

# Schuylkill County Employees' Retirement System

Report on 2012 Actuarial Valuation Including  
Determination of County Annual Required  
Contribution for 2012

HayGroup®



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for

**Schuylkill County Employees' Retirement Board**

Frank Staudenmeier	Commissioner/Chair
George F. Halcovage, Jr.	Commissioner
Gary J. Hess	Commissioner
Christy D. Joy	Controller/Secretary
Jacqueline V. McGovern	Treasurer

**May 22, 2012**

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## I. Introduction

The primary purpose of this report is to investigate and fully and fairly disclose the actuarial position of the System as of January 1, 2012 and to establish the proper appropriation for the 2012 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.

In our opinion, this report presents fairly the financial and actuarial position for the Schuylkill County Employees' Retirement Plan as of January 1, 2012 in accordance with generally accepted actuarial principles, and on the basis of actuarial assumptions and methods which, in the aggregate, are reasonable (taking into account past experience under the System and reasonable expectations) and which in combination represent our best estimate of anticipated experience.

Respectfully submitted,

### HayGroup

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## II. Findings

### **Certified Annual Required Contribution (ARC)**

Please note that the certified Annual Required Contribution which is reported on page 11 of this report and which must be funded in 2012 is \$3,227,289.00. This is required to be made by the County from the General Fund.

### **Actuarial Adjustments**

Also note that the balances in the Reserve Accounts on page 10 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	\$ 1,599,635.28	
Retired Members Annuity Reserve Account		\$ 1,599,635.28

### III. Schedules

#### Schedule A

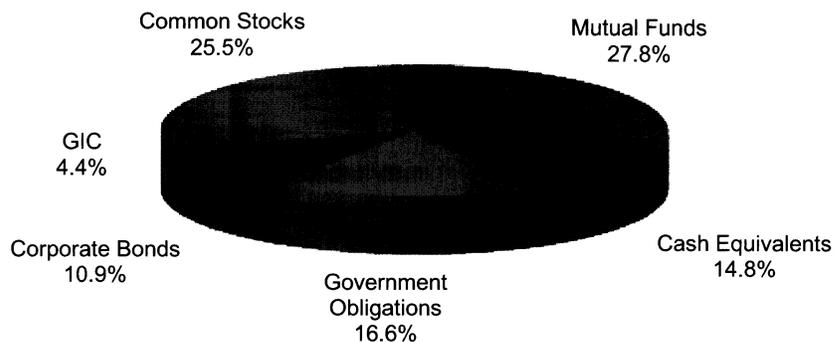
Disclosure of Pension Information in Accordance with  
Statement No. 25, Statement No. 27 and Statement No. 50  
of the Governmental Accounting Standards Board

<b>SCHUYLKILL COUNTY EMPLOYEES' RETIREMENT SYSTEM</b>			
<b>STATEMENT OF CHANGES IN PLAN NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2011 AND 2010</b>			
<b>Additions</b>			
	<u><b>2011 Total</b></u>		<u><b>2010 Total</b></u>
<b>Contributions</b>			
County	\$ 3,180,461.00	\$	3,148,444.00
Plan Members	\$ 2,247,438.17	\$	2,219,603.19
Total Contributions	<u>\$ 5,427,899.17</u>	\$	<u>5,368,047.19</u>
<b>Investment Income</b>			
Realized Gain	\$ 4,855,649.84		
Unrealized Loss	<u>\$ (6,390,492.97)</u>		
Net Loss in Fair Value	\$ (1,534,843.13)	\$	7,611,683.42
Interest	\$ 2,092,558.43	\$	1,882,939.79
Dividends	\$ 419,613.56	\$	571,505.79
Investment Income	<u>\$ 977,328.86</u>	\$	<u>10,066,129.00</u>
Less Investment Expense	\$ 341,167.20	\$	346,006.53
Net Investment Income	<u>\$ 636,161.66</u>	\$	<u>9,720,122.47</u>
Total Additions	<u>\$ 6,064,060.83</u>	\$	<u>15,088,169.30</u>
<b>Deductions</b>			
Benefits	\$ 5,376,091.29	\$	5,136,282.19
Refunds of Member Contributions	\$ 419,247.35	\$	331,719.67
Administrative Expense	<u>\$ 5,521.20</u>	\$	<u>6,121.20</u>
Total Deductions	<u>\$ 5,800,859.84</u>	\$	<u>5,474,123.06</u>
Net Increase/(Decrease)	<u>\$ 263,200.99</u>	\$	<u>9,614,046.60</u>
<b>Net Assets Held In Trust For Pension Benefits</b>			
Beginning of Year	\$ 96,351,314.25	\$	86,737,267.65
End of Year	<u>\$ 96,614,515.24</u>	\$	<u>96,351,314.25</u>

