

EMPLOYEES' RETIREMENT FUND OF THE  
CITY OF FORT WORTH

ACTUARIAL VALUATION

FOR THE YEAR BEGINNING JANUARY 1, 2009

May 20, 2009

Board of Directors  
The Employees' Retirement Fund of  
The City of Fort Worth  
4100 International Plaza, Suite 730  
Fort Worth, TX 76109

**Re: Actuarial Valuation as of January 1, 2009**

Dear Members of the Board of Directors:

We are pleased to present our Report on the actuarial valuation of the Employees' Retirement Fund of the City of Fort Worth as of January 1, 2009.

In addition to the actuarial valuation results, various accounting and statistical tables are also included which compare the results with prior years. Census data and all other information for retirees and beneficiaries, and active and vested terminated members has been provided by the Retirement Fund's staff.

***Assumptions and Methods***

Actuarial assumptions and methods are set by the Board of Directors, based upon recommendations made by the Fund's actuary. We believe the actuarial assumptions and methods are internally consistent and are reasonable, based on past and anticipated future estimated experience of the Fund.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations presented in the Report are intended to provide information for rational decision making. The actuarial assumptions and methods used in this Report comply with the parameters for disclosure that appear in the Governmental Accounting Standards Board Statement Number 25 (GASB No. 25).

***Actuarial Certification***

We certify that the information presented in the January 1, 2009 actuarial valuation report of the Employees' Retirement Fund of the City of Fort Worth is accurate and fairly portrays the actuarial position of the Fund as of January 1, 2009.

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Texas state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries and consultants. Mr. Randall is an Enrolled Actuary and Member of the American Academy of Actuaries and he meets the Qualification

Board of Directors

May 20, 2009

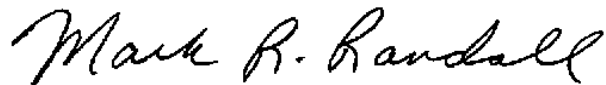
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Standards of the American Academy of Actuaries, and both Mr. Randall and Mr. Ward are experienced in performing valuations for large public retirement systems.

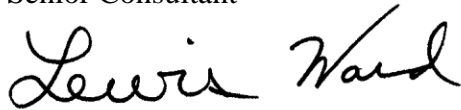
We would like to thank the Board, the Executive Director, and the Retirement Fund's staff for their assistance and input necessary to complete this actuarial valuation.

Please do not hesitate to contact us if you have any questions or need any additional or clarifying information.

Respectfully submitted.

Handwritten signature of Mark R. Randall in black ink.

Mark R. Randall, EA, MAAA  
Senior Consultant

Handwritten signature of Lewis Ward in black ink.

Lewis Ward  
Consultant

klb  
Enclosure

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SECTION A  
DISCUSSION

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## EXECUTIVE SUMMARY

The key results from the valuation of the Employees' Retirement Fund of the City of Fort Worth as of January 1, 2009 may be summarized as follows and are compared with the prior year results:

	January 1, 2009	January 1, 2008
	(1)	(2)
• Members		
- Actives	6,379	6,399
- Retirees and beneficiaries	3,304	3,204
- Vested - terminated	<u>240</u>	<u>249</u>
- Total	9,923	9,852
• Projected payroll (including overtime)	\$ 372,942,445	\$ 359,308,283
• Normal cost	\$ 66,454,970	\$ 63,869,176
as % of payroll	17.82%	17.78%
• Actuarial accrued liability (AAL)	\$ 2,192,128,182	\$ 2,059,232,093
• Actuarial value of assets (AVA)	\$1,596,392,591	\$ 1,821,688,380
• Market value of assets (MVA)	\$ 1,330,327,159	\$ 1,898,571,976
• Unfunded actuarial accrued liability (UAAL)	\$ 595,735,591	\$ 237,543,713
• Unfunded actuarial accrued liability as % of covered payroll	159.74%	66.11%
• Annual investment return assumption	8.50%	8.50%
• Estimated yield on assets (actuarial value basis)	(11.44)%	11.49%
• Total current contribution rates		
- Police officers (16.46% City, 8.73% member)	25.19%	25.19%
- All others (15.74% City, 8.25% member)	23.99%	23.99%
- Aggregate current contribution rate	24.36%	24.35%
• Benefit and refund payments	\$ 106,173,188	\$ 97,029,317
• Actuarial gains/(losses)		
- Assets	\$ (360,777,379)	\$ 49,837,246
- Actuarial accrued liability experience	\$ 15,099,902	\$ 32,372,716
- Ad hoc COLA payments	\$ (17,702,076)	\$ 0
• Total 30-year level % of pay funding cost	\$ 103,334,344	\$ 78,574,464
as % of payroll (Member + City contributions)	27.71%	21.87%
• Amortization period of unfunded actuarial accrued liability based on current contribution rates	Infinite	13.8
• Funded ratios (Assets / AAL)		
- Based on actuarial value of assets	72.8%	88.5%
- Based on market value of assets	60.7%	92.2%

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## INTRODUCTION

Gabriel Roeder Smith & Company ("GRS") has prepared this January 1, 2009 actuarial valuation of the Employees' Retirement Fund of The City of Fort Worth ("the Fund" or "the Plan"). We are pleased to have the privilege of delivering this Report and look forward to discussing the results with you.

This valuation reflects the plan provisions described in Table 14. These include all benefit increases adopted in prior years as well as the automatic cost of living adjustments for retired members. The calculations are based on the actuarial assumptions and methods described in Table 13. Please note that these assumptions are the assumptions adopted by the Board in March 2007 as a result of the recommendations from our 2007 actuarial experience study.

Pages 3-4 of this discussion section provide a summary of the valuation results. An analysis and discussion of the change in assets is provided on page 5. Pages 5-6 contain an analysis of the actuarial gains and losses during the past year.

Page 7 discusses some of the historical comparisons and statistical summaries for the Fund, and Page 9 summarize our findings and recommendations. Disclosure information based on Governmental Accounting Standards Board Statements No. 25 and No. 27 is included on pages 7-8. A discussion of the Ad-Hoc Cost-of-Living Adjustment Program is contained on page 8.

Various tables which provide a detailed analysis of the valuation are contained in Section B. Section C provides additional statistical tables.

## FUNDED STATUS OF THE PLAN

The funded status of the Fund is shown briefly in Table 1 and in detail in Table 11a of Section B. Table 1 also summarizes the significant cost items for the January 1, 2009 actuarial valuation.

Table 2 shows an allocation of the normal cost by its various components. The normal cost is the annual cost of the Fund on January 1, 2009, assuming that the actuarial accrued liability exactly equals the actuarial value of assets on that date. This normal cost is based on the Entry Age Normal actuarial cost method and is the most common method used in public sector valuations. The Entry Age Normal actuarial cost method is described in detail at the end of Table 13 in Section B.

Reviewing the composition of normal cost of the Fund, Table 2 indicates that the total normal cost as of January 1, 2009 is 17.82% of projected payroll. As may be seen in Item 1, the normal cost for the retirement benefits is 14.81% of pay. The normal cost for the vested termination benefits is 0.89%. The normal cost for refund of employee contributions is 0.87%, while the normal cost for death benefits is 0.33% of pay. Finally, the normal cost for disability benefits is 0.92% of pay.

Table 1 illustrates a number of the key actuarial items for the January 1, 2009 valuation and similar values from the January 1, 2008 valuation in column (2). As discussed above, the total normal cost rate is 17.82% of covered payroll. This compares with a value of 17.78% last year, listed in Item 4

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under column (2). The actuarial accrued liability is \$2.192 billion as shown in Item 5, and Item 6 indicates that the present actuarial value of assets equals \$1.596 billion. This compares with an actuarial accrued liability for January 1, 2008 of \$2.059 billion and actuarial value of assets of \$1.822 billion.

Since the actuarial value of assets does not exceed the actuarial accrued liability, the Fund has an unfunded actuarial accrued liability of \$595.7 million as shown in Item 7 of Table 1. This compares to the unfunded liability of \$237.5 million last year. The increase in unfunded actuarial accrued liability is primarily due to the collapse of the financial markets in the 4<sup>th</sup> quarter of 2008. This increase in the unfunded liability accompanied a decrease in the Fund's funded status. The Fund's funded status, as shown in Table 1 Item 10 (the ratio of the actuarial value of assets to the actuarial accrued liabilities), decreased from 88.46% to 72.82%. Similarly, on a market value basis, the funded ratio decreased from 92.20% to 60.69%.

The January 1, 2009 valuation determines the adequacy of the contribution policy for the next fiscal year beginning after the valuation date. Therefore, this Report is determining the adequacy of the contribution rate for fiscal year 2010.

The difference between the combined City and member contributions and the normal cost is the amount available to fund the unfunded actuarial accrued liability in the future. As a result of the significant investment losses, the anticipated contribution rates for fiscal year 2010 are no longer adequate to amortize the unfunded actuarial accrued liability over a finite period of time. The funding period, as listed in Table 1 Item 11, is infinite as of January 1, 2009. The funding period was 13.8 years as of January 1, 2008.

The number of active members decreased from 6,399 as of January 1, 2008 to 6,379 as of January 1, 2009. Over the same period of time, the average age for active Fund members increased from 42.8 to 43.0, and the average annual projected compensation increased from \$56,151 to \$58,464.

Item 8 of Table 1 provides the 30-year funding cost when amortized as a level percentage of payroll assuming covered payroll grows at 3.75% per year. This funding pattern is similar to that used by other public sector plans. This funding approach of normal cost plus amortization of unfunded actuarial accrued liability produces a contribution pattern that is intended to change from year to year in dollar terms but remain relatively consistent as a percent of total covered payroll.

