Duluth Teachers' Retirement Fund Association

Actuarial Valuation and Review as of July 1, 2005

The Segal Company
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November 30, 2005

Mr. J. Michael Stoffel
Executive Director
Duluth Teachers' Retirement Fund Association
625 East Central Entrance
Duluth, Minnesota 55811

Dear Mr. Stoffel:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2005. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2005 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the Fund and the financial information was provided by the Fund. That assistance is gratefully acknowledged. The actuarial calculations were completed under our supervision.

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. Further, in our opinion, the assumptions used in the valuation are consistent with those in the statute, and reasonably represent the experience of the plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: ____________________________ ____________________________

Leslie L. Thompson, FSA, MAAA, EA	*Brad Ramirez, ASA, MAAA, EA*
Senior Vice President and Consulting Actuary	*Consulting Actuary*

cc: Legislative Commission on Pensions and Retirement (3 copies)
Minnesota Legislative Reference Library (6 copies)
Minnesota Department of Finance (2 copies)
Office of the State Auditor (2 copies)

SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

SECTION 3

SUPPLEMENTAL INFORMATION

SECTION 4

REPORTING INFORMATION

Purpose

This report has been prepared by The Segal Company to present a valuation of the Duluth Teachers' Retirement Fund Association as of July 1, 2005. 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:

- Section 356.215 of the Minnesota Statutes;
- The benefit provisions of the Retirement Fund, as administered by the Legislative Commission on Pensions and Retirement;
- The data as provided and confirmed by the DTRFA staff;
- The characteristics of covered active members, inactive vested members, pensioners and beneficiaries as of July 1, 2005, provided by the Fund;
- The unaudited "Draft" assets of the Fund as of June 30, 2005, provided by the Fund;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The actuarial accrued liability funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1, 2005 is 86.35% compared to 91.79% as of July 1, 2004. This ratio is a measure of funding status, and its history is a measure of funding progress, and is the ratio required to be reported under GASB 25.
- As indicated on page 4 of this report, the total unrecognized investment loss as of June 30, 2005 is $1,097,265. Last year's unrecognized loss was $18,117,537. 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. Earnings in excess of 8.50% will help temper possible increases in future contribution requirements.
- The portion of deferred asset gains and losses recognized during the calculation of the July 1, 2005 actuarial value of assets was $16,879,975.
- The July 1, 2006 actuarial value of assets will recognize a loss of $7,102,375 for previous years' gains and losses, along with one fifth of the actuarial value of asset gain/(loss) during the period July 1, 2005 – June 30, 2006.
- The statutory contribution rate under Chapter 354A is equal to 11.29% of payroll compared to the required contribution rate under Chapter 356 of 14.16% of payroll. Therefore the contribution deficiency is 2.87% of payroll as of July 1, 2005. Last year's contribution rate deficiency was 0.82% of payroll.
- The only change in actuarial assumptions is a change in the retirement age for inactive vested members from 65 to 60.
- There were no changes in plan provisions or actuarial cost methods since the prior valuation.

Summary of Key Valuation Results

	2005	2004
Contributions (% of payroll) for plan year beginning July 1:		
Statutory – Chapter 354A	11.29%	11.29%
Required – Chapter 356	14.16%	12.11%
Sufficiency/(Deficiency)	-2.87%	-0.82%
Funding elements for plan year beginning July 1:		
Normal cost	$5,092,255	$4,903,049
Market value of assets	267,383,556	258,831,515
Actuarial value of assets (AVA)	268,480,821	276,949,052
Actuarial accrued liability (AAL)	310,923,929	301,704,445
Unfunded/(Overfunded) actuarial accrued liability	42,443,108	24,755,393
Funded ratios:		
Accrued Benefit Funded Ratio	89.81%	95.68%
Current assets (AVA)	$268,480,821	$276,949,052
Current benefit obligations	298,956,352	289,460,171
Projected Benefit Funded Ratio	92.01%	97.62%
Current and expected future assets	$324,077,398	$333,814,878
Current and expected future benefit obligations (Present Value of Benefits)	352,211,826	341,956,772
GASB 25/27 for plan year beginning July 1:		
Annual required employer contributions	$3,027,590	$2,510,314
Accrued Liability Funded Ratio (AVA/AAL)	86.35%	91.79%
Covered actual payroll	$49,148,256	$48,820,898
Demographic data for plan year beginning July 1:		
Number of pensioners and beneficiaries	1,153	1,137
Number of vested terminated members	313	312
Number of other non-vested terminated members	638	650
Number of active members	1,164	1,178
Total projected payroll*	$56,237,262	$55,820,306
Average annual payroll (actual dollars)	41,666	40,752

**Projected payroll includes annualized pay for new hires and increases to current fiscal year.*

A. MEMBER DATA

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

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

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

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

CHART 1

Member Population: 2002 – 2005

Year Ended June 30	Active Members	Vested Terminated Members*	Pensioners and Beneficiaries	Ratio of Non-Actives to Actives
2002	1,276	305	1,085	1.09
2003	1,373	187	1,107	0.94
2004	1,178	312	1,137	1.23
2005	1,164	313	1,153	1.26

**Excludes terminated members due a refund of employee contributions*

Active Members

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 1,164 active members with an average age of 46.4, average years of service of 12.4 years and average projected payroll of $48,314. The 1,178 active members in the prior valuation had an average age of 46.1, average service of 12.4 years and average projected payroll of $47,386.

Inactive Members

In this year's valuation, there were 313 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 638 other non-vested terminated members entitled to a return of their employee contributions.

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

CHART 2

Distribution of Active Members by Age as of June 30, 2005

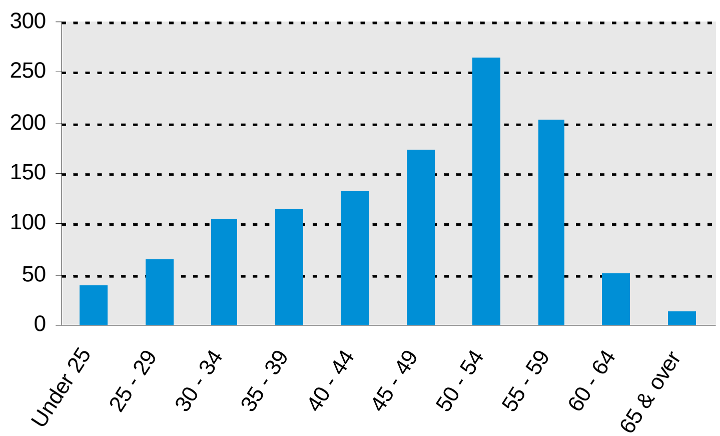
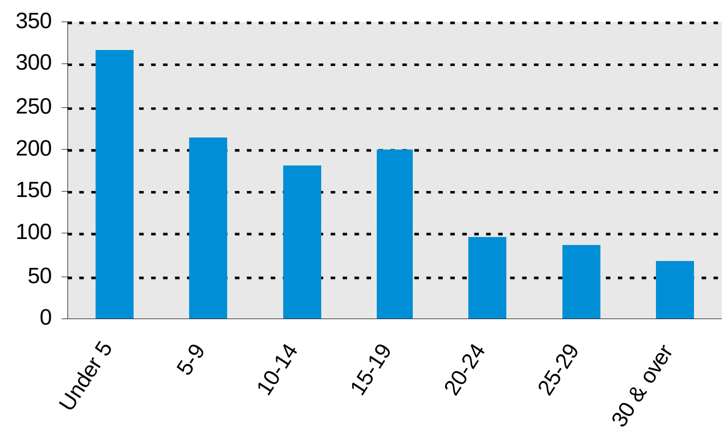


CHART 3

Distribution of Active Members by Years of Service as of June 30, 2005



Pensioners and Beneficiaries

As of June 30, 2005, 1,059 pensioners (including 16 disableds) and 94 beneficiaries were receiving total monthly benefits of $1,578,052. For comparison, in the previous valuation, there were 1,050 pensioners (including 14 disableds) and 87 beneficiaries receiving monthly benefits of $1,520,020.

