



**Report on the Actuarial Valuation of the
Public Employees' Retirement Association
of Colorado**

Prepared as of December 31, 2008



Cavanaugh Macdonald

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May 26, 2009

The Board of Trustees
Public Employees' Retirement Association of Colorado
1300 Logan Street
Denver, Colorado 80203-2386

Dear Trustees:

We are pleased to submit the results of the annual actuarial valuation of the Public Employees' Retirement Association of Colorado (PERA), prepared as of December 31, 2008.

The purpose of this report is to provide a summary of the funded status of PERA as of December 31, 2008, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25, 27, 43 and 45 (GASB 25, 27, 43 and 45). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation results indicate that the combined employer and member contribution rates are sufficient to fund the normal cost for all members and provide additional contributions to help finance the Health Care Trust Fund and each division's unfunded accrued liability. The resulting amortization periods for each division, with and without recognition of the Amortization Equalization Disbursement (AED) and the Supplemental Amortization Equalization Disbursement (SAED), are shown in the table below:

	Amortization Period		
	Current	With AED Only	With AED & SAED
State Division	Infinite	Infinite	Infinite
School Division	Infinite	Infinite	75 years
Local Government Division	29 years	35 years	19 years
Judicial Division	Infinite	Infinite	48 years
Health Care Trust Fund (HCTF)*	39 years	39 years	39 years

* The HCTF amortization period shown is calculated based on future contributions equaling the statutory rate. If future expected Medicare Part D Retiree Drug Subsidy payments are also contributed to the fund, the amortization period is 24 years.

The promised benefits of PERA are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Four-year smoothed market value of assets is used for actuarial valuation purposes (the value was marked to market as of December 31, 2004, with four year smoothing commencing from that point forward). Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll, on the assumption that payroll will increase by 4.5% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 25, 27, 43 and 45.

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We have prepared the Schedule of Funding Progress and Trend Information shown in the financial section of the Comprehensive Annual Financial Report, and all supporting schedules including the Schedule of Active Member Data, the Solvency Test and the Analysis of Financial Experience shown in the actuarial section of the Comprehensive Annual Financial Report. All historical information that references a valuation date prior to December 31, 2006 was prepared by the previous actuarial firm.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The employer contribution rate, together with the Medicare Part D Retiree Drug Subsidy, is sufficient to finance the Health Care Trust Fund benefits in accordance with GASB 43 and 45. Please note that the Local Government Division employer contribution rates are sufficient to finance the promised benefit under GASB 25 and 27. With the addition of the Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions, the Judicial Division employer contribution rates are currently sufficient to finance the promised benefits and eventually meet the required contribution levels under GASB 25 and 27. The AED and SAED contributions, combined with projected reductions in liability due to benefit structure changes for future hires, are expected to improve the funded status of the State and School Divisions. However, if additional gains do not materialize in the future, increases in contributions and/or reductions in benefits may be necessary to fund the State and School Divisions.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

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TJC/EJK/EHG:kc



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**REPORT ON THE ACTUARIAL VALUATION OF
THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO
PREPARED AS OF DECEMBER 31, 2008**

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results for State Division, School Division, Local Government Division, Judicial Division and the Health Care Trust Fund are summarized below:

**SUMMARY OF PRINCIPAL RESULTS FOR STATE DIVISION
(\$ IN THOUSANDS)**

VALUATION DATE	12/31/2008	12/31/2007
Number of Active Non-Troopers	53,628	52,522
Annual Covered Payroll	\$2,314,305	\$2,182,829
Number of Active Troopers	813	802
Annual Covered Payroll	\$57,334	\$53,689
Total Number of Active Members	54,441	53,324
Total Annual Covered Payroll	\$2,371,639	\$2,236,518
Number of Retired Members and Survivors	30,650	29,789
Annual Retirement Benefits	\$1,021,730	\$948,902
Total Assets:		
Actuarial Value	\$13,914,371	\$14,220,681
Market Value	\$10,505,176	\$14,850,919
Actuarial Accrued Liability	\$20,498,668	\$19,390,296
Unfunded Actuarial Accrued Liability (UAAL)	\$6,584,297	\$5,169,615
CONTRIBUTIONS FOR FISCAL YEAR ENDING	12/31/2010	12/31/2009
Employer Contribution Rate:		
Normal	5.40 %	5.62 %
Accrued Liability	14.76 %	12.29 %
Annual Required Contribution	20.16 %	17.91 %
Reduction for AED and SAED	(5.73)%	(5.50)%
Total Employer Contribution Rate	14.43 %	12.41 %
Amortization Period	30 years	30 years



**SUMMARY OF PRINCIPAL RESULTS FOR SCHOOL DIVISION
(\$ IN THOUSANDS)**

VALUATION DATE	12/31/2008	12/31/2007
Number of Active Members	118,547	116,245
Annual Covered Payroll	\$3,804,927	\$3,618,258
Number of Retired Members and Survivors	45,919	44,064
Annual Retirement Benefits	\$1,488,995	\$1,373,427
Assets:		
Actuarial Value	\$21,733,329	\$22,070,769
Market Value	\$16,412,172	\$23,042,078
Actuarial Accrued Liability	\$31,000,202	\$29,241,428
Unfunded Actuarial Accrued Liability (UAAL)	\$9,266,873	\$7,170,659
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2010	12/31/2009
Employer Contribution Rate:		
Normal	5.80 %	6.02 %
Accrued Liability	<u>12.95 %</u>	<u>10.54 %</u>
Annual Required Contribution	18.75 %	16.56 %
Reduction for AED and SAED	<u>(5.73)%</u>	<u>(5.50)%</u>
Total Employer Contribution Rate	13.02 %	11.06 %
Amortization Period	30 years	30 years



**SUMMARY OF PRINCIPAL RESULTS FOR LOCAL GOVERNMENT DIVISION
(\$ IN THOUSANDS)**

VALUATION DATE	12/31/2008	12/31/2007
Number of Active Members	17,379	16,977
Annual Covered Payroll	\$718,902	\$680,442
Number of Retired Members and Survivors	4,396	4,112
Annual Retirement Benefits	\$139,393	\$122,722
Assets:		
Actuarial Value	\$2,933,296	\$2,892,847
Market Value	\$2,220,318	\$3,013,807
Actuarial Accrued Liability	\$3,838,083	\$3,563,199
Unfunded Actuarial Accrued Liability (UAAL)	\$904,787	\$670,352
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2010	12/31/2009
Employer Contribution Rate:		
Normal	5.62 %	5.90 %
Accrued Liability	<u>6.69 %</u>	<u>5.24 %</u>
Annual Required Contribution	12.31 %	11.14 %
Reduction for AED and SAED	<u>(5.73)%</u>	<u>(5.50)%</u>
Total Employer Contribution Rate	6.58 %	5.64 %
Amortization Period	30 years	30 years



**SUMMARY OF PRINCIPAL RESULTS FOR JUDICIAL DIVISION
(\$ IN THOUSANDS)**

VALUATION DATE	12/31/2008	12/31/2007
Number of Active Members	317	296
Annual Covered Payroll	\$35,937	\$31,150
Number of Retired Members and Survivors	283	279
Annual Retirement Benefits	\$13,724	\$12,850
Assets:		
Actuarial Value	\$230,967	\$231,228
Market Value	\$174,873	\$240,861
Actuarial Accrued Liability	\$288,058	\$264,210
Unfunded Actuarial Accrued Liability (UAAL)	\$57,091	\$32,982
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2010	12/31/2009
Employer Contribution Rate:		
Normal	11.42 %	11.45 %
Accrued Liability	<u>8.45 %</u>	<u>5.63 %</u>
Annual Required Contribution	19.87 %	17.08 %
Reduction for AED and SAED	<u>(5.73)%</u>	<u>(5.50)%</u>
Total Employer Contribution Rate	14.14 %	11.58 %
Amortization Period	30 years	30 years



**SUMMARY OF PRINCIPAL RESULTS FOR HEALTH CARE TRUST FUND
(\$ IN THOUSANDS)**

VALUATION DATE	12/31/2008	12/31/2007
Number of Active Members	190,684	186,842
Annual Covered Payroll	\$6,931,405	\$6,566,368
Number of Retired Members and Survivors	44,885	43,119
Assets:		
Actuarial Value	\$255,976	\$258,775
Market Value	\$190,191	\$269,432
Actuarial Accrued Liability	\$1,368,633	\$1,303,594
Unfunded Actuarial Accrued Liability (UAAL)	\$1,112,657	\$1,044,819
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2010	12/31/2009
Employer Contribution Rate:		
Normal	0.27 %	0.27 %
Accrued Liability	<u>0.85 %</u>	<u>0.85 %</u>
Annual Required Contribution	1.12 %	1.12 %
Amortization Period	30 years	30 years



2. Comments on the valuation results as of December 31, 2008 are given in Section IV and further discussion of the contribution levels is set out in Section V.

3. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods used in the current valuation. The following changes have been made to certain health care assumptions since the previous valuation:
 - Expected costs for retirees who are age 65 and older, do not have Medicare Part A, and participate in the Kaiser Permanente, Rocky Mountain Health Plans, and Secure Horizons plans have been updated to reflect their change in costs for the 2009 plan year.
 - The starting per capita payments estimated to be made by the Centers for Medicare & Medicaid Services (CMS) under the Retiree Drug Subsidy Program (RDS) have been updated based upon the most recent attestation of actuarial equivalence.
 - The assumed level of spousal participation was updated to better match plan experience.
 - The last year in which the prescription drug benefit provided to those members eligible for Medicare Part D is deemed to be Actuarially Equivalent (passes the net test component of the Actuarial Equivalency Attestation) was extended to 2018 based upon the most recent attestation of actuarial equivalence.
 - The premium payable to CMS for Medicare Part A coverage was updated to reflect the change in cost for 2009.

4. The valuation takes into account the effect of amendments to PERA through the valuation date. The Main Provisions of PERA, as summarized in Schedule F, were taken into account in the current valuation. The following change was made to the main provisions since the previous valuation:
 - The interest credit on employee contribution accounts was changed from 5% to 3%.



SECTION II – MEMBERSHIP DATA

- Data regarding the membership of PERA for use as a basis of the valuation were furnished by PERA. The following table shows the number of active members and their annual compensation as of December 31, 2008 on the basis of which the valuation was prepared.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF DECEMBER 31, 2008 (\$ IN THOUSANDS)

GROUP	NUMBER	COMPENSATION
State Division	54,441	\$2,371,639
School Division	118,547	3,804,927
Local Government Division	17,379	718,902
Judicial Division	<u>317</u>	<u>35,937</u>
Total	190,684	\$6,931,405

- The following table shows a six-year history of active member valuation data.

TABLE 2

SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA

VALUATION DATE	NUMBER	ANNUAL PAYROLL (\$ IN THOUSANDS)	ANNUAL AVERAGE PAY	% CHANGE IN AVERAGE PAY
12/31/2008	190,684	\$ 6,931,405	\$ 36,350	3.43 %
12/31/2007	186,842	6,566,368	35,144	4.47 %
12/31/2006	182,404	6,135,962	33,639	2.29 %
12/31/2005	180,630	5,940,132	32,886	(1.09)%
12/31/2004	176,840	5,879,355	33,247	0.70 %
12/31/2003	170,991	5,645,468	33,016	(1.31)%



3. The following table shows the number and annual retirement benefits payable to retired members and survivors on the roll of PERA as of the valuation date.

TABLE 3
THE NUMBER AND ANNUAL RETIREMENT BENEFITS
OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS
ON THE ROLL AS OF DECEMBER 31, 2008
(\$ IN THOUSANDS)

TYPE OF RETIREMENT	GROUP				
	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	TOTAL
Service:					
Number	26,041	41,758	3,542	246	71,587
Annual Benefits	\$926,568	\$1,413,556	\$122,278	\$12,391	\$2,474,793
Disability:					
Number	3,618	3,048	681	21	7,368
Annual Benefits	\$77,153	\$59,634	\$14,150	\$855	\$151,792
Survivors*:					
Number	991	1,113	173	16	2,293
Annual Benefits	\$18,009	\$15,805	\$2,965	\$478	\$37,257
Total:					
Number	30,650	45,919	4,396	283	81,248
Annual Benefits	\$1,021,730	\$1,488,995	\$139,393	\$13,724	\$2,663,842

* Includes deferred survivors

4. Tables 1 through 4 of Schedule G show the distribution by age and service of the number and average annual compensation of active members for each division included in the valuation.



