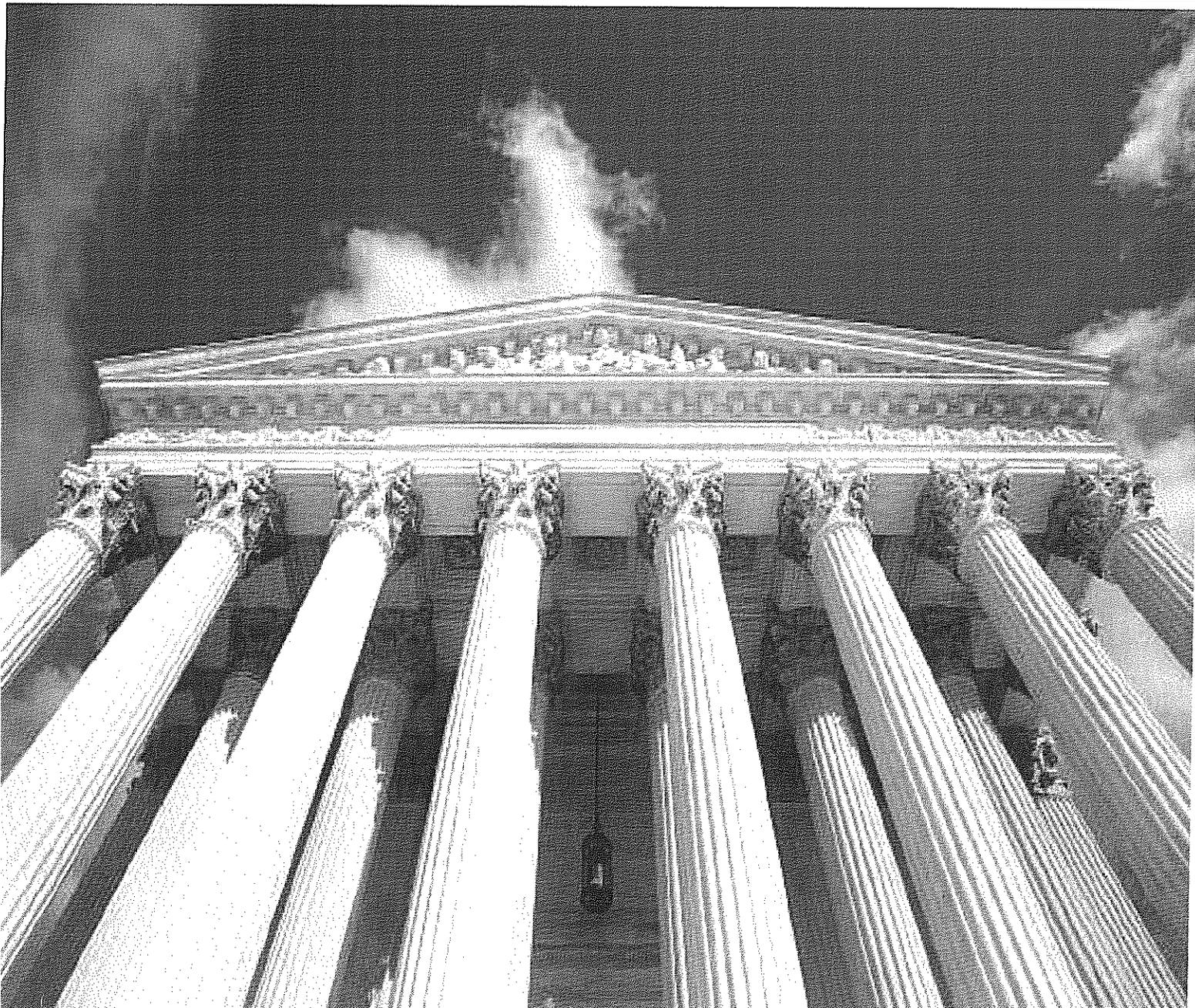


Northumberland County Employees' Retirement System

Report on 2015 Actuarial Valuation Including
Determination of County Actuarially Determined
Contribution for 2015

HayGroup®



Prepared By:

Henry E. Stiehl
Hay Group
Suite 2300
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

for

Northumberland County Employees' Retirement Board

Vinny Clausi	Commissioner/Chairman
Stephen Bridy	Commissioner
Richard J. Shoch	Commissioner
Christopher L. Grayson	Controller/Secretary
Kevin P. Gilroy	Treasurer

April 14, 2015

CONFIDENTIAL

Table of Contents

<u>Section</u>	<u>Page</u>
I. Introduction	1
II. Findings	2
III. Schedules	3
• Schedule A – Changes in Plan Net Assets, Plan Assets, Plan Description and Contribution Information and Historical Accounting information	3
• Schedule B – Allocation of Assets and Liabilities - January 1, 2015	9
• Schedule C - Unfunded Actuarial Liability and Normal Cost	10
• Schedule D – Actuarial Gain (Loss) for One Year Period Ending December 31, 2014	11
• Schedule E - Amortization Schedule	12
• Schedule F - Determination of Certified Actuarially Determined Contribution	13
• Schedule G – Notes for Schedule B and I and the Adjustment for Market Value Fluctuation	14
• Schedule H – Approximate Rate of Return for 2014	16
• Schedule I – Determination of Reserve Balances	17
• Schedule J – Membership History	18
• Schedule K – Changes in Plan Participation from January 1, 2014 to January 1, 2015	19
• Schedule L – Age, Service and Average Salary Profile	20

Table of Contents (cont.)

