TOWN OF DEDHAM
CONTRIBUTORY RETIREMENT SYSTEM

Actuarial Valuation Report

January 1, 2006

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Report Summary:

Highlights	**January 1, 2004**	**January 1, 2006**
Contributions		
Funding Schedule FY 2007	$3,251,144	$3,251,144
Funding Schedule FY 2008	3,300,160	3,405,298
Funded Ratios		
GAS No. 25	75.0%	78.7%
Participants		
Actives	395	419
Retirees and Beneficiaries	237	247
Vested	0	0
Inactives	77	106
Disabled	54	53
Total	763	825
Payroll		
Payroll of Active Members	$14,858,630	$17,182,174
Average Payroll	37,617	41,008
Normal Cost		
Employer	749,850	997,737
Employee	1,187,518	1,351,822
Administrative Expenses	126,858	100,000
Total	2,064,226	2,449,559
Actuarial Accrued Liabilities		
Actives	37,852,673	41,485,797
Retirees, Beneficiaries, Disabilities and Inactives	43,250,542	47,837,674
Total	81,608,417	89,323,471
Actuarial Value of Assets	61,222,788	70,287,535
Unfunded Actuarial Accrued Liabilities	$20,385,629	$19,035,936

Introduction

This report presents findings as of January 1, 2006 of an actuarial valuation of the Dedham Contributory Retirement System.

The actuarial valuation is based on:

- Provisions Chapter 32 of the Massachusetts General Laws, "M.G.L", as of January 1, 2006.
- Employee data provided by the Retirement Board
- Asset information reported to the Public Employee Retirement Administration Commission by the Town of Dedham Contributory Retirement System
- Actuarial assumptions approved by the Retirement Board

The valuation and appropriation forecast are prepared in accordance with Chapter 32 of the M.G.L. as of January 1, 2006.

The valuation and forecast do not account for:

- Any subsequent changes in the law
- Chapter 32 of the M.G.L., Section 3(8)(c) transfers between systems
- State-mandated benefits
- Cost-of-living increases granted to retired members between 1982 and 1997. The cost of these benefits has been assumed by the State under Proposition Two and One-Half.

Actuarial Experience

In performing the actuarial valuation, various assumptions are made regarding such factors as mortality, retirement, disability, and withdrawal rates as well as both payroll, salary increases, and investment returns. A comparison of the current valuation and the prior valuation is made to determine how closely actual experience corresponded to anticipated occurrences. This analysis of the system provides insight into the overall quality of the actuarial assumptions and helps explain any change in the annual appropriation.

During the last two years, the total unfunded actuarial accrued liability decreased by 6.6% to $19,035,936. The decrease is the result of net favorable actuarial experience during the preceding years. The primary component of the favorable experience was an investment return more than the 8.0% assumption. The actuarial value of assets had returns of 5.94% and 10.67% for 2004 and 2005, respectively. The result is a gain of $450,000.

Actuarial Costs and Liabilities:

Normal Costs

The normal cost is the sum of the individual normal costs determined for each member as if the assumptions underlying the cost determinations had been exactly realized. An individual normal cost represents that part of the cost of a member's future benefits which are assigned to the current year as if the costs are to remain level as a percentage of the member's pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation. Anticipated employee contributions to be made during the year are subtracted from the total normal cost to determine employer normal cost. The total normal cost is divided by total payroll to determine the normal cost as a percent of pay. The normal cost is shown in Table I.

Table I

	January 1, 2004	January 1, 2006
Superannuation	$1,937,368	$1,583,284
Termination	N/A	206,964
Death	N/A	123,043
Disability	N/A	436,268
Administrative Expenses	126,858	100,000
Total Normal Cost	2,064,226	2,449,559
% of Pay	13.9%	14.3%
Employee Contributions	1,187,518	1,351,822
% of Pay	8.0%	7.9%
Employer Normal Cost	$876,708	$1,097,737
% of Pay	5.9%	6.4%

Present Value of Actuarial Accrued Liabilities

The actuarial accrued liabilities (AAL) represents today's value of all benefits earned by the actives and inactives. The AAL can be compared to the assets to determine the funded status of the Plan. The value of these earned benefits is shown in Table II below.

Table II

	January 1, 2004	January 1, 2006
Actives		
Superannuations	$37,852,673	$36,125,441
Termination	N/A	759,861
Death	N/A	1,391,104
Disability	N/A	3,209,391
Retirees and Inactives		
Retirees and Beneficiaries	43,250,542	35,451,407
Vested	0	0
Terminated (Refund)	505,202	633,855
Disabled	N/A	11,752,412
Total	$81,608,417	$89,323,471

Present Value of Future Benefits

The present value of future benefits represents today's value of all benefits earned by the inactive participants as well as all benefits earned and expected to be earned in the coming years by the active participants. The difference betwee the present value of future benefits and the present value of actuarial accrued liabilities is the value of benefits to be earned in the coming years. The value of the total expected benefits is shown in Table III.

