

# **Beaver County Employees' Retirement System**

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**Report on 2005 Actuarial Valuation Including  
Determination of County Annual Required  
Contribution for 2005**

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**September 16, 2005**

**HayGroup**

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for

**Beaver County Employes' Retirement Board**

Dan Donatello	Commissioner/Chairman
Joe Spanik	Commissioner
Charles A. Camp	Commissioner
Richard W. Towcimak	Controller/Secretary
Connie T. Javens	Treasurer

**September 16, 2005**

**CONFIDENTIAL**

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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, 2005 and to establish the proper appropriation for the 2005 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 Beaver County Employees' Retirement Plan as of January 1, 2005 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,

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## II. Findings

### Certified Annual Required Contribution (ARC)

Please note that the certified Annual Required Contribution which is reported on page 9 of this report and which must be funded in 2005 is \$3,737,244.00. 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 8 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	\$ 381,995.02	
Retired Members Annuity Reserve Account		\$ 381,995.02

### III. Schedules

#### Schedule A

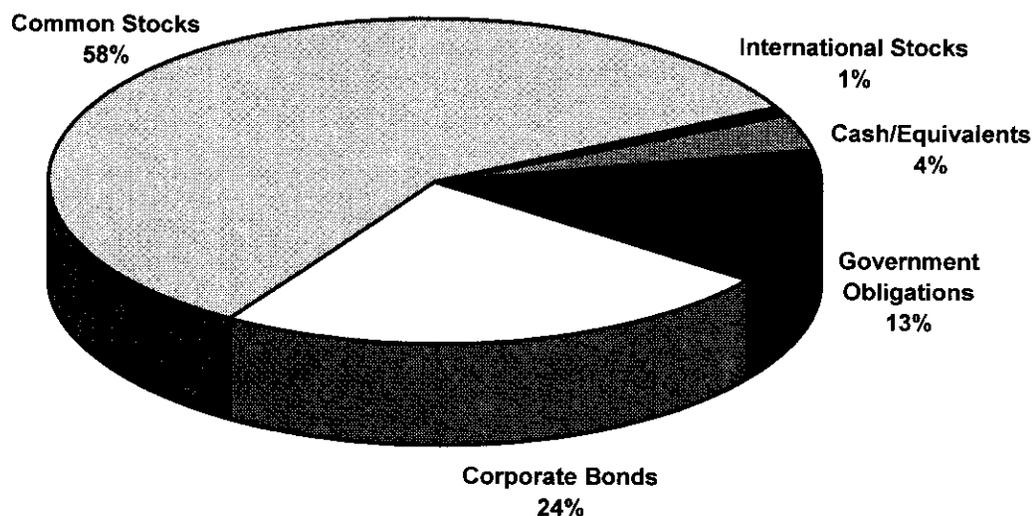
**Disclosure of Pension Information in Accordance with  
Statement No. 25 and Statement No. 27 of the  
Governmental Accounting Standards Board**

<b>BEAVER COUNTY EMPLOYEES' RETIREMENT SYSTEM</b>		
<b>STATEMENT OF CHANGES IN PLAN NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2004 AND 2003</b>		
<b>Additions</b>		
	<b><u>2004 Total</u></b>	<b><u>2003 Total</u></b>
Contributions		
County	\$ 3,652,159.00	\$ 3,325,708.00
Plan Members	\$ 4,313,640.82	\$ 4,478,111.20
Miscellaneous	\$ 23,358.93	\$ 12,459.03
Total Contributions	\$ 7,989,158.75	\$ 7,816,278.23
Investment Income		
Realized Gain	\$ 5,272,201.36	
Unrealized Gain	\$ 297,117.92	
Net Gain in Fair Value	\$ 5,569,319.28	\$ 16,023,255.20
Interest	\$ 1,741,706.35	\$ 1,130,874.76
Dividends	\$ 2,102,458.91	\$ 2,301,077.00
Investment Income	\$ 9,413,484.54	\$ 19,455,206.96
Less Investment Expense	\$ 455,526.80	\$ 350,021.19
Net Investment Income	\$ 8,957,957.74	\$ 19,105,185.77
Total Additions	\$ 16,947,116.49	\$ 26,921,464.00
<b>Deductions</b>		
Benefits	\$ 4,547,629.21	\$ 4,028,888.43
Refunds of Member Contributions	\$ 1,048,015.95	\$ 631,847.79
Administrative Expense	\$ 35,240.00	\$ 109,057.63
Total Deductions	\$ 5,630,885.16	\$ 4,769,793.85
Net Increase/(Decrease)	\$ 11,316,231.33	\$ 22,151,670.15
<b>Net Assets Held in Trust For Pension Benefits</b>		
Beginning of Year	\$ 132,079,379.35	\$ 109,927,709.20
End of Year	\$ 143,395,610.68	\$ 132,079,379.35

