

**ANCHORAGE POLICE AND FIRE  
RETIREMENT SYSTEM**

**ACTUARY'S REPORT  
(As of January 1, 2006)**



**Milliman**

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April 5, 2006

Retirement Board  
Anchorage Police and Fire Retirement System  
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Dear Members of the Board:

At your request, we have completed an actuarial valuation of the Anchorage Police and Fire Retirement System as of January 1, 2006. Our findings are discussed in Section 1.

In preparing this report, we relied without audit upon the employee and beneficiary data furnished by the System. We believe this information is sufficient and reliable for the purposes of our calculations. We relied on Section 3.85 of the Anchorage Municipal Code on the City's website as of February 28, 2006, and the clarifications and interpretations of AMC 3.85 set forth in the Board motions passed December 1, 2005, January 12, 2006, and February 16, 2006. We also relied on the financial statements supplied by the Mellon Bank which have not yet been audited. The asset information appears to be reasonable for the purpose of this report. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that this report is complete and accurate to the best of our knowledge and belief. The report has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Standards of Practice adopted by the Actuarial Standards Board of the American Academy of Actuaries.

We further certify that, in our opinion, the actuarial assumptions used in the valuation are reasonably related to the past experience of the System. They represent our best estimate of future conditions affecting the System. Nevertheless, the emerging costs of the System will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. The Retirement Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Section 3.

Actuarial computations presented in this report are for purposes of determining the recommended funding levels for the members of the System and the Municipality of Anchorage. Actuarial computations under GASB Statement No. 25 are for purposes of



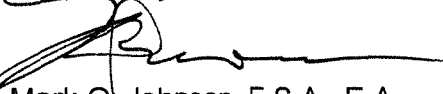
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fulfilling financial accounting requirements. The computations in this report have been made on a basis consistent with our understanding of the Retirement Board's funding policies and GASB Statement No. 25.

Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, different determinations may be needed for other purposes. Any distribution of the enclosed report must be in its entirety including this cover letter, unless prior written consent is obtained from Milliman.

Milliman has been engaged by the Anchorage Police and Fire Retirement System as an independent actuary. The undersigned is a member of the American Academy of Actuaries, a Fellow of the Society of Actuaries and an Enrolled Actuary, is experienced in performing actuarial valuations for large public employee retirement systems and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report.

Respectfully submitted,



Mark O. Johnson, F.S.A., E.A.  
Principal and Consulting Actuary

MOJ:wp  
encl.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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# **Anchorage Police and Fire Retirement System**

## **Actuarial Valuation as of January 1, 2006**

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### **SECTION 1**

#### **DISCUSSION OF THE FINDINGS**

##### **SCOPE OF THE REPORT**

This report presents the results of the Actuarial Valuation of the Anchorage Police and Fire Retirement System as of January 1, 2006. The last Actuarial Valuation of the System was performed as of January 1, 2005.

The purpose of this actuarial valuation is to analyze the resources needed to meet the current and future obligations of the three Plans. This actuarial valuation provides the best estimate of the long-term financial condition of each Plan.

A summary of the findings and an analysis of the funding level are presented in this report. The final valuation report will include a number of important statements about the findings, actuarial assumptions and methods, and our reliance on the demographic and financial data.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

### DEMOGRAPHIC DATA

We have utilized the Pension Administration System database to generate the census for this valuation. We performed a significant amount of review to ensure the accuracy of the data, including tests for reasonableness and consistency. We believe the data was sufficient and reliable for the purposes of our calculations.

The tables on this and the next few pages summarize the census data. The first table is a reconciliation of the members' change in status for the year.

	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System</u>
<b>Total on January 1, 2005</b>	<b>220</b>	<b>125</b>	<b>448</b>	<b>793</b>
<b>Active Members</b>				
Total on January 1, 2005	7	16	151	174
Reinstatements	-	-	-	-
Vested Terminations	-	-	(1)	(1)
Service Retirements	(1)	(2)	(26)	(29)
Disability Retirements	-	-	-	-
Deaths	-	-	-	-
Total on January 1, 2006	6	14	124	144
<i>Police Officers</i>	1	13	67	81
<i>Firefighters</i>	5	1	57	63
<b>Terminated Members</b>				
Total on January 1, 2005	-	4	9	13
Reinstatements	-	-	-	-
New Terminations	-	-	1	1
Retirements	-	(1)	-	(1)
Total on January 1, 2006	-	3	10	13
<b>Benefit Recipients</b>				
Total on January 1, 2005	213	105	288	606
Adjustment to Count	(1)	-	1	-
Service Retirements	1	3	26	30
Disability Retirements	-	-	-	-
Childrens' Benefit Started	-	-	-	-
Childrens' Benefit Ended	-	(1)	(4)	(5)
Deaths	(5)	-	(2)	(7)
Beneficiaries	2	-	2	4
Total on January 1, 2006	210	107	311	628
<b>Total on January 1, 2006</b>	<b>216</b>	<b>124</b>	<b>445</b>	<b>785</b>

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

The next table shows the number of Alternate Payees currently being paid. Note we have not included them in the previous table. Below, we also show the number of Children's Benefits currently being paid.

	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System</u>
<b>Alternate Payees (not included above)</b>				
Total on January 1, 2005	18	4	26	48
QDROs Established	-	-	4	4
QDROs Terminated	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total on January 1, 2006	18	4	30	52
<b>Children's Benefits (included with Benefit Recipients in the previous table)</b>				
Total on January 1, 2005	-	2	22	24
Adjustments to Count	-	(1)	1	-
Benefits Started	-	-	-	-
Benefits Ended	<u>-</u>	<u>(1)</u>	<u>(4)</u>	<u>(5)</u>
Total on January 1, 2006	-	0	19	19

The key demographic characteristics of the active members are shown in the next table.

	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>
<b>January 1, 2005</b>			
Average Salary	\$103,160	\$95,935	\$76,842
Average Age	54.0	49.3	45.4
Average Years Employed	29.7	22.4	16.4
<b>January 1, 2006</b>			
Average Salary	\$107,848	\$105,690	\$81,730
Average Age	55.3	50.4	45.6
Average Years Employed	31.1	23.5	16.5
<b>Changes for the Year</b>			
Average Salary	4.5%	10.2%	6.4%
Average Salary increase for Members active in both valuations	3.9%	8.3%	6.0%
Average Age	1.3 yr.	1.1 yr.	0.2 yr.
Average Years Employed	1.4 yr.	1.1 yr.	0.1 yr.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

The following table shows the distribution of active members by age and years of service.

<b>Age Group</b>	<b>Years of Service by Age</b>						<b>Total</b>
	<b>&lt; 10</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30 +</b>	
<b>Plan I</b>							
30-34							0
35-39							0
40-44							0
45-49							0
50-54					1	1	2
55-59					1	3	4
60 & up							
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>6</b>
-----							
<b>Plan II</b>							
30-34							0
35-39							0
40-44							0
45-49				3	1		4
50-54		1		6	1		8
55-59					2		2
60 & up							
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>4</b>	<b>0</b>	<b>14</b>
-----							
<b>Plan III</b>							
30-34							0
35-39		17	5				22
40-44		13	18	2			33
45-49		21	11	6	1		39
50-54		5	4	4	3		16
55-59			3	3	5	1	12
60 & up				1	1		2
<b>Total</b>	<b>0</b>	<b>56</b>	<b>41</b>	<b>16</b>	<b>10</b>	<b>1</b>	<b>124</b>



# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

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### ACTUARIAL METHODS AND ASSUMPTIONS

The actuarial methods and assumptions have been chosen on the basis of recent experience of the Plans and on current expectations as to future economic conditions. The assumptions are intended to estimate the future experience of the members of the Plans and of the Plans themselves in areas that impact projected benefits and anticipated investment earnings. Variations in future experience from that expected by the assumptions may result in corresponding changes in the estimated liabilities for future benefits, or the expected assets available to fund them.

A thorough examination of all of the methods and assumptions was performed for the 1999 Actuarial Valuation and a number of minor changes have been made since then.

For the 2006 valuation, the Board directed Milliman to study the Cause of Death assumption for Plan III in light of the clarifying motions passed at the December 1, 2005 Board meeting. We reviewed statistical data from the Centers for Disease Control, the Bureau of Labor Statistics, CalPERS, and other sources, as well as all available Plan experience data. In light of this information we revised our assumption for Cause of Death for all Plans. The revised assumption appears to be reasonable when compared to all of the above data sources. This is a "minor" actuarial assumption in the sense that the valuation results are not extremely sensitive to changes in this assumption. Nonetheless, the revised assumption did produce a decrease in the projected benefit liability for all three Plans.

#### ACTUARIAL METHODS

<b>Actuarial Cost Method:</b>	Modified Aggregate Actuarial Cost Method
<b>Valuation Assets:</b>	Fair Market Value of Assets

#### ACTUARIAL ASSUMPTIONS

<b>Economic Assumptions:</b>	<b>Investment Return:</b> 8% per year, net of all investment and administrative expenses
	<b>Interest on Member Accounts Balances:</b> 4% per year
	<b>Inflation:</b> 3.5% per year, so that Plan III retirement allowances will increase at the rate of 0.875% per year after the 20th anniversary of hire, and 1.75% after the 25th anniversary.
	<b>Future Salaries:</b> 4.0% per year

<b>Demographic Assumptions:</b>	The following assumptions were developed to reflect the emerging experience of each Plan: <ul style="list-style-type: none"><li>• <b>Mortality</b> (before and after retirement)</li><li>• <b>Service Retirement</b></li><li>• <b>Disablement</b> (Occupational and Non-Occupational)</li><li>• <b>Other Terminations of Membership</b></li><li>• <b>Cause of Death</b></li></ul>
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# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

### DETERMINATION OF THE PROJECTED LIABILITY

All future benefit payments from the System are projected for current members and beneficiaries. The level of benefits currently being paid is known, but assumptions are needed to estimate how long they will be paid, and the amount and timing of the payment of future benefits for active and inactive members who are not currently receiving payments. The summation of the discounted values to the valuation date, at the valuation interest rate, of the projected benefit payments for all current members and benefit recipients is called the Projected Liability.