Table III

	January 1, 2004	January 1, 2006
Actives		
Superannuation	N/A	$51,172,137
Termination	N/A	1,623,175
Death	N/A	2,528,443
Disability	N/A	7,863,082
Retirees and Inactives		
Retirees and Beneficiaries	43,250,542	35,451,407
Vested	0	0
Terminated (Refund)	505,202	633,855
Disabled	N/A	11,752,412
Total	$43,755,744	$111,024,511

Funded Status and Appropriations:

Market Value of Plan Assets

The trust fund composition on a market value basis is shown in Table IV.

Table IV

	January 1, 2004	January 1, 2006
Cash equivalents	$1,215,394	$117,856
Short term investments	0	0
Fixed income securities	0	0
Equities	0	0
International	0	0
Real Estate	0	0
Venture Capital	0	0
Other	59,675,887	76,107,135
Accounts receivable	4,348	5,177
Accounts payable	(922)	(302)
Accrued income	0	0
Total Market Value	$60,894,706	$76,229,866
Total Actuarial Value	$61,222,788	$70,287,535

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Actuarial Value of Assets

The actuarial value of assets is determined by projecting the market value of assets as of the beginning of the prior plan year with the assumed rate of return during that year (8%) and accounting for deposits and disbursements with interest at the assumed rate of return. An adjustment is then applied to recognize the difference between the actual investment return and expected return over a four year period. This preliminary actuarial value is not allowed to differ from the market value of assets by more than 10%. The calculation of the actuarial value of assets as of January 1, 2006 is presented in Table V.

Table V

		January 1, 2006
(1)	Market value at January 1, 2005	$68,635,038
(2)	2005 Contributions	$5,066,652
(3)	2005 Payments	($5,701,893)
(4)	Net interest adjustment at 8% on (1), (2), and (3) to December 31, 2005	$5,465,394
(5)	Expected market value on January 1, 2006 (1) + (2) + (3) + (4)	$73,465,191
(6)	Actual market value on January 1, 2006	$76,229,866
(7)	2005 (Gain) / Loss	($2,764,675)
(8)	75% of 2005 (Gain) / Loss	($2,073,506)
(9)	2004 (Gain) / Loss	($3,618,501)
(10)	50% of 2004 (Gain) / Loss	($1,809,251)
(11)	2003 (Gain) / Loss	($8,238,296)
(12)	25% of 2003 (Gain) / Loss	($2,059,574)
(13)	Actuarial value on January 1, 2006, (6) + (8) + (10) + (12) + (14)	$70,287,535
(14)	But not less than 90% nor greater than 110% of (6)	$70,287,535
	Ratio of actuarial value to market value	92.20%
	Market Value Return on investments	12.80%
	Actuarial Value Return on investments	10.67%

Unfunded Actuarial Accrued Liabilities

Under the Entry Age Normal Actuarial Cost Method, the Actuarial Accrued Liability represents what the accumulated assets would have been as of the valuation date if:

- current plan provisions and assumptions had always been in effect,
- experience conformed exactly to assumptions, and
- the normal cost had been contributed each year since inception.

The actuarial value of the Fund's assets as of the end of the prior year are subtracted from the Actuarial Accrued Liability (AAL) to determine the Unfunded Actuarial Accrued Liability (UAAL) as of the valuation date. Over time, annual pension contributions will accumulate Plan assets equal to the AAL, and the UAAL will be eliminated. Thereafter, annual contributions equal to the normal cost will keep the Plan's assets and liabilities in balance. The UAAL is developed in Table VI.

Table VI

	January 1, 2004	January 1, 2006
Actuarial Accrued Liability	$81,608,417	$89,323,471
Actuarial Assets	61,222,788	70,287,535
Unfunded Actuarial Accrued Liability	$20,385,629	$19,035,936
Funded Status	75.0%	78.7%

Appropriations

The pension appropriation for the upcoming fiscal years have been calculated in accordance with the requirements set forth in Section 22D of Chapter 32 of the Massachusetts General Laws. These amounts were calculated to comply with the June 30, 2028, full funding mandate for all accrued liabilities. The pension appropriation is the sum of the:

- Employer normal cost,
- Level amortization of the prior unfunded actuarial accrued liability by June 30, 2020
  $ 19,343,338 over 14 years
- Level amortization of the 2002 ERI liability by June 30, 2019
  $ 107,634 over 13 years
- Level amortization of the (gain)/loss liability by June 30, 2020
  $ (415,036) over 14 years
- Interest adjustment for payments deposited at the beginning of the fiscal year.

The pension appropriation is shown in Table VII.

