AUSTIN POLICE RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF DECEMBER 31, 2011

JULY 17, 2012

Rudd and Wisdom, Inc.

CONSULTING ACTUARIES

July 17, 2012

Police Retirement Board
Austin Police Retirement System
Post Office Box 41089
Austin, Texas 78704

Re: Actuarial Valuation as of December 31, 2011

Members of the Board of Trustees:

At your request and in accordance with the requirements of the state law governing the Austin Police Retirement System (the System), we have prepared this report of the results of an actuarial valuation of the System as of December 31, 2011. This valuation was prepared to determine whether the System has an adequate contribution arrangement. We have relied on and based our valuation on the data for police officers, pensioners, and assets provided on behalf of the Board of Trustees by Sam Jordan, Chief Executive Officer of the System, and his staff. We have not audited the data provided but have reviewed it for reasonableness as well as for consistency relative to the data provided for the December 31, 2010 actuarial valuation.

The results of the December 31, 2011 actuarial valuation are described in the Summary section of the report. A comparison of the current valuation with the December 31, 2010 valuation is also discussed in that section. The summary of key valuation results is 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 police officers and pensioners are contained in Exhibits 7 through 11. Exhibit 12 shows an historical comparison of the actuarial accrued liability and the actuarial value of assets.

9500 Arboretum Blvd., Suite 200
Austin, Texas 78759
Phone: (512) 346-1590
Fax: (512) 345-7437
www.ruddwisdom.com
Post Office Box 204209
Austin, Texas 78720-4209

A summary plan description based on the current plan 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 No. 25 of the Governmental Accounting Standards Board (GASB) for the System's financial statements are included in Exhibit 21. The disclosures required in accordance with GASB Statement No. 27 needed for the City of Austin's financial statements are included in Exhibit 22.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report.

Respectfully submitted,

Mark R. Fenlaw

Mark R. Fenlaw
Fellow, Society of Actuaries
Member, American Academy of Actuaries
Enrolled Actuary

Rebecca B. Morris

Rebecca B. Morris
Associate, Society of Actuaries
Member, American Academy of Actuaries
Enrolled Actuary

MRF/RBM:bb
i:\clients\aprs\val-2011\val.doc

Table of Contents

Austin Police Retirement System
Actuarial Valuation as of December 31, 2011

Summary

Austin Police Retirement System
Results of December 31, 2011 Actuarial Valuation

This valuation reflects assumed total ultimate contributions of 34.63% of covered pay (contributions by the police officers of 13.00% and contributions by the City of Austin of 20.63% for January through September 2012 and 21.63% thereafter) will be contributed to the System. The City of Austin contribution rates as a percent of covered pay are specified in Article 6243n-1 of Texas state law. These rates can only be changed by action of the Texas Legislature amending the state law, except that the 0.63% rate component is to be reviewed every five years and adjusted up or down as considered necessary by the actuary to fund the additional liabilities from participating in the Proportionate Retirement Program. We are assuming that the legislature would not change the statutory contribution rates without the concurrence of the System's Board of Trustees, the City of Austin, and the Austin Police Association. This procedure for changing the City of Austin contribution rates has been followed since the plan provisions were put into state law in 1991.

The assumed total contributions of 34.63% of pay are divided into three parts. The normal cost for the projected benefits for each police officer based on the current plan provisions is 23.242% of pay. A very small portion of the city's contributions is allocated each year to the Retiree Death Benefit Fund, an account within the System for funding the $10,000 post-retirement lump sum death benefits. In this valuation, the contribution rate for that fund is 0.103% of pay. The remainder of the contributions of 11.285% of pay (34.63% - 23.242% - 0.103%) is available to amortize the unfunded actuarial accrued liability (UAAL) of $270,760,099. Assuming that the total covered payroll increases at the rate of 4% per year in the future, **the UAAL will be amortized in 30.7 years**.

In order for the System to have an adequate contribution arrangement, contributions must be made that are sufficient to pay the System's normal cost and to amortize its UAAL over an acceptable period of time. Based on the Texas Pension Review Board guidelines, our professional judgment, and the actuarial assumptions and methods used in this valuation, we consider a period of 15 years to 25 years to be preferable and 40 years to be the maximum acceptable period.

The total contributions to the System are sufficient to pay the System's normal cost and to provide an additional amount that will result in amortization of the UAAL in 30.7 years. In addition, we believe that it is appropriate to assume that the police officers and the city will be able to maintain their Texas statutory commitment in future years to contribute 13% and 21.63%, respectively, of covered compensation into the System. Consequently, we are of the opinion that the System has an adequate contribution arrangement as of December 31, 2011 based on the levels of benefits and contributions reflected in this valuation. However, the System is not expected to have an adequate contribution arrangement in the December 31, 2012 actuarial valuation unless the net investment return for 2012 is 12% or more, as shown in the next section.

Projected Actuarial Valuation Results

In addition to completing this actuarial valuation, we made some projections to estimate the amortization periods for the next four annual actuarial valuations. We did these projections because the actuarial investment gains that the System experienced in 2009 and 2010 and the significant actuarial investment losses in 2008 and 2011 have been only partially recognized as of December 31, 2011. As shown in Exhibit 5, a smoothing method is used to determine the actuarial value of assets (AVA) for this valuation. This method phases in over a five-year period any investment gains or losses (actual net investment return greater or less than the actuarially assumed net investment return) that the System has had. The AVA used in this current valuation is deferring recognition of a portion of the investment gains in 2009 and 2010 and of the investment losses in 2008 and 2011. The AVA used in this valuation is $553,701,976. The market value of assets (MVA), excluding the Retiree Death Benefit Fund, is $483,600,580. The difference between this MVA and the AVA, $70,101,396, is the net of the deferred gains and losses over the past four years that will be recognized in the next four actuarial valuations.

For the purpose of projecting the amortization period in the future, we have used five scenarios of various assumed annual rates of investment return on the market value of assets, net of all expenses, over the 2012-2015 projection period. The projected amortization periods will not be the same as the actual amortization periods from completed future actuarial valuations but are the result of projected future actuarial valuation results based on the completed December 31, 2011 actuarial valuation, showing (1) 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, 2011 and (2) the effects over the next four years of investment returns different from the 8% assumption used in the valuation.

Projected Amortization Periods

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Assumed Investment Return for Calendar Year					
2012	8%	4%	6%	10%	12%
2013	8	4	6	10	12
2014	8	4	6	10	12
2015	8	4	6	10	12
2016 and later	8	8	8	8	8
Amortization Period as of December 31:					
2011 (actual)	31 years	31 years	31 years	31 years	31 years
2012 (projected)	41 years	43 years	42 years	41 years	40 years
2013 (projected)	43 years	48 years	46 years	41 years	39 years
2014 (projected)	45 years	57 years	51 years	41 years	37 years
2015 (projected)	48 years	80 years	60 years	40 years	34 years

The projected amortization periods in Scenario 1 isolate 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, 2011. The primary observation of Scenario 1 is that as the deferred portions of the investment gains for the years 2009 and 2010 are recognized, they will be outweighed by the systematic recognition of the deferred portion of the investment losses for 2008 and 2011. Therefore, without any significant investment gains in 2012 and 2013 as in Scenario 5, the System is projected to have an amortization period over 40 years in the December 31, 2012 actuarial valuation. This conclusion from Scenario 1 is not surprising since the amortization period in the December 31, 2011 actuarial valuation would be 53 years if we had used the market value of assets as the actuarial value of assets.

Scenarios 2, 3, 4, and 5 show the projected amortization periods in the next four actuarial valuations based on various levels of assumed investment experience less than or greater than 8%. We do not know what the investment experience will be for each of the next four calendar years. The future investment experience in each of the next four calendar years could be better or worse than the assumed rates shown. There is still some uncertainty in the national and global economies due to the slow pace of recovery of jobs and due to debt problems at home and abroad. In addition, variations in experience from the underlying assumptions other than investment return will cause the actual amortization periods to be different from the projected periods shown above.

In our opinion, in the context of these caveats, Scenarios 2 through 5 present a range of plausible scenarios for the next four actuarial valuations with no changes in benefits or contributions. Only Scenario 5 would avoid an amortization period exceeding 40 years in the next three annual actuarial valuations. **The primary observations from these scenarios are that (1) it would require a strong market performance in 2012 and 2013 at least as strong as Scenario 5 for the amortization period to avoid going over 40 years, and (2) a consistently subpar economy with a market performance at or below that of Scenario 2 could result in an amortization period in excess of 50 years by the December 31, 2014 actuarial valuation.**

Because of the recent increased attention by the media given to the funded ratio of public employee pension plans, the members of the board may be interested to know information about the funded ratio of the System. In this December 31, 2011 actuarial valuation, the funded ratio is 67%. In the projected Scenario 1, the funded ratio is expected to decrease in the next year to 63% as of December 31, 2012 before gradually increasing to 64% as of December 31, 2015. Only in Scenario 5 would the funded ratio as of December 31, 2015 be greater than it is now (69% after dropping to 64% as of December 31, 2012). However, we continue to believe that the amortization period is a much better indicator of the actuarial condition of the System than the funded ratio. The amortization period is forward looking and reflects the anticipated period over which future contributions will amortize the UAAL. In contrast, the funded ratio is historical and reflects only past contributions. Therefore, the amortization period for a fixed contribution rate system like APRS indicates whether the system has an adequate contribution arrangement, while the funded ratio gives no indication of whether the contribution arrangement is adequate.

Change in Amortization Period

The summary of key valuation results in Exhibit 1 compares the actuarial condition of the System on December 31, 2011 with the condition on December 31, 2010. Both valuations are based on the present plan benefit provisions, summarized in Exhibit 13. Between these two valuations, the period for amortizing the UAAL has increased by 7.5 years (from 23.2 years to 30.7 years). Since one year has passed since the prior valuation date, a one-year reduction in the amortization period to 22.2 years would be expected if the experience of the System had been exactly as anticipated (including an 8% rate of investment return on the actuarial value of assets). For the reasons described below, the System's amortization period is 8.5 years more than expected.

