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City of Costa Mesa
GASB 45 Financial Report

Fiscal Year Ending

June 30, 2012

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Certification

This report summarizes the GASB actuarial valuation for the City of Costa Mesa 2011/12 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). The valuation is also based upon our understanding of the plan provisions as summarized within the report.

The information presented herein is based on the information furnished to us by the Plan Sponsor that has been reconciled and reviewed for reasonableness. We are not aware of any material inadequacy in employee census provided by the Plan Sponsor. We have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based.

The actuarial assumptions were selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All computations have been made in accordance with generally accepted actuarial principles and practice.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.

Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report.

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Randy Gomez FSA, MAAA

Evi Laksana, ASA, MAAA

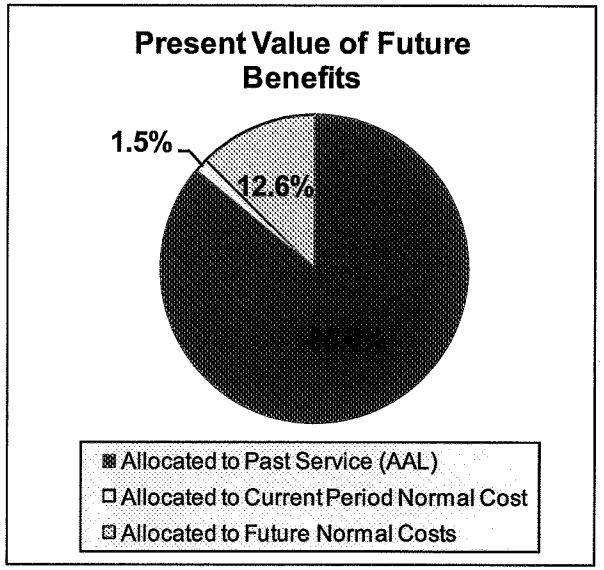
June 27, 2012

Sources of GASB Liabilities and Assets

1. The City explicitly subsidizes retiree health care coverage. Refer to the Substantive Plan Provisions section for more details on the City's explicit subsidy.
2. The City's health plans are fully insured and community-rated thus there is no GASB 45 implicit liability assigned to the City.
3. The City has historically funded its retiree health benefits on a pay-as-you-go basis.

Below is the breakdown of Present Value of Future Benefits (PVFB) allocated for past, current, and future service. Pages 2 and 3 show the GASB results for the fiscal year beginning July 1, 2011 based on the Entry Age Normal Level % of Salary cost method.

	Present Value of Future Benefits (PVFB)	***Actuarial Accrued Liability (AAL)*** *PVFB allocated to past service*	***Normal Cost (NC)*** *PVFB allocated to current period service*	***Future Normal Costs*** *PVFB allocated to future service*
	A	***B***	***C***	***D = A – B – C***
As of 7/1/2011	$ 42,384,095	$ 36,429,075	$ 616,158	$ 5,338,862



PVFB is the amount needed as of July 1, 2011 to fully fund the City's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

AAL is the portion of PVFB considered to be accrued or earned as of July 1, 2011. This amount is a required disclosure in the Required Supplementary Information section.

NC is the portion of actuarial present value of retiree health care benefits and expenses allocated to 2011/12 by the actuarial cost method (Entry Age Normal as % of Salary).

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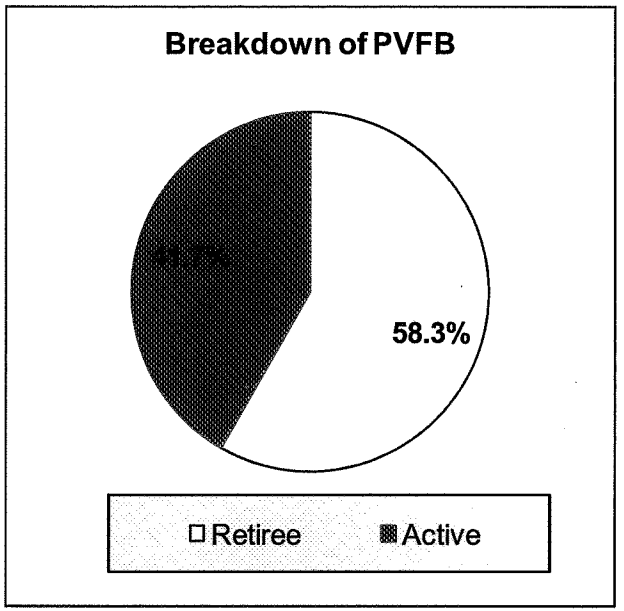
Summary of Results

