

May 23, 2007

Mr. Karl Paulson Manager of Strategic Innovation Public Employees' Retirement Association of Colorado 1300 Logan Street Denver, Colorado 80203-2386

Dear Mr. Paulson:

Enclosed are 1 unbound and 40 bound copies of the "Report on the Actuarial Valuation of the Public Employees' Retirement Association of Colorado prepared as of December 31, 2006".

Please let us know if you have any questions concerning the report.

Sincerely,

Thomas J. Cavaraugh Thomas J. Cavanaugh, FSA, FCA, EA, MAAA

Chief Executive Officer

TJC:sh

Enclosure

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

Prepared as of December 31, 2006



May 23, 2007

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

Dear Trustees:

We are pleased to submit the results of the annual actuarial valuation of the Public Employees' Retirement Association of Colorado (PERA), prepared as of December 31, 2006.

The purpose of this report is to provide a summary of the funded status of PERA as of December 31, 2006, 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			
	Basic	With AED	With AED & SAED	
State Division	Infinite	Infinite	Infinite	
School Division	Infinite	Infinite	52 years	
Local Government Division	48 years	32 years	17 years	
Judicial Division	Infinite	Infinite	28 years	
Health Care Trust Fund (HCTF)*	37 years	37 years	37 years	

<sup>\*</sup> 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 30 years.



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

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.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of PERA.

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

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

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA

Thomas J. Cavaraugh

Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA

President

TJC/EAM:sh



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## REPORT ON THE ACTUARIAL VALUATION OF THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO PREPARED AS OF DECEMBER 31, 2006

#### **SECTION I - SUMMARY OF PRINCIPAL RESULTS**

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	12/31/2006	12/31/2005
Number of Active Non-Troopers	52,096	52,576
Annual Covered Payroll*	\$ 2,050,760	\$ 2,016,683
Number of Active Troopers	770	775
Annual Covered Payroll*	\$ 48,565	\$ 48,081
Total Number of Active Members	52,866	53,351
Total Annual Covered Payroll	\$ 2,099,325	\$ 2,064,764
Number of Retired Members and Survivors	28,804	27,820
Annual Retirement Benefits	\$ 874,223	\$ 802,995
Total Assets:		
Actuarial Value	\$ 13,327,290	\$ 12,536,916
Market Value	\$ 14,041,260	\$ 12,629,060
Actuarial Accrued Liability	\$ 18,246,010	\$ 17,541,744
Unfunded Actuarial Accrued Liability (UAAL)	\$ 4,918,720	\$ 5,004,828
CONTRIBUTIONS FOR FISCAL YEAR ENDING		
Employer Contribution Rate:		
Normal	5.99%	6.14%
Accrued Liability	<u>12.46%</u>	<u>11.09%</u>
Annual Required Contribution	18.45%	17.23%
Reduction for AED and SAED	(5.26)%	(2.37)%
Total Employer Contribution Rate	13.19%	14.86%
Amortization Period	30 years	40 years

<sup>\*</sup> Covered Payroll for 2005 was ratioed from Valuation Payroll from the prior actuary's report.



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

VALUATION DATE	12/31/2006	12/31/2005
Number of Active Members	113,288	111,449
Annual Covered Payroll	\$ 3,371,186	\$ 3,241,214
Number of Retired Members and Survivors	42,127	40,065
Annual Retirement Benefits	\$ 1,256,884	\$ 1,140,981
Assets:		
Actuarial Value	\$ 20,535,733	\$ 19,184,225
Market Value	\$ 21,635,957	\$ 19,327,602
Actuarial Accrued Liability	\$ 27,708,682	\$ 25,963,972
Unfunded Actuarial Accrued Liability (UAAL)	\$ 7,172,949	\$ 6,779,747
CONTRIBUTION FOR FISCAL YEAR ENDING		
Employer Contribution Rate:		
Normal	5.87%	6.53%
Accrued Liability	<u>11.31%</u>	<u>9.53%</u>
Annual Required Contribution	17.18%	16.06%
Reduction for AED and SAED	<u>(5.26)%</u>	<u>(2.69)%</u>
Total Employer Contribution Rate	11.92%	13.37%
Amortization Period	30 years	40 years



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

VALUATION DATE	12/31/2006	12/31/2005
Number of Active Members	15,959	15,555
Annual Covered Payroll	\$ 636,300	\$ 607,217
Number of Retired Members and Survivors	3,835	3,578
Annual Retirement Benefits	\$ 107,856	\$ 94,963
Assets:		
Actuarial Value	\$ 2,613,386	\$ 2,358,719
Market Value	\$ 2,751,071	\$ 2,377,471
Actuarial Accrued Liability	\$ 3,288,421	\$ 3,022,624
Unfunded Actuarial Accrued Liability (UAAL)	\$ 675,035	\$ 663,905
CONTRIBUTIONS FOR FISCAL YEAR ENDING		
Employer Contribution Rate:		1
Normal	6.31%	6.22%
Accrued Liability	<u>5.64%</u>	<u>4.99%</u>
Annual Required Contribution	11.95%	11.21%
Reduction for AED and SAED	<u>(5.26)%</u>	<u>(2.51)%</u>
Total Employer Contribution Rate	6.69%	8.70%
Amortization Period	30 years	40 years



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

VALUATION DATE	12/31/2006	12/31/2005
Number of Active Members	291	275
Annual Covered Payroll	\$ 29,151	\$ 26,937
Number of Retired Members and Survivors	258	252
Annual Retirement Benefits	\$ 11,095	\$ 10,078
Assets:		
Actuarial Value	\$ 210,633	\$ 193,305
Market Value	\$ 221,663	\$ 194,665
Actuarial Accrued Liability	\$ 247,491	\$ 223,955
Unfunded Actuarial Accrued Liability (UAAL)	\$ 36,858	\$ 30,650
CONTRIBUTIONS FOR FISCAL YEAR ENDING		
Employer Contribution Rate:		
Normal	10.94%	10.09%
Accrued Liability	<u>6.72%</u>	<u>5.24%</u>
Annual Required Contribution	17.66%	15.33%
Reduction for AED and SAED	<u>(5.26)%</u>	(2.56)%
Total Employer Contribution Rate	12.40%	12.77%
Amortization Period	30 years	40 years



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

VALUATION DATE	12/31/2006	12/31/2005**
Number of Active Members* Annual Covered Payroll	184,876 \$ 6,617,218	179,675 \$ 5,940,132
Number of Retired Members and Survivors	41,421	40,530
Assets: Actuarial Value Market Value	\$ 214,816 \$ 226,850	\$ 191,264 \$ 193,132
Actuarial Accrued Liability Unfunded Actuarial Accrued Liability (UAAL)	\$ 1,247,950 \$ 1,033,134	\$ 1,212,914 \$ 1,021,650
CONTRIBUTIONS FOR FISCAL YEAR ENDING		
Employer Contribution Rate:  Normal  Accrued Liability  Annual Required Contribution	0.26% <u>0.85%</u> 1.11%	0.28% <u>0.91%</u> 1.19%
Amortization Period	30 years	30 years

<sup>\*</sup> The total active members for December 31, 2006 also include those actives that are participating in the defined contribution plan.

<sup>\*\*</sup> Results for fiscal year ending December 31, 2005 have been adjusted to reflect the impact of GASB 43/45 requiring a 30 year amortization of the UAAL as well as the impact of the Retiree Drug Subsidy under Medicare Part D.



- Comments on the valuation results as of December 31, 2006 are given in Section IV and further discussion of the contribution levels is set out in Section V.
- 3. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods used in the current valuation. The following changes have been made to certain health care assumptions since the previous valuation:
  - Based on the results of surveys conducted by PERA staff, the percentage of actives hired before April 1, 1986 and pre-Medicare retirees assumed to not have Part A Medicare coverage was changed to 20%.
  - > Future plan election rates for retirees age 65 and older have been adjusted to reflect recent election patterns.
  - Expected Inpatient Hospital claims costs for retirees age 65 and older that do not have Part A have been updated and associated trend assumptions for future increases in medical costs were amended to better reflect anticipated changes in the various coverage categories.

The following methodology change has been implemented since the previous valuation:

- Members electing coverage in a qualified plan option produce 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, the liability has been included in the total Health Care Trust Fund liability for this reduction in member premiums, based on this Federal program.
- 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. Since the previous valuation, the following changes were made to the provisions as a result of the passage of SB 06-235:
  - An Annual Increase Reserve was established January 1, 2007 and will be used to provide post-retirement benefit increases for members hired on or after that date. The Reserve is financed by an allocation equal to 1.00% of the employer contribution rate made on behalf of members hired on or after January 1, 2007 and through purchase of service credits.



