Appendix G. MERCER ACTUARIAL VALUATION OF HEALTH BENEFITS AS OF JULY 1, 2006

November, 2007

City and County of San Francisco

Post-Retirement Benefit Valuation Report

Under GASB 45 as of July 1, 2006

MERCER

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Contents

Section I: Report Highlights

Mercer has prepared this report for City and County of San Francisco ("City") to:

- Present the results of the valuation of the post-retirement health benefits provided by the City as of July 1, 2006,
- Provide information that may be used by the City to report their annual required contribution for the fiscal year ending June 30, 2008, and
- Provide reporting information that may be used for financial statements, government agencies and other interested parties pursuant to Government Accounting Standards Board Statement No. 45 (GASB 45).

Summary of Principal Results

The following table summarizes the primary results of the valuation which are discussed further below.

	Unfunded	Funded
Discount Rate	4.50%	8.00%
Payroll (beginning of year)	$2,021,384,946	$2,021,384,946
Unfunded Actuarial Accrued Liability (UAAL)	$4,036,324,359	$2,618,932,029
Normal Cost Rate	12.3%	5.6%
UAAL Amortization Rate	6.6%	6.8%
Annual Required Contribution (ARC) Rate	18.9%	12.4%

Most governmental employers have been accounting for post-retirement health benefits on a pay-as-you-go basis. However, effective for the fiscal year beginning July 1, 2007, the City, like other large governmental entities, must comply with the requirements of GASB 45.

This valuation is intended to provide the City with the information necessary to complete the disclosures for the fiscal year ending June 30, 2008 depending on specific decisions made by the City. GASB 45 permits the use of a valuation that is up to 24 months prior to the beginning of the first fiscal year for which the valuation provides the ARC. The City currently uses a valuation 12 months prior to the beginning of the fiscal year for reporting liabilities of the San Francisco Employees' Retirement System (SFERS) under GASB Statement No. 27. This valuation has been prepared assuming the City adopts the same policy for retiree healthcare valuations under GASB 45.

Although no trust has been established to pre-fund the retiree healthcare benefits, we understand the City is currently exploring pre-funding options and intends to establish a trust with an investment policy similar to that of the SFERS. This valuation has been prepared both assuming such a trust is established and the full ARC is contributed (Funded) and assuming no trust is established (Unfunded). If the City partially funds the ARC or develops an investment policy different from that used for SFERS, the results in this report may not be appropriate for GASB 45 reporting purposes.

Section I: Report Highlights *(continued)*

Funding Methods and Assumptions

In general, the same methods and assumptions used for SFERS have been adopted for this valuation, including use of the Entry Age Normal cost method. However, the unfunded actuarial accrued liability is amortized over a period of 30 years as a level percentage of payroll (as opposed to 15 years for SFERS).

The discount rate is to be selected as the estimated long-term investment return on the investments that are expected to be used to finance the payment of benefits. For funded plans, the considerations in selecting this rate would be similar to selecting the funding interest rate for a pension plan, and based on discussions with the City, we have used the same discount rate as SFERS essentially assuming that assets are invested similarly. However, for unfunded plans, the discount rate should be determined with reference to the employer's general assets. Since unrestricted general assets are invested in short-term fixed income securities, the City has adopted an assumption of 4.50%. If the plan is partially funded, a blended discount rate should be used, and since we have not produced results on a blended basis, some modification of this report would be necessary.

All actuarial assumptions and plan provisions valued are summarized in the Actuarial Basis section.

Annual Required Contribution

The basic annual expense recognized under GASB 45 is called the Annual Required Contribution (ARC), even though there is no requirement to fund this amount. The ARC depends on the actuarial cost method selected and typically consists of the normal cost plus amortization of the Unfunded Actuarial Accrued Liability (UAAL). The ARC is expressed as a percentage of covered payroll. The dollar amount of the ARC should be determined based on the actual covered payroll for the fiscal year.

The difference between the amounts required to be recognized and the amounts contributed (including benefits paid from general assets) is accumulated as the Net OPEB[1] Obligation (NOO). The annual OPEB cost reported as an expense in the employer's financial statements is equal to the ARC plus an adjustment related to any outstanding NOO.

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[1] Other Post-Employment Benefits

Section II: Certification

We have prepared an actuarial valuation of the City and County of San Francisco post-retirement healthcare plan as of July 1, 2006, to enable the City to comply with the accounting requirements under Statement of Governmental Accounting Standards No. 45 for the fiscal year ending June 30, 2008. The results of the valuation set forth in this report reflect our understanding of the substantive plan as of July 1, 2006.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures using an actuarial cost method which we believe is appropriate. In our opinion, the actuarial assumptions selected by the City and County of San Francisco based upon our recommendations are reasonable estimates of the future experience of the plan. To the extent that actual experience differs from the assumptions, or to the extent that plan provisions as actually administered are different from those summarized herein, the results presented in this report will differ. This report fully and fairly discloses the actuarial position of the plan.

