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MINNEAPOLIS POLICE RELIEF ASSOCIATION

SPECIAL FUND

December 31, 2005
Actuarial Valuation

VAN IWAARDEN

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May, 2006

VAN IWAARDEN ASSOCIATES 840 LUMBER EXCHANGE TEN SOUTH FIFTH STREET MINNEAPOLIS MN 55402-1032
612.596.5960 *f:* 612.596.5999 WWW.VANIWAARDEN.COM

VAN IWAARDEN

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MINNEAPOLIS POLICE RELIEF ASSOCIATION

December 31, 2005 Actuarial Valuation

Introduction

Purpose

This report presents the results of the December 31, 2005 valuation for the Minneapolis Police Relief Association. Its primary purposes are:
- to determine the funded status as of December 31, 2005,
- 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, 2005.

Sources of data

The Relief Association supplied December 31, 2005 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 previous valuation

The prior actuarial valuation of the plan was prepared as of December 31, 2004. An initial 2004 report was issued in May 2005. Following a legislative change to funding and benefit provisions to the plan, we issued a restated report in October 2005. The change added one-half unit to the benefit of surviving spouses and one-half unit to retirees with more than 20 years of service effective January 1, 2005. An additional one-half unit became effective on January 1, 2006. The legislation also extended the date for full funding ten years to December 31, 2020. We recognized these provisions in the restated 2004 report and in this report.

The actuarial assumptions and methods used to prepare this report are the same as those used in the restated 2004 report. Because the union contract that will set the unit value effective as of December 31, 2005 has not yet been settled, we have used the December 31, 2004 unit value, increased with the statutory rate of 4% (89.46), for purposes of this valuation. All future unit values for actives and inactives are assumed to increase 4% per year from the valuation date.

Summary of valuation results

As of December 31, 2005, the funded status of the plan (actuarial value of assets divided by actuarial accrued liabilities) is 77.3% (see page 7). This is an increase from last year's funded ratio of 68.6%. The improvement in funded status is due to an increase in the actuarial value of assets (see page 4). The effective investment return on the actuarial value of assets (about 12.3%) was greater than the statutory assumption of 6.0%. On a market value basis, the funded status has increased from 74.3% to 78.9%.

Actuarial liabilities increased by about $1 million more than expected (see page 8). For several years, the plan has shown a consistent actuarial liability loss.

Introduction (continued)

Because the five-year average rate of return on investments did not exceed the five-year average salary increase rate, no "13th Check" will be payable in 2006.

Actuarial certification

We certify, with one qualification, 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 associations in cities of the first class in general and the Minneapolis Police Relief Association in particular.

Under Actuarial Standards of Practice (ASOP) No. 35, Paragraph 3.1,

> A reasonable assumption is one that is expected to appropriately model the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

We believe, based on the experience study we conducted in 2004, and continuing actuarial experience losses, that the mortality assumption used for this report is not reasonable. However, Paragraph 1.2 of ASOP 35, provides,

> (w)hen applicable law, regulation, or other binding authority conflicts with this standard, complying with such law, regulation, or other binding authority shall not be deemed a deviation from this standard

and Paragraph 3.8 provides, "When an assumption is prescribed, the actuary is obligated to use it." Since the current mortality table cannot be changed without approval of the Legislative Commission on Pensions and Retirement, we believe it is a "prescribed assumption" and that we are obligated to use it, even though it is our opinion that it is not reasonable.

If we had used the mortality table that we recommend (1983 GAM F+2), the funded ratio would have been 69.4% (instead of 77.3%) and the amortization payment would have been $16.1 million (instead of $10.7 million) as of December 31, 2005.

In all other respects, we believe the results are reasonable and fairly represent the actuarial status of this plan.

