

CITY OF DOVER, DELAWARE

**Police Pension Plan
Actuarial Valuation**

**AS OF JULY 1, 2014 FOR
FISCAL YEAR ENDING JUNE 30, 2015**



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September 10, 2015

Ms. Donna Mitchell
Controller/Treasurer
City of Dover
5 E. Reed Street
Weyandt Hall, Suite 300
Dover, DE 19901

Dear Ms. Mitchell:

This report presents the results of the July 1, 2014 actuarial valuation for the City of Dover, Delaware Police Pension Plan for determining contributions for the fiscal year ending June 30, 2015.

Purpose

The main purposes of this report are:

- to determine the Actuarially Determined Contribution per the City's funding policy for the fiscal year ending June 30, 2015; and
- to assess the relative funded position of the plan; and
- to review the experience of the plan for the valuation year ending June 30, 2014.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the City. The calculations in the enclosed report have been made on a basis consistent with our understanding of the City's funding requirements and goals as well as the plan provisions described in this report. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. Calculations for GASB 67 and 68 purposes are provided in a separate report.

Milliman's work is prepared solely for the internal business use of the City. 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.

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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 exception:

- The City may provide a copy of Milliman's work, in its entirety, to the City'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.

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 own 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.

Data Reliance

In performing this analysis, we relied on data and other information (both written and oral), such as the plan provisions, provided by City of Dover, Delaware. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Variability of Results

Future actuarial measurements may differ significantly from the current measurements presented in this valuation due to actual plan experience deviating from the actuarial assumptions, the natural operation of the plan's actuarial cost method (such as the expiration of an amortization period or additional cost or contribution requirements based on the plan's funded status), and changes in plan provisions, actuarial assumptions, and applicable law. An assessment of the potential range and cost effect of such differences is beyond the scope of this project.

Certification

We hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices based on our understanding of the benefits provided by the City, which are consistent with the principles prescribed by the Actuarial Standards Board, the Code of Professional Conduct, and the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States of the American Academy of Actuaries. We further certify that all costs and liabilities have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan where available and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the Plan.

The valuation date is the date that all participant and other pertinent information is collected and liabilities are measured. The valuation date for this valuation is July 1, 2014. The City requires actuarial valuations on a biannual basis to be consistent with requirements under GASB 67 and 68. Therefore, the results of this valuation may be used for the 2015 fiscal year and be the basis for the 2016 fiscal year, unless significant changes occur that would affect the results of this valuation. Assuming no significant changes, the next valuation would be for the 2016 fiscal year.

We are members of the American Academy of Actuaries and meet its qualification standards to render this actuarial opinion.

Respectfully submitted,

By: 

Timothy J. Nugent, F.S.A.
Member American Academy of Actuaries

By: 

Scott F. Porter, F.S.A.
Member American Academy of Actuaries

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

TABLE OF CONTENTS

	Page
SECTION I - SUMMARY OF RESULTS	1
SECTION II - EXHIBITS	4
SECTION III - CENSUS DATA	11
SECTION IV - SUMMARY OF PRINCIPAL PLAN PROVISIONS	12
SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS	13

CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION I – SUMMARY OF RESULTS

Executive Summary

The purpose of the actuarial valuation is to determine the actuarially determined contribution in accordance with the City's funding policy to ensure funding on a consistent basis. The valuation does not include the new accounting standards for pension plans, GASB Statements 67 and 68, as that information is provided in a separate report.

The Actuarially Determined Contribution (ADC) increased from \$1.16 million for the fiscal year ending June 30, 2014 to \$1.18 million for the fiscal year ending June 30, 2015. The ADC comprises the Normal Cost and an amortization of the Unfunded Accrued Liability plus an interest adjustment. Since there are no active employees participating in the plan, the normal cost is \$0. The amortization payment is based on a 10-year (closed) amortization of the unfunded liability. The amortization payment is \$1.11 million and the interest adjustment is \$0.07 million. The Unfunded Accrued Liability decreased slightly from \$8.66 million as of July 1, 2013 to \$8.46 million as of July 1, 2014.