Data

The valuation is based upon membership data as of July 1, 2006 and claims data through March, 2007, furnished by the City and summarized in this report without further audit. This data would customarily not be verified by a plan's actuary. We have reviewed the data for internal consistency and reasonableness and have no reason to doubt its substantial accuracy. Assumptions and estimates were used for missing or incomplete data in consultation with the City.

The valuation is also based upon the substantive plan as described by the City and County of San Francisco and summarized in this report. The City is solely responsible for the validity and completeness of this information.

Accounting Results

The calculations reported herein are consistent with our understanding of the provisions of Government Accounting Standards Board (GASB) Statements Number 43 and 45. Actuarial computations under Statements of Governmental Accounting Standards are for purposes of fulfilling governmental employer accounting requirements. Computations for other purposes may differ significantly from the results shown in this report.

Section II: Certification *(continued)*

Professional Qualifications

We are available to answer any questions on this material, or to provide explanations or further details, as may be appropriate. Collectively, the undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

William R. Hallmark, ASA, MAAA	November 14, 2007 **Date**
Martin A. Miller, FSA	November 14, 2007 **Date**
Xavier Erhart, ASA	November 14, 2007 **Date**

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Section III: Valuation Results

Calculation of Annual Required Contribution (ARC)

Benefit Obligations and Amortization Payment		Unfunded		Funded
1. Discount Rate		4.5%		8.0%
2. Actuarial Accrued Liability				
a. Retirees	$	1,363,349,535	$	927,855,742
b. Disabled Retirees		308,881,885		206,772,635
c. Surviving Spouses		160,869,674		113,995,028
d. Vested Separated Participants		475,097,356		231,425,047
e. Active Employees		1,728,125,909		1,138,883,577
f. Total	**$**	**4,036,324,359**	**$**	**2,618,932,029**
3. Assets		0		0
4. Unfunded actuarial accrued liability (UAAL) *(2.f. – 3.)*		4,036,324,359		2,618,932,029
5. Amortization factor based on 30 years (level % of pay)		30.000		19.372
6. Amortization payment at beginning of year		134,544,145		135,190,762

Calculation of ARC		Unfunded		Funded
1. Amortization payment at beginning of year	$	134,544,145	$	135,190,762
2. Normal cost at beginning of year		248,231,153		111,061,966
3. Interest on 1. and 2. to middle of year		8,612,444		9,850,109
4. Annual Required Contribution (middle of year) *(1. + 2. + 3.)*		391,387,742		256,102,837
5. Annual covered payroll (adjusted to middle of year)		2,066,866,108		2,066,866,108
6. ARC as a percent of covered payroll (middle of year) *(4. / 5.)*		18.94%		12.39%

Census Data	Covered Members as of July 1, 2006
1. Retirees	11,068
2. Disabled Retirees	2,179
3. Spouses of Retired Employees	4,940
4. Surviving Spouses	2,289
5. Vested Separated Participants*	1,946
6. Active employees	28,282
7. Total	**50,704**

* Includes members with reciprocity agreements.

Section III: Valuation Results *(continued)*

Sensitivity Results

Summary of Key Valuation Results		Unfunded		Funded
1. Actuarial Accrued Liability (AAL) at beginning of year	$	4,036,324,359	$	2,618,932,029
2. Normal Cost (NC) at beginning of year		248,231,153		111,061,966
3. Annual Required Contribution (ARC) at middle of year		391,387,742		256,102,837

Valuation Results with +1% Trend		Unfunded		Funded
1. Actuarial Accrued Liability (AAL) at beginning of year	$	4,872,780,575	$	3,037,509,027
2. Normal Cost (NC) at beginning of year		313,418,871		134,250,777
3. Annual Required Contribution (ARC) at middle of year		486,551,400		302,690,670
4. AAL Percent Difference		20.7%		16.0%
5. NC Percent Difference		26.3%		20.9%
6. ARC Percent Difference		24.3%		18.2%

Valuation Results with -1% Trend		Unfunded		Funded
1. Actuarial Accrued Liability (AAL) at beginning of year	$	3,387,468,339	$	2,280,865,063
2. Normal Cost (NC) at beginning of year		199,818,518		93,154,640
3. Annual Required Contribution (ARC) at middle of year		319,770,647		219,329,960
4. AAL Percent Difference		(16.1)%		(12.9)%
5. NC Percent Difference		(19.5)%		(16.1)%
6. ARC Percent Difference		(18.3)%		(14.4)%

Section III: Valuation Results *(continued)*

Projected Benefit Payments

The table below shows the projected benefit payments assuming no new entrants and all valuation assumptions realized.