- > The Service Retirement Eligibility for those members other than State Troopers hired after January 1, 2007 was changed at age 55 by increasing the age and service requirements from 80 years to 85 years.
- Beginning January 1, 2008, a Supplemental Amortization Equalization Disbursement (SAED) was created in addition to the AED. The SAED calls for additional employer contributions equal to a percent of payroll in accordance with the following schedule:

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

The AED and SAED will continue until the funded ratio for a division exceeds 100%. At that point, the AED and SAED will be reduced in an amount to maintain a 100% funded ratio.



#### **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, 2006 on the basis of which the valuation was prepared.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF DECEMBER 31, 2006
(\$ IN THOUSANDS)

GROUP	NUMBER	COMPENSATION
State Division	52,866	\$ 2,099,325
School Division	113,288	3,371,186
Local Government Division	15,959	636,300
Judicial Division	291	29,151
Total	182,404	\$ 6,135,962

2. 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
12/31/2006	182,404	\$ 6,135,962	\$ 33,639	2.29%
12/31/2005	180,630	5,940,132	32,886	(1.09)%
12/31/2004	176,840	5,879,355	33,247	0.70%
12/31/2003	170,991	5,645,468	33,016	(1.31)%
12/31/2002	172,761	5,779,704	33,455	4.92%
12/31/2001	169,833	5,415,327	31,886	3.74%



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, 2006 (\$ IN THOUSANDS)

	GROUP				
TYPE OF RETIREMENT	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	TOTAL
Service:	24.098	37,965	2,981	225	65,269
Number Annual Benefits			1 1	\$10,030	\$2,072,140
Annual Deficition	\$783,878	\$1,186,073	\$92,159	φ10,030	φ2,072,140
Disability:		0.004	004	40	7.400
Number	3,701	3,064	684	19	7,468
Annual Benefits	\$73,413	\$55,957	\$13,170	\$722	\$143,262
Survivors*:					1
Number	1,005	1,098	170	14	2,287
<b>Annual Benefits</b>	\$16,932	\$14,854	\$2,527	\$343	\$34,656
Total:	1 1	1 1 1			
Number	28,804	42,127	3,835	258	75,024
Annual Benefits	\$874,223	\$1,256,884	\$107,856	\$11,095	\$2,250,058

<sup>\*</sup> 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**

1. 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, 2006, the market value of assets for each division is shown below:

TABLE 4

COMPARISON OF MARKET VALUE OF ASSETS AT DECEMBER 31, 2006 AND DECEMBER 31, 2005

(\$ IN THOUSANDS)

GROUP	DECEMBER 31, 2006 MARKET VALUE	DECEMBER 31, 2005 MARKET VALUE
State Division	\$ 14,041,260	\$ 12,629,060
School Division	21,635,957	19,327,602
Local Government Division	2,751,071	2,377,471
Judicial Division	221,663	194,665
Health Care Trust Fund	226,850	193,132
Total Market Value of Assets	\$ 38,876,801	\$ 34,721,930

 The four-year market related actuarial value of assets used for the current valuation was \$36,901,857,789. Schedule B shows the development of the actuarial value of assets as of December 31, 2006. The following table shows the actuarial value of assets allocated among all divisions.

TABLE 5

COMPARISON OF ACTUARIAL VALUE OF ASSETS AT DECEMBER 31, 2006 AND DECEMBER 31, 2005

(\$ IN THOUSANDS)

GROUP	DECEMBER 31, 2006 ACTUARIAL VALUE	DECEMBER 31, 2005 ACTUARIAL VALUE
State Division	\$ 13,327,290	
School Division	20,535,733	19,184,225
Local Government Division	2,613,386	2,358,719
Judicial Division	210,633	193,305
Health Care Trust Fund	214,816	<u>191,264</u>
Total Actuarial Value of Assets	\$ 36,901,858	\$ 34,464,429



#### **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 \$20,470,681,475, of which \$10,892,415,720 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$338,443,864 is for the prospective benefits payable on account of present inactive members, and \$9,239,821,891 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 \$13,327,290,139 as of December 31, 2006. The difference of \$7,143,391,336 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, \$1,282,049,873 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 \$5,861,341,463 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). In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

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



- 3. The valuation indicates that employer normal contributions at the rate of 5.99% of salary are required to provide the benefits for the State Division. Prospective employer normal contributions at this rate have a present value of \$942,621,093. When this amount is subtracted from \$5,861,341,463, which is the present value of the total future contributions to be made by the employers, there remains \$4,918,720,370 as the amount of future accrued liability contributions.
- 4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 5.10% of salary. Assuming the aggregate payroll of the State Division increases by 4.50% each year, contributions at this level will never amortize the unfunded accrued liability of \$4,918,720,370. After recognizing the value of both future AED and future SAED contributions, the amortization period remains infinite.



#### **School Division**

- 1. The total valuation balance sheet on account of benefits shows that the School Division has total prospective benefit liabilities of \$31,570,746,902, of which \$16,166,363,023 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$637,246,325 is for the prospective benefits payable on account of present inactive members, and \$14,767,137,554 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 \$20,535,732,606 as of December 31, 2006. The difference of \$11,035,014,296 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, \$2,247,904,940 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 \$8,787,109,356 represents the present value of future contributions payable by the employers.
- 2. The employers' contributions to the School Division on account of benefits consist of three amounts set by statute. The basic amount is 9.13% of salary (after reduction for the Health Care Trust Fund Contribution of 1.02% of salary). This amount will be increased to 9.53% of salary in 2013. In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

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

3. The valuation indicates that employer normal contributions at the rate of 5.87% of salary are required to provide the benefits for the School Division. Prospective employer normal contributions at this rate have a present value of \$1,614,160,776. When this amount is subtracted from \$8,787,109,356, which is the present value of the total future contributions to be made by the employers, there remains \$7,172,948,580 as the amount of future accrued liability contributions.



4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 5.16% of salary. Assuming the aggregate payroll of the School Division increases by 4.50% each year, contributions at this level will never amortize the unfunded accrued liability of \$7,172,948,580. If the increase in basic contribution effective in 2013 is taken into account, the amortization period remains infinite. After recognizing the value of future AED contributions, the amortization period continues to remain infinite. However, if both the AED and SAED are taken into account, the amortization period is reduced to 52 years.



#### **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 \$4,000,312,182, of which \$1,431,246,094 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$77,986,382 is for the prospective benefits payable on account of present inactive members, and \$2,491,079,706 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 \$2,613,386,001 as of December 31, 2006. The difference of \$1,386,926,181 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, \$401,611,132 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 \$985,315,049 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). In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

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

3. The valuation indicates that employer normal contributions at the rate of 6.31% 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 \$310,279,582. When this amount is subtracted from \$985,315,049, which is the present value of the total future contributions to be made by the employers, there remains \$675,035,467 as the amount of future accrued liability contributions.



4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 4.57% of salary. Contributions at this level will amortize the unfunded accrued liability of \$675,035,467 over 48 years, assuming the aggregate payroll of the Local Government Division increases by 4.50% each year. If the value of future AED contributions is taken into account, the amortization period is reduced to 32 years. If both the AED and SAED are taken into account, the amortization period is further reduced to 17 years.



#### **Judicial Division**

- 1. The total valuation balance sheet on account of benefits shows that the Judicial Division has total prospective benefit liabilities of \$290,910,015, of which \$129,057,130 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$1,923,383 is for the prospective benefits payable on account of present inactive members, and \$159,929,502 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 \$210,632,896 as of December 31, 2006. The difference of \$80,277,119 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, \$18,478,200 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 \$61,798,919 represents the present value of future contributions payable by the employers.
- 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). In addition, employers will make Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) contributions in the future at the following rates:

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

3. The valuation indicates that employer normal contributions at the rate of 10.94% of salary are required to provide the benefits for the Judicial Division. Prospective employer normal contributions at this rate have a present value of \$24,941,107. When this amount is subtracted from \$61,798,919, which is the present value of the total future contributions to be made by the employers, there remains \$36,857,812 as the amount of future accrued liability contributions.



4. After recognizing the required employer normal contribution rates, the remaining basic contribution amounts to 3.60% of salary. Assuming the aggregate payroll of the Judicial Division increases by 4.50% each year, contributions at this level will never amortize the unfunded accrued liability of \$36,857,812. After recognizing the value of future AED contributions, the amortization period remains infinite. However, if both the AED and SAED are taken into account, the amortization period is reduced to 28 years.