The increase in the ADC is primarily due to a change in the interest rate assumption from 7.0% to 6.5% partially offset by an actuarial gain on plan assets and City and State contributions in excess of the ADC for the prior year. The decrease in the interest rate assumption increased the ADC by approximately \$0.11 million. The estimated rate of return on the market value of plan assets was 14.77%, which exceeded the assumed return of 7% resulting in an actuarial gain. Contributions to the plan exceeded the ADC for the prior year by approximately \$0.07 million.

Funding Policy

The State contributes to the pension fund on behalf of the City based on 1) an allocation to the City based on a 0.25% surcharge on insurance policies issued in the state and the number of officers employed and 2) 75% of the annual cost of living increase (COLA) granted to police retirees on January 1 each year. For the fiscal year ending June 30, 2014, the State contributed \$539,963.

The ADC is based on an amortization of the unfunded actuarial accrued liability over 30 years beginning July 1, 1994 on a closed basis. For the fiscal year ending June 30, 2015, there are 10 years remaining.

Total contributions to the plan for the fiscal year ending June 30, 2015 are anticipated to be \$1.39 million, which would be 117.8% of the ADC.

CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION I – SUMMARY OF RESULTS

(Continued)

Valuation Date

The valuation date is the date that all participant and other pertinent information is collected and liabilities are measured. This date may not be more than 24 months prior to the beginning of the fiscal year. The valuation date for this valuation is July 1, 2014 which is at the beginning of the 2015 fiscal year. This is consistent with the prior valuation completed as of July 1, 2012 for the 2013 and 2014 fiscal years. The results of this valuation may be used for the 2015 fiscal year and be the basis for the 2016 fiscal year, unless significant changes occur that would affect the results of this valuation. Assuming no significant changes, the next valuation would be based on a July 1, 2016 valuation date.

Discussion of Supporting Exhibits

Exhibit 1 summarizes the assets as of June 30, 2014.

Exhibit 2 summarizes the change in assets from the prior year and displays the estimated market value rate of return for the last five years. The estimated rate of return for the fiscal year ending June 30, 2014 was 14.77%, which resulted in an actuarial gain to the plan.

Exhibit 3 summarizes the actuarial experience for the year ending June 30, 2014. In total, the plan experienced an actuarial gain of \$0.51 million. The exhibit also shows the change in the funded ratio from 56.0% as of July 1, 2013 to 59.2% as of July 1, 2014.

Exhibit 4 summarizes the unfunded actuarial accrued liability by Fund. All liabilities and assets of the Police Plan are allocated to the General Fund.

Exhibit 5 summarizes the development of the Actuarially Determined Contribution for the fiscal year ending June 30, 2015 by Fund.

Exhibit 6 displays the funded ratio on both a market value and actuarial value basis as of the current valuation date and for the prior four years. Since July 1, 2010, the funded ratio has increased from 52.3% to 59.2% on a market value basis.

It also displays the contributions made by the City during the prior five fiscal years. The City's contribution has averaged 77.9% during this period.

Exhibit 7 summarizes the expected benefit payments from the plan projected over the next 10 fiscal years.

Milliman's work product was prepared solely for the City of Dover, Delaware for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION I – SUMMARY OF RESULTS

(Continued)

Census Data

Section III summarizes the census data provided by the City utilized in the preparation of the actuarial valuation. The section shows an age benefit profile of the retirees receiving benefits as of July 1, 2014.

Summary of Principal Plan Provisions

Section IV summarizes the principal plan provisions as of the valuation date utilized in the preparation of this actuarial valuation. This information was supplied through various correspondences with the City.

Actuarial Assumptions and Methods

Section V summarizes the actuarial assumptions and methods utilized in the preparation of this actuarial valuation. The liabilities provided in this report are heavily dependent upon the assumptions utilized, especially regarding annual per capita costs and healthcare trend.

CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Market Value of Assets as of June 30, 2014

Assets		
Operating Account	\$17,948	
Cash equivalents	561,777	
Mutual Funds	<u>11,699,622</u>	
Total		\$12,279,347
Liabilities		
Accounts payable	<u>-</u>	
Total		<u>-</u>
Net Assets		\$12,279,347

Exhibit 1

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Change in Market Value of Assets

Market Value of Assets as of June 30, 2013		\$11,035,206
Income		
City's contributions	689,400	
State contributions and other income	539,963	
Net Investment income	<u>1,583,346</u>	
Total		2,812,709
Disbursements		
Benefit payments	(1,548,151)	
Administrative Expenses	<u>(20,417)</u>	
Total		<u>(1,568,568)</u>
Net increase/ (decrease)		1,244,141
Market Value of Assets as of June 30, 2014		\$12,279,347
Estimated time-weighted rate of return		14.77%

Estimated Historical Rates of Return

<u>Fiscal Year Ending</u>	<u>Market Value</u>
June 30, 2014	14.77%
June 30, 2013	7.77%
June 30, 2012	-0.32%
June 30, 2011	20.88%
June 30, 2010	12.21%
5 - Year Average	10.83%

Exhibit 2

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Actuarial Experience for Year Ending June 30, 2014

Actuarial Accrued Liability BOY	\$19,697,000
Market Value of Assets BOY	<u>11,035,206</u>
Unfunded Accrued Liability BOY	8,661,794
Funded Ratio BOY	56.0%
Gross Normal Cost BOY	-
Interest	606,326
Contributions Made	(1,262,391)
Increases in UAL due to:	
Plan Changes	-
Assumption Changes	964,724
Method Changes	<u>-</u>
Total	964,724
Expected UAL	8,970,453
Actuarial Accrued Liability EOY	\$20,736,450
Market Value of Assets EOY	<u>12,279,347</u>
Unfunded Accrued Liability EOY	8,457,103
Funded Ratio EOY	59.2%
(Gain)/Loss	(513,350)

Exhibit 3

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Unfunded Actuarial Accrued Liability as of July 1, 2014

	(110) General <u>Fund</u>	(412) Water <u>Fund</u>	(480) Electric <u>Fund</u>	<u>Total</u>
Actives	\$0	\$0	\$0	\$0
Deferred Vesteds	-	-	-	-
Retirees	<u>20,736,450</u>	<u>-</u>	<u>-</u>	<u>20,736,450</u>
Total Actuarial Accrued Liability	20,736,450	-	-	20,736,450
Market Value of Assets	12,279,347	-	-	12,279,347
Unfunded Actuarial Liability	8,457,103	-	-	8,457,103
Funded Ratio	59.2%	N/A	N/A	59.2%

Exhibit 4

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Actuarially Determined Contribution For Fiscal Year Ending June 30, 2015

	(110) General <u>Fund</u>	(412) Water <u>Fund</u>	(480) Electric <u>Fund</u>	<u>Total</u>
Actuarial Accrued Liability	\$20,736,450	\$0	\$0	\$20,736,450
Market Value of Assets	<u>12,279,347</u>	<u>-</u>	<u>-</u>	<u>12,279,347</u>
Unfunded Liability	8,457,103	-	-	8,457,103
Normal Cost	\$0	\$0	\$0	\$0
Amortization Payment	1,104,622	-	-	1,104,622
Interest at 6.50%	<u>71,800</u>	<u>-</u>	<u>-</u>	<u>71,800</u>
Actuarially Determined Contribution	1,176,422	-	-	1,176,422

The ADC is based on a discount rate of 6.5% and a 10-year amortization (closed) of the unfunded liability.