Respectfully submitted,

Mark Meyer

Mark D. Meyer, FSA, MAAA
Consulting Actuary

Paul D. Krueger, JD, EA
Consulting Actuary

Summary of Results

	December 31, 2004	December 31, 2005
A. Plan participant data		
1. Number of participants		
a. Active employees	18	17
b. Terminated vested employees	0	0
c. Retirees	678	664
d. Disability	0	0
e. Surviving spouses	242	239
f. Surviving children	1	1
g. Total	939	921

	2004 Plan Year	2005 Plan Year
B. Normal costs		
1. Total normal cost		
a. Amount	$270,930	$251,725
b. Percentage of active payroll	18.96%	17.93%
2. Employer normal cost		
a. Amount	156,589	139,417
b. Percentage of active payroll	10.96%	9.93%
C. Amortization payments		
1. Unfunded actuarial accrued liability	$147,279,344	$105,189,674
2. Amortization payment	14,305,932	10,676,247

	December 31, 2004	December 31, 2005
D. Value of plan assets		
1. Market value	$348,910,985	$366,406,914
2. Actuarial value (for calculating contributions)	322,278,156	359,031,868
E. Benefit liabilities		
1. Present value of future benefits	$469,957,919	$464,532,051
2. Actuarial accrued liability	469,557,499	464,221,542
F. Funded status		
1. Market value of assets as a % of liabilities	74.3%	78.9%
2. Actuarial value of assets as a % of liabilities	68.6%	77.3%

Funding Basis

Actuarial Value of Assets

A. Unrealized gain

Year Ending December 31:	Market Value	Book Value	Unrealized Gain (Market - Book)
2002	277,143,300	313,615,033	(36,471,733)
2003	323,467,992	305,535,163	17,932,829
2004	348,910,985	318,231,193	30,679,792
2005	366,406,914	331,038,035	35,368,879

B. Preliminary actuarial value of assets	December 31, 2004	December 31, 2005
1. Book value of assets	$318,231,193	$331,038,035
2. Average unrealized gain for previous three years	4,046,963	27,993,833
3. Preliminary actuarial value	322,278,156	359,031,868

C. Excess investment income

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

Year Ending December 31:	Salary Increase	Asset Return
2000	1.498%	-1.641%
2001	9.539%	-3.900%
2002	7.622%	-10.100%
2003	3.884%	22.700%
2004	3.410%	9.600%
2005	0.000%	5.900%

2. Determination of excess investment income		
a. Arithmetic average of previous 5 years salary increases	5.191%	4.891%
b. Arithmetic average of previous 5 years of asset returns	3.332%	4.840%
c. Excess of asset return over salary increase	-1.859%	-0.051%
d. Excess minus 2%	-3.859%	-2.051%
e. Lesser of 0.5% or 2.d., times market value (not < 0)	0	0
f. December 2005 monthly benefits paid	2,758,425	2,786,250
g. Adjustment to assets (lesser of e. or f.)	0	0

D. Actuarial value of assets (B.3. - C.2.g.)	$322,278,156	$359,031,868

Summary of Member Data

	December 31, 2004	December 31, 2005
A. Active members		
1. Number		
a. Fully vested	18	17
b. Nonvested	0	0
c. Total	18	17
2. Average age	55.2	57.4
3. Average years of service	31.1	33.3
4. Total annual payroll for the year ending on valuation date	$1,429,255	$1,403,846
5. Average annual salary	$79,403	$82,579
B. Vested terminated members		
1. Number	0	0
2. Total annual deferred benefits	$0	$0
C. Retirees		
1. Age & service	678	664
2. Disability	0	0
3. Total	678	664
4. Total annual benefits	$28,308,486	$29,200,531
5. Average annual benefit	$41,753	$43,977
D. Beneficiaries		
1. Spouses	242	239
2. Children	1	1
3. Total	243	240
4. Total annual benefits	$5,694,930	$5,957,359
5. Average annual benefit	$23,436	$24,822
E. Total number of members (A.1. + B.1. + C.3. + D.3.)	939	921

Summary of Changes in Membership

	Actives	Vested Terminees	Retirees	Beneficiaries	Total
A. Number of members on December 31, 2004	18	0	678	243	939
B. Changes in membership					
1. Retirements	(1)		1		0
2. Vested terminations					0
3. Active deaths					0
4. Retiree deaths			(15)	9	(6)
5. Beneficiary deaths				(12)	(12)
6. Expiration of surviving child benefits					0
7. Corrections					0
8. Total changes	(1)	0	(14)	(3)	(18)
C. Number of members on December 31, 2005	17	0	664	240	921

