

**AUSTIN POLICE RETIREMENT SYSTEM**

**ACTUARIAL VALUATION**

**AS OF**

**DECEMBER 31, 2004**

**SEPTEMBER 16, 2005**

# Rudd and Wisdom, Inc.

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September 16, 2005

Police Retirement Board  
Austin Police Retirement System  
Post Office Box 684808  
Austin, Texas 78768

Re: Actuarial Valuation as of December 31, 2004

Members of the Board of Trustees:

In accordance with the requirements of Article 6243n-1 in the state law which governs the Austin Police Retirement System, an actuarial valuation of the System as of December 31, 2004 has been completed.

The results of the December 31, 2004 actuarial valuation are described in the Summary section of the report. A comparison of the current valuation with the December 31, 2003 valuation is also discussed in this section. The comparative valuation balance sheets are shown in Exhibit 1. Exhibit 2 shows a 25-year projection of the assets of the System. Exhibits 3 through 6 summarize the System's assets and development of the actuarial value of assets. Data on both active and retired police officers are contained in Exhibits 7 through 11. Exhibit 12 shows a historical comparison of the actuarial accrued liability for the active and retired officers.

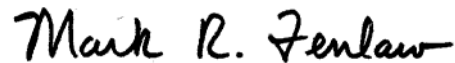
A summary plan description based on the current plan effective September 1, 2003 is included as Exhibit 13. The actuarial methods and assumptions are described in Exhibits 14 through 19, which include a description of assumption changes since the prior valuation. Exhibit 20 defines certain actuarial terms used in this report.

The disclosures required in accordance with Statement Number 25 of the Governmental Accounting Standards Board (GASB) for the System's annual report are in Exhibit 21. The disclosures required in accordance with GASB Statement Number 27 are needed for the City of Austin's financial statements. They are included in Exhibit 22.

Respectfully submitted,



Robert M. May  
Fellow, Society of Actuaries  
Enrolled Actuary



Mark R. Fenlaw  
Fellow, Society of Actuaries  
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RMM;MRF:jt

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## Summary

### *Austin Police Retirement System Results of December 31, 2004 Actuarial Valuation*

The valuation balance sheet as of December 31, 2004, shown in Exhibit 1, reveals that the plan has an unfunded actuarial accrued liability of \$108,133,306. Total contributions of 27% of pay (9% by the police officers and 18% by the City of Austin) are contributed to the System each year. Effective September 1, 2003, a very small portion of the city's biweekly contributions began to be allocated by the Board to a new Retiree Death Benefit Fund (account) within the System, which is being used to pay the \$7,500 post-retirement lump sum death benefits after that date.

The normal cost for the projected benefits for each police officer based on the current plan provisions is 20.016% of pay. Since total contributions on behalf of each police officer are more than the normal cost, the remaining portion can be used to amortize the plan's unfunded actuarial accrued liability. Assuming that the total payroll increases at the rate of 4% per year in future years attributable to general pay increases, the unfunded actuarial accrued liability will be amortized in 32.0 years.

The valuation balance sheets in Exhibit 1 compare the actuarial condition of the plan on December 31, 2004 with the condition on December 31, 2003. Both valuations are based on the current plan provisions effective on September 1, 2003 (summarized in Exhibit 13). The December 31, 2004 valuation does reflect the 1.75% ad hoc pensioner COLA granted January 1, 2005 but does not reflect any ad hoc pensioner COLAs which may be granted January 1, 2006 or annually thereafter. The results shown for the December 31, 2003 valuation do not include an adjustment to reflect the 1.75% ad hoc pensioner COLA granted effective January 1, 2005.

Between these two valuations, the unfunded actuarial accrued liability (UAAL) has increased by \$14,552,610 (from \$93,610,696 to \$108,133,306). The primary reasons for this change, which have partially offsetting effects, are as follows:

1. The rate of return, net of all expenses, on the market value of assets during 2004 is estimated at 13.7%. However, the actuarial value of assets (AVA) used in the valuation and the determination of the amortization period is based on an adjusted market value. In particular, the AVA defers recognition of a large portion of the significant gains in 2004 and 2003 but recognizes portions of the previously partially deferred large losses in 2001 and 2002. The rate of return on the AVA, net of expenses, for 2004 is estimated at 5.3% compared to the assumed rate of return of 8%. Therefore, the AVA as of December 31, 2004 is smaller than expected and caused an increase in the UAAL of \$8.7 million. This caused an increase in the amortization period of 5.3 years.
2. In 2004 the officers received a 5.5% general pay increase on October 1, 2004. The pay of the officers was greater than expected because we assumed that general pay would increase by 4% in 2004. This caused the UAAL to be \$5.2 million more than expected and caused the amortization period to increase 3.1 years.

3. The 1.75% ad hoc pensioner COLA effective January 1, 2005 increased the UAAL by \$2.7 million and added 1.6 years to the amortization period.
4. The payroll increased by almost 7.1% since the prior valuation, more than the assumed 4.0% increase. The higher payroll decreased the amortization period by 2.2 years.
5. The demographic experience in the aggregate was slightly favorable, decreasing the amortization period by 1.0 year.
6. The changes in assumptions (the change in the DROP election percent from 75% to 65% and the addition of explicit assumptions about future DROP lump sums being left with the System in the PROP) had the combined effect of decreasing the amortization period by 2.4 years.

The balance sheets in Exhibit 1 indicate that the number of years required to amortize the system's UAAL has increased from 28.6 years as of December 31, 2003 to 32.0 years as of December 31, 2004. Since one year has passed since the last valuation, a one-year reduction in the amortization period to 27.6 years would be expected if the experience of the System had been exactly as anticipated (including an 8% rate of investment return on the AVA). For the reasons described above, the System's UAAL increased somewhat more than expected, causing the amortization period to be 4.4 years greater than expected.

In summary, this valuation reveals that the actuarial value of assets plus future investment income received by the System and future contributions that will be provided by the members and the City of Austin will be adequate to pay the benefits provided by the state law governing the System as of December 31, 2004. In order for the System to have an adequate financing arrangement, contributions must be made that are sufficient to pay for the System's normal cost and amortize its unfunded actuarial accrued liability over an acceptable period of time. Based on the Texas State Pension Review Board guidelines and the actuarial assumptions and cost methods used in this valuation, periods of 25 years to 30 years are preferable and 40 years is the maximum.

The total contributions to the System are sufficient to pay for the System's normal cost and provide an additional amount that will result in amortization of the unfunded actuarial accrued liability in 32.0 years. In addition, we believe that it is appropriate to assume that the police officers and the City will be able to maintain their commitment in future years to contribute 9% and 18%, respectively, of compensation into the System. Consequently, we are of the opinion that the System has an adequate financing arrangement based on the actuarial value of assets used in this valuation.

### **Projected Actuarial Valuation Results**

In addition to completing this actuarial valuation, we did an analysis to estimate the amortization periods over the next four years. We did these projections because the significant actuarial investment losses that the System experienced in 2001 and 2002 were only partially offset by the significant actuarial investment gains in 2003 and 2004. As shown in Exhibit 5, a smoothing method is used to determine the actuarial value of assets

(AVA) that is used in this valuation. This method phases in over a five-year period any investment gains or losses (net actual investment return greater or less than the actuarially assumed investment return) that the System has had. The AVA used in this current valuation is deferring recognition of a portion of the gains and losses in 2001-2004. The AVA used in this valuation is \$343,446,574. The method used to determine this amount is shown in Exhibit 5. The market value of assets of \$348,955,037, excluding the Retiree Death Benefit Fund, is shown in the footnote for Exhibit 3. The difference of \$5,508,463 between these two values is the net of the deferred gains and losses that will be recognized over the next four years.

For the purpose of projecting the amortization period in the future, we have assumed that the System would have an annual rate of investment return, net of all expenses, equal to the expected actuarial assumed rate of 8% per year. The projections also reflect the valuation assumption of a 4% annual payroll growth and assume that no future cost-of-living adjustments will be granted. The projected amortization periods are not actual amortization periods from completed actuarial valuations but are projected from the completed December 31, 2004 actuarial valuation, showing the expected effects of the recognition over the next four years of the portions of the past investment gains and losses that are deferred as of December 31, 2004.

Valuation Date	Amortization Period	
	Actual	Projected
December 31, 2004	32.0	
December 31, 2005		34.7
December 31, 2006		33.0
December 31, 2007		27.4
December 31, 2008		25.0

The amortization period is projected to increase in the next two years as larger portions of the deferred investment losses from 2001 and 2002 than the portions of the deferred investment gains in 2003 and 2004 will be recognized in determining the actuarial value of assets. After 2006, the amortization period is projected to decrease more rapidly than one year between valuation dates because all of the investment losses from 2001 and 2002 will have been fully recognized by December 31, 2006 and only the remaining portions of the investment gains from 2003 and 2004 will be recognized in 2007 and 2008, thereby reducing the amortization period. If in 2005 and later the System has investment experience above the assumed 8% or greater payroll growth than the assumed 4% caused by an increase in the number of active member police officers, the amortization periods could be less than shown above. The System's other non-investment experience will also affect the future amortization periods.

If the amortization period increases above 40 years (or above 30 years beginning with the December 31, 2005 valuation if the maximum GASB amortization period is deemed to be important), the System might need to consider increasing contributions and/or decreasing benefits. In order to comply with the 30-year maximum GASB amortization period beginning with the December 31, 2005 valuation, a net investment return of 20% would be

needed for calendar year 2005 rather than the assumed 8%. This also assumes no future COLAs would be provided.

**Retiree Death Benefit Fund**

The statute effective September 1, 2003 established a Retiree Death Benefit Fund. This fund is a separate account within the System, administered by the System, used to pay \$7,500 post-retirement lump sum death benefits. The Retiree Death Benefit Fund is funded by a portion of the city’s total contribution rate of 18%. As part of this December 31, 2004 actuarial valuation, the city contribution needed for the Retiree Death Benefit Fund has been re-determined to be 0.094%. We recommend that this new rate be effective January 1, 2006, replacing the current rate of 0.098% that was determined based on the December 31, 2003 actuarial valuation.

