

ADAMS COUNTY RETIREMENT PLAN
ACTUARIAL VALUATION REPORT
AS OF JANUARY 1, 2012

July 3, 2012

Ms. Pamela Mathisen
Plan Administrator
Adams County
4430 South Adams County Parkway, Suite C3406
Brighton, CO 80601-8202

Re: Actuarial Valuation of the Adams County Retirement Plan as of January 1, 2012

Dear Pam:

We are pleased to present our Report on the actuarial valuation of the Adams County Retirement Plan as of January 1, 2012.

This Report presents the results of the January 1, 2012 actuarial valuation of the Adams County Retirement Plan. The Report describes the current actuarial condition of the Adams County Retirement Plan, determines the annual required contribution (ARC), and analyzes changes in these required rates. In addition, the Report provides information required in connection with Governmental Accounting Standards Board Statement No. 25 (GASB 25) and No. 27 (GASB 27), and it provides various summaries of the data.

We certify that the information included herein and contained in our January 1, 2012 Actuarial Valuation Report is accurate and fairly presents the actuarial position of the Adams County Retirement Plan as of the valuation date.

All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

Ms. Pamela Mathisen

July 3, 2012

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Certification

The undersigned are independent actuaries and consultants. Leslie Thompson and Diane Hunt are Enrolled Actuaries and are Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries. Finally, both of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

A handwritten signature in black ink that reads "Leslie Thompson". The signature is written in a cursive style with a large, prominent initial "L".

Leslie Thompson, FSA, EA, MAAA
Senior Consultant

A handwritten signature in black ink that reads "Diane L. Hunt". The signature is written in a cursive style with a large, prominent initial "D".

Diane Hunt, FSA, FCA, EA, MAAA
Consultant

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SECTION A

EXECUTIVE SUMMARY

Actuarial Valuation

Valuations are prepared annually, as of January 1 of each year, the first day of the fiscal year. The primary purposes of the valuation report are to measure the plan's liabilities, to determine the required contribution rate and to analyze changes in the Adams County Retirement Plan's actuarial position.

In addition, the report provides information in connection with Governmental Accounting Standards Board Statement Nos. 25 and 27 (GASB 25 and GASB 27), and it provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

Financing Objectives

The Adams County Retirement Plan is supported by member contributions, employer contributions, and net earnings on the investments of the fund. Contribution rates are set in ordinance, currently at 8.25% and increasing to 9.00%, for members and employers.

The combined member and employer contributions are intended to be sufficient to pay the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL) over a period of 30 years from the valuation date.

Progress toward Realization of Financing Objectives

The UAAL/(surplus) and the funded ratio (ratio of the actuarial value of assets to the actuarial accrued liability) illustrate the progress toward the realization of certain financing objectives. Based on the actuarial valuation as of January 1, 2012, the Plan has an unfunded liability of \$169.79 million and a funded ratio of 54.3%. The funded ratio declined from 57.4% to 54.3% and the annual required contribution increased, from 18.34% of pay, to 19.93% of pay. This change in both these metrics is an indication that the cost of the plan is exceeding the contributions toward the plan. Absent any changes to the contributions and/or liabilities, the plan is not expected to remain sustainable over a long period of time.

The net employer Annual Required Contribution as a percentage of pay for the year beginning January 1, 2012 is 19.93%. The expected County contribution is 8.25% of pay which creates a contribution shortfall of 11.68% of pay.

Experience During the Year

The plan experienced a liability gain of \$7.14 million during fiscal year 2011. This gain was largely due to salary increases less than expected. The plan experienced an asset loss of \$15.53 million during fiscal year 2011. This loss was due to the recognition of investment returns less than assumed during 2008 and 2011. The overall result was an unfunded liability \$8.40 million greater than expected at January 1, 2012.

Assumptions and methods

There are no changes in actuarial methods and assumptions since the prior report. The assumptions have been selected by the Adams County Board of Retirement based upon the actuary's analysis and recommendations from the 2008 Experience Study. These assumptions and methods are detailed in Section H of this Report.

The results of any actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations presented in this Report are intended to provide information for rational decision making.

Benefit Provisions

All of the benefit provisions reflected in this valuation are those which were in effect on January 1, 2012. Beginning January 1, 2012, employee and employer contribution rates were increased from 8.00% to 8.25%. The benefit provisions are summarized in Section D of our Report.

Data

Adams County staff supplied data for retired, active and inactive members as of January 1, 2012. We did not audit this data, but we did apply a number of tests to the data, and we have concluded that the data is reasonable and consistent with the prior year's data. Adams County staff also supplied asset data as of January 1, 2012.

Financial Position

Due largely to the investment losses on both a market value and actuarial value basis, the funded ratios decreased from January 1, 2011 to January 1, 2012.

