

# **El Paso County Retirement Plan**

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*Actuarial Valuation Report as of  
January 1, 2004*

*April 2004*

**Mellon**  
**1200 17<sup>th</sup> Street, Suite 1200**  
**Denver, Colorado 80202**

# TABLE OF CONTENTS

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## Letter of Certification

<b>Purpose and Highlights</b> .....	i
<b>Summary of Principal Valuation Results</b> .....	ii
<b>Effects of Changes</b> .....	iii
<b>Section 1     Funding Results</b> .....	1
1.1     Comparative Summary of Principal Valuation Results .....	2
1.2     Actuarially Required Contribution .....	4
1.3     Actuarial Gain/(Loss).....	5
1.4     Normal Cost and Unfunded Actuarial Accrued Liability.....	6
1.5     Present Value of Projected Plan Benefits.....	7
1.6     Ten-Year Projected Cash Flow .....	8
<b>Section 2     Accounting Results</b> .....	9
2.1     FAS No. 35 Information .....	10
2.2     GASB No. 25 Information .....	12
<b>Section 3     Plan Assets</b> .....	14
3.1     Summary of Assets .....	15
3.2     Reconciliation of Assets .....	16
3.3     Actuarial Value of Assets .....	17
3.4     Average Annual Rates of Investment Return .....	18
<b>Section 4     Basis of Valuation</b> .....	19
4.1     Plan Participants .....	20
4.2     Summary of Plan Provisions .....	24
4.3     Summary of Actuarial Methods, Procedures, and Assumptions .....	28

April 26, 2004

Board of Retirement  
El Paso County Retirement Plan  
411 South Tejon Street, Suite F  
Colorado Springs, Colorado 80903-2146

***Certification of Actuarial Valuation***

Ladies and Gentlemen:

This report summarizes the results of Mellon's Human Resources & Investor Solutions actuarial valuation of the El Paso County Retirement Plan as of January 1, 2004.

The actuarial valuation is based on audited financial and member data provided by the Retirement Plan Administrator and summarized in this report. The benefits considered are those delineated in the plan as amended and restated effective January 1, 2002.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures, using an actuarial cost method which we believe is reasonable. This report fully and fairly discloses the actuarial position of the plan.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable expectations, and represent our best estimate of the anticipated experience under the plan. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 4.3 beginning on page 28.

We are available to answer any questions on the material contained in this report, or to provide explanations to further details as may be appropriate.

Respectively submitted,

MELLON'S HUMAN RESOURCES & INVESTOR SOLUTIONS

David H. Slisinsky, A.S.A., E.A., M.A.A.A.  
Principal & Consulting Actuary

## PURPOSE AND HIGHLIGHTS

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The main purposes of this report are:

1. To determine if the Board's funding policy for the Retirement Plan is being met considering current assets and the current employer and member contribution rates;
2. To review the current funded status of the plan; and
3. To compare actual and expected experience under the plan during 2003.

The 2004 actuarial valuation is based upon the plan provisions as of January 1, 2004; as described in Section 4.2. The actuarial methods and assumptions are described in Section 4.3.

Highlights from the current and prior valuations are:

1. A contribution rate of 6% of salary by both the participating employers and members in 2004 will not be sufficient to fund the normal cost and amortize the unfunded actuarial accrued liability over 30 years from the valuation date. The total actuarially required contribution necessary to fund the plan's benefits under the Board's funding policy for 2004 is 12.5% of salary.
2. The market value of assets was sufficient to provide for 114.1% of the actuarial present value of accumulated plan benefits as of January 1, 2004 as compared with 98.9% as of January 1, 2003.
3. Actuarial losses were experienced in 2003 from asset and liability sources, resulting in a net actuarial loss which increased the unfunded actuarial accrued liability by \$2,901,840. The net loss from liability sources of \$602,360 was primarily due to losses caused by new entrants with prior service. The rate of return on Actuarial Value of Assets of 3.0% in 2003 fell well short of the 8% assumed investment return rate, resulting in the loss from asset sources of \$2,299,480.
4. A supplemental pension payment was approved by the Retirement Board equal to 5% of the annual pension payable in December 2003. The supplemental pension was paid in March 2004 and increased the unfunded actuarial accrued liability on January 1, 2004 by \$386,908.

## SUMMARY OF PRINCIPAL VALUATION RESULTS

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described in the section titled "Effects of Changes."

	Actuarial Valuation as of		Change Between Years	
	January 1, 2003	January 1, 2004	Amount	Percent
<b>Summary of Costs</b>				
Contribution Requirement	\$ 10,953,668	\$ 11,446,578	\$ 492,910	4.5%
Estimated Contributions	\$ 10,731,428	\$ 11,020,728	\$ 289,300	2.7%
Contribution Requirement as a Percentage of Pay	12.2%	12.5%	0.3%	2.5%
<b>GASB No. 25 Funded Status</b>				
Actuarial Accrued Liability	\$ 212,239,372	\$230,926,211	\$ 18,686,839	8.8%
Actuarial Value of Assets	\$ 192,439,605	\$207,538,410	\$ 15,098,805	7.8%
Unfunded Actuarial Accrued Liability/(Surplus)	\$ 19,799,767	\$ 23,387,801	\$ 3,588,034	(18.1%)
<b>Market Value of Assets and Additional Liabilities</b>				
Market Value of Assets	\$ 160,366,338	\$204,757,729	\$ 44,391,391	27.7%
Actuarial Present Value of Accumulated Plan Benefits (FAS No. 35)	\$ 162,186,973	\$179,412,878	\$ 17,225,905	10.6%
Present Value of Projected Plan Benefits	\$ 278,770,984	\$299,036,168	\$ 20,265,184	7.3%
<b>Summary of Data</b>				
Number of Participants in Valuation:				
Active Participants	2,226 <sup>(1)</sup>	2,206 <sup>(2)</sup>	(20)	(0.9%)
Participants with Deferred Benefits	203	199	(4)	(2.0%)
Retired Participants	600	636	36	6.0%
Beneficiaries	36	45	9	25.0%
<b>Total</b>	3,065	3,086	21	0.7%
<b>Active Participant Statistics</b>				
Total Annual Compensation	\$ 89,982,588	\$ 92,362,349	\$ 2,379,761	2.6%
Average Compensation	\$ 40,423	\$ 41,869	\$ 1,445	3.6%
Average Age	43.6	44.3	0.7	1.6%
Average Service	7.9	8.4	0.5	6.3%

<sup>(1)</sup> Includes 11 members on leave of absence.