The remaining 17.906% (18% less 0.094%) of the city’s contribution will be used for the System’s liabilities excluding the post-retirement lump sum death benefits. The 0.094% city contribution rate is comprised of the normal cost percentage plus an additional amount to amortize the unfunded actuarial accrued liability for only the \$7,500 post-retirement lump sum death benefits over 30 years as shown below. The amortization of this unfunded liability is determined as a level percentage of payroll assuming that the payroll will increase 4% per year.

<b>Allocated City Contribution Effective January 1, 2006 for the Retiree Death Benefit Fund</b>	
Normal Cost	0.030%
Thirty-Year Amortization of Unfunded Actuarial Accrued Liability	<u>0.064</u>
Total City Contribution Rate Allocated to the Retiree Death Benefit Fund as of January 1, 2006	0.094%

The 0.094% city contribution rate was determined using the same funding method and actuarial assumptions used in this December 31, 2004 actuarial valuation for the System. In particular, the Entry Age Actuarial Cost Method is used with the normal cost determined as a level percentage of payroll. The UP-1994 Male and Female Mortality Table is used with no age adjustments or projections. The following is a summary of the actuarial valuation results of the liabilities for the \$7,500 post-retirement lump sum death benefits.

<b>Actuarial Valuation Results of the Retiree Death Benefit Fund as of December 31, 2004</b>	
1. Actuarial Present Value of Future Benefits	
a. Current pensioners	\$ 608,994
b. Current active members	<u>686,406</u>
c. Total	\$ 1,295,400
2. Actuarial Accrued Liability	\$ 1,029,275
3. Assets of Fund	\$ 60,023
4. Unfunded Actuarial Accrued Liability	\$ 969,252



## Exhibit 1

### *Austin Police Retirement System Actuarial Valuation Balance Sheets*

	December 31, 2003 <sup>1,2</sup>	December 31, 2004 <sup>1</sup>
1. Actuarial present value of future benefits		
a. Payable to those now receiving benefits or entitled to receive benefits	\$ 160,104,705	\$ 174,198,292
b. Payable to active members	<u>436,800,839</u>	<u>468,744,037</u>
c. Total	\$ 596,905,544	\$ 642,942,329
2. Actuarial present value of future normal cost contributions	\$ 182,940,550	\$ 191,362,449
3. Actuarial accrued liability (Item 1c-Item 2)	\$ 413,964,994	\$ 451,579,880
4. Actuarial value of assets	\$ 320,354,298	\$ 343,446,574
5. Unfunded actuarial accrued liability (UAAL) (Item 3-Item 4)	\$ 93,610,696	\$ 108,133,306
6. Total contributions (percent of payroll) <sup>3</sup>	26.902%	26.906%
7. Normal cost (percent of payroll)	20.113%	20.016%
8. Percent of payroll available to amortize the UAAL	6.789%	6.890%
9. Annualized covered payroll	\$ 80,958,862	\$ 86,673,590
10. Present annual amount available to amortize the UAAL	\$ 5,496,297	\$ 5,971,810
11. Years to amortize the UAAL	28.6 Years	32.0 Years

<sup>1</sup> Reflects plan provisions effective September 1, 2003 and excludes the \$7,500 post-retirement lump sum death benefit.

<sup>2</sup> Valuation results as of December 31, 2003 have not been adjusted to reflect the 1.75% COLA for pensioners effective January 1, 2005.

<sup>3</sup> The total contribution rate of 27% (9% by members and 18% by the city) is reduced by the calculated city contribution rate for the separate Retiree Death Benefit Fund used to pay \$7,500 post-retirement lump sum death benefits.

**Exhibit 2**  
**Austin Police Retirement System**  
**25-Year Projection**

<i>Year</i>	<i>Market Value of Fund at Beginning of Year</i>	<i>Contributions by City and Police Officers</i>	<i>Net Investment Income</i>	<i>Monthly Benefit Payments &amp; Refunds</i>	<i>Lump Sum Retirement Payments</i>	<i>Market Value of Fund at End of Year</i>	<i>Ratio of Fund to Payments</i>
2000	\$ 250,876,441	\$ 15,336,155	\$ 19,199,820	\$ 9,894,431	\$ 2,046,971	\$ 273,471,014	22.90
2001	273,471,014	16,914,200	-12,710,942	11,769,207	1,452,390	264,452,675	20.00
2002	264,452,675	19,914,403	-20,876,785	13,074,962	1,430,698	248,984,633	17.16
2003	248,984,633	21,340,424	46,292,722	13,394,684	1,792,121	301,430,974	19.85
2004	301,430,974	22,598,861	41,612,897	15,971,005	656,667	349,015,060	20.99
2005	349,015,060	23,401,869	27,871,819	19,913,744	4,722,770	375,652,234	15.25
2006	375,652,234	24,337,944	29,999,099	22,076,196	3,588,738	404,324,343	15.75
2007	404,324,343	25,311,462	32,279,248	23,952,753	3,026,205	434,936,095	16.12
2008	434,936,095	26,323,920	34,707,024	25,795,298	2,725,219	467,446,522	16.39
2009	467,446,522	27,376,877	37,263,124	27,868,296	2,823,513	501,394,714	16.34
2010	501,394,714	28,471,952	39,918,018	30,138,780	3,172,151	536,473,753	16.11
2011	536,473,753	29,610,830	42,650,103	32,526,956	3,778,799	572,428,931	15.77
2012	572,428,931	30,795,263	45,481,368	34,744,778	3,874,137	610,086,647	15.80
2013	610,086,647	32,027,074	48,459,842	36,850,537	3,853,777	649,869,249	15.97
2014	649,869,249	33,308,157	51,645,496	38,731,990	3,177,257	692,913,655	16.53
2015	692,913,655	34,640,483	55,069,407	40,784,815	2,947,802	738,890,928	16.90
2016	738,890,928	36,026,102	58,713,560	42,986,406	2,982,553	787,661,631	17.13
2017	787,661,631	37,467,146	62,547,973	45,470,920	3,620,155	838,585,675	17.08
2018	838,585,675	38,965,832	66,540,113	48,443,942	4,190,417	891,457,261	16.94
2019	891,457,261	40,524,465	70,656,813	51,947,908	5,070,754	945,619,877	16.58
2020	945,619,877	42,145,444	74,863,800	55,949,782	5,840,404	1,000,838,935	16.20
2021	1,000,838,935	43,831,262	79,150,217	60,395,043	6,358,667	1,057,066,704	15.84
2022	1,057,066,704	45,584,512	83,472,230	65,605,267	7,306,893	1,113,211,286	15.27
2023	1,113,211,286	47,407,892	87,790,143	70,938,916	8,137,969	1,169,332,436	14.79
2024	1,169,332,436	49,304,208	92,126,299	76,280,519	8,531,092	1,225,951,332	14.45
2025	1,225,951,332	51,276,376	96,484,609	82,133,260	8,930,561	1,282,648,496	14.09
2026	1,282,648,496	53,327,431	100,857,730	87,981,336	9,199,846	1,339,652,475	13.79
2027	1,339,652,475	55,460,528	105,264,391	93,525,308	9,630,388	1,397,221,698	13.54
2028	1,397,221,698	57,678,949	109,783,988	97,665,261	9,857,379	1,457,161,995	13.55
2029	1,457,161,995	59,986,107	114,531,266	101,989,563	9,038,874	1,520,650,931	13.70

A. Data for years 2000 through 2004 was taken from the annual reports for those years. Fund balance at beginning and end of year reflects the total market value of the System's assets including the Retiree Death Benefit Fund (account).

B. Assumptions for years 2005 through 2029:

1. Benefits are assumed to commence in accordance with the demographic and economic assumptions used in this December 31, 2004 actuarial valuation and include benefit payments from the Retiree Death Benefit Fund (account).
2. Contributions will be 27% of payroll (9% of pay by the police officers and 18% by the city).
3. Annual payroll for 2005 will be \$86,673,590. It will increase 4% per year thereafter.
4. Investment income (net of expenses) will be 8% of the average fund balance in each year.
5. A 1.75% ad hoc COLA for pensioners as of January 1, 2005 was reflected but no ad hoc COLAs were assumed beginning January 1, 2006 or thereafter.

### Exhibit 3

*Austin Police Retirement System*  
**Total Market Value of Assets as of December 31, 2004**  
**Including the Retiree Death Benefit Fund**

#### **Assets**

##### Investments

Real Estate Interests	\$103,188,497
Corporate Stocks	89,945,027
International Stocks	51,157,709
U.S. Government Bonds	41,461,176
International Government Securities	36,137,530
Short-Term Investment Funds	13,128,535
Partnership Interests	8,122,925
Corporate Bonds	<u>3,267,789</u>
Total Investments	\$346,409,188

##### Other Assets

Interest and Dividends Receivable	\$ 1,738,429
Cash	974,146
Fixed Assets	454,205
Contributions Receivable	388,138
Other Assets	<u>5,252</u>
Total	\$ 3,560,170

Total Assets \$349,969,358

#### **Liabilities**

Contributions Refundable	\$ 578,315
Other Liabilities	<u>375,983</u>
Total Liabilities	<u><u>\$ 954,298</u></u>

