

THE POLICE PENSION TRUST FUND OF THE CITY OF STAMFORD

GASB 67 and 68 DISCLOSURE Fiscal Year: July 1, 2019 to June 30, 2020

Prepared by

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Table of Contents

Certification	1
Overview of GASB 67 and GASB 68	3
Executive Summary	4
Schedule of Employer Contributions	5
Actuarial Methods and Assumptions Used for Funding Policy	6
Money-Weighted Rate of Return	7
Long-Term Expected Rate of Return	8
Depletion Date Projection	9
Net Pension Liability	10
Changes in Net Pension Liability	11
Schedule of Changes in Net Pension Liability and Related Ratios	12
Pension Expense	13
Schedule of Deferred Inflows and Outflows of Resources	14
Summary Chart	15
Glossary	16

Certification

Actuarial computations presented in this report under Statements No. 67 and 68 of the Governmental Accounting Standards Board are for purposes of assisting the City in fulfilling its financial accounting requirements. No attempt is being made to offer any accounting opinion or advice. This report is for fiscal year July 1, 2019 to June 30, 2020. The reporting date for determining plan assets and obligations is June 30, 2020. The calculations enclosed in this report have been made on a basis consistent with our understanding of the plan provisions. Determinations for purposes other than meeting financial reporting requirements may be significantly different than the results contained in this report. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security or meeting employer funding requirements.

In preparing this report, we relied, without audit, on information as of July 1, 2019 and June 30, 2020 furnished by the City. This information includes, but is not limited to, statutory provisions, member census data, and financial information. Please see Milliman's funding valuation report dated April 22, 2020 for more information on the plan's participant group as of July 1, 2019 as well as a summary of the plan provisions and a summary of the actuarial methods and assumptions used for funding purposes.

We performed a limited review of the census and financial information used directly in our analysis and have found them to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

The valuation results were developed using models employing standard actuarial techniques. In addition to the models described previously, Milliman has developed certain models to develop the expected long term rate of return on assets used in this analysis. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP). The models, including all input, calculations, and output may not be appropriate for any other purpose.

We hereby certify that, to the best of our knowledge, this report, including all costs and liabilities based on actuarial assumptions and methods, is complete and accurate and determined in conformance with generally recognized and accepted actuarial principles and practices, which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions and supporting Recommendations of the American Academy of Actuaries.

Statements No. 67 and 68 of the Governmental Accounting Standards Board (GASB) require that the discount rate assumption be the estimated long-term yield on the investments that are expected to finance the benefits. Each of the assumptions used in this valuation with the exception of those set by law was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgment regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

This valuation report is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Certification

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 the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.

Milliman's work is prepared solely for the internal use and benefit of the City of Stamford. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

(a) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to the Plan Sponsor's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the City; and (b) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and has been prepared in accordance with generally recognized accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Rebecca A. Sielman, FSA

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Overview of GASB 67 and GASB 68

The Governmental Accounting Standards Board (GASB) released new accounting standards for public pension plans and participating employers in 2012. These standards, GASB Statements No. 67 and 68, have substantially revised the accounting requirements previously mandated under GASB Statements No. 25 and 27. The most notable change is the distinct separation of funding from financial reporting. The Annual Required Contribution (ARC) has been eliminated under GASB 67 and 68 and is no longer relevant for financial reporting purposes. As a result, plan sponsors have been encouraged to establish a formal funding policy that is separate from financial reporting calculations.

GASB 67 applies to financial reporting for public pension plans and is required to be implemented for plan fiscal years beginning after June 15, 2013. Note that a plan's fiscal year might not be the same as the employer's fiscal year. Even if the plan does not issue standalone financial statements, but rather is considered a pension trust fund of a government, it is subject to GASB 67. Under GASB 67, enhancements to the financial statement disclosures are required, along with certain required supplementary information.

GASB 68 governs the specifics of accounting for public pension plan obligations for participating employers and is required to be implemented for employer fiscal years beginning after June 15, 2014. GASB 68 requires a liability for pension obligations, known as the Net Pension Liability, to be recognized on the balance sheets of participating employers. Changes in the Net Pension Liability will be immediately recognized as Pension Expense on the income statement or reported as deferred inflows/outflows of resources depending on the nature of the change.