<u>Section</u>	<u>Page</u>
• Schedule M – Actuarial Assumptions and Actuarial Cost Method for Funding Purposes, January 1, 2015	21
• Schedule N – Summary of Plan Provisions	24
• Schedule O – Historical Trend Information	28

I. Introduction

The primary purpose of this report is to investigate and fully and fairly disclose the actuarial position of the Northumberland County Employees' Retirement System as of January 1, 2015 and to establish the proper appropriation for the 2015 plan year, in accordance with the funding standards of Section 6 of Act 96, 1971 of the Commonwealth of Pennsylvania as amended.

On the basis of the actuarial methods, assumptions and major plan provisions summarized in this report and in reliance on the member data and statement of the Fund's assets furnished by the County, to the best of our knowledge the information in this report is complete and accurate.

To the best of our knowledge, this report is complete and accurate and all costs and liabilities have been determined in conformance with generally accepted actuarial principles, Pennsylvania State Law, Act 44 and on the basis of actuarial assumptions and methods which are reasonable (taking into account past experience under the plan and reasonable expectations) and which represent our best estimate of anticipated experience under the plan.

Respectfully submitted,

HayGroup

By: Henry E. Stiehl
Henry E. Stiehl
Principal

By: David D. Reichert
David D. Reichert, EA
Member, American Academy of Actuaries
ERISA Enrolled Actuary No. 14-6461

II. Findings

Certified Actuarially Determined Contribution

Please note that the certified actuarially determined contribution which is reported on page 13 of this report and which must be funded in 2015 is \$1,111,373. This amount is required to ensure that the fund accumulates sufficient assets to pay future benefits and should be paid by the County from the General Fund.

Actuarial Adjustments

Also note that the balances in the Reserve Accounts on page 9 reflect the following transfers which are necessary to keep the balance in the Retired Member's Reserve Account equal to the liability for the retired lives and to reflect the difference between the amount of interest credited to the respective reserves and the interest rate assumed in the valuation of the liabilities. Please make these transfers in your records:

	DEBIT	CREDIT
County Annuity Reserve Account	\$ 1,430,129.81	
Retired Members Annuity Reserve Account		\$ 1,430,129.81

III. Schedules

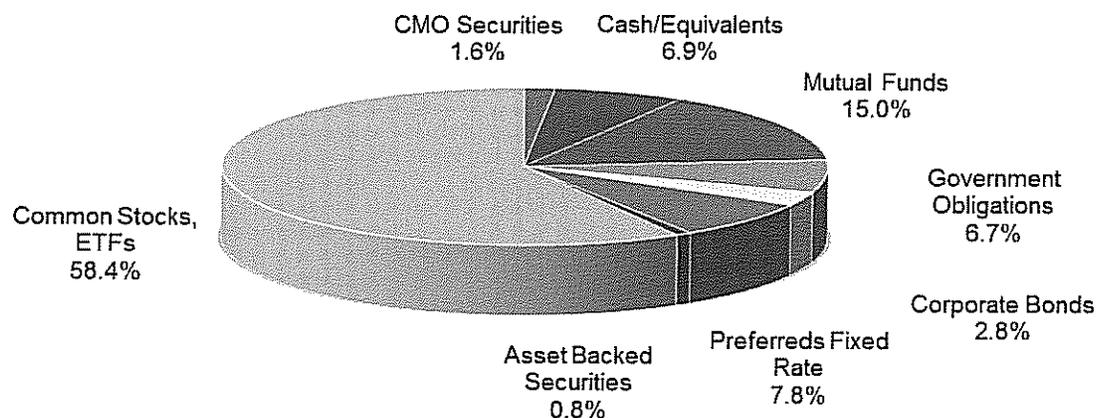
Schedule A

NORTHUMBERLAND COUNTY EMPLOYEES' RETIREMENT SYSTEM			
CHANGES IN PLAN NET ASSETS FOR THE CALENDAR YEAR 2014 AND 2013			
Additions			
		<u>2014 Total</u>	<u>2013 Total</u>
Contributions			
County – (283,177.68) in transit	\$	1,135,549.00	\$ 978,907.00
Plan Members	\$	1,060,074.78	\$ 1,106,526.32
Miscellaneous	\$	42,006.41	\$ 45,849.88
Total Contributions	\$	<u>2,237,630.19</u>	<u>\$ 2,131,283.20</u>
Investment Income			
Realized Gain	\$	<u>126,908.19</u>	
Unrealized Gain	\$	<u>3,806,474.67</u>	
Net Gain in Fair Value	\$	3,933,382.86	\$ 7,446,911.81
Interest	\$	456,002.14	\$ 542,017.28
Dividends	\$	1,661,838.21	\$ 1,450,631.32
Net Accrued Interest	\$	2,253.85	\$ 52,622.54
Investment Income	\$	<u>6,053,477.06</u>	<u>\$ 9,492,182.95</u>
Less Investment Expense	\$	401,899.02	\$ 380,489.25
Net Investment Income	\$	<u>5,651,578.04</u>	<u>\$ 9,111,693.70</u>
Total Additions	\$	<u>7,889,208.23</u>	<u>\$ 11,242,976.90</u>
Deductions			
Benefits	\$	5,779,736.79	\$ 4,992,940.97
Refunds of Member Contributions	\$	293,062.47	\$ 437,548.17
Administrative Expense	\$	100,552.64	\$ 140,833.10
Total Deductions	\$	<u>6,173,351.90</u>	<u>\$ 5,571,322.24</u>
Net Increase/(Decrease)	\$	<u>1,715,856.33</u>	<u>\$ 5,671,654.66</u>
Net Assets Held In Trust For Pension Benefits			
Beginning of Year	\$	79,286,611.47	\$ 73,614,956.81
End of Year	\$	<u>81,002,467.80</u>	<u>\$ 79,286,611.47</u>

