

MINNEAPOLIS POLICE RELIEF ASSOCIATION

SPECIAL FUND

*December 31, 2009
Actuarial Valuation*

May 2010

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LCPR JUN 09 2010

MINNEAPOLIS POLICE RELIEF ASSOCIATION

December 31, 2009 Actuarial Valuation

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Introduction and Actuarial Certification

Purposes of the valuation

This report presents the results of the December 31, 2009 actuarial valuation for the Minneapolis Police Relief Association. Its primary purposes are:

- to determine the funded status as of December 31, 2009
- to determine the normal cost and the required amortization payment, and
- to present information required to be disclosed under Governmental Accounting Standards Board Statement No. 25 (GASB 25) as of December 31, 2009.

Sources of data

The Relief Association supplied December 31, 2009 data for all active and inactive members, including unit values and historical salary increase rates. The Relief Association has also provided asset information regarding the special fund including historical rates of return. We have relied on this data in preparing this report.

Changes from the prior year

The November 20, 2009 court order required the unit value to be 86.71 effective December 1, 2009. This unit value remains in effect as of the valuation date for this report - December 31, 2009.

The prior actuarial valuation of the plan as of December 31, 2008 was prepared May 2009 and revised pursuant to the court order in November 2009. The actuarial assumptions and methods used to prepare this report are the same as those used in the 2008 report, with two exceptions. One was the refinement of the amortization method which decreased the amortization payment slightly (see page 8). The other change was to the retirement assumption.

We previously assumed active members would retire immediately on the valuation date. We changed this to assume active members retire one year from the valuation date. This decreased the liability by \$400,000 (see page 9, item A.3.c.).

For purposes of this valuation, we have used the 86.71 unit value as of the valuation date, with a 2% increase on August 1, 2010 and another increase of 1.5% on July 1, 2011. The resulting unit value is assumed to remain in effect as of January 1, 2012. All unit values after January 1, 2012 are assumed to increase 4% per year - the statutory salary increase assumption.

Since the projected 2010 and 2011 unit value increases are less than what was projected in the December 31, 2008 valuation, and therefore benefit costs are less than expected, the plan liabilities have experienced an actuarial "gain" of \$16 million (see page 9, item A.3.b.)

Summary of valuation results

As of December 31, 2009, the funded status of the plan (actuarial value of assets divided by actuarial accrued liabilities) is 66.9% (see page 7). This is a decrease from last year's revised funded ratio of 73.5%. Despite the 26.5% return on the market value of assets during 2009, there was a \$35 million loss on the actuarial value of assets which is based on the book value of assets and unrealized gain/loss history (see pages 4 and 9).

On a market value basis, the funded status increased from 56.4% to 67.4%.

Because the five-year average rate of return on investments as of the valuation date is not at least 2% larger than the five-year average salary increase rate, a "13th Check" will not be payable in 2010.

MINNEAPOLIS POLICE RELIEF ASSOCIATION

December 31, 2009 Actuarial Valuation

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Introduction and Actuarial Certification (continued)

Actuarial certification

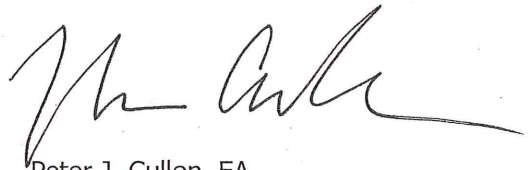
We certify that the actuarial valuation has been prepared in accordance with Minnesota Statutes §§356.20-.23, §423B, and §69.77 as they relate to police department relief association in cities of the first class in general and the Minneapolis Police Relief Association in particular. We also certify that we have made a good faith effort to comply with the November 20, 2009 District Court Order in all respects and in a manner intended to conform to Minnesota State law and generally accepted actuarial principles.

We believe the results are reasonable and fairly represent the actuarial status of this plan.

