



Highway Patrol Retirement System
6161 Busch Blvd. • Suite 119 • Columbus, OH 43229-2553 • 614.431.0781
fax 614.431.9204 • www.ohprs.org

October 3, 2007

The Honorable Kirk Schuring, Chairperson
Ohio Retirement Study Council
88 East Broad Street, Suite 1175
Columbus, OH 34215

Dear Senator Schuring:

Each year the Highway Patrol Retirement System commissions an actuary to perform an evaluation of the plan. Gabriel Roeder Smith & Company completed the attached evaluation for the period ending December 31, 2006.

I want to highlight several items from their report. First, investment returns nearly doubled the actuarial assumed rate of 8%. Additionally, there was \$24 million in investment returns from previous years to be "smoothed" in. Second, healthcare costs were about 1% lower than projected. As a result, the unfunded period dropped from 35 years to 28 years, within the 30 year standard established by previous legislation.

For the period beginning January 1, 2007 the Board established a healthcare contribution level of 4.5% to come from the employer's contributions. This is an increase of 1% over the 2006 contribution level. Combined with favorable healthcare experience and plan design changes underway at this time, the HPRS expects to have a 20 year solvency period for the healthcare fund.

Please contact me if you have any questions or need additional information.

Sincerely,

Richard A. Curtis
Executive Director

OHIO STATE HIGHWAY PATROL RETIREMENT SYSTEM
ANNUAL ACTUARIAL VALUATION REPORT
DECEMBER 31, 2006

TABLE OF CONTENTS

	<u>Pages</u>
Introduction	1
Summary of Results & Comments	2-6
Section A: Retirement, Survivor, Disability Allowances	
Summary of Benefits	A1-A5
Valuation Results	A6-A10
Actuarial Balance Sheet	A11-A12
Comparative Statement	A13-A17
GASB 25/27 Reporting	A18-A20
Section B: Post-Retirement Health Care and Medicare Reimbursement	
Summary of Benefits	B1
Employer Paid Amounts	B2
Selection of Assumptions	B3-B8
Projected Benefits	B9-B10
GASB 43/45 Reporting	B-11
Results with Alternate Assumptions	B12
Cash Flow Projections	B13-B19
Approximate IRC Section 401(h) Computation	B20
Section C: Gain/Loss Analysis	C1-C5
Section D: Financial Information	
Balance Sheet	D1
Revenues & Expenditures	D1
Additions by Source	D2
Deductions by Type	D2
Development of Funding Value of Assets	D3
Separation of Assets Between Pensions & Health	D4
Section E: Member Data	
Active Members	E1-E2
Retirees and Survivors	E3-E5
Active and Retired Member Comparative Schedules	E6
Comparative Health Schedule	E7
Vested Deferred Cases	E8
Section F: Assumptions used in the Valuations	
Assumptions in Use	F1-F4
Actual vs. Expected	F5
Summary of Actual Terminations	F6-F8
Miscellaneous and Technical Assumptions	F9
Section G: Financial Principles	G1-G5

August 30, 2007

The Retirement Board
Ohio State Highway Patrol Retirement System
Columbus, Ohio

Ladies and Gentlemen:

The results of the regular annual **actuarial valuation as of December 31, 2006** of the Ohio State Highway Patrol Retirement System, as established by Chapter 5505 of the Revised Code, are presented in this report.

Your Executive Director furnished the member statistical data required for the valuation, together with pertinent data on financial operations. Data was reviewed for reasonableness, but was not audited by the actuary. The actuarial assumptions used in making the valuation are shown in Section F of this report.

Your attention is directed particularly to the summary of results and comments on pages 2 through 6.

The actuarial calculations were performed in accordance with accepted actuarial procedures. The calculations were based upon provisions of the Retirement System described in Section A and upon actuarial assumptions that are internally consistent and reasonably based upon the actual experience of the System.

The cooperation of the Executive Director in furnishing materials requested for this valuation, and the complete and excellent condition of the records, is acknowledged with appreciation.

Respectfully submitted,

Brian B. Murphy, F.S.A.

Mita D. Drazilov, A.S.A.

BBM:dks:bd

DECEMBER 31, 2006
SUMMARY

Valuations performed as of odd-numbered years (2005, 2007, 2009...) form the basis for employer contribution rates, which are effective over two-year periods. Valuations performed as of even-numbered years are intended to provide interim measures of the funding status of the Retirement System, and to provide the Board an opportunity to reallocate the total employer contribution rate between the pension and retiree health programs, if necessary.

The employer contribution rate for the two-year period beginning July 1, 2007 was determined in accordance with the December 31, 2005 valuation. The employer contribution rate for the two-year period beginning July 1, 2009 will be determined in accordance with the December 31, 2007 valuation.

The **total employer contribution rate** for the two-year period beginning July 1, 2007 is 25.50%, as established by the Board based upon the results of the December 31, 2005 actuarial valuation. The breakdown between employer, employee, pension and health is shown below. This breakdown produces an amortization period of 28 years for pensions.

	Employer Contribution Rates Expressed As % of Active Payroll		
	Retirement, Survivor & Disability Allowances	Post Retirement Health Care	Total
Employer	21.00%	4.50%	25.50%
Employee	10.00%	0.00 %	10.00%
Total	31.00%	4.50%	35.50%

DECEMBER 31, 2006 SUMMARY

The rate of market value investment return for the calendar year was above the actuarial assumed investment return rate of 8.0%. (The market value rate of return for calendar year 2006 was approximately 14.3%. Rates of return reported by the actuary may differ from other reported figures due to restated audited asset figures, approximate formulas and treatment of System expenses.) The funding value rate of return also was above the assumed investment return rate. (The funding value rate of return for calendar year 2006 was approximately 13.0%.) The market value of assets currently exceeds the funding value of assets by approximately \$36 million. (This is primarily due to the unrecognized portion of investment gains from calendar years 2003, 2004 and 2006.) Based upon the funding value of assets, the System has a funded ratio of 80.9%. Based upon the market value of assets, the System has a funded ratio of 84.8%.

Favorable experience in the retiree health program during the calendar year had a positive effect on the solvency period of the retiree health fund. Under all scenarios (valuation, intermediate, pessimistic), the solvency period either remained the same or increased (higher solvency is good) since the last actuarial valuation. However, significantly higher contributions continue to be needed if the program is to continue in its present form.

Non-investment net cash flow is declining (please see page D-3) and has been negative since 1998. This means that the Retirement System has reached the point wherein a portion of investment return is needed to pay benefits. Eventually, about 3.8% of assets are expected to be needed to pay benefits each year. This is a normal and expected condition.

The **Deferred Retirement Option Program (DROP)** effective June 17, 2006 has been included for actuarial valuation purposes.

SUMMARY & RECOMMENDATIONS - DECEMBER 31, 2006
(CONTINUED)

This valuation indicates that a total employer contribution rate of 25.50% with an employee rate of 10.00% produces an amortization period for the pension program of 28 years, based upon a 4.50% employer rate allocation to the retiree health program and based upon the Funding Value of Assets.

Comment on Post Retirement Health Care:

With regard to the retiree health plan, higher contributions are required to extend the solvency of the fund. Historically, contributions have been higher than the 4.50% level. The benefit payout rate currently exceeds 9% of payroll, more than double the contribution income. This situation cannot continue indefinitely, and of course if for any reason the pension amortization period should be over 30 years on some future date, it might be necessary for the Board to reduce the contribution to the health plan. Changes to the retiree health plan and/or further increases in contribution rates will need to be a part of the future. The Board may wish to consider reviewing the investment return assumption used for solvency projections. Please see pages B-7 and B-11 for details.

Recommendation: The following reserve transfers are recommended as of December 31, 2006:

Transfer To (From)	Total Amount
Pension Reserve Fund:	\$60,140,667
Survivor Benefit Fund:	69,007
Total	\$60,209,674

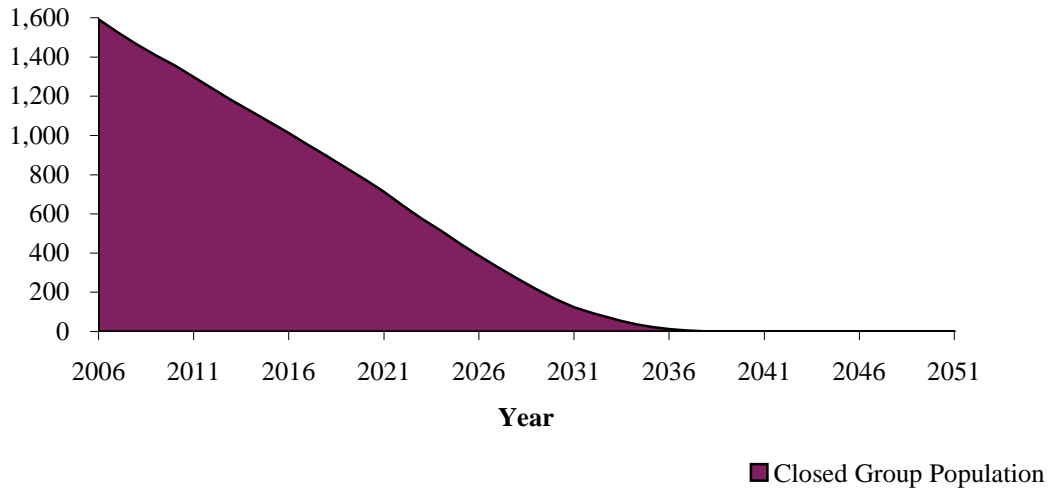
The reserve funds from which the transfers are made are determined as follows: First, the accumulated contributions of members who retired or died with survivor benefits payable prior to January 1, 2007 should be transferred from the Employees' Savings Fund if this has not already been done. The remainder of the transfer should then be taken from the Income Fund or the Employer's Accumulation Fund, as the Board deems appropriate. The purpose of these transfers is to ensure that all pension benefits that have come into pay status since January 1, 1966 are fully funded by the appropriate reserve funds. Benefits effective prior to January 1, 1966 represent a closed group and are paid from the Employer Accumulation fund.

SUMMARY & RECOMMENDATIONS - DECEMBER 31, 2006
(CONTINUED)

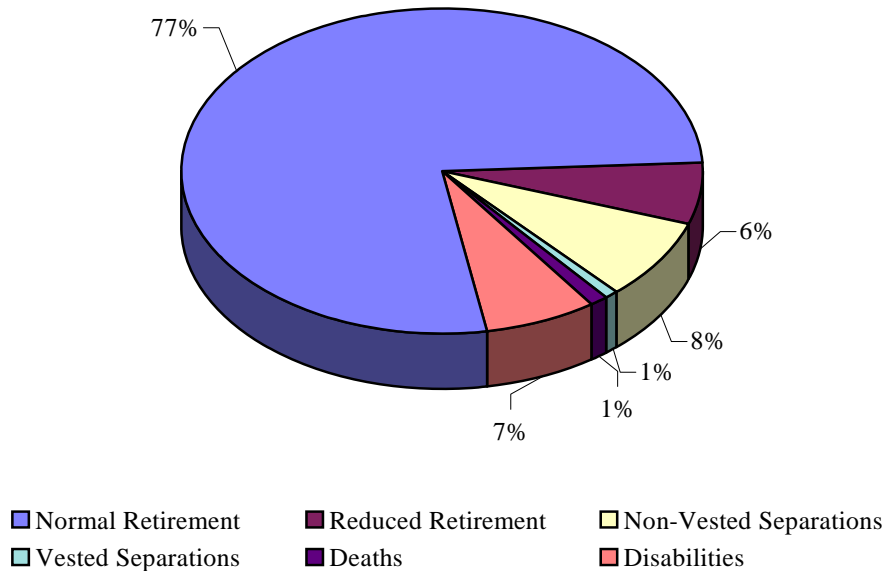
Conclusion: Based upon the results of the December 31, 2006 regular annual actuarial valuation, it is our opinion that with regard to pension benefits, the Ohio State Highway Patrol Retirement System is in sound condition in accordance with actuarial principles of level-cost financing. With regard to the Retiree Health Plan, solvency to 2024 is a relatively favorable result, but most people near retirement will live longer than that. A combination of contribution increases and continued cost containment measures will be important for the retiree health plan to accomplish its objectives.

EXPECTED DEVELOPMENT OF PRESENT POPULATION DECEMBER 31, 2006

Closed Group Population Projection



**Expected Terminations from Active Employment for
Current Active Members**



The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 1,592 active members. Eventually, 8% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for an employer provided benefit. 84% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or by separating from service without withdrawing contributions. 8% of the present population is expected to become eligible for death-in-service or disability benefits. Within 15 years, over half of the covered membership is expected to consist of new hires.

SECTION A

RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES

**RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
BENEFITS AND CONDITIONS VALUED
DECEMBER 31, 2006**

Age & Service Pension: A member may retire at age 52 to age 60, provided he has 20 or more years of service, or at age 48 with 25 or more years of contributing service. The member's pension equals the sum of 2-1/2% of final average salary (average of salaries during highest 3 years) times years of service not in excess of 20, 2-1/4% of final average salary times years of service in excess of 20 but not in excess of 25 and 2% of final average salary times years of service in excess of 25. The maximum pension payable is 79.25% of the member's final average salary. A member must retire upon attainment of age 60 or completion of 20 years of service, whichever occurs later.

Reduced Retirement: A member who has acquired at least 20 but less than 25 years of service and is between the ages of 48 and 52 is eligible to receive a Pension computed in the same manner as an Age & Service pension but reduced as follows:

Age	Percent of Age & Service Pension
48	75%
49	80
50	86
51	93
52	100

Deferred Pension: A member who has acquired 20 years of service and retires is eligible to receive a pension computed in the same manner as an Age & Service Pension at the attainment of age 52. A reduced benefit is payable if the retirant elects to receive a benefit after age 48 and prior to age 52. The reduction is waived for members with 25 or more years of service. A member, who has acquired 15 years of service and who voluntarily resigns or is discharged, is eligible to receive a pension equal to 1-1/2% of final average salary multiplied by total service. The pension shall begin the first month after attainment of age 55, provided the member does not withdraw his accumulated contributions from the employees' savings fund.

RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
BENEFITS AND CONDITIONS VALUED
DECEMBER 31, 2006
(CONTINUED)

Disability Pension:

- A. **On-Duty:** A member who is permanently disabled with a duty-related injury is eligible to receive a pension that is the largest of (i) 61.25% of average final salary, or (ii) the Age & Service Pension.

- B. **Off-Duty:** A member who is permanently disabled with a non-duty related injury or illness is eligible to receive a pension that is the larger of (i) 50% of average annual salary, or (ii) the Age & Service Pension.

Survivor's Benefits: The spouse of a deceased retirant (other than a deferred retirant) is eligible to receive a pension of \$900 a month, or 50% of the computed monthly pension the retirant was receiving, whichever is greater. The surviving spouse of an active member or of a deferred retirant who *was not* yet eligible for an immediate pension benefit is eligible to receive a pension of \$900 per month. The surviving spouse of an active member or of a deferred retirant who *was* eligible for an immediate pension benefit is eligible to receive \$900 per month or 50% of the immediate benefit for which the retiree was eligible, whichever is greater. The benefit terminates upon death. Each surviving child of a deceased member or retirant is eligible for a pension of \$150 a month until attainment of age 18, marriage, or death. The benefit may be continued to age 23 if the child is a full-time student. Each surviving child regardless of age, who was totally dependent upon the deceased member or retirant at his death because of physical or mental disability is eligible to receive a pension of \$150 per month until his death or recovery from the disability. If there is no spouse or surviving children, each dependent parent is eligible to receive a pension of \$154 a month. Additionally, a \$5,000 lump sum benefit is payable upon the death of the retirant.

Minimum Benefit: All members who retired with an Age & Service Pension or Disability Benefit are eligible to receive a minimum benefit of \$1,050 per month.

Members' Contributions to the Fund: Members contribute 10.0% of salary to the employees' savings fund. A member who leaves the employ of the State Highway Patrol before a benefit is payable may withdraw the accumulated contributions, without interest, in lieu of any other system provided benefit.

RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
BENEFITS AND CONDITIONS VALUED
DECEMBER 31, 2006
(CONTINUED)

State Contributions: The state contributes the remaining amount necessary to finance the Retirement System on an actuarial basis. By statute, the state's contribution rate can be neither less than the member contribution rate, nor more than three times the member rate.

Post-Retirement Increases: The basic benefit for all retirants is increased by 3 percent each year after age 53. The retirant must have also been receiving monthly benefits for at least twelve months. Benefit recipients receiving survivor benefits are eligible for the increase after receiving benefits for twelve months. Benefit recipients receiving disability benefits are eligible for the increase after receiving benefits for sixty months or age 53 whichever occurs first.

PLUS: A qualified member may elect a partial lump sum benefit of not less than 6 times the monthly amount payable to the member as a single lifetime pension and not more than 60 times that amount.

Deferred Retirement Option Program (DROP): Members are eligible for a one-time election to "DROP in" upon attainment of unreduced retirement eligibility. The primary features of the DROP include:

- a) During participation in the DROP, members continue to make contributions based upon the 10% member contribution rate. While participating in the DROP, 100% of members' contributions are deposited to their DROP account.
- b) 100% of the member's computed benefit (based upon service and salary at time of DROP), including any scheduled 3% post-retirement increases, is credited to the member's DROP account.
- c) The DROP account is credited with interest annually based upon a rate of return earned on a selected group of cash equivalent type investments (assumed to be 3% for actuarial valuation purposes).

**RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
BENEFITS AND CONDITIONS VALUED
DECEMBER 31, 2006
(CONCLUDED)**

Deferred Retirement Option Program (DROP) (Continued):

- d) A member who “DROPs in” must stay in the DROP for a minimum period of time based on age at time of “DROPing in”. A minimum participation period of 3 years for members who “DROP in” prior to age 52 and 2 years for members who “DROP in” on or after age 52. After a maximum of 8 years in the DROP program or attaining age 60, the member who entered the DROP program must retire.
- e) If the member “DROPs in”, the member’s annual benefit when the member “DROPs out” (i.e. retires) is based upon the benefit calculations at time of the “DROP in”, including any post-retirement increases that may have accrued during the DROP participation period.
- f) If, during participation in the DROP, a member becomes disabled due to a duty related injury/illness, the member can choose to 1) have a disability pension benefit calculated based on the assumption that participation in the DROP did not occur, or 2) the member can elect to accept the age/service pension benefit achieved through DROP participation plus the accumulation in the DROP account. Duty disability benefit recipients will not suffer the loss of accumulated interest for early departure from the DROP.
- g) Once a member elects to participate in the DROP, their contributions are committed for the minimum period (2 or 3 years). If the member voluntarily discontinues DROP participation prior to the minimum participation period, the member will not receive any interest accumulated in the DROP account but will receive all accumulated pension benefits and pension contributions deposited into the DROP account at the end of the minimum participation period.

SAMPLE BENEFIT COMPUTATION FOR MEMBERS

Assumed data in connection with this sample retirement is shown below:

	Data	Description
A.	\$40,000	Final Average Compensation
B.	27	Years of Credited Service
C.	50	Age of Retirant
D.	50%	Percentage to continue to spouse after retirant's death (this is automatic)

Sample Computation Steps

E. Benefit Formula:	0.0250 x 20 x \$40,000 = \$20,000
	0.0225 x 5 x \$40,000 = \$4,500
	0.0200 x 2 x \$40,000 = \$1,600
	\$26,100

Benefit payable to:

F. Retirant while spouse is alive (E)	\$26,100
G. Spouse after retirant's death (D x E)	\$13,050
H. Retirant after spouse's death (E)	\$26,100

Projected Benefits to Member

Year Ended December 31	Amount Payable
2007	\$ 26,100
2008	26,100
2009	26,100
2010	26,883
2011	27,666
2012	28,449
2013	29,232
2014	30,015
2015	30,798

Benefits for years 2016 and later increase by \$783 over the previous year's amount.

**RETIREMENT SURVIVOR & DISABILITY ALLOWANCES
COMPUTED EMPLOYER CONTRIBUTIONS TO SUPPORT BENEFITS**

Contributions for	Contributions Expressed as Percents of Payroll	
Valuation Date - December 31	2006	2005
Results for the Period Beginning July 1	2008	2007
Normal Cost:		
Age & Service Benefits	16.14%	16.28%
Disability Benefits	2.83%	2.89%
Survivor Benefits	0.19%	0.18%
Separation Benefits	0.87%	0.89%
Purchase of Military Service	0.75%	0.75%
Total Normal Cost	20.78%	20.99%
Less Member Contributions	10.00%	10.00%
 Employer Normal Cost	 10.78%	 10.99%
 Unfunded Actuarial Accrued Liabilities	 10.22%	 11.01%
Amortization Period	28 years	35 years
 EMPLOYER CONTRIBUTION RATE IN EFFECT	 21.00%	 22.00%

The amortization period is the period of years over which the employer contribution rate and the employee contribution rate will finance the unfunded liabilities.

RETIREMENT, SURVIVOR, & DISABILITY ALLOWANCES
METHOD OF FINANCING FUTURE BENEFITS FOR
PRESENT ACTIVE MEMBERS
DECEMBER 31, 2006

Normal cost and the allocation of present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- (i) The annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;

- (ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Actuarial Accrued Liabilities, \$807,760,712, less pension assets of \$653,493,046 resulted in unfunded actuarial accrued liabilities of \$154,267,666, which were amortized as a level percent of payroll over a period of 28 years. The characteristics of this method are illustrated on the following page. Actuarial accrued liabilities represent the portion of present values not covered by future normal cost contributions.

**RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITIES
WHICH WERE CALCULATED USING AN INFLATION ASSUMPTION
OF 4.00% AND AN INVESTMENT RETURN ASSUMPTION OF
8.00% COMPOUNDED ANNUALLY**

**Level % of Payroll Amortization:
Closed Amortization Completed in 28 Years
(\$ Thousands)**

Year	Active Employee Payroll	Unfunded Actuarial Accrued Liability	Annual Contributions		UAAL as % of Payroll
			Dollars	% of Payroll	
1	\$ 89,313	\$ 154,268	\$ 9,128	10.22%	172.7%
2	92,886	157,124	9,493	10.22%	169.2%
3	96,601	159,829	9,873	10.22%	165.5%
4	100,465	162,355	10,268	10.22%	161.6%
5	104,484	164,673	10,678	10.22%	157.6%
6	108,663	166,750	11,105	10.22%	153.5%
7	113,010	168,549	11,550	10.22%	149.1%
8	117,530	170,030	12,012	10.22%	144.7%
9	122,231	171,150	12,492	10.22%	140.0%
10	127,120	171,860	12,992	10.22%	135.2%
11	132,205	172,107	13,511	10.22%	130.2%
12	137,493	171,834	14,052	10.22%	125.0%
13	142,993	170,978	14,614	10.22%	119.6%
14	148,713	169,469	15,198	10.22%	114.0%
15	154,662	167,232	15,806	10.22%	108.1%
16	160,848	164,184	16,439	10.22%	102.1%
17	167,282	160,235	17,096	10.22%	95.8%
18	173,973	155,287	17,780	10.22%	89.3%
19	180,932	149,232	18,491	10.22%	82.5%
20	188,169	141,954	19,231	10.22%	75.4%
21	195,696	133,325	20,000	10.22%	68.1%
22	203,524	123,206	20,800	10.22%	60.5%
23	211,665	111,446	21,632	10.22%	52.7%
24	220,132	97,881	22,497	10.22%	44.5%
25	228,937	82,331	23,397	10.22%	36.0%
26	238,094	64,602	24,333	10.22%	27.1%
27	247,618	44,482	25,307	10.22%	18.0%
28	257,523	21,741	26,319	10.22%	8.4%

RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS
PRESENT RETIRED LIVES AND VESTED DEFERRED CASES
DECEMBER 31, 2006

Benefits Payable	Number	Monthly Amount	Actuarial Value
From Employer Accumulation Fund:			
Regular Retirements Effective Before 1/1/66	1	\$ 1,691	\$ 41,819
Disability Retirements Effective Before 1/1/66	0	0	0
Total Benefits Payable from Employer Accumulation Fund	1	1,691	41,819
From Pension Reserve Fund:			
Regular Retirements Effective After 1/1/66	977	2,837,968	416,409,438
Disability Retirements Effective After 1/1/66	97	225,106	35,071,361
Total Benefits Payable from Pension Reserve Fund	1,074	3,063,074	451,480,799
From Survivor Benefit Fund:			
Surviving Spouses, Dependent Children & Dependent Parents	262	277,040	28,455,564
Total Benefits Payable from Survivor Benefit Fund	262	277,040	28,455,564
Total Retirement Benefits Payable	1,337	3,341,805	479,978,182
Total Vested Deferred Benefits Payable	9	23,384	3,020,572
Grand Total	1,346	\$3,365,189	\$482,998,754

RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
DEVELOPMENT OF ACTUARIAL ACCRUED LIABILITIES
DECEMBER 31, 2006

Actuarial Present Value, December 31, of	(1) Total Actuarial Present Value	(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1) - (2)
Age & service allowances based on service rendered before and likely to be rendered after valuation date	\$ 462,370,876	\$ 145,875,629	\$ 316,495,247
Disability allowances likely to be paid to present active members who become totally and permanently disabled	31,725,290	24,568,143	7,157,147
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	2,524,626	1,596,329	928,297
Separation benefits (refunds of contributions and deferred allowances likely to be paid on behalf of present active members)	7,526,050	7,344,783	181,267
Retirement benefits likely to be paid to current retirants and beneficiaries and to present inactive members	482,998,754	0	482,998,754
Total	\$ 987,145,596	\$ 179,384,884	\$ 807,760,712
Member portion	171,694,033	85,793,945	85,900,088
Employer portion	\$ 815,451,563	\$ 93,590,939	\$ 721,860,624

RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
SUMMARY STATEMENT OF SYSTEM RESOURCES AND OBLIGATIONS
DECEMBER 31, 2006

PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES

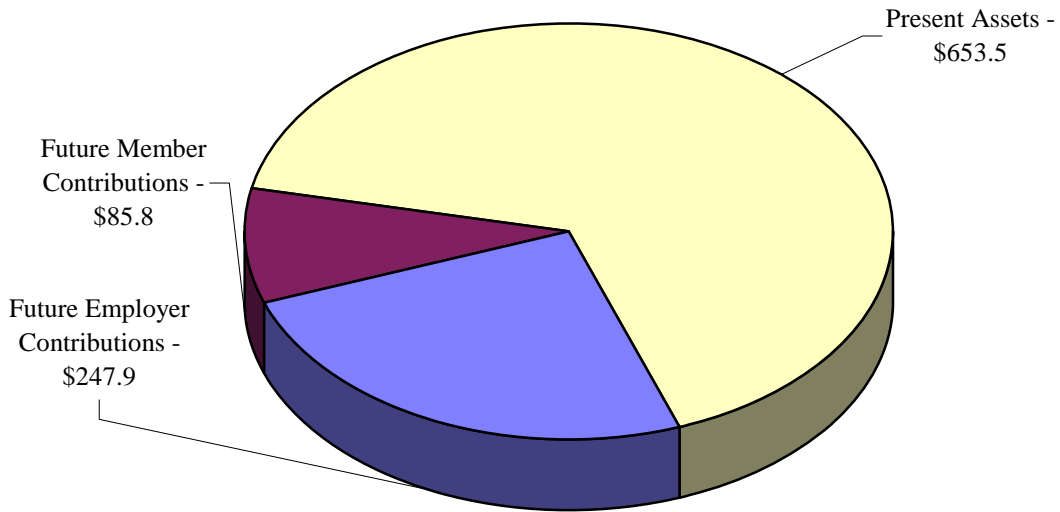
A. Present valuation assets			
1. Net assets from system financial statements	\$	794,427,257	
2. Market Value Adjustment		(36,076,999)	
3. Health Assets		104,857,212	
4. Valuation Assets: 1 + 2 - 3		104,857,212	\$ 653,493,046
B. Actuarial present value of expected future Employer contributions			
1. For normal costs		93,590,939	
2. For unfunded actuarial accrued liability		154,267,666	
3. Total		247,858,605	
C. Actuarial present value of expected future member contributions			85,793,945
D. Total Present and Expected Future Resources			\$ 987,145,596

ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE BENEFIT PAYMENTS

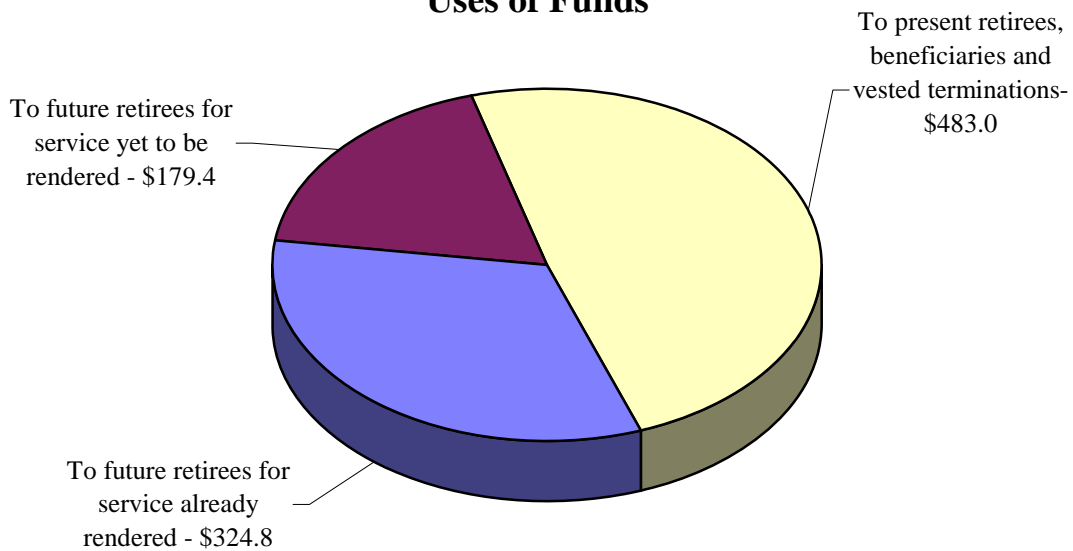
To retirants and beneficiaries	\$	479,978,182
To terminated members		3,020,572
To present active members		
1. Allocated to service rendered prior to valuation date (actuarial accrued liability)		324,761,958
2. Allocated to service likely to be rendered after valuation date		179,384,884
3. Total		504,146,842
Total Actuarial Present Value of Expected Future Benefit Payments	\$	987,145,596

**RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES
FINANCING \$ 987.2 MILLION OF BENEFIT PROMISES
DECEMBER 31, 2006**

Sources of Funds



Uses of Funds



RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES COMPARATIVE STATEMENT

Valuation Date December 31	No.	Annual Payroll	Actuarial Accrued Liabilities			Unfunded/ Payroll	% Funded	Funding Years
			Total	Funded	Unfunded			
1992	1,371	\$ 50,235,996	\$ 309,272,482	\$ 258,609,387	\$ 50,663,095	1.0	83.6%	18
1993 *	1,467	55,781,585	351,456,425	297,050,305	54,406,120	1.0	84.5%	22
1994	1,465	58,116,787	378,058,385	330,787,044	47,271,341	0.8	87.5%	16
1994 #	1,465	58,116,787	374,006,767	330,787,044	43,219,723	0.7	88.4%	12
1995	1,455	59,825,356	402,450,332	370,425,462	32,024,870	0.5	92.0%	8
1996	1,375	59,239,349	454,514,187	411,316,254	43,197,933	0.7	90.5%	16
1997	1,445	62,233,299	487,392,406	460,667,112	26,725,294	0.4	94.5%	9
1997 *	1,445	62,233,299	496,917,335	460,667,112	36,250,223	0.6	92.7%	17
1998	1,446	65,153,864	532,956,745	509,859,924	23,096,821	0.4	95.7%	10
1999	1,445	66,017,381	564,672,560	546,510,779	18,161,781	0.3	96.8%	7
1999 *	1,445	66,017,381	577,010,085	546,510,779	30,499,306	0.5	94.7%	20
2000	1,489	69,028,285	607,411,320	569,858,387	37,552,933	0.5	93.8%	26
2000 #	1,489	69,028,285	594,222,603	570,039,631	24,182,972	0.4	95.9%	8
2001	1,520	76,344,002	636,715,458	551,279,438	85,436,020	1.1	86.6%	31
2002 #	1,548	78,997,065	668,605,932	492,430,826	176,175,106	2.2	73.7%	32
2003	1,542	81,737,962	702,799,017	545,981,513	156,817,504	1.9	77.7%	32
2004	1,562	81,757,707	737,867,378	569,858,387	168,008,991	2.1	77.2%	37
2004 *	1,562	81,757,707	734,464,371	569,858,387	164,605,984	2.0	77.6%	34
2005	1,573	83,408,155	766,741,437	591,922,200	174,819,237	2.1	77.2%	37
2005 #	1,573	83,408,155	773,856,164	591,922,200	181,933,964	2.2	76.5%	35
2006 *	1,592	85,878,329	807,760,712	653,493,046	154,267,666	1.8	80.9%	28

* Plan amended.

Revised actuarial assumptions or methods.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, *the ratio of unfunded actuarial accrued liabilities to active member payroll ("Unfunded/Payroll" above) is significant.* Unfunded actuarial accrued liabilities represent a kind of debt, while active member payroll represents the Plan's capacity to collect contributions to pay toward debt --- thus *the ratio is a relative index of condition. The lower the ratio, the greater the financial strength.* And vice-versa.

CHANGES IN AVERAGE PAY

Year	Number of Members	Total Payroll	Average Pay	% Change from Prior Year in		
				Average Pay	N.A.E.+	CPI
1992	1,371	50,235,996	36,642	0.2%	5.2%	3.0%
1993	1,467	55,781,585	38,024	3.8%	0.9%	2.7%
1994	1,465	58,116,787	39,670	4.3%	2.7%	2.7%
1995	1,455	59,825,356	41,117	3.6%	4.0%	2.6%
1996	1,375	59,239,349	43,083	4.8%	4.9%	3.3%
1997	1,445	62,233,299	43,068	0.0%	5.8%	1.7%
1998	1,446	65,153,864	45,058	4.6%	5.2%	3.4%
1999	1,445	66,017,381	45,687	1.4%	5.6%	2.7%
2000	1,489	69,028,285	46,359	1.5%	5.5%	3.4%
2001	1,520	76,344,002	50,226	8.3%	2.4%	1.6%
2002	1,548	78,997,065	51,032	1.6%	1.0%	2.4%
2003	1,542	81,737,962	53,008	3.9%	2.4%	1.9%
2004	1,562	81,757,707	52,342	(1.3)%	4.6%	3.3%
2005	1,573	83,408,155	53,025	1.3%	3.7%	3.4%
2006	1,592	85,878,329	53,944	1.7%	2.7% *	2.6%
10 Year Average				2.3%	3.9%	2.6%

+ *National Average Earnings published by the Social Security Administration.*

* *Estimated National Average Earnings published by the Social Security Administration.*

Over long periods of time, the change in average pay is an approximate measure of the impact of inflation and “Across the Board” pay increases on member pays. In years when the number of members decreases, the change in average pay may tend to be greater than actual pay increases experienced by members. In years when the number of members increases the change in average pay may tend to be less than actual pay increases experienced by members.

