



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

Prepared as of December 31, 2009





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

June 4, 2010

The Board of Trustees
Public Employees' Retirement Association of Colorado
1301 Pennsylvania 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, 2009.

The purpose of this report is to provide a summary of the funded status of PERA as of December 31, 2009, 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 & SAED
State Division	43 years	24 years
School Division	44 years	23 years
Local Government Division	16 years	16 years
Judicial Division	65 years	65 years
Health Care Trust Fund (HCTF)*	53 years	53 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 41 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. 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.



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 eventually 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 State, Schools and Judicial Divisions employer contribution rates are currently sufficient to finance the promised benefits and eventually meet the required contribution levels under GASB 25 and 27.

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

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Thomas J. Cavanaugh'.

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

A handwritten signature in blue ink, appearing to read 'Edward J. Koebel'.

Edward J. Koebel, EA, FCA, MAAA
Principal and Senior Actuary

A handwritten signature in blue ink, appearing to read 'Eric H. Gary'.

Eric H. Gary, FSA, FCA, MAAA
Senior Actuary

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, 2009**

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	12/31/2009	12/31/2008
Number of Active Non-Troopers	53,534	53,628
Annual Covered Payroll	\$2,328,434	\$2,314,305
Number of Active Troopers	799	813
Annual Covered Payroll	\$55,703	\$57,334
Total Number of Active Members	54,333	54,441
Total Annual Covered Payroll	\$2,384,137	\$2,371,639
Number of Retired Members and Survivors	31,463	30,650
Annual Retirement Benefits	\$1,097,135	\$1,021,730
Total Assets:		
Actuarial Value	\$13,382,736	\$13,914,371
Market Value	\$11,603,617	\$10,505,176
Actuarial Accrued Liability	\$19,977,217	\$20,498,668
Unfunded Actuarial Accrued Liability (UAAL)	\$6,594,481	\$6,584,297
CONTRIBUTIONS FOR FISCAL YEAR ENDING	12/31/2011	12/31/2010
Employer Contribution Rate:		
Normal	2.20 %	5.40 %
Accrued Liability	<u>13.89 %</u>	<u>14.76 %</u>
Annual Required Contribution	16.09 %	20.16 %
Reduction for AED and SAED	<u>(8.93)%</u>	<u>(5.73)%</u>
Total Employer Contribution Rate	7.16 %	14.43 %
Amortization Period	30 years	30 years



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

VALUATION DATE	12/31/2009	12/31/2008
Number of Active Members	119,390	118,547
Annual Covered Payroll	\$3,922,175	\$3,804,927
Number of Retired Members and Survivors	47,641	45,919
Annual Retirement Benefits	\$1,600,940	\$1,488,995
Assets:		
Actuarial Value	\$21,054,910	\$21,733,329
Market Value	\$18,292,602	\$16,412,172
Actuarial Accrued Liability	\$30,412,815	\$31,000,202
Unfunded Actuarial Accrued Liability (UAAL)	\$9,357,906	\$9,266,873
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2011	12/31/2010
Employer Contribution Rate:		
Normal	3.75 %	5.80 %
Accrued Liability	<u>11.98 %</u>	<u>12.95 %</u>
Annual Required Contribution	15.73 %	18.75 %
Reduction for AED and SAED	<u>(8.88)%</u>	<u>(5.73)%</u>
Total Employer Contribution Rate	6.85 %	13.02 %
Amortization Period	30 years	30 years



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

VALUATION DATE	12/31/2009	12/31/2008
Number of Active Members	16,166	17,379
Annual Covered Payroll	\$705,097	\$718,902
Number of Retired Members and Survivors	4,692	4,396
Annual Retirement Benefits	\$155,244	\$139,393
Assets:		
Actuarial Value	\$2,932,628	\$2,933,296
Market Value	\$2,571,160	\$2,220,318
Actuarial Accrued Liability	\$3,850,821	\$3,838,083
Unfunded Actuarial Accrued Liability (UAAL)	\$918,193	\$904,787
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2011	12/31/2010
Employer Contribution Rate:		
Normal	2.44 %	5.62 %
Accrued Liability	<u>6.54 %</u>	<u>6.69 %</u>
Annual Required Contribution	8.98 %	12.31 %
Reduction for AED and SAED	<u>(3.70)%</u>	<u>(5.73)%</u>
Total Employer Contribution Rate	5.28 %	6.58 %
Amortization Period	30 years	30 years



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

VALUATION DATE	12/31/2009	12/31/2008
Number of Active Members	317	317
Annual Covered Payroll	\$37,583	\$35,937
Number of Retired Members and Survivors	292	283
Annual Retirement Benefits	\$15,315	\$13,725
Assets:		
Actuarial Value	\$228,714	\$230,967
Market Value	\$200,270	\$174,873
Actuarial Accrued Liability	\$295,696	\$288,058
Unfunded Actuarial Accrued Liability (UAAL)	\$66,982	\$57,091
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2011	12/31/2010
Employer Contribution Rate:		
Normal	9.84 %	11.42 %
Accrued Liability	<u>8.95 %</u>	<u>8.45 %</u>
Annual Required Contribution	18.79 %	19.87 %
Reduction for AED and SAED	<u>(3.70)%</u>	<u>(5.73)%</u>
Total Employer Contribution Rate	15.09 %	14.14 %
Amortization Period	30 years	30 years



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

VALUATION DATE	12/31/2009	12/31/2008
Number of Active Members	190,206	190,684
Annual Covered Payroll	\$7,048,992	\$6,931,405
Number of Retired Members and Survivors	46,738	44,885
Assets:		
Actuarial Value	\$260,341	\$255,976
Market Value	\$228,178	\$190,191
Actuarial Accrued Liability	\$1,763,241	\$1,368,633
Unfunded Actuarial Accrued Liability (UAAL)	\$1,502,900	\$1,112,657
CONTRIBUTION FOR FISCAL YEAR ENDING	12/31/2011	12/31/2010
Employer Contribution Rate:		
Normal	0.21 %	0.27 %
Accrued Liability	<u>1.07 %</u>	<u>0.85 %</u>
Annual Required Contribution	1.28 %	1.12 %
Amortization Period	30 years	30 years



2. Comments on the valuation results as of December 31, 2009 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 the actuarial assumptions since the previous valuation:
 - The investment rate of return has been decreased from 8.50% to 8.00% per annum.
 - The withdrawal rates, pre-retirement mortality rates, disability rates and retirement rates for all divisions have been revised to more closely reflect the actual experience of PERA.
 - The post-retirement mortality tables used for service retirements and dependents of deceased pensioners has been changed to the 1994 Group Annuity Mortality Table set back three years for males and set back two years for females.
 - The deferral period for deferred vested members has been revised to more closely reflect the actual experience of PERA.
 - The rates of participation in PERACare for current members, future members, deferred vested members, and spouses have been revised to more closely reflect the actual experience of PERA.
 - Initial health care costs for participants who are age 65 and older, and do not have Medicare Part A have been updated to reflect their change in costs for the 2010 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 rates of inflation for health care costs have been revised to reflect the expectation of future increases.
 - The last year in which the prescription drug benefit provided to those members eligible for Medicare Part D is deemed to be Actuarially Equivalent has been reduced to 2017.