(\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System</u>
<u>January 1, 2005</u>				
<b>Active Members</b>				
Retirement Benefits	\$ 5,853	\$ 8,780	\$ 67,909	\$ 82,542
Disability Benefits	48	1,702	4,133	5,883
Death Benefits	51	119	755	925
Return of Contributions	<u>0</u>	<u>1</u>	<u>18</u>	<u>19</u>
Active Members	\$ 5,952	\$ 10,602	\$ 72,815	\$ 89,369
<b>Inactive Members</b>				
Service Retirees	\$ 54,846	\$ 37,813	\$ 114,736	\$ 207,395
Disabled Members	24,022	14,192	11,752	49,966
Surviving Beneficiaries	10,926	4,597	5,689	21,212
Terminated Members	<u>0</u>	<u>1,057</u>	<u>1,297</u>	<u>2,354</u>
Inactive Members	\$ 89,794	\$ 57,659	\$ 133,474	\$ 280,927
<b>Total Projected Liability</b>	<b>\$ 95,746</b>	<b>\$ 68,261</b>	<b>\$ 206,289</b>	<b>\$ 370,296</b>
<u>January 1, 2006</u>				
<b>Active Members</b>				
Retirement Benefits	\$ 5,443	\$ 8,576	\$ 58,865	\$ 72,884
Disability Benefits	0	1,355	3,600	4,955
Death Benefits	27	101	607	735
Return of Contributions	<u>0</u>	<u>1</u>	<u>9</u>	<u>10</u>
Active Members	\$ 5,470	\$ 10,033	\$ 63,081	\$ 78,584
<b>Inactive Members</b>				
Service Retirees	\$ 53,546	\$ 37,893	\$ 126,868	\$ 218,307
Disabled Members	23,547	13,651	11,801	48,999
Surviving Beneficiaries	11,091	4,558	7,343	22,992
Terminated Members	<u>0</u>	<u>746</u>	<u>1,491</u>	<u>2,237</u>
Inactive Members	\$ 88,184	\$ 56,848	\$ 147,503	\$ 292,535
<b>Total Projected Liability</b>	<b>\$ 93,654</b>	<b>\$ 66,881</b>	<b>\$ 210,584</b>	<b>\$ 371,119</b>

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**

The next step in the actuarial process is to calculate the Actuarial Value of Assets that will be used to determine the Funding Status of each Plan. The table below shows the Fair Market Value of Assets for each Plan as reported to us by the System's staff from reports generated from the Mellon Bank database. Although not final audited figures, we believe this information is sufficient for purposes of this report.

2005 Activity (\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System</u>
<b><u>Actual Earnings</u></b>				
Beginning Balance at Mellon	\$ 107,071	\$ 73,041	\$ 214,927	\$ 395,039
Net Investment Income	6,464	4,352	13,338	24,154
Contributions – Municipality	0	0	11	11
Contributions- Members	0	0	5	5
Regular Benefit Payments	<u>(8,241)</u>	<u>(4,983)</u>	<u>(10,737)</u>	<u>(23,961)</u>
<b>Ending Balance at Mellon</b>	<b>\$ 105,294</b>	<b>\$ 72,410</b>	<b>\$ 217,544</b>	<b>\$ 395,248</b>
<b>Estimated Rate of Return (net of all expenses)</b>	<b>6.3%</b>	<b>6.2%</b>	<b>6.4%</b>	<b>6.3%</b>
<b><u>Expected Earnings</u></b>				
Beginning Balance at Mellon	\$ 107,071	\$ 73,041	\$ 214,927	\$ 395,039
Net Investment Income 8%	8,236	5,644	16,765	30,645
Contributions – Municipality	0	0	11	11
Contributions – Members	0	0	5	5
Regular Benefit Payments	<u>(8,241)</u>	<u>(4,983)</u>	<u>(10,737)</u>	<u>(23,961)</u>
<b>Ending Balance at Mellon</b>	<b>\$ 107,066</b>	<b>\$ 73,702</b>	<b>\$ 220,971</b>	<b>\$ 401,739</b>
<b>Investment Gain (Loss)</b>	<b>\$ (1,772)</b>	<b>\$ (1,292)</b>	<b>\$ (3,427)</b>	<b>\$ (6,491)</b>

**Surplus Benefit Accounts:** We have excluded the Trust assets held in the Surplus Benefit Accounts from this valuation. The assets allocated to individual members are not included in the Projected Liabilities, so it is not appropriate to include the supplemental accounts in the Assets. The Projected Liability of the supplemental accounts is equal to the sum of the Assets for all supplemental accounts, so no further funding is necessary.

**Estimated Rate of Return:** The estimated return of 6.3% was calculated assuming uniform cash flows throughout the year. In addition, these returns represent earnings after all investment and administrative expenses. The System's investment advisor generally presents gross rates of return before expenses.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**FUNDED STATUS**

The Funded Status is the difference between the Projected Liability and the Actuarial Value of Assets. The Funded Ratio is equal to the Value of Assets divided by the Projected Liability. The following chart shows the Funded Status of the System as of January 1, 2005, and 2006. As previously noted, the assets and liabilities exclude the individual supplemental accounts.

(\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System</u>
<b><u>January 1, 2005</u></b>				
Projected Liability	\$ 95,746	\$ 68,261	\$ 206,289	\$ 370,296
Actuarial Value of Assets	<u>107,071</u>	<u>73,041</u>	<u>214,927</u>	<u>395,039</u>
Funded Status	\$ (11,325)	\$ (4,780)	\$ (8,638)	\$ (24,743)
<b>Funded Ratio</b>	<b>112%</b>	<b>107%</b>	<b>104%</b>	<b>107%</b>
<b><u>January 1, 2006</u></b>				
Projected Liability	\$ 93,654	\$ 66,881	\$ 210,584	\$ 371,119
Actuarial Value of Assets	<u>105,294</u>	<u>72,410</u>	<u>217,544</u>	<u>395,248</u>
Funded Status	\$ (11,640)	\$ (5,529)	\$ (6,960)	\$ (24,129)
<b>Funded Ratio</b>	<b>112%</b>	<b>108%</b>	<b>103%</b>	<b>107%</b>

As of January 1, 2005, Plans I, II, and III each had an Actuarial Surplus. As of January 1, 2006, all three Plans continue to have an Actuarial Surplus due to the net effect of unfavorable investment performance over the last year, demographic gains or losses, assumption changes, and changes in interpretations of the Plan III survivor benefit provisions reflected in the valuation. The Funded Ratio for Plan I and Plan II increased slightly and the Funded Ratio for Plan III decreased slightly this past year.

Funded Ratio	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>
January 1, 1995	125%	108%	83%
January 1, 1996	137%	120%	95%
January 1, 1997	149%	130%	100%
January 1, 1998	172%	154%	114%
January 1, 1999	180%	164%	127%
January 1, 2000	193%	174%	135%
January 1, 2001	126%	122%	116%
January 1, 2002	110%	109%	103%
January 1, 2003	93%	92%	86%
January 1, 2004	108%	103%	98%
January 1, 2005	112%	107%	104%
January 1, 2006	112%	108%	103%

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**ACTUARIAL GAINS AND LOSSES**

Actuarial gains are produced from experience that emerged more favorably than we assumed in the previous valuation. On the other hand, actuarial losses are produced from experience that emerged less favorably than we assumed. The most important of these gains and losses are shown below and described in the paragraphs that follow.

(\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System</u>
<b><u>Actuarial (Gains) and Losses</u></b>				
Funded Status January, 2005	\$ (11,325)	\$ (4,780)	\$ (8,638)	\$ (24,743)
Expected Funded Status January, 2006	\$ (12,231)	\$ (5,161)	\$ (9,346)	\$ (26,738)
Actual Funded Status January, 2006	<u>\$ (11,640)</u>	<u>\$ (5,529)</u>	<u>\$ (6,960)</u>	<u>\$ (24,129)</u>
Actuarial (Gains) and Losses	\$ 591	\$ (368)	\$ 2,386	\$ 2,609
<b><u>(Gains) and Losses by Source</u></b>				
Demographic & Economic Experience	\$ (574)	\$ 110	\$ 331	\$ (133)
Assumption Changes	\$ (607)	\$ (1,770)	\$ (2,152)	\$ (4,529)
Plan Interpretation Changes	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 780</u>	<u>\$ 780</u>
All Liability Experience	\$ (1,181)	\$ (1,660)	\$ (1,041)	\$ (3,882)
<i>As a percent of Liabilities</i>	(1.3)%	(2.5)%	(0.5)%	(1.0)%
Investment Return (Gain) or Loss	\$ 1,772	\$ 1,292	\$ 3,427	\$ 6,491
<i>As a percent of Assets</i>	1.7%	1.8%	1.6%	1.6%
Total Actuarial (Gains) and Losses	\$ 591	\$ (368)	\$ 2,386	\$ 2,609

- **Investment Return:** The actual investment return for 2005 was about 6.3% as calculated from the Mellon Bank financial statements. Since the assumed rate of return is 8.0% net of all expenses, there were losses due to investment performance. We estimated the dollar amount of the gain based on a uniform timing of the cash flow.
- **Demographic & Economic Experience:** For the most part, the gains and losses due to all non-investment experience during 2005 were relatively minor as a percentage of the expected Projected Liability. This is an indication that the actuarial assumptions are reasonable in the aggregate.
- **Assumption Changes:** As directed by the Board, based on plan experience and other statistical information we revised our assumption for the percentages of survivors of deceased members expected to qualify for Occupational Survivor Benefits. This decreased the projected liability for all three Plans.
- **Plan Interpretation Changes:** We reflected the Board Motions passed in January and February 2006 regarding how the Survivor Benefit provisions of Plan III are to be interpreted.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

**Retire/Rehire:** The census data indicated that the Municipality has rehired a number of 2005 retirees. These members continue to receive their retirement benefits from the System while working for the Municipality. We are not attorneys and are not providing an opinion on this activity, but we did analyze the impact on the System.