RETIREMENT, SURVIVOR, AND DISABILITY BENEFITS IN PAY STATUS COMPARATIVE STATEMENT

Valuation Date December 31	Number of People	Monthly Pensions	Active Payroll	Average Amount	% of Active Member Pays
1970(6/30) #	193	\$ 54,607	\$ 10,223,188	\$ 283	6.4%
1974 #*	288	96,045	16,942,378	333	6.8%
1977 *	346	148,133	18,995,363	428	9.4%
1979 #	402	191,356	21,558,774	476	10.7%
1981 *	445	250,287	23,539,234	562	12.8%
1983	488	299,519	30,234,935	614	11.9%
1984	504	319,789	32,020,914	635	12.0%
1985 #	530	359,208	32,500,428	678	13.3%
1986	544	382,419	34,757,277	703	13.2%
1987 *#	558	427,132	39,938,921	765	12.8%
1988	575	466,519	40,674,634	811	13.8%
1989	599	544,631	43,053,057	909	15.2%
1990 *#	654	660,112	45,679,355	1,009	17.3%
1991	675	732,576	48,488,406	1,085	18.1%
1992	706	819,869	50,235,996	1,161	19.6%
1993 *	723	927,168	55,781,585	1,282	19.9%
1994 #	764	1,057,577	58,116,787	1,384	21.8%
1995 *#	826	1,184,405	59,825,356	1,434	23.8%
1996	911	1,402,909	59,239,349	1,540	28.4%
1997 *	984	1,645,613	62,233,299	1,672	31.7%
1998	1,060	1,914,091	65,153,864	1,806	35.3%
1999 *	1,123	2,123,471	66,017,381	1,891	38.6%
2000 #	1,174	2,300,464	69,028,285	1,960	40.0%
2001	1,207	2,460,308	76,344,002	2,038	38.7%
2002	1,231	2,603,108	78,997,065	2,115	39.5%
2003	1,253	2,770,149	81,737,962	2,211	40.7%
2004	1,282	3,023,341	81,757,707	2,358	44.4%
2005 #	1,301	3,177,731	83,408,155	2,443	45.7%
2006 *	1,337	3,341,805	85,878,329	2,499	46.7%

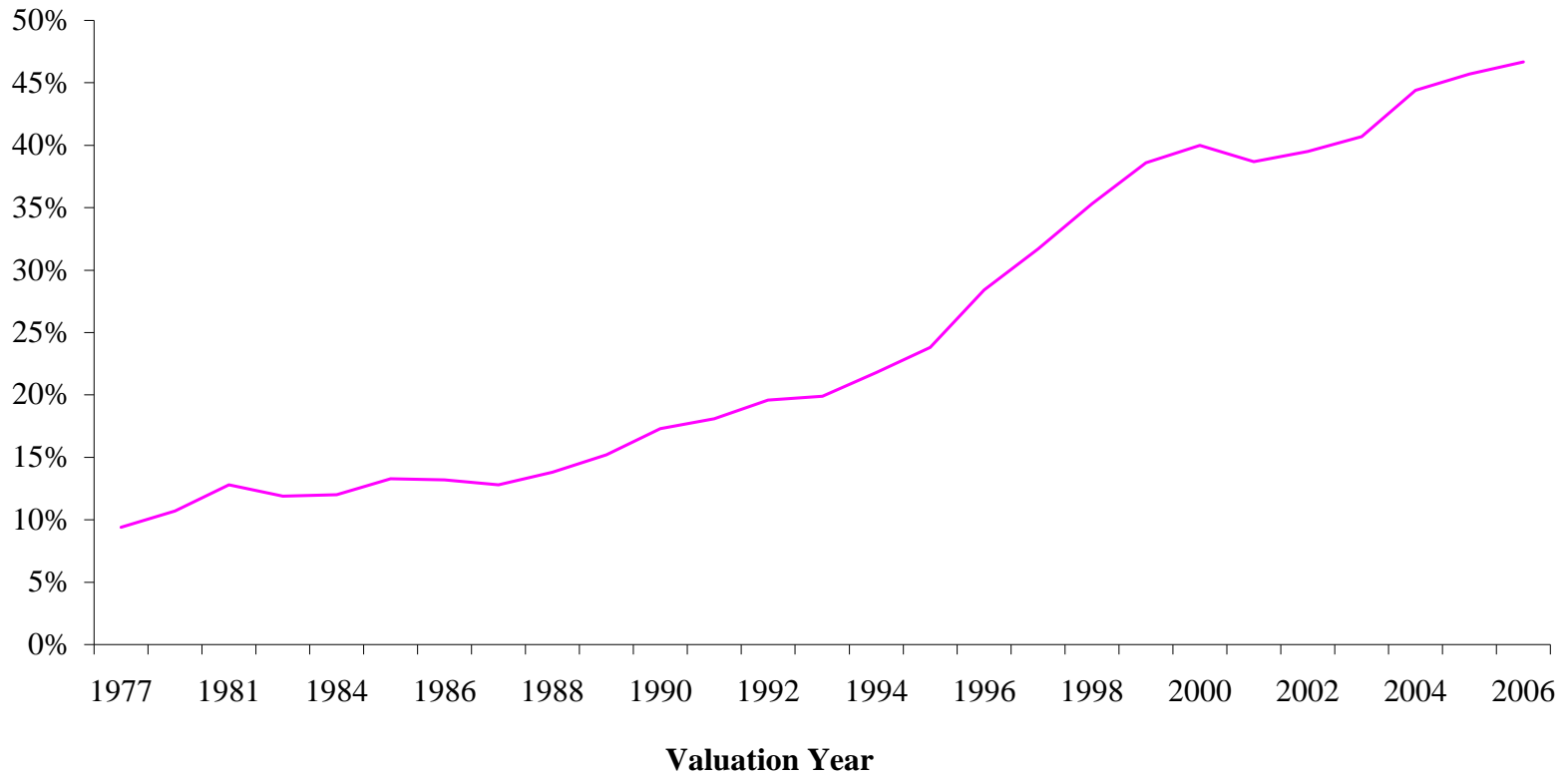
* Plan amended.

Revised actuarial assumptions or methods.

Pensions expressed as a % of payroll exceed contribution income by a considerable margin. This is a normal and expected condition in a funded plan such as HPRS, but it does have implications for cash flow and investment planning.

**RETIREMENT, SURVIVOR, AND DISABILITY ALLOWANCES BEING PAID
EXPRESSED AS A % OF ACTIVE MEMBER PAYROLL
DECEMBER 31, 2006**

% of Active Payroll



The employer contribution rate for the year ended June 30, 2009 is scheduled to be 21.00%.

SHORT-TERM SOLVENCY TEST

The HPRS financing objective is to pay for the benefits through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the system are level in concept and soundly executed, the system will *pay all promised benefits when due – the ultimate test of financial soundness.*

Short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (cash and investments) are compared with: 1) Active member contributions on deposit; 2) The liabilities for future benefits to present retired lives; 3) The liabilities for service already rendered by active members. In a system that has been following the discipline of level percent financing, the liabilities for active member contributions on deposit (1) and the liabilities for future benefits to present retired lives (2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (3) will be partially covered by the remainder of present assets. Generally, if the system has been using level cost financing, the funded portion of column 3 will increase over time.

Accrued Liabilities and Assets Allocated to Retirement, Survivor and Disability Allowances

Valuation Year	(1) Active Member Contributions	(2) Retirants, Beneficiaries & Vested Deferreds	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered By Reported Assets		
					(1)	(2)	(3)
1992	\$40,347,533	\$120,178,654	\$148,746,295	\$258,609,387	100%	100%	66%
1993 *	44,494,424	137,111,461	169,850,540	297,050,305	100%	100%	68%
1994 #	47,947,979	156,363,745	169,695,043	330,787,044	100%	100%	75%
1995	50,547,938	176,541,660	175,360,734	370,425,462	100%	100%	82%
1995 *	50,547,938	187,922,028	189,287,398	370,425,462	100%	100%	70%
1995 *#	50,547,938	189,010,261	184,793,495	370,425,462	100%	100%	71%
1996	52,297,873	218,164,080	184,052,234	411,316,254	100%	100%	77%
1997	53,264,614	256,268,302	177,859,490	460,667,112	100%	100%	85%
1997 *	53,264,614	260,095,357	183,557,364	460,667,112	100%	100%	80%
1998	53,797,385	291,066,407	188,092,953	509,859,924	100%	100%	88%
1999	55,558,145	325,395,987	183,718,428	546,510,779	100%	100%	90%
1999 *	55,558,145	333,340,728	188,111,212	546,510,779	100%	100%	84%
2000	59,455,707	360,125,257	187,830,356	570,039,631	100%	100%	80%
2000 #	59,455,707	358,422,165	176,344,731	570,039,631	100%	100%	86%
2001	63,969,216	374,228,361	198,517,881	551,279,438	100%	100%	57%
2002	68,794,904	391,098,788	208,712,240	492,430,826	100%	100%	16%
2002 #	68,794,904	391,098,788	203,176,113	527,604,456	100%	100%	33%
2003	73,358,075	412,818,959	216,621,983	545,981,513	100%	100%	28%
2004	77,100,466	445,084,791	215,682,121	569,858,387	100%	100%	22%
2004 *	77,100,466	445,084,791	212,279,114	569,858,387	100%	100%	22%
2005	77,779,569	462,913,927	226,047,941	591,922,200	100%	100%	23%
2005 #	77,779,569	463,476,318	232,600,277	591,922,200	100%	100%	22%
2006 *	82,720,940	482,998,754	242,041,018	653,493,046	100%	100%	36%

* Plan amendment.

Assumption or method change.

SUMMARY OF UNFUNDED ACCRUED LIABILITIES

Each time a new benefit is added which applies to service already rendered, an “unfunded accrued liability” is created. Also, if actual financial experiences are less favorable than assumed financial experiences, the difference is added to unfunded accrued liabilities.

In an inflationary economy, the value of the dollar is decreasing. This environment results in employee pays increasing in dollar amounts resulting in unfunded accrued liabilities increasing in dollar amounts, all at a time when the actual substance of these items may be decreasing. Looking at just dollar amounts of unfunded accrued liabilities can be misleading. Unfunded accrued liabilities divided by active employee payroll provides an index, which aids understanding. The smaller ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

Summary of Assets and Actuarial Accrued Liabilities for Retirement, Survivor, and Disability Allowances

Valuation Year	Actuarial Accrued Liability (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liability (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1993 *	\$351,456,425	\$297,050,535	\$54,405,890	84.5%	55,781,585	97.5%
1994 #	374,006,767	330,787,044	43,219,723	88.4%	58,116,787	74.4%
1995	402,450,332	370,425,462	32,024,870	92.0%	59,825,356	53.5%
1995 *	427,757,364	370,425,462	57,331,902	86.6%	59,825,356	95.8%
1995 *#	424,351,694	370,425,462	53,926,232	87.3%	59,825,356	90.1%
1996	454,514,187	411,316,254	43,197,933	90.5%	59,239,349	72.9%
1997	487,392,406	460,667,112	26,725,294	94.5%	62,233,299	42.9%
1997 *	496,917,335	460,667,112	36,250,223	92.7%	62,233,299	58.2%
1998	532,956,745	509,859,924	23,096,821	95.7%	65,153,864	35.4%
1999	564,672,560	546,510,779	18,161,781	96.8%	66,017,381	27.5%
1999 *	577,010,085	546,510,779	30,499,306	94.7%	66,017,381	46.2%
2000	607,411,320	570,039,631	37,371,689	93.8%	69,028,285	54.1%
2000 #	594,222,603	570,039,631	24,182,972	95.9%	69,028,285	35.0%
2001	636,715,458	551,279,438	85,436,020	86.6%	76,344,002	111.9%
2002	668,605,932	492,430,826	176,175,106	73.7%	78,997,065	223.0%
2002 #	663,069,805	527,604,456	135,465,349	79.6%	78,997,065	171.5%
2003	702,799,017	545,981,513	156,817,504	77.7%	81,737,962	191.9%
2004	737,867,378	569,858,387	168,008,991	77.2%	81,757,707	205.5%
2004 *	734,464,371	569,858,387	164,605,984	77.6%	81,757,707	201.3%
2005	766,741,437	591,922,200	174,819,237	77.2%	83,408,155	209.6%
2005 #	773,856,164	591,922,200	181,933,964	76.5%	83,408,155	218.1%
2006 *	807,760,712	653,493,046	154,267,666	80.9%	85,878,329	179.6%

* Plan amendment.

Assumption or method change.

The figures on this page do not include liabilities and assets related to post-retirement Health Care and Medicare reimbursement.

GASB STATEMENT NO. 25
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended December 31	Actual Contribution	Percent of Required Contributed
1999	\$13,569,730	100%
2000	13,210,189	100%
2001	13,901,313	100%
2002	14,923,893	100%
2003	16,361,339	100%
2004	17,205,610	100%
2005	18,467,789	100%
2006	19,263,941	98%

This information is presented in draft form for review by the System's auditor. Please let us know if there are any changes so that we may maintain consistency with the System's financial statements.

The amounts reported in this schedule do not include contributions for post-employment Health Care benefits.

GASB STATEMENT NO. 25
ANNUAL REQUIRED CONTRIBUTION

For purposes of Governmental Accounting Standards Board (GASB) Statement No. 25, the System's Annual Required Contribution for the plan year ending December 31, 2007 will be ½ of the employer contribution for the period from July 1, 2006 to June 30, 2007 (22.70% of payroll, based upon an amortization period of 30 years) plus ½ of the employer contribution for the period from July 1, 2007 to June 30, 2008 (22.90% of payroll, based upon an amortization period of 30 years). The System's Annual Required Contribution for the plan year ending December 31, 2008 will be ½ of the employer contribution for the period from July 1, 2007 to June 30, 2008 (22.90% of payroll, based upon an amortization period of 30 years) plus ½ of the employer contribution for the period from July 1, 2008 to June 30, 2009 (21.00% of payroll, based upon an amortization period of 28 years).

It is important to note that if the employer makes contributions at the currently scheduled rates, the employer contribution for calendar years 2007 and 2008 are likely to fall short of the Annual Required Contribution.

GASB STATEMENT NO. 25

NOTES TO TREND DATA

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	December 31, 2006
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent Open
Remaining Amortization Period	28 years for retirement allowances in determining the Annual Required Contribution
Asset Valuation Method	4 year smoothed market 20 % Corridor
Actuarial Assumptions:	
Investment Rate of Return	8.0%
Projected Salary Increases	4.3% - 14.0%
* Includes Wage Inflation at	4.0%

OTHER REQUESTED CAFR INFORMATION

As of December 31, 2006, the actuarial present value of credited projected benefits for current employees is shown below:

	Actuarial Present Value of Credited Projected Benefits
Current Employees	
Accumulated employee contributions including allocated investment income	\$ 82,720,940
Employer - financed vested	108,441,501
Employer - financed non-vested	89,112,702

As of December 31, 2006, there were 298 vested active members and 1,294 non-vested active members.

SECTION B

POST-RETIREMENT HEALTH CARE AND MEDICARE REIMBURSEMENT

**POST-RETIREMENT HEALTH CARE AND MEDICARE REIMBURSEMENT
PROVISIONS EVALUATED AND/OR CONSIDERED**

Benefits Provided

Since July 1, 1974, the Retirement System has made Health Care available for every benefit recipient and eligible dependents under a hospitalization and health care policy administered by Aetna Life & Casualty Company and Medical Mutual of Ohio. This Plan is secondary to Medicare or any other Health Care coverage. Each year the Board establishes participant premium rates, any necessary co-payments for the retiree, spouse, or dependent children, and any other changes in plan design for the following calendar year. The premium for 2006 applicable to spouses under age 65 is \$80 per month. The dependent child premium is \$25 per family.

Basic Plan coverage provides for payment of 100% of all reasonable and customary hospital expenses. All hospital admissions must be pre-certified 14 days prior to an elective admission. Emergency confinements require notification within 48 hours following admission. If a covered person is in a network area, he or she must use a preferred provider for the maximum benefit.

All other medical expenses are covered at the rate of 80% of reasonable and customary charges.

Designated surgical procedures require a second opinion. Also designated outpatient procedures must be pre-certified. For in-network activity, the annual out-of-pocket maximum is \$750 per individual or \$1,500 per family (out of network amounts are \$5,000 and \$10,000, respectively). Each covered person under the age of 65 must meet a \$100 annual deductible. Each covered person over 65 must meet a \$25 annual deductible. The maximum lifetime benefit is \$2,000,000 per person. If the covered person is in a network area and uses non-network providers, the annual deductible for the individual is \$1,000.

A mail-order prescription drug plan is also available. Each prescription submitted via mail order requires a co-payment of \$5.00 for generic, \$10.00 for brand and \$30.00 for non formulary for up to a 90-day supply. Drugs purchased retail/over-the-counter have a co-payment of \$5.00 for generic, \$10.00 for brand and \$30.00 for non formulary for up to a 34 day supply.

Administration: The medical program is administered by the AETNA and Medical Mutual of Ohio for hospital-medical-surgical coverage and by Medco for mail order prescription drug coverage.

Stop Loss Coverage: The program is fully self-insured and stop loss coverage is maintained.

Medicare Premiums: The Medicare Part B (no cap) basic premium amount is reimbursed to eligible benefit recipients upon proof of coverage.

Dental/Vision: System pays premiums for all benefit recipients. The premium for dependents is deducted from the pension benefit.

