Employees Retirement System of the City of St. Louis

Actuarial Valuation and Review as of October 1, 2009 (REVISED)

The Segal Company
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June 3, 2010

Board of Trustees
Employees Retirement System of the City of St. Louis
St. Louis, Missouri

Dear Board Members:

We are pleased to submit this revised Actuarial Valuation and Review as of October 1, 2009. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2010 and analyzes the preceding year's experience. It is based on the recommended changes presented in the Analysis of Actuarial Experience During the Period October 1, 2004 through September 30, 2009.

The census information on which our calculations were based was prepared by the System and the financial information was provided in the Report of the Secretary. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Harold S. Cooper, FSA, MAAA, EA and Thomas D. Levy, FSA, MAAA, EA.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate.

Sincerely,

THE SEGAL COMPANY

By:

Harold S. Cooper, FSA, MAAA, EA	*Thomas D. Levy, FSA, MAAA, EA*
Vice President and Actuary	*Senior Vice President and Chief Actuary*

SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

SECTION 3

SUPPLEMENTAL INFORMATION

SECTION 4

CERTIFICATE OF ACTUARIAL VALUATION

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Purpose

This revised report has been prepared by The Segal Company to present a valuation of the Employees Retirement System of the City of St. Louis as of October 1, 2009. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of October 1, 2009, provided by the Board;
- The assets of the Plan as of September 30, 2009, provided by the Report of the Secretary; and
- Actuarial assumptions regarding investment earnings, future salary increases, employee terminations, retirement, death, etc., as chosen by the Board.

Significant Issues in Valuation Year

- In accordance with the ordinance, the scheduled contribution for the Plan year ended September 30, 2009 was $26.1 million, or 10.92% of compensation. Actual contributions for the year ended September 30, 2009 totaled $27.3 million.
- The scheduled contribution for the current Plan year (October 1, 2009 through September 30, 2010) is $28.5 million, or 11.85% of compensation. We suggest that the level of contributions to the Fund be made at the scheduled contribution level, consistent with the Ordinance.
- On a market value basis, the asset return for the year ended September 30, 2009 was -3.09%. Due to the deferral of recognition of a portion of the investment losses, the actuarial rate of return was 1.52%, compared to the 8.00% assumption. As of September 30, 2009, the actuarial value of assets (capped at $667.7 million) represents 120% of the market value ($556.4 million).

  The Plan’s asset valuation method requires that the actuarial value of assets be neither more than 120% nor less than 80% of the market value of assets. Since the preliminary calculation of the actuarial value exceeds 120% of market value of assets, the actuarial value of assets has been set equal to 120% of the market value of assets for this valuation. Typically, when this happens, the actuarial asset smoothing method is less effective at smoothing, and the actuarial cost results may be more volatile.

The actuarial valuation report as of October 1, 2009 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. For example, a 10% change in the current year's actuarial value of assets would produce a $5,723,761 change in the scheduled contribution level, or 2.38% of compensation.

- As indicated in Section 2, Subsection B of this report, the total unrecognized investment loss as of September 30, 2009 is $111,277,868. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.00% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.00% rate and all other actuarial assumptions are met, the contribution requirements would still increase in each of the next few years.
- 115 members entered the DROP in the year ended September 30, 2009, compared to 113 in 2008 and 105 in 2007. During the past year, the ninth year of the DROP, 115 participants who were previously in the DROP left the program, either by commencing payment or by resuming benefit accruals. Therefore, as of October 1, 2009, 416 active members are participating in the DROP, the same number as last year. After review of the retirement experience of DROP participants and all other Plan experience, we recommend no change in the assumed number of years between entering the DROP and retirement. However, to account for the additional cost associated with the resumption of active participation, we have increased the liability and normal cost associated with the retirement decrement by 3%.
- Several of the actuarial assumptions were changed based on an experience study recently completed. The assumption changes, described in Exhibit V of Section 4, decreased the scheduled contribution by $1,468,312, or 0.61% of projected compensation.
- The projected compensation has been adjusted such that each participant's compensation does not exceed this year's Section 401(a)(17) limit of $245,000.

Summary of Key Valuation Results

	2009	2008
Contributions for plan year beginning October 1:		
Scheduled	$28,498,534	$26,072,575
Actual	--	27,252,035
Funding elements for plan year beginning October 1:		
Normal cost	$16,894,606	$17,461,741
Market value of assets	556,389,337	590,881,560
Actuarial value of assets	667,667,205	674,016,719
Actuarial accrued liability	794,686,379	765,842,026
Unfunded actuarial accrued liability	127,019,174	91,825,307
GASB 25/27 for plan year beginning October 1:		
Annual required contributions	$28,498,534	$26,072,575
Actual contributions	TBD	27,252,035
Percentage contributed	TBD	104.52%
Funded ratio	84.02%	88.01%
Covered payroll	$240,409,390*	$238,701,628
Demographic data for plan year beginning October 1:		
Number of retired participants and beneficiaries	3,918	3,818
Number of vested former participants	2,517	2,494
Number of active participants	5,641	5,756
Total compensation	$240,409,390*	$238,701,628
Average compensation	42,618*	41,470

TBD = To be determined

**Subject to the Section 401(a)(17) limit.*

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, vested terminated participants, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A and B.

A historical perspective of how the participant population has changed over the past ten valuations can be seen in this chart.

CHART 1

Participant Population: 2000 – 2009

Year Ended September 30	Active Participants	Vested Terminated Participants*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
2000	5,948	2,025	3,882	0.99
2001	5,980	2,072	3,848	0.99
2002	6,186	2,092	3,796	0.95
2003	6,035	2,150	3,860	1.00
2004	5,770	2,308	3,763	1.05
2005	5,756	2,392	3,755	1.07
2006	5,674	2,434	3,758	1.09
2007	5,712	2,480	3,774	1.09
2008	5,756	2,494	3,818	1.10
2009	5,641	2,517	3,918	1.14

** Beginning in 2001, rehires are included in both the active and vested terminated participant counts.*

Active Participants
Plan costs are affected by the age, years of creditable service and compensation of active participants. In this year's valuation, there were 5,641 active participants (including 416 DROP participants) with an average age of 47.2, average years of creditable service of 12.3 years and average limited compensation of $42,618. The 5,756 active participants (including 416 DROP participants) in the prior valuation had an average age of 47.1, average service of 12.1 years and average compensation of $41,470.

