Delaware State Police Pension Plan

Actuarial Valuation as of June 30, 2014

Produced by Cheiron

February 2015

Classic Values, Innovative Advice

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February 6, 2015

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 our annual actuarial valuation of the Delaware State Police Pension Plan (Plan) as of June 30, 2014. The results of this valuation are contained in this report. The purpose of the valuation is discussed in the Foreword.

This report contains information on plan assets and liabilities, as well as analyses combining asset and liability performance and projections. It also discloses State contribution levels and required disclosures under the Governmental Accounting Standards Board (GASB) Statement No. 67.

In completing the valuation and preparing our report, we relied on information, some oral and some written, supplied by staff of the Office of Pensions. 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 contribution results of this report are only applicable to the State contribution for Fiscal Year (FY) 2016 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 that 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 State Police 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	Elizabeth Wiley, FSA, EA	Margaret A. Tempkin, FSA
Principal Consulting Actuary	Consulting Actuary	Principal Consulting Actuary

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FOREWORD

Cheiron has performed the annual actuarial valuation of the Delaware State Police Pension Plan (Plan) as of June 30, 2014. 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 condition of the Plan;

3) **Determine the contribution rate** to be paid by the State for Fiscal Year (FY) 2016; and

4) **Provide** accounting statement information.

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 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 liabilities, measured for actuarial, accounting, and governmental reporting purposes.

Section IV presents the FY 2016 actuarially determined State contribution.

Section V includes the required disclosures under Governmental Accounting Standards Board (GASB) Statement No. 67 and items recommended by the Government Finance Officers Association (GFOA).

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 a summary of the actuarial methods and assumptions used in the valuation.

The actuarial assumptions reflect our understanding of the likely future experience of the Plan, and the assumptions individually and 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 would vary from our results.

SECTION I
BOARD SUMMARY

General Comments

The actuarially determined contribution (ADC) rate increased from 18.51% for FY 2015 to 18.60% for FY 2016.

During the year ended June 30, 2014, the Plan's assets earned 17.2% on a market value basis. However, due to the Plan's asset smoothing method, which recognizes only a portion of investment gains and losses, the return on an actuarial value basis was 11.5%. This return was greater than the assumed investment rate of return of 7.5% for last year, resulting in an actuarial gain on investments of $12.7 million. Note that this comparison will be made against the revised 7.2% assumption next year due to the investment rate of return assumption change.

The Plan experienced an actuarial gain on plan liabilities resulting from salary increases different from those assumed and members retiring, terminating, becoming disabled, and dying at rates different from the actuarial assumptions. This liability gain decreased the actuarial liability by $3.5 million, 0.9% of the total actuarial liability. This type of relatively small gain or loss is normal in the course of plan experience, as we cannot predict exactly how people will behave.

This valuation reflects changes in both liability and asset measurements due to a reduction in the assumed investment rate of return from 7.5% to 7.2%. This assumption change, combined with offsetting adjustments to inflation assumptions, increased the actuarial liability measurement by $12.1 million. As a partial offset to this liability impact, an additional 30% of the remaining balance of past investment gains was included in the measurement of the actuarial value of assets at the June 30, 2014 valuation. This additional amount represents $6.9 million of the total $12.7 million investment gain reported above.

This valuation report also contains information to be reported in the June 30, 2014 Comprehensive Annual Financial Report (CAFR) of the Delaware Public Employees' Retirement System (Delaware PERS) under the new GASB Statement No. 67 as well as additional disclosure information recommended by the Government Finance Officers Association (GFOA). The GASB disclosures are based on the use of updated procedures to roll forward the 2013 actuarial valuation liability results. The 2013 liability results, used as the starting point for this roll forward, include the changes in the investment rate of return and inflation assumptions, first included for funding in this 2014 report, and as such are higher than the funding numbers provided in the 2013 valuation report. The calculation of net pension liability in Section V is shown as disclosed for the plan year June 30, 2014, based on the 2013 actuarial valuation liability results. We also present a projection of the June 30, 2015 disclosure in Section V, assuming all actuarial assumptions are met over the coming year, which is based on the 2014 actuarial valuation liability results.

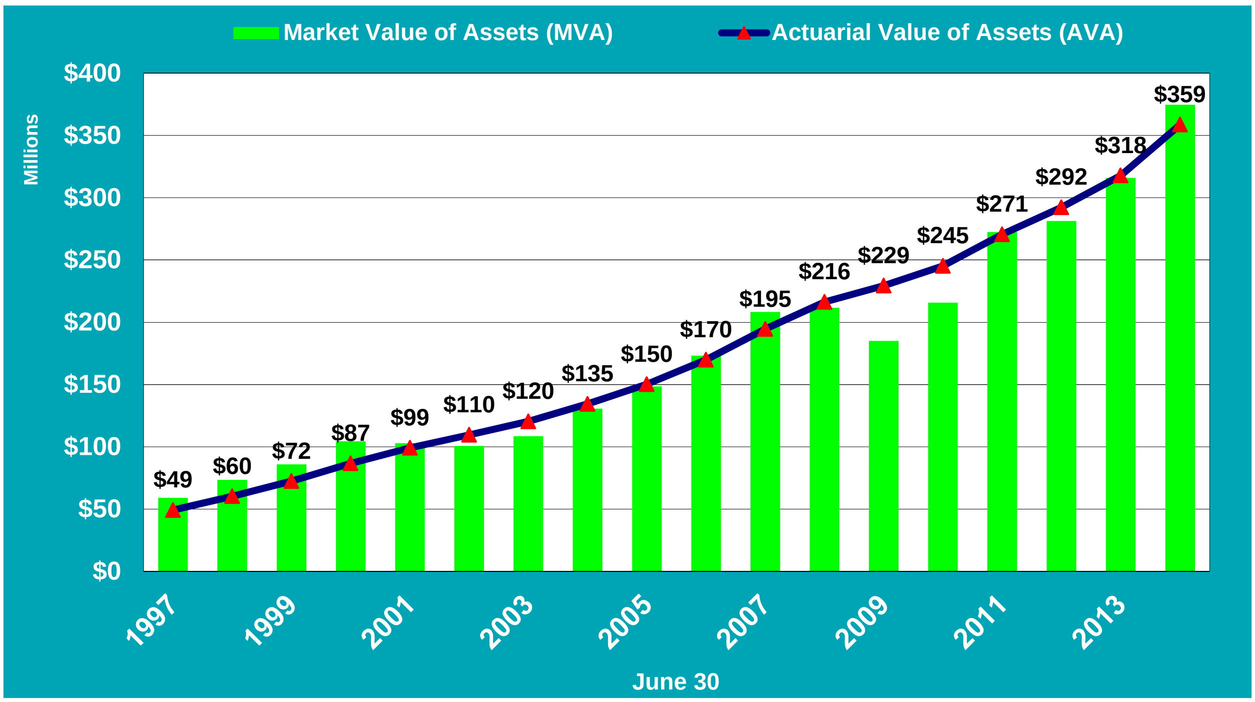
As of the June 30, 2014 actuarial valuation, the Plan's unfunded actuarial liability (UAL) was $27.9 million. This is a decrease from the $33.1 million UAL in the funding valuation for the prior year.

SECTION I
BOARD SUMMARY

Trends

Growth in Assets

The graph below shows measurements of the Plan's assets over the last 18 years based on both market values and actuarial values. The green bars represent the market value measurements, while the blue line shows the actuarial value measurements. The black numbers are the actuarial value of asset measurements as of the valuation date for each year, in millions of dollars.



The market value of assets (MVA) returned 17.2% over the last year. The determination of the Plan's actuarial value of assets (AVA) for the current year reflects a portion of the return above the 7.5% assumed for the year, continued recognition of prior years' gains and losses, and an additional 30% of the remaining unrecognized investment gains recognized as partial offset of the assumption changes.

Over the period July 1, 1997 to June 30, 2014, the Plan's assets returned approximately 8.7% per year measured on an actuarial value basis, compared to the current valuation assumption of 7.2%.

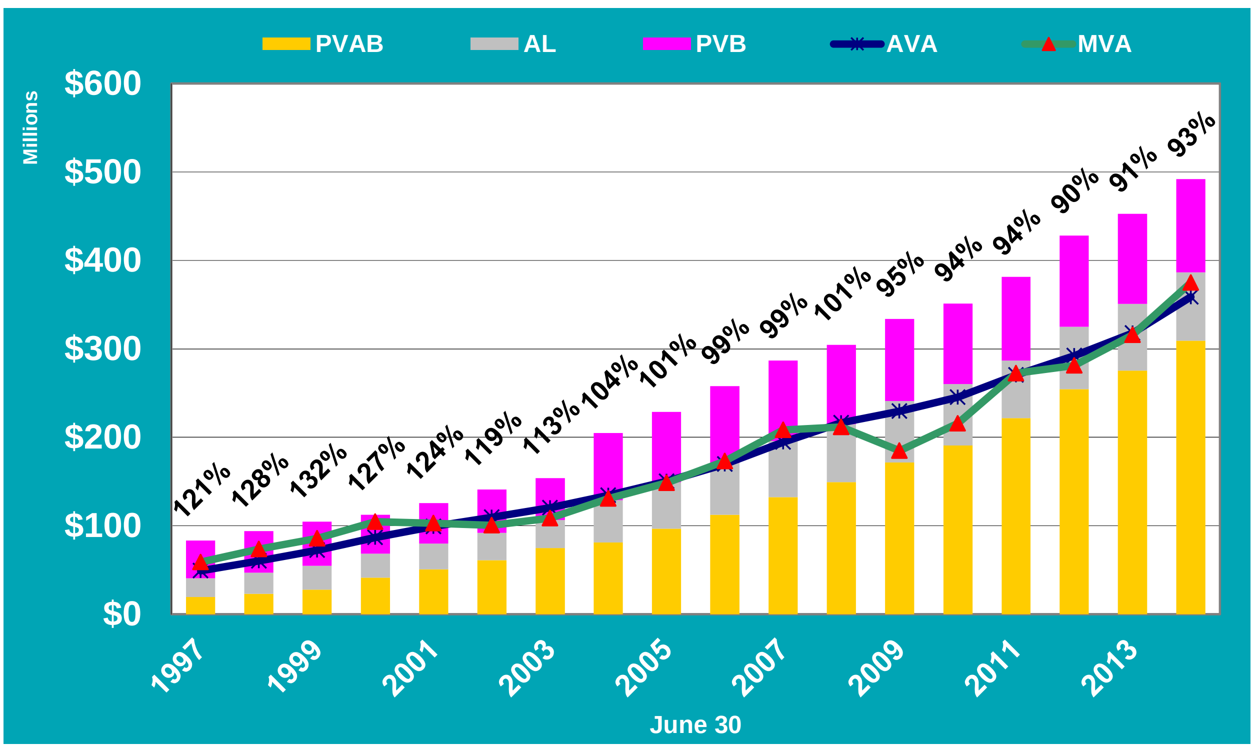
SECTION I
BOARD SUMMARY

Assets and Liabilities

The three colored bars below represent the three different measures of liability discussed in this report. The first measure is given by the yellow bars, the present value of accrued benefits (PVAB). The PVAB values represent the value of all benefits earned by current members through the valuation date. These values do not reflect any future additional service or salary increases for current members.

