#### Los Angeles Fire and Police Pension Plan

Actuarial Valuation and Review of Pension and Other Postemployment Benefits (OPEB) as of June 30, 2011

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THE SEGAL COMPANY 100 Montgomery Street, Suite 500 San Francisco, CA 94104-4308 T 415.263.8200 F 415.263.8290 www.segalco.com

January 11, 2012

Board of Fire and Police Pension Commissioners City of Los Angeles Fire and Police Pension Plan 360 East Second Street, Suite 400 Los Angeles, CA 90012

#### Re: June 30, 2011 Actuarial Valuations

Dear Board Members:

Enclosed please find the June 30, 2011 actuarial valuations for the retirement and the health programs.

As requested by LAFPP, we have attached the following supplemental schedules:

- > Exhibit A Summary of significant results for the two programs.
- > Exhibit B History of computed contribution rates for the two programs.

We look forward to discussing the reports and the enclosed schedules with the Board.

Sincerely,

Paul Crylo

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary

AB/gxk Enclosures

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Brely Yeure

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Associate Actuary

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Benefits, Compensation and HR Consulting Offices throughout the United States and Canada

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		Exhibit A				
City of Los Angeles Fire and Police Pension Plan Summary of Significant Valuation Results						
	June 30, 2011 June 30, 2010					
I.	Total Membership					
	A. Current Active Members	13,432	13,654	-1.63%		
	B. Current Vested Former Members	59	58	1.72%		
	C. Current Retirees, Beneficiaries, and Dependents	12,392 <sup>(3)</sup>	12,348	0.36%		
II.	Valuation Salary					
	A. Total Annual Payroll	\$1,343,963,356	\$1,356,986,475	-0.96%		
	B. Average Monthly Salary	8,338	8,282	0.68%		
III.	<b>Benefits to Current Retirees and Beneficiaries</b> <sup>(1)</sup>					
	A. Total Annual Benefits	\$721,509,672	\$695,295,285	3.77%		
	B. Average Monthly Benefit Amount	4,852	4,692	3.41%		
IV.	Total System Assets <sup>(2)</sup>					
	A. Actuarial Value	\$15,220,559,597	\$15,036,856,639	1.22%		
	B. Market Value	14,400,209,049	12,198,968,351	18.04%		
V.	Unfunded Actuarial Accrued Liability (UAAL)					
	A. Retirement Benefits	\$2,278,806,857	\$1,301,043,651	75.15%		
	B. Health Subsidy Benefits	1,674,716,336	1,720,549,039	-2.66%		

<sup>(1)</sup>Includes July COLA.

<sup>(2)</sup>Includes all assets for Retirement and Health Subsidy Benefits.

<sup>(3)</sup>*Includes 13 new retirees during the period July 1, 2011 to July 14, 2011.* 



	City of Los Angeles Fire and Police Pension Plan Summary of Significant Valuation Results							
VI.	Budget Items	<b>FY 201</b>	<b>FY 2012-2013</b> <sup>(2)</sup>		<b>FY 2011-2012</b> <sup>(3)</sup>		<b>Change</b>	
		Beginning of Year <sup>(1)</sup>	End of Pay Periods	Beginning of Year	End of Pay Periods	Beginning of Year	End of Pa Periods	
	Before Reflecting Additional 2% Employee Co				Terious	of Teal	1 enous	
	A. Retirement Benefits		iozen metann 5	nostates				
	1. Normal Cost as a Percent of Pay	20.45%	21.26%	20.13%	20.92%	0.32%	0.34%	
	2. Amortization of UAAL	12.01%	12.48%	7.02%	7.30%	<u>4.99</u> %	<u>5.18</u> %	
	3. Total Retirement Contribution	32.46%	33.74%	27.15%	28.22%	5.31%	5.52%	
	B. Health Subsidy Contribution							
	1. Normal Cost as a Percent of Pay	3.67%	3.81%	4.62%	4.79%	-0.95%	-0.98%	
	2. Amortization of UAAL	<u>7.26%</u>	7.53%	<u>7.20%</u>	<u>7.48%</u>	<u>0.06</u> %	<u>0.05</u> %	
	3. Total Health Contribution	10.93%	11.34%	11.82%	12.27%	-0.89%	-0.93%	
	C. Total Contribution (A+B)	43.39%	45.08%	38.97%	40.49%	4.42%	4.59%	
	After Reflecting Additional 2% Employee Con	tributions for Unfra	zen Health Su	bsidies				
	A. Retirement Benefits							
	1. Normal Cost as a Percent of Pay	19.32%	20.08%					
	2. Amortization of UAAL	12.01%	12.48%					
	3. Total Retirement Contribution	31.33%	32.56%					
	B. Health Subsidy Contribution							
	1. Normal Cost as a Percent of Pay	3.67%	3.81%					
	2. Amortization of UAAL	7.26%	<u>7.53%</u>					
	3. Total Health Contribution	10.93%	11.34%					
	C. Total Contribution (A+B)	42.26%	43.90%					

July 15, 2012 (after reflecting additional employee contributions)
 31.43%
 10.96%
 42.39%
 (2) Before adjustments to phase in over three years the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2010 Triennial Experience Study.
 (3) The June 30, 2010 valuation results were before reflecting the freeze on the medical subsidy for certain employees retiring on or after July 15, 2011.



<u>Exhibit A (continued)</u> City of Los Angeles Fire and Police Pension Plan Summary of Significant Valuation Results						
VII	Funded Ratio	June 30, 2011	June 30, 2010	<u>Change</u>		
VII	<b>Funded Ratio</b> (Based on Valuation Value of Assets)	<u>June 30, 2011</u>	<u>June 30, 2010</u>	Change		
VII		<u>June 30, 2011</u> 86.3%	<u>June 30, 2010</u> 91.6%	<u>Change</u> -5.3%		
VII	(Based on Valuation Value of Assets)					



	Exhib	oit B					
City of Los Angeles Fire and Police Pension Plan Computed Contribution Rates <sup>(1)</sup> – Historical Comparison							
Valuation <u>Date</u>	<u>Retirement</u>	Health	<u>Total</u>	Valuation Payroll <u>(In Thousands)</u>			
06/30/2002	11.00%	2.98%	13.98%	946,037			
06/30/2003	13.79%	3.09%	16.88%	970,727			
06/30/2004	12.86%	2.83%	15.69%	1,001,004			
06/30/2005	20.56%	5.03%	25.59%	1,037,445			
06/30/2006	22.12%	$8.48\%^{(2)}$	30.65%	1,092,815			
06/30/2007	19.95% <sup>(3)</sup>	8.20% <sup>(2),(3)</sup>	28.15% <sup>(3)</sup>	1,135,592			
06/30/2008	20.58%	8.76%	29.34%	1,206,589			
06/30/2009	22.26%	9.00%	31.26%	1,357,249			
06/30/2010	$28.20\%^{(4)}$	$12.27\%^{(5)}$	40.47%	1,356,986			
06/30/2011 <sup>(2)</sup>							
Before Additional 2% Employee Contributions	33.74%	11.34%	45.08%	1,343,963			
After Additional 2% Employee Contributions	32.56%	11.34%	43.90%	1,343,963			

<sup>(1)</sup> Contributions are assumed to be made at the end of the pay period.

<sup>(2)</sup> Before reflecting phase-in policy.

(3) Revised to recognize payment of Harbor Port Police June 30, 2007 UAAL during 2007-2008 fiscal year. This reduced the UAAL rate by 0.02% and 0.00% for the retirement plan and health plan, respectively.

<sup>(4)</sup> The June 30, 2010 result was before reflecting the 2% additional employee contributions.

<sup>(5)</sup> The June 30, 2010 result was before reflecting the freeze on the medical subsidy for certain employees retiring on or after July 15, 2011.



City of Los Angeles Fire and Police Pension Plan

Actuarial Valuation and Review as of June 30, 2011

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The Segal Company 100 Montgomery Street, Suite 500 San Francisco, CA 94104 T 415.263.8200 F 415.263.8290 www.segalco.com

January 11, 2012

Board of Fire and Police Pension Commissioners City of Los Angeles Fire and Police Pension Plan 360 East Second Street, Suite 400 Los Angeles, CA 90012

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2011. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2012-2013 and analyzes the preceding year's experience.

The census information on which our calculations were based and the financial information were provided by LAFPP. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board of Commissioners are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

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Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary

Brely Yeurs

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Associate Actuary

AW/bqb

By:

### **SECTION 1**

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#### Purpose

This report has been prepared by The Segal Company to present a valuation of the City of Los Angeles Fire and Police Pension Plan as of June 30, 2011. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Pension Plan, as administered by the Board of Commissioners;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2011, provided by LAFPP;
- > The assets of the Plan as of June 30, 2011, provided by LAFPP;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

#### **Significant Issues in Valuation Year**

The following key findings were the result of this actuarial valuation:

- *Reference Pg. 54* The results of this valuation reflect changes in the actuarial assumptions as recommended by Segal and adopted by the Board for the June 30, 2011 valuation. These changes were documented in our Actuarial Experience Study and are also outlined in Section 4, Exhibit V of this report. These assumption changes resulted in an increase in the employer contribution rate of 2.94% of payroll (payable at the beginning of the year; this is before reflecting the three-year phase-in discussed below).
- *Reference: Pg. 38* The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 91.6% to 86.3%. The unfunded actuarial accrued liability has increased from \$1,301 million to \$2,279 million. The reduction in the funded ratio and the increase in the Unfunded Actuarial Accrued Liability (UAAL) are primarily the result of a lower than expected return on investment (after smoothing) and the changes in actuarial assumptions, offset somewhat by other favorable actuarial experience during 2010/2011. A complete reconciliation of the System's unfunded actuarial accrued liability is provided in Section 3, Exhibit G.

# *Reference: Pg. 39 to Pg.45* Under the Board's funding policy, the 2010-2011 experience loss for Tier 2 would be amortized over the shorter of 15 years or the remaining 26-year amortization period ending June 30, 2037. For Tiers 3, 4 and 5 a new separate 15-year amortization layer is established in the June 30, 2011 valuation for the 2010-2011 experience loss or gain.

The increase in the UAAL as a result of the changes in the actuarial assumptions has been amortized over 26 years for Tier 2 and 30 years for all other Tiers.

The change in the UAAL for those members who signed up for retirement or DROP between July 1, 2011 and July 14, 2011 (see additional discussion below) has been treated as a plan amendment and amortized over 30 years.

The aggregate beginning-of-year employer rate calculated in this valuation has increased from 27.15% of payroll to 32.46% of payroll. Both of these rates are before adjustments for the additional 2% employee contributions that have been implemented by the City for those employees who elected to make such contributions in order to continue to receive an unfrozen medical subsidy. Using a projected annual payroll of \$1,344 million as of June 30, 2011, there would be an increase in contribution from \$365 million to \$436 million. The increase was primarily due to a lower than expected return on investments (after smoothing) and changes in the actuarial assumptions offset somewhat by lower than expected salary increases during 2010/2011 and lower than expected retiree COLA increases during 2010/2011.

Starting with the 2011-2012 Fiscal Year, there is a freeze on the medical subsidy for future retirees retiring on or after July 15, 2011. In order to avoid the freeze, an active member may elect to retire from the Plan or sign up to participate in the DROP on or before July 14, 2011. An active member may also avoid the freeze if the member agrees to pay a 2% contribution on his/her base salary. The 2% would be paid retroactive to August 15, 2011 and would continue in effect until an individual employee has paid such contributions for a period of 25 years or retired from the Plan. It is our understanding that in order for the additional employee contributions to be refundable to the members upon termination from LAFPP, and for other tax considerations, the City has concluded that the 2% additional employee contributions should be designated as retirement plan (instead of retiree health plan) contributions.

In Appendix One, we have developed three sets of employer contribution rates as of June 30, 2011: The first set of employer rates is calculated for members who have not opted to pay the additional 2% additional contributions. The second set of employer rates is for members who opt to pay the 2% contributions rates and the last set of employers rates is a composite of the first two sets based on the payrolls of these members who have made the election to either contribute or not contribute the 2% additional contributions as of June 30, 2011.

> On September 1, 2011, the Board elected to phase in the impact of new actuarial assumptions on the City's retirement and health plan contributions over a three-year period, beginning with the 2012-2013 fiscal year. The recommended (i.e., pre-phase-in) contribution rates for Fiscal Year 2012-2013 are contained in this report. In a separate letter, we provide the "phased-in" contribution rates for Fiscal Year 2012-2013 and an analysis of the financial reporting and future contribution rate impact of the three-year phase-in.

As indicated in Section 2, Subsection B of this report, the total unrecognized investment loss as of June 30, 2011 is \$820.4 million for the assets for Retirement and Health Subsidy Benefits. For comparison purposes, the total unrecognized investment loss as of June 30, 2010 was \$2,837.9 million. This investment loss will be recognized in the determination of

#### Reference: Pg. 17

Reference: Pg. 5

	the actuarial value of assets for funding purposes in the next few years. This implies that earning the assumed rate of investment return of 7.75% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 7.75% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years.
	The unrecognized investment losses represent about 5.7% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$820.4 million market losses is expected to have an impact on the Plan's future funded ratio and the aggregate employer contributions. This potential impact may be illustrated as follows:
	• If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 86.3% to 81.6%.
	• If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer contribution rate would increase from 32.46% of payroll to 37.24% of payroll.
Reference: Pg. 54	As adopted by the Board, any investment gains/losses established after July 1, 2008 will be recognized over a seven-year period and the actuarial value of assets will be further adjusted, if necessary, to be within 40% of the market value of assets. A description of the actuarial assumptions and methods can be found in Section 4, Exhibit V of this report.
	> The employer contribution rates (before adjustments for the additional 2% employee contribution rate or for the three-year phase in of the impact of new actuarial assumptions) provided in this report have been developed assuming that they will be made by the City at either: (1) the beginning of the fiscal year, (2) on July 15, or (3) throughout the year (i.e., the City will pay contributions at the end of every pay period).
Reference: Pg. 15	Since the prior valuation the City approved a new Tier 6 for employees entering the Plan after June 30, 2011. The initial contribution rates determined as of June 30, 2010, were provided in our study dated May 18, 2011. As actual employees do not begin to enter that Tier until after June 30, 2011, that study was based on a projected demographic profile for recently hired employees in the June 30, 2010, data. Chart 14 in this report includes the updated contribution rates, based on a projected demographic profile of recent hires as of June 30, 2011.
	The actuarial valuation report as of June 30, 2011 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan.

Summary of Key Valuation Results		
	2011	2010
Contributions calculated as of June 30 <sup>(1)</sup> :		
Recommended as a percent of pay (note there is a 12-month delay until the r	ate is effective)	
At the beginning of year	32.46%	27.15% <sup>(2)</sup>
On July 15	32.56%	27.24% <sup>(2)</sup>
At the end of each biweekly pay period	33.74%	28.22% <sup>(2</sup>
Funding elements for plan year beginning July 1:		
Normal cost	\$385,690,664	\$381,503,309(2)
Market value of assets <sup>(3)</sup>	14,400,209,049	12,198,968,351
Actuarial value of assets <sup>(3)</sup>	15,220,559,597	15,036,856,639
Valuation value of retirement assets	14,337,669,409	14,219,580,662
Actuarial accrued liability	16,616,476,266	15,520,624,313
Unfunded actuarial accrued liability	2,278,806,857	1,301,043,651
Funded ratio	86.3% <sup>(4)</sup>	91.6% <sup>(4</sup>
GASB 25/27 for fiscal year ending June 30:		
Annual required contributions	\$277,092,251	\$250,516,858
Actual contributions	277,092,251	250,516,858
Percentage contributed	100.0%	100.0%
Demographic data for plan year beginning July 1:		
Number of retired members and beneficiaries	12,392 <sup>(5)</sup>	12,348
Number of vested former members	59	58
Number of active members (includes DROP members)	13,432	13,654
Projected total payroll	\$1,343,963,356	\$1,356,986,475
Projected average payroll	100,057	99,384

#### SECTION 1: Valuation Summary for the City of Los Angeles Fire and Police Pension Plan

(1) Both the June 30, 2011 and June 30, 2010 contribution rates are before adjustments for the 2% additional contributions that have been implemented by the City for those employees who opted to make such contributions. The contribution rates for the June 30, 2011 valuation are also before adjustments to phase in over three years the City contributions rate impact of new actuarial assumptions adopted as recommended in the June 30, 2010 Triennial Experience Study.

- (2) Revised to reflect payroll as of June 30, 2011.
- (3) Includes all assets for Retirement and Health Subsidy Benefits.
- (4) The funded ratios excluding Harbor Port Police are 86.3% and 91.7% for 2011 and 2010, respectively.
- (5) Includes 13 new retirees during the period July 1, 2011 to July 14, 2011.

# **Actuarial Certification**

January 11, 2012

This is to certify that The Segal Company has conducted an actuarial valuation of the City of Los Angeles Fire and Police Pension Plan retirement program as of June 30, 2011, in accordance with generally accepted actuarial principles and practices. Actuarial valuations are performed annually for this retirement program with the last valuation completed on June 30, 2010. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of the historical funding methods used in determination of the liability for retirement benefits.

The actuarial valuation is based on the plan of benefits summarized in Exhibit VI and on participant and financial data provided by LAFPP.

The actuarial computations made are for funding plan benefits and for satisfying the financial accounting requirements under GASB Statements No. 25 and 27. Accordingly, additional determinations will be needed for other purposes, such as judging benefit security at termination.

In addition to all schedules that are shown in the actuarial section of the CAFR, a listing of supporting schedules included in the statistical and financial sections of the Plan's CAFR prepared by Segal is provided below:

- 1) Schedule of funding progress
- 2) Schedule of employer contributions
- 3) Supplementary Information Required by the GASB (Exhibit IV)

To the best of our knowledge, this report is complete and accurate and in our opinion presents the Plan's current funding information. The undersigned is a Member of the American Academy of Actuaries and meets the qualifications to provide the actuarial opinion herein.

Arely Yeung

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Associate Actuary

#### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, non-vested members (entitled to a refund of member contributions) and vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

# CHART 1

A historical perspective

population has changed over the past eight valuations can be seen in

of how the member

this chart.

Member Population: 2004 – 2011

Year Ended June 30	Active Members <sup>(1)</sup>	DROP Members	Vested Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2004	12,649	928	0	11,782	0.93
2005	12,656	1,178	0	11,746	0.93
2006	12,903	1,206	59	11,815	0.92
2007	13,218	1,226	85	11,974	0.91
2008	13,495	1,144	81	12,182	0.91
2009	13,802	1,024	61	12,327	0.90
2010	13,654	1,089	58	12,348	0.91
2011	13,432	1,314 <sup>(2)</sup>	59	12,392 <sup>(3)</sup>	0.93

(1) Includes DROP members provided in the next column.