The total aggregate contribution requirements reflect the fact that the combined member plus City contribution rate for police officers is 25.19% of covered payroll and 23.99% for all other members. Police officers contribute an additional percentage which is used to fund the 25-year-and-out option that became available to police officers in 1993.

As shown in Item 8, based on the January 1, 2009 valuation, the 30-year funding contribution amount would need to be \$103.3 million for members and the City combined, compared to \$78.6 million as of January 1, 2008, or 27.71% of projected payroll as of January 1, 2009, compared to 21.87% as of January 1, 2008.

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## CHANGE IN ASSETS DURING YEAR

An analysis of the change in the market value of the Fund's assets during the year is shown in Table 3. Table 4 provides an estimate of the yield on the smoothed actuarial value of assets for the Fund, and Table 5 shows the development of these assets for January 1, 2009.

Specifically, Table 3 traces the change in the market value from the beginning of the year to the end of the year. Item 2 of Table 3 shows the actual cash contributions received during the year. Item 4 shows the actual benefit payments for the year, including refunds of member contributions. As can be seen, there is a decrease in the market value of the Fund's assets during the year of \$568.2 million as shown in Item 5 of Table 3. This includes net investment income for the year of -\$550.3 million as shown in Item 3.

Table 4 uses the change in assets during the year to produce an estimated annual yield for the actuarial and market value of assets. In Item 4 the estimated yield is based on a traditional yield formula assuming uniform distribution of income, contributions, and expenditures during the year. The Fund's estimated yield for the year on the actuarial value of assets is -11.44%, compared to the assumed annual investment return of 8.50%. The estimated yield for the year on the market value of assets is -29.12% as of December 31, 2008, which compares with 5.30% for 2007.

Table 5 shows the development of the actuarial value of assets as of January 1, 2009. The intent of the method is to smooth out the year to year natural market fluctuations in the assets used to determine the funding levels of the Fund. The actuarial value of asset method spreads the recognition of investment gains (losses) over (under) the assumed 8.50% rate for the prior period equally over 5 years at 20% per year. This produced a preliminary actuarial value of assets of \$1.857 billion (Item D.3). This preliminary value is then tested to determine if it is within 20% of the end of year market value of assets. If it is not within this corridor (80% to 120% of market value) then the actuarial value of assets is increased/decreased until the value is within the corridor. The corridor limits as of December 31, 2008 are shown in Item D.4 of Table 5. Because the preliminary actuarial value of assets is not within the corridor, the final actuarial value of assets is set equal to the nearest corridor value. As shown in Item D.5. of Table 5, there was a decrease in the actuarial value of assets. As of January 1, 2009, the actuarial value was \$1.596 billion as compared to \$1.822 billion as of January 1, 2008. The asset valuation method is described in detail in Item B of Table 13.

At the recommendation of GRS, the Board made the decision to "mark to market" Fund assets for the October 1, 2004 actuarial valuation (i.e., the actuarial value of assets was set equal to the market value of assets for the October 1, 2004 actuarial valuation). In addition, all of the deferred gains and losses were reduced to zero for plan years prior to October 1, 2004. Consequently, the 2009 valuation has \$0 bases for years prior to the October 1, 2004 actuarial valuation. New bases have been generated by 2005, 2006, 2007 and 2008 investment experience.

## ACTUARIAL GAINS AND LOSSES

An important part of the change in unfunded actuarial accrued liability from year to year is due to the

creation of actuarial gains and losses of the Fund. Tables 6 and 7 summarize the asset gain and actuarial liability gain for the period January 1, 2008 through December 31, 2008.

As can be seen in Table 6, Item 5 shows that the expected value of actuarial assets as of January 1, 2009 is \$1.957 billion. This reflects an assumed annual investment return of 8.50% for the prior period on beginning of year assets, contributions, and benefits during the year. The actual actuarial value of assets on that date is \$1.596 billion and is less than the expected value by an amount of \$361 million as indicated in Item 7. As a result, there was an actuarial asset loss for the year.

Table 7 shows the calculation of the total asset and liability actuarial gain or loss for the year. The liability gain or loss reflects the difference between the anticipated year-end Fund liabilities determined by the assumed actuarial assumptions (mortality, disability, withdrawal, retirement, salary increase, etc.) and actual experience during the past year. If experience is more favorable than expected, a gain to the Fund will result. Total Fund experience also includes the difference between the expected return on assets and actual return during the past year. There may be other sources for actuarial gains or losses, such as a change in the actuarial assumptions or a change in the benefit provisions of the Fund.

Item 7 of Table 7 indicates that the Fund had a total actuarial gain of \$363.4 million as of January 1, 2009. As can be seen in Item 10 of Table 7, there was a \$17.7 million loss due to the granting of the January 1, 2009 ad hoc COLA. Combined with the \$360.8 million actuarial asset loss described above, this implies a gain of \$15.1 million in actuarial accrued liability experience as shown in Item 12. The total experience gain is equal to -15.77% of the actuarial accrued liability, as shown in Item 15. The asset loss for the year is -22.60% when expressed as a percentage of the actuarial value of the Fund's assets on January 1, 2009, and the experience liability gain is equal to 0.69% of the actuarial accrued liability on the same date. The liability gain is primarily due to less than expected salary increases.

## **ACTUARIAL METHODS AND ASSUMPTIONS**

No changes were made in the actuarial assumptions since the prior valuation. Actuarial liabilities are determined using the Entry Age Normal actuarial cost method. The annual assumed investment return rate is 8.50%.

Please see Table 13 of Section B for a summary of the actuarial assumptions and methods used in this valuation.

## **BENEFIT PROVISIONS**

The guaranteed COLA was removed from the Plan for nonvested employees as of January 1, 2008 and all employees hired after this date. Vested employees and retirees as of the valuation date were allowed to make an irrevocable election to join the new Ad-Hoc COLA program. The Ad-Hoc program is further discussed on page 8 of this Report. There have been no changes to the benefit provisions of the Fund since the prior valuation. Table 14 of Section B includes a summary of the benefit provisions for each of the employee groups in the Employees' Retirement Fund of The City of Fort Worth.

## HISTORICAL COMPARISONS AND STATISTICAL SUMMARIES

Various statistical data on the Fund is shown in the tables contained in Sections C. In addition, Tables 8 through 10 of Section B contain certain actuarial trend information which may be informative.

Table 8 relates the size of the unfunded actuarial accrued liability (UAAL) compared to three different measurements. In Columns 3 and 4, the UAAL is related to the projected payroll of the Fund. Columns 5 and 6 relate the UAAL to the actuarial value of present assets, while Columns 7 and 8 relate the UAAL to the total actuarial accrued liability of the Fund.

Table 9 provides the active membership, projected payroll, and average salary as of the valuation date. Projected payroll and the average salary increased during the past year. Overtime pay has been included in projected payroll beginning October 1, 1997. Since January 1, 2007, the covered payroll is based on the members' rate of pay plus a load for overtime and other non-base pay compensation. Please see Item 9 of Table 13 for a description of these loads.

Table 10 shows the number of retired members and the average monthly benefit for those individuals. It shows a continued increase in the number of retirees and benefits over the past several years.

## GASB NO. 25 & NO. 27 DISCLOSURES

The Governmental Accounting Standards Board has issued Statement No. 25 (GASB No. 25) which provides the manner in which the actuarial condition of a public sector retirement plan is to be disclosed.

The required schedule of funding progress is shown in Table 11a. Table 11b is the schedule of annual required contributions specified by GASB No. 25. Table 11c provides notes to the required supplementary information.

Assets used for GASB No. 25 disclosure are based on the actuarial value rather than market value. Fund liabilities are based on the funding method used for determining Fund liabilities for valuation purposes, as required by GASB No. 25.

The annual investment return assumption to determine Fund liabilities is 8.50%, the same rate used for the actuarial valuation as of January 1, 2009. All changes in benefit provisions have been adopted by the Board and are also recognized.

We have calculated the GASB annual required contribution (ARC) as the contribution necessary to pay the normal cost and a 30-year amortization of the unfunded liability expressed as a level percentage of pay. The City is currently scheduled to contribute less than the ARC beginning in Fiscal Year 2010. This shortfall in contributions will increase the Net Pension Obligation (NPO).

The City contributed less than the ARC for fiscal years 2005, 2006, 2007, and 2008 and will contribute more than the ARC in fiscal year 2009. Table 11d shows the development of the NPO that should be disclosed on the City's financial statements.

### AD-HOC COST-OF-LIVING ADJUSTMENT PROGRAM

Under the Ad-Hoc Cost-of-Living Adjustment (COLA) program, the COLA increase, if any, for the following January 1<sup>st</sup> is determined based upon the prior year's actuarial valuation results. Therefore, the January 1, 2010 Ad-Hoc COLA percentage increase is determined based upon the January 1, 2009 actuarial valuation results detailed herein.

As provided under the Administrative Rules and Procedures governing the Employees' Retirement Fund of the City of Fort Worth, the Ad-Hoc COLA percentage is based on the Funding Period with the following four levels or tiers:

Tier	Funding Period (to nearest 1/10 <sup>th</sup> of a year)	COLA Percentage Increase
#1	28.1 or greater	0.0%
#2	24.1 to 28.0	2.0%
#3	18.1 to 24.0	3.0%
#4	18.0 or less	4.0%

The procedure for determining the actual COLA percentage is to first establish the initial COLA percentage based upon results of the January 1, 2009 actuarial valuation. Since the funding period for the January 1, 2009 valuation of infinite falls under the level of Tier #1, the initial COLA percentage is 0.0%. Since the initial COLA percentage is 0.0% no further work is needed and the final COLA percentage is set equal to 0.0%.

