

ALLEGHENY COUNTY EMPLOYEES'  
RETIREMENT SYSTEM ACTUARIAL REPORT  
No. 30

VALUATION REPORT  
WITH  
EXECUTIVE SUMMARY

AS OF JANUARY 1, 2009

ALLEGHENY COUNTY EMPLOYEES'  
RETIREMENT SYSTEM ACTUARIAL REPORT  
No. 30

VALUATION AS OF JANUARY 1, 2009

# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

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# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

## PURPOSE OF THE REPORT AND ACTUARIAL CERTIFICATION

### Purpose

The principal purposes of the report are to:

- Indicate the contribution necessary to maintain total funded status ratio at 100% and compare this amount with the contribution currently made by active members and the County;
- Disclose the financial condition of the Fund;
- Provide information relating to Statement No. 25 of the Government Accounting Standards Board (GASB).

### Actuarial Certification

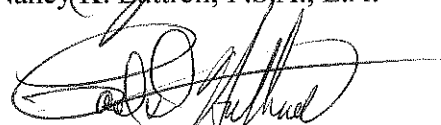
To the best of our knowledge, this report is complete and accurate and fairly reflects the actuarial condition of the Allegheny County Employees' Retirement System as of January 1, 2009 and has been prepared in accordance with generally accepted actuarial principles and practices relating to pension plans.

In our opinion, the assumptions used in preparing this actuarial report are individually and in the aggregate reasonably related to the experience under the plan and to reasonable expectations, and represent our best estimate as of the valuation date of anticipated experience under the plan.

Finally, this valuation was based upon the membership data submitted by the Retirement Board and the asset information supplied by the Board.

  
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Nancy K. Luttrell, F.S.A., E.A.

  
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Frank Canonico

  
\_\_\_\_\_  
Paul D. Halliwell, Project Coordinator

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**SUMMARY OF PRINCIPAL RESULTS**

	<i>January 1, 2008</i>	<i>January 1, 2009</i>
<b>Demographics</b>		
Active Participants		
Number	7,325	7,343
Average Age	46.4	46.7
Average Age at Hire	34.4	34.6
Average Past Service	12.0	12.2
Total Payroll (prior year)		
Reported	\$ 285,932	\$ 294,295
Calculated*	305,602	314,772
Covered Payroll**	317,380	326,803
 Average Pay		
Reported	39,056	40,078
Calculated*	41,743	42,867
 Inactive Participants		
Number in Pay Status	4,491	4,454
Average Age in Pay Status	73.8	74.1
Average Monthly Benefit	\$ 1,144	\$ 1,190
 Number of Terminated Vested	134	159
Average Age of Terminated Vested	50.6	50.1
Average Monthly Benefit	\$ 1,111	\$ 1,122
 Total Participants	11,950	11,956
 <b>Total Active Member and County Contributions during preceding 12 months</b>		
Dollars	37,219	37,249
Percentage of Payroll	12%	12%

\* Based on prior year's reported employee contributions.

\*\*Projected to next year using salary increase assumption.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**SUMMARY OF PRINCIPAL RESULTS (Continued)**

	<i>January 1, 2008</i>	<i>January 1, 2009</i>
	(\$ Amounts in Thousands)	(\$ Amounts in Thousands)
<b>Accrued Benefit Funded Status</b>		
Accrued Benefit Liability	865,690	871,609
<i>Market</i> Value of Assets	798,203	582,099
Accrued Benefit Funded Ratio	92.2%	66.8%
<b>Actuarial Liability Funded Status</b>		
Actuarial Liability	979,599	1,067,015
<i>Actuarial</i> Value of Assets	798,203	582,099
Funded Ratio	81.5%	54.6%
<b>Total Funded Status</b>		
Value of Total Liabilities	1,235,920	1,253,392
Value of Total Assets (Market Value of Existing Assets and Present Value of Future Contributions)	1,149,978	864,265
Total Ratio	93.0%	69.0%
<b>Total Normal Cost</b>		
Dollar	26,550	24,130
% of Payroll	8.40%	7.40%

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 1 - STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS  
AS OF DECEMBER 31, 2008**

	<i>Dollar Amount</i>	<i>% of Net</i>
A. Assets at Market Value		
Cash and cash equivalents	\$ 21,706,090	3.73%
Investments	559,995,211	96.21%
Accrued Interest and Dividends Receivable	1,883,518	0.32%
Contributions Receivable	2,520,680	0.43%
Receivable from Brokers and other assets	0	0.00%
Total Assets	<u>586,105,499</u>	<u>100.69%</u>
B. Liabilities		
Refunds payable and other accrued liabilities	3,063,427	0.53%
Liabilities for Securities Purchased and Other Miscellaneous	<u>942,749</u>	<u>0.16%</u>
Total Current Liabilities	<u>4,006,176</u>	<u>0.69%</u>
C. Net Assets Available for Benefits	\$ 582,099,323	100.00%

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 2 - CHANGES IN NET ASSETS  
AS OF DECEMBER 31, 2008**