<sup>(2)</sup> Includes 11 members on leave of absence.

## **EFFECTS OF CHANGES**

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### **Changes in Actuarial Assumptions**

There were no changes in the actuarial assumptions.

### **Changes in Plan Provisions**

There were no changes in the plan provisions since the prior valuation.

### **Changes in Actuarial Methods**

There were no changes in actuarial methods since the prior valuation.

## **SECTION 1: FUNDING RESULTS**

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- Section 1.1** A comparative summary of valuation results.
- Section 1.2** The actuarially required contribution.
- Section 1.3** The actuarial gain/(loss) during the preceding year.
- Section 1.4** The normal cost and unfunded actuarial accrued liability as of the current and preceding valuation dates.
- Section 1.5** The present value of projected plan benefits.
- Section 1.6** A ten-year projection of benefit payments.

## Section 1.1

### Comparative Summary of Principal Valuation Results

	Actuarial Valuation as of		Percent Change
	January 1, 2003	January 1, 2004	
<b>A. Summary of Data</b>			
1. Active Members			
a. Number <sup>(1)</sup>	2,226	2,206	(0.9%)
b. Annual Compensation	\$ 89,982,588	\$ 92,362,349	2.6%
c. Average Annual Compensation	\$ 40,423	\$ 41,869	3.6%
d. Average Age	43.6	44.3	1.6%
e. Average Service	7.9	8.4	6.3%
f. Accumulated Member Contributions			
i. With Interest	\$ 44,702,520	\$ 49,323,188	10.3%
ii. Without Interest	\$ 31,918,336	\$ 34,841,789	9.2%
2. Refund of Employee Contributions due			
a. Number	16	11	(31.3%)
b. Amount of Refunds Due	\$ 131,576	\$ 77,493	(41.1%)
3. Vested Terminated Members			
a. Number <sup>(2)</sup>	187	188	0.5%
b. Annual Deferred Benefits	\$ 1,642,650	\$ 1,617,279	(1.5%)
c. Average Annual Deferred Benefit	\$ 8,784	\$ 8,603	(2.1%)
4. Retired Members			
a. Number	600	636	6.0%
b. Annual Retirement Benefits	\$ 6,978,488	\$ 7,580,092	8.6%
c. Average Annual Retirement Benefit	\$ 11,631	\$ 11,918	2.5%
5. Beneficiaries			
a. Number	36	45	25.0%
b. Annual Retirement Benefits	\$ 294,331	\$ 383,969	30.5%
c. Average Annual Retirement Benefit	\$ 8,176	\$ 8,533	4.4%
6. Total Members Included in Valuation	<b>3,065</b>	<b>3,086</b>	<b>0.7%</b>

<sup>(1)</sup> Includes 11 members on leave of absence in 2004 and 11 members on leave of absence in 2003.

<sup>(2)</sup> Includes 10 deferred disableds in 2004 and 14 deferred disableds in 2003.

## Section 1.1

### Comparative Summary of Principal Valuation Results (continued)

	Actuarial Valuation as of		Percent Change
	January 1, 2003	January 1, 2004	
<b>B. Summary of Assets, Liabilities and Funded Status</b>			
1. Plan Assets on Valuation Date			
a. Actuarial Value	\$ 192,439,605	\$ 207,538,410	7.8%
b. Market Value	\$ 160,366,338	\$ 204,757,729	27.7%
2. Actuarial Accrued Liability (Valuation Basis)			
a. Funded Ratio - Actuarial Value	90.7%	89.9%	(0.9%)
b. Funded Ratio - Market Value	75.6%	88.7%	17.3%
3. Unfunded Actuarial Accrued Liability (Based on Actuarial Value of Assets)			
	\$ 19,799,767	\$ 23,387,801	(18.1%)
4. Present Value of Accumulated Benefits (FASB #35)			
a. Funded Ratio - Actuarial Value	118.7%	115.7%	(2.5%)
b. Funded Ratio - Market Value	98.9%	114.1%	15.4%
5. Present Value of Projected Benefits			
	\$ 278,770,984	\$ 299,036,168	7.3%

	Actuarial Valuation as of				Percent Change in Amount
	January 1, 2003		January 1, 2004		
	Amount	% of Covered Comp.	Amount	% of Covered Comp.	
<b>C. Summary of Contribution Requirements</b>					
1. Normal Cost Compensation	\$ 89,428,569	N/A	\$ 91,839,396	N/A	2.7%
2. Total Normal Cost Beginning of Year	\$ 9,297,680	10.4%	\$ 9,598,754	10.5%	3.2%
3. Amortization of Unfunded Actuarial Accrued Liability over 30 years from the valuation date	\$ 1,191,166	1.3%	\$ 1,407,024	1.5%	(18.1%)
4. Administrative Expenses	\$ 464,822	0.5%	\$ 440,800	0.5%	(5.2%)
5. Total Required Contribution (2. + 3. + 4.)	\$ 10,953,668	12.2%	\$ 11,446,578	12.5%	4.5%
6. Estimated Member Contribution <sup>(1)</sup>	\$ 5,365,714	6.0%	\$ 5,510,364	6.0%	2.7%
7. Required Employer Contribution (5. - 6.)	\$ 5,587,954	6.2%	\$ 5,936,214	6.5%	6.2%

<sup>(1)</sup> 6.0% of normal cost compensation for 2003 and 2004.

## Section 1.2

### Actuarially Required Contribution

The actuarially required contribution has been determined using the Entry Age Normal Actuarial Cost Method.

	January 1, 2003	January 1, 2004
1. Normal Cost	\$ 9,297,680	\$ 9,598,754
2. Amortization of Unfunded Actuarial Accrued Liability	1,191,166	1,407,024
3. Administrative Expenses	464,822	440,800
4. Total Required Contribution		
a. Amount (1. + 2. + 3.)	\$ 10,953,668	\$ 11,446,578
b. Percent of Normal Cost Payroll	12.2%	12.5%
5. Estimated Member Contribution <sup>(1)</sup>	\$ 5,365,714	\$ 5,510,364
6. Required Employer Contribution		
a. Amount (4.a. - 5.)	\$ 5,587,954	\$ 5,936,214
b. Percent of Normal Cost Payroll	6.2%	6.5%
7. Estimated Employer Contribution <sup>(1)</sup>	\$ 5,365,714	\$ 5,510,364
8. Amount of Total Contribution in Excess of Actuarially Required Contribution (7. - 6.a.)	\$ (222,240)	\$ (425,850)

<sup>(1)</sup> 6.0% of normal cost compensation for 2003 and 2004.