POST-RETIREMENT HEALTH CARE AND MEDICARE REIMBURSEMENT

Year	Covered Lives	Amounts Paid to Vendors (Including Medicare Part B)						Member Premiums and Other Adjustments	Net Paid by OHPRS	Per Covered Life	Payroll	% of Payroll
		Medical	Drugs	Medicare Part B	Dental	Vision	Total					
1985	697	\$ 427,361	\$ 60,015	\$ 28,272			\$ 515,648	\$ 515,648	\$ 740	\$ 32,500,428	1.6%	
1986	715	787,245	80,911	30,457			898,613	898,613	1,257	34,757,277	2.6%	
1987	731	559,832	115,544	38,037			713,413	713,413	976	39,938,912	1.8%	
1988	761	522,747	145,847	57,461			726,055	726,056	954	40,674,634	1.8%	
1989	810	1,043,650	186,795	77,869			1,308,314	\$ 97,864	1,406,178	43,053,057	3.3%	
1990	925	1,009,153	213,716	77,363			1,300,232	(94,251)	1,205,981	45,679,355	2.6%	
1991	976	1,267,327	251,004	86,740			1,605,071	180,583	1,785,654	48,488,406	3.7%	
1992	1,045	1,643,276	298,493	97,117			2,038,886	76,046	2,114,932	50,235,996	4.2%	
1993	1,081	1,553,628	299,410	118,109			1,971,147	(90,525)	1,880,622	55,781,585	3.4%	
1994	1,133	1,239,008	320,360	141,384			1,700,752	3,314	1,704,066	58,116,787	2.9%	
1995	1,225	1,512,523	364,096	149,440			2,026,059	(66,834)	1,959,225	59,825,356	3.3%	
1996	1,379	1,353,932	491,525	155,769			2,001,226	21,382	2,022,608	59,239,349	3.4%	
1997	1,499	1,623,640	849,321	166,743			2,639,704	(140,526)	2,499,178	62,233,299	4.0%	
1998	1,602	2,147,334	1,122,248	171,223			3,440,805	(311,917)	3,128,888	65,153,864	4.8%	
1999	1,772	3,315,914	1,364,990	197,606			4,878,510	619,894	5,498,404	66,017,381	8.3%	
2000	1,848	3,190,885	1,684,300	203,157			5,078,342	(358,082)	4,720,260	69,028,285	6.8%	
2001	1,900	3,730,167	1,960,825	231,046			5,922,038	138,317	6,060,355	76,344,002	7.9%	
2002	1,943	4,147,534	2,431,297	260,772	\$194,893	\$80,909	7,115,405	(200,021)	6,915,384	78,997,065	8.8%	
2003	1,912	4,256,046	2,681,414	290,506	209,429	82,097	7,519,492	(507,642)	7,011,850	81,737,962	8.6%	
2004	1,928	4,074,972	2,710,367	347,585	230,994	84,136	7,448,054	(641,707)	6,806,347	81,757,707	8.3%	
2005	1,958	6,015,277	2,980,755	422,045	364,139	124,658	9,906,874	(552,570)	9,354,304	83,408,155	11.2%	
2006#	2,078	4,999,822	2,832,743	503,034	408,667	127,266	8,871,532	(198,141)	8,673,391	4,174	85,878,328	10.1%

Member premiums and other adjustments for calendar year 2006 include member premiums totaling \$570,648 and claims incurred in 2006 expected to be paid in 2007 totaling \$372,507.

Separate information for dental and vision was not available for years prior to 2002.

POST-RETIREMENT HEALTH CARE AND MEDICARE REIMBURSEMENT



**ASSUMPTIONS FOR HEALTH CARE COVERAGES
DECEMBER 31, 2006**

Development of Health Care Rates: Based on the 2006 retired life data, the HPRS portion of the total health care rates was developed as follows:

	Age/Gender Weighted HPRS Monthly Rates			
	This Year			Prior Year
	Gross Rate	Member Paid	Net Rate	Net Rate
A. One person without Medicare	\$388.77	\$0.00	\$388.77	\$392.68
B. One person with Medicare*	242.84	0.00	242.84	208.86
C. Two persons without Medicare	777.54	80.00	697.54	705.36
D. Two persons with Medicare*	485.68	0.00	485.68	417.73
E. Child	210.84	25.00	185.84	144.18
F. Medicare Part B Reimbursement	93.50	0.00	93.50	88.50

The above rates are estimates that are suitable for the purpose of this valuation. Use of the above rates for any other purpose would require review. Pre-Medicare rates are lower than would be expected when compared with other retired groups. This may be attributable to a higher than average amount of coordination of benefit claims for younger HPRS retirees. Many younger retirees likely have other employment. Please see page B-5 for age specific rates used for valuation purposes. Employment related primary coverage for recipients and dependents have been reflected in the age based specific premium rates.

* Does not include Medicare Part B monthly premium of \$93.50.

Ohio HPRS First Year Projection of Health Care Claims Cost Based on 5-Year Averages

<u>Year</u>	<u>Claims</u>			<u>Enrollees</u>	<u>Population</u> <u>Adjusted</u>	<u>Medical</u> <u>CPI</u>	<u>Price</u> <u>Adjusted</u>	<u>Weight</u>	<u>Secondary</u> <u>Provision</u> <u>Adjustment</u>	<u>Recognized</u>	
	<u>Gross</u>	<u>Member and</u> <u>Adjustments</u>	<u>Net</u>								
2002	7,115,405	200,021	6,915,384	1,943	7,395,866	285.6	8,706,198	0.00	0.97	-	
2003	7,519,492	507,642	7,011,850	1,912	7,620,619	297.1	8,623,535	0.10	0.96	827,860	
2004	7,448,054	641,707	6,806,347	1,928	7,335,886	310.1	7,953,321	0.20	1.00	1,590,664	
2005	9,906,874	552,570	9,354,304	1,958	9,927,601	323.2	10,326,917	0.30	1.00	3,098,075	
2006	9,244,039	570,648	8,673,391	2,078	8,673,391	336.2	8,673,391	0.40	1.00	3,469,356	
										(Base for coming year) Recognized:	
									\$	8,985,955	
									Growth Factors:	Population	1.017
										Price	1.050
									First Year Projection:	\$	9,595,652

**ASSUMPTIONS FOR HEALTH CARE COVERAGES
AGE SPECIFIC HPRS MONTHLY GROSS RATES**

Age	Gross Rate		Age	Gross Rate		Age	Gross Rate	
	Male	Female		Male	Female		Male	Female
16	\$ 105.41	\$ 164.44	51	\$ 288.73	\$ 319.22	86	\$ 312.34	\$ 274.01
17	106.46	166.09	52	308.11	333.37	87	313.76	274.53
18	107.53	167.75	53	328.08	348.39	88	313.76	274.53
19	108.60	169.43	54	348.77	364.07	89	313.76	274.53
20	109.69	171.12	55	370.17	380.40	90	313.76	274.53
21	110.78	172.83	56	392.21	397.34	91	313.76	274.53
22	111.89	174.56	57	414.87	414.87	92	313.76	274.53
23	113.01	176.31	58	436.54	430.35	93	313.76	274.53
24	114.14	178.07	59	458.53	446.15	94	313.76	274.53
25	115.28	179.85	60	480.78	462.22	95	313.76	274.53
26	116.43	181.65	61	503.22	478.53	96	313.76	274.53
27	117.60	183.46	62	525.79	495.02	97	313.76	274.53
28	118.77	185.30	63	548.13	511.94	98	313.76	274.53
29	119.96	187.15	64	570.46	528.95	99	313.76	274.53
30	121.16	189.02	65	217.71	200.49	100	313.76	274.53
31	122.37	190.91	66	224.74	205.75	101	313.76	274.53
32	123.60	192.82	67	231.62	210.93	102	313.76	274.53
33	124.83	194.75	68	238.32	216.01	103	313.76	274.53
34	126.08	196.70	69	244.83	220.98	104	313.76	274.53
35	127.34	198.67	70	251.13	225.82	105	313.76	274.53
36	128.62	200.65	71	257.20	230.50	106	313.76	274.53
37	129.90	202.66	72	263.01	235.02	107	313.76	274.53
38	131.20	204.69	73	268.56	239.36	108	313.76	274.53
39	132.51	206.73	74	273.83	243.50	109	313.76	274.53
40	133.84	208.80	75	278.80	247.43	110	313.76	274.53
41	143.36	215.55	76	283.47	251.13	111	313.76	274.53
42	153.78	222.90	77	287.82	254.60	112	313.76	274.53
43	165.12	230.89	78	291.85	257.82	113	313.76	274.53
44	177.37	239.53	79	295.56	260.79	114	313.76	274.53
45	190.56	248.84	80	298.93	263.50	115	313.76	274.53
46	204.67	258.83	81	301.97	265.93	116	313.76	274.53
47	219.70	269.52	82	304.68	268.10	117	313.76	274.53
48	235.63	280.90	83	307.07	269.99	118	313.76	274.53
49	252.47	292.98	84	309.13	271.60	119	313.76	274.53
50	270.17	305.76	85	310.88	272.94	120	313.76	274.53

ASSUMPTIONS FOR HEALTH CARE COVERAGES
DECEMBER 31, 2006
(CONCLUDED)

Eligibility for Medicare Coverage: All benefit recipients were assumed to be eligible for Medicare on attainment of age 65.

Health Care Inflation: If the price for any product or service were to increase faster than wages for an indefinite period, eventually that product or service would be priced out of the market and either the product or service would not be offered or substituted with an affordable product or service. For this reason, health care inflation was assumed to equal wage inflation in the long term. The assumed point in time when health care inflation reduces to wage growth inflation is uncertain. Our assumptions are based on an approximate 5 to 10-year horizon. Short-term assumptions are described on page B-8.

Retiree health valuations require an assumption about how the health costs that the System is absorbing will change over the years. This assumption includes more than just “health inflation”. It includes the impact of:

- The introduction of new procedures and medications and how they are priced.
- The utilization of services and products by covered retirees and their dependents and how that utilization changes over the years.

Retiree health valuations use a health cost trend assumption that changes over the years. The near term rates reflect the fact that currently employers are seeing sharp increases in the cost of health goods and services. If this trend is projected to continue for years to come, it implies that years from now virtually all our expenditures will be for health care. The seemingly more reasonable alternative is that in the not too distant future inflation in medical expenses will decrease to a level at or near wage inflation. It is on this basis that we project premium rates will continue to exceed wage inflation for the next 5 - 10 years, but by less each year until leveling off at an ultimate rate, assumed to be 4.0% in this valuation.

The trend assumption is established by reviewing the System’s historical trends and evaluating their relationship with national trends. Comparative trends obtained from a variety of resources including trend surveys from major insurers and benefit consulting groups. This information is added to information we have collected from analysis done in conjunction with many retiree health valuations we have completed for other clients.

This analysis is done separately for the prescription drug program and the remainder of the medical benefits since the trends and forces driving the trends are quite different in these two segments. Review of the System’s recent experience indicates trends typical of our comparative trends for both prescription drug and medical, that is in the high teens for prescription drugs and low teens for medical. Trends are predicted to moderate in the near term but are still high in the 10% to 14% area. The trends used in this valuation are found on page B-8.

**POST-RETIREMENT HEALTH PREMIUM
AND MEDICARE REIMBURSEMENT
SELECTION OF ASSUMPTIONS
DECEMBER 31, 2006**

In order to prepare actuarial studies of the coverages, it is necessary to make assumptions regarding future events such as:

1. When people will retire and how long people will live after retirement.
2. Whether or not people will quit employment prior to eligibility for a benefit.
3. Whether or not people will die in service or become disabled.
4. Rates of Investment Return and pay increases.
5. The proportion of retirees electing coverage for a spouse after retirement.
6. Rates of increase in health care premium.
7. Effect of managed care program on future claims.

Regarding items 1 through 4, the assumptions from the regular December 31, 2006 valuations were used. It was assumed that eligible retirees would elect coverage under this program. It was further assumed that 90% of males and 50% of females who retire would elect coverage for a spouse at retirement, and that coverage would be available to surviving spouses of deceased retirees and active members.

For purposes of the solvency projections, an investment return assumption of 8.0% was chosen by default to be the same rate used in the Pension Plan valuations. It is uncertain how much longer retiree health fund assets can be invested in the same manner as pension assets given the current solvency period of the retiree health fund. For purposes of GASB Statements No. 43 and No. 45 reporting, an investment return assumption of 6.5% was used. The rates of pay growth used in the Retirement System valuations are 4.00% per year. Stability can only be achieved if the rate of increase in Health Care premiums is brought in line with the rate of growth of employee pays. Consequently, it was assumed that average Health Care cost increases would eventually stabilize at 4.00% per year. Higher or lower rates of increase could, however be possible for an extended period before that happens

**POST-RETIREMENT HEALTH PREMIUM
AND MEDICARE REIMBURSEMENT
SELECTION OF ASSUMPTIONS
DECEMBER 31, 2006**

Three alternate assumptions for near term health care cost increases were considered and are shown below. A brief description of each of the alternate assumptions follows:

Alternate A (Optimistic): The Alternate A assumption assumes that the employer share of per capita costs would increase at 7% next year, 6% the second year, 5% the third year and no faster than 4% per year thereafter.

Alternate B (Intermediate): In the middle of the range of probable conditions is the view that short-term Health Care trends will rise somewhat over the next few years before declining to the level of overall GDP growth. This is the assumption set upon which Governmental Accounting Standards Board (GASB) statements 43 and 45 information is based.

Alternate C (Pessimistic): This scenario envisions poorer experience than the other two.

No trend was applied to the \$80 monthly spouse premium.

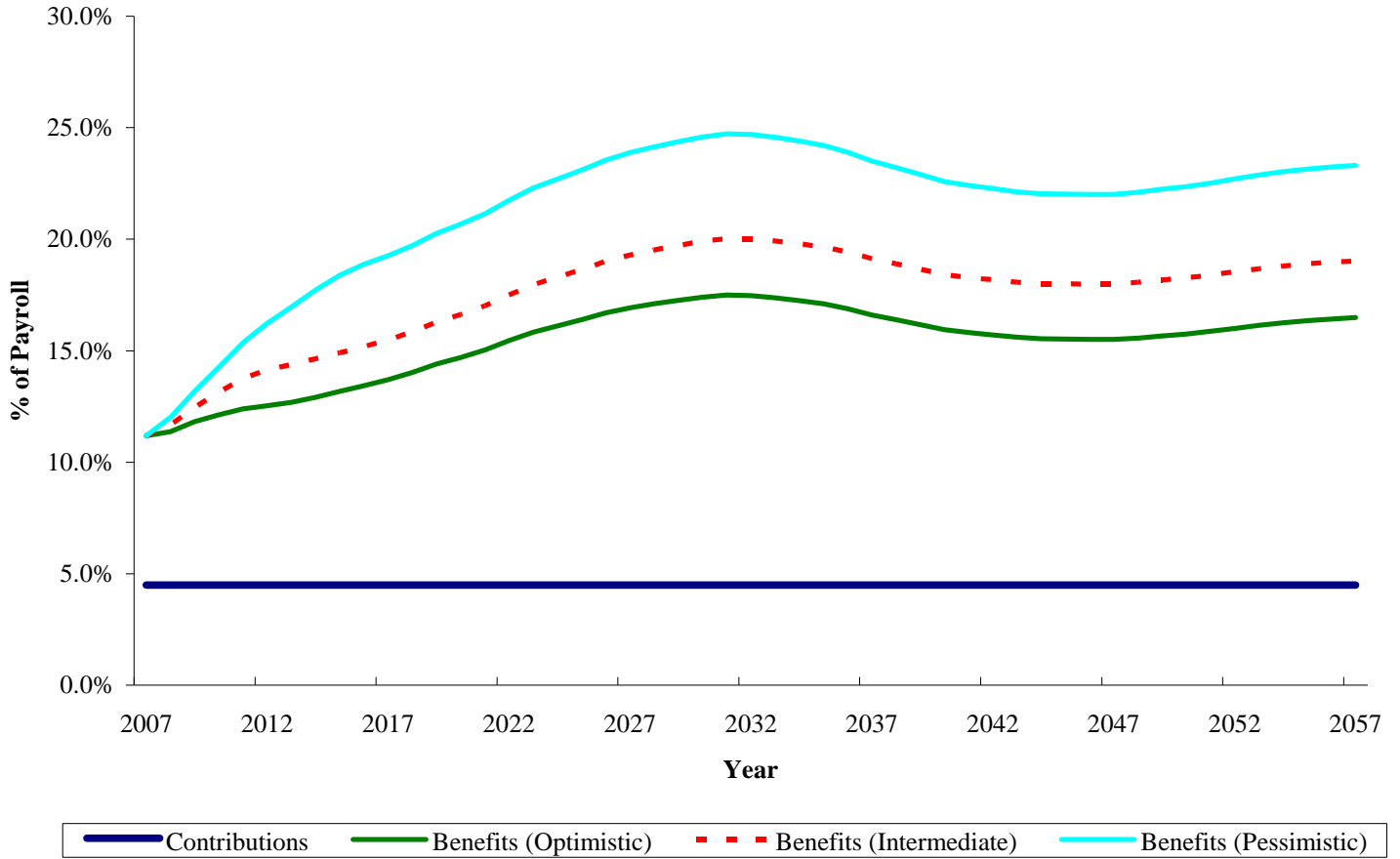
Year	Health Trend Above Wage Inflation Assumption of 4.0%				
	Medical and Prescription Drug			Medicare	
	Alt. A Optimistic	Alt. B Intermediate	Alt. C Pessimistic	Part D	Part B
2007					
2008	3.00%	6.00%	9.00%	3.00%	5.50%
2009	2.00%	5.00%	8.00%	3.00%	5.00%
2010	1.00%	4.00%	7.00%	3.00%	4.50%
2011	0.00%	3.00%	6.00%	3.00%	4.00%
2012	0.00%	2.00%	5.00%	3.00%	3.50%
2013	0.00%	1.00%	4.00%	3.00%	3.00%
2014	0.00%	0.00%	3.00%	2.50%	2.50%
2015	0.00%	0.00%	2.00%	2.00%	2.00%
2016	0.00%	0.00%	1.00%	1.00%	1.50%
2017	0.00%	0.00%	0.00%	0.00%	1.00%
2018	0.00%	0.00%	0.00%	0.00%	0.00%
2019	0.00%	0.00%	0.00%	0.00%	0.00%
2020	0.00%	0.00%	0.00%	0.00%	0.00%
2021 & Later	0.00%	0.00%	0.00%	0.00%	0.00%

**POST-RETIREMENT HEALTH CARE AND MEDICARE REIMBURSEMENT
PROJECTED BENEFITS
DECEMBER 31, 2006**

Year Ended 12/31	Projected Benefits as % of Payroll		
	Alt. A Optimistic	Alt. B Intermediate	Alt. C Pessimistic
2007	11.2%	11.2%	11.2%
2008	11.4%	11.7%	12.0%
2009	11.8%	12.4%	13.2%
2010	12.1%	13.1%	14.3%
2011	12.4%	13.8%	15.4%
2012	12.5%	14.1%	16.2%
2013	12.7%	14.4%	17.0%
2014	12.9%	14.6%	17.7%
2015	13.2%	14.9%	18.4%
2016	13.4%	15.2%	18.9%
2021	15.0%	17.0%	21.1%
2026	16.7%	19.0%	23.5%
2031	17.5%	20.0%	24.7%
2036	16.9%	19.4%	23.9%
2041	15.8%	18.3%	22.4%
2046	15.5%	18.0%	22.0%
2051	15.9%	18.4%	22.5%
2056	16.4%	19.0%	23.2%
2061	16.6%	19.0%	23.3%
2066	16.3%	18.7%	22.8%
2076	16.0%	18.2%	22.3%
2086	16.6%	18.8%	23.0%
2096	16.4%	18.6%	22.8%
2105	16.3%	18.5%	22.6%

CONTRIBUTIONS VS. BENEFIT PAYOUTS

Contributions vs. Benefit Payouts



**POST-RETIREMENT HEALTH CARE AND MEDICARE REIMBURSEMENT
GASB 43/45 REPORTING
ALTERNATIVE B: INTERMEDIATE HEALTH TREND**

Determination of the Annual Required Contribution for the Period July 1, 2008 to June 30, 2009	Contributions Expressed as Percents of Payroll
Normal Cost	9.51%
UAL Payment (30 year amortization)	10.07%
Total (Annual Required Contribution)	19.58%
Current Employer Contribution Rate Allocation	4.50%

Accrued Health and Medicare Reimbursement Liabilities, \$294,078,575 were more than applicable assets of \$104,857,212.