#### **Net Market Value of Assets**

(Assets Minus Liabilities) \$ 349,015,060\*

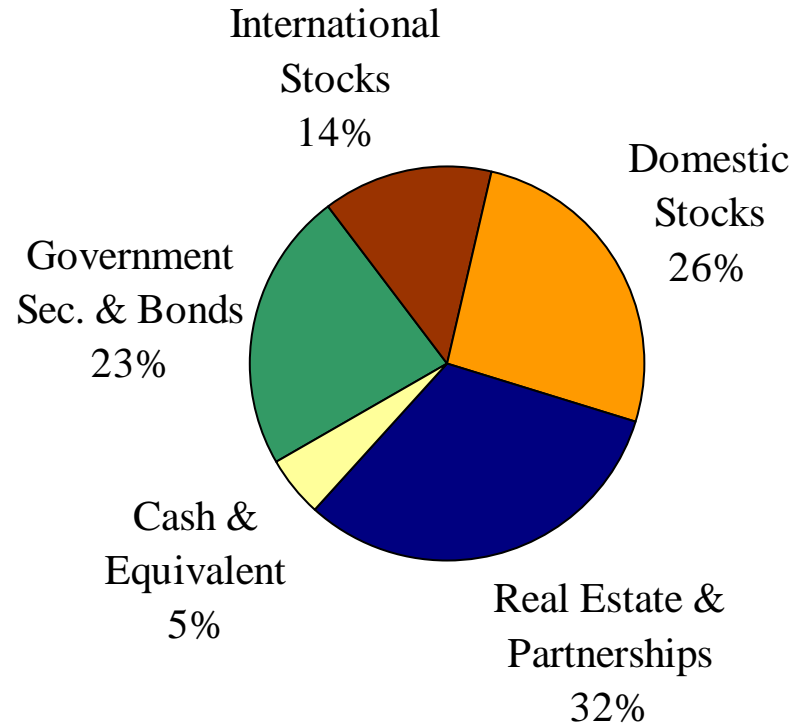
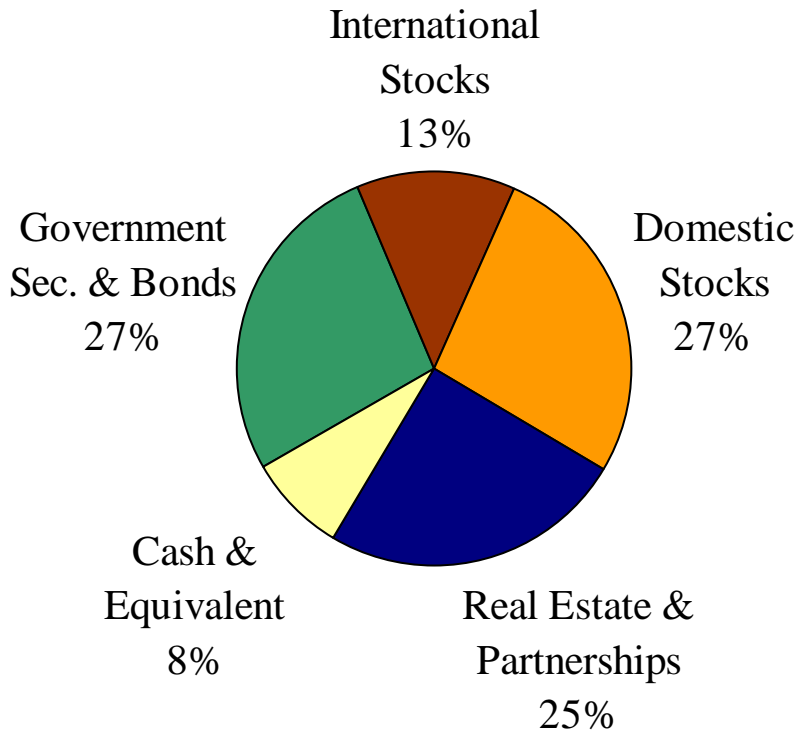
\* Includes \$60,023 for the Retiree Death Benefit Fund. The Net Market Value of Assets, excluding the Retiree Death Benefit Fund, is \$348,955,037.

Exhibit 4

*Austin Police Retirement System  
Comparison of Market Value Asset Allocation as of the Prior and Current Actuarial Valuation Dates*

**December 31, 2003**

**December 31, 2004**



**Exhibit 5**  
*Austin Police Retirement System*  
**Development of Actuarial Value of Assets**

Calculation of Actuarial Investment Gain/(Loss)  
Based on Total Market Value for Plan Years

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
Market Value of Assets as of beginning of year	\$ 301,430,974	\$ 248,984,633	\$ 264,452,675	\$ 273,471,014	\$ 250,876,441
City of Austin Contributions	14,794,834	13,950,555	12,566,293	11,178,204	10,046,065
Officer Contributions	7,804,027	7,389,869	7,348,110	5,735,996	5,290,090
Benefit Payments and Contribution Refunds	(16,627,672)	(15,186,805)	(14,505,660)	(13,221,597)	(11,941,402)
Expected Investment Return*	<u>24,348,731</u>	<u>20,160,180</u>	<u>21,368,402</u>	<u>22,710,660</u>	<u>20,834,565</u>
Expected Market Value of Assets as of end of year	\$ 331,750,894	\$ 275,298,432	\$ 291,229,820	\$ 299,874,277	\$ 275,105,759
Actual Market Value of Assets as of end of year	<u>349,015,060</u>	<u>301,430,974</u>	<u>248,984,633</u>	<u>264,452,675</u>	<u>273,471,014</u>
Actuarial Investment Gain/(Loss)	\$ 17,264,166	\$ 26,132,542	\$ (42,245,187)	\$ (35,421,602)	\$ (1,634,745)
Market Value Rate of Return Net of Expenses	13.7%	18.4%	(7.8)%	(4.6)%	7.6%
Rate of Actuarial Investment Gain/(Loss)	5.7%	10.4%	(15.8)%	(12.9)%	(0.6)%

\* Assuming (1) uniform distribution of contributions and payments during the plan year and (2) expected investment rate of return of 8.00% for 2004, 2003 and 2002, and 8.25% for 2001 and 2000.

Deferred Actuarial Investment Gains/(Losses) to be Recognized in Future Years

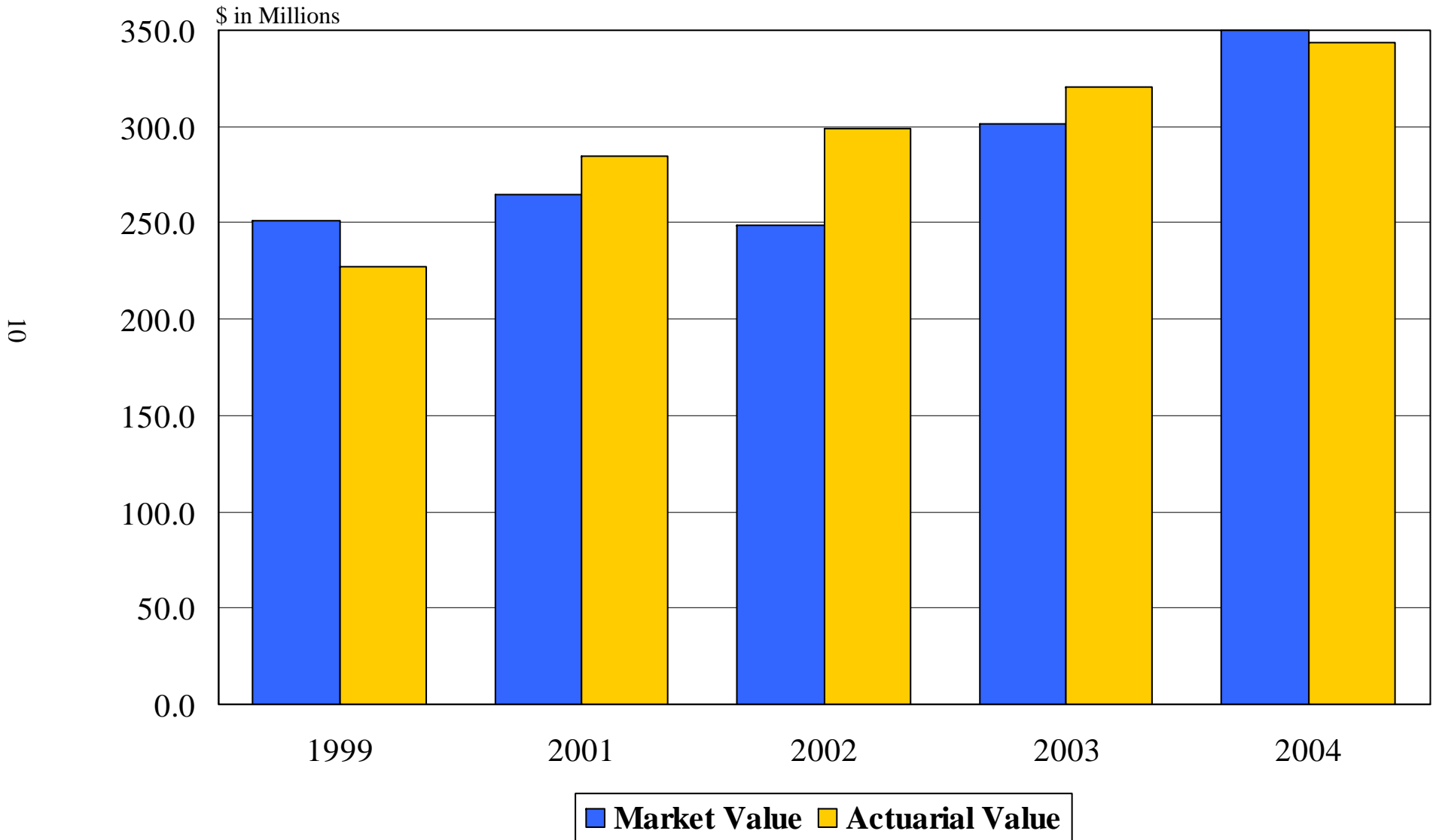
<u>Plan Year</u>	<u>Investment Gain/(Loss)</u>	<u>Deferral Percentage</u>	<u>Deferred Gain (Loss) Amount as of December 31, 2004</u>
2004	\$ 17,264,166	80%	\$ 13,811,333
2003	26,132,542	60%	15,679,525
2002	(42,245,187)	40%	(16,898,075)
2001	(35,421,602)	20%	(7,084,320)
2000	(1,634,745)	0%	<u>0</u>
Total			\$ 5,508,463

Actuarial Value of Assets as of December 31, 2004

1. Market Value of Assets as of December 31, 2004	\$349,015,060
2. Deferred Gain/(Loss) to be recognized in future	<u>\$ 5,508,463</u>
3. Preliminary Value (Item 1 – Item 2)	\$343,506,597
4. 80% of Market Value as of December 31, 2004	\$279,212,048
5. 120% of Market Value as of December 31, 2004	\$418,818,072
6. Total Actuarial Value as of December 31, 2004	\$343,506,597
7. Retiree Death Benefit Fund as of December 31, 2004	<u>\$ 60,023</u>
8. Net Actuarial Value as of December 31, 2004 (Item 6-Item 7)	\$343,446,574