Funded Status Summary (\$ in millions)		
Valuation Date	January 1, 2012	January 1, 2011
Accrued Liability	\$371.7	\$356.3
Actuarial Value of Assets (smoothed)	\$201.9	\$204.7
Unfunded Accrued Liability	\$169.8	\$151.6
Funded Ratio	54.3%	57.4%
Market Value of Assets	\$181.6	\$185.0
Unfunded Accrued Liability	\$190.1	\$171.2
Funded Ratio	48.9%	51.9%
Market Value Rate of Return	(0.5%)	9.5%
Actuarial Value Rate of Return	(0.1%)	1.9%

Investment losses increased the Total Annual Required Contribution by roughly 1.30%. Liability gains reduced the Total Annual Required Contribution by roughly 0.60%. The contribution rate of 18.34% of pay for Fiscal Year 2011 is based on a beginning of year contribution. The contribution rate of 19.93% of pay for Fiscal Year 2012 is based on contributions being made throughout the year, consistent with the funding policy of the Plan.

Contribution Requirement Summary		
All Numbers Reported Middle of Year, Percent of Pay		
Fiscal Year Beginning	January 1, 2012	January 1, 2011
Total Annual Required Contribution*	28.18%	26.34%
Estimated Member Contribution	8.25%	8.00%
Net Annual Required Contribution*	19.93%	18.34%
Net Annual Required Contribution Mid-Year	19.93%	19.02%
Estimated County Contribution	8.25%	8.00%
Contribution Shortfall	11.68%	11.02%

*GRS numbers from January 1, 2012 valuation shown middle of year. Prior year's numbers from prior actuary shown beginning of year.

Exhibit A.1		
Adams County Retirement Plan		
Executive Summary		
	January 1, 2012	January 1, 2011
1. Annual Required Contribution		
a. Total	\$ 26,530,718	25,218,142
b. Net Employer Contribution	18,762,500	18,205,702
c. Net Employer %	19.93%	19.02%
2. Funded Status		
a. Actuarial Accrued Liability	\$ 371,702,160	\$ 356,275,436
b. Actuarial Value of Assets (AVA)	201,917,055	204,666,912
c. Unfunded Liability (AVA-basis)	169,785,105	151,608,524
d. Funded Ratio (AVA-basis)	54.3%	57.4%
e. Market Value of Assets (MVA)	\$ 181,624,022	\$ 185,034,993
f. Unfunded Liability (MVA-basis)	190,078,138	171,240,443
g. Funded Ratio (MVA-basis)	48.9%	51.9%
3. Summary of Census Data		
a. Actives		
i. Counts	1,709	1,756
ii. Total Annual Projected Compensation	\$ 94,160,223	\$ 95,737,553
iii. Average Projected Compensation	55,097	54,520
iv. Average Age	44.5	44.4
v. Average Service	9.7	9.5
b. Members with Refunds Due Counts	122	121
c. Deferred Vested Member Counts	142	141
d. Retired Member Counts	676	618
e. Beneficiary Counts	89	70
f. Disabled Retiree Counts	25	34
g. Total Members Included in Valuation	2,763	2,740

SECTION B

VALUATION RESULTS

Exhibit B.1		
Adams County Retirement Plan		
Actuarial Valuation Results		
Accrued Accrued Liability		
	January 1, 2012	January 1, 2011
1. Active Members		
a. Retirement Benefits	\$ 200,269,052	\$ 202,819,664
b. Withdrawal Benefits	449,860	2,217,634
c. Refund Benefits	(6,758,437)	(4,544,843)
d. Disability Benefits	8,827,618	8,010,128
e. Death Benefits	2,486,723	2,441,683
f. Total	<u>\$ 205,274,816</u>	<u>\$ 210,944,266</u>
2. Members with Deferred Benefits	\$ 7,969,236	\$ 8,349,161
3. Members Receiving Benefits	\$ 158,458,108	\$ 136,982,009
4. Total	\$ 371,702,160	\$ 356,275,436
5. Actuarial Value of Assets	<u>\$ 201,917,055</u>	<u>\$ 204,666,912</u>
4. Unfunded Actuarial Accrued Liability	\$ 169,785,105	\$ 151,608,524

Exhibit B.2		
Adams County Retirement Plan		
Actuarial Valuation Results		
Normal Cost*		
	January 1, 2012	January 1, 2011
1. Dollar Normal Cost		
a. Retirement Benefits	\$ 8,778,677	\$ 9,337,405
b. Withdrawal Benefits	2,963,124	2,509,493
c. Disability Benefits	575,949	607,024
d. Death Benefits	181,024	190,935
e. Total	<u>\$ 12,498,774</u>	<u>\$ 12,644,857</u>
2. Normal Cost as a Percentage of Pay	13.27%	13.21%

*GRS numbers from January 1, 2012 valuation shown middle of year. Prior year's numbers from prior actuary shown beginning of year.