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 changes were made to the main provisions as part of Senate Bill 10-01 since the previous valuation:
 - For the State Division, the Amortization Equalization Disbursement (AED) will continue to increase by 0.4% per year to a total rate of 5.0% by 2017. In addition, the Supplemental



- Amortization Equalization Disbursement (SAED) will continue to increase by 0.5% per year to a total rate of 5.0% by 2017. However, if the funding ratio reaches 103%, the AED and SAED will be reduced by 0.5% of pay each.
- For the Schools Division, the AED will continue to increase by 0.4% per year from 2013 through 2015 and by 0.3% in 2016 for a total rate of 4.5%. In addition, the SAED will continue to increase by 0.5% per year to a total rate of 5.5% by 2018. Also, the 0.4% increase in the statutory employer contribution rate in 2013 was eliminated. However, if the funding ratio reaches 103%, the AED and SAED will be reduced by 0.5% of pay each.
 - For the Local Government Division and the Judicial Division, the AED is frozen at the 2010 level of 2.20%. In addition, the SAED is frozen at the 2010 level of 1.50%. However, if the funding ratio reaches 103%, the AED and SAED will be reduced by 0.5% of pay each.
 - For Tier 1 and Tier 1A members (including retirees), the Post-Retirement Benefit Increases will be reduced to an amount equal to 2% (the lesser of that or the annual CPI-W increase for 2010). However, if the investment return for the prior year is negative, then the Increase will be an amount equal to the annual CPI-W increase with a cap of 2%. In addition, the Increase will be first paid on the July 1st that is at least 12 months after retirement for those members who retire on or after January 1, 2011. Members not eligible to retire as of January 1, 2011 who retire with a reduced service retirement allowance must reach age 60 or the age and service requirements for unreduced service retirement to be eligible for the Post-Retirement Benefit Increases.
 - Effective January 1, 2011, for all active members who are not eligible for retirement on January 1, 2011, the annual salary increase cap in determination of Highest Average Salary (HAS) was lowered from 15% to 8%.
 - Effective January 1, 2011, a new requirement is added that members must have five years of earned service credit in order to receive a 50% match on a refund.



- Effective January 1, 2011, the reduction factors for a reduced service retirement benefit for members not eligible to retire as of January 1, 2011 were changed to an actuarial equivalent basis.
- Effective January 1, 2011, implement a modified Rule of 85 for service retirement eligibility for members with less than 5 years of service credit as of January 1, 2011 (this rule does not apply to State Troopers).
- Effective January 1, 2011, implement a modified Rule of 88 with a minimum age of 58 for service retirement eligibility for members hired on or after January 1, 2011 but before January 1, 2017 (this rule does not apply to State Troopers).
- Effective January 1, 2011, implement a modified Rule of 90 with a minimum age of 60 for service retirement eligibility for members hired on or after January 1, 2017 (this rule does not apply to State Troopers and those participants whose last 10 years of service were in the School Division).



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, 2009 on the basis of which the valuation was prepared.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF DECEMBER 31, 2009 (\$ IN THOUSANDS)

GROUP	NUMBER	COMPENSATION
State Division	54,333	\$2,384,137
School Division	119,390	3,922,175
Local Government Division	16,166	705,097
Judicial Division	<u>317</u>	<u>37,583</u>
Total	190,206	\$7,048,992

- 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
12/31/2009	190,206	\$ 7,048,992	\$ 37,060	1.95 %
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 %



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, 2009
(\$ IN THOUSANDS)

TYPE OF RETIREMENT	GROUP				TOTAL
	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	
Service:					
Number	26,884	43,440	3,832	257	74,413
Annual Benefits	\$999,193	\$1,522,815	\$137,396	\$13,969	\$2,673,373
Disability:					
Number	3,573	3,024	685	22	7,304
Annual Benefits	\$79,128	\$61,219	\$14,729	\$952	\$156,028
Survivors*:					
Number	1,006	1,177	175	13	2,371
Annual Benefits	\$18,814	\$16,906	\$3,119	\$394	\$39,233
Total:					
Number	31,463	47,641	4,692	292	84,088
Annual Benefits	\$1,097,135	\$1,600,940	\$155,244	\$15,315	\$2,868,634

* 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, 2009, 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, 2009 AND DECEMBER 31, 2008
(\$ IN THOUSANDS)

GROUP	DECEMBER 31, 2009 MARKET VALUE	DECEMBER 31, 2008 MARKET VALUE
State Division	\$11,603,617	\$10,505,176
School Division	18,292,602	16,412,172
Local Government Division	2,571,160	2,220,318
Judicial Division	200,270	174,873
Health Care Trust Fund	<u>228,178</u>	<u>190,191</u>
Total Market Value of Assets	\$32,895,827	\$29,502,730

- The four-year market related actuarial value of assets used for the current valuation was \$37,859,328,657. Schedule B shows the development of the actuarial value of assets as of December 31, 2009. The following table shows the actuarial value of assets allocated among all divisions.

TABLE 5
COMPARISON OF ACTUARIAL VALUE OF ASSETS AT
DECEMBER 31, 2009 AND DECEMBER 31, 2008
(\$ IN THOUSANDS)

GROUP	DECEMBER 31, 2009 ACTUARIAL VALUE	DECEMBER 31, 2008 ACTUARIAL VALUE
State Division	\$13,382,736	\$13,914,371
School Division	21,054,910	21,733,329
Local Government Division	2,932,628	2,933,296
Judicial Division	228,714	230,967
Health Care Trust Fund	<u>260,341</u>	<u>255,976</u>
Total Actuarial Value of Assets	\$37,859,329	\$39,067,939



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 \$21,853,559,325, of which \$12,289,977,322 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$370,980,985 is for the prospective benefits payable on account of present inactive members, and \$9,192,601,018 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 \$13,382,736,472 as of December 31, 2009. The difference of \$8,470,822,853 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, \$1,477,659,351 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 \$6,993,163,502 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
2009	1.80%	1.00%
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013	3.40	3.00
2014	3.80	3.50
2015	4.20	4.00
2016	4.60	4.50
2017 and later	5.00	5.00



3. The valuation indicates that employer normal contributions at the rate of 2.20% of salary are required to provide the benefits for the State Division. Prospective employer normal contributions at this rate have a present value of \$398,682,805. When this amount is subtracted from \$6,993,163,502, which is the present value of the total future contributions to be made by the employers, there remains \$6,594,480,697 as the amount of future accrued liability contributions.
4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 11.41% of salary. Contributions at this level will amortize the unfunded accrued liability of \$6,594,480,697 over 43 years, assuming the aggregate payroll of the State Division increases by 4.50% each year. After recognizing the value of both future AED and future SAED contributions, the amortization period is reduced to 24 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.



School Division

1. The total valuation balance sheet on account of benefits shows that the School Division has total prospective benefit liabilities of \$34,361,644,970, of which \$18,302,853,165 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$527,859,063 is for the prospective benefits payable on account of present inactive members, and \$15,530,932,742 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 \$21,054,909,740 as of December 31, 2009. The difference of \$13,306,735,230 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, \$2,705,130,660 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 \$10,601,604,570 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). 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
2009	1.80%	1.00%
2010	2.20	1.50
2011	2.60	2.00
2012	3.00	2.50
2013	3.40	3.00
2014	3.80	3.50
2015	4.20	4.00
2016	4.50	4.50
2017	4.50	5.00
2018 and later	4.50	5.50



3. The valuation indicates that employer normal contributions at the rate of 3.75% of salary are required to provide the benefits for the School Division. Prospective employer normal contributions at this rate have a present value of \$1,243,698,909. When this amount is subtracted from \$10,601,604,570, which is the present value of the total future contributions to be made by the employers, there remains \$9,357,905,661 as the amount of future accrued liability contributions.