Schedule A—Continued

NORTHUMBERLAND EMPLOYEES' RETIREMENT SYSTEM			
PLAN ASSETS AS OF DECEMBER 31, 2014 AND 2013			
Assets			
		<u>2014 Total</u>	<u>2013 Total</u>
Cash and Short-Term Investments	\$	5,563,083.21	\$ 6,070,019.68
Receivables	\$	0.00	\$ 0.00
Investments, at fair market value			
Government Obligations	\$	5,431,237.42	\$ 6,519,248.17
Corporate Bonds	\$	2,273,674.83	\$ 3,517,428.67
Common Stocks & ETFs	\$	47,414,601.77	\$ 46,526,959.69
Mutual Funds	\$	12,171,204.20	\$ 6,221,310.25
CMO Securities	\$	1,261,757.46	\$ 3,179,945.30
Asset Backed Securities	\$	622,273.03	\$ 701,116.40
Preferreds Fixed Rate	\$	6,285,360.91	\$ 6,577,932.81
Total Investments	\$	<u>75,460,109.62</u>	<u>\$ 73,243,941.29</u>
Total Assets	\$	<u>81,023,192.83</u>	<u>\$ 79,313,960.97</u>
Liabilities			
Refunds Payable and Other	\$	20,725.03	\$ 27,349.50
Net Assets Held In Trust For Pension Benefits			
	\$	<u>81,002,467.80</u>	<u>\$ 79,286,611.47</u>

TOTAL ASSETS (MARKET VALUE 12-31-2014)



Schedule A – Continued

Northumberland County Employees’ Retirement System

Plan Description and Contribution Information

Basis of Accounting: The Northumberland County Employees’ Retirement System financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to each plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

Method Used to Value Investments: Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair value.

Membership of the plan consisted of the following as of January 1, 2015:

Retirees and Beneficiaries Receiving Benefits	672
Terminated Plan Members Entitled to but not yet Receiving Benefits	102
Active Plan Members	502
Total	1,276
Number of Participating Employers	1

Schedule A—Continued

Northumberland County Employees' Retirement System

Plan Description: The Northumberland County Employees' Retirement Plan is a single-employer defined benefit pension plan that covers all employees of the County. The plan provides retirement, disability, and death benefits to plan members and their beneficiaries. Cost-of-living adjustments (COLA) are provided at the discretion of the Northumberland County Employees' Retirement Board. Act 96 of 1971, as amended cited as the County Pension Law provides for the creation, maintenance and operation of this plan.

Contributions: Plan members are required to contribute 5% of their annual covered salary. The County is required to contribute at an actuarially determined rate. Per Act 96 of 1971, as amended, contribution requirements of the plan members and the County are established and may be amended by the General Assembly of the Commonwealth of Pennsylvania. Administrative costs may be financed through investment earnings.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year	Contribution *	County Contribution
2005	\$ 543,852	\$ 551,473
2006	\$ 242,171	\$ 254,338
2007	\$ 0	\$ 0
2008	\$ 0	\$ 0
2009	\$ 1,839,850	\$ 1,826,128
2010	\$ 2,080,118	\$ 2,096,091
2011	\$ 1,306,185	\$ 1,306,329
2012	\$ 806,725	\$ 806,725
2013	\$ 978,907	\$ 978,907
2014	\$ 1,135,549	\$ 1,135,549

Note: Effective in 2011 the Entry Age Funding Method was used to determine the annual required contribution. Prior to 2011 the Aggregate Method was used.

*Prior to 2014, contribution was described as Annual Required Contribution (ARC). After 2013, contribution was described as actuarially determined contribution.

Schedule A--Continued

SCHEDULES OF FUNDING PROGRESS						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
1/1/2008	83,272,050	73,966,261	(9,305,789)	112.6%	22,420,223	(41.5%)
1/1/2009	70,405,801	77,926,877	7,521,076	90.3%	23,832,258	31.6%
1/1/2010	68,576,221	79,439,247	10,863,026	86.3%	20,274,058	53.6%
1/1/2011	67,643,099	75,894,935	8,251,836	89.1%	16,758,234	49.2%
1/1/2012	74,240,152	78,105,342	3,865,190	95.1%	16,708,408	23.1%
1/1/2013	74,956,675	79,845,288	4,888,613	93.9%	17,436,210	28.0%
1/1/2014	79,286,611	84,420,986	5,134,375	93.9%	17,243,020	29.8%
1/1/2015	81,002,468	85,886,299	4,883,831	94.3%	17,280,652	28.3%

Schedule A--Continued

HISTORICAL ACCOUNTING INFORMATION	
The information was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:	
Valuation Date	01/01/2015
Actuarial Cost Method	Entry Age
Asset Valuation Method	The method that is prescribed by Pennsylvania State Law, Act 44 as described in Schedule M
Actuarial Assumptions:	
Investment Rate of Return *	7.5%
Projected Salary Increases *	3.5%
* Includes Inflation at	3%

ACCOUNTING PROCEDURES FOR CALCULATING - NET PENSION OBLIGATION (NPO)							
Subsequent years Net Pension Liability calculation found in GASB 67 & 68 disclosure report							
(1) Year	(2) ARC	(3) Interest on NPO ***	(4) ARC Adjustment **	(5) Pension Cost (2+3-4)	(6) Contribution	(7) Change in NPO (5-6)	(8) NPO Balance* (BB+7)
2005	543,852	11,446	18,460	536,838	551,473	(14,635)	137,984
2006	242,171	10,349	16,778	235,742	254,338	(18,596)	119,388
2007	0	8,954	14,606	(5,652)	0	(5,652)	113,736
2008	0	8,530	14,171	(5,641)	0	(5,641)	108,095
2009	1,839,850	8,107	13,659	1,834,298	1,826,128	8,170	116,265
2010	2,080,118	8,720	14,651	2,074,187	2,096,091	(21,904)	94,361
2011	1,306,185	7,077	12,522	1,300,740	1,306,329	(5,589)	88,772
2012	806,725	6,658	11,933	801,450	806,725	(5,275)	83,497
2013	978,907	6,262	11,214	973,955	978,907	(4,952)	78,545

* BB = Beginning balance for the year.

