

ADAMS COUNTY RETIREMENT PLAN
ACTUARIAL VALUATION REPORT
AS OF JANUARY 1, 2013



June 4, 2013

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, 2013

Dear Pam:

We are pleased to present our Report on the actuarial valuation of the Adams County Retirement Plan as of January 1, 2013.

This Report presents the results of the January 1, 2013 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, 2013 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.

The valuation was based upon information, furnished by the Plan, concerning Plan benefits, financial transactions, active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. This letter and these calculations are not intended as legal or accounting advice, and we would recommend review by legal counsel for the compliance of these calculations with all relevant agreements.

Ms. Pamela Mathisen

June 4, 2013

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The valuation results summarized in this report involve actuarial calculations that require assumptions about future events for the Pension Plan. We believe that the assumptions and methods used in this report are reasonable and appropriate for the purpose for which they have been used. However, other assumptions and methods could also be reasonable and could result in materially different results. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial.

The actuarial calculations were prepared for purposes of complying with the requirements of Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying Adams County's financial reporting requirements may produce significantly different results. This report may be provided to parties other than Adams County only in its entirety and only with the permission of Adams County.

Certification

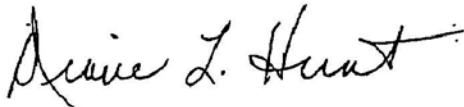
The undersigned are independent actuaries and consultants. Leslie Thompson and Diane Hunt are Enrolled Actuaries and are Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries. Finally, both of the undersigned are experienced in performing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

Respectfully submitted,

Gabriel, Roeder, Smith & Company



Leslie Thompson, FSA, FCA, EA, MAAA
Senior Consultant



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 8.50% and increasing to 8.75% in 2014 and 9.00% in 2015, 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, 2013, the Plan has an unfunded liability of \$187.76 million and a funded ratio of 51.5%. The funded ratio declined from 54.3% to 51.5% and the Net Employer Annual Required Contribution increased, from 19.93% of pay, to 20.38% 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, 2013 is 20.38%. The expected County contribution is 8.50% of pay which creates a contribution shortfall of 11.88% of pay.

Experience During the Year

The plan experienced a liability gain of \$6.16 million during fiscal year 2012. This gain was largely due to salary increases less than expected. The plan experienced an actuarial asset loss of \$14.20 million during fiscal year 2012. This loss was due to the continued recognition of the investment return less than assumed during 2008 and 2011. The overall result was an unfunded liability \$8.04 million greater than expected at January 1, 2013.

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, 2013. Beginning January 1, 2013, employee and employer contribution rates were increased from 8.25% to 8.50%. The benefit provisions are summarized in Section D of our Report.

On December 19, 2012, the Adams County Retirement Board adopted a resolution effective January 1, 2014, with changes in benefit provisions to the plan. These changes have not been reflected in this valuation.

Data

Adams County staff supplied data for retired, active and inactive members as of January 1, 2013. 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, 2013.

Financial Position

Due largely to the continued recognition of investment losses in the actuarial value of assets, the funded ratio decreased from January 1, 2012 to January 1, 2013. The market value returned investment gains and as a result the funded ratio on a market value basis increased.

Funded Status Summary (\$ in millions)		
Valuation Date	January 1, 2013	January 1, 2012
Accrued Liability	\$386.8	\$371.7
Actuarial Value of Assets (smoothed)	\$199.1	\$201.9
Unfunded Accrued Liability	\$187.8	\$169.8
Funded Ratio (AVA basis)	51.5%	54.3%
Market Value of Assets	\$199.7	\$181.6
Unfunded Accrued Liability	\$187.1	\$190.1
Funded Ratio (MVA basis)	51.6%	48.9%
Market Value Rate of Return	12.1%	(0.5%)
Actuarial Value Rate of Return	0.4%	(0.1%)