1. Present Value of Future Benefits (PVFB)

	7/1/2011
Total PVFB	$ 42,384,095
Discount Rate	4.50%



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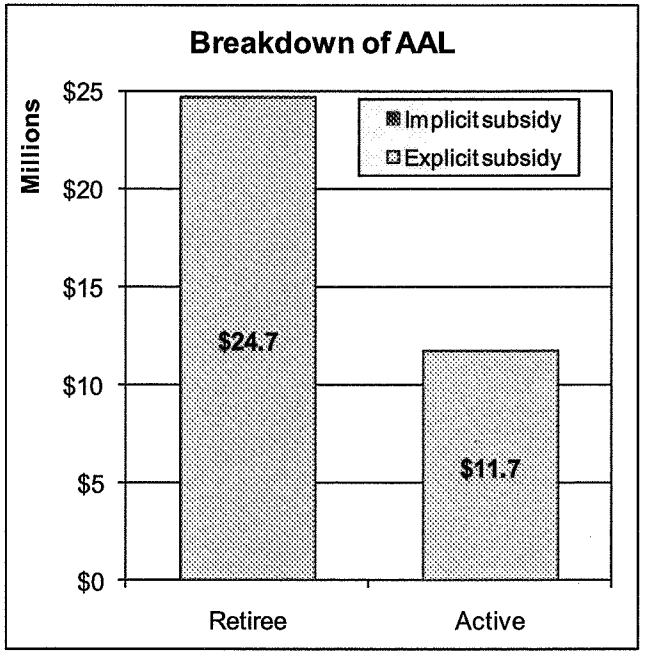
Summary of Results -- Continued

2. Actuarial Accrued Liabilities (AAL)

	7/1/2011
Total liabilities	$ 36,429,075
Discount Rate	4.50%

3. Income Statement and Balance Sheet Impact

	2010/11	*2011/12*
Annual OPEB Cost (Affects Income Statement)	$ 2,198,079	$ 2,153,804
Total Employer Contributions (See Plan Provisions) (Affects Income Statement)	$ 1,679,325	$ 1,609,565
Net OPEB Obligation at year-end (Affects Balance Sheet Liability)	$ 1,926,696	$ 2,470,935



Explicit Subsidies are created when retirees are not charged the full cost of health care as measured by the premium or premium equivalent rates determined annually by the employer.

Implicit Subsidies are additional employer liabilities when the inherently higher health care costs for retired employees are not directly reflected in the determination of the premium or premium equivalent rates.

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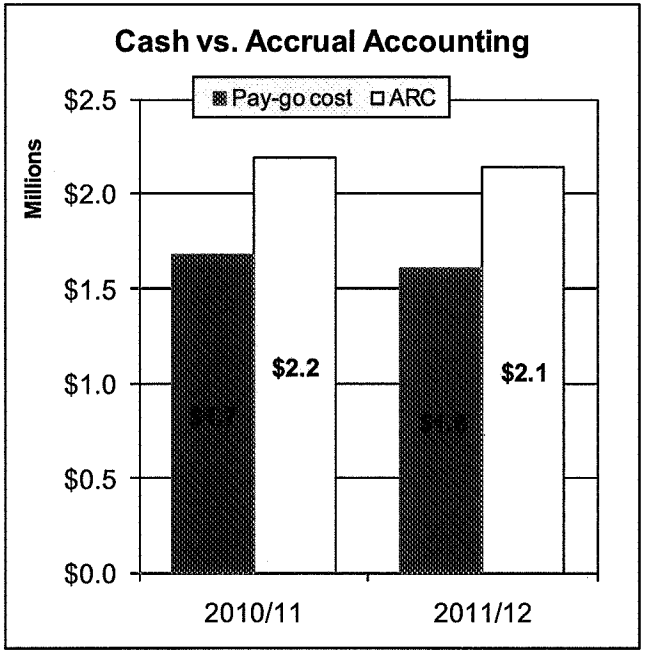
Required Supplementary Information	*2010/11*[1]	*2011/12*
Actuarial Accrued Liability as of beginning of period	$ 35,491,561	$ 36,429,075
Actuarial Value of Assets as of beginning of period	0	0
Unfunded Actuarial Accrued Liability (UAAL)	**$ 35,491,561**	**$ 36,429,075**
Covered payroll	$ 49,021,189	$ 38,315,112
UAAL as a % of covered payroll	72.4%	95.1%

Annual Required Contribution	*2010/11*	*2011/12*
Normal cost as of beginning of year	$ 700,065	$ 616,158
Amortization of the UAAL for 30 years	1,400,977	1,437,984
Total normal cost and amortization payment	$ 2,101,042	$ 2,054,142
Interest to end of year	94,547	92,436
Total Annual Required Contribution (ARC)	**$ 2,195,589**	**$ 2,146,578**



Annual Required Contribution (ARC) is the annual expense recorded in the income statement under GASB 45 accrual accounting. It replaces the cash basis method of accounting recognition with an accrual method. The GASB 45 ARC is higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

[1] The 2010/11 GASB results can be found in the City's FYE June 30, 2011 Notes to Financial Statements. The calculations were based on the actuarial report issued for FYE June 30, 2010.

