VALUATION AS OF 01/01/2009

PRINCIPAL RESULTS OF THE VALUATION

Below is a summary of the principal results of this year's valuation compared with the previous valuation. Amounts for each valuation period reflect the actuarial cost method, assumptions and plan benefits in effect at that time.

CONTRIBUTION LIMITATIONS	<u>J</u>	As of anuary 1, 2008	Ja	As of muary 1, 2009
Recommended Contribution	\$	198,608	\$	1,898,864
Percentage of Payroll		4.84%		91.33%
Expected Employee Contribution	\$	198,381	\$	98,849
SUPPORTING INFORMATION				
Market Value of Assets	\$	83,327,598	\$	55,905,465
Actuarial Value of Assets	\$	83,327,598	\$	61,496,011
Present Value of Accumulated Benefits	\$	79,917,891	\$	82,687,268
Funding Ratio – Actuarial Value of Assets as a Percentage of Present Value of Accumulated Benefits		104.3%		74.4%
Funding Ratio Discount Rate		7.5%		7.5%
Number of Lives Included in the Valuation		497		490
Present Value of All Future Benefits	\$	85,637,574	\$	84,249,712

VALUATION AS OF 01/01/2009

EXECUTIVE SUMMARY

Purpose and Scope

The principal purposes of this actuarial valuation report are:

- 1. To present our calculation of the Plan contributions under the Knox County Employee Benefit System funding policy,
- 2. To review plan experience during the year ended December 31, 2008, and the funded status of the plan as of January 1, 2009, and
- 3. To determine the funded status of accumulated plan benefits, accumulated vested benefits, and plan funding progress in accordance with Governmental Accounting Standards Board Statements No. 25, 27 and other Financial Accounting Standards.

The valuation is based upon employee data and financial information provided by Knox County. This data was not audited or otherwise verified by us other than for tests of reasonable consistency with prior year data.

Actuarial Methods and Assumptions

For the January 1, 2009 plan year, all methods and assumptions remained the same as those used in the January 1, 2008 valuation except for the assumed retirement age, salary projection and the determination of actuarial value of assets. In light of the experience study performed in 2008, the assumed retirement age was lowered from age 63 to age 60 and the salary projection was lowered from 4.0% to 3.0%. We also changed the method used to determine plan actuarial value of assets. Each year's investment gain or loss will be recognized over five years beginning with the 2008 investment gain or loss.

Plan Experience

During 2008 the market value of plan assets decreased from \$83,327,598 to \$55,905,465 with an investment return of approximately -27.52%. This investment performance was far below the 7.5% assumption, creating an asset loss of about \$28,275,000. We implemented asset smoothing, phased in over 5 years beginning on January 1, 2009. We have incorporated a 10% minimum/maximum corridor around the market value of assets. This resulted in valuation assets of \$61,496,011, thereby reducing the asset loss to about \$22,675,000. The plan also experienced a liability gain of approximately \$625,000, resulting in a net actuarial loss of about \$22,050,000.

Contribution Requirements

The suggested employer contribution for the 2009 fiscal year is \$1,898,484. Please see page 7 for more details. This large increase in the suggested contribution is entirely due to the poor investment performance of the plan's assets in 2008.



VALUATION AS OF 01/01/2009

EXECUTIVE SUMMARY (Continued)

Funding Status

The plan's funding ratio as shown on page one decreased from 104.3% in 2008 to 74.4% in 2009.

This report has been prepared in accordance with generally accepted actuarial standards and procedures, and conforms to the Guidelines for Professional Conduct of the American Academy of Actuaries. It is based upon the employee and financial data submitted to USI Consulting Group by the plan sponsor and the retirement plan provisions as outlined herein.