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

CHART 4

Distribution of Pensioners and Beneficiaries by Type and by Monthly Amount as of June 30, 2005

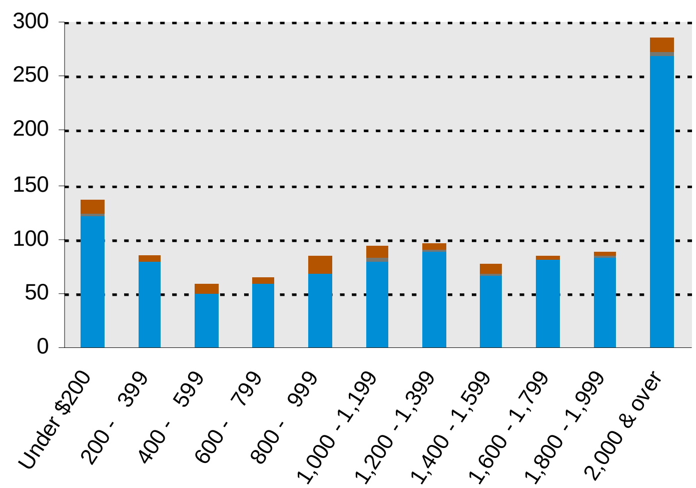
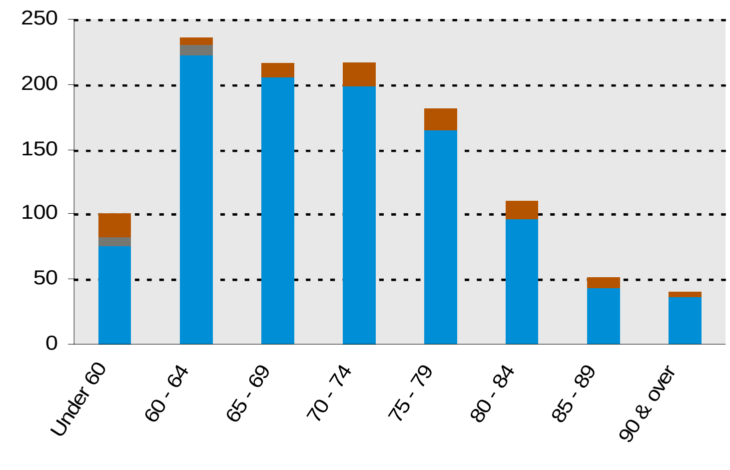


CHART 5

Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2005



Survivor
Disability
Regular

B. FINANCIAL INFORMATION

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Minnesota Statutes require an asset valuation method that gradually adjusts to market value. 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.

Both the actuarial value and market value of assets are representations of the Fund'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 Fund'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.

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

CHART 6

Determination of Actuarial Value of Assets for Years Ended June 30, 2005 and June 30, 2004

			2005		2004	
1. Calculation of unrecognized return		Original Amount	% Not Recognized		% Not Recognized	
	(a) Year ended June 30, 2005	$140,297	80%	$112,238		-
	(b) Year ended June 30, 2004	20,475,829	60%	12,285,497	80%	$16,380,663
	(c) Year ended June 30, 2003	-11,347,000	40%	-4,538,800	60%	-6,808,200
	(d) Year ended June 30, 2002	-44,781,000	20%	-8,956,200	40%	-17,912,400
	(e) Year ended June 30, 2001	-48,888,000		-	20%	-9,777,600
	(f) Total unrecognized return			-$1,097,265		-$18,117,537
2. Total return for the last five plan years				-$84,399,874		-$43,135,171
3. Write-up/down for year ended June 30, 2005: 20% of (2)				-16,879,975		-8,627,034
4. Market value of assets available for benefits				$267,383,556		$258,831,515
5. Less: Unrecognized return				-1,097,265		-18,117,537
6. Actuarial value of assets (Current Assets): (4) – (5)				$268,480,821		$276,949,052

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 $15,805,261, a loss of $18,419,965 from investments and a gain of $2,614,704 from all other sources. The net experience variation from individual sources other than investments was 0.8% of the actuarial accrued liability, which is under 1.0% of the actuarial accrued liability, including age/service retirements, disability, mortality (pre and post-retirement), withdrawal and salary increases.

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

CHART 6

Actuarial Experience for Year Ended June 30, 2005

1.	Net gain/(loss) from investments	-$18,419,965
2.	Net gain/(loss) from other experience	2,614,704
3.	Net experience gain/(loss): (1) + (2)	-$15,805,261

D. 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 on an actuarially sound basis and in accordance with the GASB funding requirements. Section 4, Exhibit III presents a schedule of this information for the Fund.

The other critical piece of information regarding the Fund'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 changes.

GASB requires that the actuarial value of assets be used to determine the funded ratio as shown in Section 4, Exhibit IV.

EXHIBIT A
Table of Plan Coverage

Category	Year Ended June 30 2005	2004	Change From Prior Year
Active members in valuation:			
Number	1,164	1,178	-1.2%
Average age	46.4	46.1	N/A
Average service	12.4	12.4	N/A
Total projected* payroll	$56,237,262	$55,820,306	0.7%
Average projected* payroll	48,314	47,386	2.0%
Total active vested members	902	932	-3.2%
Vested terminated members	313	312	0.3%
Retired participants:			
Number in pay status	1,043	1,036	0.7%
Average age	70.9	70.9	N/A
Average monthly benefit	$1,395	$1,360	2.6%
Disabled members:			
Number in pay status	16	14	14.3%
Average age	60.1	59.9	N/A
Average monthly benefit	$1,264	$1,166	8.4%
Beneficiaries:			
Number in pay status	94	87	8.0%
Average age	75.1	72.2	N/A
Average monthly benefit	$1,089	$1,089	0.0%
Other non-vested terminated members	638	650	-1.8%

** Projected payroll includes annualized pay for new hires and increases to current fiscal year.*

EXHIBIT B-1

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll – Total

		Years of Service						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	40	40	- -	- -	- -	- -	- -	- -
	$19,691	$19,691	- -	- -	- -	- -	- -	- -
25 - 29	66	62	4	- -	- -	- -	- -	- -
	22,588	21,110	$45,502	- -	- -	- -	- -	- -
30 - 34	104	41	56	7	- -	- -	- -	- -
	42,176	28,726	49,793	$60,016	- -	- -	- -	- -
35 - 39	114	43	40	29	2	- -	- -	- -
	44,234	27,783	51,144	58,091	$58,810	- -	- -	- -
40 - 44	133	37	27	36	31	2	- -	- -
	46,324	24,740	49,389	54,863	58,534	$61,280	- -	- -
45 - 49	173	31	35	39	51	16	1	- -
	49,445	21,117	46,765	58,839	57,105	62,089	$62,049	- -
50 - 54	265	23	33	40	63	41	48	17
	57,479	30,082	56,116	54,624	59,551	61,181	64,351	$67,898
55 - 59	204	19	15	26	43	27	32	42
	57,357	15,190	61,276	52,379	61,308	61,074	63,695	66,851
60 - 64	51	15	4	2	6	7	7	10
	47,087	16,439	44,464	65,384	61,731	58,806	59,427	64,819
65 & Over	14	7	- -	1	3	3	- -	- -
	34,334	19,158	- -	49,640	40,624	58,353	- -	- -
Total	1,164	318	214	180	199	96	88	69
	$48,314	$23,271	$51,099	$56,121	$58,918	$61,043	$63,695	$66,815