		<i>Dollar Amount</i>	
A.	Balance in Fund at December 31, 2007 (at Market and Audited)	\$	798,202,684
B.	Adjustment from Audited Statement		0
C.	Income		
	1. Employee Contributions	18,671,324	
	2. County Contributions	18,577,232	
	3. Miscellaneous contributions	0	
	4. Interest	8,050,124	
	5. Dividends	7,361,868	
	6. Miscellaneous Income	274,382	
	7. Investment Management Fees	<u>(1,627,280)</u>	51,307,650
D.	Disbursements		
	1. Benefit Payments	62,373,702	
	2. Contribution Refunds	5,670,165	
	3. Salaries, Wages & related expenses	260,960	
	4. Administrative and miscellaneous expenses	<u>599,034</u>	68,903,861
E.	Realized and Unrealized Appreciation		<u>(198,507,150)</u>
F.	Balance in Fund at December 31, 2008 (A) + (B) + (C) - (D) + (E) (at Market and Audited)	\$	582,099,323

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 3 - NORMAL COST**

(\$ Amounts in Thousands)

<i>Item</i>	<i>January 1, 2008</i>	<i>January 1, 2009</i>
A. Actuarial Present Value of Future Benefits		
1. Active	\$ 713,617	\$ 730,654
2. In Pay Status	507,086	505,447
3. Terminated Vested	12,607	14,681
4. Total	<u>1,233,310</u>	<u>1,250,782</u>
B. Actuarial Accrued Liability	979,599	1,067,015
C. Present Value of Future Normal Cost	253,711	183,767
D. Benefit Normal Cost	26,289	23,869
E. Expense Loading	261	261
F. Total Normal Cost: D + E	26,550	24,130
G. Covered Payroll	317,380	326,803
H. Total Normal Cost as a % of Compensation	8.37%	7.38%

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 4 - ANALYSIS OF CHANGE IN UNFUNDED ACCRUED LIABILITY**

Plan Year December 31, 2007 to December 31, 2008

The following table develops the actuarial gain or loss that occurred during the prior plan year. The gain or loss measures the difference between actual experience and that expected based upon the actuarial assumptions in effect for the period under study. Specifically, we examine the changes in the unfunded actuarial accrued liability as determined by the actuarial funding method being used. Some of the changes are due to these experience variations (gains and losses) while others are the result of such items as benefit improvements and normal benefit accruals.

(\$ Amounts in Thousands)

<i>Item</i>	<i>Amount</i>
A. Expected Unfunded Actuarial Accrued Liability	
1. Unfunded Liability on December 31, 2007	\$ 181,396
2. Normal Cost	26,550
3. Interest on (1) and (2)	16,636
4. Contributions	37,249
5. Interest on (4)	1,490
6. Subtotal: (1)+(2)+(3)-(4)-(5)	<u>185,843</u>
7. Additional Liability due to:	
a. Plan Amendments	7,633
b. Method Changes	0
c. Assumption Changes	42,396
d. Subtotal: (a) + (b) + (c)	<u>50,029</u>
8. Expected Unfunded Liability on December 31, 2008: (6) + (7d)	<u>235,872</u>
B. Unfunded Actuarial Accrued Liability	
1. Actuarial Liability on December 31, 2008	1,067,015
2. Actuarial Value of Assets	<u>582,099</u>
3. Unfunded Actuarial Liability: (1) - (2)	484,916
C. Actuarial Gain (Loss): A(8) - B(3)	\$ (249,044)

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 5 - GASB 25 STATEMENT OF DISCLOSURE**

Plan Year January 1, 2008 to December 31, 2008

Governmental Accounting Standards Board Statement No. 25 (GASB 25) effective for fiscal years beginning after June 15, 1996 covers financial reporting for this pension plan. The financial statements and the required schedules are as follows and certain information is included for review by the Plan's auditor:

1. A statement of plan net assets: See Table 1 of this report
2. A statement of changes in plan net assets: See Table 2 of this report
3. A required schedule of funding progress: Table 5 of this report
4. A required schedule of employer contributions: Table 5 of this report

The actuarial assumptions and methods are the same as those listed under 2009 Actuarial Methods and Assumptions on Page 19. GASB 25 also requires certain notes to the financial statements that are outside the scope of this valuation.

**A. SCHEDULE OF FUNDING PROGRESS**

(\$ Amounts in Thousands)

<i>As of Dec. 31st</i>	<i>Actuarial Asset Value*</i>	<i>Actuarial Accrued Liability</i>	<i>Unfunded Actuarial Accrued Liability</i>	<i>Funded Ratio</i>	<i>Covered Payroll</i>	<i>Unfunded Liability as a % of Payroll</i>
2004	\$ 705,892	831,067	125,175	84.9%	266,043	47.1%
2005	707,475	863,695	156,220	81.9%	277,004	56.4%
2006	757,476	915,208	157,732	82.8%	291,731	54.1%
2007	798,203	979,599	181,396	81.5%	317,380	57.2%
2008	582,099	1,067,015	484,916	54.6%	326,803	148.4%

\*For December 31, 2006 and December 31, 2007 the methodology for determining the actuarial value of assets was market value.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 5 - GASB 25 STATEMENT OF DISCLOSURE (Cont)**

Plan Year January 1, 2008 to December 31, 2008

**B. SCHEDULE OF EMPLOYER CONTRIBUTIONS**

(\$ Amounts in Thousands)

<i>Year Ended December 31</i>	<i>Annual Pension Cost</i>	<i>Percentage Contributed</i>
2006	26,636	66.1%
2007	26,549	69.4%
2008	28,662	65.0%

NOTE:

The unfunded liability has been amortized over a rolling 15-year period and is added to the employer normal cost. This is the Annual Required Contribution (ARC) for the year. The unfunded liability is based on an Actuarial Value of Assets until 2007 and on Market Value for years beginning in 2007.