4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 9.82% of salary. Contributions at this level will amortize the unfunded accrued liability of \$9,357,905,661 over 44 years, assuming the aggregate payroll of the School Division increases by 4.50% each year. After recognizing the value of both future AED and future SAED contributions, the amortization period is reduced to 23 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 \$4,444,076,251, of which \$1,851,188,658 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$112,735,845 is for the prospective benefits payable on account of present inactive members, and \$2,480,151,748 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 \$2,932,628,241 as of December 31, 2009. The difference of \$1,511,448,010 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, \$459,237,315 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 \$1,052,210,695 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
2009	1.80%	1.00%
2010 and later	2.20	1.50



3. The valuation indicates that employer normal contributions at the rate of 2.44% 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 \$134,018,300. When this amount is subtracted from \$1,052,210,695, which is the present value of the total future contributions to be made by the employers, there remains \$918,192,395 as the amount of future accrued liability contributions.
4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 10.02% of salary. Contributions at this level will amortize the unfunded accrued liability of \$918,192,395 over 16 years, assuming the aggregate payroll of the Local Government Division increases by 4.50% each year.
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 \$349,206,286, of which \$164,075,254 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$1,828,967 is for the prospective benefits payable on account of present inactive members, and \$183,302,065 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 \$228,713,654 as of December 31, 2009. The difference of \$120,492,632 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, \$24,121,646 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 \$96,370,986 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
2009	1.80%	1.00%
2010 and later	2.20	1.50



3. The valuation indicates that employer normal contributions at the rate of 9.84% of salary are required to provide the benefits for the Judicial Division. Prospective employer normal contributions at this rate have a present value of \$29,388,955. When this amount is subtracted from \$96,370,986, which is the present value of the total future contributions to be made by the employers, there remains \$66,982,031 as the amount of future accrued liability contributions.
4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 6.37% of salary. Contributions at this level will amortize the unfunded accrued liability of \$66,982,031 over 65 years, assuming the aggregate payroll of the Judicial Division increases by 4.50% each year.
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 \$1,846,305,516, of which \$1,218,800,133 is for the prospective benefits payable on account of present benefit recipients enrolled in PERACare and receiving a health care subsidy pursuant to law, \$22,548,614 is for the prospective benefits payable on account of present deferred vested members, and \$604,956,769 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 \$260,340,550 as of December 31, 2009. The difference of \$1,585,964,966 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 \$1,585,964,966 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 0.21% 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 \$83,065,027. When this amount is subtracted from \$1,585,964,966, which is the present value of the total future contributions to be made by the employers, there remains \$1,502,899,939 as the amount of future accrued liability contributions.
4. After recognizing the required normal contribution rate, the remaining statutory contribution amounts to 0.81% of salary. Contributions at this level will amortize the unfunded accrued liability of \$1,502,899,939 over 53 years. The Governmental Accounting Standards Board (GASB) does not allow a plan sponsor to count the Retiree Drug Subsidy (RDS) amounts to be projected to be received from CMS as "prefunding" of the GASB 43/45 liability. However, if anticipated future RDS payments are contributed to the HCTF, the resulting unfunded accrued liability amortization period will be 41 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

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 in the tables from Section IV. These amounts are continued in each division until the division's actuarial funded ratio exceeds 103%. At that time, the amount of the AED and SAED will be reduced by 0.5% of pay each.



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	7.38%	8.83%	7.55%	14.64%	0.17%
Disability Benefits	0.29%	0.20%	0.19%	0.78%	0.01%
Survivor Benefits	0.14%	0.13%	0.15%	0.44%	0.00%
Separation Benefits	<u>2.44%</u>	<u>2.59%</u>	<u>2.55%</u>	<u>1.98%</u>	<u>0.03%</u>
Total	10.25%	11.75%	10.44%	17.84%	0.21%
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	2.20%	3.75%	2.44%	9.84%	0.21%
Employer Contribution Rate*	13.61%	13.57%	12.46%	16.21%	1.02%
Percent Available to Amortize Unfunded Actuarial Accrued Liability (UAAL)					
	11.41%	9.82%	10.02%	6.37%	0.81%
Number of Years to Amortize UAAL					
> Current Contributions	43 years	44 years	16 years	65 years	53 years
> With AED & SAED	24 years	23 years	16 years	65 years	53 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)					
	7.16%	6.85%	5.28%	15.09%	1.28%

* Weighted average for State Division.



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, 2009**

GROUP	NUMBER				
	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Retirees and survivors currently receiving benefits	31,463	47,641	4,692	292	46,738
Terminated employees entitled to benefits but not yet receiving benefits	4,623	9,968	1,274	8	15,856
Inactive Members	53,820	81,448	16,251	6	N/A
Active Members					
Vested					
General employees	29,172	62,997	8,029	243	
State troopers	592	0	0	0	
Non-vested					
General employees	24,362	56,393	8,137	74	
State troopers	<u>207</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total Active Members*	54,333	119,390	16,166	317	190,206
Totals	144,239	258,447	38,383	623	252,800

* 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)
<u>STATE DIVISION*</u>						
12/31/2009	\$13,382,736	\$19,977,217	\$6,594,481	67.0 %	\$2,384,137	276.6 %
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 %
<u>SCHOOL DIVISION*</u>						
12/31/2009	\$21,054,910	\$30,412,815	\$9,357,905	69.2 %	\$3,922,175	238.6 %
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 %
<u>LOCAL GOVERNMENT DIVISION</u>						
12/31/2009	\$2,932,628	\$3,850,821	\$918,193	76.2 %	\$705,097	130.2 %
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 %
<u>JUDICIAL DIVISION</u>						
12/31/2009	\$228,714	\$295,696	\$66,982	77.3 %	\$37,583	178.2 %
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 %
<u>HEALTH CARE TRUST FUND</u>						
12/31/2009	\$260,341	\$1,763,241	\$1,502,900	14.8 %	\$7,048,992	21.3 %
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 %	6,135,962	16.8 %
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 %

* 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, 2009.

	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Valuation Date	12/31/2009	12/31/2009	12/31/2009	12/31/2009	12/31/2009
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*	8.00%	8.00%	8.00%	8.00%	8.00%
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 1/1/07	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually	2.00% 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*			
2009	\$ 480,642	20.16 %	61 %
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 %
School Division*			
2009	\$ 735,408	18.75 %	65 %
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 %
Local Government Division			
2009	\$ 86,797	12.31 %	96 %
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 %
Judicial Division			
2009	\$ 7,468	19.87 %	77 %
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 %

* The ARC for State and School Divisions is combined in 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)
2009	\$77,875,507	\$74,072,676	\$13,633,368	\$87,706,044	113 %
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 %

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 2009

(\$ 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	\$6,584.3	\$9,266.9	\$904.8	\$57.1	\$16,813.1	\$1,112.7
b) Normal Cost	333.3	548.8	102.3	7.3	991.7	19.8
c) Total Required Contributions	672.6	1,049.2	143.2	10.5	1,875.5	73.3
d) Total Actual Contributions	487.4	789.4	140.6	8.8	1,426.2	87.7
2) End of Year:						
a) Expected UAAL from previous valuation (1a) x 1.085 + (1b) x 1.0425 – (1c) x 1.0425	\$6,790.2	\$9,532.9	\$939.1	\$58.6	17,320.8	\$1,151.4
b) Expected UAAL on actual contributions (1a) x 1.085 + (1b) x 1.0425 – (1d) x 1.0425	6,983.3	9,803.8	941.8	60.4	17,789.3	1,136.5
c) Increase in UAAL due to Deficiency (2b) – (2a)	193.1	270.9	2.7	1.8	468.5	(14.9)
3) Gains/(Losses) on Year's Activities						
a) Liability – Assumed vs. Actual	(\$22.7)	(\$235.6)	(\$18.7)	(\$8.4)	(\$285.4)	(\$64.6)
b) Assets – Assumed vs. Actual	(1,039.1)	(1,633.9)	(220.4)	(15.2)	(2,908.6)	(20.0)
c) Change in Plan Assumptions	(1,766.6)	(2,665.6)	(368.4)	(26.9)	(4,827.5)	(281.8)
d) Change in Plan Provisions	3,217.2	4,981.0	631.1	43.9	8,873.2	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	\$388.8	\$445.9	\$23.6	(\$6.6)	\$851.7	(\$366.4)
4) Actual UAAL at End of Year (2a) + (2c) – (3f)	\$6,594.5	\$9,357.9	\$918.2	\$67.0	\$16,937.6	\$1,502.9

* 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 2009 RDS payments to PERA of \$13.7 million.