Investment losses increased the Total Annual Required Contribution by roughly 1.16%. Liability gains reduced the Total Annual Required Contribution by roughly 0.50%. The Employer Net Annual Required Contribution of 19.93% of pay for Fiscal Year 2012 and 20.38% of pay for Fiscal Year 2013 are 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, 2013	January 1, 2012
Total Annual Required Contribution	28.88%	28.18%
Estimated Member Contribution	8.50%	8.25%
Net Annual Required Contribution Mid-Year	20.38%	19.93%
Estimated County Contribution	8.50%	8.25%
Contribution Shortfall	11.88%	11.68%

Exhibit A.1		
Adams County Retirement Plan		
Executive Summary		
	January 1, 2013	January 1, 2012
1. Annual Required Contribution		
a. Total	\$ 27,856,681	26,530,718
b. Net Employer Contribution	19,659,013	18,762,500
c. Net Employer %	20.38%	19.93%
2. Funded Status		
a. Actuarial Accrued Liability	\$ 386,835,357	\$ 371,702,160
b. Actuarial Value of Assets (AVA)	199,076,191	201,917,055
c. Unfunded Liability (AVA-basis)	187,759,166	169,785,105
d. Funded Ratio (AVA-basis)	51.5%	54.3%
e. Market Value of Assets (MVA)	\$ 199,741,510	\$ 181,624,022
f. Unfunded Liability (MVA-basis)	187,093,847	190,078,138
g. Funded Ratio (MVA-basis)	51.6%	48.9%
3. Summary of Census Data		
a. Actives		
i. Counts	1,753	1,709
ii. Total Annual Projected Compensation	\$ 96,443,158	\$ 94,160,223
iii. Average Projected Compensation	55,016	55,097
iv. Average Age	44.5	44.5
v. Average Service	9.7	9.7
b. Members with Refunds Due Counts	114	122
c. Deferred Vested Member Counts	156	142
d. Retired Member Counts	697	676
e. Beneficiary Counts	99	89
f. Disabled Retiree Counts	27	25
g. Total Members Included in Valuation	2,846	2,763

SECTION B

VALUATION RESULTS

Exhibit B.1		
Adams County Retirement Plan		
Actuarial Valuation Results		
Accrued Accrued Liability		
	January 1, 2013	January 1, 2012
1. Active Members		
a. Retirement Benefits	\$ 205,089,684	\$ 200,269,052
b. Withdrawal Benefits	(134,600)	449,860
c. Refund Benefits	(6,733,059)	(6,758,437)
d. Disability Benefits	9,029,761	8,827,618
e. Death Benefits	2,531,371	2,486,723
f. Total	<u>\$ 209,783,157</u>	<u>\$ 205,274,816</u>
2. Members with Deferred Benefits	\$ 8,592,964	\$ 7,969,236
3. Members Receiving Benefits	<u>\$ 168,459,236</u>	<u>\$ 158,458,108</u>
4. Total	\$ 386,835,357	\$ 371,702,160
5. Actuarial Value of Assets	<u>\$ 199,076,191</u>	<u>\$ 201,917,055</u>
4. Unfunded Actuarial Accrued Liability	\$ 187,759,166	\$ 169,785,105

Exhibit B.2		
Adams County Retirement Plan		
Actuarial Valuation Results		
Normal Cost		
	January 1, 2013	January 1, 2012
1. Dollar Normal Cost		
a. Retirement Benefits	\$ 8,527,095	\$ 8,778,677
b. Withdrawal Benefits	3,057,465	2,963,124
c. Disability Benefits	563,006	575,949
d. Death Benefits	184,463	181,024
e. Total	\$ 12,332,029	\$ 12,498,774
2. Normal Cost as a Percentage of Pay	12.79%	13.27%