## Section 1.3

### Actuarial Gain/(Loss)

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of January 1, 2004.

1. Expected Actuarial Accrued Liability	
a. Actuarial Accrued Liability at January 1, 2003	\$ 212,239,372
b. Normal Cost and expected Administrative Expenses at January 1, 2003	9,762,502
c. Interest on a. + b. to End of Year	17,760,150
d. Benefit Payments and Administrative Expenses for Plan Year Ending December 31, 2003, with Interest to End of Year	9,825,081
e. Expected Actuarial Accrued Liability Before Changes (a. + b. + c. - d.)	229,936,943
f. Change in Actuarial Accrued Liability at January 1, 2004, Due to Change in Actuarial Assumptions	-
g. Change in Actuarial Accrued Liability at January 1, 2004, Due to Change in Plan Provisions	386,908
h. Expected Actuarial Accrued Liability at January 1, 2004 (e. + f. + g.)	\$ 230,323,851
2. Actuarial Accrued Liability at January 1, 2004	\$ 230,926,211
<b>3. Liability Gain/(Loss) (1.h. - 2.)</b>	<b>\$ (602,360)</b>
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at January 1, 2003	\$ 192,439,607
b. Interest on a. to End of Year	15,395,169
c. Contributions Made for Plan Year Ending December 31, 2003	11,373,264
d. Interest on c. to End of Year	454,931
e. Benefit Payments and Administrative Expenses for Plan Year Ending December 31, 2003, with Interest to End of Year	9,825,081
f. Expected Actuarial Value of Assets at January 1, 2004 (a. + b. + c. + d. - e.)	\$ 209,837,890
5. Actuarial Value of Assets as of January 1, 2004	\$ 207,538,410
<b>6. Actuarial Asset Gain/(Loss) (5. - 4.f.)</b>	<b>\$ (2,299,480)</b>
<b>7. Actuarial Gain/(Loss) (3. + 6.)</b>	<b>\$ (2,901,840)</b>

**Normal Cost and Unfunded Actuarial Accrued Liability**

**A. Normal Cost**

The components of normal cost under the Plan's funding method are:

Component	January 1, 2003	January 1, 2004
Retirement Benefits	\$ 5,883,768	\$ 6,121,335
Withdrawal Benefits	2,771,928	2,808,805
Disability Benefits	462,386	481,780
Death Benefits	179,598	186,834
<b>Total Normal Cost</b>	<b>\$ 9,297,680</b>	<b>\$ 9,598,754</b>

**B. Unfunded Actuarial Accrued Liability**

The actuarial accrued liability is the present value of projected plan benefits allocated to past service by the actuarial funding method being used. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of assets.

Development of Actuarial Accrued Liability	January 1, 2003	January 1, 2004
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 118,982,410	\$ 129,982,601
Withdrawal Benefits	9,891,750	10,005,456
Disability Benefits	4,441,679	4,712,796
Death Benefits	2,144,251	2,315,350
Total	\$ 135,460,090	\$ 147,016,203
b. Participants with Deferred Benefits	5,934,698	5,457,271
c. Participants Receiving Benefits	70,844,584	78,452,737
<b>d. Actuarial Accrued Liability (a. + b. +c.)</b>	<b>\$ 212,239,372</b>	<b>\$ 230,926,211</b>
2. Actuarial Value of Assets	\$ 192,439,605	\$ 207,538,410
<b>3. Unfunded Actuarial Accrued Liability (1.d.-2., not less than \$0)</b>	<b>\$ 19,799,767</b>	<b>\$ 23,387,801</b>

**Present Value of Projected Plan Benefits**

The present value of projected benefits is the value of plan benefits using future earnings and service.

<b>Present Value of Projected Benefits</b>	<b>January 1, 2003</b>	<b>January 1, 2004</b>
<b>1. Active Participants</b>		
Retirement Benefits	\$ 160,617,462	\$ 172,898,480
Withdrawal Benefits	30,118,601	30,392,282
Disability Benefits	7,804,425	8,174,573
Death Benefits	3,451,214	3,660,825
<b>Total</b>	<b>\$ 201,991,702</b>	<b>\$ 215,126,160</b>
<b>2. Participants with Deferred Benefits</b>	<b>5,934,698</b>	<b>5,457,271</b>
<b>3. Participants Receiving Benefits</b>	<b>70,844,584</b>	<b>78,065,829</b>
<b>4. Present Value of Projected Plan Benefits (1. + 2. + 3.)</b>	<b>\$ 278,770,984</b>	<b>\$ 299,036,168</b>

## Section 1.6

### Ten-Year Projected Cash Flow (Retirement Benefit Payments)

January 1, 2004			
Plan Year Ending	Actives	Retirees <sup>(1)</sup>	Total
12/31/2004	\$ 1,141,714	\$ 7,974,121	\$ 9,115,835
12/31/2005	2,142,704	7,902,072	10,044,776
12/31/2006	3,025,319	7,812,756	10,838,075
12/31/2007	4,012,034	7,703,564	11,715,598
12/31/2008	5,288,495	7,575,122	12,863,617
12/31/2009	\$ 6,837,393	\$ 7,460,432	\$ 14,297,825
12/31/2010	8,590,656	7,361,233	15,951,889
12/31/2011	10,509,082	7,249,060	17,758,142
12/31/2012	12,594,468	7,191,477	19,785,945
12/31/2013	14,846,822	7,063,958	21,910,780

<sup>(1)</sup> Includes Disabled Members, Beneficiaries, and Deferred Vested Members.

History of Refunds	
Year	Refund Amount
1993	\$ 633,773
1994	544,504
1995	976,233
1996	1,003,922
1997	1,037,519
1998	1,132,847
1999	1,292,444
2000	1,407,960
2001	1,597,686
2002	998,709
2003	1,414,807

## **SECTION 2: ACCOUNTING RESULTS**

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**Section 2.1** Information pertaining to the actuarial present value of accumulated plan benefits as required under FAS No. 35.