SECTION III - ASSETS

- Schedule C shows the additions and deductions of PERA for the year preceding the valuation date and a reconciliation of the fund balances at market value. As of December 31, 2008, the market value of assets used to determine the actuarial value of assets for each division is shown below:

**TABLE 4
COMPARISON OF MARKET VALUE OF ASSETS AT
DECEMBER 31, 2008 AND DECEMBER 31, 2007
(\$ IN THOUSANDS)**

GROUP	DECEMBER 31, 2008 MARKET VALUE	DECEMBER 31, 2007 MARKET VALUE
State Division	\$10,505,176	\$14,850,919
School Division	16,412,172	23,042,078
Local Government Division	2,220,318	3,013,807
Judicial Division	174,873	240,861
Health Care Trust Fund	<u>190,191</u>	<u>269,432</u>
Total Market Value of Assets	\$29,502,730	\$41,417,097

- The four-year market related actuarial value of assets used for the current valuation was \$39,067,938,495. Schedule B shows the development of the actuarial value of assets as of December 31, 2008. The following table shows the actuarial value of assets allocated among all divisions.

**TABLE 5
COMPARISON OF ACTUARIAL VALUE OF ASSETS AT
DECEMBER 31, 2008 AND DECEMBER 31, 2007
(\$ IN THOUSANDS)**

GROUP	DECEMBER 31, 2008 ACTUARIAL VALUE	DECEMBER 31, 2007 ACTUARIAL VALUE
State Division	\$13,914,371	\$14,220,681
School Division	21,733,329	22,070,769
Local Government Division	2,933,296	2,892,847
Judicial Division	230,967	231,228
Health Care Trust Fund	<u>255,976</u>	<u>258,775</u>
Total Market Value of Assets	\$39,067,939	\$39,674,300



SECTION IV - COMMENTS ON VALUATION

State Division

1. The total valuation balance sheet on account of benefits shows that the State Division has total prospective benefit liabilities of \$22,900,440,508, of which \$12,617,465,137 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$381,770,488 is for the prospective benefits payable on account of present inactive members, and \$9,901,204,883 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the State Division has a total present actuarial value of assets of \$13,914,370,734 as of December 31, 2008. The difference of \$8,986,069,774 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$1,449,642,987 is the present value of future contributions expected to be made by members (at the rate of 8.0% of salary for non-state troopers and 10.0% of salary for state troopers), and the balance of \$7,536,426,787 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the State Division on account of benefits consist of three amounts set by statute. The basic amount is 9.13% of salary for non-state troopers and 11.83% of salary for state troopers (after reduction for the Health Care Trust Fund Contribution of 1.02% of salary). For members hired on or after January 1, 2007, an allocation of the statutory rates of 1.00% of salary is made each year to an Annual Increase Reserve which will provide post-retirement increases for these members in the future. In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

Year	AED	SAED
2007	1.00%	0.00%
2008	1.40	0.50
2009	1.80	1.00
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013 and later	3.00	3.00



3. The valuation indicates that employer normal contributions at the rate of 5.40% of salary are required to provide the benefits for the State Division. Prospective employer normal contributions at this rate have a present value of \$952,129,826. When this amount is subtracted from \$7,536,426,787, which is the present value of the total future contributions to be made by the employers, there remains \$6,584,296,961 as the amount of future accrued liability contributions.
4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 7.35% of salary. Assuming the aggregate payroll of the State Division increases by 4.50% each year, contributions at this level will never amortize the unfunded accrued liability of \$6,584,296,961. After recognizing the value of future AED contributions, the amortization period remains infinite. After recognizing the value of both future AED and future SAED contributions, the amortization period remains infinite as well.
5. Effective July 1, 2005, Colorado PERA began receiving employer contributions on compensation paid to PERA retirees who are working at PERA affiliated employers. No amounts are received from the retirees who are performing the work for the employers. The employer rate is the total rate within the division, including both AED and SAED.



School Division

1. The total valuation balance sheet on account of benefits shows that the School Division has total prospective benefit liabilities of \$35,326,953,297, of which \$18,885,596,042 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$530,409,733 is for the prospective benefits payable on account of present inactive members, and \$15,910,947,522 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the School Division has a total present actuarial value of assets of \$21,733,328,531 as of December 31, 2008. The difference of \$13,593,624,766 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$2,536,052,474 is the present value of future contributions expected to be made by members (at the rate of 8.0% of salary), and the balance of \$11,057,572,292 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the School Division on account of benefits consist of three amounts set by statute. The basic amount is 9.13% of salary (after reduction for the Health Care Trust Fund Contribution of 1.02% of salary). This amount will be increased to 9.53% of salary in 2013. For members hired on or after January 1, 2007, an allocation of the statutory rates of 1.00% of salary is made each year to an Annual Increase Reserve which will provide post-retirement increases for these members in the future. In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

Year	AED	SAED
2007	1.00%	0.00%
2008	1.40	0.50
2009	1.80	1.00
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013 and later	3.00	3.00



3. The valuation indicates that employer normal contributions at the rate of 5.80% of salary are required to provide the benefits for the School Division. Prospective employer normal contributions at this rate have a present value of \$1,790,699,013. When this amount is subtracted from \$11,057,572,292, which is the present value of the total future contributions to be made by the employers, there remains \$9,266,873,279 as the amount of future accrued liability contributions.

4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 6.91% of salary. Assuming the aggregate payroll of the School Division increases by 4.50% each year, contributions at this level will never amortize the unfunded accrued liability of \$9,266,873,279. If the increase in basic contribution effective in 2013 is taken into account, the amortization period remains infinite. After recognizing the value of future AED contributions, the amortization period continues to remain infinite. However, if both the AED and SAED are taken into account, the amortization period is reduced to 75 years.

5. Effective July 1, 2005, Colorado PERA began receiving employer contributions on compensation paid to PERA retirees who are working at PERA affiliated employers. No amounts are received from the retirees who are performing the work for the employers. The employer rate is the total rate within the division, including both AED and SAED.



Local Government Division

1. The total valuation balance sheet on account of benefits shows that the Local Government Division has total prospective benefit liabilities of \$4,599,949,096, of which \$1,844,122,349 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$104,985,662 is for the prospective benefits payable on account of present inactive members, and \$2,650,841,085 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the Local Government Division has a total present actuarial value of assets of \$2,933,295,754 as of December 31, 2008. The difference of \$1,666,653,342 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$454,153,315 is the present value of future contributions expected to be made by members (at the rate of 8.0% of salary), and the balance of \$1,212,500,027 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the Local Government Division on account of benefits consist of three amounts set by statute. The basic amount is 8.98% of salary (after reduction for the Health Care Trust Fund Contribution of 1.02% of salary). For members hired on or after January 1, 2007, an allocation of the statutory rates of 1.00% of salary is made each year to an Annual Increase Reserve which will provide post-retirement increases for these members in the future. In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

Year	AED	SAED
2007	1.00%	0.00%
2008	1.40	0.50
2009	1.80	1.00
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013 and later	3.00	3.00



3. The valuation indicates that employer normal contributions at the rate of 5.62% of salary are required to provide the benefits for the Local Government Division. Prospective employer normal contributions at this rate have a present value of \$307,712,534. When this amount is subtracted from \$1,212,500,027, which is the present value of the total future contributions to be made by the employers, there remains \$904,787,493 as the amount of future accrued liability contributions.

4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 6.88% of salary. Contributions at this level will amortize the unfunded accrued liability of \$904,787,493 over 29 years, assuming the aggregate payroll of the Local Government Division increases by 4.50% each year. If the value of future AED contributions only is taken into account, the amortization period is increased to 35 years. However, if both the future AED and future SAED contributions are taken into account, the amortization period is reduced to 19 years.

5. Effective July 1, 2005, Colorado PERA began receiving employer contributions on compensation paid to PERA retirees who are working at PERA affiliated employers. No amounts are received from the retirees who are performing the work for the employers. The employer rate is the total rate within the division, including both AED and SAED.



Judicial Division

1. The total valuation balance sheet on account of benefits shows that the Judicial Division has total prospective benefit liabilities of \$342,373,800, of which \$158,572,543 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$1,902,519 is for the prospective benefits payable on account of present inactive members, and \$181,898,738 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the Judicial Division has a total present actuarial value of assets of \$230,967,047 as of December 31, 2008. The difference of \$111,406,753 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$22,879,796 is the present value of future contributions expected to be made by members (at the rate of 8.0% of salary), and the balance of \$88,526,957 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the Judicial Division on account of benefits consist of three amounts set by statute. The basic amount is 12.64% of salary (after reduction for the Health Care Trust Fund Contribution of 1.02% of salary). For members hired on or after January 1, 2007, an allocation of the statutory rates of 1.00% of salary is made each year to an Annual Increase Reserve which will provide post-retirement increases for these members in the future. In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

Year	AED	SAED
2007	1.00%	0.00%
2008	1.40	0.50
2009	1.80	1.00
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013 and later	3.00	3.00



3. The valuation indicates that employer normal contributions at the rate of 11.42% of salary are required to provide the benefits for the Judicial Division. Prospective employer normal contributions at this rate have a present value of \$31,435,572. When this amount is subtracted from \$88,526,957, which is the present value of the total future contributions to be made by the employers, there remains \$57,091,385 as the amount of future accrued liability contributions.
4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 4.82% of salary. Assuming the aggregate payroll of the Judicial Division increases by 4.50% each year, contributions at this level will never amortize the unfunded accrued liability of \$57,091,385. After recognizing the value of future AED contributions, the amortization period continues to remain infinite. However, if both the future AED and future SAED contributions are taken into account, the amortization period is reduced to 48 years.
5. Effective July 1, 2005, Colorado PERA began receiving employer contributions on compensation paid to PERA retirees who are working at PERA affiliated employers. No amounts are received from the retirees who are performing the work for the employers. The employer rate is the total rate within the division, including both AED and SAED.



Health Care Trust Fund

1. The total valuation balance sheet on account of health care benefits shows that PERA has total prospective health care benefit liabilities of \$1,473,342,789, of which \$954,142,379 is for the prospective benefits payable on account of present benefit recipients enrolled in PERA Care and receiving a health care subsidy pursuant to law, \$15,145,925 is for the prospective benefits payable on account of present deferred vested members, and \$504,054,485 is for the prospective benefits payable on account of present active members. These amounts are net of any member premiums required during retirement for enrollment in the Health Care Plan. Against these health care benefit liabilities PERA has a total present actuarial value of assets of \$255,976,429 as of December 31, 2008. The difference of \$1,217,366,360 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of health care benefits. Of this amount, \$0 is the present value of future contributions expected to be made by members, and the balance of \$1,217,366,360 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the Health Care Trust Fund consist of a statutory mandated 1.02% of salary plus an expected additional contribution resulting from PERA qualifying for the Retiree Drug Subsidy under Medicare Part D. The valuation indicates that employer normal contributions at the rate of 0.27% of salary are required to provide the health care benefits of PERA.
3. Prospective employer normal contributions at the rate noted in paragraph 2 have a present value of \$104,709,707. When this amount is subtracted from \$1,217,366,360, which is the present value of the total future contributions to be made by the employers, there remains \$1,112,656,653 as the amount of future accrued liability contributions.
4. After recognizing the required normal contribution rate, the remaining statutory contribution amounts to 0.75% of salary. Contributions at this level will amortize the unfunded accrued liability of \$1,112,656,653 over 39 years. If anticipated RDS payments are contributed to the HCTF, the amortization period will be 24 years.



SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS

1. The statutory employer contribution rates for each division are shown in the following table:

TABLE 6

Division	Employer Contribution Rate
State	
Non-Troopers	10.15%
Troopers	12.85
School	10.15*
Local Government	10.00
Judicial	13.66

* 10.55% on and after January 1, 2013

2. For each division, 1.02% of the statutory rates shown above are allocated to the Health Care Trust Fund. Additional contributions to the HCTF resulting from RDS payments are considered to be made on behalf of the employer(s).
3. In addition to the statutory rates shown in paragraph 1, Amortization Equalization Disbursements (AED) contributions and Supplemental Amortization Equalization Disbursement (SAED) contributions are to be made by all employers in amounts shown below:

Year	AED	SAED
2007	1.00%	0.00%
2008	1.40	0.50
2009	1.80	1.00
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013 and later	3.00	3.00

These amounts are continued in each division until the division’s actuarial funded ratio exceeds 100%. At that time, the amount of the AED and SAED is reduced in the following years to an amount necessary to maintain a 100% funded ratio.

4. The table below shows the development of the normal contribution rate, the unfunded accrued liability (UAL), amortization period and the actuarially required contribution rate with a 30-year amortization period for each division as well as for the Health Care Trust Fund.

Table 7
Employer Contribution Rate
Expressed as Percent of Active Member Payroll

	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
<u>Contribution For</u>					
Normal Cost					
Service Retirement Benefits	8.30%	9.32%	8.07%	12.66%	0.21%
Disability Benefits	0.91%	0.39%	0.98%	1.66%	0.03%
Survivor Benefits	0.43%	0.36%	0.43%	1.19%	0.01%
Separation Benefits	<u>3.81%</u>	<u>3.73%</u>	<u>4.14%</u>	<u>3.91%</u>	<u>0.02%</u>
Total	13.45%	13.80%	13.62%	19.42%	0.27%
Member Current Contributions*	<u>8.05%</u>	<u>8.00%</u>	<u>8.00%</u>	<u>8.00%</u>	<u>0.00%</u>
Employer Normal Cost	5.40%	5.80%	5.62%	11.42%	0.27%
Employer Contribution Rate*	12.75%	12.71%	12.50%	16.24%	1.02%
Percent Available to Amortize Unfunded Actuarial Accrued Liability (UAAL)					
	7.35%	6.91%	6.88%	4.82%	0.75%
Number of Years to Amortize UAAL					
■ Current Contributions	Infinite	Infinite	29 years	Infinite	39 years
■ With AED Only**	Infinite	Infinite	35 years	Infinite	39 years
■ With AED & SAED**	Infinite	75 years	19 years	48 years	39 years
Actuarially Required Employer Contribution Rate to pay Normal Cost and amortize UAAL over 30 years (assuming AED and SAED are paid throughout the amortization period)					
	14.43%	13.02%	6.58%	14.14%	1.12%

* Weighted average for State Division.

** Reflects value of increased statutory rate for School Division from 10.15% to 10.55% effective January 1, 2013.



SECTION VI - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of PERA and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ALL MEMBERS
AS OF DECEMBER 31, 2008**

GROUP	NUMBER				
	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Retirees and survivors currently receiving benefits	30,650	45,919	4,396	283	44,885
Terminated employees entitled to benefits but not yet receiving benefits	4,630	9,760	1,148	11	14,810
Inactive Members	51,374	76,616	15,143	5	N/A
Active Members					
Vested					
General employees	28,461	60,589	7,385	242	
State troopers	568	0	0	0	
Non-vested					
General employees	25,167	57,958	9,994	75	
State troopers	<u>245</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total Active Members*	54,441	118,547	17,379	317	190,684
Totals	141,095	250,842	38,066	616	250,379

* For current active employees, the liability only includes potential future health care benefits provided by PERA during the employees' retirement. The costs of any health care coverage during active employment are not included in this valuation.



2. Another such item is the schedule of funding progress as shown below.

**SCHEDULE OF FUNDING PROGRESS
(\$ IN THOUSANDS)**

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
STATE DIVISION*						
12/31/2008	\$13,914,371	\$20,498,668	\$6,584,297	67.9 %	\$2,371,639	277.6 %
12/31/2007	14,220,681	19,390,296	5,169,615	73.3 %	2,236,518	231.1 %
12/31/2006	13,327,290	18,246,010	4,918,720	73.0 %	2,099,325	234.3 %
12/31/2005	12,536,916	17,541,744	5,004,828	71.5 %	2,064,764	242.4 %
12/31/2004	28,594,699	40,783,531	12,188,832	70.1 %	5,303,439	229.8 %
12/31/2003	28,522,222	37,914,502	9,392,280	75.2 %	5,140,918	182.7 %
SCHOOL DIVISION*						
12/31/2008	\$21,733,329	\$31,000,202	\$9,266,873	70.1 %	\$3,804,927	243.5 %
12/31/2007	22,070,769	29,241,428	7,170,659	75.5 %	3,618,258	198.2 %
12/31/2006	20,535,733	27,708,682	7,172,949	74.1 %	3,371,186	212.8 %
12/31/2005	19,184,225	25,963,972	6,779,747	73.9 %	3,241,214	209.2 %
12/31/2004	28,594,699	40,783,531	12,188,832	70.1 %	5,303,439	229.8 %
12/31/2003	28,522,222	37,914,502	9,392,280	75.2 %	5,140,918	182.7 %
LOCAL GOVERNMENT DIVISION						
12/31/2008	\$2,933,296	\$3,838,083	\$904,787	76.4 %	\$718,902	125.9 %
12/31/2007	2,892,847	3,563,199	670,352	81.2 %	680,442	98.5 %
12/31/2006	2,613,386	3,288,421	675,035	79.5 %	636,300	106.1 %
12/31/2005	2,358,719	3,022,624	663,905	78.0 %	607,217	109.3 %
12/31/2004	1,990,652	2,576,988	586,336	77.2 %	549,607	106.7 %
12/31/2003	1,907,786	2,379,229	471,443	80.2 %	479,098	98.4 %
JUDICIAL DIVISION						
12/31/2008	\$230,967	\$288,058	\$57,091	80.2 %	\$35,937	158.9 %
12/31/2007	231,228	264,210	32,982	87.5 %	31,150	105.9 %
12/31/2006	210,633	247,491	36,858	85.1 %	29,151	126.4 %
12/31/2005	193,305	223,955	30,650	86.3 %	26,937	113.8 %
12/31/2004	170,111	209,954	39,843	81.0 %	26,309	151.4 %
12/31/2003	166,654	198,377	31,723	84.0 %	25,452	124.6 %
HEALTH CARE TRUST FUND						
12/31/2008	\$255,976	\$1,368,633	\$1,112,657	18.7 %	\$6,931,405	16.1 %
12/31/2007	258,775	1,303,594	1,044,819	19.9 %	6,566,368	15.9 %
12/31/2006	214,816	1,247,950	1,033,134	17.2 %	6,617,218	15.6 %
12/31/2005	191,264	1,116,627	925,363	17.1 %	5,940,132	15.6 %
12/31/2004	166,619	1,102,597	935,978	15.1 %	5,879,355	15.9 %
12/31/2003	160,416	897,461	737,045	17.9 %	5,645,468	13.1 %

* Results prior to 12/31/2005 are for the State and School Divisions combined.



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at December 31, 2008.

	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Valuation Date	12/31/2008	12/31/2008	12/31/2008	12/31/2008	12/31/2008
Actuarial cost method	Entry age	Entry age	Entry age	Entry age	Entry age
Amortization method	Level percent Open	Level percent Open	Level percent Open	Level percent Open	Level percent Open
Remaining amortization period	30 years	30 years	30 years	30 years	30 years
Asset valuation method	4 year smoothed Market	4 year smoothed Market	4 year smoothed Market	4 year smoothed Market	4 year smoothed Market
Actuarial assumptions:					
Investment rate of return*	8.50%	8.50%	8.50%	8.50%	8.50%
Projected salary increases*	4.50 – 10.17%	4.50 – 10.70%	4.50 – 11.47%	5.00 – 6.00%	4.50% in aggregate
Post-Retirement Benefit Increases:					
Members hired prior to 7/1/05	3.50% compounded annually	3.50% compounded annually	3.50% compounded annually	3.50% compounded annually	None
Members hired on or after 7/1/05 but before 1/1/07	3.00% compounded annually	3.00% compounded annually	3.00% compounded annually	3.00% compounded annually	None
Members hired on or after 1/1/07	None**	None**	None**	None**	None
Health Care Inflation Factor	N/A	N/A	N/A	N/A	4.50%, applicable to Medicare Part A costs

* Includes inflation at 4.50%.

** Post-Retirement Benefit Increases are provided by a separate fund subject to monies being available.



SCHEDULE OF EMPLOYER CONTRIBUTIONS*

Fiscal Year	Annual Required Contribution in Dollars (\$ in thousands)	Annual Required Contribution as a Percent of Pay	Percent of ARC Contributed
State Division**			
2008	\$ 424,761	17.91 %	63 %
2007	412,638	18.45 %	56 %
2006	361,714	17.23 %	58 %
2005	398,919	19.33 %	48 %
2004	918,025	17.31 %	51 %
2003	571,156	11.11 %	69 %
School Division**			
2008	\$ 630,096	16.56 %	68 %
2007	621,617	17.18 %	60 %
2006	541,412	16.06 %	62 %
2005	627,082	19.33 %	48 %
2004	918,025	17.31 %	51 %
2003	571,156	11.11 %	69 %
Local Government Division			
2008	\$ 80,086	11.14 %	98 %
2007	81,313	11.95 %	84 %
2006	71,329	11.21 %	85 %
2005	85,372	14.11 %	64 %
2004	76,835	13.98 %	62 %
2003	45,658	9.53 %	69 %
Judicial Division			
2008	\$ 6,138	17.08 %	83 %
2007	5,501	17.66 %	77 %
2006	4,469	15.33 %	84 %
2005	4,634	17.21 %	74 %
2004	4,267	16.22 %	64 %
2003	1,013	3.98 %	100 %

* Without consideration of future increases in AED and SAED. The amortization period for 2008 is 30 years.

** The ARC for State and School Divisions is combined in 2003 and 2004.



**SCHEDULE OF EMPLOYER CONTRIBUTIONS
HEALTH CARE TRUST FUND**

Fiscal Year	Annual Required Contribution (ARC) (a)	PERA Payroll Allocations (b)	Retiree Drug Subsidy (RDS) Contribution (c)	Total Contribution (d) = (b)+(c)	Percentage of ARC Contributed (e) = (d)/(a)
2008	\$73,282,971	\$72,599,167	\$13,742,749	\$86,341,916	118 %
2007	\$73,345,970	\$68,507,982	\$12,396,777	\$80,904,759	110 %
2006	\$70,687,571	\$64,546,501	\$12,481,068	\$77,027,569	109 %

Beginning in 2006, the following changes were implemented to comply with GASB 43 and GASB Technical Bulletin 2006-1:

- All liabilities are determined without a reduction for expected future RDS payments.
- The unfunded accrued liability (UAL) is amortized over 30 years.
- The total HCTF contribution is determined to be the statutory employer contribution plus that year's actual RDS payments.

**HISTORICAL SCHEDULE OF EMPLOYER CONTRIBUTIONS
HEALTH CARE TRUST FUND**

Fiscal Year	Annual Required Contribution (ARC)	Percent of ARC Contributed
2005	1.13%	90 %
2004	1.02%	100 %
2003	1.16%	100 %

Note: ARCs through 2005 are determined in accordance with GASB 26 and are expressed as a percentage of pay. Beginning in 2006, ARCs are determined in accordance with GASB 43/45.



