



THE POLICE PENSION TRUST FUND OF THE CITY OF STAMFORD

GASB 67 AND GASB 68 DISCLOSURE

REPORTING AS OF JUNE 30, 2016





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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 Police 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
Enrolled Actuary 14-04513

November 28, 2016



Money-Weighted Rate of Return June 30, 2016

Beg. Value 195,574,732 **Ending Value** 186,944,990

	Date	Employer Contributions	Employee Contributions	Benefit Payments	Admin. Expenses	Net External Cash Flows	Period Invested	Period Weight	Net External Cash Flows w/ Interest
Beg. of Yr.	7/1/2015						12	1.000	191,376,250
July	7/31/2015	7,158,000	100,851	(982,205)	(34,364)	6,242,282	11	0.917	6,119,333
August	8/31/2015	-	92,349	(1,000,060)	(35,067)	(942,778)	10	0.833	(925,882)
September	9/30/2015	-	115,791	(1,011,586)	(10,797)	(906,592)	9	0.750	(891,956)
October	10/31/2015	-	90,712	(1,015,137)	(63,317)	(987,742)	8	0.667	(973,555)
November	11/30/2015	-	113,782	(1,019,958)	(28,280)	(934,456)	7	0.583	(922,701)
December	12/31/2015	-	91,642	(1,025,205)	(26,010)	(959,573)	6	0.500	(949,217)
January	1/31/2016	-	91,207	(1,051,163)	(18,799)	(978,755)	5	0.417	(969,945)
February	2/29/2016	-	113,654	(1,052,943)	24,864	(914,425)	4	0.333	(907,834)
March	3/31/2016	-	91,688	(1,064,190)	(25,511)	(998,013)	3	0.250	(992,613)
April	4/30/2016	-	95,859	(1,076,111)	(40,875)	(1,021,127)	2	0.167	(1,017,440)
May	5/31/2016	-	95,067	(1,099,943)	(6,184)	(1,011,060)	1	0.083	(1,009,233)
June	6/30/2016	-	387,375	(1,316,327)	(61,265)	(990,217)	0	0.000	(990,217)
End of Yr.	6/30/2016	7,158,000	1,479,977	(12,714,828)	(325,605)				186,944,990

Money-Weighted Rate of Return

-2.15%



Schedule of Investment Returns Last 3 Fiscal Years

	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	-2.15%	4.38%	15.13%



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

	2016	2015	2014
Actuarially Determined Employer Contribution (ADEC)	\$ 7,158,000	\$ 6,645,000	\$ 6,230,000
Contributions in relation to the ADEC	<u>7,158,000</u>	<u>6,645,000</u>	<u>6,230,000</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered-employee payroll	\$ 23,328,220	\$ 22,648,757	\$ 21,994,000
Contributions as a percentage of covered-employee payroll	30.68%	29.34%	28.33%



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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
U.S. Domestic Equities	29.00%	5.00%	1.45%
Non-U.S. Equities	18.00%	5.50%	0.99%
U.S. Domestic Income	10.00%	2.00%	0.20%
Non-U.S. Income	5.00%	2.00%	0.10%
High Yield	4.00%	3.25%	0.13%
Real Estate	10.00%	5.00%	0.50%
Alternative Investments	17.00%	5.25%	0.89%
Hedge Funds	5.00%	5.25%	0.26%
Cash	2.00%	0.50%	0.01%
	100.00%		4.53%
Long-Term Inflation Expectation			3.00%
Long-Term Expected Nominal Return			7.53%