Fiscal Year	Projected Benefit Payments
2006-07	106,747,023
2007-08	120,588,156
2008-09	135,499,282
2009-10	151,471,755
2010-11	169,072,747
2011-12	186,041,405
2012-13	203,538,518
2013-14	219,991,438
2014-15	236,776,420
2015-16	253,956,282
2016-17	271,223,543
2017-18	289,197,082
2018-19	308,217,707
2019-20	327,197,109
2020-21	347,099,275
2021-22	366,737,005
2022-23	386,523,081
2023-24	407,201,216
2024-25	427,572,130
2025-26	446,724,256
2026-27	466,328,301
2027-28	485,013,509
2028-29	502,729,221
2029-30	519,290,415
2030-31	533,951,478
2031-32	548,119,888
2032-33	560,736,672
2033-34	570,215,730
2034-35	577,149,043
2035-36	582,551,143

Section III: Valuation Results *(continued)*

Development of Annual OPEB Cost and Net OPEB Obligation

The table below develops the Annual OPEB Cost and the Net OPEB Obligation based on projected payroll for the fiscal year ending June 30, 2008. The actual amounts will need to be revised to reflect actual payroll, actual benefit payments, and actual contributions to a trust.

Annual OPEB Cost for fiscal year ending June 30, 2008	**Unfunded**	**Funded**
Annual Required Contribution (ARC) Rate	18.94%	12.39%
Estimated Payroll for Fiscal Year (adjusted to middle of year)	$2,159,875,083	$2,159,875,083
Estimated Annual Required Contribution	$409,080,341	$267,608,523
Interest on Net OPEB Obligation	0	0
Adjustment to ARC	0	0
Estimated Annual OPEB Cost	**$409,080,341**	**$267,608,523**
Estimated Contributions	110,082,811	267,608,523
Increase in Net OPEB Obligation	**$298,997,530**	**$0**
Net OPEB Obligation, beginning of year	0	0
Estimated Net OPEB Obligation, end of year	**$298,997,530**	**$0**

Section III: Valuation Results *(continued)*

Schedule of Funding Progress

The table below shows the Schedule of Funding Progress on a funded and unfunded basis. This schedule is required to be disclosed (on the appropriate basis) as a part of the Required Supplementary Information in the City's notes to its financial statements. Because this is the first valuation under GASB 45, there is no historical information provided. In the future, information from the three most recent valuations will be presented.

	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL	Funded Ratio	Covered Payroll	Unfunded AAL as a Percentage of Covered Payroll
		(a)	(b)	(b – a)	(a / b)	(c)	((b – a) / c)
Unfunded	7/1/2006	$0	$4,036,324	$4,036,324	0.0%	$2,066,866	195.3%
Funded	7/1/2006	$0	$2,618,932	$2,618,932	0.0%	$2,066,866	126.7%

Amounts in thousands

Section IV: Supplemental Information

The remainder of the report includes information supporting the results presented in the previous section.

- **Plan assets**
- **Participant data** presents and describes the participant data used in the valuation.
- **Actuarial basis** describes the plan provisions, as well as the methods and assumptions used to value the plan. The valuation is based on the premise that the plan is ongoing.

Section V: Plan Assets

Summary of Assets

There are no assets as of the valuation date.

Section VI: Participant Data

Distribution of Active Participants as of July 1, 2006

Age	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35+	Total
Under 20	7								**7**
20–24	84	8	16						**108**
25–29	619	202	75						**896**
30–34	840	727	297	47	1				**1,912**
35–39	915	1,388	743	299	38				**3,383**
40–44	721	1,355	1,012	714	314	16			**4,132**
45–49	564	1,151	904	1,021	914	345	6		**4,905**
50–54	455	989	717	936	999	871	220	24	**5,211**
55–59	308	697	561	678	782	843	552	166	**4,587**
60–64	129	329	298	333	323	361	279	158	**2,210**
65–69	29	85	118	113	83	85	61	66	**640**
70+	9	17	55	45	47	30	19	39	**261**
Total	**4,680**	**6,948**	**4,796**	**4,186**	**3,501**	**2,551**	**1,137**	**453**	**28,282**