SECTION VII – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Changes in Unfunded Actuarial Accrued Liabilities (UAAL)

During Calendar Year 2008

(\$ in Millions)

	State Division	School Division	Local Government Division	Judicial Division	Total Pension	Health Care Trust Fund*
1) Beginning of Year:						
a) Unfunded Actuarial Accrued Liability	\$5,169.6	\$7,170.7	\$670.4	\$33.0	\$13,043.7	\$1,044.8
b) Normal Cost	319.5	530.3	98.8	6.3	954.9	18.5
c) Total Required Contributions	615.7	934.5	137.6	9.0	1,696.8	73.3
d) Total Actual Contributions	459.0	731.5	136.8	7.9	1,335.2	86.3
2) End of Year:						
a) Expected UAAL from previous valuation (1a) x 1.085 + (1b) x 1.0425 – (1c) x 1.0425	\$5,300.2	\$7,358.8	\$686.9	\$33.0	13,378.9	\$1,076.4
b) Expected UAAL on actual contributions (1a) x 1.085 + (1b) x 1.0425 – (1d) x 1.0425	5,463.6	7,570.5	687.8	34.1	13,756.0	1,062.9
c) Increase in UAAL due to Deficiency (2b) – (2a)	163.4	211.7	0.9	1.1	377.1	(13.5)
3) Gains (Losses) on Year's Activities						
a) Liability – Assumed vs. Actual	(\$207.1)	(\$308.0)	(\$32.6)	(\$8.0)	(\$555.7)	(\$13.3)
b) Assets – Assumed vs. Actual	(944.4)	(1,472.3)	(200.7)	(15.4)	(2,632.8)	(18.6)
c) Change in Plan Assumptions	0.0	0.0	0.0	0.0	0.0	(17.9)
d) Change in Plan Provisions	30.8	83.9	16.3	0.4	131.4	0.0
e) Change in Methods	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
f) Total	(\$1,120.7)	(\$1,696.4)	(\$217.0)	(\$23.0)	(\$3,057.1)	(\$49.8)
4) Actual UAAL at End of Year (2a) + (2c) – (3f)	\$6,584.3	\$9,266.9	\$904.8	\$57.1	\$16,813.1	\$1,112.7

* Required Employer Contributions are based on the Annual Required Contribution (ARC). The ARC is based on amortizing the UAL over 30 years and reflects liabilities that are not reduced for future Medicare Part D Retiree Drug Subsidy payments to PERA. Actual Employer Contributions include 2008 RDS payments to PERA of \$13.7 million.



Gains & Losses in Actuarial Accrued Liabilities
During Calendar Year 2008
(\$ in Millions)

Type of Activity	State Division	School Division	Local Government Division	Judicial Division	Total Pension	Health Care Trust Fund
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(\$14.3)	(\$23.8)	(\$9.7)	\$0.7	(\$47.1)	(\$1.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	14.7	9.3	4.7	0.4	29.1	0.8
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.4)	(2.6)	(0.2)	0.1	(3.1)	(0.1)
Withdrawal from Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(33.9)	(74.9)	(4.0)	(0.2)	(113.0)	(2.9)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(79.3)	(68.9)	3.1	(2.8)	(147.9)	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(50.7)	(39.1)	(6.2)	(4.6)	(100.6)	(2.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(944.4)	(1,472.3)	(200.7)	(15.4)	(2,632.8)	(18.6)
Death after Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(25.0)	(50.3)	0.9	(1.6)	(76.0)	(2.0)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(18.2)</u>	<u>(57.7)</u>	<u>(21.2)</u>	<u>0.0</u>	<u>(97.1)</u>	<u>(5.3)</u>
Gain (or Loss) During Year from Financial Experience	(\$1,151.5)	(\$1,780.3)	(\$233.3)	(\$23.4)	(\$3,188.5)	(\$31.9)



**Gains & Losses as a Percentage of Actuarial Accrued Liabilities
During Calendar Year 2008
(\$ in Millions)**

Type of Activity	State Division	School Division	Local Government Division	Judicial Division	Total Pension	Health Care Trust Fund
Actuarial Accrued Liabilities as the Beginning of the Year	\$19,390.3	\$29,241.4	\$3,563.2	\$264.2	\$52,459.1	\$1,303.6
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	-0.1%	-0.1%	-0.3%	0.3%	-0.1%	-0.1%
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.1%	0.0%	0.1%	0.2%	0.1%	0.1%
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Withdrawal from Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	-0.2%	-0.3%	-0.1%	-0.1%	-0.2%	-0.2%
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	-0.4%	-0.2%	0.1%	-1.1%	-0.3%	0.0%
New Members. Additional unfunded accrued liability will produce a loss.	-0.3%	-0.1%	-0.2%	-1.7%	-0.2%	-0.2%
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	-4.9%	-5.0%	-5.6%	-5.9%	-5.0%	-1.5%
Death after Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	-0.1%	-0.2%	0.0%	-0.6%	-0.1%	-0.2%
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	-0.1%	-0.2%	-0.6%	0.0%	-0.2%	-0.4%
Gain (or Loss) During Year from Financial Experience	-5.9%	-6.1%	-6.6%	-8.9%	-6.1%	-2.5%



SECTION VIII – ADDITIONAL HEALTH CARE TRUST FUND INFORMATION

Subsidy Analysis

Year	Administrative Expenses	Claims & HMO Premiums	Total Costs (2)+(3)	PERA Subsidy	
				Amount	Percentage (5)/(4)
(1)	(2)	(3)	(4)	(5)	(6)
2008	\$7,839,386	\$258,685,119	\$266,524,505	\$88,469,990	33%
2007	7,348,821	216,848,936	224,197,757	58,986,436	26%
2006	4,174,575	233,101,402	237,275,977	71,155,481	30%
2005	4,725,201	230,726,860	235,452,061	77,899,386	33%
2004	4,708,737	211,610,778	216,319,515	76,409,691	35%
2003	4,872,077	192,262,017	197,134,094	70,215,907	36%
2002	4,571,820	169,354,992	173,926,812	70,008,246	40%
2001	4,564,519	125,038,014	129,602,533	59,506,374	46%
2000	3,530,456	111,292,369	114,822,825	48,577,022	42%

Notes:

- Administrative Expenses total includes expenses associated with claims administration.
- Claims and HMO Premiums total reflects actual claims and premiums paid (net of any premium variance).
- The subsidy analysis schedule presented above was revised, beginning with the December 31, 2006 valuation report, for all years shown to include the premiums paid by retirees for HMOs in the claims and HMO premiums and in the total cost columns. The total cost includes all healthcare cost for retirees, beneficiaries and covered dependents. Also, claims experience gains and losses have been included in the actual PERA subsidy.



SCHEDULE A

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO
AS OF DECEMBER 31, 2008**

STATE DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$13,914,370,734
Present value of future members' contributions		1,449,642,987
Present value of future employer contributions		
Normal contributions	\$952,129,826	
Unfunded accrued liability contributions	<u>6,584,296,961</u>	
Total prospective employer contributions		<u>7,536,426,787</u>
Total Present and Prospective Assets		<u>\$22,900,440,508</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$12,617,465,137
Present value of prospective benefits payable on account of inactive members		381,770,488
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$7,895,994,341	
Disability retirement benefits	399,457,863	
Survivor benefits	257,162,660	
Separation benefits	<u>1,348,590,019</u>	
Total		<u>9,901,204,883</u>
Total Actuarial Liabilities		<u>\$22,900,440,508</u>



SCHEDULE A

(Continued)

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO
AS OF DECEMBER 31, 2008**

SCHOOL DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$21,733,328,531
Present value of future members' contributions		2,536,052,474
Present value of future employer contributions		
Normal contributions	\$1,790,699,013	
Unfunded accrued liability contributions	<u>9,266,873,279</u>	
Total prospective employer contributions		<u>11,057,572,292</u>
Total Present and Prospective Assets		<u>\$35,326,953,297</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$18,885,596,042
Present value of prospective benefits payable on account of inactive members		530,409,733
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$13,058,502,518	
Disability retirement benefits	294,315,007	
Survivor benefits	330,189,216	
Separation benefits	<u>2,227,940,781</u>	
Total		<u>15,910,947,522</u>
Total Actuarial Liabilities		<u>\$35,326,953,297</u>



SCHEDULE A

(Continued)

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO
AS OF DECEMBER 31, 2008**

LOCAL GOVERNMENT DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$2,933,295,754
Present value of future members' contributions		454,153,315
Present value of future employer contributions		
Normal contributions	\$307,712,534	
Unfunded accrued liability contributions	<u>904,787,493</u>	
Total prospective employer contributions		<u>1,212,500,027</u>
Total Present and Prospective Assets		<u>\$4,599,949,096</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$1,844,122,349
Present value of prospective benefits payable on account of inactive members		104,985,662
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$1,999,155,921	
Disability retirement benefits	126,275,578	
Survivor benefits	71,555,256	
Separation benefits	<u>453,854,330</u>	
Total		<u>2,650,841,085</u>
Total Actuarial Liabilities		<u>\$4,599,949,096</u>



SCHEDULE A

(Continued)

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO
AS OF DECEMBER 31, 2008**

JUDICIAL DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$230,967,047
Present value of future members' contributions		22,879,796
Present value of future employer contributions		
Normal contributions	\$31,435,572	
Unfunded accrued liability contributions	<u>57,091,385</u>	
Total prospective employer contributions		<u>88,526,957</u>
Total Present and Prospective Assets		<u>\$342,373,800</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$158,572,543
Present value of prospective benefits payable on account of inactive members		1,902,519
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$148,926,131	
Disability retirement benefits	10,311,871	
Survivor benefits	9,935,047	
Separation benefits	<u>12,725,689</u>	
Total		<u>181,898,738</u>
Total Actuarial Liabilities		<u>\$342,373,800</u>



SCHEDULE A

(Continued)

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO
AS OF DECEMBER 31, 2008**

HEALTH CARE TRUST FUND

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$255,976,429
Present value of future members' contributions		0
Present value of future employer contributions		
Normal contributions	\$104,709,707	
Unfunded accrued liability contributions	<u>1,112,656,653</u>	
Total prospective employer contributions		<u>1,217,366,360</u>
Total Present and Prospective Assets		<u>\$1,473,342,789</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of present benefit recipients enrolled in PERA Care and receiving a health care subsidy pursuant to the law		\$954,142,379
Present value of prospective benefits payable on account of inactive members		15,145,925
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$444,037,427	
Disability retirement benefits	34,206,569	
Survivor benefits	6,725,899	
Separation benefits	<u>19,084,590</u>	
Total		<u>504,054,485</u>
Total Actuarial Liabilities		<u>\$1,473,342,789</u>



SCHEDULE A
(continued)

SOLVENCY TEST
(\$ IN THOUSANDS)

Valuation Date	Aggregate Accrued Liabilities For*			Reported Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
12/31/2008	\$6,992,382	\$34,524,824	\$14,107,805	\$38,811,962	100%	92.2%	0.0%
12/31/2007	6,834,261	32,017,760	13,607,112	39,415,525	100%	100%	4.1%
12/31/2006	6,742,437	29,674,682	13,073,485	36,687,042	100%	100%	2.1%
12/31/2005	5,755,118	26,382,911	14,614,267	34,273,165	100%	100%	14.6%
12/31/2004	6,365,516	23,833,958	13,370,998	30,755,462	100%	100%	4.2%

* Results do not include the Health Care Trust Fund.



