions. It should not include cash flows for future plan members.

If the amount of the plan's fiduciary net position is projected to be greater than or equal to the benefit payments and administrative expenses made in that period, the actuarial present value of payments should be discounted using the long-term expected rate of return on those investments. A 20-year, high quality (AA/Aa or higher), tax-exempt municipal bond yield or index rate must be used to discount benefit payments for periods where the fiduciary net position is not projected to cover expected benefit payments and administrative expenses.

Plans that are projected to have sufficient fiduciary net position indefinitely will use the long-term expected return on investments to determine liabilities but will have to substantiate their projected solvency.

GASB permits alternative methods to evaluate the sufficiency of the plan's net fiduciary position. Based on the plan's current net pension liability and current contribution policy, the plan's projected fiduciary net position will be sufficient to cover projected benefit payments and administrative expenses indefinitely. Therefore, since the fund is not projected to run out of money, we have used the 7.5% interest rate assumption to discount plan liabilities.



## Target Allocation and Expected Rate of Return

### Actuarial Valuation as of July 1, 2015

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return*</b>	<b>Weighting</b>
Domestic Fixed Income	15.00%	2.00%	0.30%
Domestic Equity	30.00%	5.25%	1.58%
International Equity	20.00%	5.50%	1.10%
Asset Allocation	35.00%	3.84%	1.34%
	100.00%		4.32%
Long-Term Inflation Expectation			3.00%
Long-Term Expected Nominal Return			7.32%

*\*Long-Term Returns are provided by HHIA and FIA. The returns are geometric means.*

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed. Best estimates of the real rates of return for each major asset class are included in the pension plan's target asset allocation.

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. The results support a rate between 7.25% and 7.75%. An expected rate of return of 7.5% was used for the July 1, 2015 Actuarial Valuation.





## Schedule of Changes in Net Pension Liability and Related Ratios Last 4 Fiscal Years

	2016	2015	2014	2013
<b>Total pension liability</b>				
Service cost	\$ 2,636,301	\$ 2,447,371	\$ 2,376,088	\$ 2,306,882
Interest	5,216,803	5,000,246	4,667,210	4,359,174
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	-	(2,221,286)	-	-
Changes of assumptions	923,580	1,347,685	-	-
Benefit payments, including refunds of member contributions	(2,929,747)	(2,802,115)	(2,832,023)	(2,691,801)
<b>Net change in total pension liability</b>	<b>5,846,937</b>	<b>3,771,901</b>	<b>4,211,275</b>	<b>3,974,255</b>
<b>Total pension liability - beginning</b>	<b>67,218,749</b>	<b>63,446,848</b>	<b>59,235,573</b>	<b>55,261,318</b>
<b>Total pension liability - ending: (a)</b>	<b>\$ 73,065,686</b>	<b>\$ 67,218,749</b>	<b>\$ 63,446,848</b>	<b>\$ 59,235,573</b>
<b>Plan fiduciary net position</b>				
Contributions - employer	\$ 1,872,461	\$ 1,669,000	\$ 1,584,000	\$ 1,497,000
Contributions - member	1,200,202	1,146,675	1,097,592	1,057,944
Net investment income	(1,949,305)	415,987	8,053,015	5,518,467
Benefit payments, including refunds of member contributions	(2,929,747)	(2,802,115)	(2,832,023)	(2,691,801)
Administrative expenses	(33,778)	(47,045)	(71,917)	(58,888)
Other	4,076	-	(108)	-
<b>Net change in plan fiduciary net position</b>	<b>(1,836,091)</b>	<b>382,502</b>	<b>7,830,559</b>	<b>5,322,722</b>
<b>Plan fiduciary net position - beginning</b>	<b>56,961,858</b>	<b>56,579,356</b>	<b>48,748,797</b>	<b>43,426,075</b>
<b>Plan fiduciary net position - ending: (b)</b>	<b>55,125,767</b>	<b>56,961,858</b>	<b>56,579,356</b>	<b>48,748,797</b>
<b>Net pension liability - ending: (a) - (b)</b>	<b>\$ 17,939,919</b>	<b>\$ 10,256,891</b>	<b>\$ 6,867,492</b>	<b>\$ 10,486,776</b>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	<b>75.45%</b>	<b>84.74%</b>	<b>89.18%</b>	<b>82.30%</b>
<b>Covered-employee payroll</b>	<b>\$ 20,527,753</b>	<b>\$ 19,929,857</b>	<b>\$ 19,177,570</b>	<b>\$ 18,619,000</b>
<b>Net pension liability as a percentage of covered-employee payroll</b>	<b>87.39%</b>	<b>51.46%</b>	<b>35.81%</b>	<b>56.32%</b>