Inactive Participants
In this year's valuation, there were 2,517 participants with a vested right to a deferred or immediate vested benefit.

These graphs show a distribution of active participants by age and by years of creditable service.

CHART 2

Distribution of Active Participants by Age as of September 30, 2009

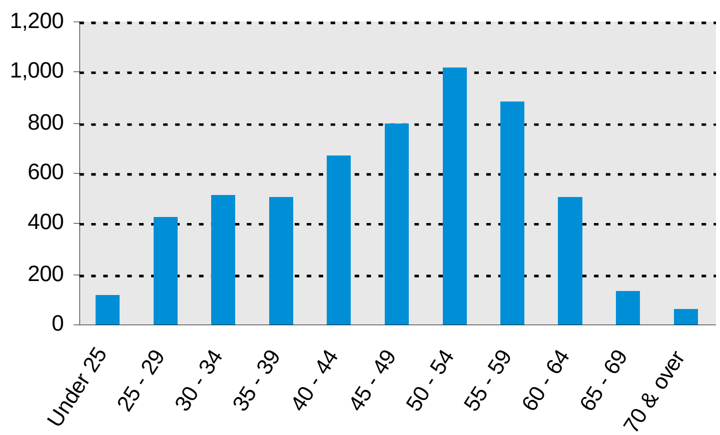
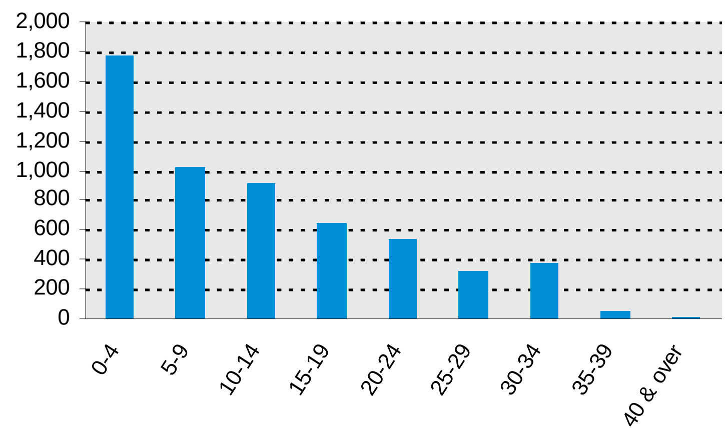


CHART 3

Distribution of Active Participants by Years of Creditable Service as of September 30, 2009



Retired Participants and Beneficiaries
As of September 30, 2009, 3,479 retired participants and 439 beneficiaries (not including DROP participants) were receiving total monthly benefits of $3,217,296, including the January 1, 2010 cost-of-living adjustment. For comparison, in the previous valuation, there were 3,377 retired participants and 441 beneficiaries receiving monthly benefits of $3,076,829. There were no retired participants in suspended status this year compared to 2 retired participants in the prior valuation.

These graphs show a distribution of the current retired participants and beneficiaries based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Participants and Beneficiaries by Type and by Monthly Amount as of September 30, 2009

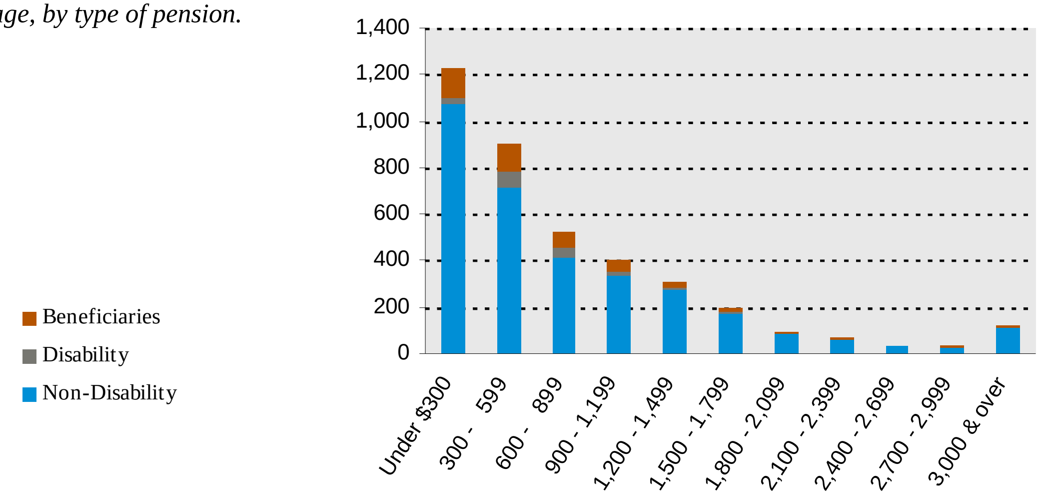
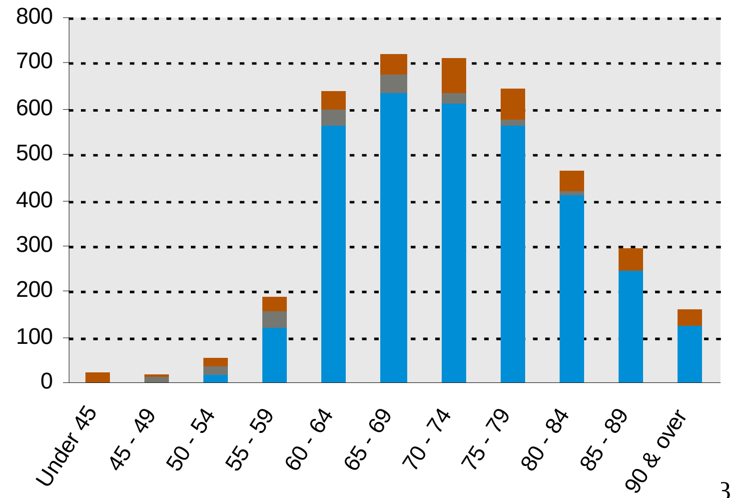