I, Dennis E. Jacobs, FSA, EA, MAAA, am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

USI CONSULTING GROUP

Dennis E. Jacobs, FSA, EA, MAAA

Vice President and Actuary

hime Packer

Senior Actuarial Consultant



FINANCIAL STATEMENT AS OF 1/01/2009

ASSETS	01/01/2008	01/01/2009
Cash (and money market funds)	0.00	0.00
Accrued Income	76,734.97	63,455.37
Receivables	0.00	0.00
Investments	0.00	0.00
Bond Funds Corporate (debt and equity instruments)	83,250,862.65	55,842,009.36
Real Estate Equity Fund	0.00	0.00
Other - Cash Equivalents	0.00	0.00
Total Investments	83,250,862.65	 55,842,009.36
Buildings & Other Property used in Plan Operation	0.00	0.00
Insurance Contracts	0.00	0.00
Other Assets	 0.00	 0.00
Total Assets	\$ 83,327,597.62	\$ 55,905,464.73
LIABILITIES AND NET ASSETS		
Payables	0.00	0.00
Acquisition Indebtedness	0.00	0.00
Other Liabilities	 0.00	 0.00
Total Liabilities	0.00	0.00
NET ASSETS	\$ 83,327,597.62	\$ 55,905,464.73
STATEMENT OF RECEIPTS AND DISBURSEMENTS		
Net Assets at Beginning of Year		\$ 83,327,597.62
Contributions Received or Receivable		
Employer	250,000.00	
Employees	194,416.06	
Others	0.00	
Total Contributions	0.00	444,416.06
Dividends and Income		1,047,450.03
Other Income		0.00
Net Realized Gain (Loss)		(676,733.02)
Net Unrealized Gain (Loss)		 (22,583,861.17)
Total Income		(21,768,728.10)
Distribution of Benefits		
Directly to Participants or Beneficiaries	5,006,045.27	•
Other	0.00	5,006,045.27
Fees and Commissions		647,359.52
Other Expenses	·	 0.00
Total Expenses		5,653,404.79
Net Income (loss)		(27,422,132.89)
NET ASSETS AT END OF YEAR		\$ 55,905,464.73



DETERMINATION OF VALUATION ASSETS AS OF 1/1/2009

1. ASSET GAIN/(LOSS) AS OF 1/1/2009

(1) Expected market value of assets as of 1/1/2009:	
(a) Market value of assets as of 1/1/2008	\$ 83,327,598
(b) Expected return on assets at 7.5%	\$ 6,249,570
(c) Contributions	\$ 444,416
(d) Benefit Payments and Expenses	\$ (5,653,405)
(e) Net interest on (c) - (d), weighted for timing	(195,337)
(f) Total: (a) + (b) + (c) + (d) + (e)	\$ 84,172,842
(2) Actual Market value of assets as of 1/1/2009:	\$ 55,905,465
(3) Asset gain/(loss) as of 1/1/2009: (2) - (1)(f)	\$(28,267,377)
2. DETERMINATION OF VALUATION ASSETS AS OF 1/1/2009	
(1) Market value of assets as of 1/1/2009:	\$ 55,905,465
(2) Amortization of asset gain/(loss) over a five year period:	

Total:		\$(22,613,902)

Portion Not

Gain/(Loss) X Yet Recognized = Amortization

4/5

\$(22,613,902)

(3) Accrued contributions as of 1/1/2009: \$

Asset

\$(28,267,377)

(4) Valuation assets as of 1/1/2009: (1) - (2) + (3) \$ 78,519,366

3. VALUATION ASSETS AS OF 1/1/2009

Year Ending

December 31

2008

(1) Valuation assets as of $1/1/2008$: (1) + (2) + (3) + (4) + (5)	\$ 83,327,598
(2) Contributions, including receivables:	\$ 444,416
(3) Benefit payments:	\$ (5,006,045)
(4) Plan expenses:	\$ (647,360)
(5) Return on assets:	<u>\$(16,622,598)</u>
(6) Valuation assets as of $1/1/2009$: (1) + (2) + (3) + (4) + (5)	\$ 61,496,011
(7) 110% of Market Value	\$ 61,496,011
(8) Final Actuarial Value of Assets, no more than (7).	\$ 61,496,011



VALUATION RESULTS AS OF JANUARY 1, 2009

1. PRESENT VALUE OF FUTURE BENEFITS

The value of all projected retirement, death, disability, and vested termination benefits expected to be paid to all current plan participants, discounted to the valuation date with interest, mortality, withdrawal, and disability decrements.