Exhibit B.3 Adams County Retirement Plan Actuarial Valuation Results Present Value of Projected Benefits		
	January 1, 2013	January 1, 2012
1. Active Members		
a. Retirement Benefits	\$ 275,551,315	\$ 273,111,969
b. Withdrawal Benefits	19,238,336	19,141,242
c. Disability Benefits	13,188,120	13,091,160
d. Death Benefits	4,020,944	3,950,755
e. Total	<u>\$ 311,998,715</u>	<u>\$ 309,295,126</u>
2. Members with Deferred Benefits	\$ 8,592,964	\$ 7,969,236
3. Members Receiving Benefits	<u>\$ 168,459,236</u>	<u>\$ 158,458,108</u>
4. Total	<u>\$ 489,050,915</u>	<u>\$ 475,722,470</u>

Exhibit B.4 Adams County Retirement Plan Development of the Annual Required Contribution				
Fiscal Year Beginning	January 1, 2013		January 1, 2012	
	Dollar	Percent of Pay	Dollar	Percent of Pay
1. Total Normal Cost	\$12,332,029	12.79%	\$12,498,774	13.27%
2. Amortization of Unfunded Actuarial Accrued Liability Over 30 Years	14,788,652	15.33%	13,372,944	14.20%
3. Assumed Administrative Expenses	736,000	0.76%	659,000	0.70%
4. Annual Required Contribution (ARC)	\$27,856,681	28.88%	\$26,530,718	28.18%
5. Estimated Member Contribution	8,197,668	8.50%	7,768,218	8.25%
6. Net ARC Mid-Year	\$19,659,013	20.38%	\$18,762,500	19.93%
7. Estimated County Contribution Mid-Year	8,197,668	8.50%	7,768,218	8.25%
8. Contribution Shortfall	\$11,461,345	11.88%	\$10,994,282	11.68%
9. Annual Projected Payroll	\$ 96,443,158		\$ 94,160,223	

Exhibit B.5		
Adams County Retirement Plan		
Plan Experience for Fiscal Year 2012		
Liabilities		
1. Actuarial Accrued Liability at January 1, 2012	\$	371,702,160
2. Normal Cost at January 1, 2012		12,498,774
3. Benefit Payments and Expenses during Fiscal Year 2012		18,847,002
4. Interest on Items 1-3 to End of Year		27,639,603
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, 2013		392,993,535
8. Actual Actuarial Accrued Liability at January 1, 2013		386,835,357
9. Liability Gain/(Loss)		6,158,178
Assets		
10. Actuarial Value of Assets at January 1, 2012	\$	201,917,055
11. Benefit Payments and Expenses during Fiscal Year 2012		18,847,002
12. Contributions during Fiscal Year 2012		15,200,037
13. Interest on Items 10-12 to End of Year		15,007,018
14. Expected Actuarial Value of Assets at January 1, 2013		213,277,108
15. Actual Actuarial Value of Assets at January 1, 2013		199,076,191
16. Asset Gain/(Loss)		(14,200,917)
Total		
17. Total Gain/(Loss)		(8,042,739)

SECTION C

PLAN ASSETS

Exhibit C.1		
Adams County Retirement Plan		
Statement of Plan Net Assets		
	<u>December 31, 2012</u>	<u>December 31, 2011</u>
Assets		
Investments, at fair value:		
Cash	\$ 18,987	\$ 3,583
Money market funds and cash equivalents	3,672,428	2,296,988
U.S. Government obligations	7,054,887	6,126,515
Foreign bonds	1,371,742	1,326,922
Corporate bonds	14,605,081	14,630,201
Municipal bonds	721,298	681,398
Equity securities	16,209,745	12,408,119
Foreign equity securities	351,954	1,459,207
Real estate	19,256,868	18,998,452
Hedge funds of funds	28,378,723	25,484,535
Partnerships/joint ventures	6,753,848	6,359,077
Mutual funds	101,286,005	91,580,953
Total cash and investments	<u>\$ 199,681,566</u>	<u>\$ 181,355,950</u>
Receivables:		
Dividends and Interest	246,704	327,114
Other Assets:		
Prepaid insurance for retirees	-	122,909
Total assets	<u>\$ 199,928,270</u>	<u>\$ 181,805,973</u>
Liabilities and net assets held in trust for benefits		
Accrued liabilities	186,760	181,951
Total payables	<u>\$ 186,760</u>	<u>\$ 181,951</u>
Net assets held in trust for pension benefits	<u><u>\$ 199,741,510</u></u>	<u><u>\$ 181,624,022</u></u>