Average Age: 47.2
Average Years of Service: 14.1

Section VI: Participant Data *(continued)*

Statistics for Active Participants

	Police	Fire	Muni	Craft	Misc.	Total
As of July 1, 2006						
▪ Fully eligible	1,923	1,391	1,776	3,132	15,350	23,572
▪ Not fully eligible	243	218	290	550	3,379	4,680
▪ Average age	43.3	43.5	48.8	49.2	47.5	47.2
▪ Average service	16.7	14.5	12.7	14.5	13.8	14.1
▪ Average salary	91,941	74,206	55,302	66,733	71,964	71,723
Females						
▪ Fully eligible	324	201	453	213	8,720	9,911
▪ Not fully eligible	37	30	70	61	2,007	2,205
▪ Average age	42.6	40.6	46.3	46.5	47.0	46.7
▪ Average service	15.6	10.6	11.7	12.6	13.8	13.7
▪ Average salary	92,265	75,000	55,281	59,745	70,132	70,008
Males						
▪ Fully eligible	1,599	1,190	1,323	2,919	6,630	13,661
▪ Not fully eligible	206	188	220	489	1,372	2,475
▪ Average age	43.5	44.0	49.6	49.4	48.1	47.7
▪ Average service	16.9	15.1	13.1	14.6	13.8	14.4
▪ Average salary	91,876	74,073	55,309	67,295	74,420	73,011

Average Salary representing 2006/2007 Rate of Pay

Section VI: Participant Data *(continued)*

Distribution of Inactive Participants as of July 1, 2006

	Status Group					
Age	**Healthy Retiree**	**Disabled Retiree**	**Spouse of Retiree**	**Surviving Spouses**	**Vested Separated**	**Total**
Under 40	0	8	43	7	463	**521**
40 – 44	0	33	54	10	383	**480**
45 – 49	0	76	174	20	451	**721**
50 – 54	380	162	396	46	322	**1,306**
55 – 59	1,220	331	779	114	196	**2,640**
60 – 64	1,944	468	996	158	75	**3,641**
65 – 69	2,183	362	823	199	32	**3,599**
70 – 74	1,821	222	647	268	14	**2,972**
75 – 79	1,417	210	478	381	4	**2,490**
80 – 84	1,131	184	372	462	3	**2,152**
85 – 89	651	97	144	396	3	**1,291**
90 – 94	267	21	30	180	0	**498**
95+	54	5	4	48	0	**111**
Total	**11,068**	**2,179**	**4,940**	**2,289**	**1,946**	**22,422**

Statistics for Inactive Participants Over Age 65

	Number			**Average Age**		
	Not Eligible for Medicare	**Eligible for Medicare**	**Total**	**Not Eligible for Medicare**	**Eligible for Medicare**	**Total**
As of July 1, 2006						
Retirees	226	6,856	7,082	71.1	75.3	75.2
Disabled retirees	46	969	1,015	72.7	75.1	74.9
Spouses of retirees	188	2,127	2,315	69.5	74.4	74.0
Surviving spouses	32	1,861	1,893	76.3	80.3	80.2
Total	**492**	**11,813**	**12,305**	**71.0**	**75.9**	**75.7**

Section VII: Actuarial Basis

Accounting Actuarial Cost Method and Policies

Actuarial cost method: Liabilities shown in this report are computed using the Entry Age Normal Cost method allocated as a level percent of pay from the date of hire to decrement age.

Unfunded Actuarial Liability amortization method: UAL is amortized as a level percentage of payroll over a period of 30 years.

Census data: We have used participant data as supplied by the City. This information would not customarily be verified by a plan's actuary. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy. Assumptions and estimates were made for incomplete or missing data in consultation with the City.

Participants included: The plan sponsor provides us with data on all employees as of the valuation date, but only those employees who have completed the plan's eligibility requirements are included in the valuation of liabilities.

Funding policy: The post-retirement medical plan's benefits are currently funded on a pay-as-you-go basis. The city funds on a cash basis as benefits are paid. No assets have been segregated and restricted to provide post-retirement benefits.

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan.

Discount rate	4.50% per annum assuming an unfunded plan 8.00% per annum assuming a trust funded plan
Payroll growth	4.50% per annum
Salary merit increase	

Years of Service	Police	Fire	Muni	Craft	Misc. Females	Misc. Males
1	13.50%	21.00%	13.00%	5.00%	5.00%	5.25%
2	5.00	5.00	8.00	2.00	4.00	4.25
3	5.00	5.00	1.00	2.00	4.00	3.50
4	1.00	1.00	0.00	2.00	3.50	3.50
5	1.00	1.00	0.00	1.50	2.50	3.25
6	1.00	1.00	0.00	1.00	2.25	2.75
7	1.00	1.00	0.00	1.00	2.25	2.50
8	1.00	1.00	0.00	0.80	2.00	2.25
9	1.00	1.00	0.00	0.70	1.75	2.25
10	1.00	1.00	0.00	0.70	1.50	2.25
11	1.00	1.00	0.00	0.70	1.00	2.25
12	1.00	1.00	0.00	0.70	1.00	1.75
13	1.00	1.00	0.00	0.70	1.00	1.75
14	1.00	1.00	0.00	0.70	1.00	1.75
15 & Over	1.00	1.00	0.00	0.70	0.90	1.00