** ARC Adjustment - Amortization factor based upon level percentage of projected payroll.

*** Interest on the balance of the NPO at the beginning of the year using the investment return rate assumed in determining ARC. The interest is an estimate of the investment earnings lost to the plan on any contributions that were not made (7.5% when applicable).

Schedule B

Schedule B shows the allocation of the assets among the Fund's reserve accounts (see Schedule I for Determination of Reserve Balances) and the Fund's liabilities as of January 1, 2015. The liabilities were determined from the actuarial valuation of the System based upon the data submitted by the County.

ASSETS	
Members' Annuity Reserve Account	\$ 16,749,031.46
County Annuity Reserve Account	\$ 19,363,871.34
Retired Members' Reserve Account	\$ 44,889,565.00
<i>Total Assets, (Market Value) of the Northumberland County Employees' Retirement Fund</i>	<i>\$ 81,002,467.80</i>
LIABILITIES	
Actuarial Present Value of:	
Accumulated Plan Benefits	
Vested participants (295)	\$ 13,045,478
Nonvested participants (207)	\$ 200,132
Future Benefit Accruals	\$ 12,001,348
Terminated Vested Benefits	\$ 3,471,604
Retired Benefits	\$ 44,889,565
Member Accumulated Deductions	\$ 16,749,031
<i>Total Liabilities of the Northumberland County Employees' Retirement Fund</i>	<i>\$ 90,357,158</i>

Schedule C

Unfunded Actuarial Liability and Normal Cost

Schedule C shows the development of the unfunded actuarial liability and the normal cost for 2015.

I. Unfunded Actuarial Liability January 1, 2015

1. Actuarial Liability:		
(a) Active Participants		
Retirement Benefits	\$	18,756,716
Termination Benefits		1,367,891
Death Benefits		651,492
Total	\$	20,776,099
(b) Terminated Vested Participants	\$	3,471,604
(c) Retired Members and Beneficiaries		
Retirement Benefits	\$	40,353,321
Cost-of-Living Benefits		4,536,244
Total	\$	44,889,565
(d) Member Accumulated Deductions	\$	16,749,031
(e) Total (a) + (b) + (c) + (d)	\$	85,886,299
2. Actuarial Value of Plan Assets (see page 15)	\$	81,002,468
3. Unfunded Actuarial Liability as of January 1, 2015: (1e) – (2)	\$	4,883,831

II. Normal Cost for 2015

1. Normal Cost for:		
(a) Retirement Benefits	\$	548,488
(b) Termination Benefits		79,990
(c) Death Benefits		21,416
(d) Normal Cost as of January 1, 2015	\$	649,894
(e) Normal Cost with interest to end of year: (d) x 1.075	\$	698,636

Schedule D

Actuarial Gain(Loss) for One Year Period Ending December 31, 2014

Schedule D shows the development of the actuarial gain (loss) for the 2014 plan year.

1.	Unfunded Actuarial Liability as of January 1, 2014	\$ 5,134,375
2.	Normal Cost as of January 1, 2014	651,285
3.	Interest at 7.50% Per Year to December 31, 2014 on (1) and (2)	433,925
4.	Employer Contributions for the 2014 Plan Year	1,135,549
5.	Change in Unfunded Actuarial Liability Due to Cost of Living Increase to Retirees	0
6.	Change in Unfunded Actuarial Liability Due to Change in Assumptions	0
7.	Expected Unfunded Actuarial Liability as of January 1, 2015: (1) + (2) + (3) - (4) + (5) + (6)	5,084,036
8.	Unfunded Actuarial Liability as of January 1, 2015	4,883,831
9.	Actuarial Gain (Loss) for 2014 Plan Year: (7) – (8)	200,205

Schedule E

Amortization Schedule

Schedule E provides a record of the amortization amounts. Actuarial gains (losses) will be amortized over 15 years from the date determined; increases or decreases created by pension plan establishing an unfunded actuarial accrued liability will be amortized over 30 years from the effective establishment date; increases or decreases created by a modification in the benefit plan applicable to active members will be amortized over 20 years beginning with the January 1st coinciding with or next following the effective date of change; increases or decreases created by a modification in the benefit plan applicable to retired members will be amortized over 10 years beginning with the January 1st coinciding with or next following the effective date of change; increases in actuarial accrued liability attributable to the special early retirement provision will be amortized over 5 years beginning with the January 1st coinciding with or next following the end of the early retirement period; and increases or decreases created by changes in actuarial assumptions will be amortized over 15 years from the effective date of change; resetting the unfunded actuarial liability (UAL) due to outstanding balance becoming negative will be amortized over 15 years beginning with the January 1st coinciding with or next following when the outstanding balance becomes negative. When resetting, any previous charges or credits will be considered paid off and eliminated.