Funding Basis

Actuarial Values Used to Determine Contribution

	December 31, 2004	December 31, 2005
A. Actuarial present value of projected benefits (the value of all future benefits to be paid to the current group of members)		
1. Active members	$14,749,750	$14,171,500
2. Vested terminated members	0	0
3. Retired members	403,149,119	398,087,711
4. Spouses and children receiving benefits	52,059,050	52,272,840
5. Disabled members receiving benefits	0	0
6. Total present value of projected benefits	469,957,919	464,532,051
B. Actuarial accrued liability (the cost allocated to all prior years)		
1. Active members	$14,349,330	$13,860,991
2. Vested terminated members	0	0
3. Retired members	403,149,119	398,087,711
4. Spouses and children receiving benefits	52,059,050	52,272,840
5. Disabled members receiving benefits	0	0
6. Total actuarial accrued liability	469,557,499	464,221,542
C. Amortization of unfunded actuarial accrued liability		
1. Total actuarial accrued liability (B.6.)	$469,557,499	$464,221,542
2. Actuarial value of assets	322,278,156	359,031,868
3. Unfunded actuarial accrued liability (1. - 2.)	147,279,344	105,189,674
4. Funded status (2. ÷ 1.)	68.6%	77.3%
5. Years left in amortization period	15	14
6. Amortization payment	14,305,932	10,676,247
D. Normal cost (the cost allocated to the current year)		
1. Present value of future normal costs (A.6. - B.6.)	$400,420	$310,509
2. Normal cost as a dollar amount		
a. Total normal cost	270,930	251,725
b. Statutory adjustment for member contributions	114,340	112,308
c. Employer normal cost (a. - b.)	156,589	139,417
3. Payroll for year ending on valuation date	1,429,255	1,403,846
4. Normal cost as a percent of active payroll		
a. Total normal cost (2.a. ÷ 3.)	18.96%	17.93%
b. Statutory adjustment for member contributions (2.b. ÷ 3.)	8.00%	8.00%
c. Employer normal cost (2.c. ÷ 3.)	10.96%	9.93%

Funding Basis

Changes in the Unfunded Actuarial Accrued Liability

A. Liability gain or loss for the year ending on December 31, 2005	
1. Expected actuarial accrued liability (AAL)	
a. AAL as of December 31, 2004	$469,557,499
b. Normal cost as of December 31, 2005 (excluding expenses)	251,725
c. Interest to December 31, 2005 on the AAL and normal cost	28,173,450
d. Benefit payments for the year	(33,789,746)
e. Interest on benefit payments (1/2 year)	(1,013,692)
f. Expected AAL on December 31, 2005 (sum of a. through e.)	463,179,236
2. Actual AAL on December 31, 2005	
a. Before any assumption or plan changes	464,221,542
b. After unit value changes	464,221,542
c. After assumption and unit value changes	464,221,542
d. After plan changes	464,221,542
3. Liability (gain) or loss	
a. Due to plan experience different from that expected (2a. - 1f.)	1,042,306
b. Due to change in unit value different from expected (2.b. - 2.a.)	0
c. Due to changes in actuarial assumptions (2c. - 2b.)	0
d. Due to plan changes (2d. - 2c.)	0
e. Total (a. + b. + c. + d.)	1,042,306
B. Asset gain or loss for the year ending on December 31, 2005	
1. Expected actuarial value of assets	
a. Actuarial value of assets on December 31, 2004	322,278,156
b. Benefit payments and expenses for the year	(34,379,236)
c. Contributions for the year	31,550,329
d. Expected return on assets	19,251,822
e. Expected actuarial value of assets on December 31, 2005 (sum of a. through d.)	338,701,071
2. Actual actuarial value of assets on December 31, 2005	359,031,868
3. Asset (gain) or loss (1e. - 2.)	(20,330,798)
C. Changes in the unfunded AAL	
1. Expected unfunded AAL on December 31, 2005	124,478,165
2. Changes	
a. Actuarial (gain) or loss other than change in unit value	(19,288,492)
b. Change in unit value different from expected	0
c. Changes in actuarial methods and assumptions	0
d. Plan change	0
e. Total change	(19,288,492)
3. Unfunded AAL on December 31, 2005	105,189,674