Gains & Losses in Actuarial Accrued Liabilities
During Calendar Year 2009
(\$ 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.	(\$8.9)	(\$1.8)	(\$5.7)	(\$2.3)	(\$18.7)	(\$0.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	15.4	9.9	5.5	0.4	31.2	1.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.2)	(2.6)	(0.1)	0.2	(2.7)	(0.1)
Withdrawal from Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(41.8)	(92.7)	(5.0)	(0.2)	(139.7)	(4.4)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	219.3	135.9	51.4	0.5	407.1	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(46.7)	(46.8)	(7.4)	(4.6)	(105.5)	(3.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(1,039.1)	(1,633.9)	(220.4)	(15.2)	(2,908.6)	(20.0)
Death after Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(17.2)	(68.1)	(2.6)	(0.6)	(88.5)	(2.8)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(142.6)</u>	<u>(169.4)</u>	<u>(54.8)</u>	<u>(1.8)</u>	<u>(368.6)</u>	<u>(54.4)</u>
Gain (or Loss) During Year from Financial Experience	(\$1,061.8)	(\$1,869.5)	(\$239.1)	(\$23.6)	(\$3,194.0)	(\$84.6)



Gains & Losses as a Percentage of Actuarial Accrued Liabilities
During Calendar Year 2009
(\$ 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	\$20,498.7	\$31,000.2	\$3,838.1	\$288.1	\$55,625.0	\$1,368.6
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	0.0%	0.0%	-0.2%	-0.8%	0.0%	0.0%
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.1%	0.0%	0.1%	0.1%	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%	0.1%	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%	-0.3%	-0.3%
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	1.1%	0.4%	1.3%	0.2%	0.7%	0.0%
New Members. Additional unfunded accrued liability will produce a loss.	-0.2%	-0.2%	-0.2%	-1.6%	-0.2%	-0.2%
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	-5.1%	-5.3%	-5.7%	-5.3%	-5.2%	-1.6%
Death after Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	-0.1%	-0.2%	-0.1%	-0.2%	-0.2%	-0.2%
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	-0.7%	-0.6%	-1.4%	-0.6%	-0.7%	-4.0%
Gain (or Loss) During Year from Financial Experience	-5.2%	-6.0%	-6.2%	-8.2%	-5.7%	-6.2%



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)
				(5)	(6)
2009	\$7,878,395	\$261,533,889	\$269,412,284	\$80,110,149	30%
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%

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, 2009**

STATE DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$13,382,736,472
Present value of future members' contributions		1,477,659,351
Present value of future employer contributions		
Normal contributions	\$398,682,805	
Unfunded accrued liability contributions	<u>6,594,480,697</u>	
Total prospective employer contributions		<u>6,993,163,502</u>
Total Present and Prospective Assets		<u>\$21,853,559,325</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$12,289,977,322
Present value of prospective benefits payable on account of inactive members		370,980,985
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$7,861,813,804	
Disability retirement benefits	152,798,851	
Survivor benefits	98,163,556	
Separation benefits	<u>1,079,824,807</u>	
Total		<u>9,192,601,018</u>
Total Actuarial Liabilities		<u>\$21,853,559,325</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, 2009**

SCHOOL DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$21,054,909,740
Present value of future members' contributions		2,705,130,660
Present value of future employer contributions		
Normal contributions	\$1,243,698,909	
Unfunded accrued liability contributions	<u>9,357,905,661</u>	
Total prospective employer contributions		<u>10,601,604,570</u>
Total Present and Prospective Assets		<u>\$34,361,644,970</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$18,302,853,165
Present value of prospective benefits payable on account of inactive members		527,859,063
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$13,309,692,385	
Disability retirement benefits	175,406,054	
Survivor benefits	132,835,168	
Separation benefits	<u>1,912,999,135</u>	
Total		<u>15,530,932,742</u>
Total Actuarial Liabilities		<u>\$34,361,644,970</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, 2009**

LOCAL GOVERNMENT DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$2,932,628,241
Present value of future members' contributions		459,237,315
Present value of future employer contributions		
Normal contributions	\$134,018,300	
Unfunded accrued liability contributions	<u>918,192,395</u>	
Total prospective employer contributions		<u>1,052,210,695</u>
Total Present and Prospective Assets		<u>\$4,444,076,251</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$1,851,188,658
Present value of prospective benefits payable on account of inactive members		112,735,845
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$2,083,688,832	
Disability retirement benefits	30,106,933	
Survivor benefits	27,404,434	
Separation benefits	<u>338,951,549</u>	
Total		<u>2,480,151,748</u>
Total Actuarial Liabilities		<u>\$4,444,076,251</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, 2009**

JUDICIAL DIVISION

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$228,713,654
Present value of future members' contributions		24,121,646
Present value of future employer contributions		
Normal contributions	\$29,388,955	
Unfunded accrued liability contributions	<u>66,982,031</u>	
Total prospective employer contributions		<u>96,370,986</u>
Total Present and Prospective Assets		<u>\$349,206,286</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$164,075,254
Present value of prospective benefits payable on account of inactive members		1,828,967
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$167,778,325	
Disability retirement benefits	4,240,413	
Survivor benefits	3,848,411	
Separation benefits	<u>7,434,916</u>	
Total		<u>183,302,065</u>
Total Actuarial Liabilities		<u>\$349,206,286</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, 2009**

HEALTH CARE TRUST FUND

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		\$260,340,550
Present value of future members' contributions		0
Present value of future employer contributions		
Normal contributions	\$83,065,027	
Unfunded accrued liability contributions	<u>1,502,899,939</u>	
Total prospective employer contributions		<u>1,585,964,966</u>
Total Present and Prospective Assets		<u>\$1,846,305,516</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of present benefit recipients enrolled in PERACare and receiving a health care subsidy pursuant to the law		\$1,218,800,133
Present value of prospective benefits payable on account of inactive members		22,548,614
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$551,322,258	
Disability retirement benefits	19,344,849	
Survivor benefits	2,199,283	
Separation benefits	<u>32,090,379</u>	
Total		<u>604,956,769</u>
Total Actuarial Liabilities		<u>\$1,846,305,516</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)
12/31/2009	\$7,068,660	\$33,621,499	\$13,846,390	\$37,598,988	100%	90.8%	0.0%
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%	100.0%	4.1%
12/31/2006	6,742,437	29,674,682	13,073,485	36,687,042	100%	100.0%	2.1%
12/31/2005	5,755,118	26,382,911	14,614,267	34,273,165	100%	100.0%	14.6%

* Results do not include the Health Care Trust Fund.



SCHEDULE B

**DEVELOPMENT OF THE DECEMBER 31, 2009
ACTUARIAL VALUE OF ASSETS**

STATE DIVISION

(1) Actuarial Value Beginning of Year	\$ 13,914,370,734
(2) Market Value End of Year	\$ 11,603,616,627
(3) Market Value Beginning of Year	\$ 10,505,175,540
(4) Cash Flow	
a. Contributions	\$ 496,231,788
b. Benefit Payments	(1,135,386,385)
c. Administrative Expenses	(8,728,559)
d. Net Transfers	4,765,565
e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$ (643,117,591)
(5) Investment Income	
a. Market total: (2) – (3) – (4)e	\$ 1,741,558,678
b. Assumed Rate	8.50%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$ 865,607,423
d. Amount for Phased-in Recognition: (5)a – (5)c	\$ 875,951,255
(6) Phased-In Recognition of Investment Income	
a. Current Year: 0.25 x (5)d	\$ 218,987,814
b. First Prior Year	(1,245,457,751)
c. Second Prior Year	54,832,209
d. Third Prior Year	217,513,634
e. Total Recognized Investment Gain	\$ (754,124,094)
(7) Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$ 13,382,736,472



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2009
ACTUARIAL VALUE OF ASSETS**

SCHOOL DIVISION

(1)	Actuarial Value Beginning of Year	\$	21,733,328,531
(2)	Market Value End of Year	\$	18,292,602,473
(3)	Market Value Beginning of Year	\$	16,412,172,110
(4)	Cash Flow		
	a. Contributions	\$	799,595,882
	b. Benefit Payments		(1,641,661,542)
	c. Administrative Expenses		(13,225,957)
	d. Net Transfers		(4,861,321)
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(860,152,938)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	2,740,583,301
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$	1,358,478,129
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	1,382,105,172
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d	\$	345,526,293
	b. First Prior Year		(1,941,735,780)
	c. Second Prior Year		84,585,415
	d. Third Prior Year		334,880,090
	e. Total Recognized Investment Gain	\$	(1,176,743,982)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$	21,054,909,740



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2009
ACTUARIAL VALUE OF ASSETS**