1. The rate of investment return, net of all expenses, on the market value of assets during 2011 was -3.5%. 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. The rate of investment return on the AVA, net of expenses, for 2011 was -0.4% compared to the assumed rate of return of 8%. This caused an **increase** in the amortization period of 9.8 years.

2. The covered payroll increased by 5.9% since the prior valuation instead of the assumed 4% increase, which **decreased** the amortization period by 1.3 years.

3. All of the experience in the aggregate other than the investment experience and the aggregate payroll experience (primarily retirement, mortality, termination, and disability experience) was slightly favorable, **decreasing** the amortization period by 1.0 year.

4. The changes in actuarial assumptions (related to DROP and PROP and summarized in Exhibit 15A) had the overall effect of **decreasing** the amortization period by 1.1 years. In a separate letter to the Board of Trustees dated July 12, 2012, we recommended the actuarial methods and assumptions for this valuation.

5. In this valuation, we made a needed refinement to reflect the timing of biweekly contributions in the determination of the normal cost as a percent of payroll rather than assuming an annual contribution. In addition, we found a change that needed to be made in the determination of the liability for vested terminated members. The combination of these two changes **increased** the amortization period by 2.1 years.

Variability in Future Actuarial Measurement

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- System experience differing from that anticipated by the current economic or demographic assumptions;

- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Analysis of the potential range of such future measurements resulting from the possible sources of measurement variability is typically outside the scope of this actuarial valuation report. However, we provided projected amortization periods for the next four annual actuarial valuations under five scenarios and the amortization period for this valuation if it had been based on the market value of assets. Additional sensitivity analysis could be performed in a subsequent report if desired by the Board of Trustees.

Retiree Death Benefit Fund

The Retiree Death Benefit Fund was established effective September 1, 2003. This fund is a separate account within the System used to advance fund and to pay \$10,000 post-retirement lump sum death benefits for retirees. The Retiree Death Benefit Fund is funded by a portion of the city's total contribution rate. As part of this December 31, 2011 actuarial valuation, the contribution rate for the Retiree Death Benefit Fund has been actuarially determined for 2013 to be 0.103%. We recommend that this new rate be effective January 1, 2013, replacing the rate of 0.102% effective for 2012 that was actuarially determined as a part of the December 31, 2010 actuarial valuation. The remainder of the city's contribution will be used for the System's liabilities excluding the \$10,000 post-retirement lump sum death benefits.

The 0.103% contribution rate is comprised of the normal cost percentage plus an additional amount to amortize the unfunded actuarial accrued liability for only the \$10,000 post-retirement lump sum death benefits over 24 years as shown below. The amortization of this unfunded actuarial accrued liability is determined as a level percentage of payroll assuming that the payroll will increase 4% per year and using a closed 25-year amortization period that began with the December 31, 2010 determination.

Allocated City Contribution Effective January 1, 2013 for the Retiree Death Benefit Fund	
Normal cost	0.035%
Amortization of unfunded actuarial accrued liability over 24 years	0.068
Total city contribution rate allocated to the Retiree Death Benefit Fund as of January 1, 2013	0.103%

The 0.103% contribution rate was determined using the same funding method and actuarial assumptions used in this December 31, 2011 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 RP-2000 Combined Healthy Mortality Tables for males and females projected to 2014 are used for both active and retired members. The following is a summary of the actuarial valuation results of the liabilities for the $10,000 post-retirement lump sum death benefits.

Actuarial Valuation Results of the Retiree Death Benefit Fund as of December 31, 2011	
1. Actuarial present value of future benefits	
a. Current retired and vested terminated members	$ 1,291,124
b. Current active members	1,016,172
c. Total	$ 2,307,296
2. Actuarial present value of future normal cost contributions	$ 402,790
3. Actuarial accrued liability (Item 1c – Item 2)	$ 1,904,506
4. Assets of fund	$ 488,051
5. Unfunded actuarial accrued liability (Item 3 – Item 4)	$ 1,416,455
6. Funded ratio (Item 4 ÷ Item 3)	25.6%

Exhibit 1

Austin Police Retirement System
Summary of Key Valuation Results

	December 31, 2010[1]	December 31, 2011[1]
1. Actuarial present value of future benefits		
a. Those now receiving benefits or entitled to receive benefits	$ 330,335,365	
• Monthly benefits		$ 343,428,175
• PROP distributions		11,360,297
b. Police officers	764,784,942	805,890,384
c. Total	$1,095,120,307	$1,160,678,856
2. Actuarial present value of future normal cost contributions	$ 318,889,280	$ 336,216,781
3. Actuarial accrued liability (Item 1c-Item 2)	$ 776,231,027	$ 824,462,075
4. Actuarial value of assets	$ 546,956,628	$ 553,701,976
5. Unfunded actuarial accrued liability (UAAL) (Item 3-Item 4)	$ 229,274,399	$ 270,760,099
6. Total contributions (percent of payroll)	34.528%[2]	34.527%[2]
7. Normal cost (percent of payroll)	22.438%	23.242%
8. Percent of payroll available to amortize the UAAL	12.090%	11.285%
9. Annualized covered payroll	$ 127,731,696	$ 135,264,530
10. Present annual amount available to amortize the UAAL	$ 15,442,762	$ 15,264,602
11. Years to amortize the UAAL	23.2 years[3]	30.7 years[4]
12. GASB 27 funded ratio (Item 4 ÷ Item 3)	70.5%	67.2%

[1] Reflects the plan provisions effective September 1, 2011 and excludes the $10,000 post-retirement lump sum death benefit.

[2] The total contribution rate of 34.63% (13% by members and 21.63% by the city) is reduced by the calculated contribution rate for the separate Retiree Death Benefit Fund, determined to be 0.102% in the December 31, 2010 valuation and 0.103% in the December 31, 2011 valuation. The 21.63% city contribution rate is the ultimate rate beginning October 2012.

[3] The amortization period was calculated reflecting the city contribution rates of 19.63% for January through September of 2011, 20.63% for October 2011 through September 2012, and 21.63% thereafter.

[4] The amortization period was calculated reflecting the city contribution rates of 20.63% for January through September of 2012 and 21.63% thereafter.

Exhibit 2

Austin Police Retirement System
25-Year Projection

Year	*Market Value of Fund at Beginning of Year*	*Contributions by City and Police Officers*	*Net Investment Income*	*Total Benefit Payments*	*Market Value of Fund at End of Year*	*Ratio of Fund to Payments*
2007	$ 461,179,532	$ 31,444,215	$ 44,359,401	$ 21,971,475	$ 515,011,673	23.44
2008	515,011,673	34,942,710	-136,715,791	26,118,172	387,120,420	14.82
2009	387,120,420	38,447,581	34,632,706	28,173,153	432,027,554	15.33
2010	432,027,554	40,081,161	51,312,351	30,875,847	492,545,219	15.95
2011	492,545,219	43,641,189	-17,234,790	34,862,987	484,088,631	13.89
2012	484,088,631	45,827,623	38,864,010	42,404,635	526,375,629	12.41
2013	526,375,629	48,715,791	42,369,098	42,239,591	575,220,927	13.62
2014	575,220,927	50,664,423	46,225,841	45,460,250	626,650,941	13.78
2015	626,650,941	52,691,000	50,204,577	50,878,446	678,668,072	13.34
2016	678,668,072	54,798,640	54,407,004	51,959,694	735,914,022	14.16
2017	735,914,022	56,990,586	58,884,470	56,706,878	795,082,200	14.02
2018	795,082,200	59,270,209	63,581,263	59,903,026	858,030,646	14.32
2019	858,030,646	61,641,017	68,565,576	63,562,919	924,674,320	14.55
2020	924,674,320	64,106,658	73,760,227	69,449,611	993,091,594	14.30
2021	993,091,594	66,670,924	79,060,637	76,338,186	1,062,484,969	13.92
2022	1,062,484,969	69,337,761	84,559,797	80,312,766	1,136,069,761	14.15
2023	1,136,069,761	72,111,271	90,349,505	85,513,173	1,213,017,364	14.19
2024	1,213,017,364	74,995,722	96,295,160	93,651,462	1,290,656,784	13.78
2025	1,290,656,784	77,995,551	102,498,547	96,845,439	1,374,305,443	14.19
2026	1,374,305,443	81,115,373	109,023,043	104,150,184	1,460,293,675	14.02
2027	1,460,293,675	84,359,988	115,932,204	106,642,239	1,553,943,628	14.57
2028	1,553,943,628	87,734,388	123,125,711	117,478,876	1,647,324,851	14.02
2029	1,647,324,851	91,243,764	130,525,147	122,764,791	1,746,328,971	14.22
2030	1,746,328,971	94,893,515	138,337,118	129,123,515	1,850,436,089	14.33
2031	1,850,436,089	98,689,256	146,483,025	137,485,813	1,958,122,557	14.24
2032	1,958,122,557	102,636,826	155,238,881	137,909,921	2,078,088,343	15.07
2033	2,078,088,343	106,742,299	164,685,046	145,792,838	2,203,722,850	15.12
2034	2,203,722,850	111,011,991	174,672,163	151,653,605	2,337,753,399	15.42
2035	2,337,753,399	115,452,471	185,275,077	159,082,335	2,479,398,612	15.59
2036	2,479,398,612	120,070,570	196,767,914	159,669,954	2,636,567,142	16.51

A. Data for years 2007 through 2011 were 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 2012 through 2036:

1. Benefits will be paid in accordance with the demographic and economic assumptions used in this December 31, 2011 actuarial valuation and include benefit payments from the Retiree Death Benefit Fund (account).
2. Contributions are made by both the police officers and the city. Contributions are 13% of pay by the police officers. The city will contribute 20.63% through September 2012 and then the rate will increase to 21.63% on October 1, 2012.
3. Annual payroll for 2012 will be $135,264,530. 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. No ad hoc COLAs were assumed beginning January 1, 2012 or thereafter.

