

**Delaware County & Municipal  
Police/Firefighters  
Pension Plan**

**Actuarial Valuation  
as of June 30, 2013**

**Produced by **Cheiron****

**December 2013**

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December 30, 2013

Board of Pension Trustees  
State of Delaware  
McArdle Building  
860 Silver Lake Boulevard, Suite 1  
Dover, Delaware 19904

Dear Members of the Board:

At your request, we have conducted the annual actuarial valuation of the Delaware County & Municipal Police/Firefighters Pension Plan as of June 30, 2013. The results of the valuation are contained in this report. The purpose of the valuation is discussed in the Foreword.

This report contains information on plan assets, as well as analyses which combine asset and liability performance and projections. The report also discloses employer contribution levels and required disclosures under the Governmental Accounting Standards Board Statement No. 25.

In preparing our report, we relied on information (some oral and some written) supplied by Office of Pension's staff. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The results of this report are only applicable to the employer contributions for Fiscal Year ending 2015 and rely on future Plan experience conforming to the underlying assumptions. To the extent that actual plan experience deviates from the underlying assumptions, the results would vary accordingly.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This report was prepared for the Delaware County & Municipal Police/Firefighters Pension Plan for the purposes described herein and for the use by the Plan auditor in completing an audit related to the matters herein. This valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,  
Cheiron



Fiona E. Liston, FSA  
Principal Consulting Actuary



Margaret A. Tempkin, FSA  
Principal Consulting Actuary



## FOREWORD

Cheiron has performed the Actuarial Valuation of the Delaware County & Municipal Police/Firefighters Pension Plan as of June 30, 2013. The purpose of this report is to:

- 1) **Measure and disclose**, as of the valuation date, the financial condition of the Plan;
- 2) **Indicate trends** in the financial progress of the Plan;
- 3) **Determine the contribution rate** to be paid by the participating employers for Fiscal Year 2015; and
- 4) **Provide specific information** and documentation required by the Governmental Accounting Standards Board (GASB).

An actuarial valuation establishes and analyzes plan assets and liabilities on a consistent basis and traces the progress of both from one year to the next. It includes measurement of the plan's investment performance as well as an analysis of actuarial liability gains and losses.

**Section I** presents a summary containing our findings and disclosing important trends experienced by the Plan in recent years.

**Section II** contains details on various asset measures, together with pertinent performance measurements.

**Section III** shows similar information on plan liabilities, measured for actuarial, accounting, and governmental reporting purposes.

**Section IV** develops the employer contribution rate determined using actuarial techniques.

**Section V** includes the required disclosures under GASB Statement No. 25.

The appendices to this report contain a summary of the Plan's membership at the valuation date, a summary of the major provisions of the Plan, and the actuarial methods and assumptions used in the valuations.

The actuarial assumptions reflect our understanding of the likely future experience of the Plan, and the assumptions as a whole represent our best estimate for the future experience of the Plan. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the Plan could vary from our results.

**SECTION I  
BOARD SUMMARY**

**General Comments**

The actuarially determined contribution rate decreased from 15.52% for FY 2014 to 14.18% for FY 2015.

During the year ended June 30, 2013, the Plan's assets earned 10.7% on a market value basis. However, due to the Plan's asset-smoothing technique and an accumulation of past asset gains, the return on the actuarial asset value was 7.59%. This return was more than the assumed rate of return of 7.50% and resulted in an actuarial gain on investments of \$0.16 million.

The Plan experienced an actuarial gain of \$10.63 million (4.9% of total actuarial liability) on plan liabilities resulting from salary increases different than assumed and members retiring, terminating, becoming disabled, and dying at rates different from the actuarial assumptions. This type of activity is normal in the course of plan experience. The Plan will experience actuarial gains and losses over time because we cannot predict exactly how people will behave. When a plan experiences alternating gains and losses that are small compared to the total actuarial liability, then the plan's actuarial assumptions are reasonable. There was also a change in the application of the Entry Age Normal funding method which redrew the line between past and future service. This change resulted in an increase to actuarial liability of \$5.2 million and an offsetting decrease in the System's normal cost.

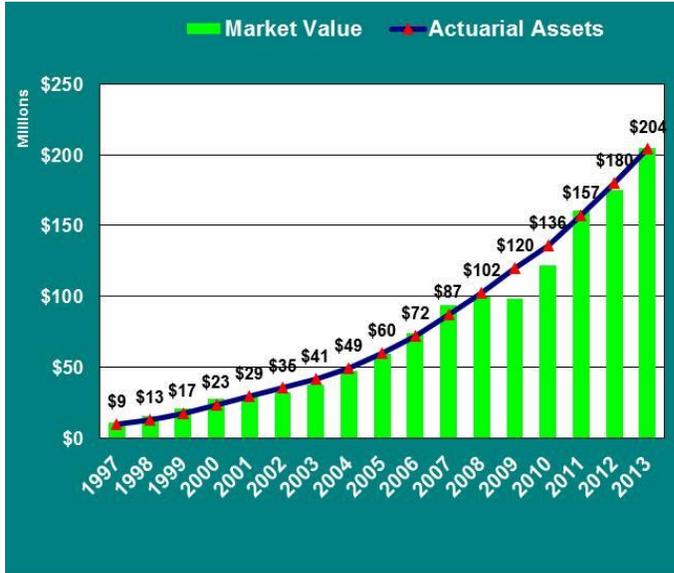
As of the June 30, 2013 Actuarial Valuation, the Plan's unfunded actuarial liability was \$3.9 million. This is a decrease from last year's unfunded actuarial liability of \$7.1 million.

**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013**

**SECTION I  
BOARD SUMMARY**

**Trends**

Growth in Assets



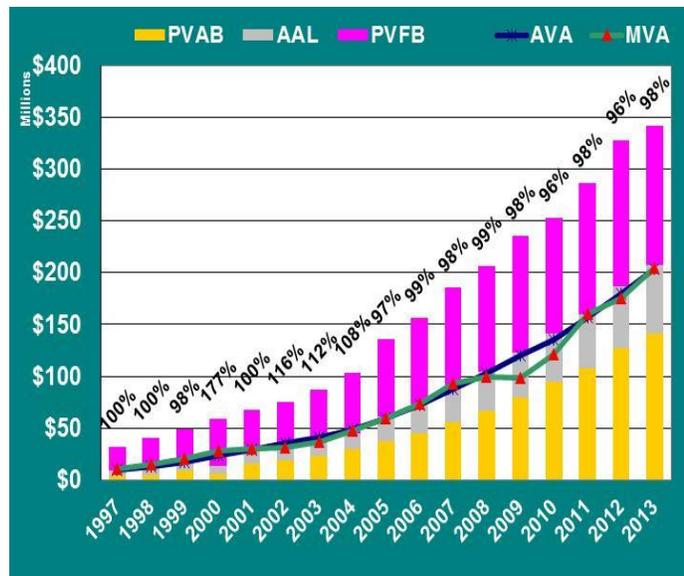
The market value of assets (MVA) returned 10.7% over the last year. The determination of the Plan's actuarial value of assets reflects only a portion of the return above 7.5%, as well as the continued recognition of the 2008-2009 losses.

Over the period July 1, 1997 to June 30, 2013, the Plan's assets returned approximately 8.4% per year measured at actuarial value, compared to a valuation assumption of 7.5% per year.

Assets and Liabilities

The three colored bars represent the three different measures of liability mentioned in this report. For funding purposes, the target amount is represented by the top of the gray bar. We compare the actuarial value of assets to this measure of liability in developing the funded percent. These are the percentages shown in the graph labels.

The amount represented by the top of the pink bars, the Present Value of Future Benefits (PVFB), is the amount needed to provide all benefits for the current participants and their beneficiaries. If the Plan had assets equal to the PVFB, no contributions would, in theory, be needed for the current members.



**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
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**SECTION I  
BOARD SUMMARY**

Contribution Rates



The stacked bars in this graph show the contributions made by the participating employers and the members (left hand scale). The black line shows the employer contribution rate as a percent of payroll (right hand scale).

The increase in employer contribution dollars between 2008 and 2009 represents payment of special past service by some of the participating municipalities.

Participant Trends

The bars show the number of participants in each category and should be read using the left-hand scale. The black line shows the covered payroll in the Plan and is read using the right-hand scale.

Since this is a relatively young plan, there are still many more actives than there are retirees.