LOCAL GOVERNMENT DIVISION

(1)	Actuarial Value Beginning of Year	\$	2,933,295,754
(2)	Market Value End of Year	\$	2,571,160,415
(3)	Market Value Beginning of Year	\$	2,220,317,807
(4)	Cash Flow		
	a. Contributions	\$	145,044,551
	b. Benefit Payments		(171,192,285)
	c. Administrative Expenses		(2,160,285)
	d. Net Transfers		(1,818,570)
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(30,126,589)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	380,969,197
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$	187,446,634
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	193,522,563
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d	\$	48,380,641
	b. First Prior Year		(258,513,846)
	c. Second Prior Year		10,417,943
	d. Third Prior Year		41,727,704
	e. Total Recognized Investment Gain	\$	(157,987,558)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$	2,932,628,241



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2009
ACTUARIAL VALUE OF ASSETS**

JUDICIAL DIVISION

(1)	Actuarial Value Beginning of Year	\$	230,967,047
(2)	Market Value End of Year	\$	200,269,609
(3)	Market Value Beginning of Year	\$	174,872,897
(4)	Cash Flow		
	a. Contributions	\$	8,747,254
	b. Benefit Payments		(15,209,375)
	c. Administrative Expenses		(21,080)
	d. Net Transfers		1,914,325
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(4,568,876)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	29,965,588
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$	14,670,019
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	15,295,569
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d	\$	3,823,892
	b. First Prior Year		(20,362,925)
	c. Second Prior Year		810,128
	d. Third Prior Year		3,374,369
	e. Total Recognized Investment Gain	\$	(12,354,536)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$	228,713,654



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE DECEMBER 31, 2009
ACTUARIAL VALUE OF ASSETS**

HEALTH CARE TRUST FUND

(1)	Actuarial Value Beginning of Year	\$	255,976,429
(2)	Market Value End of Year	\$	228,177,870
(3)	Market Value Beginning of Year	\$	190,191,487
(4)	Cash Flow		
	a. Contributions	\$	203,064,132
	b. Benefit Payments		(192,656,411)
	c. Other Income and Expenses		4,266,400
	d. Administrative Expenses		(12,170,009)
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	2,504,112
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	35,482,271
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)e x (5)b x 0.5]	\$	16,272,701
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	19,209,570
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d	\$	4,802,393
	b. First Prior Year		(23,758,691)
	c. Second Prior Year		947,527
	d. Third Prior Year		3,596,079
	e. Total Recognized Investment Gain	\$	(14,412,692)
(7)	Actuarial Value End of Year: (1) + (4)e + (5)c + (6)e	\$	260,340,550



SCHEDULE C

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2009**

STATE DIVISION

Additions for the Year

Contributions:		
Members (including purchased service)	\$	202,997,707
Employers		<u>293,234,081</u>
Total	\$	496,231,788
Net Investment Income		<u>1,741,558,678</u>
TOTAL	\$	2,237,790,466

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$	1,132,144,465
Transfers		(4,765,565)
Other deductions		3,241,920
Administrative Expenses		<u>8,728,559</u>
TOTAL	\$	<u>1,139,349,379</u>

Excess of Additions Over Deductions \$ 1,098,441,087

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2008	\$	10,505,175,540
Excess of Additions over Deductions		<u>1,098,441,087</u>
Market Value of Assets as of 12/31/2009*	\$	<u>11,603,616,627</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 \$11,611,757,848 and includes the amount in the Annual Increase Reserve of \$8,141,221 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, 2009**

SCHOOL DIVISION

Additions for the Year

Contributions:

Members (including purchased service)	\$ 324,723,471	
Employers	<u>474,872,411</u>	
Total		\$ 799,595,882

Net Investment Income 2,740,583,301

TOTAL \$ 3,540,179,183

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$ 1,637,411,519	
Transfers	4,861,321	
Other deductions	4,250,023	
Administrative Expenses	<u>13,225,957</u>	
TOTAL		\$ <u>1,659,748,820</u>

Excess of Additions Over Deductions \$ 1,880,430,363

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2008	\$ 16,412,172,110	
Excess of Additions over Deductions	<u>1,880,430,363</u>	
Market Value of Assets as of 12/31/2009*		\$ <u>18,292,602,473</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 \$18,302,812,561 and includes the amount in the Annual Increase Reserve of \$10,210,088 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, 2009**

LOCAL GOVERNMENT DIVISION

Additions for the Year

Contributions:

Members (including purchased service)	\$ 62,058,117
Employers	<u>82,986,434</u>

Total	\$ 145,044,551
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Net Investment Income	<u>380,969,197</u>
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TOTAL	\$ 526,013,748
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Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$ 170,275,003
Transfers	1,818,570
Other deductions	917,282
Administrative Expenses	<u>2,160,285</u>

TOTAL	<u>\$ 175,171,140</u>
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<u>Excess of Additions Over Deductions</u>	<u>\$ 350,842,608</u>
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Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2008	\$ 2,220,317,807
Excess of Additions over Deductions	<u>350,842,608</u>
Market Value of Assets as of 12/31/2009*	<u>\$ 2,571,160,415</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 \$2,574,274,916 and includes the amount in the Annual Increase Reserve of \$3,114,501 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, 2009**

JUDICIAL DIVISION

Additions for the Year

Contributions:

Members (including purchased service)	\$ 2,997,815
Employers	<u>5,749,439</u>
Total	\$ 8,747,254

Net Investment Income 29,965,588

TOTAL \$ 38,712,842

Deductions for the Year

Benefit Payments (including refunds and disability insurance)	\$ 15,072,264
Transfers	(1,914,325)
Other deductions	137,111
Administrative Expenses	<u>21,080</u>
TOTAL	<u>\$ 13,316,130</u>

Excess of Additions Over Deductions \$ 25,396,712

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2008	\$ 174,872,897
Excess of Additions over Deductions	<u>25,396,712</u>
Market Value of Assets as of 12/31/2009*	<u>\$ 200,269,609</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 \$200,354,534 and includes the amount in the Annual Increase Reserve of \$84,925 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, 2009**

HEALTH CARE TRUST FUND

Additions for the Year

Contributions:

Members' Purchase Service Transfers	\$ 8,454,950
Employers	74,072,676
Retiree Health Care Premiums	106,903,138
Medicare Retiree Drug Subsidy	<u>13,633,368</u>

Total \$ 203,064,132

Net Investment Income 35,482,271

TOTAL \$ 238,546,403

Deductions for the Year

Benefit Payments	\$ 192,656,411
Other Income and Expenses	(4,266,400)
Administrative Expenses	<u>12,170,009</u>

TOTAL \$ 200,560,020

Excess of Additions Over Deductions \$ 37,986,383

Reconciliation of Asset Balances

Market Value of Assets as of 12/31/2008	\$ 190,191,487
Excess of Additions over Deductions	<u>37,986,383</u>
Market Value of Assets as of 12/31/2009	<u>\$ 228,177,870</u>



SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.00% 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.

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.

OPTIONAL BENEFIT LOADS: 1.00% for active member retirement liability to reflect the availability of a pop-up option and .75% to reflect the value of the modified cash refund normal form.