Exhibit 3

Austin Police Retirement System
Net Market Value of Assets as of December 31, 2010 and 2011
Including the Retiree Death Benefit Fund

	December 31, 2010	December 31, 2011
Assets		
Investments		
Real Estate Interests	$ 114,332,543	$ 126,796,553
Corporate Stocks	159,866,871	144,078,778
U.S. Government Bonds	7,805,823	0
International Government Securities	53,346,493	48,287,751
International Stocks	23,977,184	24,314,676
Short-Term Investment Funds	10,647,971	14,285,087
Partnership Interests	47,946,856	47,466,319
Corporate Bonds	16,605,560	13,938,905
Alternatives	54,963,696	58,176,143
Retiree Death Benefit Fund	407,858	488,051
Total Investments	$ 489,900,855	$ 477,832,263
Other Assets		
Interest and Dividends Receivable	$ 801,965	$ 4,422,524
Cash	311,721	83,784
Fixed Assets	744,435	656,545
Contributions Receivable	1,376,860	1,726,399
Other Assets	(162)	7,611
Total	$ 3,234,819	$ 6,896,863
Total Assets	$ 493,135,674	$ 484,729,126
Liabilities		
Refunds Payable	$ 127,757	$ 124,199
Other Payables	462,698	516,296
Total Payables	$ 590,455	$ 640,495
Net Market Value of Assets (Assets Minus Liabilities)	$ 492,545,219[1]	$ 484,088,631[2]

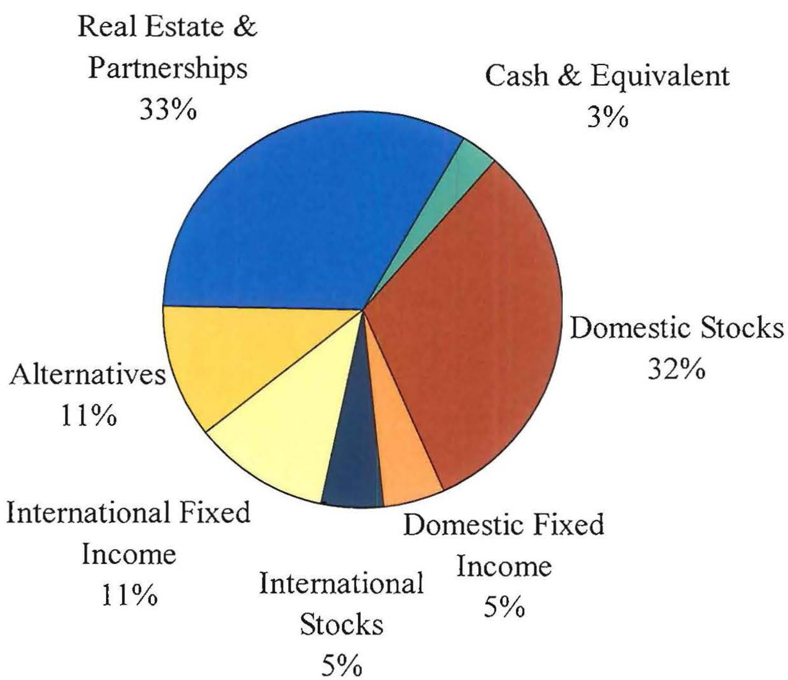
[1] Includes $407,858 for the Retiree Death Benefit Fund. The Net Market Value of Assets, excluding the Retiree Death Benefit Fund, is $492,137,361.

[2] Includes $488,051 for the Retiree Death Benefit Fund. The Net Market Value of Assets, excluding the Retiree Death Benefit Fund, is $483,600,580.

Exhibit 4

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

December 31, 2010



December 31, 2011

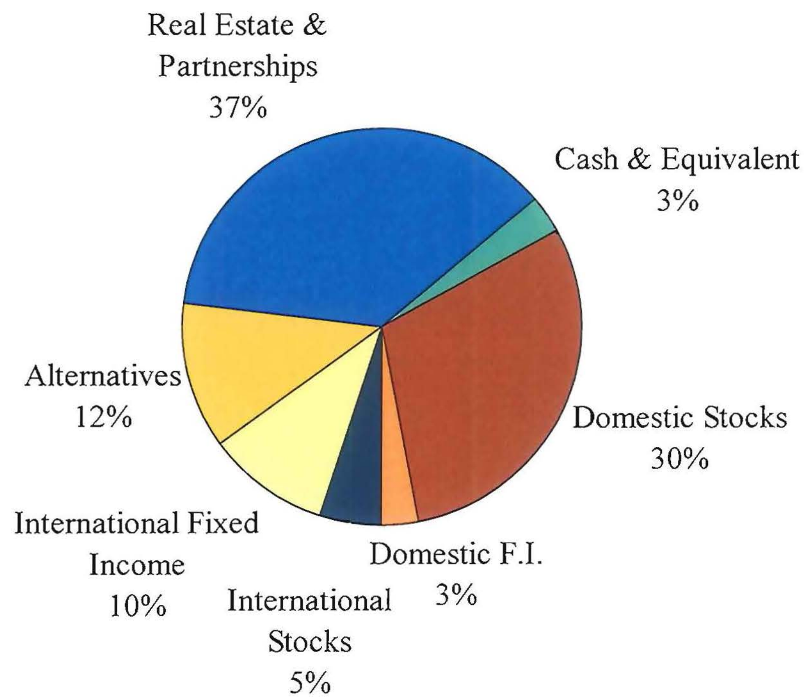


Exhibit 5
Austin Police Retirement System
Development of Actuarial Value of Assets

Calculation of Actuarial Investment Gain/(Loss) Based on Total Market Value for Plan Years	2011	2010	2009	2008
1. Market Value of Assets as of beginning of year	$ 492,545,219	$ 432,027,554	$ 387,120,420	$ 515,011,673
2. City of Austin Contributions	26,028,992	23,501,902	22,272,667	20,171,151
3. Police Officer Contributions	17,612,197	16,579,259	16,174,914	14,771,559
4. Benefit Payments and Contribution Refunds	(34,862,987)	(30,875,847)	(28,173,153)	(26,118,172)
5. Expected Investment Return*	39,747,991	34,923,333	31,372,704	41,547,125
6. Expected Market Value of Assets as of end of year	$ 541,071,412	$ 476,156,201	$ 428,767,552	$ 565,383,336
7. Actual Market Value of Assets as of end of year	484,088,631	492,545,219	432,027,554	387,120,420
8. Actuarial Investment Gain/(Loss)	$(56,982,781)	$ 16,389,018	$ 3,260,002	$(178,262,916)
9. Market Value Rate of Return Net of Expenses	(3.5)%	11.8%	8.8%	(26.3)%
10. Rate of Actuarial Investment Gain/(Loss)	(11.5)%	3.8%	0.8%	(34.3)%

* Assuming (1) uniform distribution of contributions and payments during the plan year and (2) expected investment rate of return of 8.00%.

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

Plan Year	Investment Gain/(Loss)	Deferral Percentage	Deferred Gain/(Loss) as of December 31, 2011
2011	$ (56,982,781)	80%	$ (45,586,225)
2010	16,389,018	60%	9,833,411
2009	3,260,002	40%	1,304,001
2008	(178,262,916)	20%	(35,652,583)
Total			$ (70,101,396)

Actuarial Value of Assets as of December 31, 2011

11. Market Value of Assets as of December 31, 2011	$ 484,088,631
12. Deferred Gain/(Loss) to be recognized in future	(70,101,396)
13. Preliminary Value (Item 11 – Item 12)	$ 554,190,027
14. Corridor for Actuarial Value of Assets	
a. 80% of Market Value as of December 31, 2011 (minimum)	387,270,905
b. 120% of Market Value as of December 31, 2011 (maximum)	580,906,357
15. Total Actuarial Value as of December 31, 2011	554,190,027
16. Retiree Death Benefit Fund as of December 31, 2011	488,051
17. Net Actuarial Value as of December 31, 2011 (Item 15-Item 16)	$ 553,701,976
18. Adjustment to market value of assets (Item 15 – Item 11)	$ 70,101,396

