

# ACTUARIAL SOLUTIONS CORP.

PENSION ACTUARIAL AND ADMINISTRATIVE SERVICES

August 26, 2011

Pension Fund Board  
Gunnison Firemen's Pension Fund  
P.O. Box 239  
Gunnison, CO 81230

Re: Gunnison Firemen's Pension Fund

Dear Members:

Enclosed you will find ten copies of an Actuarial Report for Firemen's Pension Fund as of January 1, 2011. The valuation results are based on the census, asset, and benefit information you provided.

The results of our valuation indicate that at the current benefit level of \$11.75 per month per year of service and considering level of contributions from the City, District and State the Fund can be considered actuarially sound from an ongoing perspective. There is no longer an Unfunded Actuarial Past Service Liability because the investment return on the assets in the Fund was very good over the last two years. Based on our approximate calculations the return on assets averaged 21.9% per year over the 2009-2010 time period. City, District, and State contributions combined are more than adequate to pay the current service cost. Our calculations are based on the plan provisions outlined on page one of the report.

It appears that the fund could support a higher benefit level, but exactly how much higher would involve some additional calculations. I would propose determining the maximum benefit level using the assumed rate of return of 6% and also using a very conservative rate of 3% so the Board can see how sensitive the Annual Required contribution is to the rate of return on assets which would be useful in setting the new benefit level. Even though the investment return over prior two years was very good the return could be negative in 2011. A discussion with the Fund's investment advisor would be advisable. We recommend a very conservative approach to setting the benefit level in light of the volatility in the financial markets.

Contact me if you have any questions.

Sincerely,

ACTUARIAL SOLUTIONS CORP.



Frank J. Dobis, FSA, MAAA  
Enrolled Actuary

Enclosures



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# **Gunnison Firemen's Pension Fund**

**Actuarial Review as of  
As of January 1, 2011**



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Gunnison Firemen's Pension Fund

Actuarial Review As of January 1, 2011

Table of Contents

Exhibit

Certification of Actuarial Valuation

Plan Provisions .....	Page 1
Actuarial Assumptions .....	Page 2
Covered Participants .....	Page 3
Fund Data .....	Page 4
Annual Required Contribution for \$235 Per Month Maximum Benefit..	Page 5
GASB Statements for \$235 Per Month Maximum Benefit .....	Page 6
Estimated Future Pension Payments.....	Page 7
Conclusions and Recommendations.....	Page 8

**Gunnison Firemen's Pension Fund**

Actuarial Review as of January 1, 2011

Certification of Actuarial Valuation

This actuarial valuation was prepared based on benefits that are available in accordance with Colorado State statutes. It has also been prepared in accordance with generally accepted actuarial principles. This study was prepared to demonstrate that the current benefits, as described in this report, can be supported by the fund.

This study is based on member and fund data as reported by the City of Gunnison.

To the best of my knowledge, the information supplied in this study is complete and accurate and reflects the plan provisions, assumptions, funding method and data as specified in this study. Therefore this valuation fully and fairly discloses the actuarial position of the fund as of January 1, 2011.

ACTUARIAL SOLUTIONS CORP.



Frank J. Dobis, FSA, MAAA  
Enrolled Actuary

## Gunnison Firemen's Pension Fund

Actuarial Review As of January 1, 2011

### Summary of Principal Plan Provisions

Eligibility for Normal Retirement Pension: Age 50 with 20 years of volunteer service.

Eligibility for Deferred Retirement Pension: If a fireman leaves the department with 20 years of service but is not yet age 50, he will be entitled to a pension upon attainment of age 50.

#### Benefits:

Normal Retirement: \$11.75 per month per year of volunteer service for a maximum of 20 years.

Temporary Disability: None

Permanent Disability: None

Death After Retirement: 50% of the retired members benefit continues to the surviving spouse if married. If not married then there is not a death benefit.

Death Before Retirement: 50% of the benefit earned by the member at the time of death. Member must have 10 completed 10 years of service at the date of death and be married.

Funeral Benefit: Single payment of \$100

## Gunnison Firemen's Pension Fund

Actuarial Review As of January 1, 2011

### Actuarial Assumptions

Investment Return:	6% (Unchanged from prior study)
Mortality After Retirement:	1994 Group Annuity Mortality Table, Static
Pre-Retirement Mortality:	1994 Group Annuity Mortality Table, Static
Turnover:	T-4 Table
Disability:	None
Retirement:	All fire fighters are assumed to retire upon the attainment of age 50 and completion of 20 years of service whichever occurs last.
Actuarial Cost Method:	Entry Age Normal
Amortization of Unfunded Liability:	Level Dollar, 20-year open period
Expenses:	Investment return is assumed to be net of expenses.
Marriage:	90% of fire fighters are assumed to be married. Females are assumed to be 3 years younger than males.