**Section 2.2** Items required under GASB No. 25.

**FAS No. 35 Information**

**A. Actuarial Present Value of Accumulated Plan Benefits**

The actuarial present value of vested and nonvested accumulated plan benefits was computed on an ongoing plan basis in order to provide required information under Financial Accounting Standards Board Statement No. 35. In this calculation, a determination is made of all benefits earned by current participants as of the valuation date; the actuarial present value is then computed using demographic assumptions and an assumed interest rate. Assumptions regarding future salary and Social Security increases and accrual of future benefit service are not necessary for this purpose.

<b>Accumulated Plan Benefits</b>	<b>January 1, 2003</b>	<b>January 1, 2004</b>
<b>Vested Benefits</b>		
• Active Participants	\$ 77,248,145	\$ 86,859,269
• Participants with Deferred Benefits	5,934,698	5,457,271
• Participants Receiving Benefits	70,844,584	78,452,737
<b>Total Vested Benefits</b>	<b>\$ 154,027,427</b>	<b>\$ 170,769,277</b>
<b>Nonvested Benefits</b>	<b>8,159,546</b>	<b>8,643,601</b>
<b>Total Accumulated Plan Benefits</b>	<b>\$ 162,186,973</b>	<b>\$ 179,412,878</b>
Assumed Rate of Interest	8.0%	8.0%
Market Value of Assets Available for Benefits	\$ 160,366,338	\$ 204,757,729
Funded Ratio	98.9%	114.1%
<b>Change in Accumulated Plan Benefits Due to:</b>		
• Assumption Changes	\$ 0	\$ 0
• Plan Provision Changes	\$ 0	\$ 386,908
<b>Number of Members</b>		
<b>Vested Members</b>		
• Active Participants	1,215	1,271
• Participants with Deferred Benefits	203	199
• Participants Receiving Benefits	636	681
<b>Total Vested Members</b>	<b>2,054</b>	<b>2,151</b>
<b>Nonvested Members</b>	<b>1,011</b>	<b>935</b>
<b>Total Members</b>	<b>3,065</b>	<b>3,086</b>

## Section 2.1

### B. Statement of Changes in Accumulated Plan Benefits

A statement of changes in the actuarial present value of accumulated plan benefits (FAS No. 35 basis) follows. This statement shows the effect of certain events on the actuarial present value shown on the previous page.

<b>Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2003</b>	<b>\$ 162,186,973</b>
Increase/(Decrease) During Year Attributable to:	
• Normal Cost	\$ 10,238,665
• Benefits Paid	(9,099,671)
• Increase for interest due to decrease in discount period	13,437,067
• Plan Amendments	-
• Assumption Changes	-
• (Gains)/Losses	2,649,844
Net Increase/(Decrease)	\$ 17,225,905
<b>Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2004</b>	<b>\$ 179,412,878</b>

The benefits valued include all benefits -- retirement, preretirement death and vested termination -- payable from the Plan for employee service prior to the valuation date. Benefits are assumed to accrue/(accumulate) in accordance with the plan provisions.

**GASB No. 25 Information**

**Supplementary Schedules**

The GASB has issued a statement; Financial Reporting for Defined Benefit and Note Disclosures for Defined Contribution Plans (GASB Statement No. 25). This standard became effective for periods beginning after June 15, 1996, and requires funding status to be measured based upon the actuarial funding method adopted by the El Paso County Board of Retirement. The method adopted is the Entry Age Normal Cost Method. The target value of assets is equal to the Actuarial Accrued Liability (AAL). The Actuarial Value of Assets was determined using techniques that smooth the effects of short-term volatility in the Market Value of investments over a five-year period. The actual value of assets is the Market Value. This new GASB standard supersedes GASB Statement No. 5 in its entirety.

**A. Schedule of Funding Progress**

The GASB Statement No. 25 liabilities and assets resulting from the last seven actuarial valuations are as follows:

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
01/01/1998	\$121,857,056	\$ 114,912,759	\$ (6,944,297)	106.0%	\$ 65,524,430	0.0%
01/01/1999	\$141,604,484	\$ 141,479,124	\$ (125,360)	100.1%	\$ 71,921,961	0.0%
01/01/2000	\$164,150,523	\$ 155,629,902	\$ (8,520,621)	105.5%	\$ 76,887,185	0.0%
01/01/2001	\$182,231,496	\$ 173,320,947	\$ (8,910,550)	105.1%	\$ 80,468,981	0.0%
01/01/2002	\$194,589,207	\$ 193,721,675	\$ (867,532)	100.4%	\$ 85,260,314	0.0%
01/01/2003	\$192,439,607	\$ 212,239,372	\$ 19,799,765	90.7%	\$ 89,629,062	22.1%
01/01/2004	\$207,538,410	\$ 230,926,211	\$ 23,387,801	89.9%	\$ 91,978,099	25.4%

**B. Schedule of Employer Contributions**

The GASB Statement No. 25 required contributions and actual percentages contributed over the last seven years are as follows:

**Schedule of Employer Contributions**

Year Ended December 31	Annual Required Contribution <sup>(1)</sup>	Percentage Contributed
1997	\$ 3,532,832	105.4%
1998	\$ 2,262,486	180.4%
1999	\$ 4,081,973	107.0%
2000	\$ 3,982,444	116.3%
2001	\$ 4,336,783	112.9%
2002	\$ 4,225,002	125.5%
2003	\$ 5,587,954	98.9%

<sup>(1)</sup> Beginning of year.

### C. Actuarial Assumptions, Method and Additional Information

Valuation Date	January 1, 2004
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent Open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	8.0%
Projected salary increases*	4.5 – 11.6%
<b>*Includes inflation at</b>	<b>3.5%</b>
Cost-of-living adjustments	None

## **SECTION 3: PLAN ASSETS**

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This section presents information regarding plan assets as reported by the plan administrator or the auditor. The plan assets represent the portion of total plan liabilities which has been funded as of the valuation date.