Exhibit 5

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Historical Summary of Assets and Liabilities

Valuation Date	Market Value of Assets	Actuarial Value of Assets	Actuarial Accrued Liability	Funded Ratio	
				Market Value	Actuarial Value
7/1/2014	\$12,279,347	\$12,279,347	\$20,736,450	59.2%	59.2%
7/1/2013	11,035,206	11,035,206	19,697,000	56.0%	56.0%
7/1/2012	10,687,727	10,687,727	19,867,849	53.8%	53.8%
7/1/2011	11,553,751	11,553,751	19,737,000	58.5%	58.5%
7/1/2010	10,378,602	10,378,602	19,849,553	52.3%	52.3%

Schedule of Employer Contributions

Fiscal Year End	Actuarially Determined Contribution	City + State Contributions	Contribution Deficiency (Excess)	Percent Contributed
6/30/2014	\$1,155,110	\$1,229,363	(\$74,253)	106.4%
6/30/2013	1,155,796	1,074,599	81,197	93.0%
6/30/2012	979,132	668,274	310,858	68.3%
6/30/2011	1,082,956	633,636	449,320	58.5%
6/30/2010	786,436	496,587	289,849	63.1%

Exhibit 6

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION II – EXHIBITS

Expected Benefit Payments by Fiscal Year

<u>Fiscal Year</u>	<u>Amount</u>
2015	\$ 1,562,000
2016	1,575,000
2017	1,587,000
2018	1,596,000
2019	1,604,000
2020	1,609,000
2021	1,611,000
2022	1,611,000
2023	1,608,000
2024	1,602,000

Exhibit 7

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION III – CENSUS DATA

Summary of Census Data as of July 1, 2014

Participants in Pay Status

<u>Age</u>	<u>Number of Participants</u>	<u>Monthly Benefit</u>
< 55	2	\$5,990
55 - 59	6	14,560
60 - 64	14	43,016
65 - 69	10	27,038
70 - 74	7	22,198
75 - 79	5	8,449
80 - 84	3	6,508
85 - 89	1	3,056
90 & Up	<u>0</u>	<u>0</u>
Total	48	\$130,815

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CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

**SECTION IV – SUMMARY OF PRINCIPAL PLAN PROVISIONS
as of JULY 1, 2014**

As of the date of this valuation, there are no active members in the plan. The following summary is geared to provisions impacting retired members.

- 1) Type of Plan: The Plan is a contributory, defined benefit plan for policemen hired prior to September 1, 1982.
- 2) Definitions:
 - a) Average Earnings: Average of the last three years of earnings prior to termination of employment.
 - b) Eligible Survivor: The member's spouse of at least one year and not domiciled apart at the date of death or surviving children under the age of 18.
- 3) Retirement Benefits
 - a) Unreduced Retirement

Eligibility: Completion of 20 years of service.

Benefit: 2 ½% of Average Earnings times Service, but no more than 62 ½% of average earnings.

Increase: The retirement benefit is increased 2% per annum every January 1 on a compound basis.
 - b) Death Benefits:

Eligibility: Currently retired.

Benefit: 50% of the benefit the member was receiving. Benefit is payable immediately to an Eligible Survivor and ceases upon the earliest of death, remarriage or attainment of age 18 for children.

Increase: The survivor benefit is increased 2% per annum every January 1 on a compound basis.
- 4) Changes in Plan Provisions: There have been no changes since the prior valuation.

CITY OF DOVER, DELAWARE

Police Pension Plan Actuarial Valuation

SECTION V - SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

Interest Rate: 6.5% per annum, compounded annually.

Future Increases on IRS Limits on Benefits: 2.5%

Mortality: RP-2000 Healthy Annuitant Mortality Table projected on a generational basis using Scale AA. As a generational table, it reflects mortality improvements both before and after the measurement date.

B. Actuarial Cost Method

The Entry Age Normal Method was used for determining the actuarial accrued liability. Under this method, a projected benefit is determined at each active participant's assumed retirement age assuming future compensation increases. The plan's accrued liability is the sum of (a) the accumulation of each active participant's normal costs attributable to all prior years of service plus (b) the present value of each inactive participant's future benefits. As of the valuation date, there are no active participants.

C. Asset Valuation Method

The actuarial value of assets is equal to the market value of assets.

D. Changes in Actuarial Assumptions or Methods

The following changes have been made to the economic assumptions used in the actuarial valuation:

- The interest rate was reduced from 7.0% to 6.5%
- The inflation assumption was reduced from 2.75% to 2.5%