Respectfully submitted,



Mark D. Meyer, FSA, MAAA
Consulting Actuary



Peter J. Cullen, EA
Consulting Actuary

May 2010

MINNEAPOLIS POLICE RELIEF ASSOCIATION

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Summary of Results

<u>A. Plan participant data</u>	<u>December 31, 2008*</u>	<u>December 31, 2009</u>	<u>Change</u>
1. Number of participants			
a. Active employees	14	11	(3)
b. Terminated vested employees	0	0	0
c. Retirees	607	589	(18)
d. Disability	0	0	0
e. Surviving spouses	239	239	0
f. Surviving children	<u>0</u>	<u>0</u>	<u>0</u>
g. Total	860	839	(21)
<u>B. Normal costs</u>			
1. Total normal cost			
a. Amount	\$191,121	\$131,692	(\$59,429)
b. Percentage of active payroll	15.30%	13.02%	-2.28%
2. Employer normal cost			
a. Amount	91,210	50,750	(\$40,460)
b. Percentage of active payroll	7.30%	5.02%	-2.28%
<u>C. Amortization payments</u>			
1. Unfunded actuarial accrued liability	\$117,075,675	\$137,636,587	\$20,560,912
2. Amortization payment	14,004,122	17,636,212	3,632,090
<u>D. Value of plan assets</u>			
1. Market value	249,250,215	279,933,574	30,683,359
2. Actuarial value (for calculating contributions)	324,723,051	277,847,097	(46,875,954)
<u>E. Benefit liabilities</u>			
1. Present value of future benefits	441,989,847	415,615,376	(26,374,471)
2. Actuarial accrued liability	441,798,726	415,483,684	(26,315,042)
<u>F. Funded status</u>			
1. Market value of assets as a percent of liabilities	56.4%	67.4%	11.0%
2. Actuarial value of assets as a percent of liabilities	73.5%	66.9%	-6.6%

*As revised pursuant to the court order in November 2009

MINNEAPOLIS POLICE RELIEF ASSOCIATION
December 31, 2009 Actuarial Valuation

Actuarial Value of Assets

A. Unrealized gain

<u>Year Ending</u> <u>December 31:</u>	<u>Market</u> <u>Value</u>	<u>Book</u> <u>Value</u>	<u>Unrealized Gain</u> <u>(Market - Book)</u>
2006	390,831,714	340,010,710	50,821,004
2007	389,025,966	330,008,751	59,017,215
2008	249,250,215	307,540,360	(58,290,145)
2009	279,933,574	276,440,323	3,493,251

B. Preliminary actuarial value of assets

	<u>December 31, 2008</u>	<u>December 31, 2009</u>
1. Book value of assets	307,540,360	276,440,323
2. Average unrealized gain for previous three years	<u>17,182,691</u>	<u>1,406,774</u>
3. Preliminary actuarial value	324,723,051	277,847,097

C. Excess investment income

1. Salary increases and time-weighted rate of return on assets

<u>Fiscal Year</u>	<u>Salary Increase</u>	<u>Asset Return</u>
2004	3.525%	9.6%
2005	3.082%	5.9%
2006	1.932%	13.7%
2007	2.245%	7.2%
2008	7.635%	-29.8%
2009	-0.856%	26.5%

2. Determination of excess investment income

a. Arithmetic average of previous 5 years salary increases	3.684%	2.808%
b. Arithmetic average of previous 5 years of asset returns	<u>1.320%</u>	<u>4.700%</u>
c. Excess of asset return over salary increase	0.000%	1.892%
d. Excess minus 2%	0.000%	0.000%
e. Lesser of 0.5% or 2.d., times market value (not < 0)	\$0	\$0
f. December 2008/2009 monthly benefits paid	3,208,120	2,878,444
g. Adjustment to assets (lesser of e. or f.)	<u>0</u>	<u>0</u>

D. Actuarial value of assets (B.3. - C.2.f.)

	\$324,723,051	\$277,847,097
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MINNEAPOLIS POLICE RELIEF ASSOCIATION
December 31, 2009 Actuarial Valuation