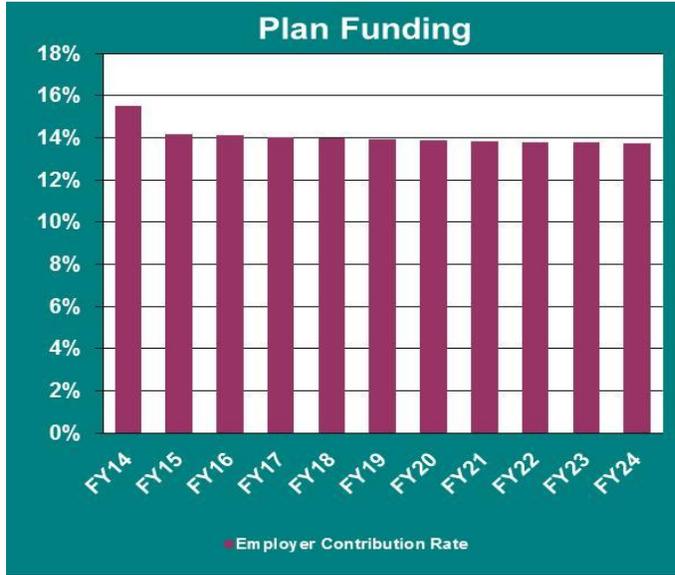


DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
 ACTUARIAL VALUATION AS OF JUNE 30, 2013

SECTION I  
 BOARD SUMMARY

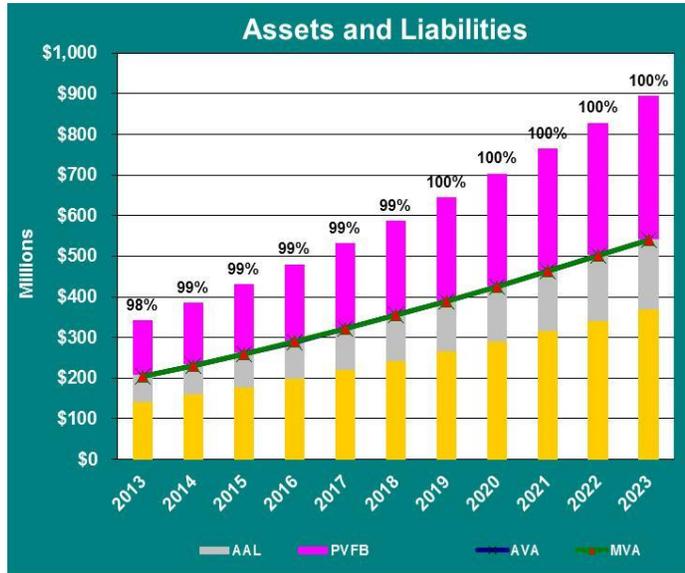
Future Outlook

Base Line Projections



These graphs show the expected progress of the Plan over the next ten years assuming the Plan’s assets earn 7.5% on their *market value*. The chart entitled “Plan Funding” shows that, after an initial decrease developed in this valuation, the employer rate is expected to remain fairly level.

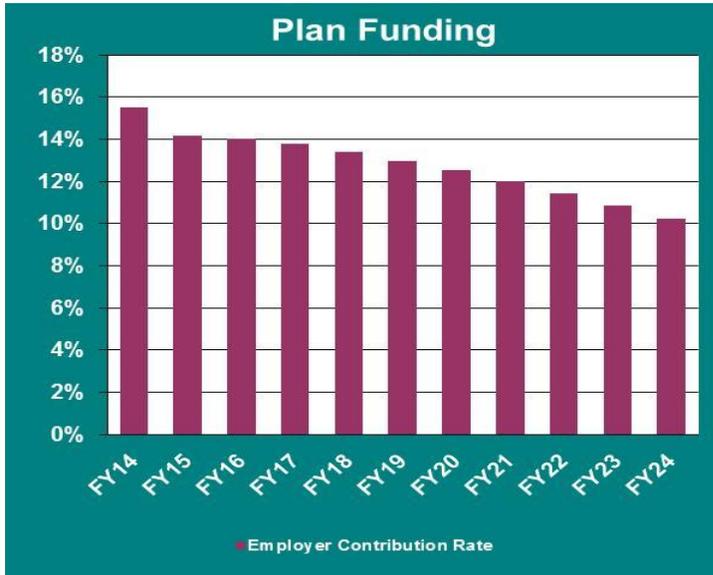
The “Assets and Liabilities” graph shows the projected funding status over the next ten years. The Plan’s funded status is projected to reach 100% by 2019.



DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
 ACTUARIAL VALUATION AS OF JUNE 30, 2013

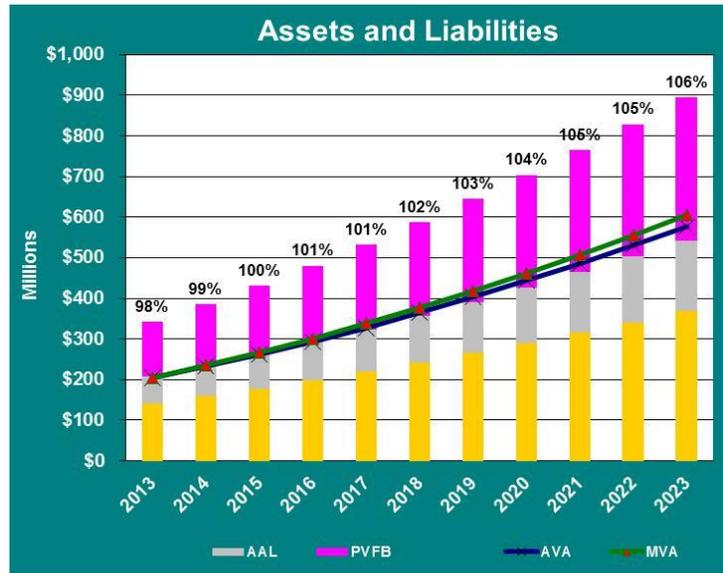
SECTION I  
 BOARD SUMMARY

Projections with Asset Returns of 9.0%



The future funding status of this Plan will be influenced by the investment earnings. These charts show what the next ten years would look like with a 9.0% annual return in each year. The Plan has earned an average 7.2% per year over the ten-year period ending June 30, 2013.

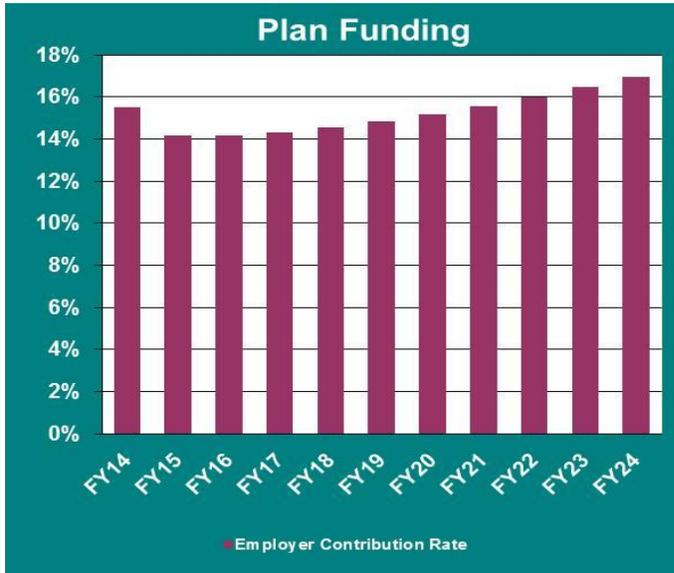
As you can see, the Plan would reach 106% funding by 2023. The contribution rate would decrease rapidly to a level of around 10.25% of payroll.



**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
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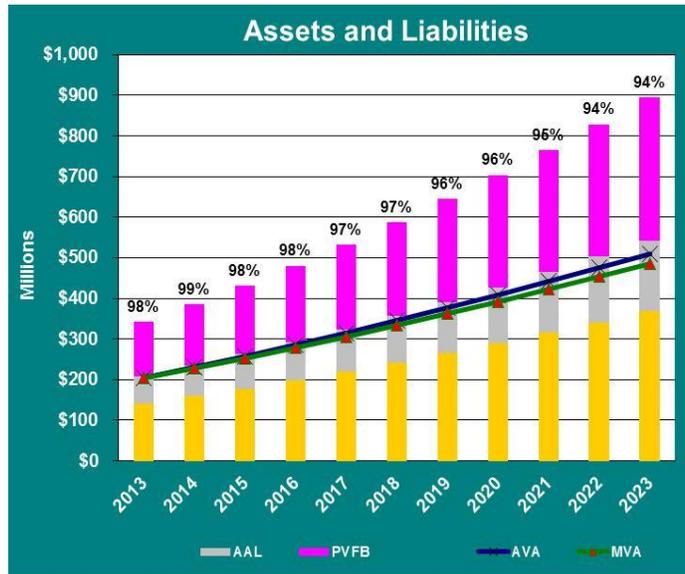
**SECTION I  
BOARD SUMMARY**

Projections with Asset Returns of 6.0%



To further demonstrate how the future funding of this Plan will be driven by investment earnings, we show next the anticipated Plan funding projections if the invested assets earn 6.0% per year over the entire ten-year period.

Under this scenario, the employer contribution rate increases to approximately 17% of payroll. The funding status is expected to decline from 98% to 94%.



DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013

SECTION I  
BOARD SUMMARY

<b>Table I-1</b>			
<b>Delaware County &amp; Municipal Police/Firefighters Pension Plan</b>			
<b>Summary of Principal Plan Results</b>			
<b>Valuation as of:</b>	<b>June 30, 2012</b>	<b>June 30, 2013</b>	<b>% Change</b>
<b><u>Participant Counts</u></b>			
Active Participants	1,059	1,082	2.17%
Disabled Participants	22	22	0.00%
Retirees and Beneficiaries	57	65	14.04%
Terminated Vested Participants	20	28	40.00%
Inactive Participants	<u>6</u>	<u>21</u>	250.00%
<b>Total</b>	<b>1,164</b>	<b>1,218</b>	<b>4.64%</b>
Annual Salaries of Active Members*	\$ 67,090,600	\$ 68,122,000	1.54%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 2,371,500	\$ 2,651,900	11.82%
<b><u>Assets and Liabilities</u></b>			
Actuarial Accrued Liability (AAL)	\$ 186,900,600	\$ 207,740,200	11.15%
Actuarial Value of Assets	<u>179,815,800</u>	<u>203,831,600</u>	13.36%
Unfunded AAL	\$ 7,084,800	\$ 3,908,600	(44.83%)
Funded Ratio	96.2%	98.1%	
Present Value of Accrued Benefits (PVAB)	\$ 127,381,700	\$ 140,813,500	10.54%
Market Value of Assets	<u>175,214,400</u>	<u>204,483,700</u>	16.70%
Unfunded PVAB	\$ (47,832,700)	\$ (63,670,200)	33.11%
Accrued Benefit Funding Ratio	137.6%	145.2%	
<b><u>Contributions as a Percentage of Payroll</u></b>			
	<b>Fiscal Year 2014</b>	<b>Fiscal Year 2015</b>	
Normal Cost Contribution	14.01%	13.26%	
Unfunded Actuarial Liability Contribution	1.26%	0.67%	
Administrative Expense	<u>0.25%</u>	<u>0.25%</u>	
Total State Contribution	15.52%	14.18%	

\* Assumes one year of payroll projection.

