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Principal

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Mr. Thomas Taneyhill
Executive Director
Baltimore City Fire and Police Employees' Retirement System
7 E. Redwood Street
4th Floor
Baltimore, MD 21202

June 8, 2010

Subject: Cost Impact of Proposed Changes

Dear Tom:

As requested, we have estimated the City and State contribution savings of the potential changes in plan provisions outlined in the information you e-mailed to us on June 1, 2010, the data for the "pre-DROP" retirees¹ and beneficiaries that was attached to that e-mail, as well as the June 3, 2010 e-mail from Abe Schwartz.

We have calculated the contribution savings for FY2011 reflecting the proposal that all current and future employees are affected by the changes, although the degree to which they are affected depends on whether or not they meet the age / service eligibility for grandfathering (described in detail later in this letter) at the date of the change.

The "baseline" scenarios are based on the results from the June 30, 2009 actuarial valuation report, using two alternative assumptions for post-retirement investment return:

- The assumption mandated by the City Code--6.8%, and
- The "Mercer Recommended" assumption--5.0%.

These "baseline" results incorporate the current variable benefits structure. Mercer's recommended assumption reflects the impact of transfers of potential excess investment returns to the Paid-Up Benefit Fund under the current formula for determining the transfers. The amount of excess returns to be transferred is based on a percentile distribution of potential returns. The System's Trustees voted to request that the City make a contribution for FY 2011 based on the "Mercer Recommended" assumption.

¹ Members who retired prior to July 1, 1996, with 20 or more years of service at retirement.

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Basis for the Cost/Savings Calculations

Our estimates use the data used for June 30, 2009 actuarial valuation as well as the data received from you on June 1, 2010, and except as noted below, the plan provisions, actuarial assumptions and methods are the same as those used in that valuation. Actual costs or savings will depend on the experience of the plan.

We have assumed the benefit changes would be reflected as an update to the June 30, 2009 valuation. Therefore, if the changes were adopted, the FY 2011 City contribution would be the first contribution to change.

The initial savings equals the change in Normal Cost and a 20-year amortization of any changes in Unfunded Actuarial Liability, as required by Article 22 of the City Code. In the interest of time, the estimates shown in this letter only show the effect on the City's and State's contribution in the first year. Over the long term, the contribution requirement will change from the FY 2011 amount, perhaps significantly, based on the demographics of plan members, economic conditions and plan experience. However, regardless of whether the benefit changes described in this letter occur, in the absence of significant actuarial gains, we expect contributions will increase dramatically over the short term. This is because the actuarial value of assets, which is used to determine the annual contribution, was approximately \$812 million more than the market value of assets as of June 30, 2009. The most significant contributors to this difference are:

- 80% of the investment losses which occurred during FY2009, as well as about 64% of the investment loss which occurred during FY 2008, remain deferred as of June 30, 2009 due to the 5-year asset smoothing method,
- As of June 30, 2009, about \$199 million of the negative balances of the BIF & ERF remain to be recognized over the next 5 years.

If these items were recognized immediately (and with no other changes,) the City's contribution requirement would increase by approximately \$80 to \$85 million. Interested parties may wish to consider this potential upcoming increase when reviewing the estimated savings under the benefit changes as well as when analyzing the System's near and long term funded status. A comprehensive solution to the System's current funded status might include a plan for dealing with the likely contribution increases, perhaps by accelerating recognition of past losses, either now or when the City's budget pressure begins to ease. Actuarial gains (e.g. lower-than-assumed pay increases) could ameliorate or actuarial losses (e.g. lower turnover) could exacerbate the projected trend of rapidly increasing contribution requirements. We have previously furnished illustrations of the pattern of these increases based on current benefit

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provisions to the Trustees. We would be happy to prepare comparable projections for these proposed provisions.

Benefit and Investment Return Assumption Changes

As requested, we analyzed the cost savings of the following changes. We have split the changes into two groups: those which apply to all members and those which apply only to members not yet meeting the earlier of current retirement eligibility requirements or 15 or more years of service as of the date of the change ("non-grandfathered members").