	<u>Lives</u>	Retirement	<u>Death</u>	Withdrawal	Disability	<u>Total</u>
Active	53	15,717,267	44,934	841,027	624,343	17,227,571
Terminated	19	2,137,449	19,413	0	0	2,156,862
Retired	<u>418</u>	64,865,279	<u>0</u>	<u>0</u>	<u>0</u>	<u>64,865,279</u>
Totals	490	82,719,995	64,347	841,027	624,343	84,249,712

2. ENTRY AGE ACCRUED LIABILITY

The portion of the present value of future benefit attributable to prior normal costs.

	Active	16,969,217
	Terminated	2,156,862
	Retired	64,865,279
	Total	83,991,358
3.	ACTUARIAL VALUE OF ASSETS	61,496,011
4.	UNFUNDED ACCRUED LIABILITY (2 - 3)	22,495,347

5. DEVELOPMENT OF CREDIT BALANCE

(1) Minimum Contribution as of 7/1/2008 - prior year	198,608
(2) Actual Employer Contribution - 7/2008	250,000
(3) Interest on Employer Contribution	0
(4) Credit Balance (2 + 3 - 1)	51,392

6. ENTRY AGE NORMAL COST

The amount required to fund the present value of benefits as a level percent of pay from entry age to retirement age.

A. Total Normal Cost	128,171
B. Expected Employee Contributions	<u>98,849</u>
C. Employer Normal Cost	29,322



CONTRIBUTION REQUIREMENTS FOR PLAN YEAR ENDING DECEMBER 31, 2009

With recent experience, the Plan now shows an Unfunded Accrued Liability using the Individual Entry Age Normal cost method. The Recommended Employer contribution will be the Plan's Normal Cost reduced by Expected Employee Contributions (see pg. 6) plus a 27 year amoritization of the Past Service Base in effect on January 1, 2009 (see below) reduced by the Plan's Credit Balance (also on page 6).

RECOMMENDED PLAN CONTRIBUTION

CH	A T	Rί	71	٦¢	٠

(1) Employer Normal Cost		29,322
(2) Outstanding Charge Base	22,495,347	
(3) Amortization of Outstanding Charge Base		1,851,934
(4) Credit Balance		51,392
(5) Total Charges = $(1) + (3) - (4)$, not less than zero		1,829,864
(6) Interest Charge on (1) and (3) and (4)		68,620

Annual Contributions

	<u>2008</u>	<u>2009</u>
Total Recommended Employer		
Contribution as of Beginning of the Plan Year	191,429	1,829,864
the Fith Feth	191, 129	1,025,001
Total Recommended Employer		
Contribution as of Beginning of		
fiscal year starting July 1	198,608	1,898,484
Expected Employee Contributions		
for the Plan Year	198,381	98,849
	,	,

AMORTIZATION SCHEDULE

-					
1)	esc	rı	าวใ	11	nn

Description					
	Year	Initial	Outstanding	Amortization	Years
	Est.	Amount	Balance	Payment	Remaining
Past Service Base	2009	22,495,347	22,495,347 22,495,347	1,851,934 1,851,934	26



PARTICIPANT DATA AS OF 1/1/2009

Active employees under retirement age Number Total annual compensation Average accrued benefit Average projected benefit Average attained age Average prior service									
Other active and inactive employments Number Average accrued benefit Average attained age					21 2,299.13 62.14				
Terminated deferred vested, de Number Average accrued benefi Average attained age					19 869.75 58.84				
Retired employees, beneficiari Number Average monthly beneficiari Average attained age					418 1,056.17 67.23				
RECONCIL	IATION O	F PARTIO	CIPANT ST	TATUS					
Prior Valuation	Active 70	Inactive 0	Deferred Vested 21	Pay <u>Status</u> 406	<u>Total</u> 497				
Terminated - vested Cashed Out Death Entered as Beneficiary Retired Rehired Data Corrections	0 0 0 0 (17)	0 0 0 0 0 0	0 0 0 0 (2) 0	0 (3) (4) 0 19 0	0 (3) (4) 0 0 0				
Current Valuation	53	0	19	418	490				



SUMMARY OF PLAN PROVISIONS

Effective Date

Shall mean for credited service July 1, 1987 and for all other purposes June 26, 1990.