EXHIBIT B-2

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll – Old

		Years of Service						
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Over**
Under 25	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
30 - 34	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
35 - 39	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
40 - 44	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	7	- -	- -	- -	2	4	1	- -
	$62,541	- -	- -	- -	$62,364	$62,752	$62,049	- -
50 - 54	82	- -	1	- -	2	15	47	17
	64,022	- -	$59,594	- -	55,937	59,799	64,406	$67,898
55 - 59	86	- -	1	1	2	9	32	41
	63,280	- -	16,264	$67,685	46,500	56,612	63,695	66,278
60 - 64	22	- -	- -	- -	- -	5	7	10
	60,898	- -	- -	- -	- -	55,114	59,427	64,819
65 & Over	3	- -	- -	- -	- -	3	- -	- -
	58,353	- -	- -	- -	- -	58,353	- -	- -
Total	200	- -	2	1	6	36	87	68
	$63,222	- -	$37,929	$67,685	$54,934	$58,559	$63,717	$66,468

EXHIBIT B-3

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll – New

		Years of Service						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	40	40	- -	- -	- -	- -	- -	- -
	$19,691	$19,691	- -	- -	- -	- -	- -	- -
25 - 29	66	62	4	- -	- -	- -	- -	- -
	22,588	21,110	$45,502	- -	- -	- -	- -	- -
30 - 34	104	41	56	7	- -	- -	- -	- -
	42,176	28,726	49,793	$60,016	- -	- -	- -	- -
35 - 39	114	43	40	29	2	- -	- -	- -
	44,234	27,783	51,144	58,091	$58,810	- -	- -	- -
40 - 44	133	37	27	36	31	2	- -	- -
	46,324	24,740	49,389	54,863	58,534	$61,280	- -	- -
45 - 49	166	31	35	39	49	12	- -	- -
	48,892	21,117	46,765	58,839	56,890	61,867	- -	- -
50 - 54	183	23	32	40	61	26	1	- -
	54,547	30,082	56,007	54,624	59,669	61,979	$61,768	- -
55 - 59	118	19	14	25	41	18	- -	1
	53,040	15,190	64,491	51,767	62,030	63,305	- -	$90,361
60 - 64	29	15	4	2	6	2	- -	- -
	36,609	16,439	44,464	65,384	61,731	68,037	- -	- -
65 & Over	11	7	- -	1	3	- -	- -	- -
	27,783	19,158	- -	49,640	40,624	- -	- -	- -
Total	964	318	212	179	193	60	1	1
	$45,221	$23,271	$51,224	$56,056	$59,042	$62,533	$61,768	$90,361

EXHIBIT C-1
Retired Participants as of June 30, 2005
By Age, Years Retired and Average Annual Benefit – Total

		Years Retired						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	1	1	- -	- -	- -	- -	- -	- -
	$6,544	$6,544	- -	- -	- -	- -	- -	- -
50 - 54	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	87	11	4	5	4	12	13	38
	25,075	4,200	$4,402	$11,098	$15,556	$24,762	$27,702	$35,336
60 - 64	227	30	12	9	15	31	33	97
	19,257	2,012	3,852	11,214	12,921	14,856	21,036	29,023
65 - 69	214	39	8	11	21	32	48	55
	15,997	2,137	4,346	7,673	12,573	15,904	19,982	27,067
70 - 74	196	37	15	4	18	34	45	43
	16,690	2,320	4,933	10,228	10,968	19,523	21,633	28,738
75 - 79	152	20	6	12	27	23	36	28
	15,569	2,295	5,187	6,145	12,481	16,784	20,370	27,122
80 - 84	92	10	4	12	18	22	13	13
	12,212	2,128	4,615	7,575	10,189	13,170	17,654	22,329
85 - 89	40	8	2	5	3	10	4	8
	10,302	2,311	3,947	6,694	9,484	11,447	14,867	18,729
90 & Over	34	4	2	4	5	8	3	8
	9,933	3,017	4,052	5,814	9,146	10,067	15,060	15,355
Total	1,043	160	53	62	111	172	195	290
	$16,745	$2,375	$4,494	$8,114	$11,820	$16,286	$20,792	$28,292

EXHIBIT C-2

Retired Participants as of June 30, 2005
By Age, Years Retired and Average Annual Benefit – Old

		Years Retired							
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Over**
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	30	8	3	- -	1	9	6	3
	$16,195	$2,788	$5,230	- -	$26,380	$21,675	$23,801	$27,863
60 - 64	86	19	2	4	7	24	22	8
	13,382	1,260	6,462	$10,062	13,554	14,623	19,282	25,458
65 - 69	84	16	1	5	14	20	22	6
	13,037	2,191	2,142	7,274	13,233	14,620	18,363	23,319
70 - 74	59	11	4	1	12	13	16	2
	12,748	2,131	6,465	2,645	9,430	16,563	20,131	24,800
75 - 79	51	4	1	10	14	10	10	2
	10,955	2,806	4,107	5,440	8,875	13,046	18,115	26,555
80 - 84	58	4	2	10	16	18	7	1
	10,325	2,712	5,454	7,878	9,603	12,482	14,797	16,401
85 - 89	35	7	2	4	3	10	4	5
	9,488	2,427	3,947	5,528	9,484	11,447	14,867	16,538
90 & Over	34	4	2	4	5	8	3	8
	9,933	3,017	4,052	5,814	9,146	10,067	15,060	15,355
Total	437	73	17	38	72	112	90	35
	$12,154	$2,135	$5,155	$6,785	$10,719	$14,320	$18,694	$21,480

EXHIBIT C-3
Retired Participants as of June 30, 2005
By Age, Years Retired and Average Annual Benefit – New

		Years Retired						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	1	1	- -	- -	- -	- -	- -	- -
	$6,544	$6,544	- -	- -	- -	- -	- -	- -
50 - 54	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	57	3	1	5	3	3	7	35
	29,749	7,966	$1,919	$11,098	$11,949	$34,025	$31,046	$35,976
60 - 64	141	11	10	5	8	7	11	89
	22,840	3,311	3,330	$12,135	12,367	15,657	24,542	29,343
65 - 69	130	23	7	6	7	12	26	49
	17,909	2,100	4,661	8,006	11,252	18,045	21,351	27,526
70 - 74	137	26	11	3	6	21	29	41
	18,387	2,400	4,376	12,755	14,043	21,355	22,462	28,930
75 - 79	101	16	5	2	13	13	26	26
	17,899	2,168	5,403	9,670	16,364	19,659	21,237	27,165
80 - 84	34	6	2	2	2	4	6	12
	15,433	1,739	3,777	6,056	14,877	16,266	20,987	22,823
85 - 89	5	1	- -	1	- -	- -	- -	3
	16,000	1,499	- -	11,360	- -	- -	- -	22,381
90 & Over	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
Total	606	87	36	24	39	60	105	255
	$20,103	$2,577	$4,182	$10,220	$13,854	$19,955	$22,590	$29,227

EXHIBIT D-1
Disabled Members as of June 30, 2005
By Age, Years Disabled and Average Annual Benefit – Total