Annual OPEB Cost and Net OPEB Obligation	*2010/11*[2]	*2011/12*
ARC as of end of year	$ 2,195,589	$ 2,146,578
Interest on Net OPEB Obligation (NOO) to end of year	29,880	86,701
NOO amortization adjustment to the ARC	(27,390)	(79,475)
Annual OPEB cost	$ 2,198,079	$ 2,153,804
Total annual employer contribution for pay-go cost[3]	(1,679,325)	(1,609,565)
Total annual employer contribution for pre-funding	0	0
Change in NOO	$ 518,754	$ 544,239
NOO as of beginning of year	1,407,942	1,926,696
NOO as of end of year	**$ 1,926,696**	**$ 2,470,935**

Pay-as-you-go Cost is the expected total employer cash cost for the coming period based on all explicit and implicit subsidies. It is also the amount recognized as expense on the Income Statement under pay-as-you-go accounting.

Net OPEB Obligation is the cumulative difference between the annual OPEB cost and employer contributions. This obligation will be created if cash contributions are less than the current year expense under GASB 45 accrual rules.

The net obligation is recorded as a liability on the employer's balance sheet which will reduce the net fund balance.

The value of implicit subsidies is considered as part of cash contributions for the current period. Other cash expenditures that meet certain conditions are also considered as contributions for GASB 45 purposes.

[2] The 2010/11 GASB results can be found in the City's FYE June 30, 2011 Notes to Financial Statements. The calculations were based on the actuarial report issued for FYE June 30, 2010.
[3] 2010/11 pay-go is an actual amount. 2011/12 pay-go is an estimated amount.

Schedule of Funding Progress

As of	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	AVA as a % of AAL	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	C = B – A	D = A / B	E	F = C / E
July 1, 2011	$ -	$ 36,429,075	$ 36,429,075	0.0%	$ 38,315,112	95.1%
July 1, 2010	$ -	$ 35,491,561	$ 35,491,561	0.0%	$ 49,021,189	72.4%
July 1, 2009	$ -	$ 35,491,561	$ 35,491,561	0.0%	$ 45,365,004	78.2%

Schedule of Employer Contributions

FYE	Employer Contributions	Annual Required Contribution (ARC)	% of ARC Contributed
	A	B	C = A / B
June 30, 2012	$ 1,609,565	$ 2,146,578	75.0%
June 30, 2011	$ 1,679,325	$ 2,195,589	76.5%
June 30, 2010	$ 1,454,137	$ 2,195,589	66.2%

Annual OPEB Cost

As of	Annual OPEB Cost	% of Annual OPEB Cost Contributed	Net OPEB Obligation
June 30, 2012	$ 2,153,804	74.7%	$ 2,470,935
June 30, 2011	$ 2,198,079	76.4%	$ 1,926,696
June 30, 2010	$ 2,198,079	66.2%	$ 1,407,942

The Actuarial Accrued Liability (AAL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the AAL and whether they increase or decrease the actuarial liability.

Expected Events

- Increases in AAL due to additional benefit accruals as employees continue to earn service each year
- Increases in AAL due to interest as the employees and retirees age
- Decreases in AAL due to benefit payments

Unexpected Events

- Increases in AAL when actual premium rates increase more than expected. A liability decrease occurs when premium rates increase less than expected.
- Increases in AAL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite of outcomes happen.
- Increases or decreases in AAL depending on whether benefit provisions are improved or reduced.

	2011/12
Actuarial Accrued Liability as of beginning of year[4]	$ 36,429,075
Normal cost as of beginning of year	616,158
Expected benefit payments during the year	(1,609,565)
Interest adjustment to end of year	1,631,219
Expected Actuarial Accrued Liability as of end of year	$ 37,066,887
Actuarial (gain) / loss	0
Actual Actuarial Accrued Liability as of end of year	$ 37,066,887

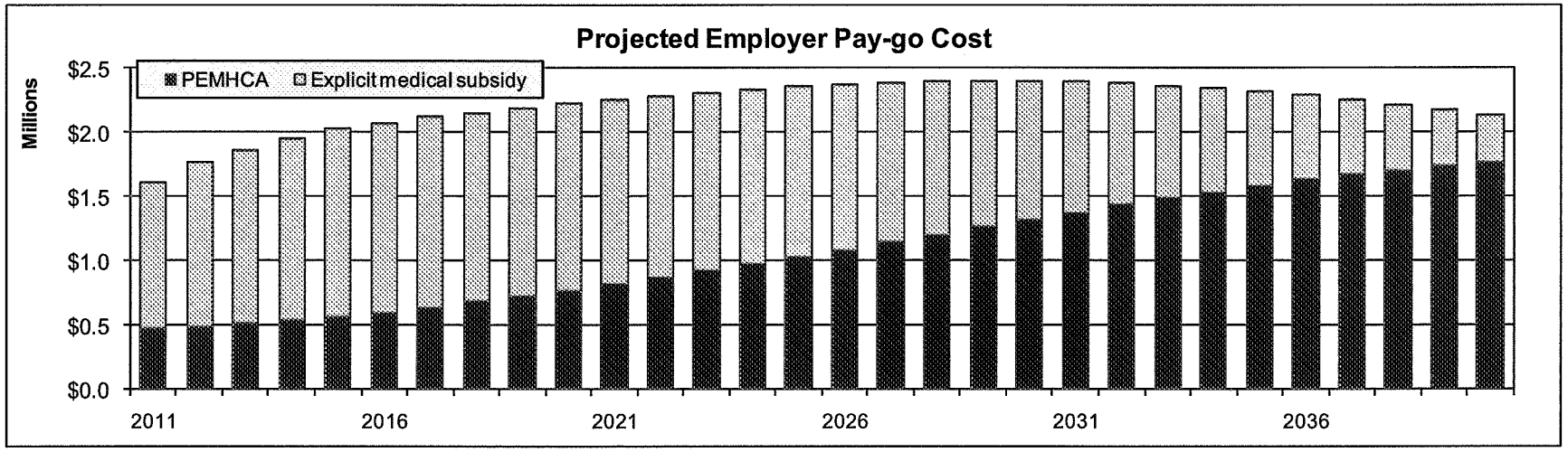
[4] The Actuarial Accrued Liability (AAL) as of beginning of year was actuarially rolled-back from end of year AAL on a "no gain / loss" basis.