Exhibit 6

*Austin Police Retirement System  
Historical Comparison of Market and Actuarial Value of Assets  
(Valuation as of December 31)*



## Exhibit 7

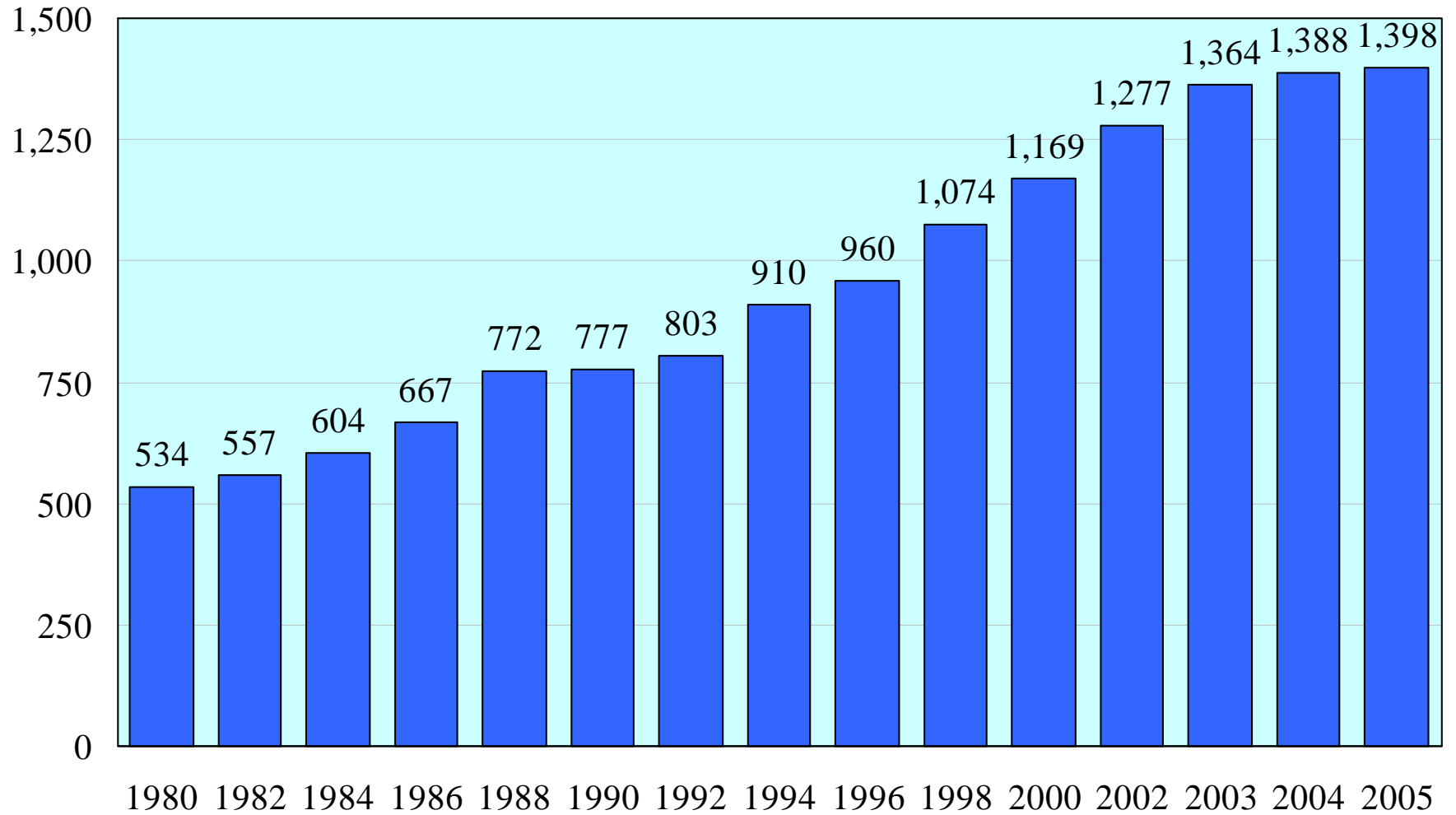
### *Austin Police Retirement System Distribution of Police Officers by Age and Service as of December 31, 2004*

Years of Service	Attained Age											Total
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 or Over	
0	0	15	20	14	8	0	0	0	0	0	0	57
1	0	1	25	22	19	6	0	0	0	0	0	73
2	0	2	26	22	5	3	0	0	0	0	0	58
3	0	2	37	41	14	9	2	0	0	0	0	105
4	0	0	34	43	19	6	2	0	0	0	0	104
5	0	0	7	21	8	3	0	0	0	0	0	39
6	0	1	11	47	26	11	2	0	0	0	0	98
7	0	0	6	42	34	10	2	0	0	0	0	94
8	0	0	0	38	17	6	2	0	0	0	0	63
9	0	0	1	20	30	6	1	0	0	0	0	58
10	0	0	1	24	25	16	2	1	0	0	0	69
11	0	0	0	5	27	15	2	0	0	0	0	49
12	0	0	0	3	27	21	12	0	0	0	0	63
13	0	0	0	1	16	10	2	0	0	0	0	29
14	0	0	0	0	17	27	15	0	0	0	0	59
15	0	0	0	0	1	0	1	0	0	0	0	2
16	0	0	0	0	6	9	4	4	1	0	0	24
17	0	0	0	0	1	8	3	0	0	0	0	12
18	0	0	0	0	0	29	15	2	1	0	0	47
19	0	0	0	0	0	36	15	4	2	0	0	57
20-24	0	0	0	0	0	29	65	42	8	0	0	144
25-29	0	0	0	0	0	0	25	44	6	1	0	76
30-34	0	0	0	0	0	0	0	14	2	0	0	16
35-39	0	0	0	0	0	0	0	0	2	0	0	2
40-44	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0	0
50+	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	0	21	168	343	300	260	172	111	22	1	0	1,398
Average Monthly Salary	\$0	\$3,023	\$3,994	\$4,473	\$4,848	\$5,770	\$6,381	\$6,816	\$6,610	\$9,161	0	\$5,173

Exhibit 8

*Austin Police Retirement System  
Historical Summary of Growth in Number of Contributing Members*

12



Average annual increase over:

- 7-year period 1998-2005: 3.8%
- 13-year period 1992-2005: 4.4%
- 25-year period 1980-2005: 3.9%



Exhibit 9

*Austin Police Retirement System  
Breakdown by Sex of Number of Officers and Average Annual Rate  
of Pay as Reported for the December 31, 2004 Valuation*

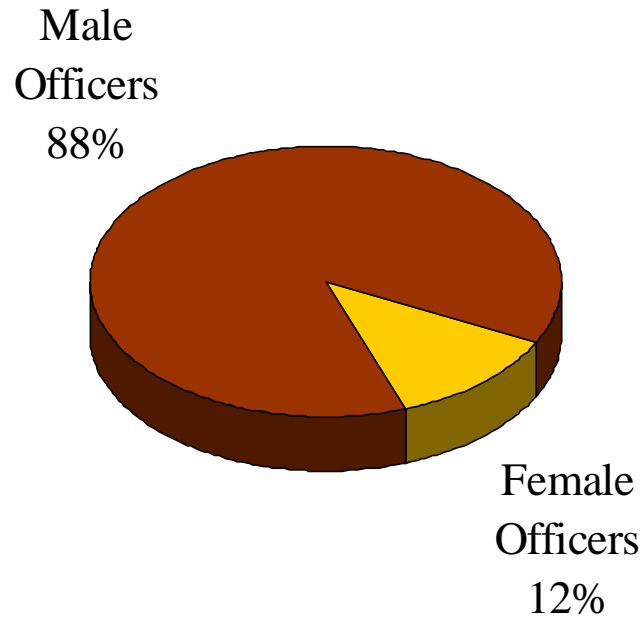
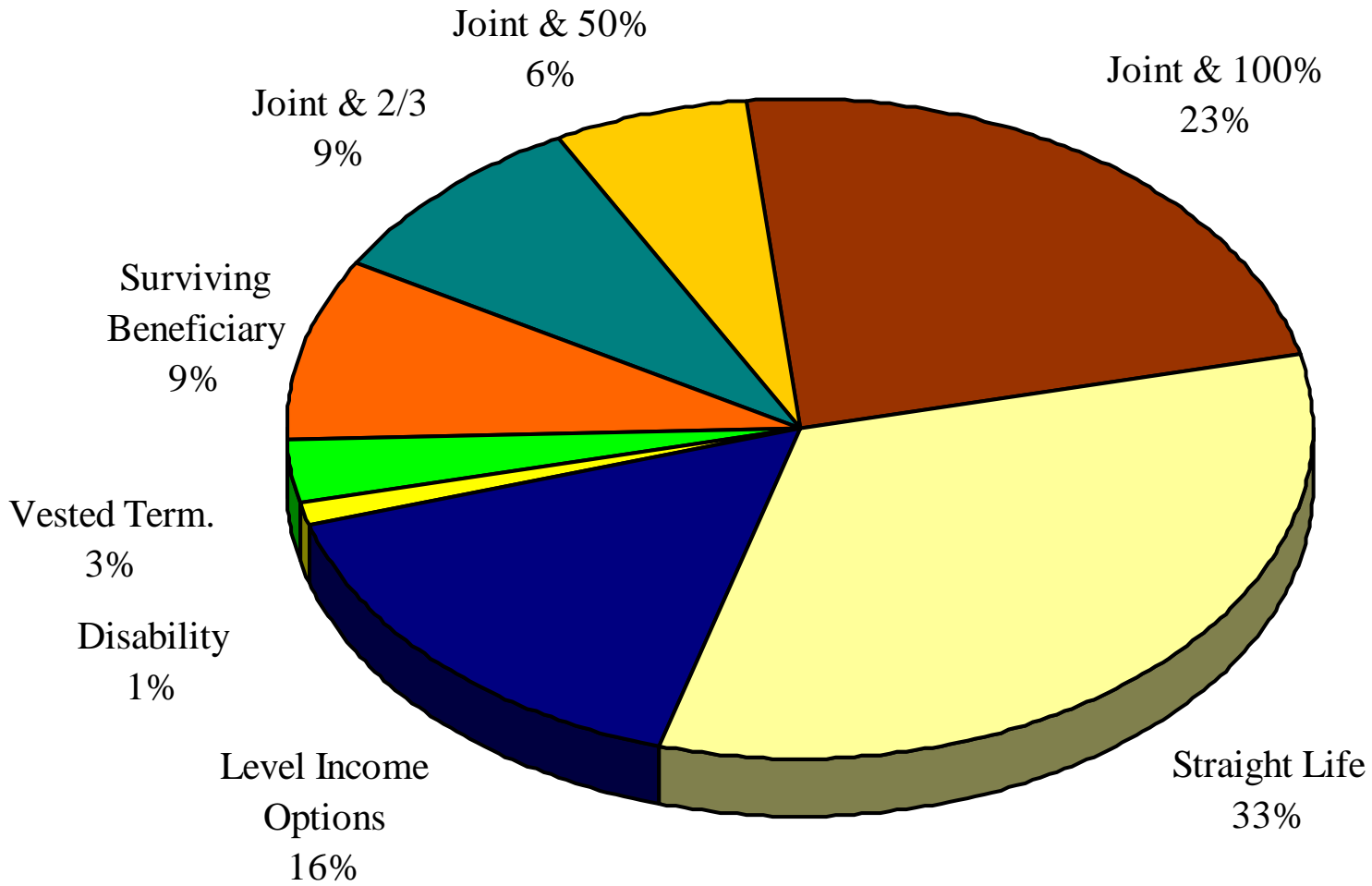