### Schedule of Net Pension Liability Last 5 Fiscal Years

	2016	2015	2014	2013	2012
Total pension liability*	\$ 73,065,686	\$ 67,218,749	\$ 63,446,848	\$ 59,235,573	\$ 55,261,318
Plan fiduciary net position	<u>55,125,767</u>	<u>56,961,858</u>	<u>56,579,356</u>	<u>48,748,797</u>	<u>43,426,075</u>
Net pension liability (asset)	\$ 17,939,919	\$ 10,256,891	\$ 6,867,492	\$ 10,486,776	\$ 11,835,243
Plan fiduciary net position as percentage of total pension liability	75.45%	84.74%	89.18%	82.30%	78.58%
Covered-employee payroll	\$ 20,527,753	\$ 19,929,857	\$ 19,177,570	\$ 18,619,000	\$ 19,247,000
Net pension liability as a % of covered-employee payroll	87.39%	51.46%	35.81%	56.32%	61.49%

*\*Total pension liability calculated using the Entry Age Normal Cost Method, as required by paragraph 46 of GASB Statement 67.*



## Disclosure Overview

	Plan's Funded Status			Deferred Outflows/(Inflows) of Resources			Recognized in Net Pension Liability	Recognized in Total Pension Expense
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	(Gains)/ Losses	Assumption Changes	Projected Net Investment Income		
Balances -- prior year disclosure	(67,218,749)	56,961,858	(10,256,891)	(1,984,979)	1,204,314	3,174,112	(10,256,891)	
Changes in net pension liability:								
Service cost	(2,636,301)		(2,636,301)					2,636,301
Interest	(5,216,803)		(5,216,803)					5,216,803
Net investment income		(1,949,305)	(1,949,305)					1,949,305
Contributions - employer		1,872,461	1,872,461				1,872,461	
Contributions - member		1,200,202	1,200,202					(1,200,202)
Benefit payments, including refunds of member contributions	2,929,747	(2,929,747)	0					
Administrative expense		(33,778)	(33,778)					33,778
Other		4,076	4,076					(4,076)
Recognized in total pension expense								
Differences between expected and actual experience				236,307			(236,307)	(236,307)
Changes of assumptions					(243,760)		243,760	243,760
Differences between projected and actual earnings on pension plan						(2,052,905)	2,052,905	2,052,905
Deferred outflows/inflows of resources								
Differences between expected and actual experience	0		0	0			0	
Changes of assumptions	(923,580)		(923,580)		923,580		(923,580)	
Differences between projected and actual earnings on pension plan						6,296,883	(6,296,883)	(6,296,883)
Total pension expense							(4,395,384)	4,395,384
Balances -- end of year	(73,065,686)	55,125,767	(17,939,919)	(1,748,672)	1,884,134	7,418,090	(17,939,919)	



## Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances as of June 30, 2015</b>	\$ 67,218,749	\$ 56,961,858	\$ 10,256,891
<b>Changes for the year:</b>			
Service cost	2,636,301		2,636,301
Interest	5,216,803		5,216,803
Differences between expected and actual experience	-		-
Changes of assumptions	923,580		923,580
Contributions - employer		1,872,461	(1,872,461)
Contributions - member		1,200,202	(1,200,202)
Net investment income		(1,949,305)	1,949,305
Benefit payments, including refunds of member contributions	(2,929,747)	(2,929,747)	-
Administrative expense		(33,778)	33,778
Other		4,076	(4,076)
<b>Net changes</b>	<u>5,846,937</u>	<u>(1,836,091)</u>	<u>7,683,028</u>
<b>Balances at June 30, 2016</b>	<u>\$ 73,065,686</u>	<u>\$ 55,125,767</u>	<u>\$ 17,939,919</u>



## Components of the Pension Expense for the Fiscal Year Ended June 30, 2016

Description	Amount
Service cost	\$ 2,636,301
Interest on the total pension liability	5,216,803
Differences between expected and actual experience	(236,307)
Changes of assumptions	243,760
Member contributions	(1,200,202)
Projected earnings on pension plan investments	(4,347,578)
Differences between projected and actual earnings on plan investments	2,052,905
Pension plan administrative expense	33,778
Other changes in fiduciary net position	<u>(4,076)</u>
<b>Total pension expense</b>	<b><u>\$ 4,395,384</u></b>



**Increase (Decrease) in Pension Expense from the Recognition of the Effects  
 of Differences Between Expected and Actual Experience**