Table VII

	January 1, 2004	January 1, 2006
Normal cost	$933,644	$1,097,737
Amortization payment of the prior accrued liability	2,270,818	2,125,874
Amortization payment of 1992 ERI liability	0	12,609
Amortization payment of current (gains)/losses	0	0
Total cost	$3,204,462	$3,236,220
% of Pay	21.6%	18.8%
Fiscal 2007 cost	$3,251,144	$3,251,144
Fiscal 2008 cost	$3,300,160	$3,405,298

Appropriation Forecast

The following exhibit forecasts employer and employee contributions over the next 32 years under the adopted funding schedule.

Note that the forecast is based upon an "open group" method. This method assumes that sufficient employees will be hired each year to keep the number constant. The total payroll of the system is expected to increase 4.5% per year. The employee contribution rate is expected to increase to 10.5% by 2028 as members contributing base percentages 5%, 7%, and 8% are replaced by new members, whose base contribution is 9%. Payments are assumed to be made at the beginning of the year.

The employer total cost is expected to increase during the next 13 years until the unfunded liabilities are completely paid off, at which time only the normal cost will remain. The total cost represents 18.9% of payroll, increasing to 19.0% for FYE 2008, decreasing to 12.2% by the time the unfunded liabilities are fully paid off, leaving only a normal cost of 4.8% in 2021. The decrease in the cost as a percentage of payroll is a result of the increase in member deductions.

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Appropriation Forecast

Fiscal Year Ending	Payroll*	Employee Contribution	Employer Normal Cost with Interest	Amortization Payments with Interest	Employer Total Cost with Interest	Employer Total Cost % of Payroll	Funded Ratio %**
2007	$17,182,174	$1,351,822	$1,140,802	$2,110,342	$3,251,144	18.9	78.7
2008	$17,955,372	$1,435,162	$1,168,747	$2,236,551	$3,405,298	19.0	80.4
2009	$18,763,364	$1,523,264	$1,196,898	$2,236,551	$3,433,449	18.3	82.0
2010	$19,607,715	$1,616,390	$1,225,215	$2,236,551	$3,461,766	17.7	83.7
2011	$20,490,062	$1,714,813	$1,253,657	$2,236,551	$3,490,208	17.0	85.3
2012	$21,412,115	$1,818,820	$1,282,178	$2,236,551	$3,518,729	16.4	86.9
2013	$22,375,660	$1,928,715	$1,310,727	$2,236,551	$3,547,278	15.9	88.4
2014	$23,382,565	$2,044,818	$1,339,249	$2,236,551	$3,575,800	15.3	89.9
2015	$24,434,780	$2,167,465	$1,367,684	$2,236,551	$3,604,235	14.8	91.4
2016	$25,534,345	$2,297,009	$1,395,966	$2,236,551	$3,632,517	14.2	92.9
2017	$26,683,391	$2,433,823	$1,424,024	$2,236,551	$3,660,575	13.7	94.4
2018	$27,884,143	$2,578,299	$1,451,780	$2,236,551	$3,688,331	13.2	95.8
2019	$29,138,930	$2,730,849	$1,479,150	$2,236,551	$3,715,701	12.8	97.2
2020	$30,450,182	$2,891,907	$1,506,044	$2,223,447	$3,729,491	12.2	98.6
2021	$31,820,440	$3,061,931	$1,532,364	$0	$1,532,364	4.8	100.0
2022	$33,252,360	$3,241,401	$1,558,002	$0	$1,558,002	4.7	100.0
2023	$34,748,716	$3,430,822	$1,582,845	$0	$1,582,845	4.6	100.0
2024	$36,312,408	$3,630,728	$1,606,768	$0	$1,606,768	4.4	100.0
2025	$37,946,466	$3,841,678	$1,629,639	$0	$1,629,639	4.3	100.0
2026	$39,654,057	$4,064,261	$1,651,316	$0	$1,651,316	4.2	100.0
2027	$41,438,490	$4,299,097	$1,671,643	$0	$1,671,643	4.0	100.0
2028	$43,303,222	$4,546,838	$1,690,455	$0	$1,690,455	3.9	100.0
2029	$45,251,867	$4,751,446	$1,766,525	$0	$1,766,525	3.9	100.0
2030	$47,288,201	$4,965,261	$1,846,019	$0	$1,846,019	3.9	100.0
2031	$49,416,170	$5,188,698	$1,929,090	$0	$1,929,090	3.9	100.0
2032	$51,639,898	$5,422,189	$2,015,899	$0	$2,015,899	3.9	100.0
2033	$53,963,693	$5,666,188	$2,106,614	$0	$2,106,614	3.9	100.0
2034	$56,392,059	$5,921,166	$2,201,412	$0	$2,201,412	3.9	100.0
2035	$58,929,702	$6,187,619	$2,300,476	$0	$2,300,476	3.9	100.0
2036	$61,581,539	$6,466,062	$2,403,997	$0	$2,403,997	3.9	100.0
2037	$64,352,708	$6,757,034	$2,512,177	$0	$2,512,177	3.9	100.0
2038	$67,248,580	$7,061,101	$2,625,225	$0	$2,625,225	3.9	100.0

* Calendar basis

** As of the Beginning of the Fiscal Year

GASB Statements No. 25 and No. 27

Effective for periods beginning after June 15, 1997, the Governmental Accounting Standards Board (GASB) requires the disclosure of pension related liabilities for public employer financial statements in accordance with Statements 25 and 27. These statements, which replace GASB Statement No. 5, must be adhered to by any public employee retirement system that follows Generally Accepted Accounting Principles (GAAP).