**Section 3.1** Summary of Market Value of Assets.

**Section 3.2** Reconciliation of Assets.

**Section 3.3** Actuarial Value of Plan Assets as of January 1, 2004.

**Section 3.4** Average Annual Rates of Investment Return.

## Section 3.1

### Summary of Assets

Asset Category	Market Value as of December 31, 2002		Market Value as of December 31, 2003	
	Amount	%	Amount	%
<b>1. Cash and Short-Term Investments</b>				
a. Cash in Bank	\$ 2,465,360	1.5%	\$ 2,897,989	1.4%
b. Cash – Money Manager	3,490,412	2.2	5,713,321	2.8
c. Total	\$ 5,955,772	3.7	\$ 8,611,310	4.2
<b>2. Receivables</b>				
a. Interest and Dividends	\$ 721,390	0.4	\$ 513,273	0.4
b. Investments Sold	233,743	0.1	9,666,510	4.7
c. Other Receivables	155,255	0.1	46,307	0.0
d. Total	\$ 1,110,388	0.6	\$ 10,226,090	5.1
<b>3. Investments at Fair Value</b>				
a. U.S. Treasury Notes	\$ 0	0.0	\$ 0	0.0
b. Bonds	55,624,210	34.7	46,690,075	22.8
c. Equity Stock	76,701,217	47.8	110,038,338	53.7
d. Foreign Equity	21,627,901	13.5	30,934,654	15.1
e. Real Estate	0	0.0	0	0.0
f. Notes Receivable	0	0.0	0	0.0
h. Total	\$ 153,953,328	96.0	\$ 187,663,067	91.6
<b>4. Fixed Assets</b>	\$ 12,596	0.0	\$ 4,712	0.0
<b>5. Total Assets</b>	\$ 161,032,084	100.3	\$ 206,505,179	100.9
<b>6. Liabilities</b>				
a. Payable for Investments Purchased	\$ 391,984	0.2	\$ 1,366,222	0.7
b. Accounts Payable and Accrued Liabilities	264,762	0.1	381,228	0.2
c. Total	\$ 656,746	0.3	\$ 1,747,450	0.9
<b>7. Net Assets for Pension Benefits [5. – 6.c.]</b>	<b>\$ 160,375,338</b>	<b>100.0</b>	<b>\$ 204,757,729</b>	<b>100.0</b>

## Section 3.2

### Reconciliation of Assets

Transactions	2002 Plan Year	2003 Plan Year
<b>Additions</b>		
<b>1. Contributions</b>		
a. Contributions from Employers	\$ 5,303,267	\$ 5,525,400
b. Contributions from Plan Members	5,538,724	5,847,864
c. Total	\$ 10,841,991	\$ 11,373,264
<b>2. Net Investment Income</b>		
a. Interest and Dividends	\$ 4,471,091	\$ 2,841,184
b. Net Appreciation(Depreciation)	(17,689,827)	40,581,828
c. Rental Income	231,937	-
d. Net Securities Lending Income	29,028	32,650
e. Miscellaneous	21,987	47,222
f. Total	\$ (12,935,784)	\$ 43,502,884
g. Investment Expense	\$ (901,743)	\$ (1,037,566)
h. Net Investment Income	\$ (13,837,525)	\$ 42,465,318
<b>3. Total Additions</b>	<b>\$ (2,995,534)</b>	<b>\$ 53,838,582</b>
<b>Deductions</b>		
<b>4. Benefits and Expenses</b>		
a. Retirement Benefits	\$ 6,780,836	\$ 7,528,482
b. Refund of Contributions	998,709	1,414,807
c. Death	147,323	156,382
d. Administrative Expenses	365,623	347,520
<b>5. Total Deductions</b>	<b>\$ 8,292,491</b>	<b>\$ 9,447,191</b>
<b>6. Net Increase</b>	<b>\$ (11,288,025)</b>	<b>\$ 44,391,391</b>
<b>7. Net Assets Held in Trust for Pension Benefits</b>		
a. Beginning of Year	\$ 171,654,363	\$ 160,366,338
b. End of Year	\$ 160,366,338	\$ 204,757,729

## Section 3.3

### Actuarial Value of Assets

Schedule of Asset Gains/(Losses)				
Year Ending December 31	Original Amount	Recognized in Prior Years	Recognized This Year	Recognized in Future Years
1999	\$ (5,231,985)	\$ (4,185,588)	\$ (1,046,397)	\$ 0
2000	(12,312,221)	(7,387,332)	(2,462,444)	(2,462,445)
2001	(18,405,743)	(7,362,298)	(3,681,149)	(7,362,296)
2002	(27,671,855)	(5,534,371)	(5,534,371)	(16,603,113)
2003	29,558,966	0	5,911,793	23,647,173
<b>Total</b>	<b>\$ (34,062,838)</b>	<b>\$ (24,469,589)</b>	<b>\$ (6,812,568)</b>	<b>\$ (2,780,681)</b>

Development of Actuarial Value of Assets	
1. Initial Actuarial Value as of January 1, 2003	\$ 199,518,555
2. Contributions	
a. Employers	\$ 5,525,400
b. Members	5,847,864
c. Total (a. + b.)	\$ 11,373,264
3. Decreases during Year	
a. Benefit Payments	\$ 7,684,864
b. Return of Member Contributions	1,414,807
c. Non-investment Expenses	347,520
d. Total (a. + b. + c.)	\$ 9,447,191
4. Expected Return at 8.0% on:	
a. Actuarial Value of Assets as of January 1, 2003	\$ 15,961,484
b. Item 2 (one-half year)	454,931
c. Item 3 (one-half year)	377,888
d. Item 6	(3,132,177)
e. Total (a. + b. - c. + d.)	\$ 12,906,350
5. Expected Actuarial Value of Assets December 31, 2003 (1. + 2. - 3. + 4.)	\$ 214,350,978
6. Unrecognized Asset Gain as of December 31, 2003	(39,152,215)
7. Expected Actuarial Value December 31, 2003, plus Previous Year's Unrecognized Asset Gain (5. + 6.)	\$ 175,198,763
8. Market Value December 31, 2003	\$ 204,757,729
9. 2003 Asset Gain/(Loss) (8. - 7.)	\$ 29,558,966
10. Asset Gain/(Loss) to be Recognized as of December 31, 2003	\$ (6,812,568)
11. Initial Actuarial Value January 1, 2004 (5. + 10.)	\$ 207,538,410
12. Constraining Values:	
a. 80% of Market Value (8. x .8)	\$ 163,806,184
b. 120% of Market Value (8. x 1.2)	\$ 245,709,274
<b>13. Actuarial Value January 1, 2004 (11.), but not less than (12a.), nor greater than (12b.)</b>	<b>\$ 207,538,410</b>

**Average Annual Rates of Investment Return**

Year Ending December 31	Actuarial Value		Market Value	
	Annual	Cumulative	Annual	Cumulative
1995	11.2%	11.2%	21.4%	21.4%
1996	12.0%	11.6%	16.4%	18.9%
1997	12.4%	11.9%	16.5%	18.1%
1998	14.0%	12.4%	11.4%	16.4%
1999	13.7%*	12.7%	4.8%	14.1%
2000	9.5%	12.1%	0.8%	11.9%
2001	5.7%	11.2%	(2.5%)	9.8%
2002	(2.4%)	9.5%	(8.0%)	7.6%
2003	3.0%	8.8%	26.3%	9.7%

\* Includes change in Asset valuation method.