<sup>(2)</sup> Includes 113 members who made an election to participate in the DROP during the period July 1, 2011 to July 14, 2011.

<sup>(3)</sup> Includes 13 new retirees during the period July 1, 2011 to July 14, 2011.

#### **Active Members (Including DROP)**

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 13,432 active members with an average age of 41.2, average years of service of 14.2 years and average payroll of \$100,057. The 13,654 active members in the prior valuation had an average age of 40.6, average service of 13.6 years and average payroll of \$99,384.

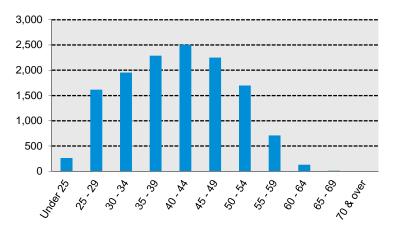
#### **Inactive Members**

In this year's valuation, there were a total of 59 members with a vested right to a deferred or immediate vested benefit versus 58 in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

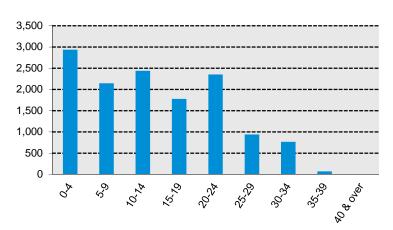
#### CHART 2

Distribution of Active Members (Including DROP) by Age as of June 30, 2011



#### CHART 3

Distribution of Active Members (Including DROP) by Years of Service as of June 30, 2011



#### **Retired Members and Beneficiaries**

As of June 30, 2011, 10,004 retired members and 2,388 beneficiaries were receiving total monthly benefits of \$60,125,806. For comparison, in the previous valuation, there were 9,958 retired members and 2,390 beneficiaries receiving monthly benefits of \$57,941,274.

Please note that the monthly benefits provided have been adjusted for the COLA granted effective for the month of July.

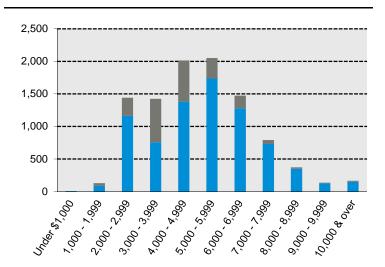
These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

■ Disability

Service

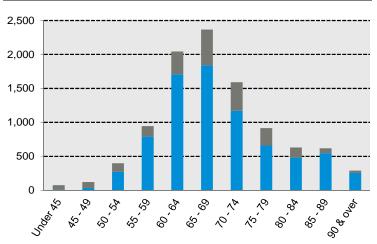


Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2011



#### CHART 5

Distribution of Retired Members and by Type and by Age as of June 30, 2011



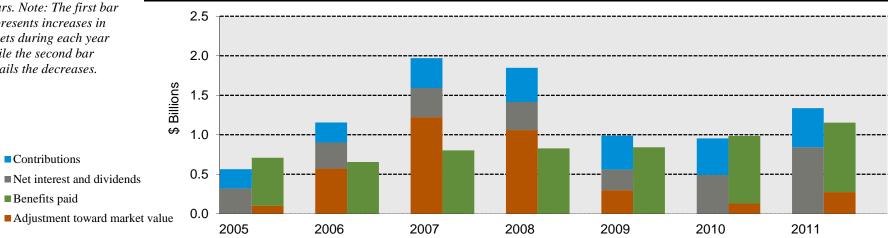
#### **B.** FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

#### CHART 6

The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2005 – 2011



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Commissioners has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

#### CHART 7

#### Determination of Actuarial Value of Assets for Year Ended June 30, 2011

1.	Market value of assets (for Retirement and Health Subsidy Ber	nefits)			\$14,400,209,049
		Original	Percent Not	Amount Not	
2.	Calculation of unrecognized return <sup>(1)</sup>	Amount	Recognized <sup>(2)</sup>	Recognized	
	(a) Year ended June 30, 2011	\$1,641,626,618	85.71%	\$1,407,108,530	
	(b) Year ended June 30, 2010	737,173,630	71.43%	526,552,593	
	(c) Year ended June 30, 2009	-4,113,928,646	57.14%	-2,350,816,369	
	(d) Year ended June 30, 2008	-2,015,976,509	20.00%	-403,195,302	
	(e) Year ended June 30, 2007	1,375,798,329	0.00%	0	
	(f) Total unrecognized return				-820,350,548
	Preliminary actuarial value: (1) - (2f)				15,220,559,597
	Adjustment to be within 40% corridor				0
•	Final actuarial value of assets: $(3) + (4)$				\$15,220,559,597
•	Actuarial value as a percentage of market value: $(5) \div (1)$				105.7%
•	Market value of retirement assets				\$13,564,904,460
	Valuation value of retirement assets: $(5) \div (1) \ge (7)$				\$14,337,669,409
•	Deferred return recognized in each of the next 6 years:				
	(a) Amount recognized on June 30, 2012				-\$651,070,788
	(b) Amount recognized on June 30, 2013				-247,875,485
	(c) Amount recognized on June 30, 2014				-247,875,485
	(d) Amount recognized on June 30, 2015				-247,875,485
	(e) Amount recognized on June 30, 2016				339,828,607
	(f) Amount recognized on June 30, 2017				234,518,088
	(g) Subtotal (may not total exactly due to rounding)				-\$820,350,548

<sup>(1)</sup> Total return minus expected return on a market value basis

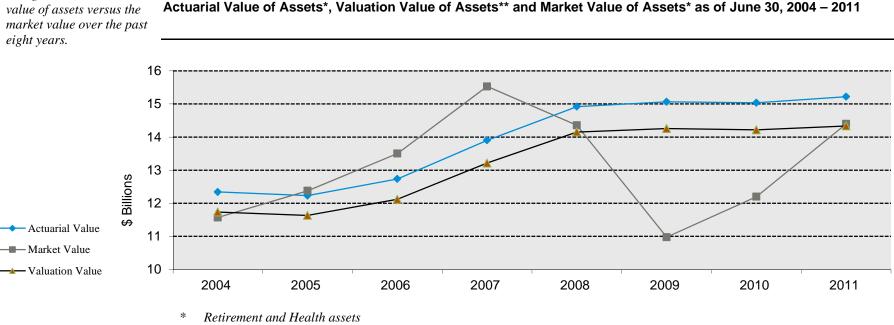
<sup>(2)</sup> Any investment gains/losses established after July 1, 2008 are recognized over a seven-year period.

The actuarial value, market value and valuation value of assets are representations of LAFPP's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The portion of the total actuarial value of assets allocated for retirement benefits, based on multiplying the total actuarial value of assets by the ratio of market value of retirement assets to the market value of both retirement and health assets, is shown as the valuation

value of assets. The valuation value of assets is significant because LAFPP's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

#### This chart shows the change in the actuarial value of assets versus the market value over the past eight years.

**CHART 8** 



\*\* Retirement only assets

#### C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total net loss of \$220,558,066 was due mainly to an investment loss of \$570,549,621 offset somewhat by salary and COLA gains. The net experience variation from all sources was 1.3% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

#### This chart provides a summary of the actuarial experience during the past year.

#### CHART 9

Actuarial Experience for Year Ended June 30, 2011

1.	Net gain/(loss) from investments <sup>(1)</sup>	-\$570,549,621
2.	Net gain/(loss) from other experience <sup>(2)</sup>	349,991,555
3.	Net experience gain/(loss): $(1) + (2)$	-\$220,558,066

<sup>(1)</sup> Details in Chart 10.

(2) Details in Chart 13. The net gain is attributed to actual liability experience from June 30, 2010 to June 30, 2011, compared to the projected experience as predicted by the actuarial assumptions as of June 30, 2010.

#### **Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on LAFPP's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 7.75%. The actual rate of return on the actuarial value of assets basis for the 2011 plan year was 3.78%.

Since the actual return for the year was lower than the assumed return, LAFPP experienced an actuarial loss during the year ended June 30, 2011 with regard to its investments.

# This chart shows the gain/(loss) due to investment experience.

#### CHART 10

#### Actuarial Value Investment Experience for Year Ended June 30, 2011

	All Assets <sup>(1)</sup>	Assets for Retirement Only
1. Actual return	\$568,411,044	\$525,522,375
2. Average value of assets	15,022,690,431	14,142,864,463
3. Actual rate of return: $(1) \div (2)$	3.78%	3.72%
4. Assumed rate of return	7.75%	7.75%
5. Expected return: (2) x (4)	\$1,164,258,509	\$1,096,071,996
6. Actuarial gain/(loss): $(1) - (5)$	<u>-\$595,847,465</u>	<u>-\$570,549,621</u>

<sup>(1)</sup> Includes all assets for Retirement and Health Subsidy Benefits.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for all Retirement and Health Subsidy Benefits assets.

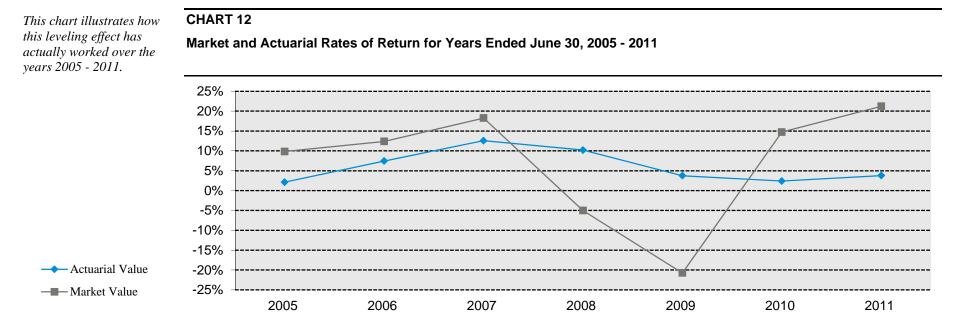
#### CHART 11

#### Investment Return<sup>(1)</sup> – Actuarial Value vs. Market Value: 2005 – 2011

	Actuarial Value Inv	vestment Return	Market Value Invo	estment Return
Year Ended June 30	Amount	Percent	Amount	Percent
2005	\$259,388,778	2.12%	\$1,131,871,641	9.83%
2006	901,268,460	7.44%	1,520,383,435	12.40%
2007	1,590,968,304	12.57%	2,450,077,668	18.25%
2008	1,414,391,128	10.20%	-776,503,003	-5.01%
2009	557,346,783	3.75%	-2,968,762,917	-20.74%
2010	360,741,904	2.40%	1,612,772,227	14.74%
2011	568,411,044	3.78%	2,585,948,784	21.22%
ven-Year Average Retur	rn	5.97%		6.25%

<sup>(1)</sup> Includes all assets for Retirement and Health Subsidy Benefits

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.



#### **Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- > the extent of turnover among the participants,
- > retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),

- > the number of disability retirements, and
- > salary increases different than assumed.

The net gain from this other experience for the year ended June 30, 2011 amounted to \$349,991,555, which is 2.1% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the LAFPP for the year ended June 30, 2011 is shown in the chart below.

#### The chart shows elements of the experience gain/(loss) for the most recent year.

#### CHART 13

#### Experience Due to Changes in Demographics for Year Ended June 30, 2011

1.	Gain due to lower than expected salary increases for continuing actives	\$258,507,497
2.	Gain due to lower than expected COLA for continuing retirees and beneficiaries	80,845,814
3.	Miscellaneous gain	10,638,244
4.	Net gain/(loss)	\$349,991,555

#### **D. RECOMMENDED CONTRIBUTION**

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability, separately for each Tier. The total amount is then divided by the projected payroll for active members to determine the contribution rate of 32.46% of payroll if paid at beginning of year.

The 32.46% contribution rate is before adjustments for the 2% additional contributions that have been implemented by the City for those employees who opted to make such contributions and also before adjustments to phase in over three years the City contributions rate impact of new actuarial assumptions adopted as recommended in the June 30, 2010 experience study. See Appendix One for contribution rates reflecting those additional member contributions.

Recommended Contribution<sup>(1)</sup>

			June 3	30	
		20	11	201	10
		Amount	% of Payroll	Amount(2)	% of Payrol
Tier	1 Members				
1.	Total normal cost	\$0	N/A	\$0	N/A
2.	Expected employee contributions, discounted to beginning of year	0	N/A	0	N/A
3.	Employer normal cost: $(1) + (2)$	0	N/A	0	N/A
4.	Actuarial accrued liability	154,861,068		152,894,371	
5.	Valuation value of assets	-53,919,685		-49,364,479	
6.	Unfunded actuarial accrued liability	208,780,753		202,258,850	
7.	Amortization of unfunded accrued liability	17,534,670	N/A	16,784,496	N/A
8.	Total recommended contribution, beginning of year	17,534,670	N/A	16,784,496	N/A
9.	Total recommended contribution, July 15	17,589,290	N/A	16,836,780	N/A
10.	Total recommended contribution, biweekly	18,223,382	N/A	17,443,743	N/A
11.	Projected payroll used for developing normal cost rate	N/A		N/A	
Tier	2 Members				
1.	Total normal cost	\$3,679,303	25.78%	\$3,749,222	26.27%
2.	Expected employee contributions, discounted to beginning of year	-4,220	-0.03%	-55,660	-0.39%
3.	Employer normal cost: $(1) + (2)$	3,675,083	25.75%	3,693,562	25.88%
4.	Actuarial accrued liability	6,020,146,450		5,772,008,132	
5.	Valuation value of assets	5,881,813,474		6,165,929,922	
6.	Unfunded actuarial accrued liability	138,332,976		-393,921,790	
7.	Amortization of unfunded accrued liability	21,677,102	$1.61\%^{(3)}$	-13,842,823	-1.03% <sup>(3</sup>
8.	Total recommended contribution, beginning of year	25,352,185	N/A	-10,149,261	N/A
9.	Total recommended contribution, July 15	25,431,157	N/A	-10,180,875	N/A
10.	Total recommended contribution, biweekly	26,347,946	N/A	-10,547,895	N/A
11.	Projected payroll used for developing normal cost rate	14,271,877		N/A	

Both the June 30, 2011 and June 30, 2010 contribution rates are before adjustments for the 2% additional contributions that have been implemented by the City for those employees who opted to make such contributions. The contribution rates for the June 30, 2011 valuation are also before adjustments to phase in over three years the City contributions rate impact of new actuarial assumptions adopted as recommended in the June 30, 2010 Triennial Experience Study.

<sup>(2)</sup> For Tiers 2 through 5, amounts are revised to reflect payroll as of June 30, 2011.

<sup>(3)</sup> Percent of TOTAL payroll.

**Recommended Contribution (Continued)** 

		June 30			
		2011		201	10
		Amount	% of Payroll	Amount <sup>(1)</sup>	% of Payroll
Tier	r 3 Members				
1.	Total normal cost	\$25,345,422	26.27%	\$24,989,204	25.90%
2.	Expected employee contributions, discounted to beginning of year	-7,425,677	-7.70%	-7,429,223	-7.70%
3.	Employer normal cost: $(1) + (2)$	17,919,745	18.57%	17,559,981	18.20%
4.	Actuarial accrued liability	793,822,446		731,978,359	
5.	Valuation value of assets	625,146,481		592,579,557	
6.	Unfunded actuarial accrued liability	168,675,965		139,398,802	
7.	Amortization of unfunded accrued liability	9,384,918	9.73%	7,496,761	7.77%
8.	Total recommended contribution, beginning of year	27,304,663	28.30%	25,056,742	25.97%
9.	Total recommended contribution, July 15	27,389,717	28.39%	25,133,929	26.05%
10.	Total recommended contribution, biweekly	28,377,113	29.41%	26,040,873	26.99%
11.	Projected payroll used for developing normal cost rate	96,483,412		N/A	
Tie	r 4 Members				
1.	Total normal cost	\$10,330,555	24.54%	\$10,304,478	24.47%
2.	Expected employee contributions, discounted to beginning of year	-3,034,088	-7.21%	-3,200,410	-7.60%
3.	Employer normal cost: $(1) + (2)$	7,296,467	17.33%	7,104,068	16.87%
4.	Actuarial accrued liability	414,524,012		379,858,147	
5.	Valuation value of assets	307,704,070		294,989,171	
6.	Unfunded actuarial accrued liability	106,819,942		84,868,976	
7.	Amortization of unfunded accrued liability	5,817,183	13.81%	4,097,367	9.73%
8.	Total recommended contribution, beginning of year	13,113,650	31.14%	11,201,435	26.60%
9.	Total recommended contribution, July 15	13,154,499	31.24%	11,239,334	26.69%
10.	Total recommended contribution, biweekly	13,628,717	32.36%	11,643,597	27.65%
11.	Projected payroll used for developing normal cost rate	42,110,657		N/A	

#### **Recommended Contribution (Continued)**

	June 30			
	20	11	2010	
	Amount	% of Payroll	Amount <sup>(1)</sup>	% of Payroll
Tier 5 Members (without Harbor Port Police)				
1. Total normal cost	\$343,179,759	29.07%	\$339,429,424	28.75%
2. Expected employee contributions, discounted to beginning of year	-99,409,481	-8.42%	-99,290,485	-8.41%
3. Employer normal cost: $(1) + (2)$	243,770,278	20.65%	240,138,939	20.34%
4. Actuarial accrued liability	9,200,854,822		8,455,734,296	
5. Valuation value of assets	7,554,147,261		7,196,561,308	
6. Unfunded actuarial accrued liability	1,646,707,561		1,259,172,988	
7. Amortization of unfunded accrued liability	106,141,409	8.99%	78,983,751	6.69%
8. Total recommended contribution, beginning of year	349,911,687	29.64%	319,122,690	27.03%
9. Total recommended contribution, July 15	351,001,658	29.73%	320,185,252	27.12%
10. Total recommended contribution, biweekly	363,655,222	30.80%	331,637,305	28.09%
11. Projected payroll used for developing normal cost rate	1,180,624,084		N/A	
Tier 6 Members (without Harbor Port Police)				
1. Total normal cost		26.35%		25.67%
2. Expected employee contributions, discounted to beginning of year		-10.58%		-10.58%
3. Employer normal cost: $(1) + (2)$		15.77%		15.09%
4. Actuarial accrued liability				
5. Valuation value of assets				
6. Unfunded actuarial accrued liability				
7. Amortization of unfunded accrued liability		8.99%		6.69%
8. Total recommended contribution, beginning of year		24.76%		21.78%
9. Total recommended contribution, July 15		24.84%		21.85%
10. Total recommended contribution, biweekly		25.73%		22.64%
11. Projected payroll used for developing normal cost rate				

