



# City of Dover, Delaware Police Pension Plan

June 30, 2018  
GASB Nos. 67 & 68 Report

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This report is prepared in accordance with our understanding of GASB Nos. 67 & 68 for the purpose of disclosing pension plans in financial statements. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report.

The information presented in this report is based on:

- the actuarial assumptions included in this report;
- the plan provisions;
- participant information furnished to us by the Plan Administrator;
- asset information furnished to us by the Plan Trustee.

We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we may have made assumptions we believe are reasonable for the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report.

The interest rate, other economic assumptions, and demographic assumptions have been selected by the plan sponsor with our recommendations. The assumptions used, in our opinion, are reasonable and represent a reasonable expectation of future experience under the plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

A summary of any assumptions not included in this report, the plan provisions and the participant information is included in the Actuarial Valuation Report for funding purposes.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as 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.

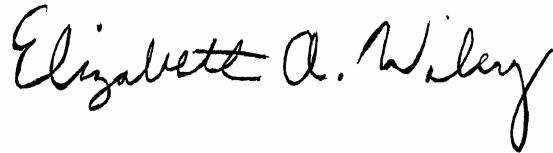
We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

To our knowledge there have been no significant events prior to the current year's measurement date or as of the date of this report which could materially affect the results contained herein.

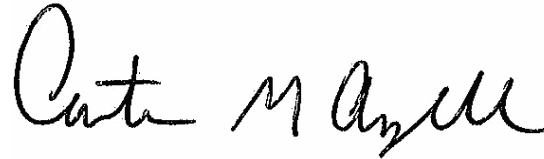
Neither Nyhart nor any of its employees have any relationships with the plan or plan sponsor which could impair or appear to impair the objectivity of this report.

Nyhart



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Elizabeth A. Wiley, ASA, EA



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Carter M. Angell, FSA, EA, MAAA

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10/17/2018

**Net Pension Liability**

The components of the net pension liability at June 30

	<b>06/30/2018</b>	<b>06/30/2017</b>
Total pension liability	\$ 18,797,596	\$ 19,185,974
Plan fiduciary net position	(13,900,129)	(13,243,119)
Net pension liability	\$ 4,897,467	\$ 5,942,855
Plan fiduciary net position as a percent of the total pension liability	73.95%	69.03%
Pension Expense for the Fiscal Year Ended June 30	\$ 379,906	\$ 636,069

**Actuarial Assumptions**

The total pension liability was determined using the following actuarial assumptions

Inflation	2.50%	2.50%
Salary increases, including inflation	0.00%	0.00%
Investment rate of return, including inflation, and net of investment expense	6.50%	6.50%

**Plan Membership**

The total pension liability was determined based on the plan membership as of July 1

	<b>2016</b>	<b>2016</b>
Inactive plan members and beneficiaries currently receiving benefits	47	47
Inactive plan members entitled to but not yet receiving benefits	0	0
Active plan members	0	0
Total members	47	47

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**Statement of Fiduciary Net Position**

<b>Assets</b>	<b>06/30/2018</b>	<b>06/30/2017</b>
Cash and deposits	\$ 816,825	\$ 908,583
Securities lending cash collateral	0	0
Total cash	\$ 816,825	\$ 908,583
Receivables:		
Contributions	\$ 0	\$ 0
Due from broker for investments sold	0	0
Investment income	0	0
Other	0	0
Total receivables	\$ 0	\$ 0
Investments:		
Fixed income	\$ 4,009,457	\$ 3,835,613
Stocks	9,073,847	8,792,295
Short-term investments	0	0
Real estate	0	0
Alternatives	0	0
Total investments	\$ 13,083,304	\$ 12,627,908
Total assets	\$ 13,900,129	\$ 13,536,491
<b>Liabilities</b>		
Payables:		
Investment management fees	\$ 0	\$ 0
Due to broker for investments purchased	0	0
Collateral payable for securities lending	0	0
Other	0	293,372
Total liabilities	\$ 0	\$ 293,372
<b>Net position restricted for pensions</b>	<b>\$ 13,900,129</b>	<b>\$ 13,243,119</b>