Summary of Member Data

	<u>December 31, 2008*</u>	<u>December 31, 2009</u>
<u>A. Active members</u>		
1. Number		
a. Fully vested	14	11
b. Nonvested	<u>0</u>	<u>0</u>
c. Total	14	11
2. Average age	60.7	61.6
3. Average years of service	36.8	37.8
4. Average annualized unit value salary	\$89,206	\$91,980
<u>B. Vested terminated members</u>		
1. Number	0	0
2. Average age	0.0	0.0
3. Total annual deferred benefits	\$0	\$0
<u>C. Retirees</u>		
1. Retirees	607	589
2. Disability	<u>0</u>	<u>0</u>
3. Total	607	589
4. Average age	69.5	70.2
5. Total annual benefits	\$28,565,907	\$25,336,396
6. Average annual benefit	\$47,061	\$43,016
<u>D. Beneficiaries</u>		
1. Spouses	239	239
2. Children	<u>0</u>	<u>0</u>
3. Total	239	239
4. Average age	78.8	78.8
5. Total annual benefits	\$6,354,588	\$5,787,523
6. Average annual benefit	\$26,588	\$24,216
<u>E. Total number of members</u>		
	860	839

*As revised pursuant to the court order in November 2009

MINNEAPOLIS POLICE RELIEF ASSOCIATION
December 31, 2009 Actuarial Valuation

Summary of Changes in Membership

	<u>Actives</u>	<u>Vested Terminees</u>	<u>Retirees</u>	<u>Beneficiaries</u>	<u>Total</u>
<u>A. Number of members on January 1, 2009</u>	14	0	607	239	860
<u>B. Changes in membership</u>					
1. Retirements	(3)		3		0
2. Vested terminations					0
3. Active deaths					0
4. Retiree deaths			(21)	14	(7)
5. Beneficiary deaths				(14)	(14)
6. Expiration of surviving child benefits					0
7. Corrections					0
8. Total changes	(3)	0	(18)	0	(21)
<u>C. Number of members on December 31, 2009</u>	11	0	589	239	839

MINNEAPOLIS POLICE RELIEF ASSOCIATION
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Actuarial Values Used to Determine Contribution

	<u>December 31, 2008*</u>	<u>December 31, 2009</u>
<u>A. Actuarial present value of projected benefits (the value of all future benefits to be paid to the current group of members)</u>		
1. Active members	\$11,689,527	\$8,472,550
2. Vested terminated members	0	0
3. Retired members	377,085,079	354,541,309
4. Spouses and children receiving benefits	53,215,241	52,601,517
5. Disabled members receiving benefits	0	0
6. Total present value of projected benefits	441,989,847	415,615,376
<u>B. Actuarial accrued liability (the cost allocated to all prior years)</u>		
1. Active members	\$11,498,406	\$8,340,858
2. Vested terminated members	0	0
3. Retired members	377,085,079	354,541,309
4. Spouses and children receiving benefits	53,215,241	52,601,517
5. Disabled members receiving benefits	0	0
6. Total actuarial accrued liability	441,798,726	415,483,684
<u>C. Amortization of unfunded actuarial accrued liability</u>		
1. Total actuarial accrued liability (B.6.)	\$441,798,726	\$415,483,684
2. Actuarial value of assets	324,723,051	277,847,097
3. Unfunded actuarial accrued liability (1. - 2.)	117,075,675	137,636,587
4. Funded status (2. / 1.)	73.5%	66.9%
5. Years left in amortization period	11	10
6. Amortization payment (see page 8)	14,004,122	17,636,212
<u>D. Normal cost (the cost allocated to the current year)</u>		
1. Present value of future normal costs (A.6. - B.6.)	\$191,121	\$131,692
2. Normal cost as a dollar amount		
a. Total normal cost	191,121	131,692
b. Statutory adjustment for member contributions	99,911	80,942
c. Employer normal cost (a. - b.)	91,210	50,750
3. Estimated payroll for year ending on valuation date	1,248,886	1,011,780
4. Normal cost as a percent of active payroll		
a. Total normal cost (2.a. / 3.)	15.30%	13.02%
b. Statutory adjustment for member contributions (2.b. / 3.)	8.00%	8.00%
c. Employer normal cost (a. - b.)	7.30%	5.02%