A 30-year projection of estimated future valuation results of the Fund is shown in Table 12 of this Report. The projection includes adjustments for the following year's Ad-Hoc COLA based on the current year's valuation results. Based on the projections it is not expected that any future ad hoc COLAs will be granted. It is important to note that these projections assume that all of the actuarial assumptions will be exactly met. Actual Plan experience will be different than assumed and could result in materially different results from those shown in Table 12.

### SUMMARY AND CLOSING COMMENTS

It is our opinion that the results of this actuarial valuation provide a reasonable reflection of the funded status of the Fund. Like most other large public sector retirement systems, the Fund experienced severe turmoil in its investments during the 4<sup>th</sup> quarter of 2008. This resulted in a significant decrease in the market value of assets of the Fund. As a result of this decline, the 80% -

120% of market value corridor around the actuarial assets was exceeded. This forced the recognition of additional investment losses this year in excess of the normal 20% resulting in a decrease in the actuarial value of assets.

The Fund is now in a very similar situation to where it was on January 1, 2007. The Fund has a substantial unfunded liability (\$596 million) and the funding period is once again infinite. However, at January 1, 2007 the Fund was deferring net investment gains of \$170 million. As of January 1, 2009, the Fund is deferring net investment losses of \$266 million.

Due to the extreme volatility of the investment markets we are suggesting that the Fund wait until at least the next valuation cycle before taking any action with regards to the benefits and contribution patterns of the Fund. It is possible that there could be a substantial recovery over the next one or two years that will make the situation considerably different than it is now. It would be better to make long term benefit and financing decisions once we have a better idea what the long term costs of the Fund will be. However, one thing is clear, if the investment markets do not have a substantial recovery the current benefit structure will not be supportable by the current contribution patterns and changes to the benefits and/or contributions will need to be made.

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## SECTION B

### ACTUARIAL TABLES

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**ACTUARIAL TABLES**

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## SUMMARY OF COST ITEMS

	<u>January 1, 2009</u> (1)	<u>January 1, 2008</u> (2)
1. Members		
a. Active	6,379	6,399
b. Retired and beneficiaries	3,304	3,204
c. Vested terminated	<u>240</u>	<u>249</u>
d. Total	9,923	9,852
2. Projected payroll of active members	\$ 372,942,445	\$ 359,308,283
3. Averages for active members		
a. Average age	43.0	42.8
b. Average years of service	10.3	10.1
c. Average pay	\$ 58,464	\$ 56,151
4. Normal cost (adjusted for contribution timing) as % of pay	\$ 66,454,970 17.82%	\$ 63,869,176 17.78%
5. Actuarial accrued liability (AAL)		
a. Active members	\$ 1,211,170,259	\$ 1,158,789,560
b. Retired members	955,810,867	875,564,022
c. Vested terminated members	24,140,038	23,492,575
d. Terminated members due refund	<u>1,007,018</u>	<u>1,385,936</u>
e. Total	\$ 2,192,128,182	\$ 2,059,232,093
6. Present actuarial value of assets	\$ 1,596,392,591	\$ 1,821,688,380
7. Unfunded actuarial accrued liability (UAAL)	\$ 595,735,591	\$ 237,543,713
8. Total 30-year level percent of pay funding cost with 3.75% payroll growth (member + City contributions) as % of pay	\$ 103,334,344 27.71%	\$ 78,574,464 21.87%
9. Estimated yield on actuarial value of assets	(11.44)%	11.49%
10. Funded ratio (Item 6. divided by Item 5.e.)	72.82%	88.46%
11. Amortization period of unfunded actuarial accrued liability	Infinite	13.8 years
12. Aggregate current contribution rate as a percentage of payroll		
a. City	15.96%	15.96%
b. Member	<u>8.39%</u>	<u>8.39%</u>
c. Total	24.35%	24.35%
13. GASB 30-year annual required employer contribution as a level percentage of payroll	19.32%	13.48%
14. Selected Actuarial Results Reflecting Ad-Hoc COLA for the following January 1st:		
a. Ad-Hoc COLA Percent for January 1, 2010	0.0%	4.0%
b. Estimated additional liability as of January 1, 2010 due to Ad-Hoc COLA (in millions)	\$0.0	\$15.8
c. Funding Period as of January 1, 2009 with 2010 Ad-Hoc COLA	Infinite	15.0 years

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**ANALYSIS OF NORMAL COST BY COMPONENT**

Benefit Component	December 31, 2008 Cost as % of Pay	December 31, 2007 Cost as % of Pay
(1)	(2)	(3)
1. Retirement benefits	14.81%	14.77%
2. Vested termination benefits	0.89%	0.89%
3. Refund of contributions	0.87%	0.87%
4. Death benefits	0.33%	0.33%
5. Disability benefits	<u>0.92%</u>	<u>0.92%</u>
6. Total normal cost	17.82%	17.78%

**CHANGE IN ASSETS DURING YEAR**

Item (1)	Year Ending December 31, 2008 (2)	Year Ending December 31, 2007 (3)
1. Market value, beginning of year	\$ 1,898,571,976	\$ 1,827,994,042
2. Contributions during the year		
a. Member contributions	\$ 30,505,262	\$ 29,383,524
b. Employer contributions	57,755,888	42,054,697
c. Total contributions	<u>\$ 88,261,150</u>	<u>\$ 71,438,221</u>
3. Net investment income for the year	\$ (550,332,779)	\$ 96,169,030
4. Benefits paid during the year		
a. Retirement benefits	\$ 102,574,801	\$ 93,515,355
b. Refunds paid	3,598,387	3,513,962
c. Total benefits	<u>\$ 106,173,188</u>	<u>\$ 97,029,317</u>
5. Change in market value (2.c. + 3 - 4.c.)	\$ (568,244,817)	\$ 70,577,934
6. Market value, end of year	\$ 1,330,327,159	\$ 1,898,571,976

**ESTIMATED RETURN ON ASSETS**

Item	Actuarial Value Basis	
	Year Ending	Year Ending
	December 31, 2008	December 31, 2007
(1)	(2)	(3)
1. Net investment income for the year (I)	\$ (207,383,751)	\$ 209,393,510
2. Beginning of year actuarial value (A)	\$ 1,821,688,380	\$ 1,482,940,173
3. End of year actuarial value (B)	\$ 1,596,392,591	\$ 1,658,181,113
4. Estimated actuarial value yield based on 2I/(A + B - I)	(11.44)%	11.27%

Item	Market Value of Assets	
	Year Ending	Year Ending
	December 31, 2008	December 31, 2007
(1)	(2)	(3)
1. Net investment income for the year (I)	\$ (550,332,779)	\$ 96,169,030
2. Beginning of year market value (A)	\$ 1,898,571,976	\$ 1,827,994,042
3. End of year market value (B)	\$ 1,330,327,159	\$ 1,898,571,976
4. Estimated market value yield based on 2I/(A + B - I)	(29.12)%	5.30%

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
AS OF JANUARY 1, 2009**

**A. *Expected Return on Assets for Prior Year***

1.	Market value of assets at January 1, 2008	\$	1,898,571,976																				
2.	Actual contributions and distributions in prior year weighted for timing																						
	<table style="width: 100%; border-collapse: collapse; margin-left: 40px;"> <thead> <tr> <th style="text-align: center; border-bottom: 1px solid black;">Item</th> <th style="text-align: center; border-bottom: 1px solid black;">Amount</th> <th style="text-align: center; border-bottom: 1px solid black;">Weight for Timing</th> <th style="text-align: center; border-bottom: 1px solid black;">Weighted Amount</th> </tr> <tr> <th style="text-align: center;">(1)</th> <th style="text-align: center;">(2)</th> <th style="text-align: center;">(3)</th> <th style="text-align: center;">(4)</th> </tr> </thead> <tbody> <tr> <td>a. Employer &amp; employee contributions</td> <td style="text-align: right;">\$ 88,261,150</td> <td style="text-align: right;">45.833%</td> <td style="text-align: right;">\$40,453,027</td> </tr> <tr> <td>b. Benefit payments</td> <td style="text-align: right;">(106,173,188)</td> <td style="text-align: right;">54.167%</td> <td style="text-align: right;"><u>(57,510,477)</u></td> </tr> <tr> <td>c. Total</td> <td></td> <td></td> <td style="text-align: right;"><u>(\$17,057,450)</u></td> </tr> </tbody> </table>	Item	Amount	Weight for Timing	Weighted Amount	(1)	(2)	(3)	(4)	a. Employer & employee contributions	\$ 88,261,150	45.833%	\$40,453,027	b. Benefit payments	(106,173,188)	54.167%	<u>(57,510,477)</u>	c. Total			<u>(\$17,057,450)</u>		
Item	Amount	Weight for Timing	Weighted Amount																				
(1)	(2)	(3)	(4)																				
a. Employer & employee contributions	\$ 88,261,150	45.833%	\$40,453,027																				
b. Benefit payments	(106,173,188)	54.167%	<u>(57,510,477)</u>																				
c. Total			<u>(\$17,057,450)</u>																				
3.	Market value of assets adjusted for timing of actual contributions and distributions (1 + 2c)	\$	1,881,514,526																				
4.	Assumed rate of return on plan assets for the prior year		8.5%																				
5.	Expected return (3 x 4)	\$	159,928,735																				