City of Dover, Delaware Police Pension Plan  
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 Statement of Changes in Fiduciary Net Position

	06/30/2018	06/30/2017
<b>Additions</b>		
Contributions:		
Employer	\$ 1,294,750	\$ 1,118,346
Member	0	0
Nonemployer contributing entity	0	0
Total contributions	\$ 1,294,750	\$ 1,118,346
Investment income:		
Net increase in fair value of investments	\$ 597,573	\$ 1,126,127
Interest and dividends	324,173	320,464
Less investment expense, other than from securities lending	(13,333)	(13,333)
Net income other than from securities lending	\$ 908,413	\$ 1,433,258
Securities lending income	0	0
Less securities lending expense	0	0
Net income from securities lending	\$ 0	\$ 0
Net investment income	\$ 908,413	\$ 1,433,258
Other	0	0
Total additions	\$ 2,203,163	\$ 2,551,604
<b>Deductions</b>		
Benefit payments, including refunds of member contributions	\$ 1,540,946	\$ 1,528,191
Administrative expense	5,207	4,979
Other	0	0
Total deductions	\$ 1,546,153	\$ 1,533,170
<b>Net increase in net position</b>	\$ 657,010	\$ 1,018,434
<b>Net position restricted for pensions</b>		
Beginning of year	13,243,119	12,224,685
End of year	\$ 13,900,129	\$ 13,243,119

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 Schedule of Changes in Net Pension Liability and Related Ratios

	06/30/2018	06/30/2017	06/30/2016	06/30/2015
<b>Total pension liability</b>				
Service cost	\$ 0	\$ 0	\$ 0	\$ 0
Interest	1,197,008	1,210,545	1,280,958	1,311,335
Changes of benefit terms	0	0	0	0
Differences between expected and actual experience	0	0	(836,177)	286,306
Changes of assumptions	(44,440)	115,749	0	932,000
Benefit payments, including refunds of member contributions	(1,540,946)	(1,528,191)	(1,527,910)	(1,557,641)
Net change in total pension liability	(388,378)	(201,897)	(1,083,129)	972,000
Total pension liability - beginning	19,185,974	19,387,871	20,471,000	19,499,000
<b>Total pension liability - ending (a)</b>	<b>\$ 18,797,596</b>	<b>\$ 19,185,974</b>	<b>\$ 19,387,871</b>	<b>\$ 20,471,000</b>
<b>Plan fiduciary net position</b>				
Contributions - employer	\$ 1,294,750	\$ 1,118,346	\$ 1,093,278	\$ 1,385,789
Contributions - member	0	0	0	0
Contributions - nonemployer contributing member	0	0	0	0
Net investment income	908,413	1,433,258	279,303	283,144
Benefit payments, including refunds of member contributions	(1,540,946)	(1,528,191)	(1,527,910)	(1,557,641)
Administrative expenses	(5,207)	(4,979)	(4,831)	(5,794)
Other	0	0	0	0
Net change in plan fiduciary net position	\$ 657,010	\$ 1,018,434	\$ (160,160)	\$ 105,498
Plan fiduciary net position - beginning	13,243,119	12,224,685	12,384,845	12,279,347
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 13,900,129</b>	<b>\$ 13,243,119</b>	<b>\$ 12,224,685</b>	<b>\$ 12,384,845</b>
<b>Net pension liability - ending (a) - (b)</b>	<b>\$ 4,897,467</b>	<b>\$ 5,942,855</b>	<b>\$ 7,163,186</b>	<b>\$ 8,086,155</b>
Plan fiduciary net position as a percentage of the total pension liability	73.95%	69.03%	63.05%	60.50%
Covered-employee payroll	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Net pension liability as percentage of covered-employee payroll	Not Applicable	Not Applicable	Not Applicable	Not Applicable