**Schedule A--Continued**

<b>SCHUYLKILL EMPLOYES' RETIREMENT SYSTEM</b>			
<b>STATEMENT OF PLAN ASSETS AS OF DECEMBER 31, 2011 AND 2010</b>			
<b>Assets</b>			
	<u>2011 Total</u>		<u>2010 Total</u>
Cash and Short-Term Investments	\$ 14,317,194.25	\$	16,735,043.98
Receivables	\$ 85,769.50	\$	0.00
Investments, at fair market value			
Government Obligations	\$ 16,082,430.72	\$	11,002,234.96
Corporate Bonds	\$ 10,552,090.03	\$	9,446,323.40
Common Stocks	\$ 24,802,714.73	\$	29,629,873.36
Mutual Funds	\$ 27,017,832.68	\$	25,524,730.31
GIC	\$ 4,217,769.71	\$	4,080,829.19
Total Investments	\$ 82,672,837.87	\$	79,683,991.22
Total Assets	\$ 97,075,801.62	\$	96,419,035.20
<b>Liabilities</b>			
Refunds Payable and Other	\$ 461,286.38	\$	67,720.95
<b>Net Assets Held In Trust For Pension Benefits</b>			
	\$ 96,614,515.24	\$	96,351,314.25

**TOTAL ASSETS (MARKET VALUE 12-31-2011)**



**Schedule A -- Continued**

**Schuylkill County Employees' Retirement System**

**Notes to the Financial Statements for the Fiscal Year Ended December 31, 2011**

**Summary of Significant Accounting Policies**

**Basis of Accounting:** The Schuylkill 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.

**Plan Descriptions and Contribution Information**

Membership of the plan consisted of the following at December 31, 2011, the date of the latest actuarial valuation:

Retirees and Beneficiaries Receiving Benefits	496
Terminated Plan Members Entitled to but not yet Receiving Benefits	49
Active Plan Members	703
	1,248
Total	1,248
Number of Participating Employers	1

## Schedule A--Continued

### Schuylkill County Employees' Pension System

**Plan Description:** The Schuylkill County Employees' Pension 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 Schuylkill 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 8% 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.

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#### REQUIRED SUPPLEMENTARY INFORMATION

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#### SCHEDULES OF EMPLOYER CONTRIBUTIONS

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Year	Annual Required Contribution	County Contribution
2003	\$ 631,779	\$ 631,779
2004	\$ 1,012,701	\$ 1,012,701
2005	\$ 943,363	\$ 943,363
2006	\$ 1,227,586	\$ 1,227,586
2007	\$ 1,217,811	\$ 1,217,811
2008	\$ 733,243	\$ 733,243
2009	\$ 2,217,034	\$ 2,217,034
2010	\$ 3,148,444	\$ 3,148,444
2011	\$ 3,180,461	\$ 3,180,461
2012	\$ 3,227,289	\$

**Schedule A—Continued**

REQUIRED SUPPLEMENTARY INFORMATION						
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	97,213,001	95,781,127	(1,431,874)	101.5%	26,094,042	(5.5)%
1/1/2009	90,642,099	101,240,012	10,598,013	89.5%	26,268,179	40.3%
1/1/2010	88,175,275	106,027,742	17,852,467	83.2%	27,521,360	64.9%
1/1/2011	92,959,297	111,277,577	18,318,280	83.5%	27,323,547	67.0%
1/1/2012	97,595,446	115,921,028	18,325,582	84.2%	27,725,849	66.1%

\* The ARC is calculated using the aggregate actuarial cost method. Information in this schedule is calculated using the entry age actuarial cost method as a surrogate for the funding progress of the plan.