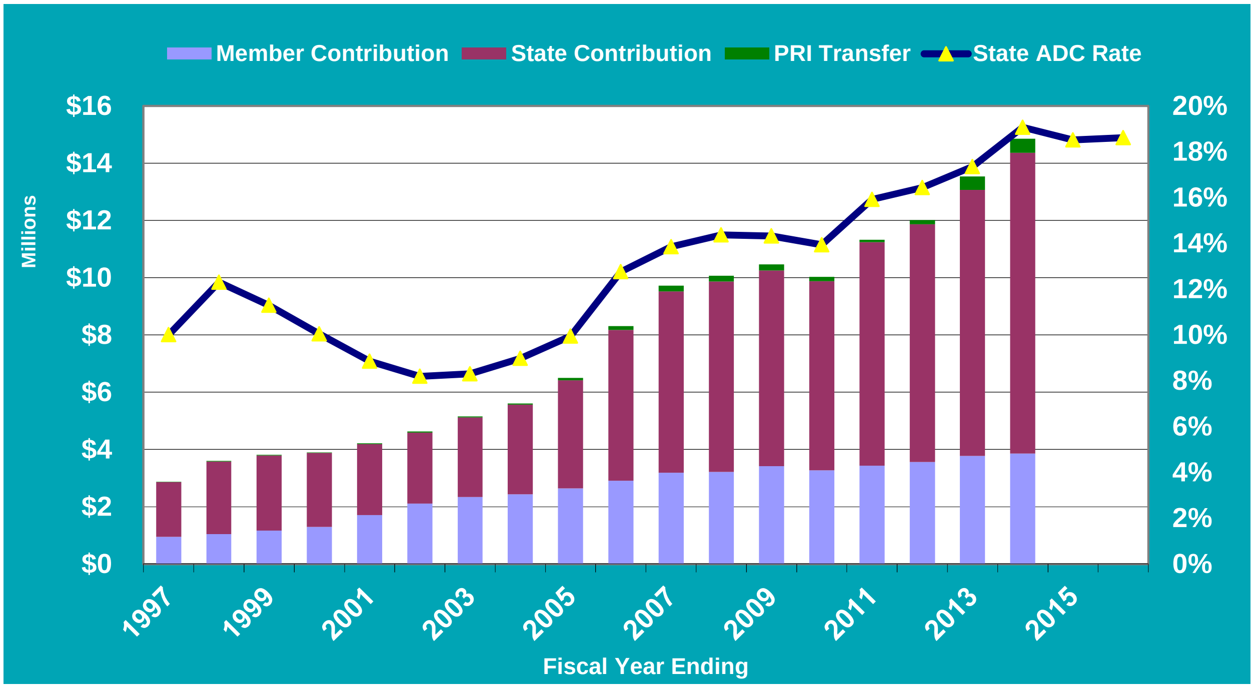
The second liability measure is the one currently used for the Plan's funding target, the actuarial liability (AL). These target amounts are represented by the top of the gray bars. The funded ratios reported by the Plan are the percentages shown above the bars and are developed by comparing these target measurements of liability to the actuarial value of assets at each valuation date. This measurement is also the basis of the liability measure used in GASB 67.

The amount represented by the top of the pink bars, the present value of future benefits (PVB), is the amount needed to provide all benefits for the current members and their beneficiaries, including reflection of assumed future service and pay increases. If the Plan had assets equal to the PVB as of a certain date, no additional contributions would, in theory, be needed for the current members if all assumptions were exactly met from that point forward.



SECTION I
BOARD SUMMARY

Contribution Rates



The stacked bars in the graph above show the contributions made by the State, the Post-Retirement Increase Fund (PRI), and the members for each fiscal year, and are read using the left-hand scale. The blue line shows the State ADC rate for each fiscal year as a percentage of payroll (right-hand scale).

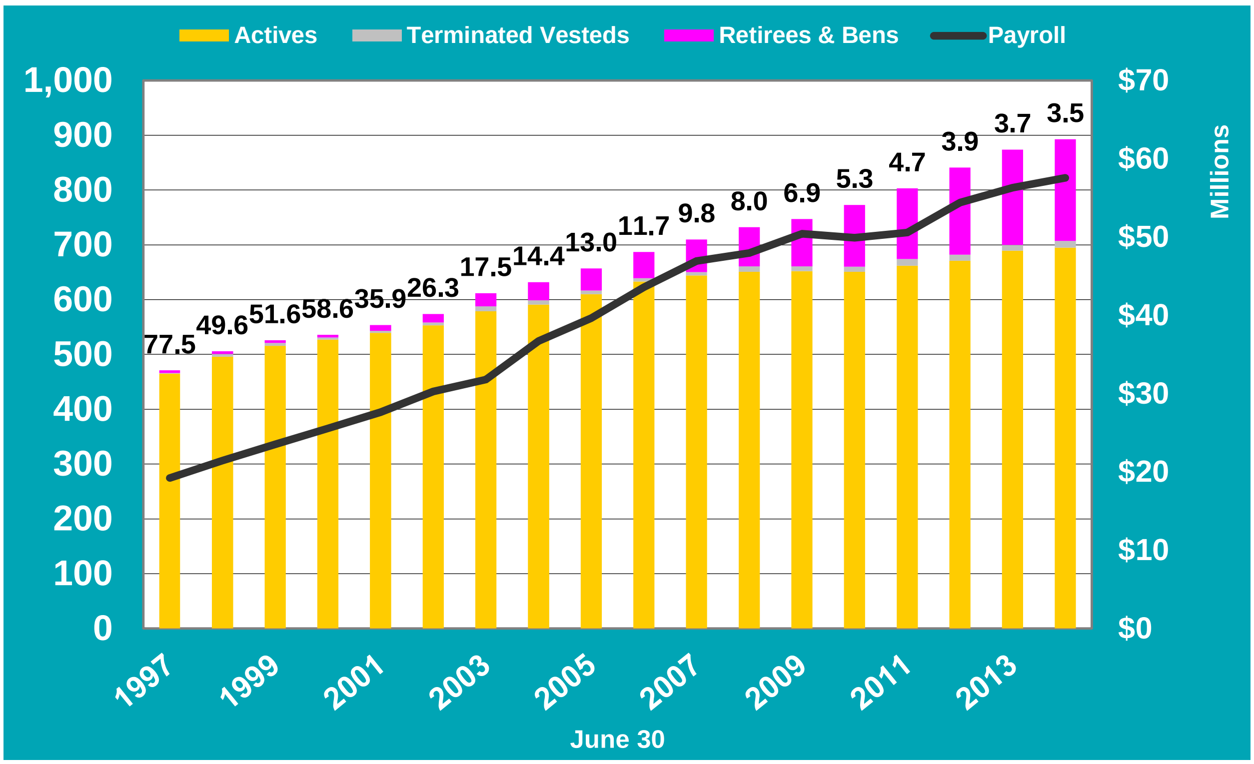
The member contribution rate is set by State law, based on the Plan in which the member participates. The State contribution rate is set by the actuarial process, while the PRI transfer amounts depend on the increases granted by the State legislature. Please note that there is a lag in the State contribution rates shown. For example, the value shown for the Fiscal Year 2014 is the rate prepared by the June 30, 2012 valuation and implemented for the period July 1, 2013 to June 30, 2014.

SECTION I
BOARD SUMMARY

Participant Trends

The bars below show the number of members as of each valuation date, divided between active members, terminated vested members, and retirees/beneficiaries. These bars are read using the left-hand scale. As with most maturing funds, this Plan continues to show growth in the number of inactive members. The numbers that appear above each bar represent the ratio of active members to inactive members (retirees, beneficiaries, and terminated vested members) at each valuation date. This active-to-inactive ratio has decreased from 77.5 actives to each inactive in 1997 to 3.5 actives for each inactive in 2014.