The Board has adopted a set of assumptions to predict when members will retire. The following table shows the rates of retirement we expect at each service level. Note the expected rates of retirement are the same for Plans I and II, but are different for Plan III.

The rates of retirement used in this valuation are shown below.

Plans I and II		Plan III	
Service	Rates	Service	Rates
		15	17.5%
		16	7.5%
		17	7.5%
		18	7.5%
		19	12.5%
20	27.5%	20	20.0%
21	12.5%	21	20.0%
22	12.5%	22	20.0%
23	20.0%	23	15.0%
24	20.0%	24	15.0%
25 or more	20.0%	25 or more	25.0%
Age 57 & 5 Years of Service	100.0%	Age 55 & 5 Years of Service	100.0%

For example, we are assuming that 27.5% of the Plan II members who attained 20 years of service in 2005 would retire, and that 72.5% of them work at least another year.

The following table shows the number of expected and actual retirements during 2005.

	Expected Retirements	Actual Retirements During 2005		
		Total	No Rehire	With Rehire
Plan I	1.4	1	1	-
Plan II	3.4	3	2	1
Plan III	<u>25.5</u>	<u>26</u>	<u>6</u>	<u>20</u>
Total	30.3	30	9	21

As you can see, the total number of retirements was very close to the number expected. For 2005, the number of actual retirements was about 99% of what we expected.

We also looked at the actuarial gains or losses due to retirements in 2005. In all three Plans, there was a slight loss.

\$(000)	Actual Gain or (Loss) on Retirements During 2005			
	Total	Pct of TPL	No Rehire	With Rehire
Plan I	\$ (89)	(0.1)%	\$ (89)	\$ -
Plan II	(4)	(0.0)%	9	(13)
Plan III	<u>(101)</u>	<u>(0.0)%</u>	<u>136</u>	<u>(237)</u>
Total	\$ (194)	(0.0)%	\$ 56	\$ (250)

The gains and losses were measured for each individual. In total, the actuarial gains and losses are a very small percent of the Total Projected Liability for each Plan.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

### CALCULATION OF RECOMMENDED CONTRIBUTIONS

The Retirement Board has adopted an actuarial method that allows for the amortization of gains and losses past the expected working life of the active members. The Governmental Accounting Standards Board recognizes this situation for mature closed groups and allows an amortization of gains and losses over a fixed period of years.

The Retirement Board adopted a Modified Aggregate Actuarial Cost Method designed to produce stable contribution patterns. The Unfunded Projected Liability, if any, and future actuarial gains and losses will be amortized as a level dollar amount over a fixed 15-year period beginning one year after the valuation date.

All three Plans were in a surplus position on January 1, 2006. Therefore, no member or Municipality contributions are due for 2007. The following table summarizes the calculations if this method adopted in 2003 for the 2004 contributions is used in the future.

	(\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>
(1) Projected Liability		\$ 93,654	\$ 66,881	\$ 210,584
(2) Actuarial Value of Assets		<u>105,294</u>	<u>72,410</u>	<u>217,544</u>
(3) Unfunded Projected Liability (2) – (1)		\$ (11,640)	\$ (5,529)	\$ (6,960)
(4) Expected 2006 Contribution discounted to 1/1/2006 at 8.00% interest		0	0	0
(5) Remaining Unfunded Projected Liability (3) – (4), but not less than zero		0	0	0
(6) Amortization Period		15 years	15 years	15 years
(7) <b>Amortization Payment for 2007</b>		<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>

Member contributions, if needed, are calculated to be 40% of the Municipality contributions (ratio of 2.5:1) subject to a maximum level of 6% of salary.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

### ALLOCATION OF RESERVES

The Retirement Board has established a procedure to allocate Actuarial Gains and Losses between the Benefit Enhancement Reserve and the Additional Contingency Reserve. The following is a description of each step used to determine the amount of the reserves as of the valuation date.

1. Each Plan maintains a Contingency Reserve equal to 16% of the Projected Liability. Regardless of the experience that emerged during the previous year, the Contingency Reserve has first priority and will be funded each year at the 16% level.
2. An Unallocated Gains and Loss Reserve is determined. This Reserve is equal to Plan Assets less the sum of the Projected Liability, the Contingency Reserve, the prior year's Additional Contingency Reserve, and the prior year's Benefit Enhancement Reserve.
3. The Unallocated Gain and Loss Reserve is allocated to the Additional Contingency Reserve (25%) and the Benefit Enhancement Reserve (75%).

Table 10 shows the adjustments to the Reserves for the past year. The ending balances, including the distribution of the Unallocated Gain and Loss Reserve to the Additional Contingency Reserve and the Benefit Enhancement Reserve, are summarized below.

(\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System Total</u>
Projected Liability	\$ 93,654	\$ 66,881	\$ 210,584	\$ 371,119
Actuarial Value of Assets	<u>105,294</u>	<u>72,410</u>	<u>217,544</u>	<u>395,248</u>
Unfunded Projected Liability	\$ (11,640)	\$ (5,529)	\$ (6,960)	\$ (24,129)
Contingency Reserve	\$ 14,985	\$ 10,701	\$ 33,693	\$ 59,379
Additional Contingency Reserve	(708)	(1,331)	(5,381)	(7,420)
Benefit Enhancement Reserve	<u>(2,637)</u>	<u>(3,841)</u>	<u>(21,352)</u>	<u>(27,830)</u>
Total Reserves	\$ 11,640	\$ 5,529	\$ 6,960	\$ 24,129



**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**SECTION 2**  
**ACTUARIAL VALUATION RESULTS**

The following tables document the findings of the actuarial valuation.

TABLE 1	Actuarial Present Value of Projected Benefits
TABLE 2	Actuarial Value of Assets
TABLE 3	Actuarial Balance Sheet
TABLE 4	Determination of Contribution Rates
TABLE 5	Disclosure Information - GASB Statement No. 25

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

**TABLE 1**  
**ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS**

	Plan I	Plan II	Plan III
<b>Active Members</b>			
(1) Retirement Benefits	\$ 5,443,073	\$ 8,576,168	\$ 58,864,455
(2) Return of Contributions	0	916	8,930
(3) Occupational Disability Benefits	0	1,294,509	2,994,890
(4) Non-Occupational Disability Benefits	0	60,152	474,349
(5) Occupational Death Benefits	22,637	85,233	458,902
(6) Non-Occupational Death Benefits	4,244	15,949	103,675
(7) Children's Benefit	<u>0</u>	<u>0</u>	<u>175,631</u>
(8) Subtotal Present Value of Benefits	\$ 5,469,954	\$ 10,032,927	\$ 63,080,832
<b>Inactive Members</b>			
(9) Service Retirees	\$ 53,546,372	\$ 37,893,117	\$ 126,868,202
(10) Disabilities	23,547,005	13,650,836	11,801,004
(11) Surviving Beneficiaries	11,090,902	4,557,890	7,343,177
(12) Vested Terminations	<u>0</u>	<u>746,182</u>	<u>1,490,617</u>
(13) Subtotal Present Value of Benefits	\$ 88,184,279	\$ 56,848,025	\$ 147,503,000
(14) <b>Total Present Value of Benefits</b> <b>(8) + (13)</b>	<b>\$ 93,654,233</b>	<b>\$ 66,880,952</b>	<b>\$ 210,583,832</b>

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 2**  
**ACTUARIAL VALUE OF ASSETS**

	<b>Plan I</b>	<b>Plan II</b>	<b>Plan III</b>
(1) As Reported in Prior Valuation	\$ 107,070,834	\$ 73,040,508	\$ 214,927,386
(2) Net Investment Income	6,464,254	4,352,218	13,338,554
(3) Contributions – Municipality	0	0	11,028
(4) Contributions – Member	0	0	4,879
(5) Benefit Distributions	<u>(8,240,665)</u>	<u>(4,982,931)</u>	<u>(10,737,444)</u>
(6) <b>Ending Balance at Mellon Bank included in this Valuation</b>	<b>\$ 105,294,423</b>	<b>\$ 72,409,795</b>	<b>\$ 217,544,403</b>

The table above shows the Fair Market Value of Assets for each Plan as reported to us by the System's staff from reports generated from the Mellon Bank database. Although not final audited figures, we believe this information is sufficient for purposes of this report.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 3**  
**ACTUARIAL BALANCE SHEET**

<b>RESOURCES</b>			
	<b>Plan I</b>	<b>Plan II</b>	<b>Plan III</b>
(1) Actuarial Value of Assets	\$ 105,294,423	\$ 72,409,795	\$ 217,544,403
(2) Actuarial Present Value of Future Contributions	<u>(11,640,190)</u>	<u>(5,528,843)</u>	<u>(6,960,571)</u>
(3) <b>Total Resources</b>	<b>\$ 93,654,233</b>	<b>\$ 66,880,952</b>	<b>\$ 210,583,832</b>
 <b>REQUIREMENTS</b>  			
(4) Actuarial Present Value of Projected Benefits			
(a) Retired or Disabled Members and Beneficiaries	\$ 88,184,279	\$ 56,101,843	\$ 146,012,383
(b) Vested Terminated and Inactive Members	0	746,182	1,490,617
(c) Active Members' Municipality-Provided Pension	4,848,216	8,669,817	58,206,144
(d) Active Members' Contributions	<u>621,738</u>	<u>1,363,110</u>	<u>4,874,688</u>
(5) <b>Total Requirements</b>	<b>\$ 93,654,233</b>	<b>\$ 68,880,952</b>	<b>\$ 210,583,832</b>

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**TABLE 4**  
**DETERMINATION OF CONTRIBUTION RATES**  
**BASED ON 15-YEAR AMORTIZATION PERIOD**