The changes would be effective July 1, 2010:

Apply to all members

- Eliminate the current variable benefit structure by taking the following steps:
 - No future increases to benefits under the current variable benefits structure (including the potential January 2011 increase which may have been effective based on broad market returns through April 30, 2010)
 - Assets and benefit obligations from the Contingency Reserve Fund and the Paid-Up Benefits Fund are merged with the assets of the other four funds
- The current variable benefit structure is replaced with an age-based COLA for all current and future benefit recipients as follows:
 - Under age 55: no COLA
 - Age 55 up to age 65: 1% annual COLA
 - Age 65 and older: 2% annual COLA
 - For these purposes, age would be determined as of the June 30 preceding each increase
 - The increases would continue to be paid in January as they are now
 - The 2 year wait between retirement and the June 30 preceding the first increase would continue
 - The COLA would first be effective January 1, 2012
- Member contributions would be increased from 6% of pay to 10% of pay. This would take place in 1% increments over the next four years:
 - 7% contribution rate starting 7/1/2010
 - 8% contribution rate starting 7/1/2011
 - 9% contribution rate starting 7/1/2012
 - 10% contribution rate starting 7/1/2013
- Decrease the interest rate for accumulating employee contributions from 5.5% to 3.0%
- The investment return assumption for valuing pension benefit obligations would be changed from 8.25% pre-retirement and 6.8% post-retirement (City Code assumption) / 5.0% post-

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retirement (Mercer recommended assumption), to 8.0% (both pre-retirement and post-retirement).

Apply to "non-grandfathered" members (members not meeting the "grandfathered member" requirement as of July 1, 2010)

- Increase the averaging period for final average compensation from 18 months to 36 months
- Change retirement eligibility for:
 - a. Normal retirement:
 - to the earlier of:
 - 1. age 55 and 15 years of service, or
 - 2. 25 years of service, regardless of age, from age 50² or 20 years of service
 - b. Early retirement: to current eligibility for normal retirement (age 50² or 20 years of service)
- Move eligibility for DROP² from 20 years of service to 25 years of service.
- Add benefit reduction for early retirement: The normal retirement benefit is reduced by 6.5%/year for the first 5 years, 4.5%/year for the next 5 years, 3.0% for the next 5 years and 2%/year thereafter from the date the member would have been eligible for normal retirement assuming continued service. For example, members retiring at age 55 with 10 years of service would not be eligible for normal retirement until they reach 15 years of service. Therefore, the early retirement reduction would be 32.5% (6.5%/year multiplied by 5 years) of the 25% of average pay (2.5%/year for 10 years of service) benefit accrual, producing a benefit of 16.875% (25% x (100%-32.5%)) of average pay.

In addition to the changes above, the following changes would be effective July 1, 2010 for "pre-DROP" retirees³ and beneficiaries:

- Increase benefits for those members to \$24,000 for retirees and \$12,000 for beneficiaries for retirees and beneficiaries currently receiving less.

The FY2011 contribution amounts and contribution savings associated with these changes under the assumptions described below are shown on the attached Exhibits 1 and 1A.

² The eligibility is age 50 for members hired before January 1, 2003, and age 50 with 10 or more years of service for members hired on or after January 1, 2003

³ Members who retired prior to July 1, 1996 with 20 or more years of service at retirement.

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Assumption Changes

Benefit liabilities under the proposed plan changes in this letter were calculated using an 8.00% investment return assumption for both pre-retirement and post-retirement, per the proposed changes shown in our May 25, 2010 letter.

Because retirement eligibility is delayed in this proposal, retirement / employment patterns would be affected. Timing of retirement can significantly affect plan costs and we have no way to determine the actual rates of retirement under the proposed changes until we can observe experience with the provisions in place. Actual experience could be later or earlier (and therefore, everything else being equal, more or less costly) than that expected under any given set of assumed rates. This letter shows the results for one set of retirement assumptions, reflecting later retirement than the current assumptions. The age-based COLA and limited subsidy of early retirement under the proposed changes could make early retirements less expensive than under many public safety plans. The retirement assumption was not changed for grandfathered members. We anticipate using the assumptions shown herein for the FY2011 contribution if the proposed changes are incorporated.