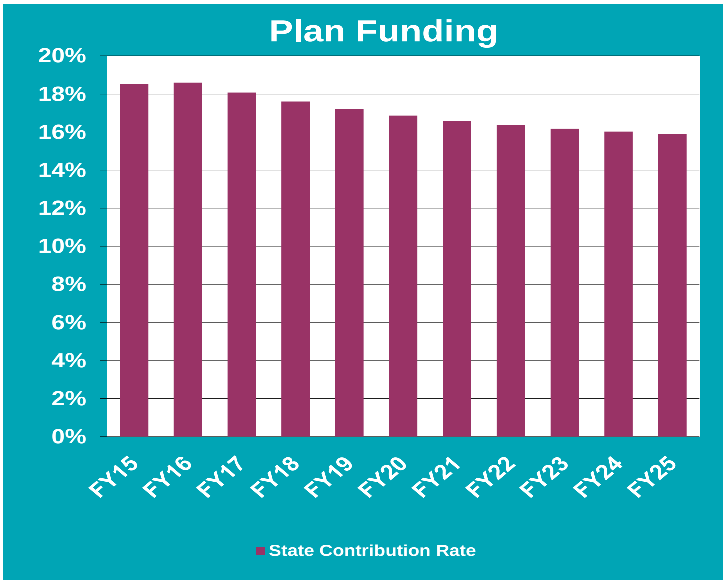
The black line shows the covered payroll for the Plan as of each valuation date and is read using the right-hand scale.



SECTION I
BOARD SUMMARY

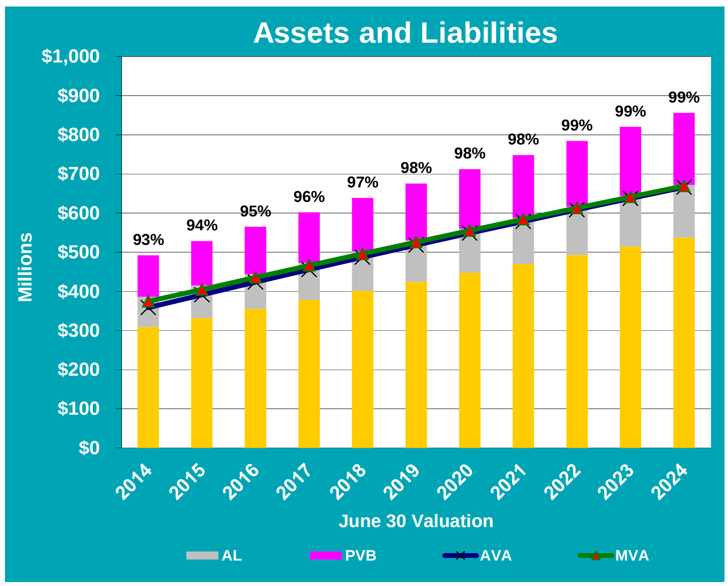
Future Outlook

Baseline Projections



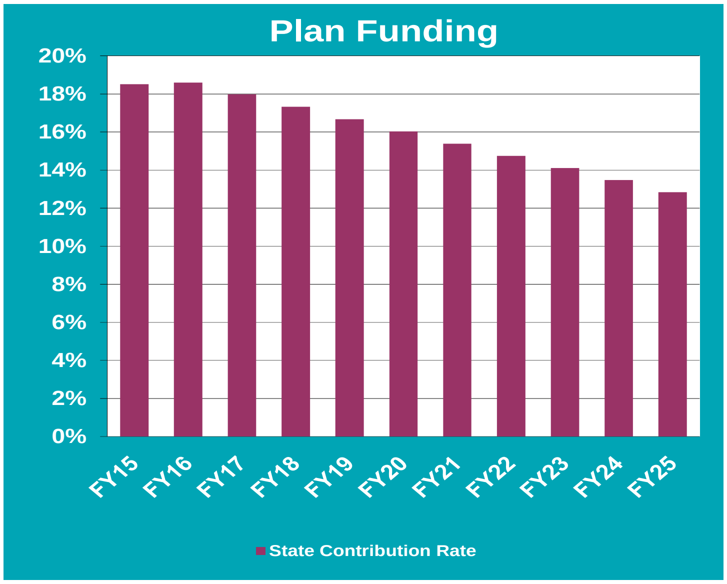
These graphs show the expected progress of the Plan over the next ten years, assuming the Plan's assets earn 7.2% on a *market value* basis and assuming all assumptions are exactly met, including that the ADC amounts are made in full. The chart entitled "Plan Funding" shows a decrease in the State ADC rate from 18.6% in FY 2016, determined by the current valuation, to 15.9% at the end of this period, absent further gains or losses.

The "Assets and Liabilities" graph shows the projected funded ratios of the Plan over the next ten years. The Plan's funded status is projected to increase by 6% over the next ten years, to 99%, assuming all assumptions are exactly met.



SECTION I
BOARD SUMMARY

Projections with Asset Returns of 8.2%

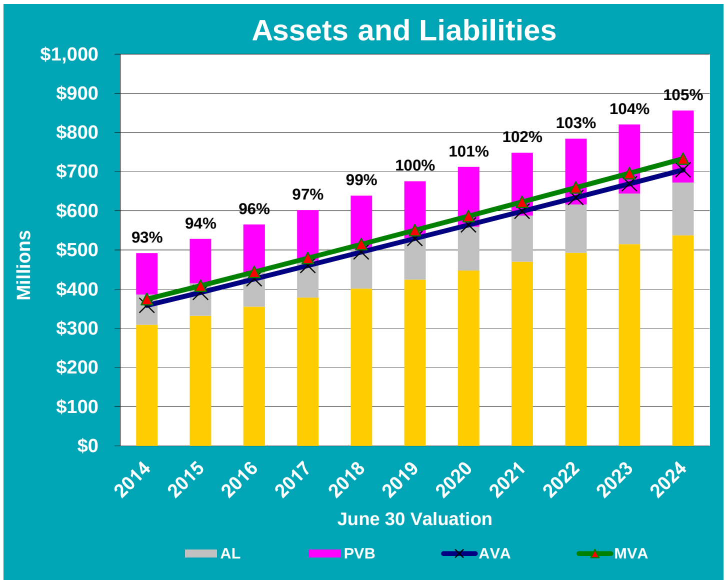


The Plan's investment earnings will affect the future funding status of the Plan. These two graphs show what the next ten years would be expected to look like if the Plan's investment performance is 8.2% each year, 1.0% higher than the valuation investment rate of return assumption.

These two graphs assume all other assumptions are exactly met, including State contributions equal to the full actuarially determined amounts.

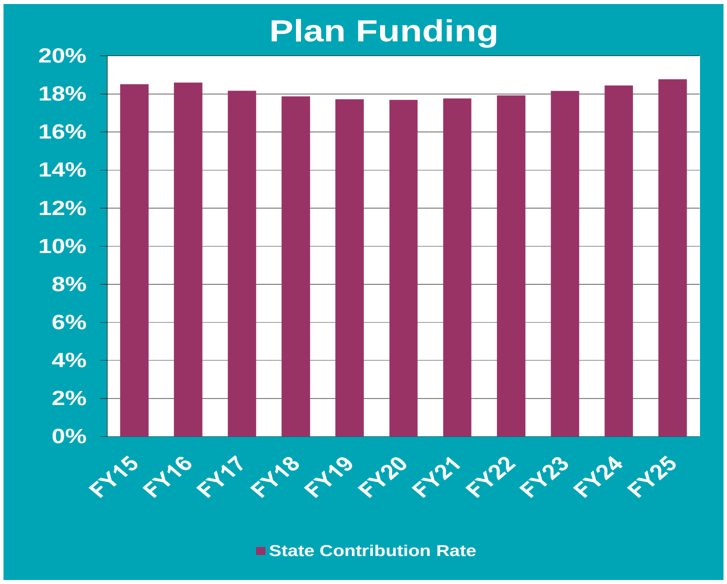
The "Plan Funding" graph shows that the State ADC rate under this scenario decreases even more than the baseline scenario, dropping to approximately 12.8% of payroll at the end of the projected period.

The "Assets and Liabilities" graph shows that the Plan would reach a 105% funded ratio by 2024 under this scenario, an improvement over the baseline scenario's 99%.



SECTION I
BOARD SUMMARY

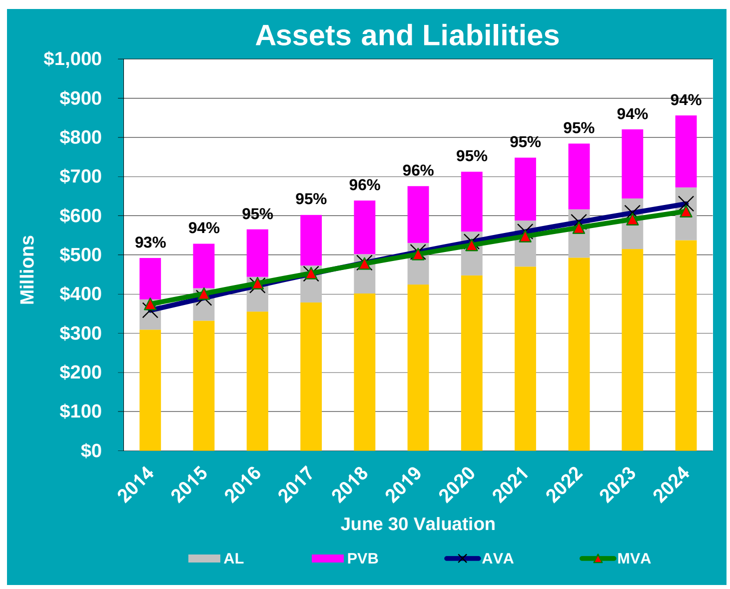
<u>Projections with Asset Returns of 6.2%</u>



The graphs on this page show projections of the Plan's funding status assuming the Plan's investment performance is 6.2% each year of the projection, 1.0% lower than the valuation investment rate of return assumption. While the current remaining unrecognized gains would cushion the new annual losses for a period, eventually the new losses would result in the funded ratio dropping and the required contributions increasing compared to the baseline scenario. This effect demonstrates the importance of investment earnings on the Plan's future funding needs.

Note that these projections assume all other assumptions are exactly met, including payment of State contributions equal to the full actuarially determined contribution.

Under this scenario, the State's ADC rate increases to approximately 18.8% of payroll, compared to 15.9% in the baseline, and the funded ratio remains relatively flat over the projection period.