## Schedule A--Continued

### NOTES TO THE REQUIRED SCHEDULES

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

Valuation Date	12/31/2011
Actuarial Cost Method	Aggregate **
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return *	7.5%
Projected Salary Increases *	4.5%
* Includes Inflation at	3%

\*\* The aggregate actuarial cost method is used to determine the annual required contribution (ARC) for the plan. Because this method does not identify or separately amortize unfunded actuarial liabilities, information about funded status is prepared using the entry age actuarial cost method and is intended to serve as a surrogate for the funded status of the plan.

**Schedule A--Continued**

ACCOUNTING PROCEDURES FOR CALCULATING - NET PENSION OBLIGATION (NPO)							
(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)
2003	631,779	(2,690)	(4,489)	633,578	631,779	1,799	(34,071)
2004	1,012,701	(2,555)	(4,122)	1,014,268	1,012,701	1,567	(32,504)
2005	943,363	(2,438)	(3,865)	944,790	943,363	1,427	(31,077)
2006	1,227,586	(2,331)	(3,709)	1,228,964	1,227,586	1,378	(29,699)
2007	1,217,811	(2,227)	(3,559)	1,219,143	1,217,811	1,332	(28,367)
2008	733,243	(2,128)	(3,425)	734,540	733,243	1,297	(27,070)
2009	2,217,034	(2,030)	(3,285)	2,218,289	2,217,034	1,255	(25,815)
2010	3,148,444	(1,936)	(3,151)	3,149,659	3,148,444	1,215	(24,600)
2011	3,180,461	(1,845)	(2,968)	3,181,584	3,180,461	1,123	(23,477)
2012	3,227,289	(1,761)	(2,861)	3,228,389			

\* 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 F for Determination of Reserve Balances) and the Fund's liabilities as of January 1, 2012. The liabilities were determined from the actuarial valuation of the System based upon the data submitted by the County.

<b>ASSETS</b>	
Members' Annuity Reserve Account	\$ 29,292,134.21
County Annuity Reserve Account	\$ 16,975,132.31
Retired Members' Reserve Account	\$ 48,910,660.00
Unrealized Appreciation of Assets	\$ 1,436,588.72
<i>Total Assets, (Market Value) of the Schuylkill County Employees' Retirement Fund</i>	<i>\$ 96,614,515.24</i>
<b>LIABILITIES</b>	
Actuarial Present Value of:	
Accumulated Plan Benefits	
Vested (477)	\$ 19,750,108.00
Nonvested (226)	\$ 401,794.00
Future Benefit Accruals	\$ 24,425,995.00
Terminated Vested Benefits	\$ 1,286,898.00
Retired Benefits	\$ 48,910,660.00
Member Accumulated Deductions	\$ 29,292,134.21
<i>Total Liabilities of the Schuylkill County Employees' Retirement Fund</i>	<i>\$ 124,067,589.21</i>

## Schedule C

Schedule C determines the certified Annual Required Contribution (ARC) of \$3,227,289.00 for 2012 for the Schuylkill County Employees' Retirement System.