Executive Summary

Relationship Between Valuation Date, Measurement Date, and Reporting Date

The Valuation Date is July 1, 2019. This is the date as of which the actuarial valuation is performed. The Measurement Date is June 30, 2020. This is the date as of which the net pension liability is determined. The Reporting Date is June 30, 2020. This is the plan's and/or employer's fiscal year ending date.

Significant Changes

There have been no significant changes between the valuation date and fiscal year end.

Participant Data as of July 1, 2019

Actives	274
Terminated vested & other inactives	2
Retirees and beneficiaries	<u>351</u>
Total	627

Schedule of Employer Contributions

Fiscal Year Ending	Actuarially Determined	Actual Employer	Contribution Deficiency	Covered	Contribution as a % of
June 30	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2020	\$8,897,000	\$8,897,000	\$0	\$24,244,956	36.70%
2019	8,711,000	8,711,000	0	24,435,134	35.65%
2018	8,275,000	8,275,000	0	22,958,568	36.04%
2017	7,903,000	7,903,000	0	22,320,912	35.41%
2016	7,158,000	7,158,000	0	23,328,220	30.68%
2015	6,645,000	6,645,000	0	22,648,757	29.34%
2014	6,230,000	6,230,000	0	21,994,000	28.33%
2013	4,885,000	4,885,000	0	21,353,000	22.88%
2012	4,885,000	4,885,000	0	22,340,000	21.87%
2011	4,341,000	4,341,000	0	21,378,000	20.31%

Actuarial Methods and Assumptions Used for Funding Policy

The following actuarial methods and assumptions were used in the July 1, 2019 funding valuation. Please see the valuation report dated April 22, 2020 for further details.

Valuation Timing Actuarially determined contribution rates are calculated as of

June 30, two years prior to the end of the fiscal year in which

the contributions are reported.

Actuarial Cost Method Projected Unit Credit

Amortization Method

Level percent or level dollar

Closed, open, or layered periods

Amortization period at 07/01/2019

Amortization growth rate

Level dollar

Open

15 years

0.00%

Asset Valuation Method

Smoothing period 5 years
Recognition method Asymptotic

Corridor Range of 70% and 130% of the Market Value of Assets

Inflation 2.60%

Salary Increases Graded by service

Investment Rate of Return 7.05%

Cost of Living Adjustments None

Retirement Age Graded by service with 100% retiring at age 65

Turnover Graded by age

Mortality PubS-2010 Mortality Table with generational projection per

the MP-2019 ultimate scale

Money-Weighted Rate of Return

Fiscal Year	Net
Ending	Money-Weighted
June 30	Rate of Return
2020	-3.18%
2019	1.92%
2018	9.18%
2017	10.81%
2016	-2.15%
2015	4.38%
2014	15.13%

Calculation of Money-Weighted Rate of Return

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the beginning of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value - July 1, 2019	\$214,745,827	12.00	1.00	\$207,913,893
Monthly net external cash flows:				
July	7,513,902	12.00	1.00	7,274,854
August	(1,312,495)	11.00	0.92	(1,274,030)
September	(1,285,444)	10.00	0.83	(1,251,408)
October	(1,381,689)	9.00	0.75	(1,348,588)
November	(1,316,265)	8.00	0.67	(1,288,059)
December	(1,249,810)	7.00	0.58	(1,226,592)
January	(1,361,434)	6.00	0.50	(1,339,603)
February	(1,322,018)	5.00	0.42	(1,304,188)
March	(1,300,117)	4.00	0.33	(1,286,319)
April	(1,338,227)	3.00	0.25	(1,327,454)
May	(1,353,736)	2.00	0.17	(1,346,316)
June	(1,276,991)	1.00	0.08	(1,273,692)
Ending Value - June 30, 2020	200,922,498			200,922,498
Money-Weighted Rate of Return	-3.18%			

Long-Term Expected Rate of Return

The assumption for 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 June 30, 2019.