SECTION I
BOARD SUMMARY

Table I-1
Summary of Principal Plan Results

Valuation as of:	June 30, 2013	June 30, 2014	% Change
Member Counts			
Active Members	689	695	0.87%
Disabled Members	23	23	0.00%
Retirees and Beneficiaries	149	162	8.72%
Terminated Vested Members	11	12	9.09%
Terminated Non-Vested Members	2	1	(50.00%)
Total	**874**	**893**	**2.17%**
Covered Payroll of Active Members*	$ 56,288,900	$ 57,542,900	2.23%
Annual Benefit Payments for Retirees, Disabled Members, and Beneficiaries	$ 9,939,600	$ 10,967,500	10.34%
Assets and Liabilities			
Actuarial Liability (AL)	$ 350,884,800	$ 386,523,600	10.16%
Actuarial Value of Assets (AVA)	317,813,600	358,662,700	12.85%
Unfunded AL (UAL)	$ 33,071,200	$ 27,860,900	(15.75%)
Funded Ratio	90.6%	92.8%	
Present Value of Accrued Benefits (PVAB)	$ 275,216,300	$ 309,198,600	12.35%
Market Value of Assets (MVA)	315,968,100	374,788,600	‼ LINK
Unfunded PVAB	$ (40,751,800)	$ (65,590,000)	(60.95%)
Accrued Benefit Funded Ratio	114.8%	121.2%	
State Contribution Rate	**Fiscal Year 2015**	**Fiscal Year 2016**	
Entry Age Normal Cost	14.22%	15.04%	
UAL Amortization Payment	4.14%	3.41%	
Administrative Expense	0.15%	0.15%	
Actuarially Determined Contribution (ADC)	18.51%	18.60%	

* Assumes one year of payroll increase projection, so represents payroll beginning on each valuation date.

SECTION II
ASSETS

Pension plan assets play a key role in the financial operation of the plan and in the decisions that 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 affect benefit levels, State actuarially determined contributions, and the ultimate security of members' benefits.

In this section, we present detailed information on the Plan's assets including:

- **Disclosure** of the Plan's assets at June 30, 2013 and June 30, 2014;
- 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 **cash flows** for the next ten years.

Market Value of Assets Disclosure

The market values of assets represent "snap-shot" or "cash-out" values that provide the principal basis for measuring financial performance from one year to the next. However, market values can fluctuate widely with swings in the marketplace, and as such, are usually not suitable for budgeting and long-range planning.

Table II-1 below shows the market values as of June 30, 2013 and June 30, 2014, along with the changes between the two.

Table II-1
Changes in Market Values of Assets

Market Value of Assets – June 30, 2013		**$ 315,968,100**
Additions		
Member Contributions	$ 3,861,900	
State Contributions	10,499,500	
PRI Transfers	493,900	
Other	31,500	
Investment Returns	54,634,800	
Total Additions	**$ 69,521,600**	
Deductions		
Benefit Payments	$ 10,619,400	
Administrative Expenses	81,700	
Total Deductions	**$ 10,701,100**	
Market Value of Assets – June 30, 2014		**$ 374,788,600**

SECTION II
ASSETS

Actuarial Value of Assets

The actuarial value of assets represents a "smoothed" value developed by the actuary to reduce, or eliminate, erratic results that could develop from short-term fluctuations in the market value of assets. The actuarial value for this plan equals the expected actuarial value of assets, developed from the immediately prior valuation, plus 20% of the difference between the actual market value of assets and that expected actuarial value of assets at the valuation date. For this June 30, 2014 valuation, the actuarial value of assets also recognizes an additional 30% of past deferred gains to partially offset the increases in liability and normal cost resulting from the reduction of the investment rate of return assumption from 7.50% to 7.20%. The table below illustrates the calculation of the actuarial value of assets as of June 30, 2014.

Table II-2
Development of Actuarial Value of Assets

1.	Actuarial Value of Assets at June 30, 2013	$ 317,813,600
2.	Amount in (1) with interest to June 30, 2014 at 7.50% per year	$ 341,649,600
3.	State, PRI, and member contributions for the Plan Year ended June 30, 2014	14,886,800
4.	Interest on contributions assuming payments made uniformly throughout the year to June 30, 2014 at 7.50% per year	558,300
5.	Disbursements from Trust except investment expenses, July 1, 2013 through June 30, 2014	10,701,100
6.	Interest on disbursements to June 30, 2014 at 7.50% per year	401,300
7.	Expected Actuarial Value of Assets at June 30, 2014 = (2) + (3) + (4) – (5) – (6)	$ 345,992,300
8.	Actual Market Value of Assets at June 30, 2014	$ 374,788,600
9.	Excess of (8) over (7)	28,796,300
10.	Additional 30% Recognition of Past Deferred Gains = 30% of 80% of (9)	6,911,100
11.	Actuarial Value of Assets at June 30, 2014 = (7) + 20% of (9) + (10)	$ 358,662,700

SECTION II
ASSETS

Investment Performance

The market value of assets (MVA) returned 17.2% during 2014, which is greater than the assumed 7.5% investment rate of return. The actuarial value of assets (AVA) returned 11.5% over this same year, including reflecting the additional 30% recognized due to the assumption changes adopted and the standard asset smoothing method being utilized by the Plan for the measurement of the actuarial value of assets. Since only 20% of the gain or loss from the performance of the Plan is typically recognized in a given year under the asset smoothing method, in periods of very good performance, the AVA can lag significantly behind the MVA, and in a period of negative returns, the AVA does not decline as rapidly as the MVA.

Projection of Cash Flows

Table II-3
Cash Flow Projections

Year Beginning July 1,	Expected Benefit Payments	Expected Contributions*
2014	$ 11,896,000	$ 15,239,000
2015	13,951,000	15,724,000
2016	16,367,000	16,024,000
2017	18,761,000	16,100,000
2018	21,243,000	16,583,000
2019	23,804,000	17,081,000
2020	26,439,000	17,593,000
2021	29,106,000	18,121,000
2022	31,752,000	18,664,000
2023	34,261,000	19,224,000

* Expected contributions include State contributions, member contributions, and PRI transfers. For illustration purposes, we have assumed the State contribution rate will remain level and that payroll will increase at the actuarially assumed rate of 3.00% per year.

Expected benefit payments are projected for the closed group valued at June 30, 2014. Projecting any further than ten years using a closed-group would not yield reliable predictions due to the omission of new hires in the benefit payments, compounded by their inclusion in the expected contributions.

SECTION III
LIABILITIES

In this section, we present detailed information on the Plan's liabilities including:

- **Disclosure** of the Plan's liabilities at June 30, 2013 and June 30, 2014; and
- Statement of **changes** in these liabilities during the year.

Disclosure

Three liability measurements are calculated and presented in this report. Each type is distinguished by the purpose, or purposes, for which they are used.

- **Present Value of Benefits (PVB):** Used for analyzing the financial outlook of plans, this represents the amount of money needed today to fully pay off all future benefits and expenses of a plan, assuming current members continue to accrue benefits and there are no new entrants.

- **Actuarial Liability (AL):** Used for funding calculations and GASB disclosures, this liability is calculated by taking the present value of benefits (PVB) and subtracting the present value of future member contributions (PVFEEC) and the present value of future State normal costs (PVFNC) under an acceptable actuarial funding method. This Plan uses the **Entry Age Normal** funding method.

- **Present Value of Accrued Benefits (PVAB):** 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 a plan, assuming no future accruals of benefits. These liabilities are also required for some accounting purposes (Topic No. 960) and are sometimes used as part of assessing whether a plan can meet its current benefit commitments.

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

SECTION III
LIABILITIES

Table III-1
Liabilities and Net (Surplus)/Unfunded Amounts

	June 30, 2013	June 30, 2014
Present Value of Benefits		
Active Member Benefits	$ 334,424,200	$ 358,570,800
Retiree , Beneficiary, Disabled, and Terminated Members Benefits	118,305,800	133,550,800
Present Value of Benefits (PVB)	**$ 452,730,000**	**$ 492,121,600**
Market Value of Assets (MVA)	$ 315,968,100	$ 374,788,600
Future Member Contributions	33,565,400	33,505,100
Future State Contributions & PRI Fund Transfers	103,196,500	83,827,900
Total Resources	**$ 452,730,000**	**$ 492,121,600**
Actuarial Liability		
Present Value of Benefits (PVB)	$ 452,730,000	$ 492,121,600
Present Value of Future State Normal Costs (PVFNC)	68,279,800	72,092,900
Present Value of Future Member Contributions (PVFEEC)	33,565,400	33,505,100
Actuarial Liability (AL=PVB–PVFNC–PVFEEC)	**$ 350,884,800**	**$ 386,523,600**
Actuarial Value of Assets (AVA)	317,813,600	358,662,700
Net (Surplus)/Unfunded AL (AL – AVA)	**$ 33,071,200**	**$ 27,860,900**
Present Value of Accrued Benefits		
Present Value of Benefits (PVB)	$ 452,730,000	$ 492,121,600
Present Value of Future Benefit Accruals (PVFBA)	177,513,700	182,923,000
Present Value of Accrued Benefits (PVAB=PVB–PVFBA)	**$ 275,216,300**	**$ 309,198,600**
Market Value of Assets (MVA)	$ 315,968,100	$ 374,788,600
Net (Surplus)/Unfunded PVAB (PVAB – MVA)	**$ (40,751,800)**	**$ (65,590,000)**

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 entrants 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 assumptions
- A change in actuarial methods

Unfunded liabilities (or surpluses) will change because of all of the above as well as due to changes in plan assets resulting from:

- State 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 that 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.