Exhibit B.3 Adams County Retirement Plan Actuarial Valuation Results Present Value of Projected Benefits		
	January 1, 2012	January 1, 2011
1. Active Members		
a. Retirement Benefits	\$ 273,111,969	\$ 280,546,440
b. Withdrawal Benefits	19,141,242	19,411,848
c. Disability Benefits	13,091,160	12,907,509
d. Death Benefits	<u>3,950,755</u>	<u>4,030,453</u>
e. Total	\$ 309,295,126	\$ 316,896,250
2. Members with Deferred Benefits	\$ 7,969,236	\$ 8,349,161
3. Members Receiving Benefits	\$ 158,458,108	\$ 136,982,009
4. Total	\$ 475,722,470	\$ 462,227,420

Exhibit B.4 Adams County Retirement Plan Development of the Annual Required Contribution*				
Fiscal Year Beginning	January 1, 2012		January 1, 2011	
	Dollar	Percent of Pay	Dollar	Percent of Pay
1. Total Normal Cost*	\$12,498,774	13.27%	\$12,644,857	13.21%
2. Amortization of Unfunded Actuarial Accrued Liability Over 30 Years*	13,372,944	14.20%	11,941,285	12.47%
3. Assumed Administrative Expenses	659,000	0.70%	632,000	0.66%
4. Annual Required Contribution (ARC)*	\$26,530,718	28.18%	\$25,218,142	26.34%
5. Estimated Member Contribution	7,768,218	8.25%	7,659,004	8.00%
6. Net ARC	\$18,762,500	19.93%	\$17,559,138	18.34%
7. Adjustment to Mid-Year	-	0.00%	646,564	0.68%
8. Net ARC Mid-Year	\$18,762,500	19.93%	\$18,205,702	19.02%
9. Estimated County Contribution Mid-Year	7,768,218	8.25%	7,659,004	8.00%
10. Contribution Shortfall	\$10,994,282	11.68%	\$10,546,698	11.02%
11. Annual Projected Payroll	\$ 94,160,223		\$ 95,737,553	

*GRS numbers from January 1, 2012 valuation shown middle of year. Prior year's numbers from prior actuary shown beginning of year.

Exhibit B.5	
Adams County Retirement Plan	
Plan Experience for Fiscal Year 2011	
Liabilities	
1. Actuarial Accrued Liability at January 1, 2011	\$ 356,275,436
2. Normal Cost at January 1, 2011	12,644,857
3. Benefit Payments and Expenses during Fiscal Year 2011	17,108,521
4. Interest on Items 1-3 to End of Year	27,027,452
5. Change in Actuarial Accrued Liability Due to Assumption Changes	-
6. Change in Actuarial Accrued Liability Due to Provision Changes	-
7. Expected Actuarial Accrued Liability at January 1, 2012	378,839,224
8. Actual Actuarial Accrued Liability at January 1, 2012	371,702,160
9. Liability Gain/(Loss)	7,137,064
Assets	
10. Actuarial Value of Assets at January 1, 2011	\$ 204,666,912
11. Benefit Payments and Expenses during Fiscal Year 2011	17,108,521
12. Contributions during Fiscal Year 2011	14,635,268
13. Interest on Items 10-12 to End of Year	15,257,271
14. Expected Actuarial Value of Assets at January 1, 2012	217,450,930
15. Actual Actuarial Value of Assets at January 1, 2012	201,917,055
16. Asset Gain/(Loss)	(15,533,875)
Total	
17. Total Gain/(Loss)	(8,396,811)

SECTION C

PLAN ASSETS

Exhibit C.1		
Adams County Retirement Plan		
Statement of Plan Net Assets		
	<u>December 31, 2011</u>	<u>December 31, 2010</u>
Assets		
Investments, at fair value:		
Cash	\$ 3,583	\$ 20,546
Money market funds and cash equivalents	2,296,988	3,609,260
U.S. Government obligations	6,126,515	5,413,007
Foreign bonds	1,326,922	1,176,325
Corporate bonds	14,630,201	13,136,107
Municipal bonds	681,398	587,370
Equity securities	12,408,119	12,652,315
Foreign equity securities	1,459,207	1,461,008
Real estate	18,998,452	19,783,026
Hedge funds of funds	25,484,535	26,435,603
Partnerships/joint ventures	6,359,077	4,739,676
Mutual funds	91,580,953	95,912,561
Total investments	<u>\$ 181,355,950</u>	<u>\$ 184,926,804</u>
Receivables:		
Dividends and Interest	327,114	239,155
Other Assets:		
Prepaid insurance for retirees	122,909	-
Total assets	<u>\$ 181,805,973</u>	<u>\$ 185,165,959</u>
Liabilities and net assets held in trust for benefits		
Accrued liabilities	181,951	130,966
Total payables	<u>\$ 181,951</u>	<u>\$ 130,966</u>
Net assets held in trust for pension benefits	<u><u>\$ 181,624,022</u></u>	<u><u>\$ 185,034,993</u></u>