This report contains limited information related to GASB 25 and 27. Additional information is outside the scope of this report. The determination of the ARC is an Employer decision and not a function of the Allegheny County Retirement Board.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 6- ANALYSIS OF VESTED AND ACCRUED BENEFITS (Benefit Security Ratio)  
AS OF DECEMBER 31, 2008**

(\$ Amounts in Thousands)

<i>Item</i>	<i>Number of Participants</i>	<i>Amount</i>
A. Present Value of Vested Benefits		
1. Retired and Beneficiaries	4,454	\$ 505,447
2. Terminated Vested	159	14,681
3. Actives	7,343	351,481
4. Total Vested	11,956	<u>871,609</u>
B. Present Value of Non-Vested Benefits		See Note 4
C. Total Present Value of Accrued Benefits	11,956	<u>871,609</u>
D. Market Value of Assets		\$ 582,099
E. Accrued Benefit Funded Ratio		66.8%

NOTES:

1. The vested analysis considers only those benefits for which the Plan participants are vested on a "going-concern" basis and are based upon each participant's age and service as of the date indicated.
2. The present value amounts shown were computed based upon the valuation assumptions for mortality, retirement age and interest.
3. The present value amounts shown above do not include an allowance for administrative expenses.
4. Employees are always 100% vested in their own contributions and interest thereon. The value of the contributions with interest tends to be larger than the value of total accrued benefits in the early years; therefore no attempt is made to distinguish between non-vested and vested benefits.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 6- ANALYSIS OF ACCRUED BENEFITS AS OF DECEMBER 31, 2008 (continued)**

(\$ Amounts in Thousands)

				<i>Amount</i>
A. Present Value of Accumulated Plan Benefits as of December 31, 2007				\$ 865,690
B. Increase(Decrease) Attributable to:				
1. Plan Amendments				7,633
2. Changes in the nature of the Plan				0
3. Changes in Actuarial Assumptions and Method Change**				(35,541)
4. Additional Benefits Accumulated				35,338
5. Increase in Interest due to the Decrease in the Discount Period				66,533
6. Benefits Paid to Participants				(68,044)
7. Total Net Changes				<u>5,919</u>
C. Present Value of Accumulated Plan Benefits as of December 31, 2008				\$ 871,609
D. Vested/Nonvested Active Population by Subgroups				
	<u>Police &amp; Fire</u>	<u>Non-Uniform</u>	<u>All Others</u>	<u>Total</u>
Vested	145	3,599	463	4,207
Nonvested*	<u>103</u>	<u>2,833</u>	<u>200</u>	<u>3,136</u>
	248	6,432	663	7,343
* Members are always 100% vested in their own contributions plus interest regardless of years of service.				
** Mid year decrement change and assumption change				

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 7 - ACTUARIAL BALANCE SHEET (Total Funded Status Ratio)**

The following table develops the ratio of A) assets (existing assets and the discounted value of those assets that are expected to be provided by active member and county future contributions) to B) discounted value of liabilities for benefits that have been earned and that are expected to be earned in the future.

Ultimately a ratio of 100% or more is necessary for the long-term solvency of the Fund.

(\$ Amounts in Thousands)

<i>Description</i>	<i>January 1, 2008</i>	<i>January 1, 2009</i>
<b>A. Liabilities</b>		
1. Present Value of Future Benefits	\$ 1,233,310	\$ 1,250,782
2. Present Value of Future Non-Investment Related Expenses	2,610	2,610
3. Total Liabilities	<u>1,235,920</u>	<u>1,253,392</u>
<b>B. Assets</b>		
1. Market Value of Assets	798,203	582,099
2. Present Value of Future Contributions*	351,775	282,166
3. Total Assets	<u>\$ 1,149,978</u>	<u>\$ 864,265</u>
<b>C. Ratio of Assets to Liabilities</b>	93.0%	69.0%

\* Measured using 12% combined active member and county contribution rate.

NOTES:

- 1) In general, asset gains or liability gains must occur over the long term or the member/County rate must increase in order to achieve the 100%. What may be equally important for the long term solvency is the influx of new participants.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 8- PLAN PARTICIPANTS INCLUDED IN THE VALUATION**

The following table traces the flow of participants from the prior valuation date to the current valuation date. This table is based upon census data provided by the County.

<i>Reason for Change</i>	<i>Active</i>	<i>Terminated</i>			<i>Survivor</i>	<i>Total</i>
		<i>Vested</i>	<i>Disabled</i>	<i>Retired</i>		
Participants at 1/1/2008	7,325	134	176	3,629	686	11,950
New Participants	622	0	0	0	0	622
Returned to Work	8	(2)	0	0	0	6
Deaths (Refund or survivor pension)	(3)	(3)	(8)	(147)	(39)	(200)
New Survivors	0	0	0	0	31	31
Retirements	(106)	(11)	0	117	0	0
Disability	(4)	0	4	0	0	0
Terminated						
Vested	(43)	43	0	0	0	0
Non Vested or Refunds	(456)	(5)	0	0	0	(461)
Net Adjustments	0	3	(1)	6	0	8
Participants at 1/1/2009	7,343	159	171	3,605	678	11,956

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 9: AGE/SERVICE/SALARY DISTRIBUTION**

*Profile Of Age, Service And Salaries Of Active Participants as of December 31, 2008  
All Active Employees (Uniformed and Non-Uniformed)*