	Plan I	Plan II	Plan III
(1) Actuarial Present Value of Benefits	\$ 93,654,233	\$ 66,880,952	\$ 210,583,832
(2) Actuarial Value of Assets	<u>\$ 105,294,423</u>	<u>\$ 72,409,795</u>	<u>\$ 217,544,403</u>
(3) Unfunded Projected Liability (1) – (2)	(11,640,190)	(5,528,843)	(6,960,571)
(4) Expected 2006 Contributions, discounted to 1/1/2006 at 8% interest	\$ 0	\$ 0	\$ 0
(5) Remaining Unfunded Projected Liability (3) – (4)	(11,640,190)	(5,528,843)	(6,960,571)
(6) Amortization Period	15 years	15 years	15 years
One-Year Deferred Amortization Factor at 8% Interest <i>(present value of \$1 per year for period)</i>	8.23840	8.23840	8.23840
(7) <b>Total Annual Contribution for 2007</b> <b>((5) ÷ (6)) , but not less than zero</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b><u>Determination of Member Portion</u></b>			
(8) Projected Payroll in 2007 <i>(based on current actuarial assumptions)</i>	N/A	N/A	N/A
(9) Member Share (7) ÷ 3.5	N/A	N/A	N/A
(10) Calculated Member Rate (9) ÷ (8)	N/A	N/A	N/A
(11) <b>Actual Member Rate</b> <i>(subject to maximum; rounded down)</i>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 5**  
**DISCLOSURE INFORMATION - GASB STATEMENT NO. 25**

**Plan I**

**SCHEDULE OF FUNDING PROGRESS**

**Not required – Aggregate Actuarial Cost Method**

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**  
(Dollar Amounts in Thousands)

<b>Year Ending</b>	<b>Annual Required Contribution</b>	<b>Amount Contributed</b>	<b>Percentage Contributed</b>
December 31, 1992	0	0	100%
December 31, 1993	0	0	100%
December 31, 1994	0	0	100%
December 31, 1995	0	0	100%
December 31, 1996	0	0	100%
December 31, 1997	0	0	100%
December 31, 1998	0	0	100%
December 31, 1999	0	0	100%
December 31, 2000	0	0	100%
December 31, 2001	0	0	100%
December 31, 2002	0	0	100%
December 31, 2003	0	0	100%
December 31, 2004	752	752	100%
December 31, 2005	0	0	100%

The Municipality's contribution has been calculated in conformance with the provisions of GASB No. 27 as a percentage of covered payroll. Therefore, the contributions transmitted to the System in the year following the Actuarial Valuation are equal to the Annual Required Contribution (ARC), and there is no Net Pension Obligation (NPO) necessary to amortize any unmade contributions.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 5**  
**DISCLOSURE INFORMATION - GASB STATEMENT NO. 25**  
**(CONTINUED)**

**Plan II**

**SCHEDULE OF FUNDING PROGRESS**

**Not required – Aggregate Actuarial Cost Method**

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**  
(Dollar Amounts in Thousands)

Year Ending	Annual Required Contribution	Amount Contributed	Percentage Contributed
December 31, 1992	\$ 698	\$ 698	100%
December 31, 1993	237	237	100%
December 31, 1994	0	0	100%
December 31, 1995	0	0	100%
December 31, 1996	0	0	100%
December 31, 1997	0	0	100%
December 31, 1998	0	0	100%
December 31, 1999	0	0	100%
December 31, 2000	0	0	100%
December 31, 2001	0	0	100%
December 31, 2002	0	0	100%
December 31, 2003	0	0	100%
December 31, 2004	547	547	100%
December 31, 2005	0	0	100%

The Municipality's contribution has been calculated in conformance with the provisions of GASB No. 27 as a percentage of covered payroll. Therefore, the contributions transmitted to the System in the year following the Actuarial Valuation are equal to the Annual Required Contribution (ARC), and there is no Net Pension Obligation (NPO) necessary to amortize any unmade contributions.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 5**  
**DISCLOSURE INFORMATION - GASB STATEMENT NO. 25**  
**(CONTINUED)**

**Plan III**

**SCHEDULE OF FUNDING PROGRESS**

**Not required – Aggregate Actuarial Cost Method**

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**  
(Dollar Amounts in Thousands)

Year Ending	Annual Required Contribution	Amount Contributed	Percentage Contributed
December 31, 1992	\$ 2,387	\$ 2,387	100%
December 31, 1993	2,390	2,390	100%
December 31, 1994	2,236	1,204	54%
December 31, 1995	1,947	0	0%
December 31, 1996	2,340	0	0%
December 31, 1997	750	0	0%
December 31, 1998	0	0	100%
December 31, 1999	0	0	100%
December 31, 2000	0	0	100%
December 31, 2001	0	0	100%
December 31, 2002	0	0	100%
December 31, 2003	0	0	100%
December 31, 2004	2,519	2,519	100%
December 31, 2005	11	11	100%

The Municipality's contribution has been calculated in conformance with the provisions of GASB No. 27 as a percentage of covered payroll. Therefore, the contributions transmitted to the System in the year following the Actuarial Valuation are equal to the Annual Required Contribution (ARC). However, Ordinance AO 94-95 ceased contributions to Plan III on July 24, 1994.



# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## SECTION 3 ACTUARIAL METHODS AND ASSUMPTIONS

This section of the report describes the actuarial methods and assumptions used in this valuation. The actuarial methods and assumptions have been chosen on the basis of recent experience of the Plans and on current expectations as to future economic conditions. The assumptions are intended to estimate the future experience of the members of the Plans and of the Plans themselves in areas that affect the projected benefits and anticipated investment earnings. Any variations in future experience from that expected from the assumptions will result in corresponding changes in the estimated liabilities for future benefits.

A thorough examination of all of the methods and assumptions was performed for the 1999 Actuarial Valuation and a number of minor changes have been made since then.

For the 2006 valuation, the Board directed Milliman to study the Cause of Death assumption in light of the clarifying motions passed at the December 1, 2005 Board meeting. We reviewed statistical data from the Centers for Disease Control, the Bureau of Labor Statistics, CalPERS, and other sources, as well as all available Plan experience data. In light of this information we revised our assumption for Cause of Death. The revised assumption appears to be reasonable when compared to all of the above data sources. This is a "minor" actuarial assumption in the sense that the valuation results are not extremely sensitive to changes in this assumption. Nonetheless, the revised assumption did produce a decrease in the projected benefit liability for all three Plans.

### STANDARDS OF PRACTICE

- ◆ The economic assumptions have been developed in accordance with the Actuarial Standard of Practice No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*.
- ◆ The demographic assumptions have been developed in accordance with the Actuarial Standard of Practice No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*.
- ◆ We relied on the membership data furnished by the System. Although we did not audit this data, we compared the data for this and prior reports and tested for reasonableness. Based on these tests, we believe the data to be sufficiently accurate for the purposes of our calculations. Our review of the data was performed in accordance with the Actuarial Standard of Practice No. 23, *Data Quality*.
- ◆ Methods and assumptions have been developed in conformance with the Actuarial Standard of Practice No. 4, *Recommendations for Measuring Pension Obligations*.

### RECORDS AND DATA

The data used in the valuation consist of financial information and records of age, service and income of contributing members, former contributing members and their survivors. All of the data were supplied by the Municipality and are accepted for valuation purposes without audit.

# **Anchorage Police and Fire Retirement System**

## **Actuarial Valuation as of January 1, 2006**

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### **ACTUARIAL COST METHOD**

The accruing costs of all benefits under each Plan are measured by a Modified Aggregate Actuarial Cost Method. The difference between the Actuarial Present Value of Projected Benefits and the Actuarial Value of Assets is called the Unfunded Projected Liability.

The total contribution is equal to the Unfunded Projected Liability (as of January 1, 2006) amortized over a fixed amortization period (15 years for Plans I, II, and III).

### **VALUATION ASSETS**

Asset values were supplied by the Anchorage Police and Fire System and were accepted without audit. The Actuarial Value of Assets is equal to the Fair Market Value.

### **INVESTMENT EARNINGS**

The future investment earnings of the assets of the plan are assumed to accrue at an annual rate of 8%, compounded annually, net of investment and administrative expenses.

### **INTEREST ON MEMBER CONTRIBUTIONS**

Interest on member contributions is assumed to accrue at a net annual rate of 4%, compounded annually through December 31, 1993, and compounded bi-weekly thereafter.

### **POST-RETIREMENT BENEFIT INCREASES**

It is assumed that the Consumer Price Index will increase at a rate of 3.5% per year, so that Plan III retirement allowances will increase at the rate of 0.875% per year for present retirees and after retirement for current active members and their beneficiaries for payments after their 20th anniversary of hire, and 1.750% after their 25th anniversary of hire. The cost-of-living adjustments are assumed to begin immediately for disabled participants and beneficiaries.

### **FUTURE SALARIES**

The total annual rate of salary increase was assumed to be 4.0% per annum.

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## SERVICE RETIREMENT

The rates of retirement used in this valuation are shown below.

Plans I and II		Plan III	
Service	Rates	Service	Rates
20	27.5%	15	17.5%
21 – 22	12.5%	16 – 18	7.5%
23+	20.0%	19	12.5%
		20	20.0%
Age 57 & 5 Years of Service	100.0%	21 – 22	20.0%
		23 – 24	15.0%
		25	25.0%
		Age 55 & 5 Years of Service	100.0%

## DISABLEMENT

The rates of disablement used in this valuation are shown below. However, the service retirement benefit is assumed payable if it is projected to be greater than the disability benefit.