Exhibit C.2
Adams County Retirement Plan
Statement of Changes in Plan Net Assets

	<u>Year Ended</u> <u>December 31, 2011</u>	<u>Year Ended</u> <u>December 31, 2010</u>
Additions to Net Assets Attributed to:		
Contributions		
Employer contributions	\$ 7,235,764	\$ 7,153,366
Plan Members contributions	7,235,773	7,153,366
Plan Members for Purchase of service	163,731	129,771
Total contributions	<u>14,635,268</u>	<u>14,436,503</u>
Net Investment Income		
Net appreciation in fair value of investments	(2,863,733)	14,121,284
Interest	1,078,803	1,024,782
Dividends	1,790,102	1,832,007
Other	40,322	167
	<u>45,494</u>	<u>16,978,240</u>
Less Investment expense	<u>(983,212)</u>	<u>(896,722)</u>
Net investment income	<u>(937,718)</u>	<u>16,081,518</u>
Total additions	<u>13,697,550</u>	<u>30,518,021</u>
Deductions to Net Assets Attributed to:		
Benefit payments	14,669,214	12,925,593
Refunds	1,761,213	910,161
Administrative expenses	678,094	648,812
Total deductions	<u>17,108,521</u>	<u>14,484,566</u>
Change in net assets	(3,410,971)	16,033,455
Net assets held in trust for benefits:		
Beginning of year	<u>185,034,993</u>	<u>169,001,538</u>
End of year	<u>\$ 181,624,022</u>	<u>\$ 185,034,993</u>

Exhibit C.3			
Adams County Retirement Plan			
Development of the Actuarial Value of Assets			
Item	Year Ending December 31, 2011		
1. Actuarial value of assets, at beginning of year (prior to corridor)	\$		204,666,912
2. Market value of assets, at beginning of year			185,034,993
3. Net new investments			
a. Contributions received for prior plan year	\$		14,635,268
b. Benefits paid and administrative expenses			(17,108,521)
c. Net	\$		(2,473,253)
4. Market value of assets, at end of year	\$		181,624,022
5. Net MVA earnings [(4) - (2) - (3c)]	\$		(937,718)
6. Assumed investment return rate			7.50%
7. Expected return [(6)*(2)+(6)*(3c)/2]	\$		13,784,877
8. Excess return [(5) - (7)]	\$		(14,722,595)
9. Expected actuarial value of assets as of December 31, 2011	\$		215,978,536
10. Deferred amounts for fiscal year ending December 31,			
	<u>Year</u>	<u>Gain/(Loss)</u>	<u>Percent Deferred</u>
a.	2011	\$ (14,722,595)	80%
b.	2010	3,408,205	60%
c.	2009	7,560,313	40%
d.	2008	(67,920,033)	20%
e.	2007	<u>1,366,702</u>	0%
f. Total		\$ (70,307,408)	\$ (20,293,032)
11. Asset gain to be recognized as of December 31, 2011			(14,061,482)
12. 80% of Market Value	\$		145,299,218
13. 120% of Market Value	\$		217,948,826
14. Actuarial value of assets [(Item 9 - Item 11), but not more than Item 13 or less than Item 12]	\$		201,917,055

Exhibit C.4 Average Annual Rates of Investment Return				
Fiscal Year Ended December 31,	Actuarial Value		Market Value	
	Annual	Cumulative	Annual	Cumulative
1992	10.4 %	10.4 %	8.1 %	8.1 %
1993	11.4	10.9	12.2	10.1
1994	9.1	10.3	(1.6)	6.1
1995	12.1	10.7	22.9	10.1
1996	11.6	10.9	12.0	10.4
1997	13.0	11.3	17.0	11.5
1998	12.2	11.4	9.0	11.1
1999	12.0	11.5	4.0	10.2
2000	8.7	11.2	2.6	9.4
2001	6.2	10.7	(1.6)	8.2
2002	(4.5)	9.2	(10.9)	6.3
2003	9.7	9.2	22.4	7.6
2004	4.3	8.8	11.0	7.8
2005	4.4	8.5	6.2	7.7
2006	7.6	8.5	14.2	8.1
2007	11.1	8.6	8.2	8.1
2008	(7.9)	7.6	(26.2)	5.7
2009	11.6	7.8	12.5	6.1
2010	1.9	7.5	9.5	6.3
2011	(0.1)	7.1	(0.5)	5.9

SECTION D

SUMMARY OF BENEFIT PROVISIONS

SUMMARY OF BENEFIT PROVISIONS

BASED ON THE PLAN ORIGINALLY EFFECTIVE JULY 1, 1968 AND AMENDED AND
RESTATED EFFECTIVE JANUARY 1, 2011.

Participation

Any County Official and any person assigned to a full-time position as defined by Adams County or Rangeview Library District Personnel Policies and Procedures including job-sharing employees shall become a member of the Plan on the first day of the pay period coincident with or following date of employment.

Member Contributions

Effective January 1, 2012, each member contributes 8.25% of compensation on a monthly basis. The rate will continue to increase by 0.25% each year to 9.0% by 2015. Interest on contributions is credited at a rate of 3.0% per annum compounded monthly.

After December 31, 1983 member contributions are picked up and paid by the County as provided in Code Section 414(h).

County Contributions

The County will match member contributions.

Credited Service

All service completed during the elapsed time from the member's date of employment, excluding any breaks in service, to the member's date of termination on the basis of 1/365th year for each day of employment after January 1, 1965, provided an employee joined the plan on the first date eligible. Service prior to January 1, 1970 will be included (up to five years) provided the employee became a Member on the first date he was first eligible. Service is credited while a member is on long-term disability as long as no benefits are being paid from the plan.

Credited Service for Head Start employees commences on the later of joining the Plan and September 1, 1990.