Asset Class	Index	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return	Long-Term Expected Geometric Real Rate of Return
US Cash	BAML 3-Mon Tbill	2.00%	0.88%	0.87%
US Core Fixed Income	Barclays Aggregate	15.00%	2.28%	2.18%
Non-US Bonds	JPM GBI Global xUS	5.00%	0.73%	0.29%
US Equity Market	Russell 3000	25.00%	4.73%	3.52%
Non-US Equity	MSCI ACWI xUS NR	10.00%	6.28%	4.70%
Emerging Markets Equity	MSCI EM NR	5.00%	8.28%	5.43%
US REITs	FTSE NAREIT Equity REIT	10.00%	5.08%	3.42%
Private Equity	Cambridge Private Equity	8.00%	9.55%	5.68%
Commodities	Dow Jones UBS	5.00%	2.99%	1.37%
Hedge Funds - MultiStrategy	HFRI:Fund Wtd Composite	15.00%	3.40%	3.03%
Assumed Inflation - Mean			2.60%	2.60%
Assumed Inflation - Standard D	Peviation		1.65%	1.65%
Portfolio Real Mean Return			4.55%	3.93%
Portfolio Nominal Mean Return			7.17%	6.61%
Portfolio Standard Deviation				10.97%
Long-Term Expected Rate of	Return			7.05%

Depletion Date Projection

GASB 67 and 68 generally require that a blended discount rate be used to measure the Total Pension Liability (the Actuarial Accrued Liability calculated using the Individual Entry Age Normal Cost Method). The long-term expected return on plan investments may be used to discount liabilities to the extent that the plan's Fiduciary Net Position (fair market value of assets) is projected to cover benefit payments and administrative expenses. A 20-year high quality (AA/Aa or higher) municipal bond rate must be used for periods where the Fiduciary Net Position is not projected to cover benefit payments and administrative expenses. Determining the discount rate under GASB 67 and 68 will often require that the actuary perform complex projections of future benefit payments and asset values. GASB 67 and 68 (paragraph 29) do allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB does not contemplate a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

The following circumstances justify an alternative evaluation of sufficiency for the City of Stamford:

- The City of Stamford has at least a 5-year history of paying at least 100% of the Actuarially Determined Contribution (previously termed the Annual Required Contribution).
- The Actuarially Determined Contribution (ADC) is based on amortizing the Unfunded Accrued Liability over an open 15-year amortization period. The ratio of the Actuarial Value of Assets to the Accrued Liability that is used for funding purposes has been between 77% and 84% for the past five years. Based on the funded status of the plan and the relatively short fixed amortization period, it is our professional opinion that payment of the ADC each year will not cause the funded position of the plan to decline.
- GASB 67 and 68 specify that the projections regarding future solvency assume that plan assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions, which means that the projections would not reflect any adverse future experience which might impact the plan's funded position.

Based on these circumstances, it is our professional opinion that the detailed depletion date projections outlined in GASB 67 and 68 will show that the Fiduciary Net Position is always projected to be sufficient to cover benefit payments and administrative expenses.

Net Pension Liability

Net Pension Liability	June 30, 2020	June 30, 2019
Total pension liability	\$298,128,032	\$277,431,615
Fiduciary net position	_200,922,498_	_214,745,827
Net pension liability	97,205,534	62,685,788
Fiduciary net position as a % of total pension liability	67.39%	77.40%
Covered payroll	24,244,956	24,435,134
Net pension liability as a % of covered payroll	400.93%	256.54%

The total pension liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions below, and was then projected forward to the measurement date. Any significant changes during this period have been reflected as prescribed by GASB 67 and 68.

Discount Rate

Discount rate	7.05%	7.10%
Long-term expected rate of return, net of investment expense	7.05%	7.10%
Municipal bond rate	N/A	N/A

The plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return.

Other Key Actuarial Assumptions

The plan has not had a formal actuarial experience study performed.

July 1, 2019	July 1, 2018
June 30, 2020	June 30, 2019
Entry Age Normal	Entry Age Normal
2.60%	2.60%
Graded by service	Graded by service
PubS-2010 Mortality Table with generational projection per the MP-2019 ultimate scale	RP-2000 Mortality Table separate tables for non- annuitants and annuitants, with Blue Collar adjustment, and generational projection per scale BB
	June 30, 2020 Entry Age Normal 2.60% Graded by service PubS-2010 Mortality Table with generational projection per the MP-2019 ultimate

Please see Milliman's funding valuation report dated April 22, 2020 for more detail.