CHART 5

Distribution of Retired Participants and Beneficiaries by Type and by Age as of September 30, 2009



B. FINANCIAL INFORMATION

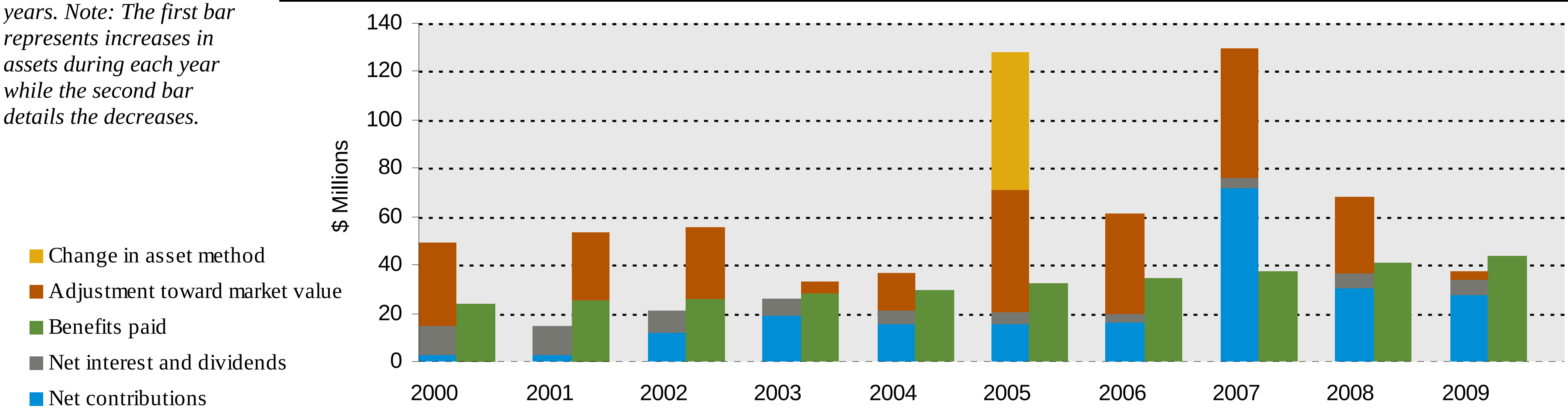
Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits C and D.

The chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended September 30, 2000 – 2009



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. As of October 1, 2005 the asset method was changed, with an initial value set to the market value of assets. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 2

Determination of Actuarial Value of Assets for Year Ended September 30, 2009

1.	Market value of assets			$556,389,337
		Original	Unrecognized	
2.	Calculation of unrecognized return	Amount*	Return**	
	(a) Year ended September 30, 2009	-$64,625,469	-$51,700,376	
	(b) Year ended September 30, 2008	-141,799,294	-85,079,576	
	(c) Year ended September 30, 2007	38,933,065	15,573,226	
	(d) Year ended September 30, 2006	17,361,094	3,472,219	
	(e) Year ended September 30, 2005	0	N/A	
	(f) Total unrecognized return			-117,734,507
3.	Preliminary actuarial value: (1) - (2f)			674,123,844
4.	Adjustment to be within 20% corridor			-6,456,639
5.	Final actuarial value of assets: (3) + (4)			$667,667,205
6.	Actuarial value as a percentage of market value: (5) ÷ (1)			120.0%

**Total return minus expected return on a market value basis*

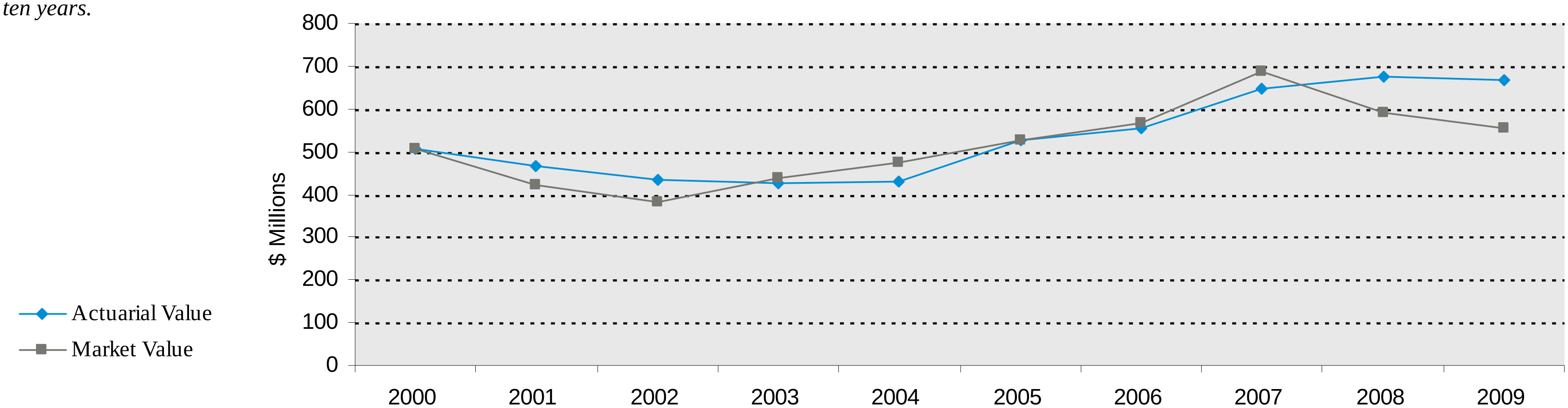
***Recognition at 20% per year over 5 years*

Both the actuarial value and market value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past ten years.