These disclosures are intended to establish a reporting framework that distinguishes between:

- current financial information about plan assets and financial activities,
- actuarially determined information from a long-term perspective,
- the funded status of the plan, and
- progress being made in accumulating sufficient assets to pay benefits when due.

Footnote disclosures required by GASB Statement No. 25 and 27 include a description of the plan, a summary of significant accounting policies, and information about contributions, legally required reserves, and investment concentrations. As a result of the oversight of the Public Employees Retirement Administration Commission (PERAC) and the conversion of unpaid contributions to pension related debt, the Net Pension Obligation (NPO) as required by Statement No. 27 will effectively always be equal to $0. The required disclosure information is shown in Table VIII.

Table VIII

		January 1, 2004	January 1, 2006
(1)	Actuarial Accrued Liability	$81,608,417	$89,323,471
(2)	Actuarial Value of Assets	61,222,788	70,287,535
(3)	Unfunded Actuarial Accrued Liability	20,385,629	19,035,936
(4)	Funded Ratio (2)/(1)	75.0%	78.7%
(5)	Covered Payroll	$14,858,630	$17,182,174
(6)	UAAL as a percentage of payroll: (3)/(5)	137.2%	110.8%
(7)	Annual Required Contribution (ARC)	$3,204,462	$3,251,144
(8)	Net Pension Obligation	$0	$0

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PERAC Annual Statement
APPENDIX PAGE 3
ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Buck Consultants as of January 1, 2006.

The normal cost for employees on that date was:	$1,351,822	7.9% of pay
The normal cost for the employer was:	997,737	5.8% of pay

The actuarial liability for active members was:	$41,485,797
The actuarial liability for retired members was:	47,837,674
Total actuarial accrued liability:	89,323,471
System assets as of that date:	70,287,535
Unfunded actuarial accrued liability:	$19,035,936

The ratio of system's assets to total actuarial liability was 78.7%

The principal actuarial assumptions used in the valuation are as follows:

Investment Return:	8.0%
Rate of Salary Increase:	5.0%

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a percent of Covered Payroll (b-a)/c
01/01/06	$70,287,535	$89,323,471	$19,035,936	78.7%	$17,182,174	110.8%
01/01/04	61,223,000	81,608,000	20,385,000	75.0%	14,859,000	137.0%
01/01/03	54,144,000	77,109,000	22,964,000	70.0%	14,696,000	156.0%
01/01/01	57,355,000	67,959,000	10,603,000	84.0%	13,273,000	80.0%

Attach Copy of Current Approved Funding Schedule

EXHIBITS

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Age/Service Distribution with Salary as of January 1, 2006

Attained Age	Average Salary <5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
< 20	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
20-24	8	0	0	0	0	0	0	0	0	8
	23,656	0	0	0	0	0	0	0	0	23,656
25-29	21	1	0	0	0	0	0	0	0	22
	27,064	58,227	0	0	0	0	0	0	0	28,481
30-34	19	14	1	0	0	0	0	0	0	34
	39,534	48,747	36,196	0	0	0	0	0	0	43,229
35-39	14	15	9	1	0	0	0	0	0	39
	33,377	56,057	50,602	45,416	0	0	0	0	0	46,384
40-44	28	14	4	11	2	0	0	0	0	59
	22,650	37,682	59,851	61,714	57,174	0	0	0	0	37,193
45-49	22	14	8	14	11	1	0	0	0	70
	27,040	33,900	45,205	59,201	62,288	82,956	0	0	0	43,258
50-54	21	20	13	8	11	6	1	0	0	80
	30,346	34,584	35,702	38,608	57,525	65,671	66,722	0	0	39,943
55-59	9	10	6	2	2	8	14	2	0	53
	21,093	33,019	27,198	36,984	40,980	55,100	70,338	82,181	0	45,831
60-64	5	4	7	5	3	2	3	2	0	31
	33,371	46,132	44,300	33,894	49,328	39,199	65,620	78,982	0	45,554
65-69	4	0	3	1	2	4	0	0	1	15
	17,365	0	51,287	8,209	36,876	52,748	0	0	52,730	37,934
70+	1	1	0	2	2	2	0	0	0	8
	10,620	13,580	0	39,420	51,994	26,223	0	0	0	32,434
Total Employees	152	93	51	44	33	23	18	4	1	419
Average Salary	28,152	40,900	42,822	49,828	55,757	54,766	69,351	80,582	52,730	41,008

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Retiree Distribution as of January 1, 2006