Changes in Net Pension Liability

	Increase (Decrease)					
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability			
Changes in Net Pension Liability	(a)	(b)	(a) - (b)			
Balances as of June 30, 2019	\$277,431,615	\$214,745,827	\$62,685,788			
Changes for the year:						
Service cost	5,622,164		5,622,164			
Interest on total pension liability	19,505,840		19,505,840			
Effect of plan changes	0		0			
Effect of economic/demographic gains or losses	7,202,144		7,202,144			
Effect of assumptions changes or inputs	5,303,988		5,303,988			
Benefit payments	(16,937,719)	(16,937,719)	0			
Employer contributions		8,897,000	(8,897,000)			
Member contributions		1,383,011	(1,383,011)			
Net investment income		(6,839,005)	6,839,005			
Administrative expenses		(326,616)	326,616			
Balances as of June 30, 2020	298,128,032	200,922,498	97,205,534			

Sensitivity Analysis

The following presents the net pension liability of the City, calculated using the discount rate of 7.05%, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.05%) or 1 percentage point higher (8.05%) than the current rate.

	1% Current Decrease Discount Rate 6.05% 7.05%		1% Increase 8.05%	
al pension liability Iciary net position	\$332,725,131 200,922,498	\$298,128,032 200,922,498	\$269,277,282 200,922,498	
ension liability	131,802,633	97,205,534	68,354,784	

Schedule of Changes in Net Pension Liability and Related Ratios

		Fiscal Year Ending June 30								
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total Pension Liability										
Service cost	\$5,622,164	\$5,304,605	\$5,176,399	\$4,784,685	\$4,539,800	\$4,400,529	\$4,272,359	N/A	N/A	N/A
Interest on total pension liability	19,505,840	19,054,378	18,392,422	18,693,625	18,039,262	17,449,743	16,709,145	N/A	N/A	N/A
Effect of plan changes	0	(5,257,605)	0	(17,318)	0	0	0	N/A	N/A	N/A
Effect of economic/demographic gains or losses	7,202,144	3,950,577	368,828	537,450	0	(1,349,423)	0	N/A	N/A	N/A
Effect of assumption changes or inputs	5,303,988	2,844,851	0	(4,088,924)	3,084,827	2,952,505	0	N/A	N/A	N/A
Benefit payments	(16,937,719)	(15,342,795)	(14,417,321)	(13,782,624)	(12,714,828)	(11,641,732)	(11,468,644)	N/A	N/A	N/A
Net change in total pension liability	20,696,417	10,554,011	9,520,328	6,126,894	12,949,061	11,811,622	9,512,860	N/A	N/A	N/A
Total pension liability, beginning	277,431,615	266,877,604	257,357,276	251,230,382	238,281,321	226,469,699	216,956,839	N/A	N/A	N/A
Total pension liability, ending (a)	298,128,032	277,431,615	266,877,604	257,357,276	251,230,382	238,281,321	226,469,699	N/A	N/A	N/A
Fiduciary Net Position										
Employer contributions	\$8,897,000	\$8,711,000	\$8,275,000	\$7,903,000	\$7,158,000	\$6,645,000	\$6,230,000	N/A	N/A	N/A
Member contributions	1,383,011	1,405,434	1,369,773	1,302,140	1,479,977	1,210,331	1,250,143	N/A	N/A	N/A
Net investment income	(6,839,005)	4,166,104	18,688,574	20,375,655	(4,227,286)	8,404,119	25,799,437	N/A	N/A	N/A
Benefit payments	(16,937,719)	(15,342,795)	(14,417,321)	(13,782,624)	(12,714,828)	(11,641,732)	(11,468,644)	N/A	N/A	N/A
Administrative expenses	(326,616)	(303,264)	(300,014)	(249,825)	(325,605)	(228,492)	(82,936)	N/A	N/A	N/A
Net change in plan fiduciary net position	(13,823,329)	(1,363,521)	13,616,012	15,548,346	(8,629,742)	4,389,226	21,728,000	N/A	N/A	N/A
Fiduciary net position, beginning	214,745,827	216,109,348	202,493,336	186,944,990	195,574,732	191,185,506	169,457,506	N/A	N/A	N/A
Fiduciary net position, ending (b)	200,922,498	214,745,827	216,109,348	202,493,336	186,944,990	195,574,732	191,185,506	N/A	N/A	N/A
Net pension liability, ending = (a) - (b)	\$97,205,534	\$62,685,788	\$50,768,256	\$54,863,940	\$64,285,392	\$42,706,589	\$35,284,193	N/A	N/A	N/A
Fiduciary net position as a % of total pension liability	67.39%	77.40%	80.98%	78.68%	74.41%	82.08%	84.42%	N/A	N/A	N/A
Covered payroll	\$24,244,956	\$24,435,134	\$22,958,568	\$22,320,912	\$23,328,220	\$22,648,757	\$21,994,000	N/A	N/A	N/A
Net pension liability as a % of covered payroll	400.93%	256.54%	221.13%	245.80%	275.57%	188.56%	160.43%	N/A	N/A	N/A