CHART 3

Actuarial Value of Assets vs. Market Value of Assets as of September 30, 2000 – 2009



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total loss is $44,317,863: $43,133,572 from investments and $1,184,291 from all other sources. The net experience variation from individual sources other than investments was 0.1% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 4

Actuarial Experience for Year Ended September 30, 2009

1.	Net loss from investments*	-$43,133,572
2.	Net loss from other experience**	-1,184,291
3.	Net experience loss: (1) + (2)	-$44,317,863

** Details in Chart 5*

*** Details in Chart 8*

Investment Rate of Return
A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.00%. The actual rate of return on an actuarial basis for the 2009 plan year was 1.52%.

Since the actual return for the year was less than the assumed return, the Plan experienced an actuarial loss during the year ended September 30, 2009 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 5

Actuarial Value Investment Experience for Year Ended September 30, 2009

1.	Actual return	$10,128,639
2.	Average value of assets	665,777,642
3.	Actual rate of return: (1) ÷ (2)	1.52%
4.	Assumed rate of return	8.00%
5.	Expected return: (2) x (4)	$53,262,211
6.	Actuarial gain/(loss): (1) – (5)	-$43,133,572

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last ten years, including five-year and ten-year averages.

CHART 6

Investment Return – Actuarial Value vs. Market Value: 2000 - 2009

	Net Interest and Dividend Income		Adjustment Toward Market Value		Change in Asset Method		Actuarial Value Investment Return		Market Value Investment Return	
Year Ended September 30	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2000	$12,386,611	2.63%	$33,982,499	7.21%	- -	- -	$46,369,110	9.84%	$35,686,796	7.43%
2001	12,001,812	2.42%	-27,909,181	-5.63%	- -	- -	-15,907,369	-3.21%	-57,662,700	-11.68%
2002	9,146,847	1.99%	-28,958,738	-6.30%	- -	- -	-19,811,891	-4.31%	-26,532,945	-6.37%
2003	6,567,932	1.53%	-5,042,210	-1.17%	- -	- -	1,525,722	0.36%	66,296,658	17.54%
2004	5,966,120	1.43%	15,186,086	3.63%	- -	- -	21,152,206	5.06%	48,545,327	11.22%
2005	4,606,424	1.08%	50,831,750	12.00%	$56,649,741	13.37%	112,087,915	26.45%	69,841,063	14.99%
2006	3,707,172	0.72%	41,239,143	7.95%	- -	- -	44,946,315	8.67%	58,835,190	11.35%
2007	4,842,212	0.85%	53,230,233	9.32%	- -	- -	58,072,445	10.17%	85,746,678	14.65%
2008	6,475,800	1.01%	31,069,844	4.84%	- -	- -	37,545,644	5.85%	-87,152,623	-12.76%
2009	6,849,086	1.03%	3,279,553	0.49%	- -	- -	10,128,639	1.52%	-18,014,070	-3.09%
Total	$72,550,016		$166,908,979		$56,649,741		$296,108,736		$175,589,374	
							Five-year average return	9.32%		3.85%
							Ten-year average return	5.81%		3.49%

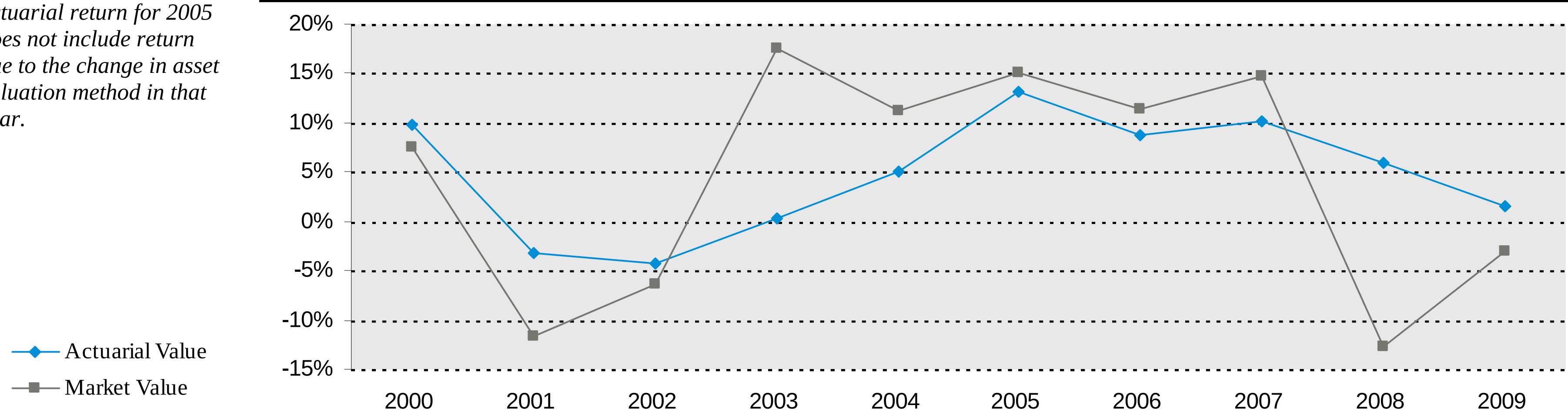
Note: Each year's yield is weighted by the average asset value in that year.

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2000 - 2009. The actuarial return for 2005 does not include return due to the change in asset valuation method in that year.

CHART 7

Market and Actuarial Rates of Return for Years Ended September 30, 2000 - 2009



Other Experience
There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

The net loss from this other experience for the year ended September 30, 2009 amounted to $1,184,291 which is 0.1% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Plan for the year ended September 30, 2009 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 8

Experience Due to Changes in Demographics for Year Ended September 30, 2009

1.	Turnover	-$470,334
2.	Retirement (including DROP experience)	-3,107,546
3.	Deaths among retired members and beneficiaries	3,795,793
4.	Salary increase for continuing actives	64,449
5.	Miscellaneous	-1,466,653
6.	Total	-$1,184,291

D. SCHEDULED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected compensation for active members to determine the funding rate. The funding rate is 11.85% of compensation as of October 1, 2009, compared to 10.92% as of October 1, 2008.

Section Eleven(3) of Ordinance #66511 requires that the unfunded actuarial accrued liability be amortized over 30 years. This period is reset to 30 each year.

The chart compares this valuation's scheduled contribution with the prior valuation.