Exhibit 10

*Austin Police Retirement System  
Breakdown of Pensioners by Type and Annuity Option*



## Exhibit 11

*Austin Police Retirement System  
Summary Data of Active Police Officers and Pensioners  
as Reported for the December 31, 2004 Valuation*

Active Police Officers	Male	Female	Total
Total Contributing Police Officers	1,235	163	1,398
Annualized Reported Payroll	\$76,458,499	\$10,325,026	\$86,783,525
Average Annual Rate of Pay	\$61,910	\$63,344	\$62,077

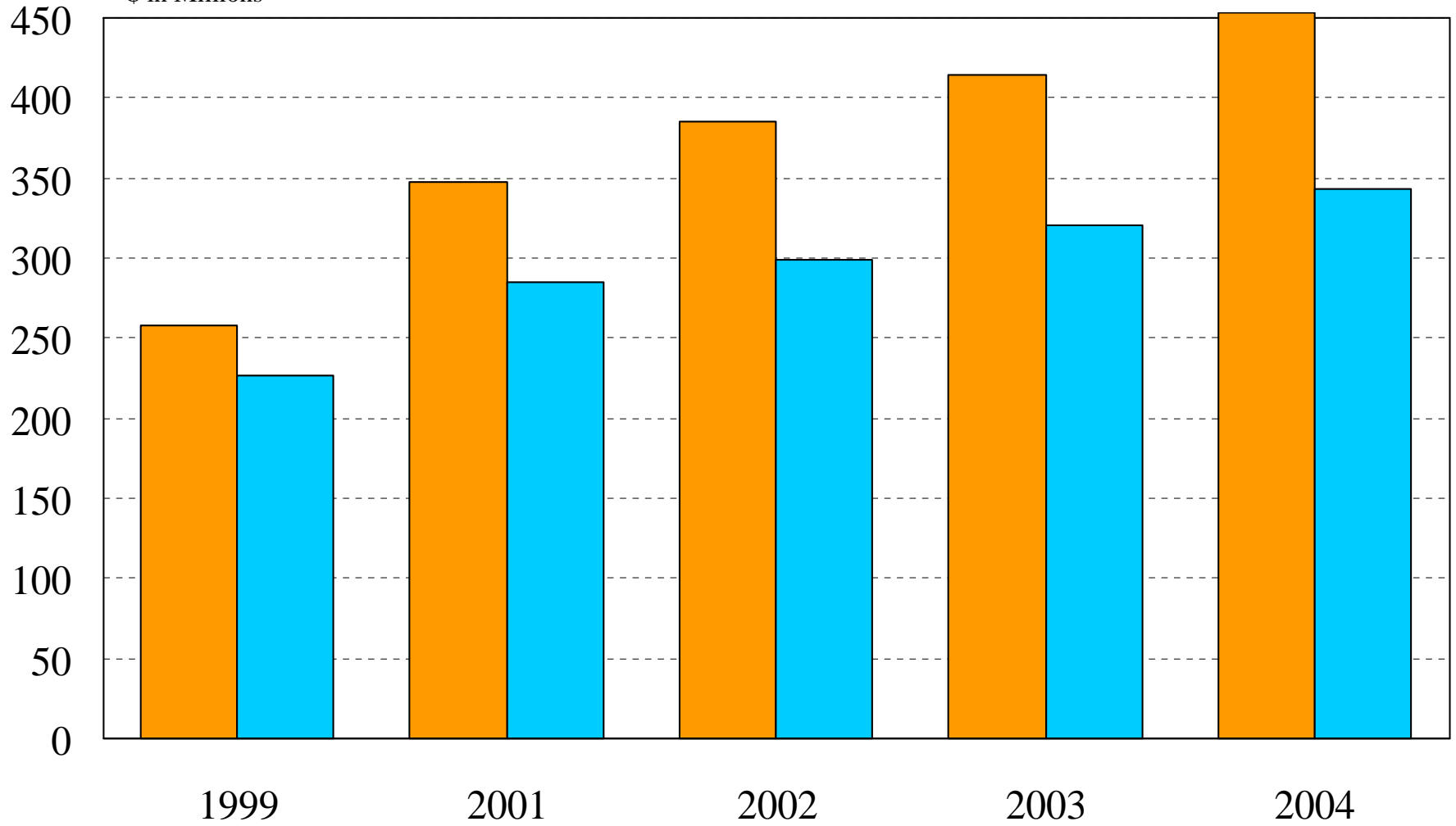
Pensioners and Vested Terminated Officers	Number	Monthly Payment	Actuarial Present Value of Benefits
<b>Service Retirements by Type of Annuity</b>			
Straight Life	117	\$498,078	\$62,612,796
Joint and 100%	81	321,067	43,926,117
Joint and 50%	23	96,864	11,979,998
Joint and Two-Thirds Beneficiary	32	132,189	17,252,139
Joint and Two-Thirds Last Survivor	1	4,426	516,965
Level Income Straight Life	17	64,147	6,034,600
Level Income Joint and Two-Thirds	28	99,372	10,586,486
Level Income Joint and 100%	11	43,833	5,269,299
Fifteen Year Certain and Life	<u>3</u>	<u>11,134</u>	<u>1,380,335</u>
Total Service Retirements	313	1,271,110	159,558,735
Disability Retirements	2	3,799	348,424
Surviving Beneficiaries	34	111,153	12,170,251
Vested Terminated Officers	<u>12</u>	<u>22,333</u>	<u>1,148,172</u>
<b>Total</b>	<b>361</b>	<b>\$1,408,395</b>	<b>\$173,225,582</b>

Exhibit 12

*Austin Police Retirement System*  
*Historical Comparison of Actuarial Accrued Liability and Actuarial Value of Assets*  
*(Present Plan Valuations as of December 31)*

\$ in Millions

16



Actuarial Accrued Liability Actuarial Value of Assets

## **Exhibit 13**

### *Austin Police Retirement System Summary Plan Description*

#### ***Date System Began***

January 1, 1980

#### ***Statute Effective Date***

September 1, 2003

#### ***Administration***

The fund is administered by a retirement board consisting of 11 members. Funds are held by the retirement board, as trustee.

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

All regular and permanent full-time police officers or cadets who are employed by the police department. In addition, employees of the System's administrative staff are also included.

#### ***Employee Contributions***

9% of each police officer's "Compensation Considered".

#### ***City Contributions***

18% of "Compensation Considered" for all "Employees Included" effective as of October 1, 1996 and thereafter. Effective September 1, 2003, a very small portion of the city contribution will be allocated by the Board to the Retiree Death Benefit Fund (account) administered by the System.

#### ***Service Considered***

The number of months during which a member is required to make and does make prescribed contributions plus (a) any creditable service received as a result of the provisions for establishing credit for certain military service, cadet service, or probationary service and (b) any previously forfeited service that is reinstated according to the provisions for reinstatement.

## **Exhibit 13 (continued)**

### *Austin Police Retirement System Summary Plan Description*

#### ***Compensation Considered***

Base pay and longevity pay.

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

The highest monthly average of the “Compensation Considered” for 36 months of the last 120 months during which the member contributed to the system or during the months of service for which he did contribute, if less than 120.

#### ***Normal Retirement Date***

The first day of the month following the earliest month in which (a) the member has completed at least 23 years of creditable service not reflecting any military service credit; or (b) the member has attained age 55 and completed at least 20 years of creditable service not reflecting any military service credit; or (c) the member has reached age 62.

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

A member is eligible for a normal service retirement benefit after having reached his normal retirement date. The monthly annuity, payable as a life annuity (modified cash refund), is 3.00% of “Average Final Compensation” multiplied by years and months of “Service Considered.”

#### ***Disability Benefit***

A member is eligible for a disability benefit (a) at any age provided he has completed ten years of service and (b) has a total and permanent disability from any cause. A member with less than 10 years of service is also eligible for a disability benefit if his disability is total and permanent and is the result of his duties as a police officer. The annuity is computed considered service and compensation to date of disability; however, not less than 20 years of service will be credited for an occupational disability.

## **Exhibit 13 (continued)**

### *Austin Police Retirement System Summary Plan Description*

#### ***Death Benefits***

If death occurs before eligibility for retirement, the member's beneficiary receives a benefit equal to twice the accumulated member contributions made plus allowable interest. This benefit will not be less than \$7,500.