#### **Recommended Contribution (Continued)**

		June	30	
	20	11	<b>20</b> 1	0
	Amount	% of Payroll	Amount <sup>(1)</sup>	% of Payroll
All Tiers Combined (without Harbor Port Police)				
1. Total normal cost	\$382,535,039	28.69%	\$378,472,328	28.39%
2. Expected employee contributions, discounted to beginning of year	-109,873,465	-8.24%	-109,975,778	-8.25%
3. Employer normal cost: $(1) + (2)$	272,661,574	20.45%	268,496,550	20.14%
4. Actuarial accrued liability	16,584,208,798		15,492,473,305	
5. Valuation value of assets	14,314,891,601		14,200,695,479	
6. Unfunded actuarial accrued liability	2,269,317,197		1,291,777,826	
7. Amortization of unfunded accrued liability	160,555,282	12.04%	93,519,552	7.01%
8. Total recommended contribution, beginning of year	433,216,856	32.49%	362,016,102	27.15%
9. Total recommended contribution, July 15	434,566,322	32.59%	363,214,419	27.24%
10. Total recommended contribution, biweekly	450,232,380	33.76%	376,217,623	28.21%
11. Projected payroll used for developing normal cost rate	1,333,490,030		N/A	
Harbor Port Police (Tier 5)				
1. Total normal cost	\$3,155,625	30.13%	\$3,030,981	28.94%
2. Expected employee contributions, discounted to beginning of year	-897,298	-8.57%	-897,564	-8.57%
3. Employer normal cost: $(1) + (2)$	2,258,327	21.56%	2,133,417	20.37%
4. Actuarial accrued liability	32,267,468		28,151,008	
5. Valuation value of assets	22,777,808		18,885,183	
6. Unfunded actuarial accrued liability	9,489,660		9,265,825	
7. Amortization of unfunded accrued liability	799,050	7.63%	770,837	7.36%
8. Total recommended contribution, beginning of year	3,057,377	29.19%	2,904,254	27.73%
9. Total recommended contribution, July 15	3,066,901	29.28%	2,913,679	27.82%
10. Total recommended contribution, biweekly	3,177,462	30.34%	3,018,413	28.82%
11. Projected payroll used for developing normal cost rate	10,473,326		N/A	

#### **Recommended Contribution (Continued)**

			June	30	
		20	11	<b>20</b> 1	10
		Amount	% of Payroll	Amount <sup>(1)</sup>	% of Payroll
Har	bor Port Police (Tier 6)				
1.	Total normal cost		26.35%		25.67%
2.	Expected employee contributions, discounted to beginning of year		-10.58%		-10.58%
3.	Employer normal cost: $(1) + (2)$		15.77%		15.09%
4.	Actuarial accrued liability				
5.	Valuation value of assets				
6.	Unfunded actuarial accrued liability				
7.	Amortization of unfunded accrued liability		7.63%		7.36%
8.	Total recommended contribution, beginning of year		23.40%		22.45%
9.	Total recommended contribution, July 15		23.47%		22.52%
10.	Total recommended contribution, biweekly		24.32%		23.33%
11.	Projected payroll used for developing normal cost rate				
All	Tiers Combined				
1.	Total normal cost	\$385,690,664	28.69%	\$381,503,309	28.38%
2.	Expected employee contributions, discounted to beginning of year	-110,770,763	-8.24%	-110,873,342	-8.25%
3.	Employer normal cost: $(1) + (2)$	274,919,901	20.45%	270,629,967	20.13%
4.	Actuarial accrued liability	16,616,476,266		15,520,624,313	
5.	Valuation value of assets	14,337,669,409		14,219,580,662	
6.	Unfunded actuarial accrued liability	2,278,806,857		1,301,043,651	
7.	Amortization of unfunded accrued liability	161,354,332	12.01%	94,290,389	7.02%
8.	Total recommended contribution, beginning of year	436,274,233	32.46%	364,920,356	27.15%
9.	Total recommended contribution, July 15	437,633,223	32.56%	366,128,098	27.24%
10.	Total recommended contribution, biweekly	453,409,843	33.74%	379,236,036	28.22%
11.	Projected payroll used for developing normal cost rate	1,343,963,356		N/A	

If paid by the City at the beginning of the year, the calculated normal cost is 20.45% payroll. The remaining 12.01% of payroll will amortize the unfunded actuarial accrued liability over an equivalent single amortization period of about 18.6 years.

The contribution rates as of June 30, 2011 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation.

#### **Reconciliation of Recommended Contribution**

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

#### CHART 15

Reconciliation of Recommended Contribution Rate\* from June 30, 2010 to June 30, 2011

Recommended Contribution as of June 30, 2010 (Assuming Payment at the Beginning of the Year) 27.15%\*\* Effect of contributions (more)/less than recommended contribution, from one-year delay between valuation and 0.68% rate implementation Effect of investment (gain)/loss 3.53% Effect of difference in actual versus expected salary increase -1.60% Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll 0.37% Effect of retiree COLA more/(less) than assumed -0.50% Effect of other actuarial (gains)/losses\*\*\* -0.14% Effect of retirements and new DROP participants from July 1, 2011 to July 14, 2011 0.03% 2.94% Effect of change in assumptions Total change <u>5.31%</u> Recommended Contribution as of June 30, 2011 (Assuming Payment at the Beginning of the Year) 32.46%

Contribution rates are before adjustments for the 2% additional contributions that have been implemented by the City for those employees who opted to make such contributions. The contribution rates for the June 30, 2011 valuation are also before adjustments to phase in over three years the City contributions rate impact of new actuarial assumptions adopted as recommended in the June 30, 2010 Triennial Experience Study.

Revised using payroll as of June 30, 2011.

\* Includes effect of new retirees and new DROP members in 2010-2011 of +0.02%.

#### E. INFORMATION REQUIRED BY GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes for governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 16 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the

of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

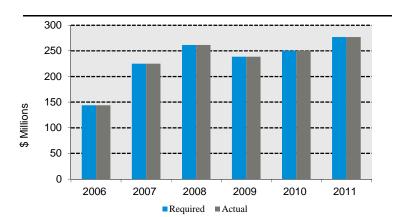
actuarial value of assets to the actuarial accrued liabilities

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits II, III, and IV.

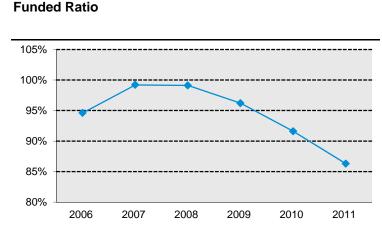
These graphs show key GASB factors.

# CHART 16

**Required Versus Actual Contributions** 



# CHART 17



#### SECTION 3: Supplemental Information for the City of Los Angeles Fire and Police Pension Plan

#### EXHIBIT A

Table of Plan Coverage

Total

	Year End	ded June 30	– Change From
Category	2011	2010	Prior Year
Active members in valuation:			
Number	13,432	13,654	-1.6%
Average age	41.2	40.6	N/A
Average service	14.2	13.6	N/A
Projected total payroll	\$1,343,963,356	\$1,356,986,476	-1.0%
Projected average payroll	\$100,057	\$99,384	0.7%
Account balances	\$1,471,923,465	\$1,406,834,156	4.6%
Total active vested members	4,808	4,698	2.3%
Vested terminated members:			
Number	59	58	1.7%
Average age	45.1	44.9	N/A
Average monthly benefit at age 50	\$1,870	\$1,830	2.2%
Retired members:			
Number in pay status	7,770	7,685	1.1%
Average age at retirement	51.5	51.5	N/A
Average age	69.0	69.0	N/A
Average monthly benefit (includes July COLA)	\$5,305	\$5,128	3.5%
Disabled members:			
Number in pay status	2,234	2,273	-1.7%
Average age at retirement	44.1	44.1	N/A
Average age	67.3	66.7	N/A
Average monthly benefit (includes July COLA)	\$4,374	\$4,274	2.3%
Beneficiaries:			
Number in pay status	2,388	2,390	-0.1%
Average age	76.9	76.8	N/A
Average monthly benefit (includes July COLA)	\$3,825	\$3,688	3.7%

#### SECTION 3: Supplemental Information for the City of Los Angeles Fire and Police Pension Plan

#### EXHIBIT A

Table of Plan Coverage

i. Tier 1

	Year Ende	d June 30	— Change From
Category	2011	2010	Prior Year
Active members in valuation:			
Number	0	0	N/A
Average age	N/A	N/A	N/A
Average service	N/A	N/A	N/A
Projected total payroll	N/A	N/A	N/A
Projected average payroll	N/A	N/A	N/A
Account balances	N/A	N/A	N/A
Total active vested members	N/A	N/A	N/A
Vested terminated members:			
Number	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit at age 50	N/A	N/A	N/A
Retired members:			
Number in pay status	130	142	-8.5%
Average age at retirement	46.3	46.2	N/A
Average age	84.8	84.3	N/A
Average monthly benefit (includes July COLA)	\$2,234	\$2,176	2.7%
Disabled members:			
Number in pay status	136	143	-4.9%
Average age at retirement	37.3	37.2	N/A
Average age	81.3	80.5	N/A
Average monthly benefit (includes July COLA)	\$2,768	\$2,679	3.3%
Beneficiaries:			
Number in pay status	420	464	-9.5%
Average age	84.5	84.2	N/A
Average monthly benefit (includes July COLA)	\$2,472	\$2,432	1.6%

#### SECTION 3: Supplemental Information for the City of Los Angeles Fire and Police Pension Plan

#### EXHIBIT A

Table of Plan Coverage

ii. Tier 2

	Year End	ed June 30	— Change From
Category	2011	2010	Prior Year
Active members in valuation:			
Number	115	140	-17.9%
Average age	55.2	54.4	N/A
Average service	32.3	31.5	N/A
Projected total payroll	\$14,271,877	\$17,234,853	-17.2%
Projected average payroll	\$124,103	\$123,106	0.8%
Account balances	\$26,343,793	\$31,424,253	-16.2%
Total active vested members	115	140	-17.9%
Vested terminated members:			
Number	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit at age 50	N/A	N/A	N/A
Retired members:			
Number in pay status	5,220	5,382	-3.0%
Average age at retirement	50.5	50.5	N/A
Average age	72.3	71.8	N/A
Average monthly benefit (includes July COLA)	\$4,738	\$4,619	2.6%
Disabled members:			
Number in pay status	1,715	1,757	-2.4%
Average age at retirement	45.3	45.3	N/A
Average age	69.8	69.0	N/A
Average monthly benefit (includes July COLA)	\$4,649	\$4,545	2.3%
Beneficiaries:			
Number in pay status	1,792	1,770	1.2%
Average age	77.6	77.1	N/A
Average monthly benefit (includes July COLA)	\$4,038	\$3,921	3.0%

#### EXHIBIT A

Table of Plan Coverage

iii. Tier 3

	Year End	led June 30	— Change From
Category	2011	2010	Prior Year
Active members in valuation:			
Number	937	954	-1.8%
Average age	45.3	44.4	N/A
Average service	17.2	16.2	N/A
Projected total payroll	\$96,483,412	\$97,967,569	-1.5%
Projected average payroll	\$102,971	\$102,691	0.3%
Account balances	\$113,030,483	\$105,500,438	7.1%
Total active vested members	933	949	-1.7%
Vested terminated members:			
Number	52	52	0.0%
Average age	44.7	44.6	N/A
Average monthly benefit at age 50	\$1,701	\$1,652	3.0%
Retired members:			
Number in pay status	143	129	10.9%
Average age at retirement	52.3	52.5	N/A
Average age	59.0	58.9	N/A
Average monthly benefit (includes July COLA)	\$2,486	\$2,439	1.9%
Disabled members:			
Number in pay status	245	243	0.8%
Average age at retirement	39.6	39.6	N/A
Average age	52.6	51.8	N/A
Average monthly benefit (includes July COLA)	\$3,312	\$3,237	2.3%
Beneficiaries:			
Number in pay status	71	71	0.0%
Average age	50.1	48.5	N/A
Average monthly benefit (includes July COLA)	\$3,762	\$3,770	-0.2%

#### EXHIBIT A

Table of Plan Coverage

iv. Tier 4

	Year End	ed June 30	— Change From
Category	2011	2010	Prior Year
Active members in valuation:			
Number	397	422	-5.9%
Average age	42.8	42.1	N/A
Average service	18.2	17.6	N/A
Projected total payroll	\$42,110,657	\$45,131,204	-6.7%
Projected average payroll	\$106,072	\$106,946	-0.8%
Account balances	\$54,089,104	\$54,597,662	-0.9%
Total active vested members	193	204	-5.4%
Vested terminated members:			
Number	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit at age 50	N/A	N/A	N/A
Retired members:			
Number in pay status	141	117	20.5%
Average age at retirement	45.4	45.2	N/A
Average age	50.6	50.1	N/A
Average monthly benefit (includes July COLA)	\$4,132	\$3,873	6.7%
Disabled members:			
Number in pay status	41	40	2.5%
Average age at retirement	42.1	42.1	N/A
Average age	49.8	49.0	N/A
Average monthly benefit (includes July COLA)	\$4,334	\$4,274	1.4%
Beneficiaries:			
Number in pay status	3	3	0.0%
Average age	48.6	47.6	N/A
Average monthly benefit (includes July COLA)	\$7,676	\$7,503	2.3%

#### EXHIBIT A

# Table of Plan Coverage

v. Tier 5 (without Harbor Port Police)

	Year End	ded June 30	
Category	2011	2010	Prior Year
Active members in valuation:			
Number	11,872	12,023	-1.3%
Average age	40.7	40.1	N/A
Average service	13.7	13.2	N/A
Projected total payroll	\$1,180,624,084	\$1,186,271,650	-0.5%
Projected average payroll	\$99,446	\$98,667	0.8%
Account balances	\$1,273,509,243	\$1,211,154,616	5.1%
Total active vested members	3,558	3,394	4.8%
Vested terminated members:			
Number	7	6	16.7%
Average age	48.1	47.7	N/A
Average monthly benefit at age 50	\$3,131	\$3,368	-7.0%
Retired members:			
Number in pay status	2,133	1,914	11.4%
Average age at retirement	54.7	54.9	N/A
Average age	62.0	61.6	N/A
Average monthly benefit (includes July COLA)	\$7,146	\$7,037	1.5%
Disabled members:			
Number in pay status	95	88	8.0%
Average age at retirement	43.6	43.4	N/A
Average age	48.1	47.3	N/A
Average monthly benefit (includes July COLA)	\$4,464	\$4,313	3.5%
Beneficiaries:			
Number in pay status	102	82	24.4%
Average age	54.1	52.3	N/A
Average monthly benefit (includes July COLA)	\$5,586	\$5,557	0.5%

#### EXHIBIT A

# Table of Plan Coverage

vi. Harbor Port Police (Tier 5)

	Year End	ed June 30	— Change From
Category	2011	2010	Prior Year
Active members in valuation:			
Number	111	115	-3.5%
Average age	36.7	36.1	N/A
Average service	7.0	6.5	N/A
Projected total payroll	\$10,473,326	\$10,381,200	0.9%
Projected average payroll	\$94,354	\$90,271	4.5%
Account balances	\$4,950,841	\$4,157,187	19.1%
Total active vested members	9	11	-18.2%
Vested terminated members:			
Number	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit at age 50	N/A	N/A	N/A
Retired members:			
Number in pay status	3	1	200.0%
Average age at retirement	55.1	57.0	N/A
Average age	57.4	61.0	N/A
Average monthly benefit (includes July COLA)	\$5,970	\$5,961	0.2%
Disabled members:			
Number in pay status	2	2	0.0%
Average age at retirement	40.1	40.1	N/A
Average age	46.1	45.2	N/A
Average monthly benefit (includes July COLA)	\$4,682	\$4,576	2.3%
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit (includes July COLA)	N/A	N/A	N/A

Members in Active Service and Projected Average Payroll as of June 30, 2011 By Age and Years of Service Total

					Ye	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove
Under 25	267	267								
	\$66,924	\$66,924								
25 - 29	1,615	1,404	211							
	79,728	78,056	\$90,853							
30 - 34	1,954	786	963	205						
	89,584	81,709	93,789	\$100,019						
35 - 39	2,290	319	595	1,076	300					
	97,114	80,806	94,935	100,543	\$106,482					
40 - 44	2,505	119	284	806	875	421				
	103,422	80,241	95,037	101,072	107,349	\$111,970				
45 - 49	2,246	34	77	251	444	1,255	177	8		
	109,417	84,532	94,158	100,774	106,105	112,623	\$117,927	\$125,745		
50 - 54	1,700	4	13	75	117	535	535	420	1	
	115,213	76,276	100,582	101,256	105,001	112,376	116,282	123,655	\$102,434	
55 - 59	708	2	2	22	31	127	193	292	39	
	116,171	71,834	94,256	98,879	103,115	111,310	114,128	122,077	121,425	
60 - 64	133			4	10	12	29	48	30	
	116,200			108,674	104,863	113,183	111,719	116,972	125,287	
65 - 69	12			2	1	1	5		2	1
	109,646			102,923	137,750	110,946	99,139		117,502	\$130,505
70 & over	2					1				1
	95,336					96,172				94,498
Total	13,432	2,935	2,145	2,441	1,778	2,352	939	768	72	2
	\$100,057	\$78,477	\$94,039	\$100,719	\$106,667	\$112,374	\$115,917	\$122,659	\$122,661	\$112,502

Members in Active Service and Projected Average Payroll as of June 30, 2011 By Age and Years of Service

i. Tier 1

					Ye	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove
Under 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44										
45 - 49										
50 - 54										
55 - 59										
60 - 64										
65 - 69										
70 & over										
Total										

Members in Active Service and Projected Average Payroll as of June 30, 2011 By Age and Years of Service ii. Tier 2

					Ye	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44										
45 - 49										
50 - 54	75						1	73	1	
	\$126,733						\$123,634	\$127,108	\$102,434	
55 - 59	29							28	1	
	118,681							119,070	107,807	
60 - 64	10							9	1	
	121,423							117,329	158,275	
65 - 69	1								1	
	110,946								110,946	
70 & over										
Total	115						1	110	4	
	\$124,103						\$123,634	\$124,262	\$119,866	

Members in Active Service and Projected Average Payroll as of June 30, 2011 By Age and Years of Service iii. Tier 3

					Ye	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25										
25 - 29										
30 - 34										
35 - 39	182	1		117	64					
	\$100,747	\$91,130		\$99,070	\$103,963					
40 - 44	333			111	174	48				
	102,479			98,386	103,359	\$108,755				
45 - 49	258	1	2	39	84	123	9			
	103,951	65,619	\$87,844	99,086	103,420	106,401	\$104,361			
50 - 54	100			19	29	42	10			
	104,862			105,699	101,189	105,765	110,136			
55 - 59	46			11	14	18	3			
	103,534			95,350	100,780	110,060	107,234			
60 - 64	13			3	7	2	1			
	109,060			107,917	106,493	118,816	110,946			
65 - 69	4			2	1		1			
	109,942			102,923	137,750		96,172			
70 & over	1					1				
	96,172					96,172				
Total	937	2	2	302	373	234	24			
	\$102,971	\$78,375	\$87,844	\$99,215	\$103,362	\$107,113	\$107,060			