*As revised pursuant to the court order in November 2009

MINNEAPOLIS POLICE RELIEF ASSOCIATION

December 31, 2009 Actuarial Valuation

Amortization Schedule

Prior Amortization Method			
<u>Assumed Payment Date</u>	<u>Amortization Payment</u>	<u>Present Value as of 12/31/2009</u>	<u>Amortization Based on Valuation December 31</u>
10/1/2010	\$14,004,122	\$13,403,128	2008
10/1/2011	17,641,889	15,929,037	2009
10/1/2012	17,641,889	15,027,394	2009
10/1/2013	17,641,889	14,176,786	2009
10/1/2014	17,641,889	13,374,327	2009
10/1/2015	17,641,889	12,617,289	2009
10/1/2016	17,641,889	11,903,103	2009
10/1/2017	17,641,889	11,229,343	2009
10/1/2018	17,641,889	10,593,720	2009
10/1/2019	17,641,889	9,994,075	2009
10/1/2020	17,641,889	9,428,373	2009
Total Present Value of Amortization Payments (at 6%)			137,676,575
Unfunded Actuarial Accrued Liability as of 12/31/2009			137,636,587

Revised Amortization Method			
<u>Assumed Payment Date</u>	<u>Amortization Payment</u>	<u>Present Value as of 12/31/2009</u>	<u>Amortization Based on Valuation December 31</u>
10/1/2010	\$14,004,122	\$13,403,128	2008
10/1/2011	17,636,212	15,923,912	2009
10/1/2012	17,636,212	15,022,558	2009
10/1/2013	17,636,212	14,172,225	2009
10/1/2014	17,636,212	13,370,023	2009
10/1/2015	17,636,212	12,613,230	2009
10/1/2016	17,636,212	11,899,273	2009
10/1/2017	17,636,212	11,225,729	2009
10/1/2018	17,636,212	10,590,311	2009
10/1/2019	17,636,212	9,990,859	2009
10/1/2020	17,636,212	9,425,339	2009
Total Present Value of Amortization Payments (at 6%)			137,636,587
Unfunded Actuarial Accrued Liability as of 12/31/2009			137,636,587

MINNEAPOLIS POLICE RELIEF ASSOCIATION
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Changes in the Unfunded Actuarial Accrued Liability

A. Liability gain or loss for the year ending on December 31, 2009

1. Expected actuarial accrued liability (AAL)	
a. AAL as of December 31, 2008	\$441,798,726
b. Normal cost as of December 31, 2008 (excluding expenses)	191,121
c. Interest to December 31, 2009 on the AAL and normal cost	26,519,391
d. Benefit payments for the year	(34,747,136)
e. Interest on benefit payments (1/2 year)	<u>(1,042,414)</u>
f. Expected AAL on December 31, 2009 (sum of a. through e.)	432,719,688
2. Actual AAL on December 31, 2009	
a. Before any assumption or plan changes	431,990,244
b. After unit value changes	415,916,656
c. After assumption and unit value changes	415,483,684
d. After plan changes	415,483,684
3. Liability (gain) or loss	
a. Due to plan experience different from that expected (2a. - 1f.)	(729,444)
b. Due to change in unit value different from expected (2.b. - 2.a.)	(16,073,588)
c. Due to changes in actuarial assumptions (2c. - 2b.)	(432,972)
d. Due to plan changes (2d. - 2c.)	<u>0</u>
e. Total (a. + b. + c. + d.)	(17,236,004)

B. Asset gain or loss for the year ending on December 31, 2009

1. Expected actuarial value of assets	
a. Actuarial value of assets on December 31, 2008	324,723,051
b. Actual benefit payments and expenses for the year	(35,582,613)
c. Actual contributions for the year	5,505,537
d. Expected return on assets	<u>18,581,071</u>
e. Expected actuarial value of assets on December 31, 2009 (sum of a. through d.)	313,227,046
2. Actual actuarial value of assets on December 31, 2009	277,847,097
3. Asset (gain) or loss (1e. - 2.)	35,379,949

C. Changes in the unfunded AAL

1. Expected unfunded AAL on December 31, 2009	119,492,642
2. Changes	
a. Actuarial (gain) or loss other than change in unit value	34,650,505
b. Change in unit value different from expected	(16,073,588)
c. Changes in actuarial methods and assumptions	(432,972)
d. Plan change	<u>0</u>
e. Total change	18,143,945
3. Unfunded AAL on December 31, 2009	137,636,587

MINNEAPOLIS POLICE RELIEF ASSOCIATION*December 31, 2009 Actuarial Valuation*

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Statement of Plan Net Assets as of December 31, 2009