**Schedule A--Continued**

<b>BEAVER EMPLOYES' RETIREMENT SYSTEM</b>			
<b>STATEMENT OF PLAN ASSETS AS OF DECEMBER 31, 2004 AND 2003</b>			
<b>Assets</b>			
	<u>2004 Total</u>		<u>2003 Total</u>
Cash and Short-Term Investments	\$ 5,211,710.28	\$	5,038,101.30
Receivables	\$ 0.00	\$	0.00
Investments, at fair market value			
Government Obligations	\$ 18,912,099.95	\$	16,314,462.60
Corporate Bonds	\$ 34,473,712.89	\$	33,086,019.35
Common Stocks	\$ 83,762,056.03	\$	76,828,378.56
International Stocks	\$ 1,036,031.53	\$	812,417.54
Total Investments	\$ 138,183,900.40	\$	127,041,278.05
<b>Total Assets</b>	<b>\$ 143,395,610.68</b>	<b>\$</b>	<b>132,079,379.35</b>
<b>Liabilities</b>			
Refunds Payable and Other	\$ 0.00	\$	0.00
<b>Net Assets Held In Trust For Pension Benefits</b>			
	<u>\$ 143,395,610.68</u>	<u>\$</u>	<u>132,079,379.35</u>

**TOTAL ASSETS (MARKET VALUE 12-31-2004)**



**Schedule A -- Continued**

**Beaver County Employees' Retirement System**

**Notes to the Financial Statements for the Fiscal Year Ended December 31, 2004**

**Summary of Significant Accounting Policies**

**Basis of Accounting:** The Beaver 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, 2004, the date of the latest actuarial valuation:

Retirees and Beneficiaries Receiving Benefits	463
Terminated Plan Members Entitled to but not yet Receiving Benefits	31
Active Plan Members	1,430
Total	<u>1,924</u>
Number of Participating Employers	1

## **Schedule A--Continued**

### **Beaver County Employees' Pension System**

**Plan Description:** The Beaver 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 Beaver 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 9% 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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<b>Year</b>	<b>Annual Required Contribution</b>	<b>County Contribution</b>
1998	\$ 147,216	\$ 147,216
1999	\$ 0	\$ 0
2000	\$ 0	\$ 0
2001	\$ 0	\$ 0
2002	\$ 1,451,894	\$ 1,451,894
2003	\$ 3,325,708	\$ 3,325,708
2004	\$ 3,652,159	\$ 3,652,159
2005	\$ 3,737,244	\$

### 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	12/31/2004
Actuarial Cost Method	Aggregate **
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return *	7½%
Projected Salary Increases *	3.50%-4.5%; graduated .25% increments over 4 years
* Includes Inflation at	3%
** Plans that use the <u>aggregate actuarial cost method</u> are not required to present a schedule of funding progress. Separate determination and amortization of the unfunded actuarial liability are not part of the aggregate actuarial cost method and are not required when that method is used.	