## **SECTION 4: BASIS OF VALUATION**

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This section presents and describes the basis of the valuation. The census of participants, actuarial basis and provisions of the Plan are the foundation of the valuation, since these are the present facts on which the projection of benefit payments will depend. The valuation is based on the premise that the Plan will continue in existence.

**Section 4.1** The participant data used for the actuarial valuation.

**Section 4.2** The plan provisions valued in the actuarial valuation.

**Section 4.3** The actuarial funding method, procedures and actuarial assumptions.

## Section 4.1

### Plan Participants

#### A. Participant Data Reconciliation

	Active Members	Inactive Members*				Total
		With Deferred Benefits	Retired Members	Disabled Members	Beneficiaries	
<b>As of January 1, 2003</b>	<b>2,226</b>	<b>187</b>	<b>600</b>	<b>0</b>	<b>36</b>	<b>3,049</b>
Age Retirements	(35)	(23)	58	0	0	0
Disability Retirements	0	0	0	0	0	0
Deaths Without Beneficiary	(2)	(1)	(12)	0	(1)	(16)
Deaths With Beneficiary	0	(1)	(9)	0	12	2
Nonvested Terminations	(11)	0	0	0	0	(11)
Vested Terminations	(29)	29	0	0	0	0
Rehires	3	(2)	(1)	0	0	0
Cashouts	(161)	(6)	0	0	0	(167)
Expiration of Benefits	0	0	0	0	(2)	(2)
Data Corrections	(1)	5	0	0	0	4
Transfers Out	0	0	0	0	0	0
Transfers In	0	0	0	0	0	0
<b>Net Change</b>	<b>(236)</b>	<b>1</b>	<b>36</b>	<b>0</b>	<b>9</b>	<b>(190)</b>
New Entrants During the Year	216	0	0	0	0	216
<b>As of January 1, 2004</b>	<b>2,206</b>	<b>188</b>	<b>636</b>	<b>0</b>	<b>45</b>	<b>3,075</b>

\*Excludes nonvested terminated members who are due a refund of member contributions as of the valuation date.

## Section 4.1

### B. Count of Active Members

Age <sup>(1)</sup>	Years of Service <sup>(2)</sup>								Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	
Under 20	0	0	0	0	0	0	0	0	0
20-24	30	0	0	0	0	0	0	0	30
25-29	151	20		0	0	0	0	0	171
30-34	152	79	10	1	0	0	0	0	242
35-39	132	86	33	25	1	0	0	0	277
40-44	147	108	60	55	19	1	0	0	390
45-49	133	95	61	61	41	12	0	0	403
50-54	96	74	58	49	31	20	3	0	331
55-59	63	50	49	44	15	8	1	2	232
60-64	20	25	17	20	8	4	1	0	95
65-69	4	2	1	7	4	4		0	22
Over 70		0	2		0	0	0	0	2
<b>Total</b>	928	539	291	262	119	49	5	2	2,195

### C. Average Compensation

Age <sup>(1)</sup>	Years of Service <sup>(2)</sup>								Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	
Under 20	0	0	0	0	0	0	0	0	0
20-24	32,640	0	0	0	0	0	0	0	32,640
25-29	35,140	40,047		0	0	0	0	0	35,714
30-34	38,191	43,799	39,777	33,987	0	0	0	0	40,070
35-39	37,334	44,574	49,107	50,527	52,032	0	0	0	42,228
40-44	36,970	39,561	43,057	49,251	49,677	42,576	0	0	40,989
45-49	36,492	39,871	43,182	49,531	56,779	47,274	0	0	42,660
50-54	37,436	39,702	42,439	50,355	54,649	56,559	80,500	0	43,890
55-59	40,915	41,428	40,780	47,477	59,143	64,877	82,500	52,608	44,526
60-64	35,719	46,655	42,617	51,344	62,105	64,041	59,569	0	46,786
65-69	38,618	38,569	48,828	36,058	42,167	44,328	0	0	39,947
Over 70		-	69,351		0	0	0	0	69,351
<b>Total</b>	37,012	41,573	43,325	49,095	55,215	54,970	76,714	52,608	41,903

<sup>(1)</sup> Attained age last birthday.

<sup>(2)</sup> Attained service last hire date. Excludes 11 members on leave of absence.

**D. Inactive Members - Annual Benefits**

Attained Age	Members With Deferred Benefits <sup>(1)</sup>		Retired Members		Beneficiaries	
	No.	Benefit	No.	Benefit	No.	Benefit
Under 50	117	\$ 1,028,934	2	\$ 76,824	4	\$ 23,373
50 - 54	46	424,341	25	661,380	0	0
55 - 59	16	104,395	104	1,422,156	4	51,817
60 - 64	9	59,609	117	1,542,108	7	75,397
65 - 69	0	0	129	1,485,880	4	37,462
70 - 74	0	0	104	1,165,512	8	67,245
75 - 79	0	0	79	731,604	10	80,542
80 - 84	0	0	48	334,428	6	42,408
Over 84	0	0	28	160,200	2	5,725
<b>Total</b>	<b>188</b>	<b>\$ 1,617,279</b>	<b>636</b>	<b>\$ 7,580,092</b>	<b>45</b>	<b>\$ 383,969</b>

<sup>(1)</sup> Includes 10 deferred disabled participants.