Amortization Record for 2015

As of January 1, 2015					
	<u>Initial Amount</u>	<u>Effective Date</u>	<u>Remaining Period</u>	<u>Outstanding Balance</u>	<u>Amortization Charge or (Credit)</u>
Amortization of Liability for:					
(a) Initial UAAL	\$ 8,251,836	1/1/2011	26 Years	\$ 7,894,871	\$ 698,693
(b) Experience gain	(4,306,697)	1/1/2012	12 Years	(3,773,996)	(487,894)
(c) Experience loss	601,468	1/1/2013	13 Years	553,681	68,139
(d) Mortality table chg.	921,810	1/1/2013	13 Years	848,576	104,429
(e) Asset val method chg.	(578,946)	1/1/2013	13 Years	(532,950)	(65,587)
(f) Retiree COLA increase	2,942,480	1/1/2014	9 Years	2,734,494	428,678
(g) Experience gain	(2,745,584)	1/1/2014	14 Years	(2,640,470)	(311,040)
(h) Experience gain	(200,205)	1/1/2015	15 Years	<u>(200,205)</u>	<u>(22,681)</u>
(i) Total				\$ 4,884,001	\$ 412,737

Schedule F

Schedule F determines the certified actuarially determined contribution of \$1,111,373 for 2015 for the Northumberland County Employees' Retirement System.

1.	Total Amortization Charge/(Credit) (page 12 (i))	\$ 412,737
2.	Normal Cost with interest to end of year (page 10 II 1(e))	\$ 698,636
3.	Total Funding Requirement for 2015 (actuarially determined contribution for 2015): (1) + (2), but not less than 0	\$ 1,111,373

Notes:

The actuarially determined contribution for 2015 as a percentage of the estimated 2015 compensation (\$17,280,652) for active members is 6.43%.

The equivalent normal cost accrual rate to be applied to actual 2014 salaries to determine reimbursable expenses is 6.66%.

Schedule G

The following are notes to Schedules B and I:

Members' Annuity Reserve Account

The balance of \$16,749,031.46 in this account is the total of the contributions deducted from the salaries of the active and terminated vested members of the retirement system and the IRC 414(h)(2) pickup contributions together with the interest additions as of January 1, 2015. Since these accumulations represent the present value as of January 1, 2015, of future benefits, the reserve balance and liability are identical.

County Annuity Reserve Account

The balance of \$19,363,871.34 in this account as of January 1, 2015 and the amounts expected to be credited in the future, plus investment earnings, represent the reserves set aside for the payment of the county's share of the retirement allowances.

This is the account out of which regular interest is credited to the member's annuity and retired members' reserve account, administrative expenses may be paid and the pension obligations of the County are funded.

When a County Annuity is scheduled to commence for a particular member, sufficient monies are transferred from the County Annuity Reserve Account to the Retired Members' Reserve Account to provide for such County Annuities actually entered upon.

Retired Members' Reserve Account

This is the account out of which monthly retirement allowances including cost-of-living increases and death benefits are paid.

The assets allocated to this reserve account as of January 1, 2015 amount to \$44,889,565.00. The corresponding liability for those annuitants on the roll is identical.

Schedule G--Continued

Adjustment for Market Value Fluctuation

In order to reduce the fluctuations in the County normal cost which can result from full recognition of the unrealized appreciation or depreciation of the Fund's securities each year, the value of assets used to determine costs was determined as prescribed by the Pennsylvania State Law, Act 44 by using the greater of the market value of assets as of the valuation date and adjusting the actuarial value of assets as of the prior valuation date: increased by contributions and other deposits except investment income; decreased by benefit payments and administrative expenses or other payments; and credited with interest at 1% less than the plan's assumed rate to the valuation date. The actuarial value of assets will be limited to a maximum of 120% and a minimum of 80% of the market value of assets as of the valuation date.

1. Actuarial Value of Assets as of 1/1/2014	\$	79,286,611.47
2. Contributions and Other Deposits Except Investment Income	\$	2,237,630.19
3. Benefit Payments and Administrative Expenses or Other Payments	\$	6,575,250.92
4. Interest at 1% less than the plan's assumed rate to the valuation date 2014: $0.065 \times [(1) + 0 \times (2) - 11/24 \times (3)]$	\$	4,957,742.06
5. Preliminary Actuarial Value of Assets: $(1) + (2) - (3) + (4)$	\$	79,906,732.80
6. Market Value of Assets as of 1/1/2015	\$	81,002,467.80
7. 80% of Market Value: $.8 \times (6)$	\$	64,801,974.24
8. 120% of Market Value: $1.2 \times (6)$	\$	97,202,961.36
9. Actuarial Value of Assets as of 1/1/2015: Greater of (5) and (6) but not less than (7) nor more than (8)	\$	81,002,467.80

Schedule H

APPROXIMATE RATE OF RETURN FOR 2014 PLAN YEAR			
		<u>Actuarial Value</u>	<u>Market Value</u>
1. Value as of December 31, 2013	\$	79,286,611.47	\$ 79,286,611.47
2. Contributions Received During Year	\$	2,237,630.19	\$ 2,237,630.19
3. Benefits and Expenses Paid During Year	\$	6,575,250.92	\$ 6,575,250.92
4. Value as of December 31, 2014	\$	81,002,467.80	\$ 81,002,467.80
5. Non-Investment Increment: (2) - (3)	\$	(4,337,620.73)	\$ (4,337,620.73)
6. Investment Increment: (4) - (1) - (5)	\$	6,053,477.06	\$ 6,053,477.06
7. Time Weighted Value of Assets: (1) + .5 x (5)	\$	77,117,801.11	\$ 77,117,801.11
8. Approximate Rate of Return for 2014: (6) / (7)		7.85%	7.85%