SCHEDULE B

**DEVELOPMENT OF THE DECEMBER 31, 2008
ACTUARIAL VALUE OF ASSETS**

STATE DIVISION

(1)	Actuarial Value Beginning of Year	\$ 14,220,680,819
(2)	Market Value End of Year	\$ 10,505,175,540
(3)	Market Value Beginning of Year	\$ 14,850,919,254
(4)	Cash Flow	
	a. Contributions	\$ 472,328,494
	b. Benefit Payments	(1,062,404,773)
	c. Administrative Expenses	(8,638,810)
	d. Net Transfers	(1,995,555)
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$ (600,710,644)
(5)	Investment Income	
	a. Market total: (2) – (3) – (4)e	\$ (3,745,033,070)
	b. Assumed Rate	8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$ 1,236,797,934
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$ (4,981,831,004)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.25 x (5)d	\$ (1,245,457,751)
	b. First Prior Year	54,832,209
	c. Second Prior Year	217,513,634
	d. Third Prior Year	30,714,533
	e. Total Recognized Investment Gain	\$ (942,397,375)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$ 13,914,370,734



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2008
ACTUARIAL VALUE OF ASSETS**

SCHOOL DIVISION

(1)	Actuarial Value Beginning of Year	\$ 22,070,769,075
(2)	Market Value End of Year	\$ 16,412,172,110
(3)	Market Value Beginning of Year	\$ 23,042,077,727
(4)	Cash Flow	
	a. Contributions	\$ 746,491,752
	b. Benefit Payments	(1,523,924,291)
	c. Administrative Expenses	(12,814,580)
	d. Net Transfers	2,200,018
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$ (788,047,101)
(5)	Investment Income	
	a. Market total: (2) – (3) – (4)e	\$ (5,841,858,516)
	b. Assumed Rate	8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$ 1,925,084,605
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$ (7,766,943,121)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.25 x (5)d	\$ (1,941,735,780)
	b. First Prior Year	84,585,415
	c. Second Prior Year	334,880,090
	d. Third Prior Year	47,792,227
	e. Total Recognized Investment Gain	\$ (1,474,478,048)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$ 21,733,328,531



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2008
ACTUARIAL VALUE OF ASSETS**

LOCAL GOVERNMENT DIVISION

(1)	Actuarial Value Beginning of Year	\$	2,892,846,938
(2)	Market Value End of Year	\$	2,220,317,807
(3)	Market Value Beginning of Year	\$	3,013,806,957
(4)	Cash Flow		
	a. Contributions	\$	140,619,897
	b. Benefit Payments		(152,929,254)
	c. Administrative Expenses		(2,102,401)
	d. Net Transfers		(559,330)
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(14,971,088)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	(778,518,062)
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$	255,537,320
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	(1,034,055,382)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d	\$	(258,513,846)
	b. First Prior Year		10,417,943
	c. Second Prior Year		41,727,704
	d. Third Prior Year		6,250,783
	e. Total Recognized Investment Gain	\$	(200,117,416)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$	2,933,295,754



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2008
ACTUARIAL VALUE OF ASSETS**

JUDICIAL DIVISION

(1) Actuarial Value Beginning of Year	\$	231,228,304
(2) Market Value End of Year	\$	174,872,897
(3) Market Value Beginning of Year	\$	240,861,140
(4) Cash Flow		
a. Contributions	\$	8,275,990
b. Benefit Payments		(13,415,855)
c. Administrative Expenses		(20,510)
d. Net Transfers		354,867
e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(4,805,508)
(5) Investment Income		
a. Market total: (2) – (3) – (4)e	\$	(61,182,735)
b. Assumed Rate		8.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$	20,268,963
d. Amount for Phased-in Recognition: (5)a – (5)c	\$	(81,451,698)
(6) Phased-In Recognition of Investment Income		
a. Current Year: 0.25 x (5)d	\$	(20,362,925)
b. First Prior Year		810,128
c. Second Prior Year		3,374,369
d. Third Prior Year		453,716
e. Total Recognized Investment Gain	\$	(15,724,712)
(7) Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$	230,967,047



SCHEDULE B
(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2008
ACTUARIAL VALUE OF ASSETS**

HEALTH CARE TRUST FUND

(1) Actuarial Value Beginning of Year	\$ 258,774,755
(2) Market Value End of Year	\$ 190,191,487
(3) Market Value Beginning of Year	\$ 269,432,145
(4) Cash Flow	
a. Contributions	\$ 84,107,470
b. Benefit Payments	(88,469,990)
c. Administrative Expenses	(2,455,347)
d. Net Cash Flow: [(4)a + (4)b + (4)c]	\$ (6,817,867)
(5) Investment Income	
a. Market total: (2) – (3) – (4)d	\$ (72,422,791)
b. Assumed Rate	8.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)d x (5)b x 0.5]	\$ 22,611,973
d. Amount for Phased-in Recognition: (5)a – (5)c	\$ (95,034,764)
(6) Phased-In Recognition of Investment Income	
a. Current Year: 0.25 x (5)d	\$ (23,758,691)
b. First Prior Year	947,527
c. Second Prior Year	3,596,079
d. Third Prior Year	622,653
e. Total Recognized Investment Gain	\$ (18,592,432)
(7) Actuarial Value End of Year: (1) + (4)d + (5)c + (6)e	\$ 255,976,429



SCHEDULE C

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2008**

STATE DIVISION

Additions for the Year

Contributions:

Members (including purchased service)	\$	204,795,920
Employers		<u>267,532,574</u>

Total \$ 472,328,494

Net Investment Income (3,745,033,070)

TOTAL \$ (3,272,704,576)

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$	1,057,787,825
Transfers		1,995,555
Other deductions		4,616,948
Administrative Expenses		<u>8,638,810</u>

TOTAL \$ 1,073,039,138

Excess of Additions Over Deductions \$ (4,345,743,714)

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2007	\$	14,850,919,254
Excess of Additions over Deductions		<u>(4,345,743,714)</u>
Market Value of Assets as of 12/31/2008*	\$	<u>10,505,175,540</u>

* The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B). Final Market Value of Assets is \$10,508,301,336 and includes the amount in the Annual Increase Reserve of \$3,125,796 for post-retirement benefit increases for members hired on or after January 1, 2007.



SCHEDULE C

(Continued)

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2008**

SCHOOL DIVISION

Additions for the Year

Contributions:		
Members (including purchased service)	\$	319,705,310
Employers		<u>426,786,442</u>
Total	\$	746,491,752
Net Investment Income		<u>(5,841,858,516)</u>
TOTAL	\$	(5,095,366,764)

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$	1,518,452,223
Transfers		(2,200,018)
Other deductions		5,472,068
Administrative Expenses		<u>12,814,580</u>
TOTAL	\$	<u>1,534,538,853</u>

Excess of Additions Over Deductions \$ (6,629,905,617)

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2007	\$	23,042,077,727
Excess of Additions over Deductions		<u>(6,629,905,617)</u>
Market Value of Assets as of 12/31/2008*	\$	<u><u>16,412,172,110</u></u>

* The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B). Final Market Value of Assets is \$16,415,799,788 and includes the amount in the Annual Increase Reserve of \$3,627,678 for post-retirement benefit increases for members hired on or after January 1, 2007.



SCHEDULE C
(Continued)

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2008**

LOCAL GOVERNMENT DIVISION

Additions for the Year

Contributions:		
Members (including purchased service)	\$	62,328,484
Employers		<u>78,291,413</u>
Total	\$	140,619,897
Net Investment Income		<u>(778,518,062)</u>
TOTAL	\$	(637,898,165)

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$	151,474,618
Transfers		559,330
Other deductions		1,454,636
Administrative Expenses		<u>2,102,401</u>
TOTAL	\$	<u>155,590,985</u>

Excess of Additions Over Deductions \$ (793,489,150)

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2007	\$	3,013,806,957
Excess of Additions over Deductions		<u>(793,489,150)</u>
Market Value of Assets as of 12/31/2008*	\$	<u>2,220,317,807</u>

* The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B). Final Market Value of Assets is \$2,221,581,047 and includes the amount in the Annual Increase Reserve of \$1,263,240 for post-retirement benefit increases for members hired on or after January 1, 2007.



SCHEDULE C
(Continued)

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2008**

JUDICIAL DIVISION

Additions for the Year

Contributions:		
Members (including purchased service)	\$	3,197,740
Employers		<u>5,078,250</u>
Total	\$	8,275,990
Net Investment Income		<u>(61,182,735)</u>
TOTAL	\$	(52,906,745)

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$	13,382,673
Transfers		(354,867)
Other deductions		33,182
Administrative Expenses		<u>20,510</u>
TOTAL	\$	<u>13,081,498</u>

Excess of Additions Over Deductions **\$ (65,988,243)**

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2007	\$	240,861,140
Excess of Additions over Deductions		<u>(65,988,243)</u>
Market Value of Assets as of 12/31/2008*	\$	<u>174,872,897</u>

* The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B). Final Market Value of Assets is \$174,903,277 and includes the amount in the Annual Increase Reserve of \$30,380 for post-retirement benefit increases for members hired on or after January 1, 2007.



SCHEDULE C
(Continued)

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2008**

HEALTH CARE TRUST FUND

Additions for the Year

Contributions:		
Members' Purchase Service Transfers	\$	11,508,303
Employers		<u>72,599,167</u>
Total	\$	84,107,470
Net Investment Income		<u>(72,422,791)</u>
TOTAL	\$	<u>11,684,679</u>

Deductions for the Year

Benefit Payments	\$	88,469,990
Other Income and Expenses		(1,542,152)
PERA Internal Administrative Expenses		<u>3,997,499</u>
TOTAL	\$	<u>90,925,337</u>

Excess of Additions Over Deductions \$ (79,240,658)

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2007	\$	269,432,145
Excess of Additions over Deductions		<u>(79,240,658)</u>
Market Value of Assets as of 12/31/2008	\$	<u>190,191,487</u>



SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.50% per annum, compounded annually (net of administrative expenses).

INFLATION ASSUMPTION: 4.50% per year.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. See Schedule E for a detailed explanation.

ASSETS: The method of valuing assets is intended to recognize a “smoothed” market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a four-year period. The actuarial value of assets was reinitialized at Market Value as of December 31, 2004. There will be four years of smoothing in the December 31, 2008 valuation.

INTEREST CREDIT: 3% per annum on member contribution account balances.

WITHDRAWAL ASSUMPTION: It was assumed that 35% of the vested members who terminate elect to withdraw their contributions and matching employer contributions while the remaining 65% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date. The only exception to this is the Judicial Division, which assumes 100% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.



SCHEDULE D

(Continued)

**STATE DIVISION
NON-TROOPERS**

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation 4.50% per annum:

Sample Ages	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
20	5.67%	4.50%	10.17%
25	3.75	4.50	8.25
30	2.80	4.50	7.30
35	2.05	4.50	6.55
40	1.50	4.50	6.00
45	0.85	4.50	5.35
50	0.50	4.50	5.00
55	0.10	4.50	4.60
60	0.00	4.50	4.50
65	0.00	4.50	4.50

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, death and disability are shown in the following tables:

Sample Ages	Percent of Members Separating Within the Next Year					
	Ultimate Withdrawal		Death ¹		Disability	
	Males	Females	Males	Females	Males	Females
20	21.00%	18.00%	0.025%	0.015%	0.01%	0.01%
25	7.20	7.60	0.030	0.015	0.04	0.03
30	6.30	6.90	0.040	0.025	0.05	0.05
35	5.40	6.20	0.055	0.035	0.18	0.16
40	4.40	5.60	0.095	0.058	0.24	0.22
45	4.30	5.00	0.200	0.097	0.39	0.34
50	4.20	5.00	0.383	0.158	0.55	0.50
55	4.20	5.00	0.538	0.227	0.90	0.84
60	4.20	5.00	0.680	0.345	1.06	0.94
65	4.20	5.00	1.061	0.603	1.08	0.96

¹Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



SCHEDULE D

(Continued)

**STATE DIVISION
NON-TROOPERS**

The select withdrawal assumptions for members with less than five years of service are shown in the following table:

Completed Years of Service	Males	Females
0	40.0%	40.0%
1	18.0	20.0
2	12.0	14.0
3	9.0	11.0
4	8.0	10.0

RETIREMENT: Representative values of the assumed annual rates of service retirement are shown in the following table:

Retirement Ages	Percent of Members Who Are Eligible for Reduced Benefits Retiring Next Year		Percent of Members Who Are Eligible for Unreduced Benefits Retiring Next Year	
	Males	Females	Males	Females
50	10%	10%	40%	40%
51	10	10	35	35
52	10	10	30	30
53	10	10	30	25
54	15	15	30	25
55	15	15	20	25
56	15	15	20	20
57	15	15	20	20
58	15	15	20	20
59	15	15	20	20
60	12	15	20	20
61	12	12	18	16
62	15	18	20	20
63	25	12	17	16
64	25	12	17	16
65	0	0	30	25
66	0	0	25	22
67	0	0	25	22
68	0	0	25	22
69	0	0	25	22
70 & over	0	0	100	100



SCHEDULE D
(Continued)

STATE DIVISION
TROOPERS

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.50% per annum:

Sample Ages	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
20	5.50%	4.50%	10.00%
25	3.75	4.50	8.25
30	2.80	4.50	7.30
35	2.05	4.50	6.55
40	1.50	4.50	6.00
45	1.20	4.50	5.70
50	0.80	4.50	5.30
55	0.40	4.50	4.90
60	0.00	4.50	4.50
65	0.00	4.50	4.50

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, death and disability are shown in the following tables:

Sample Ages	Percent of Members Separating Within the Next Year					
	Ultimate Withdrawal ¹		Death ²		Disability	
	Males	Females	Males	Females	Males	Females
20	5.00%	5.00%	0.025%	0.015%	0.02%	0.02%
25	5.00	5.00	0.030	0.015	0.08	0.08
30	3.80	3.80	0.040	0.025	0.12	0.12
35	2.50	2.50	0.055	0.035	0.40	0.40
40	1.60	1.60	0.095	0.058	0.54	0.54
45	1.10	1.10	0.200	0.097	0.86	0.86
50	1.00	1.00	0.383	0.158	1.28	1.28
55	1.00	1.00	0.538	0.227	1.85	1.85
60	1.00	1.00	0.680	0.345	2.00	2.00
65	1.00	1.00	1.061	0.603	2.00	2.00

¹There are no select withdrawal assumptions for the State Troopers.

²Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



SCHEDULE D

(Continued)

**STATE DIVISION
TROOPERS**

RETIREMENT: Representative values of the assumed annual rates of service retirement are shown in the following table:

Retirement Ages	Percent of Members Who Are Eligible for Reduced Benefits Retiring Next Year	Percent of Members Who Are Eligible for Unreduced Benefits Retiring Next Year
50	20%	30%
51	20	30
52	20	30
53	20	30
54	20	25
55	10	25
56	10	15
57	10	15
58	10	35
59	10	35
60	25	35
61	25	35
62	25	50
63	25	50
64	25	50
65 & over	0	100



SCHEDULE D

(Continued)

SCHOOL DIVISION

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.50% per annum:

Sample Ages	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
20	6.20%	4.50%	10.70%
25	4.10	4.50	8.60
30	2.95	4.50	7.45
35	2.50	4.50	7.00
40	1.95	4.50	6.45
45	1.35	4.50	5.85
50	0.80	4.50	5.30
55	0.35	4.50	4.85
60	0.00	4.50	4.50
65	0.00	4.50	4.50

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, death and disability are shown in the following tables:

Sample Ages	Percent of Members Separating Within the Next Year					
	Ultimate Withdrawal		Death ¹		Disability	
	Males	Females	Males	Females	Males	Females
20	21.00%	18.00%	0.025%	0.015%	0.01%	0.01%
25	7.63	8.99	0.030	0.015	0.01	0.02
30	5.24	7.79	0.040	0.025	0.01	0.03
35	4.36	6.80	0.055	0.035	0.04	0.05
40	3.59	5.40	0.095	0.058	0.11	0.08
45	3.27	5.00	0.200	0.097	0.18	0.11
50	3.90	4.60	0.383	0.158	0.30	0.20
55	3.90	4.60	0.538	0.227	0.55	0.36
60	3.90	4.60	0.680	0.345	0.70	0.40
65	3.90	4.60	1.061	0.603	0.70	0.40

¹Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



SCHEDULE D

(Continued)

SCHOOL DIVISION

The select withdrawal assumptions for members with less than five years of service are shown in the following table:

Completed Years of Service	Males	Females
0	40.0%	40.0%
1	16.0	16.5
2	12.0	12.5
3	9.0	10.5
4	8.0	10.0

RETIREMENT: Representative values of the assumed annual rates of service retirement are shown in the following table:

Retirement Ages	Percent of Members Who Are Eligible for Reduced Benefits Retiring Next Year		Percent of Members Who Are Eligible for Unreduced Benefits Retiring Next Year	
	Males	Females	Males	Females
50	10%	12%	40%	40%
51	10	12	40	40
52	10	12	35	35
53	10	12	35	35
54	18	20	35	35
55	18	20	25	25
56	18	20	25	25
57	18	20	25	22
58	18	20	25	22
59	18	20	25	22
60	14	15	25	22
61	14	15	22	17
62	14	15	22	17
63	14	15	22	17
64	14	15	22	17
65	0	0	30	25
66	0	0	19	17
67	0	0	19	17
68	0	0	19	17
69	0	0	19	17
70 & over	0	0	100	100



SCHEDULE D

(Continued)

LOCAL GOVERNMENT DIVISION

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.50% per annum:

Sample Ages	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
20	6.97%	4.50%	11.47%
25	4.31	4.50	8.81
30	2.65	4.50	7.15
35	1.72	4.50	6.22
40	1.23	4.50	5.73
45	0.99	4.50	5.49
50	0.79	4.50	5.29
55	0.60	4.50	5.10
60	0.25	4.50	4.75
65	0.00	4.50	4.50

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, death and disability are shown in the following tables:

Sample Ages	Percent of Members Separating Within the Next Year					
	Ultimate Withdrawal		Death ¹		Disability	
	Males	Females	Males	Females	Males	Females
20	12.00%	15.00%	0.025%	0.015%	0.01%	0.01%
25	9.50	12.35	0.030	0.015	0.04	0.04
30	7.20	9.58	0.040	0.025	0.07	0.07
35	4.40	8.00	0.055	0.035	0.18	0.18
40	3.90	7.10	0.095	0.058	0.27	0.24
45	3.40	6.30	0.200	0.097	0.41	0.39
50	3.40	6.30	0.383	0.158	0.61	0.65
55	3.40	6.30	0.538	0.227	1.02	0.90
60	3.40	6.30	0.680	0.345	1.10	1.03
65	3.40	6.30	1.061	0.603	1.10	1.03

¹Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



SCHEDULE D
(Continued)

LOCAL GOVERNMENT DIVISION

The select withdrawal assumptions for members with less than five years of service are shown in the following table:

Completed Years of Service	Males	Females
0	40.0%	40.0%
1	16.0	18.0
2	12.0	12.0
3	9.0	9.0
4	7.0	7.0

RETIREMENT: Representative values of the assumed annual rates of service retirement are shown in the following table:

Retirement Ages	Percent of Members Who Are Eligible for Reduced Benefits Retiring Next Year		Percent of Members Who Are Eligible for Unreduced Benefits Retiring Next Year	
	Males	Females	Males	Females
50	12%	15%	15%	15%
51	12	15	15	15
52	12	15	15	15
53	12	15	15	15
54	12	15	15	25
55	12	15	15	25
56	15	15	25	25
57	15	15	25	25
58	15	15	25	25
59	15	15	25	25
60	15	10	20	12
61	15	10	20	12
62	15	12	20	15
63	15	12	20	15
64	15	12	20	15
65	0	0	25	30
66	0	0	30	25
67	0	0	30	25
68	0	0	30	25
69	0	0	30	25
70 & over	0	0	100	100



SCHEDULE D

(Continued)

JUDICIAL DIVISION

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.50% per annum:

Sample Ages	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
30	1.50%	4.50%	6.00%
35	1.50	4.50	6.00
40	0.67	4.50	5.17
45	0.50	4.50	5.00
50	0.50	4.50	5.00
55	0.50	4.50	5.00
60	0.50	4.50	5.00
65	0.50	4.50	5.00

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, death and disability are shown in the following tables:

Sample Ages	Percent of Members Separating Within the Next Year					
	Ultimate Withdrawal ¹		Death ²		Disability	
	Males	Females	Males	Females	Males	Females
30	2.70%	2.70%	0.040%	0.025%	0.06%	0.06%
35	2.70	2.70	0.055	0.035	0.07	0.07
40	2.70	2.70	0.095	0.058	0.10	0.10
45	2.70	2.70	0.200	0.097	0.17	0.17
50	2.70	2.70	0.383	0.158	0.31	0.31
55	2.70	2.70	0.538	0.227	0.63	0.63
60	2.70	2.70	0.680	0.345	1.22	1.22
65	2.70	2.70	1.061	0.603	1.48	1.48

¹There are no select withdrawal assumptions for the Judicial Division.

²Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



SCHEDULE D

(Continued)

JUDICIAL DIVISION

RETIREMENT: Representative values of the assumed annual rates of service retirement are shown in the following table:

Retirement Ages	Percent of Members Who Are Eligible for Reduced Benefits Retiring Next Year	Percent of Members Who Are Eligible for Unreduced Benefits Retiring Next Year
50	10%	10%
51	10	10
52	10	10
53	10	10
54	10	10
55	10	10
56	10	10
57	10	10
58	10	10
59	10	10
60	10	10
61	10	10
62	10	10
63	10	10
64	10	10
65	10	10
66	10	10
67	10	10
68	15	15
69	20	20
70	40	40
71	40	40
72 & over	100	100



SCHEDULE D
(Continued)

SINGLE LIFE RETIREMENT VALUES

Sample Ages	Present Value of \$1.00 Monthly for Life		Present Value of \$1.00 Monthly Increasing 3.5% Annually		Future Life Expectancy (Years)	
	Males	Females	Males	Females	Males	Females
40	\$138.39	\$141.51	\$206.81	\$214.96	41.93	45.71
45	134.80	139.02	197.32	207.10	37.19	40.86
50	130.42	135.64	186.57	197.55	32.65	36.09
55	125.29	131.12	174.65	186.07	28.35	31.41
60	118.37	124.79	160.31	171.98	24.11	26.78
65	109.07	116.45	143.22	155.38	19.98	22.32
70	98.28	105.86	125.02	136.43	16.62	18.08
75	86.47	93.08	106.56	115.73	12.91	14.19
80	74.16	79.29	88.65	95.06	10.08	10.82
85	62.15	63.82	72.23	73.84	7.76	7.84



SCHEDULE D

(Continued)

Methods and Assumptions Specific to the Health Care Trust Fund

Current PERA benefit recipients age 65 and older are assumed to maintain current benefit elections in perpetuity. Current PERA benefit recipients not yet age 65 are assumed to maintain current elections until age 65, with 70% of all PERA benefit recipients assumed to participate age 65 and older. For deferred vested members, 20% are assumed to elect coverage upon commencement of their PERA monthly benefit. For active members retiring directly from PERA, the following participation rates are assumed:

Not yet Age 65: 50%
 Age 65 and older: 70%

Plan elections for future members are assumed as follows:

Self Funded Plans: 60%
 Kaiser Permanente: 25%
 Rocky Mountain Health Plans (RMHP): 10%
 Secure Horizons: 5%

For spousal participation, actual census data and current plan elections of current retirees were used. For spouses of future retirees, 30% are assumed to elect coverage for their spouse.

Health Care Cost Trend Rates:

Year	Self Funded Plans		Kaiser	
	"Part A" Claims	Part A Deductible	No Part A Premiums	With Part A Premiums
2009	10.00%	4.50%	9.00%	7.50%
2010	9.00%	4.50%	8.00%	7.25%
2011	8.00%	4.50%	7.00%	7.00%
2012	7.00%	4.50%	6.50%	6.75%
2013+	6.50%	4.50%	6.50%	6.50%

Year	RMHP		Secure Horizons			
	No Part A Premiums	With Part A Premiums	No Part A Premiums	With Part A Premiums	Part A Premiums	RDS Payments
2009	7.50%	6.50%	11.00%	10.00%	5.50%	6.50%
2010	7.25%	6.50%	9.00%	9.00%	5.50%	6.50%
2011	7.00%	6.50%	8.00%	8.00%	5.50%	6.50%
2012	6.75%	6.50%	7.00%	7.00%	5.50%	6.50%
2013+	6.50%	6.50%	6.50%	6.50%	5.50%	6.50%

The service-based PERA subsidy is assumed to remain constant.



SCHEDULE D

(Continued)

The following monthly costs are assumed for 2008, and subject to the Health Care Cost Trend Rates:

Self Funded Plans "Part A" Claims		Kaiser Permanente	
Members without Part A	Members with Part A	Premiums for Members without Part A	Premiums for Members with Part A
\$318	\$44	\$534	\$141

Rocky Mountain Health Plans		Secure Horizons		
Premiums for Members without Part A	Premiums for Members with Part A	Premiums for Members without Part A	Premiums for Members with Part A	Part A Premiums
\$581	\$242	\$516	\$177	\$443

Monthly Retiree Drug Subsidy Payments

Medicare Supplement Plan #1:	\$49.23
Medicare Supplement Plan #2:	\$28.02
Rocky Mountain Health Plan	\$37.00
Kaiser	\$ 0.00
Secure Horizons*	\$ 0.00

* Members eligible for Medicare Part D that are enrolled in Kaiser Permanente or Secure Horizons receive prescription drug benefits in a Medicare Prescription Drug Plan and do not qualify to generate an RDS for PERA.