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Health care cost trend rates

The trend rates of incurred claims represent the rate of increase in employer claim payments:

Years	Non-Medicare (All Plans)	Medicare (All Plans)	Pharmacy (City Plan)	Medicare Part B
2006-07	8.5%	9.5%	9.5%	8.5%
2007-08	8.0	9.0	9.0	8.0
2008-09	7.5	8.5	8.5	7.5
2009-10	7.0	8.0	8.0	7.0
2010-11	6.5	7.5	7.5	6.5
2011-12	6.0	7.0	7.0	6.0
2012-13	5.5	6.5	6.5	5.5
2013-14	5.0	6.0	6.0	5.5
2014-15	5.0	5.5	5.5	5.5
2015-16+	5.0	5.0	5.0	5.5

Health care cost trend rates (continued)

The trend rates of incurred claims represent the rate of increase in employer claim payments:

Years	Vision	Admin. Cost	10-County Amount
2006-07	3.0%	4.5%	7.5%
2007-08	3.0	4.5	7.0
2008-09	3.0	4.5	6.5
2009-10	3.0	4.5	6.0
2010-11	3.0	4.5	5.5
2011-12	3.0	4.5	5.0
2012-13	3.0	4.5	5.0
2013-14	3.0	4.5	5.0
2014-15	3.0	4.5	5.0
2015-16+	3.0	4.5	5.0

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Base year per capita plan costs

Base year per capita plan costs for 2006-2007 were developed by Mercer. Costs were developed at age 65 as shown below:

Plan	Medical	Pharmacy	Expense
City Health Plan (Non-Medicare)	10,523	3,203	424
City Health Plan (Medicare)	1,144	1,629	304

Plan	Kaiser	PacifiCare	Blue Shield
Other Plan (Non-Medicare)	6,499	7,466	6,110
Other Plans (Medicare)	2,995	2,473	3,499
Expense (Other Plans)	6	6	6
Vision (All Plans)	46	46	46

Aging

For medical and Rx annual increases

Age of Employee / Retiree / Dependent	Annual Cost Increment in One Year
40-44	2.10% per year
45-49	3.80% per year
50-54	4.00% per year
55-59	3.80% per year
60-64	4.10% per year
65-69	2.50% per year
70-74	2.00% per year
75-79	1.30% per year
80-84	0.60% per year
85-89	0.30% per year
90 and above	0.00% per year

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Per capita retiree contributions

Contributions are determined in accordance with formulae set out in the Plan Provisions subsection. The following table shows the starting values that served as a basis for projecting contributions into the future.

Plan Year Ending June 30, 2007

Cost	City Plan	Kaiser
Total Active Employee Cost	$588	$368
10-County Average	$366	$366
Dependent Cost	$552	$368

Cost	PacifiCare	Blue Shield
Total Active Employee Cost	$395	$354
10-County Average	$366	$366
Dependent Cost	$395	$354

Mortality, healthy lives

Mortality rates for healthy lives are based on the 1994 Group Annuity Mortality Table. Rates at sample ages are shown below:

Age	Male	Female
25	0.00066%	0.00029%
30	0.00080	0.00035
35	0.00085	0.00048
40	0.00107	0.00071
45	0.00158	0.00097
50	0.00258	0.00143
55	0.00443	0.00229
60	0.00798	0.00444
65	0.01454	0.00864
70	0.02373	0.01373
75	0.03721	0.02269
80	0.06203	0.03940
85	0.09724	0.06774
90	0.15293	0.11627
95	0.23361	0.18621
100	0.31724	0.27643

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Disabled mortality Rates at sample ages are shown below:

	Miscellaneous		Safety	
Age	**Male**	**Female**	**Male**	**Female**
25	0.00752%	0.00536%	0.00050%	0.00070%
30	0.00773	0.00566	0.00070	0.00100
35	0.00796	0.00595	0.00110	0.00150
40	0.00865	0.00625	0.00170	0.00260
45	0.01059	0.00757	0.00280	0.00380
50	0.01459	0.01004	0.00400	0.00540
55	0.02115	0.01337	0.00590	0.00890
60	0.02870	0.01713	0.00980	0.01450
65	0.03617	0.02157	0.01630	0.02400
70	0.04673	0.02709	0.02610	0.03610
75	0.06552	0.03687	0.03890	0.05310
80	0.09481	0.05517	0.05770	0.08090
85	0.14041	0.08560	0.08620	0.11070
90	0.20793	0.13494	0.11790	0.16000
95	0.30792	0.21273	0.17520	0.25150
100	0.45599	0.33538	0.27510	0.39500