Eligibility

Participation

Any person who is a "teacher" as defined by the Court of Appeals in its opinion of December 30, 1987 in the case of Knox County v. The City of Knoxville, et al, and who is entitled to maintain membership in a local pension system as a result of their membership in any applicable plan of the City of Knoxville Pension System on June 30, 1987, and who thereafter is employed as a result of the City of Knoxville ceasing to operate a separate school system and is so regularly employed by the Knox County Board of Education.

Normal Retirement

Eligibility

Each member shall be eligible to retire at age 62 or on the first day of any of the thirty-five months next following age 62.

Benefit

A monthly benefit payable for life, computed as of normal retirement date as one-twelfth of credited service multiplied by the sum of (A) and (B):

- (A) Benefit Rate A times average base earnings
- (B) Benefit Rate B times average excess earnings

Benefit Rate A and Benefit Rate B shall vary according to the member's last birthday at time benefit payments are to commence, as follows:

	Benefit	Benefit
<u>Age</u>	Rate A	Rate B
62 or earlier	.75%	1.50%
63	.78%	1.58%
64	.84%	1.66%
65 or later	.88%	1.76%

This amount is then reduced by the benefit accrued under the applicable City of Knoxville retirement plan as of June 30, 1987.



SUMMARY OF PLAN PROVISIONS (Continued)

Minimum Benefit

The monthly benefit, including 50% of the primary Social Security benefit, shall not be less than \$10 per year of credited service, with a maximum of \$250.

Earnings

Total compensation

Base Earnings

That part of earnings in any calendar year which does not exceed \$4,800.00 per annum.

Excess Earnings

That part of earnings in any calendar year which are in excess of base earnings.

Credited Service

Years and completed calendar months of service as an employee of either the City of Knoxville or Knox County.

Average Earnings

A 3-year arithmetic average determined for the number of full calendar years of credited service during which the earnings were the highest, or number of full calendar years actually completed if less than 3.

Accrued Benefit

Normal retirement benefit based on service and compensation up to the determination date less that benefit accrued under the applicable City of Knoxville retirement plan as of June 30, 1987.

Early Retirement

Eligibility

Completion of 25 years of credited service.

Benefit

Upon early retirement, a member may elect to receive either (a) a deferred monthly benefit equal to his accrued benefit commencing at normal retirement date, or (b) a reduced benefit equal to the actuarially equivalent benefit described in (a) above, commencing immediately.

Disability Not In Line of Duty

Eligibility

Completion of 15 years of credited service.

Benefit

Accrued benefit, based on credited service at time of disablement, payable immediately, plus a lump sum equal to six times the accrued monthly benefit.



SUMMARY OF PLAN PROVISIONS (Continued)

Disability in Line of Duty

Eligibility

Disablement in the course of performance of duty as an employee.

Benefit

Accrued benefit, based on credited service projected to age 62, payable immediately and reduced by any workers' compensation

benefits paid.

Death Benefit

Eligibility

Completion of 15 years of credited service.

Benefit

50% of the monthly benefit that the participant would have been entitled to if he/she had elected the 50% joint and survivor form of payment, payable at the earliest time benefits could have commenced to the participant.

Deferred Vested

Eligibility

Completion of 10 years of credited service.

Benefit

A deferred monthly benefit equal to the accrued benefit commencing at normal retirement date, determined as of the date of termination, provided the member leaves his contributions in the fund.

Return of Employee Contribution

A minimum of employee contributions with interest is paid on death, termination, or retirement.

Normal Form of Annuity

Life Annuity

Optional Forms of Annuity

Certain and Life, Joint and Survivor, Cash Refund. Such options will be actuarially equivalent to a life annuity.

Employee Contributions

Each employee who is a member shall contribute to the fund an amount equal to (a) plus (b) where:

- (a) The contribution rate shall be 3 percent of base earnings, and
- (b) The contribution rate shall be 5 percent of excess earnings.



SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

ACTUARIAL COST METHOD

Individual Entry Age Normal Cost.

Under this method, the annual cost is equal to the normal cost, plus amortization of unfunded accrued liabilities over a fixed period of years selected within the minimum (10 years) and maximum (5 to 30 years) periods permitted by law.

The normal cost is the sum of individual normal costs, determined as a level percentage of compensation which would have been necessary to fund the employee's projected retirement, death and withdrawal benefits, from entry age (the age at which the employee would have entered the plan had it been in effect on his employment date), to his retirement age. Thus, the dollar normal cost is expected to increase with the salary projection assumption.

The actuarial accrued liability is the accumulation, based on the actuarial assumptions, of all assumed prior normal costs. Thus, it represents the amount of reserves, which would be held by the plan, had it always been in effect for the present group of participants and had plan experience followed that predicted by the actuarial assumptions. The unfunded accrued liability is the excess, if any, of the accrued liability over the plan assets.

Actuarial gains and losses arising from differences between plan experience and that predicted by the actuarial assumptions, as measured by the difference between actual and expected unfunded accrued liabilities, are amortized over 5 years.

ACTUARIAL ASSUMPTIONS

Post-Retirement

Mortality - 1983 Group Annuity Mortality Table for Males and Females

Investment Return -7.5% per annum.

Assumed benefit increases -2.75% per annum.

Pre-Retirement

Mortality - 1983 Group Annuity Mortality Table for Males and Females

Investment Return -7.5% per annum.

Salary projection -3.0% per annum.



SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

ACTUARIAL ASSUMPTIONS (Continued)

Expense loading - None

Retirement age – 60 or immediately if older.

Disability rates – Rates set forth below.

Withdrawal rates – Rates set forth below.

Pre-retirement Decrement Rates

	Mortality		With	drawal	Disability		
Age	Male	Female	Male	Female	Male	Female	
20	0.038%	0.032%	0.000%	0.000%	0.000%	0.000%	
25	0.046%	0.036%	6.100%	5.925%	0.000%	0.000%	
30	0.061%	0.044%	5.850%	5.460%	0.400%	0.400%	
35	0.086%	0.057%	5.097%	4.861%	0.400%	0.400%	
40	0.124%	0.078%	2.701%	3.891%	0.400%	0.400%	
45	0.218%	0.113%	2.060%	3.444%	0.420%	0.420%	
50	0.391%	0.193%	2.997%	2.889%	0.730%	0.730%	
55	0.613%	0.351%	3.271%	3.015%	1.400%	1.400%	
60	0.916%	0.566%	6.537%	3.372%	2.480%	2.480%	

ASSET VALUATION

Each plan year's investment gain or loss is recognized over five years.



ACCUMULATED PLAN BENEFITS UNDER FAS 35

Actuarial Present Values of Accumulated Plan Benefits (Accumulated Benefit Obligation):	<u>1/01/2008</u>	1/01/2009
Vested Benefits		
Participants currently receiving payments	60,135,606	64,865,279
Other Participants		
Active Employees	17,250,080	15,665,127
Deceased and Disabled Employees	0	0
Deferred Vested Terminated Employees	2,532,205	2,156,862
Total - Other Participants	19,782,285	17,821,989
Total Vested Benefits	79,917,891	82,687,268
Nonvested Benefits	0	0
Total Actuarial Present Values of Accumulated Plan Benefits	79,917,891	82,687,268
Discount Rate	7.50%	7.50%