Pay-as-you-go Cash Flow Projections

The projection below shows the anticipated pay-as-you-go cost for employer subsidized benefits for the next 30 years. The projection was completed on a closed group basis (i.e. new hires are not reflected in the projection).

FYE	*PEMHCA*	*Explicit Medical Subsidy*	*Total*
2012	$ 475,622	$ 1,133,943	$ 1,609,565
2013	$ 488,369	$ 1,280,349	$ 1,768,718
2014	$ 509,706	$ 1,346,052	$ 1,855,758
2015	$ 534,510	$ 1,411,747	$ 1,946,257
2016	$ 564,619	$ 1,463,698	$ 2,028,317
2017	$ 598,869	$ 1,474,714	$ 2,073,583
2018	$ 638,172	$ 1,478,624	$ 2,116,796
2019	$ 679,772	$ 1,473,796	$ 2,153,568
2020	$ 723,896	$ 1,465,353	$ 2,189,249
2021	$ 769,826	$ 1,453,324	$ 2,223,150
2022	$ 816,417	$ 1,435,216	$ 2,251,633
2023	$ 865,618	$ 1,412,422	$ 2,278,040
2024	$ 918,247	$ 1,387,912	$ 2,306,159
2025	$ 972,816	$ 1,359,805	$ 2,332,621
2026	$ 1,028,452	$ 1,325,552	$ 2,354,004

FYE	*PEMHCA*	*Explicit Medical Subsidy*	*Total*
2027	$ 1,083,551	$ 1,284,713	$ 2,368,264
2028	$ 1,142,451	$ 1,242,876	$ 2,385,327
2029	$ 1,201,361	$ 1,194,749	$ 2,396,110
2030	$ 1,259,802	$ 1,139,512	$ 2,399,314
2031	$ 1,318,664	$ 1,080,811	$ 2,399,475
2032	$ 1,376,166	$ 1,016,735	$ 2,392,901
2033	$ 1,431,827	$ 949,777	$ 2,381,604
2034	$ 1,483,727	$ 879,494	$ 2,363,221
2035	$ 1,533,653	$ 807,185	$ 2,340,838
2036	$ 1,582,351	$ 734,083	$ 2,316,434
2037	$ 1,628,017	$ 661,588	$ 2,289,605
2038	$ 1,667,572	$ 588,308	$ 2,255,880
2039	$ 1,701,075	$ 515,887	$ 2,216,962
2040	$ 1,733,643	$ 447,048	$ 2,180,691
2041	$ 1,760,389	$ 380,251	$ 2,140,640



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Eligibility

Retiree health care eligibility follows California Public Employees Retirement System (CalPERS).

Hired Before 1/1/2004

- Participate in the "defined benefit" plan and Retiree Health Savings Plan
- Age 50 and 5 years CalPERS service for service retirement
- Must have participated in medical plan for any 5 consecutive years
- Must have participated in medical plan immediately prior to retirement

Hired After 1/1/2004

- Participate in the Retiree Health Savings Plan (treated as an OPEB defined contribution plan)
- Participate in the "defined benefit" plan and Retiree Health Savings Plan
- Age 50 and 5 years CalPERS service for service retirement
- Must have participated in medical plan for any 5 consecutive years
- Must have participated in medical plan immediately prior to retirement

Spouse Benefit

Retiree benefits continue to surviving spouse if retiree elects CalPERS survivor annuity. Surviving spouses are only eligible for the PEMHCA City subsidy.

Medical Benefit

Same benefit options are available to retirees as active employees. Costa Mesa participates in the PEMHCA health plan and all health options are community-rated. The premiums do not include the PEMHCA employer contribution.

The monthly premium rates effective on January 1, 2012 for "Other Southern California" area residents are shown below.

	Pre-Medicare		Medicare	
HMO Plans	**EE**	**EE + 1**	**EE**	**EE + 1**
BS Access +	$ 583.60	$ 1,167.20	$ 337.99	$ 675.98
BS NetValue	$ 501.93	$ 1,003.86	$ 337.99	$ 675.98
Kaiser	$ 512.76	$ 1,025.52	$ 277.81	$ 555.62
PPO Plans	**EE**	**EE + 1**	**EE**	**EE + 1**
PERS Choice	$ 526.19	$ 1,052.38	$ 383.44	$ 766.88
PERS Select	$ 446.68	$ 893.36	$ 383.44	$ 766.88
PERS Care	$ 943.26	$ 1,886.52	$ 432.43	$ 864.86
PORAC	$ 556.00	$ 1,041.00	$ 418.00	$ 833.00

The monthly premium rates effective on January 1, 2012 for "Los Angeles" area residents are shown below.