**SECTION II  
ASSETS**

Pension plan assets play a key role in the financial operation of the plan and in the decisions the Trustees may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact upon benefit levels, employer contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on plan assets including:

- **Disclosure** of plan assets at June 30, 2012 and June 30, 2013;
- Statement of the **changes** in market values during the year;
- Development of the **Actuarial Value of Assets**;
- An assessment of **investment performance**; and
- A projection of the Plan's expected **cashflows** for the next ten years.

**Disclosure**

The market value of assets represents a "snap-shot or cash-out" value which provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not suitable for long-range planning.

The actuarial values are market values which have been smoothed to avoid overreacting to any one market event. They are used for evaluating the Plan's ongoing liability to meet its obligations.

Current methods employed by this Plan set the actuarial value equal to the expected value plus 20% of the difference between the expected value of assets and the actual market value where the expected value is equal to the prior year's actuarial value, rolled forward with actual contributions and benefit payments plus interest imputed at 7.5%.

<b>Table II-1 Changes in Market Values</b>		
<b>Value of Assets – June 30, 2012</b>		<b>\$ 175,214,400</b>
<b><u>Additions</u></b>		
Member Contributions	\$ 4,165,800	
Employer Contributions	8,722,500	
Investment Return	<u>19,277,400</u>	
<b>Total Additions</b>	<b>\$ 32,165,700</b>	
<b><u>Deductions</u></b>		
Benefit Payments	\$ 2,779,400	
Administrative Expenses	<u>117,000</u>	
<b>Total Deductions</b>	<b>\$ 2,896,400</b>	
<b>Value of Assets – June 30, 2013</b>		<b>\$ 204,483,700</b>

**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013**

**SECTION II  
ASSETS**

<b>Table II-2 Development of Actuarial Value of Assets</b>		
1.	Actuarial Value of Assets at June 30, 2012	\$ 179,815,800
2.	Amount in (1) with interest to June 30, 2013	193,302,000
3.	Employer and member contributions for the Plan Year ended June 30, 2013	12,888,300
4.	Interest on contributions assuming payments made uniformly throughout the year to June 30, 2013 at 7.50% per year	483,300
5.	Disbursements from Trust except investment expenses, July 1, 2012 through June 30, 2013	2,896,400
6.	Interest on disbursements to June 30, 2013 at 7.50% per year	108,600
7.	Expected Actuarial Value of Assets at June 30, 2013 = (2) + (3) + (4) – (5) – (6)	203,668,600
8.	Actual Market Value of Assets at June 30, 2013	204,483,700
9.	Excess of (8) over (7)	815,100
10.	Actuarial Value of Assets at June 30, 2013 = (7) + 20% of (9)	\$ 203,831,600

### **Actuarial Value of Assets**

The actuarial value of assets represents a “smoothed” value developed by the actuary to reduce, or eliminate, erratic results which could develop from short-term fluctuations in the market value of assets. For this Plan, the actuarial value has been calculated by adding 20% of the difference between market value and expected value to the expected value. The above table illustrates the calculation of actuarial value of assets for the June 30, 2013 valuation.

### **Investment Performance**

The market value of assets (MVA) returned 10.7% during 2013, which is more than the assumed 7.5% return. A return of 7.59% on the actuarial value of assets (AVA) is primarily the result of the asset smoothing method being utilized for the calculation of the actuarial value of assets. Since only 20% of the gain or loss from the performance of the Plan is recognized in a given year, in periods of very good performance, the AVA can lag significantly behind the MVA. In a period of negative returns, the AVA does not decline as rapidly as the MVA.

**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013**

**SECTION II  
ASSETS**

**Projection of Cash Flows**

<b>Table II-3 Projection of Plan's Benefit Payments</b>		
<b>Year Beginning July 1,</b>	<b>Expected Benefit Payments</b>	<b>Expected Contributions*</b>
2013	\$ 3,504,000	\$ 15,342,000
2014	4,186,000	14,903,000
2015	4,979,000	15,387,000
2016	5,878,000	15,887,000
2017	7,046,000	16,403,000
2018	8,471,000	16,936,000
2019	10,187,000	17,487,000
2020	12,069,000	18,055,000
2021	14,141,000	18,642,000
2022	16,405,000	19,248,000

\* Expected contributions include participating employer contributions and member contributions. For illustration purposes, we have assumed the employer contribution rate will remain level and that payroll will increase at the actuarially assumed rate of 3.25% per year.

Expected benefit payments are projected for the closed group valued at June 30, 2013. Projecting any farther than ten years using a closed-group would not yield reliable predictions due to the omission of new hires.

### SECTION III LIABILITIES

In this section, we present detailed information on plan liabilities including:

- **Disclosure** of plan liabilities at June 30, 2012 and June 30, 2013; and
- Statement of **changes** in these liabilities during the year.

#### Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them.

- **Present Value of Benefits:** Used for analyzing the financial outlook of the Plan, this represents the amount of money needed today to fully pay off all future benefits and expenses of the Plan, assuming participants continue to accrue benefits.
- **Actuarial Accrued Liability:** Used for funding calculations and GASB disclosures, this liability is calculated taking the Present Value of Benefits and subtracting the present value of future Member Contributions and future Employer Normal Costs under an acceptable actuarial funding method. This method is referred to as the **Entry Age Normal** funding method.
- **Present Value of Accrued Liabilities:** Used for communicating the current level of liabilities, this liability represents the total amount of money needed today to fully pay off the current accrued obligations of the Plan, assuming no future accruals of benefits. These liabilities are also required for accounting purposes (Topic No. 960) and used to assess whether the Plan can meet its current benefit commitments.

The following table discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of plan assets yields, for each respective type, a **net surplus** or an **unfunded liability**.

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013

**SECTION III  
LIABILITIES**

**Table III-1  
Liabilities/Net (Surplus)/Unfunded**

	June 30, 2012	June 30, 2013
<b><u>Present Value of Benefits</u></b>		
Active Participant Benefits	\$ 299,075,700	\$ 309,134,600
Retiree and Inactive Benefits	<u>29,123,600</u>	<u>32,899,400</u>
<b>Present Value of Benefits (PVB)</b>	<b>\$ 328,199,300</b>	<b>\$ 342,034,000</b>
Market Value of Assets (MVA)	\$ 175,214,400	\$ 204,483,700
Future Member Contributions	47,121,000	46,525,300
Future Employer Contributions	<u>105,863,900</u>	<u>91,025,000</u>
<b>Total Resources</b>	<b>\$ 328,199,300</b>	<b>\$ 342,034,000</b>
<b><u>Actuarial Accrued Liability</u></b>		
Present Value of Benefits (PVB)	\$ 328,199,300	\$ 342,034,000
Present Value of Future Normal Costs (PVFNC)	94,177,700	87,768,500
Present Value of Future Member Contributions (PVFEEC)	<u>47,121,000</u>	<u>46,525,300</u>
<b>Actuarial Accrued Liability (AAL=PVB-PVFNC-PVFEEC)</b>	<b>\$ 186,900,600</b>	<b>\$ 207,740,200</b>
Actuarial Value of Assets (AVA)	<u>179,815,800</u>	<u>203,831,600</u>
<b>Net (Surplus)/Unfunded (AAL – AVA)</b>	<b>\$ 7,084,800</b>	<b>\$ 3,908,600</b>
<b><u>Present Value of Accrued Liability</u></b>		
Present Value of Benefits (PVB)	\$ 328,199,300	\$ 342,034,000
Present Value of Future Benefit Accruals (PVFBA)	<u>200,817,600</u>	<u>201,220,500</u>
<b>Present Value of Accrued Liability (PVAB=PVB-PVFBA)</b>	<b>\$ 127,381,700</b>	<b>\$ 140,813,500</b>
Market Value of Assets (MVA)	\$ 175,214,400	\$ 204,483,700
<b>Net Unfunded (PVAB – MVA)</b>	<b>\$ (47,832,700)</b>	<b>\$ (63,670,200)</b>

**SECTION III  
LIABILITIES**

**Changes in Liabilities**

Each of the liabilities disclosed in the prior table are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above and also due to changes in plan assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure plan assets

In each valuation, we report on those elements of change which are of particular significance, potentially affecting the long-term financial outlook of the Plan. Below we present key changes in liabilities since the last valuation.