## Section 4.1

### E. Participant Statistics

Inactive Participants as of January 1, 2004	No.	Amount of Annual Benefit
<b>Participants Receiving Benefits</b>		
• Retired	636	\$ 7,580,092
• Beneficiaries	45	383,969
<b>Total</b>	<b>681</b>	<b>\$ 7,964,061</b>
<b>Participants with Deferred Benefits</b>		
• Vested Terminated	178	\$ 1,537,120
• Beneficiaries	0	-
• Disabled	10	80,159
<b>Total</b>	<b>188</b>	<b>\$ 1,617,279</b>

Statistics for Active Participants	No.	Average		
		Age	Service <sup>(1)</sup>	Earnings
<b>As of January 1, 2003</b>				
• Continuing	1,922	44.6	8.9	\$ 41,733
• New <sup>(2)</sup>	293	37.5	1.0	32,147
<b>Total</b>	<b>2,215</b>	<b>43.6</b>	<b>7.9</b>	<b>\$ 40,465</b>
<b>As of January 1, 2004</b>				
• Continuing	1,968	45.0	9.2	\$ 42,626
• New <sup>(2)</sup>	227	39.3	1.1	35,636
<b>Total</b>	<b>2,195</b>	<b>44.4</b>	<b>8.4</b>	<b>\$ 41,903</b>

<sup>(1)</sup> Service since date of hire.

<sup>(2)</sup> Includes rehires.

### Summary of Plan Provisions

#### *El Paso County Retirement Plan*

##### ***Effective Date and Plan Year***

Originally effective September 1, 1967; the plan was last amended and restated effective January 1, 1998, and further amended by Amendment No. 2 effective January 1, 2000, and amended and restated effective January 1, 2002. The plan year is January 1, through December 31.

##### ***Administration***

The plan is administered by the El Paso County Board of Retirement which consists of five voting members including the Treasurer of El Paso County, two non-elected employees of participating employers, and two registered electors of El Paso County appointed by the Board of County Commissioners.

##### ***Type of Plan***

A self-administered defined benefit pension plan.

##### ***Employers Included***

El Paso County, Colorado, El Paso County Health Department, Pikes Peak Library District, Office of the 4<sup>th</sup> Judicial District, El Paso County Board of Retirement.

##### ***Employees Included***

A covered employee is any elected or appointed officer or any person employed by the employer who defined as a full-time employer or a job-share employee by the Employer. A covered employee participates in the plan on the first date of employment.

##### ***Service***

###### Credited Service

Credited Service is the sum of past service, membership service and purchased service and is used in determining the amount of pension benefits and benefit eligibility. Past Service and membership service are periods of employment before and after September 1, 1967 respectively and are measured in years and fractions thereof. Past Service is limited to five years, and Purchase Service is also limited to 5 years and is subject to additional conditions.

### ***Compensation***

Total regular compensation excluding bonuses, extra pay, overtime, etc., but including any deferred compensation. The amount of compensation for Plan purposes for any participant, who first became a participant on or after January 1, 1996, is limited in any year to a maximum of \$200,000 (as indexed).

### ***Final Average Monthly Compensation***

The average compensation of the highest paid 36 consecutive calendar months within the last 120 calendar months of Credited Service.

### ***County Contributions***

The County will contribute an amount that along with participant contributions will be sufficient to provide benefits provided by the plan and pay all administrative expenses of the plan. Such County contributions must at least match participant contributions.

### ***Participant Contributions***

Effective January 1, 1986, participants are required to make monthly contributions equal to 6% of earnings. The rate of interest credited on participant contributions, after December 31, 1995 is 6% per year compounded annually, or such other rate as established by the Retirement Board.

### ***Normal Form of Benefit***

The Normal Form of Benefit provided by the plan is a 10-year certain and life annuity payable monthly.

### ***Accrued Benefit***

The benefit determined as for normal retirement payable at normal retirement date considering current earnings and service.

### ***Normal Retirement Benefit***

Normal retirement date is the first of the month on or after attainment of age 62. The monthly benefit payable at normal retirement is equal to 2.22% times final average monthly compensation, times years of Credited Service. Such benefit will not be greater than 75% final of the participant's average monthly compensation, and not less than \$25.00 per year of Credited Service.

### ***Late Retirement Benefit***

The benefit is equal to the Normal Retirement Benefit, recognizing Credited Service and increased compensation to postponed retirement date.

### ***Special Early Retirement Benefit***

An active participant may elect to retire with a special early benefit if the sum of his age and years of employment equals at least 75 upon termination of employment. The benefit will be equal to his accrued benefit unreduced for early payment.

### ***Regular Early Retirement Benefit***

Upon attainment of age 50, an active or vested terminated participant who has five or more years of Credited Service may elect to retire on the first of any month after the attainment of age 55. The benefit will be equal to his accrued benefit reduced by .25% per month for each month by which his early retirement date precedes age 62.

### ***Terminated Vested Benefit***

A participant who terminates employment with five or more years of Credited Service before he is eligible to receive immediate retirement benefits may elect to receive either his accumulated contributions in lieu of all other benefits or his vested accrued benefit payable at his normal retirement date. The participant may elect to receive a reduced benefit at an earlier commencement date.

A participant who terminates employment before becoming vested is entitled to a refund of his accumulated contributions with interest.

### ***Disability Benefit***

An active participant who becomes permanently and totally disabled under their employer's long-term disability insurance program or Social Security disability is entitled to receive a benefit payable at his normal retirement date based on his average monthly compensation for the calendar year prior to the calendar year in which disablement occurred and the credited service he would have accumulated to such retirement date. Payments will be made for ten years certain and life thereafter.

### ***Death Benefit***

#### Death of a Participant Prior to Benefit Commencement

In the event a Participant, either actively accruing service, disabled or terminated vested, dies before payments commence, the following benefits shall be paid:

If such Participant is not married at his death, there shall be paid the Beneficiary two times the Participant's accumulated contributions at the date of death.

If such Participant is married at his death, one of the following death benefits shall be payable to his spouse, at her sole option:

Two times the Participant's accumulated contributions at the date of death; or

## Section 4.2

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A monthly benefit payable for life in an amount equal to 60% of the Participant's Accrued Benefit on his date of death, reduced if the spouse is more than five years younger than the participant. Such death benefit shall commence on the first day of the month coincident with or following the later of the date the Participant would have attained age 55 or date of death. If the member dies while in active service on or after attainment of age 62 or attaining eligibility under the special early retirement provision, if earlier, the surviving spouse is eligible to receive a monthly benefit payable for life as if the member retired the day before death and elected the 100% joint and survivor annuity.

### Death After Retirement

A lump sum death benefit of \$3,000 is payable to the participant's designated beneficiary. In addition, applicable benefits will be paid if the Participant has elected an option providing for payments to a beneficiary, or has elected the normal form of benefit and dies prior to having received benefits for 120 months, or prior to having received benefits equal to his total accumulated contributions as of the date of his retirement.