SCHEDULE OF FUNDING PROGRESS

	Actuarial	Actuarial Accrued	Unfunded			UAAL as a
Actuarial	Value of	Liability (AAL)	AAL	Funded	Covered	Percentage of
Valuation	Assets	EAN (prior to 1/1/05	(UAAL)	Ratio	Payroll	Covered Payroll
		Aggregate)				
<u>Date</u>	<u>(a)</u>	(b)	<u>(b - a)</u>	<u>(a / b)</u>	<u>(c)</u>	((b - a) / c)
01/01/1997	31,532,498	31,532,498	0	100.00%	16,518,534	0.00%
01/01/1998	55,425,760	55,425,760	0	100.00%	16,280,062	0.00%
01/01/1999	62,622,721	62,622,721	0	100.00%	15,714,131	0.00%
01/01/2000	70,243,735	70,243,735	0	100.00%	14,392,249	0.00%
01/01/2001	69,634,862	69,634,862	0	100.00%	14,009,264	0.00%
01/01/2002	72,917,044	72,917,044	0	100.00%	13,254,219	0.00%
01/01/2003	71,458,839	71,458,839	0	100.00%	12,286,006	0.00%
01/01/2004	73,472,465	73,472,465	0	100.00%	11,014,729	0.00%
01/01/2005	74,889,828	82,120,286	7,230,458	91.20%	7,595,733	95.19%
01/01/2006	75,174,360	83,066,476	7,892,116	90.50%	6,274,664	125.78%
01/01/2007	84,154,462	84,362,290	207,828	99.75%	5,236,764	3.97%
01/01/2008	83,327,598	84,657,462	1,329,864	98.43%	4,102,017	32.42%
01/01/2009	61,496,011	83,991,358	22,495,347	73.22%	2,018,191	1114.63%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year	Annual		
Ended	Required	Actual	Percentage
<u>June 30</u>	Contribution	Contribution	Contributed
1997	2,797,910	697,248	24.92%
1998	2,522,434	17,366,919	688.50%
1999	773,683	778,642	100.64%
2000	357,275	343,534	96.15%
2001	0	400,000	N/A
2002	344,411	600,000	174.21%
2003	412,445	600,000	145.47%
2004	784,838	784,838	100.00%
2005	881,447	881,447	100.00%
2006	739,370	739,370	100.00%
2007	771,772	771,772	100.00%
2008	135,786	135,786	100.00%
2009	198,608	250,000	125.88%
	,	•	

GOVERNMENT ACCOUNTING STANDARDS BOARD STATEMENT No. 27

	06/30/1999	06/30/2000	06/30/2001	06/30/2002	06/30/2003	06/30/2004	06/30/2005	06/30/2006	06/30/2007	06/30/2008	06/30/2009
NPO: Net Pension Obligation/(Asset) at beginning of period	4,411,099	4,376,410	4,360,656	3,931,267	3,649,183	3,437,034	3,413,870	3,385,016	3,356,407	3,328,039	3,299,911
2. Annual Pension Cost:											
Annual Required Contribution (ARC)	773,683	357,275	0	344,411	412,445	784,838	881,447	739,370	771,772	135,786	198,608
b. Interest on NPO	352,888	350,113	348,852	314,501	291,935	274,963	256,040	253,876	251,731	249,603	247,493
c. Adjustments to ARC *	(382,617)	(379,608)	(378,242)	(340,997)	(316,529)	(298,127)	(284,894)	(282,486)	(280,098)	(277,731)	(275,383)
d. Total = $(a)+(b)+(c)$	743,954	327,780	(29,389)	317,916	387,851	761,674	852,594	710,761	743,404	107,658	170,718
3. Contributions made	778,642	343,534	400,000	600,000	600,000	784,838	881,447	739,370	771,772	135,786	250,000
4. Increase in NPO = $(2)(d)$ - (3)	(34,688)	(15,754)	(429,389)	(282,084)	(212,149)	(23,164)	(28,853)	(28,609)	(28,368)	(28,128)	(79,282)
5. NPO at end of period = $(1)+(4)$	4,376,410	4,360,656	3,931,267	3,649,183	3,437,034	3,413,870	3,385,016	3,356,407	3,328,039	3,299,911	3,220,629
Amortization Period: Interest Rate:	25 8.0%	25 8.0%	25 8.0%	25 8.0%	25 8.0%	25 8.0%	25 7.50%	25 7.50%	25 7.50%	25 7.50%	25 7.50%
intologi Rate.	0.070	0.070	0.070	0.070	0.070	0.070	7.5070	7.5070	7.5070	7.5076	7.5070



^{*} The adjustment is a level dollar amortization of the NPO at beginning of period.