Service Purchase ("air time")

Eligible members may purchase additional years of service credit for any full-time, non-vested previous employment with any public or private employer in the United States, subject to certain restrictions.

Compensation

Compensation is the total regular compensation paid to the member, reflecting the normal regular salary or hourly wage rate, before any payroll deductions for income tax, Social Security, group insurance, or any other purpose, excluding bonuses, extra pay, overtime pay, workers' compensation, single-sum payments received in lieu of accrued vacation and sick leave upon termination of employment or during the course of employment or during the course of employment, required contributions by the County under this Plan, or for Social Security, group insurance, retainers' fees under contract, or the like, but including compensation deferred under Sections 125, 403(b), 414(h), or 457 of the Internal Revenue Code.

Final Average Monthly Compensation

- *Members hired prior to January 1, 2005:*

Average of the highest 36 consecutive calendar months of compensation during the last 120 months of employment.

- *Members hired on or after January 1, 2005 but before January 1, 2010:*

Average of the highest 60 consecutive calendar months of compensation during the last 120 months of employment.

Career Compensation

- *Members hired on or after January 1, 2010:*

Pensionable Compensation from date of participation to retirement.

Accrued Benefit

- *Members hired prior to January 1, 2010:*

2.5% of Final Average Monthly Compensation multiplied by Credited Service including purchased service or \$25 per year of Credited Service, if greater.

- *Members hired on or after January 1, 2010:*

1.75% of Career Compensation divided by 12 or \$25 per year of Credited Service, if greater.

Vested Accrued Benefit

- *Members are hired before January 1, 2010:*
Five years of Credited Service
- *Members are hired on or after January 1, 2010:*
Ten years of Credited Service

Normal Retirement

Eligibility:

Attainment of age 65.

Benefit:

Accrued Benefit up to a maximum of 80% of the members Final Average Monthly Compensation.

Regular Early Retirement

Eligibility:

- *Members hired prior to January 1, 2005:*
Attainment of age 55 and 5 years of Credited Service.
- *Members hired on or after January 1, 2005:*
Attainment of age 55 and 10 years of Credited Service.

Benefit:

- *Members hired prior to July 1, 2005:*
Vested Accrued Benefit determined as of his Early Retirement Date, reduced by 1/6 of 1% for each of the first 36 months and 1/4 of 1% for each additional month payments commence prior to the Normal Retirement Date.

- *Members hired on or after July 1, 2005:*

Vested Accrued Benefit determined as of his Early Retirement Date, reduced by 1/3 of 1% for each of the first 36 months and 5/12 of 1% for each additional month payments commence prior to the Normal Retirement Date.

Special Early Retirement

Eligibility:

- *Members hired prior to January 1, 2005:*

Attainment of any age and age plus credited service equals 70 or more at termination.

- *Members hired on or after January 1, 2005 and prior to January 1, 2010:*

Attainment of age 50 and age plus credited service equals 70 or more at termination.

- *Members hired on or after January 1, 2010:*

Attainment of age 55 and age plus credited service equals 80 or more at termination.

Benefit:

Vested Accrued Benefit determined as of his Special Early Retirement Date, unreduced for early payment.

Disability Retirement

Eligibility:

Total and permanent disability. Member qualifies for disability under the County's long-term disability plan or under Title II of the Social Security Act.

Benefit:

Normal Retirement Benefit considering annual rate of compensation at disability and Credited Service he would have accumulated if employment had continued uninterrupted to the later of his Normal Retirement Date or the date that the County's long-term disability benefits end. Benefits commence at Normal Retirement Date, or if later, the first day of the month after payments cease under the County's long-term disability insurance contract.

Termination Benefit

Eligibility:

- *Members hired prior to January 1, 2010:*

Members with less than five years of Credited Service receive a refund of the member’s contributions. Members who have completed at least five years of Credited Service are eligible to receive their Vested Accrued Benefit payable at Normal Retirement Date.

- *Members hired on or after January 1, 2010:*

Members with less than ten years of Credited Service receive a refund of the member’s contributions. Members who have completed at least ten years of Credited Service are eligible to receive their Vested Accrued Benefit payable at Normal Retirement Date.

Refund of Accumulated Contributions

Upon termination prior to Normal Retirement Age, in lieu of a monthly pension benefit, the member may elect to receive a refund of a percentage of their accumulated contributions (Excluding service purchase contributions) according to the following schedule:

Completed Years of Service	Percent Vested of Contributions Accumulated At Termination		
	Hired Prior to 1/1/2005	Hired 2005-2010	Hired on or after January 1, 2010
Less Than 5	100%	100%	100%
5	110%	100%	100%
6	125%	110%	100%
7	140%	120%	100%
8	155%	130%	100%
9	170%	140%	100%
10	185%	150%	100%
11	200%	160%	100%
12	200%	170%	100%
13	200%	180%	100%
14	200%	190%	100%
15 or more	200%	200%	100%

Pre-Retirement Death Benefit

- *Member is single:*

Beneficiary receives two times member's accumulated contributions at date of death (Excluding service purchase contributions).