<b>Table III-2</b>			
	<b>Present Value of Benefits</b>	<b>Actuarial Accrued Liability</b>	<b>Present Value of Accrued Liability</b>
Liabilities June 30, 2012	\$ 328,199,300	\$ 186,900,600	\$ 127,381,700
Liabilities June 30, 2013	342,034,000	207,740,200	140,813,500
Liability Increase (Decrease)	13,834,700	20,839,600	13,431,800
Change Due to:			
Method Change	N/A	5,179,400	N/A
Actuarial (Gain)/Loss	NC*	(10,624,600)	NC*
Benefits Accumulated and Other Sources	13,834,700	26,284,800	13,431,800

\* NC = not calculated

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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**SECTION III  
LIABILITIES**

<b>Table III-3</b>		
<b>Actuarial Liabilities for Funding</b>		
	<b>June 30, 2012</b>	<b>June 30, 2013</b>
1. Actuarial Liabilities		
Retiree and Inactive Benefits	\$ 29,123,600	\$ 32,899,400
Active Members	<u>157,777,000</u>	<u>174,840,800</u>
<b>Total Actuarial Liability</b>	<b>\$ 186,900,600</b>	<b>\$ 207,740,200</b>
2. Actuarial Value of Assets	\$ 179,815,800	\$ 203,831,600
3. Unfunded Actuarial Liability	\$ 7,084,800	\$ 3,908,600
4. Allocation of Unfunded Actuarial Liability		
Unpaid UAL from participating municipalities	\$ 257,300	\$ 221,800
<b>5. Net (Gain)/Loss Base for 10 Year Amort. (3-4)</b>	<b>\$ 6,827,500</b>	<b>\$ 3,686,800</b>

**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013**

**SECTION IV  
CONTRIBUTIONS**

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this Plan, the funding method employed is the **Entry Age Actuarial Cost Method**. Under this method, there are three components to the total contribution: the **normal cost rate**, the **unfunded actuarial liability rate** (UAL rate), and the **administrative expense rate**. The normal cost rate is determined in the following steps. First, for each active member an individual normal cost rate is determined by taking the value, as of entry age into the Plan, of that member's projected future benefits. This value is then divided by the value, also at entry age, of the member's expected future salary. Finally, the total normal cost rate is reduced by the member contribution rate to produce the employer normal cost rate.

The net unfunded actuarial liability (after subtracting payments due from municipalities paying for prior service) as of each valuation date is amortized over a rolling ten-year period. All payments are determined assuming total pay increases by the annual inflation rate.

The assumed administrative expense rate is 0.25% of payroll. This rate, when applied to payroll, is intended to provide an allowance above the cost of funding the benefits to pay for the expense of operating the Plan.

The table below presents and compares the employer contribution rates for the Plan for this valuation and the prior one.

<b>Table IV-1</b>		
<b>Employer Contribution Rate</b>		
	<b>June 30, 2012</b>	<b>June 30, 2013</b>
Entry Age Normal Cost Rate	14.01%	13.26%
Amortization Payment	1.26%	0.67%
Expense	<u>0.25%</u>	<u>0.25%</u>
Actuarially Determined Contribution	15.52%	14.18%

**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013**

**SECTION IV  
CONTRIBUTIONS**

<b>Table IV-2 Development of Plan Cost as of June 30, 2013</b>		
	<b>In Dollars</b>	<b>As % of Payroll</b>
1. Present value of projected benefits attributable to:		
a. Total Normal Cost	\$ 13,803,700	20.26%
b. Expected Members Contribution	<u>4,768,500</u>	<u>7.00%</u>
c. Employer Paid Normal Cost (a) – (b)	\$ 9,035,200	13.26%
2. Amortization of Unfunded Liability, less the unpaid UAL from participating municipalities	\$ 456,600	0.67%
3. Allowance for Expense	<u>\$ 170,300</u>	<u>0.25%</u>
4. Total Employer Contribution Rate (1) + (2) + (3)	\$ 9,662,100	14.18%

**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

ASC Topic No. 960 of the Financial Accounting Standards Board requires the Plan to disclose certain information regarding its funded status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

The FASB ASC Topic No. 960 disclosures provide a quasi “snap shot” view of how the Plan’s assets compare to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the Plan were to terminate.

The GASB-25 actuarial accrued liability is the same as the actuarial liability amount calculated for funding purposes.

Both the present value of accrued benefits (Topic No. 960) and the actuarial accrued liability (GASB-25) are determined assuming that the Plan is on-going and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.5% per annum.

FASB ASC Topic No. 960 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial accrued liability be compared with the actuarial value of assets for funding purposes. The relevant amounts are exhibited in Table V-1. Finally, Table V-2 reconciles the Topic No. 960 liabilities determined as of the prior valuation, July 1, 2012, to the liabilities as of June 30, 2013.

Tables V-3 through V-5 are exhibits to be used with the State CAFR report. Table V-3 is the Note to Required Supplementary Information, Table V-4 is a history of gains and losses in Accrued Liability, and Table V-5 is the Solvency Test which shows the portion of Accrued Liability covered by Assets.

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013

**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

<b>Table V-1</b>		
<b>Accounting Statement Information</b>		
	<b>June 30, 2012</b>	<b>June 30, 2013</b>
<b>A. FASB ASC Topic No. 960 Basis</b>		
1. Present Value of Benefits Accrued and Vested to Date		
a. Members Currently Receiving Payments	\$ 28,007,100	\$ 31,217,400
b. Former Vested Members	1,116,500	1,682,000
c. Active Members	<u>98,258,100</u>	<u>107,914,100</u>
2. Total Present Value of Accrued Benefits (1 (a) + 1(b) + 1(c))	\$ 127,381,700	\$ 140,813,500
3. Assets at Market Value	<u>175,214,400</u>	<u>204,483,700</u>
4. Unfunded Present Value of Accrued Benefits (2 – 3)	\$ (47,832,700)	\$ (63,670,200)
5. Ratio of Assets to Present Value of Benefits (3 / 2)	137.6%	145.2%
<b>B. GASB No. 25 Basis</b>		
1. Actuarial Accrued Liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 29,123,600	\$ 32,899,400
2. Actuarial Accrued Liabilities for current employees	<u>157,777,000</u>	<u>174,840,800</u>
3. Total Actuarial Accrued Liability (1 + 2)	\$ 186,900,600	\$ 207,740,200
4. Net Actuarial Assets available for benefits	<u>179,815,800</u>	<u>203,831,600</u>
5. Unfunded Actuarial Accrued Liability (3 – 4)	\$ 7,084,800	\$ 3,908,600

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

<b>Table V-2</b> <b>Statement of Changes in Total Actuarial</b> <b>Present Value of All Accrued Benefits</b>	<b>Accumulated Benefit</b> <b>Obligation (FASB ASC</b> <b>Topic No. 960)</b>
Actuarial Present Value of Accrued Benefits at June 30, 2012	\$ 127,381,700
Increase (Decrease) During Years Attributable to:	
Passage of Time	9,449,400
Benefit Paid – FY 2013	(2,779,400)
Assumption Change	0
Benefits Accrued, Other Gains/Losses	<u>6,761,800</u>
Net Increase (Decrease)	\$ 13,431,800
Actuarial Present Value of Accrued Benefits at June 30, 2013	\$ 140,813,500

**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

**Table V-3  
Note to Required Supplementary Information**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	July 1, 2013
Actuarial cost method	Entry age
Amortization method	Level percent open
Amortization period	Ten years
Asset valuation method	5-Year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.5%
Projected salary increases*	4.3%-11.8%
Cost-of-living adjustments	ad hoc
*Includes inflation at	3.25%

The actuarial assumptions used have been recommended by the actuary and adopted by the Plan's Board of Trustees based on the most recent review of the Plan's experience completed in 2011.

The rate of employer contributions to the Plan is composed of the normal cost, amortization of the unfunded actuarial accrued liability and an allowance for administrative expenses. The normal cost is a level percent of payroll cost which, along with member contributions, will pay for projected benefits at retirement for each active plan participant. The actuarial accrued liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial accrued liability. The allowance for administrative expenses is based upon the Plan's actual administrative expenses.

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
ACTUARIAL VALUATION AS OF JUNE 30, 2013

**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

**Table V-4**  
**Analysis of Financial Experience**  
**Gain and Loss in Accrued Liability During Years Ended June 30**  
**Resulting from Differences Between Assumed Experience and Actual Experience**

*Gain (or Loss) for Year ending June 30,  
(expressed in thousands)*

Type of Activity	2008	2009	2010	2011	2012	2013
Investment Income on Actuarial Assets	\$ (612)	\$ (5,360)	\$ (3,528)	\$ 846	\$ (1,150)	\$ 163
Combined Liability Experience	<u>851</u>	<u>(937)</u>	<u>1,407</u>	<u>420</u>	<u>(3,898)</u>	<u>10,625</u>
(Loss)/Gain During Year from Financial Experience	\$ 239	\$ (6,297)	\$ (2,121)	\$ 1,276	\$ (5,048)	\$ 10,788
Non-Recurring Items	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,502</u>	<u>0</u>	<u>(5,179)</u>
Composite Gain (or Loss) During Year	\$ 239	\$ (6,297)	\$ (2,121)	\$ 3,778	\$ (5,048)	\$ 5,609

**Table V-5**  
**Solvency Test**  
**Aggregate Accrued Liabilities for**  
**(expressed in thousands)**

Valuation Date June 30,	Active Member Employer Financed Contributions			Actuarial Value of Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2013	\$ 42,945	\$ 31,217	\$ 133,578	\$ 203,832	100%	100%	97%
2012	38,013	28,007	120,881	179,816	100	100	94
2011	33,031	22,870	104,249	157,394	100	100	97
2010	28,585	18,613	94,232	135,684	100	100	94
2009	24,808	13,383	84,382	119,712	100	100	97
2008	20,669	10,380	72,862	102,423	100	100	98
2007	17,135	9,072	62,815	87,395	100	100	97

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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**APPENDIX A**  
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**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Active Members by Age and Service as of June 30, 2013**