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			Total Increase (Next Year)
	Merit & Seniority	Inflation & Productivity (Economy)		
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%	0.022%	0.014%	0.01%	0.01%
25	10.00	10.00	0.028	0.015	0.02	0.02
30	6.50	9.00	0.036	0.016	0.03	0.03
35	6.00	8.00	0.042	0.021	0.05	0.05
40	5.00	6.00	0.045	0.030	0.09	0.09
45	4.20	5.00	0.063	0.044	0.14	0.14
50	4.20	5.00	0.095	0.060	0.20	0.20
55	4.20	5.00	0.161	0.095	0.28	0.28
60	4.20	5.00	0.279	0.168	0.40	0.40
65	4.20	5.00	0.507	0.334	0.60	0.60

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	43.0%	43.0%
1	20.0	22.0
2	15.0	16.0
3	12.0	13.0
4	10.0	11.0

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	20%	18%	45%	45%
51	15	14	35	32
52	13	13	35	32
53	13	10	30	27
54	18	18	30	27
55	12	18	25	30
56	12	13	25	20
57	12	11	22	22
58	14	11	22	22
59	12	20	20	22
60	12	14	22	22
61	10	10	20	22
62	12	12	22	25
63	15	12	22	22
64	15	12	22	18
65	0	0	27	28
66	0	0	25	28
67	0	0	25	23
68	0	0	20	22
69	0	0	20	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	10.00%	10.00%	0.022%	0.014%	0.02%	0.02%
25	10.00	10.00	0.028	0.015	0.04	0.04
30	5.00	5.00	0.036	0.016	0.06	0.06
35	4.00	4.00	0.042	0.021	0.10	0.10
40	3.50	3.50	0.045	0.030	0.18	0.18
45	3.50	3.50	0.063	0.044	0.28	0.28
50	3.50	3.50	0.095	0.060	0.40	0.40
55	3.50	3.50	0.161	0.095	0.56	0.56
60	3.50	3.50	0.279	0.168	0.80	0.80
65	3.50	3.50	0.507	0.334	1.20	1.20

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	10%	35%
51	10	30
52	10	30
53	10	30
54	10	30
55	10	30
56	10	30
57	10	30
58	10	30
59	10	30
60	10	30
61	10	30
62	10	30
63	10	30
64	10	30
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	12.00%	14.50%	0.022%	0.014%	0.01%	0.01%
25	10.00	12.00	0.028	0.015	0.01	0.01
30	5.50	8.00	0.036	0.016	0.01	0.01
35	4.00	6.50	0.042	0.021	0.02	0.02
40	4.00	5.00	0.045	0.030	0.04	0.04
45	4.00	4.50	0.063	0.044	0.08	0.08
50	4.00	4.50	0.095	0.060	0.14	0.14
55	4.00	4.50	0.161	0.095	0.21	0.21
60	4.00	4.50	0.279	0.168	0.30	0.30
65	4.00	4.50	0.507	0.334	0.41	0.41

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	39.0%	36.0%
1	20.0	19.0
2	15.0	14.0
3	11.0	11.0
4	10.0	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	12%	12%	45%	45%
51	12	12	38	34
52	12	12	38	35
53	10	12	35	35
54	16	18	32	35
55	18	18	28	30
56	10	12	25	25
57	10	15	25	25
58	10	18	25	25
59	18	18	25	25
60	12	13	25	25
61	10	13	25	25
62	14	15	28	25
63	14	15	25	25
64	14	15	22	25
65	0	0	30	28
66	0	0	20	22
67	0	0	20	22
68	0	0	20	22
69	0	0	16	22
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			Total Increase (Next Year)
	Merit & Seniority	Inflation & Productivity (Economy)		
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%	0.022%	0.014%	0.01%	0.01%
25	11.00	12.00	0.028	0.015	0.01	0.01
30	7.00	11.00	0.036	0.016	0.01	0.01
35	6.00	8.00	0.042	0.021	0.02	0.02
40	5.00	6.00	0.045	0.030	0.04	0.04
45	4.00	5.00	0.063	0.044	0.08	0.08
50	4.00	5.50	0.095	0.060	0.14	0.14
55	4.00	5.50	0.161	0.095	0.21	0.21
60	4.00	5.50	0.279	0.168	0.30	0.30
65	4.00	5.50	0.507	0.334	0.41	0.41

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	39.0%	37.0%
1	19.0	21.0
2	13.0	16.0
3	11.0	13.0
4	10.0	11.0

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%	45%	45%
51	12	17	25	35
52	12	20	22	35
53	12	10	22	35
54	20	20	22	35
55	10	20	22	23
56	12	10	22	23
57	13	15	22	25
58	13	17	22	25
59	15	20	22	25
60	15	10	25	20
61	15	12	20	17
62	18	12	20	25
63	13	12	20	30
64	10	12	25	14
65	0	0	30	35
66	0	0	27	20
67	0	0	27	20
68	0	0	27	25
69	0	0	27	20
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	2.00%	2.00%	0.036%	0.016%	0.01%	0.01%
35	2.00	2.00	0.042	0.021	0.04	0.04
40	2.00	2.00	0.045	0.030	0.08	0.08
45	2.00	2.00	0.063	0.044	0.14	0.14
50	2.00	2.00	0.095	0.060	0.22	0.22
55	2.00	2.00	0.161	0.095	0.32	0.32
60	2.00	2.00	0.279	0.168	0.44	0.44
65	2.00	2.00	0.507	0.334	0.60	0.60

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	13	13
60	13	13
61	13	13
62	13	13
63	13	13
64	10	10
65	0	10
66	0	10
67	0	10
68	0	25
69	0	40
70 & over	0	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 2.0% Annually		Future Life Expectancy (Years)	
	Males	Females	Males	Females	Males	Females
40	\$147.11	\$149.29	\$187.13	\$191.40	43.02	46.45
45	143.59	146.54	180.46	185.84	38.23	41.61
50	138.77	142.73	172.01	178.71	33.49	36.80
55	132.36	137.48	161.52	169.64	28.85	32.05
60	124.13	130.44	148.88	158.33	24.39	27.39
65	114.05	121.60	134.30	144.96	20.18	22.96
70	102.60	111.26	118.51	130.07	16.37	18.86
75	90.03	98.86	101.95	113.20	12.98	15.04
80	76.17	84.51	84.56	94.74	9.96	11.57
85	62.26	69.31	67.81	76.09	7.44	8.58



SCHEDULE D

(Continued)

METHODS AND ASSUMPTIONS SPECIFIC TO THE HEALTH CARE TRUST FUND

Health Care Participation Rates

Current PERACare participants are assumed to maintain their current health care benefit elections in perpetuity. For active members retiring directly from PERA, the following participation rates are assumed:

Attained Age(s)	Percent Electing Health Care Coverage
15-48	15%
49	25%
50	30%
51-52	35%
53-55	40%
56-57	45%
58-62	50%
63-64	55%
65-73	60%
74+	65%

The participation of current members and future retirees is adjusted to reflect the increasing rate of participation with age, as described in the above table.

For deferred vested members, 25% are assumed to elect health care coverage upon commencement of their PERA monthly benefit.

For spousal participation, actual census data and current plan elections of current retirees were used. For spouses of deferred vested members and future retirees, 25% are assumed to elect coverage for their spouse.

Health Care Plan Election Rates

Plan elections for future retirees are assumed as follows:

Plan	Percent Electing Plan
Self-Funded Medicare Supplement Plans	60%
Kaiser Permanente Medicare Advantage HMO	25%
Rocky Mountain Health Plans Medicare HMO	10%
Secure Horizons Medicare Advantage HMO	5%



SCHEDULE D
(Continued)

Initial Health Care Cost Rates

In determining the liability associated with the “No Part A” subsidy, the following monthly costs and premiums are assumed for 2010, and are subject to the Health Care Cost Trend Rates:

Self Funded Medicare Supplement Plans		Kaiser Permanente Medicare Advantage HMO	
Claims for Members without Medicare Part A	Claims for Members with Medicare Part A	Premiums for Members without Medicare Part A	Premiums for Members with Medicare Part A
\$350	\$48	\$614	\$163

Rocky Mountain Health Plans Medicare HMO		Secure Horizons Medicare Advantage HMO		Medicare Part A Premiums
Premiums for Members without Medicare Part A	Premiums for Members with Medicare Part A	Premiums for Members without Medicare Part A	Premiums for Members with Medicare Part A	
\$538	\$225	\$521	\$163	\$461

Monthly Retiree Drug Subsidy Payments

In determining the liability associated with the RDS subsidy, the following monthly payments are assumed for 2010, and are subject to the Health Care Cost Trend Rates:

Plan	Estimated Retiree Drug Subsidy Payment
Self- Funded Medicare Supplement Plan #1 (MS#1)	\$50.97
Self- Funded Medicare Supplement Plan #2 (MS#2)	\$34.80
Self- Funded Medicare Supplement Plan #3 (MS#3)	\$34.80
Kaiser Permanente Medicare Advantage HMO*	\$ 0.00
Rocky Mountain Health Plans Medicare HMO	\$37.00
Secure Horizons Medicare Advantage HMO*	\$ 0.00

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

75% of those enrollees participating in the self-funded plans are assumed to elect MS#1.