**Long-Term Returns are provided by HHIA. 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 arithmetic 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
Total pension liability				
Service cost	\$ 4,539,800	\$ 4,400,529	\$ 4,272,359	\$ 4,147,921
Interest	18,039,262	17,449,743	16,709,145	15,999,943
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	-	(1,349,423)	-	-
Changes of assumptions	3,084,827	2,952,505	-	-
Benefit payments, including refunds of member contributions	<u>(12,714,828)</u>	<u>(11,641,732)</u>	<u>(11,468,644)</u>	<u>(10,786,696)</u>
Net change in total pension liability	12,949,061	11,811,622	9,512,860	9,361,168
Total pension liability - beginning	<u>238,281,321</u>	<u>226,469,699</u>	<u>216,956,839</u>	<u>207,595,671</u>
Total pension liability - ending: (a)	<u>\$ 251,230,382</u>	<u>\$ 238,281,321</u>	<u>\$ 226,469,699</u>	<u>\$ 216,956,839</u>
Plan fiduciary net position				
Contributions - employer	\$ 7,158,000	\$ 6,645,000	\$ 6,230,000	\$ 4,885,000
Contributions - member	1,479,977	1,210,331	1,250,143	1,231,498
Net investment income	(4,227,286)	8,404,119	25,799,437	19,409,718
Benefit payments, including refunds of member contributions	(12,714,828)	(11,641,732)	(11,468,644)	(10,786,696)
Administrative expenses	(325,605)	(228,492)	(82,936)	-
Other	-	-	-	-
Net change in plan fiduciary net position	(8,629,742)	4,389,226	21,728,000	14,739,520
Plan fiduciary net position - beginning	<u>195,574,732</u>	<u>191,185,506</u>	<u>169,457,506</u>	<u>154,717,986</u>
Plan fiduciary net position - ending: (b)	<u>186,944,990</u>	<u>195,574,732</u>	<u>191,185,506</u>	<u>169,457,506</u>
Net pension liability - ending: (a) - (b)	<u>\$ 64,285,392</u>	<u>\$ 42,706,589</u>	<u>\$ 35,284,193</u>	<u>\$ 47,499,333</u>
Plan fiduciary net position as a percentage of the total pension liability	74.41%	82.08%	84.42%	78.11%
Covered-employee payroll	\$ 23,328,220	\$ 22,648,757	\$ 21,994,000	\$ 21,353,000
Net pension liability as a percentage of covered-employee payroll	275.57%	188.56%	160.43%	222.45%



Schedule of Net Pension Liability Last 5 Fiscal Years

	2016	2015	2014	2013	2012
Total pension liability*	\$ 251,230,382	\$ 238,281,321	\$ 226,469,699	\$ 216,956,839	\$ 207,595,671
Plan fiduciary net position	<u>186,944,990</u>	<u>195,574,732</u>	<u>191,185,506</u>	<u>169,457,506</u>	<u>154,717,986</u>
Net pension liability (asset)	\$ 64,285,392	\$ 42,706,589	\$ 35,284,193	\$ 47,499,333	\$ 52,877,685
Plan fiduciary net position as percentage of total pension liability	74.41%	82.08%	84.42%	78.11%	74.53%
Covered-employee payroll	\$ 23,328,220	\$ 22,648,757	\$ 21,994,000	\$ 21,353,000	\$ 22,340,000
Net pension liability as a % of covered-employee payroll	275.57%	188.56%	160.43%	222.45%	236.70%

**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	(238,281,321)	195,574,732	(42,706,589)	(1,068,293)	2,337,400	5,008,066	(42,706,589)	
Changes in net pension liability:								
Service cost	(4,539,800)		(4,539,800)					4,539,800
Interest	(18,039,262)		(18,039,262)					18,039,262
Net investment income		(4,227,286)	(4,227,286)					4,227,286
Contributions - employer		7,158,000	7,158,000				7,158,000	
Contributions - member		1,479,977	1,479,977					(1,479,977)
Benefit payments, including refunds of member contributions	12,714,828	(12,714,828)	0					
Administrative expense		(325,605)	(325,605)					325,605
Other		0	0					0
Recognized in total pension expense								
Differences between expected and actual experience				281,130			(281,130)	(281,130)
Changes of assumptions					(1,332,507)		1,332,507	1,332,507
Differences between projected and actual earnings on pension plan						(5,047,037)	5,047,037	5,047,037
Deferred outflows/inflows of resources								
Differences between expected and actual experience	0		0	0			0	
Changes of assumptions	(3,084,827)		(3,084,827)		3,084,827		(3,084,827)	
Differences between projected and actual earnings on pension plan						18,975,098	(18,975,098)	(18,975,098)
Total pension expense							(12,775,292)	<u>12,775,292</u>
Balances -- end of year	(251,230,382)	186,944,990	(64,285,392)	(787,163)	4,089,720	18,936,127	(64,285,392)	



Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances as of June 30, 2015	\$ 238,281,321	\$ 195,574,732	\$ 42,706,589
Changes for the year:			
Service cost	4,539,800		4,539,800
Interest	18,039,262		18,039,262
Differences between expected and actual experience	-		-
Changes of assumptions	3,084,827		3,084,827
Contributions - employer		7,158,000	(7,158,000)
Contributions - member		1,479,977	(1,479,977)
Net investment income		(4,227,286)	4,227,286
Benefit payments, including refunds of member contributions	(12,714,828)	(12,714,828)	-
Administrative expense		(325,605)	325,605
Other		-	-
Net changes	<u>12,949,061</u>	<u>(8,629,742)</u>	<u>21,578,803</u>
Balances at June 30, 2016	<u>\$ 251,230,382</u>	<u>\$ 186,944,990</u>	<u>\$ 64,285,392</u>



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

Description	Amount
Service cost	\$ 4,539,800
Interest on the total pension liability	18,039,262
Differences between expected and actual experience	(281,130)
Changes of assumptions	1,332,507
Member contributions	(1,479,977)
Projected earnings on pension plan investments	(14,747,812)
Differences between projected and actual earnings on plan investments	5,047,037
Pension plan administrative expense	325,605
Other changes in fiduciary net position	-
Total pension expense	\$ 12,775,292



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

Differences between Expected and Actual Experience								
Year	Recognition Period (Years)	2015	2016	2017	2018	2019	2020	
2015	4.8	\$ (281,130)	\$ (281,130)	\$ (281,130)	\$ (281,130)	\$ (224,903)		
2016	4.3	-	-	-	-	-	\$ -	
Net increase (decrease) in pension expense		<u>\$ (281,130)</u>	<u>\$ (281,130)</u>	<u>\$ (281,130)</u>	<u>\$ (281,130)</u>	<u>\$ (224,903)</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	\$ 2,952,505	4.8	\$ 615,105	\$ 615,105	\$ 615,105	\$ 615,105	\$ 492,085	
2016	3,084,827	4.3		717,402	717,402	717,402	717,402	\$ 215,219
Net increase (decrease) in pension expense			<u>\$ 615,105</u>	<u>\$ 1,332,507</u>	<u>\$ 1,332,507</u>	<u>\$ 1,332,507</u>	<u>\$ 1,209,487</u>	<u>\$ 215,219</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	\$ 6,260,083	5	\$ 1,252,017	\$ 1,252,017	\$ 1,252,017	\$ 1,252,017	\$ 1,252,015	
2016	18,975,098	5		3,795,020	3,795,020	3,795,020	3,795,020	\$ 3,795,018
Net increase (decrease) in pension expense			<u>\$ 1,252,017</u>	<u>\$ 5,047,037</u>	<u>\$ 5,047,037</u>	<u>\$ 5,047,037</u>	<u>\$ 5,047,035</u>	<u>\$ 3,795,018</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	\$ 238,281,321	100%	7.625%	\$ 18,168,951
Service cost	4,539,800	100	7.625	346,160
Benefit payments, including refunds of member contributions	(12,714,828)	50	7.625	<u>(475,849)</u>
Total interest on the pension liability				\$ 18,039,262

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	\$ 195,574,732	100%	7.625%	\$ 14,912,573
Contributions - employer	7,158,000	50	7.625	267,886
Contributions - member	1,479,977	50	7.625	55,388
Benefit payments, including refunds of member contributions	(12,714,828)	50	7.625	(475,849)
Administrative expense and other	(325,605)	50	7.625	<u>(12,186)</u>
Total projected earnings				\$ 14,747,812



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 \$12,775,292. 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		\$ (787,163)
Changes of assumptions	\$ 4,089,720	
Net difference between projected and actual earnings on pension plan investments	18,936,127	
Total	\$ 23,025,847	\$ (787,163)

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	\$ 6,098,414
2018	6,098,414
2019	6,031,619
2020	4,010,237
2021	-
Thereafter	-



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		\$ (1,349,423)	\$ (562,260)		\$ (787,163)
				\$ -	\$ (787,163)