The calculations above show the employer's annual required contribution (ARC) for the year ended June 30, 2009. The System's ARC for the year ended December 31, 2008 will be ½ of 20.29% and ½ of the 19.58% shown above.

**GASB STATEMENTS 43/45
NOTES TO TREND DATA**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	December 31, 2006
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent Open
Remaining Amortization Period	30 years for retiree health benefits in determining the Annual Required Contribution
Asset Valuation Method	4 year smoothed market 20 % Corridor
Actuarial Assumptions:	
Investment Rate of Return	6.5%
Projected Salary Increases	4.3% - 14.0%
* Includes Wage Inflation at Health Trend	4.0%
	Intermediate Trend (See Page B-8)

POST-RETIREMENT HEALTH AND MEDICARE REIMBURSEMENT RESULTS WITH ALTERNATE HEALTH INFLATION ASSUMPTIONS DECEMBER 31, 2006

Optimistic, Intermediate and Pessimistic assumption sets were described on page B-8. For each assumption set, two questions are asked.

Question 1. How long will the Health Care fund remain solvent if the present employer contribution rate allocation, “Funding Level 1”, is not changed?

Question 2. What is the lowest employer contribution rate, “Funding Level 2”, that would maintain the solvency of the fund indefinitely?

The answers to these questions are summarized below. In reviewing the answers, it is important to keep in mind that the alternates are intended to be helpful in understanding the range of potential outcomes. They are not predictions.

<u>Assumption Set</u>	<u>Funding Level 1 (Recommended Employer Rate)</u>		<u>Funding Level 2 (Lowest Employer Rate to Maintain Solvency of Fund Indefinitely)</u>		
	<u>%</u>	<u>Fund Solvent Until</u>	<u>%</u>	<u>Fund Solvent Until</u>	<u>Prior Valuation %</u>
A (Optimistic)	4.50%	2028	9.50%	Indefinitely	9.10%
B (Intermediate)	4.50%	2024	11.50%	Indefinitely	12.90%
C (Pessimistic)	4.50%	2021	14.90%	Indefinitely	17.30%

The above results show that

- Under the optimistic assumptions, the employer rate will need to be raised prior to 2028 in order to maintain the solvency of the fund. The ultimate rate needed to support the plan would be 9.50% of payroll.
- Under the intermediate assumptions, the employer rate will need to be raised prior to 2024 in order to maintain the solvency of the fund. The ultimate rate needed to support the plan would be 11.50% of payroll if the increase were made today.
- Under the pessimistic assumptions, the employer rate will need to be raised prior to 2021 in order to maintain the solvency of the fund. The ultimate rate needed to support the plan would be 14.90% of payroll if the increase were made today.

The following pages show projected fund activity based upon Alternate Assumptions A, B and C, and Funding Levels 1 and 2.

POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
CASH FLOW PROJECTION
OPTIMISTIC ASSUMPTIONS: A
FUNDING LEVEL 1

Fiscal Year	Fund Balance BOY	Contributions	Benefits	Net	Investment Return %	Investment Return \$	Fund Balance EOY		% of Payroll	
							Nominal \$	Real \$	Contrib.	Benefits
2007	\$104,857	\$4,328	\$9,968	\$(5,640)	8.00%	\$8,166	\$107,383	\$107,383	4.50%	11.19%
2008	107,383	4,513	10,473	(5,960)	8.00%	8,355	109,778	105,556	4.50%	11.37%
2009	109,778	4,713	11,277	(6,564)	8.00%	8,523	111,737	103,308	4.50%	11.81%
2010	111,737	4,932	12,026	(7,094)	8.00%	8,659	113,302	100,726	4.50%	12.13%
2011	113,302	5,157	12,742	(7,585)	8.00%	8,765	114,482	97,860	4.50%	12.38%
2012	114,482	5,407	13,372	(7,965)	8.00%	8,844	115,361	94,819	4.50%	12.54%
2013	115,361	5,667	14,022	(8,355)	8.00%	8,899	115,905	91,602	4.50%	12.68%
2014	115,905	5,930	14,818	(8,888)	8.00%	8,921	115,938	88,104	4.50%	12.91%
2015	115,938	6,196	15,694	(9,498)	8.00%	8,900	115,340	84,278	4.50%	13.18%
2016	115,340	6,470	16,597	(10,127)	8.00%	8,827	114,040	80,123	4.50%	13.42%
2017	114,040	6,737	17,575	(10,838)	8.00%	8,695	111,897	75,594	4.50%	13.70%
2018	111,897	7,005	18,661	(11,656)	8.00%	8,492	108,733	70,631	4.50%	14.02%
2019	108,733	7,278	19,888	(12,610)	8.00%	8,201	104,324	65,161	4.50%	14.40%
2020	104,324	7,581	21,076	(13,495)	8.00%	7,813	98,642	59,242	4.50%	14.70%
2021	98,642	7,895	22,380	(14,485)	8.00%	7,319	91,476	52,825	4.50%	15.03%
2022	91,476	8,211	23,872	(15,661)	8.00%	6,700	82,515	45,818	4.50%	15.45%
2023	82,515	8,552	25,400	(16,848)	8.00%	5,936	71,603	38,230	4.50%	15.84%
2024	71,603	8,932	26,887	(17,955)	8.00%	5,019	58,667	30,118	4.50%	16.12%
2025	58,667	9,330	28,478	(19,148)	8.00%	3,937	43,456	21,451	4.50%	16.40%
2026	43,456	9,743	30,233	(20,490)	8.00%	2,667	25,633	12,167	4.50%	16.71%
2027	25,633	10,184	31,967	(21,783)	8.00%	1,191	5,041	2,301	4.50%	16.93%
2028	5,041	10,648	33,700	(23,052)	8.00%	(507)	(18,518)	(8,126)	4.50%	17.10%

Funding Level 1 is the present contribution rate for post-retirement Health Care and Medicare reimbursement. The fund remains solvent until 2028 in this projection.

POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
CASH FLOW PROJECTION
OPTIMISTIC ASSUMPTIONS: A
FUNDING LEVEL 2

Fiscal Year	Fund Balance BOY	Contributions	Benefits	Net	Investment Return %	Investment Return \$	Fund Balance EOY		% of Payroll	
							Nominal \$	Real \$	Contrib.	Benefits
2007	\$104,857	\$8,782	\$9,968	\$(1,186)	8.00%	\$8,342	\$112,013	\$112,013	9.50%	11.19%
2008	112,013	9,120	10,473	(1,353)	8.00%	8,908	119,568	114,970	9.50%	11.37%
2009	119,568	9,488	11,277	(1,789)	8.00%	9,495	127,274	117,672	9.50%	11.81%
2010	127,274	9,890	12,026	(2,136)	8.00%	10,098	135,236	120,225	9.50%	12.13%
2011	135,236	10,302	12,742	(2,440)	8.00%	10,723	143,519	122,681	9.50%	12.38%
2012	143,519	10,741	13,372	(2,631)	8.00%	11,378	152,266	125,152	9.50%	12.54%
2013	152,266	11,197	14,022	(2,825)	8.00%	12,070	161,511	127,645	9.50%	12.68%
2014	161,511	11,667	14,818	(3,151)	8.00%	12,796	171,156	130,065	9.50%	12.91%
2015	171,156	12,152	15,694	(3,542)	8.00%	13,553	181,167	132,377	9.50%	13.18%
2016	181,167	12,652	16,597	(3,945)	8.00%	14,338	191,560	134,588	9.50%	13.42%
2021	235,775	15,339	22,380	(7,041)	8.00%	18,584	247,318	142,820	9.50%	15.03%
2026	293,703	18,792	30,233	(11,441)	8.00%	23,045	305,307	144,912	9.50%	16.71%
2031	351,792	23,450	39,344	(15,894)	8.00%	27,516	363,414	141,776	9.50%	17.49%
2036	413,871	29,528	47,467	(17,939)	8.00%	32,401	428,333	137,346	9.50%	16.88%
2041	498,896	36,503	54,632	(18,129)	8.00%	39,196	519,963	137,037	9.50%	15.82%
2046	618,218	44,407	65,090	(20,683)	8.00%	48,641	646,176	139,975	9.50%	15.51%
2051	769,879	53,644	80,813	(27,169)	8.00%	60,518	803,228	143,012	9.50%	15.87%
2056	944,338	64,848	101,482	(36,634)	8.00%	74,101	981,805	143,679	9.50%	16.43%
2066	1,287,681	87,162	149,747	(62,585)	8.00%	100,543	1,325,639	131,056	9.50%	16.32%
2076	1,709,347	129,102	218,045	(88,943)	8.00%	133,236	1,753,640	117,122	9.50%	16.04%
2086	2,067,140	190,631	332,923	(142,292)	8.00%	159,753	2,084,601	94,057	9.50%	16.59%
2096	1,951,918	282,662	489,332	(206,670)	8.00%	147,993	1,893,241	57,708	9.50%	16.45%
2106	627,329	418,417	717,677	(299,260)	8.00%	38,369	366,438	7,546	9.50%	16.29%

Funding Level 2 is the lowest funding level that will keep the fund solvent indefinitely, i.e., throughout the entire 100-year projection period assuming all assumptions are realized.

**POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
CASH FLOW PROJECTION
INTERMEDIATE ASSUMPTIONS: B
FUNDING LEVEL 1**

Fiscal Year	Fund Balance BOY	Contributions	Benefits	Net	Investment Return %	Investment Return \$	Fund Balance EOY		% of Payroll	
							Nominal \$	Real \$	Contrib.	Benefits
2007	\$104,857	\$4,328	\$9,968	\$(5,640)	8.00%	\$8,166	\$107,383	\$107,383	4.50%	11.19%
2008	107,383	4,513	10,749	(6,236)	8.00%	8,344	109,491	105,280	4.50%	11.67%
2009	109,491	4,713	11,885	(7,172)	8.00%	8,476	110,795	102,437	4.50%	12.45%
2010	110,795	4,932	13,020	(8,088)	8.00%	8,544	111,251	98,902	4.50%	13.13%
2011	111,251	5,157	14,152	(8,995)	8.00%	8,545	110,801	94,714	4.50%	13.75%
2012	110,801	5,407	15,079	(9,672)	8.00%	8,482	109,611	90,093	4.50%	14.14%
2013	109,611	5,667	15,914	(10,247)	8.00%	8,364	107,728	85,139	4.50%	14.39%
2014	107,728	5,930	16,796	(10,866)	8.00%	8,189	105,051	79,831	4.50%	14.64%
2015	105,051	6,196	17,767	(11,571)	8.00%	7,947	101,427	74,112	4.50%	14.92%
2016	101,427	6,470	18,767	(12,297)	8.00%	7,629	96,759	67,982	4.50%	15.18%
2017	96,759	6,737	19,862	(13,125)	8.00%	7,222	90,856	61,379	4.50%	15.49%
2018	90,856	7,005	21,089	(14,084)	8.00%	6,712	83,484	54,230	4.50%	15.85%
2019	83,484	7,278	22,481	(15,203)	8.00%	6,078	74,359	46,445	4.50%	16.28%
2020	74,359	7,581	23,829	(16,248)	8.00%	5,307	63,418	38,088	4.50%	16.62%
2021	63,418	7,895	25,320	(17,425)	8.00%	4,385	50,378	29,092	4.50%	17.01%
2022	50,378	8,211	27,029	(18,818)	8.00%	3,287	34,847	19,350	4.50%	17.50%
2023	34,847	8,552	28,780	(20,228)	8.00%	1,989	16,608	8,867	4.50%	17.95%
2024	16,608	8,932	30,513	(21,581)	8.00%	477	(4,496)	(2,308)	4.50%	18.29%

Funding Level 1 is the present contribution rate for post-retirement Health Care and Medicare reimbursement. The fund remains solvent until 2024 in this projection.

**POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
CASH FLOW PROJECTION
INTERMEDIATE ASSUMPTIONS: B
FUNDING LEVEL 2**

Fiscal Year	Fund Balance BOY	Contributions	Benefits	Net	Investment Return %	Investment Return \$	Fund Balance EOY		% of Payroll	
							Nominal \$	Real \$	Contrib.	Benefits
2007	\$104,857	\$10,563	\$9,968	\$595	8.00%	\$8,412	\$113,864	\$113,864	11.50%	11.19%
2008	113,864	10,962	10,749	213	8.00%	9,118	123,195	118,457	11.50%	11.67%
2009	123,195	11,398	11,885	(487)	8.00%	9,836	132,544	122,545	11.50%	12.45%
2010	132,544	11,874	13,020	(1,146)	8.00%	10,558	141,956	126,199	11.50%	13.13%
2011	141,956	12,360	14,152	(1,792)	8.00%	11,286	151,450	129,461	11.50%	13.75%
2012	151,450	12,874	15,079	(2,205)	8.00%	12,029	161,274	132,556	11.50%	14.14%
2013	161,274	13,409	15,914	(2,505)	8.00%	12,803	171,572	135,596	11.50%	14.39%
2014	171,572	13,962	16,796	(2,834)	8.00%	13,614	182,352	138,573	11.50%	14.64%
2015	182,352	14,535	17,767	(3,232)	8.00%	14,461	193,581	141,448	11.50%	14.92%
2016	193,581	15,124	18,767	(3,643)	8.00%	15,343	205,281	144,228	11.50%	15.18%
2021	255,400	18,316	25,320	(7,004)	8.00%	20,155	268,551	155,082	11.50%	17.01%
2026	321,529	22,411	34,407	(11,996)	8.00%	25,249	334,782	158,902	11.50%	19.01%
2031	387,794	27,948	45,048	(17,100)	8.00%	30,348	401,042	156,455	11.50%	20.03%
2036	458,567	35,153	54,612	(19,459)	8.00%	35,917	475,025	152,318	11.50%	19.42%
2041	555,157	43,411	63,165	(19,754)	8.00%	43,633	579,036	152,606	11.50%	18.29%
2046	690,220	52,801	75,502	(22,701)	8.00%	54,321	721,840	156,366	11.50%	17.99%
2051	861,972	63,828	93,677	(29,849)	8.00%	67,779	899,902	160,224	11.50%	18.40%
2056	1,061,656	77,204	117,176	(39,972)	8.00%	83,354	1,105,038	161,713	11.50%	18.97%
2066	1,489,400	105,512	171,136	(65,624)	8.00%	116,561	1,540,337	152,282	11.50%	18.65%
2076	2,106,714	156,281	247,441	(91,160)	8.00%	164,938	2,180,492	145,631	11.50%	18.21%
2086	2,880,297	230,764	377,626	(146,862)	8.00%	224,625	2,958,060	133,467	11.50%	18.82%
2096	3,627,044	342,170	554,883	(212,713)	8.00%	281,764	3,696,095	112,662	11.50%	18.65%
2106	4,147,230	506,505	813,566	(307,061)	8.00%	319,654	4,159,823	85,659	11.50%	18.47%

Funding Level 2 is the lowest funding level that will keep the fund solvent indefinitely, i.e., throughout the entire 100-year projection period assuming all assumptions are realized.

**POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
CASH FLOW PROJECTION
PESSIMISTIC ASSUMPTIONS: C
FUNDING LEVEL 1**

Fiscal Year	Fund Balance BOY	Contributions	Benefits	Net	Investment Return %	Investment Return \$	Fund Balance EOY		% of Payroll	
							Nominal \$	Real \$	Contrib.	Benefits
2007	\$104,857	\$4,328	\$9,968	\$(5,640)	8.00%	\$8,166	\$107,383	\$107,383	4.50%	11.19%
2008	107,383	4,513	11,064	(6,551)	8.00%	8,332	109,164	104,966	4.50%	12.01%
2009	109,164	4,713	12,574	(7,861)	8.00%	8,423	109,726	101,448	4.50%	13.17%
2010	109,726	4,932	14,145	(9,213)	8.00%	8,414	108,927	96,836	4.50%	14.26%
2011	108,927	5,157	15,804	(10,647)	8.00%	8,294	106,574	91,100	4.50%	15.36%
2012	106,574	5,407	17,313	(11,906)	8.00%	8,056	102,724	84,432	4.50%	16.23%
2013	102,724	5,667	18,770	(13,103)	8.00%	7,701	97,322	76,915	4.50%	16.97%
2014	97,322	5,930	20,337	(14,407)	8.00%	7,217	90,132	68,493	4.50%	17.72%
2015	90,132	6,196	21,896	(15,700)	8.00%	6,591	81,023	59,203	4.50%	18.38%
2016	81,023	6,470	23,329	(16,859)	8.00%	5,816	69,980	49,167	4.50%	18.87%
2017	69,980	6,737	24,700	(17,963)	8.00%	4,889	56,906	38,444	4.50%	19.26%
2018	56,906	7,005	26,229	(19,224)	8.00%	3,793	41,475	26,942	4.50%	19.71%
2019	41,475	7,278	27,969	(20,691)	8.00%	2,501	23,285	14,544	4.50%	20.25%
2020	23,285	7,581	29,635	(22,054)	8.00%	992	2,223	1,335	4.50%	20.67%
2021	2,223	7,895	31,472	(23,577)	8.00%	(753)	(22,107)	(12,766)	4.50%	21.14%

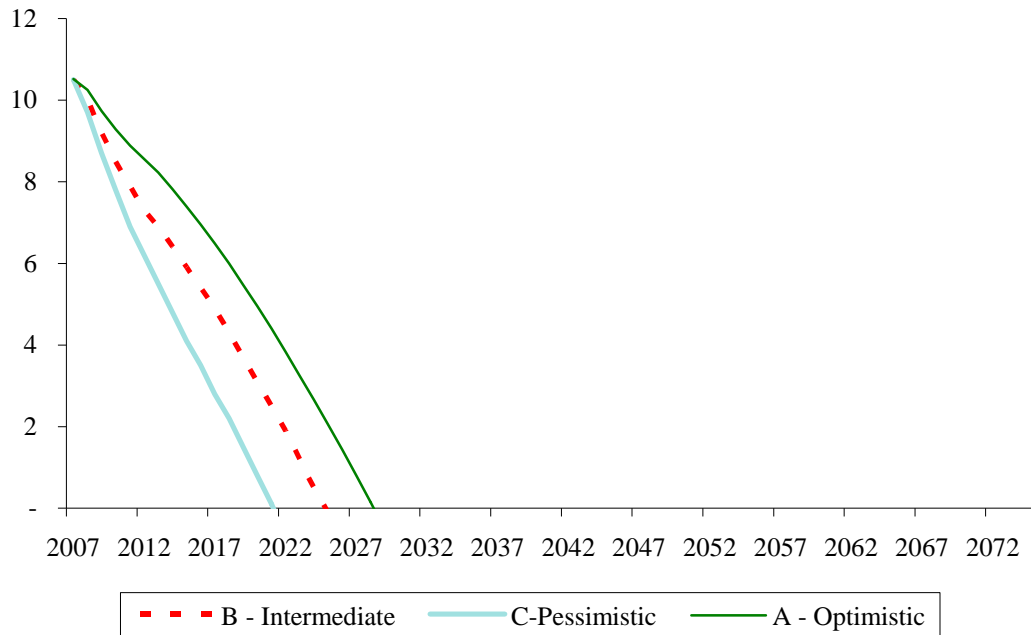
Funding Level 1 is the present contribution rate for post-retirement Health Care and Medicare reimbursement. The fund remains solvent until 2021 in this projection.

**POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
CASH FLOW PROJECTION
PESSIMISTIC ASSUMPTIONS: C
FUNDING LEVEL 2**

Fiscal Year	Fund Balance BOY	Contributions	Benefits	Net	Investment Return %	Investment Return \$	Fund Balance EOY		% of Payroll	
							Nominal \$	Real \$	Contrib.	Benefits
2007	\$ 104,857	\$ 13,591	\$ 9,968	\$ 3,623	8.00%	\$ 8,532	\$ 117,012	\$ 117,012	14.90%	11.19%
2008	117,012	14,095	11,064	3,031	8.00%	9,481	129,524	124,543	14.90%	12.01%
2009	129,524	14,644	12,574	2,070	8.00%	10,444	142,038	131,323	14.90%	13.17%
2010	142,038	15,245	14,145	1,100	8.00%	11,407	154,545	137,390	14.90%	14.26%
2011	154,545	15,859	15,804	55	8.00%	12,366	166,966	142,724	14.90%	15.36%
2012	166,966	16,501	17,313	(812)	8.00%	13,325	179,479	147,519	14.90%	16.23%
2013	179,479	17,169	18,770	(1,601)	8.00%	14,295	192,173	151,878	14.90%	16.97%
2014	192,173	17,864	20,337	(2,473)	8.00%	15,276	204,976	155,765	14.90%	17.72%
2015	204,976	18,585	21,896	(3,311)	8.00%	16,267	217,932	159,241	14.90%	18.38%
2016	217,932	19,328	23,329	(4,001)	8.00%	17,277	231,208	162,444	14.90%	18.87%
2021	287,445	23,378	31,472	(8,094)	8.00%	22,676	302,027	174,413	14.90%	21.14%
2026	359,733	28,564	42,617	(14,053)	8.00%	28,224	373,904	177,471	14.90%	23.55%
2031	429,480	35,595	55,609	(20,014)	8.00%	33,568	443,034	172,837	14.90%	24.72%
2036	501,327	44,715	67,196	(22,481)	8.00%	39,218	518,064	166,118	14.90%	23.89%
2041	600,883	55,154	77,413	(22,259)	8.00%	47,192	625,816	164,935	14.90%	22.41%
2046	742,316	67,073	92,365	(25,292)	8.00%	58,387	775,411	167,970	14.90%	22.01%
2051	920,862	81,141	114,658	(33,517)	8.00%	72,346	959,691	170,870	14.90%	22.52%
2056	1,121,911	98,208	143,541	(45,333)	8.00%	87,963	1,164,541	170,420	14.90%	23.24%
2066	1,524,335	136,707	209,558	(72,851)	8.00%	119,070	1,570,554	155,269	14.90%	22.84%
2076	2,068,553	202,486	302,583	(100,097)	8.00%	161,532	2,129,988	142,258	14.90%	22.27%
2086	2,624,262	298,990	462,273	(163,283)	8.00%	203,493	2,664,472	120,220	14.90%	23.04%
2096	2,784,353	443,334	679,077	(235,743)	8.00%	213,440	2,762,050	84,191	14.90%	22.82%
2106	1,940,583	656,255	995,243	(338,988)	8.00%	141,861	1,743,456	35,901	14.90%	22.60%

Funding Level 2 is the lowest funding level that will keep the fund solvent indefinitely, i.e., throughout the entire 100-year projection period assuming all assumptions are realized.

**POST-RETIREMENT HEALTH CARE & MEDICARE REIMBURSEMENT
PROJECTED FUNDING RATIOS BASED ON
4.50% EMPLOYER CONTRIBUTION RATE
DECEMBER 31, 2006**



The *funding ratio* is the ratio of the fund balance at the beginning of the year to the projected benefit payout during the year. It is one measure of the Plan’s ability to pay benefits. A funding ratio on the order of about 15 to 25 is expected in a plan that is funding health care payouts as a level percentage of payroll. Given the experience of the last several years, very few, if any plans, are likely to be able to report such a funded ratio.

**APPROXIMATE IRC SECTION 401(H) COMPUTATION
(\$ IN THOUSANDS)**

Year	(1) Covered Pay	(3) Pension		(4) PUCNC \$	(5) Health Contribution	(6) (4) + (5)	(7) Sum of (5)	(8) Sum of (6)	(9) IRC Ratio (7) / (8)
		(2) EANC %	PUCNC %						
1985	\$32,550	22.16%	23.05%	\$ 7,502.8	\$1,114.8	\$8,617.6	\$ 1,114.8	\$ 8,617.6	12.9%
1986	34,735	22.16%	23.05%	8,006.4	1,229.0	9,235.4	2,343.8	17,853.0	13.1%
1987	39,894	21.59%	22.45%	8,956.2	1,351.4	10,307.6	3,695.2	28,160.6	13.1%
1988	40,725	21.59%	22.45%	9,142.8	1,478.2	10,621.0	5,173.4	38,781.6	13.3%
1989	43,048	22.75%	23.66%	10,185.2	1,752.8	11,938.0	6,926.2	50,719.6	13.7%
1990	45,640	22.75%	23.66%	10,798.4	1,835.5	12,633.9	8,761.7	63,353.5	13.8%
1991	48,586	22.15%	23.04%	11,194.2	2,165.1	13,359.3	10,926.8	76,712.8	14.2%
1992	50,255	22.15%	23.04%	11,578.8	2,542.7	14,121.5	13,469.5	90,834.3	14.8%
1993	54,715	22.36%	23.25%	12,721.2	2,563.5	15,284.7	16,033.0	106,119.0	15.1%
1994	58,341	22.36%	23.25%	13,564.3	3,053.4	16,617.7	19,086.4	122,736.7	15.6%
1995	56,833	23.79%	24.74%	14,060.5	3,122.0	17,182.5	22,208.4	139,919.2	15.9%
1996	60,909	23.79%	24.74%	15,068.9	2,860.8	17,929.7	25,069.2	157,848.9	15.9%
1997	61,714	24.47%	25.45%	15,706.2	2,548.8	18,255.0	27,618.0	176,103.9	15.7%
1998	65,848	24.45%	25.55%	16,824.2	2,719.5	19,543.7	30,337.5	195,647.6	15.5%
1999	69,030	24.96%	26.08%	18,003.0	3,278.9	21,281.9	33,616.4	216,929.5	15.5%
2000	68,505	24.96%	26.08%	17,866.1	3,254.0	21,120.1	36,870.4	238,049.6	15.5%
2001	74,140	23.10%	23.63%	17,519.3	3,521.7	21,041.0	40,392.1	259,090.6	15.6%
2002	79,594	23.14%	23.71%	18,871.7	3,780.7	22,652.4	44,172.8	281,743.0	15.7%
2003	80,641	21.88%	22.72%	18,321.6	3,395.7	21,717.3	47,568.5	303,460.3	15.7%
2004	81,931	21.91%	22.83%	18,704.8	2,867.6	21,572.4	50,436.1	325,032.7	15.5%
2005	85,828	21.68%	22.59%	19,388.5	3,006.4	22,394.9	53,442.5	347,427.6	15.4%
2006	87,563	20.99%	21.83%	19,115.0	3,384.8	22,499.8	56,827.3	369,927.4	15.4%

The approximate computations above indicate compliance with IRC Section 401(h) because the ratio in column 9 is below 25%. The ratio in column 9 would appear lower if the computations were extended farther into the past.

SECTION C

GAIN/LOSS ANALYSIS

GAIN/(LOSS) ANALYSIS

Purpose of Gain/Loss Analysis. Regular actuarial valuations provide information about the composite change in unfunded actuarial accrued liabilities -- whether or not the liabilities are increasing or decreasing, and by how much.

However, valuations do not show the portion of the change attributable to each risk area within the Retirement System: the rate of investment income on plan assets; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of salary increases; the assumed ages at actual retirement. In an actuarial valuation, assumptions are made as to what these rates will be for the next year and for decades in the future.

The objective of a gain and loss analysis is to determine the portion of the change in unfunded actuarial accrued liabilities attributable to each risk area.

The fact that actual experience differs from assumed experience is to be expected. The future cannot be predicted with precision. Changes in the valuation assumption for a risk area should be made when the differences between assumed and actual experience have been observed to be sizable and persistent. One year's gain and loss analysis may or may not be indicative of *long-term trends, which are the basis of financial assumptions.*

**DEVELOPMENT OF TOTAL GAIN/(LOSS)
JANUARY 1, 2006 TO DECEMBER 31, 2006**

Unfunded Accrued Liabilities (UAL), January 1	\$181,933,964
Normal Cost	17,959,171
Contributions	27,874,029
Interest	14,158,123
Expected UAL Before Any Changes	186,177,229
Effect of Changes in Benefits	0
Expected UAL After All Changes	186,177,229
Actual UAL	154,267,666
Gain/(Loss) for Year From Financial Experience	\$31,909,563

This page measures the actual gain or loss for the year after adjusting for the effect of benefit and assumption changes.

**ANALYSIS OF FINANCIAL EXPERIENCE
FOR THE YEAR ENDED DECEMBER 31, 2006 AND 2005**

*Gains and Losses in Pension Accrued Liabilities Resulting from
Differences Between Assumed Experience and Actual Experience*

TYPE OF ACTIVITY	Gain or (Loss) for Year Ended 12/31	
	2006	2005
Age & Service Retirements. If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pays, a loss.	\$ 809,589	\$ 573,112
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(218,643)	511,784
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	20,027	(75,140)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(161,554)	218,425
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	6,152,934	10,088,099
Contribution Income. If more contributions are received than expected, there is a gain. If less, there is a loss.	0	0
Investment Income. If there is greater investment return on pension assets than assumed, there is a gain. If less return, a loss.	27,841,080	(12,724,444)
Other. Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, etc.	(2,533,870)	(5,551,189)
Gain (or Loss) During Year From Financial Experience	\$ 31,909,563	\$ (6,959,353)
Non-Recurring Items (Effect of Benefit/Assumption Changes)	0	7,114,727
Composite Gain (or Loss) During Year	\$ 31,909,563	\$ 155,374

INVESTMENT GAIN LOSS
DEVELOPMENT OF PORTION ATTRIBUTABLE TO RETIREMENT,
SURVIVOR AND DISABILITY ALLOWANCES
JANUARY 1, 2006 TO DECEMBER 31, 2006

Assets, Beginning of Year	\$591,922,200
Net Cash Flow	(13,100,010)
Assumed Investment Return	46,829,776
Expected Assets End of Year	\$625,651,966
Actual Assets End of Year	653,493,046
Gain/(Loss) for Year	\$27,841,080

The total investment gain (loss) was \$33,917,756. This amount includes health assets.

ACTIVE MEMBER POPULATION RECONCILIATION
JANUARY 1, 2006 TO DECEMBER 31, 2006

	Actual	Expected
Active Members Beginning of Year	1,573	
Plus New Hires	75	
Minus Retirements	26	41.9
Minus Deaths	2	0.8
Minus Disabilities	9	6.7
Minus Other Terminations*	24	21.0
Returned to Active Status	5	
Plus or Minus Data Correction	0	
Active Members End of Year	1,592	

** Includes 4 members who took a leave of absence and 1 member who transferred out of the System.*

SECTION D

FINANCIAL INFORMATION

**CURRENT ASSET INFORMATION
FURNISHED FOR THE VALUATION
DECEMBER 31, 2006**

Balance Sheet

Current Assets (Market Value)		Fund Balance	
Cash & short-term investments	\$ 44,850,778	Employees' Savings Fund	\$ 85,900,088
Fixed Income	127,827,471	Employer Accumulation Fund	65,123,828
Stocks	501,438,088	Pension Reserve Fund	391,340,132
Real Estate	47,737,809	Survivors Benefit Fund	28,386,557
Alternatives	72,580,754	Health Care Fund	89,674,421
Other short-term	18,111	Income Fund	<u>134,002,231</u>
Accruals & Receivables	<u>(25,754)</u>	Total Fund Balance	<u><u>\$ 794,427,257</u></u>
Total Current Assets	<u><u>\$ 794,427,257</u></u>		

Revenues and Expenditures

	2006	2005
Balance - January 1	\$711,718,909	\$684,569,250
Revenues*		
Employee contributions	8,610,088	9,119,343
Employer contributions (net)	22,382,054	21,713,937
Investment income (net)	101,069,778	46,888,921
Miscellaneous	0	<u>(2,774,214)</u>
Total	<u>132,061,920</u>	<u>74,947,987</u>
Expenditures		
Benefit payments	40,343,244	37,641,268
Health insurance	7,980,823	8,932,259
Refund of member contributions	299,128	495,640
Administrative expenses	665,377	654,161
Death benefit	65,000	<u>75,000</u>
Total	<u>49,353,572</u>	<u>47,798,328</u>
Net Addition to Assets	<u>82,708,348</u>	<u>27,149,659</u>
Balance - December 31	<u><u>\$794,427,257</u></u>	<u><u>\$711,718,909</u></u>

* Revenues include transfers to and from systems.