Age	Occupational Disability	Non-Occupational Disability
<b>Plans I and II</b>		
20 to 29	0.1%	0.1%
30 to 34	1.6%	0.1%
35 to 39	1.6%	0.1%
40 to 44	1.6%	0.4%
45 to 49	2.0%	1.0%
50 to 54	6.0%	2.0%
55+	10.0%	5.0%
<b>Plan III</b>		
20 to 29	0.2%	0.1%
30 to 39	0.2%	0.2%
40 to 44	0.5%	0.3%
45 to 49	1.5%	0.4%
50 to 54	5.0%	0.0%
55+	6.0%	0.0%

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## MORTALITY

The probabilities of mortality for healthy lives are based on the UP-1994 Table, set forward one year for males and females. Disabled mortality was assumed to follow the UP-1984 Table set forward four years.

## CAUSE OF DEATH

When a Heart/Lung presumption is in effect, 80% of deaths are assumed to be Occupational and when a Heart/Lung presumption is not in effect, 20% of deaths are assumed to be Occupational. An Occupational death is a death that results in an Occupational Death Benefit being payable to the survivor of the deceased member under the terms of Plan I, Plan II, or Plan III.

## OTHER TERMINATIONS OF EMPLOYMENT

The rates of assumed future withdrawal from active service for reasons other than death, disability or retirement are shown below. All members terminating before retirement, death, or disability are assumed to receive a distribution of their account balance in lieu of a deferred pension.

Member's Service	Rate of Termination
1 <sup>st</sup> Year	8%
2 <sup>nd</sup> - 3 <sup>rd</sup> Years	3%
4 <sup>th</sup> - 7 <sup>th</sup> Years	2%
8 <sup>th</sup> or Later Years	1%

## FAMILY COMPOSITION

Reported marital status and the reported number of dependents are assumed to remain unchanged in the future. Wives are assumed to be four years younger than their husbands. Dependent children were assumed to have the following years left until their 18th birthday:

Member's Age	Years Until Age 18
20-39	18
40-44	9
45-49	5
50+	0

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**SECTION 4**  
**SUMMARY OF PLAN PROVISIONS**

**Plan I**

**EFFECTIVE DATE**

Plan I became effective as of July 1, 1968.

**MEMBERSHIP**

Enrollment in the Plans is closed for all new police officers and firefighters. In the Spring of 1984, an open enrollment allowed Plan I Members to switch into Plan III.

**CREDITED SERVICE**

Credited Service is the total period of regular full-time employment with the Municipality as a police officer or firefighter.

**BREAK IN SERVICE**

If a Member terminates employment prior to becoming eligible for a retirement benefit and subsequently is reemployed, all Credited Service accumulated prior to the date of termination will be reinstated once the Member makes a contribution to the Plan equal to the amount of the refund paid upon the earlier termination, including interest until the date of repayment. However, the contribution must be made within two years after reemployment. Membership will resume in the same plan the Member participated in at the time of termination, or the Member may elect to participate in the plan being offered to new Members, unless the Member previously elected not to participate. Benefit levels and entitlements are those in effect upon the date of reemployment.

**AVERAGE MONTHLY COMPENSATION**

Total compensation during three consecutive calendar years of Credited Service which yield the highest average monthly compensation (total compensation during period divided by number of months included). Compensation means that remuneration paid by the Municipality of Anchorage for personal services rendered during the period considered as credited service. This includes compensation reported on federal W-2 forms, temporary disability benefits and excludes meal and clothing allowances and annual leave cash-in.

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## MEMBER CONTRIBUTIONS

Plan I Members will make contributions not to exceed 6% compensation. If the plan is determined to be in a significant actuarial surplus position, no Member contributions will be required.

## VOLUNTARY RETIREMENT BENEFIT

**Eligibility:** The earlier of the completion of 20 years of total Credited Service, or the attainment of age 55 with a minimum of 5 years of Credited Service.

**Benefit:** 2.5% of Average Monthly Compensation times the number of years of Credited Service

## TERMINATION BENEFIT

A Member who terminates employment before completing five years of Credited Service will receive all of the Member's contributions to the Plan plus interest at the nominal annual rate of 4% compounded bi-weekly. Payment is made upon application or age 62.

A vested Member who terminates employment prior to being eligible for the voluntary retirement benefit may elect one of the following two benefits:

- (a) Withdrawal of all the Member's contributions to the Plan plus interest at the nominal annual rate of 4% compounded bi-weekly.
- (b) A lifetime benefit beginning at age 55 equaling 2.5% of Average Monthly Compensation times the number of years of total Credited Service.

## OCCUPATIONAL DISABILITY

### Definition:

- (a) Any injury received while performing official duties for the Municipality of Anchorage, or
- (b) Any heart, lung, or respiratory system illnesses occurring before or after retirement, or which renders a Member incapable of performing normal assigned duties. Heart, lung or respiratory system illness or injury shall be construed as an illness contracted or injury received in the performance of official duty.

**Benefit:** A monthly pension of 66-2/3% of the Member's gross monthly compensation at the time of disability, payable for life or until the Member is capable of resuming similar duty with any police or fire department.

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## NON-OCCUPATIONAL DISABILITY

**Eligibility:** Five years of Credited Service prior to the date of disability.

**Definition:** Any non-occupational disability which renders a Member incapable of performing the Member's assigned duties. This definition excludes elective surgery not required for the preservation of the Member's health.

**Benefit:** A monthly pension of 50% of gross compensation at the time of disability, payable for life or until the Member is capable of resuming similar duties with any police or fire department.

## OCCUPATIONAL DEATH BENEFIT

**Definition:** The death of an active Member or retired Member caused by an accident occurring during the performance of official duties for the Municipality of Anchorage, or by any heart, lung, or respiratory system illness.

**Benefit:** A monthly pension of 66-2/3% of the Member's monthly compensation, payable as designated by the Member to the surviving spouse or the surviving children until the surviving children reach the age of 18. The Member may designate the portion of the benefit paid to the surviving spouse and the portion paid to surviving children. The surviving spouse is entitled to receive at least 50% of the retirement benefits the Member was entitled to receive at death. In the event the participant makes no designation, then the surviving beneficiaries will receive the benefit in the following priority:

- (a) surviving spouse,
- (b) surviving children under the age of 18,
- (c) disabled children, regardless of age,
- (d) dependent parents,
- (e) dependent siblings under the age of 18.

## NON-OCCUPATIONAL DEATH BENEFIT

**Benefit:** A monthly pension of 50% of the Member's monthly compensation payable in the same manner as the occupational death benefit described above. However, in the event of the death of a retired member, the amount of the monthly non-occupational death benefit may not exceed the amount of the monthly retirement benefit the retiree was receiving while alive.

## OPTIONAL FORM OF BENEFIT

Members of Plan I may elect to participate in the Actuarial DROP program when they would otherwise be eligible for normal or early retirement. The DROP period must be between two and five years. DROP participation periods must be in full year increments. For every year served in the DROP, the member may elect to receive five percent (5%) of the monthly pension benefit calculated at the time of retirement in a lump sum form. The lump sum is computed to be actuarially equivalent to the DROP percentage of the member's monthly pension.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**SUMMARY OF PLAN PROVISIONS**

**Plan II**

**EFFECTIVE DATE**

Plan II became effective as of July 1, 1977.

**MEMBERSHIP**

Enrollment in the Plan is closed for all new police officers and firefighters. In the Spring of 1984, an open enrollment allowed Plan II Members to switch into Plan III.

**CREDITED SERVICE**

Credited Service is the total period of regular full-time employment with the Municipality as a police officer or firefighter.

**BREAK IN SERVICE**

If a Member terminates employment prior to becoming eligible for a retirement benefit and subsequently is reemployed, all Credited Service accumulated prior to the date of termination will be reinstated once the Member makes a contribution to the Plan equal to the amount of the refund paid upon the earlier termination, including interest until the date of repayment. However, the contribution must be made within two years after reemployment. Membership will resume in the same plan the Member participated in at the time of termination, or the Member may elect to participate in the plan being offered to new Members, unless the Member previously elected not to participate. Benefit levels and entitlements are those in effect upon the date of reemployment.

**AVERAGE MONTHLY COMPENSATION**

Total compensation during three consecutive calendar years of Credited Service which yield the highest average monthly compensation (total compensation during period divided by number of months included). Compensation means that remuneration paid by the Municipality of Anchorage for personal services rendered during the period considered as credited service. This includes compensation reported on federal W-2 forms, temporary disability benefits and excludes meal and clothing allowances and annual leave cash-in.



# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## MEMBER CONTRIBUTIONS

Plan II Members will make contributions not to exceed 6% compensation. If the plan is determined to be in a significant actuarial surplus position, no Member contributions will be required.

## VOLUNTARY RETIREMENT BENEFIT

**Eligibility:** The earlier of the completion of 20 years of total Credited Service, or the attainment of age 55 with a minimum of 5 years of Credited Service.

**Benefit:** 2.5% of Average Monthly Compensation times the number of years of Credited Service.

## TERMINATION BENEFIT

A Member who terminates employment before completing five years of Credited Service will receive all of the Member's contributions to the Plan plus interest at the nominal annual rate of 4% compounded bi-weekly. Payment is made upon application or age 62.

A vested Member who terminates employment prior to being eligible for the voluntary retirement benefit may elect one of the following two benefits:

- (a) Withdrawal of all the Member's contributions to the Plan plus interest at the nominal annual rate of 4% compounded bi-weekly.
- (b) A lifetime benefit beginning at age 55 equaling 2.5% of Average Monthly Compensation times the number of years of total Credited Service.

## OCCUPATIONAL DISABILITY

### Definition:

- (a) Any injury received while performing official duties for the Municipality of Anchorage, or
- (b) Any heart, lung, or respiratory system illnesses occurring before or after retirement, or which renders a Member incapable of performing normal assigned duties. Plan II Members who retired under Voluntary Retirement or are receiving a Non-Occupational Disability Benefit are not eligible for conversion to occupational disability benefits after the seventh anniversary of retirement. Heart, lung or respiratory system illness or injury shall be construed as an illness contracted or injury received in the performance of official duty.