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

	<u>Year Ended</u> <u>December 31, 2012</u>	<u>Year Ended</u> <u>December 31, 2011</u>
Additions to Net Assets Attributed to:		
Contributions		
Employer contributions	\$ 7,533,395	\$ 7,235,764
Plan Members contributions	7,533,416	7,235,773
Plan Members for Purchase of service	133,226	163,731
Total contributions	<u>15,200,037</u>	<u>14,635,268</u>
Net Investment Income		
Net appreciation in fair value of investments	18,923,817	(2,863,733)
Interest	922,589	1,078,803
Dividends	2,889,353	1,790,102
Other	10,194	40,322
	<u>22,745,953</u>	<u>45,494</u>
Less Investment expense	<u>(981,500)</u>	<u>(983,212)</u>
Net investment income	<u>21,764,453</u>	<u>(937,718)</u>
Total additions	<u>36,964,490</u>	<u>13,697,550</u>
Deductions to Net Assets Attributed to:		
Benefit payments	16,095,266	14,669,214
Refunds	1,870,042	1,761,213
Administrative expenses	881,694	678,094
Total deductions	<u>18,847,002</u>	<u>17,108,521</u>
Change in net assets	18,117,488	(3,410,971)
Net assets held in trust for benefits:		
Beginning of year	181,624,022	185,034,993
End of year	<u>\$ 199,741,510</u>	<u>\$ 181,624,022</u>

Exhibit C.3			
Adams County Retirement Plan			
Development of the Actuarial Value of Assets			
Item	Year Ending December 31, 2012		
1. Actuarial value of assets, at beginning of year (prior to corridor)	\$		201,917,055
2. Market value of assets, at beginning of year			181,624,022
3. Net new investments			
a. Contributions received for prior plan year	\$		15,200,037
b. Benefits paid and administrative expenses			(18,847,002)
c. Net	\$		(3,646,965)
4. Market value of assets, at end of year	\$		199,741,510
5. Net MVA earnings [(4) - (2) - (3c)]	\$		21,764,453
6. Assumed investment return rate			7.50%
7. Expected return [(6)*(2)+(6)*(3c)/2]	\$		13,485,040
8. Excess return [(5) - (7)]	\$		8,279,413
9. Expected actuarial value of assets as of December 31, 2012 [(1) + (3c) + (7)]	\$		211,755,130
10. Deferred amounts for fiscal year ending December 31,			
<u>Year</u>	<u>Gain/(Loss)</u>	<u>Percent Deferred</u>	<u>Amount Deferred</u>
a. 2012	\$ 8,279,413	80%	\$ 6,623,530
b. 2011	(14,722,595)	60%	(8,833,557)
c. 2010	3,408,205	40%	1,363,283
d. 2009	7,560,313	20%	1,512,063
e. 2008	(67,920,033)	0%	0
f. Total	\$ (63,394,697)		\$ 665,319
11. Asset gain/(loss) to be recognized as of December 31, 2012			(12,678,939)
12. 80% of Market Value	\$		159,793,208
13. 120% of Market Value	\$		239,689,812
14. Actuarial value of assets [(Item 9 - Item 11), but not more than Item 13 or less than Item 12]	\$		199,076,191

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	
2012	0.4	6.8	12.1	6.2	

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, AS AMENDED THROUGH AMENDMENT NO. 2

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, 2013, each member contributes 8.50% 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 of eligibility. 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.