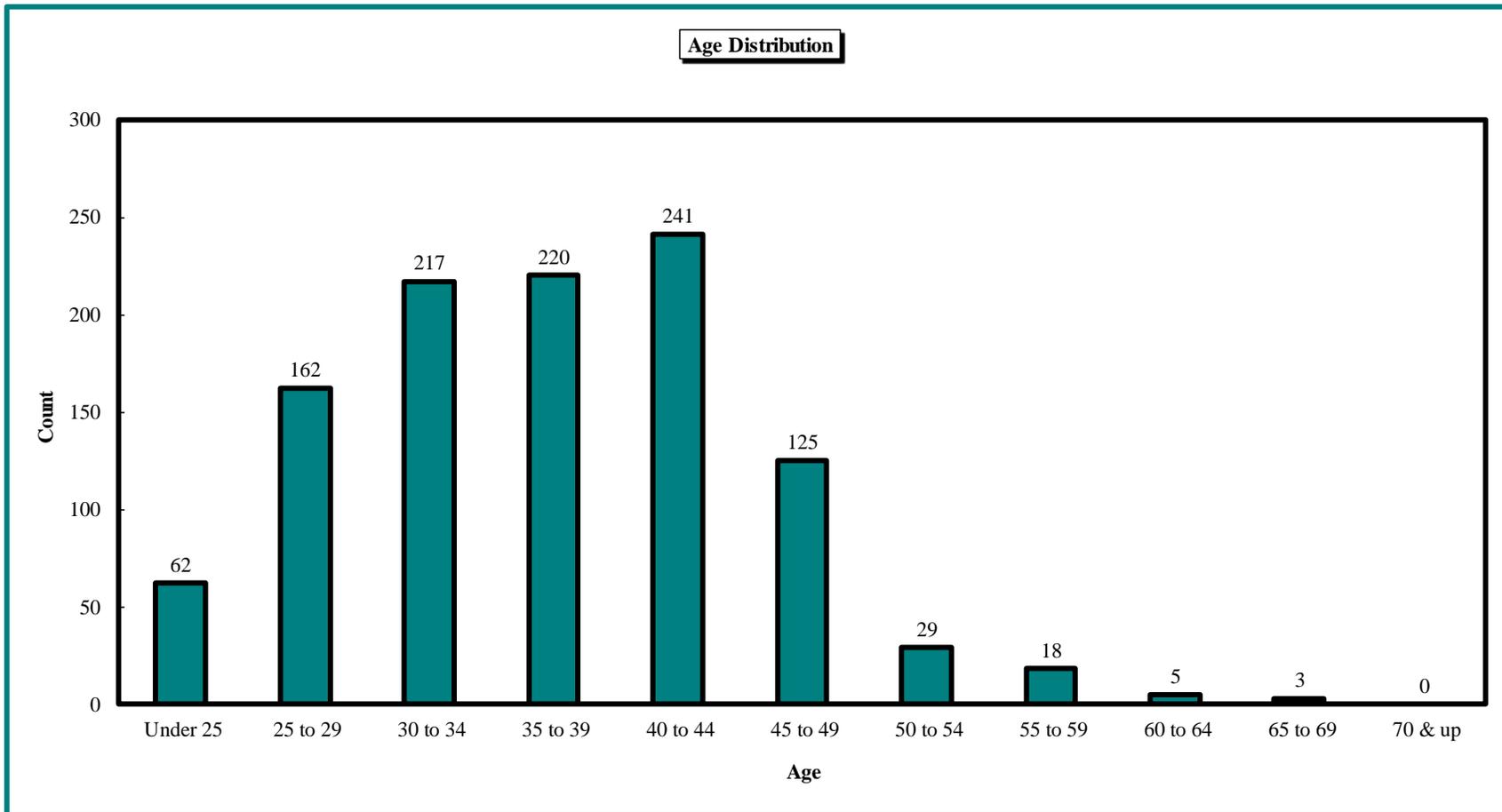
COUNTS BY AGE/SERVICE

Age	Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up		
Under 25	23	39	0	0	0	0	0	0	0	0	0	62
25 to 29	25	101	36	0	0	0	0	0	0	0	0	162
30 to 34	16	59	119	23	0	0	0	0	0	0	0	217
35 to 39	2	29	75	90	24	0	0	0	0	0	0	220
40 to 44	5	12	41	69	112	2	0	0	0	0	0	241
45 to 49	2	8	18	24	60	12	1	0	0	0	0	125
50 to 54	0	1	2	4	17	3	2	0	0	0	0	29
55 to 59	0	1	7	2	4	2	1	1	0	0	0	18
60 to 64	0	1	1	2	0	0	1	0	0	0	0	5
65 to 69	0	0	0	2	0	0	1	0	0	0	0	3
70 & up	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	73	251	299	216	217	19	6	1	0	0	0	1,082

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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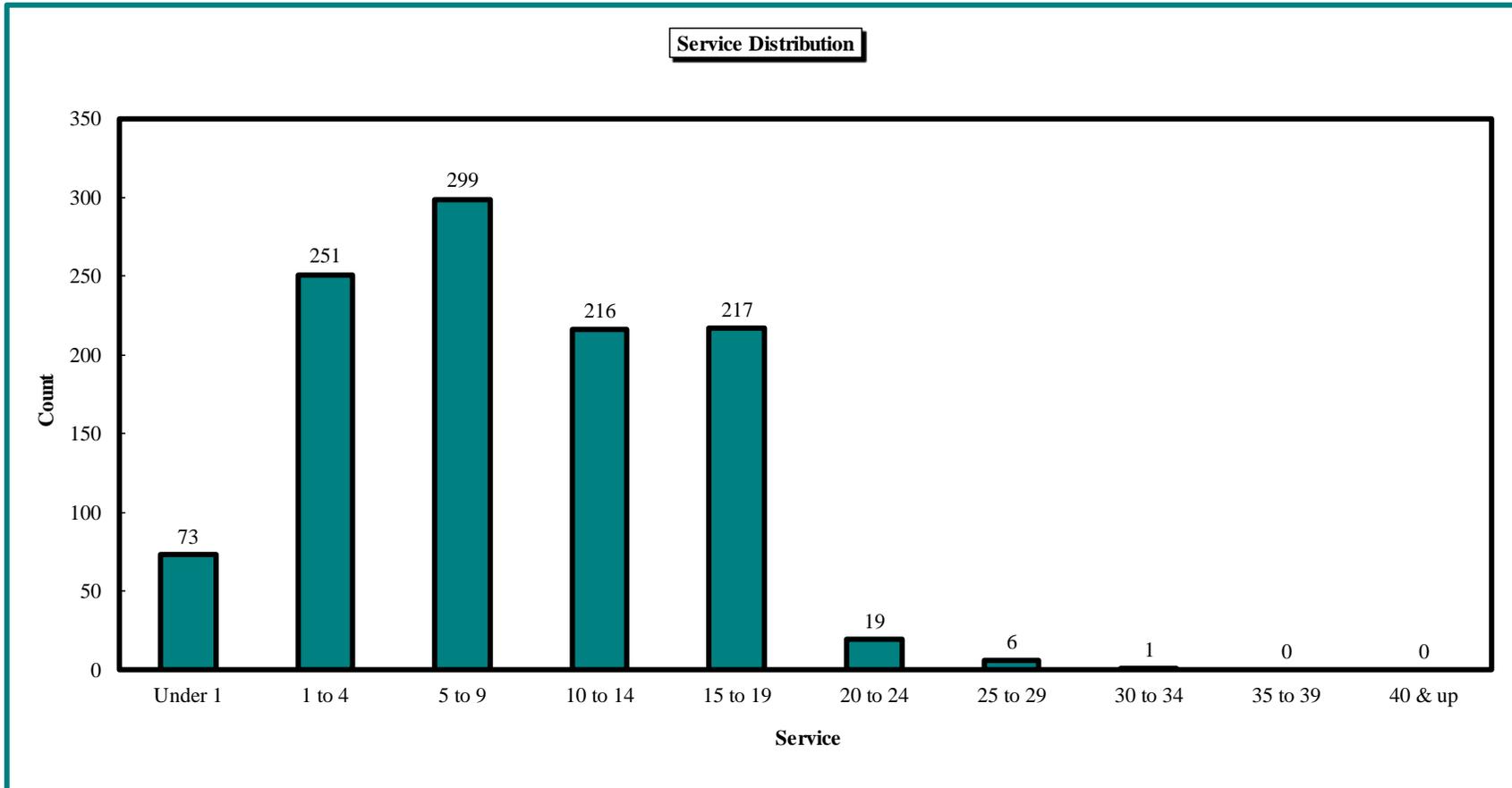
**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Active Members by Age as of June 30, 2013**



DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Active Members by Service as of June 30, 2013



**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
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**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Active Members by Age and Service as of June 30, 2013**