**City of Dover, Delaware Police Pension Plan**  
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**Pension Expense**

Fiscal year ending	<b>06/30/2018</b>	<b>06/30/2017</b>
Service cost	\$ 0	\$ 0
Interest on total pension liability	1,197,008	1,210,545
Projected earnings on pension plan investments	(852,632)	(781,123)
Changes of benefit terms	0	0
Employee contributions	0	0
Pension plan administrative expense	5,207	4,979
Other changes	0	0
Current period recognition of deferred outflows/(inflows) of resources		
Differences between Expected & Actual Experience in measurement of the Total Pension Liability	\$ 0	\$ 0
Changes of assumptions	(44,440)	115,749
Differences between Projected & Actual Earnings on Pension Plan Investments	74,763	85,919
<b>Total</b>	<b>\$ 379,906</b>	<b>\$ 636,069</b>

**City of Dover, Delaware Police Pension Plan**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

Differences between expected and actual experience in measurement of the total pension liability for fiscal year ending:	Initial Balance	Initial Amortization Period	Annual Recognition	06/30/2018 Balance
June 30, 2018	\$ 0	1.0	\$ 0	\$ 0
			<u>\$ 0</u>	<u>\$ 0</u>
Changes in assumptions for fiscal year ending:	Initial Balance	Initial Amortization Period	Annual Recognition	06/30/2018 Balance
June 30, 2018	\$ (44,440)	1.0	\$ (44,440)	\$ 0
			<u>\$ (44,440)</u>	<u>\$ 0</u>
Differences between projected and actual earnings on pension plan investments for fiscal year ending:	Initial Balance	Initial Amortization Period	Annual Recognition	06/30/2018 Balance
June 30, 2018	\$ (55,781)	5.0	\$ (11,156)	\$ (44,625)
June 30, 2017	\$ (652,135)	5.0	\$ (130,427)	\$ (391,281)
June 30, 2016	\$ 511,429	5.0	\$ 102,286	\$ 204,571
June 30, 2015	\$ 570,298	5.0	\$ 114,060	\$ 114,058
			<u>\$ 74,763</u>	<u>\$ (117,277)</u>

City of Dover, Delaware Police Pension Plan  
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 Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

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	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 0	\$ 0
Changes of Assumptions	\$ 0	\$ 0
Net difference between projected and actual earnings on pension plan investments	\$ 318,629	\$ (435,906)
	\$ 318,629	\$ (435,906)

The balances as of June 30, 2018 of the deferred outflows/(inflows) of resources will be recognized in pension expense for the fiscal year ending June 30.

2019	\$ 74,761
2020	\$(39,298)
2021	\$(141,583)
2022	\$(11,157)
2023	\$ 0
Thereafter	\$ 0

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2018 are summarized in the following table:

<b>Asset class</b>	Target allocation	Long-term expected real rate of return
Fixed income	27.5%	3.62%
Stocks	61.0%	7.73%
Short-term investments	0.0%	0.00%
Real estate	5.0%	7.25%
Alternatives	0.0%	0.00%
Cash	6.5%	2.26%
Total	100.0%	

Long-term expected rate of return is 6.50%.

**Discount rate**

The discount rate used to measure the total pension liability was 6.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Professional judgment on future contributions has been applied in those cases where contribution patterns deviate from the actuarially determined rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the net pension liability to changes in the discount rate**

The following presents the net pension liability, calculated using the discount rate of 6.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.50%) or 1-percentage-point higher (7.50%) than the current rate:

	<b>1% Decrease (5.50%)</b>	<b>Current Discount Rate (6.50%)</b>	<b>1% Increase (7.50%)</b>
Net pension liability	\$ 6,775,556	\$ 4,897,467	\$ 3,297,647