Classification of Tiers

- *Tier 1* - Members hired prior to January 1, 2005
- *Tier 2* - Members hired on or after January 1, 2005 but before January 1, 2010
- *Tier 3* - Members hired on or after January 1, 2010

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, 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 (Monthly)

- *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 hired prior to January 1, 2010:*

Five years of Credited Service

- *Members 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 January 1, 2005:*

Vested Accrued Benefit determined as of the 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 the 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 the 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 that would have accumulated if employment had continued uninterrupted to the later of the 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 any type of retirement, in lieu of a monthly pension benefit, the member may elect to receive a refund of a percentage of the 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

- *Tier 1* - 10-year certain and life
- *Tier 2* - 10-year certain and life
- *Tier 3* - Single life annuity

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
- For members in Tier 1 and Tier 2 only: Single life annuity
- For members in Tier 3 only: 10-year certain and life

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, 2013	January 1, 2012
1. Active Members		
a. Counts	1,753	1,709
b. Annual Projected Compensation	\$ 96,443,158	\$ 94,160,223
c. Average Annual Compensation	\$ 55,016	\$ 55,097
d. Average Age	44.5	44.5
e. Average Service	9.7	9.7
f. Accumulated Member Contributions with Interest	\$ 63,336,405	\$ 59,360,127
2. NonVested Members with Refunds Due		
a. Counts	114	122
b. Amount of Refunds Due	\$ 446,645	\$ 407,451
3. Deferred Vested Members*		
a. Counts	156	142
b. Annual Deferred Benefits	\$ 1,785,090	\$ 1,664,254
c. Average Benefit	\$ 11,443	\$ 11,720
4. Retired Members		
a. Counts	697	676
b. Annual Benefits	\$ 14,987,374	\$ 14,068,121
c. Average Benefit	\$ 21,503	\$ 20,811
5. Beneficiaries		
a. Counts	99	89
b. Annual Benefits	\$ 1,086,269	\$ 902,160
c. Average Benefit	\$ 10,972	\$ 10,137
6. Disabled Retirees		
a. Counts	27	25
b. Annual Benefits	\$ 474,807	\$ 480,807
c. Average Benefit	\$ 17,585	\$ 19,232
7. Total Members Included in Valuation	2,846	2,763

*Includes 27 deferred disableds in 2013 and 25 deferred disableds in 2012.

Exhibit E.2 Summary of Changes in Participant Status During Fiscal Year 2012							
	Active Members	With Deferred Benefits ¹	With Refunds Due	Retirees	Disabled Retirees	Beneficiaries	Total
As of January 1, 2012	1,709	142	122	676	25	89	2,763
Age retirements	(39)	(2)		42	(1)		0
Disability retirements	(2)	(2)			4		0
Deferred disability	(6)	6					0
Deaths	(1)			(19)	(1)	(1)	(22)
Vested terminations	(19)	20	(1)				0
Rehires	1	(1)					0
Cashouts	(60)	(7)	(44)	(6)			(117)
Expiration of benefits						(3)	(3)
Terminated nonvested with refunds due	(27)		27				0
New Beneficiary						14	14
New entrants during the year ²	197		10	4			211
Net change	44	14	(8)	21	2	10	83
As of January 1, 2013	1,753	156	114	697	27	99	2,846

¹ Includes 27 deferred disabled members at January 1, 2013.

² Includes 10 members hired and terminated in 2012 with refunds due.

Exhibit E.3 Active Member Counts by Age and Service as of January 1, 2013								
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	26	0	0	0	0	0	0	26
25-29	117	32	2	0	0	0	0	151
30-34	130	100	26	0	0	0	0	256
35-39	84	83	66	5	0	0	0	238
40-44	68	86	62	35	8	0	0	259
45-49	41	62	76	34	25	7	1	246
50-54	32	46	42	31	29	23	9	212
55-59	29	44	41	27	21	24	8	194
60-64	14	28	30	14	19	14	8	127
65-69	7	8	12	2	2	0	3	34
Over 70	0	1	1	1	2	2	3	10
Total	548	490	358	149	106	70	32	1,753