	0-4	5-9	10-14	15-19	20-24	25-29	30 +	Total	Ave Pay
Age Group									
under 20	16	-	-	-	-	-	-	16	
	296,690	-	-	-	-	-	-	296,690	18,543
20-24	209	3	-	-	-	-	-	212	
	5,535,340	84,141	-	-	-	-	-	5,619,481	26,507
25-29	465	91	2	-	-	-	-	558	
	14,632,877	3,278,516	64,723	-	-	-	-	17,976,116	32,215
30-34	289	259	59	-	-	-	-	607	
	10,356,923	10,537,715	2,580,168	-	-	-	-	23,474,806	38,673
35-39	253	257	172	53	1	-	-	736	
	8,915,819	10,948,246	8,235,444	2,424,361	30,773	-	-	30,554,644	41,514
40-44	248	199	165	181	68	4	-	865	
	8,687,357	8,369,128	7,707,596	8,502,445	2,928,517	147,412	-	36,342,455	42,014
45-49	231	237	190	199	173	98	13	1,141	
	8,334,340	9,387,832	8,076,104	9,207,619	8,411,354	4,259,171	467,270	48,143,691	42,194
50-54	210	208	162	197	189	175	138	1,279	
	7,549,467	8,221,723	7,170,485	8,817,290	8,532,281	8,031,900	5,238,616	53,561,761	41,878
55-59	160	191	125	172	140	102	214	1,104	
	5,788,371	7,144,361	5,165,370	7,251,274	6,052,466	4,647,523	9,726,511	45,775,875	41,464
60-64	71	100	67	106	73	37	117	571	
	2,641,187	3,545,554	2,548,198	4,315,847	2,969,023	1,619,540	5,318,451	22,957,800	40,206
65 +	39	60	41	44	29	16	25	254	
	1,202,313	1,905,853	1,432,345	1,772,316	1,418,016	632,304	1,228,770	9,591,918	37,763
Total Number	2,191	1,605	983	952	673	432	507	7,343	
Total Pay	73,940,683	63,423,070	42,980,434	42,291,151	30,342,430	19,337,850	21,979,617	294,295,235	
Ave. Pay	33,747	39,516	43,724	44,423	45,085	44,764	43,352	40,078	
Average Age	46.7		Average Service				12.2		

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 10-CONTRIBUTION FUNDING CAPACITY**

A pension plan *funding policy* should be designed to create a rational and systematic method for employer and active employee contributions to the pension plan in order to have sufficient funds available to pay for pension benefits as they come due.

The Allegheny County Retirement Board sets the contribution rate on an annual basis. That contribution rate is shared equally between members and the Employer as required by statute. Historically that rate is influenced by the estimated rate necessary to bring the Total Funded Status Ratio to 100% together with consideration of avoiding annual fluctuations of the member and Employer contribution rates. Unless the significant asset loss and related investment earnings on that loss is recovered, the estimated long-range level contribution necessary for the Fund is **approximately 29% of Compensation** with such amount being equally shared by the County and the active employees. See details below. The contribution rate is currently 12% of Compensation.

On an open group basis it appears that 18% of Compensation would be sufficient (9.0% County and 9.0% employee).

<i>Item</i>	<i>Amount (x 1,000)</i>
A. Present Value of Liabilities and Expenses (Table 7)	1,253,392
B. Actuarial Value of Plan Assets	<u>582,099</u>
C. Present Value of Liabilities and Expenses not covered by Plan Assets: (A.)	671,293
D. Present Value of Future Member Payroll:	2,349,414
E. Annual Cost as a percent of payroll (County and Members)	28.57%
F. Annual Cost as a percent of payroll (County): One half of item E.	14.29%
G. TFSR Contribution to make Ratio 100%	
County: Item F rounded to the nearest one half of one percent	14.50%
Member: same as County	14.50%

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 11 - PROJECTION OF TOTAL FUNDED LIABILITY RATIO IF ALL ASSUMPTIONS ARE MET (CLOSED GROUP BASIS)**

(\$ Amounts in Thousands)