**B. *Actual Return on Assets for Prior Year***

1.	Market value at January 1, 2008	\$	1,898,571,976
2.	Contributions for prior plan year		88,261,150
3.	Benefits paid in prior plan year		106,173,188
4.	Market value at December 31, 2008		1,330,327,159
5.	Actual return (4 + 3 - 2 - 1)	\$	(550,332,779)

**C. *Investment Gain/(Loss) for Prior Year (B5 - A5)*** \$ (710,261,514)

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
AS OF JANUARY 1, 2009**

**D. Actuarial Value of Assets as of January 1, 2009**

1.	Market value of plan assets as of December 31, 2008				\$ 1,330,327,159
2.	Deferred investment gains or (losses) for last year and the preceding four years:				
	Year		Percent	Percent	Deferred
	Ending*	Gain/(Loss)	Recognized	Deferred	Amount
	(1)	(2)	(3)	(4)	(5)
a.	2008	\$ (710,261,514)	20%	80%	\$ (568,209,211)
b.	2007	(57,526,186)	40%	60%	(34,515,712)
c.	2006	145,438,889	60%	40%	58,175,556
d.	2005	89,103,030	80%	20%	17,820,606
e.	2004	0	100%	0%	0
f.	Total				<u>\$ (526,728,761)</u>
3.	Asset value adjusted for deferred gains and (losses) (Item 1 - Item 2.f.)				\$ 1,857,055,920
4.	Corridor for actuarial value:				
a.	80% of Item 1				\$ 1,064,261,727
b.	120% of Item 1				\$ 1,596,392,591
5.	Actuarial value of plan assets (3, but not less than 4a nor greater than 4b)				\$ 1,596,392,591

\*For years 2005 and prior, the year ending is as of September 30th. For years 2006 and later, the year ending is December 31st.

Note: The actuarial value of assets was set equal to the market value of assets effective October 1, 2004. As a result, all bases for plan years prior to October 1, 2004 were set to zero.

**ACTUAL VERSUS EXPECTED ACTUARIAL ASSETS**

	Plan Year Ending December 31, 2008 <u>(1)</u>	Plan Year Ending December 31, 2007 <u>(2)</u>
1. Actuarial assets, beginning of year	\$ 1,821,688,380	\$ 1,658,181,113
2. Actual contributions for the year		
a. Employee contributions	\$ 30,505,262	\$ 29,383,524
b. Employer contributions	57,755,888	42,054,697
c. Total	<u>\$ 88,261,150</u>	<u>\$ 71,438,221</u>
3. Benefits and refunds paid during year	\$ (106,173,188)	\$ (97,029,317)
4. Assumed weighted investment income at		
a. Beginning of year assets	\$ 154,843,512	\$ 140,945,395
b. Contributions	3,438,507	2,783,114
c. Benefits and refunds	(4,888,391)	(4,467,391)
d. Total	<u>\$ 153,393,628</u>	<u>\$ 139,261,118</u>
5. Expected actuarial assets at end of year (Sum of Items 1 through 4)	\$ 1,957,169,970	\$ 1,771,851,135
6. Actual actuarial assets at end of year	\$ 1,596,392,591	\$ 1,821,688,380
7. Actuarial asset gain/(loss) for year (Item 6 - Item 5)	\$ (360,777,379)	\$ 49,837,245
8. Actuarial asset gain/(loss) as percentage of actual actuarial assets (Item 7 ÷ Item 6)	(22.60)%	2.74%

**ACTUARIAL GAIN OR LOSS  
FOR PLAN YEAR ENDING DECEMBER 31, 2008**

	Plan Year Ending December 31, 2008 (1)	Plan Year Ending December 31, 2007 (2)
<b>A. <u>CALCULATION OF TOTAL ACTUARIAL GAIN OR LOSS</u></b>		
1. Unfunded actuarial accrued liability (UAAL) for previous year	\$ 237,543,713	\$ 410,661,556
2. Normal cost for previous year	\$ 61,125,130	\$ 66,284,037
3. Actual contributions during the year		
a. Employee	\$ (30,505,262)	\$ (29,383,524)
b. Employer	(57,755,888)	(42,054,697)
c. Total	\$ (88,261,150)	\$ (71,438,221)
4. Interest at previous year's rate of 8.5%		
a. On UAAL	\$ 20,191,216	\$ 34,906,232
b. On normal cost	5,195,636	5,634,143
c. On contributions	(3,438,507)	(2,783,114)
d. Total	\$ 21,948,345	\$ 37,757,261
5. Expected UAAL (Item 1.+2.+3.c.+4.d.)	\$ 232,356,038	\$ 443,264,633
6. Actual UAAL	\$ 595,735,591	\$ 237,543,713
7. Total gain/(loss) for the year (Item 5. - Item 6.)	\$ (363,379,553)	\$ 205,720,920
<b>B. <u>SOURCE OF GAINS AND LOSSES</u></b>		
8. Gain/(loss) due to assumption change	\$ 0	\$ 0
9. Gain/(loss) due to ad hoc COLA elections	\$ 0	\$ 123,510,959
10. Gain/(loss) due to ad hoc COLA paid to retirees	\$ (17,702,076)	N/A
11. Asset gain/(loss) for the year (Item 7. of Table 6)	(\$360,777,379)	\$ 49,837,246
12. AAL experience gain/(loss) for the year (Item 7. - Item 8. - Item 9. - Item 10. - Item 11.)	\$ 15,099,902	\$ 32,372,715
13. Total experience gain/(loss) for the year (Item 11. plus Item 12.)	(\$345,677,477)	\$ 82,209,961
14. Experience liability gain/(loss) as percentage of total		
15. AAL (Item 12. ÷ Item 5.e. of Table 1)	0.69%	1.57%
Total experience gain/(loss) as percentage of total liability (Item 13. / Item 5.e. of Table 1)	(15.77)%	3.99%

**RELATIVE SIZE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY**  
**(Amounts in Millions)**

Valuation Date	Unfunded/ (Overfunded) Actuarial Accrued Liability	Relative to Covered Payroll		Relative to Actuarial Value of Present Assets		Relative to Total Actuarial Accrued Liability	
		Covered Payroll	Percent of Covered Payroll	Present Assets	Percent of Present Assets	Actuarial Accrued Liability	Percent of Actuarial Accrued Liability
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
01-01-89	\$47.008	\$128.468	36.5%	\$407.147	11.5%	\$454.155	10.4%
01-01-90	34.693	132.755	26.1	481.429	7.2	516.121	6.7
01-01-91	15.668	124.015	12.6	520.857	3.0	536.525	2.9
01-01-92	1.993	127.711	1.6	564.918	0.4	566.911	0.4
01-01-93	(9.440)	126.004	(7.5)	605.750	(1.6)	596.310	(1.6)
01-01-94	41.756	130.055	32.1	668.310	6.2	710.066	5.9
01-01-95	32.175	134.982	23.8	696.852	4.6	729.026	4.4
01-01-96	39.377	151.973	25.9	749.650	5.3	789.027	5.0
10-01-96	86.255	163.813	52.7	814.705	10.6	900.960	9.6
10-01-97	79.759	182.525 *	43.7	928.908	8.6	1,008.667	7.9
10-01-98	82.486	192.693 *	42.8	1,032.917	8.0	1,115.403	7.4
10-01-99	57.666	205.301 *	28.1	1,159.783	5.0	1,217.449	4.7
10-01-00	51.720	227.938 *	22.7	1,299.806	4.0	1,351.527	3.8
10-01-01	85.313	230.307 *	37.0	1,356.334	6.3	1,441.648	5.9
10-01-02	282.391	246.770 *	114.4	1,236.979	22.8	1,519.370	18.6
10-01-03	205.684	238.490 *	86.2	1,351.224	15.2	1,556.908	13.2
10-01-04	355.822	286.703 *	124.1	1,376.345	25.9	1,732.167	20.5
10-01-05	411.332	317.064 *	129.7	1,482.940	27.7	1,894.272	21.7
01-01-07	410.662	338.458 *	121.3	1,658.181	24.8	2,068.843	19.8
01-01-08	237.544	359.308 *	66.1	1,821.688	13.0	2,059.232	11.5
01-01-09	595.736	372.942 *	159.7	1,596.393	37.3	2,192.128	27.2

\* Overtime included beginning 10-1-97. Beginning 1-1-07 covered payroll is determined as the rate of pay loaded for overtime and other non-base pay compensation.

**GROWTH OF COVERED PAYROLL AND ACTIVE MEMBERS**

Valuation Date	Active Members		Projected Payroll*		Average Salary	
	Number	Percent Increase	Amount	Percent Increase	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01-01-89	5,097	---	\$128.468	---	\$25,205	---
01-01-90	5,174	1.5%	132.755	3.3%	25,658	1.8%
01-01-91	4,969	(4.0)	124.015	(6.6)	24,958	(2.7)
01-01-92	4,925	(0.9)	127.711	3.0	25,931	3.9
01-01-93	4,806	(2.4)	126.004	(1.3)	26,218	1.1
01-01-94	4,815	0.2	130.055	3.2	27,010	3.0
01-01-95	4,800	(0.3)	134.982	3.8	28,121	4.1
01-01-96	5,045	5.1	151.973	12.6	30,124	7.1
10-01-96	5,165	2.4	163.813	7.8	31,716	5.3
10-01-97	5,204	1.0	182.525 **	11.4	35,074	10.6
10-01-98	5,268	1.2	192.693 **	5.6	36,578	4.3
10-01-99	5,397	2.4	205.301 **	6.5	38,040	4.0
10-01-00	5,363	(0.6)	227.938 **	11.0	42,502	11.7
10-01-01	5,314	(0.9)	230.307 **	1.0	43,340	2.0
10-01-02	5,511	3.7	246.770 **	7.1	44,778	3.3
10-01-03	5,390	(2.2)	238.490 **	(3.4)	44,247	(1.2)
10-01-04	5,581	3.5	286.703 **	20.2	51,371	16.1
10-01-05	5,779	3.5	317.064 **	10.6	54,865	6.8
01-01-07	5,907	2.2	338.458 **	6.7	57,298	4.4
01-01-08	6,399	8.3	359.308 **	6.2	56,151	(2.0)
01-01-09	6,379	(0.3)	372.942 **	3.8	58,464	4.1

\* Projected payroll in millions.