HISTORY OF RATE OF RETURNS

<u>Plan Year</u>	<u>Actuarial Value Rate of Return</u>	<u>Market Value Rate of Return</u>
2013	11.16%	13.24%
2012	6.44%	12.60%
2011	14.06%	(0.81%)
2010	6.71%	11.75%
2009	(1.09%)	23.35%
2008	(12.20%)	(26.83%)
2007		5.80%
2006		11.74%
2005		7.11%
Five Year Average (2010 - 2014):	9.20%	8.80%
Ten Year Average (2005 - 2014):		5.71%

Schedule I

Determination of Reserve Balances

	M.A.R.A.	C.A.R.A.	R.M.R.A.	TOTAL
Balance 1/1/2014	\$ 16,687,335.68	\$ 19,258,999.79	\$ 43,340,276.00	\$ 79,286,611.47
County Appropriations		1,135,549.00		1,135,549.00
Member Contributions	1,060,074.78			1,060,074.78
Member Purchases				0.00
Net Investment Income		6,053,477.06		6,053,477.06
Investment Expenses		(401,899.02)		(401,899.02)
Member Contributions Refunded	(293,062.47)			(293,062.47)
Pension Payments			(5,679,541.99)	(5,679,541.99)
Death Benefits			(100,194.80)	(100,194.80)
Retiree and Death Benefit Transfers	(1,485,051.30)	(2,711,889.56)	4,196,940.86	0.00
Cost of Living Funding Requirement				0.00
Administrative Expenses		(100,552.64)		(100,552.64)
Miscellaneous		42,006.41		42,006.41
Balance Before Interest	15,969,296.69	23,275,691.04	41,757,480.07	81,002,467.80
Interest Allocated in 2014	779,734.77	(2,481,689.89)	1,701,955.12	
Balance Before Actuarial Adjustments	16,749,031.46	20,794,001.15	43,459,435.19	81,002,467.80
Actuarial Adjustments		(1,430,129.81)	1,430,129.81	
Ending Balance 12/31/2014	16,749,031.46	19,363,871.34	44,889,565.00	81,002,467.80

Schedule J

Membership History

Below is a ten-year history of the Retirement System's membership.

ACTIVE MEMBERS AND VESTED TERMINATED MEMBERS				RETIRED MEMBERS AND BENEFICIARIES		
January 1	Male	Female	Total	Male	Female	Total
2015	229	375	604	203	469	672
2014	226	368	594	208	459	667
2013	220	399	619	205	459	664
2012	237	409	646	204	451	655
2011	264	401	665	197	443	640
2010	281	479	760	181	358	539
2009	290	588	878	187	342	529
2008	275	564	839	176	335	511
2007	278	555	833	174	328	502
2006	281	566	847	185	321	506

Schedule K

Changes in Plan Participation From January 1, 2014 to January 1, 2015

ACTIVE PARTICIPANTS		
Number as of January 1, 2014		493
Changes During Plan Year:		
Retired	(-)	12
Terminated and Vested	(-)	9
Terminated	(-)	32
Died	(-)	0
New Participants	(+)	62
Number as of January 1, 2015		502

RETIRED PARTICIPANTS		
Number as of January 1, 2014		667
Changes During Plan Year:		
Returned to Active Service	(-)	0
Died	(-)	18
New Retirements from Active Service	(+)	12
New Surviving Annuitants	(+)	4
Vested Terminated Participants Whose Benefits Commenced	(+)	7
Number as of January 1, 2015		672

TERMINATED VESTED PARTICIPANTS		
Number as of January 1, 2014		101
Changes During Plan Year:		
Returned to Active Service	(-)	0
Benefits Commenced	(-)	7
Terminated	(-)	1
New Termination's with Vesting	(+)	9
Number as of January 1, 2015		102

Schedule L

Age, Service and Average Salary Profile of the Active Members on January 1, 2015.

MALES -- FULL YEARS OF SERVICE TO JANUARY 1, 2015									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Average Salary
0-19	1	0	0	0	0	0	0	1	\$ 22,332
20-24	16	1	0	0	0	0	0	17	\$ 21,884
25-29	21	8	0	0	0	0	0	29	\$ 30,339
30-34	12	10	1	0	0	0	0	23	\$ 34,258
35-39	6	6	1	3	0	0	0	16	\$ 37,194
40-44	8	4	5	6	3	0	0	26	\$ 45,816
45-49	4	1	1	1	6	1	0	14	\$ 39,987
50-54	5	2	1	5	3	2	1	19	\$ 39,873
55-59	4	5	2	1	2	2	1	17	\$ 40,838
60-64	1	6	1	4	3	1	5	21	\$ 39,774
65 +	3	7	1	1	0	0	1	13	\$ 19,292
Total	81	50	13	21	17	6	8	196	\$ 35,440

Average Age: 43.07
 Average Service: 9.57

FEMALES -- FULL YEARS OF SERVICE TO JANUARY 1, 2015									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Average Salary
0-19	0	0	0	0	0	0	0	0	\$ 0
20-24	13	0	0	0	0	0	0	13	\$ 20,040
25-29	24	10	0	0	0	0	0	34	\$ 29,188
30-34	19	12	5	0	0	0	0	36	\$ 32,360
35-39	10	12	9	4	0	0	0	35	\$ 32,056
40-44	6	8	3	13	4	0	0	34	\$ 37,171
45-49	8	4	4	4	11	4	0	35	\$ 38,608
50-54	5	7	7	2	3	3	3	30	\$ 32,001
55-59	2	8	5	12	5	0	6	38	\$ 38,089
60-64	1	7	4	8	4	3	8	35	\$ 34,490
65 +	1	2	3	2	3	2	3	16	\$ 35,310
Total	89	70	40	45	30	12	20	306	\$ 33,773

Average Age: 44.71
 Average Service: 11.80

Schedule M

Actuarial Assumptions and Actuarial Cost Method for Funding Purposes, January 1, 2015.