The retirement rates used in this analysis for the non-grandfathered members are shown in the attached Exhibits 2B, 2C, 3 and 4. The effect on expected retirement ages for non-grandfathered members is shown below:

Weighted average anticipated retirement ages

Scenario*	Current Benefits (DROP eligible)		Current Benefits (DROP2 eligible)		Proposed Changes (non-grandfathered)	
	Fire	Police	Fire	Police	Fire	Police
Average assumed service retirement age	52.5	52.5	52.6	52.0	54.2	52.6

* For "grandfathered" members the retirement assumption is the same as baseline. Therefore, the expected retirement age for these members is the same as the baseline assumptions.

The later retirement eligibility under the proposed provisions could also cause an increase in the disability claims, which could have a significant impact on contribution requirements. This letter shows results with no change in the rate of disability retirements. In a similar analysis we recently prepared for the City, we found that doubling the rate of disability assumption in the period from five years preceding the current eligibility for Normal Retirement to the new eligibility

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for Normal Retirement could increase annual contributions by \$4 to \$5 million. That calculation was only meant to demonstrate one possible scenario. The rate of disability could more than double or it could change less. That calculation was for Normal Retirement only at age 55 with 15 years of service. Adding Normal Retirement at 25 years regardless of age should reduce the potential additional cost for higher rates of disability.

Exhibits 2A, 2B, and 2C show the retirement assumptions for unreduced retirement benefits (for members reaching the earlier of 1) age 55 with 15+ years of service, or 2) 25 years of service regardless of age) with separate rates for firefighters and police. Exhibits 3 and 4 show the retirement assumptions for the reduced benefits for early retirement, with separate tables for firefighters and police.

The data you provided for evaluating the minimum benefits for pre-DROP retirees and beneficiaries showed 17 records of beneficiaries for members who were included in our June 30, 2009 valuation as retirees. For consistency with the baseline valuation, we valued these as retirees and used the retiree benefit amount shown on the June 30, 2009 valuation data. These would be reflected as beneficiaries with the reduced amounts for the June 30, 2010 valuation.

We assumed that the number of active members on the date of the plan change would be the same as at July 1, 2009. We did not reflect any change to administrative costs as a result of the proposed changes.

Other Issues

As noted above, pension changes are likely to affect the timing of members' retirement. Changes in retirement timing typically also affect the cost of retiree medical benefits. Estimating that change in cost is beyond the scope of this letter.

Less generous retirement benefits, due to either later eligibility for retirement benefits or lower City-funded benefit amounts at retirement, could cause additional turnover or could result in members working longer than anticipated to reach the same level of benefits. We did not attempt to quantify the impact caused by any changes in turnover.

The Governmental Accounting Standards Board (GASB) is working on a project on Postemployment Benefit Accounting and Financial Reporting. While the final requirements and effective date are uncertain, we believe changes in the current GASB 27 requirements are likely. Based on the tentative decisions to date, those changes are likely to increase (perhaps substantially) the amount the City will have to report as its Annual Required Contribution (ARC).

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While GASB has no authority to actually require higher contributions, only to make jurisdictions report what GASB believes is a fair representation of the annual cost of the plan, bond rating agencies could well pay attention to any gap between the ARC and the actual contribution. We will be happy to provide further information about the GASB tentative decisions and their possible impact on the City's ARC.

Any increase/decrease in Actuarial Accrued Liability worsens/improves the System's funded status. As you're aware, the funded status has been drawing attention. A summary of the GASB 27 funded ratio as would be shown in the CAFR is also shown in Exhibit 1.

This letter has been prepared for the board of the Trustees to provide cost estimates for proposed changes in benefits and member contributions. This letter may not be used or relied upon by any other party or for any other purpose; Mercer is not responsible for the consequences of any such unauthorized use.

This letter includes or is derived from projections of future funding and/or accounting costs and/or benefit related results. To prepare these projections or results, various actuarial assumptions and methods, as described in this letter and in the 2009 actuarial valuation report, were used to project a limited number of scenarios from a range of possibilities. However, the future is uncertain, and the plan's actual experience will likely differ from the assumptions utilized and the scenarios presented; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. This letter has been created for a limited purpose, is presented at a particular point in time and should not be viewed as a prediction of the plan's future financial condition.