	Pre-Medicare		Medicare	
HMO Plans	**EE**	**EE + 1**	**EE**	**EE + 1**
BS Access +	$ 510.72	$ 1,021.44	$ 337.99	$ 675.98
BS NetValue	$ 439.25	$ 878.50	$ 337.99	$ 675.98
Kaiser	$ 465.63	$ 931.26	$ 277.81	$ 555.62
PPO Plans	**EE**	**EE + 1**	**EE**	**EE + 1**
PERS Choice	$ 505.63	$ 1,011.26	$ 383.44	$ 766.88
PERS Select	$ 429.22	$ 858.44	$ 383.44	$ 766.88
PERS Care	$ 906.39	$ 1,812.78	$ 432.43	$ 864.86
PORAC	$ 556.00	$ 1,041.00	$ 418.00	$ 833.00

Dental Coverage

None

Life Insurance

Retiree coverage: $1,000
Spouse coverage: $500

Explicit Subsidy

Employees with 10 years of City service

- City pays percentage of the lesser of (a) retiree-only premium of the plan elected or (b) the most popular active employee medical plan.
- City contribution is capped at a percentage of $500 per month.
- The City will pay the minimum monthly PEMCHA employer contribution for all retirees and surviving spouses (at 100%).
- The premium is reduced by the PEMCHA contribution (fully-paid by the City) before applying the appropriate city subsidy percentage.
- City's subsidy percentage depends on retirement date and years of service:

Retired before 7/19/1993		Retired between 7/20/1993 and 8/18/2003		Retired after 8/19/2003	
YOS at Retirement	Percentage	YOS at Retirement	Percentage	YOS at Retirement	Percentage
10-19	50.00%	10	50.00%	10	50.00%
20-29	75.00%	11	52.50%	11	53.33%
30+	100.00%	12	55.00%	12	56.67%
		...*	...*	...**	...**
		30	100.00%	25	100.00%

* Increasing at 2.5% for each additional years of service at retirement.
** Increasing at 3.33% for each additional years of service at retirement.

Explicit Subsidy Example

Below is an example of how the City's explicit subsidy is split between medical premium rates and PEMHCA for a retiree currently enrolled in PERS Choice plan with 80% City subsidy.

CY	Total Premiums[1]	PEMHCA[2]	Prems w/o PEMHCA	Max. City subsidy	City Subsidy Pmt for PEMHCA	City Subsidy Pmt for Medical Premiums	Total City subsidy
	A	B	C = A - B	D[3]	E	F[4]	G = E + F
2012	$ 526.19	$ 112.00	$ 414.19	$ 400.00	$ 112.00	$ 288.00	$ 400.00
2017	$ 781.95	$ 133.24	$ 648.71	$ 400.00	$ 133.24	$ 266.76	$ 400.00
2022	$ 995.53	$ 166.04	$ 829.49	$ 400.00	$ 166.04	$ 233.96	$ 400.00
2027	$ 1,240.61	$ 206.92	$ 1,033.70	$ 400.00	$ 206.92	$ 193.08	$ 400.00
2032	$ 1,546.03	$ 257.85	$ 1,288.17	$ 400.00	$ 257.85	$ 142.15	$ 400.00
2037	$ 1,926.63	$ 321.33	$ 1,605.30	$ 400.00	$ 321.33	$ 78.67	$ 400.00
2042	$ 2,400.94	$ 400.44	$ 2,000.49	$ 400.00	$ 400.44	$ -	$ 400.44
2047	$ 2,992.00	$ 499.02	$ 2,492.98	$ 400.00	$ 499.02	$ -	$ 499.02
2052	$ 3,728.58	$ 621.87	$ 3,106.71	$ 400.00	$ 621.87	$ -	$ 621.87

[1] Total premiums are increasing according to assumed health care trend rates.
[2] PEMHCA fees are increasing according to assumed PEMHCA trend rates.
[3] In this example, the maximum City subsidy is 80% of $500.
[4] City subsidy payment towards medical premiums for 2012 calendar year is the lesser of:
a) 80% x $526.19 = $420.95 and
b) $400 – $112 = $288 (the remaining City subsidy balance after PEMHCA payment).

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and City experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

There are no significant changes to the actuarial methods and assumptions since the last GASB valuation, which was for the fiscal year ending June 30, 2010. For the current year GASB valuation we have updated the per capita costs and trend rates. The per capita costs and trend rates are expected to be updated for the next full GASB valuation, which will be for the fiscal year ending June 30, 2014.