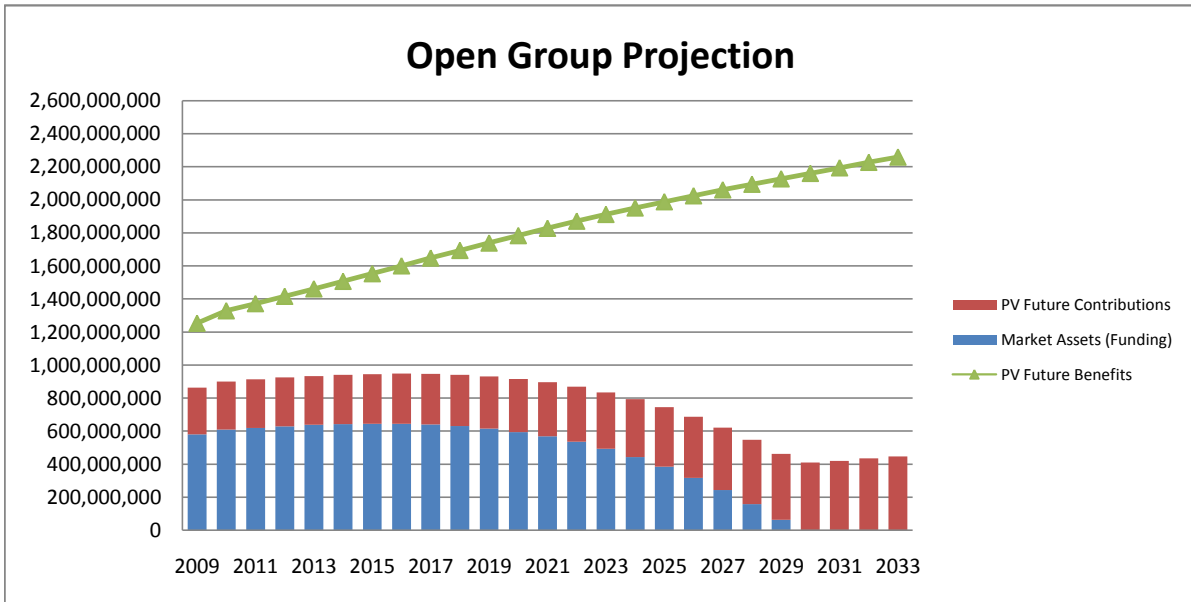
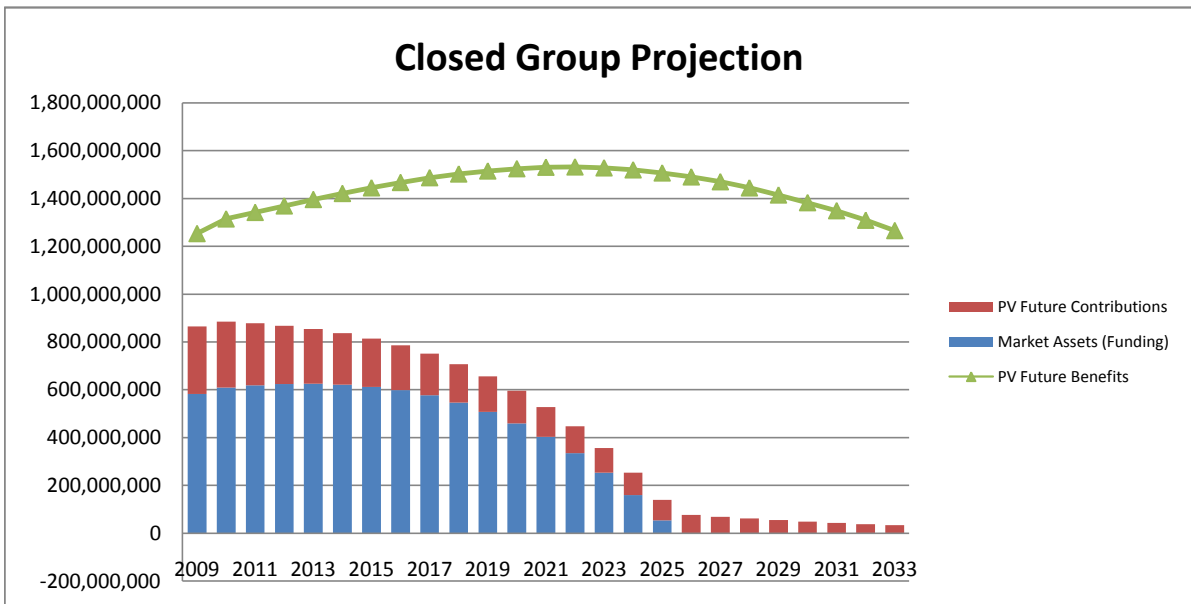
<i>Year</i>	<i>Expected Present Value of Future Benefits</i>	<i>Expected Assets in Plan</i>	<i>Expected Value of Future Contributions</i>	<i>Total Present Value of current and Future Assets</i>	<i>6% Contribution Rate - Expected Total Funded Status</i>
2009	\$1,253,392	\$582,099	\$282,166	\$864,265	69%
2010	1,317,481	609,842	274,446	884,288	67%
2011	1,344,721	618,367	259,240	877,607	65%
2012	1,371,978	623,550	244,404	867,954	63%
2017	1,490,295	577,027	173,582	750,609	50%
2022	1,535,894	334,518	113,618	448,136	29%
2027	1,474,587	0	68,844	68,844	5%
2032	1,314,472	0	38,530	38,530	3%
2034	1,227,172	0	30,090	30,090	3%

NOTES:

1. The projections are based upon a combined rate of 12.0% of compensation
2. Basis of projection: Closed Group Valuation Method. This means that no new participants are assumed to come into the plan. While there would be no new liability associated with those members, there would also be no additional employee and County contributions.
3. Additional COLA's have not been anticipated in this projection
4. Table 12 on the following page illustrates the assumed progression over the next 25 years of the assets and liabilities both on an open group basis and a closed group basis if all actuarial assumptions are met. Clearly adjustments will be required to the contribution rate, asset return, or plan liabilities for the necessary improvement in the overall health of the fund going forward.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**TABLE 12 - PROJECTION OF ACTUARIAL BALANCE SHEET ITEMS**



**NOTES**

Assumes contributions (County and Member) contributions are 6% each.

Basis of projection:

Closed Group Valuation Method. This means that no new participants are assumed to come into the plan.

While there would be no new liability associated with those new members, there would also be no additional employee and County contributions.

Open Group Valuation Method: This means new participants are assumed to come into the plan. There would be new liability associated with those new members as well as additional employee and County contributions.

# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

## DEFINITIONS

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**Actuarial Present Value of Future Benefits (PVFB):**

Value at a point in time of all projected future benefit payments for current plan members (active, those who quit and will be entitled to a benefit sometime in the future and those in pay status). The value is determined using actuarial assumptions regarding future events.