If death occurs before retirement but after eligibility for retirement and the member had elected an optional annuity, the member's beneficiary will be entitled to a monthly annuity calculated as if the member had retired at the end of the month in which he died. A \$7,500 lump-sum death benefit is also payable to the beneficiary.

If death occurs before retirement but after eligibility for retirement and prior to selection of an optional annuity and, if the member leaves a lawfully married spouse surviving, then the surviving spouse may select an optional annuity or select a lump sum benefit equal to twice the accumulated member contributions made plus allowable interest. If the lawfully married surviving spouse dies before having received benefits equal to the amount of accumulated member contributions, the excess of such accumulated deposits over the benefits actually received will be refunded in one sum to the member's estate. If the member leaves no surviving spouse, then the member's designated beneficiary, or if no beneficiary exists, the executor or administrator of the estate, may select either the Fifteen Year Certain and Life Annuity or a lump sum benefit equal to twice the accumulated member contributions made plus allowable interest. If an optional annuity is selected in lieu of a lump sum benefit, a \$7,500 lump sum death benefit is payable to the beneficiary.

If death occurs after retirement, under certain optional pension forms the beneficiary will also be entitled to receive a monthly annuity for life or for the remainder of a certain period. If no monthly annuity is payable, the member's beneficiary receives a lump sum benefit equal to the excess, if any, of the accumulated member contributions plus allowable interest over any benefits actually received.

#### ***Retiree Death Benefit Fund***

Effective September 1, 2003, a separate fund was established to pay \$7,500 post-retirement lump sum death benefits. This fund is funded by city contributions.

## **Exhibit 13 (continued)**

### *Austin Police Retirement System Summary Plan Description*

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

If the member has 10 years of service, he may elect to leave his accumulated deposits with the retirement system. He will be entitled to a deferred benefit commencing at the normal retirement date based upon his service and compensation prior to termination.

#### ***Termination of Employment***

A member terminating employment for reasons other than service retirement, disability retirement or death will receive an amount equal to his contributions to the retirement system and accumulated interest. Interest will be credited at the end of each calendar year at a rate determined by the system's board of trustees on the member's beginning-of-year account balance.

#### ***Optional Payments***

A retiring member may elect an optional form of annuity payment rather than the standard Life Annuity. Such options are a Joint and 100% to Survivor, Joint and 50% to Survivor, Joint and Two-Thirds to Survivor, Joint and Two-Thirds to Last Survivor or 15-Year Certain and Life Annuity.

A retroactive deferred retirement option plan (RETRO DROP) can also be elected by retiring members meeting certain eligibility requirements. This option provides the member with a monthly annuity and a lump sum. The RETRO DROP benefit computation date elected by the member may not be earlier than the date the member completed 23 years of creditable service not reflecting any military service credit or may not be earlier than 36 months prior to the date of retirement.

#### ***Postretirement Cost-of-Living Increases***

The Board may authorize an annual ad hoc cost-of-living adjustment (COLA), subject to actuarial approval, not to exceed 6% per year. (Recent COLAs were 1.75%, 3.00%, and 1.50% effective January 1, 2005, 2004, and 2003, respectively). Postretirement benefit increases will automatically be provided when the system's benefit formula as a percent of average compensation for years of service increases.



## Exhibit 14

### *Austin Police Retirement System Summary of Actuarial Methods and Assumptions*

1. Actuarial Cost Method	Entry Age Actuarial Cost Method <ul style="list-style-type: none"><li>• The normal cost is calculated to be a level percent of compensation over a member's career.</li><li>• The unfunded actuarial accrued liability is assumed to be funded by level percent contributions of employee payroll based on annual payroll growth of 4% per year due to general wage increases.</li></ul>
2. Asset Valuation Method	Gains and losses in the market value of assets, based on the difference between the actual rate of return and the assumed rate of return, are recognized in the actuarial value over five years. The actuarial value will not be less than 80% or more than 120% of the market value of assets.
3. Investment Return (Interest Rate)	8% per year, net of expenses
4. Inflation	4% per year
5. Salary Increase Due to General Wage Increases	4% per year
6. Salary Increases Due to Promotion and Longevity Increases	2.8% per year average over 25-year career. See Exhibit 16 for the promotion and longevity salary increases by year of service.
7. Total Salary Increase	6.8% per year average over 25-year career. See Exhibit 16 for the total salary increases by year of service.
8. Interest Credited on Officer's Accumulated Contributions	3% per year
9. Mortality	
a. Active and Retired	UP-1994 Mortality Tables for males and females with no age adjustments or projections
b. Disabled	85% of 1965 RRB Disabled Annuitants Mortality Table

## Exhibit 14 (continued)

### *Austin Police Retirement System Summary of Actuarial Methods and Assumptions*

- |   |  |
|---|--|
| 10. Retirement Rates  | Expected average retirement age of 52.9 based on the officers included in the December 31, 2004 valuation. See Exhibit 17 for service and age-related rates.   |
| 11. Withdrawal Rates  | Expected number of terminations of 23 in 2005 based on the officers included in the December 31, 2004 valuation. See Exhibit 18 for service-related rates.   |
| 12. Disability Rates  | See Exhibit 19 for age-related rates.  |
| 13. Future Pre-Employment Military Service Purchase for Officers without Purchase | <ul style="list-style-type: none"><li>• 20 months purchased on average</li><li>• 50% of officers under 45</li><li>• 75% of officers 45 and above</li><li>• 25% of estimated cost paid by officer</li></ul> |
| 14. RETRO DROP Election   | 65% of those eligible for at least a one-year RETRO DROP are assumed to make such an election.   |
| 15. RETRO DROP Period Election  | Members elect the maximum period eligible (up to 36 months).   |
| 16. Percent Single after Eligible for Service Retirement                          | 15%  |
| 17. Age of Spouse of Officer Who Dies While Eligible to Retire                    | Female 3 years younger than male   |
| 18. Payment Form Election for Pre-Retirement Death Benefits                       |  |
| a. Married Members  | Joint and 100% to Survivor   |
| b. Single Members   | 15-Year Certain and Life Annuity   |
| 19. Ad Hoc Cost-of-Living Increases for Pensioners                                | None   |

## Exhibit 14 (continued)

### *Austin Police Retirement System Summary of Actuarial Methods and Assumptions*

20. Cadet Service Purchase
- 100% of officers who have not yet purchased the credit will purchase their cadet service in the future.
  - Officer purchase amount based on officer contribution rate and cadet pay at time of cadet service.
21. Forfeited Service Purchase, Probationary Service Purchase, and Uniform Military Leave of Service Purchase
- 100% of officers with such eligible service will purchase the respective service.
22. RETRO DROP lump sums left with the System (PROP)
- 40% of officers electing RETRO DROP will leave their lump sum in the System until age 60.
  - Average annual rate credited to the PROP accounts will be 7%.

## Exhibit 15

### *Austin Police Retirement System Changes in Actuarial Methods and Assumptions*

	December 31, 2003 Actuarial Assumption	December 31, 2004 Actuarial Assumption
<ul style="list-style-type: none"><li>• RETRO DROP Election</li></ul>	75%	65%
<ul style="list-style-type: none"><li>• RETRO DROP lump sums left with the System (PROP)</li></ul>	No explicit assumptions	<ul style="list-style-type: none"><li>• 40%</li><li>• until age 60</li><li>• 7% credited to PROP accounts</li></ul>

**Exhibit 16**

*Austin Police Retirement System  
Salary Rate of Increase Assumption from Year t-1 to Year t*

Year of Service t	Salary Increases Due to	
	Promotion and Longevity Increases	Total Increases
1	18.0%	22.7%
2	11.2	15.6
3	5.8	10.0
4	0.9	4.9
5	0.9	4.9
6	7.1	11.4
7	0.5	4.5
8	0.5	4.5
8	0.5	4.5
10	7.1	11.4
11	0.3	4.3
12	0.3	4.3
13	0.3	4.3
14	7.1	11.4
15	0.2	4.2
16	7.2	11.5
17	0.2	4.2
18	0.1	4.1
19	0.1	4.1
20	0.1	4.1
21	0.1	4.1
22	0.1	4.1
23	0.1	4.1
24	0.1	4.1
25	0.1	4.1
26-45	0.0	4.0

## Exhibit 17

### *Austin Police Retirement System Assumed Service Retirement Rates Per 1,000 Members*

For Entry Ages Under 32				For Entry Ages 33 and Above			
Service	22 & Under	23-27	28-32	Age	33-37	38-42	43 & Over
23	50	75	100	43			
24	200	200	200	44			
25	250	250	250	45			
26	300	300	300	46			
27	500	400	350	47			
28	500	400	400	48			
29	500	400	500	49			
30	500	500	500	50			
31	500	500	500	51			
32	500	500	1000*	52			
33	500	500		53			
34	500	500		54			
35	600	500		55	200		
36	600	500		56	250		
37	600	1000*		57	300		
38	600			58	350		
39	600			59	500		
40	600			60	1000	500	
41	600			61		350	
42	1000*			62		350	800
				63		350	400
				64		350	400
				65		1000	1000

\* 100% retirement rate will be effective at age 60 if earlier.

**Exhibit 18**

*Austin Police Retirement System  
Assumed Withdrawal Rates Per 1,000 Members*

Years of Service	Withdrawal Rates
0	100
1	20
2	20
3	20
4	20
5	20
6	20
7	20
8	20
9	20
10	20
11	17
12	14
13	10
14	5
15	0
16	0
17	0
18	0
19	0

**Exhibit 19**

*Austin Police Retirement System  
Assumed Disability Rates Per 1,000 Members\**

Age	Disability Rates	Age	Disability Rates
20	0.14	40	0.92
21	0.15	41	1.14
22	0.16	42	1.32
23	0.17	43	1.48
24	0.18	44	1.73
25	0.19	45	2.09
26	0.21	46	2.55
27	0.23	47	2.98
28	0.25	48	3.34
29	0.28	49	3.62
30	0.31	50	3.79
31	0.35	51	3.92
32	0.40	52	4.04
33	0.45	53	4.24
34	0.49	54	4.56
35	0.52	55	4.90
36	0.54	56	5.32
37	0.57	57	5.86
38	0.62	58	6.60
39	0.73	59	7.53
		60	9.11
		61	11.72
		62 and later	0.00

\* Rates are for disability due to all causes, and occupational disability rates are assumed to be 55% of all cause rates.