### ***Optional Retirement Benefits***

In lieu of the Normal Form of Benefit (10-year certain and life), a Participant may elect to receive an adjusted amount, payable for life only, or an amount payable as a 100% or 50% joint and survivor benefit. 100% and 50% joint and survivor benefits with benefits increases if beneficiary dies first are also available options.

### Summary of Actuarial Methods, Procedures, and Assumptions

#### A. Entry Age Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the **Entry Age Actuarial** method of funding.

Sometimes called “funding method,” this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each Member would have been eligible to join the plan if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the plan.

The normal cost for the Plan is determined by summing individual results for each active Member and determining an average normal cost rate by dividing the summed individual normal costs by the total payroll of Members before assumed retirement age.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date.) The **Unfunded Actuarial Accrued Liability** is the excess of the actuarial accrued liability over the actuarial value of plan assets actually on hand on the valuation date.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

#### B. Asset Valuation Method

The actuarial value of assets is based on a five-year moving average of expected and market values determined as follows:

- at the beginning of each plan year, a preliminary expected actuarial asset value is calculated as the sum of the previous year’s actuarial value increased with a year’s interest at the Plan valuation rate, plus net cash flow (including investment expenses) adjusted for interest (at the same rate) to the end of the previous plan year, plus interest (at the same rate) on the prior year’s unrecognized asset bases to the end of the previous plan year;
- the expected actuarial asset value is set equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the end of the previous plan year;
- the difference between the expected actuarial asset value and the market value is the investment gain or loss for the previous plan year;
- the final actuarial asset value is the preliminary value plus 20% of the investment gains and losses for each of the five previous plan years, but in no case more than 120% of the market value or less than 80% of the market value,

### **C. Valuation Procedures**

No actuarial liability is included for participants who terminated nonvested prior to the valuation date, except those due a refund of contributions.

The compensation amounts used in the projection of benefits and liabilities were January 1, 2004, rates of pay.

In computing accrued benefits, average earnings were determined using actual earnings histories supplied by El Paso County.

No benefits were projected to be greater than the dollar limitation required by the Internal Revenue Code Section 415 for governmental plans.

**D. Actuarial Assumptions**

**Interest:** 8.0% per annum, compounded annually, net of investment expenses.  
**Mortality:** 1994 Group Annuity Mortality Table (Healthy). Sample rates are as follows:

Per 100 Participants		
Age	Male	Female
20	0.05	0.03
25	0.07	0.03
30	0.08	0.04
35	0.09	0.05
40	0.11	0.07
45	0.16	0.10
50	0.26	0.14
55	0.44	0.23
60	0.80	0.44
64	1.29	0.76

**Withdrawal:**

Per 100 Participants		
Age	Male	Female
20	25.79	28.26
25	21.29	23.95
30	16.79	19.63
35	12.95	15.06
40	9.75	11.30
45	7.03	8.29
50	4.71	6.04
55	2.96	5.07
60	1.21	4.10
64	0.84	2.42

*Withdrawal rates are not applied after a participant becomes eligible for retirement benefits.*

**Disability:**

Disability rates are the rates at which active Plan participants are expected to become disabled, and to be eligible for plan disability retirement. Sample rates are as follows:

Per 100 Participants	
Age	Disablement
20	0.11
25	0.12
30	0.12
35	0.18
40	0.24
45	0.39
50	0.55
55	1.00
60	1.44
64	1.59

**Post-Disability Mortality:**

Participants who are receiving disability retirement benefits are expected to have a higher mortality risk than other retirees or active plan participants. The disability mortality is based on the 1983 Railroad Board Disabled Mortality Table. Sample rates are as follows:

Per 100 Participants	
Age	Disabled Mortality
20	1.01
25	1.68
30	1.06
35	1.14
40	1.35
45	2.00
50	3.16
55	3.78
60	4.25
64	4.88

## Section 4.3

**Salary Increase:**

Anticipated salary increases include both inflationary and merit increases. Merit increases are anticipated to be greater at younger ages. A composite salary increase assumption based on age is, therefore, applied. Sample rates are as follows:

Attained Age	Percentage Increase at Attained Age			Ratio of Salary at Age 65 to Salary at Attained Age
	Merit	Inflation	Total	
20	8.1%	3.5%	11.6%	22.84
25	6.5	3.5	10.0	13.42
30	4.4	3.5	7.9	8.60
35	3.5	3.5	7.0	5.87
40	2.9	3.5	6.4	4.19
45	2.7	3.5	6.2	3.08
50	2.5	3.5	6.0	2.28
55	2.3	3.5	5.8	1.71
60	2.0	3.5	5.5	1.29
64	1.2	3.5	4.7	1.05

**Salary Limit Increase:**

3.5% per year, rounded down to nearest \$10,000.

**Retirement Rates:**

According to the following table based on eligibility for reduced or unreduced retirement benefits.

Attained Age	Annual Rates of Retirement Per 100 Eligible Participants		Attained Age	Annual Rates of Retirement Per 100 Eligible Participants		Attained Age	Annual Rates of Retirement Per 100 Eligible Participants	
	Unreduced	Reduced		Unreduced	Reduced		Unreduced	Reduced
49 & before	5.0	--	55	20.0	5.0	61	15.0	2.7
50	20.0	--	56	15.0	3.5	62	40.0	--
51	20.0	--	57	15.0	3.3	63	20.0	--
52	20.0	--	58	15.0	3.1	64	20.0	--
53	15.0	--	59	15.0	3.0	65	50.0	--
54	15.0	--	60	25.0	2.9	66-69	40.0	--
						70	100.0	--

**Expense Loading:**

Loading for administrative expenses is based on an estimate for the year, provided by the Retirement Board. For 2004, the administrative expense loading is 440,800.

**Section 4.3**

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**Percent Married:** 85% of all participants are assumed to have eligible spouses.

**Age Difference:** A husband is assumed to be three years older than his wife.

**Age for  
Commencement of  
Deferred Vested Benefits:** Age 55.

**Amortization of the  
Unfunded Actuarial  
Accrued Liability** The unfunded actuarial accrued liability is amortized as a level percent of payroll over an open amortization period of 30 years. Payroll is assumed to increase 3.5% per year for this purpose.