		Years Disabled						
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Over**
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	1	- -	- -	- -	- -	1	- -	- -
	$13,277	- -	- -	- -	- -	$13,277	- -	- -
50 - 54	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	6	1	1	1	1	1	- -	1
	14,540	$1,745	$3,169	$13,200	$15,627	25,528	- -	$27,971
60 - 64	9	2	- -	3	- -	2	2	- -
	15,791	3,852	- -	14,420	- -	19,299	$26,280	- -
65 - 69	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
70 - 74	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
75 - 79	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
80 - 84	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
85 - 89	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
90 & Over	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
Total	16	3	1	4	1	4	2	1
	$15,165	$3,150	$3,169	$14,115	$15,627	$19,351	$26,280	$27,971

EXHIBIT D-2

Disabled Members as of June 30, 2005
By Age, Years Disabled and Average Annual Benefit – Old

		Years Disabled						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
60 - 64	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
65 - 69	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
70 - 74	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
75 - 79	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
80 - 84	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
85 - 89	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
90 & Over	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
Total	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -

EXHIBIT D-3
Disabled Members as of June 30, 2005
By Age, Years Disabled and Average Annual Benefit - New

		Years Disabled						
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Over**
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	1	- -	- -	- -	- -	1	- -	- -
	$13,277	- -	- -	- -	- -	$13,277	- -	- -
50 - 54	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	6	1	1	1	1	1	- -	1
	14,540	$1,745	$3,169	$13,200	$15,627	25,528	- -	$27,971
60 - 64	9	2	- -	3	- -	2	2	- -
	15,791	3,852	- -	14,420	- -	19,299	$26,280	- -
65 - 69	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
70 - 74	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
75 - 79	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
80 - 84	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
85 - 89	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
90 & Over	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
Total	16	3	1	4	1	4	2	1
	$15,165	$3,150	$3,169	$14,115	$15,627	$19,351	$26,280	$27,971

EXHIBIT E-1
Beneficiaries as of June 30, 2005
By Age, Years Since Death and Average Annual Benefit – Total

		Years Since Death						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 45	6	6	- -	- -	- -	- -	- -	- -
	$5,549	$5,549	- -	- -	- -	- -	- -	- -
45 - 49	4	4	- -	- -	- -	- -	- -	- -
	7,591	7,591	- -	- -	- -	- -	- -	- -
50 - 54	3	1	1	- -	1	- -	- -	- -
	7,159	2,726	$4,973	- -	$13,779	- -	- -	- -
55 - 59	3	2	- -	- -	1	- -	- -	- -
	15,690	13,317	- -	- -	20,435	- -	- -	- -
60 - 64	5	4	- -	- -	- -	- -	1	- -
	17,920	17,705	- -	- -	- -	- -	$18,780	- -
65 - 69	11	6	1	- -	- -	- -	2	2
	16,002	8,969	10,732	- -	- -	- -	25,997	$29,737
70 - 74	18	10	- -	- -	2	1	2	3
	17,273	17,703	- -	- -	15,915	$9,668	15,123	20,711
75 - 79	17	6	- -	1	2	2	3	3
	14,080	13,311	- -	$10,212	5,930	16,222	18,624	16,369
80 - 84	13	2	1	- -	1	3	1	5
	12,579	3,020	5,152	- -	11,461	10,764	12,635	19,188
85 - 89	8	1	- -	2	1	1	- -	3
	9,749	8,949	- -	6,433	6,092	7,658	- -	14,144
90 & Over	6	4	- -	- -	- -	1	- -	1
	6,399	4,712	- -	- -	- -	8,622	- -	10,925
Total	94	46	3	3	8	8	9	17
	$13,064	$11,052	$6,952	$7,693	$11,932	$11,335	$18,836	$18,824

EXHIBIT E-2
Beneficiaries as of June 30, 2005
By Age, Years Since Death and Average Annual Benefit – Old

	Years Since Death								
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 45	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	2	- -	1	- -	1	- -	- -	- -
	$9,376	- -	$4,973	- -	$13,779	- -	- -	- -
55 - 59	2	1	- -	- -	1	- -	- -	- -
	20,550	$20,665	- -	- -	20,435	- -	- -	- -
60 - 64	3	2	- -	- -	- -	- -	1	- -
	12,161	8,851	- -	- -	- -	- -	$18,780	- -
65 - 69	4	3	- -	- -	- -	- -	1	- -
	10,562	4,833	- -	- -	- -	- -	27,749	- -
70 - 74	4	1	- -	- -	1	- -	1	1
	11,580	2,766	- -	- -	18,506	- -	11,902	$13,144
75 - 79	7	- -	- -	- -	2	1	2	2
	13,189	- -	- -	- -	5,930	$9,800	18,132	17,200
80 - 84	9	1	1	- -	1	2	1	3
	12,235	4,191	5,152	- -	11,461	9,853	12,635	18,992
85 - 89	7	1	- -	2	1	1	- -	2
	8,331	8,949	- -	$6,433	6,092	7,658		11,378
90 & Over	3	1	- -	- -	- -	1	- -	1
	12,642	18,381	- -	- -	- -	8,622	- -	10,925
Total	41	10	2	2	7	5	6	9
	$11,795	$8,715	$5,063	$6,433	$11,733	$9,157	$17,888	$15,355

EXHIBIT E-3
Beneficiaries as of June 30, 2005
By Age, Years Since Death and Average Annual Benefit – New

	Years Since Death							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 45	6	6	- -	- -	- -	- -	- -	- -
	$5,549	$5,549	- -	- -	- -	- -	- -	- -
45 - 49	4	4	- -	- -	- -	- -	- -	- -
	7,591	7,591	- -	- -	- -	- -	- -	- -
50 - 54	1	1	- -	- -	- -	- -	- -	- -
	2,726	2,726	- -	- -	- -	- -	- -	- -
55 - 59	1	1	- -	- -	- -	- -	- -	- -
	5,969	5,969	- -	- -	- -	- -	- -	- -
60 - 64	2	2	- -	- -	- -	- -	- -	- -
	26,559	26,559	- -	- -	- -	- -	- -	- -
65 - 69	7	3	1	- -	- -	- -	1	2
	19,110	13,106	$10,732	- -	- -	- -	$24,245	$29,737
70 - 74	14	9	- -	- -	1	1	1	2
	18,899	19,363	- -	- -	$13,324	$9,668	18,343	24,494
75 - 79	10	6	- -	1	- -	1	1	1
	14,703	13,311	- -	$10,212	- -	22,643	19,607	14,708
80 - 84	4	1	- -	- -	- -	1	- -	2
	13,350	1,849	- -	- -	- -	12,585	- -	19,483
85 - 89	1	- -	- -	- -	- -	- -	- -	1
	19,677	- -	- -	- -	- -	- -	- -	19,677
90 & Over	3	3	- -	- -	- -	- -	- -	- -
	156	156	- -	- -	- -	- -	- -	- -
Total	53	36	1	1	1	3	3	8
	$14,046	$11,701	$10,732	$10,212	$13,324	$14,966	$20,732	$22,727

EXHIBIT F

Reconciliation of Member Data

		Active Members	Vested Terminated Members	Other Non-Vested Terminated Members	Retired Participants	Disableds	Beneficiaries	Total
A.	Number as of June 30, 2004	1,178	312	650	1,036	14	87	3,277
B.	Additions	126	17	84	49	3	12	291
C.	Deletions:							
	1. Retirements	-38	-6	-2	N/A	-1	0	-47
	2. Disability	-2	0	0	0	N/A	0	-2
	3. Died with beneficiary	0	0	0	-9	0	N/A	-9
	4. Died without beneficiary	0	0	-2	-28	0	-5	-35
	5. Terminated – deferred	-16	N/A	0	0	0	0	-16
	6. Terminated – other non-vested	-82	0	N/A	0	0	0	-82
	7. Refunds	-2	-2	-9	0	0	0	-13
	8. Rehired as active	N/A	-8	-17	0	0	0	-25
	9. Contributions Written Off	0	0	-66	0	0	0	-66
D.	Data Adjustments	0	0	0	-5	0	0	-5
E.	Number as of June 30, 2005	1,164	313	638	1,043	16	94	3,268