This letter is based on participant data supplied by the Fire and Police Employees' Retirement System (this data customarily would not be verified by a plan's actuary) and on the plan documents, including amendments, supplied by the Fire and Police Employees' Retirement System. Mercer is not responsible for the validity, accuracy and comprehensiveness of this information; the results can be expected to differ and may need to be revised if the underlying data or the plan provisions supplied to us are incomplete or inaccurate.

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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Please let me know if you have any questions or need any further information. I can be reached at 410 347 2806. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

A handwritten signature in cursive script that reads "Douglas L. Rowe".

Douglas L. Rowe, FSA, MAAA, EA
Principal

Copy:
James Baughman, Mercer

Enclosure

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Fire and Police Employees' Retirement System of the City of Baltimore
 - Exhibit 1 for June 8, 2010 letter
 Contribution Impact of Proposed Changes

FY2011 contributions

Results in \$millions	2009 Valuation		Proposed Changes**
	Based on City Code*	Based on Mercer's Recommendation**	
Plan Provisions			
Retirement Assumptions	Current	Current	June 8, 2010 letter
Disability Assumptions	Current	Current	Proposed
Investment Return Assumption	8.25%	8.25%	Current
Grandfathering Criteria****	N/A	N/A	8.00%
			15 Years of Service
Normal Cost	\$ 54.6	\$ 68.0	\$ 52.4
Amortization of Unfunded Liability	\$ 48.1	\$ 98.3	\$ 35.8
Reduction due to CRF Transfer	\$ (0.9)	\$ -	\$ -
FY2011 City/State contribution	\$ 101.8	\$ 166.3	\$ 88.2
Normal Cost as a % of Pay	19.42%	24.17%	18.61%
Amortization of Unfunded Liability as a % of Pay	17.09%	34.94%	12.72%
Reduction due to CRF Transfer as a % of Pay	(0.32%)	0.00%	0.00%
FY2011 City/State contribution as a % of Pay	38.18%	59.11%	31.33%
Funded Status (Actuarial Value of Assets basis)	84.8%	73.2%	88.0%
Funded Status (Market Value of Assets basis)	58.2%	50.2%	60.4%
Unfunded Liability (Actuarial Value of Assets basis)	\$ 463.6	\$ 947.6	\$ 351.5
Unfunded Liability (Market Value of Assets basis)	\$ 1,275.5	\$ 1,759.5	\$ 1,163.4

* Article 22 of the City Code requires that the variable benefit structure be valued by determining the liabilities of the plan using a 6.80% investment return assumption to make an allowance for the returns that are used to provide benefit increases. As explained previously, Mercer is concerned that this approach understates the liability.
 ** Mercer has recommended that the variable benefit structure be valued by determining the liabilities of the plan as though the investment returns subsequent to retirement are 5.0%.
 *** For a description of these scenarios, please refer to the letter. The proposed benefit changes replace the investment return-related benefit increases for retirees with fixed percentages so the need for separate pre- and post-retirement investment return assumptions disappears.
 **** Also includes members currently eligible for service retirement benefits due to age (age 50 and hired before 1/1/03)

The normal cost for the proposed changes is offset by the 7% expected employee contribution rate that would be effective July 1, 2010.
 According to the proposal, the employee contribution rate would increase to 8% of pay starting July 1, 2011, then to 9% of pay starting July 1, 2012, and then to 10% of pay starting July 1, 2013, which is projected to reduce the normal cost by approximately \$3 million for FY 2012, an additional \$3 million for FY 2013, and an additional \$3 million for FY 2014. Only the 7% rate is reflected in the contributions above.
 Please note that the normal cost and amortization amounts shown include a year of interest to 7/1/2010.
 The State contribution shown would normally be contributed prior to FY2011.
 Some of the results shown above may not add due to rounding.

This exhibit may only be used in conjunction with Mercer's June 8, 2010 letter.