Members in Active Service and Projected Average Payroll as of June 30, 2011 By Age and Years of Service iv. Tier 4

					Ye	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove
Under 25										
25 - 29										
30 - 34	46		13	33						
	\$96,054		\$94,940	\$96,492						
35 - 39	112		16	91	5					
	98,199		98,189	97,578	\$109,524					
40 - 44	74		5	18	10	41				
	106,469		93,242	95,641	107,652	\$112,547				
45 - 49	102		2	7	1	61	31			
	112,027		104,751	96,534	98,411	111,341	\$117,785			
50 - 54	62		2	1		1	48	10		
	117,227		107,822	89,016		135,423	115,814	\$126,893		
55 - 59	1						1			
	120,358						120,358			
60 - 64										
65 - 69										
70 & over										
Total	397		38	150	16	103	80	10		
	\$106,072		\$97,279	\$97,001	\$107,659	\$112,055	\$116,635	\$126,893		

Members in Active Service and Projected Average Payroll as of June 30, 2011

By Age and Years of Service

v. Tier 5 (without Harbor Port Police)

					Y	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove
Under 25	265	265								
	\$66,854	\$66,854								
25 - 29	1,595	1,385	210							
	79,684	77,987	\$90,874							
30 - 34	1,868	756	940	172						
	89,480	81,639	93,734	\$100,696						
35 - 39	1,978	306	576	865	231					
	96,761	80,492	94,833	101,035	\$107,114					
40 - 44	2,088	115	276	674	691	332				
	103,503	80,083	95,056	101,627	108,349	\$112,364				
45 - 49	1,874	30	70	202	358	1,069	137	8		
	109,968	79,208	93,941	101,223	106,693	113,374	\$118,850	\$125,745		
50 - 54	1,458	4	11	54	87	490	475	337		
	115,182	76,276	99,266	99,471	106,037	112,691	116,496	122,811		
55 - 59	629	2	2	11	17	108	187	264	38	
	116,964	71,834	94,256	102,408	105,037	111,645	114,053	122,396	\$121,783	
60 - 64	109			1	3	10	28	38	29	
	116,613			110,946	101,060	112,057	111,746	117,025	124,149	
65 - 69	7					1	4		1	1
	109,290					110,946	99,881		124,057	\$130,505
70 & over	1									1
	94,498									94,498
Total	11,872 \$99,446	2,863 \$78,279	2,085 \$93,961	1,979 \$101,196	1,387 \$107,515	2,010 \$112,940	831 \$116,094	647 \$122,338	68 \$122,826	2 \$112,502

Members in Active Service and Projected Average Payroll as of June 30, 2011 By Age and Years of Service

vi. Harbor Port Police (Tier 5)

					Ye	ears of Se	rvice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove
Under 25	2	2								
	\$76,280	\$76,280								
25 - 29	20	19	1							
	83,281	83,113	\$86,480							
30 - 34	40	30	10							
	86,992	83,473	97,549							
35 - 39	18	12	3	3						
	92,510	87,950	97,218	\$106,039						
40 - 44	10	4	3	3						
	95,348	84,789	96,321	108,453						
45 - 49	12	3	3	3	1	2				
	118,631	144,076	96,385	102,381	\$128,711	\$133,170				
50 - 54	5			1	1	2	1			
	133,420			125,456	125,456	162,465	\$91,257			
55 - 59	3					1	2			
	118,125					97,651	128,362			
60 - 64	1							1		
	111,762							\$111,762		
65 - 69										
70 & over										
Total	111	70	20	10	2	5	3	1		
	\$94,354	\$86,610	\$96,587	\$107,607	\$127,084	\$137,784	\$115,993	\$111,762		

# EXHIBIT C

**Reconciliation of Member Data** 

	Active Members *	Vested Former Members	Disableds	Retired Members	Beneficiaries	Total
Number as of June 30, 2010	13,654	58	2,273	7,685	2,390	26,060
New members	174	N/A	N/A	N/A	N/A	174
Terminations – with vested rights	-4	4	0	0	0	0
Retirements	-285	-8	N/A	293	N/A	0
New disabilities	-11	0	11	0	N/A	0
Died with or without beneficiary	-10	0	-52	-210	-2	-274
Refund of member contributions	-86	0	0	0	0	-86
Rehired	1	0	0	-1	N/A	0
Data adjustments	<u>-1</u>	<u>5</u>	<u>2</u>	<u>3</u>	<u>0</u>	<u>9</u>
Number as of June 30, 2011	13,432	59	2,234**	7,770**	2,388	25,883

\* Includes DROP members

\*\* Includes 13 new retirees during the period July 1, 2011 to July 14, 2011

#### EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis for All Retirement and Health Subsidy Benefits Assets

	Year Ended June 3	Year Ended June 30, 2011		une 30, 2010
Contribution income:				
Employer contributions	\$388,773,459		\$357,165,140	
Employee contributions	105,471,264		106,411,630	
Net contribution income	9	6494,244,723		\$463,576,770
Investment income:				
Interest, dividends and other income	\$908,922,544		\$555,187,632	
Recognition of capital appreciation	-274,002,668		-130,353,250	
Less investment and administrative fees	-66,508,832		-64,092,478	
Net investment income		568,411,044		<u>360,741,904</u>
Total income available for benefits	\$1	,062,655,767		\$824,318,674
Less benefit payments	-9	878,952,809		-\$853,749,429
Change in reserve for future benefits	9	6183,702,958		-\$29,430,755

#### EXHIBIT E

#### Summary Statement of Assets for Retirement and Health Subsidy Benefits

	Year Ended	June 30, 2011	Year Ended	June 30, 2010
Cash equivalents		\$5,373,537		\$5,299,376
Accounts receivable:				
Accrued interest and dividends	\$48,270,211		\$36,902,239	
Contributions	4,196,667		3,805,162	
Due from brokers	<u>19,299,002</u>		<u>81,424,853</u>	
Total accounts receivable		71,765,880		122,132,254
Investments:				
Equities	\$8,417,166,846		\$8,139,691,423	
Fixed income investments	5,353,379,824		3,306,620,533	
Real estate	1,116,820,806		<u>1,035,003,872</u>	
Total investments at market value		<u>14,887,367,476</u>		12,481,315,828
Total assets		\$14,964,506,893		\$12,608,747,458
Less accounts payable:				
Accounts payable and benefits in process	-\$21,027,725		-\$20,540,302	
Due to brokers	-304,894,567		-115,187,861	
Mortgage payable	-238,375,552		-274,050,944	
Total accounts payable		-\$564,297,844		-\$409,779,107
Net assets at market value		<u>\$14,400,209,049</u>		<u>\$12,198,968,351*</u>
Net assets at actuarial value		<u>\$15,220,559,597</u>		\$15,036,856,639
Net assets at valuation value (retirement benefits)		<u>\$14,337,669,409</u>		<u>\$14,219,580,662</u>

\* Based on unaudited market value of assets. Subsequent to the June 30, 2010 valuation, the market value of assets was changed to \$12,106,932,219.

#### EXHIBIT F

Development of the Fund Through June 30, 2011 for All Retirement and Health Subsidy Benefits Assets

Employer	Employee	Net Investment Boturn <sup>(1)</sup>	Benefit	Actuarial Value of Assets at End of Year
			,	
\$175,359,083	\$79,402,694	\$901,268,460	\$652,157,960	\$12,735,185,068
286,167,278 <sup>(2)</sup>	91,263,474	1,590,968,304	800,819,286	13,902,764,838
333,672,743	98,074,219	1,414,391,128	827,959,245	14,920,943,683
326,876,839	103,685,447	557,346,783	842,565,358	15,066,287,394
357,165,140	106,411,630	360,741,904	853,749,429	15,036,856,639
388,773,459	105,471,264	568,411,044	878,952,809	15,220,559,597
	<b>Contributions</b> \$175,359,083 286,167,278 <sup>(2)</sup> 333,672,743 326,876,839 357,165,140	ContributionsContributions\$175,359,083\$79,402,694286,167,278 <sup>(2)</sup> 91,263,474333,672,74398,074,219326,876,839103,685,447357,165,140106,411,630	Employer ContributionsEmployee ContributionsInvestment Return(1)\$175,359,083\$79,402,694\$901,268,460286,167,278 <sup>(2)</sup> 91,263,4741,590,968,304333,672,74398,074,2191,414,391,128326,876,839103,685,447557,346,783357,165,140106,411,630360,741,904	Employer ContributionsEmployee ContributionsInvestment Return(1)Benefit Payments\$175,359,083\$79,402,694\$901,268,460\$652,157,960286,167,278 <sup>(2)</sup> 91,263,4741,590,968,304800,819,286333,672,74398,074,2191,414,391,128827,959,245326,876,839103,685,447557,346,783842,565,358357,165,140106,411,630360,741,904853,749,429

<sup>(1)</sup> Net of investment fees and administrative expenses

<sup>(2)</sup> Includes \$6,220,076 (discounted to \$6,058,515) of Harbor Port Police assets transferred in October, 2007.

# EXHIBIT G

Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2011

1. Unfunded actuarial accrued liability at beginning of year	\$1,301,043,651
2. Normal cost at beginning of year	385,000,579
3. Total contributions	-382,563,515
4. Interest	<u>106,001,544</u>
5. Expected unfunded actuarial accrued liability: $(1) + (2) + (3) + (4)$	1,409,482,259
6 Actuarial (gain)/loss due to all changes:	
(a) Investment loss	570,549,621
(b) Salary increases less than expected	-258,507,497
(c) COLA increases less than expected for retirees	-80,845,814
(d) Other experience gain*	- <u>10,638,244</u>
(e) Total changes	220,558,066
7. Loss due to new retirees and new DROP members during $7/1/2011 - 7/14/2011$	7,199,875
8. Change in actuarial assumptions	641,566,657
9. Unfunded actuarial accrued liability at end of year: $(5) + (6e) + (7) + (8)$	<u>\$2,278,806,857</u>

\* Includes loss of \$2,774,912 due to new retirees from non-DROP status and new DROP members during the plan year 2010-2011.

Table of Amortization Bases

#### Tier 1

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Unfunded Actuarial Accrued Liability	07/01/2011	\$208,780,753	26	\$17,534,670
Total		\$208,780,753		\$17,534,670

#### Tier 2

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(2)</sup>
Unfunded Actuarial Accrued Liability	07/01/2011	-\$670,940,829	26	-\$37,821,417
Experience Loss	07/01/2009	51,946,292	13	4,834,467
Experience Loss	07/01/2010	208,193,131	14	18,269,024
Assumption Change	07/01/2010	1,476,694	26	83,242
Experience Loss	07/01/2011	203,104,597	15	16,889,081
Assumption Change	07/01/2011	344,553,091	26	19,422,705
Total		\$138,332,976		\$21,677,102

<sup>(1)</sup> Level dollar amortization.

<sup>(2)</sup> Level percentage of payroll amortization.

Table of Amortization Bases (Continued)

#### Tier 3

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Assumption Change	07/01/1989	-\$13,007,620	8	-\$1,819,951
Plan Amendment	07/01/1990	238,869	9	30,179
Assumption Change	07/01/1990	-5,365,935	9	-677,939
Assumption Change	07/01/1992	2,258,873	11	240,902
Assumption Change	07/01/1995	-20,202,324	14	-1,772,761
Plan Amendment	07/01/1996	2,870,386	15	238,686
Asset Method Change	07/01/1996	-18,555,009	15	-1,542,934
Experience Gain	07/01/1997	-2,740,941	1	-2,740,941
Experience Gain	07/01/1998	-8,252,360	2	-4,194,301
Plan Amendment	07/01/1998	5,772,243	17	436,473
Assumption Change	07/01/1998	9,708,277	17	734,100
Experience Gain	07/01/1999	-18,452,913	3	-6,355,168
Experience Gain	07/01/2000	-27,737,924	4	-7,281,651
Plan Amendment	07/01/2000	1,021,856	19	71,224
Experience Gain	07/01/2001	-25,900,538	5	-5,527,742
Assumption Change	07/01/2001	-31,720,121	20	-2,131,580
Experience Loss	07/01/2002	78,460,176	6	14,179,492
Experience Loss	07/01/2003	116,428,471	7	18,324,751
Experience Loss	07/01/2004	8,226,083	8	1,150,946
Assumption Change	07/01/2004	-9,743,043	23	-594,773
Experience Loss	07/01/2005	18,457,796	9	2,331,980
Assumption Change	07/01/2005	30,773,563	24	1,826,431
Experience Loss	07/01/2006	14,596,552	10	1,685,909
Assumption Change	07/01/2006	32,400,468	25	1,872,674

Table of Amortization Bases (Continued)

#### Tier 3

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Experience Gain	07/01/2007	-21,295,131	17	-1,610,249
Assumption Change	07/01/2007	-5,456,054	26	-307,562
Experience Gain	07/01/2008	-17,892,976	14	-1,570,115
Assumption Change	07/01/2008	8,556,558	27	471,086
Experience Loss	07/01/2009	9,873,723	13	918,914
Experience Loss	07/01/2010	2,118,575	14	185,906
Assumption Change	07/01/2010	26,565,047	29	1,400,359
Plan Amendment <sup>(2)</sup>	07/01/2011	-18,044	30	-932
Experience Loss	07/01/2011	1,095,451	15	91,092
Assumption Change	07/01/2011	25,593,931	30	1,322,413
Total		\$168,675,965		\$9,384,918

<sup>(1)</sup>Level percentage of payroll amortization.

<sup>(2)</sup> Gain due to new retirees from non-DROP status and new DROP members during 7/1/2011 – 7/14/2011.

Table of Amortization Bases (Continued)

#### Tier 4

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Assumption Change	07/01/1989	-\$5,098,242	8	-\$713,317
Plan Amendment	07/01/1990	93,623	9	11,828
Assumption Change	07/01/1990	-2,103,138	9	-265,713
Assumption Change	07/01/1992	885,348	11	94,420
Assumption Change	07/01/1995	-7,918,152	14	-694,821
Plan Amendment	07/01/1996	1,125,028	15	93,551
Asset Method Change	07/01/1996	-7,272,501	15	-604,742
Experience Gain	07/01/1997	-1,074,291	1	-1,074,291
Experience Gain	07/01/1998	-3,234,452	2	-1,643,925
Plan Amendment	07/01/1998	2,262,389	17	171,072
Assumption Change	07/01/1998	3,805,089	17	287,725
Experience Gain	07/01/1999	-7,232,483	3	-2,490,861
Experience Gain	07/01/2000	-10,871,676	4	-2,853,990
Plan Amendment	07/01/2000	398,177	19	27,753
Experience Gain	07/01/2001	-5,988,658	5	-1,278,111
Assumption Change	07/01/2001	-5,309,138	20	-356,772
Experience Loss	07/01/2002	13,219,699	6	2,389,093
Experience Loss	07/01/2003	45,817,419	7	7,211,233
Experience Loss	07/01/2004	8,261,011	8	1,155,833
Assumption Change	07/01/2004	-5,847,773	23	-356,983
Experience Loss	07/01/2005	11,314,636	9	1,429,504
Assumption Change	07/01/2005	15,845,680	24	940,452
Experience Loss	07/01/2006	5,396,723	10	623,324
Assumption Change	07/01/2006	16,080,620	25	929,424
Experience Gain	07/01/2007	-9,080,043	17	-686,595

Table of Amortization Bases (Continued)

#### Tier 4

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Assumption Change	07/01/2007	-3,272,776	26	-184,489
Experience Gain	07/01/2008	-4,332,777	14	-380,203
Assumption Change	07/01/2008	11,288,149	27	621,475
Experience Loss	07/01/2009	11,590,762	13	1,078,713
Experience Loss	07/01/2010	4,736,047	14	415,590
Assumption Change	07/01/2010	13,230,795	29	697,453
Plan Amendment <sup>(2)</sup>	07/01/2011	1,483,135	30	76,632
Experience Loss	07/01/2011	5,867,945	15	487,947
Assumption Change	07/01/2011	12,753,767	30	658,974
Total		\$106,819,942		\$5,817,183

<sup>(1)</sup>Level percentage of payroll amortization.

<sup>(2)</sup>Loss due to new retirees from non-DROP status and new DROP members during 7/1/2011 – 7/14/2011.

Table of Amortization Bases (Continued)

#### Tier 5 (without Harbor Port Police)

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Original Base	07/01/2002	-\$173,269,440	21	-\$11,252,972
Experience Gain	07/01/2003	-241,374,271	7	-37,990,050
Experience Loss	07/01/2004	86,701,985	8	12,130,841
Assumption Change	07/01/2004	-271,218,573	23	-16,556,787
Experience Loss	07/01/2005	206,614,852	9	26,103,965
Assumption Change	07/01/2005	475,383,429	24	28,214,323
Experience Loss	07/01/2006	56,984,809	10	6,581,772
Assumption Change	07/01/2006	321,781,494	25	18,598,247
Experience Gain	07/01/2007	-204,440,890	17	-15,458,971
Assumption Change	07/01/2007	-77,335,075	26	-4,359,434
Experience Gain	07/01/2008	-77,701,536	14	-6,818,338
Assumption Change	07/01/2008	332,986,566	27	18,332,757
Experience Loss	07/01/2009	347,252,626	13	32,317,635
Experience Loss	07/01/2010	205,083,095	14	17,996,117
Assumption Change	07/01/2010	283,734,135	29	14,956,863
Plan Amendment <sup>(2)</sup>	07/01/2011	5,693,576	30	294,181
Experience Loss	07/01/2011	125,215,079	15	10,412,210
Assumption Change	07/01/2011	244,615,700	30	12,639,050
Total		\$1,646,707,561		\$106,141,409

<sup>(1)</sup>Level percentage of payroll amortization.

<sup>(2)</sup> Loss due to new retirees from non-DROP status and new DROP members during 7/1/2011 - 7/14/2011.

Table of Amortization Bases (Continued)

#### Harbor Port Police (Tier 5)

Туре	Date Established	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
Experience Gain	07/01/2008	-\$165,414	14	-\$14,515
Assumption Change	07/01/2008	134,648	27	7,413
Experience Loss	07/01/2009	6,403,744	13	595,975
Experience Loss	07/01/2010	1,721,642	14	151,075
Assumption Change	07/01/2010	1,066,413	29	56,215
Plan Amendment <sup>(2)</sup>	07/01/2011	41,208	30	2,129
Experience Gain	07/01/2011	-447,574	15	-37,218
Assumption Change	07/01/2011	734,993	30	37,976
Total		\$9,489,660		\$799,050

<sup>(1)</sup> Level percentage of payroll amortization.