#### **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 \$1,343,516,433, of which \$868,993,528 is for the prospective benefits payable on account of present benefit recipients enrolled in PERA Care and receiving a health care subsidy pursuant to law, \$10,003,411 is for the prospective benefits payable on account of present deferred vested members, and \$464,519,494 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 \$214,816,145 as of December 31, 2006. The difference of \$1,128,700,288 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 \$1,128,700,288 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 0.26% 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 \$95,566,020. When this amount is subtracted from \$1,128,700,288, which is the present value of the total future contributions to be made by the employers, there remains \$1,033,134,268 as the amount of future accrued liability contributions.
- 4. After recognizing the required normal contribution rate, the remaining contribution amounts to 0.76% of salary. Contributions at this level will amortize the unfunded accrued liability of \$1,033,134,268 over 37 years. If anticipated RDS payments are contributed to the HCTF, the amortization period will be 30 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

<sup>\* 10.55%</sup> on and after January 1, 2013

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

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

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



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

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

	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Contribution For					
Normal Cost					
Service Retirement Benefits	8.58%	9.36%	8.41%	12.71%	0.20%
Disability Benefits	0.94%	0.39%	1.02%	1.66%	0.04%
Survivor Benefits	0.44%	0.35%	0.45%	1.19%	0.00%
Separation Benefits	4.08%	3.77%	<u>4.43%</u>	3.38%	0.02%
Total	14.04%	13.87%	14.31%	18.94%	0.26%
Member Current Contributions*	8.05%	8.00%	8.00%	8.00%	0.00%
Employer Normal Cost	5.99%	5.87%	6.31%	10.94%	0.26%
Employer Contribution Rate*	11.09%	11.03%	10.88%	14.54%	1.02%
Percent Available to Amortize Unfunded Actuarial Accrued Liability (UAAL)	5.10%	5.16%	4.57%	3.60%	0.76%
Number of Years to Amortize UAAL					
<ul><li>Without AED</li></ul>	Infinite	Infinite	48 years	Infinite	37 years
■ With AED**	Infinite	Infinite	32 years	Infinite	37 years
■ With AED & SAED**	Infinite	52 years	17 years	28 years	37 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)	13.19%	11.92%	6.69%	12.40%	1.11%

<sup>\*</sup> Weighted average for State Division.

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



#### **SECTION VI - ACCOUNTING INFORMATION**

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

#### NUMBER OF ALL MEMBERS AS OF DECEMBER 31, 2006

GROUP	NUMBER				
	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund*
Retirees and survivors currently receiving benefits	28,804	42,127	3,835	258	41,421
Terminated employees entitled to benefits but not yet receiving benefits	4,349	8,584	961	13	13,736
Inactive Members	44,584	65,777	12,461	4	N/A
Active Members Vested					
General employees	28,905	57,835	7,129	225	! ! !
State troopers Non-vested	561	0	0	0	1 1 1 1 1 1 1
General employees	23,191	55,453	8,830	66	!
State troopers	209	0	0	0	
Total Active Members	52,866	113,288	15,959	291	184,876
Totals	130,603	229,776	33,216	566	240,033

<sup>\*</sup> The total active members include those actives that are participating in the defined contribution plan.



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

SCHEDULE OF FUNDING PROGRESS (\$ IN THOUSANDS)

		(4)	N THOUSAND	<u> </u>		
Actuarial Valuation Date	Actuarial Value of Plan Assets ( a )	Actuarial Accrued 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>s</u>	TATE DIVISION	<u>1*</u>		
12/31/2006 12/31/2005 12/31/2004 12/31/2003 12/31/2002 12/31/2001	\$ 13,327,290 12,536,916 28,594,699 28,522,222 28,551,607 28,947,935	\$ 18,246,010 17,541,744 40,783,531 37,914,502 32,463,918 29,469,608	\$ 4,918,720 5,004,828 12,188,832 9,392,280 3,912,311 521,673	73.0% 71.5% 70.1% 75.2% 87.9% 98.2%	\$ 2,099,325 2,064,764 5,303,439 5,140,918 5,278,586 4,954,605	234.3% 242.4% 229.8% 182.7% 74.1% 10.5%
		sc	HOOL DIVISIO	N*		
12/31/2006 12/31/2005 12/31/2004 12/31/2003 12/31/2002 12/31/2001	\$ 20,535,733 19,184,225 28,594,699 28,522,222 28,551,607 28,947,935	\$ 27,708,682 25,963,972 40,783,531 37,914,502 32,463,918 29,469,608	\$ 7,172,949 6,779,747 12,188,832 9,392,280 3,912,311 521,673	74.1% 73.9% 70.1% 75.2% 87.9% 98.2%	\$ 3,371,186 3,241,214 5,303,439 5,140,918 5,278,586 4,954,605	212.8% 209.2% 229.8% 182.7% 74.1% 10.5%
		LOCAL G	OVERNMENT	DIVISION		
12/31/2006 12/31/2005 12/31/2004 12/31/2003 12/31/2002 12/31/2001	\$ 2,613,386 2,358,719 1,990,652 1,907,786 1,839,632 1,822,413	\$ 3,288,421 3,022,624 2,576,988 2,379,229 1,966,143 1,746,761	\$ 675,035 663,905 586,336 471,443 126,511 (75,652)	79.5% 78.0% 77.2% 80.2% 93.6% 104.3%	\$ 636,300 607,217 549,607 479,098 474,760 436,582	106.1% 109.3% 106.7% 98.4% 26.6% (17.3)%
		JU	DICIAL DIVISION	<u>NC</u>		
12/31/2006 12/31/2005 12/31/2004 12/31/2003 12/31/2002 12/31/2001	\$ 210,633 193,305 170,111 166,654 162,901 165,130	\$ 247,491 223,955 209,954 198,377 165,672 150,943	\$ 36,858 30,650 39,843 31,723 2,771 (14,187)	85.1% 86.3% 81.0% 84.0% 98.3% 109.4%	\$ 29,151 26,937 26,309 25,452 26,357 24,140	126.4% 113.8% 151.4% 124.6% 10.5% (58.8)%
		HEALT	H CARE TRUS	T FUND		
12/31/2006 12/31/2005 12/31/2004 12/31/2003 12/31/2002 12/31/2001	\$ 214,816 191,264 166,619 160,416 161,700 138,198	\$ 1,247,950 1,116,627 1,102,597 897,461 813,211 782,961	\$ 1,033,134 925,363 935,978 737,045 651,511 644,763	17.2% 17.1% 15.1% 17.9% 19.9% 17.7%	\$ 6,617,218 5,940,132 5,879,355 5,645,468 5,779,703 5,415,327	15.6% 15.6% 15.9% 13.1% 11.3%

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



The information presented in the required supplementary schedules was determined as part of the 3. actuarial valuation at December 31, 2006.

	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Valuation date	12/31/2006	12/31/2006	12/31/2006	12/31/2006	12/31/2006
Actuarial cost method	Entry age				
Amortization method	Level percent Open				
Remaining amortization period	30 years				
Asset valuation method	4 year smoothed Market				
Actuarial assumptions:					
Investment rate of return*	8.50%	8.50%	8.50%	8.50%	8.50%
Projected salary increases*	4.50 – 10.17%	4.50 – 10.70%	4.50 – 11.47%	5.00 – 6.00%	4.50% in aggregate
Post-Retirement Benefit Increases:					
Members hired prior to 7/1/05	3.50% compounded annually	3.50% compounded annually	3.50% compounded annually	3.50% compounded annually	None
Members hired on or after 7/1/05 but before 1/1/07	3.00% compounded annually	3.00% compounded annually	3.00% compounded annually	3.00% compounded annually	None
Members hired on or after 1/1/07	None**	None**	None**	None**	None
Health Care Inflation Factor	N/A	N/A	N/A	N/A	4.50%, applicable to Medicare Part A costs

<sup>\*</sup> Includes inflation at 4.50%.
\*\* Post-Retirement Benefit Increases are provided by a separate fund subject to monies being available.