CHART 9

Scheduled Contribution

	Year Beginning October 1			
	2009		2008	
	Amount	% of Compensation	Amount	% of Compensation
1. Total normal cost	$16,894,606	7.03%	$17,461,741	7.32%
2. Actuarial accrued liability	794,686,379		765,842,026	
3. Actuarial value of assets	667,667,205		674,016,719	
4. Unfunded actuarial accrued liability: (2) – (3)	$127,019,174		$91,825,307	
5. Payment on unfunded actuarial accrued liability, beginning of year	10,447,025	4.35%	7,552,413	3.16%
6. Total scheduled contribution: (1) + (5), adjusted for timing*	$28,498,534	11.85%	$26,072,575	10.92%
7. Projected compensation	$240,409,390**		$238,701,628	

**Scheduled contributions are assumed to be paid at the end of every month.*

***Subject to the Section 401(a)(17) limit.*

The scheduled contribution as of October 1, 2009 is based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. It includes all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Scheduled Contribution

The chart below details the changes in the scheduled contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 10

Reconciliation of Scheduled Contribution from October 1, 2008 to October 1, 2009

Scheduled Contribution as of October 1, 2008	$26,072,575
Effect of increase in statutory limits	6,298
Effect of maintaining an amortization period of 30 years	-102,312
Effect of contributions more than scheduled contribution	-114,804
Effect of change in assumptions	-1,468,312
Effect of investment loss	3,730,677
Effect of other gains and losses on accrued liability	102,431
Effect of net other changes, including composition and number of participants	271,981
Total change	$2,425,959
Scheduled Contribution as of October 1, 2009	$28,498,534

E. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded within the range of the GASB reporting requirements. Chart 16 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

Although GASB requires that the actuarial value of assets be used to determine the funded ratio, Chart 17 shows the funded ratio calculated using both the actuarial value of assets and the market value of assets.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits II, III, and IV.

These graphs show key GASB factors.

CHART 11

Required Versus Actual Contributions, Years Ended September 30

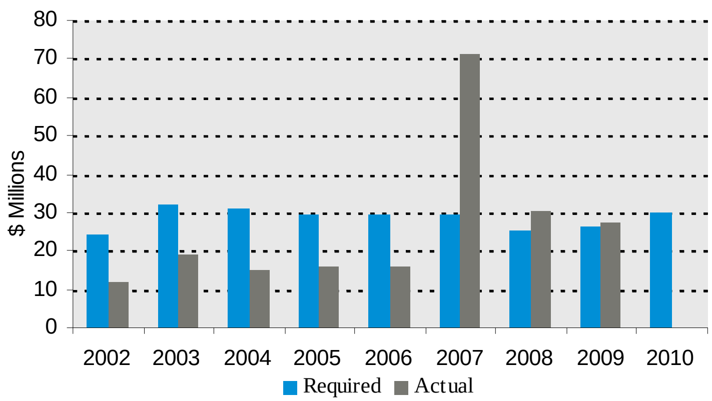


CHART 12

Funded Ratio, Years Ended September 30

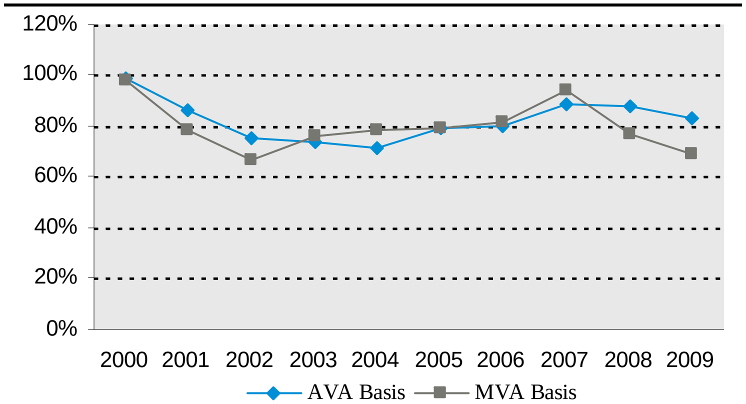


EXHIBIT A
Table of Plan Coverage

Category	Year Ended September 30 2009	Year Ended September 30 2008	Change From Prior Year
Active participants in valuation:			
Number	5,641	5,756	-2.0%
Average age	47.2	47.1	N/A
Average creditable service	12.3	12.1	N/A
Total compensation	$240,409,390**	$238,701,628	0.7%
Average compensation	$42,618**	$41,470	2.8%
Total active vested participants	3,876	4,002	-3.1%
Vested terminated participants	2,517	2,494	0.9%
Retired participants:			
Number in pay status	3,479	3,377	3.0%
Average age	72.7	72.7	N/A
Average monthly benefit	$828	$809	2.3%
Number in suspended status	0	2	-100.0%
Beneficiaries in pay status	439	441	-0.5%
DROP participants*:			
Number in pay status	416	416	0.0%
Average age	59.8	59.9	N/A
Average monthly benefit deposited to account	$1,505	$1,477	1.9%
Average account balance	$41,579	$40,928	1.6%
DROP account balance	$41,959,358	$38,431,269	9.2%

**DROP participants are also included in active participant status*

***Subject to the Section 401(a)(17) limit.*

EXHIBIT B

Participants in Active Service as of September 30, 2009
By Age, Years of Creditable Service, and Average Compensation