Table III-2
Liability Changes

(In Thousands)	Present Value of Benefits	Actuarial Liability	Present Value of Accrued Benefits
Liabilities June 30, 2013	$ 452,730	$ 350,885	$ 275,216
Liabilities June 30, 2014	492,122	386,524	309,199
Liability Increase (Decrease)	39,392	35,639	33,983
Change Due to:			
PRI	0	0	0
Actuarial (Gain)/Loss	NC *	(3,520)	NC *
Assumption Changes	16,536	12,075	11,836
Benefits Accumulated and Other Sources	22,856	27,084	22,147

* NC = not calculated

SECTION III
LIABILITIES

Table III-3 below provides additional information about the liability measurements for funding purposes as of both the current and the immediately prior valuations.

Table III-3
Actuarial Liabilities for Funding

		June 30, 2013	June 30, 2014
1.	Actuarial Liabilities		
	Retiree, Beneficiary, Disabled, and Terminated Members Benefit	$ 118,305,800	$ 133,550,800
	Active Members	232,579,000	252,972,800
	Total Actuarial Liability	**$ 350,884,800**	**$ 386,523,600**
2.	Actuarial Value of Assets	$ 317,813,600	$ 358,662,700
3.	Unfunded Actuarial Liability (UAL)	$ 33,071,200	$ 27,860,900
4.	Present Value of Outstanding PRI Transfers	$ 1,667,800	$ 1,282,200
5.	**Net Base for 20-Year UAL Amortization (3-4)**	**$ 31,403,400**	**$ 26,578,700**

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 are 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 fairly stable and predictable.

For this Plan, the funding method employed is the **Entry Age Actuarial** funding method. Under this method, there are three components to the total contribution: the **normal cost contribution**, the **unfunded actuarial liability contribution** (UAL contribution), and the **administrative expense contribution**.

The normal cost contribution 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 and dividing it by the value, also at entry age, of the member's expected future salary. Then, this total normal cost rate is reduced by the member contribution rate to produce the State normal cost rate for each member. The State normal cost rate times payroll for each active member equals the State normal cost. The sum of the State normal cost amounts for all active members is then divided by the covered payroll to produce the State normal cost contribution rate.

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

The UAL contribution rate is calculated by amortizing this UAL, reflecting the present value of scheduled PRI transfers as well, over an open 20-year period. All payments are determined assuming total pay increases by the annual inflation rate of 3.00% (3.25% for 2013 results).

The assumed administrative expense rate is 0.15% 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 State contribution rates for the Plan for this valuation and the immediately prior one.

Table IV-1
State Contribution Rate

	June 30, 2013	June 30, 2014
Entry Age Normal Cost Rate	14.22%	15.04%
UAL Amortization Payment	4.14%	3.41%
Administrative Expense	0.15%	0.15%
Actuarially Determined Contribution	18.51%	18.60%

SECTION IV
CONTRIBUTIONS

Table IV-2 below provides additional detail about the development of the State contribution rate as well as the expected dollar amounts these rates will result in for FY 2016.

Table IV-2
Expected FY 2016
State Contributions

	In Dollars	As % of Payroll
1. Present Value of Projected Benefits Attributable to:		
a. Total Normal Cost	$ 12,685,300	22.04%
b. Expected Members Contribution	4,028,000	7.00%
c. State Normal Cost (a) – (b)	$ 8,657,300	15.04%
2. Amortization of Unfunded Liability	1,964,300	3.41%
3. Allowance for Administrative Expense	86,300	0.15%
4. Total State Actuarially Determined Contribution Rate (1) + (2) + (3)	$ 10,707,900	18.60%

SECTION V
ACCOUNTING STATEMENT INFORMATION

ASC Topic No. 960 of the Financial Accounting Standards Board (FASB) requires plans subject to it to disclose certain information regarding its funded status. Statement No. 67 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.

Disclosures based on FASB ASC Topic No. 960 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.

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. The relevant amounts as of June 30, 2013 and June 30, 2014 are exhibited in Table V-1, which also includes a reconciliation of liabilities determined as of the prior valuation, July 1, 2013, to the liabilities as of June 30, 2014.

This valuation contains information reported in the June 30, 2014 Comprehensive Annual Financial Report (CAFR) of Delaware PERS under the new GASB Statement No. 67. Disclosures are based on the use of updated procedures to roll forward the 2013 valuation results. The 2013 starting point is higher than the funding numbers from 2013, because it includes the reduction in the assumed investment return, which was first effective for funding purposes in the 2014 valuation. The calculation of Net Pension Liability in Table V-2 shows the amounts disclosed for the plan year June 30, 2014, based on the updated 2013 liability valuation, as well as a projection of the anticipated June 30, 2015 disclosures, based on 2014 liability valuations, assuming all actuarial assumptions are met over the coming year.

Tables V-3 through V-5 are exhibits to be used for the State's CAFR. 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. This valuation does not contain any information reported based on the new GASB Statement No. 68 that will be effective for the State beginning in their Fiscal Year 2015 CAFR.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-1
Accounting Statement Disclosure and
Reconciliation of Present Value of Accrued Benefits

	June 30, 2013	June 30, 2014
FASB ASC Topic No. 960 Basis		
1. Present Value of Accrued Benefits		
a. Members Currently Receiving Payments	$ 117,659,700	$ 132,801,000
b. Former Vested Members	646,100	749,800
c. Active Members	156,910,500	175,647,800
2. Total Present Value of Accrued Benefits (1 (a) + 1(b) + 1(c))	$ 275,216,300	$ 309,198,600
3. Assets at Market Value	315,968,100	374,788,600
4. Unfunded Present Value of Accrued Benefits (2 – 3)	$ (40,751,800)	$ (65,590,000)
5. Ratio of Assets to Present Value of Benefits (3 / 2)	114.8%	121.2%

Reconciliation of Present Value of Accrued Benefits

Actuarial Present Value of Accrued Benefits at June 30, 2013	$ 275,216,300
Increase (Decrease) During Year Attributable to:	
Passage of Time	20,243,000
Benefits Paid – FY 2014	(10,619,400)
Assumption Changes	11,835,600
PRI	0
Benefits Accrued, Other Gains/Losses	12,523,100
Net Increase (Decrease)	33,982,300
Actuarial Present Value of Accrued Benefits at June 30, 2014	$ 309,198,600

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-2
GASB No. 67 Disclosures

	June 30, 2014	Estimated June 30, 2015
Total Pension Liability		
Service cost	$ 12,378,000	$ 12,685,000
Interest	26,137,000	27,858,000
Changes in benefit terms	0	1,154,000
Differences between expected and actual experience	0	(3,520,000)
Changes in assumptions	0	0
Benefit payments, including refunds of member contributions	(10,619,000)	(11,896,000)
Net change in Total Pension Liability	**$ 27,896,000**	**$ 26,281,000**
Total Pension Liability - beginning	**$ 362,148,000**	**$ 390,044,000**
Total Pension Liability - ending (a)	**$ 390,044,000**	**$ 416,325,000**
Plan Fiduciary Net Position		
Contributions - Employer	$ 10,500,000	$ 10,651,000
Contributions - Non-employer	525,000	560,000
Contributions - Member	3,862,000	4,028,000
Net investment income	54,635,000	27,100,000
Benefit payments, including refunds of member contributions	(10,619,000)	(11,896,000)
Administrative expenses	(82,000)	(86,000)
Net change in Plan Fiduciary Net Position	**$ 58,821,000**	**$ 30,357,000**
Plan Fiduciary Net Position - beginning	**$ 315,968,000**	**$ 374,789,000**
Plan Fiduciary Net Position - ending (b)	**$ 374,789,000**	**$ 405,146,000**
Plan Net Pension Liability (Asset) - ending [(a)-(b)]	**$ 15,255,000**	**$ 11,179,000**

Items printed in red will be replaced with actual amounts once known at the end of FY 2015.

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, 2014
Actuarial cost method	Entry age
Amortization method	Percentage of pay - open
Amortization period	20 years
Asset valuation method	5-Year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.2%
Projected salary increases*	4.5%-11.5%
Cost-of-living adjustments	ad hoc
*Includes inflation at	3.00%

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 Board of Trustees further modified the investment rate of return and inflation assumptions for the 2014 Plan Year.

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

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	2009	2010	2011	2012	2013	2014
Investment Income on Actuarial Assets	$ (11,135)	$ (7,410)	$ 481	$ (2,738)	$ (461)	$ 5,759
Combined Liability Experience	(2,136)	6,287	5,030	(12,064)	4,887	3,520
(Loss)/Gain During Year from Financial Experience	$ (13,271)	$ (1,123)	$ 5,511	$ (14,802)	$ 4,426	$ 9,279
Non-Recurring Items	0	0	(5,996)	(803)	(3,664)	(5,164)
Composite Gain (or Loss) During Year	$ (13,271)	$ (1,123)	$ (485)	$ (15,605)	$ 762	$ 4,115

Table V-5
Solvency Test
Aggregate Accrued Liabilities for

(expressed in thousands)

Valuation Date June 30,	Active Member Contributions (1)	Retirees & Beneficiaries (2)	Active Member State Financed Contributions (3)	Actuarial Value of Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
2014	$ 53,289	$ 132,801	$ 200,434	$ 358,663	100%	100%	86%
2013	49,201	117,660	184,024	317,814	100	100	82
2012	45,534	105,829	173,535	292,262	100	100	81
2011	43,865	81,299	161,726	270,625	100	100	90
2010	40,955	65,550	153,753	245,303	100	100	90
2009	38,619	47,700	154,932	229,457	100	100	92