**Benefit:** A monthly pension of 66-2/3% of the Member's gross monthly compensation at the time of disability, payable for life or until the Member is capable of resuming similar duty with any police or fire department.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

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### NON-OCCUPATIONAL DISABILITY

**Eligibility:** Five years of Credited Service prior to the date of disability.

**Definition:** Any non-occupational disability which renders a Member incapable of performing the Member's assigned duties. This definition excludes elective surgery not required for the preservation of the Member's health.

**Benefit:** A monthly pension of 50% of gross compensation at the time of disability, payable for life or until the Member is capable of resuming similar duties with any police or fire department.

### OCCUPATIONAL DEATH BENEFIT

**Definition:** The death of an active Member or retired Member caused by an accident occurring during the performance of official duties for the Municipality of Anchorage, or by any heart, lung, or respiratory system illness. Plan II Members who retired under Voluntary Retirement or are receiving a Non-Occupational Disability Benefit are not eligible for conversion to occupational death benefits after the seventh anniversary of retirement.

**Benefit:** A monthly pension of 66-2/3% of the Member's monthly compensation, payable as designated by the Member to the surviving spouse or the surviving children until the surviving children reach the age of 18. The Member may designate the portion of the benefit paid to the surviving spouse and the portion paid to surviving children. The surviving spouse is entitled to receive at least 50% of the retirement benefits the Member was entitled to receive at death. In the event the participant makes no designation, then the surviving beneficiaries will receive the benefit in the following priority:

- (a) surviving spouse,
- (b) surviving children under the age of 18,
- (c) disabled children, regardless of age,
- (d) dependent parents,
- (e) dependent siblings under the age of 18.

### NON-OCCUPATIONAL DEATH BENEFIT

**Benefit:** A monthly pension of 50% of the Member's monthly compensation payable in the same manner as the occupational death benefit described above. However, in the event of the death of a retired member, the amount of the monthly non-occupational death benefit may not exceed the amount of the monthly retirement benefit the retiree was receiving while alive.

# **Anchorage Police and Fire Retirement System**

## **Actuarial Valuation as of January 1, 2006**

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### **OPTIONAL FORM OF BENEFIT**

Members of Plan II may elect to participate in the Actuarial DROP program when they would otherwise be eligible for normal or early retirement. The DROP period must be between two and five years. DROP participation periods must be in full year increments. For every year served in the DROP, the member may elect to receive five percent (5%) of the monthly pension benefit calculated at the time of retirement in a lump sum form. The lump sum is computed to be actuarially equivalent to the DROP percentage of the member's monthly pension.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**SUMMARY OF PLAN PROVISIONS**

**Plan III**

**EFFECTIVE DATE**

Plan III became effective April 17, 1984.

**MEMBERSHIP**

Enrollment in the Plan is closed to all new police officers and firefighters. In the Spring of 1984, an open enrollment allowed Plan I and 2 Members to switch into Plan III.

**CREDITED SERVICE**

Credited Service is the total period of regular full-time employment with the Municipality as a police officer or firefighter.

**BREAK IN SERVICE**

If a Member terminates employment prior to becoming eligible for a retirement benefit and subsequently is reemployed, all Credited Service accumulated prior to the date of termination will be reinstated after the Member makes a contribution to the Plan equal to the amount of the refund paid upon the earlier termination, including interest until the date of repayment. However, the contribution must be made within two years after reemployment.

**FINAL AVERAGE COMPENSATION**

Average compensation during the last 52 biweekly pay periods, or any two consecutive tax years, whichever is higher. Compensation means the sum of the basic hourly wage, longevity, holiday pay, shift differential and educational pay received by a Member from Anchorage.

**MEMBER CONTRIBUTIONS**

Plan III Members will make contributions not to exceed 6% compensation. If the plan is determined to be in a significant actuarial surplus position, no Member contributions will be required.

**NORMAL SERVICE RETIREMENT**

**Eligibility:** 20 years of Credited Service.

**Benefit:** 2.5% of Final Average Compensation times the number of years of Credited Service.

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

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## EARLY SERVICE RETIREMENT

**Eligibility:** 15 years of Credited Service.

**Benefit:** 2.5% of Final Average Compensation times the number of years of Credited Service, payable for life. The cost-of-living adjustment is not available until 20 years total service would have been obtained.

## TERMINATION BENEFIT

A Member who terminates employment before completing five years of Credited Service will receive all of the Member's contributions to the Plan plus interest at the nominal annual rate of 4% compounded bi-weekly upon request or at age 62.

A vested Member who terminates employment prior to being eligible for service retirement may elect one of the following:

- (a) Withdrawal of all the Member's contributions to the Plan plus interest at the nominal annual rate of 4% compounded bi-weekly.
- (b) The accrued Service Retirement Benefit beginning at the earlier of age 55 or when the Member would have completed 20 years of service.

## OCCUPATIONAL DISABILITY

**Definition:** Any injury received while performing official duties for the Municipality of Anchorage, or any heart, lung, or respiratory system illness are rebuttably presumed to be an occupational disability. Disability must occur prior to termination.

**Benefit:** A monthly pension of 50% of the Member's final average compensation at the time of disability. The benefit is payable for life or until the Member is capable of resuming assigned duties similar to their pre-disability assigned duties, with any police or fire department, and is offset by any other wage continuation benefits attributable to the Municipality.

## NON-OCCUPATIONAL DISABILITY

**Eligibility:** Five years of Credited Service prior to the date of disability.

**Definition:** Any non-occupational disability which renders a Member incapable of performing assigned duties similar to their pre-disability assigned duties. This definition excludes elective surgery not required for the preservation of the Member's health.

**Benefit:** A monthly pension of 25% of final average compensation if the Member retires after more than 5 years but less than 10 years of credited service. For every additional year of credited service more than 10 years up to 20 years, the benefit is increased by 2.5% of final average compensation. The benefit is payable for life or until the Member is capable of resuming duties with any police or fire department.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

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### **OCCUPATIONAL DEATH BENEFIT**

The benefit is the greater of the following:

- (a) 100% of the occupational disability benefit to which the Member would have been entitled had the Member survived with a disability. For a retired member, this amount is computed as of retirement date and increased by the COLA accrued since retirement on the benefit actually received by the retired member while alive, or,
- (b) For an active member, 75% of the service retirement benefit to which the Member would have been entitled had the Member survived. For a retired member, 75% of the service retirement benefit, occupational disability benefit, or non-occupational disability benefit the member was receiving at the time of death, including the COLA accrued on the retired member's benefit at the time of death.

Where a Heart/Lung/Respiratory occupational presumption is not available, the survivor must prove that the member's death was due to an occupational cause in order to qualify for this benefit. There is no occupational presumption available subsequent to termination of employment as an active Plan III member.

### **NON-OCCUPATIONAL DEATH BENEFIT**

The benefit is the greater of the following:

- (a) 100% of the non-occupational disability benefit to which the Member would have been entitled had the Member survived with a disability. For a retired member, this amount is computed as of retirement date and increased by the COLA accrued since retirement on the benefit actually received by the retired member while alive, or,
- (b) For an active member, 75% of the service retirement benefit to which the Member would have been entitled had the Member survived. For a retired member, 75% of the service retirement benefit, occupational disability benefit, or non-occupational disability benefit the member was receiving at the time of death, including the COLA accrued on the retired member's benefit at the time of death.

The Occupational and Non-Occupational death benefits are payable as designated by the Member to the surviving spouse or the surviving children until the surviving children reach the age of 18. The Member may designate the portion of the benefit paid to the surviving spouse and the portion paid to surviving children. The surviving spouse is entitled to receive at least 50% of the retirement benefits the Member was entitled to receive at death. In the event the participant makes no designation, then the surviving beneficiaries will receive the benefit in the following priority:

- (a) surviving spouse,
- (b) surviving children under the age of 18,
- (c) disabled children, regardless of age,
- (d) dependent parents,
- (e) dependent siblings under the age of 18.

# **Anchorage Police and Fire Retirement System**

## **Actuarial Valuation as of January 1, 2006**

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### **CHILDREN'S BENEFIT**

5% of final average compensation for each dependent child, up to 10%, is payable monthly with disability benefits and to surviving spouse's with dependent children until age 18.

### **COST-OF-LIVING ADJUSTMENT**

All service retirees after 20 years from date of entry, disability, and survivor's and children's benefits are subject to an annual cost-of-living adjustment equal to the lesser of 3% or 25% of the CPI. Starting 25 years from date of hire, annual COLA is limited to 6% or 50% of the CPI. The CPI shall be the Anchorage CPI Urban Consumers Index or such other inflation index if the Anchorage CPI Urban Consumers Index ceases to exist. This adjustment is generally effective each July 1.

### **OPTIONAL FORM OF BENEFIT**

Members of Plan III may elect to participate in the Actuarial DROP program when they would otherwise be eligible for normal or early retirement. The DROP period must be between two and five years. DROP participation periods must be in full year increments. For every year served in the DROP, the member may elect to receive five percent (5%) of the monthly pension benefit calculated at the time of retirement in a lump sum form. The lump sum is computed to be actuarially equivalent to the DROP percentage of the member's monthly pension, without the value of future Cost-of-Living adjustments. The COLA on the portion of the member's monthly pension will be calculated based on the full monthly benefit without reduction for the DROP lump sum.

# Anchorage Police and Fire Retirement System

## Actuarial Valuation as of January 1, 2006

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### SECTION 5 SUMMARY OF MEMBERSHIP DATA

The collection and analysis of the membership data was performed in the same manner as last year. There were no unusual changes in the number of members during 2005. The number of active members continues to decline because all Plans are closed to new members.

The following tables depict the membership data that was used in the valuation.

Table 6 is a five-year history of membership characteristics for each Plan.

Table 7 displays the data included in this valuation for the vested terminated members.

Table 8 is a distribution of the active members by age, service and salary.

Table 9 displays the number of retirees and beneficiaries by Plan in 5-year age groups and the total monthly benefit on record for each group.