**CAFR ASSET INFORMATION FURNISHED FOR THE VALUATION
DECEMBER 31, 2006**

ADDITIONS BY SOURCE

Year	Pension Benefits					Other Postemployment Benefits		
	Contributions		Net Investment Income	Transfers from Other Systems	Total	Employer Contributions	Net Investment Income	Total
	Member*	Employer						
1997	\$6,146,774	\$12,236,515	\$66,159,004	\$330,119	\$ 84,872,412	\$2,543,372	\$ 11,536,686	\$ 14,080,058
1998	6,573,762	13,101,039	13,029,413	503,509	33,207,723	2,687,150	1,396,472	4,083,622
1999	6,708,497	13,569,730	33,612,434	444,135	54,334,796	2,783,534	6,878,890	9,662,424
2000	6,954,301	13,210,189	(14,120,288)	925,998	6,970,200	3,346,581	(3,114,980)	231,601
2001	7,042,044	13,901,313	(17,920,157)	999,380	4,022,580	3,521,665	(2,900,183)	621,482
2002	7,563,173	14,923,893	(42,921,956)	999,176	(19,435,714)	3,780,715	(6,673,383)	(2,892,668)
2003	8,136,974	16,361,339	105,112,725	763,419	130,374,457	3,395,749	18,885,722	22,281,471
2004	8,192,944	17,205,609	62,907,281	856,496	89,162,330	2,867,602	12,051,961	14,919,563
2005	8,582,130	18,467,789	35,511,228	1,180,951	63,742,098	3,006,385	8,603,479	11,609,864
2006	8,610,088	19,263,941	85,757,656	648,282	114,279,967	3,384,780	15,312,122	18,696,902

* Does not include service purchases.

DEDUCTIONS BY TYPE

Year	Pension Benefits					Other Postemployment Benefits		
	Benefits#	Refunds	Transfers to Other Systems	Administrative	Total	Health Care	Administrative	Total
1997	\$18,683,246	\$231,705	\$98,810	\$704,542	\$19,718,303	\$2,499,178	\$ 122,856	\$2,622,034
1998	21,539,636	164,054	281,606	648,144	22,633,440	3,128,888	114,378	3,243,266
1999	24,324,038	529,654	196,414	449,167	25,499,273	5,498,402	78,854	5,577,256
2000	27,042,946	363,067	904,972	549,168	28,860,153	4,720,260	95,423	4,815,683
2001	29,457,281	306,452	448,381	524,922	30,737,036	6,179,096	90,422	6,269,518
2002	31,325,089	266,137	1,054,264	462,200	33,107,690	7,025,043	78,635	7,103,678
2003	33,074,853	386,931	789,387	559,052	34,810,223	7,181,129	93,769	7,274,898
2004	35,187,531	155,989	602,345	518,834	36,464,699	6,948,650	86,031	7,034,681
2005	37,716,268	495,640	403,975	561,817	39,177,700	8,932,259	92,344	9,024,603
2006	40,408,244	299,128	914,949	572,616	42,194,937	7,980,823	92,761	8,073,584

Includes death benefits.

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS DECEMBER 31, 2006

	2004	2005	2006	2007	2008	2009
A. Funding Value From Prior Year	\$ 636,515,677	\$ 663,524,635	\$ 687,811,479			
B. Market Value End of Year	684,569,250	711,718,909	794,427,257			
C. Market Value Beginning of Year	623,986,737	684,569,250	711,718,909			
D. Non-Investment Net Cash Flow	(13,771,864)	(16,310,887)	(17,696,053)			
E. Investment Return:						
E1. Market Total: B - C - D	74,354,377	43,460,546	100,404,401			
E2. For Immediate Recognition (8.0%)	50,370,380	52,429,535	54,317,076			
E3. Amount for Phased-In Recognition E1-E2	23,983,997	(8,968,989)	46,087,325			
F. Phased-In Recognition of Investment Return:						
F1. Current Year: 25% x E3	5,995,999	(2,242,247)	11,521,831			
F2. First Prior Year	18,642,172	5,995,999	(2,242,247)	\$11,521,831		
F3. Second Prior Year	(34,227,729)	18,642,172	5,995,999	(2,242,247)	\$11,521,831	
F4. Third Prior Year	0	(34,227,728)	18,642,173	5,996,000	(2,242,248)	\$11,521,832
F5. Total Recognized Phase-ins	\$ (9,589,558)	\$ (11,831,804)	\$ 33,917,756	\$15,275,584	\$ 9,279,583	\$11,521,832
G. Funding Value End of Year:						
G1. Preliminary Funding Value End of Year: A + D + E2 + F5	\$ 663,524,635	\$ 687,811,479	\$ 758,350,258			
G2. Corridor Percent	20%	20%	20%			
G3. Upper Corridor Limit: (100% + G2) x B	\$ 821,483,100	\$ 854,062,691	\$ 953,312,708			
G4. Lower Corridor Limit: (100% - G2) x B	\$ 547,655,400	\$ 569,375,127	\$ 635,541,806			
G5. Funding Value End of Year	\$ 663,524,635	\$ 687,811,479	\$ 758,350,258			
H. Difference between Market Value and Funding Value	\$ 21,044,615	\$ 23,907,430	\$ 36,076,999			
I. Funding Value Rate of Return	6.5 %	6.2 %	13.0 %			
J. Market Value Rate of Return	12.0 %	6.4 %	14.3 %			
K. Ratio of Funding Value to Market Value	97%	97%	95%			

The asset valuation method recognizes assumed investment income (line E2) fully each year. Differences between actual and expected investment income (line E3) are phased in over a closed 4-year period. When investment markets are performing well, Funding Value will tend to lag market value. When investment markets are performing poorly, Funding Value will tend to exceed market value. From a Funding standpoint, the asset valuation method is *neutral*.

SEPARATION OF ASSETS BETWEEN PENSIONS AND HEALTH
DECEMBER 31, 2006

	Pension	Health	Total
A. Market Value Beginning of Year	\$612,496,643	\$99,222,266	\$711,718,909
B. Member Contributions			
B1. Pension Contributions	8,610,088		8,610,088
B2. Retiree Health Contributions		570,648	570,648
C. Employer Contributions			
C1. System Contributions	19,263,941	3,064,718	22,328,659
C2. Transfers	(266,667)		(266,667)
C3. Medicare Part D Reimbursement		320,062	320,062
D. Benefits Paid			
D1. Pension Benefits	40,343,244		40,343,244
D2. HPRS Paid Retiree Health Benefits		7,477,789	7,477,789
D3. HPRS Paid Medicare Part B Benefits		503,034	503,034
D4. Member Paid Retiree Health Benefits		570,648	570,648
E. Refunds of Member Contributions	299,128	0	299,128
F. Death Benefits	65,000	0	65,000
G. Net External Cash Flow (B + C - D - E - F)	(13,100,010)	(4,596,043)	(17,696,053)
H. Other Changes in Market Value	85,185,040	15,219,361	100,404,401
I. Market Value End of Year (A + G + H)	684,581,673	109,845,584	794,427,257
J. Funding Value Adjustment	(31,088,627)	(4,988,372)	(36,076,999)
K. Funding Value End of Year (I + J)	\$653,493,046	\$104,857,212	\$758,350,258

Line J is allocated in proportion to Line I.

SECTION E

SUMMARY OF MEMBER DATA

ACTIVE MEMBERS AS OF DECEMBER 31, 2006
BY ATTAINED AGE AND YEARS OF SERVICE*

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Up	No.	Payroll
20-24	41							41	\$ 1,116,949
25-29	165	92	1					258	10,756,411
30-34	75	218	53	2				348	17,186,298
35-39	41	115	156	83	1			396	21,874,883
40		10	16	28	3			57	3,372,214
41		5	10	24	6			45	2,734,426
42		7	11	33	6			57	3,489,859
43	1	1	10	16	17			45	2,827,337
44		1	7	17	24	1		50	3,023,757
45			6	18	16	5		45	2,921,094
46			2	6	20	9		37	2,361,813
47			2	9	14	27		52	3,410,154
48			1	5	15	23		44	2,923,861
49				2	10	17		29	1,931,884
50				2	9	12	1	24	1,513,803
51					5	8	1	14	873,966
52					1	11	1	13	876,147
53				1		11	3	15	1,235,040
54				1	2	8	2	13	815,338
55						3	1	4	278,337
56							1	1	65,389
57					1	1	2	4	289,369
Totals	323	449	275	247	150	136	12	1,592	\$85,878,329

While not used in valuations, the following group averages are computed and shown for their general interest.

Age: 36.9 years.

Service: 12.2 years.

Annual Pay: \$53,944

** Includes 60 DROP members.*

**ACTIVE MEMBERS
BY AGES OF ENTRY INTO SERVICE
DECEMBER 31, 2006**

Entry Age Nearest Birthday	Number	Cumulative Number	Percent	Cumulative Percent
Less than 18	0	0	0.00%	0.00%
18	6	6	0.38%	0.38%
19	49	55	3.07%	3.45%
20	51	106	3.21%	6.66%
21	162	268	10.17%	16.83%
22	231	499	14.51%	31.34%
23	190	689	11.94%	43.28%
24	206	895	12.94%	56.22%
25	151	1,046	9.48%	65.70%
26	131	1,177	8.23%	73.93%
27	98	1,275	6.16%	80.09%
28	80	1,355	5.02%	85.11%
29	38	1,393	2.39%	87.50%
30	64	1,457	4.02%	91.52%
31	33	1,490	2.07%	93.59%
32	32	1,522	2.01%	95.60%
33	35	1,557	2.20%	97.80%
34	21	1,578	1.32%	99.12%
35	12	1,590	0.75%	99.87%
36	0	1,590	0.00%	99.87%
37	0	1,590	0.00%	99.87%
38	0	1,590	0.00%	99.87%
39	2	1,592	0.13%	100.00%
40 & Up	0	1,592	0.00%	100.00%
Total	1,592			

**AGE AND SERVICE PENSIONS BEING PAID DECEMBER 31, 2006
BY ATTAINED AGES**

Attained Ages	Number	Monthly Pensions	Number Married	Average Age of Spouse
46	1	\$1,050		
47	1	1,959		
48	16	51,997	13	45
49	15	52,169	12	45
50	14	48,443	13	49
51	30	98,218	27	49
52	21	62,817	18	51
53	13	39,847	11	52
54	27	93,102	24	52
55	46	138,929	39	53
56	44	139,010	41	53
57	41	136,116	36	54
58	55	169,020	49	55
59	73	230,159	68	54
60	46	152,615	45	57
61	41	133,134	38	58
62	55	172,602	54	59
63	39	115,076	36	61
64	52	154,731	49	59
65	40	116,881	37	61
66	28	86,486	28	60
67	28	87,808	28	64
68	26	65,694	26	65
69	28	76,735	27	65
70	20	50,251	19	67
71	15	40,321	13	68
72	15	35,287	13	68
73	9	19,662	9	69
74	15	34,546	14	69
75	12	26,079	12	73
76	16	39,276	15	72
77	15	28,573	13	74
78	14	25,114	13	75
79	13	23,286	11	76
80	8	13,137	7	76
81	8	13,578	7	77
82	9	16,269	7	80
85 & Over	29	49,682	20	83
Totals	978	\$ 2,839,659	892	

**DISABILITY PENSIONS BEING PAID DECEMBER 31, 2006
BY ATTAINED AGE**

Attained Ages	Number	Monthly Pensions	Number Married	Average Age of Spouse
28	1	\$1,938		
32	1	2,477	1	32
34	1	2,659	1	34
35	2	4,826	1	33
36	1	2,455	1	31
37	1	2,619	1	42
38	2	4,678	2	35
39	4	9,377	4	35
40	4	8,591	2	40
41	2	2,925	1	50
42	4	9,106	3	41
43	4	9,070	4	40
44	1	2,740	1	39
45	3	10,597	3	46
46	5	12,073	5	45
47	4	10,399	3	42
48	6	14,610	4	47
49	7	17,764	5	50
50	4	10,529	4	44
51	2	5,777	2	53
53	3	7,552	3	51
54	3	6,869	3	35
55	3	8,087	3	53
56	1	1,628	1	51
57	3	7,246	2	55
58	6	11,758	6	46
59	1	2,252	1	
60	3	6,957	2	54
62	2	4,955	1	64
63	2	3,681	2	62
64	1	2,275		N/A
65	2	2,901	2	56
69	1	2,838	1	66
71	1	1,451	1	67
76	1	1,539	1	71
77	2	3,119	2	37
79	1	1,564	1	77
80	1	1,575	1	80
84	1	1,649	1	84
Totals	97	\$225,106	82	

DEPENDENTS BEING PAID AS OF DECEMBER 31, 2006
TABULATED BY ATTAINED AGE

Attained Ages	Number	Monthly Pensions
12 & Under	8	\$1,347
14	4	689
15	3	485
16	4	717
17	3	495
18	1	200
19	1	176
20	6	1,071
21	1	195
27	1	900
29	1	1,035
33	1	1,057
34	1	1,126
36	1	1,057
38	1	1,183
40	1	1,126
41	1	1,101
42	2	2,001
44	2	2,344
47	2	399
49	2	2,397
51	2	2,434
52	3	3,199
54	1	1,245
55	4	4,740
56	2	2,626
57	1	1,414
58	3	4,007
59	5	5,934
60	5	6,827
61	4	5,361
62	4	4,830
63	3	3,837
64	7	9,139
65	1	1,173
66	4	4,469
67	4	4,683
68	3	4,538
69	4	5,574
70-79	84	96,748
80-89	61	70,832
90 & Over	10	12,329
Totals	262	\$277,040

ACTIVE MEMBER VALUATION DATA, 1996 TO 2006

Actuarial Valuation as of December 31	Number of Active Members	Annual Payroll	Average Annual Salary	% Increase in Average Pay
1997	1,445	\$62,233,299	\$43,068	(0.0) %
1998	1,446	65,153,864	45,058	4.6
1999	1,445	66,017,381	45,687	1.4
2000	1,489	69,028,285	46,359	1.5
2001	1,520	76,344,002	50,226	8.3
2002	1,548	78,997,065	51,032	1.6
2003	1,542	81,737,962	53,008	3.9
2004	1,562	81,757,707	52,342	(1.3)
2005	1,573	83,408,155	53,025	1.3
2006	1,592	85,878,329	53,944	1.7

RETIRANTS AND BENEFICIARIES VALUATION DATA, 1996 TO 2006

Actuarial Valuation as of December 31	Added to Rolls		Removed from Rolls		Number of People	Monthly Amounts Pensions	Average Amount
	No.	Monthly Benefits	No.	Monthly Benefits			
1997	96		23		984	\$1,645,613	\$1,672
1998	96		20		1,060	1,914,091	1,806
1999	82		19		1,123	2,123,471	1,891
2000	78		27		1,174	2,300,464	1,960
2001	53	\$181,427	20	\$21,583	1,207	2,460,308	2,038
2002	55	184,301	31	41,501	1,231	2,603,108	2,115
2003	48	196,385	26	29,344	1,253	2,770,149	2,211
2004	58	287,345	29	34,153	1,282	3,023,341	2,358
2005	45	194,666	26	40,276	1,301	3,177,731	2,443
2006	70	215,820	34	51,746	1,337	3,341,805	2,499

Of the 1,337 retirants and beneficiaries as of December 31, 2006, 978 are service retirees, 97 are disability retirees and 262 are survivor beneficiaries. The average monthly benefits are \$2,904 for service retirees, \$2,321 for disability retirees and \$1,057 for survivor beneficiaries.

**NUMBER OF RETIRED LIVES COVERED BY AETNA & OTHER CARRIERS
COMPARATIVE SCHEDULE**

	Census Date									
	12/06	12/05	12/04	12/03	12/02	12/01	12/00	12/99	12/98	12/97
Recipients:										
w/o Medicare A	779	806	808	791	773	771	761	724	656	589
Medicare A	522	437	411	394	386	368	346	339	337	333
Spouses:										
w/o Medicare A	420	375	373	403	483	471	447	429	373	354
w Medicare A	156	187	176	165	158	155	151	146	139	130
Dependent Children	168	127	130	129	111	105	110	107	75	70
Orphans	33	26	30	30	32	30	33	27	22	23
Total	2,078	1,958	1,928	1,912	1,943	1,900	1,848	1,772	1,602	1,499

A summary of recipients and dependents covered by AETNA and Medical Mutual of Ohio follows:

	AETNA		Medical Mutual		Total
	Network	Non-Network	Network	Non-Network	
2002	880	491	516	56	1,943
2003	815	486	546	65	1,912
2004	783	494	568	83	1,928
2005	767	505	588	98	1,958
2006	1,279	22	749	28	2,078

DEFERRED PENSIONS AS OF DECEMBER 31, 2006
TABULATED BY ATTAINED AGE

Attained Ages	Number	Monthly Pensions
44	1	\$3,354
45	1	3,578
46	1	2,417
47	3	10,140
48	1	1,092
51	2	2,803
Totals	9	\$23,384

A *deferred retirant* is a member who has left active service with at least 15 (and in most cases 20) years of service credit, and has not withdrawn his accumulated contributions. Such members are entitled to a pension upon attaining eligibility age.

SECTION F

ASSUMPTIONS USED IN THE VALUATION

APPENDIX

SUMMARY OF VALUATION METHOD AND ASSUMPTIONS DECEMBER 31, 2006

The actuarial assumptions used in the valuation are shown in this Appendix of the report. The assumptions were established for the December 31, 2005 actuarial valuation, following a 5-year experience study covering the period January 1, 2000 through December 31, 2004. They were adopted by the Board after obtaining the advice of the Actuary and other professionals.

Economic Assumptions

The investment return rate used in making the valuations was 8.0% per year, compounded annually (net after administrative expenses). The real rate of return is defined to be the portion of total investment return, which is more than the wage inflation rate. Considering other financial assumptions, the 8.0% investment return rate translates to an assumed real rate of return over wage growth of 4.0%. In order to assume a 4.0% real return over wage growth, it would be necessary to realize about a 5.0% real return over price inflation, after accounting for expenses and the difference between wage increases and price increases. Based on our experience with other public employee retirement systems, both nationally and statewide, and published results of national surveys, the assumed investment return rate remains reasonable. The current assumed rate probably would be close to the average for retirement systems with asset allocations similar to HPRS. The economic assumptions were last reviewed as part of the 5-year experience study for the period January 1, 2000 through December 31, 2004. It is scheduled to be reviewed again following the December 31, 2009 actuarial valuation.