APPENDIX A
MEMBERSHIP INFORMATION

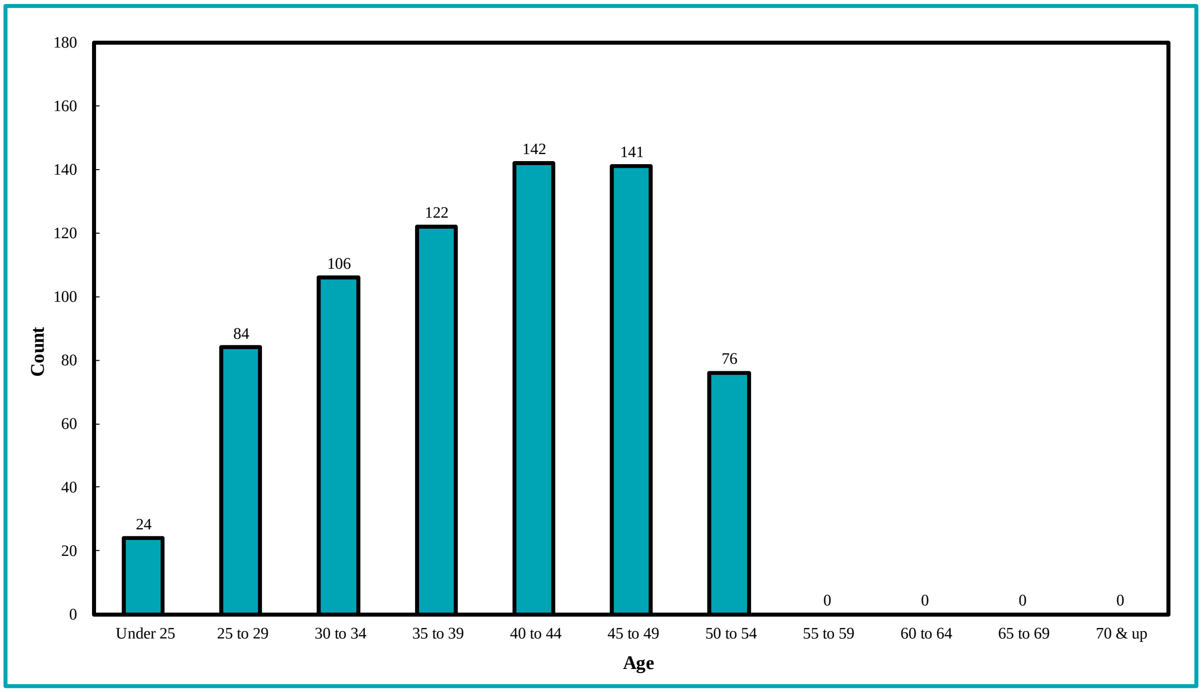
Delaware State Police Pension Plan Population Distribution of Active Members by Age and Service as of June 30, 2014

COUNTS BY AGE/SERVICE

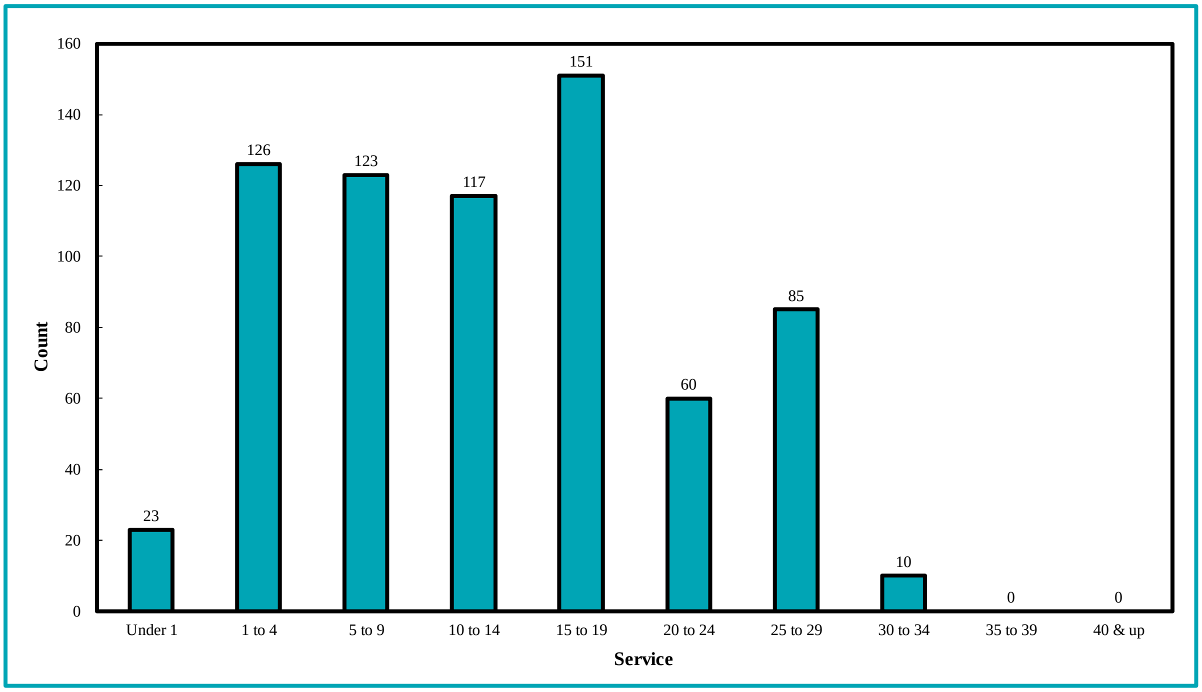
	Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	11	13	0	0	0	0	0	0	0	0	24
25 to 29	7	66	11	0	0	0	0	0	0	0	84
30 to 34	3	24	64	15	0	0	0	0	0	0	106
35 to 39	2	20	28	56	16	0	0	0	0	0	122
40 to 44	0	3	17	32	85	5	0	0	0	0	142
45 to 49	0	0	3	12	44	45	37	0	0	0	141
50 to 54	0	0	0	2	6	10	48	10	0	0	76
55 to 59	0	0	0	0	0	0	0	0	0	0	0
60 to 64	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0
Total	23	126	123	117	151	60	85	10	0	0	695

APPENDIX A
MEMBERSHIP INFORMATION

Delaware State Police Pension Plan Population Distribution of Active Members by Age as of June 30, 2014



Delaware State Police Pension Plan Population Distribution of Active Members by Service as of June 30, 2014



APPENDIX A
MEMBERSHIP INFORMATION

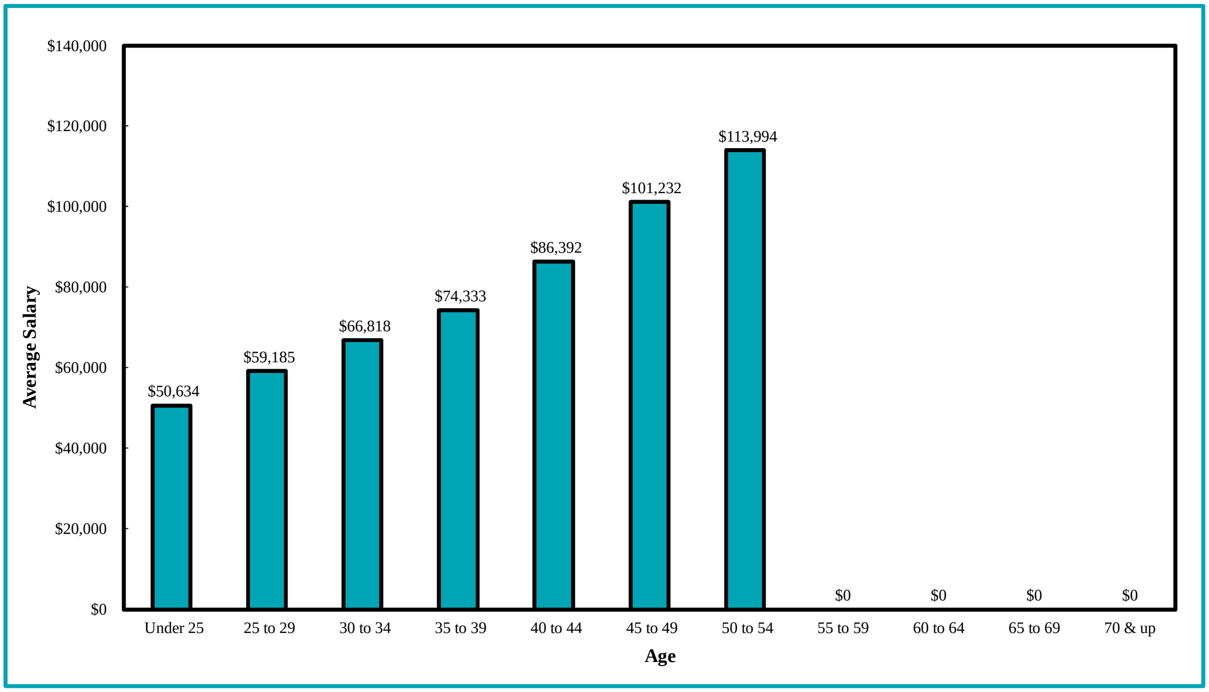
Delaware State Police Pension Plan Salary Distribution of Active Members by Age and Service as of June 30, 2014