Fire and Police Employees' Retirement System of the City of Baltimore
 - Exhibit 1A for June 8, 2010 letter
 Contribution Impact of Proposed Changes

FY2011 contribution impact

Results in \$millions	2009 Valuation		Impact of Proposed Changes***
	Based on City Code*	Based on Mercer's Recommendation**	
Plan Provisions	Current	Current	June 8, 2010 letter
Retirement Assumptions	Current	Current	Proposed
Disability Assumptions	Current	Current	Current
Investment Return Assumption	6.25%	9.25%	8.00%
Grandfathering Criteria****	N/A	N/A	15 Years of Service
Normal Cost	\$ 54.6	\$ 88.0	\$ (2.2)
Amortization of Unfunded Liability	\$ 48.1	\$ 98.3	\$ (12.3)
Reduction due to CRF Transfer	\$ (0.9)	\$ -	\$ 0.9
FY2011 City/State contribution	\$ 101.9	\$ 186.3	\$ (13.6)
Normal Cost as a % of Pay	19.42%	24.17%	(0.81%)
Amortization of Unfunded Liability as a % of Pay	17.09%	34.94%	(4.37%)
Reduction due to CRF Transfer as a % of Pay	(0.32%)	0.00%	0.32%
FY2011 City/State contribution as a % of Pay	36.18%	59.11%	(4.85%)
Unfunded Liability (Actuarial Value of Assets basis)	\$ 463.6	\$ 947.6	\$ (112.1)

* Article 22 of the City Code requires that the variable benefit structure be valued by determining the liabilities of the plan using a 6.80% investment return assumption to make an allowance for the returns that are used to provide benefit increases. As explained previously, Mercer is concerned that this approach understates the liability.
 ** Mercer has recommended that the variable benefit structure be valued by determining the liabilities of the plan as though the investment returns subsequent to retirement are 5.0%.
 *** For a description of these scenarios, please refer to the letter. The proposed benefit changes replace the investment return-related benefit increases for retirees with fixed percentages so the need for separate pre- and post-retirement investment return assumptions disappears.
 **** Also includes members currently eligible for service retirement benefits due to age (age 50 and hired before 1/1/03)

The increase/(decrease) in contributions is from the first column—the 2009 valuation results using City Code (6.6%) assumptions.
 The normal cost for the proposed changes is offset by the 7% expected employee contribution rate that would be effective July 1, 2010.
 According to the proposal, the employee contribution rate would increase to 8% of pay starting July 1, 2011, then to 9% of pay starting July 1, 2012, and then to 10% of pay starting July 1, 2013, which is projected to reduce the normal cost by approximately \$3 million for FY 2012, an additional \$3 million for FY 2013, and an additional \$3 million for FY 2014. Only the 7% rate is reflected in the contributions above.
 Please note that the normal cost and amortization amounts shown include a year of interest to 7/1/2010.
 The State contribution shown would normally be contributed prior to FY2011.
 Some of the results shown above may not add due to rounding.

This exhibit may only be used in conjunction with Mercer's June 8, 2010 letter.

**Service Retirement Rates for Proposed Changes
 – Exhibit 2A for June 8, 2010 letter**

Retirement rates for members & future members not participating in DROP or DROP2 (also grandfathered members under proposed changes)

Baseline

If 20 or more years of service, regardless of age

After age 50, if less than 20 years of service and retirement eligible

Years of Service	Rate*	After Reflecting DROP %**	Age	Rate*	After Reflecting DROP %**
20	60.00%	6.00%	50	6.40%	0.64%
21	22.50%	2.25%	51	4.60%	0.46%
22	22.50%	2.25%	52	4.60%	0.46%
23	29.30%	2.93%	53	4.70%	0.47%
24	33.80%	3.38%	54	5.90%	0.59%
25	33.80%	3.38%	55	7.30%	0.73%
26	33.80%	3.38%	56	6.90%	0.69%
27	33.80%	3.38%	57	6.90%	0.69%
28	33.80%	3.38%	58	6.90%	0.69%
29	33.80%	3.38%	59	13.90%	1.39%
30	33.80%	3.38%	60	21.20%	2.12%
31	33.80%	3.38%	61	17.20%	1.72%
32	33.80%	3.38%	62	25.50%	2.55%
33	33.80%	3.38%	63	25.50%	2.55%
34+	33.80%	3.38%	64	32.30%	3.23%
			65+	100.00%	100.00%

* before applying DROP/DROP2 participation assumption

** retirement rate after reflecting DROP/DROP2 participation assumption

Note:

Baseline rates also apply to grandfathered members under the proposed changes.