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)
1998	147,216	0	0	147,216	147,216	0	0
1999	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0
2002	1,451,894	0	0	1,451,894	1,451,894	0	0
2003	3,325,708	0	0	3,325,708	3,325,708	0	0
2004	3,652,159	0	0	3,652,159	3,652,159	0	0
2005	3,737,244	0	0	3,737,244	0		

\* 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 (7½% 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, 2005. 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	\$ 49,888,966.61
County Annuity Reserve Account	\$ 42,213,010.86
Retired Members' Reserve Account	\$ 32,479,306.00
Unrealized Appreciation of Assets	\$ 18,814,327.21
<i>Total Assets, (Market Value) of the Beaver County Employees' Retirement Fund</i>	<i>\$ 143,395,610.68</i>
<b>LIABILITIES</b>	
Actuarial Present Value of:	
Accumulated Plan Benefits	
Vested (1,024)	\$ 33,648,658.00
Nonvested (406)	\$ 1,024,705.00
Future Benefit Accruals	\$ 55,189,750.00
Terminated Vested Benefits	\$ 1,037,834.00
Retired Benefits	\$ 32,479,306.00
Member Accumulated Deductions	\$ 49,888,966.61
<i>Total Liabilities of the Beaver County Employees' Retirement Fund</i>	<i>\$ 173,269,219.61</i>

## Schedule C

Schedule C determines the certified Annual Required Contribution (ARC) of \$ for 2005 for the Beaver County Employees' Retirement System.

<b>1. Actuarial Present Value of Projected Future Benefits:</b>		
a. Active Participants		\$ 89,863,113.00
Retirement Benefits	\$ 77,221,399.00	
Termination Benefits	\$ 7,655,244.00	
Death Benefits	\$ 4,986,470.00	
b. Terminated Vested Participants		\$ 1,037,834.00
c. Retired Members and Beneficiaries		\$ 32,479,306.00
Retirement Benefits	\$ 30,692,927.00	
Cost-of-Living Benefits	\$ 1,786,379.00	
d. Member Accumulated Deductions		\$ 49,888,966.61
e. Total (a) + (b) + (c) + (d)		\$ 173,269,219.61
<b>2. Valuation Assets</b>		
a. Actuarial Value of Plan Assets (see page 11)		\$ 138,546,845.35
b. Excess of actuarial value of assets over present value of future benefits for Administrative and CBU plans		\$ 2,465,193.95
c. Total (a) + (b)		\$ 141,012,039.30
<b>3. Present Value of Future County Normal Costs (1e) - (2c)</b>		\$ 32,257,180.31
<b>4. Present Value of Future Compensation of Active Members</b>		\$ 436,400,164.00
<b>5. County Normal Cost Accrual Rate (3) / (4)</b>		7.39%*
<b>6. Estimated 2005 Compensation Rate of Members</b>		\$ 50,571,637.00
<b>7. County Normal Cost for 2005 (5) x (6)</b> (Annual Required Contribution (ARC) for 2005)		\$ 3,737,244.00
<b>Notes:</b>		
* The equivalent normal cost accrual rate to be applied to actual 2004 salaries to determine reimbursable expenses is 7.65%.		

## **Schedule D**

The following are notes to Schedules B and C:

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

The balance of \$49,888,966.61 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, 2005. Since these accumulations represent the present value as of January 1, 2005, of future benefits, the reserve balance and liability are identical.

### **County Annuity Reserve Account**

The balance of \$42,213,010.86 in this account as of January 1, 2005 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, 2005 amount to \$32,479,306.00. 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>
2001	\$	106,082,91	\$ 118,377,291	1.1159
2002	\$	105,817,118	\$ 115,310,304	1.0897
2003	\$	105,605,978	\$ 109,927,709	1.0409
2004	\$	113,562,170	\$ 132,079,379	1.1631
2005	\$	124,581,283	\$ 143,395,611	1.1510
Average				1.1121

<b>ACTUARIAL VALUE OF ASSETS JANUARY 1, 2005</b>		
(1) Cost Value of Assets	\$	124,581,283.47
(2) Average Ratio		1.1121
(3) Actuarial Value of Assets (see line 2, page 9)	\$	138,546,845.35

### Schedule E

<b>APPROXIMATE RATE OF RETURN FOR 2004 PLAN YEAR (MARKET VALUE)</b>		
1. Market Value December 31, 2003	\$	132,079,379.35
2. Contributions Received During Year	\$	7,989,158.75
3. Benefits and Expenses Paid During Year	\$	6,086,411.96
4. Market Value December 31, 2004	\$	143,395,610.68
5. Non-Investment Increment: (2) - (3)	\$	1,902,746.79
6. Investment Increment: (4) - (1) - (5)	\$	9,413,484.54
7. Time Weighted Value of Assets: (1) + .5(5)	\$	133,030,752.75
8. Approximate Rate of Return for 2004: (6) / (7)		7.08%