<sup>(2)</sup> Loss due to new retirees from non-DROP status and new DROP members during 7/1/2011 - 7/14/2011.

#### EXHIBIT I

#### **Section 415 Limitations**

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$195,000 for 2011 and \$200,000 for 2012. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions. Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

#### EXHIBIT J

#### **Definitions of Pension Terms**

The following list defines certain technical terms for the convenience of the reader: **Assumptions or Actuarial Assumptions:** The estimates on which the cost of the Plan is calculated including: Investment return — the rate of investment yield that the Plan will earn over (a) the long-term future; Mortality rates — the death rates of employees and pensioners; life (b) expectancy is based on these rates; <u>Retirement rates</u> — the rate or probability of retirement at a given age; and (c) (d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement. Normal Cost: The amount of contributions required to fund the cost of benefits allocated to the current year of service. **Actuarial Accrued Liability** For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date. **Actuarial Accrued Liability** The single sum value of lifetime benefits to existing pensioners. This sum takes For Pensioners: account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits. **Unfunded Actuarial Accrued** Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

\*SEGAL

Amortization of the Unfunded Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and market gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.

# EXHIBIT I

# **Summary of Actuarial Valuation Results**

The valuation was made with respect to the following data supplied to us:		
. Retired members as of the valuation date (including 2,388 beneficiaries in pay status)		12,39
. Members inactive during year ended June 30, 2011 with vested rights		5
. Members active during the year ended June 30, 2011		13,43
Fully vested	4,808	
Not vested	8,624	
The actuarial factors as of the valuation date are as follows:		
Assets		
. Valuation value of retirement assets (\$14,400,209,049 at market value <sup>(1)</sup> as reported by LAFPP and \$15,220,559,597 at actuarial value <sup>(1)</sup> )		\$14,337,669,40
Present value of future normal costs		
Employee <sup>(2)</sup>	\$1,180,538,407	
Employer <sup>(2)</sup>	2,972,324,784	
Total		\$4,152,863,19
. Unfunded actuarial accrued liability		2,278,806,85
Present value of current and future assets		\$20,769,339,45
Liabilities		
Present value of future benefits		
Retired members and beneficiaries	\$9,334,083,084	
Inactive members with vested rights	17,217,930	
Active members	<u>11,418,038,443</u>	
Total		\$20,769,339,45

<sup>(1)</sup>Includes all assets for Retirement and Health Subsidy Benefits.

<sup>(2)</sup> Before adjustments for the 2% additional contributions that have been implemented by the City for those employees who opted to make such contributions.

# EXHIBIT I (continued)

Summary of Actuarial	Valuation	Results (1)
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The determination of the recommended contribution is as follows:

1.	Total normal cost	\$385,690,664
2.	Expected employee contributions	<u>-110,770,763</u>
3.	Employer normal cost: $(1) + (2)$	\$274,919,901
4.	Payment on projected unfunded actuarial accrued liability	161,354,332
5.	Total recommended contribution: $(3) + (4)$ , payable beginning of year	\$436,274,233
6.	Total recommended contribution: adjusted for July 15 payment	\$437,633,223
7.	Total recommended contribution: adjusted for biweekly payment	<u>\$453,409,843</u>
8.	Projected payroll	\$1,343,963,356
9.	Item 5 as a percentage of projected payroll: $(5) \div (8)$	32.46%
10.	Item 6 as a percentage of projected payroll: $(6) \div (8)$	32.56%
11.	Item 7 as a percentage of projected payroll: $(7) \div (8)$	33.74%

<sup>(1)</sup> Before adjustments for the 2% additional contributions that have been implemented by the City for those employees who opted to make such contributions. Before adjustments to phase in over three years the City contributions rate impact of new actuarial assumptions adopted as recommended in the June 30, 2010 Triennial Experience Study.

# EXHIBIT II

Supplementary Information Required by GASB – Schedule of Employer Contributions

rement Benefits				
Plan Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed	
2006	\$143,945,802	\$143,945,802	100.00%	
2007	224,946,082	224,946,082	100.00%	
2008 <sup>(1)</sup>	261,635,491	261,635,491	100.00%	
2009	238,697,929	238,697,929	100.00%	
2010	250,516,858	250,516,858	100.00%	
2011	277,092,251	277,092,251	100.00%	

<sup>(1)</sup> Figures include amounts transferred and contributed during the fiscal year that were related to the transfer of certain Harbor Port Police members from the Los Angeles City Employees' Retirement System.

# EXHIBIT III

Supplementary Information Required by GASB – Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2006	\$12,121,403	\$12,811,384	\$689,981	94.6%	\$1,092,815	63.1%
06/30/2007	13,215,668	13,324,089	108,421	99.2%	1,135,592	9.5%
06/30/2008	14,153,296	14,279,116	125,820	99.1%	1,206,589	10.4%
06/30/2009	14,256,611	14,817,146	560,535	96.2%	1,357,249	41.3%
06/30/2010	14,219,581	15,520,625	1,301,044	91.6%	1,356,986	95.9%
06/30/2011	14,337,669	16,616,476	2,278,807	86.3%	1,343,963	169.6%

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# EXHIBIT IV

Supplementary Information Required by GASB

Valuation date	June 30, 2011
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	For Tier 1, level dollar amortization is used ending on June 30, 2037. For Tier 2, level percent of payroll amortization is used ending on June 30, 2037 as a percent of TOTAL valuation payroll. Actuarial losses are amortized over the shorter of 15 years or the remaining amortization period ending June 30, 2037.
	For other Tiers, level percent of payroll with multiple layers. Actuarial gains/losses are amortized over 15 years (21 and 17 years for gains/losses emerging at the June 30, 2007 and June 30, 2008 valuations, respectively). Plan and assumption changes are amortized over 30 years.
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five-year period. Unrecognized return established after July 1, 2008 is recognized over a seven-year period. The actuarial value of assets is further adjusted, if necessary to be within 40% of the market value of assets.
Actuarial assumptions:	
Investment rate of return	7.75%
Inflation rate	3.50%
Real across-the-board salary increase	0.75%
Projected salary increases*	Ranges from 5.25% to 12.25% based on service.
Cost of living adjustments	3.50% of Tiers 1 and 2 retirement income and 3.00% of Tiers 3, 4, 5, and 6 retirement income.
Plan membership:	
Retired members and beneficiaries received	ving benefits 12,392
Terminated members entitled to, but not	-
Terminated members entitled to, but not	
Active members	<u>13,432</u>

\* See Exhibit V for these increases.

#### **EXHIBIT V**

#### Actuarial Assumptions and Actuarial Cost Method

The following assumptions were adopted by the Board based on the Actuarial Experience Study as of June 30, 2010 and the Economics Assumptions Study as of June 30, 2010.

#### **Mortality Rates**

Healthy: RP-2000 Combined Healthy Mortality Table (separate for males and females) set back four years for members.
 RP-2000 Combined Healthy Mortality Table (separate for males and females) set back two years for beneficiaries.
 Disabled: RP-2000 Combined Healthy Mortality Table (separate for males and females) set back two years.
 The tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality, based on a review of mortality experience as of the measurement date.

SECTION 4:	Reporting Information for the City of Los Angeles Fire and Police Pension Plan
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# **Termination Rates Before Retirement:**

Pre-Retirement Mortality:

	Rate (%) Mortality		
Age	Male	Female	
20	0.03	0.02	
25	0.04	0.02	
30	0.04	0.02	
35	0.05	0.03	
40	0.08	0.05	
45	0.11	0.08	
50	0.16	0.12	
55	0.24	0.19	
60	0.42	0.31	

All pre-retirement deaths are assumed to be service connected.

	Rate (%)		
	Disability*		
Age	Fire	Police	
20	0.02	0.02	
25	0.02	0.03	
30	0.03	0.05	
35	0.06	0.11	
40	0.15	0.29	
45	0.26	0.46	
50	0.42	0.56	
55	1.40	1.08	
60	4.40	1.46	

# **Termination Rates Before Retirement (continued):**

\* 90% of disabilities are assumed to be service connected.

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Rate (%) Withdrawal (< 5 Years of Service)		
Service	Fire	Police
0 - 1	8.00	8.00
1 - 2	3.00	4.00
2 - 3	2.00	3.00
3 – 4	1.00	3.00
4 – 5	1.00	2.50

Rate (%) Vested Termination (5+ Years of Service) *						
Age	Fire	Police				
20	1.50	2.50				
25	1.50	2.50				
30	1.20	2.20				
35	0.70	1.70				
40	0.41	1.20				
45	0.20	0.82				
50	0.04	0.28				
55	0.00	0.00				
60	0.00	0.00				

\* No vested termination is assumed after a member is eligible for retirement.

Age	Rate(%) Fire Police					
	Tiers 2&4	Tiers 3&5	Tier 6	Tiers 2&4	Tiers 3&5	Tier 6
41	1.00%	0.00%	0.00%	8.00%	0.00%	0.00%
42	1.00	0.00	0.00	8.00	0.00	0.00
43	1.00	0.00	0.00	10.00	0.00	0.00
44	1.00	0.00	0.00	10.00	0.00	0.00
45	1.00	0.00	0.00	10.00	0.00	0.00
46	1.00	0.00	0.00	8.00	0.00	0.00
47	1.00	0.00	0.00	8.00	0.00	0.00
48	2.00	0.00	0.00	8.00	0.00	0.00
49	2.00	0.00	0.00	8.00	0.00	0.00
50	3.00	5.00	3.00	8.00	10.00	8.00
51	3.00	5.00	3.00	10.00	10.00	10.00
52	4.00	5.00	4.00	10.00	10.00	10.00
53	5.00	5.00	5.00	15.00	10.00	15.00
54	5.00	8.00	5.00	15.00	13.00	15.00
55	10.00	10.00	10.00	20.00	16.00	18.00
56	15.00	12.00	12.00	20.00	18.00	18.00
57	15.00	15.00	15.00	20.00	22.00	22.00
58	15.00	18.00	18.00	25.00	25.00	25.00
59	15.00	20.00	20.00	25.00	30.00	30.00
60	20.00	25.00	25.00	25.00	30.00	30.00
61	20.00	30.00	30.00	25.00	30.00	30.00
62	20.00	30.00	30.00	25.00	30.00	30.00
63	25.00	35.00	35.00	30.00	30.00	30.00
64	30.00	40.00	40.00	40.00	30.00	30.00
65	100.00	100.00	100.00	100.00	100.00	100.00

#### SECTION 4: Reporting Information for the City of Los Angeles Fire and Police Pension Plan

**DROP Program:** 

For this valuation, of all members expected to retire with a service retirement benefit, we assume a 95% DROP utilization rate if they also satisfy the requirements for participating in the DROP. Members are assumed to remain in the DROP for 5 years.

<b>Retirement Age and Benefit for</b>	
Inactive Vested Participants:	For deferred vested members, retirement assumption is age 50.
	We assume that all deferred vested members receive a deferred vested benefit.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Exclusion of Inactive Vesteds:	All inactive participants are included in the valuation.
<b>Definition of Active Members:</b>	First day of biweekly payroll following employment for new department employees or immediately following transfer from other city department.
Percent Married/Domestic Partner:	86%
Age of Spouse:	Wives are 3 years younger than their husbands.
Future Benefit Accruals:	1.0 year of service per year.
<b>Consumer Price Index:</b>	Increase of 3.50% per year; benefit increases due to CPI subject to a 3.0% maximum for Tiers 3 through 6.
Member Contribution and Matching Account Crediting Rate:	5.00%
Net Investment Return:	7.75%, net of investment and administrative expenses

# Salary Increases:

Annual Rate of Compensation Increase

Inflation: 3.50% per year; plus 0.75% "across the board" salary increases; plus the following Merit and Longevity increases based on years of service.

Years of Service	Additional Salary Increase
0	8.00%
1	7.00%
2	4.50%
3	4.00%
4	3.50%
5	3.20%
6	2.75%
7	2.50%
8	2.25%
9	2.25%
10	2.00%
11 or more	1.00%

Service Connected Disability Benefits:

	Years of Service	Benefit
—	Less than 20	55% of Final Average Salary
	20 - 30	65% of Final Average Salary
	More than 30	75% of Final Average Salary

Nonservice Connected Disability Benefits:

40% of Final Average Salary

Actuarial Value of Assets:	The market value of assets less unrecognized returns. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis. Unrecognized returns established before July 1, 2008 are recognized over a five-year period and unrecognized returns established after July 1, 2008 is recognized over a seven-year period. The actuarial value of assets is further adjusted, if necessary, to be within 40% of the market value of assets.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the current age minus Service Credit. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation.
Funding Policy:	The City of Los Angeles Fire & Police Pension Plan makes contributions equal to the Normal Cost adjusted by amount to amortize any Surplus or Unfunded Actuarial Accrued Liability. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age Normal cost method. Any changes in Surplus or Unfunded Actuarial Accrued Liability due to actuarial gains or losses are amortized over separate fifteen year periods as a level percentage of payroll. Any changes in Surplus or Unfunded Actuarial Accrued Liability from plan amendments or plan assumption changes are amortized over separate thirty year periods as a level percentage of payroll. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service. For Tier 1, the Unfunded Actuarial Accrued Liability is amortized using level dollar amortization ending on June 30, 2037. For Tier 2, the Unfunded Actuarial Accrued Liability is amortized using level percent of payroll amortization ending on June 30, 2037 as a percent of total valuation payroll. Under the Board's funding policy, experience loss for Tier 2 would be amortized over the shorter of 15 years or the remaining amortization period ending June 30, 2037.

as of June 30, 2010. The assumptions that changed from the previous valuation are as follows:
RP-2000 Combined Healthy Mortality Table (separate for males and females) set back two years for members.
RP-2000 Combined Healthy Mortality Table (separate for males and females) for beneficiaries.

*Disabled:* RP-2000 Combined Healthy Mortality Table (separate for males and females) set forward one year. **Termination Rates Before Retirement:** 

**Pre-Retirement Mortality:** 

	Rate (%)	
	Mortality	
Age	Male	Female
20	0.03	0.02
25	0.04	0.02
30	0.04	0.02
35	0.06	0.04
40	0.10	0.06
45	0.13	0.09
50	0.19	0.14
55	0.29	0.22
60	0.53	0.39

All pre-retirement deaths are assumed to be service connected.

**Changes in Actuarial Assumptions (continued):** 

**Termination Rates Before Retirement (continued):** 

	Rate (%)		
	Disability*		
Age	Fire	Police	
20	0.02	0.01	
25	0.02	0.04	
30	0.03	0.11	
35	0.06	0.17	
40	0.15	0.31	
45	0.29	0.49	
50	0.56	0.58	
55	2.08	1.14	
60	6.00	1.59	

\* 90% of disabilities are assumed to be service connected.

**Changes in Actuarial Assumptions (continued):** 

Termination Rates Before Retirement (continued):

w	Rate (%) Withdrawal (< 5 Years of Service)		
Service	Fire	Police	
0 - 1	8.00	8.00	
1 - 2	4.00	4.50	
2 - 3	3.00	3.50	
3 - 4	2.00	3.50	
4 - 5	2.00	3.00	

Rate (%) Vested Termination (5+ Years of Service) *		
Age	Fire	Police
20	2.00	3.00
25	2.00	3.00
30	1.52	2.70
35	0.90	2.20
40	0.55	1.70
45	0.30	1.20
50	0.00	0.00
55	0.00	0.00
60	0.00	0.00

\* No vested termination is assumed after a member is eligible for retirement.

**Changes in Actuarial Assumptions (continued):** 

**Retirement Rates:** 

	Rate(%)			
	Fire		Po	lice
Age	Tiers 2&4	Tiers 3&5	Tiers 2&4	Tiers 3&5
41	1.00%	0.00%	6.00%	0.00%
42	1.00	0.00	6.00	0.00
43	1.00	0.00	10.00	0.00
44	1.00	0.00	10.00	0.00
45	1.00	0.00	8.00	0.00
46	1.00	0.00	8.00	0.00
47	1.00	0.00	8.00	0.00
48	2.00	0.00	9.00	0.00
49	2.00	0.00	9.00	0.00
50	2.00	8.00	8.00	15.00
51	2.00	8.00	8.00	15.00
52	4.00	8.00	8.00	15.00
53	4.00	8.00	15.00	15.00
54	4.00	8.00	15.00	15.00
55	6.00	10.00	15.00	15.00
56	10.00	10.00	15.00	15.00
57	10.00	10.00	15.00	18.00
58	10.00	12.00	25.00	20.00
59	10.00	15.00	25.00	25.00
60	20.00	20.00	25.00	25.00
61	20.00	20.00	25.00	25.00
62	20.00	20.00	25.00	25.00
63	25.00	25.00	25.00	25.00
64	30.00	30.00	30.00	30.00
65	100.00	100.00	100.00	100.00

**DROP Program:** 

For this valuation, of all members expected to retire with a service retirement benefit, we assume a 90% DROP utilization rate if they also satisfy the requirements for participating in the DROP. Members are assumed to remain in the DROP for 4 years.

**Changes in Actuarial Assumptions (continued):** 

**Salary Increases:** 

Annual Rate of Compensation Increase

Inflation: 3.50% per year; plus 0.75% "across the board" salary increases; plus the following Merit and Longevity increases based on age.

Additional Salary Increase
5.84%
4.99%
3.87%
2.75%
1.75%
1.17%
0.87%
0.69%
0.65%

Service Connected Disability Benefits:		
	Years of Service	Benefit
	Less than 20	50% of Final Average Salary
	20 - 30	60% of Final Average Salary
	More than 30	70% of Final Average Salary

# EXHIBIT VI

# **Summary of Plan Provisions**

This exhibit summarizes the major provisions of the City of Los Angeles Fire & Police Pension Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions. For Tiers 1 through 4 and Tier 6, the section codes are from the Los Angeles Charter. For Tier 5 and the DROP program, the section codes are from the Los Angeles Administrative Code.