Exhibit E.4								
Active Member Average Salary by Age and Service¹								
Age	Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	
Under 20								
20-24	\$38,355							\$38,355
25-29	43,453	43,441						43,424
30-34	44,794	49,508	50,042					47,169
35-39	44,011	53,104	58,455	63,170				51,590
40-44	42,585	50,271	57,617	64,211	75,410			52,672
45-49	42,914	49,623	56,655	62,707	68,474	69,474		54,999
50-54	41,500	48,859	53,142	64,148	62,772	74,849	69,315	56,424
55-59	42,729	45,309	49,431	60,152	63,109	71,761	62,315	53,761
60-64	40,988	55,249	50,483	62,248	62,181	65,246	76,400	56,794
65-69	41,900	46,440	53,336					51,121
Over 70								62,703
Total	\$43,231	49,787	54,649	62,774	64,474	71,467	69,005	\$51,939

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	
2013	\$ 1,573,529	\$ 16,678,962	\$	18,252,492
2014	3,180,121	16,617,886		19,798,007
2015	4,776,215	16,481,924		21,258,139
2016	6,470,741	16,318,472		22,789,213
2017	8,279,823	16,105,727		24,385,551
2018	10,234,420	15,889,801		26,124,221
2019	12,301,954	15,650,184		27,952,138
2020	14,403,201	15,424,616		29,827,818
2021	16,523,294	15,094,459		31,617,753
2022	18,688,294	14,779,403		33,467,698

Exhibit E.6	
History of Refunds	
Fiscal Year Ended December 31,	Refund Amount
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
2012	1,870,042

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)
1/1/2007	\$ 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	201,712,397	371,702,160	169,785,105	54.3%	94,160,223	180.3%
1/1/2013	199,076,191	386,835,357	187,759,166	51.5%	96,443,158	194.7%

Exhibit F.2				
Adams County Retirement Plan				
Schedule of Employer Contributions				
Fiscal Year Ended December 31,	Annual Required Contribution	Actual County Contribution	Percentage Contributed	
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	7,533,395	40.2%	
2013	19,659,013	TBD	TBD	

Exhibit F.3 Adams County Retirement Plan Required Supplementary Information	
Valuation Date	January 1, 2013
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, 2013	January 1, 2012
1. Accumulated Plan Benefits		
a. Active Members	\$ 137,605,380	\$ 131,493,274
b. Members with Deferred Benefits	8,592,964	7,969,236
c. Members Receiving Benefits	168,459,236	158,458,108
d. Total	<u>\$ 314,657,580</u>	<u>\$ 297,920,618</u>
2. Market Value of Assets	\$ 199,741,510	\$ 181,624,022
3. Funded Ratio	63.5%	61.0%

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 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 cost 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 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 market value of assets (based on the prior year’s market value of assets, cash flows during the year and expected investment returns on those amounts) to the current year’s 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.

Completed Years of Service	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) – The valuation assumes fully generational mortality. The base mortality table used is the RP-2000 Mortality Table. Future mortality improvements are assumed each year using Scale AA. The following are sample rates:

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	0.04
40	0.12	0.07
45	0.15	0.11
50	0.19	0.16
55	0.27	0.25
60	0.43	0.37
65	0.65	0.49
70	0.82	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	0.04
40	0.12	0.07
45	0.15	0.11
50	0.44	0.16
55	0.56	0.25
60	0.86	0.56
65	1.38	1.06
70	2.20	1.75
75	3.59	2.78
80	6.19	4.47
85	10.50	7.68
90	17.25	13.15

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 %	0.75 %
25	2.26	0.75
30	2.26	0.75
35	2.26	0.75
40	2.26	0.75
45	2.26	0.75
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	0.85	0.85
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:

Completed Years of Service	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. Based on the prior three year average, rounded to the nearest \$1,000.

Year	Noninvestment Expenses	
2010	\$648,812	
2011	678,094	
2012	881,694	÷3
	<u>\$2,208,600</u>	= \$736,200

Average \$736,200
 Loading \$736,000

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.