### HISTORY OF RATE OF RETURNS

Plan Year	Rate of Return
2003	17.48 %
2002	(5.31) %
2001	(2.60) %
2000	(0.14) %
1999	8.16 %
1998	15.17 %
1997	18.77 %
1996	14.00 %
1995	25.71 %

Five Year Average: 3.30%  
 Ten Year Average: 9.83%

## Schedule F

### Determination of Reserve Balances

	M.A.R.A.	C.A.R.A	R.M.R.A.	TOTAL
Balance 1/1/2004	\$ 48,476,874.20	\$ 40,982,697.86	\$ 24,102,598.00	\$ 113,562,170.06
County Appropriations		3,652,159.00		
Member Contributions	4,313,640.82			
Net Investment Income		9,116,366.62		
Investment Expenses		-455,526.80		
Member Contributions Refunded	-1,048,015.95			
Pension Payments			-4,405,913.08	
Death Benefits			-141,716.13	
Retiree and Death Benefit Transfers	-4,593,718.96	-6,846,664.23	11,440,383.19	
Administrative Expenses		-35,240.00		
Miscellaneous		23,358.93		
Balance Before Interest	47,148,780.11	46,437,151.38	30,995,351.98	124,581,283.47
Interest Allocated in 2004	2,740,186.50	-3,842,145.50	1,101,959.00	
Balance Before Actuarial Adjustments	49,888,966.61	42,595,005.88	32,097,310.98	124,581,283.47
Actuarial Adjustments		-381,995.02	381,995.02	
Ending Balance 12/31/2004	49,888,966.61	42,213,010.86	32,479,306.00	124,581,283.47
Unrealized Appreciation				18,814,327.21
Total Assets (12/31/2004) (Market Value)				143,395,610.68

## 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
2005	453	1,008	1,461	137	315	452*
2004	508	1,073	1,581	116	271	387
2003	515	1,067	1,582	109	254	363
2002	489	1,044	1,533	100	239	339
2001	466	1,037	1,503	95	223	318
2000	441	1,011	1,452	93	210	303
1999	424	998	1,422	86	190	276
1998	411	959	1,370	82	174	256
1997	394	932	1,326	74	157	231
1996	366	889	1,255	67	143	210

\* This total does not include the 11 County Retirees who are receiving monthly retirement payments from Hartford in addition to cost-of-living payments from Beaver County Employees' Retirement Fund.

## Schedule H

### Changes in Plan Participation From January 1, 2004 to January 1, 2005

<b>ACTIVE PARTICIPANTS</b>		
Number as of January 1, 2004		1,559
Changes During Plan Year:		
Retired	(-)	66
Terminated and Vested	(-)	13
Terminated	(-)	106
Died	(-)	1
New Participants	(+)	57
Number as of January 1, 2005		1,430

<b>RETIRED PARTICIPANTS</b>		
Number as of January 1, 2004		387
Changes During Plan Year:		
Returned to Active Service	(-)	0
Died	(-)	7
New Retirements from Active Service	(+)	66
New Surviving Annuitants	(+)	2
Vested Terminated Participants Whose Benefits Commenced	(+)	2
Additions	(+)	2
Number as of January 1, 2005		452

<b>TERMINATED VESTED PARTICIPANTS</b>		
Number as of January 1, 2004		22
Changes During Plan Year:		
Terminated	(-)	2
Returned to Active Service	(-)	1
Benefits Commenced	(-)	2
Died	(-)	0
New Termination's with Vesting	(+)	13
Additions	(+)	1
Number as of January 1, 2005		31

### Schedule I

#### Age, Service and Average Salary Profile of the Active Members on January 1, 2005.

MALES -- FULL YEARS OF SERVICE TO JANUARY 1, 2005									
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	8	0	0	0	0	0	0	8	\$ 23,882
25-29	23	7	0	0	0	0	0	30	\$ 29,792
30-34	12	27	12	0	0	0	0	51	\$ 36,029
35-39	12	17	28	5	0	0	0	62	\$ 35,756
40-44	6	8	15	14	4	0	0	47	\$ 39,952
45-49	14	20	16	22	13	5	0	90	\$ 39,229
50-54	15	10	8	13	12	5	9	72	\$ 41,125
55-59	7	10	7	5	6	4	7	46	\$ 38,873
60-64	0	9	5	4	2	2	0	22	\$ 34,931
65 +	3	7	2	2	1	1	0	16	\$ 31,408
Total	100	115	93	65	38	17	16	444	\$ 37,315