Plan Year:	July 1 through June 3	30
Census Date:	June 30	
Service Retirement Benefit:		
Tier 1 (§ 1304)		
Age & Service Requirement	20 years of service	
Amount		
	Years of Service	Benefit
	20	40% of Normal Pension Base
	20 to 25	Additional 2% for each year over 20 and under 25
	25	50% of Normal Pension Base
	25 to 35	Additional 1 2/3% for each year over 25 and under 35
	35+	66 2/3% of Normal Pension Base

Tier 2 (§ 1408) Age & Service Requirement Amount	20 years of service	
	Years of Service	<u>Benefit</u>
	Less than 25	2% of Normal Pension Base per year of service
	25+	55% plus 3% per year over 25 to a maximum of 70% of Normal Pension Base
Tier 3 (§ 1504)		
Age & Service Requirement Amount	Age 50 and 10 yea	ars of service
	Years of Service	<u>Benefit</u>
	Less than 20	2% of Final Average Salary per year of service
	20+	For each additional year over 20, 3% of Final Average Salary per year over 20 to a maximum of 70% Final Average Salary
Tier 4 (§ 1604)		
Age & Service Requirement Amount	20 years of service	
	Years of Service	<u>Benefit</u>
	20	40% of Final Average Salary
	20+	For each additional year over 20, 3% of Final Average Salary per year over 20 to a maximum of 70% Final Average Salary
Tier 5 (§ 4.2004)		
Age & Service Requirement Amount		
	Years of Service	Benefit
	20	50% of Final Average Salary
	20+	For each additional year over 20, 3% of Final Average Salary per year over 20, except 30 <sup>th</sup> year where 4% is provided, to a maximum of 90% Final Average Salary

Tier 6 (§ 1704) Age & Service Requirement Amount	Age 50 and 20 years of service		
	Years of Service	Benefit	
	20	40% of Final Average Salary	
	21 to 25	Additional 3% of Final Average Salary for years 21 through 25	
	26 to 30	Additional 4% of Final Average Salary for years 26 through 30	
	31+	Additional 5% of Final Average Salary per year over 30, to a maximum of 90% of Final Average Salary	
Deferred Retirement Option Pla (DROP) (§4.2100 - 4.2109):	n		
Eligibility	Tier 2:	25 years of service	
	Tier 3:	Age 50 and 25 years of service	
	Tier 4:	25 years of service	
	Tier 5:	Age 50 and 25 years of service	
	Tier 6:	Age 50 and 25 years of service	
Benefits under DROP	DROP benefits (calculated using age, service, and salary at the commencement date of participation in DROP) will be credited to a DROP account with interest at 5% annually. Members are required to make normal member contributions. DROP benefits receive annual COLA while in DROP (limited to 3% for all Tiers). Members may participate in DROP for up to five years.		
Normal Pension Base:			
Tier 1, 2 (§ 1302, § 1406)	Final mon	thly salary rate	
Final Average Salary:			
Tier 3, 4, 5 (§ 1502, § 1602, § 4	service	average salary actually received during any 12 consecutive months of	
Tier 6 (§ 1702)	Monthly a service	average salary actually received during any 24 consecutive months of	

Cost of Living Benefit:	
Tier 1 (§ 1328)	Based on changes to Los Angeles area consumer price index.
Tier 2 (§ 1422)	Based on changes to Los Angeles area consumer price index.
Tier 3 (§ 1516)	Based on changes to Los Angeles area consumer price index to a maximum of 3%
	per year.
Tier 4 (§ 1616)	Based on changes to Los Angeles area consumer price index to a maximum of 3%
	per year.
Tier 5 (§ 4.2016)	Based on changes to Los Angeles area consumer price index to a maximum of 3% per year, excess banked.
Tier 6 (§ 1716)	Based on changes to Los Angeles area consumer price index to a maximum of 3% per year, excess banked.

# **Death After Retirement:**

Tier 1 (§ 1314, § 1316)	
Service Retirement	Pension equal to the same percentage of the Member's Normal Pension Base to a maximum of 50%.
Service Connected Disability	50% of Member's Normal Pension Base.
Nonservice Connected Disability	40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay.
Tier 2 (§ 1414)	
Service Retirement	Pension equal to the same percentage of the Member's Normal Pension Base to a maximum of 55%.
Service Connected Disability	50% of the Member's Normal Pension Base, or 55% of the Member's Normal Pension Base if Member had at least 25 years of service at the date of death.
Nonservice Connected Disability	40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay (nonservice connected pension base).

Tier 3, 4 (§ 1508, § 1608)	
Service Retirement	Pension equal to 60% of the pension received by the deceased Member.
Service Connected Disability	If death occurs within three years of the Member's effective date of pension, then the eligible spouse or designated beneficiary shall receive 75% of the Final Average Salary.
	Otherwise, a pension equal to 60% of the pension received by the deceased Member immediately preceding the date of death.
Nonservice Connected Disability	Pension equal to 60% of the pension received by the deceased Member.
Tier 5 (§ 4.2008, § 4.2008.5)	If former Tier 2 member, see Tier 2. Otherwise, see Tier 3.
Tier 6 (§ 1708)	
Service Retirement	Pension equal to 70% of the pension received by the deceased Member.
Service Connected Disability	If death occurs within three years of the Member's effective date of pension, then the eligible spouse or designated beneficiary shall receive 80% of the Final Average Salary.
	Otherwise, a pension equal to 80% of the pension received by the deceased Member immediately preceding the date of death.
Nonservice Connected Disability	Pension equal to 70% of the pension received by the deceased Member.

# **Death Before Retirement:**

Tier 1 (§ 1314, § 1316) Eligible for Service Retirement	
Service Requirement	20 years of service.
Amount	100% of Member's accrued service retirement Member would have received, not to exceed 50% of Normal Pension Base.
Service Connected	
Service Requirement	None.
Amount	50% of Member's Normal Pension Base.

Nonservice Connected	
Service Requirement	5 years of service.
Amount	40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay.
Tier 2 (§ 1414)	
Eligible for Service Retirement	
Service Requirement	20 years of service.
Amount	100% of Member's accrued service retirement Member would have received, not to exceed 55% of Normal Pension Base.
Service Connected	
Service Requirement	None.
Amount	50% of the Member's Normal Pension Base, or 55% of the Member's Normal Pension Base if Member had at least 25 years of service at the date of death.
Nonservice Connected	
Service Requirement	5 years of service.
Amount	40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay (nonservice connected pension base).
Tier 3, 4 (§ 1508, § 1608)	
Service Connected	
Service Requirement	None.
Amount	75% of the Member's Final Average Salary.
Nonservice Connected	
Service Requirement	5 years of service.
Amount	30% of the Member's Final Average Salary, or 80% of the service pension if the Member was eligible to retire to a maximum of 40% of the Member's Final Average Salary.

Basic Death Benefit	If Member has at least one year of service, in addition to return of contributions, beneficiary receives the Member's one-year average monthly salary times years of completed service (not to exceed 6 years).
Tier 5 (§ 4.2008, § 4.2008.5)	
Eligible for Service Retirement	
Service Requirement	20 years of service.
Amount	For former Tier 2, 100% of Member's accrued service retirement Member would have received, not to exceed 55% of Normal Pension Base. For former Tier 3, 4, or 5, per section 1508(2), if member was eligible to retire based on years of service, 80% of service retirement Member would have been entitled to or 30% of Member's Final Average Salary, not to exceed 40% of Final Average Salary.
Service Connected	
Service Requirement	None.
Amount	75% of the Member's Final Average Salary payable to an eligible spouse or designated beneficiary.
Nonservice Connected	
Service Requirement	5 years of service.
Amount	For former Tier 2, 40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay. For former Tier 3, 4, or 5, if member was eligible to retire based on years of service, 80% of service retirement Member would have been entitled to or 30% of Member's Final Average Salary; not to exceed 40% of Final Average Salary.
Basic Death Benefit	If Member has at least one year of service, in addition to return of contributions, beneficiary receives the Member's one-year average monthly salary times years of completed service (not to exceed 6 years).
Tier 6 (§ 1708)	
Service Connected	
Service Requirement	None.
Amount	80% of the Member's Final Average Salary.

Nonservice Connected		
Service Requirement	5 years of service.	
Amount 50% of the Member's Final Average Salary.		
Basic Death Benefit	If Member has at least one year of service, in addition to return of contributions, beneficiary receives the Member's two-year average monthly salary times years of completed service (not to exceed 6 years).	
Disability:		
Tier 1 (§ 1310, § 1312)		
Service Connected		
Service Requirement	None.	
Amount	50% to 90% of Normal Pension Base depending on severity of disability, with a minimum of Member's service pension percentage rate.	
Nonservice Connected		
Service Requirement	5 years of service.	
Amount	40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay.	
Tier 2 (§ 1412)		
Service Connected		
Service Requirement	None.	
Amount	50% to 90% of Normal Pension Base depending on severity of disability, with a minimum of Member's service pension percentage rate.	
Nonservice Connected		
Service Requirement	5 years of service.	
Amount	40% of highest monthly salary as of Member's retirement for basic rank of Police Officer III or Firefighter III, and the highest length of service pay.	

## Tier 3, 4, 5, 6 (§ 1506, § 1606, § 4.2006, § 1706)

Service Connected

Service Requirement	None.
Amount	30% to 90% of Final Average Salary depending on severity of disability with a minimum of 2% of Final Average Salary per year of service.
Nonservice Connected	
Service Requirement	5 years of service.
Amount	30% to 50% of Final Average Salary depending on severity of disability.

# **Deferred Withdrawal Retirement Benefit (Vested):**

Tier 3 (§ 1504)	
Age & Service Requirement	Age 50 with 10 years of service.
Amount	See Tier 3 Service Retirement.
Tier 5, Tier 6 (§ 4.2004, § 1704)	
Age & Service Requirement	Age 50 and 20 years of service.
Amount	Member is entitled to receive a service pension using Tier 3 retirement formula.

**Member Normal Contributions:** Members are exempt from making contributions if their continuous service exceeds 30 years for Tiers 1 through 4, and 33 years for Tier 5 and Tier 6.

Tier 1 (§ 1324)	Normal contribution rate of 6%.
Tier 2 (§ 1420)	Normal contribution rate of 6% plus half of the cost of the cost of living benefit to a maximum of 1%.
Tier 3 (§ 1514)	Normal contribution rate of 8%.
Tier 4 (§ 1614)	Normal contribution rate of 8%.
Tier 5 (§ 4.2014)	Normal contribution rate of 9% with the City of Los Angeles paying 1% provided that the LAFPP is at least 100% actuarially funded for pension benefits.
Tier 6 (§ 1714)	Normal contribution rate of 9%, plus 2% additional contributions to support funding of retiree health benefits. The additional 2% contributions shall not be required for members with more than 25 years of service.

Changes in Plan Provisions: A 2% additional e

A 2% additional employee contribution and a new Tier 6 benefit were added since the last valuation.

# APPENDIX ONE

Employer Contribution Rates with and without the Additional 2% Employee Contributions <sup>(1)</sup>

	Witho	ut Additional 2%		June 30 Wit	h Additional 2%		Comp	site Rate Refle	cted
		yee Contribution			yee Contribution	18	-	6 Employee Cor	
Employ er Contributions	Beginning of Year	15-Jul	Biweekly	Beginning of Year	15-Jul	Biweekly	Beginning of Year	15-Jul	Biweekly
Tier 1	<u>or rear</u>	<u>13-Jui</u>	DIWEEKIY	<u>or real</u>	<u>13-Jul</u>	BIWCCKIY	<u>or rear</u>	<u>15-Jul</u>	DIWCCKIY
1. Amortization of UAAL	\$17,534,670			\$0			\$17.534.670		
Tier 2	\$17,554,070			40			\$17,554,070		
1. Normal Cost	25.75%			23.98%			25.40%		
2. Amortization of UAAL <sup>(3)</sup>	1.61%			1.61%			1.61%		
Tier 3	1.0170			1.0170			1.01%		
1. Normal Cost	18.57%			16.88%			17.36%		
2. Amortization of UAAL	9.73%			9.73%			9.73%		
3. Total Retirement Contribution	28.30%	28.39%	29.41%	26.61%	26.69%	27.66%	27.09%	27.17%	28.15
Tier 4	20.5070	20.3970	29.4170	20.0170	20.0970	27.0070	21.0970	27.1770	20.15
1. Normal Cost	17.33%			15.66%			16.21%		
2. Amortization of UAAL	13.81%			13.81%			13.81%		
3. Total Retirement Contribution	31.14%	31.24%	32.36%	29.47%	29.56%	30.63%	30.02%	30.11%	31.20
Tier 5 (without Harbor Port Police)	51111/0	5112170	52.5070	27.1770	2710070	5010570	5010270	501170	51120
1. Normal Cost	20.65%			19.00%			19.52%		
2. Amortization of UAAL	8.99%			8.99%			8.99%		
3. Total Retirement Contribution	29.64%	29.73%	30.80%	27.99%	28.08%	29.09%	28.51%	28.60%	29.63
All Tiers Combined (without Harbor Port		_,							
1. Normal Cost	20.45%			18.79%			19.32%		
2. Amortization of UAAL	12.04%			12.04%			12.04%		
3. Total Retirement Contribution	32.49%	32.59%	33.76%	30.83%	30.93%	32.04%	31.36%	31.46%	32.59
Harbor Port Police (Tier 5)									
1. Normal Cost	21.56%			19.86%			20.09%		
2. Amortization of UAAL	7.63%			7.63%			7.63%		
3. Total Retirement Contribution	29.19%	29.28%	30.34%	27.49%	27.58%	28.57%	27.72%	27.81%	28.81
All Tiers Combined									
1. Normal Cost	20.45%			18.79%			19.32%		
2. Amortization of UAAL	12.01%			12.01%			12.01%		
3. Total Retirement Contribution	32.46%	32,56%	33.74%	30.80%	30.90%	32.01%	31.33%	31.43%	32.56

(1) Additional 2% Employee is Paid on Base Pay Only

(2) Before adjustments to phase in over three years the impact of new actuarial assumptions (as a result of the June 30, 2010 Actuarial Experience Study) on the City's contributions.

(3) Percent of TOTAL payroll.

# APPENDIX ONE

Employer Contribution Rates with and without the Additional 2% Employee Contributions

Supplemental Information	With	out Additional 2%	With Additional 2%		Total
	Emp	loyee Contributions	Employee Contributions		Payroll
Tier 2					
1. Payroll	\$	11,428,388	\$ 2,843,489	\$	14,271,877
2. Base Pay as a Percentage of Pensionable Pay			91.84%		
3. Non-Refundability Factor			99.88%		
Tier 3					
1. Payroll	\$	27,173,458	\$ 69,309,954	\$	96,483,412
2. Base Pay as a Percentage of Pensionable Pay			87.97%		
3. Non-Refundability Factor			99.83%		
Tier 4					
1. Payroll	\$	13,981,261	\$ 28,129,396	\$	42,110,657
2. Base Pay as a Percentage of Pensionable Pay			86.92%		
3. Non-Refundability Factor			99.83%		
<b>Fier 5</b> (without Harbor Port Police)					
1. Payroll	\$	374,644,969	\$ 805,979,115	\$1,	180,624,084
2. Base Pay as a Percentage of Pensionable Pay			88.02%		
3. Non-Refundability Factor			97.66%		
All Tiers Combined (without Harbor Port Police)					
1. Payroll	\$	427,228,076	\$ 906,261,954	\$ 1,	333,490,030
2. Base Pay as a Percentage of Pensionable Pay			87.99%		
3. Non-Refundability Factor			97.85%		
Harbor Port Police (Tier 5)					
1. Payroll	\$	1,407,003	\$ 9,066,323	\$	10,473,326
2. Base Pay as a Percentage of Pensionable Pay			92.56%		
3. Non-Refundability Factor			95.28%		
All Tiers Combined					
1. Payroll	\$	428,635,079	\$ 915,328,277	\$ 1,	343,963,350
2. Base Pay as a Percentage of Pensionable Pay			88.04%		
3. Non-Refundability Factor			97.87%		

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# City of Los Angeles Fire and Police Pension Plan

Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2011 In accordance with GASB Statements No. 43 and No. 45

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# \*SEGAL

THE SEGAL COMPANY 100 Montgomery Street, Suite 500 San Francisco, CA 94104 T 415.263.8200 F 415.263.8290 www.segalco.com

January 11, 2012

Board of Fire and Police Pension Commissioners City of Los Angeles Fire and Police Pension Plan 360 East Second Street, Suite 400 Los Angeles, CA 90012-4203

Dear Board members:

We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2011 under Governmental Accounting Standards Board Statements No. 43 and No. 45. The report summarizes the actuarial data used in the valuation, discloses the Net OPEB obligation (NOO) as of June 30, 2011, establishes the Annual Required Contribution (ARC) for the coming year, and analyzes the preceding year's experience. This report was based on the census data provided by LAFPP. The actuarial calculations were completed under the supervision of Patrick Twomey, ASA, MAAA and Thomas Bergman, MAAA.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in this valuation and described in Exhibit II are reasonably related to the experience of and the expectations for the Plan. The actuarial projections are based on these assumptions and the plan of benefits as summarized in Exhibit III.

Sincerely,

Bv:

#### THE SEGAL COMPANY

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary TXB/hy

Arely Yeurg

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Associate Actuary

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# **SECTION 2**

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# PURPOSE

This report presents the results of our actuarial valuation of the City of Los Angeles Fire and Police Plan as of June 30, 2011. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants' active working lifetimes.

# HIGHLIGHTS OF THE VALUATION

> The June 30, 2010 results provided in this report were based on those developed in our report dated November 17, 2010. Since the release of that valuation report, the Board, pursuant to a request by the City, requested that Segal recalculate the contribution rate requirements for the retiree health plan for the 2011-2012 Fiscal Year to reflect a freeze on the medical subsidy for future retirees retiring on or after July 15, 2011. In order to avoid the freeze, an active member may elect to retire from the Plan or sign up to participate in the DROP on or before July 14, 2011. An active member may also avoid the freeze if the member agrees to pay a 2% contribution on his/her base salary. The 2% would be paid retroactive to August 15, 2011 and would continue in effect until an individual employee has paid such contributions for a period of 25 years or retired from the Plan. It is our understanding that in order for the additional employee contributions to be refundable to the members upon termination from LAFPP, and for other tax considerations, the City has concluded that the 2% additional employee contributions should be designated as retirement plan (instead of retiree health

plan) contributions. Our study, dated November 22, 2011, communicated these recalculated rates and is included as an Appendix in this valuation report. In particular, the recommended contribution rate in the June 30, 2010 valuation for the total OPEB Plan was decreased from 11.86% of payroll to 10.31% of payroll, after reflecting the freeze.

- The recommended contribution rate has increased to 10.96% of payroll (\$146.9 million), assuming contributions are made by the City on July 15. The increase in the recommended contribution amount is due mainly to the new assumptions from the triennial experience study, offset somewhat by lower, updated medical trend assumptions. A reconciliation of the employer's rate is provided in Exhibit H.
- The employer contribution rates provided in this report have been developed assuming that they will be made by the City either (1) throughout the year (i.e. the City will pay contributions at the end of every pay period), (2) on July 15 or (3) the beginning of the year.
- The funded ratio has increased from 32.2% to 34.5% in this valuation. The unfunded actuarial accrued liability (UAAL) has decreased from \$1,721 million to \$1,675 million. A reconciliation of the change in the UAAL is provided in Section 2, Chart 2.
- The City of Los Angeles Fire and Police Pension Plan is required to comply with GASB 43 effective with fiscal year 2006/2007. The City is required to include the GASB 45 results in its financial statements effective with fiscal year 2007/2008.