**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 6**  
**HISTORICAL MEMBERSHIP SUMMARY - PLAN I**

	1-1-02	1-1-03	1-1-04	1-1-05	1-1-06
<b>Active Members</b>					
(1) Number	16	13	13	7	6
(2) Average Current Age	51.6	52.6	53.6	54.0	55.3
(3) Average Service to Date	27.0	27.8	28.8	29.7	31.1
(4) Average Salary	\$97,096	\$97,311	\$91,611	\$103,160	\$107,848
<b>Terminated Members</b>					
(5) Number	--	--	--	--	--
(6) Average Age	--	--	--	--	--
(7) Average Monthly Benefit	--	--	--	--	--
<b>Retirees, Beneficiaries, and Alternative Payees (QDROs)</b>					
(8) Number	223	227	223	231	228
(9) Average Age	59.9	60.7	61.6	62.2	62.9
(10) Average Monthly Benefit	\$2,865	\$2,913	\$2,929	\$2,973	\$3,003

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 6**  
**HISTORICAL MEMBERSHIP SUMMARY - PLAN II**

	<b>1-1-02</b>	<b>1-1-03</b>	<b>1-1-04</b>	<b>1-1-05</b>	<b>1-1-06</b>
<b>Active Members</b>					
(1) Number	53	30	22	16	14
(2) Average Current Age	48.7	48.6	48.8	49.3	50.4
(3) Average Service to Date	20.6	21.0	21.8	22.4	23.5
(4) Average Salary	\$90,929	\$92,512	\$90,513	\$95,935	\$105,690
<b>Terminated Members</b>					
(5) Number	5	6	5	4	3
(6) Average Age	50.0	50.5	52.0	52.3	52.3
(7) Average Monthly Benefit	\$1,903	\$2,234	\$1,903	\$2,081	\$2,069
<b>Retirees, Beneficiaries, and Alternative Payees (QDROs)</b>					
(8) Number	70	94	102	109	111
(9) Average Age	51.2	52.3	53.5	53.8	55.0
(10) Average Monthly Benefit	\$3,372	\$3,567	\$3,690	\$3,716	\$3,691

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 6**  
**HISTORICAL MEMBERSHIP SUMMARY - PLAN III**

	1-1-02	1-1-03	1-1-04	1-1-05	1-1-06
<b>Active Members</b>					
(1) Number	205	183	167	151	124
(2) Average Current Age	43.4	43.9	44.7	45.4	45.6
(3) Average Service to Date	14.6	15.3	15.9	16.4	16.5
(4) Average Salary	\$72,577	\$74,679	\$75,913	\$76,842	\$81,730
<b>Terminated Members</b>					
(5) Number	10	9	11	9	10
(6) Average Age	43.4	40.9	40.7	40.6	41.7
(7) Average Monthly Benefit	\$1,341	\$1,261	\$1,341	\$1,317	\$1,366
<b>Retirees, Beneficiaries*, and Alternative Payees (QDROs)</b>					
(8) Number	243	278	297	314	322
(9) Average Age	52.9	52.5	52.8	53.4	56.6
(10) Average Monthly Benefit	\$2,563	\$2,527	\$2,545	\$2,618	\$2,850

\* Excludes Child Beneficiaries with benefit payments scheduled to stop at age 18.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**TABLE 7**  
**SUMMARY OF TERMINATED MEMBERS**

Name	Monthly Benefit (for valuation purposes only)	Date of Birth	Assumed Retirement Date
<b><u>PLAN I</u></b>			
None			
<b><u>PLAN II</u></b>			
Dahl, Mathew H.	\$ 2,181.50	June 9, 1957	July 1, 2012
Gansel, John A.	2,271.69	February 6, 1952	March 1, 2007
Woelfel, James R.	1,752.83	December 10, 1951	January 1, 2007
<b><u>PLAN III</u></b>			
Anderson, Scott	\$ 1,493.10	May 10, 1965	August 1, 2010
Cross, Ken L.	807.74	October 10, 1961	January 1, 2011
Dow, Gloria T.	872.73	September 23, 1964	November 1, 2013
Dutton, Robert J.	1,760.71	April 11, 1969	March 1, 2012
Herrera, Bryan N.	1,803.92	May 8, 1963	September 1, 2013
Martin Jr., Ronald D.	1,559.73	July 26, 1963	January 1, 2011
Oruoja, Indrek	1,471.94	May 18, 1961	September 1, 2013
Shelton, Chris E.	1,264.92	September 2, 1966	September 1, 2013
Smith, Terrance R.	1,356.46	June 1, 1964	September 1, 2013
Take, Flint A.	1,267.30	December 29, 1962	August 1, 2010

**Anchorage Police and Fire Retirement System**  
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**TABLE 8**  
**ACTIVE MEMBER AGE AND SERVICE DISTRIBUTIONS - PLAN I**

<b>ANNUAL EARNINGS BY AGE</b>			
<u>Age Group</u>	<u>Count</u>	<u>Total Earnings</u>	<u>Average Earnings</u>
25-29			
30-34			
35-39			
40-44			
45-49			
50-54	2	\$ 205,962	\$ 102,981
55-59	4	441,125	110,281
60-64			
65-69			
<b>Total</b>	<b>6</b>	<b>\$ 647,087</b>	<b>\$ 107,848</b>

<b>ANNUAL EARNINGS BY SERVICE</b>			
<u>Service Group</u>	<u>Count</u>	<u>Total Earnings</u>	<u>Average Earnings</u>
0-4			
5-9			
10-14			
15-19			
20-24			
25-29	2	\$ 227,683	\$ 113,842
30 & up	4	419,404	104,851
<b>Total</b>	<b>6</b>	<b>\$ 647,087</b>	<b>\$ 107,848</b>

<b>YEARS OF SERVICE BY AGE</b>								
<u>Age Group</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>Total</u>
25-29								
30-34								
35-39								
40-44								
45-49								
50-54						1	1	2
55-59						1	3	4
60-64								
65-69								
<b>Total</b>						<b>2</b>	<b>4</b>	<b>6</b>

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**TABLE 8**  
**ACTIVE MEMBER AGE AND SERVICE DISTRIBUTIONS - PLAN II**

<b>ANNUAL EARNINGS BY AGE</b>			
<u>Age Group</u>	<u>Count</u>	<u>Total Earnings</u>	<u>Average Earnings</u>
25-29			
30-34			
35-39			
40-44			
45-49	4	\$ 516,869	\$ 129,217
50-54	8	746,059	93,257
55-59	2	216,725	108,363
60-64			
<b>Total</b>	<b>14</b>	<b>\$ 1,479,653</b>	<b>\$ 105,690</b>

<b>ANNUAL EARNINGS BY SERVICE</b>			
<u>Service Group</u>	<u>Count</u>	<u>Total Earnings</u>	<u>Average Earnings</u>
0-4			
5-9			
10-14	1	\$ 88,908	\$ 88,908
15-19			
20-24	9	869,067	96,563
25-29	4	521,678	130,420
30 & up			
<b>Total</b>	<b>14</b>	<b>\$ 1,479,653</b>	<b>\$ 105,690</b>

<b>YEARS OF SERVICE BY AGE</b>								
<u>Age Group</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>Total</u>
25-29								
30-34								
35-39								
40-44								
45-49					3	1		4
50-54			1		6	1		8
55-59						2		2
60-64								
65-69								
<b>Total</b>			<b>1</b>		<b>9</b>	<b>4</b>		<b>14</b>

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**TABLE 8**  
**ACTIVE MEMBER AGE AND SERVICE DISTRIBUTIONS - PLAN III**

<b>ANNUAL EARNINGS BY AGE</b>			
Age Group	Count	Total Earnings	Average Earnings
25-29			
30-34			
35-39	22	\$ 1,714,766	\$77,944
40-44	33	2,640,276	80,008
45-49	39	3,149,341	80,752
50-54	16	1,331,583	83,224
55-59	12	1,103,226	91,936
60-64	2	195,281	97,641
<b>Total</b>	<b>124</b>	<b>\$ 10,134,473</b>	<b>\$81,730</b>

<b>ANNUAL EARNINGS BY SERVICE</b>			
Service Group	Count	Total Earnings	Average Earnings
0-4			
5-9			
10-14	56	\$ 4,347,320	\$77,631
15-19	41	3,349,582	81,697
20-24	16	1,340,314	83,770
25-29	10	1,017,027	101,703
30 & Up	1	80,230	80,230
<b>Total</b>	<b>124</b>	<b>\$ 10,134,473</b>	<b>\$81,730</b>

<b>YEARS OF SERVICE BY AGE</b>								
Age Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>Total</u>
25-29								
30-34								
35-39			17	5				22
40-44			13	18	2			33
45-49			21	11	6	1		39
50-54			5	4	4	3		16
55-59				3	3	5	1	12
60-64					1	1		2
65-69								
<b>Total</b>			<b>56</b>	<b>41</b>	<b>16</b>	<b>10</b>	<b>1</b>	<b>124</b>

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

**TABLE 9**  
**RETIREE AND BENEFICIARY DISTRIBUTIONS**

**PLAN 1**

**Distribution of Service Retirees**  
**January 1, 2006**

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 50	0	\$ 0	\$ 0
50 – 54	23	98,031	4,262
55 – 59	39	158,838	4,073
60 – 64	14	54,108	3,865
65 – 69	12	47,312	3,943
70 – 74	7	17,662	2,523
75 – 79	8	14,365	1,796
80+	<u>2</u>	<u>1,624</u>	<u>812</u>
Totals	105	\$ 391,940	\$ 3,733

**PLAN 1**

**Distribution of Disability Retirees**  
**January 1, 2006**

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 50	0	\$ 0	\$ 0
50 – 54	7	25,695	3,671
55 – 59	15	45,860	3,057
60 – 64	17	48,667	2,863
65 – 69	11	30,173	2,743
70 – 74	10	25,822	2,582
75 – 79	7	16,444	2,349
80 - 84	0	0	0
85+	<u>2</u>	<u>1,979</u>	<u>990</u>
Totals	69	\$ 194,640	\$ 2,821



# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

## PLAN 1

### Distribution of Survivors January 1, 2006

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 45	0	\$ 0	\$ 0
45 – 49	2	7,796	3,898
50 – 54	3	9,652	3,217
55 – 59	3	7,706	2,569
60 – 64	6	13,822	2,304
65 – 69	3	6,109	2,036
70 – 74	8	17,235	2,154
75 – 79	6	9,099	1,517
80 – 84	3	3,596	1,199
85+	<u>2</u>	<u>1,390</u>	<u>695</u>
Totals	36	\$ 76,405	\$ 2,122

## PLAN 1

### Distribution of Alternate Payees \* January 1, 2006

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 50	0	\$ 0	\$ 0
50 – 54	3	3,353	1,118
55 – 59	10	12,117	1,212
60 – 64	4	5,590	1,398
65 – 69	1	722	722
70+	<u>0</u>	<u>0</u>	<u>0</u>
Totals	18	\$ 21,782	\$ 1,210

- Ages shown are ages of the corresponding retirees. Benefits generally are payable to alternate payees for the life of the corresponding retiree.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**PLAN 2**

**Distribution of Service Retirees**  
**January 1, 2006**

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 45	0	\$ 0	\$ 0
45 – 49	9	37,760	4,196
50 – 54	24	100,315	4,180
55 – 59	23	94,971	4,129
60 – 64	6	25,304	4,217
65 – 69	5	14,045	2,809
70+	<u>0</u>	<u>0</u>	<u>0</u>
Totals	67	\$ 272,395	\$ 4,066

**PLAN 2**

**Distribution of Disability Retirees**  
**January 1, 2006**

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 45	0	\$ 0	\$ 0
45 – 49	4	13,212	3,303
50 - 54	9	30,215	3,357
55 – 59	8	28,114	3,514
60 – 64	5	17,907	3,581
65 – 69	4	10,884	2,721
70+	<u>1</u>	<u>3,391</u>	<u>3,391</u>
Totals	31	\$ 103,723	\$ 3,346

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

## PLAN 2

### Distribution of Survivors January 1, 2006

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 40	2	\$ 6,632	\$ 3,316
40 - 44	0	0	0
45 - 49	3	11,677	3,892
50 - 54	0	0	0
55 - 59	2	6,499	3,250
60 - 64	1	3,754	3,754
65+	<u>1</u>	<u>2,534</u>	<u>2,534</u>
Totals	9	\$ 31,096	\$ 3,455

## PLAN 2

### Distribution of Alternate Payees \* January 1, 2006

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 45	0	\$ 0	\$ 0
45 - 49	2	1,050	525
50 - 54	0	0	0
55 - 59	1	694	694
60 - 64	1	761	761
65+	<u>0</u>	<u>0</u>	<u>0</u>
Totals	4	\$ 2,505	\$ 626

- Ages shown are ages of the corresponding retirees. Benefits generally are payable to alternate payees for the life of the corresponding retiree.

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

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**PLAN 3**

**Distribution of Service Retirees**  
**January 1, 2006**

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 40	0	\$ 0	\$ 0
40 – 44	10	27,205	2,721
45 – 49	36	99,635	2,768
50 – 54	46	158,957	3,456
55 – 59	64	199,532	3,118
60 – 64	66	205,800	3,118
65 – 69	23	77,209	3,357
70 – 74	4	12,571	3,143
75+	<u>3</u>	<u>11,025</u>	<u>3,675</u>
Totals	252	\$ 791,934	\$ 3,143

**PLAN 3**

**Distribution of Disability Retirees**  
**January 1, 2006**

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 40	1	\$ 2,321	\$ 2,321
40 – 44	2	3,945	1,973
45 – 49	3	7,467	2,489
50 – 54	14	37,750	2,696
55 – 59	3	6,940	2,313
60 – 64	3	7,489	2,496
65 – 69	3	6,234	2,078
70 - 74	2	4,652	2,326
75+	<u>0</u>	<u>0</u>	<u>0</u>
Totals	31	\$ 76,798	\$ 2,477

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

## PLAN 3

### Distribution of Survivors January 1, 2006

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 40	19	\$ 4,491	\$ 236
40 – 44	1	2,929	2,929
45 – 49	1	2,495	2,495
50 – 54	0	0	0
55 – 59	2	5,867	2,934
60 – 64	4	9,569	2,392
65 – 69	0	0	0
70 – 74	1	1,909	1,909
75+	<u>0</u>	<u>0</u>	<u>0</u>
Totals	28	\$ 27,260	\$ 974

## PLAN 3

### Distribution of Alternate Payees \* January 1, 2006

<u>Age</u>	<u>Number</u>	<u>Total Monthly Pension</u>	<u>Average Monthly Pension</u>
Under 40	0	\$ 0	\$ 0
40 – 44	1	468	468
45 - 49	5	5,094	1,019
50 – 54	3	3,831	1,277
55 – 59	12	8,618	718
60 – 64	7	6,474	925
65– 69	2	1,710	855
70+	<u>0</u>	<u>0</u>	<u>0</u>
Totals	30	\$ 26,195	\$ 873

\* Ages shown are ages of the corresponding retirees. Benefits generally are payable to alternate payees for the life of the corresponding retiree.

# Anchorage Police and Fire Retirement System

Actuarial Valuation as of January 1, 2006

## SECTION 6 ALLOCATION OF RESERVES

The Retirement Board has established a procedure to allocate Actuarial Gains and Losses between the Benefit Enhancement Reserve and the Additional Contingency Reserve. The following is a description of each step used to determine the amount of the reserves as of the valuation date.

1. Each Plan maintains a Contingency Reserve equal to 16% of the Projected Liability. Regardless of the experience that emerged during the previous year, the Contingency Reserve has first priority and will be funded each year at the 16% level.
2. An Unallocated Gain and Loss Reserve is determined. This Reserve is equal to Plan Assets less the sum of the Projected Liability, the Contingency Reserve, the prior year's Additional Contingency Reserve, and the prior year's Benefit Enhancement Reserve.
3. The Unallocated Gain and Loss Reserve is allocated to the Additional Contingency Reserve (25%) and the Benefit Enhancement Reserve (75%).

Table 10 shows the adjustments to the Reserves for the year. The ending balances, including the distribution of the Unallocated Gain and Loss Reserve to the Additional Contingency Reserve and the Benefit Enhancement Reserve, are summarized below.

(\$000)	<u>Plan I</u>	<u>Plan II</u>	<u>Plan III</u>	<u>System Total</u>
Projected Liability	\$ 93,654	\$ 66,881	\$ 210,584	\$ 371,119
Actuarial Value of Assets	<u>105,294</u>	<u>72,410</u>	<u>217,544</u>	<u>395,248</u>
Unfunded Projected Liability	\$ (11,640)	\$ (5,529)	\$ (6,960)	\$ (24,129)
Contingency Reserve	\$ 14,985	\$ 10,701	\$ 33,693	\$ 59,379
Additional Contingency Reserve	(708)	(1,331)	(5,381)	(7,420)
Benefit Enhancement Reserve	<u>(2,637)</u>	<u>(3,841)</u>	<u>(21,352)</u>	<u>(27,830)</u>
Total Reserves	\$ 11,640	\$ 5,529	\$ 6,960	\$ 24,129

**Anchorage Police and Fire Retirement System**  
**Actuarial Valuation as of January 1, 2006**

**TABLE 10**  
**ALLOCATION OF RESERVES**

<u>January 1, 2006</u>	<u>Before</u> <u>Allocation</u>	<u>Allocation</u>	<u>After</u> <u>Allocation</u>
<b>Plan I</b>			
Projected Liability	\$ 93,654,233		\$ 93,654,233
Contingency Reserve at 16%	14,984,677		14,984,677
Additional Contingency Reserve (25%)	(870,196)	\$ 162,366	(707,830)
<i>Contingency Reserve Level</i>			15.2%
Benefit Enhancement Reserve (75%)	(3,123,756)	487,099	<u>(2,636,657)</u>
Total Reserves after Allocation			\$ 11,640,190
<i>Total Reserve Level</i>			12.4%
Unallocated Gain and Loss Reserve	<u>649,465</u>	<u>(649,465)</u>	<u>0</u>
Available Assets at Fair Value	\$ 105,294,423	\$ 0	\$ 105,294,423
<b>Plan II</b>			
Projected Liability	\$ 66,880,952		\$ 66,880,952
Contingency Reserve at 16%	10,700,952		10,700,952
Additional Contingency Reserve (25%)	(1,573,599)	\$ 242,639	(1,330,960)
<i>Contingency Reserve Level</i>			14.0%
Benefit Enhancement Reserve (75%)	(4,569,068)	727,919	<u>(3,841,149)</u>
Total Reserves after Allocation			\$ 5,528,843
<i>Total Reserve Level</i>			8.3%
Unallocated Gain and Loss Reserve	<u>970,558</u>	<u>(970,558)</u>	<u>0</u>
Available Assets at Fair Value	\$ 72,409,795	\$ 0	\$ 72,409,795
<b>Plan III</b>			
Projected Liability	\$ 210,583,832		\$ 210,583,832
Contingency Reserve at 16%	33,693,413		33,693,413
Additional Contingency Reserve (25%)	(4,790,027)	\$ (591,212)	(5,381,239)
<i>Contingency Reserve Level</i>			13.4%
Benefit Enhancement Reserve (75%)	(19,577,966)	(1,773,637)	<u>(21,351,603)</u>
Total Reserves after Allocation			\$ 6,960,571
<i>Total Reserve Level</i>			3.3%
Unallocated Gain and Loss Reserve	<u>(2,364,849)</u>	<u>2,364,849</u>	<u>0</u>
Available Assets at Fair Value	\$ 217,544,403	\$ 0	\$ 217,544,403