## Exhibit 20

### *Austin Police Retirement System Definitions*

1. ***Actuarial cost method*** – A procedure for determining the actuarial present value of pension plan benefits and for developing an actuarially equivalent allocation of such value to time periods in the form of a normal cost contribution rate and an actuarial accrued liability.
2. ***Actuarially equivalent*** – Of equal actuarial present value, determined as of a given date with each value based on the same set of actuarial assumptions.
3. ***Actuarial present value*** – The value of an amount or series of amounts payable or receivable at various times in the future, determined as of a given date (the valuation date) by the application of the actuarial assumptions.
4. ***Entry age actuarial cost method*** – A method under which the actuarial present value of projected benefits of each individual included in the valuation is allocated on a level basis over the earnings of the individual between the entry age and assumed exit. Entry age is calculated as the difference between the attained age and the years of service credit as of the valuation date. Service is assumed to be continuous.
5. ***Normal cost contribution rate*** – That portion of the actuarial present value of benefits which is allocated to a valuation year by the Entry Age Actuarial Cost Method. It is expressed as a percent of compensation and is equal to the actuarial present value at hire of projected benefits divided by the actuarial present value at hire of anticipated future compensation. It is calculated for each individual and summed for the entire group.
6. ***Actuarial accrued liability*** – That portion, as determined by the Entry Age Actuarial Cost Method, of the actuarial present value of benefits which is not provided for by future normal cost contributions.
7. ***Unfunded actuarial accrued liability*** – The excess of the total actuarial present value of future benefits over the sum of the tangible assets and the actuarial present value of future normal cost contributions.
8. ***Actuarial value of assets*** – The value of cash, investments, and other property belonging to a pension plan, as used by the actuary for the purpose of an actuarial valuation.
9. ***Actuarial gain or loss*** – A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates.
10. ***Amortization period*** – The period determined in an actuarial valuation as the number of years required, beginning with the valuation date, to amortize the unfunded actuarial accrued liability with a level percent of payroll that is the difference between the expected total contribution rate and the normal cost contribution rate.

## Exhibit 21

*Austin Police Retirement System  
Disclosures in Accordance with GASB Statement No. 25  
Required Supplementary Information  
for the System's Financial Statements for Fiscal Year  
Ending December 31, 2004*

### I. Schedule of Funding Progress

Actuarial Valuation Date <sup>1</sup>	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Annual Covered Payroll <sup>2</sup> (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
12/31/99	\$226,913,439	\$257,850,162	\$30,936,723	88.0%	\$54,695,072	56.6%
12/31/01 <sup>3,4</sup>	284,761,203	347,548,177	62,786,974	81.9	69,706,749	90.1
12/31/02 <sup>5</sup>	298,781,560	384,991,799	86,210,239	77.6	79,236,366	108.8
12/31/03 <sup>5</sup>	320,354,298	413,964,994	93,610,696	77.4	80,958,862	115.6
12/31/04 <sup>3,5</sup>	343,446,574	451,579,880	108,133,306	76.1	86,673,590	124.8

<sup>1</sup> Prior to the actuarial valuation as December 31, 2002, the System had biennial valuations.

<sup>2</sup> The covered payroll is based on the annual rate of base pay and longevity pay used in the valuation.

<sup>3</sup> Economic and demographic assumptions were revised.

<sup>4</sup> Reflects changes in plan benefit provisions effective September 1, 2001.

<sup>5</sup> Reflects changes in plan benefit provisions effective September 1, 2003.

### II. Schedule of Employer Contributions

Plan Year Ended December 31	Annual Contribution As a Fixed Percentage of Payroll	Annual Required Contribution <sup>1</sup>	Percentage Contributed
1999	18%	\$ 9,288,148	100%
2000	18	10,046,065	100
2001	18	11,178,204	100
2002	18	12,566,293	100
2003	18.000/17.906 <sup>2</sup>	13,929,724 <sup>3</sup>	100
2004	17.902	14,714,174 <sup>4</sup>	100

<sup>1</sup> The annual required contribution is based on actual covered payroll.

<sup>2</sup> Effective September 1, 2003, a portion of the Employer's total 18% contribution is allocated to a Retiree Death Benefit Fund. This portion was determined to be 0.094% effective September 1, 2003 based on the December 31, 2002 actuarial valuation

<sup>3</sup> The employer's total contribution during 2003 including the Retiree Death Benefit Fund was \$13,950,555.

<sup>4</sup> The employer's total contribution during 2004 including the Retiree Death Benefit Fund was \$14,794,834.

**Exhibit 21 (continued)**

*Austin Police Retirement System  
Disclosures in Accordance with GASB Statement No. 25  
Required Supplementary Information  
for the System's Financial Statements for Fiscal Year  
Ending December 31, 2004*

**III. Notes to Required Supplementary Information**

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	December 31, 2004
Actuarial cost method	Entry Age
Amortization method	Level percentage of projected payroll, open
Amortization period	32.0 years
Asset valuation method	Market value smoothed by a 5-year deferred recognition method with a 80%/120% corridor on market
Actuarial assumptions:	
- Investment rate of return, net of expenses	8.0%
- Projected salary increases including promotion and longevity	4.0% to 22.0% per year, averaging 6.8%
- Inflation rate per year	4.0%
- Postretirement cost-of-living adjustments	None

**IV. Actuarial Information Needed for Notes to the Financial Statement as Required by Paragraph 32 of GASB 25**

**A. PLAN DESCRIPTION**

The Board of Trustees of the City of Austin Police Retirement System is the administrator of a single-employer defined benefit pension plan. The System is considered part of the City of Austin's financial reporting entity and is included in the City's financial reports as a pension trust fund.

The System was originally established in 1979 by a City Council ordinance. Effective August 1991, the System is governed by state law with plan amendments made by the Legislature of the State of Texas. The System provides retirement, death, disability and withdrawal benefits. Benefits vest after 10 years of credited service. Participants may retire at (a) 23 years of service excluding any military service credit regardless of age, or (b) age 55 with 20 years of service excluding any military service or (c) age 62. The monthly benefit at retirement is payable as a life annuity (modified cash refund).

As of the actuarial valuation date of December 31, 2004, the monthly benefit is equal to 3.0% of the highest 36-month average salary multiplied by years and months of service. Effective September 1, 2001, the RETRO DROP provisions were changed to require that a participant must have 23 years of creditable service with the retirement

**Exhibit 21 (continued)**

*Austin Police Retirement System  
Disclosures in Accordance with GASB Statement No. 25  
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Ending December 31, 2004*

system excluding any military service credit on the date the participant elects for the RETRO DROP benefit computation date. Further, the selection of RETRO DROP benefit computation date may be changed in the future by Board rule with approval by the System's actuary. Also effective September 1, 2001 changes were made allowing the eligibility requirement for Service Retirement to be changed in the future by rule of the System's Board with approval by the System's actuary, except, the age 62 minimum eligibility regardless of services could not be changed.

On September 1, 2001, a Post Retirement Option Plan (PROP) introduced an option allowing for participants to elect to receive partial payments from the RETRO DROP lump sum account. The participant can also elect to delay payment of the entire RETRO DROP lump sum. Interest credits will be paid on the participant's RETRO DROP lump sum account following the participant's retirement until the entire lump sum is paid. The interest credits will be granted based on an annual rate determined from time to time by Board Rule.

Effective September 1, 2003, the \$7,500 post-retirement lump sum death benefit is payable from a separate Retiree Death Benefit Fund (account) administered by the System. As of December 31, 2004, the assets of the Retiree Death Benefit Fund were \$60,023 included in the System's total market value of assets of \$349,015,060.

Distributions to officers or their beneficiaries are also available in the event of total and permanent disability, provided the officer has completed 10 years of service or the injury was sustained during the performance of employment duties, or upon death. The terms of benefit payments are determined by certain elections made by the officer, their level of earnings and length of service. Payments to officers or their beneficiaries may be increased annually on an ad hoc basis by the amount of increase in the Consumer Price Index, limited to 6% per year, and subject to the approval of the Retirement Board and the actuary.

Participating members in the System include full-time police officers and cadets employed by the police department of the City and employees of the System. The following membership status of the System was reflected in the actuarial valuation as of December 31, 2004:

Retirees and beneficiaries currently receiving benefits (356) and terminated employees entitled to future monthly benefits (12)	368
Current participating members	<u>1,398</u>
Total	1,766

## **Exhibit 21 (continued)**

*Austin Police Retirement System  
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### **B. CONTRIBUTIONS**

The System is funded by biweekly contributions from the basic compensation, consisting of base pay and longevity pay, of police officers and by contributions from the City. Under the provisions in effect on December 31, 2004, participants are required to contribute 9% of their basic compensation to the System. The City is required to make contributions equal to 18% of basic compensation and may authorize additional contributions. Effective September 1, 2003, a portion of the City's total 18% contribution is allocated to the Retiree Death Benefit Fund. This portion was 0.094% of payroll from September 1, 2003 through December 31, 2004. This portion was redetermined to be 0.098% for 2005 based on the December 31, 2003 actuarial valuation. This portion was redetermined based on the December 31, 2004 actuarial valuation to be 0.094% for 2006.

The City contribution rate is required by the state law governing the System and may be changed by amendment made by the Legislature of the State of Texas. The participant contribution rate must be at least 6% but was increased to 9% effective October 1993 by a recommendation of the Retirement Board and an approving vote of the participating members in accordance with the state law governing the System. The participant contribution rate may be changed by amendment made by the Legislature of the State of Texas or by appropriate actions of the Board and the participating members in accordance with the state law governing the System.