\*\* Overtime included beginning 10-1-97. Beginning 1-1-07 covered payroll is determined as the rate of pay loaded for overtime and other non-base pay compensation.

**RETIRED MEMBERS**

Valuation Date	All Retired Members	
	Number	Average Monthly Benefit
(1)	(2)	(3)
01-01-91	2,188	\$903
01-01-92	2,242	987
01-01-93	2,368	1,043
01-01-94	2,461	1,172
01-01-95	2,512	1,236
01-01-96	2,565	1,272
10-01-96	2,573	1,446
10-01-97	2,600	1,470
10-01-98	2,670	1,534
10-01-99	2,749	1,649
10-01-00	2,867	1,707
10-01-01	2,924	1,809
10-01-02	2,953	1,908
10-01-03	3,005	1,993
10-01-04	3,029	2,055
10-01-05	3,083	2,126
01-01-07	3,159	2,265
01-01-08	3,204	2,360
01-01-09	3,304	2,510

**SCHEDULE OF FUNDING PROGRESS  
(As Required by GASB #25)**

<u>Valuation Date</u>	<u>Actuarial Value of Assets (AVA)</u>	<u>Actuarial Accrued Liability (AAL)</u>	<u>Unfunded Actuarial Accrued Liability</u>	<u>Funded Ratio (2) / (3)</u>	<u>Annual Covered Payroll</u>	<u>UAAL as % of Payroll (4) / (6)</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01-01-92	\$564.9	\$566.9	\$2.0	99.6%	\$127.7	1.6%
01-01-93	605.7	596.3	(9.4)	101.6%	126.0	(7.5)%
01-01-94	668.3	710.1	41.8	94.1%	130.1	32.1%
01-01-95	696.8	729.0	32.2	95.6%	135.0	23.9%
01-01-96	749.6	789.0	39.4	95.0%	152.0	25.9%
10-01-96	814.7	901.0	86.3	90.4%	163.8	52.7%
10-01-97	928.9	1,008.7	79.8	92.1%	182.5	43.7%
10-01-98	1,032.9	1,115.4	82.5	92.6%	192.7	42.8%
10-01-99	1,159.8	1,217.5	57.7	95.3%	205.3	28.1%
10-01-00	1,299.8	1,351.5	51.7	96.2%	227.9	22.7%
10-01-01	1,356.3	1,441.6	85.3	94.1%	230.3	37.0%
10-01-02	1,237.0	1,519.4	282.4	81.4%	246.8	114.4%
10-01-03	1,351.2	1,556.9	205.7	86.8%	238.5	86.2%
10-01-04	1,376.3	1,732.2	355.8	79.5%	286.7	124.1%
10-01-05	1,482.9	1,894.3	411.3	78.3%	317.1	129.7%
01-01-07	1,658.2	2,068.8	410.7	80.2%	338.5	121.3%
01-01-08	1,821.7	2,059.2	237.5	88.5%	359.3	66.1%
01-01-09	1,596.4	2,192.1	595.7	72.8%	372.9	159.7%

Note: Dollar amounts in millions.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**  
**(As Required by GASB #25)**

Fiscal Year Ending	Annual Required	Percentage Contributed
(1)	(2)	(3)
09-30-90	\$15,584,809	100.00%
09-30-91	\$11,300,444	100.00%
09-30-92	\$12,108,670	100.00%
09-30-93	\$11,585,964	100.00%
09-30-94	\$12,134,932	100.00%
09-30-95	\$13,160,033	100.00%
09-30-96	\$14,775,058	100.00%
09-30-97	\$16,665,890	100.00%
09-30-98	\$18,758,244	100.00%
09-30-99	\$21,387,714	100.00%
09-30-00	\$24,605,002	100.00%
09-30-01	\$26,541,610	100.00%
09-30-02	\$27,208,058	100.00%
09-30-03	\$27,891,674	100.00%
09-30-04	\$40,367,474	72.12%
09-30-05	\$43,276,150	73.36%
09-30-06	\$52,057,475	65.83%
09-30-07	\$60,489,969	61.68%
09-30-08	\$70,524,021	81.51%

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**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation for GASB 25 purposes is as follows:

Valuation Date	January 1, 2009
Actuarial cost method	Entry Age Normal
Amortization method	Level Percent of Pay, open
Payroll growth rate for amortization	3.75%
Remaining amortization period	30 years <sup>1</sup>
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	8.5%
Projected salary increases	5.25% - 29.75%
*Includes inflation at	3.0%
Cost-of-living adjustments <sup>2</sup>	2.0%

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<sup>1</sup> The funding period on which the annual required contribution as determined by the January 1, 2009 valuation will be based.

<sup>2</sup> A 2% cost-of-living adjustment (COLA) is assumed for members receiving the guaranteed COLA. Members in the Ad-Hoc COLA program have no future COLAs assumed.

**CALCULATION OF ANNUAL PENSION COST AND NET PENSION OBLIGATION  
(As Required by GASB #27)**

Fiscal Year Ended	Employer Annual Required Contribution	Employer Amount Contributed	Interest on NPO (9) x 8.5%	ARC Adjustmen (9) / (6)	Amortizati Factor (6)	Pension Cost (2)+(4)-(5)	Change in NPO (7) - (3)	NPO Balance NPO + (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
September 30, 2003								0
September 30, 2004	40,367,474	29,111,415	0	0	17.26483	40,367,474	11,256,059	11,256,059
September 30, 2005	43,276,150	31,747,430	956,765	651,965	17.26483	43,580,950	11,833,520	23,089,579
September 30, 2006	52,057,475	34,267,263	1,962,614	1,337,377	17.26483	52,682,712	18,415,449	41,505,029
September 30, 2007	60,489,969	37,308,388	3,527,927	2,663,226	15.58449	61,354,670	24,046,282	65,551,311
September 30, 2008	70,524,021	57,485,361	5,571,861	3,883,648	16.87880	72,212,234	14,726,873	80,278,184
September 30, 2009	50,266,147 *		6,823,646	4,756,155	16.87880			

**ESTIMATED 30-YEAR PROJECTION OF FUTURE VALUATION RESULTS AND AD HOC COLAS**

Valuation as of January 1,	Employee Contribution Rate for Calendar Year Following	Employer Contribution Rate for Calendar Year Following	Calculated Employer Contribution Rate	Contribution (Shortfall) /Excess	Funding Period in Years	Employer Contributions (in Millions)	Employee Contributions (in Millions)	Actuarial Accrued Liability (in Millions)	Actuarial Value of Assets (in Millions)	Funded Ratio	Ad Hoc Cola Granted on the Valuation Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2009	8.39%	15.96%	19.32%	(3.36%)	Never	\$ 59.5	\$ 31.3	\$ 2,192.1	\$ 1,596.4	72.8%	0.0%
2010	8.39%	15.96%	19.37%	(3.41%)	Never	62.6	32.9	2,322.4	1,695.1	73.0%	0.0%
2011	8.39%	15.96%	19.52%	(3.56%)	Never	65.7	34.6	2,461.4	1,796.3	73.0%	0.0%
2012	8.39%	15.96%	22.10%	(6.14%)	Never	68.8	36.2	2,604.6	1,731.7	66.5%	0.0%
2013	8.39%	15.96%	24.32%	(8.36%)	Never	72.1	37.9	2,750.2	1,677.4	61.0%	0.0%
2014	8.39%	15.96%	24.52%	(8.56%)	Never	75.4	39.6	2,902.7	1,768.3	60.9%	0.0%
2015	8.39%	15.96%	24.75%	(8.79%)	Never	78.8	41.4	3,060.8	1,860.8	60.8%	0.0%
2016	8.39%	15.96%	24.94%	(8.98%)	Never	82.6	43.4	3,230.7	1,960.5	60.7%	0.0%
2017	8.39%	15.96%	25.17%	(9.21%)	Never	86.4	45.4	3,405.4	2,060.4	60.5%	0.0%
2018	8.39%	15.96%	25.40%	(9.44%)	Never	90.4	47.5	3,590.1	2,165.3	60.3%	0.0%
2019	8.39%	15.96%	25.65%	(9.69%)	Never	94.5	49.7	3,780.9	2,270.7	60.1%	0.0%
2020	8.39%	15.96%	25.90%	(9.94%)	Never	98.8	51.9	3,979.4	2,378.0	59.8%	0.0%
2021	8.39%	15.96%	26.16%	(10.20%)	Never	103.2	54.3	4,187.1	2,488.6	59.4%	0.0%
2022	8.39%	15.96%	26.43%	(10.47%)	Never	107.8	56.7	4,398.4	2,598.5	59.1%	0.0%
2023	8.39%	15.96%	26.73%	(10.77%)	Never	112.6	59.2	4,621.0	2,710.1	58.6%	0.0%

The above amounts are estimates and are for illustrative purposes only. The calculations are based upon assumptions regarding future events (actuarial assumptions), which may or may not materialize. Actual results could deviate significantly from the estimated projections, depending on actual future Plan experience.