Actuarial Assumptions

Mortality Rates: 2013 RP Annuitant and Non-Annuitant Mortality Tables for males and females with no projected improvement.

Withdrawal Rates: Members not eligible to retire are assumed to terminate employment in accordance with a percentage of the withdrawal rates set forth in Table T-7 of the Actuary's Handbook. The applicable percentage depends on the member's years of service as follows:

YEARS OF SERVICE	PERCENTAGE
less than 1	300%
1 but less than 2	275%
2 but less than 3	250%
3 but less than 4	225%
4 but less than 5	200%
5 but less than 6	175%
6 or more	100%

It is further assumed that a percentage of members who terminate after having met the Plan's five year vesting requirement will elect an immediate refund of their own contributions with interest thus forfeiting the County -- provided pension. The applicable percentage is 100% for termination ages up to age 30. After age 30 the applicable percentage is determined as 100% less (age - 30) x 3 1/3%. Illustrative percentages are as follows:

AGE	PERCENTAGE
30 or less	100.0%
35	83.3%
40	66.7%
45	50.0%
50	33.3%
55	16.7%

Schedule M--Continued

The following tables set forth illustrative withdrawal rates as determined in accordance with the methodology described on the previous page.

Probability of Withdrawing During Year:

LESS THAN FIVE YEARS OF SERVICE					
Age at Hire	Years of Service				
	0	1	2	3	4
20	.2982	.2720	.2460	.2202	.1947
30	.2791	.2532	.2275	.2021	.1770
40	.2326	.2067	.1814	.1570	.1335
50	.1267	.1013	.0781	.0577	.0407
59	.0086	-	-	-	-

FIVE OR MORE YEARS OF SERVICE		
Age at Beginning of Year	Probability of Withdrawing and Forfeiting County Pension	Probability of Withdrawing and Retaining County Pension
30	.0930	.0000
40	.0517	.0258
50	.0141	.0281
59	.0001	.0028

Schedule M--Continued

Retirement Rates: Members eligible to retire are assumed to retire in accordance with the following rates:

AGE AT BEGINNING OF YEAR	PROBABILITY OF RETIRING DURING YEAR
55-59	.07
60-61	.08
62-64	.15
65	.34
66-70	.23
71-79	.21
80	1.00

Disability Rates Disability rates are not used.

Investment Return 7.5% per annum, compounded annually.

Salary Increases 3.5% per annum.

Valuation Assets The asset method that is prescribed by Pennsylvania State Law, Act 44, which is the greater of the market value of assets as of the valuation date and the actuarial value of assets as of the prior valuation date plus contributions and other deposits except investment income minus benefit payments and administrative expenses or other payments plus credited interest at 1% less than the plan's assumed rate to the valuation date. The actuarial value of assets will be limited to a maximum of 120% and a minimum of 80% of the market value of assets as of the valuation date.

Administrative Expenses Assumed to be paid from the County's general fund and not from plan assets. However, administrative expenses may from year to year be paid from the fund unless it is determined by the actuary that such payment will impair the actuarial soundness of the fund.

Actuarial Cost Method The actuarial cost method used to determine the plan's funding requirements is the entry age normal method. Under this method, an actuarial accrued liability is determined as the actuarial present value of projected benefits for all participants minus the actuarial present value of future normal costs. The normal cost is determined as the annual amount required to fund between entry age and assumed exit age the actuarial present value of projected benefits for each active participant under the assumed retirement age.

Schedule N

Summary of Plan Provisions

- 1. Effective Date** The effective date of this plan is January 1, 1942.
- 2. Eligibility for Plan Membership** An employee shall be eligible to become a participant immediately upon becoming an employee.
- 3. Accrued Benefit** The Retirement Board has authorized benefits equal to a percentage of the members Final Average Salary for each year of service the member has participated in the following Classes:

<u>CLASS</u>	<u>PERCENTAGE</u>	<u>EFFECTIVE</u>
1/120	0.833%	01/01/1942
1/100	1.000%	01/01/1950
1/80	1.250%	01/01/1966
1/70	1.429%	01/01/1973

- 4. Normal Retirement (Superannuation)** *Eligibility:* Retirement occurs at age 60 or at age 55 if the participant has completed 20 years of service.

Pension: A monthly pension equal to (a) and (b), as follows:

- (a) 0.833% of 1/12th of Final Average Salary multiplied by years of credited service on the 1/120 Class,
- 1.000% of 1/12th of Final Average Salary multiplied by years of credited service on the 1/100 Class,
- 1.250% of 1/12th of Final Average Salary multiplied by years of credited service on the 1/80 Class,
- 1.429% of 1/12th of Final Average Salary multiplied by years of credited service on the 1/70 Class,

PLUS

- (b) a monthly annuity based on the actuarial equivalent of the member's accumulated contributions with credited interest.

Schedule N--Continued

5. Final Average Salary The average of the member's annual compensation received for the three years which produce the highest such average.

6. Compensation Pick-up contributions plus remuneration received as a county employee excluding refunds for expenses, contingency and accountable expense allowances and excluding severance payments or payments for unused vacation or sick leave.