<b>1. Actuarial Present Value of Projected Future Benefits:</b>		
a. Active Participants		\$ 44,577,897.00
Retirement Benefits	\$ 38,729,150.00	
Termination Benefits	\$ 3,332,214.00	
Death Benefits	\$ 2,516,533.00	
b. Terminated Vested Participants		\$ 1,286,898.00
c. Retired Members and Beneficiaries		\$ 48,910,660.00
Retirement Benefits	\$ 45,606,136.00	
Cost-of-Living Benefits	\$ 3,304,524.00	
d. Member Accumulated Deductions		\$ 29,292,134.21
e. Total (a) + (b) + (c) + (d)		\$ 124,067,589.21
<b>2. Valuation Assets</b>		
Actuarial Value of Plan Assets (see page 13)		\$ 97,595,445.85
<b>3. Present Value of Future County Normal Costs (1e) - (2)</b>		\$ 26,472,143.36
<b>4. Present Value of Future Compensation of Active Members</b>		\$ 227,512,543.00
<b>5. County Normal Cost Accrual Rate (3) / (4)</b>		11.64%*
<b>6. Estimated 2012 Compensation Rate of Members</b>		\$ 27,725,849.00
<b>7. County Normal Cost for 2012 (5) x (6)</b>		\$ 3,227,289.00
(Annual Required Contribution (ARC) for 2012)		
<b>Notes:</b>		
*The equivalent normal cost accrual rate to be applied to actual 2011 salaries to determine reimbursable expenses is 12.16%.		

## **Schedule D**

The following are notes to Schedules B and F:

### **Members' Annuity Reserve Account**

The balance of \$29,292,134.21 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, 2012. Since these accumulations represent the present value as of January 1, 2012, of future benefits, the reserve balance and liability are identical.

### **County Annuity Reserve Account**

The balance of \$16,975,132.31 in this account as of January 1, 2012 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, 2012 amount to \$48,910,660.00. The corresponding liability for those annuitants on the roll is identical.

**Schedule D--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 by adjusting the cost value of the assets by the average ratio of market to cost value for the past five years:

<b>RATIO OF MARKET VALUE TO COST VALUE OF ASSETS</b>				
<b>January 1</b>		<b>(1) Cost Value of Assets</b>	<b>(2) Market Value of Assets</b>	<b>Ratio (2) / (1)</b>
2008	\$	85,192,359	\$ 93,812,484	1.1012
2009	\$	84,083,580	\$ 74,121,947	0.8815
2010	\$	83,333,593	\$ 86,737,268	1.0408
2011	\$	88,524,233	\$ 96,351,314	1.0884
2012	\$	95,177,927	\$ 96,614,515	1.0151
Average				1.0254

<b>ACTUARIAL VALUE OF ASSETS JANUARY 1, 2012</b>		
(1) Cost Value of Assets	\$	95,177,926.52
(2) Average Ratio		1.0254
(3) Actuarial Value of Assets (see line 2, page 11)	\$	97,595,445.85

### Schedule E

APPROXIMATE RATE OF RETURN FOR 2011 PLAN YEAR			
		<u>Actuarial Value</u>	<u>Market Value</u>
1. Value as of December 31, 2010	\$	92,959,296.61	\$ 96,351,314.25
2. Contributions Received During Year	\$	5,427,899.17	\$ 5,427,899.17
3. Benefits and Expenses Paid During Year	\$	6,142,027.04	\$ 6,142,027.04
4. Value as of December 31, 2011	\$	97,595,445.85	\$ 96,614,515.24
5. Non-Investment Increment: (2) - (3)	\$	(714,127.87)	\$ (714,127.87)
6. Investment Increment: (4) - (1) - (5)	\$	5,350,277.11	\$ 977,328.86
7. Time Weighted Value of Assets: (1) + .5(5)	\$	92,602,232.68	\$ 95,994,250.32
8. Approximate Rate of Return for 2011: (6) / (7)		5.78%	1.02%

### HISTORY OF RATE OF RETURNS

<b>Plan Year</b>	<b>Actuarial Value Rate of Return</b>	<b>Market Value Rate of Return</b>
2010	5.95 %	11.64 %
2009	(1.24) %	19.02 %
2008	(4.21) %	(18.54) %
2007		8.49 %
2006		11.47 %
2005		5.39 %
2004		9.19 %
2003		18.99 %
2002		(8.22) %
Five Year Average:		3.48%
Ten Year Average:		5.21%