		Years of Creditable Service								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	122	121	1	- -	- -	- -	- -	- -	- -	- -
	30,460	30,429	34,294	- -	- -	- -	- -	- -	- -	- -
25 - 29	430	389	41	- -	- -	- -	- -	- -	- -	- -
	33,503	33,392	34,554	- -	- -	- -	- -	- -	- -	- -
30 - 34	513	311	164	36	2	- -	- -	- -	- -	- -
	37,216	36,340	38,222	40,228	36,831	- -	- -	- -	- -	- -
35 - 39	503	188	162	124	28	1	- -	- -	- -	- -
	38,761	36,537	38,010	42,277	43,438	11,762	- -	- -	- -	- -
40 - 44	673	202	151	157	115	47	1	- -	- -	- -
	40,734	36,666	38,492	41,246	45,731	51,149	56,342	- -	- -	- -
45 - 49	800	176	150	155	140	142	23	14	- -	- -
	43,277	36,501	40,227	42,335	47,217	50,310	48,606	52,104	- -	- -
50 - 54	1,015	165	146	199	134	151	97	123	- -	- -
	45,254	34,869	39,949	41,804	47,394	51,788	55,604	52,546	- -	- -
55 - 59	886	130	95	130	123	116	127	157	8	- -
	48,158	36,299	39,823	44,013	47,199	51,148	60,731	54,424	55,982	- -
60 - 64	502	64	77	66	70	58	61	65	38	3
	47,691	35,959	38,371	43,529	45,708	56,361	55,338	59,349	50,344	65,700
65 - 69	136	13	29	20	21	20	10	8	9	6
	46,144	38,545	45,751	38,008	47,009	45,222	58,023	61,633	54,862	38,158
70 & over	61	7	7	21	11	6	4	3	- -	2
	46,647	62,644	31,522	44,427	41,114	58,513	46,358	60,337	- -	41,782
Total	5,641	1,766	1,023	908	644	541	323	370	55	11
	$42,618	$35,326	$38,945	$42,219	$46,514	$51,456	$57,034	$54,781	$51,903	$46,328

EXHIBIT C

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended September 30, 2009		Year Ended September 30, 2008	
Contribution income:				
Employer contributions	$27,252,035		$30,350,011	
Member purchase of additional service	501		90,934	
Net contribution income		$27,252,536		$30,440,945
Investment income:				
Interest, dividends and other income	$9,705,756		$10,524,608	
Adjustment toward market value	3,279,553		31,069,844	
Less investment and administrative fees	-2,856,670		-4,048,808	
Net investment income		10,128,639		37,545,644
Total income available for benefits		$37,381,175		$67,986,589
Less benefit payments:				
Retirement payments	-$37,556,186		-$35,199,809	
DROP distributions	-6,133,957		-5,289,331	
Pension service transfer payments	-40,546		-50,208	
Net benefit payments		-$43,730,689		-$40,539,348
Change in reserve for future benefits		-$6,349,514		$27,447,241

EXHIBIT D
Table of Financial Information

	Year Ended September 30, 2009		Year Ended September 30, 2008	
Cash equivalents		$214,803		$48,611
Accounts receivable:				
Accrued interest and dividends	$1,065,521		$1,285,288	
Contributions	39,895		1,434,753	
Total accounts receivable		1,105,416		2,720,041
Investments:				
Debt securities	$131,280,918		$128,294,052	
Managed funds	192,585,595		212,692,419	
Common stock and other	231,647,960		247,727,491	
Total investments at market value		555,514,473		588,713,962
Total assets		$556,834,692		$591,482,614
Less accounts payable		-$445,355		-$601,054
Net assets at market value*		$556,389,337		$590,881,560
Net assets at actuarial value		$667,667,205		$674,016,719

**Includes $41,959,358 DROP account balances in 2009 and $38,431,269 in 2008*

EXHIBIT E

Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2009

1. Unfunded actuarial accrued liability at beginning of year		$91,825,307
2. Normal cost at beginning of year		17,461,741
3. Total contributions		-27,252,536
4. Interest		
(a) For whole year on (1) + (2)	$8,742,964	
(b) For half year on (3)	-1,090,101	
(c) Total interest		7,652,863
5. Expected unfunded actuarial accrued liability		$89,687,375
6. Changes due to:		
(a) (Gain)/loss	$44,317,863	
(b) Change in assumptions	-7,017,263	
(c) Change in funding method	0	
(d) Change in statutory limits	31,199	
(e) Total changes		37,331,799
7. Unfunded actuarial accrued liability at end of year		$127,019,174

EXHIBIT F
Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of $160,000 indexed for inflation. That limit is $195,000 for 2009. Normal Retirement Age for these purposes is age 61. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

EXHIBIT G
Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

June 3, 2010

CERTIFICATE OF ACTUARIAL VALUATION

This is to certify that we have prepared a revised Actuarial Valuation of the System as of October 1, 2009 in accordance with generally accepted actuarial principles and practices.

The certificate contains the following attached exhibits:

I. Summary of Actuarial Valuation Results

II. Supplementary Information Required by the GASB – Schedule of Employer Contributions

III. Supplementary Information Required by the GASB – Schedule of Funding Progress

IV. Supplementary Information Required by the GASB

V. Actuarial Assumptions and Actuarial Cost Method

VI. Summary of Plan Provisions

The valuation was based on information supplied by the System with respect to member data and in the Report of the Secretary with respect to financial data. We have not verified, and customarily would not verify, such information but we have no reason to doubt its substantial accuracy.

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate and in our opinion each individual assumption used (a) is reasonably related to the experience of the System and to reasonable expectations and (b) represents a reasonable estimate of anticipated experience under the System.

The undersigned are available to provide further information or to answer any questions regarding the report.

Harold S. Cooper, FSA, MAAA, EA
Vice President and Actuary

Thomas D. Levy, FSA, MAAA, EA
Senior Vice President and Chief Actuary

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 439 beneficiaries in pay status)		3,918
2.	Participants inactive during year ended September 30, 2009 with vested rights		2,517
3.	Participants active during the year ended September 30, 2009 (including 416 DROP participants)		5,641
	Fully vested	3,876	
	Not vested	1,765	

The actuarial factors as of the valuation date are as follows:

1.	Normal cost		$16,894,606
2.	Actuarial accrued liability		794,686,379
	Retired participants and beneficiaries	$351,978,131	
	Inactive participants with vested rights	51,226,883	
	Active participants	391,481,365	
3.	Actuarial value of assets ($556,389,337 at market value)		667,667,205
4.	Unfunded actuarial accrued liability		$127,019,174

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The determination of the recommended contribution is as follows:

1.	Employer normal cost	$16,894,606
2.	Payment on unfunded actuarial accrued liability	10,447,025
3.	Total scheduled contribution: (1) + (2), adjusted for timing	$28,498,534
4.	Projected compensation	$240,409,390*
5.	Total scheduled contribution as a percentage of projected compensation: (3) ÷ (4)	11.85%