Measurement Date	June 30, 2012 with results projected backwards to July 1, 2011 on a "no gain/no loss" basis
Discount Rate	4.5% unfunded
Aggregate Payroll Increases	3.25% per year; the assumption is used to amortize the unfunded actuarial accrued liability and to determine the Entry Age Normal actuarial liabilities.
Cost Method	Entry Age Normal as a level percent of payroll
Census Data	Census data was provided by the City and it was collected as of March 2012. It was reviewed for reasonableness and no material modifications were made to it.
Employer Funding Policy	Pay-as-you-go cash basis
Amortization	Level percent of pay amount over thirty years based on an open group.
Mortality	CalPERS 1997-2007 Experience Study
Disability Rate	CalPERS 1997-2007 Experience Study
Turnover Rate	Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage. The annual turnover rates for employees are based on the CalPERS 1997-2007 Experience Study.
Retirement Rate	Retirement rates for employees are based on the CalPERS 1997-2007 Experience Study.
Spousal Coverage	Spousal coverage is based on actual data. Husbands are assumed to be three years older than wives.

Health Care Coverage Election Rate

Actives with current coverage and hired before January 1, 2004: 100%
Actives with waived coverage and hired before January 1, 2004: 75% (pre-65) and 90% (post-65)
Actives hired after January 1, 2004: 65% elect retiree health coverage immediately upon retirement and 35% do not elect retiree health coverage upon retirement with 10% of this group ultimately applying for health coverage at age 65.

Future retirees were assumed to elect the same health plan elected while actively employed. Current employees with waived coverage were assumed to elect retiree health plan in the same proportion as active employees with coverage.

Inactive employees with current coverage: 100%
Inactive employees with no coverage: 0%

Health Care Trend Rates

Annual health care trend rates for medical and PEMHCA fees are as shown below:

	Non-Medicare		Medicare		
FYE	HMO	PPO	HMO	PPO	PEMHCA
2013	9.05%	9.75%	9.40%	10.10%	2.68%*
2014	8.40%	9.00%	8.70%	9.30%	2.50%
2015	7.75%	8.25%	8.00%	8.50%	3.00%
2016	7.10%	7.50%	7.30%	7.70%	3.50%
2017	6.45%	6.75%	6.60%	6.90%	4.00%
2018	5.80%	6.00%	5.90%	6.10%	4.50%
2019	5.15%	5.25%	5.20%	5.30%	4.50%
2020+	4.50%	4.50%	4.50%	4.50%	4.50%

The initial trend rate was based on the plan's actuarial experience. The subsequent year trend rates were selected based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

* Actual increase from 2012 to 2013.

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Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a retiree under age 65 enrolled in PERS Choice plan with 80% City subsidy.

	Premium Rate*	PEMHCA Contribution	Premium w/o PEMHCA	Retiree Contribution	City's Explicit Subsidy*
	A	B	C = A – B	D = A – E	E = B + 80% x C
Ret only	$ 526.19	$112.00	$ 414.19	$ 129.16	$ 400.00

* City's explicit subsidy for retiree only is equal to $112 plus 80% of premium without PEMHCA, limited to $400.

Implicit Subsidy

The plan is assumed to meet the GASB 45 definition of a community rated plan. Therefore, no implicit subsidy is determined for this valuation.

Enrollment information below is by plan, for all locations combined.

Actives with Coverage	*Single*	*With Spouse*	*Total*	*Avg. Age*	*Avg. Svc*	*Salary*
BS	18	64	82	44.5	14.3	$ 7,108,536
BS NetValue	8	12	20	46.2	14.5	$ 1,726,248
Kaiser	35	39	74	40.8	11.0	$ 6,161,208
PERS Choice	26	38	64	49.3	16.5	$ 5,636,717
PERS Select	5	14	19	44.1	11.1	$ 1,598,837
PERS Care	2	1	3	50.6	12.0	$ 250,548
PORAC	18	56	74	41.5	14.4	$ 7,596,660
Total Actives with coverage	**112**	**224**	**336**	**44.1**	**13.9**	**$ 30,078,754**

Actives without Coverage[5]	*Single*	*With Spouse*	*Total*	*Avg. Age*	*Avg. Svc*	*Salary*
Total	**N/A**	**N/A**	**98**	**42.9**	**12.0**	**$ 8,236,358**

Retireees	*Single*	*With Spouse*	*Total*	*Avg. Age*
BS	2	1	3	72.2
BS Advantage	30	22	52	61.3
BS NetValue	1	1	2	60.9
BS NetValue Advantage	6	5	11	61.8
Kaiser	15	8	23	61.1
PERS Choice	147	55	202	65.9
PERS Select		2	2	54.8
PERS Care	18	1	19	79.3
PORAC	16	22	38	58.4
Total Actives with coverage	**235**	**117**	**352**	**64.6**

[5] Actives who currently have no coverage are assumed to elect coverage at retirement. They have been included in the GASB valuation.