	Number of Employees			Total Payments		
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	0	0	0	0	0	0
45-49	1	0	1	2,151	0	2,151
50-54	2	2	4	67,508	6,000	73,508
55-59	9	2	11	299,021	33,459	332,480
60-64	14	7	21	407,296	99,537	506,834
65-69	29	17	46	901,626	216,465	1,118,091
70-74	18	18	36	448,305	210,820	659,125
75-79	21	33	54	379,357	357,882	737,239
80-84	20	23	43	317,374	156,743	474,117
85-89	8	10	18	66,363	72,167	138,531
90-94	3	4	7	16,127	33,238	49,366
95-99	3	3	6	9,720	19,757	29,477
Total	128	119	247	2,914,848	1,206,070	4,120,918
Average (Age/Payment)	73.1	76.2	74.6	22,772	10,135	16,684
Frequency Percent	51.8	48.2	100	70.7	29.3	100

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Disabled Retiree Distribution as of January 1, 2006

	Number of Employees			Total Payments		
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	0	1	1	0	40,870	40,870
45-49	2	1	3	62,774	44,213	106,988
50-54	2	0	2	35,287	0	35,287
55-59	11	0	11	226,354	0	226,354
60-64	12	1	13	328,660	28,743	357,403
65-69	9	0	9	246,850	0	246,850
70-74	4	0	4	60,746	0	60,746
75-79	5	0	5	80,018	0	80,018
80-84	3	0	3	45,632	0	45,632
85-89	2	0	2	29,042	0	29,042
90-94	0	0	0	0	0	0
95-99	0	0	0	0	0	0
Total	50	3	53	1,115,363	113,827	1,229,190
Average (Age/Payment)	65.5	50.9	64.7	22,307	37,942	23,192
Frequency Percent	94.3	5.7	100	90.7	9.3	100

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EXHIBIT 4 - CASHFLOW FORECAST:

The following is a 30 year forecast of benefit payments net of state reimbursable COLA payments, Contribution Income and Investment Returns.

Plan Year Ending	Benefit Payments	Employee Contributions	Employer Contributions	Investment Returns	Net change in plan assets
2006	$5,827,590	$1,351,822	$3,251,144	$5,526,469	$4,301,845
2007	$5,994,915	1,435,162	3,405,298	$5,875,918	4,721,463
2008	$6,136,268	1,523,264	3,433,449	$6,250,030	5,070,475
2009	$6,328,919	1,616,390	3,461,766	$6,650,230	5,399,467
2010	$6,574,343	1,714,813	3,490,208	$7,074,868	5,705,547
2011	$6,960,878	1,818,820	3,518,729	$7,518,658	5,895,329
2012	$7,319,148	1,928,715	3,547,278	$7,978,950	6,135,796
2013	$7,746,726	2,044,818	3,575,800	$8,455,984	6,329,877
2014	$7,955,867	2,167,465	3,604,235	$8,957,349	6,773,183
2015	$8,298,961	2,297,009	3,632,517	$9,489,172	7,119,737
2016	$8,671,487	2,433,823	3,660,575	$10,047,826	7,470,737
2017	$8,954,082	2,578,299	3,688,331	$10,638,364	7,950,912
2018	$9,292,838	2,730,849	3,715,701	$11,265,404	8,419,116
2019	$9,607,495	2,891,907	3,729,491	$11,930,639	8,944,542
2020	$10,032,503	3,061,931	1,532,364	$12,547,746	7,109,538
2021	$10,486,014	3,241,401	1,558,002	$13,105,080	7,418,469
2022	$10,811,676	3,430,822	1,582,845	$13,692,504	7,894,495
2023	$11,266,805	3,630,728	1,606,768	$14,313,311	8,284,002
2024	$11,596,527	3,841,678	1,629,639	$14,970,599	8,845,389
2025	$11,873,331	4,064,261	1,651,316	$15,675,294	9,517,540
2026	$12,211,883	4,299,097	1,671,643	$16,431,784	10,190,641
2027	$12,462,830	4,546,838	1,690,455	$17,246,027	11,020,490
2028	$12,640,333	4,751,446	1,766,525	$18,127,807	12,005,445
2029	$12,745,819	4,965,261	1,846,019	$19,091,529	13,156,990
2030	$12,842,173	5,188,698	1,929,090	$20,148,066	14,423,681
2031	$12,995,422	5,422,189	2,015,899	$21,304,056	15,746,722
2032	$13,049,133	5,666,188	2,106,614	$22,570,159	17,293,828
2033	$13,147,787	5,921,166	2,201,412	$23,958,649	18,933,440
2034	$13,079,533	6,187,619	2,300,476	$25,485,254	20,893,816
2035	$13,518,530	6,466,062	2,403,997	$27,149,205	22,500,735

amounts in thousands

EXHIBIT 5 – SUMMARY OF PLAN PROVISIONS:

This summary is prepared in accordance with Chapter 32 as of January 1, 2006, and does not take into account any subsequent changes.