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	\$ 2,952,505		\$ 1,230,210	\$ 1,722,295	
2016	3,084,827		717,402	2,367,425	
				\$ 4,089,720	\$ -



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	\$ 6,260,083		\$ 2,504,034	\$ 3,756,049	
2016	18,975,098		3,795,020	15,180,078	
				<u>\$ 18,936,127</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	\$ 64,285,392	\$ 91,570,528	\$ 41,348,594

Participant Breakdown as of July 1, 2014

	Participant Count
Inactive plan members or beneficiaries currently receiving benefits	296
Inactive plan members entitled to but not yet receiving benefits	2
Active plan members	282
Total members	580



Description of Significant Changes Prior to Year End

A Deferred Retirement Option Plan (DROP) was added to the plan. However, it did not affect liabilities.

DROP Balances

Although there is a Deferred Retirement Option Plan (DROP), as of June 30, 2016 no members have elected the 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 Annual Recommended Contribution.

The total Annual Recommended 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
Investment rate of return (net of investment-related and administrative expenses)	7.5%	7.625%
Rate of compensation increase (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 Blue Collar Combined - Generational Mortality Table.

Mortality Improvement

Pre and Post-retirement: Projected to date of decrement using Scale AA.

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

We are using scale AA because is consistent with recent industry analysis of future mortality improvement and Scale AA is commonly used with the RP-2000 Mortality Table.

Salary Scale

Yearly Rates of Increases

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.



Payroll Growth Assumption

3% used to project normal cost only.

Medicare Part B Reimbursement

3% increase assumption each year.

Retirement Age

Sample rates of assumed annual rates of retirement after completion of 25 years are as follows:

Age	Retirement Rate
55	50%
56	50%
57	50%
58	50%
59	50%

An additional 50% is added upon attainment of 20 years of service and 100% of members remaining beyond the earlier of age 60 with 25 years of service or age 65 are assumed to retire.

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%

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.



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	1.74%

Survivorship

80% of employees assumed to be married, with wives 4 years younger than husbands.

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Expenses

Administrative expenses were assumed to be the average of the last two years of administrative expenses.

Sick Bank and Vacation Bank

50% of retirees are assumed to elect an annuity from the fund.

Post-Retirement Life Insurance

100% of active and retired employees are assumed to have a \$4,000 life insurance policy beginning at retirement.



Summary of Plan Provisions

Pension Earnings

Base Salary in Final Year of Employment plus 14 paid holidays.

Normal Retirement

Eligibility: 20 years of service

Benefit:

Years of Service	% of Pension Earnings
20	50.00%
21	53.00%
22	56.00%
23	59.00%
24	62.00%
25	65.00%
26	67.33%
27	69.66%
28	71.99%
29	74.32%
30	76.65%

Limits on Annual Benefit

Maximum: 76.65% of pension earnings plus a possible 7.5% (from Sick Bank) for a total of 84.15%

Minimum: None.

Early Retirement

Eligibility: None.

Minimum: See Termination Benefit.

Disability:

Service Requirement: None.

Benefit: 75% of pay (or 50% of pay depending on extent of disability).

Pre-Retirement Death Benefit – Non Service Connected

Service Requirement: 10 years of service.

Benefit: 50% of salary.

Pre-Retirement Death Benefit – Service Connected

Service Requirement: None.

Benefit: 50% of salary but not less than the accrued benefit.



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).

Post-Retirement Lump Sum at Death

Lump Sum equal to \$4,000.00.

Vesting in Accrued Benefit

Eligibility: 10 years of service.

Benefit: 50% off final salary times the ratio of service at termination to 20 years. Benefit is payable when the officer would have had 20 years of service but not earlier than age 48.

Termination Benefit

Accumulated contributions as lump sum, if not vested.

Employee Contributions

7% of salary; no contributions for those with 30 or more years of service.

Additional Retirement Benefits

Employees can trade in 50% of sick leave for additional pension credit. If an officer's sick bank has less than 200 days, unused vacation time may be added, subject to a maximum of 200 sick and unused vacation days combined. Each 20 days grants an additional 1.5% of salary up to a maximum of 7.5%.