Exhibit 6

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

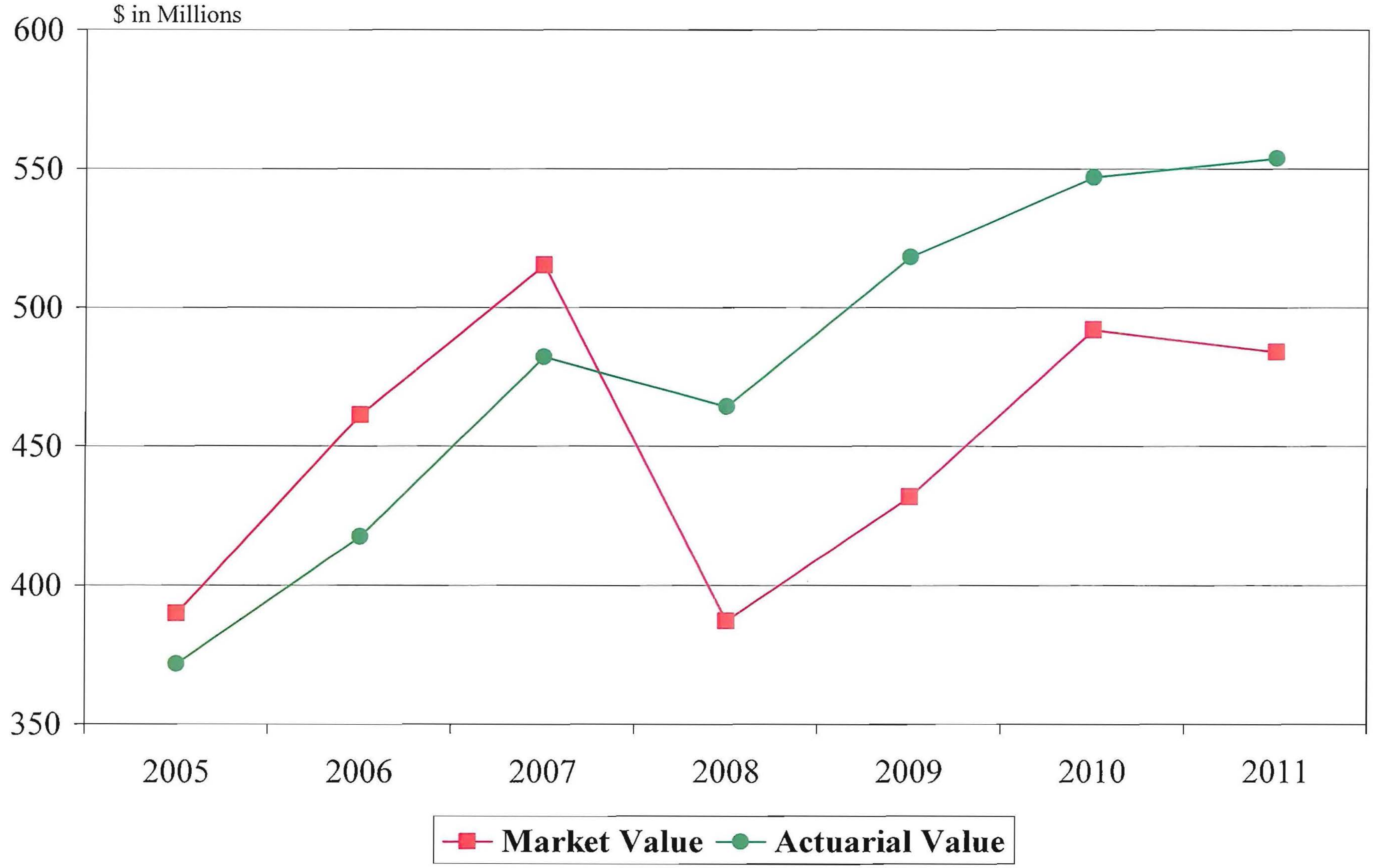


Exhibit 7

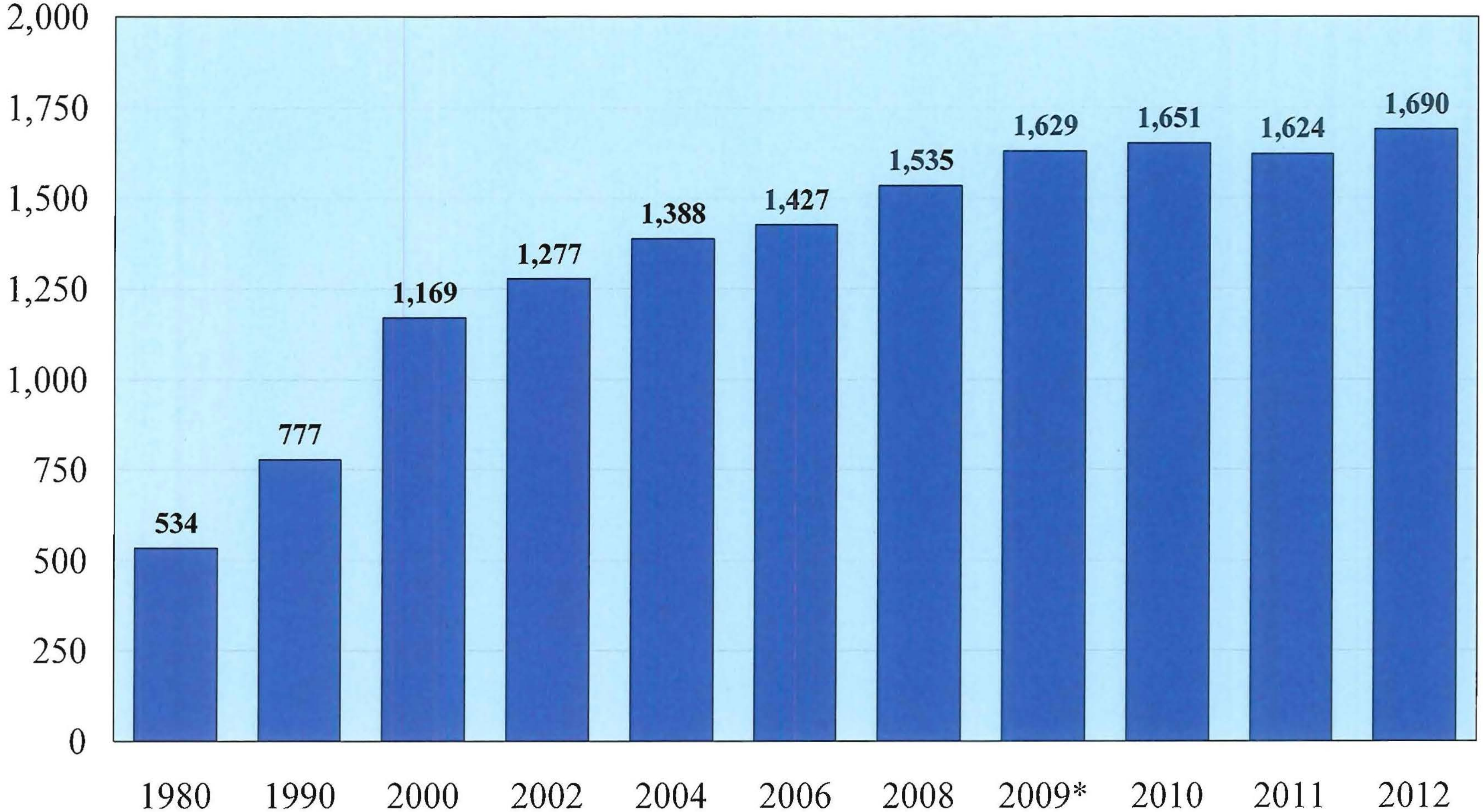
Austin Police Retirement System
Distribution of Police Officers by Age and Service as of December 31, 2011
with Average Annual Salary

Years of Service*	Attained Age: Under 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or Over	Total	Average Annual Salary
0	7	29	12	4	1	0	0	0	0	53	$32,056
1	5	34	30	13	3	1	0	0	0	86	57,331
2	0	34	28	9	4	0	0	0	0	75	60,957
3**	0	1	8	16	22	17	11	8	2	85	72,053
4	0	31	35	19	5	2	0	0	0	92	67,306
5	0	44	59	22	16	5	2	0	0	148	67,458
6	0	4	27	16	6	4	0	0	0	57	67,678
7	0	0	24	12	14	2	0	0	0	52	72,073
8	0	0	15	26	24	7	0	0	0	72	73,330
9	0	0	11	23	5	5	0	0	0	44	73,592
10	0	0	22	39	26	6	4	0	0	97	74,663
11	0	0	14	43	23	9	4	0	0	93	79,237
12	0	0	2	18	15	2	2	0	0	39	81,661
13	0	0	1	33	32	18	3	0	0	87	83,676
14	0	0	0	34	37	14	2	2	0	89	84,385
15	0	0	0	25	28	6	1	0	0	60	90,283
16	0	0	1	7	34	12	0	1	0	55	91,863
17	0	0	0	6	29	23	5	1	0	64	100,352
18	0	0	0	0	27	13	6	0	0	46	103,546
19	0	0	0	0	16	24	13	4	0	57	102,904
20-24	0	0	0	0	21	61	25	11	0	118	106,286
25-29	0	0	0	0	0	21	54	16	1	92	108,969
30-34	0	0	0	0	0	0	8	15	3	26	101,461
35-39	0	0	0	0	0	0	0	1	1	2	102,651
40-44	0	0	0	0	0	0	0	0	1	1	122,630
Totals	12	177	289	365	388	252	140	59	8	1,690	$80,038
Average Annual Salary	$41,302	$58,045	$66,521	$76,572	$85,220	$94,067	$99,682	$98,101	$100,981	$80,038	

* Service with APRS only.
** Includes most of the PSEM transfers in January 2009.

Exhibit 8

Austin Police Retirement System
Historical Summary of Growth in Number of Contributing Members
as of January 1

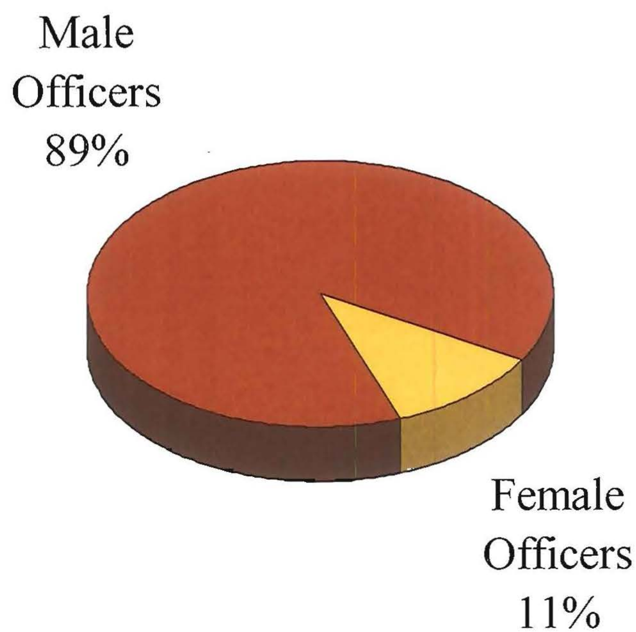


* Includes the PSEM transfers in January 2009.