Average Age: 44.86  
Average Service: 11.49

FEMALES -- FULL YEARS OF SERVICE TO JANUARY 1, 2005									
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	23	5	0	0	0	0	0	28	\$ 27,778
25-29	42	33	2	0	0	0	0	77	\$ 31,099
30-34	21	36	11	3	0	0	0	71	\$ 32,624
35-39	25	36	27	12	0	0	0	100	\$ 33,644
40-44	15	39	29	26	6	7	0	122	\$ 34,987
45-49	26	39	45	51	5	16	3	185	\$ 35,190
50-54	25	45	46	38	14	6	9	183	\$ 36,286
55-59	14	25	35	36	12	7	3	132	\$ 35,465
60-64	5	12	22	14	6	0	0	59	\$ 36,447
65 +	6	9	6	5	3	0	0	29	\$ 31,038
Total	202	279	223	185	46	36	15	986	\$ 34,487

Average Age: 45.83  
Average Service: 10.86

## Schedule J

### Actuarial Assumptions and Actuarial Cost Method for Funding Purposes, January 1, 2005.

#### 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.

**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:**

<b>LESS THAN FIVE YEARS OF SERVICE</b>					
<b>Age at Hire</b>	<b>Years of Service</b>				
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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	-	-	-	-

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



## 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%	01/01/1950
1/80	1.250%	01/01/1965
1/60	1.667%	01/01/1972

- 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,  
1.667% of 1/12th of Final "Average" Salary multiplied by years of credited service on the 1/60 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 1/80 Class must contribute between 7% and 17% of salary.

Employees on the 1/60 Class must contribute between 9% and 19% of salary.

**15. Deposit Administrator**

***Investment Managers:***

C.S. McKee  
MDL Capital  
Commonwealth Security  
RRZ Investments

**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 in the past as follows:

PERCENTAGE CHANGE IN C.P.I.	EFFECTIVE DATE OF INCREASE
25 %	1/1/1987
25 %	1/1/1989
25 %	1/1/1990
25 %	1/1/1993
25 %	1/1/1997
100 %	1/1/2000

## Schedule L

### Historical Trend Information

REVENUES BY SOURCE						
Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous	Total	
1995	\$ 2,645,126	\$ 2,342,402	\$ 5,353,102	\$ 18,982	\$ 10,359,612	
1996	2,865,954	2,449,741	7,910,251	92,685	13,318,631	
1997	3,012,789	2,597,521	7,919,249	2,857	13,532,416	
1998	3,192,144	147,216	13,096,158	719	16,436,237	
1999	3,431,982	0	7,616,767	1,058	11,049,807	
2000	3,674,766	0	7,734,917	10,760	11,420,443	
2001	3,916,060	0	(274,679)	390,836	4,032,217	
2002	4,247,750	1,451,894	(969,434)	6,692	4,736,902	
2003	4,478,111	3,325,708	5,259,729	12,459	13,076,007	
2004	4,313,641	3,652,159	9,116,367	23,359	17,105,526	

EXPENSES BY TYPE					
Fiscal Year	Benefits	Refunds	Administrative/ Miscellaneous	Total	
1995	\$ 1,801,672	\$ 361,326	\$ 288,568	\$ 2,451,566	
1996	1,899,687	355,421	361,912	2,617,020	
1997	2,078,567	436,748	401,799	2,917,114	
1998	2,141,239	472,988	446,035	3,060,262	
1999	2,534,386	570,863	484,691	3,589,940	
2000	2,737,690	906,973	523,173	4,167,836	
2001	2,911,218	718,986	667,813	4,298,017	
2002	3,754,457	729,366	464,218	4,948,041	
2003	4,028,888	631,848	459,079	5,119,815	
2004	4,547,629	1,048,016	490,767	6,086,412	