Active Age Service Distribution

	Years of Service										
Age	*< 1*	*1 to 4*	*5 to 9*	*10 to 14*	*15 to 19*	*20 to 24*	*25 to 29*	*30 to 34*	*35 to 39*	*40 & up*	*Total*
Under 25		1									1
25 to 29	1	16	12	1							30
30 to 34		9	35	10	1						55
35 to 39		5	35	30	10						80
40 to 44		2	15	29	17	1					64
45 to 49		4	8	22	11	26	7				78
50 to 54	3	5	11	7	6	20	17	3			72
55 to 59		2	5	5	7	8	4	4			35
60 to 64		1	4	4	1	3		3		1	17
65 to 69						1	1				2
70 & up											0
Total	**4**	**45**	**125**	**108**	**53**	**59**	**29**	**10**	**0**	**1**	**434**

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GASB 45 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

1. **Actuarial Accrued Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits and expenses which is not provided for by the future Normal Costs.

2. **Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, turnover, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

3. **Actuarial Cost Method** – A procedure for determining the Actuarial Present Value of future benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

4. **Actuarial Present Value** – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

   a) adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
   b) multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
   c) discounted according to an assumed rate (or rates) of return to reflect the time value of money.

5. **Annual OPEB Cost** – An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

6. **Annual Required Contribution (ARC)** – The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

7. **Explicit Subsidy** – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.

8. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

9. **Healthcare Cost Trend Rate** – The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

10. **Implicit Subsidy** – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.

11. **Net OPEB Obligation** – The cumulative difference since the effective date of this Statement between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

12. **Normal Cost** – The portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

13. **Pay-as-you-go** – A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

14. **Per Capita Costs** – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.

15. **Present Value of Future Benefits** – Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.

16. **Select and Ultimate Rates** – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.

17. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.

APPENDIX

Appendix A – Historical Comparison of Participant Demographic Information

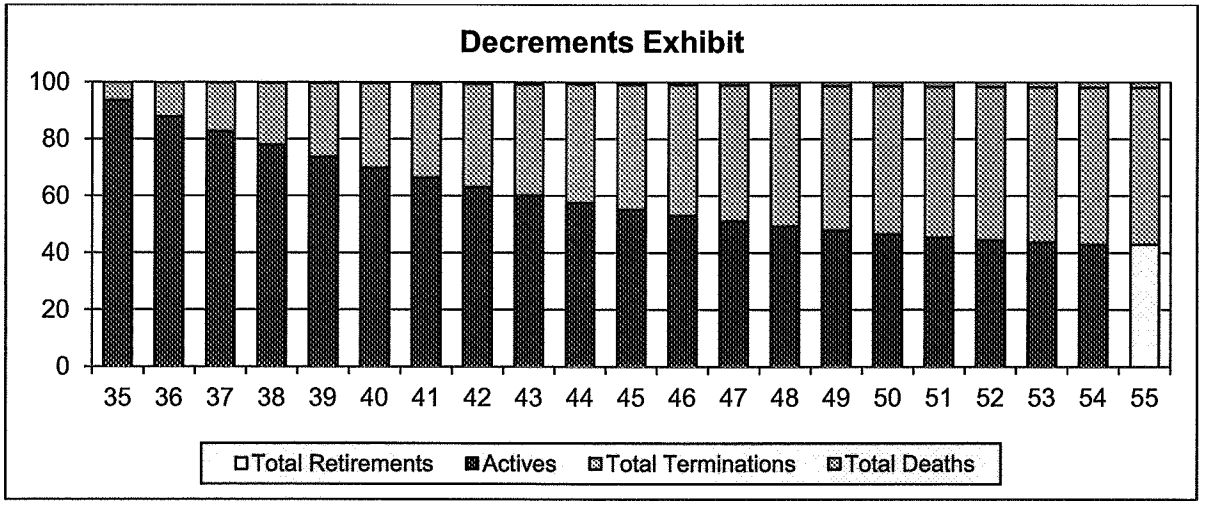
Measured as of	June 30, 2010	June 30, 2012
Active participants		
With health coverage	462	336
Waived and part-time	66	98
All active participants	528	434
Inactive participants		
With health coverage	328	352
Waived and part-time	N/A	N/A
All inactive participants	328	352
Averages for active		
Age	42.3	43.8
Service	11.9	13.4
Average for inactive		
Age	63.6	64.6

Appendix B – Decrements Exhibit (Turnover and Mortality Rates)

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Based on a sample of 100 active employees whom all are age 35, the actuarial assumptions show that 42.949 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# Deaths per year*	# of Terminations per year*	# of Retirements per year*	Total Decrements
35	100.000	0.077	6.276	0.000	6.353
36	93.647	0.079	5.672	0.000	5.751
37	87.896	0.079	5.127	0.000	5.206
38	82.690	0.080	4.636	0.000	4.716
39	77.974	0.080	4.194	0.000	4.274
40	73.700	0.080	3.796	0.000	3.876
41	69.824	0.080	3.436	0.000	3.516
42	66.308	0.081	3.109	0.000	3.190
43	63.118	0.082	2.811	0.000	2.893
44	60.225	0.084	2.539	0.000	2.623
45	57.602	0.087	2.290	0.000	2.377