**Subject to the Section 401(a)(17) limit.*

EXHIBIT II

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended September 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
2004	$30,926,604	$15,158,997	49.0%
2005	29,243,453	15,752,497	53.9%
2006	29,478,032	15,756,456	53.5%
2007	29,599,091	71,301,428	240.9%
2008	25,297,801	30,350,011	120.0%
2009	26,072,575	27,252,035	104.5%
2010	28,498,534	--	--

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
10/01/2004	$431,853,406	$602,795,470	$170,942,064	71.64%	$221,768,791	77.08%
10/01/2005	527,733,171	666,182,075	138,448,904	79.22%	223,837,003	61.85%
10/01/2006	554,065,539	695,889,716	141,824,177	79.62%	224,120,314	63.28%
10/01/2007	646,569,478	732,576,024	86,006,546	88.26%	231,029,237	37.23%
10/01/2008	674,016,719	765,842,026	91,825,307	88.01%	238,701,628	38.47%
10/01/2009	667,667,205	794,686,379	127,019,174	84.02%	240,409,390**	52.83%

** Not less than zero*

***Subject to the Section 401(a)(17) limit.*

EXHIBIT IV

Supplementary Information Required by the GASB

Valuation date	October 1, 2009
Actuarial cost method	Projected Unit Credit Cost Method
Amortization method	Level dollar amount for unfunded liability, open
Remaining amortization period	30 years remaining as of October 1, 2009
Asset valuation method	The market value of assets less unrecognized returns in each of the last five years, but no earlier than October 1, 2005. Unrecognized return is equal to the difference between the actual market return and the expected market return, and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of market value. The actuarial asset value was initialized at market value as of October 1, 2005.
Actuarial assumptions:	
Investment rate of return	8.00%
Projected salary increases	Varies by age, ranging from 3.500% to 7.017%
Cost of living adjustments	3.125% per year; maximum cumulative increase of 25%
Plan membership:	
Retired participants and beneficiaries receiving benefits	3,918
Terminated participants entitled to, but not yet receiving benefits	2,517
Active participants	5,641
Total	12,076

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1994 Group Annuity Mortality Table

Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table

Mortality and Disability Rates before Retirement:

	Mortality (%)		Disability (%)			
Age	**Male**	**Female**	**Male**		**Female**	
20	0.05	0.03	0.00	*0.00*	0.00	*0.00*
25	0.07	0.03	0.00	*0.00*	0.00	*0.00*
30	0.08	0.04	0.00	*0.00*	0.00	*0.00*
35	0.09	0.05	0.00	*0.00*	0.00	*0.00*
40	0.11	0.07	0.11	*0.14*	0.05	*0.06*
45	0.16	0.10	0.17	*0.21*	0.10	*0.12*
50	0.26	0.14	0.50	*0.63*	0.24	*0.30*
55	0.44	0.23	0.62	*0.77*	0.34	*0.42*
60	0.80	0.44	0.39	*0.49*	0.24	*0.30*

Note: From this page forward, text in red italics indicate the assumptions that were used before the recommended changes outlined in the Analysis of Actuarial Experience, dated April 15, 2010, were adopted by the Board of Trustees.

Withdrawal Rates before Retirement:

Withdrawal Rate (%)										
With Less Than Four Years of Creditable Service					With Four or More Years of Creditable Service					
Creditable Service	Male		Female		Age	Male		Female		
0	22.0	*25.0*	16.0	*22.5*	20	25.00	*25.00*	13.90	*13.90*	
1	16.0	*17.0*	14.0	*16.0*	25	17.20	*17.80*	10.96	*12.34*	
2	12.0	*13.0*	10.0	*13.0*	30	10.80	*10.24*	8.40	*9.14*	
3	10.0	*11.5*	8.0	*10.5*	35	8.44	*7.38*	7.10	*6.74*	
					40	5.90	*5.74*	5.60	*5.56*	
					45	4.30	*4.44*	4.40	*4.78*	
					50	3.60	*3.64*	3.52	*3.84*	
					55	3.10	*3.16*	2.60	*3.16*	

Retirement Rates:

Age	Retirement Rate (%)		Age	Retirement Rate (%)	
55	5.0	*6.0*	63	20.0	*15.0*
56	5.0	*3.5*	64	20.0	*20.0*
57 – 58	8.0	*5.0*	65	25.0	*40.0*
59	10.0	*5.0*	66	25.0	*25.0*
60	10.0	*10.0*	67 – 69	25.0	*20.0*
61	10.0	*15.0*	70	100.0	*100.0*
62	20.0	*25.0*			

In addition, in the first year that a participant satisfies the requirements under the "Rule of 85," the retirement rate is assumed to be 75% if the age in the first year of eligibility is 55 or less and 60% if the age in the first year of eligibility is older than 55 (100% at age 70). *Previously, in the first year that a participant satisfied the requirements under the "Rule of 85," the retirement rate was assumed to be 65%.*

Retirement Age for Inactive Vested Participants:	For members who terminate employment with 30 or more years of creditable service or are eligible for a Rule of 85 pension, immediate commencement of benefits is assumed. All others are assumed to retire at age 61. *Previously, all others were assumed to retire at age 62.*
DROP Participants:	Participants in the DROP are assumed to remain in the DROP for 5 years. The standard retirement rates are assumed. Interest to the DROP account is assumed to be creditable at 6% for those participants who enter the DROP after January 21, 2003. The liability and normal cost associated with the retirement decrement has been increased by 3% to account for the additional cost associated with the resumption of active participants. *Previously, there was no assumed additional cost associated with the resumption of active participants.*