		<b>Differences between Expected and Actual Experience</b>							
<b>Year</b>		<b>Recognition Period (Years)</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	
2015	\$ (2,221,286)	9.4	\$ (236,307)	\$ (236,307)	\$ (236,307)	\$ (236,307)	\$ (236,307)	\$ (236,307)	
2016	-	9.2		-	-	-	-	-	
Net increase (decrease) in pension expense			<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	

		<b>Differences between Expected and Actual Experience</b>						
<b>Year</b>		<b>Recognition Period (Years)</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	
2015	\$ -	0.0	\$ (236,307)	\$ (236,307)	\$ (236,307)	\$ (94,523)		
2016	-	1.0		-	-	-	\$ -	
Net increase (decrease) in pension expense			<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	<u>\$ (236,307)</u>	<u>\$ (94,523)</u>	<u>\$ -</u>	



### Increase (Decrease) in Pension Expense from the Recognition of the Effects of Changes of Assumptions

Year	Changes of Assumptions	Recognition Period (Years)	2015	2016	2017	2018	2019	2020
2015	\$ 1,347,685	9.4	\$ 143,371	\$ 143,371	\$ 143,371	\$ 143,371	\$ 143,371	\$ 143,371
2016	923,580	9.2		100,389	100,389	100,389	100,389	100,389
Net increase (decrease) in pension expense			<u>\$ 143,371</u>	<u>\$ 243,760</u>	<u>\$ 243,760</u>	<u>\$ 243,760</u>	<u>\$ 243,760</u>	<u>\$ 243,760</u>

Year	Changes of Assumptions	Recognition Period (Years)	2021	2022	2023	2024	2025
2015	\$ -	0.0	\$ 143,371	\$ 143,371	\$ 143,371	\$ 57,346	
2016	-	1.0	100,389	100,389	100,389	100,389	\$ 20,079
Net increase (decrease) in pension expense			<u>\$ 243,760</u>	<u>\$ 243,760</u>	<u>\$ 243,760</u>	<u>\$ 157,735</u>	<u>\$ 20,079</u>



### Increase (Decrease) in Pension Expense from the Recognition of Differences between Projected and Actual Earnings on Pension Plan Investments

Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	2015	2016	2017	2018	2019	2020
2015	\$ 3,967,640	5	\$ 793,528	\$ 793,528	\$ 793,528	\$ 793,528	\$ 793,528	
2016	6,296,883	5		1,259,377	1,259,377	1,259,377	1,259,377	\$ 1,259,375
Net increase (decrease) in pension expense			<u>\$ 793,528</u>	<u>\$ 2,052,905</u>	<u>\$ 2,052,905</u>	<u>\$ 2,052,905</u>	<u>\$ 2,052,905</u>	<u>\$ 1,259,375</u>





### Interest on the Total Pension Liability Recognized in Expense

	Amount for Period	Portion of Period	Interest Rate	Interest on the Total Pension Liability
Beginning total pension liability	\$ 67,218,749	100%	7.625%	\$ 5,125,430
Service cost	2,636,301	100	7.625	201,018
Benefit payments, including refunds of member contributions	(2,929,747)	50	7.625	<u>(109,645)</u>
Total interest on the pension liability				\$ 5,216,803

### Projected Earnings on Pension Plan Investments Recognized in Expense

	Amount for Period	Portion of Period	Projected Rate of Return	Projected Earnings
Beginning plan fiduciary net position	\$ 56,961,858	100%	7.625%	\$ 4,343,342
Contributions - employer	1,872,461	50	7.625	70,076
Contributions - member	1,200,202	50	7.625	44,917
Benefit payments, including refunds of member contributions	(2,929,747)	50	7.625	(109,645)
Administrative expense and other	(29,702)	50	7.625	<u>(1,112)</u>
Total projected earnings				\$ 4,347,578



## Pension Expense and Deferred Outflows and Inflows of Resources Related to Pensions

For the fiscal year ended June 30, 2016, the recognized pension expense is \$4,395,384. As of June 30, 2016, deferred outflows and inflows of resources related to pensions are reported as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience		\$ (1,748,672)
Changes of assumptions	\$ 1,884,134	
Net difference between projected and actual earnings on pension plan investments	<u>7,418,090</u>	
Total	<u>\$ 9,302,224</u>	<u>\$ (1,748,672)</u>

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in the pension expense as follows:

Year Ended June 30:	
2017	\$ 2,060,358
2018	2,060,358
2019	2,060,358
2020	1,266,828
2021	7,453
Thereafter	98,197