1. Administration

Each of the 107 contributory retirement systems for public employees for the Commonwealth of Massachusetts are guided by the applicable provisions of Chapter 32 of the Massachusetts General Laws and other applicable statutes. Although these boards operate semi-independently, there is a uniform set of rules governing benefits, eligibility, contributions, financing, and accounting.

2. Participation

Participation is mandatory for all full-time employees whose employment commences prior to age 65. Eligibility with respect to part-time, professional, temporary, or intermittent employment is governed by the local board. Membership is optional for certain elected officials, State officials appointed by the Governor, and certain hospital interns.

There are four classes of membership as follows:

(i) Group 1: Most general employees in State and local government

(ii) Group 2: Certain specified hazardous duty positions

(iii) Group 3: State police officers and inspectors

(iv) Group 4: Local police officers, firefighters, and designated employees of the municipal light department.

For members in more than one group, participation will be proportional.

3. **Salary**

Salary is defined as gross regular compensation. Salary does not include bonuses, overtime, severance pay, unused sick leave credit, or other similar compensation.

4. **Member Contributions**

Member contributions vary depending upon date hired as follows:

Date of Hire	Member Contribution Rate
Prior to 1975	5.0% of Salary
1975 to 1983	7.0% of Salary
1984 to 1996	8.0% of Salary
1996 and Later plus	9.0% of Salary
1979 and Later	2.0% of Salary in excess of $30,000

5. **Average Salary**

Average salary is used to determine a participant's benefit. It is defined as the average salary during the three consecutive-year period that produces the highest average. (Alternatively, if a greater amount results, it is the average rate of salary earned during the period or periods, whether or not consecutive, that constitutes the last three years preceding retirement.)

6. **Creditable Service**

In general, creditable service is awarded during the period in which a member contributes to the retirement system.

7. **Service Retirement**

a. Eligibility:

For an employee to be eligible for service retirement (also referred to as superannuation), one of the following conditions must be met:

(i) completion of 20 years of service

(ii) for an employee hired prior to January 1, 1978, attainment of age 55 as an active member

(iii) for an employee hired on or after January 1, 1978, attainment of age 55 as an active member and completion of ten years of service

b. Benefit Amount:

The retirement allowance is determined as a product of the participant's Benefit Rate times Average Salary times Creditable Service, where Benefit Rate is determined from the following table:

Age at	Percentage of Average Salary		
Retirement	Group 1	Group 2	Group 4
65 or Over	.025	.025	.025
64	.024	.025	.025
63	.023	.025	.025
62	.022	.025	.025
61	.021	.025	.025
60	.020	.025	.025
59	.019	.024	.025
58	.018	.023	.025
57	.017	.022	.025
56	.016	.021	.025
55	.015	.020	.025
54	.014	.014	.024
53	.013	.013	.023
52	.012	.012	.022
51	.011	.011	.021
50	.010	.010	.020
49	.009	.009	.019
48	.008	.008	.018
47	.007	.007	.017
46	.006	.006	.016
45	.005	.005	.015
44	.004	.004	.004
43	.003	.003	.003
42	.002	.002	.002
41	.001	.001	.001

8. Deferred Vested Retirement

a. Eligibility:

A participant who has completed ten or more years of creditable service is eligible for a deferred vested retirement benefit. If termination is involuntary, the participant is vested after six years.

b. Benefit Amount:

The participant's accrued benefit is payable commencing at age 55, or may be deferred until later at the employee's option.

c. Refund of Contributions:

In lieu of the deferred pension benefit, a member may elect to receive a refund of their accumulated contributions. Members with ten or more years of service are entitled to 100% of the credited interest on their contributions. Members with five to ten years of service are entitled to 50% of the credited interest on their contributions. No credited interest is provided for members with less than five years of service.

9. Accidental Disability

a. Eligibility:

Participants are eligible for an accidental disability benefit, regardless of service or age, if they become permanently and totally incapacitated for further duty as a result of personal injury sustained while in the performance of duties.

b. Benefit Amount:

The accidental disability amount is 72% of annual salary plus $450 per year for each child plus an additional annuity based upon accumulated Member Contributions with credited interest.

10. Ordinary Disability

a. Eligibility:

An ordinary disability occurs when a member becomes permanently and totally disabled due to sickness or injury that is not job related. In order to be eligible for an ordinary disability benefit, a member must have ten years of service (and be less than age 55).

b. Benefit Amount:

The ordinary disability amount is equal to the accrued retirement benefit as if the member were age 55. If the member was a veteran, the benefit is 50% of the member's final rate of Salary during the preceding 12 months, plus an annuity based upon accumulated Member Contributions plus credited interest. If the participant is over age 55, he will receive not less than the superannuation allowance to which he is entitled.