- *Member is married:*

Spouse receives two times member's accumulated contributions at date of death (Excluding service purchase contributions); or

A monthly benefit equal to 60% of the member's vested accrued benefit, commencing the first day of the month after the member's death or age 50 (55 for Terminated Vested Members) whichever is later.

Normal Form

Monthly benefit paid for the life of the member, and if the member dies prior to receiving 120 monthly payments, the remainder of the 120 payments will be paid to the member's beneficiary.

Optional Forms

- 100% joint and survivor annuity
- 50% joint and survivor annuity
- 66-2/3% last survivor annuity
- 100% joint and survivor annuity with pop up
- 50% joint and survivor annuity with pop up
- Single life annuity

Optional Form Conversion Factors

Optional annuity forms are actuarially equivalent based on 7.50% interest and the 1983 Group Annuity Mortality table blended 50% male and 50% female.

Payment Date

Benefits are paid on the first of the month following eligibility for receipt.

SECTION E

SUMMARY OF PARTICIPANT DATA

Exhibit E.1		
Adams County Retirement Plan		
Summary of Census Data		
	January 1, 2012	January 1, 2011
1. Active Members		
a. Counts	1,709	1,756
b. Annual Projected Compensation	\$ 94,160,223	\$ 95,737,553
c. Average Annual Compensation	\$ 55,097	\$ 54,520
d. Average Age	44.5	44.4
e. Average Service	9.7	9.5
f. Accumulated Member Contributions with Interest	\$ 59,360,127	\$ 56,867,620
2. NonVested Members with Refunds Due		
a. Counts	122	121
b. Amount of Refunds Due	\$ 407,451	\$ 420,330
3. Deferred Vested Members*		
a. Counts	142	141
b. Annual Deferred Benefits	\$ 1,664,254	\$ 1,691,560
c. Average Benefit	\$ 11,720	\$ 11,997
4. Retired Members		
a. Counts	676	618
b. Annual Benefits	\$ 14,068,121	\$ 12,122,761
c. Average Benefit	\$ 20,811	\$ 19,616
5. Beneficiaries		
a. Counts	89	70
b. Annual Benefits	\$ 902,160	\$ 741,069
c. Average Benefit	\$ 10,137	\$ 10,587
6. Disabled Retirees		
a. Counts	25	34
b. Annual Benefits	\$ 480,807	\$ 554,373
c. Average Benefit	\$ 19,232	\$ 16,305
7. Total Members Included in Valuation	2,763	2,740

*Includes 25 deferred disableds in 2012 and 26 deferred disableds and 1 deferred beneficiary in 2011.

Exhibit E.2 Summary of Changes in Participant Status During Fiscal Year 2011							
	Active Members	With Deferred Benefits ¹	With Refunds Due	Retirees	Disabled Retirees	Beneficiaries	Total
As of January 1, 2011	1,756	141	121	618	34	70	2,740
Age retirements	(57)	(2)		73	(14)		0
Disability retirements	(1)	(4)			5		0
Deferred disability	(5)	5					0
Deaths	(5)	(3)		(15)		(1)	(24)
Vested terminations	(18)	18					0
Rehires	8	(5)	(3)				0
Cashouts	(80)	(8)	(29)				(117)
Expiration of benefits						(1)	(1)
Terminated nonvested with refunds due	(19)		19				0
New Beneficiary						21	21
New entrants during the year ²	130		14				144
Net change	(47)	1	1	58	(9)	19	23
As of January 1, 2012	1,709	142	122	676	25	89	2,763

¹ Includes 25 deferred disabled members at January 1, 2012.

² Includes 14 members hired and terminated in 2012 with refunds due.

Exhibit E.3								
Active Member Counts by Age and Service								
as of January 1, 2012								
Age	Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	
Under 20	0	0	0	0	0	0	0	-
20-24	21	1	0	0	0	0	0	22
25-29	110	46	3	0	0	0	0	159
30-34	117	83	20	0	0	0	0	220
35-39	82	84	56	10	0	0	0	232
40-44	71	86	67	22	7	0	0	253
45-49	48	70	57	36	25	8	1	245
50-54	40	50	39	32	35	21	7	224
55-59	30	40	37	25	21	28	11	192
60-64	23	27	24	16	16	8	9	123
65-69	3	7	11	3	2	3	3	32
Over 70	0	2	1	1	1	1	1	7
Total	545	496	315	145	107	69	32	1,709

Exhibit E.4 Active Member Average Salary by Age and Service ¹								
Age	Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	
Under 20								
20-24	\$36,862							\$37,397
25-29	42,521	42,282						42,308
30-34	44,460	52,157	47,734					47,662
35-39	43,194	54,766	56,811	66,257				51,665
40-44	44,528	50,928	58,280	65,128	68,505			52,800
45-49	44,251	51,206	54,087	62,642	69,780	65,819		54,585
50-54	42,654	47,552	49,723	66,429	62,815	72,760	74,832	55,353
55-59	44,649	47,659	50,245	63,978	59,430	65,210	62,013	54,481
60-64	55,393	45,211	51,013	64,490	67,496	64,910	73,566	57,010
65-69		58,423	51,422					56,921
Over 70								64,412
Total	\$43,878	50,273	53,483	65,024	64,358	68,007	68,562	\$52,017