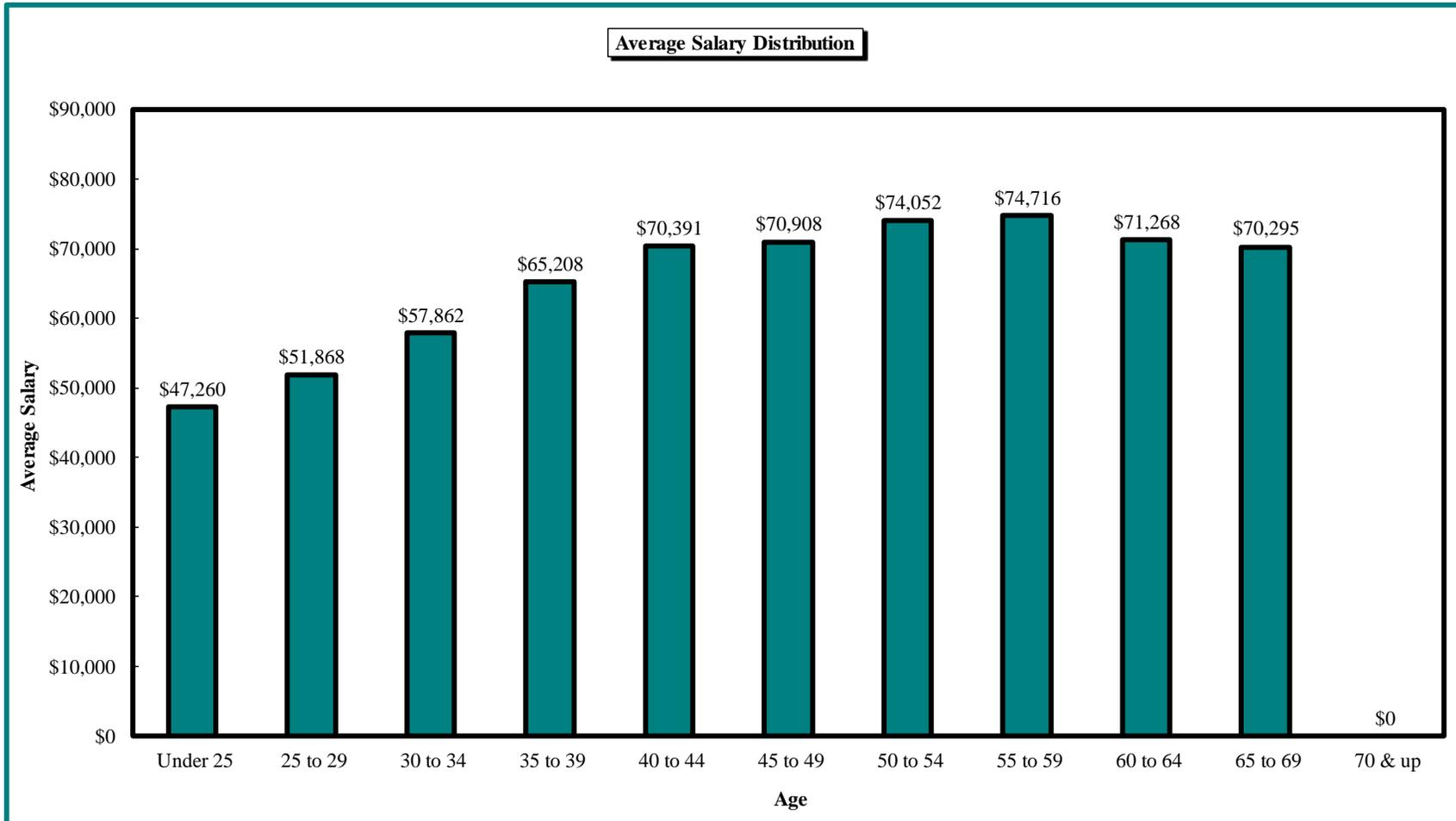
**AVERAGE SALARY BY AGE/SERVICE**

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	\$44,744	\$48,744	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,260
25 to 29	\$45,415	\$51,192	\$58,247	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$51,868
30 to 34	\$43,618	\$52,374	\$60,933	\$65,962	\$0	\$0	\$0	\$0	\$0	\$0	\$57,862
35 to 39	\$47,661	\$52,762	\$61,608	\$70,277	\$73,947	\$0	\$0	\$0	\$0	\$0	\$65,208
40 to 44	\$42,374	\$56,342	\$62,220	\$70,492	\$76,077	\$70,300	\$0	\$0	\$0	\$0	\$70,391
45 to 49	\$39,605	\$54,779	\$58,493	\$70,040	\$75,217	\$84,340	\$87,140	\$0	\$0	\$0	\$70,908
50 to 54	\$0	\$42,414	\$59,031	\$60,583	\$77,951	\$95,196	\$66,975	\$0	\$0	\$0	\$74,052
55 to 59	\$0	\$54,962	\$65,500	\$93,804	\$86,750	\$68,014	\$95,282	\$65,512	\$0	\$0	\$74,716
60 to 64	\$0	\$53,496	\$70,261	\$75,134	\$0	\$0	\$82,316	\$0	\$0	\$0	\$71,268
65 to 69	\$0	\$0	\$0	\$65,927	\$0	\$0	\$79,030	\$0	\$0	\$0	\$70,295
70 & up	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$44,504</b>	<b>\$51,621</b>	<b>\$60,934</b>	<b>\$69,903</b>	<b>\$75,947</b>	<b>\$82,858</b>	<b>\$79,620</b>	<b>\$65,512</b>	<b>\$0</b>	<b>\$0</b>	<b>\$62,959</b>

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
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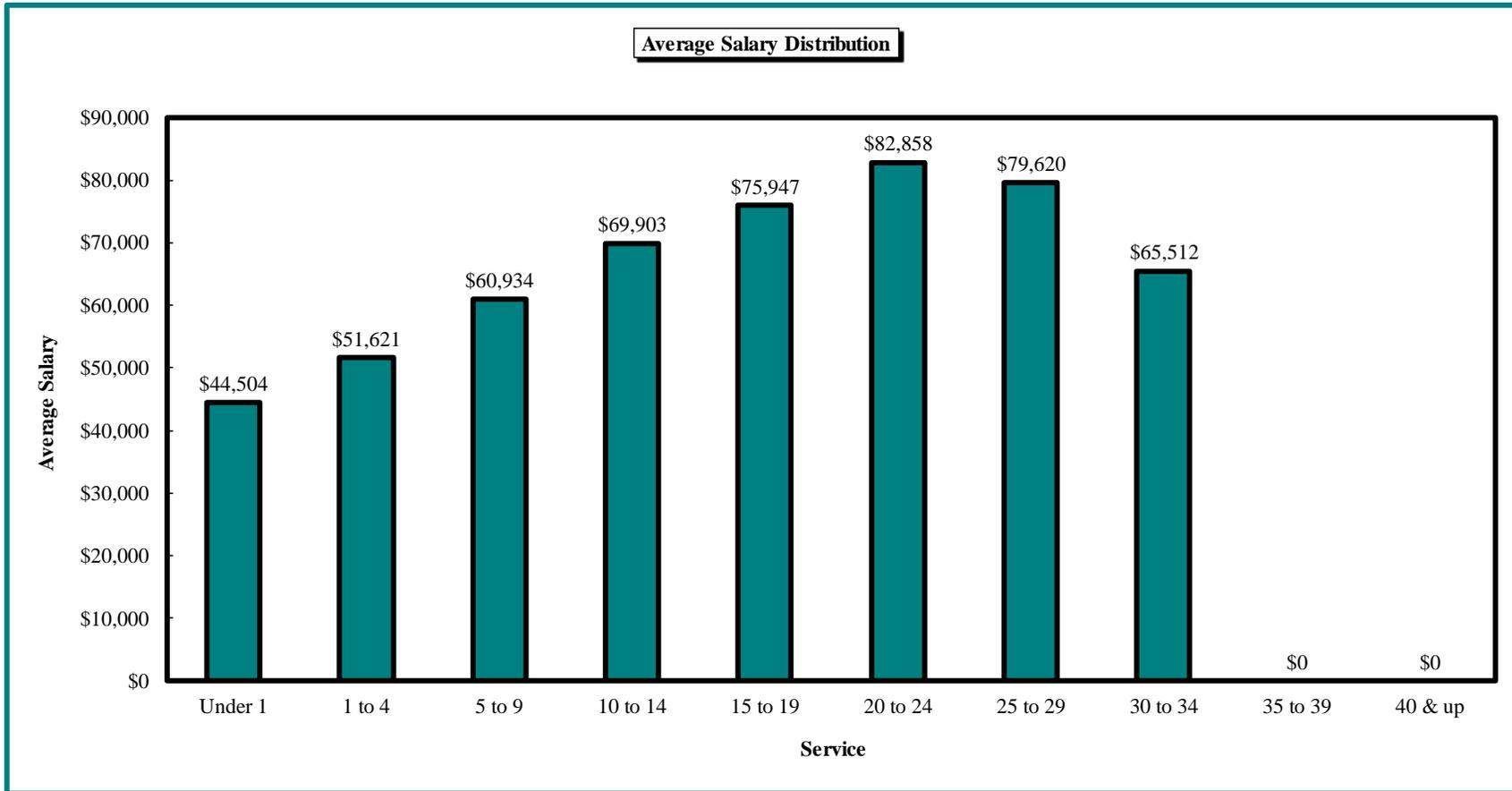
**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Active Members by Age as of June 30, 2013**



DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIIGHTERS PENSION PLAN  
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Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
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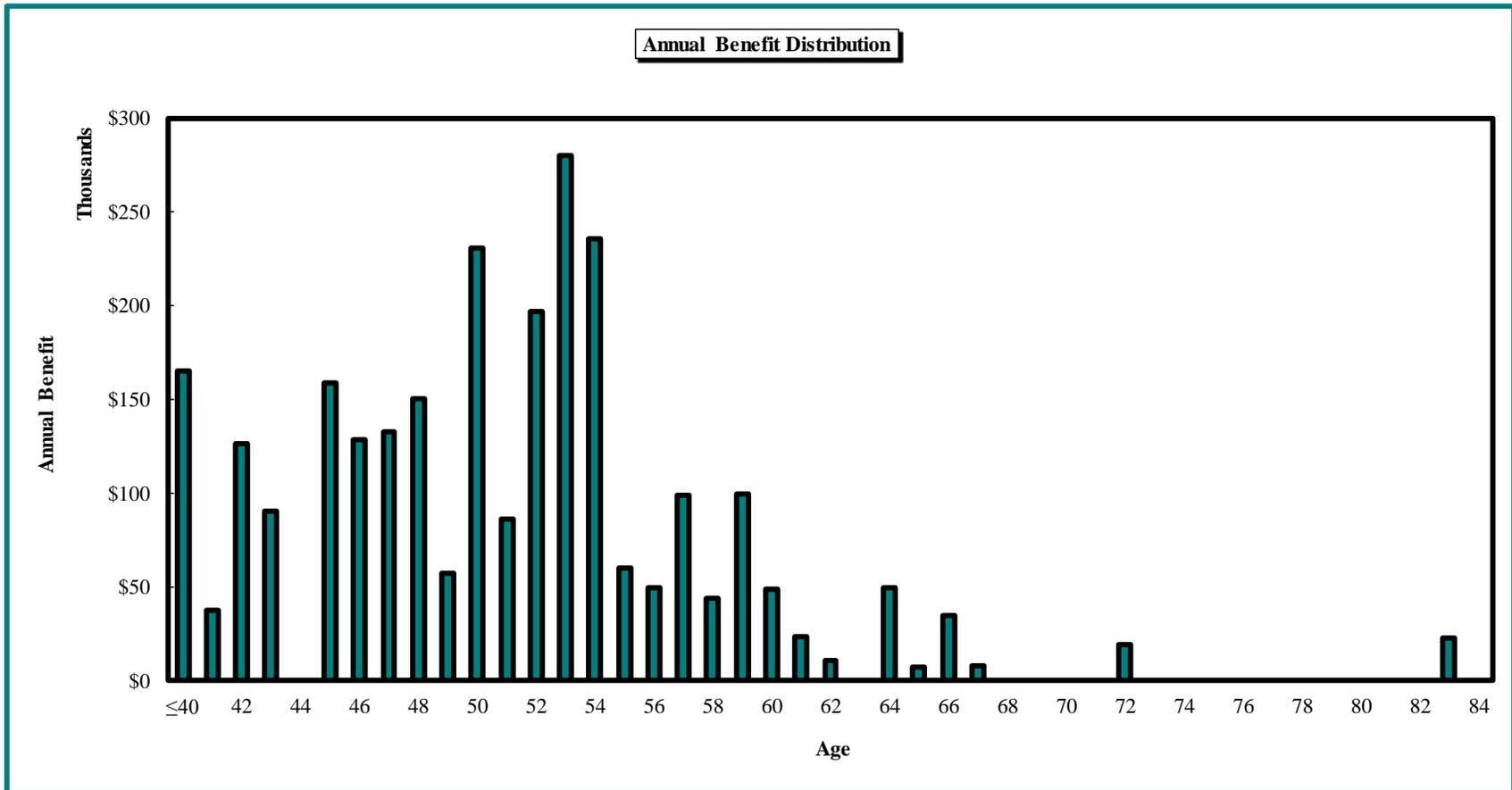
**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of Retired  
Members, Survivors, and Disabled Members as of June 30, 2013**

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	3	\$39,877	73	0	\$0
25	0	\$0	74	0	\$0
26	0	\$0	75	0	\$0
27	0	\$0	76	0	\$0
28	0	\$0	77	0	\$0
29	0	\$0	78	0	\$0
30	0	\$0	79	0	\$0
31	0	\$0	80	0	\$0
32	0	\$0	81	0	\$0
33	0	\$0	82	0	\$0
34	1	\$25,752	83	1	\$22,252
35	1	\$29,234	84	0	\$0
36	0	\$0	85	0	\$0
37	0	\$0	86	0	\$0
38	1	\$36,678	87	0	\$0
39	1	\$17,188	88	0	\$0
40	1	\$16,749	89	0	\$0
41	1	\$37,665	90	0	\$0
42	4	\$126,327	91	0	\$0
43	2	\$90,274	92	0	\$0
44	0	\$0	93	0	\$0
45	5	\$158,705	94	0	\$0
46	4	\$128,790	95	0	\$0
47	3	\$132,796	96	0	\$0
48	5	\$150,078	97	0	\$0
49	2	\$57,215	98	0	\$0
50	6	\$231,116	99	0	\$0
51	3	\$86,467	100	0	\$0
52	5	\$196,914	101	0	\$0
53	8	\$280,468	102	0	\$0
54	5	\$236,099	103	0	\$0
55	2	\$59,844	104	0	\$0
56	3	\$49,747	105	0	\$0
57	2	\$98,713	106	0	\$0
58	1	\$43,658	107	0	\$0
59	4	\$99,545	108	0	\$0
60	3	\$48,607	109	0	\$0
61	1	\$23,524	110	0	\$0
62	1	\$10,379	111	0	\$0
63	0	\$0	112	0	\$0
64	2	\$49,113	113	0	\$0
65	1	\$7,217	114	0	\$0
66	2	\$34,649	115	0	\$0
67	1	\$7,565	116	0	\$0
68	0	\$0	117	0	\$0
69	0	\$0	118	0	\$0
70	0	\$0	119	0	\$0
71	0	\$0	120	0	\$0
72	2	\$18,709			
			Totals	87	\$2,651,913

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of Retired Members, Survivors, and Disabled Members as of June 30, 2013**



**DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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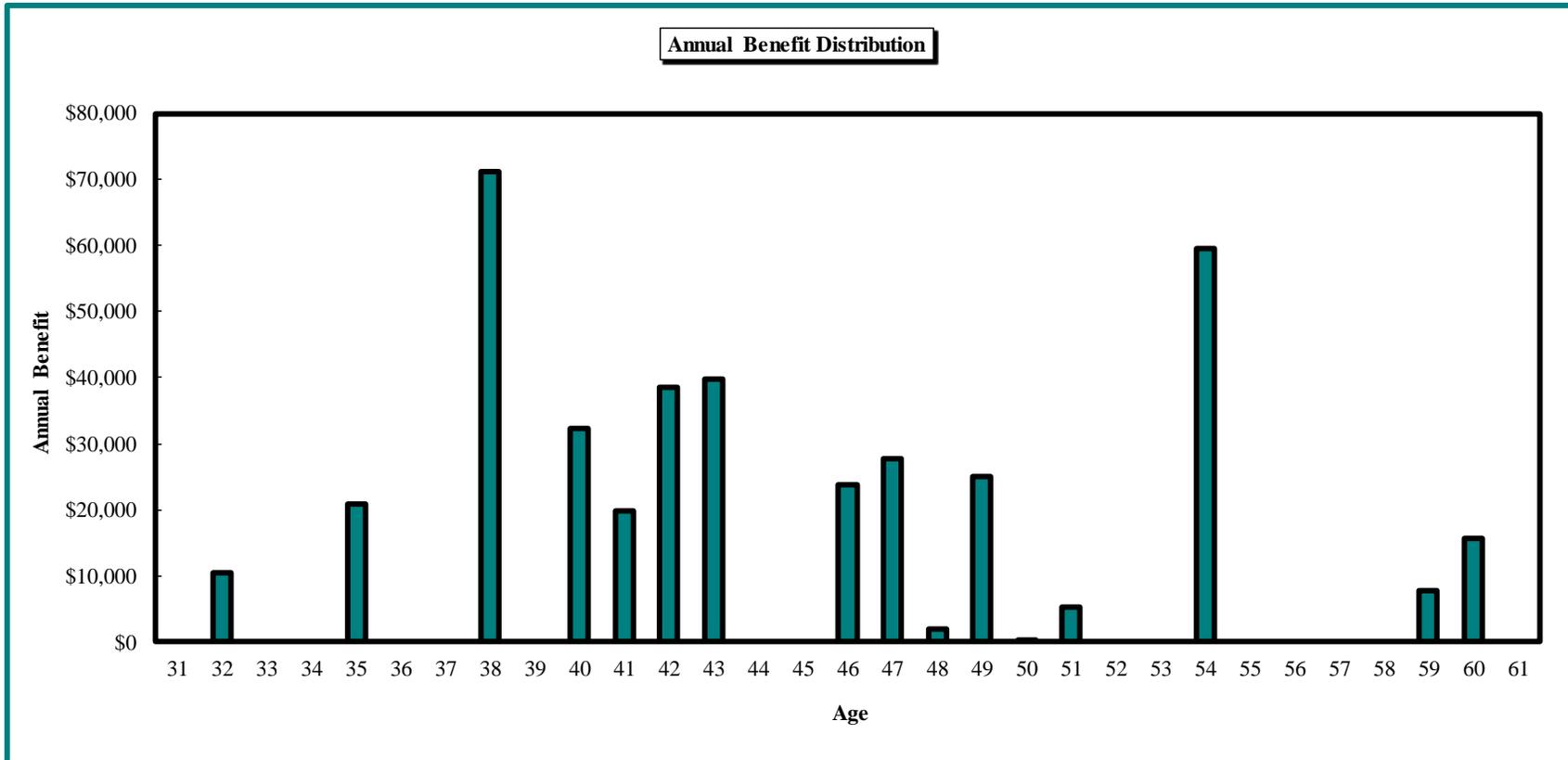
**Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Vested Members as of June 30, 2013**