Morbidity

Under GASB Statements 43 and 45, liabilities for medical and drug post-employment benefits are to be based, in most circumstances, on assumed claims costs that vary by age. This is generally accomplished using a morbidity, or aging, curve that models the growth in assumed claims as a member ages. Benefits funded by the Health Care Trust Fund are defined to be the service based monthly subsidy, which does not result in annually changing costs to the Trust as a member ages (not counting the subsidy reduction at age 65 or disability Medicare eligibility), and the "no-Part A" and RDS subsidies, which are assumed to not vary materially as a member ages. Therefore, no morbidity assumptions are utilized in the determination of Health Care Trust Fund liabilities.



SCHEDULE D
(Continued)

Assumptions Specific to the “no-Part A” subsidy:

For retired members currently age 65 and older, Part A eligibility status is provided by PERA and is assumed to be maintained in perpetuity. For current retirees not yet age 65, and for active employees hired prior to April 1, 1986, 20% are assumed to not qualify for Medicare Part A; thus qualifying for the “no-Part A” subsidy from the Health Care Trust Fund.

The 20% assumption is based on the results of a survey, conducted by PERA of its membership in 2007, designed specifically to measure the portion of its membership that will not be eligible for Medicare Part A coverage either through their own work history or that of their spouse or ex-spouse.

100% of members receiving health care benefits as a result of disability retirement are assumed to qualify for Medicare Part A.

100% of vested, but deferred, retirements, are assumed to pay the 40 quarters of Medicare taxes required by CMS for free Part A coverage as a result of subsequent employment.

Members that qualify for the “no-Part A” subsidy are assumed to drop coverage at a rate of 7.5% annually in all years.

Costs for the “no-Part A” subsidy are currently less than the costs of PERA paying the Part A premium on behalf of its members that do not qualify for free Part A coverage. However, future increases in the “no-Part A” subsidy may result in it becoming more cost effective in the future for PERA to pay the Part A premium as an alternative to continuing the “no-Part A” subsidy in its current configuration. This valuation assumes PERA will make the decision to pay the Part A premium (on a “whole group basis”) when and if it becomes cost effective to do so.

At that time, it is assumed PERA will also pay any premium penalties associated with enrollment of its members after first eligibility, which is 10% of the Part A premium and is payable for a period that is twice as long as the delay in enrollment. For example, someone enrolling at age 70 would need to pay the premium penalty for 10 years, assuming first eligibility at age 65.

Retiree Drug Subsidy (RDS) under Medicare Part D:

Due to the service-based premium subsidy not increasing over time, retirees are required to pay the entire increase in annual costs each year, resulting in monthly contributions that increase more rapidly over time than the total costs of coverage. This is expected to result in the prescription drug benefit provided to those members eligible for Medicare Part D to cease being Actuarially Equivalent (by failing the net test component of the Actuarial Equivalency Attestation) at some point in the future, resulting in a termination of the RDS. This valuation is based on the assumption that PERA will last qualify for an RDS payment in 2018, assuming no changes in plan design are made.



SCHEDULE E

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 8.50%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.
2. The employer contributions required to support the benefits of PERA are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf. For health care benefits, the calculation of the normal contribution is similar but is determined based on total expected career service and is independent of compensation.
4. The unfunded accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from the PERA. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.



SCHEDULE F

SUMMARY OF MAIN PERA PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Effective Date Pension: Established in 1931, most recently amended during 2008.

Health Care Trust Fund (HCTF): On July 1, 1985, employer contributions to the HCTF commenced. Plan coverage and premium subsidy payments began July 1, 1986.

DEFINITIONS

Affiliated Employers State agencies and institutions of higher education, political subdivisions of the state, all school districts except Denver, courts, cities and municipalities and any other public entities which affiliate with PERA.

Covered Members Employees of Affiliated Employers who work in a position subject to membership and for whom contributions are made.

Division One of four separate divisions which include: State, School, Local Government and Judicial. Upon affiliation, employers are assigned to one of these divisions. The financial activities of each division are accounted for in separate trust funds.

Highest Average Salary (HAS) For members, not in the Judicial Division, who were hired prior to January 1, 2007 one-twelfth of the average of the highest annual salaries upon which contributions were made during three periods of twelve consecutive months of Service Credit; or for a member with less than three years of Service Credit, one-twelfth of the average of the annual salaries upon which contributions were made. Annual salary increases recognized in the determination of HAS are limited to 15% a year.

For members, not in the Judicial Division, who were hired on and after January 1, 2007, one-twelfth of the average of the highest annual salaries upon which contributions were made during three periods of twelve consecutive months of Service Credit; or for a member with less than three years of Service Credit, one-twelfth of the average of the annual salaries upon which contributions were made. Annual salary increases recognized in the determination of HAS are limited to 8% a year.

For Judicial Division members, one-twelfth of the highest annual salary upon which contributions were made during one period of twelve consecutive months of Service Credit.



Service Credit

The total of all earned, purchased, (disability) projected, and military service credit which is used to determine benefit eligibility and amounts.

Vested

Members who accrue five or more years of Service Credit are vested for benefits. If these members leave service they may leave their Member Contribution Accounts with the Plan for a future benefit when reaching eligibility (deferred vested in this report).



CONTRIBUTIONS

Member Contributions Members, except for State Troopers, contribute 8.0% of salary. State Troopers contribute 10.0% of salary. Member contributions, together with any purchased service credit payments and interest, are credited to individual Member Contribution Accounts.

Employer Contributions State Division (except State Troopers): 10.04% of salary through 6/30/2003, 10.15% after 7/1/2003

School Division: 10.04% of salary through 6/30/2003, 10.15% after 7/1/2003 and further increased to 10.55% on 1/1/2013

State Troopers: 12.74% of salary through 6/30/2003, 12.85% after 7/1/2003

Local Government Division: 9.60% of salary through 12/31/2003, 10.00% on and after 1/1/2004

Judicial Division: 11.82% of salary through 6/30/2003, 12.66% from 7/1/2003 to 6/30/2004, 13.66% after 7/1/2004

These contribution rates include the contributions allocated to the Health Care Trust Fund for all divisions as follows:

Before 7/1/2004	1.10%
On and after 7/1/2004	1.02%

For members hired on or after January 1, 2007, these contribution rates also include the 1.00% of payroll contribution earmarked for the Annual Increase Reserve.

Employer contributions are credited to the employer reserve of each division.



**Amortization Equalization
Disbursement (AED)**

Beginning January 1, 2006, each employer shall pay to PERA a disbursement equal to a percent of total payroll in accordance with the following schedule:

Year	Percent of Total Payroll
2006	0.50%
2007	1.00%
2008	1.40%
2009	1.80%
2010	2.20%
2011	2.60%
2012 & after	3.00%

If, at any time, the actuarial funded ratio for a division is 100% or more, then the amount of the disbursement is reduced in the following year to an amount necessary to maintain the 100% funded ratio.

**Supplemental Amortization
Equalization
Disbursement (SAED)**

Beginning January 1, 2008, each employer shall pay to PERA a supplemental disbursement equal to a percent of total payroll in accordance with the following schedule:

Year	Percent of Total Payroll
2008	0.50%
2009	1.00%
2010	1.50%
2011	2.00%
2012	2.50%
2013 & after	3.00%

If, at any time, the actuarial funded ratio for a division is 100% or more, then the amount of the disbursement is reduced in the following year to an amount necessary to maintain the 100% funded ratio.



Matching Contributions

A match applied to individual Member Contribution Accounts when a refund is made or when a money purchase benefit is calculated. The match is applied to the account balance less:

1. Any amount paid for the purchase of service credit,
2. Any payments in lieu of member contributions, and
3. Any interest accrued on 1 and 2.

For members who meet the requirements for a service or reduced service retirement at the time the match is applied, or for payments made to survivors or beneficiaries of members who die before retirement, the match is 100% of eligible amounts.

For members who receive a refund or retire prior to meeting the requirements for a service or reduced service retirement, the match is 50% of eligible amounts.



ELIGIBILITY FOR BENEFITS

Refund of Member Contributions

In the event a member leaves service for a reason other than death or retirement, member contribution accounts including interest plus matching employer contributions with interest are refunded upon request.

Service Retirement

The Age and Service Credit requirements to be eligible for a full Service Retirement are listed below:

- **Members, except State Troopers, hired before 7/1/2005**

Age	Service Credit
50	30
55	Age and Service = 80 years or more
60	20
65	5
65	Less than 5 but 60 payroll postings

- **Members, except State Troopers, hired on and after 7/1/2005 but before 1/1/2007**

Age	Service Credit
Any Age	35
55	30
55	Age and Service = 85 years or more
60	20
65	5
65	Less than 5 but 60 payroll postings

- **Members, except State Troopers, hired on and after 1/1/2007**

Age	Service Credit
Any Age	35
55	30
60	25
65	5
65	Less than 5 but 60 payroll postings

- **State Troopers, regardless of date of hire**

Age	Service Credit
Any Age	30
50	25
55	20
65	5
65	Less than 5 but 60 payroll postings



Reduced Service Retirement

The Age and Service Credit requirements to be eligible for a Reduced Service Retirement are listed below:

- **Members, except State Troopers, regardless of date of hire**

Age	Service Credit
50	25
55	20
60	5

- **State Troopers, regardless of date of hire**

Age	Service Credit
50	20
60	5

Disability Retirement

Active members with five or more years of earned service credit, with at least 6 months of this time earned in the most recent period of membership are covered (vested) for disability retirement. To be eligible, the member must be found to be totally and permanently disabled (mentally or physically) from regular and gainful employment. The service credit requirement is waived for state troopers injured in the line of duty and for judges found disabled by the Colorado Supreme Court.

Survivor Benefits

The qualified survivors of members who die before retirement with at least one year of service credit are eligible for monthly survivor benefits. The service credit requirement is waived if the death was job related.

MONTHLY BENEFIT CALCULATIONS

Service Retirement Benefit

State including state troopers, School and Local Government Divisions and Members of the Judicial Division who were on the bench on and after July 1, 1973:

The greater of a) or b)

- a) 2.5% of HAS times years of Service Credit up to 40
- b) The money purchase benefit which is actuarially determined based on the value of the member contribution account and matching employer contributions on the effective date of retirement.

Members age 65 with less than 5 years and less than 60 payroll postings are eligible for the money purchase benefit only.



Members of the Judicial Division who were on the bench prior to July 1, 1973:

The greater of c) or d)

- c) The greater of a) or b) above
- d)
 1. 4% of HAS times years of Service Credit up to 10, plus
 2. 1 2/3% of HAS times years of Service Credit in excess of 10 up to 16, plus
 3. 1.5% of HAS times years of Service Credit in excess of 16 up to 20, plus
 4. 2.5% of HAS times years of Service Credit in excess of 20, the total not to exceed 100% of HAS.

In all cases, the benefit is limited to 100% of HAS.

Reduced Service Retirement Benefit

For all members, except State Troopers:

The service retirement benefit calculated above reduced 4% for each year after age 60, 3% for each year from age 55 to age 60, 6% for each year prior to 55, and proportionately for fractions of a year, from the effective date of reduced service retirement to the date the member would have been eligible for a service retirement benefit.

For State Troopers:

The service retirement benefit calculated above reduced 4% for each year after age 60, 3% for each year from age 50 to age 60, and proportionately for fractions of a year, from the effective date of reduced service retirement to the date the member would have been eligible for a service retirement benefit.



**Disability Retirement
Benefit**

If years of Service Credit at disability are greater than 20, the disability retirement benefit is calculated based on actual Service Credit at disability; otherwise, the disability retirement benefit is calculated based on actual Service Credit at disability plus Service Credit projected to age 65, but not to exceed a total of 20 years of Service Credit.

Benefits for disability retirees with an effective disability retirement date on or after July 1, 1988 and before January 1, 1999, who work after retirement will be reduced by 1/3 of the amount, if any, by which the initial annual PERA benefit plus earned income exceeds the annualized HAS.

Disability benefits are payable for as long as the disability retiree is disabled. Benefits cease upon recovery.