Withdrawal Rates at sample ages are shown below:

Service	Fire	Police	Craft	Muni	Safety
0	0.0400%	0.0100%	0.0700%	0.1000%	0.1072%
1	0.0150	0.0400	0.0300	0.0250	0.0841
2	0.0100	0.0200	0.0300	0.0250	0.0609
3	0.0100	0.0200	0.0300	0.0250	0.0470
4	0.0100	0.0200	0.0300	0.0250	0.0445
5	0.0100	0.0100	0.0300	0.0400	0.0421
10	0.0100	0.0100	0.0200	0.0250	0.0300
15	0.0050	0.0100	0.0100	0.0250	0.0178
20	0.0005	0.0050	0.0100	0.0250	0.0096
25	0.0000	0.0000	0.0000	0.0000	0.0053
30	0.0000	0.0000	0.0000	0.0000	0.0036

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Withdrawal (continued)

Rates of termination for Miscellaneous employees vary by age and service. Rates at sample ages are shown below:

	Less than 1 Year of Service	
Age	**Male**	**Female**
25	0.1500%	0.1500%
30	0.1500	0.1250
35	0.1000	0.1250
40	0.1000	0.1000
45	0.1000	0.1000
50	0.1000	0.1500
55	0.1000	0.1500
60	0.2000	0.0750
65	0.2000	0.0750

Withdrawal (continued)

Rates of termination for Miscellaneous employees vary by age and service. Rates at sample ages are shown below:

	3 Years' Service	
Age	**Male**	**Female**
25	0.1000%	0.0750%
30	0.0700	0.0750
35	0.0700	0.0750
40	0.0500	0.0500
45	0.0500	0.0250
50	0.0500	0.0250
55	0.0250	0.0250
60	0.0250	0.0250
65	0.0250	0.0250

	5 or More Years' Service	
Age	**Male**	**Female**
25	0.0650%	0.0500%
30	0.0650	0.0500
35	0.0250	0.0300
40	0.0250	0.0300
45	0.0250	0.0250
50	0.0250	0.0250
55	0.0250	0.0250
60	0.0250	0.0250
65	0.0250	0.0250

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Disability incidence

Rates at sample ages are shown below:

Age	Fire	Police	Craft	Muni	Miscellaneous Male	Miscellaneous Female
25	0.0003%	0.0002%	0.0000%	0.0000%	0.0000%	0.0000%
30	0.0006	0.0005	0.0001	0.0001	0.0001	0.0002
35	0.0015	0.0009	0.0006	0.0006	0.0012	0.0015
40	0.0070	0.0012	0.0012	0.0011	0.0023	0.0025
45	0.0050	0.0010	0.0024	0.0017	0.0032	0.0060
50	0.0100	0.0160	0.0060	0.0080	0.0037	0.0060
55	0.0500	0.0300	0.0200	0.0180	0.0055	0.0100
60	0.1300	0.0008	0.0000	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	0.0000		
70	0.0000	0.0000	0.0000	0.0000		
75	0.0000	0.0000	0.0000	0.0000		
80	0.0000	0.0000	0.0000	0.0000		

Retirement

Sample rates are as follows:

Age	Fire	Police	Craft	Muni	Miscellaneous Male	Miscellaneous Female
50	0.0200%	0.0300%	0.0300%	0.0700%	0.0200%	0.0300%
51	0.0200	0.0300	0.0200	0.0250	0.0200	0.0200
52	0.0200	0.0300	0.0200	0.0250	0.0200	0.0200
53	0.0200	0.0300	0.0300	0.0250	0.0200	0.0200
54	0.0200	0.0300	0.0300	0.0250	0.0450	0.0300
55	0.1000	0.1000	0.0400	0.0600	0.0450	0.0300
56	0.1000	0.1000	0.0400	0.0250	0.0450	0.0500
57	0.2000	0.1200	0.0400	0.0250	0.0450	0.0600
58	0.2000	0.1200	0.0550	0.1500	0.0450	0.0600
59	0.2000	0.1200	0.0550	0.2000	0.1000	0.0600
60	0.2000	0.3500	0.1500	0.2500	0.1200	0.1600
61	0.4000	0.2500	0.1800	0.1500	0.1400	0.1600
62	0.3500	0.2500	0.3000	0.4000	0.2800	0.2000
63	0.3000	0.2500	0.1800	0.1250	0.2000	0.1800
64	0.3000	0.2500	0.1800	0.2000	0.2000	0.2000
65	1.0000	1.0000	0.1500	0.2500	0.1500	0.1500