## Schedule F

### Determination of Reserve Balances

	M.A.R.A.	C.A.R.A.	R.M.R.A.	TOTAL
Balance 1/1/2011	\$ 27,497,121.42	\$ 13,144,379.14	\$ 47,882,732.00	\$ 88,524,232.56
County Appropriations		3,180,461.00		
Member Contributions	2,247,438.17			
Net Investment Income		7,367,821.83		
Investment Expenses		(341,167.20)		
Member Contributions Refunded	(419,247.35)			
Pension Payments			(5,351,177.68)	
Death Benefits			(24,913.61)	
Retiree and Death Benefit Transfers	(1,151,061.69)	(1,786,778.07)	2,937,839.76	
Administrative Expenses		(5,521.20)		
Balance Before Interest	28,174,250.55	21,559,195.50	45,444,480.47	95,177,926.52
Interest Allocated in 2011	1,117,883.66	(2,984,427.91)	1,866,544.25	
Balance Before Actuarial Adjustments	29,292,134.21	18,574,767.59	47,311,024.72	95,177,926.52
Actuarial Adjustments		(1,599,635.28)	1,599,635.28	
Ending Balance 12/31/2011	29,292,134.21	16,975,132.31	48,910,660.00	95,177,926.52
Unrealized Appreciation				1,436,588.72
Total Assets (12/31/2011) (Market Value)				96,614,515.24

## Schedule G

### 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
2012	271	481	752	166	330	496
2011	268	484	752	168	331	499
2010	274	489	763	163	318	481
2009	276	476	752	161	312	473
2008	271	478	749	158	299	457
2007	264	482	746	149	294	443
2006	260	488	748	144	285	429
2005	257	486	743	138	269	407
2004	283	529	812	122	248	370
2003	288	522	810	119	255	374

## Schedule H

### Changes in Plan Participation From January 1, 2011 to January 1, 2012

<b>ACTIVE PARTICIPANTS</b>		
Number as of January 1, 2011		710
Changes During Plan Year:		
Retired	(-)	13
Terminated and Vested	(-)	12
Terminated	(-)	47
Died	(-)	0
New Participants	(+)	65
Number as of January 1, 2012		703

<b>RETIRED PARTICIPANTS</b>		
Number as of January 1, 2011		499
Changes During Plan Year:		
Returned to Active Service	(-)	0
Died	(-)	17
New Retirements from Active Service	(+)	13
New Surviving Annuitants	(+)	0
Vested Terminated Participants Whose Benefits Commenced	(+)	2
Deletions	(-)	1
Number as of January 1, 2012		496

<b>TERMINATED VESTED PARTICIPANTS</b>		
Number as of January 1, 2011		42
Changes During Plan Year:		
Terminations	(-)	3
Benefits Commenced	(-)	2
Died	(-)	0
New Termination's with Vesting	(+)	12
Number as of January 1, 2012		49

### Schedule I

#### Age, Service and Average Salary Profile of the Active Members on January 1, 2012.

MALES -- FULL YEARS OF SERVICE TO JANUARY 1, 2012									
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	3	0	0	0	0	0	0	3	\$ 29,332
25-29	17	10	0	0	0	0	0	27	\$ 39,001
30-34	7	12	11	0	0	0	0	30	\$ 47,055
35-39	4	6	14	6	1	0	0	31	\$ 43,127
40-44	6	11	5	7	2	0	0	31	\$ 39,252
45-49	4	5	1	5	7	3	0	25	\$ 49,959
50-54	5	7	7	6	0	10	2	37	\$ 42,599
55-59	5	7	6	6	4	2	4	34	\$ 42,988
60-64	2	8	5	2	3	2	3	25	\$ 49,095
65 +	4	1	2	1	1	0	0	9	\$ 37,653
Total	57	67	51	33	18	17	9	252	\$ 43,490