**Actuarial Cost Method:**

A methodology that allocates the PVFB to past service and to expected future service.

**Actuarial Accrued Liability(AAL):**

The portion of PVFB allocated to **past service** by the Actuarial Cost Method. Note that the total PVFB for all non-active members is allocated to past service.

**Actuarial Present Value of Future Normal Cost (PVFNC):**

The portion of PVFB allocated to expected **future service** by the Actuarial Cost Method. Note that a future service portion applies only to active members.

**Normal Cost (NC):**

The portion of PVFNC that is allocated to the current year.

**Unfunded Liability:**

Portion of the AAL not covered by plan Assets.

**Present Value of Accrued Benefits:**

Value at a point in time of all future benefit payments for current plan members (active, those who quit and will be entitled to a benefit sometime in the future and those in pay status) based on pension salary and service to date. The value is determined using actuarial assumptions regarding future events except that no provision is made for salary increases or additional service that may be earned.

## ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

### DEFINITIONS (continued)

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The **Accrued Benefit Funded Status** reflects the relationship between the Actuarial Value of Benefits that have been accrued through the end of the current plan year and the Market Value of the Assets.

The **Actuarial Liability Funded Status** is, historically, perhaps the oldest measurement of funding progress and solvency and is the relationship between the *Actuarial Liability* and the *Actuarial Value* of existing assets. The Actuarial Liability is determined by the “Actuarial Method” used by the Fund’s actuary (in this case, the method commonly known as “Entry Age Normal”) and by the assumptions established by the actuary.

The **Total Funded Status** reflects not only existing assets and liabilities, but considers the value of future contributions, future benefit accruals and future expenses. The ratio formed between the Value of Total Assets (based on Market Value) and the Value of Total Liabilities represents the Fund’s ability to meet the long-range funding commitment demanded by the plan’s benefit structure. It is possible for a fund to exhibit strong funding factors when limited to accrued benefits and assets and, at the same time, be in funding jeopardy going forward.

The **GASB 25 Disclosure** is a funding progress disclosure required by the Governmental Accounting Standards Board. The figures developed for this purpose are identical to those used in the development of the Actuarial Liability Funded Status.

ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

2009 ACTUARIAL METHODS AND ASSUMPTIONS

Assumptions shown in italics have changed since the last valuation.

**Mortality:**

1. Pre and Post-Retirement: RP-2000 with projections for future improvement through 2007 by scale AA.

2. Post-Disability: RP 2000 Disability Table. Sample rates are shown below for the period after disability retirement:

<u>Age</u>	<u>Male</u>	<u>Female</u>
40	0.02257	0.00745
55	0.03544	0.01654
75	0.08207	0.05223

*Interest: 11.0% for 2009 and 8.0% per annum thereafter, Net of investment-related expenses*

*Withdrawal: For Non-Uniformed employees, rates of withdrawal in accordance with the unisex select and ultimate table developed by the 2003 Society of Actuaries (SOA) Pension Plan Termination and Retirement Study. For Uniformed employees, 70% of the Non-Uniformed rates.*

Upon termination, 50% of the non-uniformed members are assumed to elect a refund of contributions in lieu of a deferred benefit at retirement and 25% of all other groups are assumed to do so.

**Salary Scale:** Salaries are assumed to increase in accord with the following table. This assumption includes GSA as well as merits, grade and promotion-related adjustments.

<u>Age</u>	<u>Rate/Yr</u>
<25	6.0%
25 to 29	5.5%
30 to 34	4.5%
35 to 39	4.0%
40 >	3.5%

**Disability:**

1. Police and Firefighters: Sample rates are shown below:

<u>Age</u>	<u>Rate of Disablement</u>
25	0.00060
40	0.00300
55	0.00590

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**2009 ACTUARIAL METHODS AND ASSUMPTIONS (continued)**

2. All Other Employees: Sample rates are shown below:

<u>Age</u>	<u>Rate of Disablement</u>
25	0.0003
40	0.0004
55	0.0039

*For all groups, the disability rates are shut off once the employee reaches Normal Retirement Age since there is no difference, at that point, between Normal Retirement and Disability Retirement benefits.*

**Retirement Age:**

*1. Police, Firefighters, Sheriffs, Prison Guards and Probation Officers: A percentage of those eligible to retire at age 50 and later are assumed to retire. Sample rates are shown below:*

Age	Police and Fire			Sheriff, Probation Officers, Jail Guards			Uniformed Employees
	Under 20 Years	20 Years (first eligible for full benefits)	21 Years and over	Under 20 Years	20 Years (first eligible for full benefits)	21 Years and over	Greater than 8 Years
50-54	0%	25%	25%	N/A	N/A	N/A	N/A
55-59	10%	25%	10%	10%	25%	25%	4%
60	10%	40%	40%	10%	25%	25%	10%
61	10%	25%	10%	10%	25%	10%	10%
62	10%	25%	10%	10%	40%	40%	20%
63	10%	25%	10%	10%	25%	10%	15%
64	10%	25%	10%	10%	25%	10%	15%
65	10%	25%	10%	10%	25%	10%	25%
66-69	10%	25%	10%	10%	25%	10%	15%
70	100%	100%	100%	100%	100%	100%	100%

**Spouses Benefit:** Husbands are assumed to be four year older than their wives and 100 percent of the active participants are assumed to be married.