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Spouse/partner coverage	
▪ Percentage married and assumed to elect spouse or partner coverage at retirement. Actual Spouse data is used for current retirees.	Males .... 50% Females 20%
▪ Age difference of spouses	Males are assumed to be 3 years older than females.
Eligible dependents	Spouses, children, and/or domestic partners are eligible for the plan. Upon death of a covered retiree, coverage can be continued for the spouse or domestic partner.
Plan participation	94 % of future retirees are assumed to elect a medical plan at retirement with the following frequencies:

Plan	<65	≥ 65
City Health Plan	10%	10%
Blue Shield	40	40
PacifiCare	10	10
Kaiser	40	40

Administrative expenses	Administrative expense is included in the claims cost.
Stop Loss	N/A
Medicare Eligibility	For those currently under age 65, 95% are assumed to become eligible for Medicare upon attainment of age 65. Actual data is used for those currently over age 65.
Federal Part D subsidy	Federal subsidy of qualified Part D Plans (PDPs) is reflected in the per capita cost of these plans. This subsidy is shared between the City and retirees. Anticipated federal RDS subsidy payments are also shared with retirees in the form of reductions in contributions. RDS subsidy payments are not reflected as offsets against City costs or liabilities for purposes of the valuation.

Section VII: Actuarial Basis *(continued)*

Claims Cost Development

Claims costs for the City Plan and the HMOs were developed differently. 2005/06 incurred claims experience of the City plan was converted into per capita claims costs and projected into 2006/07. Actual HMO premiums for 2006/07 were used as the basis for developing the HMO per capita claims costs, with adjustments for the addition of Pacificare and removal of Health Net. Only the per capita costs for medical and pharmacy benefits are further discussed, as the costs for vision benefits were taken directly from the 2006/07 rates for the vision plan.

City Plan per capita claims costs: Medical and pharmacy costs incurred in 2005/06 and paid through March 2007 were included. In that the payment period extended for nine months beyond the payment period, the claims were essentially complete, representing incurred costs not needing adjustment for claims incurred but not yet reported. These claims costs pertained to the entire City Plan, including claims costs for the San Francisco Unified School District and the Community College District.

These claims costs were related to counts of retirees and dependents to develop an average per capita incurred claims cost for an adult retiree/dependent. The counts pertained to the entire City Plan, including San Francisco Unified School District and the Community College District. This process was applied to non-Medicare claims cost experience and Medicare claims cost experience, with the retiree/dependent counts related to their corresponding costs.

The resulting per capita claims costs were then age-graded using counts taken from the censuses pertaining to this valuation (i.e., retirees and dependents from the San Francisco Unified School District and Community College District were not included).

Last, the age-graded per capita claims costs for non-Medicare and Medicare medical and pharmacy were projected into 2006/07 using a trend assumption of 10% (except that the trend assumption for non-Medicare medical was only 9%).

HMO per capita claims costs: For all of the HMOs in place in 2006/07, medical and pharmacy costs are aggregated in the premium rates. As such, they were treated as a single cost. To develop per capita claims costs for non-Medicare adults, the 2006/07 premiums for active employee only, first dependent of active employee, retiree without Medicare, and first dependent of retiree without Medicare were blended based upon the counts taken from the censuses pertaining to this valuation. The resulting costs were deemed to apply to active and non-Medicare adults (i.e., employees, retirees, and dependents). These costs were age-graded, again using the censuses pertaining to this valuation.

The process was replicated for the Medicare adult, except only retirees with Medicare and the first dependent of the retiree with Medicare were included.

The resulting per capita costs already pertained to 2006/07. With the exception of the Health Net costs, these costs were used in the valuation. In that Health Net replaced Pacificare for 2007/08, and because plan sponsors wanted to look ahead and reflect known changes, the effect of replacing Health Net with Pacificare was taken into account. Based upon an examination of the 2007/08 rate tables versus the 2006/07 rate tables, non-Medicare costs for Pacificare were assumed to be 90% of the corresponding Health Net costs. Similarly, Medicare costs for Pacificare were assumed to be 98% of the corresponding Health Net costs.

Section VII: Actuarial Basis *(continued)*

Claims Cost Development *(continued)*

Based upon an examination of the results of the 2007/08 open enrollment, taking into account the demographics of all the health plans, none of the costs of the other HMOs (nor the City Plan) required any adjustment owing to the introduction of Pacificare.