	12-year period 2000-2012: 3.1%
Average annual increase over:	22-year period 1990-2012: 3.6%
	32-year period 1980-2012: 3.7%

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, 2011 Valuation



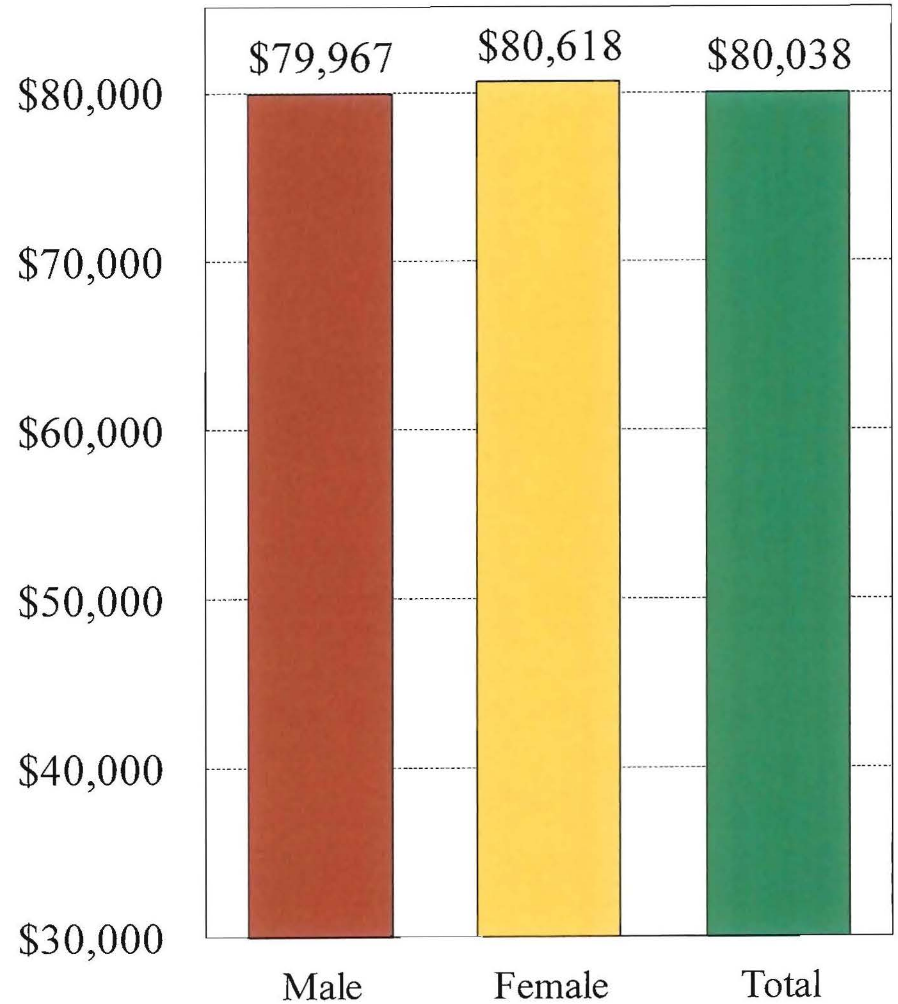


Exhibit 10

Austin Police Retirement System
Breakdown of Pensioners by Type and Annuity Option
as of the December 31, 2011 Valuation

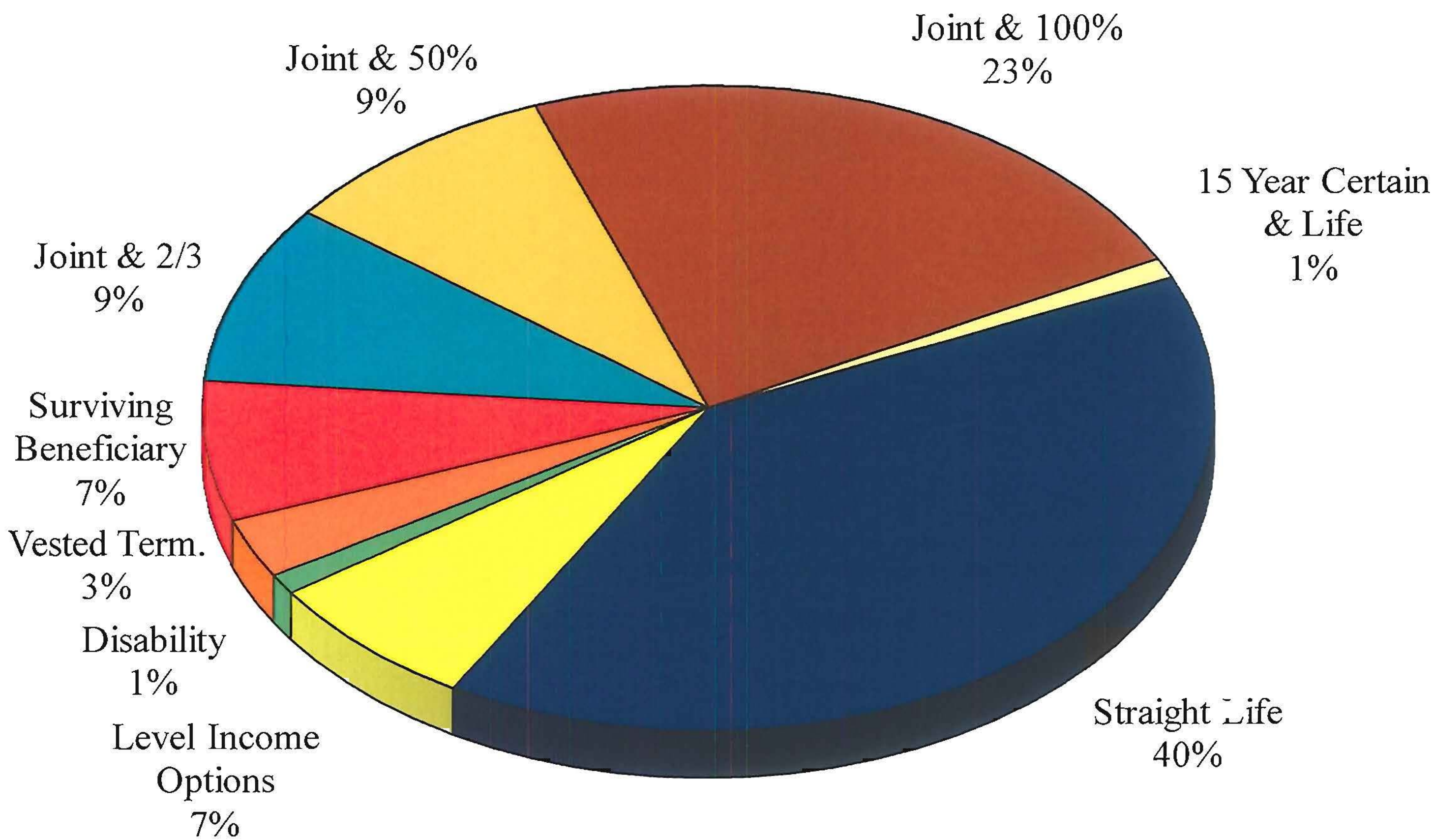


Exhibit 12

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

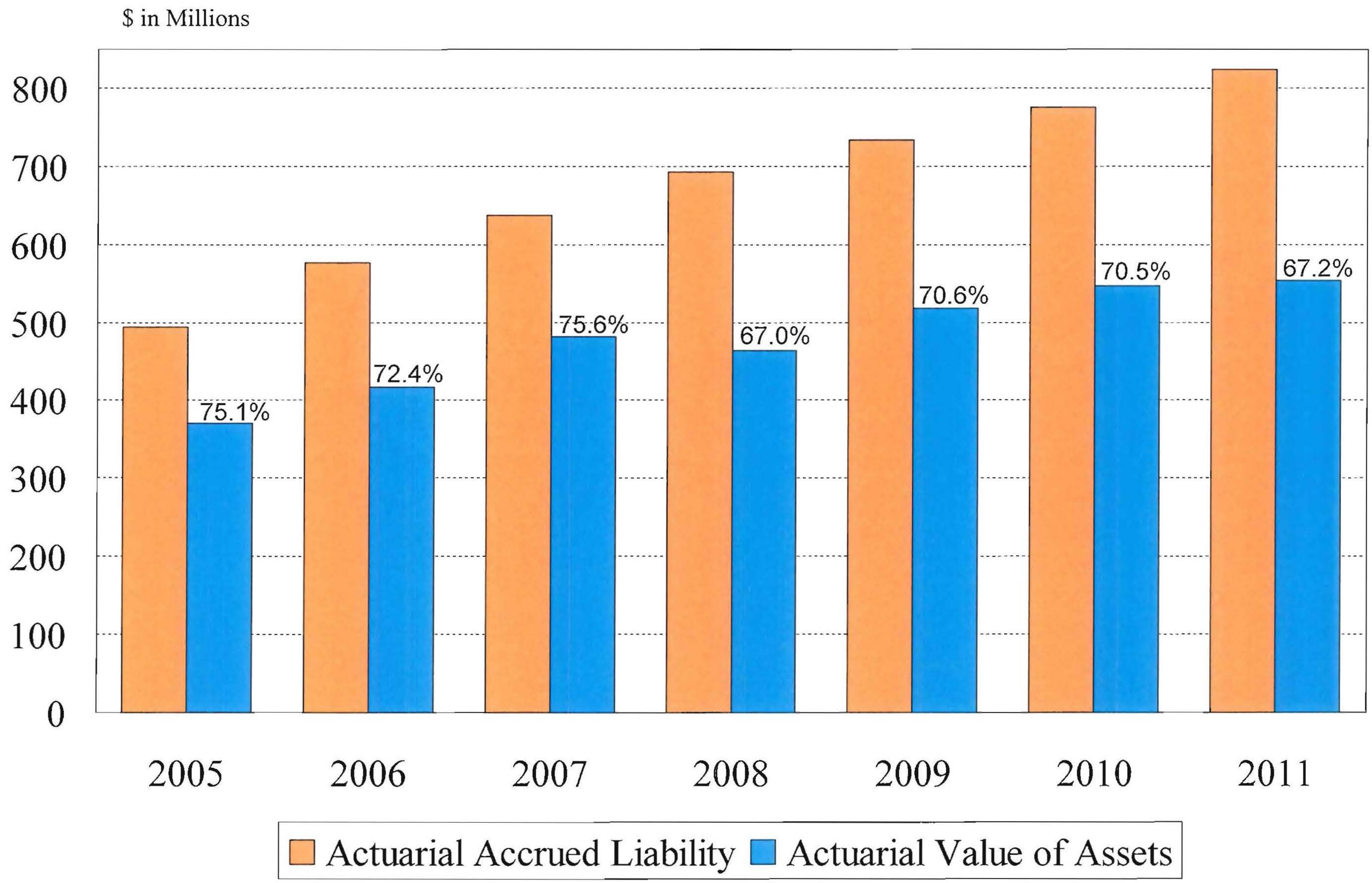


Exhibit 11

Austin Police Retirement System
Summary Data of Police Officers and Pensioners
as of the December 31, 2011 Valuation