EXHIBIT G

Schedule of Pensioners and Beneficiaries Added to and Removed from Rolls

Fiscal Year	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
1998	58	$898,675	27	$242,860	910	$9,744,631	12.3%	$10,708
1999	61	1,263,965	32	251,972	939	10,926,102	12.1	11,636
2000	90	2,519,000	33	633,465	996	12,359,721	13.1	12,409
2001	88	2,458,668	26	547,671	1,058	14,341,500	16.0	13,555
2002	56	1,817,094	29	800,165	1,085	15,968,396	11.3	14,717
2003	41	1,191,364	19	574,944	1,107	16,767,603	5.0	15,147
2004	56	1,203,279	26	303,856	1,137	18,240,239	8.8	16,042
2005	64	1,373,262	48	603,930	1,153	18,936,633	3.8	16,424

EXHIBIT H

Statement of Change in Net Plan Assets for Year Ended June 30, 2005

			Market Value	Cost Value
A.	Assets available at beginning of period		$258,831,515	$241,096,683
B.	Additions:			
	1.	Member contributions	$2,924,264	$2,924,264
	2.	Employer contributions	2,845,684	2,845,684
	3.	Supplemental contribution	0	0
	4.	Investment income	7,906,994	7,906,994
	5.	Investment expenses	-1,219,009	-1,219,009
	6.	Net realized gain/(loss)	16,319,090	16,319,090
	7.	Other	10,345	10,345
	8.	Net change in unrealized gain/(loss)	-1,430,430	0
	9.	Total Additions	$27,356,938	$28,787,368
C.	Operating Expenses:			
	1.	Service retirements	$16,907,619	$16,907,619
	2.	Disability benefits	224,027	224,027
	3.	Survivor benefits	1,158,994	1,158,994
	4.	Refunds	77,750	77,750
	5.	Administrative expenses	436,507	436,507
	6.	Total operating expenses	$18,804,897	$18,804,897
D.	Other changes in reserves		0	0
E.	Assets available at end of period		$267,383,556	$251,079,154

F.	Determination of current year unrecognized asset return		
	1.	Average balance:	
		(a) Assets available at BOY: (A)	$258,831,515
		(b) Assets available at EOY: (E)	267,383,556
		(c) Average balance [(a) + (b) – Net Investment Income] / 2 [Net Investment Income: (B.4) + (B.5) + (B.6) + (B.7) + (B.8)]	252,314,041
	2.	Expected return: 8.50% x (F.1.(c))	21,446,693
	3.	Actual return: (B.4) + (B.5) + (B.6) + (B.7) + (B.8)	21,586,990
	4.	Current year unrecognized asset return: (F.3) – (F.2)	$140,297

EXHIBIT I

Statement of Plan Net Assets for Year Ended June 30, 2005

	Market Value	Cost Value
Assets in trust		
Cash, equivalents, short-term securities	$38,887,048	$38,887,048
Investments:		
Fixed income	$157,242,145	$154,649,136
Equity	93,331,426	79,620,033
Real estate and mortgage loans	2,380,701	2,380,701
Invested securities lending collateral	43,730,695	43,730,695
Other assets	363,827	363,827
Total assets in trust	$335,935,842	$319,631,440
Assets receivable	$4,039,657	$4,039,657
Liabilities		
Invested securities lending collateral	-43,730,695	-43,730,695
Other	-28,861,248	-28,861,248
Total liabilities	-$72,591,943	-$72,591,943
Net assets held in Trust for Pension Benefits		
Member reserves	$31,108,392	$31,108,392
Future reserves	236,275,164	219,970,762
Total Assets Available for Benefits	$267,383,556	$251,079,154
Net Assets at Market/Cost Value	$267,383,556	$251,079,154

EXHIBIT J

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2002	- -	- -	- -	- -	- -	$280,515,000
2003	$2,933,000	$3,299,000	$9,174,000	$445,000	$17,009,000	278,467,000
2004	2,826,730	2,991,801	10,518,561	448,704	17,406,336	276,949,052
2005	2,845,684	2,924,264	4,566,718	436,507	18,368,390	268,480,821

* *Net Investment Return on an Actuarial Value of Assets basis, and net of investment fees.*

EXHIBIT K

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2005

1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		$24,755,393
2. Normal cost at beginning of year, including expenses		5,339,554
3. Total contributions		5,769,948
4. Interest		
(a) For whole year on (1) + (2)	$2,558,071	
(b) For half year on (3)	245,223	
(c) Total interest: (4a) – (4b)		2,312,848
5. Expected unfunded/(overfunded) actuarial accrued liability: (1) + (2) – (3) + (4)		$26,637,847
6. Changes due to (gain)/loss from:		
(a) Investments	$18,419,965	
(b) Demographics*	-2,614,704	
(c) Total changes due to (gain)/loss		$15,805,261
7. Unfunded/(Overfunded) actuarial accrued liability at end of year		$42,443,108

**Includes (gain)/loss due to age/service retirements, disability, mortality (pre and post-retirement), withdrawal and salary increases.*

EXHIBIT L
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 Fund is calculated including:

(a) Investment return — the rate of investment yield that the Fund 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 Fund exceeds the assets of the Fund. 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 Fund's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Fund 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.

Accrued Benefit Funded Ratio: A current year funded status that measures the percent of benefits covered by Current Assets. This ratio is based on benefits earned to the valuation date (accrued service) and includes future salary increases to retirement. The liability for these benefits is defined as the Current Benefit Obligations. The Accrued Benefit Funded Ratio is calculated as the Actuarial Value of Assets (Current Assets) divided by the Current Benefit Obligations.

Projected Benefit Funded Ratio: A projected funded status that measures contribution sufficiency/deficiency, which is based on a present value of all plan benefits for the lifetime of all plan members. The liability for these benefits is defined as the Current and Expected Future Benefit Obligations, or Present Value of Benefits. The Current and Expected Future Assets are determined as the sum of the Actuarial Value of Assets (Current Assets), the Present Value of Expected Future Statutory Supplemental Contributions and the Present Value of Future Normal Costs. The Projected Benefit Funded Ratio is calculated as the Current and Expected Future Assets divided by the Current and Expected Future Benefit Obligations. If the ratio is equal to or more than 100%, there is a contribution sufficiency, and if it is less than 100% there is a contribution deficiency.