11. Survivor Benefits

a. Occupational Death:

The survivors of a member who dies due to an occupational injury will be entitled to a lump sum return of contributions plus a pension benefit equal to 72% of the participant's annual Salary.

b. Non-Occupational Death:

Upon the death of a member other than due to an occupational injury, the designated beneficiary will be entitled to a retirement benefit as if Option C had been elected with a minimum of $250 per month to the surviving spouse, plus $120 for the first child, plus $90 for each additional child. If no beneficiary is designated and if the employee worked two years, and is married at least one year, the spouse may elect benefits. If there is no designated beneficiary or surviving spouse, then member contributions are returned. If there are dependent children but no surviving spouse, they may elect minimum survivor benefits of $250 per month plus $120 for the first child and $90 for each additional child.

c. Refund of Contributions:

Upon the death of a member not entitled to survivor benefits, the beneficiary is entitled to a refund of all member contributions with interest.

12. Cost-of-Living Increases

In accordance with the adoption of Chapter 17 of the Acts of 1997, the granting of a cost-of-living adjustment will be determined by an annual vote by the Retirement Board. The amount of increase will be based upon the Consumer Price Index, limited to a maximum of 3.0%, beginning on July 1. All retirees, disabled retirees, and beneficiaries who have been receiving benefits payments for at least one year as of July 1 are eligible for the adjustment. The maximum amount of pension benefit subject to a COLA is $12,000. All COLAs granted to members after 1981 and prior to July 1, 1998 are deemed to be an obligation of the State and are not the liability of the Retirement System.

13. Postretirement Death Benefits

Any benefits following the death of a member after retirement are based upon the form of benefit the participant elected at the time of retirement. There are three available forms as follows:

(i) Option A – Life annuity

(ii) Option B – Life annuity with death benefit equal to excess of member contributions plus credited interest to retirement over annuity benefit paid to member

(iii) Option C – Life annuity with 66-2/3% of benefit continued after death of member to designated joint annuitant

EXHIBIT 6 – ACTUARIAL METHODS AND ASSUMPTIONS:

The actuarial cost method, factors, and assumptions used in determining cost estimates are presented below.

1. Member Data

The member data used in the determination of cost estimates consist of pertinent information with respect to the active, inactive, retired, and disabled members of the employer as supplied by the employer to the actuary.

2. Valuation Date

January 1, 2006.

3. Actuarial Cost Method

The costs of the Plan have been determined in accordance with the individual entry age normal actuarial cost method.

4. Rate of Investment Return

It is assumed that the assets of the fund will accumulate at a compound annual rate of 8.0% per annum.

5. Salary Scale

It is assumed that salaries including longevity will increase at a rate of 5% per year.

6. Cost-of-Living Increases

Cost-of-living increases have been assumed to be 3.0% of the lesser of the pension amount and $12,000 per year.

7. Value of Investments

Assets held by the fund are valued at market value as reported by the Public Employees'

Retirement Administration Commission (PERAC). The actuarial value of assets is determined using a four-year smoothing of unrealized gains and losses.

8. Annual Rate of Withdrawal Prior to Retirement

Based on an analysis of experience, the assumed annual rates of withdrawal may best be illustrated by the following rates at the following ages:

Service	General Employees	Police and Fire Employees
0	0.3751	0.0315
10	0.1735	0.0248
20	0.0721	0.0084
30	0.0457	0.0000

9. Annual Rate of Mortality

It is assumed that both pre-retirement and post retirement mortality are represented by the RP-2000 Mortality Table for males and females. Mortality for disabled members is represented by the RP-2000 Mortality Table set forward two years for all disabled members.

10. Service Retirement

Based on an analysis of experience, the assumed annual retirement rates are illustrated at the following ages:

Age	General Employees	Police and Fire Employees
50	0.0000	0.02000
51	0.0000	0.02000
52	0.0000	0.02000
53	0.0000	0.02000
54	0.0000	0.02000
55	0.1000	0.05000
56	0.0300	0.05000
57	0.0300	0.05000
58	0.0300	0.05000
59	0.0500	0.05000
60	0.0500	0.10000
61	0.1000	0.10000
62	0.1000	0.20000
63	0.1000	0.20000
64	0.1000	0.20000
65	0.1000	1.00000
66	1.0000	1.00000
67	1.0000	1.00000
68	1.0000	1.00000
69	1.0000	1.00000
70	1.0000	1.00000

11. Annual Rate of Disability Prior to Retirement

Based on an analysis of experience, the assumed annual rates of disability may best be illustrated by the following probabilities at the following ages:

Attained Age	General Employees	Police and Fire Employees
20	0.0001	0.0001
30	0.0003	0.0003
40	0.0010	0.0030
50	0.0019	0.0125

In addition, it is assumed for the general employees that 45% of all disabilities are ordinary (55% are service connected). For police and fire employees, 10% of all disabilities are assumed to be ordinary (90% are service connected).

12. Family Composition

It is assumed that 80% of all members will be survived by a spouse and that females (males) are three years younger (older) than members.