Accounting Basis

Statement of Plan Net Assets

	Market	Book
A. Investment assets		
Fixed income	39,829,754	39,979,240
Corporate stock	19,282,064	16,261,856
State Board of Investment	128,416,809	107,384,011
Mutual funds	141,820,042	132,222,446
Cash equivalents and other investments	37,156,887	35,289,124
Total	366,505,556	331,136,677
B. Checking account	22,014	22,014
C. Accrued/payable		
Accrued investment income	345,554	345,554
Accrued contributions	221,286	221,286
Investment sales receivable	3,430,574	3,430,574
Accounts payable	(2,848,220)	(2,848,220)
Investment purchase payable	(1,269,850)	(1,269,850)
Total	(120,656)	(120,656)
D. Total pension assets (A. + B. + C.)	$366,406,914	$331,038,035

Accounting Basis

Statement of Changes in Plan Net Assets

	2004	2005
A. Additions		
1. Contributions		
a. State	$6,745,843	$6,573,582
b. City	21,143,709	24,976,747
c. Plan members	0	0
d. Total	27,889,552	31,550,329
2. Investment income	30,914,670	20,115,053
3. Unclaimed property	206,289	209,783
4. Proceeds from litigation	0	0
4. Total additions	59,010,511	51,875,165
B. Deductions		
1. Benefits paid	$32,797,952	$33,789,746
2. Refund of contributions	0	0
3. Expenses	769,566	589,490
4. Total deductions	33,567,518	34,379,236
C. Net increase (A.4. - B.4.)	25,442,993	17,495,929
D. Net assets held in special fund		
1. Beginning of year	$323,467,992	$348,910,985
2. Post closing audit adjustments	0	0
3. End of year	$348,910,985	$366,406,914

Accounting Basis

Schedule of Funding Progress
(Dollar amounts in thousands)

As of December 31:	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio
1992	$265,307	$325,891	$60,584	81.4%
1993	288,942	347,879	58,937	83.1%
1994	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	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#	322,278	469,557	147,279	68.6%
2005	359,032	464,222	105,190	77.3%

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

Accounting Basis

Schedule of Employer Contributions

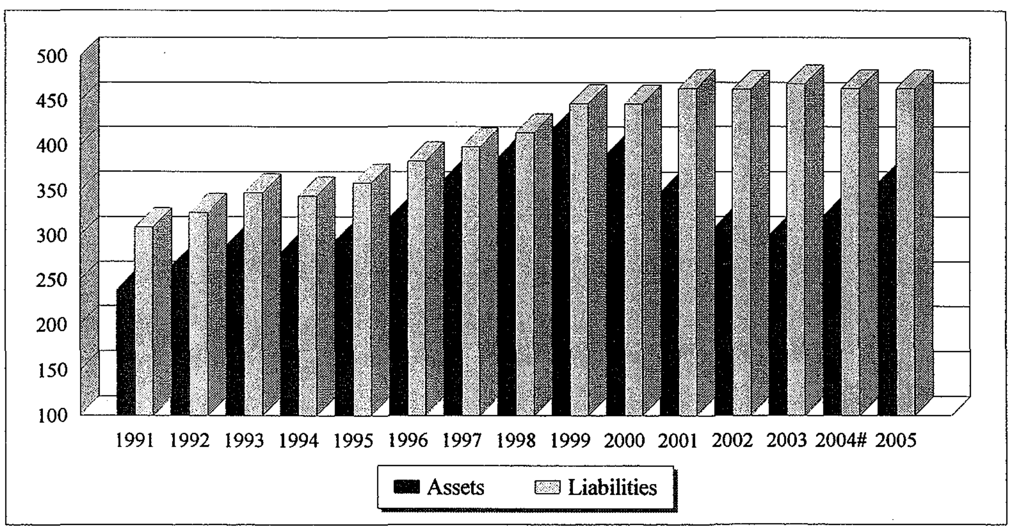
Year Ended December 31:	Employer Contributions Paid During the Year
1992	$8,281,262
1993	8,859,961
1994	6,239,591
1995	8,359,115
1996	5,544,721
1997	7,298,118
1998	6,207,956
1999	3,719,453
2000	4,563,133
2001	3,459,195
2002	8,325,895
2003	19,420,159
2004	27,889,552
2005	31,550,329