Survivor Benefits

➤ If the deceased was not Eligible for Reduced Service Retirement at the time of Death

Benefits are payable in the following order:

- a) Qualified Children Under Age 23: 40% of HAS for one child, an equal share of 50% of HAS if there are two or more children.
- b) Spouse: If no qualified children in (a) exist: i) less than 10 years of Service Credit, 25% of HAS, benefits begin at age 60; ii) 10 or more years of Service Credit, the greater of 25% of HAS or the benefit which would have been payable as a 100% joint and survivor option if the deceased member had been eligible for service retirement and retired on the date of death, benefits begin immediately.
- c) Qualified Children Age 23 or Over: If no persons in (a) or (b) exist, 40% of HAS for one child, an equal share of 50% of HAS if there are two or more children.
- d) Dependent Parents: If no persons in (a) to (c) exist, 25% of HAS for one dependent parent or 40% of HAS for two dependent parents (minimum of \$100 per month for each dependent parent). Benefits begin immediately and continue until the death of the parent(s).
- e) Named Beneficiary: If no persons in (a) to (d) exist, single payment equal to the member contribution account plus the appropriate matching contribution, plus interest.
- f) Estate of Deceased Member: If no persons in (a) to (e) exist, single payment equal to the member contribution account plus the appropriate matching contribution, plus interest.

➤ If the deceased was eligible for Reduced or Service Retirement at the time of Death

The co-beneficiary is eligible for the amount that would have been payable had the member retired on the date of death and elected the 100% joint and survivor option. The order of payment is:

- a) Co-beneficiary – If the deceased member designated a co-beneficiary prior to death, that individual takes precedence in payment of benefits.
- b) Surviving Spouse
- c) Qualified Children
- d) Dependent Parents
- e) Named beneficiary
- f) Estate

**Benefit Options**

Retirement and disability benefits are payable for the life of the retired member. Optional reduced benefits may be elected at the time of retirement to provide for continuation of 50% or 100% of a reduced benefit amount to a designated co-beneficiary. If the member retires any time after the date on which service retirement eligibility is first met, the reduction for 50% or 100% continuation option will be actuarially determined as of the date the member first became eligible for service retirement.

**Post-Retirement
Benefit Increases**

For members hired prior to January 1, 2007, each year on March 1, benefits which have been paid for at least three months preceding March 1 are increased. The increase is 3.5% compounded annually for each year of retirement for members hired before July 1, 2005 and 3.0% compounded annually for each year of retirement for members hired on or after July 1, 2005.

For members hired on or after January 1, 2007, each year on July 1, benefits which have been paid for at least the full preceding calendar year and who retired on disability, survivor benefits, the rule of 85 service retirement or has attained age 60 as of the previous January 1 are increased. The increase shall be determined by valuations of the Annual Increase Reserve and only to the extent such increases can be funded through transfers from that Reserve.



OTHER PROVISIONS SPECIFIC TO THE HEALTH CARE TRUST FUND

Eligibility for Health Care Coverage	<p>Anyone receiving a monthly PERA benefit, spouses, and unmarried, dependent children under age 25.</p> <p>Members receiving short-term disability payments.</p> <p>Guardians of children receiving PERA survivor benefits if children are receiving health care benefits.</p> <p>Retirees temporarily not receiving PERA benefits.</p> <p>Surviving spouses of deceased retirees who are not receiving PERA benefits but were receiving health care benefits at the time when death occurred.</p> <p>Divorced spouses of retirees who are not receiving PERA benefits, but were receiving health care benefits, when the divorce occurred.</p>
Enrollment	<p>Enrollment is voluntary, with annual open enrollment for coverage effective each January 1.</p>
Premium Subsidy	<p>A monthly subsidy is allocated to each benefit recipient only electing health care coverage. The following monthly amounts are allocated per year of credited service, up to a maximum of 20 years of service:</p> <ul style="list-style-type: none">• \$ 5.75 if age 65 and older or eligible for Medicare hospital insurance benefits• \$11.50 if not yet age 65 or eligible for Medicare hospital insurance benefits <p>This subsidy is used to determine member premiums, which are projected full costs of coverage less the premium subsidy. The full costs for claims, administration, premiums, etc. are paid by the Trust.</p> <p>Historically, this has resulted in net costs to the Trust being very close to the premium subsidy, with all costs of coverage above this subsidy paid by the member. For those age 65 or older, the full cost of coverage is considered to be based on the full cost of coverage assuming Medicare Part A eligibility. This is independent of actual Medicare Part A eligibility.</p> <p>Members not receiving a PERA monthly benefit do not qualify for this subsidy and bear the full cost of coverage.</p> <p>This premium subsidy is only available to those electing health care coverage.</p>



Special Note on those Members not qualifying for Medicare Part A:

The Fund pays an implicit subsidy for members without Medicare Part A. For members in fully-insured HMOs, this amount is the difference in premiums charged for those without Part A and for those with Part A. For the self-funded plans, this amount is the assumed difference in claims costs for services covered under Part A between members without Part A coverage and those with Part A coverage.

Special Note on those Members eligible for Medicare Part D:

For members electing coverage in a plan option that produces a Retiree Drug Subsidy (RDS), which is payable to PERA, under Part D of the Medicare Modernization Act of 2003 (MMA), PERA has reduced the full cost of coverage by the estimated RDS. GASB Statements 43 and 45 do not allow for future assumed RDS payments to be used as a direct offset for future liabilities. Therefore, a liability for these payments has been included in the total Health Care Trust Fund liability. Plan options producing an RDS for PERA in 2008 are the self-funded Medicare Supplement plans and the Rocky Mountain Health Plan HMO.



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2008**

STATE DIVISION

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	342	0	0	0	0	0	0	342	\$ 2,419,403
20 to 24	1,910	16	0	0	0	0	0	1,926	\$ 40,294,500
25 to 29	3,774	463	11	0	0	0	0	4,248	\$ 134,021,978
30 to 34	3,299	1,403	312	7	0	0	0	5,021	\$ 192,631,979
35 to 39	3,049	1,586	1,077	309	15	0	0	6,036	\$ 264,561,981
40 to 44	2,651	1,461	1,093	833	394	44	0	6,476	\$ 300,123,333
45 to 49	4,493	1,542	1,161	1,011	855	642	105	9,809	\$ 435,194,342
50 to 54	2,434	1,509	1,083	1,052	971	893	377	8,319	\$ 418,480,957
55 to 59	1,879	1,272	962	976	880	600	436	7,005	\$ 347,559,217
60	263	193	121	124	114	78	72	965	\$ 46,744,956
61	261	193	114	139	115	88	67	977	\$ 48,159,263
62	205	164	117	95	76	62	50	769	\$ 35,432,338
63	164	115	70	58	57	56	50	570	\$ 27,761,190
64	122	83	57	77	46	31	39	455	\$ 22,365,714
65	105	60	52	43	40	25	28	353	\$ 15,392,240
66	93	61	30	39	19	13	32	287	\$ 11,841,422
67	51	30	21	15	20	12	17	166	\$ 7,064,019
68	49	26	12	13	17	6	8	131	\$ 5,452,266
69	52	8	16	14	7	6	12	115	\$ 3,853,558
70 & Over	216	100	55	42	18	18	22	471	\$ 12,284,150
Total	25,412	10,285	6,364	4,847	3,644	2,574	1,315	54,441	\$ 2,371,638,806

Average Age (Non-Trooper): 45.48
 Average Service (Non-Trooper): 8.81
 Average Age (Trooper): 39.47
 Average Service (Trooper): 10.37



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2008**

SCHOOL DIVISION

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	1,374	0	0	0	0	0	0	1,374	\$ 8,683,678
20 to 24	4,819	85	0	0	0	0	0	4,904	\$ 86,810,192
25 to 29	9,537	1,529	38	0	0	0	0	11,104	\$ 314,890,625
30 to 34	7,074	4,540	676	16	0	0	0	12,306	\$ 404,530,572
35 to 39	7,348	3,766	2,677	556	18	0	0	14,365	\$ 473,453,733
40 to 44	8,634	3,708	2,202	1,748	490	35	0	16,817	\$ 523,217,900
45 to 49	6,722	4,348	2,642	1,804	1,696	811	64	18,087	\$ 611,267,129
50 to 54	4,888	3,469	2,585	1,996	1,752	1,743	532	16,965	\$ 626,609,643
55 to 59	3,614	2,350	1,722	1,857	1,476	1,116	657	12,792	\$ 481,771,830
60	562	338	202	232	227	159	104	1,824	\$ 65,989,284
61	578	297	215	182	187	120	72	1,651	\$ 54,641,095
62	462	256	164	149	148	106	58	1,343	\$ 43,213,605
63	328	195	108	87	92	69	45	924	\$ 28,721,966
64	314	154	84	73	63	57	25	770	\$ 21,180,603
65	291	122	62	60	49	33	26	643	\$ 15,868,520
66	234	104	52	33	26	24	16	489	\$ 10,988,241
67	200	88	39	33	22	15	11	408	\$ 7,660,354
68	180	48	30	28	17	14	7	324	\$ 5,686,575
69	153	66	28	15	9	8	10	289	\$ 4,566,232
70 & Over	646	268	97	62	32	27	36	1,168	\$ 15,175,000
Total	57,958	25,731	13,623	8,931	6,304	4,337	1,663	118,547	\$ 3,804,926,777

Average Age: 43.99

Average Service: 7.84



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2008**

LOCAL GOVERNMENT DIVISION

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	593	0	0	0	0	0	0	593	\$ 2,896,982
20 to 24	1,036	25	0	0	0	0	0	1,061	\$ 19,362,589
25 to 29	1,320	210	12	0	0	0	0	1,542	\$ 47,573,845
30 to 34	1,183	360	86	0	0	0	0	1,629	\$ 62,203,966
35 to 39	1,237	466	224	84	5	0	0	2,016	\$ 88,388,664
40 to 44	1,246	455	300	147	79	10	0	2,237	\$ 96,855,519
45 to 49	1,061	502	368	251	212	200	39	2,633	\$ 133,546,859
50 to 54	897	426	295	262	223	195	94	2,392	\$ 124,324,513
55 to 59	661	303	231	200	156	123	92	1,766	\$ 89,303,898
60	96	50	31	28	18	9	12	244	\$ 12,190,942
61	95	33	23	27	24	10	15	227	\$ 10,717,569
62	84	36	14	16	18	11	13	192	\$ 8,389,881
63	56	27	16	10	13	10	5	137	\$ 5,808,475
64	60	30	8	7	5	6	10	126	\$ 4,445,985
65	62	24	10	9	7	5	5	122	\$ 4,513,519
66	51	15	2	4	5	9	5	91	\$ 2,740,428
67	34	2	3	3	2	1	0	45	\$ 1,052,655
68	28	9	8	6	1	1	0	53	\$ 1,105,297
69	26	9	2	2	0	2	1	42	\$ 582,050
70 & Over	168	35	13	11	0	0	4	231	\$ 2,898,127
Total	9,994	3,017	1,646	1,067	768	592	295	17,379	\$ 718,901,763

Average Age: 43.23

Average Service: 7.09



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2008**

JUDICIAL DIVISION

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	0	0	0	0	0	0	0	0	\$ 0
20 to 24	0	0	0	0	0	0	0	0	\$ 0
25 to 29	0	0	0	0	0	0	0	0	\$ 0
30 to 34	1	0	0	0	0	0	0	1	\$ 25,977
35 to 39	5	3	0	1	0	0	0	9	\$ 933,747
40 to 44	16	9	0	1	0	0	0	26	\$ 2,901,248
45 to 49	14	10	10	7	5	2	0	48	\$ 5,403,862
50 to 54	14	13	10	7	5	2	1	52	\$ 6,012,618
55 to 59	15	13	11	15	14	10	9	87	\$ 9,763,767
60	4	5	2	8	6	3	1	29	\$ 3,345,821
61	0	1	0	2	2	2	1	8	\$ 955,895
62	3	3	3	2	2	1	1	15	\$ 1,656,529
63	0	0	1	1	3	1	4	10	\$ 1,246,065
64	1	1	3	0	0	0	1	6	\$ 641,418
65	0	1	2	0	2	1	2	8	\$ 926,504
66	2	0	0	2	0	1	2	7	\$ 767,505
67	0	1	0	1	2	0	2	6	\$ 742,059
68	0	0	0	0	2	0	1	3	\$ 346,322
69	0	0	0	0	0	0	0	0	\$ 0
70 & Over	0	0	1	0	1	0	0	2	\$ 267,757
Total	75	60	43	47	44	23	25	317	\$ 35,937,094

Average Age: 55.00

Average Service: 13.86