#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

	Annual	Percent Of ARC
Fiscal	Required Contribution (ARC)*	Contributed
<u>Year</u>	(ARC)	Contributed
	State Division	
2006	17.23%	58%
2005	19.33%	48%
2004	17.31%	51%
2003	11.11%	69%
2002	6.37%	100%
2001	6.84%	100%
2001	0.0170	10070
	School Division	•
2006	16.06%	62%
2005	19.33%	48%
2004	17.31%	51%
2003	11.11%	69%
2002	6.37%	100%
2001	6.84%	100%
2001	0.047/0	
	Local Government Division	on
2006	11.21%	85%
2005	14.11%	64%
2004	13.98%	62%
2003	9.53%	69%
2002	5.02%	100%
2001	6.26%	100%
-44.		1
	Judicial Division	
2006	15.33%	84%
2005	17.21%	74%
2004	16.22%	64%
2003	3.98%	100%
2002	1.55%	100%
2001	1.79%	100%
	1 1	

<sup>\*</sup> As a percentage of Covered Payroll without consideration of future increases in AED and SAED. The amortization period for 2006 is 30 years.



### 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)
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 <u>Year</u>	Annual Required Contribution (ARC)	Percent Of ARC <u>Contributed</u>
2005	1.13%	90%
2004	1.02%	100%
2003	1.16%	100%
2002	1.71%	100%
2001	1.48%	100%

Note: ARCs through 2005 are determined in accordance with GASB 26. Beginning in 2006, ARCs will be determined in accordance with GASB 43/45.



#### SECTION VII - DERIVATION OF EXPERIENCE GAINS AND LOSSES

# Table 8 Changes in Unfunded Actuarial Accrued Liabilities (UAAL) During Calendar Year 2006 (\$ in Millions)

	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund*
1) Beginning of Year:				3110	
a) Unfunded Actuarial Accrued Liability	\$5,004.8	\$6,779.7	\$663.9	\$30.7	\$925.4
b) Normal Cost	309.3	499.5	91.4	5.1	17.6
c) Required Employer Contributions	530.7	811.1	122.2	6.8	70.7
d) Actual Employer Contributions	378.8	609.3	111.7	6.1	77.0
2) End of Year:					
a) Expected UAAL from previous valuation (1a) x 1.085 + (1b) x 1.0425 – (1c) x 1.0425	\$5,199.4	\$7,031.2	\$688.2	\$31.5	\$948.7
b) Expected UAAL on actual contributions (1a) x 1.085 + (1b) x 1.0425 – (1d) x 1.0425	5,357.9	7,241.6	699.1	32.3	942.1
c) Increase in UAAL due to Deficiency (2b) – (2a)	158.5	210.4	10.9	0.8	(6.6)
3) Gains (Losses) on Year's Activities					
a) Liability – Assumed vs. Actual	\$189.1	(\$309.9)	(\$26.0)	(\$8.5)	\$83.8
b) Assets – Assumed vs. Actual	250.1	378.6	50.1	3.9	4.2
c) Change in Plan Assumptions	0.0	0.0	0.0	0.0	(86.8)
d) Change in Plan Provisions	0.0	0.0	0.0	0.0	0.0
e) Change in Methods	0.0	0.0	0.0	0.0	(92.2)
f) Total	\$439.2	\$68.7	\$24.1	(\$4.6)	(\$91.0)
4) Actual UAAL at End of Year					
(2a) + (2c) – (3f)	\$4,918.7	\$7,172.9	\$675.0	\$36.9	\$1,033.1

<sup>\*</sup> 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 2006 RDS payments to PERA of \$12.5 million.



# Table 9 Gains & Losses in Actuarial Accrued Liabilities During Calendar Year 2006 (\$ in Millions)

Type of Activity	State Division	School Division	Local Government Division	Judicial Division	Health Care Trust Fund
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(\$21.5)	(\$35.5)	(\$3.3)	(\$0.4)	(\$1.5)
<b>Disability Retirements</b> . If disability claims are less than assumed, there is a gain. If more claims, a loss.	13.5	6.9	3.9	0.0	0.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.2)	(3.5)	(0.3)	0.0	(0.1)
Withdrawal from Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(24.3)	(55.5)	(9.1)	0.0	(2.2)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	49.5	(5.3)	13.7	1.7	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(52.2)	(69.6)	(11.2)	(3.2)	(3.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	250.1	378.6	50.1	3.9	4.2
Death after Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	29.1	(28.9)	5.9	(0.8)	0.1
Claims Experience. If self-funded claims are greater than expected, there is a loss. If RDS payments are greater than expected, there is a gain.	0.0	0.0	0.0	0.0	10.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>196.2</u>	(118.5)	(25.6)	(5.8)	80.0
Gain (or Loss) During Year from Financial Experience	\$439.2	\$68.7	\$24.1	(\$4.6)	\$88.0



#### SECTION VIII - ADDITIONAL HEALTH CARE TRUST FUND INFORMATION

#### **Subsidy Analysis**

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

#### Notes:

- Administrative Expenses total includes expenses associated with claims administration.
- Claims and HMO Premiums total reflects actual claims and premiums paid (net of any premium variance).
- The subsidy analysis schedule presented above has been revised 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 actives. Also,
  claims experience gains and losses have now 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, 2006

#### **STATE DIVISION**

PRESENT AND PROSPECTIVE ASSETS					
Actuarial Value of Present Assets		\$ 13,327,290,139			
Present value of future members' contributions		1,282,049,873			
Present value of future employer contributions					
Normal contributions Unfunded accrued liability contributions	\$ 942,621,093 4,918,720,370				
Total prospective employer contributions		5,861,341,463			
Total Present and Prospective Assets		\$ 20,470,681,475			
ACTUARIAL LIA	ABILITIES				
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 10,892,415,720			
Present value of prospective benefits payable on account of inactive members		338,443,864			
Present value of prospective benefits payable on account of present active members:					
Service retirement benefits	\$ 7,339,809,284				
Disability retirement benefits	367,721,264				
Survivor benefits	230,067,000				
Separation benefits	1,302,224,343				
Total		9,239,821,891			
Total Actuarial Liabilities		\$ 20,470,681,475			



## 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, 2006

#### **SCHOOL DIVISION**

PRESENT AND PROSE	PECTIVE ASSETS	
Actuarial Value of Present Assets		\$ 20,535,732,606
Present value of future members' contributions		2,247,904,940
Present value of future employer contributions		
Normal contributions Unfunded accrued liability contributions	\$ 1,614,160,776 	
Total prospective employer contributions		\$ 8,787,109,356
Total Present and Prospective Assets		\$ 31,570,746,902
ACTUARIAL LI	ABILITIES .	
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 16,166,363,023
Present value of prospective benefits payable on account of inactive members		637,246,325
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 12,151,071,648	
Disability retirement benefits	265,841,388	
Survivor benefits	296,009,547	
Separation benefits	2,054,214,971	
Total		\$ 14,767,137,554
Total Actuarial Liabilities		\$ 31,570,746,902



# VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO AS OF DECEMBER 31, 2006

### LOCAL GOVERNMENT DIVISION

PRESENT AND PROS	PECTIVE ASSETS	
Actuarial Value of Present Assets		\$ 2,613,386,001
Present value of future members' contributions		401,611,132
Present value of future employer contributions		
Normal contributions Unfunded accrued liability contributions	\$ 310,279,582 _675,035,467	
Total prospective employer contributions		\$ 985,315,049
Total Present and Prospective Assets		\$ 4,000,312,182
ACTUARIAL L	IABILITIES	
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 1,431,246,094
Present value of prospective benefits payable on account of inactive members		77,986,382
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 1,874,289,452	
Disability retirement benefits	116,278,486	
Survivor benefits	64,706,827	
Separation benefits	435,804,941	
Total		\$ 2,491,079,706
Total Actuarial Liabilities		\$ 4,000,312,182



# VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO AS OF DECEMBER 31, 2006

### **JUDICIAL DIVISION**

PRESENT AND PROS	PECTIVE ASSETS	
Actuarial Value of Present Assets		\$ 210,632,896
Present value of future members' contributions		18,478,200
Present value of future employer contributions		
Normal contributions Unfunded accrued liability contributions	\$ 24,941,107 36,857,812	
Total prospective employer contributions		\$ 61,798,919
Total Present and Prospective Assets		\$ 290,910,015
ACTUARIAL LI	ABILITIES	
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$ 129,057,130
Present value of prospective benefits payable on account of inactive members		1,923,383
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$ 129,925,138	
Disability retirement benefits	8,907,256	
Survivor benefits	8,361,600	
Separation benefits	12,735,508	
Total		\$ 159,929,502
Total Actuarial Liabilities		\$ 290,910,015



# VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO AS OF DECEMBER 31, 2006

### **HEALTH CARE TRUST FUND**

PRESENT AND PROSE	PECTIVE ASSETS	
Actuarial Value of Present Assets		\$ 214,816,145
Present value of future members' contributions		0
Present value of future employer contributions		
Normal contributions Unfunded accrued liability contributions	\$ 95,566,020 _1,033,134,268	
Total prospective employer contributions		\$ 1,128,700,288
Total Present and Prospective Assets		<u>\$ 1,343,516,433</u>
ACTUARIAL LI	ABILITIES	
Present value of benefits payable on account of present benefit recipients enrolled in PERA Care and receiving a health care subsidy pursuant to law		\$ 868,993,528
Present value of prospective benefits payable on account of deferred vested members		10,003,411
Present value of prospective benefits payable on account of present active members:  Service retirement benefits  Disability retirement benefits  Survivor benefits  Separation benefits	\$ 412,193,092 32,748,878 1,070,347 	
Total		\$ 464,519,494
Total Actuarial Liabilities		<u>\$ 1,343,516,433</u>



## SOLVENCY TEST (\$ IN THOUSANDS)

	Aggree	gate Accrued Lial	oilities For*			tion of Acc Liabilities red by Rep Asset	
Valuation Date	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)
12/31/2006	\$6,742,437	\$29,674,682	\$13,073,485	\$36,687,042	100%	100%	2.1%
12/31/2005	5,755,118	26,382,911	14,614,267	34,273,165	100%	100%	14.6%
12/31/2004	6,365,516	23,833,958	13,370,998	30,755,462	100%	100%	4.2%
12/31/2003	6,316,579	20,844,058	13,291,470	30,596,662	100%	100%	25.9%
12/31/2002	6,118,094	18,208,961	10,268,678	30,554,140	100%	100%	60.6%

<sup>\*</sup> Results do not include the Health Care Trust Fund.



## SCHEDULE B

## DEVELOPMENT OF THE DECEMBER 31, 2006 ACTUARIAL VALUE OF ASSETS

## STATE DIVISION

(1)	Actu	arial Value Beginning of Year	\$	12,536,916,495
(2)	Mark	xet Value End of Year	\$	14,041,260,113
(3)	Mark	et Value Beginning of Year	\$	12,629,060,099
(4)	Cash	n Flow		
2.06	a.	Contributions	\$	418,240,037
	b.	Benefit Payments		(921,843,800)
	C.	Administrative Expenses	į	(7,889,428)
	d.	Net Transfers		1,829,276
	e.	Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(509,663,915)
(5)	Inves	stment Income		
	a.	Market total: (2) - (3) - (4)e	\$	1,921,863,929
	b.	Assumed Rate		8.50%
	C.	Amount of Immediate Recognition		
		$[(3) \times (5)b] + [(4)e \times (5)b \times 0.5]$	\$	1,051,809,392
	d.	Amount for Phased-in Recognition: (5)a - (5)c	\$	870,054,537
(6)	Phas	sed-In Recognition of Investment Income		
	a.	Current Year: 0.25 x (5)d	\$	217,513,634
	b.	First Prior Year	1	30,714,533
	C.	Second Prior Year		0
	d.	Third Prior Year	<u> </u>	0
	e.	Total Recognized Investment Gain	\$	248,228,167
(7)	Actu	arial Value End of Year:		
	(1) +	(4)e + (5)c + (6)e	\$	13,327,290,139



## DEVELOPMENT OF THE DECEMBER 31, 2006 ACTUARIAL VALUE OF ASSETS

## SCHOOL DIVISION

(1)	Act	uarial Value Beginning of Year	\$	19,184,224,998
(2)	Market Value End of Year		\$	21,635,957,329
(3)	Ма	rket Value Beginning of Year	\$	19,327,601,678
(4)	Cas	sh Flow		
( - /	a.	Contributions	\$	660,097,555
	b.	Benefit Payments		(1,291,028,489)
	C.	Administrative Expenses		(11,522,684)
	d.	Net Transfers		(4,079,573)
	e.	Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	(646,533,191)
(5)	Inv	estment Income		
	a.	Market total: (2) - (3) - (4)e	\$	2,954,888,842
	b.	Assumed Rate		8.50%
	C.	Amount of Immediate Recognition		
		$[(3) \times (5)b] + [(4)e \times (5)b \times 0.5]$	\$	1,615,368,482
	d.	Amount for Phased-in Recognition: (5)a – (5)c	\$	1,339,520,360
(6)	Pha	ased-In Recognition of Investment Income		
	a.	Current Year: 0.25 x (5)d	\$	334,880,090
	b.	First Prior Year		47,792,227
	C.	Second Prior Year		0
	d.	Third Prior Year	_	0
	e.	Total Recognized Investment Gain	\$	382,672,317
(7)	Act	uarial Value End of Year:		
	(1)	+ (4)e + (5)c + (6)e	\$	20,535,732,606



## DEVELOPMENT OF THE DECEMBER 31, 2006 ACTUARIAL VALUE OF ASSETS

## LOCAL GOVERNMENT DIVISION

(1)	Actuarial Value Beginning of Year	\$	2,358,718,797
(2)	Market Value End of Year	\$	2,751,070,678
(3)	Market Value Beginning of Year	\$	2,377,471,146
(4)	Cash Flow		
(4)	a. Contributions	\$	126,172,367
	b. Benefit Payments		(122,093,964)
	c. Administrative Expenses	1	(1,799,930)
	d. Net Transfers		2,137,517
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]	\$	4,415,990
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)e	\$	369,183,542
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition		
	$[(3) \times (5)b] + [(4)e \times (5)b \times 0.5]$	\$	202,272,727
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	166,910,815
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d	\$	41,727,704
	b. First Prior Year		6,250,783
	c. Second Prior Year		0
	d. Third Prior Year	i	0
	e. Total Recognized Investment Gain	\$	47,978,487
(7)	Actuarial Value End of Year:		
	(1) + (4)e + (5)c + (6)e	\$	2,613,386,001



## DEVELOPMENT OF THE DECEMBER 31, 2006 ACTUARIAL VALUE OF ASSETS

## JUDICIAL DIVISION

(1)	Actuarial Value Beginning of Year		\$ 193,304,208
(2)	Market Value End of Year		\$ 221,663,432
(3)	Market Value Beginning of Year		\$ 194,665,354
(4)	Cash Flow		
107	a. Contributions		\$ 7,872,736
	b. Benefit Payments		(10,888,720)
	c. Administrative Expenses		(18,573)
	d. Net Transfers		112,780
	e. Net Cash Flow: [(4)a + (4)b + (4)c + (4)d]		\$ (2,921,777)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)e		\$ 29,919,855
	b. Assumed Rate		8.50%
	c. Amount of Immediate Recognition		
	$[(3) \times (5)b] + [(4)e \times (5)b \times 0.5]$		\$ 16,422,380
	d. Amount for Phased-in Recognition: (5)a – (5)c		\$ 13,497,475
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.25 x (5)d		\$ 3,374,369
	b. First Prior Year		453,716
	c. Second Prior Year	į	0
	d. Third Prior Year		 0
	e. Total Recognized Investment Gain		\$ 3,828,085
(7)	Actuarial Value End of Year:		
	(1) + (4)e + (5)c + (6)e		\$ 210,632,896