Active Police Officers	Male	Female	Total
Total Contributing Police Officers	1,505	185	1,690
Annualized Reported Payroll	$120,350,115	$14,914,415	$135,264,530
Average Annual Rate of Pay	$79,967	$80,618	$80,038

Pensioners and Vested Terminated Officers	Number	Monthly Payment	Actuarial Present Value of Benefits
Service Retirements by Type of Annuity			
Straight Life	235	$1,210,740	$151,434,581
Joint and 100%	133	618,827	83,009,878
Joint and 50%	51	268,020	33,874,471
Joint and Two-Thirds	50	253,309	32,609,343
Level Income Straight Life	15	69,041	5,976,638
Level Income Joint and Two-Thirds	21	90,050	8,510,384
Level Income Joint and 100%	8	36,939	4,350,170
Fifteen Year Certain and Life	3	12,154	1,369,562
Total Service Retirements	516	2,559,080	321,135,027
PROP Distributions			11,360,297
Disability Retirements	4	10,033	1,413,812
Surviving Beneficiaries	43	158,118	16,299,601
Vested Terminated Officers	20	35,547	1,253,304
Alternate Payees	22	26,091	3,326,431
Total	605	$2,788,869	$354,788,472

Exhibit 11 (continued)

Austin Police Retirement System
Police Officers and Pensioners Reconciliation

	Police Officers	Current Payment Status	Vested Terminated Police Officers	Total
1. As of December 31, 2010	1,624	543[1]	21	2,188
2. Change of status				
a. retirement	(40)	43	(3)	0
b. disability	0	0	0	0
c. death	0	(4)	0	(4)
d. withdrawal	(11)	0	0	(11)
e. vested termination (VT)	(2)	0	2	0
f. new VT from PRP	0	0	0	0
g. new QDRO	0	3	0	3
h. completion of payment	0	0	0	0
i. new retirement from PRP	0	0	0	0
j. net changes	(53)	42	(1)	(12)
3. New police officers	119	0	0	119
4. As of December 31, 2011	1,690	585[2]	20	2,295

[1] Includes 20 alternate payees of QDROs.
[2] Includes 22 alternate payees of QDROs.

Exhibit 13

Austin Police Retirement System
Summary Plan Description

Date System Began: January 1, 1980

Plan Effective Date: September 1, 2011

Administration: The System 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: 13% of each police officer's "Compensation Considered".

City Contributions: 18% of "Compensation Considered" for all "Employees Included" effective as of October 1, 1996 through December 31, 2008. Beginning in January 2009, the contribution rate increased to 18.25% and increased to 18.63% effective October 1, 2009, both as a result of implementing the Proportionate Retirement Program. The city contribution rate increased to 19.63% effective October 1, 2010, and it will increase further to 20.63% effective October 1, 2011 and to 21.63% effective October 1, 2012. Since September 1, 2003, a very small portion of the city contribution has been 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, (b) any previously forfeited service that is reinstated according to the provisions for reinstatement, and (c) any "permissive service credit" that is purchased according to plan provisions.

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.

Exhibit 13 (continued)

Austin Police Retirement System
Summary Plan Description

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, effective December 1, 2007, 3.20% 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 based on credited service and compensation to date of disability; however, not less than 20 years of service will be credited for an occupational disability.

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 $10,000.

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 $10,000 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 $10,000 lump sum death benefit is payable to the beneficiary.

Exhibit 13 (continued)

Austin Police Retirement System
Summary Plan Description

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 post-retirement lump sum death benefits. This fund is funded by city contributions. Effective September 1, 2007, the amount of these benefits was increased to $10,000.

Termination Benefit: A member terminating employment with less than 10 years of service 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 is 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. Effective September 1, 2007, interest will not be credited to members with less than 10 years of service.

If the terminating member has 10 or more years of service, he may elect to leave his accumulated contributions 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.

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 (1) may not be earlier than the date the member completed 23 years of creditable service not reflecting any military service credit and (2) may not be earlier than 36 months prior to the date of retirement.

Exhibit 13 (continued)

Austin Police Retirement System
Summary Plan Description

Beginning in 2007, a FORWARD DROP can be elected by a member who has at least 23 years of creditable service not reflecting any military service credit. This option provides the member at retirement with a monthly annuity and a lump sum. The monthly benefit is determined at the election date as if the member had retired on that date. The amount of the lump sum depends upon the period between the election date and the actual date of retirement. The maximum lump sum possible is provided if the member retires five years after the election date.

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. No COLAs were given January 1, 2009-2012. A COLA of 1% was given January 1, 2008. No COLAs were given January 1, 2007 and January 1, 2006. COLAs of 1.75%, 3%, and 1.5% were given 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. Therefore, effective December 1, 2007, the monthly benefits of pensions also increased 6.67% because of the increase in the benefit formula from 3.0% to 3.2% of average compensation.

Proportionate Retirement Program: Beginning in 2009, the System and the city began participating in the statewide Proportionate Retirement Program (PRP). Service in other participating public employee retirement systems can be combined with service in the System to satisfy the System's requirements for service retirement eligibility and for eligibility for vested benefits for a terminated member. The participating systems, in addition to the System, are the six statewide systems, the City of Austin Employees' Retirement System, and the systems for the City of El Paso employees.

Exhibit 14

Austin Police Retirement System
Summary of Actuarial Methods and Assumptions

1. Actuarial Cost Method	Entry Age Actuarial Cost Method • The normal cost is calculated to be a level percent of compensation over a member's career. • 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.
2. Actuarial Value of Assets Method	All assets are valued at market value with an adjustment made to uniformly spread actuarial gains or losses (as measured by actual market value investment return vs. expected market value investment return) over a five-year period. The total adjustment amount shall be limited as necessary such that the actuarial value of assets shall not be less than 80% of market value nor greater than 120% of market value. As a last step, the amount in the Retiree Death Benefit Fund according to the audited financial statements is subtracted.
3. Investment Return (Interest Rate)	8% per year, net of all expenses
4. Inflation	3.75% per year
5. Salary Increase Due to General Wage Increases	4% per year
6. Salary Increases Due to Promotion, Step, and Longevity Increases	2.8% per year average over 25-year career. See Exhibit 16 for the promotion, step, 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	0% per year for first ten years; 5% per year after the first ten years

Exhibit 14 (continued)

Austin Police Retirement System
Summary of Actuarial Methods and Assumptions

9. Mortality	
a. Active and Retired	RP-2000 Combined Healthy Mortality Tables for males and females projected to 2014
b. Disabled	RP-2000 Combined Healthy Mortality Tables for males and females projected to 2014
10. Retirement Rates	See Exhibit 17 for service and age-related rates.
11. Withdrawal Rates	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 with Military Service Information in Database Who Have Not Yet Purchased Credit	• 100% of officers will purchase • All of military service will be purchased up to allowable 24 months • Officers will pay 25% of estimated cost
14. Future Pre-Employment Military Service Purchase for Officers Who Have Not Told System Whether They Have Such Service	• 35% of officers will purchase • 22 months purchased on average • Officers will pay 25% of estimated cost
15. DROP Election	75% of those assumed to retire who are eligible for at least a 12-month DROP lump sum will make such an election (RETRO) or will have made such an election (FORWARD). See Exhibit 17 for the allocation between RETRO and FORWARD.
16. DROP Period Election	Members elect the maximum period eligible (up to 36 months for RETRO and up to 60 months for FORWARD).
17. Percent Single after Eligible for Service Retirement	15%
18. Age of Spouse of Officer Who Dies While Eligible to Retire	Female 3 years younger than male

Exhibit 14 (continued)

Austin Police Retirement System
Summary of Actuarial Methods and Assumptions

19. Payment Form Election for Pre-Retirement Death Benefits a. Married Members b. Single Members	 Joint and 100% to Survivor 15-Year Certain and Life Annuity
20. Ad Hoc Cost-of-Living Increases for Pensioners	None
21. 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.
22. Forfeited Service Purchase, Probationary Service Purchase, and Uniform Military Leave of Service Purchase	100% of officers with such eligible service in the database will purchase the respective service.
23. DROP Lump Sums Left with the System for Investment after Retirement (PROP)	• 75% of officers retiring with DROP will leave their lump sum in the System until age 60. • Average annual rate credited to the PROP accounts will be 4%.
24. Payment Form for Retirement Benefits Due to Service Retirement, Disability Retirement, or Vested Termination	• Life annuity (modified cash refund) To the extent optional forms of payment are elected and conversions are determined under an actuarial basis which differs from the basis used in the valuation, actuarial gains or losses will occur. These gains or losses are expected to be very small and will be recognized through the valuation process for those new retirees making an optional election since the prior valuation.

Exhibit 14 (continued)

Austin Police Retirement System
Summary of Actuarial Methods and Assumptions

25. Future Vested Terminated Members with Earlier Retirement Date Due to the Proportionate Retirement Program	• One termination per year for next 18 years • Termination at age 45 with 18 years of service • Retirement at age 50 instead of age 62 • Final average monthly salary of $8,094 for the 2012 termination, with 4.1% per year increase for subsequent terminations
26. Additional Administrative Expenses for Participation in the Proportionate Retirement Program	An increase in the normal cost contribution rate of 0.025% of payroll
27. Contributions (% of Covered Pay)	
a. City	
i. January 2012-Sept. 2012	20.63%
ii. October 2012 and thereafter	21.63%
b. Police Officers	13.00%
28. Assumed Compensation	For the plan year first following the valuation date, the assumed compensation for each active participant is the sum of the current base rate of pay plus the current longevity rate of pay converted to an annual amount.
29. Annualized Covered Payroll	For the plan year first following the valuation date, the annualized covered payroll is the sum of the assumed compensation for all active participants.