Service Retirement Rates for Proposed Changes
-- Exhibit 2B for June 8, 2010 letter

Service retirement rates for non-grandfathered members at the effective date of the change
 -- Service retirement eligibility would be postponed from age 50 or 20 years of service
 to the earlier of a) age 55 and 15 years of service, and b) 25 years of service regardless of age

The following rates have not been adjusted by DROP2 participation
 The following rates only apply to members with 25 or more years of service at retirement.

Firefighters

age	<u>at first eligibility*</u>		<u>after first eligibility*</u>	
	<u>rate**</u>	after reflecting <u>DROP2%***</u>	<u>rate**</u>	after reflecting <u>DROP2%***</u>
<55	60.00%	9.00%	50.00%	7.50%
55	60.00%	9.00%	50.00%	7.50%
56	60.00%	9.00%	50.00%	7.50%
57	60.00%	9.00%	50.00%	7.50%
58	60.00%	9.00%	50.00%	7.50%
59	60.00%	9.00%	50.00%	7.50%
60	60.00%	9.00%	50.00%	7.50%
61	60.00%	9.00%	50.00%	7.50%
62	60.00%	9.00%	50.00%	7.50%
63	60.00%	9.00%	50.00%	7.50%
64	60.00%	9.00%	50.00%	7.50%
65+	100.00%	100.00%	100.00%	100.00%

Police

age	<u>at first eligibility*</u>		<u>after first eligibility*</u>	
	<u>rate**</u>	after reflecting <u>DROP2%***</u>	<u>rate**</u>	after reflecting <u>DROP2%***</u>
<55	70.00%	17.50%	60.00%	15.00%
55	70.00%	17.50%	60.00%	15.00%
56	70.00%	17.50%	60.00%	15.00%
57	70.00%	17.50%	60.00%	15.00%
58	70.00%	17.50%	60.00%	15.00%
59	70.00%	17.50%	60.00%	15.00%
60	70.00%	17.50%	60.00%	15.00%
61	70.00%	17.50%	60.00%	15.00%
62	70.00%	17.50%	60.00%	15.00%
63	70.00%	17.50%	60.00%	15.00%
64	70.00%	17.50%	60.00%	15.00%
65+	100.00%	100.00%	100.00%	100.00%

* Eligibility for unreduced benefits

** Service retirement eligibility would be age 55 with 15 or more years of service, or 25 years of service regardless of age

*** Retirement rate after reflecting DROP/DROP2 participation assumption

Note:

Members reaching the "age/service" eligibility (age 55 with 15 or more years of service) but with less than 25 years of service are assumed to retire at the following rates:

Firefighters - 14%, Police - 16%

DROP2 Retirement Rates for Proposed Changes
-- Exhibit 2C for June 8, 2010 letter

*DROP2 participation assumption for non-grandfathered members (assumption for grandfathered members is unchanged from Baseline)
 -- DROP2 eligibility for non-grandfathered members would be postponed from 20 years of service to 25 years of service*

Participation %	Baseline		Proposed Changes	
	Fire	Police	Fire	Police
	90%	90%	85%	75%

Retirement rates for non-grandfathered participating in DROP2 (assumption for grandfathered members is unchanged from Baseline)

-- before applying the DROP2 participation assumption noted above

Years after eligibility/ election	Baseline		Proposed Changes	
	Fire	Police	Fire	Police
0	0.00%	0.00%	0.00%	0.00%
1	3.25%	4.75%	4.00%	6.00%
2	4.25%	5.75%	5.00%	7.00%
3	11.25%	12.75%	14.00%	16.00%
4	10.25%	11.75%	13.00%	15.00%
5	10.25%	11.75%	15.00%	18.00%
6	7.25%	9.00%	12.00%	14.00%
7	7.25%	26.00%	12.00%	36.00%
8	24.00%	26.00%	34.00%	36.00%
9	24.00%	26.00%	34.00%	36.00%
10	23.50%	26.50%	33.50%	36.50%
11	23.50%	26.50%	33.50%	36.50%
12	23.50%	26.50%	33.50%	36.50%
13	23.50%	26.50%	33.50%	36.50%
14+	23.00%	27.00%	33.00%	37.00%