## DEVELOPMENT OF THE DECEMBER 31, 2006 ACTUARIAL VALUE OF ASSETS

## **HEALTH CARE TRUST FUND**

Actuarial Value Beginning of Year	\$	191,264,402
Market Value End of Year	\$	226,849,686
Market Value Beginning of Year	\$	193,132,361
Cash Flow		
a. Contributions	\$	76,319,240
b. Benefit Payments	!	(71,155,482)
The state of the s	ĺ	(2,365,906)
d. Net Cash Flow: [(4)a + (4)b + (4)c]	\$	2,797,852
Investment Income		
a. Market total: (2) – (3) – (4)d	\$	30,919,473
b. Assumed Rate	į	8.50%
c. Amount of Immediate Recognition	ĺ	
$[(3) \times (5)b] + [(4)d \times (5)b \times 0.5]$	\$	16,535,159
d. Amount for Phased-in Recognition: (5)a – (5)c	\$	14,384,314
Phased-In Recognition of Investment Income		
a. Current Year: 0.25 x (5)d	\$	3,596,079
b. First Prior Year		622,653
c. Second Prior Year	1	0
d. Third Prior Year	ļ	0
e. Total Recognized Investment Gain	\$	4,218,732
Actuarial Value End of Year:		
(1) + (4)d + (5)c + (6)e	\$	214,816,145
	Market Value End of Year  Cash Flow a. Contributions b. Benefit Payments c. Administrative Expenses d. Net Cash Flow: [(4)a + (4)b + (4)c]  Investment Income a. Market total: (2) – (3) – (4)d b. Assumed Rate c. Amount of Immediate Recognition [(3) x (5)b] + [(4)d x (5)b x 0.5] d. Amount for Phased-in Recognition: (5)a – (5)c  Phased-In Recognition of Investment Income a. Current Year: 0.25 x (5)d b. First Prior Year c. Second Prior Year d. Third Prior Year e. Total Recognized Investment Gain	Market Value End of Year  Market Value Beginning of Year  Cash Flow a. Contributions b. Benefit Payments c. Administrative Expenses d. Net Cash Flow: [(4)a + (4)b + (4)c]  Investment Income a. Market total: (2) – (3) – (4)d b. Assumed Rate c. Amount of Immediate Recognition [(3) x (5)b] + [(4)d x (5)b x 0.5] d. Amount for Phased-in Recognition: (5)a – (5)c  Phased-In Recognition of Investment Income a. Current Year: 0.25 x (5)d b. First Prior Year c. Second Prior Year d. Third Prior Year e. Total Recognized Investment Gain  \$  Actuarial Value End of Year:



### SCHEDULE C

## SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING DECEMBER 31, 2006

#### STATE DIVISION

Additions	for	the	Year

Contributions:

Members (including purchased service) \$ 209,444,615 Employers 208,795,422

Total \$ 418,240,037

TOTAL \$ 2,340,103,966

Deductions for the Year

Benefit Payments (including refunds and disability insurance) \$ 916,911,148
Transfers (1,829,276)
Other deductions 4,932,652
Administrative Expenses 7,889,428

TOTAL \$ 927,903,952

Excess of Additions Over Deductions \$ 1,412,200,014

Reconciliation of Asset Balances

 Market Value of Assets as of 12/31/2005
 \$ 12,629,060,099

 Excess of Additions over Deductions
 1,412,200,014

 Market Value of Assets as of 12/31/2006
 \$ 14,041,260,113



## SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING DECEMBER 31, 2006

### **SCHOOL DIVISION**

Additions for the Year		
Contributions:  Members (including purchased service)  Employers	\$ 323,394,511 336,703,044	
Total		\$ 660,097,555
Net Investment Income		2,954,888,842
TOTAL		\$ 3,614,986,397
Deductions for the Year		
Benefit Payments (including refunds and disability insurance) Transfers Other deductions Administrative Expenses	\$ 1,285,199,227 4,079,573 5,829,262 11,522,684	
TOTAL		\$ 1,306,630,746
Excess of Additions Over Deductions		\$ 2,308,355,651
Reconciliation of Asset Balances		
Market Value of Assets as of 12/31/2005 Excess of Additions over Deductions Market Value of Assets as of 12/31/2006		\$ 19,327,601,678 2,308,355,651 \$ 21,635,957,329



## SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING DECEMBER 31, 2006

### LOCAL GOVERNMENT DIVISION

Additions for the Year		
Contributions:  Members (including purchased service)  Employers	\$ 65,508,481 60,663,886	
Total		\$ 126,172,367
Net Investment Income		369,183,542
TOTAL		\$ 495,355,909
Deductions for the Year		
Benefit Payments (including refunds and disability insurance) Transfers Other deductions Administrative Expenses	\$ 121,012,647 (2,137,517) 1,081,317 1,799,930	
TOTAL		\$ 121,756,377
Excess of Additions Over Deductions		\$ 373,599,532
Reconciliation of Asset Balances		
Market Value of Assets as of 12/31/2005 Excess of Additions over Deductions Market Value of Assets as of 12/31/2006		\$ 2,377,471,146



## SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING DECEMBER 31, 2006

### **JUDICIAL DIVISION**

Additions for the Year		
Contributions:  Members (including purchase service)  Employers	\$ 4,105,976 3,766,760	
Total		\$ 7,872,736
Net Investment Income	361	29,919,855
TOTAL		\$ 37,792,591
Deductions for the Year		
Benefit Payments (including refunds and disability insurance) Transfers Other deductions Administrative Expenses	\$ 10,779,154 (112,780) 109,566 18,573	
TOTAL		\$ 10,794,513
Excess of Additions Over Deductions		\$ 26,998,078
Reconciliation of Asset Balances		
Market Value of Assets as of 12/31/2005 Excess of Additions over Deductions Market Value of Assets as of 12/31/2006		\$ 194,665,354 26,998,078 \$ 221,663,432



## SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING DECEMBER 31, 2006

### **HEALTH CARE TRUST FUND**

Additions for the Year		
Contributions:  Members' Purchased Service Transfer Employers	\$ 11,772,739 64,546,501	
Total		\$ 76,319,240
Net Investment Income		30,919,473
TOTAL		\$ 107,238,713
Deductions for the Year		
Net benefit payments paid by the HCTF Other income and expense PERA Internal Administrative Expenses	\$ 71,155,482 (1,605,069) 3,970,975	
TOTAL		\$ 73,521,388
Excess of Additions Over Deductions		\$ 33,717,325
Reconciliation of Asset Balances		
Market Value of Assets as of 12/31/2005 Excess of Additions over Deductions Market Value of Assets as of 12/31/2006		\$ 193,132,361 33,717,325 \$ 226,849,686



#### SCHEDULE D

#### **OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

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

INFLATION ASSUMPTION: 4.50% per year.

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

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

ASSETS: The method of valuing assets is intended to recognize a "smoothed" market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a four-year period. The actuarial value of assets was reinitialized at Market Value as of December 31, 2004. There will be two years of smoothing in the December 31, 2006 valuation as the method is phased in.

INTEREST CREDIT: 5% 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.



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

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

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

<sup>&</sup>lt;sup>1</sup>Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



## STATE DIVISION NON-TROOPERS

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

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

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

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



## 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	Merit & Seniority	Pay Increase Assumptions for an Individual Member 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				Withdrawal <sup>1</sup> Death <sup>2</sup> Disability			bility
Ages	Males	Females	Males	Females	Males	Females	
20	5.00%	5.00%	0.025%	0.015%	0.02%	0.02%	
25	5.00	5.00	0.030	0.015	0.08	0.08	
30	3.80	3.80	0.040	0.025	0.12	0.12	
35	2.50	2.50	0.055	0.035	0.40	0.40	
40	1.60	1.60	0.095	0.058	0.54	0.54	
45	1.10	1.10	0.200	0.097	0.86	0.86	
50	1.00	1.00	0.383	0.158	1.28	1.28	
55	1.00	1.00	0.538	0.227	1.85	1.85	
60	1.00	1.00	0.680	0.345	2.00	2.00	
65	1.00	1.00	1.061	0.603	2.00	2.00	

<sup>&</sup>lt;sup>1</sup>There are no select withdrawal assumptions for the State Troopers.

<sup>&</sup>lt;sup>2</sup>Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



## STATE DIVISION TROOPERS

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

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



### **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		ay Increase Assumpti for an Individual Memb Inflation & Productivity (Economy)	
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	4.05	4.50	F 0F
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	Percent of Members Separating Within the Next Y Ultimate <u>Withdrawal</u> <u>Death</u> <sup>1</sup>			in the Next Yea		<u>bility</u>
Ages	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>	Males	<u>Females</u>
20 25 30 35 40	21.00% 7.63 5.24 4.36 3.59	18.00% 8.99 7.79 6.80 5.40	0.025% 0.030 0.040 0.055 0.095	0.015% 0.015 0.025 0.035 0.058	0.01% 0.01 0.01 0.04 0.11	0.01% 0.02 0.03 0.05 0.08
45	3.27	5.00	0.200	0.097	0.18	0.11
50	3.90	4.60	0.383	0.158	0.30	0.20
55	3.90	4.60	0.538	0.227	0.55	0.36
60	3.90	4.60	0.680	0.345	0.70	0.40
65	3.90	4.60	1.061	0.603	0.70	0.40