This schedule is presented to illustrate the requirement to show information for 10 years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the current GASB standards, they should not be reported.

GASB 67 and 68 Disclosure for Fiscal Year Ending June 30, 2020 The Police Pension Trust Fund of the City of Stamford

Pension Expense

_	July 1, 2019 to	July 1, 2018 to
Pension Expense	June 30, 2020	June 30, 2019
Service cost	\$5,622,164	\$5,304,605
Interest on total pension liability	19,505,840	19,054,378
Effect of plan changes	0	(5,257,605)
Administrative expenses	326,616	303,264
Member contributions	(1,383,011)	(1,405,434)
Expected investment return net of investment expenses	(15,003,262)	(15,364,266)
Recognition of Deferred Inflows/Outflows of Resources		
Recognition of economic/demographic gains or losses	2,391,108	754,020
Recognition of assumption changes or inputs	972,328	926,598
Recognition of investment gains or losses	8,238,898	5,122,462
Pension Expense	20,670,681	9,438,022

As of June 30, 2020, the deferred inflows and outflows of resources are as follows:

	Deferred Inflows	Deferred Outflows
Deferred Inflows / Outflows of Resources	of Resources	of Resources
Differences between expected and actual experience	\$0	\$8,388,191
Changes of assumptions	(681,488)	5,970,901
Net difference between projected and actual earnings	0	21,170,809
Contributions made subsequent to measurement date	0	0
Total	(681,488)	35,529,901

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 June 30:	
2021	\$7,740,075
2022	9,623,125
2023	10,419,358
2024	6,820,638
2025	245,217
Thereafter*	0

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

Schedule of Deferred Inflows and Outflows of Resources

-	Original Amount	Date Established	Original Rec. Period*	Amount Recognized in Pension Expense for FYE 06/30/2020	Amount Recognized in Pension Expense through 06/30/2020	Balance of Deferred Inflows as of 06/30/2020	Balance of Deferred Outflows as of 06/30/2020
Economic/ demographic gains or losses	\$7,202,144 3,950,577 368,828 537,450	6/30/2020 6/30/2019 6/30/2018 6/30/2017 Total	5.1 5.0 4.8 4.8	\$1,412,185 790,115 76,839 111,969 2,391,108	\$1,412,185 1,580,230 230,517 447,876 3,670,808	\$0 0 0 0	\$5,789,959 2,370,347 138,311 89,574 8,388,191
Assumption changes or inputs	5,303,988 2,844,851 (4,088,924) 3,084,827	6/30/2020 6/30/2019 6/30/2017 6/30/2016 Total	5.1 5.0 4.8 4.3	1,039,998 568,970 (851,859) 215,219 972,328	1,039,998 1,137,940 (3,407,436) 3,084,827 1,855,329	0 0 (681,488) 0 (681,488)	4,263,990 1,706,911 0 0 5,970,901
Investment gains or losses	21,842,267 11,198,162 (4,288,492) (6,532,533) 18,975,098	6/30/2020 6/30/2019 6/30/2018 6/30/2017 6/30/2016 Total	5.0 5.0 5.0 5.0 5.0	4,368,453 2,239,632 (857,698) (1,306,507) 3,795,018 8,238,898	4,368,453 4,479,264 (2,573,094) (5,226,028) 18,975,098 20,023,693	0 0 (1,715,398) (1,306,505) 0 (3,021,903)	17,473,814 6,718,898 0 0 0 24,192,712
Total for economic/demographic gains or losses and assumption changes or inputs				(681,488)	14,359,092		
Net deferred (inflows)/outflows for investment gains or losses				0	21,170,809		
Total deferred (inflows)/outflows					(681,488)	35,529,901	
Total net deferrals					34,848,413		