-- after applying the DROP2 participation assumption noted above

Years after eligibility/ election	Baseline		Proposed Changes	
	Fire	Police	Fire	Police
0	0.00%	0.00%	0.00%	0.00%
1	2.93%	4.28%	3.40%	4.50%
2	3.83%	5.18%	4.25%	5.25%
3	10.13%	11.48%	11.90%	12.00%
4	9.23%	10.58%	11.05%	11.25%
5	9.23%	10.58%	12.75%	13.50%
6	6.53%	8.10%	10.20%	10.50%
7	6.53%	23.40%	10.20%	27.00%
8	21.60%	23.40%	28.90%	27.00%
9	21.60%	23.40%	28.90%	27.00%
10	21.15%	23.85%	28.48%	27.38%
11	21.15%	23.85%	28.48%	27.38%
12	21.15%	23.85%	28.48%	27.38%
13	21.15%	23.85%	28.48%	27.38%
14+	20.70%	24.30%	28.05%	27.75%

Notes:

Baseline rates also apply to grandfathered members under proposed changes

Early Retirement Rates for Proposed Changes
 -- Exhibit 3 for June 8, 2010 letter

Early retirement rates for non-grandfathered members at the effective date of the change
 -- Firefighters

Age	Service											21-24	25+
	<10*	10	11	12	13	14	15	1	2	3	4		
<45												3.00%	2.00%
45												3.00%	3.00%
46												3.00%	3.00%
47												3.00%	3.00%
48												3.00%	3.00%
49												4.00%	4.00%
50	3.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
51	3.00%	6.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
52	3.00%	6.00%	8.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
53	3.00%	6.00%	8.00%	10.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
54	3.00%	6.00%	8.00%	10.00%	12.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
55	4.50%	7.00%	9.50%	12.00%	14.50%	17.00%							
56	5.00%	8.00%	11.00%	14.00%	17.00%	20.00%							
57	5.00%	8.00%	11.00%	15.00%	19.00%	23.00%							
58	5.00%	8.00%	14.00%	18.00%	22.00%	26.00%							
59	5.00%	8.00%	15.00%	20.00%	25.00%	30.00%							
60	5.00%	15.00%	20.00%	25.00%	30.00%	35.00%							
61	10.00%	20.00%	25.00%	30.00%	35.00%	40.00%							
62	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%							
63	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%							
64	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%							
65	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%							

* For members hired before January 1, 2003. Members hired on or after January 1, 2003 would need 10 or more years of service to retire

Early Retirement Rates for Proposed Changes
 -- Exhibit 4 for June 8, 2010 letter

Early retirement rates for non-grandfathered members at the effective date of the change
 -- Police

Age	Service											21-24	25+
	<10*	10	11	12	13	14	15	1	2	3	4		
<45												5.00%	4.00%
45												5.00%	5.00%
46	← Members not yet eligible for early retirement →											5.00%	5.00%
47	← Members not yet eligible for early retirement →											5.00%	5.00%
48	← Members not yet eligible for early retirement →											5.00%	5.00%
49	← Members not yet eligible for early retirement →											6.00%	6.00%
50	5.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
51	5.00%	8.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
52	5.00%	8.00%	10.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
53	5.00%	8.00%	10.00%	12.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
54	5.00%	8.00%	10.00%	12.00%	14.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
55	5.00%	8.00%	11.00%	14.00%	17.00%	20.00%							
56	7.00%	11.00%	15.00%	19.00%	23.00%	27.00%							
57	10.00%	15.00%	20.00%	25.00%	30.00%	35.00%							
58	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%							
59	20.00%	25.00%	30.00%	35.00%	40.00%	45.00%							
60	25.00%	30.00%	35.00%	40.00%	45.00%	50.00%							
61	30.00%	35.00%	40.00%	45.00%	50.00%	55.00%							
62	35.00%	40.00%	45.00%	50.00%	55.00%	60.00%							
63	35.00%	40.00%	45.00%	50.00%	55.00%	60.00%							
64	35.00%	40.00%	45.00%	50.00%	55.00%	60.00%							
65	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%							

↑ Members eligible for unreduced benefits

* For members hired before January 1, 2003. Members hired on or after January 1, 2003 would need 10 or more years of service to retire