Exhibit 15A

Austin Police Retirement System
Changes in Actuarial Methods and Assumptions

	December 31, 2010 Actuarial Assumption	December 31, 2011 Actuarial Assumption
• Price Inflation	4%	3.75%
• DROP Election – Percentage of those assumed to retire who are eligible for at least a 12-month DROP lump sum will make such an election (RETRO) or will have made such an election (FORWARD)	70% (also Exhibit 15B)	75% (also Exhibit 17)
• DROP Lump Sums Left with the System for Investment after Retirement (PROP)	70%	75%
• Average Annual Rate Credited to the PROP Accounts	5%	4%

Exhibit 15B

Austin Police Retirement System
Assumed Distribution of Retirements by Options Elected
for December 31, 2010 Actuarial Valuation

Service at Employment Termination	No DROP Elected[1]	RETRO DROP Elected	FORWARD DROP Elected	Total
23 or less	100%	0%	0%	100%
24	30	60	10	100
25	30	50	20	100
26	30	40	30	100
27	30	35	35	100
28	30	35	35	100
29	30	35	35	100
30	30	35	35	100
31	30	35	35	100
32	30	35	35	100
33	30	40	30	100
34	30	50	20	100
35	30	60	10	100
36	30	70	0	100
37	30	70	0	100
38	30	70	0	100
39	30	70	0	100
40	30	70	0	100
41	30	70	0	100
42	30	70	0	100

[1] Police officers elect a type of service retirement benefit that does not include payment of a lump sum distribution.

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, Step, and Longevity Increases	Salary Increases Due to 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
9	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[1]				For Entry Ages 33 and Above[3]			
APRS Service	22 & Under	23-27	28-32	Age	33-37	38-42	43 & Over
0-22	**50**	**50**	**50**	33-37	**100**		
23	150	150	225	38-42	**100**	**100**	
24	100	100	150	43-47	**100**	**100**	**100**
25	100	100	150	48	**100**	**100**	**100**
26	150	150	250	49	**100**	**100**	**100**
27	150	150	250	50	**100**	**100**	**100**
28	250	250	250	51	**100**	**100**	**100**
29	250	250	300	52	**100**	**100**	**100**
30	300	300	400	53	**100**	**100**	**100**
31	300	300	500	54	**100**	**100**	**100**
32	300	300	1000[2]	55	200	**100**	**100**
33	300	300		56	250	**100**	**100**
34	400	400		57	300	**100**	**100**
35	400	500		58	350	**100**	**100**
36	400	500		59	500	**100**	**100**
37	500	1000[2]		60	1000	500	**100**
38	500			61		350	**100**
39	500			62		350	800
40	500			63		350	400
41	500			64		350	400
42	1000[2]			65		1000	1000

[1] Rates are based on only APRS service and apply after an officer is eligible for retirement with combined APRS and Proportionate Retirement Program (PRP) service. Entry ages are determined based on only APRS service. **An officer would need to have some PRP service in order for the bold rates to be applicable.**

[2] 100% retirement rate will be effective at age 60 if earlier.

[3] Rates are based on age and apply after an officer is eligible for retirement with combined APRS and PRP service. Entry ages are determined based on only APRS service. **An officer would need to have some PRP service in order for the bold rates to be applicable.**

Exhibit 17 (continued)

Austin Police Retirement System
Assumed Distribution of Retirements by Option Elected

Service at Employment Termination	No DROP Elected[1]	RETRO DROP Elected	FORWARD DROP Elected	Total
23 or less	100%	0%	0%	100%
24	25	75	0	100
25	25	65	10	100
26	25	60	15	100
27	25	55	20	100
28	25	55	20	100
29	25	55	20	100
30	25	55	20	100
31	25	55	20	100
32	25	55	20	100
33	25	60	15	100
34	25	65	10	100
35	25	75	0	100
36	25	75	0	100
37	25	75	0	100
38	25	75	0	100
39	25	75	0	100
40	25	75	0	100
41	25	75	0	100
42	25	75	0	100

[1] Police officers elect a type of service retirement benefit that does not include payment of a lump sum distribution.

Exhibit 18

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

Combined Years of Service[1]	Withdrawal Rates
0	50
1	20
2	20
3	20
4	20
5	20
6	20
7	20
8	20
9	20
10	10
11	10
12	5
13	5
14	5
15	0
16	0
17	0
18	0
19	0

[1] APRS service combined with Proportionate Retirement Program service.

Exhibit 19

Austin Police Retirement System
Assumed Disability Rates Per 1,000 Members[1]

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

[1] Rates are for disability due to all causes, and occupational disability rates are assumed to be 55% of all cause rates. Rates are not applicable after an officer is or would be eligible for retirement.

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
for the System's Financial Statements for Fiscal Year
Ending December 31, 2011

I. Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Annual Covered Payroll[1] (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
12/31/06[3]	$417,283,844	$576,125,324	$158,841,480	72.4%	$100,090,151	158.7%
12/31/07[2]	482,303,290	637,559,674	155,256,384	75.6	111,809,091	138.9
12/31/08[2,4]	464,230,585	693,202,499	228,971,914	67.0	122,735,216	186.6
12/31/09[2]	518,111,923	733,634,660	215,522,737	70.6	122,928,285	175.3
12/31/10[2]	546,956,628	776,231,027	229,274,399	70.5	127,731,696	179.5
12/31/11[2]	553,701,976	824,462,075	270,760,099	67.2	135,264,530	200.2

[1] The covered payroll is based on the annual rate of base pay and longevity pay assumed for the year following the valuation date.
[2] Some of the actuarial assumptions were revised.
[3] Reflects changes in plan benefit provisions effective September 1, 2007 and December 1, 2007.
[4] Reflects changes in plan benefit provisions effective January 2009.

II. Schedule of Employer Contributions

Plan Year Ended 12/31	Actual Contribution As a Percent of Covered Payroll	Actual Contribution Amount	Annual Required Contribution (ARC)[1]			Percent of ARC Contri-buted
			Date	AP	Rate	
2006	17.906%[2]	$16,945,167[3]	12/31/04	32.0	17.906%	100.0%
2007	17.919[2]	18,510,066[4]	12/31/05	30.0	18.775	95.4
2008	17.900[2]	20,060,458[5]	12/31/06	30.0	17.846	100.3
2009	18.254[6]	22,159,076[7]	12/31/07	30.0	16.776	108.8
2010	18.788[8]	23,382,043[9]	12/31/08	30.0	20.291	92.6
2011	19.782[10]	25,888,511[11]	12/31/09	30.0	19.360	102.2

1 The ARC is based on a one-year lag between the date of the actuarial valuation ("Date") and the beginning of the plan year. The ARC is expressed as a contribution rate ("Rate") that is a percent of covered payroll. An amortization period (AP) for the ARC of up to 40 years was compliant with GASB parameters through the 2006 plan year. After the 2006 plan year, an AP of up to 30 years is compliant.
2 A portion of the Employer's total 18% contribution is allocated to a Retiree Death Benefit Fund.
3 The employer's total contribution during 2006 including the Retiree Death Benefit Fund (RDBF) was $17,033,469.
4 The employer's total contribution during 2007 including the RDBF was $18,594,236.
5 The employer's total contribution during 2008 including the RDBF was $20,171,151.
6 The employer's total contribution rate was 18.25% January-September 2009 and 18.63% October-December 2009. The average contribution rate was 18.254% (18.345% total average – 0.091% for the RDBF).
7 The employer's total contribution during 2009 including the RDBF was $22,272,667.
8 The employer's total contribution rate was 18.63% January-September 2010 and 19.63% October-December 2010. The average contribution rate was 18.788% (18.88% total average – 0.092% for the RDBF).
9 The employer's total contribution during 2010 including the RDBF was $23,501,903.
10 The employer's total contribution rate was 19.63% January-September 2011 and 20.63% October-December 2011. The average contribution rate was 19.782% (19.88% total average – 0.098% for RDBF).
11 The employer's total contribution during 2011 including the RDBF was $26,028,992.

Exhibit 21 (continued)

Austin Police Retirement System
Disclosures in Accordance with GASB Statement No. 25
for the System's Financial Statements for Fiscal Year
Ending December 31, 2011

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, 2011
Actuarial cost method	Entry Age
Amortization method	Level percentage of projected payroll, open
Amortization period	30.7 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 for promotion, step, and longevity	4.0% to 22.0% per year, averaging 6.8%
- Inflation rate per year	3.75%
- Postretirement cost-of-living adjustments	None

IV. Actuarial Information 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 was originally established in 1979 by a City Council ordinance. Since August 1991, the System has been governed by state law, with plan amendments made by the Texas Legislature. 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). The monthly benefit is equal to 3.2% of the highest 36-month average salary multiplied by years and months of service.

The 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 either elects for the RETRO DROP benefit computation date or elects to enter the FORWARD DROP. Further, the DROP provisions may be changed in the future by Board rule with approval by the System's actuary. Similarly, 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.

The Post Retirement Option Plan (PROP) is an option allowing retiring officers to leave their DROP lump sum in the System for a period of time. The participant can elect to receive partial payments from the DROP lump sum account and can also elect to delay payment of the entire DROP lump sum. Interest credits are paid on the participant's DROP lump sum account following the participant's retirement until the entire lump sum is paid. The interest credits are granted based on an annual rate determined from time to time by Board Rule.

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, limited to 6% per year, and subject to the approval of the Retirement Board and the actuary.

A $10,000 post-retirement lump sum death benefit is payable from a separate Retiree Death Benefit Fund (account) administered by the System.

Beginning in 2009, the System and the city began participating in the Texas statewide Proportionate Retirement Program (PRP). Service in other participating public employee retirement systems can be combined with service in the System to satisfy the System's requirements for service retirement eligibility and for eligibility for vested benefits for a terminated member. The participating systems, in addition to the System, are the six Texas statewide systems, the City of Austin Employees' Retirement System, and the systems for the City of El Paso employees.