Age	# Remaining Employees	# Deaths per year*	# of Terminations per year*	# of Retirements per year*	Total Decrements
46	55.225	0.089	2.058	0.000	2.147
47	53.078	0.092	1.839	0.000	1.931
48	51.147	0.095	1.629	0.000	1.724
49	49.423	0.099	1.425	0.000	1.524
50	47.899	0.102	1.227	0.000	1.329
51	46.570	0.114	1.037	0.000	1.151
52	45.419	0.121	0.856	0.000	0.977
53	44.442	0.130	0.688	0.000	0.818
54	43.624	0.139	0.536	0.000	0.675
55	42.949	0.000	0.000	42.949	42.949



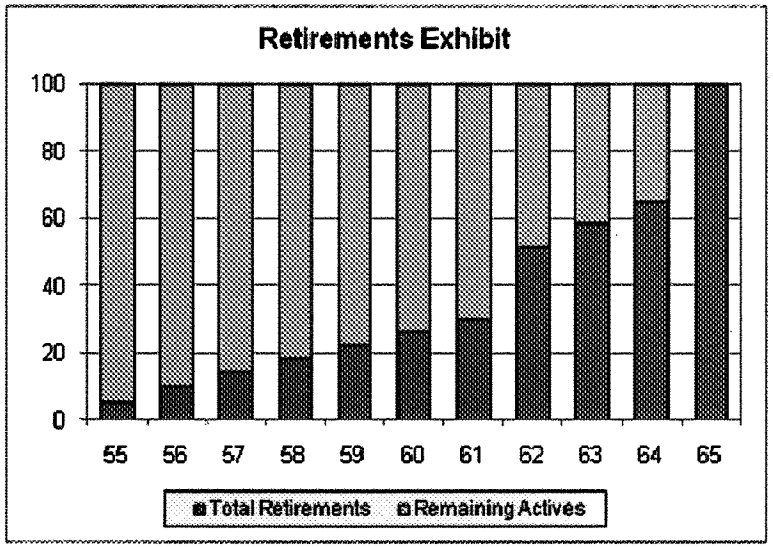
* The above rates are illustrative rates and are not used in our GASB calculations.

Appendix C – Retirement Rates Exhibit

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The retirement rates show the number of employees who are assumed to retire annually based on a sample of 100 employees (all age 55) who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per year	Active Employees EOY
55	100.000	5%	5.000	95.000
56	95.000	5%	4.750	90.250
57	90.250	5%	4.513	85.738
58	85.738	5%	4.287	81.451
59	81.451	5%	4.073	77.378
60	77.378	5%	3.869	73.509
61	73.509	5%	3.675	69.834
62	69.834	30%	20.950	48.884
63	48.884	15%	7.333	41.551
64	41.551	15%	6.233	35.318
65	35.318	100%	35.318	0.000

* The above rates are illustrative rates and are not used in our GASB calculations.



Appendix D – Illustration of GASB Calculations for Non-Actuaries

The purpose of the illustration is to familiarize non-actuaries with the GASB 45 actuarial calculation process.

I. Facts

1. The employer provides subsidized retiree health coverage worth $100,000 to employees retiring at age 55 with 25 years of service. The employer funds for retiree health coverage on a pay-as-you-go basis.
2. Employee X is age 50 and has worked 20 years with the employer.
3. Retiree health subsidies are paid from the general fund assets which are expected to earn 4.5% per year on a long-term basis.
4. Based on Employee X's age and sex he has a 98.0% probability of living to age 55 and a 95.0% probability of continuing to work to age 55.

II. Calculation of Present Value of Future Benefits

Present Value of Future Benefits represents the cost to finance benefits payable in the future to current and future retirees and beneficiaries, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

	Value	Description
A.	$100,000	Projected benefit at retirement
B.	80.2%	Interest discount for five years = $(1 / 1.045)^5$
C.	98.0%	Probability of living to retirement age
D.	95.0%	Probability of continuing to work to retirement age
E.	$74,666	Present value of projected retirement benefit measured at employee's current age = A x B x C x D

Appendix D – Continued

III. Calculation of Actuarial Accrued Liability

Actuarial Accrued Liability represents the portion of the Present Value of Future Benefits which has been accrued recognizing the employee's past service with the employer. The Actuarial Accrued Liability is a required disclosure in the Required Supplementary Information section of the employer's financial statement.

	Value	Description
A.	$74,666	Present value of projected retirement benefit measured at employee's current age
B.	20	Current years of service with employer
C.	25	Projected years of service with employer at retirement
D.	$59,733	Actuarial accrued liability measured at employee's current age = A x B / C

IV. Calculation of Normal Cost

Normal Cost represents the portion of the Present Value of Future Benefits allocated to the current year.

	Value	Description
A.	$74,666	Present value of projected retirement benefit measured at employee's current age
B.	25	Projected years of service with employer at retirement
C.	$2,987	Normal cost measured at employee's current age = A / B

V. Calculation of Annual Required Contribution

Annual Required Contribution is the total expense for the current year to be shown in the employer's income statement.

	Value	Description
A.	$2,987	Normal Cost for the current year
B.	$3,509	30-year amortization (level dollar method) of Unfunded Actuarial Accrued Liability using a 4.5% interest rate discount factor
C.	$292	Interest adjustment = 4.5% x (A + B)
D.	$6,788	Annual Required Contribution = A + B + C