Unknown Data for Participants:	Same as those exhibited by participants with similar known characteristics. For inactive vested participants with unknown benefit amounts, $250 per month is assumed.
Rehires:	A 0.4% load on active accrued liability and normal cost has been added to reflect the cost of rehires.
Sick Leave:	Sick leave may be used to increase either Final Average Compensation, Creditable Service, or both. The valuation assumes: • 20 hours accrued each year. *Previously, 25 hours accrued each year was assumed.* • 50% of accrued hours are "banked" • 50% of banked hours are used first to increase Final Average Compensation • The remainder of available banked hours is used to increase Creditable Service
Percent Married:	1960 U.S. census, varies by sex and age
Age of Spouse:	Females (or males) are three years younger (or older) than their spouses

Net Investment Return:	8.00% per year, net of expenses
Salary Increases:	Varies by age, ranging from 3.500% to 7.017%. *Previously, the range was from 3.825% to 7.226%*
Increases in Social Security Taxable Wage Base:	3.5% per year
Cost-of-Living Adjustment:	3.125% per year for 8 years. *Previously, 5% per year for 5 years was assumed.*
Increase in Section 415 and Section 401(a)(17) limits:	4.5% per year
Actuarial Value of Assets:	The market value of assets less unrecognized returns in each of the last five years, but no earlier than October 1, 2005. Initial unrecognized return is equal to the difference between the actual market return and expected market return, and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value. The actuarial asset value was initialized at the market value as of October 1, 2005.
Actuarial Cost Method:	Projected Unit Credit Actuarial Cost Method

EXHIBIT VI
Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	October 1 through September 30
Final Average Compensation:	One-half the sum of: (a) The total compensation earned during the last two highest consecutive years of Creditable Service prior to termination (subject to the Section 401(a)(17) limit); and (b) The balance of sick leave pay as of the date of retirement less sick leave hours paid upon termination and less sick leave hours considered as Creditable Service. Said balance cannot exceed 25% of a member's total sick leave pay as of the date of retirement.
Benefit Compensation Base:	Amount of annual compensation with respect to which old age and survivor's insurance benefits would be provided to the member under the Social Security Act in effect on the date the Benefit Compensation Base is determined calculated when the member terminates employment.

Normal Retirement:	
Age Requirement	65
Service Requirement	Five years of Creditable Service
Amount	The product of: (a) 1.30% of Final Average Compensation up to the Benefit Compensation Base, plus 2.05% of Final Average Compensation in excess of the Benefit Compensation Base, and (b) Creditable Service Minimum $200 per month for retirees with 12 or more years of creditable service.
Rule of 85 Retirement:	
Age and Service Requirement	Sum of Age and Creditable Service at date of termination equals or exceeds 85
Amount	The product of: (a) 1.30% of Final Average Compensation up to the Benefit Compensation Base, plus 2.05% of Final Average Compensation in excess of the Benefit Compensation Base, and (b) Creditable Service
Early Retirement:	
Age and Service Requirement	Age 60 with five years of Creditable Service; or age 55 with 20 years of Creditable Service; or any age with 30 years of Creditable Service
Amount	Normal retirement amount reduced by 1/3% for each month benefit begins before age 65.

Disability:

Age Requirement	None
Service Requirement	Five years of Creditable Service and an active employee at disablement
Amount	Normal retirement amount based on Creditable Service and Final Average Compensation at disability, payable immediately

DROP (Deferred Retirement Option Plan):

Members who have achieved eligibility for retirement can continue active employment and defer receipt of their retirement allowance for a period not to exceed five years. During the DROP period, the member's retirement allowance will be paid directly into a separate account.

Service during the DROP period shall not be counted as Creditable Service, nor shall it count toward determination of retirement allowance. A member's DROP account shall not be adjusted for any cost-of-living increases during participation in the DROP. No member returning to non-DROP status shall make any withdrawal from his/her DROP account until after termination of employment.

The account balance is credited with interest annually. In no event does the total account balance exceed the accumulated value of five-years-payments with interest.

The annuity awarded upon full termination and subsequent benefit receipt reflects the unused sick-leave conversion to Creditable Service and/or Final Average Compensation. During participation in the DROP, the annual deposit to the account does NOT reflect any conversion of unused sick leave as each participant continues to accrue sick leave hours.

Vesting:

Age Requirement	None
Service Requirement	Five years of Creditable Service
Amount	Normal or early service retirement amount

Spouse's Pre-Retirement Death Benefit:

Age Requirement	None
Service Requirement	Five years of Creditable Service and an active employee
Amount	If married, 100% of the benefit the employee would have received had he or she retired the day before he or she died and elected the joint and 100% survivor option. If the employee died prior to eligibility for early service retirement, the spouse's benefit is deferred to the employee's earliest retirement date. Death benefits may also be payable to members who have terminated employment. The cost of those benefits are paid for by the reduction of the accrued benefit payable to the inactive vested participant.

Post-Retirement Death Benefits:	If married, the employee and spouse may elect to have pension benefits paid in the form of a 100% joint and survivor annuity. A member may also elect a ten year certain and life equivalent form of benefit. If any one of these options is elected, the benefit amount otherwise payable is reduced to reflect the coverage. If not elected, benefits are payable for the life of the employee without reduction.
Cost-of-Living Adjustment:	Based on the change in the Consumer Price Index (CPI) for the fiscal year, subject to a maximum increase of 3.125% per year (3.0% for retirements between March 21, 1972 and March 26, 1974; none for retirements prior to March 21, 1972), with a cumulative percentage increase (equal to the sum of the annual percentage increases) limited to 25.0%. If the increase in CPI is less than 1.0%, no adjustment is made. If the change is a decrease, the cost-of-living adjustment shall be zero unless the decrease is 3.125% or more. Adjustments begin on the second January 1 after payments begin. *Previously, the maximum increase was 5.0% per year.*

Creditable Service:	Number of years and completed months of service during which the member receives compensation after April 1, 1960. Creditable Service for employment prior to April 1, 1960 is granted only if the member was an employee of an employer of the System on April 1, 1960. Unused credited sick leave shall be considered as Creditable Service provided the member does not receive payment for the sick leave.

Membership:	Immediate upon employment
Section 415 limit:	$195,000
Section 401(a)(17):	$245,000
	Note these limits were increased by the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA). The provisions of EGTRRA were scheduled to sunset December 31, 2010. Effective August 17, 2006, the Pension Protection Act made theses changes permanent.

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