**Future Expenses:** Investment Expenses are assumed to be a direct offset to the Investment income of the fund.

Annual non-investment expenses for the year 2009 were assumed to be \$261,000.

## ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

### 2009 ACTUARIAL METHODS AND ASSUMPTIONS (continued)

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**Actuarial Cost Method:** The actuarial accrued liability and normal cost are determined under the Entry Age Normal actuarial cost method. Under this method, normal cost percent is determined separately for each active participant as the level percent of expected career earnings required to fund expected plan benefits. A dollar normal cost is computed by applying this percent to the participant's expected earnings for the current plan year. The participant's actuarial accrued liability is the difference between the present value of all future plan benefits expected to be paid on his behalf and the present value of his future normal costs. This actuarial accrued liability represents the amount of assets that would theoretically be on hand at the valuation date if the current plan provisions and assumptions had always been in effect, historical experience conformed exactly to assumptions, and the participant's individual normal cost had been contributed each year.

Actuarial accrued liability for non-active participants is determined as the actuarial present value of the benefits expected to be paid; no normal cost is determined for these participants.

The normal cost and actuarial accrued liability for the plan are the sum of the individual normal costs (plus non-investment-related expenses expected to be paid from the trust during the plan year) and accrued liabilities.

**GASB 25:** The same actuarial assumptions are used for the other funding requirements.

#### **Asset Valuation Method:**

Market Value

#### **Code Section 415 and 401(a)(17) Limits:**

The Federally mandated annual benefit limit (\$195,000 in 2009) and compensation limit (\$245,000 in 2009) were projected to increase at 3% per year.

# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

## SUMMARY OF PLAN PROVISIONS

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### GENERAL

**Plan Year:** January 1 - December 31

**Governing Statute:** P.L. 723, No. 230 (Second Class County Code)

**Effective Date:** July 28, 1953

**Last Amended:** Act No. 2002-185

### DEFINITIONS

**Final Average Salary:** Monthly average of the highest twenty-four months of compensation in last forty-eight preceding retirement. The "cap" on compensation was removed in 2000, provided the employee makes the required contributions (See Page 27)

**Early Retirement:** Reduced retirement benefits at age 55 with at least 8 years of service. (¶ 1701, ¶ 1710(a))

#### **Retirement Dates:**

Voluntary Normal Retirement: ¶ 1710(b)

1. Police and Firefighters: Any police officer or firefighter is eligible to voluntarily retire and receive a normal retirement benefit if he has attained age 50 and has at least 20 years of service.
2. Sheriffs, Deputy Sheriffs, Prison Guards and Probation Officers: Any sheriff, deputy sheriff, prison guard and probation officer is eligible to voluntarily retire and receive a normal retirement benefit if he has attained age 55 and has at least 20 years of service.
3. All Other Employees: All other County employees are eligible to voluntarily retire and receive a normal retirement benefit if they have attained age 60 and have at least 20 years of service.

# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

## SUMMARY OF PLAN PROVISIONS (Continued)

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### Involuntary Retirement: ¶ 1710(b)

#### 1. Under Age 50:

An employee under age 50 who has twenty or more years of service and who is dismissed through no fault of his or her own may elect to receive immediately upon retirement a retirement allowance equal to 70% of the benefit he or she would have been entitled to receive had he or she been age 60 at the time of the dismissal and election.

An employee who does not elect the reduced retirement benefit upon dismissal will receive an unreduced retirement allowance and service increment, if any, upon attainment of age 60.

#### 2. Over Age 50:

An employee who has 20 or more years of service and has reached the age of 50, who is separated from service by reason of no cause or act of his or her own is entitled, upon application to the Retirement Board, to an unreduced retirement allowance plus a service increment, if any, based on the employee's age and years of service upon separation and application.

### Early Retirement: ¶ 1710(h) and definition in ¶ 1701

Any County employee who has completed at least 8 but less than 20 years of service is eligible to retire and receive a benefit commencing at age 60. Reduced benefits are available as early as age 55.

### Disability Retirement: (¶ 1711)

Any County employee who has completed at least 12 years of service and who was employed (or re-employed) prior to attaining age 55 who becomes mentally incapacitated or totally and permanently disabled is eligible to receive a disability retirement benefit. There is no age requirement to receive this benefit.

### Deferred Vested Retirement: ¶ 1713 (Options I & II)

Any County employee who terminates employment with at least 8 years of service is eligible for a deferred unreduced vested benefit beginning at age 60, or a benefit reduced by one half of 1% per month prior to age 60 but not before age 55.

# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

## SUMMARY OF PLAN PROVISIONS (Continued)

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### **Ancillary Benefit Eligibility**

#### Pre-Retirement Spouse's Benefit: ¶ 1712(e) and (f)

Any County employee may elect the spouse's benefit at any time prior to retirement. The election is irrevocable after attained age 50.

1. Class I: If a County employee shall die after electing this coverage, and prior to retirement after attaining age 50 but prior to attaining age 55 and after completing at least 8 years but less than 20 years of service, his surviving spouse shall be eligible to receive a surviving spouse's benefit when the deceased employee would have attained age 55.
2. Class II: If a County employee shall die after electing this coverage but prior to retirement and prior to age 50 and with 20 or more years of service, his surviving spouse shall be eligible to receive a surviving spouse's benefit immediately.

#### Post-Retirement Spouse's Benefit: ¶ 1712(e)

If a County employee shall die after retiring and with a survivorship election in effect, his spouse shall be eligible to receive a surviving spouse's benefit.