<sup>&</sup>lt;sup>1</sup>Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



### **SCHOOL DIVISION**

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

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

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

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



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

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

Samula	The second secon	So mate drawal	Percent of eparating With Dea	in the Next Yea		bility
Sample Ages	Males	Females	Males	Females	Males	Females
20	12.00%	15.00%	0.025%	0.015%	0.01%	0.01%
25	9.50	12.35	0.030	0.015	0.04	0.04
30	7.20	9.58	0.040	0.025	0.07	0.07
35	4.40	8.00	0.055	0.035	0.18	0.18
40	3.90	7.10	0.095	0.058	0.27	0.24
45	3.40	6.30	0.200	0.097	0.41	0.39
50	3.40	6.30	0.383	0.158	0.61	0.65
55	3.40	6.30	0.538	0.227	1.02	0.90
60	3.40	6.30	0.680	0.345	1.10	1.03
65	3.40	6.30	1.061	0.603	1.10	1.03

<sup>&</sup>lt;sup>1</sup>Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



### LOCAL GOVERNMENT DIVISION

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

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

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

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



### **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	Merit & Seniority	Pay Increase Assumption for an Individual Memb Inflation & Productivity (Economy)	
and the second			to union
30	1.50%	4.50%	6.00%
35	1.50	4.50	6.00
40	0.67	4.50	5.17
	0.1002		
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:

Samolo		So mate <u>Irawal</u> 1	Percent of eparating With <u>Dea</u>	in the Next Yea		bility
Sample <u>Ages</u>	Males	<u>Females</u>	Males	<u>Females</u>	Males	<u>Females</u>
30	2.70%	2.70%	0.040%	0.025%	0.06%	0.06%
35	2.70	2.70	0.055	0.035	0.07	0.07
40	2.70	2.70	0.095	0.058	0.10	0.10
45	2.70	2.70	0.200	0.097	0.17	0.17
50	2.70	2.70	0.383	0.158	0.31	0.31
55	2.70	2.70	0.538	0.227	0.63	0.63
60	2.70	2.70	0.680	0.345	1.22	1.22
65	2.70	2.70	1.061	0.603	1.48	1.48

<sup>&</sup>lt;sup>1</sup>There are no select withdrawal assumptions for the Judicial Division.

<sup>&</sup>lt;sup>2</sup>Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.



## JUDICIAL DIVISION

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

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



## SINGLE LIFE RETIREMENT VALUES

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



## SCHEDULE D

(Continued)

## Methods and Assumptions Specific to the Health Care Trust Fund

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

Not yet Age 65:

50%

Age 65 and older:

70%

Plan elections for future members are assumed as follows:

Self Funded Plans:

50%

Rocky Mountain Health Plans (RMHP):

25%

Kaiser Permanente:

25%

Secure Horizons:

0%

### **Health Care Cost Trend Rates:**

	Self Fun	ded Plans	Kaiser		RMHP			
Year	"Part A" Claims	Part A Deductible	No Part A Premiums	With Part A Premiums	No Part A Premiums	With Part A Premiums	Part A Premiums	RDS Payments
2007	12.00%	4.50%	11.00%	8.00%	8.00%	6.50%	5.50%	6.50%
2008	11.00%	4.50%	10.00%	7.75%	7.75%	6.50%	5.50%	6.50%
2009	10.00%	4.50%	9.00%	7.50%	7.50%	6.50%	5.50%	6.50%
2010	9.00%	4.50%	8.00%	7.25%	7.25%	6.50%	5.50%	6.50%
2011	8.00%	4.50%	7.00%	7.00%	7.00%	6.50%	5.50%	6.50%
2012	7.00%	4.50%	6.50%	6.75%	6.75%	6.50%	5.50%	6.50%
2013+	6.50%	4.50%	6.50%	6.50%	6.50%	6.50%	5.50%	6.50%

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

The following monthly costs are assumed for 2007, and subject to the Health Care Cost Trend Rates:

	Self Funded Plans "Part A" Claims		Rocky Mountain Healt Kaiser Permanente Plans			
		Premiums	Premiums for	Premiums for	Premiums for	
Members without Part A	Members with Part A	for Members without Part A	Members with Part A	Members without Part A	Members with Part A	Part A Premiums
\$423	\$37	\$524	\$138	\$639	\$230	\$410



#### Monthly Retiree Drug Subsidy Payments

Medicare Supplement Plan #1: \$42.76
Medicare Supplement Plan #2: \$25.05
Rocky Mountain Health Plan \$33.00
Kaiser \$0.00

#### Morbidity

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

### Assumptions Specific to the "no-Part A" subsidy:

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

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

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

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

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

Costs for the "no-Part A" subsidy are currently less than the costs of PERA paying the Part A premium on behalf of its members that do not qualify for free Part A coverage. However, it is expected that future increases in the "no-Part A" subsidy are expected to result in it becoming more cost effective in the future for PERA to pay the Part A premium as an alternative to continuing the "no-Part A" subsidy in its current

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



configuration. This valuation assumes PERA will make the decision to pay the Part A premium (on a "whole group basis") when it becomes cost effective to do so, which is projected to occur in 2010.

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

### Retiree Drug Subsidy (RDS) under Medicare Part D:

Due to the service-based premium subsidy not increasing over time, retirees are required to pay the entire increase in annual costs each year, resulting in monthly contributions that increase more rapidly over time than the total costs of coverage. This is expected to result in the prescription drug benefit provided to those members eligible for Medicare Part D to cease being Actuarially Equivalent (by failing the net test component of the Actuarial Equivalency Attestation) at some point in the future, resulting in a termination of the RDS. This valuation is based on the assumption that PERA will last qualify for an RDS payment in 2013.



### **SCHEDULE E**

### **ACTUARIAL COST METHOD**

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



#### **SCHEDULE F**

## SUMMARY OF MAIN PERA PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

**Effective Date** 

Pension: Established in 1931, most recently amended during 2006.

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

#### **DEFINITIONS**

**Affiliated Employers** 

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

**Covered Members** 

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

Division

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

Highest Average Salary (HAS)

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

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

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



**Service Credit** 

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

Vested

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





### **CONTRIBUTIONS**

**Member Contributions** 

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

**Employer Contributions** 

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

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

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

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

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

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

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

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

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



## Amortization Equalization Disbursement (AED)

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

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

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

### Supplemental Amortization Equalization Disbursement (SAED)

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

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

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



### **Matching Contributions**

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

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

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

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



### **ELIGIBILITY FOR BENEFITS**

Refund of Member Contributions

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

Service Retirement

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

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

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

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

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

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

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

State Troopers, regardless of date of hire

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



### Reduced Service Retirement

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

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

Age	Service Credit	
50	25	
55	20	
60	5	

- State Troopers, regardless of date of hire

Age	Service Credit
50	20
60	5

### **Disability Retirement**

Active members with five or more years of earned service credit, with at least 6 months of this time earned in the most recent period of membership are covered (vested) for disability retirement. To be eligible, the member must be found to be totally and permanently disabled (mentally ore 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
  - 1.5% of HAS times years of Service Credit in excess of 16 up to 20, plus
  - 2.5% of HAS times years of Service Credit in excess of 20, the total not to exceed 100% of HAS.

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

### Reduced Service Retirement Benefit

For all members, except State Troopers:

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

### For State Troopers:

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



### Disability Retirement Benefit

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

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

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



#### **Survivor Benefits**

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

Benefits are payable in the following order:

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

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

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

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



### **Benefit Options**

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

### Post-Retirement Benefit Increases

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

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



### OTHER PROVISIONS SPECIFIC TO THE HEALTH CARE TRUST FUND

## Eligibility for Health Care Coverage

Anyone receiving a monthly PERA benefit, spouses, and unmarried, dependent children under age 25.

Members receiving short-term disability payments.

Guardians of children receiving PERA survivor benefits if children are receiving health care benefits.

Retirees temporarily not receiving PERA benefits.

Surviving spouses of deceased retirees who are not receiving PERA benefits but were receiving health care benefits at the time when death occurred.

Divorced spouses of retirees who are not receiving PERA benefits, but were receiving health care benefits, when the divorce occurred.

#### Enrollment

Enrollment is voluntary, with annual open enrollment for coverage effective each January 1.

### **Premium Subsidy**

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:

- \$ 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

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.

Historically, this has resulted in net costs to the Trust being very close to the premium subsidy, with all costs of coverage above this subsidy paid by the member. For those age 65 or older, the full cost of coverage is considered to be based on the full cost of coverage assuming Medicare Part A eligibility. This is independent of actual Medicare Part A eligibility.

Members not receiving a PERA monthly benefit do not qualify for this subsidy and bear the full cost of coverage.

This premium subsidy is only available to those electing health care coverage.