Average Age: 45.27  
Average Service: 11.51

FEMALES -- FULL YEARS OF SERVICE TO JANUARY 1, 2012									
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	10	0	0	0	0	0	0	10	\$ 25,829
25-29	29	20	0	0	0	0	0	49	\$ 34,346
30-34	14	21	15	0	0	0	0	50	\$ 33,714
35-39	12	12	14	3	0	0	0	41	\$ 38,793
40-44	14	10	14	13	6	0	0	57	\$ 36,898
45-49	14	9	10	8	13	4	0	58	\$ 39,094
50-54	11	8	15	11	10	16	5	76	\$ 39,350
55-59	8	9	13	13	7	6	9	65	\$ 38,781
60-64	4	8	6	3	5	4	5	35	\$ 37,526
65 +	0	0	3	3	2	1	1	10	\$ 35,356
Total	116	97	90	54	43	31	20	451	\$ 37,176

Average Age: 44.92  
Average Service: 11.98

**Schedule J**

**Actuarial Assumptions and Actuarial Cost Method for Funding Purposes, January 1, 2012.**

**Actuarial Assumptions**

**Mortality Rates:** The life expectancy of all members (active and retired) is determined in accordance with the mortality rates set forth in the 1983 Group Annuity Mortality Table 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 J--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 J--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**

4.5% per annum.

**Valuation Assets**

The assets at cost value adjusted by the past five-year average of the market to cost ratio of assets.

**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 Aggregate Actuarial Cost Method of funding was used to determine costs. Under this method, the valuation assets of the plan are subtracted from the present value of all projected benefits. The result, when divided by the present value of future compensation, gives a percentage normal cost factor which is applied to the estimated 2012 compensation of all members to arrive at the normal cost at the beginning of the plan year.

**Schedule K**

**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%	09/01/1949
1/80	1.250%	09/01/1953
1/70	1.429%	01/01/1970

- 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 K--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 K--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 K--Continued**

**14. Employee Contributions** Employees on the 1/70 Class must contribute between 8% and 18% of salary.

**15. Deposit Administrator** Investment Managers:  
 Sterling Capital Management  
 Emerald Advisers, Inc.  
 Fred Alger Management  
 Barrow, Hanley, Mewhinney and Strauss  
 M&T Bank  
 C.S. McKee

Custodian:  
 M&T Bank

Financial Consultant:  
 Cornerstone Advisors Asset Management

**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 nine times in the past from January, 1972 through January, 1990 and since then as follows:

PERCENTAGE CHANGE IN C.P.I.	EFFECTIVE DATE OF INCREASE
85 %	1/1/1992
85 %	1/1/1995
85 %	1/1/1997
85 %	1/1/1999
85 %	1/1/2000
85 %	1/1/2001
85 %	1/1/2003
85 %	1/1/2004
85 %	1/1/2006
85 %	1/1/2007

## Schedule L

### Historical Trend Information

REVENUES BY SOURCE					
Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous	Total
2002	\$ 1,968,708	\$ 0	\$ (24,964)	\$ 0	\$ 1,943,744
2003	2,090,784	631,779	4,348,340	0	7,070,903
2004	2,164,564	1,012,701	8,880,748	0	12,058,013
2005	1,998,158	943,363	4,618,822	0	7,560,343
2006	2,076,751	1,227,586	7,578,598	0	10,882,935
2007	2,102,354	1,217,811	9,530,301	0	12,850,466
2008	2,148,399	733,243	1,419,375	0	4,301,017
2009	2,201,308	2,217,034	605,208	0	5,023,550
2010	2,219,603	3,148,444	5,642,722	0	11,010,769
2011	2,247,438	3,180,461	7,367,822	0	12,795,721

EXPENSES BY TYPE				
Fiscal Year	Benefits	Refunds	Administrative/ Miscellaneous	Total
2002	\$ 2,584,579	\$ 345,521	\$ 444,358	\$ 3,374,458
2003	2,653,157	286,575	410,757	3,350,489
2004	3,700,747	738,554	486,302	4,925,603
2005	3,358,667	489,398	424,933	4,272,998
2006	3,859,608	438,828	405,903	4,704,339
2007	4,196,840	369,963	401,413	4,968,216
2008	4,434,263	572,674	402,785	5,409,722
2009	5,272,623	170,910	330,004	5,773,537
2010	5,136,282	331,720	352,128	5,820,130
2011	5,376,091	419,247	346,688	6,142,026