EXHIBIT I
Summary of Actuarial Valuation Results

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

1.	Pensioners as of the valuation date (including 94 beneficiaries in pay status)		1,153
2.	Members inactive during year ended June 30, 2005 with vested rights		313
3.	Members active during the year ended June 30, 2005		1,164
	Fully vested	902	
	Not vested	262	
4.	Other non-vested terminated members as of June 30, 2005		638

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

		Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability				
1.	Active members:			
	(a) Retirement benefits	$149,221,874	$34,388,266	$114,833,608
	(b) Disability benefits	1,393,616	528,991	864,625
	(c) Death benefits	2,149,622	764,138	1,385,484
	(d) Withdrawal benefits	6,923,324	5,606,502	1,316,822
	(e) Total	$159,688,436	$41,287,897	$118,400,539
2.	Vested terminated members	$11,525,782	- -	$11,525,782
3.	Other non-vested terminated members	921,701	- -	921,701
4.	Annuitants	180,075,907	- -	180,075,907
5.	Total	$352,211,826	$41,287,897	$310,923,929
B. Determination of Unfunded Actuarial Accrued Liability				
1.	Actuarial Accrued Liability			$310,923,929
2.	Actuarial Value of Assets			268,480,821
3.	Unfunded Actuarial Accrued Liability: (1) – (2)			$42,443,108
C. Determination of Supplemental Contribution Rate				
1.	Present value of future payrolls through the amortization date of June 30, 2032			$980,046,547
2.	Supplemental contribution rate: (B.3) / (C.1)			4.33%

EXHIBIT II
Actuarial Balance Sheet

A. Current Assets				$268,480,821
B. Expected Future Assets				
1. Present Value of Expected Future Statutory Supplemental Contributions				$14,308,680
2. Present Value of Future Normal Costs				41,287,897
3. Total Expected Future Assets				$55,596,577
C. Total Current and Expected Future Assets				$324,077,398
D. Current Benefit Obligations		**Non-Vested**	**Vested**	**Total**
1. Benefit recipients:				
	(a) Retirement annuities	- -	$167,649,179	$167,649,179
	(b) Disability benefits	- -	2,557,048	2,557,048
	(c) Beneficiaries	- -	9,869,680	9,869,680
2. Vested terminated members		- -	11,525,782	11,525,782
3. Other non-vested terminated members		- -	921,701	921,701
4. Active members:				
	(a) Retirement benefits	$334,106	99,604,750	99,938,856
	(b) Disability benefits	6,140	879,624	885,764
	(c) Death benefits	8,967	1,310,794	1,319,761
	(d) Withdrawal benefits	99,011	4,189,570	4,288,581
5. Total Current Benefit Obligations		$448,224	$298,508,128	$298,956,352
E. Expected Future Benefit Obligations				53,255,474
F. Total Current and Expected Future Benefit Obligations - Present Value of Benefits: (D.5 + E)				$352,211,826
G. Current Unfunded Actuarial Liability (D.5 - A)				$30,475,531
H. Current and Future Unfunded Actuarial Liability (F - C)				$28,134,428

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended June 30	Actuarially Required Contribution Rate (a)	Actual Covered Payroll (b)	Actual Member Contributions (c)	Annual Required Employer Contributions [(a) x (b)] – (c) = (d)	Actual Employer Contributions* (e)	Percentage Contributed (e) / (d)
1991	10.70%	$42,297,000	$2,043,000	$2,483,000	$2,449,000	98.63%
1992	11.09	42,884,000	2,124,000	2,632,000	2,483,000	94.34
1993	11.42	43,282,000	2,126,000	2,817,000	2,506,000	88.96
1994	10.21	43,109,000	2,230,000	2,171,000	2,496,000	114.97
1995	10.36	46,528,000	2,144,000	2,676,000	2,694,000	100.67
1996	13.23	44,870,000	2,570,000	3,366,000	2,598,000	77.18
1997	13.60	46,770,000	2,644,000	3,717,000	2,708,000	72.85
1998	12.87	47,064,000	2,664,000	3,393,000	3,211,000	94.64
1999	10.24	52,176,000	3,118,000	2,225,000	3,507,000	157.62
2000	9.16	52,270,000	3,152,000	1,636,000	3,512,000	214.67
2001	8.51	51,996,000	3,141,000	1,284,000	3,497,000	272.35
2002	7.49	51,054,000	3,275,000	549,000	3,442,000	626.96
2003**	9.85	50,656,000	3,299,000	1,691,000	2,933,000	173.45
2004	11.27	48,820,898	2,991,801	2,510,314	2,826,730	112.60
2005	12.11	49,148,256	2,924,264	3,027,590	2,845,684	93.99

* *Includes contributions from other sources (if applicable)*
** *Actuarially Required Contribution Rate prior to change in actuarial assumptions and plan provisions is 7.62%.*

EXHIBIT IV

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)	Actual Covered Payroll (Previous FY) (c)	UAAL as a Percentage of Covered Payroll [(b) – (a)] / (c)
07/01/1991	$105,087,000	$117,582,000	$12,495,000	89.37%	$42,297,000	29.54%
07/01/1992	116,492,000	124,140,000	7,648,000	93.84	42,884,000	17.83
07/01/1993	130,856,000	132,700,000	1,844,000	98.61	43,282,000	4.26
07/01/1994	133,632,000	137,042,000	3,410,000	97.51	43,109,000	7.91
07/01/1995	142,852,000	173,965,000	31,113,000	82.12	46,528,000	66.87
07/01/1996	157,007,000	189,518,000	32,511,000	82.85	44,870,000	72.46
07/01/1997	170,059,000	197,820,000	27,761,000	85.97	46,770,000	59.36
07/01/1998	187,482,000	197,078,000	9,596,000	95.13	47,064,000	20.39
07/01/1999	218,699,000	220,540,000	1,841,000	99.17	52,176,000	3.53
07/01/2000	251,007,000	241,899,000	-9,108,000	103.77	52,270,000	-17.42
07/01/2001	273,618,000	254,255,000	-19,363,000	107.62	51,996,000	-37.24
07/01/2002	280,515,000	279,428,000	-1,087,000	100.39	51,054,000	-2.13
07/01/2003	278,467,000	291,109,000	12,642,000	95.66	50,656,000	24.96
07/01/2004	276,949,052	301,704,445	24,755,393	91.79	48,820,898	50.71
07/01/2005	268,480,821	310,923,929	42,443,108	86.35	49,148,256	86.36

Exhibit V

Determination of Contribution Sufficiency – Total

	July 1, 2005	
A. Statutory Contributions – Chapter 354A	**Percent of Payroll**	**Dollar Amount**
1. Member contributions	5.50%	$3,093,049
2. Employer contributions	5.79%	3,256,137
3. Total	11.29%	$6,349,186
B. Required Contributions – Chapter 356	**Percent of Payroll**	**Dollar Amount**
1. Normal Cost:		
(a) Retirement	7.64%	$4,295,640
(b) Disability	0.11%	60,702
(c) Death	0.15%	86,953
(d) Withdrawal	1.15%	648,960
(e) Total	9.05%	$5,092,255
2. Supplemental contribution amortization	4.33%	$2,435,073
3. Allowance for administrative expenses	0.78%	438,651
4. Total	14.16%	$7,965,979
C. Contribution Sufficiency / (Deficiency): (A.3) – (B.4)	-2.87%	-$1,616,793
Projected* annual payroll for fiscal year beginning on the valuation date		$56,237,262

** Projected payroll includes annualized pay for new hires and increases to current fiscal year.*

Exhibit VI
Determination of Contribution Sufficiency – Old Plan

	July 1, 2005	
A. Statutory Contributions – Chapter 354A	**Percent of Payroll**	**Dollar Amount**
1. Member contributions	5.50%	$695,447
2. Employer contributions	5.79%	732,116
3. Total	11.29%	$1,427,563

B. Required Contributions – Chapter 356	**Percent of Payroll**	**Dollar Amount**
1. Normal Cost:		
(a) Retirement	6.76%	$855,036
(b) Disability	0.09%	11,347
(c) Death	0.12%	14,561
(d) Withdrawal	1.48%	187,309
(e) Total	8.45%	$1,068,253

Projected* annual payroll for fiscal year beginning on the valuation date	$12,644,498

** Projected payroll includes annualized pay for new hires and increases to current fiscal year.*

Exhibit VII
Determination of Contribution Sufficiency – New Plan

	July 1, 2005	
A. Statutory Contributions – Chapter 354A	**Percent of Payroll**	**Dollar Amount**
1. Member contributions	5.50%	$2,397,602
2. Employer contributions	5.79%	2,524,021
3. Total	11.29%	$4,921,623