Pay increase assumptions for individual active members are shown for sample ages on page F-4. Part of the assumed increase at each age is for merit and/or seniority, and the other 4.0% recognizes changes in wage levels due to broad economic effects, including inflation and real wage growth. No specific price inflation assumption is required to perform the actuarial valuation.

The active member payroll is assumed to increase 4.0% annually, which is the portion of the individual pay increase assumptions attributable to broad economic effects.

The number of active members is assumed to continue at the present number.

Non-Economic Assumptions

The mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were 105% of the RP-2000 Combined Healthy Male and Female Tables. This assumption was last reviewed and updated as part of the 5-year experience study for the period January 1, 2000 through December 31, 2004. As shown in that study, the current assumption allows some margin for future mortality improvement. It is scheduled to be reviewed again following the December 31, 2009 actuarial valuation. Related values are shown on page F-3.

The probabilities of age and service retirement are shown on page F-4.

The probabilities of withdrawal from service, disability and death-in-service are shown for sample ages on page F-4. For disability retirement, impaired longevity was recognized by basing benefit values on the RP-2000 Combined Healthy Male and Female Tables set-forward 10 years. Fifty percent of disability retirements are assumed to be non-duty related and fifty percent are assumed to be duty related.

The entry age normal actuarial cost method of valuation was used in determining liabilities and normal cost.

Differences in the past between assumed experience and actual experience (“actuarial gains and losses”) become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce payments (principal & interest), which are level percent of payroll contributions.

Employer contributions were assumed to be *paid in equal installments* throughout the employer fiscal year.

Present assets (cash & investments) were used with a market value adjustment that spreads differences between actual and assumed return over a closed four-year period. Funding value is not permitted to deviate from market value by more than 20%. Details of the method may be found in the body of the report on page D-3. Assets may be used in the valuation prior to the final audit.

The data about persons now covered and about present assets were furnished by the System’s administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.) who has experience performing public plan valuations.

SINGLE LIFE RETIREMENT VALUES
(8.00% INTEREST)

Sample Attained Ages	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	\$135.03	\$138.31	30.37	33.14
55	127.41	131.75	25.76	28.47
60	117.65	123.20	21.35	23.95
65	105.90	112.81	17.24	19.72
70	92.57	100.81	13.54	15.86
75	77.83	87.41	10.27	12.40
80	62.54	72.92	7.50	9.38

The present values shown above are for illustrative purposes only and do not include the value of future post-retirement increases.

SEPARATIONS FROM ACTIVE EMPLOYMENT & SALARY SCALE

Sample Ages	Percent of Active Members Separating Within Next Year				Salary Increase Assumptions for an Individual Member			
	Disability	Death		Other	Service	Merit & Seniority	Base (Economic)	Increase Next Year
		Men	Women					
20	0.08%	0.02%	0.01%	2.57%	1-2	10.00%	4.00%	14.00%
25	0.08%	0.02%	0.01%	2.24%	3-5	3.00%	4.00%	7.00%
30	0.23%	0.02%	0.01%	1.91%	6-10	1.00%	4.00%	5.00%
35	0.42%	0.04%	0.02%	1.56%	11 & Up	0.30%	4.00%	4.30%
40	0.70%	0.05%	0.04%	0.84%				
45	0.85%	0.08%	0.06%	0.41%				
50	1.13%	0.11%	0.08%	0.15%				
55	1.32%	0.18%	0.14%	0.00%				

In the first year of employment, 8% of active members are assumed to terminate employment.

Probabilities of Age & Service Retirement		
Retirement Ages	Percents of Eligible Members Retiring Within Next Year with an Unreduced Benefit	Percents of Eligible Members Retiring Within Next Year with a Reduced Benefit
48	40%	7%
49	35%	7%
50	25%	7%
51	30%	7%
52	30%	
53	30%	
54	40%	
55	25%	
56	25%	
57	25%	
58	30%	
59	35%	
60 & Over	100%	

In addition, it was assumed that 100% of eligible members age 55 and older would retire upon attaining 34 years of service. A member was assumed eligible for unreduced retirement at age 48 or greater with 25 or more years of service or age 52 or greater with 20 or more years of service. A member was assumed eligible for reduced retirement at age 48 or greater with 20 or more years of service.

It was assumed that members eligible to DROP would either retire or "DROP in" at first eligibility for unreduced retirement. Current retirement rates were adjusted according to the following:

Beginning at first age of eligibility, the normal retirement pattern is as follows:

% of current retirement rates = 85%, 0%, 25%, 50%, 100%, 150%, 200%, 200%. 100% of members still working 8 years after first reaching retirement eligibility are assumed to retire.

**ADDITIONS TO AND REMOVALS FROM ACTIVE MEMBERSHIP
ACTUAL AND EXPECTED NUMBERS**

Year Ended December 31	Number Added		Retirement		Disability Retirement		Died-in Service		Other Terminations		Active Members
	During Year		A	E	A	E	A	E	A	E	
	A	E	A	E	A	E	A	E	A	E	
1997	161	81.9	73	60.7	3	3.4	1	1.7	14	16.1	1,445
1998	109	72.7	74	49.1	7	3.5	0	1.6	27	18.5	1,446
1999	86	61.8	53	37.5	14	3.5	2	1.6	18	19.2	1,445
2000	120	55.7	42	31.2	8	3.5	1	1.5	25	19.5	1,489
2001	113	51.4	28	24.8	10	6.0	1	0.9	43	19.7	1,520
2002	92	53.8	35	26.7	3	6.2	0	0.9	26	20.0	1,548
2003	64	61.0	32	33.5	6	6.3	0	1.0	32	20.2	1,542
2004	90	63.6	39	36.5	4	6.5	1	1.0	26	19.6	1,562
2005	76	60.7	23	33.2	8	6.7	0	1.0	34	19.8	1,573
2006	80	70.4	26	41.9	9	6.7	2	0.8	24	21.0	1,592
Total	991	633.0	425	375.1	72	52.3	8	12.0	269	193.6	

A: Actual

E: Expected

The following pages summarize the removals from active membership by age group and years of accrued service.

**AGE AND SERVICE RETIREMENTS
DURING CALENDAR YEAR 2006**

Age Group	Years of Accrued Service				
	15-19	20-24	25-29	30 Plus	Total
Under 20					
20-24					
25-29					
30-34					
35-39					
40-44					
45					
46					
47			1		1
48			16		16
49			1		1
50			2		2
51			1		1
52		1	2		3
53					
54			1	1	2
55					
56					
57					
58					
59					
60 & Over					
Totals		1	24	1	26

**DISABILITY RETIREMENTS
DURING CALENDAR YEAR 2006**

Age Group	Years of Accrued Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20								
20-24								
25-29		1						1
30-34		1	1					2
35-39		1	2					3
40-44				1				1
45-49					2			2
50 & Over								
Totals		3	3	1	2			9

**DEATH-IN-SERVICE TERMINATIONS
DURING CALENDAR YEAR 2006**

Age Group	Years of Accrued Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20								
20-24								
25-29		1						1
30-34								
35-39								
40-44								
45-49					1			1
50 & Over								
Totals		1			1			2

**WITHDREW AND ELIGIBLE FOR DEFERRED BENEFIT TERMINATIONS
DURING CALENDAR YEAR 2006**

Age Group	Years of Accrued Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20								
20-24								
25-29								
30-34								
35-39								
40-44								
45-49				1		1		2
50 & Over								
Totals				1		1		2

**WITHDREW AND PENDING CONTRIBUTIONS TERMINATION
DURING CALENDAR YEAR 2006**

Age Group	Years of Accrued Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20								
20-24								
25-29								
30-34								
35-39								
40-44								
45-49								
50 & Over								
Totals								0

**WITHDREW AND REFUNDED TERMINATIONS*
DURING CALENDAR YEAR 2006**

Age Group	Years of Accrued Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20								
20-24	2							2
25-29	5							5
30-34	1	4	1					6
35-39		2		1				3
40-44			1					1
45-49								
50 & Over								
Totals	8	6	2	1				17

* In addition to the 17 terminations above, there were also 4 members who took a leave of absence and 1 member who transferred out of the System.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Administrative Expenses:	Assumed investment return is net of administrative and investment expenses.
Marriage Assumption:	100% of participants are assumed to be married for purposes of death-in-service benefits.
Pay Increase Timing:	Beginning of year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Other:	Disability and turnover decrements do not operate during retirement eligibility. For death-in-service, two children are assumed to receive benefits for a 10-year period.
Miscellaneous Loading Factors:	A load of 0.75% of payroll is used to measure the effect of military service purchases.

SECTION G

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF THE RETIREMENT SYSTEM

Promises Made, and To Be Paid For. As each year is completed, the Retirement System in effect hands an “IOU” to each member then acquiring a year of service credit -- the “IOU” says: “The Ohio State Highway Patrol Retirement System owes you one year’s worth of retirement benefits, payments in cash commencing when you qualify for retirement.”

The principal related financial question is: When shall the money required to cover the “IOU” be contributed? This year, when the benefit of the member’s service is received? Or, some future year when the “IOU” becomes a cash demand?

The objective of level percent-of-payroll financing is that this year’s taxpayers contribute the money to cover the IOUs being handed out this year. By following this objective, ***the employer contribution rate will remain approximately level from year to year*** --- and will not have to be increased for future generations of taxpayers.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a lower contribution rate now and putting aside the consequence that the contribution rate must then relentlessly grow much greater over decades of time.)

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. ***Invested assets are a by-product and not the objective.*** Investment income becomes the 3rd contributor for benefits to employees, and is interlocked with the contribution amounts required from employees and employer.

(Concluded on Next Page)

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF THE RETIREMENT SYSTEM (CONCLUDED)

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Normal Cost (the value assigned to service being rendered this year)

. . . plus . . .

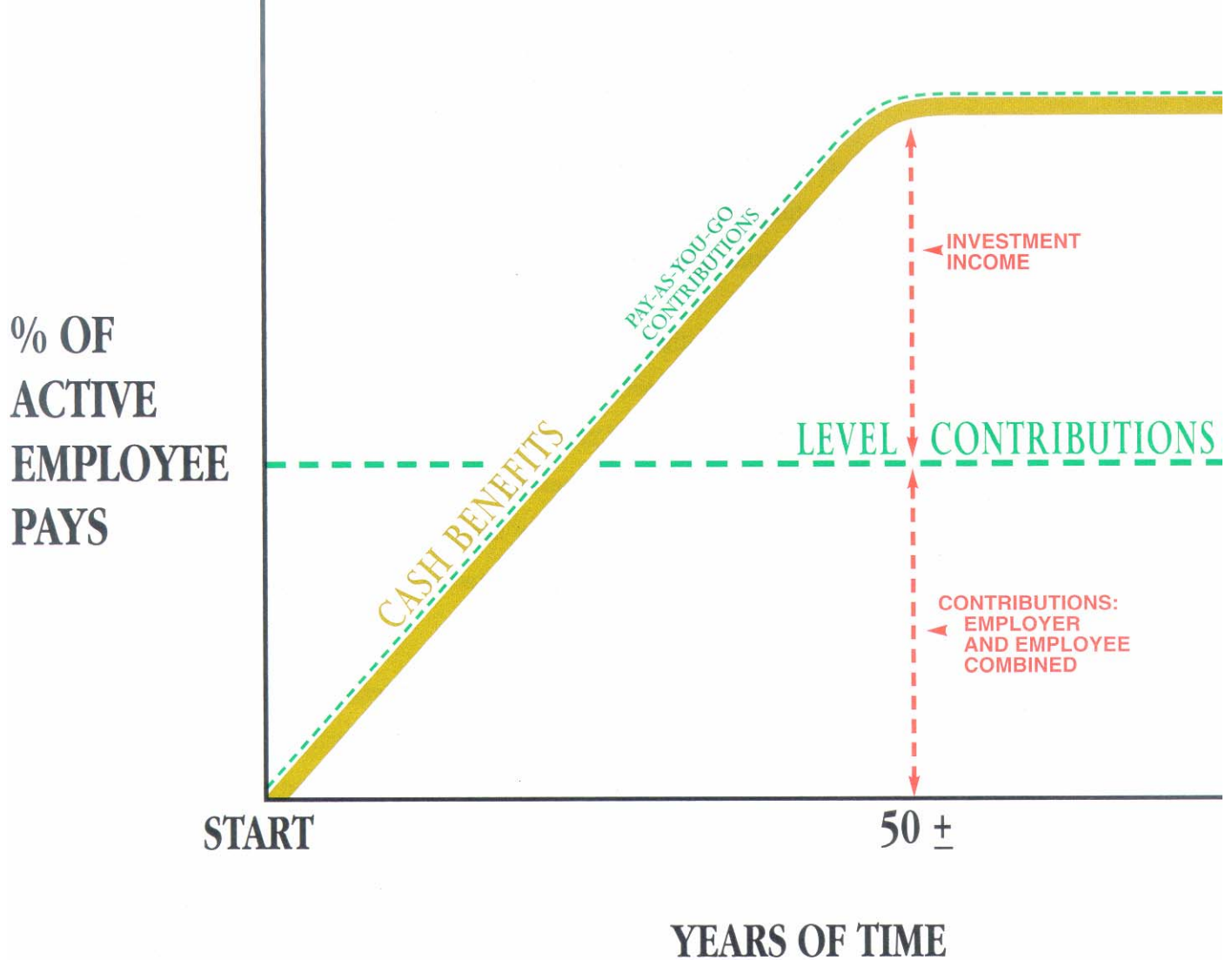
Interest on Unfunded Actuarial Accrued Liabilities (the difference between liabilities for service already rendered and the accrued assets of the Retirement System).

Computing Contributions To Support System Benefits From a given schedule of benefits and from the employee data and asset data furnished by the system, the actuary determines the contribution rates to support the benefits, by means of *an actuarial valuation*.

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases and the assumed age or ages at actual retirement.

In an actuarial valuation the actuary must assume what the above rates will be, for the next year and for decades in the future. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

Reconciling Differences Between Assumed Experience and Actual Experience Once actual experience has occurred and has been observed, it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the many calculations made. Most retirement systems cope with such differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is *continuing adjustments to the financial position*.



CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

- Rates of investment return
- Rates of pay increase
- Changes in active member group size

Non-Economic Risk Areas

- Ages at actual retirement
- Rates of mortality
- Rates of withdrawal of active members (turnover)
- Rates of disability

THE ACTUARIAL VALUATION PROCESS

The *actuarial valuation* is the mathematical process by which the contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

- A. ***Covered people data*** furnished by plan administrator, including:
 - Retired lives now receiving benefits
 - Former employees with vested benefits not yet payable
 - Active employees

- B. + ***Asset data*** (cash & investments), furnished by the plan administrator

- C. + ***Benefit provisions*** which specify eligibility and amounts of pensions

- D. + ***Assumptions concerning future experience in various risk areas***, which are established by the Retirement Board after consulting with the actuary

- E. + ***The funding method*** for employer contributions (the long-term, planned pattern for employer contributions)

- F. + ***Mathematically combining the assumptions, the funding method, and the data***

- G. = Determination of:
 - Plan Financial Position and/or
 - New Employer Contribution Rate

MEANING OF “UNFUNDED ACTUARIAL ACCRUED LIABILITIES”

“Actuarial accrued liabilities” are the portion of the present value of plan promises to pay benefits in the future that are not covered by future normal cost contributions. A liability has been established (“accrued”) because the service has been rendered but the resulting monthly cash benefit may not be payable until years in the future. Actuarial accrued liabilities are the result of complex mathematical calculations, which are made by the plan’s actuary.

If “actuarial accrued liabilities” exceed the plan’s accrued assets (cash & investments), the difference is *“unfunded actuarial accrued liabilities.”* This is the usual condition. If the plan’s assets equaled the plan’s “actuarial accrued liabilities,” then the plan would be termed “fully funded.” This is an unusual condition.

Each time a plan adds a new benefit, which applies to service already rendered, an “actuarial accrued liability” is created, which is also an “unfunded actuarial accrued liability” because the plan can’t print instant cash to cover the value of the new benefit promises. Payment for such unfunded actuarial accrued liabilities is spread over a period of years, commonly in the 20-50 year range.

Unfunded actuarial accrued liabilities can occur in another way: if actual plan experience is less favorable than assumed plan experience, the difference is added to unfunded actuarial accrued liabilities. In plans where benefits are directly related to an employee’s pay near time of retirement, unfunded actuarial accrued liabilities rose dramatically during the 1970’s. Unexpected rates of pay increase created additional actuarial accrued liabilities, which could not be matched by reasonable investment results. More recent experience has generally been more favorable with some reductions in unfunded actuarial accrued liabilities.

The existence of unfunded actuarial accrued liabilities is not bad, but the changes from year to year in the amount of unfunded actuarial accrued liabilities are important, --- “bad” or “good” or somewhere in between.

Even though unfunded actuarial accrued liabilities don’t constitute a bill payable immediately, it is important that policy-makers prevent the amount from becoming unreasonably high and *it is vital for plans to have a sound method for making payments toward them* so that they are controlled.

August 30, 2007

Mr. Richard Curtis
Director
Ohio State Highway Patrol Retirement System
6161 Busch Boulevard, Suite 119
Columbus, Ohio 43229

Dear Richard:

Enclosed are 20 bound copies of the December 31, 2006 actuarial valuation of the Ohio State Highway Patrol Retirement System.

An additional 10 unbound, 3-hole punched copies are enclosed for your convenience.

Sincerely,

Brian B. Murphy

BBM:dks:bd
Enclosures

cc: Kennedy, Cottrell & Associates LLC (+1 report copy).

A. One pe

Updated 4/12/2006

Kennedy, Cottrell & Associates LLC
ATTN: Mr. Bill Kennedy
383 North Front St.
1st Floor
Columbus, Ohio 43215