¹ Average Salary not shown if group contains less than five members

Exhibit E.5			
10-Year Projected Benefit Payments (Closed Group)			
Fiscal Year Ended December 31,	Actives	Inactives	Total
2012	\$ 1,503,107	\$ 15,544,404	\$ 17,047,511
2013	2,982,630	15,463,206	18,445,837
2014	4,368,501	15,386,384	19,754,885
2015	5,999,049	15,245,067	21,244,115
2016	7,740,846	15,087,465	22,828,312
2017	9,584,874	14,885,868	24,470,742
2018	11,581,708	14,661,934	26,243,642
2019	13,696,593	14,430,480	28,127,073
2020	15,846,203	14,221,790	30,067,993
2021	18,099,016	13,900,221	31,999,237

Exhibit E.6	
History of Refunds	
Fiscal Year Ended December 31,	Refund Amount
2000	\$ 2,108,717
2001	1,162,536
2002	1,454,715
2003	1,476,978
2004	1,086,548
2005	1,231,836
2006	1,225,048
2007	1,187,708
2008	1,220,911
2009	1,043,307
2010	910,161
2011	1,761,213

SECTION F

GASB ACCOUNTING SCHEDULES

Exhibit F.1 Adams County Retirement Plan Schedule of Funding Progress						
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
(1)	(2)	(3)	(4)=(3)-(2)	(5)=(2)/(3)	(6)	(7)=(4)/(6)
1/1/2006	\$ 162,006,855	\$ 239,818,699	\$ 77,811,844	67.6%	\$ 74,694,189	104.2%
1/1/2007	174,254,209	264,910,496	90,656,287	65.8%	81,386,811	111.4%
1/1/2008	194,027,237	287,832,266	93,805,029	67.4%	87,215,518	107.6%
1/1/2009	179,216,396	316,117,270	136,900,874	56.7%	94,396,658	145.0%
1/1/2010	200,975,215	340,984,767	140,009,552	58.9%	98,982,060	141.4%
1/1/2011	204,666,912	356,275,436	151,608,524	57.4%	95,737,553	158.4%
1/1/2012	201,917,055	371,702,160	169,785,105	54.3%	94,160,223	180.3%

Exhibit F.2				
Adams County Retirement Plan				
Schedule of Employer Contributions				
Fiscal Year Ended December 31,	Annual Required Contribution	Actual County Contribution	Percentage Contributed	
2002	\$ 4,734,705	\$ 3,727,123	78.7%	
2003	6,405,211	3,866,302	60.4%	
2004	6,858,772	4,054,317	59.1%	
2005	9,359,536	4,597,297	49.1%	
2006	10,110,243	5,175,320	51.2%	
2007	11,320,501	5,740,166	50.7%	
2008	11,542,116	6,445,284	55.8%	
2009	16,237,097	7,048,276	43.4%	
2010	16,856,144	7,153,366	42.4%	
2011	17,559,138	7,235,764	41.2%	
2012	18,762,499	TBD	TBD	

Exhibit F.3 Adams County Retirement Plan Required Supplementary Information	
Valuation Date	January 1, 2012
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar Open
Remaining Amortization Periods	30 Years
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return	7.50%
Projected Salary Increases	Service-based increases from 4.5% to 7.50%
Inflation	2.80%
Cost of Living Adjustments	N/A

SECTION G

ACCUMULATED PLAN BENEFITS

The actuarial valuation for the Adams County Retirement Plan has historically included the accumulated plan benefits under Accounting Standards Codification 960, formerly Financial Accounting Standard No. 35. Although this particular measure is not typically used in public sector valuations and is not needed for public sector accounting, we have continued to include it for comparative purposes. Accumulated Plan Benefits represents the present value of benefits based on accrued service and current salary as of the valuation date.

Exhibit G.1 Adams County Retirement Plan Actuarial Valuation Results Accumulated Plan Benefits		
	January 1, 2012	January 1, 2011
1. Accumulated Plan Benefits		
a. Active Members	\$ 131,493,274	\$ 139,132,952
b. Members with Deferred Benefits	7,969,236	8,349,161
c. Members Receiving Benefits	<u>158,458,108</u>	<u>136,982,009</u>
d. Total	\$ 297,920,618	\$ 284,464,122
2. Market Value of Assets	\$ 181,624,022	\$ 185,034,993
3. Funded Ratio	61.0%	65.0%

SECTION H

ACTUARIAL ASSUMPTIONS AND METHODS

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

I. Valuation Date

The valuation date is January 1st of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial liability.

1. The valuation is prepared on the projected benefit basis. The present value of each participant's expected benefit payable at retirement or termination is determined, based on age, service, sex, compensation, and the interest rate assumed to be earned in the future (7.50%). The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal cost 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 to determine the average uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new participant during the entire period of his anticipated covered service, would be required in addition to the contributions of the participant to meet the cost of all benefits payable on their behalf.
4. The unfunded accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability and amortizing the result over 30 years from the valuation date as a level dollar. It is assumed that payments are made throughout the year.