13. Administrative Expenses

The normal cost is increased by an amount equal to the anticipated administrative expenses for the upcoming fiscal year. The amount for fiscal year 2006 is $100,000 and is anticipated to increase at 4.5% per year.

EXHIBIT 7 – GLOSSARY OF TERMS:

This glossary summarizes the technical terms contained in this report.

1. Actuarial Accrued Liability

That portion of the Actuarial Present Value of plan benefits that is not provided for by future employer Normal Costs or employee contributions.

2. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting the Retirement System such as:

- Rates of investment returns
- Increases in a member's salary
- Inflation
- The probability of mortality, turnover, disablement
- Retirement at each age and other relevant items

3. Actuarial Cost Method

A procedure for allocating the Actuarial Present Value of pension plan benefits between Normal Cost and Actuarial Accrued Liability.

4. Actuarial Present Value

The single sum amount required at the valuation date that is required to provide for anticipated future events based upon the terms of the plan and the Actuarial Assumptions.

5. Forecast

A projection of future benefit payments or contribution requirements based upon the terms of the plan, the current asset amounts, the Actuarial Assumptions, and additional assumptions as to the replacement of terminating employees with new employees.

6. <u>Normal Cost</u>

That portion of the Actuarial Present Value of future benefits that is assigned to the current year.

7. <u>Unfunded Actuarial Accrued Liability</u>

That portion of the Actuarial Accrued Liability that is not provided for by current actuarial value of assets.

8. <u>Valuation Method</u>

The method used to divide the cost of future benefits among the Actuarial Accrued Liability, the current year's Normal Costs, and future years' Normal Costs. The resulting current funding requirement is then determined as the current year's Normal Cost plus the payment necessary to amortize the Unfunded Actuarial Liability.

9. <u>Vested Liability</u>

That portion of the Actuarial Present Value of Accrued Benefits that a member would be entitled to if the member terminated employment with the employer as of the valuation date.

CERTIFICATION:

This report fairly represents the actuarial position of the Town of Dedham Retirement System contributing as of January 1, 2006, in accordance with generally accepted actuarial principles applied consistently with the preceding valuation. In our opinion, the actuarial assumptions used to compute actuarial accrued liability and normal cost are reasonably related to plan experience and to reasonable expectations, and represents our best estimate of anticipated plan experience.

Buck Consultants, LLC

Daniel W. Sherman, ASA, MAAA
Enrolled Actuary No. 05-4086

July 2006

BREAKOUTS

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Breakouts - Payroll Based

	Total	All Others	Housing
(1) Participants			
(a) Actives	419	403	16
(b) Inactives	106	103	3
(c) Retirees	247	237	10
(d) Disabled Retirees	53	53	0
(e) Total	825	796	29
(2) Payroll of Active Participants	$17,182,174	$16,525,639	$656,535
(3) Percentage of Payroll	100.00%	96.18%	3.82%
(4) Normal Cost			
(a) ERI	12,609	0	12,609
(b) Remaining Amortizations	2,125,874	2,044,644	81,230
(c) Employer Normal Cost	2,349,559	2,259,782	89,777
(d) Administrative Expenses	100,000	96,179	3,821
(e) Total	4,588,042	4,400,605	187,437
(5) Fiscal 2007 Cost	$3,251,144	3,092,976	158,168
(6) Fiscal 2008 Cost	$3,405,298	3,266,180	139,118
(7) Percentage of Total Cost	100.00%	95.91%	4.09%

*Appropriations are allocated based on the ratio of the division payroll to the total payroll.

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Breakouts - Actuarial Based

	Total	All Others	Housing
(1) Participants			
(a) Actives	419	403	16
(b) Inactives	106	103	3
(c) Retirees	247	237	10
(d) Disabled Retirees	53	53	0
(e) Total	825	796	29
(2) Payroll of Active Participants	$17,182,174	$16,525,639	$656,535
(3) Normal Cost			
(a) Total Normal Cost	2,349,559	2,281,539	68,020
(b) Expected Employee Contributions	1,351,822	1,297,549	54,273
(c) Administrative Expenses	100,000	96,485	3,515
(d) Net Employer Normal Cost (a) - (b) + (c)	1,097,737	1,080,475	17,262
(4) Actuarial Accrued Liability	89,323,471	86,915,496	2,407,975
(5) Assets*	70,287,535	68,392,729	1,894,806
(6) Unfunded Actuarial Accrued Liability (4) - (5)	19,035,936	18,522,767	513,169
(7) Amortizations*	2,138,483	2,068,565	69,918
(8) Total Required Employer Contributions (3d) + (7)	3,236,220	3,149,040	87,180
(9) Fiscal 2007 Cost	$3,251,144	$3,092,976	$158,168
Percentage of Total Cost	100.0%	95.1%	4.9%
(10) Fiscal 2008 Cost	$3,405,298	$3,313,564	$91,735
Percentage of Total Cost	100.0%	97.3%	2.7%

* Allocation is based on the ratio of the Unfunded Actuarial Accrued Liability