Development of Healthcare Cost Trend Rates

The trend assumptions selected for this valuation comply with Mercer's guidelines on retiree medical trend assumptions (Actuarial and Finance Steering Committee Guideline Standard of Practice #2A).

The trend assumptions are comprised of three elements: the initial trend rate, the ultimate trend rate, and the grade-down period. Trend rates exclude the expected impact of aging since this impact is explicitly reflected elsewhere in the valuation.

The initial trend rate is the expected increase in health care costs into the second year of the valuation (i.e., the first assumed annual increase in starting per capita rates). Initial rates are established separately for pre-Medicare medical claims, Medicare-eligible medical claims, prescription drug claims, and administrative expenses. These expected trend rates are based on market assessments and surveys and take into account actual historical experience, expected unit cost information, changes in utilization, plan design leveraging, cost shifting, and new technology. For valuation purposes, these trend rates are blended together based on a cost-weighted average basis.

The assumed ultimate trend rate and grade-down period are based on macroeconomic principles. These assumptions reflect assumed long term general information, nominal gross domestic product growth rates, and the excess of national health expenditures over other goods and services, and an adjustment for an assumed impact of population growth.

Section VII: Actuarial Basis *(continued)*

Plan Provisions

The following summary of plan provisions represents our understanding of the substantive plan;

Eligibility	The plan provides benefits to individuals who terminate service with the City through service retirement, disability retirement and vested termination.
Covered groups	Fire, police, and miscellaneous employees covered under the SFERS and CalPERS retirement plans; does not include employees of the San Francisco Unified School District and San Francisco Community College District, whose costs are covered by those two districts.
Plans available	PPO – City Health Plan (Self-insured) HMO – Kaiser, PacifiCare and Blue Shield (Fully-insured)
Retirement date	Age 50 with 5 years of service (service includes years accumulated under a reciprocity agreement)
Service retirement	Employees who retire from active status after attaining age 50 and completing 5 years of service can immediately commence medical benefits. Service includes reciprocity service.
Vested termination	Employees who complete 5 years of service at termination can immediately commence medical benefits when they retire after attaining age 50.
Disability retirement	Employees who become disabled due to duty-related disability and retire, can immediately commence medical benefits. Employees with 5 years of service, who become disabled due to non-duty-related disability and retire, can immediately commence medical benefits.
Dependent eligibility	Spouses and children of the retiree are eligible for the plan. Domestic partners of the retiree and their children are also eligible on the same basis as spouses and children.
Survivor eligibility	Upon the death of a covered retiree, coverage can continue for life to a spouse or domestic partner.

Section VII: Actuarial Basis *(continued)*

Plan Provisions

Member contributions	The difference between the "total cost of coverage" and the "10-county survey amount" is the employee's required contribution under the Charter. The "total cost of coverage" is equal to the City plan rate for retiree coverage or the HMO premium, as appropriate. However, with respect to non-Medicare coverage, the "total cost of coverage" for the retiree only is deemed to be the cost of coverage for an active employee. That is, the employer defrays any cost increment between the cost of the non-Medicare eligible retiree and the active employee. The "10-county survey amount" is a survey of the ten most populous counties in California to determine the average employer contribution made toward employee medical coverage. Non-Medicare eligible retirees are required to contribute to their own coverage 50% of the amount that an employee in the same health plan pays under the Charter, irrespective of any negotiated City contributions in addition to the 10-county survey amount. Medicare eligible retirees contribute to their own coverage 50% of the difference between the contribution for an active employee in the same health plan (under the Charter) and the Medicare Part B premium. Retirees contribute 50% of the cost of medical coverage for one dependent and 100% of the cost of coverage for any additional dependents. For dependents, the employer does not defray any cost increment between the cost of non-Medicare eligible dependents and the corresponding dependent of active employees. For the purposes of developing contributions, the rates are not adjusted to age-graded per capita costs as is done in the Claims Cost development. Surviving spouses and domestic partners of deceased retirees contribute the same amounts as retirees. For 2006/07, hypothetical contributions pertaining to PacifiCare were developed using the adjustments set out in the Claims Cost Development.
Vision benefits	All retirees covered under a City-sponsored medical plan receive vision benefits. The contributions calculated as described above take into account the cost of the vision benefits. Vision benefits for all retirees are administered by Vision Service Plan.
Dental benefits	Dental benefits are provided through three plan choices — Delta Dental, Delta PMI and Pacific Union. Retirees pay the full cost of dental coverage offered by the City for themselves and their dependents. Dental benefits have been excluded from the actuarial valuation.
Other post-retirement welfare benefits	None.