	<u>Market Value</u>	<u>Book Value</u>
<u>A. Investment assets</u>		
Fixed income	\$19,231,463	\$19,163,824
State Board of Investments	168,039,135	161,553,730
Mutual funds	79,878,275	76,749,897
Other investments	12,753,757	18,940,110
Cash equivalents	<u>1,829,286</u>	<u>1,829,286</u>
Total	281,731,916	278,236,847
<u>B. Checking account</u>		
	6,371	8,189
<u>C. Accrued/payable</u>		
Accrued investment income	190,433	190,433
Accrued contributions	373,672	373,672
Miscellaneous receivable	365,322	365,322
Accounts payable	<u>(2,734,140)</u>	<u>(2,734,140)</u>
Total	(1,804,713)	(1,804,713)
<u>D. Total pension assets (A. + B. + C.)</u>		
	279,933,574	276,440,323

MINNEAPOLIS POLICE RELIEF ASSOCIATION

December 31, 2009 Actuarial Valuation

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Statement of Changes in Plan Net Assets

	<u>2008</u>	<u>2009</u>
<u>A. Additions</u>		
1. Contributions		
a. City of Minneapolis	3,535,999	2,081,211
b. State of Minnesota	2,275,349	3,424,326
c. Other	<u>0</u>	<u>0</u>
d. Total	5,811,348	5,505,537
2. Investment income net of direct investment fees	(107,698,299)	59,591,336
3. Proceeds from unclaimed property and other	<u>297,221</u>	<u>1,169,100</u>
4. Total additions	(101,589,730)	66,265,973
<u>B. Deductions</u>		
1. Benefits paid		
a. Regular benefit payments	35,666,049	34,747,136
b. Post-retirement payments	<u>1,941,041</u>	<u>0</u>
c. Total	37,607,090	34,747,136
2. Administrative expenses	<u>578,931</u>	<u>835,477</u>
3. Total deductions	38,186,021	35,582,613
<u>C. Net increase (A.5. - B.3.)</u>	(139,775,751)	30,683,359
<u>D. Net assets held in special fund</u>		
1. Beginning of year	389,025,966	249,250,215
2. Post closing audit adjustments	0	0
3. End of year	249,250,215	279,933,574

MINNEAPOLIS POLICE RELIEF ASSOCIATION

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Schedule of Funding Progress

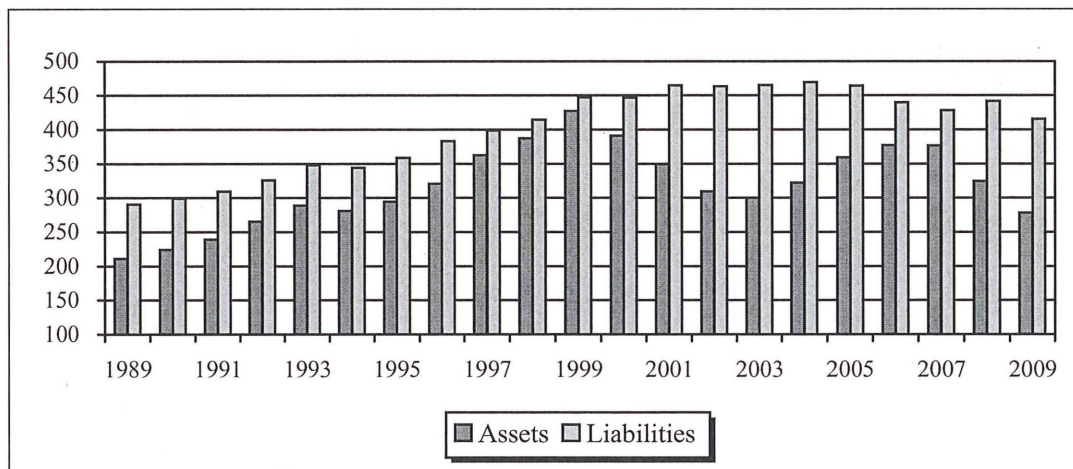
(Dollar amounts in thousands)