^{*} 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.

	Total	Plan	Net	Net Investment				Net Pension	
	Pension	Fiduciary	Pension	Deferred	Deferred	(Inflows)/	Net	Liability plus	Annual
	Liability	Net Position	Liability	(Inflows)	Outflows	Outflows	Deferrals	Net Deferrals	Expense
Balances as of June 30, 2019	(\$277,431,615)	\$214,745,827	(\$62,685,788)	(\$1,533,347)	\$6,068,255	\$7,567,440	\$12,102,348	(\$50,583,440)	
Service cost	(5,622,164)		(5,622,164)						5,622,164
Interest on total pension liability	(19,505,840)		(19,505,840)						19,505,840
Effect of plan changes	0		0						0
Effect of liability gains or losses	(7,202,144)		(7,202,144)		7,202,144		7,202,144		
Effect of assumption changes or inputs	(5,303,988)		(5,303,988)		5,303,988		5,303,988		
Benefit payments	16,937,719	(16,937,719)	0						
Administrative expenses		(326,616)	(326,616)						326,616
Member contributions		1,383,011	1,383,011						(1,383,011)
Expected net investment income		15,003,262	15,003,262						(15,003,262)
Investment gains or losses		(21,842,267)	(21,842,267)			21,842,267	21,842,267		
Employer contributions		8,897,000	8,897,000					8,897,000	
Recognition of liability gains or losses					(2,391,108)		(2,391,108)		2,391,108
Recognition of assumption changes or inputs				851,859	(1,824,187)		(972,328)		972,328
Recognition of investment gains or losses						(8,238,898)	(8,238,898)		8,238,898
Annual expense								(20,670,681)	20,670,681
									1
Balances as of June 30, 2020	(298,128,032)	200,922,498	(97,205,534)	(681,488)	14,359,092	21,170,809	34,848,413	(62,357,121)	

Glossary

Actuarially Determined Contribution

A target or recommended contribution to a defined benefit pension plan for the reporting period, determined based on the funding policy and most recent measurement available when the contribution for the reporting period was adopted.

Deferred Inflows/Outflows of Resources

Portion of changes in net pension liability that is not immediately recognized in Pension Expense. These changes include differences between expected and actual experience, changes in assumptions, and differences between expected and actual earnings on plan investments.

Discount Rate

Single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the sum of:

- The actuarial present value of benefit payments projected to be made in future periods where the plan assets are projected to be sufficient to meet benefit payments, calculated using the Long-Term Expected Rate of Return.
- The actuarial present value of projected benefit payments not included in (1), calculated using the Municipal Bond Rate.

Fiduciary Net Position

Equal to market value of assets.

Long-Term Expected Rate of Return

Long-term expected rate of return on pension plan investments expected to be used to finance the payment of benefits, net of investment expenses.

Money-Weighted Rate of Return

The internal rate of return on pension plan investments, net of investment expenses.

Municipal Bond Rate

Yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Net Pension Liability

Total Pension Liability minus the Plan's Fiduciary Net Position (unfunded accrued liability).

Projected Benefit Payments

All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and expected future service.

Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.

Total Pension Liability

The portion of actuarial present value of projected benefit payments that is attributable to past periods of member service using the Entry Age Normal cost method based on the requirements of GASB 67 and 68.

GASB 67 and 68 Disclosure for Fiscal Year Ending June 30, 2020 The Police Pension Trust Fund of the City of Stamford