**ESTIMATED 30-YEAR PROJECTION OF FUTURE VALUATION RESULTS AND AD HOC COLAS (CONT.)**

Valuation as of January 1,	Employee Contribution Rate for Calendar Year Following	Employer Contribution Rate for Calendar Year Following	Calculated Employer Contribution Rate	Contribution (Shortfall) /Excess	Funding Period in Years	Employer Contributions (in Millions)	Employee Contributions (in Millions)	Actuarial Accrued Liability (in Millions)	Actuarial Value of Assets (in Millions)	Funded Ratio	Ad Hoc Cola Granted on the Valuation Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2024	8.39%	15.96%	27.03%	(11.07%)	Never	\$ 117.6	\$ 61.8	\$ 4,852.8	\$ 2,823.8	58.2%	0.0%
2025	8.39%	15.96%	27.34%	(11.38%)	Never	122.8	64.6	5,092.1	2,937.3	57.7%	0.0%
2026	8.39%	15.96%	27.68%	(11.72%)	Never	128.1	67.3	5,337.2	3,048.6	57.1%	0.0%
2027	8.39%	15.96%	28.03%	(12.07%)	Never	133.6	70.2	5,590.8	3,159.4	56.5%	0.0%
2028	8.39%	15.96%	28.39%	(12.43%)	Never	139.3	73.2	5,851.0	3,268.0	55.9%	0.0%
2029	8.39%	15.96%	28.76%	(12.80%)	Never	145.3	76.4	6,120.0	3,375.0	55.1%	0.0%
2030	8.39%	15.96%	29.15%	(13.19%)	Never	151.4	79.6	6,394.3	3,476.0	54.4%	0.0%
2031	8.39%	15.96%	29.54%	(13.58%)	Never	157.8	83.0	6,676.3	3,575.1	53.5%	0.0%
2032	8.39%	15.96%	29.94%	(13.98%)	Never	164.5	86.5	6,969.1	3,672.2	52.7%	0.0%
2033	8.39%	15.96%	30.36%	(14.40%)	Never	171.4	90.1	7,274.5	3,768.6	51.8%	0.0%
2034	8.39%	15.96%	30.73%	(14.77%)	Never	178.7	94.0	7,581.6	3,862.4	50.9%	0.0%
2035	8.39%	15.96%	31.19%	(15.23%)	Never	186.1	97.8	7,911.0	3,953.4	50.0%	0.0%
2036	8.39%	15.96%	31.68%	(15.72%)	Never	193.8	101.9	8,257.6	4,042.2	49.0%	0.0%
2037	8.39%	15.96%	32.23%	(16.27%)	Never	201.5	105.9	8,615.4	4,122.3	47.8%	0.0%
2038	8.39%	15.96%	32.74%	(16.78%)	Never	209.4	110.1	8,967.8	4,191.9	46.7%	0.0%
2039	8.39%	15.96%	33.38%	(17.42%)	Never	217.5	114.3	9,356.2	4,255.5	45.5%	0.0%

The above amounts are estimates and are for illustrative purposes only. The calculations are based upon assumptions regarding future events (actuarial assumptions), which may or may not materialize. Actual results could deviate significantly from the estimated projections, depending on actual future Plan experience.

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**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS OF JANUARY 1, 2007)**

**A. ACTUARIAL ASSUMPTIONS**

1. Investment Return Rate

8.50% per annum, compounded annually composed of an assumed 3.00% inflation rate and a 5.50% real rate of return, net of expenses.

2. Cost-of-Living-Adjustments

For those members with the guaranteed annual 2% Cost-of-Living Adjustment, an annual assumption of a 2% increase in the base pension amount is assumed.

For those members who are participating in the Ad-Hoc Cost-of-Living Adjustment Program, accrued liabilities for any prospective ad-hoc increases that may or may not occur in the future have not been included in the Fund's liabilities since any future increases under this Program are contingent upon the actual funding status of the Fund at future points in time.

However, the Projection Exhibit as provided in Table 12 of this Report illustrates the estimated future cost impact of these potential Cost-of-Living Adjustments based upon all current actuarial assumptions being met each year into the future.

3. Mortality

- a. Healthy male annuitants –  
RP-2000 Mortality Table for male annuitants set forward one year for Municipal Employees and Police Officers and with no age adjustment for Firefighters.
- b. Healthy female annuitants –  
RP-2000 Mortality Table for female annuitants set forward one year for all employee groups.
- c. Disabled males and females–  
RP-2000 Mortality Table for female disabled lives set forward two years.
- d. Active male members –  
RP-2000 Mortality Table for male employees with no age adjustment.
- e. Active female members –  
RP-2000 Mortality Table for female employees with no age adjustment.

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS OF JANUARY 1, 2007)**

Note: The percentage of pre-retirement deaths assumed to be ordinary death as opposed to duty death varies by employee group as follows:

Type	Municipal Members		Police Officers	Firefighters
	Males	Females		
Ordinary	90%	95%	75%	90%
Duty	10%	5%	25%	10%

4. Disability Rates

Rates for selected ages are shown below:

Age	Rates of Decrement due to Active Disability	
	Male Members	Female Members
20	.00065	.00035
25	.00075	.00045
30	.00100	.00075
35	.00135	.00115
40	.00190	.00170
45	.00290	.00245
50	.00490	.00395
55	.00860	.00650
60	.01195	.00800
65	.00000	.00000

Note: The percentage of disabilities assumed to be ordinary disability as opposed to duty disability varies by employee group as follows:

Type	Municipal Members		Police Officers	Firefighters
	Males	Females		
Ordinary	70%	75%	60%	85%
Duty	30%	25%	40%	15%

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS OF JANUARY 1, 2007)**

5. Withdrawal Rates (for causes other than death, disability, or retirement)

The selected basic termination rates are shown below:

Age	Termination Rates - Municipal Males											
	Years of Service											
	1	2	3	4	5	6	7	8	9	10	11+	
20	0.2723	0.2623	0.2447	0.1690	0.1048	0.1027	0.0805	0.0805	0.0805	0.0805	0.0805	0.0805
25	0.2379	0.2279	0.2127	0.1499	0.1003	0.0983	0.0770	0.0770	0.0770	0.0770	0.0770	0.0770
30	0.2155	0.2055	0.1811	0.1302	0.0957	0.0938	0.0735	0.0735	0.0735	0.0735	0.0735	0.0735
35	0.1914	0.1814	0.1503	0.1103	0.0912	0.0893	0.0070	0.0070	0.0070	0.0070	0.0070	0.0638
40	0.1704	0.1552	0.1208	0.0903	0.0870	0.0853	0.0668	0.0668	0.0668	0.0668	0.0668	0.0495
45	0.1507	0.1263	0.0939	0.0795	0.0764	0.0749	0.0587	0.0587	0.0587	0.0587	0.0587	0.0352
50	0.1198	0.0949	0.0707	0.0612	0.0596	0.0584	0.0458	0.0458	0.0458	0.0458	0.0458	0.0265
55	0.0781	0.0615	0.0521	0.0415	0.0363	0.0356	0.0279	0.0279	0.0279	0.0279	0.0279	0.0181
60	0.0860	0.0676	0.0572	0.0456	0.0400	0.0392	0.0307	0.0307	0.0307	0.0307	0.0307	0.0161

Age	Termination Rates - Municipal Females							
	Years of Service							
	1	2	3	4	5	6	7	8+
20	0.2354	0.1971	0.1938	0.1627	0.1474	0.1321	0.1168	0.0978
25	0.2264	0.1896	0.1864	0.1564	0.1417	0.1270	0.1123	0.0657
30	0.2254	0.1696	0.1574	0.1372	0.1303	0.1235	0.1166	0.0606
35	0.2170	0.1519	0.1355	0.1227	0.1189	0.1150	0.1111	0.0543
40	0.2001	0.1359	0.1199	0.1127	0.1111	0.1096	0.1080	0.0469
45	0.1741	0.1206	0.1100	0.1068	0.1056	0.1044	0.1032	0.0386
50	0.1389	0.1051	0.1049	0.1044	0.1019	0.0994	0.0969	0.0302
55	0.1250	0.0946	0.0944	0.0939	0.0917	0.0894	0.0872	0.0228
60	0.1375	0.1041	0.1039	0.1034	0.1009	0.0984	0.0959	0.0174

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS OF JANUARY 1, 2007)**

5. Withdrawal Rates (continued)

Termination Rates		
Age	Police	Firefighters
20	0.0374	0.0207
25	0.0288	0.0137
30	0.0265	0.0103
35	0.0218	0.0081
40	0.0083	0.0060
45	0.0058	0.0053
50	0.0037	0.0046
55	0.0037	0.0039
60	0.0037	0.0032

Rates of termination are assumed to be zero once a member is eligible for retirement.