AVERAGE SALARY BY AGE/SERVICE

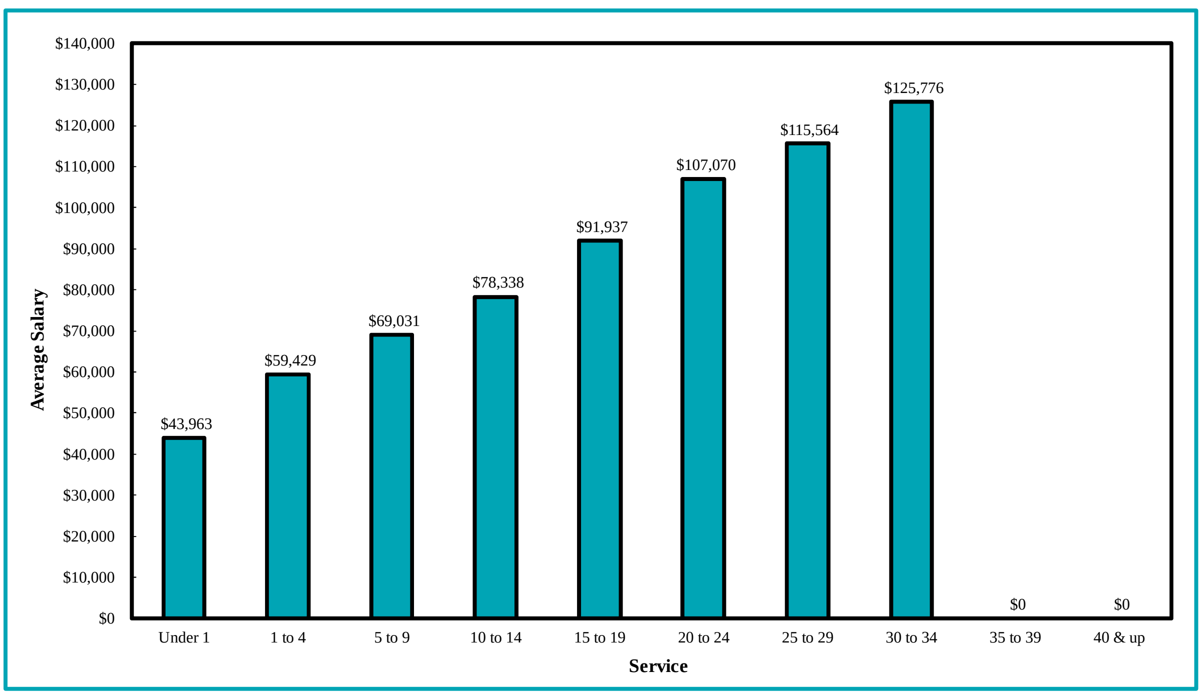
	Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	$ 43,739	$ 56,468	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 50,634
25 to 29	$ 44,397	$ 59,485	$ 66,795	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 59,185
30 to 34	$ 43,739	$ 59,493	$ 68,815	$ 74,632	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 66,818
35 to 39	$ 44,009	$ 60,763	$ 69,705	$ 78,758	$ 87,695	$ 0	$ 0	$ 0	$ 0	$ 0	$ 74,333
40 to 44	$ 0	$ 61,631	$ 69,798	$ 78,835	$ 92,235	$ 106,711	$ 0	$ 0	$ 0	$ 0	$ 86,392
45 to 49	$ 0	$ 0	$ 71,196	$ 79,427	$ 91,971	$ 106,787	$ 114,995	$ 0	$ 0	$ 0	$ 101,232
50 to 54	$ 0	$ 0	$ 0	$ 79,900	$ 98,774	$ 108,523	$ 116,002	$ 125,776	$ 0	$ 0	$ 113,994
55 to 59	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
60 to 64	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
65 to 69	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
70 & up	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Total	$ 43,963	$ 59,429	$ 69,031	$ 78,338	$ 91,937	$ 107,070	$ 115,564	$ 125,776	$ 0	$ 0	$ 82,796

APPENDIX A
MEMBERSHIP INFORMATION

Delaware State Police Pension Plan Salary Distribution of Active Members by Age as of June 30, 2014



Delaware State Police Pension Plan Salary Distribution of Active Members by Service as of June 30, 2014



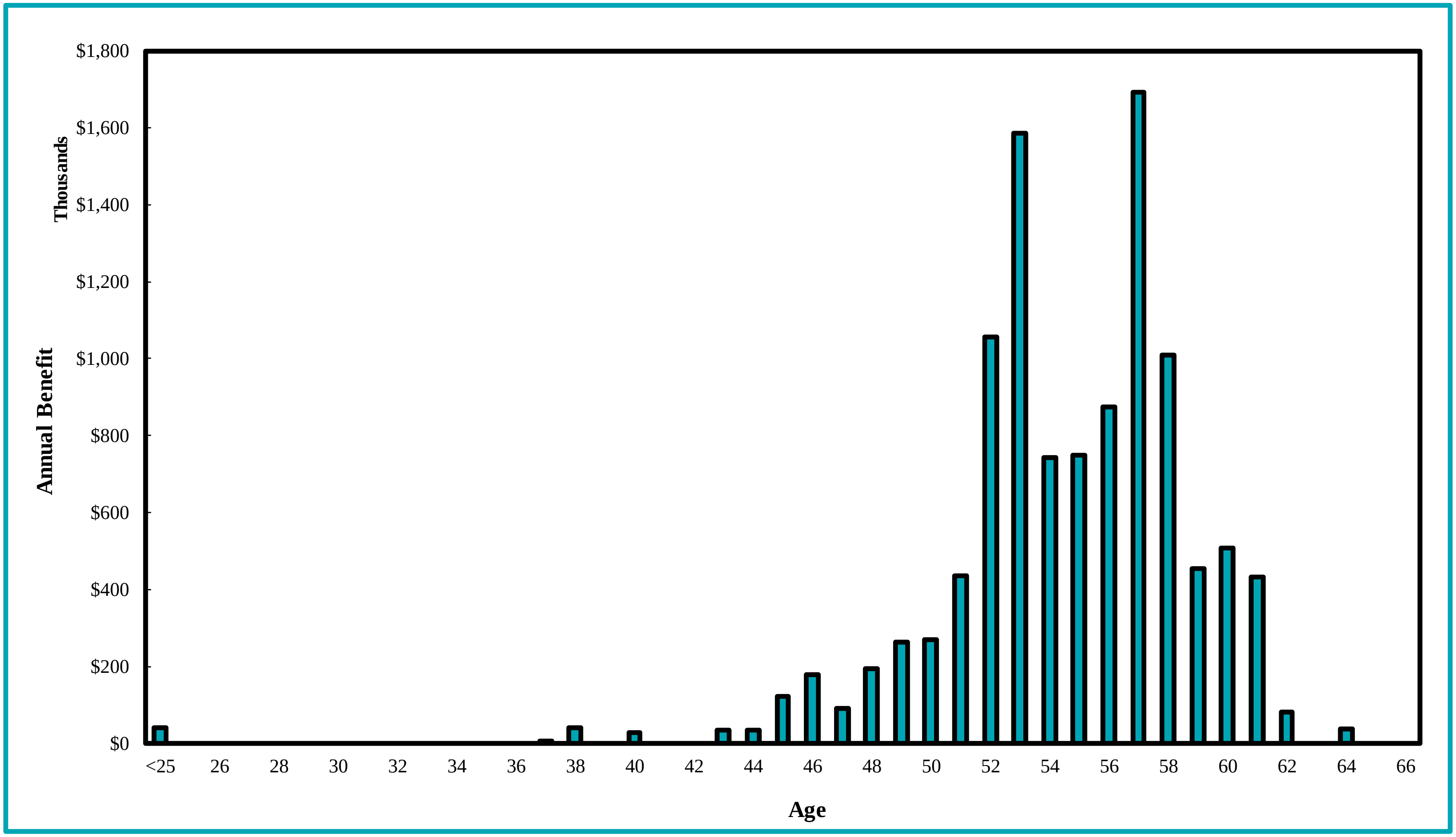
APPENDIX A
MEMBERSHIP INFORMATION

Delaware State Police Pension Plan Annual Benefit Distribution by Age of Retired Members, Survivors, and Disabled Members as of June 30, 2014

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	1	$39,713	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	0	$0	83	0	$0
35	0	$0	84	0	$0
36	0	$0	85	0	$0
37	1	$6,364	86	0	$0
38	1	$40,850	87	0	$0
39	0	$0	88	0	$0
40	1	$28,198	89	0	$0
41	0	$0	90	0	$0
42	0	$0	91	0	$0
43	1	$35,246	92	0	$0
44	1	$35,364	93	0	$0
45	2	$122,335	94	0	$0
46	5	$178,084	95	0	$0
47	2	$90,650	96	0	$0
48	4	$194,379	97	0	$0
49	5	$263,062	98	0	$0
50	5	$269,828	99	0	$0
51	7	$436,314	100	0	$0
52	17	$1,056,868	101	0	$0
53	27	$1,585,127	102	0	$0
54	9	$743,602	103	0	$0
55	11	$749,648	104	0	$0
56	18	$873,740	105	0	$0
57	22	$1,692,341	106	0	$0
58	16	$1,010,502	107	0	$0
59	9	$455,895	108	0	$0
60	10	$508,929	109	0	$0
61	8	$433,373	110	0	$0
62	1	$80,623	111	0	$0
63	0	$0	112	0	$0
64	1	$36,432	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	185	$10,967,466

APPENDIX A
MEMBERSHIP INFORMATION

Delaware State Police Pension Plan Annual Benefit Distribution by Age of Retired Members, Beneficiaries, and Disabled Members as of June 30, 2014