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

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

### Special Note on those Members eligible for Medicare Part D:

For members electing coverage in a plan option that produces a Retiree Drug Subsidy (RDS), which is payable to PERA, under Part D of the Medicare Modernization Act of 2003 (MMA), PERA has reduced the full cost of coverage by the estimated RDS. GASB Statements 43 and 45 do not allow for future assumed RDS payments to be used as a direct offset for future liabilities. Therefore, a liability for these payments has been included in the total Health Care Trust Fund liability. Plan options producing an RDS for PERA in 2007 are the self-funded Medicare Supplement plans and the Rocky Mountain Health Plan HMO.



## SCHEDULE OF ACTIVE MEMBER DATA AS OF DECEMBER 31, 2006

### STATE DIVISION

Attained Age				Co	mpleted Ye	ars of Servic	•		
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total	Payroll
Under 20	489	0	0	0	0	0	0	489	\$ 3,303,32
20 to 24	1,786	35	0	0	0	0	0	1,821	\$ 32,572,62
25 to 29	3,159	549	5	0	0	0	0	3,713	\$ 103,194,00
30 to 34	2,974	1,510	270	8	0	0	0	4,762	\$ 164,245,24
35 to 39	2,775	1,761	1,007	330	25	0	0	5,898	\$ 234,112,80
40 to 44	2,531	1,652	1,055	858	482	64	0	6,642	\$ 276,888,83
45 to 49	4,410	1,731	1,089	1,059	906	801	117	10,113	\$ 416,034,70
50 to 54	2,240	1,517	1,111	1,156	944	943	464	8,375	\$ 386,278,17
55 to 59	1,689	1,195	846	960	778	636	492	6,596	\$ 301,825,81
60	254	194	133	114	113	90	65	963	\$ 41,997,18
61	196	132	80	74	91	80	61	714	\$ 32,441,85
62	138	103	78	84	67	39	51	560	\$ 25,766,08
63	139	75	69	69	49	37	45	483	\$ 20,646,86
64	116	67	68	69	38	30	47	435	\$ 18,626,86
65	81	52	28	32	40	24	28	285	\$ 11,623,53
66	67	47	21	26	18	16	12	207	\$ 8,045,07
67	70	21	25	12	17	14	11	170	\$ 5,828,25
68	64	32	13	13	7	6	13	148	\$ 4,504,20
69	56	22	14	15	10	3	4	124	\$ 3,431,69
70 & Over	166	82	40	28	20	21	11	368	\$ 7,958,00
Total	23,400	10,777	5,952	4,907	3,605	2,804	1,421	52,866	\$ 2,099,325,14

Average Age (Non-Trooper): 45.32 Average Service (Non-Trooper): 9.05

Average Age (Trooper): 39.61 Average Service (Trooper): 10.88



## SCHEDULE OF ACTIVE MEMBER DATA AS OF DECEMBER 31, 2006

## **SCHOOL DIVISION**

Attained Age				Co	ompleted Ye	ears of Serv	ice		
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total	Payroll
Under 20	1,245	0	0	0	0	0	0	1,245	\$ 7,095,215
20 to 24	4,679	115	0	0	0	0	0	4,794	\$ 78,460,089
25 to 29	9,287	1,553	29	0	0	0	0	10,869	\$ 286,503,145
30 to 34	6,649	4,080	578	11	0	0	0	11,318	\$ 336,633,756
35 to 39	6,934	3,614	2,403	494	14	0	0	13,459	\$ 402,621,675
40 to 44	8,542	3,801	2,078	1,697	572	41	0	16,731	\$ 464,811,744
45 to 49	6,873	4,319	2,385	1,768	1,778	1,003	94	18,220	\$ 567,313,636
50 to 54	4,625	3,231	2,436	2,043	1,814	1,918	660	16,727	\$ 595,158,439
55 to 59	3,402	2,001	1,495	1,647	1,460	1,259	719	11,983	\$ 432,988,360
60	520	289	188	209	187	147	80	1,620	\$ 52,162,409
61	375	210	146	122	119	110	47	1,129	\$ 35,713,127
62	357	154	96	101	112	80	37	937	\$ 27,380,295
63	315	139	105	94	76	60	39	828	\$ 22,329,638
64	257	153	86	48	54	43	29	670	\$ 17,251,954
65	216	101	64	49	49	27	20	526	\$ 11,602,745
66	198	57	37	40	37	20	13	402	\$ 7,862,032
67	145	80	25	27	16	13	9	315	\$ 5,677,880
68	166	52	26	24	13	18	11	310	\$ 5,420,733
69	121	43	20	14	10	9	4	221	\$ 3,241,363
70 & Over	547	237	76	47	30	27	20	984	\$ 10,957,510
Total	55,453	24,229	12,273	8,435	6,341	4,775	1,782	113,288	\$ 3,371,185,745

Average Age: 43.83 Average Service: 7.88



## SCHEDULE OF ACTIVE MEMBER DATA AS OF DECEMBER 31, 2006

## LOCAL GOVERNMENT DIVISION

Attained Age				Co	ompleted Ye	ars of Servic	е		
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total	Payroll
Under 20	517	0	0	0	0	0	0	517	\$ 2,622,779
20 to 24	879	27	0	0	0	0	0	906	\$ 16,151,317
25 to 29	1,109	190	5	0	0	0	0	1,304	\$ 38,377,364
30 to 34	1,085	332	80	2	0	0	0	1,499	\$ 54,732,787
35 to 39	1,132	451	213	66	7	0	0	1,869	\$ 75,704,867
40 to 44	1,245	463	284	181	123	32	0	2,328	\$ 98,261,441
45 to 49	967	514	323	253	250	205	43	2,555	\$ 125,278,806
50 to 54	772	377	256	261	214	187	125	2,192	\$ 108,696,080
55 to 59	538	274	181	192	159	133	103	1,580	\$ 77,112,045
60	86	41	20	24	16	15	15	217	\$ 8,955,369
61	66	29	25	15	17	9	8	169	\$ 6,956,952
62	56	37	13	11	9	13	12	151	\$ 5,731,027
63	59	28	16	16	7	9	3	138	\$ 5,523,396
64	44	13	6	5	18	5	8	99	\$ 3,514,317
65	37	4	6	9	2	2	2	62	\$ 1,532,299
66	22	13	8	6	3	2	0	54	\$ 1,500,516
67	30	8	4	3	2	3	2	52	\$ 1,081,751
68	21	6	3	2	1	0	2	35	\$ 832,036
69	18	4	1	0	0	0	1	24	\$ 414,222
70 & Over	147	28	20	4	2	5	2	208	\$ 3,320,154
Total	8,830	2,839	1,464	1,050	830	620	326	15,959	\$ 636,299,525

Average Age: 43.17 Average Service: 7.44



## SCHEDULE OF ACTIVE MEMBER DATA AS OF DECEMBER 31, 2006

## JUDICIAL DIVISION

Attained Age				Co	ompleted Ye	ars of Servic	e		
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total	Payroll
Under 20	0	0	0	0	0	0	0	0	\$ 0
20 to 24	0	0	0	0	0	0	0	0	\$ 0
25 to 29	0	0	0	0	0	0	0	0	\$ 0
30 to 34	1	0	0	0	0	0	0	1	\$ 23,687
35 to 39	5	1	1	1	0	0	0	8	\$ 650,245
40 to 44	15	3	2	3	0	0	0	23	\$ 2,164,272
45 to 49	13	8	13	7	3	1	0	45	\$ 4,437,419
50 to 54	13	6	8	10	6	7	2	52	\$ 5,351,303
55 to 59	11	12	13	20	18	16	6	96	\$ 9,620,699
60	5	3	1	2	2	3	0	16	\$ 1,590,891
61	0	2	1	0	4	2	3	12	\$ 1,333,741
62	0	2	2	0	1	1	1	7	\$ 682,030
63	1	1	1	2	2	2	0	9	\$ 929,722
64	1	0	1	1	0	1	2	6	\$ 576,463
65	1	0	0	1	2	3	1	8	\$ 890,307
66	0	0	0	0	2	0	1	3	\$ 332,030
67	0	0	0	0	0	0	0	0	\$ 0
68	0	0	0	1	0	0	2	3	\$ 337,067
69	0	0	1	0	0	0	0	1	\$ 119,013
70 & Over	0	0	0	0	0	0	1	1	\$ 111,744
Total	66	38	44	48	40	36	19	291	\$ 29,150,633

Average Age: 54.66 Average Service: 14.81