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS OF JANUARY 1, 2007)**

6. Salary Increase Rates

Inflation rate of 3.00% plus productivity component of 2.25% plus step-rate/promotional increase as shown:

Years of Service	Annual Step-rate/Promotional Component			Annual Total Salary Increase (Including 3.00% inflation and 2.25% Productivity Component)		
	Municipal	Police		Municipal	Police	
	Firefighters	Employees	Officers	Firefighters	Employees	Officers
1	24.50%	3.25%	24.50%	29.75%	8.50%	29.75%
2	7.00%	3.00%	9.75%	12.25%	8.25%	15.00%
3	6.25%	2.75%	3.75%	11.50%	8.00%	9.00%
4	6.00%	2.50%	3.75%	11.25%	7.75%	9.00%
5	6.00%	2.00%	3.50%	11.25%	7.25%	8.75%
6	4.75%	1.25%	1.00%	10.00%	6.50%	6.25%
7	1.25%	1.00%	0.00%	6.50%	6.25%	5.25%
8	0.50%	1.00%	0.00%	5.75%	6.25%	5.25%
9	0.00%	1.00%	5.00%	5.25%	6.25%	10.25%
10	0.00%	0.75%	0.00%	5.25%	6.00%	5.25%
11	0.00%	0.50%	0.00%	5.25%	5.75%	5.25%
12	0.00%	0.25%	0.00%	5.25%	5.50%	5.25%
13	0.00%	0.25%	5.00%	5.25%	5.50%	10.25%
14	0.00%	0.25%	0.00%	5.25%	5.50%	5.25%
15	0.00%	0.00%	0.00%	5.25%	5.25%	5.25%
16	0.00%	0.00%	0.00%	5.25%	5.25%	5.25%
17	0.00%	0.00%	5.00%	5.25%	5.25%	10.25%
18	0.00%	0.00%	0.00%	5.25%	5.25%	5.25%
19	0.00%	0.00%	0.00%	5.25%	5.25%	5.25%
20	0.00%	0.00%	0.00%	5.25%	5.25%	5.25%
21	0.00%	0.00%	5.00%	5.25%	5.25%	10.25%
22+	0.00%	0.00%	0.00%	5.25%	5.25%	5.25%

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS OF JANUARY 1, 2007)**

7. Retirement Rates

Rates of unreduced retirement are shown below:

Rates of Retirement - Unreduced Retirement		
Age	Municipal	Fire and Police
45-49	0.25	0.25
50-54	0.25	0.20
55-59	0.25	0.25
60-64	0.40	0.25
65-70	0.25	1.00
70+	1.00	1.00

Rate for male Municipal Employees at first eligibility for unreduced retirement is 50%, and for female Municipal Employees at first eligibility for unreduced retirement is 40%.

Police Officers and Firefighters have zero probability of retiring prior to eligibility for unreduced retirement.

Selected rates of reduced retirement are shown below for Municipal Members:

Rates of Retirement - Reduced Retirement	
Age	Male & Female
50-54	0.030
55-59	0.025
60-64	0.030

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS JANUARY 1, 2007)**

8. Deferred Retirement Option Program Participation

The following table shows the percentage of membership that is assumed to enter DROP.

Firefighters	Municipal Employees	Police Officers
65%	20%	30%

Members are assumed to make a one-time decision regarding DROP participation at first eligibility. If an active member is past first eligibility, it is assumed that the active member will make a one-time decision regarding DROP participation in the upcoming year.

All DROP participants are assumed to participate in DROP for at least two years before retiring.

9. Overtime and Other Pay

A member's valuation pay, upcoming year's gross salary, is determined by applying the "loads" shown in the following table to their base salary rate.

Employee Group	Overtime Load	Other-Pay Load	Total Base Pay Load
Firefighters	15.00%	4.00%	19.00%
Municipal Employees	3.75%	2.50%	6.25%
Police Officers	8.50%	4.50%	13.00%

10. Sick-Leave Service Conversions

Due to sick-leave service conversions, retirement benefits and terminated vested benefits are increased by 3.4%, 3.5% and 2.9%, respectively, for Firefighters, Municipal Employees and Police Officers.

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**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS JANUARY 1, 2007)**

11. Administrative Expense

No provision is made for administrative expense in the normal cost or actuarial accrued liability. The assumed investment return represents the anticipated net rate of return after payment of all investment and administrative expenses.

12. Payroll Growth Rate

3.75% per annum, used to amortize the unfunded actuarial accrued liabilities.

13. Spousal Age Difference

Male members are assumed to be 3 years older than their spouses. Female members are assumed to be 3 years younger than their spouses.

14. Marital Assumption

75% of participants are assumed to be married. This assumption is assumed to cover the cost of the pre-retirement death benefits for spouses and dependent children/parents.

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**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS  
USED IN DETERMINING COST  
(EFFECTIVE AS JANUARY 1, 2007)**

**B. ASSET VALUATION METHOD**

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment returns in excess of (less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). In no event will this amount exceed 120% of market value or be less than 80% of market value.

**C. ACTUARIAL COST METHOD**

The funding period required to amortize the unfunded actuarial accrued liability (UAAL) is determined using the Individual Entry Age Normal actuarial cost method. This method assigns the Fund's total actuarial present value of future benefits to various periods. The actuarial accrued liability is assigned to years prior to the valuation, and the normal cost is assigned to the year following the valuation. The remaining costs are assigned to future years.

The normal cost is determined on an individual basis. The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is the excess of the actuarial accrued liability over the actuarial value of assets.

The balance of the City's contributions -- the remainder after paying its share of the normal cost -- is used to amortize the unfunded actuarial accrued liability. The funding period is the length of time required for the unfunded actuarial accrued liability to be completely amortized, assuming that the portion used to reduce the UAAL remains level as a percentage of total payroll, which is assumed to grow 3.75% per year.

**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**(In effect for Actuarial Valuations beginning January 1, 2008)**

**A. MEMBERSHIP**

Membership is a condition of employment for all police officers, firefighters, and other City employees, elective officers; nonsalaried appointive members of administrative boards and commissions; part-time, temporary, and contract employees; employees paid partly by a county, state, or other governmental agency; Board of Education employees and members of other local, municipal, or state funds.

**B. CONTRIBUTIONS**

The contribution rates are as follows:

Effective Date	Police Officers			Non-Police Officers		
	Members	City	Total	Members	City	Total
Prior to 10-01-90	7.67%	11.50%	19.17%	7.67%	11.50%	19.17%
10-01-1990	5.67%	8.50%	14.17%	5.67%	8.50%	14.17%
10-01-1993	6.15%	9.22%	15.37%	5.67%	8.50%	14.17%
10-01-1996	7.43%	9.78%	17.21%	6.95%	9.06%	16.01%
10-01-1997	7.43%	10.34%	17.77%	6.95%	9.62%	16.57%
10-01-1998	7.43%	10.90%	18.33%	6.95%	10.18%	17.13%
04-01-1999	8.73%	10.90%	19.63%	8.25%	10.18%	18.43%
10-01-1999	8.73%	11.46%	20.19%	8.25%	10.74%	18.99%
10-01-2007	8.73%	16.46%	25.19%	8.25%	15.74%	23.99%

**C. RETIREMENT DATES**

(1) Normal Retirement

Earliest of following dates that occur:

- (i) total of member's age and years of service equals 80, or
- (ii) vested member reaches age 65.

25 and Out Retirement for Police Officers

- (iii) Police officers may retire after completing 25 years of service.

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**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**(In effect for Actuarial Valuations beginning January 1, 2008)**

(2) Early Retirement

Eligibility for early retirement is when the member attains the age of 50 and has completed five (5) or more years of service for a pension at a reduced amount.

The reduced amount of pension is equal to the amount of pension earned to date of termination of service reduced by 5/12% for each month by which the actual commencement date of the pension precedes the date when the member would have been eligible for the unreduced pension had the member remained in service to the earlier qualification date in C(1) above.

(3) Deferred Retirement

Eligibility for deferred retirement is when the member has completed five (5) or more years of service. The unreduced pension is payable at age 65.

A member eligible for deferred retirement whose age plus years of service equals 80 or more is eligible to receive the unreduced pension when the "Rule of 80" is satisfied, if earlier than age 65. This "Rule of 80" will be calculated as if the former employee had remained in service until the "Rule of 80" is satisfied. For the purpose of benefit accrual, however, service is accrued only to the date of termination of service.

Also, a member eligible for deferred retirement is also eligible for Early Retirement as outlined above in C(2) upon attainment of age 50.

**D. COMPENSATION BASE**

A member's pension is based on the average of his or her highest five (5) calendar years' earnings during employment with the City. On and after April 1, 1999, this average is based on his or her highest three (3) calendar year's earnings with the City.

**E. PENSION FORMULA**

A member's annual pension at normal or late retirement date equals 3.0% of compensation base multiplied by his or her total credited service with the City. Police officers who retire prior to their normal retirement date but after completing 25 years of service will receive 3.0% of compensation base multiplied by his or her total credited service with the City. For early retirements or vested terminations commencing early, the benefit formula is 2.75% of compensation base multiplied by his or her total credited service with the City.

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**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**(In effect for Actuarial Valuations beginning January 1, 2008)**

If the member has remaining sick days for which the member is not compensated, these will be converted to credited service to be used in this Pension Formula.

**F. DISABILITY PENSION**

A member who becomes totally and permanently disabled in line of duty will receive a pension equal to 2.75% of his or her compensation base multiplied by total credited service which would have accrued if the member had worked to his or her normal retirement date. A member who becomes disabled while not in the line of duty and who is vested will receive a pension equal to 2.75% of his or her compensation base multiplied by total credited service to date of disability. The pension commences the first day of the month following 90 days of disability. A minimum of \$250 per month applies if disability occurs in line of duty. Benefits shall be reduced if such benefit plus earnings while on disability exceeds the rate of compensation earned at the date of disability.

**G. DEATH BENEFITS**

(1) Before Retirement

If a member dies in line of duty, the spouse receives a pension equal to 75% of the benefit the member would have accrued if the member had worked to his or her normal retirement date based on the 3% multiplier, subject to a minimum of \$250 per month. Each child under age 18 receives \$100 monthly.

If death is not service connected but occurs after five (5) years of service, the benefit is 75% of the deceased member's unreduced accrued pension based on a 2.75% multiplier if the member is not eligible for a normal retirement benefit at the date of death. The benefit is subject to a minimum of \$150 monthly to the spouse, plus \$100 for each child.