### Deferred Outflows and Inflows of Resources from Differences between Expected and Actual Experience

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense through June 30, 2016 (c)	Balances at June 30, 2016	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2015		\$ (2,221,286)	\$ (472,614)		\$ (1,748,672)
2016					
				<u>\$ -</u>	<u>\$ (1,748,672)</u>



## Deferred Outflows and Inflows of Resources from Changes of Assumptions

Year	Increases in the Total Pension Liability (a)	Decreases in the Total Pension Liability (b)	Amounts Recognized in Pension Expense through June 30, 2016 (c)	Balances at June 30, 2016	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2015	\$ 1,347,685		\$ 286,742	\$ 1,060,943	
2016	923,580		100,389	823,191	
				<u>\$ 1,884,134</u>	<u>\$ -</u>



**Deferred Outflows and Inflows of Resources from Differences  
 between Projected and Actual Earnings on Pension Plan Investments**

Year	Investment Earnings Less Than Projected (a)	Investment Earnings Greater Than Projected (b)	Amounts Recognized in Pension Expense through June 30, 2016 (c)	Balances at June 30, 2016	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2015	\$ 3,967,640		\$ 1,587,056	\$ 2,380,584	
2016	6,296,883		1,259,377	5,037,506	
				<u>\$ 7,418,090</u>	<u>\$ -</u>



## Sensitivity of the Net Pension Liability to Changes in the Discount Rate

	Current Discount Rate (7.50%)	1% Decrease (6.50%)	1% Increase (8.50%)
Net pension liability as of June 30, 2016	\$ 17,939,919	\$ 26,055,616	\$ 11,044,954

## Participant Breakdown as of July 1, 2014

	Participant Count
Inactive plan members or beneficiaries currently receiving benefits	147
Inactive plan members entitled to but not yet receiving benefits	20
Active plan members	527
Total members	694



## Description of Significant Changes Prior to Year End

There were no significant plan changes since the last published valuation.

## DROP Balances

Currently, there is no Deferred Retirement Option Plan (DROP). Therefore, the DROP balances are \$0.

## Valuation Date and Roll Forward Process

The Plan Sponsor uses the July 1, 2014 Actuarial Valuation to calculate the ADEC for fiscal 2016.

The July 1, 2014 Actuarial Valuation was used to project the July 1, 2015 Total Pension Liability (TPL). The July 1, 2015 TPL was increased by service cost and interest and decreased by benefit payments to estimate the TPL as of June 30, 2016. The TPL as of June 30, 2016 was also adjusted to reflect any material plan changes after the valuation.

## Funding Policy

The Plan Sponsor uses the Entry Age Normal Actuarial Cost Method to calculate the plan liabilities. The Funding Policy has two parts.

1. Normal Cost
2. Amortization of the Unfunded Actuarial Liability (UAL)

Each year the Plan Sponsor pays the Normal Cost plus an amortization of the plan's UAL. For the July 1, 2015 Actuarial Valuation, an open amortization period of 15 years was used.

## Assumption Selection

The selections of all assumptions used in determining the total pension liability were made in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board.

The actuarial assumptions used in the valuation were based on standard tables modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor. A full actuarial experience study has not been completed.



## Description of Actuarial Methods

### Asset Valuation Method - Valuation

The Actuarial Value of Assets used in the development of the Annual Recommended Contribution is designed to smooth out fluctuations in the market value. An Expected Actuarial Value of Assets is determined based on the prior year's Actuarial Value of Assets and the assumed interest rate equal to the valuation interest rate. The Actuarial Value of Assets is equal to the Expected Actuarial Asset Value plus 20% of the difference between the Market Value and the Expected Value. The Actuarial Value of Assets is limited to a minimum of 70% or a maximum of 130% of the Market Value.

### Asset Valuation Method – GASB 67/68

As required by GASB 67/68, the market value of assets was used.

### Actuarial Cost Method

Cost method for determining the calculating GASB liability: Entry Age Normal Actuarial Cost Method (level percentage of salary).

Cost method for determining the ADEC: Projected Unit Credit Cost Method.

The Ongoing Annual Cost equals the total present value for all participants of the benefit accruing during the coming year, increased to reflect salaries projected to the assumed retirement date.

The Accrued Liability equals the present value of all benefits accrued to date, increased to reflect salaries for all active participants. The total Accrued Liability is reduced by plan assets to develop the Unfunded Accrued Liability.

The cost of amortizing the Unfunded Accrued Liability constitutes a portion of the Actuarially Determined Contribution.