7. Early Retirement *Eligibility:*

Voluntary: Upon completion of 20 years of service.

Involuntary: Upon completion of 8 years of service.

Pension:

(a) a monthly pension equal to the actuarial equivalent of the benefits calculated in 4(a),

PLUS

(b) a monthly annuity based on the actuarial equivalent of the member's accumulated contributions with credited interest.

8. Vesting One Hundred Percent (100%) upon completion of five years of credited service. A member who terminates employment after five years of credited service will receive a deferred annuity commencing at age 60 (or at age 55 if the member has at least 20 years of service at termination). The deferred benefit shall be calculated using the normal retirement pension formula but based on credited service, final average salary and accumulated contributions at termination.

If a member terminates employment prior to entitlement to Plan benefits, he will receive his accumulated contributions with interest.

9. Postponed Retirement A member may work past normal retirement age and continue to accrue pension credits.

Schedule N--Continued

10. Disability Retirement

Eligibility: Total and permanent disability prior to Superannuation (Normal Retirement) age and after completion of five years of credited service.

Pension: A total monthly pension commencing on the last day of the month following disability retirement equal to 25% of the 1/12th of Final Average Salary at time of retirement. Such total monthly pension shall include the monthly disability that is actuarially equivalent to the member's accumulated contributions at retirement.

11. Normal Form of Pension

Benefits are payable in the form of a modified cash refund life annuity, that is for the member's lifetime only, except that disability benefits shall cease upon cessation of disability.

12. Optional Retirement Benefits

A member may elect to receive the actuarial equivalent of his retirement benefit as a full cash refund annuity (Option One) or a reduced joint and survivor pension payable for the remainder of his life, with either 100% or 50% of the member's pension continuing after death to the designated beneficiary. A member may also elect to receive, in one payment, the full amount of his accumulated deductions and continue to receive the annuity provided by the county.

13. Death Benefits

(a) Pre-Retirement. If a member dies after having attained age 60 or having completed ten years of credited service, his beneficiary will receive a lump sum equal to the actuarially determined present value of the benefits calculated in (7a) based on the member's Final Average Salary and credited service at time of death plus the member's accumulated contributions with interest at time of death.

(b) Post-Retirement. Upon the death of a terminated or retired member, his beneficiary will receive survivor benefits, if any, in accordance with the form under which benefits were being paid to the member. In any event, the total amount of benefits paid to the deceased member and beneficiary must, at least, equal the member's accumulated contributions with interest.

Schedule N--Continued

14. Employee Contributions

The Retirement Board has authorized each member of the retirement system to individually elect to contribute between 5% and 15% of his salary.

15. Deposit Administrator

Investment Managers:

NFJ	Madison Investments
Scout	Fayez Sarofim & Co.
PIMCO	Vanguard
Reinhart	Kayne Anderson
Spectrum	Goldman Sachs

Custodian:

Wells Fargo

Investment Consultant:

Wells Fargo Advisors

16. Administration

Retirement Board as designated in Act 96 of 1971, the County Pension Law.

17. Cost-of-Living

The cost-of-living increase shall be reviewed at least once in every three years by the Retirement Board. The Board has granted cost-of-living increases twelve times in the past from January, 1972 through January, 1995 and since then as follows:

PERCENTAGE CHANGE IN C.P.I.	EFFECTIVE DATE OF INCREASE
85%	1/1/1997
85%	1/1/1998
100%	1/1/1999
100%	1/1/2000
100%	1/1/2001
100%	1/1/2002
100%	1/1/2003
100%	1/1/2004
95%	1/1/2007
85%	1/1/2013

18. Early Retirement Provision

The Retirement Board has authorized the following Early Retirement Provisions:

<u>Percent of Additional Service</u>	<u>Early Retirement Period</u>
20%	10/1/1996-9/30/1997
20%	10/1/2001-9/30/2002

Schedule O

Historical Trend Information

REVENUES BY SOURCE						
Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous	Total	
2005	\$ 1,349,629	\$ 551,474	\$ 5,866,305	\$ 0	\$ 7,767,408	
2006	1,410,755	254,338	7,240,075	28,278	8,933,446	
2007	1,490,371	0	6,320,930	22,099	7,833,400	
2008	1,543,926	0	(6,083,313)	2,797	(4,536,590)	
2009	1,526,361	1,826,128	52,264	51,004	3,455,757	
2010	1,109,462	2,096,091	4,196,032	11,154	7,412,739	
2011	1,134,146	1,306,329	11,202,600	6,251	13,649,326	
2012	1,111,580	806,725	5,481,641	8,684	7,408,630	
2013	1,106,526	978,907	9,492,183	45,850	11,623,466	
2014	1,060,075	1,135,549	6,053,477	42,006	8,291,107	

EXPENSES BY TYPE					
Fiscal Year	Benefits	Refunds	Administrative/ Miscellaneous	Total	
2005	\$ 3,128,035	\$ 180,652	\$ 508,388	\$ 3,817,075	
2006	3,561,743	305,019	444,544	4,311,306	
2007	3,759,569	450,324	448,761	4,658,654	
2008	3,550,891	403,837	472,279	4,427,007	
2009	3,781,897	233,950	453,149	4,468,996	
2010	7,109,707	937,380	522,094	8,569,181	
2011	4,404,203	349,037	416,651	5,169,891	
2012	5,036,795	472,490	352,168	5,861,453	
2013	4,992,941	437,548	521,322	5,951,811	
2014	5,779,737	293,062	502,452	6,575,251	