Historical Tables

Historical Funding Ratio Schedule
(Dollar amounts in thousands)

As of December 31:	Actuarial Accrued Liability	Actuarial Value of Assets	Percent Funded
1989	$290,537	$211,081	72.7%
1990#	299,151	223,919	74.9%
1991	309,429	238,975	77.2%
1992#	325,891	265,307	81.4%
1993#	347,879	288,942	83.1%
1994#	344,087	280,772	81.6%
1995	358,657	294,692	82.2%
1996	382,957	320,686	83.7%
1997	398,728	362,683	91.0%
1998#	414,694	387,531	93.4%
1999	447,596	418,122	95.4%
2000	447,086	391,083	87.5%
2001	464,649	349,170	75.1%
2002	463,487	309,667	66.8%
2003	465,276	300,154	64.5%
2004#	469,557	322,278	68.6%
2005	464,222	359,032	77.3%

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



Historical Tables

History of Employer Contributions

Valuation December 31:	Normal Cost as a Percent of Payroll	Amortization of Unfunded Actuarial Liability
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#	18.96%	14,305,932
2005	17.93%	10,676,247

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

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

Historical Tables

Comparative Schedule of Active Members

Valuation December 31:	Number of Active Members	Projected Payroll	Averages Age	Averages Service	Averages Pay
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	7,804,036	51.3	26.6	63,447
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

**Payroll used to calculate normal cost for calendar year 1999 is $7,503,881.*

Historical Tables

Comparative Schedule of Inactive Members

	Number of Retirees and Beneficiaries					
As of December 31:	Added to Rolls	Removed from Rolls	On Valuation Date	Actual Annual Benefits	Projected Annual Benefits	Present Value of Benefits
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#	40	31	921	32,797,952	34,479,242	455,208,169
2005	14	28	904	33,789,746	35,157,890	450,360,551

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

Actuarial Methods and Assumptions

1. Mortality

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 frozen, and all remaining active members are over age 50.

3. Disability

Rates varying by age. Sample disability rates are as follows:

Age	Rate
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 attained age if older.

5. Interest rate

6% compounded annually.

6. Unit value/Salary scale

Because the union contract that will set the unit value effective as of December 31, 2005 has not yet been settled, we have used the December 31, 2004 unit value, increased with the statutory rate of 4% (89.46) for purposes of this valuation. All future unit values for actives and inactives are assumed to increase 4% per year from the valuation date.

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.

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 3.60/80 units are awarded for the 20th year of service. Effective January 1, 2005, an additional 4.10/80 units, and effective January 1, 2006 an additional 4.60/80 units will be 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 42/80 of base pay (42.5/80 after January 1, 2005 and 43/80 after January 1, 2006). The monthly benefits of retired members will be adjusted effective January 1, 2005 and 2006 based on their years of service at retirement. "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 frozen. 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 22/80 of base pay for the surviving spouse of an active or retired member. Effective January 1, 2005 this benefit was increased to 22.5/80 of base pay. Effective January 1, 2006 the benefit increased to 23/80 of base pay. The monthly benefits of surviving spouses already receiving payments were adjusted effective January 1, 2005 and 2006.
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 to age 22 if the child is a full-time student. The total benefit for surviving children and spouse combined is limited to 41/80 of base pay.

Summary of Plan Provisions *(continued)*

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.