B. Required Contributions – Chapter 356	**Percent of Payroll**	**Dollar Amount**
1. Normal Cost:		
(a) Retirement	7.89%	$3,440,603
(b) Disability	0.11%	49,357
(c) Death	0.17%	72,391
(d) Withdrawal	1.06%	461,651
(e) Total	9.23%	$4,024,002

Projected* annual payroll for fiscal year beginning on the valuation date	$43,592,764

** Projected payroll includes annualized pay for new hires and increases to current fiscal year.*

EXHIBIT VIII

Supplementary Information Required by the GASB

Valuation date	July 1, 2005
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, assuming payroll increases of 5.00% per annum
Remaining amortization period	27 years remaining as of July 1, 2005
Asset valuation method	Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Actuarial assumptions:	
Investment rate of return:	
Pre-retirement	8.50% per annum
Post-retirement	6.50% per annum
Projected salary increases	Select and ultimate rates by age, with ultimate rates of 5.00% - 7.00%
Plan membership:	
Pensioners and beneficiaries receiving benefits	1,153
Terminated vested members entitled to, but not yet receiving benefits	313
Other terminated non-vested members	638
Active members	1,164
Total	3,268

EXHIBIT IX

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy Pre-Retirement:

	Male:	1983 Group Annuity Mortality Table for Males set back 10 years
	Female:	1983 Group Annuity Mortality Table for Females set back 7 years

Healthy Post-Retirement:

	Male:	1983 Group Annuity Mortality Table for Males set back 2 years
	Female:	1983 Group Annuity Mortality Table for Females

Disabled:

	Male:	1977 Railroad Retirement Board Mortality Table for Disabled Lives
	Female:	1977 Railroad Retirement Board Mortality Table for Disabled Lives

Summary of Rates: Shown below for selected ages:

	Rate (%)						
	Mortality				Retirement		Ultimate Rate of Salary Increases
Age	Male	Female	Withdrawal	Disability	Old	New	
20	0.03%	0.01%	3.50%	- -	- -	- -	6.90%
25	0.03	0.02	3.25	- -	- -	- -	6.75
30	0.04	0.02	3.00	- -	- -	- -	6.50
35	0.05	0.03	2.75	0.01%	- -	- -	6.25
40	0.06	0.04	2.50	0.03	- -	- -	6.00
45	0.09	0.06	2.00	0.06	- -	- -	5.50
50	0.12	0.08	1.50	0.10	- -	- -	5.00
55	0.22	0.14	0.75	0.15	15.00%	10.00%	5.00
60	0.39	0.21	- -	0.21	15.00	10.00	5.00
65	0.61	0.34	- -	- -	40.00	20.00	5.00
70	0.92	0.58	- -	- -	50.00	40.00	5.00
75	1.56	0.97	- -	- -	80.00	80.00	5.00
80	2.75	1.85	- -	- -	100.00	100.00	5.00

Retirement Rates:	Rates are shown for selected ages on the previous page. In addition, 40% of the members are assumed to retire each year that they are eligible for Rule of 90.
Withdrawal Rates:	Select and ultimate rates are based on recent plan experience. Ultimate rates after the third year are shown in the rate table shown above. Select rates are as follows:
First year:	40.00%
Second year:	10.00%
Third year:	6.00%
Retirement Age for Inactive Vested Members:	60
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics.
Percent Married:	80% of members are assumed to be married.
Age of Spouse:	Females three years younger than males.
Net Investment Return:	
Pre-Retirement:	8.50% per annum
Post-Retirement:	6.50% per annum
Salary Increases:	Reported salary for prior fiscal year, with new hires annualized, increased to current fiscal year and annually for each future year according to the ultimate rate table on the prior page. This table includes a 5.00% base inflation assumption. During a 10-year select period, 0.30% x (10-T) where T is completed years of service is added to the ultimate rate.
Administrative Expenses:	Prior year administrative expenses expressed as percentage of prior year projected payroll.
Allowance for Combined Service Annuity:	10.00% load on liabilities for active members and 10.00% load on liabilities for former members.

Return of Contributions:	All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.
Special Consideration:	Annual 2.00% increase for annuitants is accounted for by using a 6.50% post-retirement interest rate. Members in the Old Plan are assumed to receive their retirement benefits from the New Plan. Members who terminated under the Old Plan are assumed to take refund under the New Plan.
	Married Members assumed to elect subsidized joint and survivor form of annuity as follows:
Males:	35% elect 50% J&S option
	55% elect 100% J&S option
Females:	25% elect 50% J&S option
	25% elect 100% J&S option
Asset Valuation Method:	Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Actuarial Cost Method:	Entry Age Normal Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are expressed as a level percentage of payroll, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Payment on the Unfunded Actuarial Accrued Liability:	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5.00% per annum. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Changes in Actuarial Assumptions and Cost Methods:	The only change in actuarial assumptions and cost methods is a change in the retirement age for inactive vested members from 65 to 60.

EXHIBIT X
Summary of Plan Provisions

This summary of provisions reflects the interpretation of applicable Statues for purposes of preparing this valuation. This interpretation is not intended to create or rescind any benefit rights in conflict with any Minnesota Statutes.

Plan Year:	July 1 through June 30
Eligibility (Old Plan and New Plan):	Licensed full-time and part-time teachers who are employed by the Duluth Public Schools other than a charter school teacher, and eligible licensed staff at Lake Superior College, who have elected to retain their membership in the DTRFA. Also includes any employees of the Retirement Fund Association. Employees in the Old Plan are those first hired before July 1, 1981. Employees in the New Plan, Tier I are those first hired on or after July 1, 1981. Employees in the New Plan, Tier II are those first hired on or after July 1, 1989.
Credited Service (Old Plan and New Plan):	Earned while employed in a covered position and employee contributions are deducted. May also include extended or mid-career leaves of absence, medical leave of absence, sabbatical leave, and military service. Credit for less than a full year is granted on a prorated basis.
Salary (Old Plan and New Plan):	Total Compensation. Excludes any lump-sum annual leave or sick leave payments and lump-sum payments at time of separation from employment.
Average Salary (Old Plan):	Average of the five highest years of annual salary.
Average Salary (New Plan):	Average of the five highest successive years of salary. Average Salary is based on all Credited Service if less than five years.

Retirement (Old Plan):

<u>*Normal Retirement:*</u>

Age Requirement:	Age 60, and
Service Requirement:	10 years of Credited Service
Amount:	1.45% of Average Salary for each year of Credited Service

<u>*Early Retirement:*</u>

Age Requirement:	Age 55, and
Service Requirement:	10 years of Credited Service, or
Age/Service Requirement:	The sum of age and Credited Service equals 90, if earlier.
Amount:	1.45% of Average Salary for each year of Credited Service with reduction of 0.25% for each month the member is under age 60. No reduction if the sum of age and years of Credited Service equals 90.
Form of Payment:	Life annuity. Actuarially equivalent options are: (a) 5, 10, 15 or 20-year certain and life, or (b) 50% or 100% joint and survivor with bounce back feature without additional reduction. (c) Other equivalent options approved by the Board.
Benefit Increases:	<u>Annual Cost-of-Living Adjustment (COLA):</u> Increase all benefits by 2.00% each January 1. An additional increase will be allowed when the 5-year average rate of return of the fund exceeds the Fund's assumed rate of return, currently 8.50%. To be eligible for a COLA, a retiree or beneficiary must have received a payment for at least 12 months as of the adjustment date. **Note: A member who is eligible for normal or early benefits under the Old Plan may instead receive a benefit under New Plan Tier I or New Plan Tier II if it is greater than the benefit from the Old Plan.**

Retirement (New Plan Tier I):

<u>*Normal Retirement:*</u>

Age/Service Requirement:	Members first hired before July 1, 1989: (a) Age 65, or (b) Age 62 and 30 years of Credited Service.
Amount:	1.20% of Average Salary for each of the first ten years of Credited Service and 1.70% of Average Salary for each subsequent year.