III. Actuarial Value of Assets

The actuarial value of assets is based on recognizing gains and losses over a five-year period where gains and losses are determined by comparing the projected actuarial value of assets (based on the prior year’s actuarial value of assets before application of the corridor, cash flows during the year and expected investment returns on those amounts) to the market value of assets. The actuarial value of assets must be between 80% and 120% of market value.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.50% per annum, compounded annually, composed of an assumed 2.80% inflation rate and a 4.70% real rate of return. This rate represents the assumed return, net of all investment expenses.
2. Salary increase rate: Inflation rate of 2.80%, plus productivity component of 1.70%, plus step-rate/ promotional component as shown.

Sample Attained Age	Percentage Increase in Salary		
	Merit	Inflation	Total
0	4.70 %	2.80 %	7.50 %
5	3.70	2.80	6.50
10	3.30	2.80	6.10
15	2.35	2.80	5.15
20	1.90	2.80	4.70
25	1.70	2.80	4.50
30	1.70	2.80	4.50
35	1.70	2.80	4.50
40	1.70	2.80	4.50

B. Demographic Assumptions

1. Mortality rates (pre- and post-retirement) –RP-2000 Blue Collar Mortality Tables projected with scale AA to 2012 as published in Internal Revenue Bulletin 2007-09. Sample rates shown below:

Sample Attained Ages	Probability of Death Pre-Retirement	
	Men	Women
20	0.04 %	0.02 %
25	0.05	0.02
30	0.07	0.03
35	0.10	0.05
40	0.12	0.07
45	0.15	0.11
50	0.19	0.16
55	0.27	0.25
60	0.44	0.37
65	0.66	0.49
70	0.83	0.63
75	0.00	0.00
80	0.00	0.00
85	0.00	0.00
90	0.00	0.00

Sample Attained Ages	Probability of Death Post-Retirement	
	Men	Women
20	0.04 %	0.02 %
25	0.05	0.02
30	0.07	0.03
35	0.10	0.05
40	0.12	0.07
45	0.15	0.11
50	0.45	0.16
55	0.57	0.25
60	0.87	0.57
65	1.40	1.06
70	2.23	1.75
75	3.64	2.80
80	6.25	4.50
85	10.58	7.73
90	17.32	13.18

2. Mortality rates (post-disablement) – RP-2000 Disabled Male and Female No Collar Mortality Table. Sample rates shown below:

Sample Attained Ages	Probability of Death Post-Disability	
	Men	Women
20	2.26 %	0.74 %
25	2.26	0.74
30	2.26	0.74
35	2.26	0.74
40	2.26	0.74
45	2.26	0.74
50	2.90	1.15
55	3.54	1.65
60	4.20	2.18
65	5.02	2.80
70	6.26	3.76
75	8.21	5.22
80	10.94	7.23
85	14.16	10.02
90	18.34	14.00

3. Disability rates. Sample rates shown below:

Sample Attained Ages	Probability of Disablement Next Year	
	Men	Women
25	0.04 %	0.04 %
30	0.06	0.06
35	0.10	0.10
40	0.16	0.16
45	0.26	0.26
50	0.45	0.45
55	0.84	0.84
60	1.20	1.20

4. Termination rates (for causes other than death, disability or retirement): Termination rates are based on service. Termination rates are not applied after a member becomes eligible for a retirement benefit. Rates at selected ages are shown:

Sample Attained Age	Probability of Termination Next Year	
	Men	Women
0	23.00 %	26.00 %
5	9.00	12.00
10	5.00	5.40
15	1.70	2.00
20	1.00	1.00
25	1.00	1.00
30	1.00	1.00
35	1.00	1.00

5. Retirement rates.

Attained Age	Before Eligible Special Early Retirement	After Eligible for Special Early Retirement
42-52	0.0 %	8.0 %
53-54	0.0	9.0
55	1.3	9.0
56	2.0	9.5
57	3.1	9.5
58	4.5	10.0
59	6.3	10.0
60	8.3	10.0
61	10.0	10.0
62	10.0	25.0
63-64	10.0	15.0
65	10.0	20.0
66-67	25.0	25.0
68-69	50.0	50.0
70 & Over	100.0	100.0

C. Expense Loading

Year	Noninvestment Expenses	
2009	\$651,185	
2010	648,812	
2011	678,094	÷3
	<u>\$1,978,091</u>	= \$659,364
Average	\$659,364	
Loading	\$659,000	

D. Other Assumptions

1. Percent married: 85% of employees are assumed to be married.
2. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
3. Cost of living adjustment: None.
4. Optional forms: Members are assumed to elect the normal form of benefit.
5. Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
6. Current and future deferred vested participants are assumed to retire at the earlier of age 55 or the age they meet special early retirement eligibility. Deferred disabled participants are assumed to commence benefits at age 65.
7. Pay increase timing: Middle of year.
8. Decrement timing: Decrements of all types are assumed to occur mid-year.
9. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
10. Decrement relativity: Decrement rates are used directly, without adjustment for multiple decrement table effects.
11. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.