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	\$0	73	0	\$0
25	0	\$0	74	0	\$0
26	0	\$0	75	0	\$0
27	0	\$0	76	0	\$0
28	0	\$0	77	0	\$0
29	0	\$0	78	0	\$0
30	0	\$0	79	0	\$0
31	0	\$0	80	0	\$0
32	1	\$10,400	81	0	\$0
33	0	\$0	82	0	\$0
34	0	\$0	83	0	\$0
35	2	\$20,822	84	0	\$0
36	0	\$0	85	0	\$0
37	0	\$0	86	0	\$0
38	3	\$71,111	87	0	\$0
39	0	\$0	88	0	\$0
40	4	\$32,387	89	0	\$0
41	1	\$19,864	90	0	\$0
42	4	\$38,499	91	0	\$0
43	3	\$39,862	92	0	\$0
44	0	\$0	93	0	\$0
45	0	\$0	94	0	\$0
46	2	\$23,737	95	0	\$0
47	1	\$27,722	96	0	\$0
48	1	\$1,951	97	0	\$0
49	1	\$24,970	98	0	\$0
50	1	\$187	99	0	\$0
51	1	\$5,331	100	0	\$0
52	0	\$0	101	0	\$0
53	0	\$0	102	0	\$0
54	1	\$59,513	103	0	\$0
55	0	\$0	104	0	\$0
56	0	\$0	105	0	\$0
57	0	\$0	106	0	\$0
58	0	\$0	107	0	\$0
59	1	\$7,708	108	0	\$0
60	1	\$15,719	109	0	\$0
61	0	\$0	110	0	\$0
62	0	\$0	111	0	\$0
63	0	\$0	112	0	\$0
64	0	\$0	113	0	\$0
65	0	\$0	114	0	\$0
66	0	\$0	115	0	\$0
67	0	\$0	116	0	\$0
68	0	\$0	117	0	\$0
69	0	\$0	118	0	\$0
70	0	\$0	119	0	\$0
71	0	\$0	120	0	\$0
72	0	\$0			
			Totals	28	\$399,783

DELAWARE COUNTY & MUNICIPAL POLICE/FIREFIGHTERS PENSION PLAN  
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Delaware County and Municipal Police/Firefighters Pension Plan Distribution of  
Vested Members as of June 30, 2013



**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**A. Long-Term Assumptions Used to Determine Plan Costs and Liabilities**

**1. Demographic Assumptions**

**a. Healthy Active and Inactive Mortality**

Mortality Improvements Projected to 2015 (Projection Scale AA)

Male: RP-2000 Combined Mortality Table

Female: RP-2000 Combined Mortality Table

<b>Rates of Healthy Active and Inactive Mortality</b>		
<b>Rates (With Projection Scale AA)</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
20	0.03%	0.02%
25	0.03	0.02
30	0.04	0.02
35	0.07	0.04
40	0.09	0.06
45	0.12	0.09
50	0.16	0.13
55	0.27	0.24
60	0.53	0.47
65	1.03	0.90
70	1.77	1.55
75	3.06	2.49
80	5.54	4.13
85	9.97	7.08
90	17.27	12.59

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**b. Disabled Inactive Mortality**

2011 PBGC Disabled Mortality Tables, 50% Social Security Disabled / 50% Non-Social Security Disabled.

<b>Rates of Disabled Inactive Mortality</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
40	1.97%	1.06%
45	2.22	1.24
50	2.51	1.47
55	2.88	1.79
60	3.33	2.21
65	3.91	2.77
70	4.78	3.38
75	6.39	4.53
80	8.93	6.46

**c. Rates of Active Disability**

<b>Rates of Active Disability</b>	
<b>Age</b>	<b>Rate</b>
20	0.02%
25	0.02
30	0.07
35	0.10
40	0.39
45	0.78
50	1.10
55	1.50

1/3 of disabilities are partial and 2/3 are total.

1/3 of disabilities are duty-related and 2/3 are non-duty related.

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**d. Termination of Employment (Prior to Normal Retirement Eligibility)**

10-year Select & Ultimate tables (service-based). Table applies until eligibility for retirement is reached.

<b>Service</b>		
<b>Select:</b>		<b>Rate</b>
0-2		6.50%
3		5.00
4		4.00
5		3.50
6		3.00
7		2.50
8		2.00
9		1.50
Ultimate		0.50

**e. Retirement**

Normal Retirement: 1-year Select & Ultimate (age-based) upon attaining the earlier of:

- i. Completion of 20 years of credited service, or
- ii. Attainment of age 62 with ten years of credited service, or
- iii. When age plus service equals or exceeds 75 with a minimum of 10 years of credited service.

<b>Normal Retirement</b>		
<b>Age</b>	<b>Select</b>	<b>Ultimate</b>
<37	17.00%	0.00%
37-49	17.00	11.00
50-54	17.00	13.50
55-59	17.00	75.00
60+	17.00	100.00

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**f. Salary Increase**

10-year service-based table includes an annual inflation rate of 3.25%.

<b>Service</b>	<b>Increase</b>
0	11.75%
1	9.75
2	7.75
3	6.25
4	6.00
5	6.00
6	5.75
7	5.50
8	5.25
9	5.00
10	4.28

**g. Family Composition**

Female spouses are assumed to be three years younger than males.

80% are assumed married for both male and female employees.

Actual marital characteristics are used for pensioners.

Dependent children eligible for survivor benefits are assumed to have their benefits cease at age 20.

**2. Economic Assumptions**

- a. Rate of Investment Return: 7.50%
- b. Rate of General Wage Increase: 3.25%
- c. Rate of Increase in Cost-of-Living for Retirees: 0.00%
- d. Rate of Increase in Total Payroll (for Amortization): 3.25%
- e. Administrative Expenses as a Percentage of Payroll: 0.25%

**3. Changes Since Last Valuation**

None.

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**B. Actuarial Methods**

**1. Funding Method**

The Entry Age Normal Actuarial Cost method is used to determine costs. Under this funding method, a normal cost rate is determined as a level percent of pay for each active member. The normal cost rate times payroll equals the normal cost. The normal cost plus member contributions will pay for projected benefits at retirement for each active Plan participant.

The actuarial accrued liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and funds accumulated as of the same date is referred to as the unfunded actuarial liability.

The portion of the actuarial accrued liability in excess of plan assets is funded according to a schedule which is intended to amortize such unfunded actuarial liability fully after a period of years. This is in addition to each year's employer normal cost. Under this cost method, actuarial gains and losses are directly reflected in the size of the unfunded actuarial liability.

The net unfunded actuarial liability (after subtracting payments due from municipalities paying for prior service) is amortized over a rolling ten-year period from each valuation date. The payments are determined assuming total pay increases by the annual inflation rate.

**2. Actuarial Value of Assets**

For purposes of determining the State contribution rate to the Plan, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

The actuarial value of assets is a weighted average giving 20% weight to the current market value and 80% weight to the prior year's actuarial value increased by expected interest and contributions and decreased by benefit payments and expenses. This is mathematically equivalent to recognizing 100% of the actuarially assumed interest rate, plus contribution, less payment each year, and 20% of the portion of each year's returns that have not already been reflected in asset values.

**3. Changes Since Last Valuation**

Slight change in coding the Individual Entry Age Normal method to align benefits and salary amounts used in first year of employment.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

**1. Membership**

The Plan covers an individual who is employed on a full-time basis as a police officer by a county or municipality in Delaware or an individual who is employed on a full-time basis as a uniformed firefighter by the City of Wilmington.

**2. Member Contributions**

7% of compensation.

Interest is credited at the rate of 5% per year.

Member contributions are made through an “employer pick-up” arrangement which results in deferral of taxes on the contributions.

**3. Credited Service**

All service as a member plus certain claimed and purchased service.

**4. Final Average Compensation**

Final Average Compensation is the average over the highest 36 consecutive months (or shorter period of total service).

**5. Normal Retirement**

Eligibility: (i) age 62 with ten years of credited service, or (ii) any age with 20 years of credited service, or (iii) ten years of credited service when age plus service equals 75.

Benefit: 2.5% of final average compensation for each year of credited service, up to 20 years, plus 3.5% of final average compensation for each year of credited service over 20 years.

**6. Duty-Connected Disability Benefit**

Eligibility: Disabled in the performance of his or her duties.

Benefit: If member is totally disabled: 75% of final average compensation at the time disability commenced plus 10% for each eligible dependent not to exceed 100%.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

If member is partially disabled: the normal retirement benefit based on credited service at date of disability that is not less than 50% of final average compensation at the time disability commences.

**7. Ordinary Disability**

Eligibility: Five years of credited service.

Benefit: If member is totally disabled: the normal retirement benefit based on credited service at date of disability that is not less than 50% of the final average compensation at the time of disability plus 5% for each eligible dependent to a maximum of 70%.

If member is partially disabled: the normal retirement benefit based on credited service at the date of disability that is not less than 30% of final average compensation at the time of retirement.

**8. Survivor's Benefit**

Eligibility: Death while active or death after retirement.

Benefit: For eligible survivors of employees who die in active service: 50% of salary, payable to the primary survivor.

For eligible survivors of pensioners who die: 50% of the member's pension at the time of death.

Eligible survivors include: (1) widow or widower, or (2) child or children under 18, or between 18 and 22 and attending school on a full-time basis, or over 18 and permanently disabled before 18, or (3) dependent parent or parents.

**9. Vesting**

Eligibility: Five years of credited service.

Benefit: Normal retirement benefit payable at age 62 based on final average compensation and service at date of termination. In lieu of a pension, a member may receive a refund of accumulated contributions with interest. Upon application for a refund of contributions, a member's vested right to a monthly benefit shall be forfeited.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

**10. Withdrawal**

Eligibility: Not eligible for other benefits.

Benefit: Accumulated employee contributions with interest.

**11. Form of Payment**

The normal form of payment is a 50% joint and survivor annuity.

A member may elect a 75% joint and survivor form with a 3% reduction in benefits.

**12. Cost-of-Living Adjustments**

Cost-of-living adjustments are made on an ad hoc basis.

**13. Changes Since Last Valuation**

None.