#### "Pop-Up" Benefit: ¶ 1712(f):

If the spouse of a County employee who retired with a survivorship election in effect shall predecease or be legally separated from the employee, he shall be eligible to receive the "pop-up" benefit.

#### Death Benefits (Lump Sum):

1. Pre-Retirement; ¶ 1714(a): Any County employee who dies prior to retirement, without making a survivorship election and is ineligible for any form of retirement benefit shall be eligible for a refund of his contributions with interest.
2. Post-Retirement; ¶ 1714(b): Any County employee who dies after retirement but prior to receiving retirement benefits (including spouse's benefits) equal to his total contributions shall be eligible for a refund of the difference between his total contributions and retirement benefits received.

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**SUMMARY OF PLAN PROVISIONS (Continued)**

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**Benefit Amounts**

Normal Retirement (Voluntary): ¶ 1712(a)

50 percent of final average salary (FAS) plus 1 percent of FAS for each year of service between 20 and 40 years

Normal Retirement (Involuntary): ¶ 1712(a)

50 percent of final average salary (FAS) plus 1 percent of FAS for each year of service between 20 and 40 years

Early Retirement:

2-1/2 percent of final average salary times years of service (up to 20 years) plus 1 percent of final average salary times years of service between 20 and 40 years.

Disability Retirement: ¶ 1711

50 percent of final average salary (FAS) plus 1 percent of FAS for each full year of service between 20 and 40 years

Deferred Vested Retirement: ¶ 1713

The deferred vested benefit amount is governed by years of service in the following schedule:

<u>Years of Service</u>	<u>Amount</u>
8 to 19	Early Retirement Benefit Amount
20 or more	Normal Retirement Benefit Amount

Involuntary Retirement: ¶ 1713

(If not eligible for Normal Retirement but with 20 or more years of service); The benefit as described on page 23.

# ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM

## SUMMARY OF PLAN PROVISIONS (Continued)

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### Pre-Retirement Spouses Benefit: ¶ 1712(e), (f)

The benefit payable while a survivorship election is in effect is the normal or early retirement benefit reduced by a percentage based on the difference in age between an employee and his spouse. If the spouse is:

- |                        |  |
|------------------------|--|
| 1. Same age or younger | 10 percent plus 1 percent per year (in excess of five) for each year younger (maximum reduction of 30 percent) |
| 2. Older               | 10 percent minus 1/2 percent per year for each year older (minimum reduction of 5 percent)                     |

The benefit is also reduced by 1/2 percent per month prior to age 60 that it is received. Maximum reduction for this purpose is 30 percent.

### Post-Retirement Spouse's Benefit: ¶ 1712(e)

50 percent of the monthly benefit being received while both were alive, to those employees who elected the survivorship option under the pre-retirement spouse benefit

### "Pop-Up" Benefit: ¶ 1712(f)

Reinstatement of the benefit prior to the decrease described above.

### Death Benefits (Lump Sum): ¶ 1714(b)

1. Pre-Retirement: Sum of contributions made during:
  - a. The third and later years of employment accumulated at the designated rate of interest for each year, and
  - b. The first two years of employment with no interest
2. Post-Retirement
  - a. The difference between the total employee contributions made, and
  - b. All benefits paid

**ALLEGHENY COUNTY EMPLOYEES' RETIREMENT SYSTEM**

**SUMMARY OF PLAN PROVISIONS (Continued)**

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Payment of Benefits: ¶ 1712 (e), (f)

Benefits are payable monthly on a life annuity basis unless a survivorship election is in effect. In this event benefits are payable for the life of the employee and reducing to 50 percent of the benefit amount if he predeceases his spouse. If the spouse predeceases the employee the "Pop-Up" benefit reinstates the life annuity.

Monthly Retirement Allowance Increases: ¶ 1708 (e)

Based solely on the annual actuarial valuation, the Board has the authority to increase the monthly retirement allowance for members who have been retired for at least one year. The Total Funded Status Ratio (TFSR) is calculated at an interest rate which is the arithmetic average of the current valuation interest rate and the interest rates used for the four preceding valuations. The increase is based on the table below:

<u>TFSR</u>	<u>Percentage Increase</u>
< 110%	0% or more at discretion of the Board
>= 110%	2% or more at discretion of the Board. However, the resulting TFSR must be at least 110%.

The percentage increase is applied to the average monthly retirement allowance paid in the December prior to the valuation date and rounded down to the next lower dollar. This increase is added to the monthly retirement allowance of those eligible and is paid beginning in the January next following.

Contributions:

1. Employee Contributions: ¶ 1708: Employees contribute a percentage of pensionable compensation as specified annually by the Board. The current level is 6%.
2. County Contributions: ¶ 1709: Allegheny County contributes an amount equal to the sum of contributions of the employees.

NOTES:

- 1 With the removal of the covered compensation "cap", new retirees, in order to benefit from the cap's removal, will be required to contribute (at the required contribution rate of not more than 6.0%) on their uncapped level of pay for a minimum of five years. This requirement can be met through either ongoing employment or by making a "buy-back" contribution. County contributions will match any buy-back contributions.

Miscellaneous:

Certain retired police and firefighters received a special postretirement adjustment (Act 64 of 2002) that was effective for pension payments after June 30, 2002.

Discretionary COLA's of \$20/month were granted effective January 1, 2007 and January 1, 2009.