<u>As of December 31:</u>	<u>Actuarial Value of Assets</u>	<u>Actuarial Accrued Liability (AAL)</u>	<u>Unfunded AAL (UAAL)</u>	<u>Funded Ratio</u>
1989	\$211,081	\$290,537	\$79,456	72.7%
1990 ¹	223,919	299,151	75,232	74.9%
1991	238,975	309,429	70,454	77.2%
1992 ¹	265,307	325,891	60,584	81.4%
1993 ¹	288,942	347,879	58,937	83.1%
1994 ¹	280,772	344,087	63,315	81.6%
1995	294,692	358,657	63,965	82.2%
1996	320,686	382,957	62,271	83.7%
1997	362,683	398,728	36,045	91.0%
1998 ¹	387,530	414,694	27,164	93.4%
1999	427,122	447,596	20,474	95.4%
2000	391,083	447,086	56,003	87.5%
2001	349,170	464,649	115,479	75.1%
2002	309,667	463,487	153,820	66.8%
2003	300,154	465,276	165,122	64.5%
2004 ¹	322,278	469,557	147,279	68.6%
2005	359,032	464,222	105,190	77.3%
2006	377,013	439,992	62,979	85.7%
2007	376,466	428,281	51,815	87.9%
2008 ²	324,723	506,949	182,226	64.1%
2008 ³	324,723	441,799	117,076	73.5%
2009	277,847	415,484	137,637	66.9%

¹ After change in benefit and funding provisions, from restated report

² As stated in original December 31, 2008 report, after change in mortality assumption

³ After court-ordered change to unit value, from restated December 31, 2008 report



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Schedule of Employer Contributions

<u>Year Ended</u> <u>December 31:</u>	<u>City</u> <u>Contributions</u>	<u>State</u> <u>Contributions</u>	<u>Total</u> <u>Employer</u> <u>Contributions</u>
1992	\$5,926,443	\$2,975,695	\$8,902,138
1993	5,664,620	2,550,138	8,214,758
1994	4,437,124	2,354,380	6,791,504
1995	4,583,006	3,776,109	8,359,115
1996	4,144,998	4,317,908	8,462,906
1997	3,907,944	3,630,557	7,538,501
1998	2,698,561	3,431,684	6,130,245
1999	698,080	3,021,373	3,719,453
2000	1,295,071	3,268,063	4,563,134
2001	10,812	3,448,383	3,459,195
2002	2,912,060	5,413,835	8,325,895
2003	13,540,305	5,879,854	19,420,159
2004	20,800,530	7,089,022	27,889,552
2005	24,976,747	6,573,582	31,550,329
2006	5,366,224	5,200,521	10,566,745
2007	3,647,229	3,167,214	6,814,443
2008	3,535,999	2,275,349	5,811,348
2009	2,081,211	3,424,326	5,505,537

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Historical Unit Values

	Effective Date	Contract Unit Values	Months Paid	Historical Salary Rates for PRB		
				Annualized Unit Values	Annualized Return	5-Year Average
2000	01/01/2000	68.36	9.5	68.7350		
	10/15/2000	70.16	2.5			
2001	01/01/2001	73.16	9.5	73.6850	7.202%	
	10/15/2001	75.68	2.5			
2002	01/01/2002	77.74	9.5	78.2275	6.165%	
	10/15/2002	80.08	2.5			
2003	01/01/2003	80.08	9.5	80.7279	3.196%	
	10/15/2003	83.19	2.5			
2004	01/01/2004	83.19	9.5	83.5733	3.525%	
	10/15/2004	85.03	2.5			
2005	01/01/2005	85.03	2.0	86.1488	3.082%	4.634%
	03/01/2005	86.02	7.5			
	10/15/2005	87.43	2.5			
2006	01/01/2006	87.43	9.5	87.8133	1.932%	3.580%
	10/15/2006	89.27	2.5			
2007	01/01/2007	89.27	9.5	89.7846	2.245%	2.796%
	10/15/2007	91.74	2.5			
2008	01/01/2008	96.64	9.5	96.6400	7.635%	3.684%
	10/15/2008	96.64	2.5			
2009	01/01/2009	96.64	11.0	95.8125	-0.856%	2.808%
	12/01/2009	86.71	1.0			
2010	01/01/2010	86.71	7.0	87.4308	-8.748%	0.442%
	08/01/2010	88.44	5.0			
2011	01/01/2011	88.44	6.0	89.1050	1.915%	0.438%
	07/01/2011	89.77	6.0			
2012	01/01/2012	89.77	12.0	89.7700	0.746%	0.138%

Contract Unit Values: Rice, Michels and Walther has determined that the unit value under the November 20, 2009 order was 86.71 as of December 1, 2009. Based on the labor agreement effective through December 31, 2011, a 2% increase is expected August 1, 2010 and a 1.5% increase is expected July 1, 2011.