While contribution rates are not actuarially determined, state law requires that each plan of benefits adopted by the System must be approved by a qualified actuary. The actuary certifies that the contribution commitment by the police officers and the City provides an adequate financing arrangement. Using the entry age actuarial cost method, the System's normal cost is determined as a percentage of payroll. The excess of the total contribution rate over the normal cost rate is used to amortize the System's unfunded actuarial accrued liability, and the number of years needed to amortize the System's unfunded actuarial accrued liability is determined using an open, level percentage of payroll method. Based on the actuarial valuation as of December 31, 2004 and the Plan provisions effective September 1, 2003, the normal cost was 20.016% of pay and the amortization period was 32.0 years.

## Exhibit 22

*Austin Police Retirement System  
Disclosures in Accordance with GASB Statement No. 27  
Notes to the Financial Statements for the City of Austin  
for the Fiscal Year Ending September 30, 2005*

### I. Annual Pension Cost

For the fiscal year ending September 30, 2005, the City's Annual Pension Cost (APC) of \$\_\_\_\_\_ for the Austin Police Retirement System is equal to approximately 17.9% of the basic compensation, consisting of base pay and longevity pay, of the members of the System (including both police cadets and officers). The APC is equal to the City's required and actual contributions. The total required contributions by the City are a fixed 18% of pay. However, effective September 1, 2003, a portion of the city's contribution is allocated to a separate Retiree Death Benefit Fund (account). Based on the December 31, 2002 actuarial valuation, this portion was 0.094% of payroll from September 1, 2003 through December 31, 2004. This portion was redetermined to be 0.098% for 2005 based on the December 31, 2003 actuarial valuation. Therefore, the required contributions for the fiscal year ending September 30, 2005 were equal to 17.906% of payroll for the period October 1, 2004 through December 31, 2004 and 17.902% of payroll for the period January 1, 2005 through September 30, 2005.

The required contributions for the fiscal year ending September 30, 2005 were based on the results of the actuarial valuations as of December 31, 2002 and as of December 31, 2003 using the entry age actuarial cost method and were determined in compliance with the GASB Statement No. 27 parameters. The actuarial methods and assumptions used for the three most recent valuations are shown below:

Valuation date	12/31/2002	12/31/2003	12/31/2004
Actuarial cost method	Entry age	Entry age	Entry age
Amortization method	Level percent of payroll, open	Level percent of payroll, open	Level percent of payroll, open
Amortization period	25.7 years	28.6 years	32.0 years
Asset valuation method	5-year adjusted market value	5-year adjusted market value	5-year adjusted market value
Actuarial Assumptions			
• Investment return	8.0%	8.0%	8.0%
• Projected salary increases	4.0% plus promotion and longevity	4.0% plus promotion and longevity	4.0% plus promotion and longevity
• Inflation	4.0%	4.0%	4.0%
• Cost-of-living increases	0.0%	0.0%	0.0%
• Payroll increases	4.0%	4.0%	4.0%

**Exhibit 22 (continued)**

*Austin Police Retirement System  
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Notes to the Financial Statements for the City of Austin  
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**II. Three-Year Trend Information for the  
Austin Police Retirement System**

Fiscal Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Contribution as a Percentage of Payroll	Net Pension Obligation
09/30/2003	\$_____ <sup>1</sup>	100%	18/17.906% <sup>2</sup>	\$0
09/30/2004	_____ <sup>1</sup>	100	17.906 <sup>3</sup>	0
09/30/2005	_____ <sup>1</sup>	100	17.906/17.902 <sup>4</sup>	0

- <sup>1</sup> City will be able to determine these amounts from their accounting system since there is no net pension obligation.  
<sup>2</sup> APC was equal to 18% of payroll for the period October 1, 2002 through August 31, 2003 plus 17.906% of payroll for the month of September 2003.  
<sup>3</sup> APC was equal to 17.906% of payroll for the period October 1, 2003 through September 30, 2004.  
<sup>4</sup> APC was equal to 17.906% of payroll for the period October 1, 2004 through December 31, 2004 plus 17.902% of payroll for the period January 1, 2005 through September 30, 2005.

**III. Schedule of Funding Progress**

Actuarial Valuation Date <sup>1</sup>	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Annual Covered Payroll <sup>2</sup> (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
12/31/99	\$226,913,439	\$257,850,162	\$30,936,723	88.0%	\$54,695,072	56.6%
12/31/01 <sup>3,4</sup>	284,761,203	347,548,177	62,786,974	81.9	69,706,749	90.1
12/31/02 <sup>5</sup>	298,781,560	384,991,799	86,210,239	77.6	79,236,366	108.8
12/31/03 <sup>5</sup>	320,354,298	413,964,994	93,610,696	77.4	80,958,862	115.6
12/31/04 <sup>3,5</sup>	343,446,574	451,579,880	108,133,306	76.1	86,673,590	124.8

- <sup>1</sup> Prior to the actuarial valuation as December 31, 2002, the System had biennial valuations.  
<sup>2</sup> The covered payroll is based on the annual rate of base pay and longevity pay used in the valuation.  
<sup>3</sup> Economic and demographic assumptions were revised.  
<sup>4</sup> Reflects changes in plan benefit provisions effective September 1, 2001.  
<sup>5</sup> Reflects changes in plan benefit provisions effective September 1, 2003.

## **Exhibit 22 (continued)**

*Austin Police Retirement System  
Disclosures in Accordance with GASB Statement No. 27  
Notes to the Financial Statements for the City of Austin  
for the Fiscal Year Ending September 30, 2005*

### **IV. Actuarial Information Needed for Notes to the Financial Statement as Required by Paragraph 20 of GASB 27**

#### **A. PLAN DESCRIPTION**

The Board of Trustees of the City of Austin Police Retirement System is the administrator of a single-employer defined benefit pension plan. The System is considered part of the City of Austin's financial reporting entity and is included in the City's financial reports as a pension trust fund. The Plan issues a stand alone report that is available from the Retirement Board.

The System was originally established in 1979 by a City Council ordinance. Effective August 1991, the System is governed by state law with plan amendments made by the Legislature of the State of Texas. The System provides retirement, death, disability and withdrawal benefits. Benefits vest after 10 years of credited service. Participants may retire at (a) 23 years of service excluding any military service credit regardless of age, or (b) age 55 with 20 years of service excluding any military service or (c) age 62. The monthly benefit at retirement is payable as a life annuity (modified cash refund). As of the actuarial valuation date of December 31, 2004, the monthly benefit is equal to 3.0% of the highest 36-month average salary multiplied by years and months of service.

Effective September 1, 2001, the RETRO DROP provisions require that a participant must have 23 years of creditable service with the retirement system excluding any military service credit on the date the participant elects for the RETRO DROP benefit computation date. Further, the selection of RETRO DROP benefit computation date may be changed in the future by Board rule with approval by the System's actuary. Also effective September 1, 2001 the eligibility requirement for Service Retirement may be changed in the future by Board rule with approval by the System's actuary, except, the age 62 minimum eligibility regardless of service may not be changed by Board rule.

On September 1, 2001, a Post Retirement Option Plan (PROP) introduced an option allowing for participants to elect to receive partial payments from the RETRO DROP lump sum account. The participant can also elect to delay payment of the entire RETRO DROP lump sum. Interest credits will be paid on the participant's RETRO DROP lump sum account following the participant's retirement until the entire lump sum is paid. The interest credits will be granted based on an annual rate determined from time to time by Board Rule.



## **Exhibit 22 (continued)**

*Austin Police Retirement System*  
**Disclosures in Accordance with GASB Statement No. 27**  
**Notes to the Financial Statements for the City of Austin**  
**for the Fiscal Year Ending September 30, 2005**

Effective September 1, 2003, the \$7,500 post-retirement lump sum death benefit is payable from a separate Retiree Death Benefit Fund (account) administered by the System.

Distributions to officers or their beneficiaries are also available in the event of total and permanent disability, provided the officer has completed 10 years of service or the injury was sustained during the performance of employment duties, or upon death. The terms of benefit payments are determined by certain elections made by the officer, their level of earnings and length of service.

Payments to officers or their beneficiaries may be increased annually on an ad hoc basis by the amount of increase in the Consumer Price Index, limited to 6% per year, and subject to the approval of the Retirement Board and the actuary.

Participating members in the System include full-time police officers and cadets employed by the police department of the City and employees of the System.

### **B. CONTRIBUTIONS**

The System is funded by biweekly contributions from the basic compensation, consisting of base pay and longevity pay, of police officers and by contributions from the City. Under the provisions in effect during the fiscal year ending September 30, 2005, participants were required to contribute 9% of their basic compensation to the System. The City was required to make contributions equal to at least 18% of basic compensation. Effective September 1, 2003, a portion of the City's total 18% contribution is allocated to the Retiree Death Benefit Fund. This portion was 0.094% for the period October 1, 2004 through December 31, 2004 and was 0.098% for the period January 1, 2005 through September 30, 2005.

The total City contribution rate of at least 18% is required by the state law governing the System and may be changed by amendment made by the Legislature of the State of Texas. The participant contribution rate must be at least 6% but was increased to 9% effective October 1993 by a recommendation of the Retirement Board and an approving vote of the participating members in accordance with the state law governing the System. The participant contribution rate may be changed by amendment made by the Legislature of the State of Texas or by appropriate actions of the Board and the participating members in accordance with the state law governing the System.

**Exhibit 22 (continued)**

*Austin Police Retirement System  
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Notes to the Financial Statements for the City of Austin  
for the Fiscal Year Ending September 30, 2005*

While contribution rates are not actuarially determined, state law requires that each plan of benefits adopted by the System must be approved by a qualified actuary. The actuary certifies that the contribution commitment by the police officers and the City provides an adequate financing arrangement. Using the entry age actuarial cost method, the System's normal cost is determined as a percentage of payroll. The excess of the total contribution rate over the normal cost rate is used to amortize the System's unfunded actuarial accrued liability, and the number of years needed to amortize the System's unfunded actuarial accrued liability is determined using an open, level percentage of payroll method. Based on the actuarial valuation as of December 31, 2004 and the Plan provisions effective September 1, 2003, the normal cost was 20.016% of pay and the amortization period was 32.0 years.