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, 2011:

Exhibit 21 (continued)

Austin Police Retirement System
Disclosures in Accordance with GASB Statement No. 25
for the System's Financial Statements for Fiscal Year
Ending December 31, 2011

Retirees and beneficiaries currently receiving benefits (585) and terminated employees entitled to future monthly benefits (20)	605
Current participating members	1,690
Total	2,295

B. FUNDING POLICY

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 plan year ending December 31, 2010, participants are required to contribute 13% of their basic compensation to the System. The City's required contributions were equal to 19.63% of basic compensation for the first nine months of 2011. The City contribution rate increased to 20.63% on October 1, 2011 and will further increase to 21.63% on October 1, 2012.

Since September 1, 2003, a portion of the City's contribution has been allocated to the Retiree Death Benefit Fund. This portion, determined annually, was 0.098% for 2011 based on the December 31, 2009 actuarial valuation and is 0.102% for 2012 based on the December 31, 2010 actuarial valuation. This portion was determined based on the December 31, 2011 actuarial valuation to be 0.103% for 2013.

The City contribution rate is required by the state law governing the System and may be changed by amendment made by the Texas Legislature. The participant contribution rate may be changed by amendment made by the Texas Legislature or by appropriate actions of the Board and the participating members in accordance with the state law governing the System. The participant contribution rate was increased from 9% to 11% effective October 2006 and to 13% effective October 2007 by a recommendation of the Retirement Board and an approving vote of the participating members in accordance with the state law governing the System. During the regular 2011 session of the Texas Legislature, they set the minimum participant contribution rate at 13%.

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 contribution arrangement at the time any change is made.

Exhibit 21 (continued)

Austin Police Retirement System
Disclosures in Accordance with GASB Statement No. 25
for the System's Financial Statements for Fiscal Year
Ending December 31, 2011

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, 2011 and the plan provisions reflected in that valuation, the normal cost was 23.242% of pay and the amortization period was 30.7 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, 2012

I. Annual Pension Cost

For the fiscal year ending September 30, 2012, the City's Annual Pension Cost (APC) for the Austin Police Retirement System is $__________ as described below in footnote 4 of Trend Information. The total contributions by the City are a fixed percentage of basic compensation, consisting of base pay and longevity pay, of the members of the System. Effective October 1, 2011, the city contribution rate increased from 19.63 to 20.63% and will further increase to 21.63% on October 1, 2012.

A portion of the city's contribution is allocated to a separate Retiree Death Benefit Fund (account). This portion, determined annually, was 0.098% for 2011 based on the December 31, 2009 actuarial valuation and is 0.102% for 2012 based on the December 31, 2010 actuarial valuation. Therefore, the contributions for the fiscal year ending September 30, 2012 were equal to 20.532% of payroll for the period October 1, 2011 through December 31, 2011, and 20.528% of payroll for the period January 1, 2012 through September 30, 2012.

The annual required contribution (ARC) by the city for the fiscal year ending September 30, 2012 was based on the actuarial valuations as of December 31, 2009 (for the 2011 plan year) and as of December 31, 2010 (for the 2012 plan year) using the entry age actuarial cost method and determined in compliance with the GASB Statement No. 27 parameters, including the amortization periods for the ARC indicated below. The actuarial methods and assumptions used for the three most recent valuations are shown below:

Valuation date	12/31/2009	12/31/2010	12/31/2011
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 for ARC	30 years	30 years	30 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, step, and longevity	4.0% plus promotion, step, and longevity	4.00% plus promotion, step, and longevity
• Inflation	4.0%	4.0%	3.75%
• Cost-of-living increases	0.0%	0.0%	0.00%
• Payroll increases	4.0%	4.0%	4.00%
ARC as a percent of payroll for the plan year	19.360% 2011	19.698% 2012	21.625% 2013

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, 2012

II. Three-Year Trend Information for the Austin Police Retirement System

Fiscal Year Ending	Annual Pension Cost (APC)	Contributions as a Percent of Covered Payroll	Percentage of APC Contributed	Net Pension Obligation
09/30/2010	$_____[1]	18.538/18.539%	_____[2]	_____[1]
09/30/2011	_____[3]	19.538/19.532	_____[2]	_____[3]
09/30/2012	_____[4]	20.532/20.528	_____[2]	_____[4]

[1] As determined using worksheet on page 44 of the December 31, 2009 actuarial valuation report.
[2] The percentage of APC contributed is the actual city contributions to the System in excess of the portion of contributions for the Retiree Death Benefit Fund, divided by the APC.
[3] As determined using worksheet on page 47 of the December 31, 2010 actuarial valuation report.
[4] See the worksheet at the end of this exhibit.

III. Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Annual Covered Payroll[1] (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
12/31/06[3]	$417,283,844	$576,125,324	$158,841,480	72.4%	$100,090,151	158.7%
12/31/07[2]	482,303,290	637,559,674	155,256,384	75.6	111,809,091	138.9
12/31/08[2,4]	464,230,585	693,202,499	228,971,914	67.0	122,735,216	186.6
12/31/09[2]	518,111,923	733,634,660	215,522,737	70.6	122,928,285	175.3
12/31/10[2]	546,956,628	776,231,027	229,274,399	70.5	127,731,696	179.5
12/31/11[2]	553,701,976	824,462,075	270,760,099	67.2	135,264,530	200.2

[1] The covered payroll is based on the annual rate of base pay and longevity pay assumed for the year following the valuation date.
[2] Some of the actuarial assumptions were revised.
[3] Reflects changes in plan benefit provisions effective September 1, 2007 and December 1, 2007.
[4] Reflects changes in plan benefit provisions effective January 2009.

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, 2012

IV. Actuarial Information 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 issues a stand-alone report that is available from the Retirement Board.

The System was originally established in 1979 by a City Council ordinance. Since 1991, the System has been governed by state law, with plan amendments made by the Texas Legislature. 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). The monthly benefit is equal to 3.2% of the highest 36-month average salary multiplied by years and months of service.

The 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 either elects for the RETRO benefit computation date or elects to enter the FORWARD DROP. Further, the DROP provisions may be changed in the future by Board rule with approval by the System's actuary. Similarly, 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.

The Post Retirement Option Plan (PROP) is an option allowing retiring officers to leave their DROP lump sum in the System for a period of time. The participant can elect to receive partial payments from the DROP lump sum account and can also elect to delay payment of the entire DROP lump sum. Interest credits are paid on the participant's DROP lump sum account following the participant's retirement until the entire lump sum is paid. The interest credits are granted based on an annual rate determined from time to time by Board Rule.

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, limited to 6% per year, and subject to the approval of the Retirement Board and the actuary.

A $10,000 post-retirement lump sum death benefit is payable from a separate Retiree Death Benefit Fund (account) administered by the System.

Beginning in 2009, the System and the city began participating in the Texas statewide Proportionate Retirement Program (PRP). Service in other participating public employee retirement systems can be combined with service in the System to satisfy the System's requirements for service retirement eligibility and for eligibility for vested benefits for a terminated member. The participating systems, in addition to the System, are the six Texas statewide systems, the City of Austin Employees' Retirement System, and the systems for the City of El Paso employees.

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. FUNDING POLICY

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, 2011, participants are required to contribute 13% of their basic compensation to the System. The City's required contributions were equal to 20.63% of basic compensation from October 1, 2011 to September 30, 2012. The City contribution rate increased to 21.63% on October 1, 2012.

Since September 1, 2003, a portion of the City's contribution has been allocated to the Retiree Death Benefit Fund. This portion, determined annually, was 0.098% for 2011 based on the December 31, 2009 actuarial valuation and is 0.102% for 2012 based on the December 31, 2010 actuarial valuation. This portion was determined based on the December 31, 2011 actuarial valuation to be 0.103% for 2013.

The total City contribution rate of 20.63% during fiscal year 2011-2012 and the subsequent increase as described above are required by the state law governing the System and may be changed by amendment made by the Texas Legislature. The participant contribution rate may be changed by amendment made by the Texas Legislature or by appropriate actions of the Board and the participating members in accordance with the state law governing the System. The participant contribution rate was increased from 9% to 11% effective October 2006 and to 13% effective October 2007 by a recommendation of the Retirement Board and an approving vote of the participating members in accordance with the state law governing the System. During the regular 2011 session of the Texas Legislature, they set the minimum participant contribution rate at 13%.

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 contribution arrangement at the time any change is made. 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, 2011 and the plan provisions reflected in that valuation, the normal cost was 23.242 % of pay and the amortization period was 30.7 years.

Exhibit 22 (continued)

Austin Police Retirement System
GASB Statement No. 27 Worksheet for
Annual Pension Cost (APC) and Net Pension Obligation (NPO)
for the Fiscal Year Ending September 30, 2012

	Plan Year in Which the Accounting Year Begins	Plan Year in Which the Accounting Year Ends	Accounting Year Total
	Column A	Column B	Column C
1. Plan year	2011	2012	
2. Valuation date that is the basis for plan year ARC	12/31/2009	12/31/2010	
3. Months of accounting year in each plan year	Oct.-Dec.	Jan.-Sept.	
4. Portion of accounting year in each plan year	25%	75%	
5. GASB compliant ARC for months of accounting year in line 3	______ [1]	______ [2]	
6. ARC for the accounting year (5A+5B)			______
7. NPO at beginning of accounting year	______ [3]		
8. Actuarial investment return assumption used in calculating line 5	8.0%	8.0%	
9. Multiply line 7A by line 4 x line 8	______	______	
10. Total interest on NPO (9A+9B)			______
11. Actuarial amortization factor used in calculating line 5 amount	18.2974	18.2974	
12. Divide line 7A by line 11, then multiply by line 4	______	______	
13. Adjustment to the ARC (12A+12B)			______
14. Annual pension cost (APC) (6C+10C-13C)			______
15. Actual contributions to the plan for the accounting year			______ [4]
16. Change in NPO (14C-15C)			______
17. NPO at end of accounting year (7A+16C)			______
18. % of APC contributed (15C÷14C)			______

[1] ARC = 19.360% of actual covered payroll for October – December 2011.
[2] ARC = 19.698% of actual covered payroll for January – September 2012.
[3] The NPO as of October 1, 2011 should have been determined according to the prior year worksheet.
[4] Contributions in excess of the portion of contributions for the Retiree Death Benefit Fund.