MINNEAPOLIS POLICE RELIEF ASSOCIATION
December 31, 2009 Actuarial Valuation

History of Actuarially Determined Employer Contributions

<u>Valuation December 31:</u>	<u>Normal Cost as a Percent of Payroll</u>	<u>Amortization of Unfunded Actuarial Liability</u>
1989	24.53%	\$6,727,495
1990	25.61%	6,547,850
1991	25.58%	6,319,193
1992	25.62%	5,615,587
1993	25.57%	5,663,676
1994	25.43%	6,331,000
1995	24.91%	6,683,106
1996	24.83%	6,831,165
1997	24.66%	4,175,261
1998	26.53%	3,344,809
1999	26.50%	2,624,238
2000	24.03%	7,767,618
2001	23.10%	17,543,533
2002	21.56%	25,994,756
2003	19.78%	31,678,807
2004 ¹	18.96%	14,305,932
2005	17.93%	10,676,247
2006	16.87%	6,711,413
2007	15.81%	5,830,498
2008 ²	17.61%	21,797,105
2008 ³	15.30%	14,004,122
2009	13.02%	17,636,212

The required municipal normal cost contribution is the total normal cost shown less an 8% adjustment for member payroll contributions.

¹ *After change in benefit and funding provisions, from restated report*

² *As stated in original December 31, 2008 report*

³ *After court-ordered change to unit value, from restated December 31, 2008 report*

MINNEAPOLIS POLICE RELIEF ASSOCIATION
December 31, 2009 Actuarial Valuation

Comparative Schedule of Active Members

<u>Valuation</u> <u>December 31:</u>	<u>Number of</u> <u>Active</u> <u>Members</u>	<u>Projected</u> <u>Payroll</u>	<u>Averages</u>		
			<u>Age</u>	<u>Service</u>	<u>Pay</u>
1989	460	\$18,421,160	46.6	21.0	\$40,046
1990	433	17,859,951	47.3	21.8	41,247
1991	410	17,658,290	48.0	22.5	43,069
1992	381	16,913,352	48.5	23.2	44,392
1993	349	16,576,802	49.2	24.0	47,498
1994	307	14,799,242	49.8	24.6	48,206
1995	278	13,937,530	50.3	25.3	50,135
1996	239	13,002,556	50.9	25.9	54,404
1997	188	10,817,520	51.1	26.3	57,540
1998	148	8,856,616	51.5	26.8	59,842
1999	123	7,503,881	51.3	26.6	61,007
2000	97	6,583,342	51.7	27.2	67,870
2001	73	5,238,480	52.6	28.4	71,760
2002	53	3,955,411	53.7	29.4	74,630
2003	24	1,860,356	55.0	30.4	77,515
2004	18	1,429,255	55.2	31.1	79,403
2005	17	1,403,846	57.4	33.3	82,579
2006	15	1,236,046	58.8	34.5	82,403
2007	14	1,185,563	59.7	35.8	84,683
2008	14	1,248,886	60.7	36.8	89,206
2009	11	923,269	61.6	37.8	83,934

MINNEAPOLIS POLICE RELIEF ASSOCIATION*December 31, 2009 Actuarial Valuation*

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Comparative Schedule of Inactive Members