SCHEDULE D
(Continued)

Health Care Cost Trend Rates

Year	Self Funded Medicare Supplement Plans		Kaiser Permanente Medicare Advantage HMO	
	"Part A" Claims	Part A Deductible	No Part A Premiums	With Part A Premiums
2010	9.09%	4.50%	8.27%	7.05%
2011	8.18%	4.50%	7.55%	6.59%
2012	7.27%	4.50%	6.82%	6.14%
2013	6.36%	4.50%	6.09%	5.68%
2014	5.91%	4.50%	5.73%	5.45%
2015	5.45%	4.50%	5.36%	5.23%
2016	5.00%	4.50%	5.00%	5.00%
2017+	5.00%	4.50%	5.00%	5.00%

Year	Rocky Mountain Health Plans Medicare HMO		Secure Horizons Medicare Advantage HMO		Medicare Part A Premiums	Retiree Drug Subsidy Payments
	Without Medicare Part A Premiums	With Medicare Part A Premiums	Without Medicare Part A Premiums	With Medicare Part A Premiums		
2010	7.05%	6.23%	9.91%	9.09%	4.25%	5.75%
2011	6.59%	5.95%	8.82%	8.18%	4.25%	6.00%
2012	6.14%	5.68%	7.73%	7.27%	4.25%	6.25%
2013	5.68%	5.41%	6.64%	6.36%	4.25%	6.25%
2014	5.45%	5.27%	6.09%	5.91%	4.25%	6.25%
2015	5.23%	5.14%	5.55%	5.45%	4.25%	7.25%
2016	5.00%	5.00%	5.00%	5.00%	4.25%	7.50%
2017+	5.00%	5.00%	5.00%	5.00%	4.25%	7.75%

The service-based PERA subsidy is assumed to remain constant at its current level.

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 rates of morbidity, or, an aging curve, modeling the growth in assumed claims as a member ages. The service-based PERA subsidy for health care does not result in annually increasing costs to the HCTF as a member ages (excluding the subsidy reduction at age 65 or the costs associated with Medicare disability eligibility). The "No Part A" and RDS subsidies are assumed not to vary materially as a member ages. Therefore, no morbidity assumptions are utilized in the determination of HCTF liabilities.



SCHEDULE D
(Continued)

Assumptions Specific to the “No Part A” Subsidy

Under Colorado Revised Statute 24-51-1206(4), the premiums charged to a member who is age sixty-five or older and who is not eligible for benefits under Medicare Part A shall be no greater than the premium charged to a member eligible for benefits under Medicare Part A with the same plan option, coverage level, and service credit. As a result, an additional “No Part A” subsidy is paid by the HCTF on behalf of those benefit recipients who are age sixty-five or older and are not eligible for benefits under Medicare Part A.

For those current members who are age 65 and older, the Medicare Part A eligibility status is provided by PERA and is assumed to be maintained in perpetuity. For current members not yet age 65, hired prior to April 1, 1986, and not assumed eligible for premium-free Medicare Part A coverage through their spouse, and for those active employees hired prior to April 1, 1986, 20% are assumed to not qualify for premium-free Medicare Part A coverage; thus qualifying for the “No Part A” subsidy from the HCTF.

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 premium-free Medicare Part A coverage either through their own work history or that of their spouse or ex-spouse.

95% of members receiving health care benefits as a result of disability retirement are assumed to qualify for premium-free Medicare Part A coverage.

100% of deferred vested members receiving health care benefits are assumed to obtain the 40 or more quarters of Medicare-covered employment required for premium-free Medicare Part A coverage as a result of their subsequent employment.

Currently, the additional plan costs or premiums associated with those members not eligible for premium-free Medicare Part A coverage are less than the costs of PERA paying the Medicare Part A premium on behalf of its members. However, future increases in the additional costs or premiums associated with members not eligible for premium-free Medicare Part A coverage may exceed the Medicare Part A premium. As a result, it is assumed PERA will make the decision to pay the Medicare Part A premium when more cost-effective to do so. In making the decision to pay the Medicare Part A premium on behalf of its members, it is assumed PERA’s decision will: be based upon the legal ability to do so; consider the level of additional plan costs under all of PERACare’s Medicare plan offerings in aggregate; and include the premium penalties associated with late enrollment in Medicare Part A.

The premium penalty associated with enrollment in Medicare Part A after initial eligibility 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 initial eligibility at age 65.



SCHEDULE D

(Continued)

Retiree Drug Subsidy (RDS) under Medicare Part D:

The HCTF receives the Medicare Retiree Drug Subsidy (RDS) for those benefit recipients participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans. The HCTF uses each year's estimated RDS payments to reduce the premium paid by the members of these plans, thus creating a liability under GASB Statements No. 43 and No. 45 for those future years the plans are projected to be eligible to receive the RDS.

As the service-based premium subsidy does not increase over time, members are required to pay the entire increase in annual health care costs each year, resulting in monthly contributions that increase more rapidly over time than the total cost of coverage. As a result, the prescription drug benefit provided to those members covered under the plans receiving the RDS is expected to lose its status as a Qualified Retiree Prescription Drug Plan by failing the Actuarial Equivalence Test at some point in the future, resulting in a termination of the RDS. This valuation assumes PERA will last qualify for an RDS payment in 2017, 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 8.00%). 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 2010.

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 For members, not in the Judicial Division, who are eligible for retirement as of January 1, 2011 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 are not eligible for retirement as of January 1, 2011, 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

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	State Division	Schools Division
2006	0.50%	0.50%
2007	1.00%	1.00%
2008	1.40%	1.40%
2009	1.80%	1.80%
2010	2.20%	2.20%
2011	2.60%	2.60%
2012	3.00%	3.00%
2013	3.40%	3.40%
2014	3.80%	3.80%
2015	4.20%	4.20%
2016	4.60%	4.50%
2017 & after	5.00%	4.50%

If, at any time, the actuarial funded ratio for a division is 103% or more, then the amount of the disbursement shall be reduced by 0.5% of pay.

**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	State Division	Schools Division
2008	0.50%	0.50%
2009	1.00%	1.00%
2010	1.50%	1.50%
2011	2.00%	2.00%
2012	2.50%	2.50%
2013	3.00%	3.00%
2014	3.50%	3.50%
2015	4.00%	4.00%
2016	4.50%	4.50%
2017	5.00%	5.00%
2018	5.00%	5.50%

If, at any time, the actuarial funded ratio for a division is 103% or more, then the amount of the disbursement shall be reduced by 0.5% of pay.

* For the Local Government and Judicial Divisions, the AED and SAED contributions are frozen at the 2010 levels.



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.

Effective January 1, 2011, members must have five years of earned service credit in order to receive the 50% match on a refund.



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, and who have more than 5 years of service credit as of 1/1/2011**

Age	Service Credit
Any Age	35
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 1/1/2007, or who have less than 5 years of service credit as of 1/1/2011**

Age	Service Credit
Any Age	35
55	30
55	Age and Service = 85 years or more
60	25
65	5
65	Less than 5 but 60 payroll postings



- **Members, except State Troopers, hired on and after 1/1/2011 but before 1/1/2017**

Age	Service Credit
58	Age and Service = 88 years or more
65	5
65	Less than 5 but 60 payroll postings

- **Members, except State Troopers and participants whose last 10 years of service were in School Division, hired on and after 1/1/2017**

Age	Service Credit
60	Age and Service = 90 years or more
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.

Effective 1/1/2011, for all members that are not retirement eligible on 1/1/2011, the service retirement benefit calculated above shall be reduced using actuarial equivalent factors, 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 July 1, benefits which have been paid for at least twelve months preceding July 1 are increased. The increase is 2.0% compounded annually for each year of retirement (the lesser of that or the annual CPI-W increase for 2010). However, if the investment return for the prior year is negative, then the Increase will be an amount equal to the annual CPI-W increase with a cap of 2%. In addition, the Increase will be first paid on the July 1 that is at least 12 months after retirement for those members who retire on or after January 1, 2011. Members not eligible to retire as of January 1, 2011 who retire with a reduced service retirement allowance must reach age 60 or the age and service requirements for unreduced service retirement to be eligible for the Post-Retirement Benefit Increases.