APPENDIX A
MEMBERSHIP INFORMATION

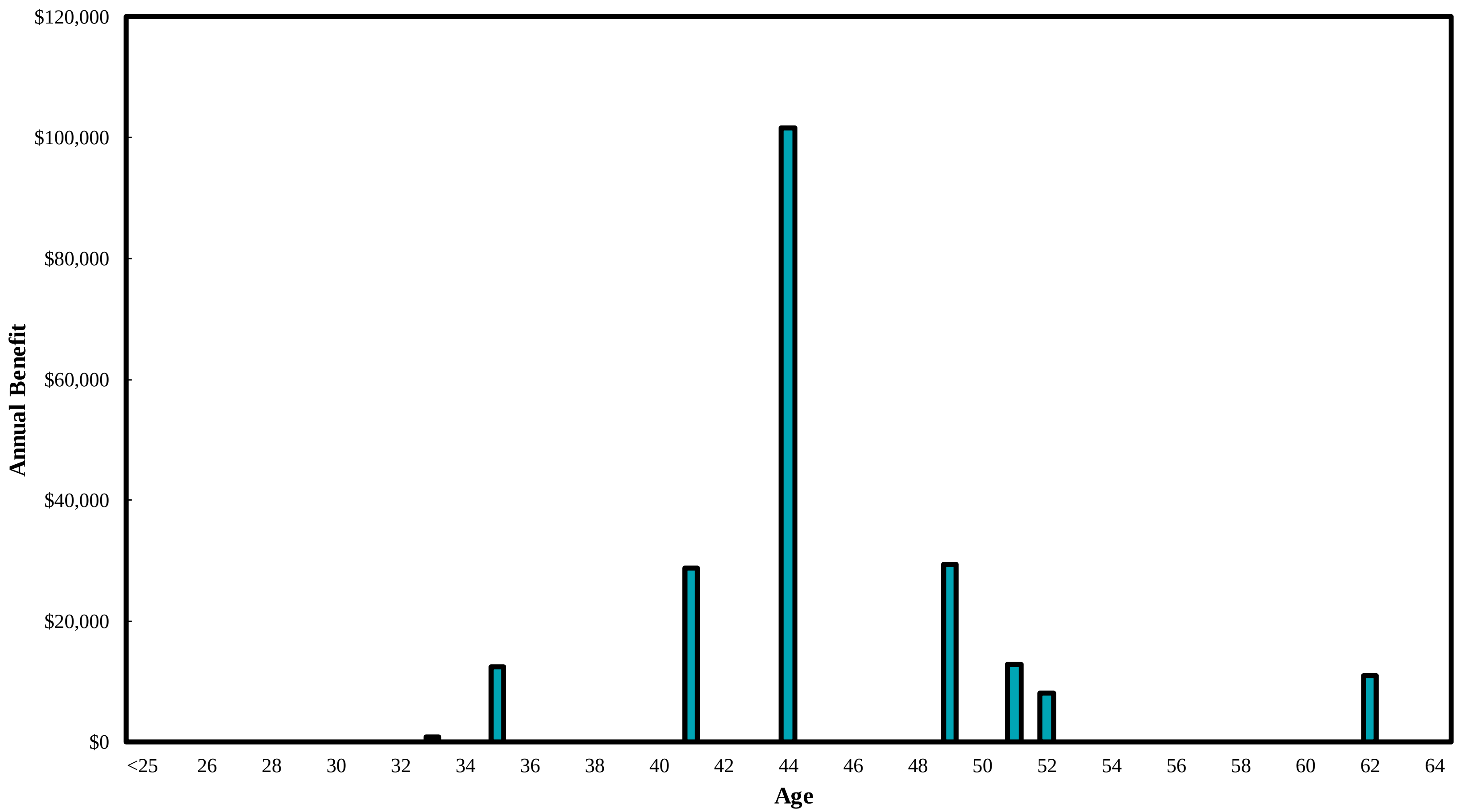
Delaware State Police Pension Plan Annual Benefit Distribution by Age of Vested Members as of June 30, 2014

Age	Count	Annual Benefit
<25	0	$0
25	0	$0
26	0	$0
27	0	$0
28	0	$0
29	0	$0
30	0	$0
31	0	$0
32	0	$0
33	1	$777
34	0	$0
35	1	$12,492
36	0	$0
37	0	$0
38	0	$0
39	0	$0
40	0	$0
41	1	$28,869
42	0	$0
43	0	$0
44	3	$101,649
45	0	$0
46	0	$0
47	0	$0
48	0	$0
49	3	$29,369
50	0	$0
51	1	$12,915
52	1	$8,014
53	0	$0
54	0	$0
55	0	$0
56	0	$0
57	0	$0
58	0	$0
59	0	$0
60	0	$0
61	0	$0
62	1	$11,057
63	0	$0
64	0	$0
65	0	$0
66	0	$0
67	0	$0
68	0	$0
69	0	$0
70	0	$0
71	0	$0
72	0	$0

Age	Count	Annual Benefit
73	0	$0
74	0	$0
75	0	$0
76	0	$0
77	0	$0
78	0	$0
79	0	$0
80	0	$0
81	0	$0
82	0	$0
83	0	$0
84	0	$0
85	0	$0
86	0	$0
87	0	$0
88	0	$0
89	0	$0
90	0	$0
91	0	$0
92	0	$0
93	0	$0
94	0	$0
95	0	$0
96	0	$0
97	0	$0
98	0	$0
99	0	$0
100	0	$0
101	0	$0
102	0	$0
103	0	$0
104	0	$0
105	0	$0
106	0	$0
107	0	$0
108	0	$0
109	0	$0
110	0	$0
111	0	$0
112	0	$0
113	0	$0
114	0	$0
115	0	$0
116	0	$0
117	0	$0
118	0	$0
119	0	$0
120	0	$0
Totals	12	$205,142

APPENDIX A
MEMBERSHIP INFORMATION

Delaware State Police Pension Plan Annual Benefit Distribution by Age of Vested Members as of June 30, 2014



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

Rates of Healthy Active and Inactive Mortality		
	Rates (With Projection Scale AA)	
Age	**Male**	**Female**
20	0.03%	0.02%
25	0.03	0.02
30	0.04	0.02
35	0.07	0.04
40	0.10	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

b. Disabled Inactive Mortality

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

Rates of Disabled Inactive Mortality		
Age	**Male**	**Female**
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	4.54
80	8.93	6.46

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

c. Rates of Active Disability

Rates of Active Disability	
Age	**Current**
20	0.02%
25	0.02
30	0.07
35	0.10
40	0.39
45	0.78
50	1.10
55	1.50
60	0.00

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

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

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

Service	
Select:	**Rate**
0	8.00%
1	2.50
2	2.50
3	2.25
4	2.00
5	2.00
6	1.75
7	1.50
8	1.25
9	1.00
Ultimate	1.00

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

e. Retirement

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

a) age 55
b) 20 years of credited service

Normal Retirement		
Age	Select	Ultimate
<37	14.45%	0.00%
37-49	14.45	9.35
50-54	14.45	11.48
55-59	14.45	63.75
60+	14.45	100.00

f. Salary Increase

30-year Service-based tables include an annual inflation rate of 3.00%.

Service	Increase
0	11.48%
1	9.48
2	7.49
3	5.99
4	5.74
5	5.74
10	4.50
15	4.50
20	4.50
30	4.50

g. Family Composition

Female spouses are assumed to be three years younger than males.
80% are assumed married for both male and female employees.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

2. Economic Assumptions

a.	Investment Rate of Return:	7.20%
b.	General Wage Increase Rate:	3.00%
c.	Annual Cost-of-Living Increase Rate for Retirees:	0.00%
d.	Total Payroll Increase Rate (for Amortization):	3.00%
e.	Administrative Expenses as a Percentage of Covered Payroll:	0.15%

3. Changes Since Last Valuation

Based upon adoption by the Board of Pension Trustees, the following assumptions were changed:

Investment Rate of Return was reduced from 7.5% to 7.2%.
General Wage Increase Rate was reduced from 3.25% to 3.00%.
Total Payroll Increase Rate (for Amortization) was reduced from 3.25% to 3.00%.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Funding Method

The Entry Age Normal funding 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 for each active member. The normal cost plus member contributions will pay for projected benefits at retirement for each active plan participant.

The actuarial liability is that portion of the present value of projected benefits that will not be paid by future State 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 liability in excess of plan assets is amortized to develop an additional cost or savings that is added to each year's State normal cost. Under this cost method, actuarial gains and losses are directly reflected in the size of the unfunded actuarial liability.

The portion of unfunded liability not expected to be paid through PRI transfers is amortized over a rolling 20-year period. All payments are determined assuming total payroll 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. This asset smoothing 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 contributions, less payments each year, and 20% of the portion of each year's returns that have not already been reflected in asset values.

In the 2014 valuation there was an additional recognition of 30% of the remaining balance of past investment gains.

3. Changes Since Last Valuation

There was an additional recognition of 30% of the past investment gains in the asset smoothing method.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

1. Membership

The Plan covers full-time State Police Officers first hired on or after July 1, 1980.

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) of compensation paid to the member, including salary or wages but excluding overtime and payment for extra duties.

5. Normal Retirement

Eligibility: (i) Must be employed at 55 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 multiplied by years of service up to a maximum of 20 years, plus 3.5% of final average compensation multiplied by years of service in excess of 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 salary at the time disability commences plus 10% for each eligible dependent not to exceed 100%.

Eligibility: If member is partially disabled: the normal retirement benefit based on credited service at date of disability, but is not less than 50% of salary at the time disability commences.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

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, but is not less than 50% of the salary 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, but is not less than 30% of salary at the time of disability.

8. Survivor's Benefit

Eligibility: Death while active or death after retirement.

Benefit: For eligible survivors of employees who die in the line of duty: 75% of salary, payable to the primary survivor.

For eligible survivors of pensioners who die: the greater of 50% of the member's pension at the time of death or whichever alternative option elected by the deceased retired member.

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. If there are no eligible survivors, accumulated contributions with interest over aggregate pension payments made are payable to the beneficiary.

9. Burial Benefit

$7,000 lump sum

10. Vesting

Eligibility: Ten years of credited service.

Benefit: Normal retirement benefit, payable at age 62, based on final average compensation and credited 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

11. Withdrawal

Eligibility: Terminates service and is not eligible for other benefits.

Benefit: Accumulated employee contributions with interest.

12. Form of Payment

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

As an alternative to the normal form, a member may elect one of the following optional forms of payment upon service retirement or disability:

- 66 2/3% joint and survivor form with a 2% reduction in benefits;
- 75% joint and survivor form with a 3% reduction in benefits; or
- 100% joint and survivor form with a 6% reduction in benefits.

The 66 2/3% and 100% options are only available for retirement on or after January 1, 2015.

13. Cost-of-Living Adjustment

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

14. Changes Since Last Valuation

None