The total Actuarially Determined Contribution equals the Ongoing Annual Cost, further increased by any positive amortization of the Unfunded Accrued Liability. The amortization period is 15 years.





## Description of Actuarial Assumptions

	Year Ending June 30, 2016	Year Ending June 30, 2015
<b>Investment rate of return</b> (net of investment-related and administrative expenses)	7.50%	7.625%
<b>Rate of compensation increase</b> (including inflation)	Graded Scale	Graded Scale

### Inflation

3.0%.

This assumption is based on long term (1926-2013) historical inflation numbers. While near term averages have been lower, we do not believe this trend will continue indefinitely and expect that there will be a reversion to the long term average.

### Mortality

RP-2000 Mortality Table with separate male and female rates, with blue collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale AA.

### Mortality Improvement

Projected to date of decrement using Scale AA (generational mortality).

We have selected a mortality table commonly used by public pension systems (such as the State of Connecticut). The plan does not have sufficiently credible data on which to perform a mortality experience study.

### Salary Scale

Based on age. Sample rates shown below.

Age	Rate
20	6.50%
25	6.50%
30	5.85%
35	5.20%
40	4.55%
45	3.90%
50	3.25%
55+	3.00%

The assumption is based on input from the plan sponsor regarding future expectations, as well as knowledge that younger employees generally earn higher annual percentage increases than older employees.



## Retirement

Assumed annual rates of retirement after the completion of 10 years of service are as follows:

Age	Retirement Rate
60	20%
61	5%
62-69	20%
70	100%

An additional 50% probability of retirement is added upon completion of 25 years of service.

## Turnover

The following annual rates of turnover are assumed:

Age	Probability
20	5.44%
25	4.89%
30	3.70%
35	2.35%
40	1.13%
45	0.00%
50	0.00%
55	0.00%
60	0.00%

## Disability

The following annual rates of disability are assumed:

Age	Probability
20	.05%
25	.05%
30	.05%
35	.06%
40	.09%
45	.18%
50	.40%
55	.85%
60	.00%

The actuarial assumptions in regards to rates of decrement shown above are based on standard tables modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

## Deaths

For purposes of valuing the plan's pre-retirement death benefit, we assume all deaths are non-service related.

## Payroll Growth

3%, only used to project normal cost to the next year.



### **Survivorship**

70% of employees assumed to be married, with wives 4 years younger than husbands.

### **Expenses**

The normal cost includes a load for expected administrative expenses. Expenses are estimated based on actual amounts for the two prior years.

### **Sick Bank**

50% of retirees are assumed to elect an annuity from the fund and 50% of retirees are assumed to elect a lump sum paid from the operating budget.

### **Medicare Part B Reimbursement**

3% increase assumption each year.



## Summary of Plan Provisions

### **Pension Earnings**

Salary in Final Year of Employment.

### **Normal Retirement**

Eligibility: The earlier of 1) age 60 with 10 years of service, or 2) 25 years of service.

Benefit: Educational Assistants and Security Workers: 1.5% of pension earnings per year of service to a maximum of 33 years.

Custodians: 2.25% of pension earnings times year of service to a maximum of 33 years.

### **Limits on Annual Benefit**

Maximum: None.

Minimum: None.

### **Disability – Non-Service Connected**

Service Requirement: 10 years of service.

Benefit: 50% of pension earnings if less than 25 years of service. Accrued retirement benefit if more than 25 years of service.

### **Disability – Service Connected:**

Service Requirement: None.

Benefit: 50% of pension earnings.

### **Pre-Retirement Death Benefit – Non Service Connected**

Service Requirement: None.

Benefit: Return of contributions if less than 10 years of service. 50% of pension earnings with 10 years of service.

### **Pre-Retirement Death Benefit – Service Connected**

Service Requirement: None.

Benefit: 50% of pension earnings.

### **Post-Retirement Spouse's Benefit**

100% of pension retiree was receiving.

### **Post-Retirement Death Benefit**

Lump sum, excess of accumulated contributions over benefits paid to member or survivors (if not eligible for spouse's benefit).



### **Vesting in Accrued Benefit**

Eligibility: 10 years of service.

Benefit: Accrued retirement benefit.

### **Termination Benefit**

Accumulated contributions as lump sum, if not vested.

### **Employee Contributions**

5% of salary; no contributions for those with 33 or more years of service (7% for Custodians with a 33 year maximum).

### **Additional Retirement Benefits**

Employees can trade in up to 125 days of sick leave for additional pension credit. Each 25 days grants an additional 1.5% of salary up to a maximum of 7.5%.

Educational Assistants and Security Workers are not eligible for this additional retirement benefit.