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, domestic partners, unmarried, dependent children under age 25, certain mentally or physically incapacitated adult children, and dependent parents.</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. If a surviving spouse or divorced spouse discontinues coverage, re-enrollment is not allowed.</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 data-bbox="609 1171 1446 1297" 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 HCTF 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 premium-free 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 Premium-Free Medicare Part A Coverage:

The HCTF pays an implicit subsidy for members not eligible for premium-free Medicare Part A coverage. For members in the fully-insured HMOs, this amount is the difference in premiums charged for those without Medicare Part A and for those enrolled in Medicare Part A. For the self-funded plans, this amount is the assumed difference in claims costs for services covered under Medicare Part A between members without Medicare Part A coverage and those enrolled in Medicare Part A.

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 2010 are the Self-Funded Medicare Supplement plans and the Rocky Mountain Health Plan Medicare HMO.



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2009**

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	209	0	0	0	0	0	0	209	\$ 1,181,563
20 to 24	1,387	7	0	0	0	0	0	1,394	\$ 24,940,852
25 to 29	3,474	408	12	0	0	0	0	3,894	\$ 119,521,170
30 to 34	3,377	1,412	278	2	0	0	0	5,069	\$ 190,156,062
35 to 39	2,873	1,598	1,078	231	4	0	0	5,784	\$ 251,704,690
40 to 44	2,651	1,533	1,227	800	319	22	0	6,552	\$ 306,325,095
45 to 49	4,363	1,597	1,183	951	789	496	55	9,434	\$ 416,303,448
50 to 54	2,430	1,553	1,153	1,052	965	879	342	8,374	\$ 420,806,726
55 to 59	1,929	1,334	1,036	995	881	617	432	7,224	\$ 361,201,634
60	293	226	179	136	151	100	72	1,157	\$ 55,756,772
61	298	195	155	121	112	86	59	1,026	\$ 50,458,861
62	244	163	126	119	96	74	61	883	\$ 41,536,112
63	230	183	115	100	102	74	57	861	\$ 41,450,854
64	143	121	80	68	43	43	48	546	\$ 25,996,384
65	128	89	71	64	44	35	32	463	\$ 21,762,648
66	92	56	47	45	32	27	29	328	\$ 16,023,293
67	83	65	27	29	25	11	30	270	\$ 10,792,287
68	64	26	21	21	23	6	12	173	\$ 7,462,247
69	53	28	19	11	13	12	11	147	\$ 5,630,907
70 & Over	248	96	70	48	32	19	32	545	\$ 15,125,239
Total	24,569	10,690	6,877	4,793	3,631	2,501	1,272	54,333	\$ 2,384,136,844

Average Age (Non-Trooper): 45.91
 Average Service (Non-Trooper): 8.94
 Average Age (Trooper): 40.10
 Average Service (Trooper): 11.04



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2009**

SCHOOL DIVISION

Attained Age	Completed Years of Service								Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total	
Under 20	891	0	0	0	0	0	0	891	\$ 4,880,119
20 to 24	4,197	85	0	0	0	0	0	4,282	\$ 66,855,573
25 to 29	9,465	1,284	37	0	0	0	0	10,786	\$ 295,995,459
30 to 34	7,266	4,693	606	16	0	0	0	12,581	\$ 417,621,940
35 to 39	6,789	3,836	2,750	423	8	0	0	13,806	\$ 478,208,519
40 to 44	8,042	3,764	2,521	1,890	339	12	0	16,568	\$ 545,153,169
45 to 49	6,733	4,382	2,563	1,871	1,593	613	37	17,792	\$ 607,768,399
50 to 54	5,195	3,817	2,822	2,026	1,616	1,742	456	17,674	\$ 650,178,992
55 to 59	3,564	2,573	1,954	1,994	1,529	1,143	705	13,462	\$ 510,727,845
60	568	391	266	294	232	168	89	2,008	\$ 74,885,707
61	532	336	229	220	204	157	96	1,774	\$ 65,136,232
62	487	310	206	169	171	120	85	1,548	\$ 53,054,428
63	512	289	213	149	149	90	74	1,476	\$ 47,412,732
64	297	182	107	107	78	57	40	868	\$ 26,589,764
65	297	145	80	86	55	48	32	743	\$ 20,331,831
66	262	127	73	49	41	32	18	602	\$ 14,849,471
67	250	101	46	45	26	19	15	502	\$ 10,593,866
68	187	81	42	32	12	24	8	386	\$ 7,425,810
69	168	55	33	30	14	13	7	320	\$ 6,041,380
70 & Over	691	301	139	70	46	29	45	1,321	\$ 18,463,994
Total	56,393	26,752	14,687	9,471	6,113	4,267	1,707	119,390	\$ 3,922,175,230

Average Age: 44.21
Average Service: 7.98



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2009**

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	422	0	0	0	0	0	0	422	\$ 1,741,661
20 to 24	813	18	0	0	0	0	0	831	\$ 12,314,386
25 to 29	1,144	184	12	0	0	0	0	1,340	\$ 42,078,690
30 to 34	1,044	417	88	3	0	0	0	1,552	\$ 61,421,008
35 to 39	980	538	205	59	3	0	0	1,785	\$ 79,705,255
40 to 44	1,026	569	286	140	57	6	0	2,084	\$ 96,533,734
45 to 49	828	582	344	233	187	139	31	2,344	\$ 123,092,302
50 to 54	707	545	326	273	231	219	90	2,391	\$ 127,731,870
55 to 59	541	378	241	202	186	117	96	1,761	\$ 93,838,966
60	101	77	36	27	23	19	18	301	\$ 15,172,188
61	73	58	37	24	19	20	9	240	\$ 12,551,144
62	44	60	20	26	24	4	8	186	\$ 9,296,930
63	55	55	24	18	21	10	14	197	\$ 8,839,745
64	44	28	14	12	6	9	9	122	\$ 5,346,048
65	39	26	15	5	8	5	3	101	\$ 3,628,508
66	36	24	9	10	4	2	6	91	\$ 3,434,037
67	38	21	4	7	1	8	5	84	\$ 2,802,515
68	34	20	1	4	1	3	0	63	\$ 1,613,554
69	25	11	2	2	4	0	0	44	\$ 780,974
70 & Over	143	46	18	14	1	2	3	227	\$ 3,173,520
Total	8,137	3,657	1,682	1,059	776	563	292	16,166	\$ 705,097,035

Average Age: 43.76

Average Service: 7.71



SCHEDULE G

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF DECEMBER 31, 2009**

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	0	0	0	0	0	0	0	0	\$ 0
35 to 39	3	1	0	0	0	0	0	4	\$ 284,846
40 to 44	13	10	3	1	1	0	0	28	\$ 3,319,646
45 to 49	18	7	7	4	4	1	0	41	\$ 4,907,299
50 to 54	16	15	9	8	8	3	0	59	\$ 7,096,445
55 to 59	13	18	11	11	9	7	5	74	\$ 8,956,324
60	4	1	2	5	4	3	2	21	\$ 2,349,663
61	2	5	1	4	6	1	3	22	\$ 2,402,380
62	1	0	3	3	3	3	1	14	\$ 1,751,966
63	2	4	0	1	2	4	1	14	\$ 1,667,202
64	0	0	4	2	0	0	2	8	\$ 1,009,865
65	0	1	2	1	2	2	0	8	\$ 1,019,083
66	1	1	2	0	1	1	2	8	\$ 876,110
67	0	0	0	1	0	0	2	3	\$ 390,903
68	1	2	0	2	0	0	0	5	\$ 535,190
69	0	0	0	0	3	0	3	6	\$ 747,413
70 & Over	0	0	0	1	1	0	0	2	\$ 268,326
Total	74	65	44	44	44	25	21	317	\$ 37,582,661

Average Age: 55.41

Average Service: 13.79