- The discount rate for this valuation is 7.75%, and is based on the assumption that in the long term the City is paying a contribution that equals the ARC and 100% of benefits will be paid from the trust.
- The funding method used to develop the (ARC) is Entry Age Normal, with the normal cost developed as a level percent of payroll. The contribution to amortize the UAAL is developed as a level percent of payroll.
- Contributions will generally increase with payroll growth. Other factors such as gains or losses, or changes in trend assumptions will also change the ARC for future years.
- On September 1, 2011, the Board elected to phase in the impact of new actuarial assumptions on the City's retirement and health plan contributions over a threeyear period, beginning with the 2012-2013 fiscal year. The recommended (i.e., pre-phase-in) contribution rates for Fiscal Year 2012-2013 are contained in this report. In a separate letter, we provide the "phased-in" contribution rates for Fiscal Year 2012-2013 and an analysis of the financial reporting and future contribution rate impact of the three-year phase-in.
- As indicated in Section 3, Exhibit G of this report, the total unrecognized investment loss as of June 30, 2011 is \$820 million for the assets for Retirement and Health Subsidy Benefits. For comparison purposes, the total unrecognized investment loss as of June 30, 2010 was \$2,838 million. The investment loss will be recognized in the determination of the actuarial value of assets in the next few years. This implies that earning the assumed rate of investment return of 7.75% per year

(net of expense) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 7.75% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years.

- The deferred losses of \$820 million represent 5.7% of the market value of assets as of June 30, 2011. Unless offset by future investment gains, or other favorable experience, the recognition of the \$820 million market losses is expected to have an impact on the Health Plan's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:
  - If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 34.5% to 32.7%.
  - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate (payable throughout the fiscal year period) would increase from 11.34% to 11.62% of payroll.

- We have not included the projected excise tax that may be imposed by the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act. Under these acts, health plans that provide a subsidy above certain thresholds (for example, the annual thresholds for non-Medicare retirees aged 55-64 are \$11,850 and \$30,950 for single and family coverage, respectively) beginning in 2018 may be subject to a 40% excise tax. Because GASB has yet to issue required guidance for reflecting the excise tax, it is our understanding that LAFPP has the option of deciding whether to include this liability, in consultation with tax and legal counsel, in future actuarial valuations. Segal is available to discuss and to calculate the potential liability for future valuations.
- Since the prior valuation, the City approved a new Tier 6 for employees entering the Plan after June 30, 2011. The initial contribution rates determined as of June 30, 2010 were provided in our study dated May 18, 2011. As actual employees do not begin to enter that Tier until after June 30, 2011, that study was based on projected demographic profile for recently hired employees in the June 30, 2010 data. Exhibit B in this report includes the updated contribution rates, determined as of June 30, 2011based on a projected demographic profile of recent hires as of June 30, 2011.

#### SECTION 1: Executive Summary for City of Los Angeles Fire and Police Pension Plan June 30, 2011 Measurement Under GASB 43 and 45

#### SUMMARY OF VALUATION RESULTS

The key valuation results for the current and prior years are shown.

	June 30, 2011	June 30, 2010**
Actuarial Accrued Liability (AAL)	\$2,557,606,524	\$2,537,825,016
Actuarial Value of Assets	882,890,188	817,275,977
Unfunded Actuarial Accrued Liability	1,674,716,336	1,720,549,039
Funded Ratio	34.52%	32.20%
Market Value of Assets	\$835,304,589	\$663,032,442
Annual Required Contribution (ARC) for coming year*		
Normal cost (beginning of year)	\$49,369,035	\$62,677,377
Amortization of the unfunded actuarial accrued liability	<u>97,512,556</u>	<u>97,731,938</u>
Total Annual Required Contribution at beginning of year	\$146,881,591	\$160,409,315
ARC as a percentage of pay at beginning of year	10.93%	11.82%
Adjustment for timing (payable throughout the year)	<u>5,585,462</u>	<u>6,099,881</u>
Total Annual Required Contribution, including adjustment for timing	152,467,053	166,509,196
ARC as a percentage of pay (payable throughout the year)	11.34%	12.27%
Total Annual Required Contribution (payable July 15)	\$147,355,896	\$160,927,303
ARC as a percentage of pay (payable July 15)	10.96%	11.86%
Covered payroll	\$1,343,963,356	\$1,356,986,476
Total Participants	25,241	25,413
Annual OPEB Cost (AOC) for Coming Year		
Annual Required Contributions (payable end of fiscal year)	158,264,914	\$172,841,037
Interest on Net OPEB Obligations	7,700,361	3,654,571
ARC Adjustments	-6,187,819	-2,850,327
Total Annual OPEB Cost	\$159,777,456	\$173,645,281
AOC as percentage of pay	11.89%	12.80%

\* June 30, 2011 contribution rates are before adjustments to phase in over three years the City contribution rate impact due to the new actuarial assumptions adopted as recommended in the June 30, 2010 triennial experience study.

\*\*June 30, 2010 results are before adjustments to freeze the medical subsidy effective with the 2011-2012 fiscal year for certain members.

January 11, 2012

# ACTUARIAL CERTIFICATION

This is to certify that The Segal Company has conducted an actuarial valuation of certain benefit obligations of City of Los Angeles Fire and Police Pension Plan's other postemployment benefit program as of June 30, 2011, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements No. 43 and No. 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by LAFPP and reliance on participant, premium, claims and expense data provided by LAFPP. The Segal Company has not audited the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, has reviewed the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting and funding requirements. Determinations for purposes other than meeting financial accounting and funding requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements No. 43 and No. 45 with respect to the benefit obligations addressed. The signing actuaries are Members of the Society of Actuaries, and/or the American Academy of Actuaries, and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.

Thans Bergmin

Thomas Bergman, MAAA, EA Assistant Actuary

Patrick Twomey, ASA, MAAA, EA Assistant Actuary

The actuarial present value of total projected benefits uses the actuarial assumptions disclosed in Section 4 to calculate the value today of all benefits expected to be paid to current actives and retired plan members. The actuarial balance sheet shows the expected breakdown of how these benefits will be financed.

# CHART 1

Actuarial Present Value of Total Projected Benefits (APB) and Actuarial Balance Sheet

	Actuarial Present Value of Total Projected Benefits (APB)		
	June 30, 2011	June 30, 2010*	
Participant Category			
Current retirees, beneficiaries, and dependents	\$1,506,696,305	\$1,450,500,242	
Current active members	<u>1,563,302,360</u>	<u>1,769,781,102</u>	
Total as of June 30	\$3,069,998,665	\$3,220,281,344	
	June 30, 2011	June 30, 2010*	
Actuarial Balance Sheet			
The actuarial balance sheet as of the valuation date is as follows:			
Assets			
1. Actuarial value of assets	\$882,890,188	\$817,275,977	
2. Present value of future normal costs	512,392,141	682,456,328	
3. Unfunded actuarial accrued liability	<u>1,674,716,336</u>	1,720,549,039	
4. Present value of current and future assets	\$3,069,998,665	\$3,220,281,344	
Liabilities			
5. Actuarial Present Value of total Projected Benefits	\$3,069,998,665	\$3,220,281,344	

\*June 30, 2010 results are before adjustments to freeze the medical subsidy effective with the 2011-2012 fiscal year for certain members.

The actuarial accrued liability shows that portion of the APB (Chart 1) allocated to periods prior to the valuation date by the actuarial cost method. The chart below shows the portion of the liability for active and inactive members,

and reconciles the unfunded actuarial accrued liability from last year to this year.

#### CHART 2

#### Actuarial Accrued Liability (AAL) and Unfunded AAL (UAAL)

	June 30, 2011	June 30, 2010*
Participant Category		
Current retirees, beneficiaries, and dependents	\$1,506,696,305	\$1,450,500,242
Current active members	<u>1,050,910,219</u>	1,087,324,774
Total actuarial accrued liability	\$2,557,606,524	\$2,537,825,016
Unfunded Actuarial Accrued Liability		
Actuarial accrued liability	\$2,557,606,524	\$2,537,825,016
Actuarial value of assets	882,890,188	<u>817,275,977</u>
Unfunded actuarial accrued liability	\$1,674,716,336	\$1,720,549,039
Development of Unfunded Actuarial Accrued Liability for the Year Endeo	l June 30, 2011	
1. Unfunded actuarial accrued liability at beginning of year		\$1,720,549,039
2. Change due to health subsidy freeze from revised June 30, 2010 valuation		-154,621,214
3. Loss due to new DROP participants and new retirees during July 1, 201	0-June 30, 2011	37,508,859
4. Loss due to new DROP participants and new retirees during July 1, 201	1-July 14, 2011	12,334,623
5. Normal cost from prior valuation		62,677,377
6. Employer contributions		-111,681,208
7. Interest on prior year UAAL, normal cost and contributions		129,913,325
8. Change due to assumption changes from triennial experience study	180,965,011	
9. Change due to health assumption and starting cost changes (mainly due	to lower health trend)	-187,298,607
10. Change due to miscellaneous gains		-15,630,869
11. Unfunded actuarial accrued liability at end of year		\$1,674,716,336

\*June 30, 2010 results are before adjustments to freeze the medical subsidy effective with the 2011-2012 fiscal year for certain members.

The unfunded actuarial accrued liability may be amortized over periods of up to 30 years. Amortization payments may be calculated as level dollar amounts or as amounts designed to remain level as a percent of a growing payroll base. City of Los Angeles Fire and Police Pension Plan has elected to amortize the unfunded actuarial accrued liability using the following rules: Tier 1 is 30-year closed, level dollar effective June 30, 2006, Tiers 2 through 5 are 30year closed, level percent of pay effective June 30, 2006.

## CHART 3

#### **Table of Amortization Bases**

Туре	Date Established	Initial Period	Initial Amount	Current Balance	Years Remaining	Annual Payment
Гier 1*	06/30/2006	30	\$24,466,082	\$ 26,295,692	25	\$2,237,548
Гіег 2**	06/30/2006	30	653,100,516	892,673,992	25	51,594,550
Гіег 3**	06/30/2006	30	48,141,902	68,153,341	25	3,939,110
Гier 4**	06/30/2006	30	28,161,779	49,380,711	25	2,854,094
Гier 5 - Non-Harbor**	06/30/2006	30	263,534,994	635,657,540	25	36,739,577
Гier 5 – Harbor	06/30/2007	29	512,651	2,555,060	25	147,677
Гotal				\$1,674,716,336		\$97,512,556

Restarted June 30, 2006 with a 30 year, level dollar schedule.

\*\* Restarted June 30, 2006 with a 30 year, level percent of pay schedule.

The Annual Required Contribution (ARC) is the amount calculated to determine the annual cost of the OPEB plan for accounting purposes on an accrual basis. The calculation consists of adding the Normal Cost of the plan to an amortization payment. Both are determined as of the start of the accounting period and adjusted as if the annual cost were to be contributed throughout the fiscal year or on July 15<sup>th</sup>.

The amortization payment is based on a 25-year amortization of the Unfunded Actuarial Accrued Liability on a level percent of pay basis, except that Tier 1 is based on a level dollar basis.

# CHART 4 Determination of Annual Required Contribution (ARC)

	Cost Element	20	11*	2010**	
		Amount	Percentage of Compensation	Amount	Percentage of Compensation
1.	Normal cost	\$49,369,035	3.67%	\$62,677,377	4.62%
2.	Amortization of the unfunded actuarial accrued liability	<u>97,512,556</u>	7.26%	<u>97,731,938</u>	7.20%
3.	Total Annual Required Contribution at beginning of year	\$146,881,591	10.93%	\$160,409,315	11.82%
4.	Adjustment for timing (payable throughout the year)	5,585,462	0.41%	<u>6,099,881</u>	0.45%
5.	Total Annual Required Contribution (payable throughout the year)	\$152,467,053	11.34%	\$166,509,196	12.27%
6.	Adjustment for timing (payable July 15)	474,305	0.03%	517,988	0.04%
7.	Total Annual Required Contribution (payable July 15)	\$147,355,896	10.96%	\$160,927,303	11.86%
8.	Total Compensation	\$ <u>1,343,963,356</u>		<u>\$1,356,986,476</u>	

\* June 30, 2011 contribution rates are before adjustments to phase in over three years the City contribution rate impact due to the new actuarial assumptions adopted as recommended in the June 30, 2010 triennial experience study.

\*\* June 30, 2010 results are before adjustments to freeze the medical subsidy effective with the 2011-2012 fiscal year for certain members.

The Annual OPEB Cost (AOC) adjusts the ARC for timing differences between the ARC and contributions in relation to the ARC. The AOC is the cost of OPEB actually booked as an expense for the Fiscal Year under GASB 45.

## CHART 4 (continued)

# **Determination of Annual OPEB Cost (AOC)**

		Determined as of June 30			
	Cost Element	2011	2010*		
		Amount	Amount		
1.	Annual Required Contribution (payable at end of fiscal year)	\$158,264,914	\$172,841,037		
2.	Interest on Beginning of Year Net OPEB Obligation (NOO)	7,700,361	3,654,571		
3.	ARC adjustment	-6,187,819	-2,850,327		
4.	Annual OPEB Cost	\$159,777,456	<u>\$173,645,281</u>		
5.	AOC as percentage of pay	11.89%	12.80%		
6.	Total compensation	<u>\$1,343,963,356</u>	<u>\$1,356,986,476</u>		

\* June 30, 2010 results are before adjustments to freeze the medical subsidy effective with the 2011-2012 fiscal year for certain members.

For GASB 43 (plan reporting) purposes, the schedule of employer contributions compares actual contributions to the ARC. For GASB 45 (employer reporting) purposes, the schedule of employer contributions compares actual contributions to the AOC.

# CHART 5

# **Required Supplementary Information – Schedule of Employer Contributions**

#### GASB 43

iscal Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
2006	\$31,413,281 <sup>(1)</sup>	\$31,413,281 <sup>(1)</sup>	100.00%
2007	55,162,681 <sup>(1)</sup>	55,162,681 <sup>(1)</sup>	100.00
2008	98,033,338 <sup>(1)</sup>	78,257,328 <sup>(1)</sup>	79.83
2009	98,444,833 <sup>(2)</sup>	88,178,910 <sup>(2)</sup>	89.57
2010	106,648,282 <sup>(2)</sup>	106,648,282 <sup>(2)</sup>	100.00
2011	111,681,208 <sup>(2)</sup>	111,681,208 <sup>(2)</sup>	100.00

## **Required Supplementary Information – Schedule of Employer Contributions**

## GASB 45

Fiscal Year Ended June 30	(2)		Percentage Contributed
2006	\$31,413,281 <sup>(1)</sup>	\$31,413,281 <sup>(1)</sup>	100.00%
2007	55,162,681 <sup>(1)</sup>	55,162,681 <sup>(1)</sup>	100.00
2008	105,876,005	84,517,914	79.83
2009	106,452,937	94,916,833	89.16
2010	127,604,379	114,816,430	89.98
2011	173,645,281	119,975,864	69.09

<sup>(1)</sup> Shown at beginning of year. For years 2007 and prior, it appears that the ARC developed by the Plan's prior actuary may not have been determined in compliance with GASB 43/45 due to the maximum amortization period and/or the medical trend rate employed.

<sup>(2)</sup> Payable as of July 15.

<sup>(3)</sup> Shown with interest to end of year.

This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

# CHART 6

	(Amounts in \$1,000s)								
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]			
06/30/2006	\$613,782	\$1,631,187	\$1,017,405	37.63%	\$1,092,814	93.10%			
06/30/2007	687,096	1,656,653	969,557	41.47%	1,135,592	85.38%			
06/30/2008	767,647	1,836,840	1,069,193	41.79%	1,206,589	88.61%			
06/30/2009	809,677	2,038,659	1,228,982	39.72%	1,357,249	90.55%			
06/30/2010	817,276	2,537,825	1,720,549	32.20%	1,356,986	126.79%			
06/30/2011	882,890	2,557,607	1,674,716	34.52%	1,343,963	124.61%			

#### **Required Supplementary Information – Schedule of Funding Progress**

The Net OPEB obligation measures the accumulated differences between the annual OPEB cost and the actual contributions in relation to the ARC.

## **CHART 7**

# Required Supplementary Information – Net OPEB Obligation (NOO)

Fiscal Year Beginning	Annual Required Contribution (a)	Interest on Existing NOO (b)	ARC Adjustment (c)	Annual OPEB Cost (a) + (b) + (c) (d)	Actual Contribution Amount <sup>(3)</sup> (e)	Net Increase in NOO (d) - (e) (f)	NOO as of End of Fiscal Year (g)
07/01/2006	\$55,162,681 <sup>(1)</sup>	\$0	\$0	\$55,162,681	\$55,162,681	\$0	\$0
07/01/2007	105,876,005 <sup>(2)(3)</sup>	0	0	105,876,005	84,517,914	21,358,091	21,358,091
07/01/2008	105,967,196 <sup>(4)(3)</sup>	1,708,647	-1,222,906	106,452,937	94,916,833	11,536,103	32,894,194
07/01/2009	126,897,238 <sup>(3)</sup>	2,631,536	-1,924,395	127,604,379	114,816,430	12,787,949	45,682,143
07/01/2010	172,841,037 <sup>(3)</sup>	3,654,571	-2,850,327	173,645,281	119,975,864	53,669,417	99,351,560

<sup>(1)</sup> Payable at the beginning of the year. For years 2007 and prior it appears that the ARC may not have been determined in compliance with GASB 43 and 45 due to the maximum amortization period and/or the medical trend rate employed. All results for 2007 and prior years were provided by the Plan based on valuations by the prior actuary.

(2) Based on the beginning of year contribution rate of 8.15% of compensation calculated in the June 30, 2006 valuation before the phase-in. The ARC dollar amount has been approximated by applying the ratio of the contribution before the phase-in to the contribution after the phase-in as determined in the June 30, 2006 valuation to the actual contributions made during 2007/2008.

<sup>(3)</sup> With interest to end of year.

(4) Based on the beginning of year contribution rate of 7.89% of compensation calculated in the June 30, 2007 valuation before the phase-in. The ARC dollar amount has been approximated by applying the ratio of the contribution before the phase-in to the contribution after the phase-in made during 2008/2009 as determined in the June 30, 2007 valuation to the actual contributions.