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 Schedule of Contributions

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 1,205,092	\$ 1,176,462	\$ 1,212,000	\$ 1,176,422	\$ 1,155,110
Contributions in relation to the actuarially determined contribution	1,294,750	1,118,346	1,093,278	1,385,789	1,229,363
<b>Contribution deficiency (excess)</b>	<b>\$ (89,658)</b>	<b>\$ 58,116</b>	<b>\$ 118,722</b>	<b>\$ (209,367)</b>	<b>\$ (74,253)</b>
Covered-employee payroll	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Contributions as a percentage of covered-employee payroll	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Actuarially determined contribution	\$ 1,155,796	\$ 979,132	\$ 1,082,956	\$ 786,436	\$ 520,505
Contributions in relation to the actuarially determined contribution	1,074,599	668,274	633,636	496,587	725,492
<b>Contribution deficiency (excess)</b>	<b>\$ 81,197</b>	<b>\$ 310,858</b>	<b>\$ 449,320</b>	<b>\$ 289,849</b>	<b>\$ (204,987)</b>
Covered-employee payroll	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Contributions as a percentage of covered-employee payroll	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

The total pension liability as of June 30, 2018 was determined using the following actuarial assumptions:

<b>Actuarial Cost Method</b>	Entry Age Method
<b>Asset Valuation Method</b>	Fair market value of assets on the measurement date
<b>Interest Rates</b>	
Discount Rate	6.50%
Expected Long Term Rate of Return	6.50%
Municipal Bond Rate	N/A
<b>Inflation</b>	2.50%
<b>Annual Pay Increases</b>	N/A
<b>Measurement Date</b>	June 30, 2018
<b>Participant Data</b>	July 1, 2016 data is projected forward to the measurement date and adjusted for any material events
<b>Cost of Living Increases</b>	2.00% per annum every January 1 on a compound basis
<b>Mortality Rates</b>	
Healthy	RP-2014 Blue Collar with fully generational improvements from 2006 based on assumptions from the 2017 Social Security Administration Trustee's Report
Disabled	RP-2014 Blue Collar with fully generational improvements from 2006 based on assumptions from the 2017 Social Security Administration Trustee's Report
<b>Retirement Rates</b>	N/A
<b>All other assumptions</b>	As described in the assumptions section of the actuarially determined contribution

<b>Actuarial Cost Method</b>	Entry Age Method
<b>Asset Valuation Method</b>	Fair market value of assets on the measurement date
<b>Amortization Method</b>	Level Dollar: The amortization period is 9 years for the 2016 fiscal year and will decline by 1 each year until 1 year
<b>Interest Rate</b>	6.50% net of investment expenses
<b>Inflation</b>	2.50%
<b>Annual Pay Increases</b>	N/A
<b>Cost of Living Increases</b>	2.00% per annum every January 1 on a compound basis
<b>Mortality Rates</b>	
Healthy	RP-2014 Blue Collar with fully generational improvements from 2006 based on assumptions from the 2016 Social Security Administration Trustee's Report
Disabled	RP-2014 Blue Collar with fully generational improvements from 2006 based on assumptions from the 2016 Social Security Administration Trustee's Report
<b>Retirement Rates</b>	N/A
<b>Disability Rates</b>	N/A
<b>Withdrawal Rates</b>	N/A
<b>Marital Status and Ages</b>	N/A
<b>Expense and/or Contingency Loading</b>	N/A



**Name of Plan**

City of Dover, Delaware Police Pension Plan

**Plan Status**

As of the valuation date, there are no active members in the plan. The Plan is a contributory, defined benefit plan for policemen hired prior to September 1, 1982.

**Benefits**

**Normal Retirement**

Eligibility Completion of 20 years of service

Benefit 2.5% of Average Earnings multiplied by service, but no more than 62.5% of Average Earnings

**Death Benefits**

Eligibility Currently Retired

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

**Cost of Living Adjustments**

2.0% per year every January 1 on a compound basis