As of December 31:	Number of Retirees and Beneficiaries			Actual Benefits	Projected Annual Benefits	Present Value of Benefits
	Added to Rolls	Removed from Rolls	On Valuation Date			
1989	40	31	752	\$12,988,156	\$12,007,149	\$163,236,324
1990	33	33	752	13,179,656	12,579,039	169,649,676
1991	30	25	757	12,726,042	13,152,752	175,237,680
1992	55	28	784	14,764,375	14,352,332	192,504,840
1993	45	33	796	15,646,456	15,690,269	212,051,856
1994	56	40	812	18,040,942	17,238,698	226,104,506
1995	35	39	808	17,597,704	17,375,347	235,698,327
1996	51	28	831	20,240,597	19,435,342	263,685,600
1997	82	35	878	25,513,260	21,662,581	298,497,984
1998	65	23	920	24,511,366	24,020,183	330,745,536
1999	34	37	917	26,213,944	26,701,339	368,568,524
2000	34	37	924	30,697,541	28,043,660	385,062,755
2001	41	34	933	30,503,691	30,398,324	413,026,264
2002	35	40	928	30,724,261	31,446,287	423,583,483
2003	40	31	935	31,855,476	33,194,254	447,163,590
2004 ¹	40	31	921	32,797,952	34,479,242	455,208,169
2005	10	27	904	33,789,746	34,157,890	450,360,551
2006	19	39	884	34,121,401	34,216,563	428,105,651
2007	14	38	860	36,033,230	34,191,406	417,106,358
2008	16	30	846	37,607,090	34,920,495	430,300,320
2009	17	35	828	34,747,136	31,123,919	407,142,826

¹ After change in benefit and funding provisions, from restated report

Actuarial Methods and Assumptions

1. Mortality The 1983 GAM mortality table set back 2 years for males and set forward 1 year for females. Before 2008, the UP-1984 mortality table set forward 2 years for males and set back 3 years for females.
2. Withdrawal The rate of withdrawal is 0% after age 50. The plan is closed, and all remaining active members are over age 50.
3. Disability Rates varying by age. Sample disability rates are as follows:
- | <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 25 | 0.08% |
| 30 | 0.08% |
| 35 | 0.08% |
| 40 | 0.20% |
| 45 | 0.26% |
| 50 | 0.49% |
| 55 | 0.89% |
4. Retirement Age Members are assumed to retire at age 54, or in one year if later. Before 2009, members were assumed to retire at age 54, or immediately if older.
5. Interest Rate 6% compounded annually.
6. Unit value/Salary Scale The unit value under the November 20, 2009 order is 86.71 as of December 31, 2009. The unit value is expected to increase 2% on August 1, 2010 and increase another 1.5% on July 1, 2011. That unit value is assumed to remain in effect as of January 1, 2012. All unit values after January 1, 2012 are assumed to increase 4% per year.
7. Actuarial Cost Method The Entry Age Normal Cost Method. Under this method, the normal cost for an individual member is the level percentage of pay required, beginning on the date of joining the association, to accumulate the funds needed to pay the member's accrued benefits by their assumed retirement age. The actuarial accrued liability is the accumulated value of these annual normal costs on a given date. The normal cost and accrued liability for the plan is the total of these values for all members.
8. Beneficiary Data 85% of active employees are assumed to be married with wives 3 years younger than husbands. Actual spouse data is available for retirees, so no assumption is needed.

Summary of Plan Provisions

1. Normal Retirement Benefit
Annual benefit of 30.40/80 of base pay for first 19 years of service. An additional 4.60/80 units are awarded for the 20th year of service. For service years in excess of 20, an additional 1.60/80 is granted; to a maximum of 25 years of service and 43/80 of base pay. "Base pay" for this purpose means the maximum monthly salary of a first class patrolman. Members must be at least age 50 with 5 years of service to receive this benefit.
2. Deferred Vested Benefit
The plan is closed. All remaining active members are eligible for an immediate benefit upon retirement.
3. Disability Benefit
Annual benefit of 34/80 of base pay for members no longer able to perform the duties of a policeman due to disability.
4. Surviving Spouse's Benefit
Annual benefit of 23/80 of base pay for the surviving spouse of an active or retired member.
5. Surviving Children's Benefit
Annual benefit of 8/80 of base pay for each surviving child of an active or retired member. Benefits continue to age 18 or if the child is a full-time student, to age 22. The total benefit for surviving children and spouse combined is limited to 41/80 of base pay.
6. Member Contributions
Members are required to contribute 8% of base pay. After 25 years of service, member contributions are paid to a separate health insurance account. In the event of death without survivorship, member contributions are refundable including 5% interest from the month the contribution is made.