(2) After Retirement

The death benefit after retirement is 75% of the member's pension to the spouse plus \$100 to each child under age 18, but not more in total than the member's pension.

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**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**(In effect for Actuarial Valuations beginning January 1, 2008)**

(3) General Provisions

Pensions to a spouse will cease upon death and not upon remarriage; those to a child, upon the earliest of death, marriage, or attainment of age 18.

If a deceased member leaves no spouse or children, the benefit otherwise payable to the spouse is paid to his dependent parent (or parents). If a deceased member leaves no eligible dependents, the member's total contributions plus 5.25% compound interest are paid to his or her estate.

**H. SEVERANCE BENEFITS**

A member who terminates service with less than five (5) years of service, for reasons other than disability and death while in the line of duty, is not entitled to any benefits under the Plan other than a refund of contributions at 5.25% interest, compounded annually while an active member.

A member who terminates service with five (5) or more years of service, but who is not qualified for Normal Retirement or Early Retirement, is entitled to receive a Deferred Retirement as described in C(3) above.

A member who terminates service with five (5) or more years of service may receive, in lieu of all other benefits under the Plan, a refund of contributions at 5.25% interest, compounded annually while an active member. No interest is credited after the member leaves active service.

**I. COST-OF-LIVING ADJUSTMENTS (COLA)**

Beginning January 1, 2008, all future hired employees will be in the Ad-Hoc COLA program. Also, nonvested members as of this date automatically participate in the Ad-Hoc COLA program. During calendar year 2007, an election was held during which vested active members and retirees were given the option of joining the new Ad-Hoc COLA program. If a member elected to switch from a guaranteed COLA to the Ad-Hoc COLA program, their right to a future guaranteed COLA was eliminated. This election choice is irrevocable.

On January 1, 2008 and each year thereafter, a cost-of-living adjustment will be made on monthly pension benefits to all members who are entitled to a guaranteed COLA and who have retired (or beneficiaries who are entitled to the continuing benefits) as of September 30<sup>th</sup> of the preceding year. The guaranteed additional COLA amount is determined by applying 2% to the Base Pension amount.

**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**(In effect for Actuarial Valuations beginning January 1, 2008)**

On January 1, 2008 and each year thereafter, a cost-of-living adjustment may be made on monthly pension benefits of all members who participate in the Ad-Hoc COLA program and who have retired (or beneficiaries who are entitled to continuing benefits) as of September 30<sup>th</sup> of the preceding year. The potential non-guaranteed Ad-Hoc COLA amount is determined by applying the Ad-Hoc COLA Percentage to the Total Pension Benefit for these members. The Ad-Hoc increase as of January 1, 2008 is 2.0%. Future Ad-Hoc COLAs will be determined based upon the prior year's valuation results. As detailed in Section A of this Report, the Ad-Hoc COLA increase for January 1, 2010 will be 0.0%.

The Base Pension amount is defined to be the amount of monthly retirement benefit first paid to a retired member or beneficiary without any subsequent cost-of-living increases.

The Total Pension Benefit is defined to be the amount of monthly benefit expected to be paid to a retired member or beneficiary prior to the granting of any Ad-Hoc COLA.

The procedure for determining the Ad-Hoc COLA Percentage is to first establish the initial COLA percentage based upon results of the prior year's actuarial valuation. The initial COLA percentage is determined by selecting the appropriate percentage from the table below. The next step is to determine the additional liability of an Ad-Hoc COLA as of the following January 1<sup>st</sup> based on the preliminary COLA percentage. This liability is then added to the prior year's valuation results and the funding period is recomputed. If the level or tier does not change with this added liability, the COLA percentage is unchanged and the corresponding increase as initially determined is the Ad-Hoc COLA Percentage granted as of the following January 1<sup>st</sup>. If, however, the additional liability causes the level to drop to the next lowest tier, then the preliminary COLA percentage is set equal to the percentage for the next lowest tier and the process is repeated until a final Ad-Hoc COLA percentage is determined. The four tiers are listed below:

Tier	Funding Period (to nearest 1/10 <sup>th</sup> of a year)	COLA Percentage Increase
#1	28.1 or greater	0.0%
#2	24.1 to 28.0	2.0%
#3	18.1 to 24.0	3.0%
#4	18.0 or less	4.0%

In addition to the above adjustments, there was a one-time pension adjustment for persons receiving benefits as of July 1, 1990. Effective July 1, 1990, all retired members previously

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**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**(In effect for Actuarial Valuations beginning January 1, 2008)**

receiving pension benefits had their calculation for base pension benefits adjusted by 2.5% of their compensation base multiplied by their total credited service to date of actual retirement. Any cost-of-living amount presently being paid in addition to base pension benefits shall be added to the new base pension to determine total benefits to be paid.

Effective July 1, 1990, after the adjustment provided above is made, all retired members shall have their calculation for pension benefits further adjusted, if necessary, so that the monthly payment received, including any cost-of-living adjustments, shall not be less than a minimum of \$150 for each completed five (5) years of credited service to the date of actual retirement. Where this minimum benefit is applicable, it shall become the new and revised Base Pension amount.

Effective October 1, 1996, there was a one-time pension adjustment for members previously receiving retirement benefits. Base pension benefits were adjusted to equal 3.0% of the member's compensation base multiplied by the member's total years of credited service to date of actual retirement.

**J. DEFERRED RETIREMENT OPTION PROGRAM (DROP)**

Active members who are eligible for an unreduced retirement benefit may elect to participate in DROP. A member who elects to participate in DROP must stay in the DROP for at least one year to be eligible to receive the DROP benefit and for at least two years to be eligible to receive a retroactive cost-of-living adjustment at the time of actual retirement. Both member and employer contributions continue during DROP but are not added to the member's DROP account. However, 100% of the member's DROP annuity will be credited to the DROP account. The maximum length of DROP participation is five (5) years. Upon separation from service, if the member participates in DROP for at least two (2) years, the member's monthly annuity will be increased for retroactive cost-of-living adjustments that occurred while the member was in DROP.

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## SECTION C

### STATISTICAL TABLES

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**STATISTICAL TABLES**

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**DISTRIBUTION OF ALL ACTIVE PARTICIPANTS BY AGE AND LENGTH OF SERVICE COMPLETED YEARS OF PAST SERVICE**

<u>Age Last Birthday</u>	<u>Completed Years of Service</u>												<u>All Actives</u>
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35 &amp; Up</u>	<u>Total</u>
<b>Up to 20</b>	2	3	0	0	0	0	0	0	0	0	0	0	5
<b>20 - 24</b>	53	116	27	13	4	5	0	0	0	0	0	0	218
<b>25 - 29</b>	94	174	79	70	48	125	1	0	0	0	0	0	591
<b>30 - 34</b>	56	123	71	61	47	275	69	0	0	0	0	0	702
<b>35 - 39</b>	56	93	69	48	47	300	249	57	1	0	0	0	920
<b>40 - 44</b>	42	104	51	32	33	199	247	188	94	3	0	0	993
<b>45 - 49</b>	41	69	54	37	34	149	192	142	277	105	4	0	1,104
<b>50 - 54</b>	26	49	49	43	28	136	132	90	156	148	51	1	909
<b>55 - 59</b>	18	36	25	19	31	87	86	59	100	63	34	5	563
<b>60 - 64</b>	8	27	21	12	16	64	51	46	32	10	4	1	292
<b>65 &amp; Up</b>	0	8	2	3	5	17	18	20	5	4	0	0	82
<b>Total</b>	396	802	448	338	293	1,357	1,045	602	665	333	93	7	6,379

**DISTRIBUTION OF ACTIVE MEMBERS BY SERVICE AND  
AVERAGE RATE OF COMPENSATION**

<b>Age Last Birthday</b>	<b>Completed Years of Service</b>												<b>All Actives Total</b>	
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35 &amp; Up</b>		
<b>Up to 20</b>	30,719	19,800	0	0	0	0	0	0	0	0	0	0	0	24,168
<b>20 - 24</b>	39,980	39,799	43,634	39,817	43,403	38,096	0	0	0	0	0	0	0	40,346
<b>25 - 29</b>	42,954	42,613	48,126	51,053	50,193	55,983	47,184	0	0	0	0	0	0	47,855
<b>30 - 34</b>	43,444	45,865	48,881	51,349	50,574	59,690	59,068	0	0	0	0	0	0	53,482
<b>35 - 39</b>	44,828	42,131	50,596	48,691	51,079	60,555	70,338	73,984	75,448	0	0	0	0	59,381
<b>40 - 44</b>	39,825	38,727	49,014	47,777	49,092	54,897	66,591	75,874	77,182	72,575	0	0	0	60,885
<b>45 - 49</b>	43,094	42,517	50,066	45,906	48,335	52,103	61,568	70,901	81,737	77,001	72,747	0	0	64,688
<b>50 - 54</b>	45,980	43,355	51,291	47,785	47,416	50,167	57,039	61,998	73,340	81,201	81,997	100,528	0	62,583
<b>55 - 59</b>	50,962	42,222	46,873	54,642	48,016	58,396	53,934	57,953	69,113	79,091	81,018	62,771	0	60,810
<b>60 - 64</b>	50,016	39,733	55,847	57,370	71,289	52,746	55,658	55,125	64,625	80,136	56,361	79,232	0	56,161
<b>65 &amp; Up</b>	0	40,500	22,846	50,182	39,033	49,679	54,117	52,258	75,463	53,736	0	0	0	50,871
<b>Overall</b>	43,217	41,961	49,216	49,468	50,430	56,434	63,049	68,321	76,345	79,038	80,139	70,516	0	58,464