<u>*Early Retirement:*</u>

Age/Service Requirement:	(a) Age 55 and three years of Credited Service, or (b) Any age with 30 years of Credited Service, or (c) The sum of age and Credited Service equals 90.
Amount:	1.20% of Average Salary for the first ten years of Credited Service and 1.70% of Average Salary for each subsequent year with reduction of 0.25% for each month the member is under Normal Retirement Age. No reduction if the sum of age and years of Credited Service equals 90.
Form of Payment:	Life annuity. Actuarially equivalent options are: (a) 5, 10, 15 or 20-year certain and life, or (b) 50% or 100% joint and survivor with bounce back feature without additional reduction. (c) A larger life annuity before age 62 and reduced thereafter.

Benefit Increases: Annual Cost-of-Living Adjustment (COLA):

Increase all benefits by 2.00% each January 1. An additional increase will be allowed when the 5-year average rate of return of the fund exceeds the Fund's assumed rate of return, currently 8.50%. To be eligible for a COLA, a retiree or beneficiary must have received a payment for at least 12 months as of the adjustment date.

Note: A member who is eligible for normal or early benefits under the New Plan Tier I may instead receive a benefit under New Plan Tier II if it is greater than the benefit from New Plan Tier I.

Retirement (New Plan Tier II):

Normal Retirement:

Age/Service Requirement: Members first hired after June 30, 1989:

The greater of age 65 or the age eligible for full Social Security retirement benefits but not higher than age 66.

Amount: 1.70% of Average Salary for each year of Credited Service.

Early Retirement:

Age/Service Requirement: Age 55 and three years of Credited Service.

Amount: 1.70% of Average Salary for each year of Credited Service with augmentation to the age eligible for full social security retirement benefits at 3.00% per year and actuarial reduction for each month the member is under the Social Security Retirement Age.

Form of Payment: Life annuity. Actuarially equivalent options are:

(a) 5, 10, 15 or 20-year certain and life, or

(b) 50% or 100% joint and survivor with bounce back feature without additional reduction.

(c) A larger life annuity before age 62 and reduced thereafter.

Benefit Increases: Annual Cost-of-Living Adjustment (COLA):

Increase all benefits by 2.00% each January 1. An additional increase will be allowed when the 5-year average rate of return of the fund exceeds the Fund's assumed rate of return, currently 8.50%. To be eligible for a COLA, a retiree or beneficiary must have received a payment for at least 12 months as of the adjustment date.

Disability (Old Plan):

Age/Service Requirement: Totally and permanently disabled as a teacher before the age of 60 with five years of Credited Service.

Amount:

(a) Normal Retirement benefit based on Credited Service and Average Salary at disability date without reduction for early commencement. Amount is reduced for Workers' Compensation.

(b) Payment stops at age 60, or earlier if disability ceases or death occurs.

Form of Payment: Same as for Normal Retirement.

Benefit Increases: Same as for Normal Retirement.

Disability (New Plan):

Age/Service Requirement: Totally and permanently disabled under Normal Retirement Age with three years of Credited Service. Also, at least two of the years of Credited Service must have been uninterrupted.

Amount:

(a) Normal Retirement benefit based on Credited Service and Average Salary at disability without reduction commencement before retirement age. Benefit is reduced by Workers' Compensation.

(b) Payments may begin 90 days after disability and stops at Normal Retirement Age, or earlier if disability ceases or death occurs. Benefits paid while partially employed may be reduced.

Form of Payment: Same as for Normal Retirement.

Benefit Increases: Same as for Normal Retirement.

<u>Retirement After Disability</u>:

Age/Service Requirement: Normal Retirement Age if still totally and permanently disabled.

Amount: Optional annuity continues, otherwise the larger of the disability benefit paid before Normal Retirement Age or the Normal Retirement benefit available at Normal Retirement Age, or an actuarial equivalent optional annuity.

Benefit Increases: Same as for retirement.

Withdrawal (Old Plan):

<u>Refund of Member's Contributions</u>:

Age/Service Requirement:	Termination from Teaching Service.
Amount:	Member's contributions with 5.00% interest compounded annually if termination occurred before May 16, 1989, and 6.00% interest if termination occurred on or after May 16, 1989.

<u>Deferred Annuity</u>:

Age/Service Requirement:	Ten years of Credited Service.
Amount:	Benefit computed under law in effect at termination and increased by the following annual percentage: 3.00% until January 1 of the year following attainment of age 55 and 5.00% thereafter until the annuity begins. Amount is payable as a Normal or Early Retirement.

Withdrawal (New Plan):

<u>Refund of Member's Contributions</u>:

Age/Service Requirement:	Termination from Teaching Service.
Amount:	Member's contributions with 5.00% interest compounded annually if termination occurred before May 16, 1989, and 6.00% interest if termination occurred on or after May 16, 1989.

<u>Deferred Annuity</u>:

Age/Service Requirement:	Three years of Credited Service.
Amount:	Benefit computed under law in effect at termination and increased by the following annual percentage: 3.00% until January 1 of the year following attainment of age 55 and 5.00% thereafter until the annuity begins. Amount is payable as a Normal or Early Retirement.

Pre-Retirement Death Benefit (Old Plan):

Age/Service Requirement:	None.
Amount:	Refund of two times member's contributions accumulated with 5.00% interest compounded annually if death occurred before May 16, 1989, and 6.00% interest if death occurred on or after May 16, 1989.

Post-Retirement Death Benefit (Old Plan):

Age/Service Requirement:	None.
Amount:	Refund the excess of member's contributions over total benefits paid, accumulated with 5.00% interest compounded annually if death occurred before May 16, 1989, and 6.00% interest compounded annually if death occurred on or after May 16, 1989.

Surviving Spouse Benefit (Old Plan):

Optional Annuity I:

Age/Service Requirement:	Death of active member with ten years of Credited Service.
Amount:	In lieu of the Pre-Retirement Death Benefit Refund, an annuity to surviving spouse equivalent to 120% of the refund amount.

Optional Annuity II:

Age/Service Requirement:	Death of active member who is age 55 with ten years of Credited Service.
Amount:	In lieu of Pre-Retirement Death Benefit Refund or Surviving Spouse Optional Annuity I, spouse may elect survivor portion of the 100% joint and survivor annuity the member could have elected if terminated.

Pre-Retirement Death Benefit (New Plan):

Surviving Spouse Optional Annuity:

Age/Service Requirement:	Member who dies before retirement benefits commence with three years of Credited Service.
Amount:	Survivor's payment of the 100% joint and survivor benefit or an actuarial equivalent term certain annuity. If commencement is prior to Normal Retirement Age, the benefit is reduced at the early retirement reduction factors, with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer.
Benefit Increases:	Same as for Normal Retirement.

Refund of Member's Contributions:

Age/Service Requirement:	Member or former member dies before receiving any disability or retirement benefits, and survivor benefits are not payable.
Amount:	Member's contributions with 5.00% interest compounded annually if death occurred before May 16, 1989, and 6.00% interest if death occurred on or after May 16, 1989.

Contributions:

Member:	5.50% of salary.
Employer:	5.79% of salary.

Changes in Plan Provisions: There have been no changes made to the plan provisions since the prior valuation.