## Gunnison Firemen's Pension Fund

Actuarial Review as of January 1, 2011

### Covered Participants

Valuation Period	<u>Prior</u>	<u>Current</u>
Active	35	34
Average age	35.42	37.73
Average service	9.37	10.14
Normal retired drawing pensions	34	33
Total monthly payments	\$ 7,990.00	\$ 7,755.00
Average monthly payment	\$ 235.00	\$ 235.00
Average Age		66.14
Disabled retired drawing pensions	0	0
Total monthly payments	0	0
Average monthly payment	0	0
Beneficiaries drawing pensions	0	1
Total monthly payments	0 \$	117.50
Average monthly payment	0	84.58
Vested retired not yet drawing pensions	1	2
Total monthly payments	\$ 235.00	\$ 235.00
Average monthly payment	\$ 235.00	\$ 235.00
Average Age		47.64
Total members included	70	70

Gunnison Firemen's Pension Fund

Actuarial Review as of January 1, 2011

Assets and Expected Revenue as of January 1, 2011:

Value of the Fund as of January 1, 2011	\$1,520,739
Accrued interest	0
Accrued State Contribution	<u>\$0</u>
Fair Market Value of the Fund as of January 1, 2011	<u>\$1,520,739</u>

Expected Revenues:

	<u>City</u>	<u>District</u>	<u>State</u>	<u>Total</u>
2009	\$32,700	\$45,000	\$69,930	<u>\$147,630</u>
2010	\$32,700	\$31,500	\$69,930	<u>\$134,130</u>
2011	\$32,700	\$45,000	\$63,630	<u>\$141,330</u>

## Gunnison Firemen's Pension Fund

Actuarial Review As of January 1, 2011

### Development of the Annual Required Contribution

Actuarial Present Value of Future Benefits	Current Benefit of \$11.75/mo Per Year of Service
<u>Membership Category</u>	
Active	\$ 505,474
Normal retired drawing pensions	\$ 1,043,559
Disabled retired drawing pensions	\$ -
Beneficiaries drawing pensions	\$ 8,053
Vested retired not yet drawing pensions	\$ 71,464
Total	\$ 1,628,550
Entry Age Normal Accrued Liability	\$ 1,516,769
Fund Balance as of January 1, 2011	\$ 1,520,739
Unfunded Accrued Liability	\$ (3,970)
Amortization over 20 years	\$ (327)
Entry Age Normal Cost	\$ 13,200
Annual Required Contribution at beginning of year	\$ 12,873
Annual Required Contribution with interest to end of year.	\$ 13,646
Amount necessary to fund the current service cost and amortize the unfunded past-service liability over:	
10 Years	\$ 13,453
20 Years	\$ 13,646
30 Years	\$ 13,704
Actuarially Sound	<b>Yes</b>

## Gunnison Firemen's Pension Fund

Actuarial Review As of January 1, 2011

### **GASB Statement Number 25**

#### Schedule of Funding Progress

Actuarial Value of Assets	\$1,520,739
Actuarial Accrued Liability	1,516,769
Excess of Assets over Accrued Liability	3,970
Funded Ratio	100%

#### Schedule of Employer Contributions

Annual Required Contribution	13,646
Percentage Contributed	100%

### **GASB Statement Number 27**

Estimated Net Pension Obligation as of January 1,	\$0
Annual Required Contribution	13,646
Estimated Contribution for Plan Year	141,330
Estimated Net Pension Obligation as of December 31,	\$0

The Net Pension Obligation shown above is a standardized disclosure measure of the difference between the cumulative annual pension costs and contributions made to the Pension Fund since transition to this reporting standard. The Annual Required Contribution is a disclosure measure of the annual pension cost.

Both standardized measures are calculated as of January 1, 2011 in accordance with Statement #25 and Statement #27 of the Governmental Accounting Standards Board (GASB). Actuarial assumptions used are the same as those used for the valuation of plan liabilities and are identical to those shown on page 2 of this report.

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Gunnison Firemen's Pension Fund

Actuarial Review As of January 1, 2011

Estimated Future Benefit Payments

<u>Year</u>	<u>Payments</u>
2011	\$104,744
2012	\$105,358
2013	\$105,946
2014	\$106,512
2015	\$106,804
2016	\$112,670
2017	\$110,344
2018	\$107,998
2019	\$110,554
2020	\$110,259
2021	\$109,953
2022	\$109,605
2023	\$107,090
2024	\$104,533
2025	\$103,715
2026	\$102,814
2027	\$106,253
2028	\$108,243
2029	\$107,502

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Gunnison Firemen's Pension Fund

**Actuarial Review as of January 1, 2011**

Summary and Conclusions

The fund is actuarially sound for the \$235 per month maximum benefit based on the assumptions outlined on page 2. In particular, we have assumed that the long term rate of return on the fund will average 6.0%. We have also assumed that a significant number of firemen will not remain with the department for 20 years.