#### SECTION 3: Supplemental Valuation Details for the City of Los Angeles Fire and Police Pension Plan June 30, 2011 Measurement Under GASB 43 and 45

This exhibit summarizes the participant data used for the current and prior valuations. EXHIBIT A

**Summary of Participant Data** 

	June 30, 2011	June 30, 2010
Retirees		
Number of non-disabled	7,770	7,684
Number of disabled	<u>1,829</u>	<u>1,862</u>
Total Number of retirees	9,599	9,546
Average age of retirees	68.9	68.7
Number of spouses/domestic partners	5,866	6,194
Average age of spouses/domestic partners	65.9	64.5
Surviving Spouses		
Number	2,210	2,213
Average age	77.9	77.9
Active Participants		
Number	13,432	13,654
Average age	41.1	40.6
Average years of service	14.2	13.6

#### EXHIBIT B

Allocation of ARC by Tier

	Cost Element			Determine	ed as of June 3	30, 2011***			
		Tier 1	Tier 2*	Tier 3	Tier 4	Tier 5 (Without HPP)	Tier 5 (HPP)	Tier 6** (Without HPP)	Tier 6** (HPP)
1.	Normal cost	\$0	\$485,118	\$3,771,884	\$1,482,090	\$43,168,066	\$461,877	N/A	N/A
2.	Amortization of the unfunded actuarial accrued liability over 25 years	\$2,237,548	\$51,594,550	\$3,939,110	\$2,854,094	\$36,739,577	\$147,677	<u>N/A</u>	<u>N/A</u>
3.	Total annual required contribution, beginning of year	\$2,237,548	\$52,079,668	\$7,710,994	\$4,336,184	\$79,907,643	\$609,554	N/A	N/A
4.	Percent of compensation	N/A	3.88%	7.99%	10.30%	6.77%	5.82%	8.60%	6.90%
5.	Adjustment for timing (payable throughout the year)	\$85,087	\$1,980,432	\$293,226	\$164,892	\$3,038,646	\$23,179	N/A	N/A
6.	Total annual required contribution	\$2,322,635	\$54,060,100	\$8,004,220	\$4,501,076	\$82,946,289	\$632,733	N/A	N/A
7.	Percent of compensation	N/A	4.02%	8.30%	10.69%	7.03%	6.04%	8.93%	7.16%
8.	Payroll	N/A	\$1,343,963,356	\$96,483,412	\$42,110,657	\$1,180,624,084	\$10,473,326	N/A	N/A
9.	Total annual required contribution (payable July 15)	\$2,244,773	\$52,247,842	\$7,735,894	\$4,350,186	\$80,165,678	\$611,522	N/A	N/A
10.	Percent of compensation	N/A	3.89%	8.02%	10.33%	6.79%	5.84%	8.63%	6.92%

\* Tier 2 normal cost rate based on total payroll.

\*\* Tier 6 only includes employees entering Plan after June 30, 2011. Rates developed based on recently hired employees. The UAAL rate at beginning of year for non-HPP is 3.11% and the UAAL rate at beginning of year for HPP is 1.41% (same as respective Tier 5 rates).

\*\*\*June 30, 2011 contribution rates are before adjustments to phase in over three years the City contribution rate impact due to the new actuarial assumptions adopted as recommended in the June 30, 2010 triennial experience study.

# EXHIBIT C

#### **Cash Flow Projections**

The ARC generally exceeds the current pay-as-you-go ("paygo") cost of an OPEB plan. Over time the paygo cost will tend to grow and may even eventually exceed the ARC in a well funded plan. The following table projects the paygo cost as the projected net fund payment over the next ten years.

Year Ending	Projected	Number of	Retirees*	Projecte	ed Benefit Pa	yments
June 30	Current	Future	Total	Current	Future	Total
2012	15,735	352	16,087	\$92,973,611	\$2,337,428	\$95,311,039
2013	15,499	754	16,253	97,917,668	5,415,878	103,333,546
2014	15,213	1,218	16,431	102,934,193	9,379,874	112,314,067
2015	14,934	1,725	16,659	108,224,870	14,232,772	122,457,642
2016	14,606	2,288	16,894	113,210,059	20,128,959	133,339,018
2017	14,225	2,875	17,100	117,641,367	26,889,178	144,530,545
2018	13,823	3,497	17,320	121,916,808	34,609,602	156,526,410
2019	13,398	4,165	17,563	125,489,730	43,369,225	168,858,955
2020	12,965	4,833	17,798	128,511,855	52,694,918	181,206,773
2021	12,531	5,497	18,028	131,047,006	62,474,552	193,521,558

\* Includes spouses of retirees. Does not include retirees under age 55 who have yet to commence retiree health benefits.

#### EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis for All Retirement and Health Subsidy Benefits Assets

	Year Ended June 30,	2011 Year En	ded June 30, 2010
Contribution income:			
Employer contributions	\$388,773,459	\$357,165,1	40
Employee contributions	105,471,264	106,411,6	<u>30</u>
Net contribution income	\$49	4,244,723	\$463,576,770
Investment income:			
Interest, dividends and other income	\$908,922,544	\$555,187,6	532
Recognition of capital appreciation	-274,002,668	-130,353,2	.50
Less investment and administrative fees	-66,508,832	-64,092,4	-78
Net investment income	<u>56</u>	8,411,044	360,741,904
Total income available for benefits	\$1,06	2,655,767	\$824,318,674
Less benefit payments	-\$87	8,952,809	-\$853,749,429
Change in reserve for future benefits	\$18	3,702,958	-\$29,430,755

# EXHIBIT E

Summary Statement of Assets for Retirement and Health Subsidy Benefits

	Year Ended	June 30, 2011	Year Ended June 30, 2010	
Cash equivalents		\$5,373,537		\$5,299,376
Accounts receivable:				
Accrued interest and dividends	\$48,270,211		\$36,902,239	
Contributions	4,196,667		3,805,162	
Due from brokers	<u>19,299,002</u>		<u>81,424,853</u>	
Total accounts receivable		71,765,880		122,132,254
Investments:				
Equities	\$8,417,166,846		\$8,139,691,423	
Fixed income investments	5,353,379,824		3,306,620,533	
Real estate	<u>1,116,820,806</u>		1,035,003,872	
Total investments at market value		14,887,367,476		12,481,315,828
Total assets		\$14,964,506,893		\$12,608,747,458
Less accounts payable:				
Accounts payable and benefits in process	-\$21,027,725		-\$20,540,302	
Due to brokers	-304,894,567		-115,187,861	
Mortgage payable	-238,375,552		-274,050,944	
Total accounts payable		-\$564,297,844		-\$409,779,107
Net assets at market value		<u>\$14,400,209,049</u>		<u>\$12,198,968,351</u> *
Net assets at actuarial value		<u>\$15,220,559,597</u>		<u>\$15,036,856,639</u>
Net assets at valuation value (health benefits)		<u>\$882,890,188</u>		<u>\$817,875,977</u>

\* Based on unaudited market value of assets. Subsequent to the June 30, 2010 valuations, the market value of assets was changed to \$12,106,932,219.

# EXHIBIT F

Development of the Fund Through June 30, 2011 for All Retirement and Health Subsidy Benefits Assets

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return <sup>(1)</sup>	Benefit Payments	Actuarial Value of Assets at End of Year
2006	\$175,359,083	\$79,402,694	\$901,268,460	\$652,157,960	\$12,735,185,068
2007	286,167,278 <sup>(2)</sup>	91,263,474	1,590,968,304	800,819,286	13,902,764,838
2008	333,672,743	98,074,219	1,414,391,128	827,959,245	14,920,943,683
2009	326,876,839	103,685,447	557,346,783	842,565,358	15,066,287,394
2010	357,165,140	106,416,630	360,741,904	853,749,429	15,036,856,639
2011	388,773,459	105,471,264	568,411,044	878,952,809	15,220,559,597

<sup>(1)</sup> Net of investment fees and administrative expenses

<sup>(2)</sup> Includes \$6,220,076 (discounted to \$6,058,515) of Harbor Port Police assets transferred in October, 2007.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Commissioners has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative.

Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

As adopted by the Board, any investment gains/losses established after July 1, 2008 will be recognized over a seven-year period and the actuarial value of assets will be further adjusted, if necessary, to be within 40% of the market value.

# EXHIBIT G

The chart shows the determination of the actuarial value of assets as of the valuation date.

#### Determination of Actuarial Value of Assets for All Retirement and Health Subsidy Benefits

1.	Market value of assets (for Retirement and Health Subsidy Bene	efits)			\$14,400,209,049
		Original	Percent Not	Amount Not	
2.	Calculation of unrecognized return <sup>(1)</sup>	Amount	Recognized <sup>(2)</sup>	Recognized	
	(a) Year ended June 30, 2011	\$1,641,626,618	85.71%	\$1,407,108,530	
	(b) Year ended June 30, 2010	737,173,630	71.43%	526,552,593	
	(c) Year ended June 30, 2009	-4,113,928,646	57.14%	-2,350,816,369	
	(d) Year ended June 30, 2008	-2,015,976,509	20.00%	-403,195,302	
	(e) Year ended June 30, 2007	1,375,798,329	0.00%	0	
	(f) Total unrecognized return				-820,350,548
3.	Preliminary actuarial value: (1) - (2f)				15,220,559,597
4.	Adjustment to be within 40% corridor				0
5.	Final actuarial value of assets: $(3) + (4)$				\$15,220,559,597
6.	Actuarial value as a percentage of market value: $(5) \div (1)$				105.7%
7.	Market value of health assets				\$835,304,589
8.	Valuation value of health assets: $(5) \div (1) \ge (7)$				\$882,890,188
9.	Deferred return recognized in each of the next 6 years:				
	(a) Amount recognized on June 30, 2012				-\$651,070,788
	(b) Amount recognized on June 30, 2013				-247,875,485
	(c) Amount recognized on June 30, 2014				-247,875,485
	(d) Amount recognized on June 30, 2015				-247,875,485
	(e) Amount recognized on June 30, 2016				339,828,607
	(f) Amount recognized on June 30, 2017				234,518,088
	(g) Subtotal (may not total exactly due to rounding)				-\$820,350,548

<sup>&</sup>lt;sup>(1)</sup> Total return minus expected return on a market value basis

<sup>(2)</sup> Any investment gains/losses established after July 1, 2008 are recognized over a seven-year period.

#### SECTION 3: Supplemental Valuation Details for the City of Los Angeles Fire and Police Pension Plan June 30, 2011 Measurement Under GASB 43 and 45

The chart below details the changes in the ARC from the prior valuation to the current year's valuation.

## EXHIBIT H

#### Reconciliation of Recommended Contribution from June 30, 2010 to June 30, 2011

Recommended Contribution as of June 30, 2010	11.82%*
Decrease due to subsidy freeze from revising June 30, 2010 results	-1.55%
Effect of losses due to new retirees and DROPs 7/1/2010 - 6/30/2011	0.16%
Effect of losses due to new retirees and DROPs 7/1/2011 - 7/14/2011	0.05%
Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll	0.34%
Effect of contributions less than recommended, from one-year delay between valuation and rate implementation	0.23%
Effect of combined investment loss and demographic gain	0.05%
Effect of new trend and per capita costs	-1.11%
Effect of assumptions changes from experience study	0.82%
Effect of miscellaneous factors including change in active population composition	0.12%
Recommended Contribution as of June 30, 2011**	10.93%*

\* Based on contributions at beginning of year.

\*\* Before adjustments to phase in over three years the impact of new actuarial assumptions as a result of the June 30, 2010 triennial Experience Study.

Valuation date	June 30, 2011			
Actuarial cost method	Entry age normal, level percent	t of pay		
Amortization method		f pay (with the exception of Tier 1 that is		
Remaining amortization period	25 years as of June 30, 2011			
Asset valuation methodMarket value of assets less unrecognized returns in each of the Unrecognized return is equal to the difference between the actu and the expected return on the market value, and is recognized period. Unrecognized return established after July 1, 2008 is re seven-year period. The actuarial value of assets is further adjus necessary, to be within 40% of the market value of assets.				
Actuarial assumptions:				
Investment rate of return	7.75%			
Inflation rate	3.50%			
Across-the-board pay increase	0.75%			
Projected payroll increases	4.25%			
Health care cost trend rate (to calculate following year's premium)				
• Medical	9.00% in 2011-2012 and 2012-2013, then decreasing by 0.5% for each year for eight years until it reaches an ultimate rate of 5%.			
• Dental	5.00%			
Medicare Part B Premium	The 2012-2013 and all subsequent fiscal year premiums are assumed to be greater than the prior year premium.			
Medical Subsidy Trend	For employees not subject to fr	eeze:		
	<ul> <li>For all non-Medicare retirees</li> </ul>	s, increase at lesser of 7% or medical trend.		
	<ul> <li>For Medicare retirees with single party premium, increase with medical trend.</li> </ul>			
	<ul> <li>For Medicare retirees with 2-Party premium less than or equal to the maximum subsidy as of July 1, 2011 (e.g. Fire Medical), increase with medical trend.</li> </ul>			
		-Party premium greater than the maximum .g. Police Blue Cross), increase with lesser of		
Plan membership:	June 30, 2011 <sup>(1)</sup>	June 30, 2010 <sup>(1)</sup>		
Current retirees and beneficiaries	11,809	11,759		
Current active participants	<u>13,432</u>	<u>13,654</u>		
Total	25,241	25,413		

# EXHIBIT I

<sup>(1)</sup> Includes all eligible retirees and surviving spouse or domestic partners whether or not they are receiving a subsidy.

# Actuarial Assumptions and Actuarial Cost Method

The following assumptions were adopted by the Board based on the actuarial experience study as of June 30, 2010 and the Economic Assumptions Study of June 30, 2010.

Data:	Detailed census data and financial data for postemployment benefits were provided by the City of Los Angeles Fire and Police Pension Plan.
Actuarial Cost Method	Entry age normal, level percent of pay.
Administrative Expenses	No administrative expenses were valued separately from the claim costs.
Spouse Age Difference	Husbands are assumed to be 4 years older than wives.
Participation	

Service Range (Years)	Assumption for Future Retirees Under 65	Assumption for Future Retirees Over 65
10-14	45%	80%
15-19	60	85
20-24	70	90
25 and over	95	95

Medicare Coverage	100% of future retirees are assumed to elect Medicare Parts A & B.
Dental Coverage	75% of future retirees are assumed to elect dental coverage.
Spousal Coverage	Of future retirees receiving a medical subsidy 80% are assumed to elect coverage for married and surviving spouses or domestic partners. For those retired on valuation date, spousal coverage is based on census data.
Implicit Subsidy	No implicit subsidy exists since retiree medical premiums are underwritten separately from active premiums.

#### EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method (continued)

Per Capita Cost Development:

Future retirees under age 65 are assumed, upon retirement, to elect carriers in the percentages and corresponding premiums and subsidies as noted in the table below. Current retirees and current eligible survivors under age 65 are assumed to continue to cover themselves (and their spouse or domestic partner) – but all children are assumed to age out at the valuation date.

2011 – 2012 Fiscal Year			Single Party		Married/With Domestic Partner				Eligible Survivor	
Carrier	Assumed Election Percent	Monthly Premium	Maximum Subsidy	Subsidy	Monthly Premium	Maximum Subsidy	Subsidy	Monthly Premium	Maximum Subsidy	Subsidy
	rercent									
<u>Fire</u>										
Fire Medical	75	\$901.66	\$1,097.41	\$901.66	\$1,170.13	\$1,097.41	\$1,097.41	\$455.21	\$595.60	\$455.21
Fire Kaiser	15	\$526.00	\$1,097.41	\$526.00	\$1,042.00	\$1,097.41	\$1,042.00	\$526.00	\$595.60	\$526.00
Fire Blue Cross	5	\$736.10	\$1,097.41	\$736.10	\$1,455.16	\$1,097.41	\$1,097.41	\$736.10	\$595.60	\$595.60
Fire California Care	5	\$442.42	\$1,097.41	\$442.42	\$859.28	\$1,097.41	\$859.28	\$442.42	\$595.60	\$442.42
Police										
Blue Cross PPO	65	\$891.59	\$1,097.41	\$891.59	\$1,548.65	\$1,097.41	\$1,097.41	\$891.59	\$595.60	\$595.60
California Care	20	\$521.76	\$1,097.41	\$521.76	\$990.16	\$1,097.41	\$990.16	\$521.76	\$595.60	\$521.76
Police Kaiser	15	\$470.93	\$1,097.41	\$470.93	\$932.19	\$1,097.41	\$932.19	\$470.93	\$595.60	\$470.93

For the valuation of current retirees, subsidies valued are based on actual subsidies provided in the data reported for the Health Plan.

#### EXHIBIT II

# Actuarial Assumptions and Actuarial Cost Method (continued)

#### **Per Capita Cost Development:**

Future retirees and current retirees under age 65 are assumed, upon reaching age 65, to elect carriers in the percentages and corresponding premiums and subsidies as noted in the table below. Current retirees and current eligible survivors over age 65 are assumed to continue to cover themselves (and their spouse or domestic partner) – but all children are assumed to age out at the valuation date.

2011 – 2012 Fiscal Year			Single Party		Married/With Domestic Partner Eligible Survivor			r		
Carrier	Assumed Election Percent	Monthly Premium	Maximum Subsidy	Subsidy	Monthly Premium	Maximum Subsidy	Subsidy	Monthly Premium	Maximum Subsidy	Subsidy
<u>Fire</u>										
Fire Medical	90	\$449.86	\$480.41	\$449.86	\$735.50	\$735.50	\$735.50	\$389.62	\$480.41	\$389.62
Fire Kaiser	10	\$380.06	\$480.41	\$380.06	\$750.12	\$750.12	\$750.12	\$380.06	\$480.41	\$380.06
Fire Blue Cross	0	\$655.04	\$480.41	\$480.41	\$1,160.64	\$841.72	\$841.72	\$655.04	\$480.41	\$480.41
Fire California Care	0	\$390.72	\$480.41	\$390.72	\$764.30	\$764.30	\$764.30	\$390.72	\$480.41	\$390.72
Police										
Blue Cross PPO	75	\$524.80	\$480.41	\$480.41	\$971.38	\$873.02	\$873.02	\$524.80	\$480.41	\$480.41
California Care	10	\$391.76	\$480.41	\$391.76	\$792.27	\$792.27	\$792.27	\$391.76	\$480.41	\$391.76
Police Kaiser	15	\$226.50	\$480.41	\$226.50	\$447.98	\$447.98	\$447.98	\$226.50	\$480.41	\$226.50

For the valuation of current retirees, subsidies valued are based on actual subsidies provided in the data reported for the Health Plan.

#### EXHIBIT II

#### Actuarial Assumptions and Actuarial Cost Method (continued)

The following assumptions were adopted by the Board based on the Actuarial Experience Study as of June 30, 2010 and the Economics Assumptions Study as of June 30, 2010.

#### **Mortality Rates**

Healthy: RP-2000 Combined Healthy Mortality Table (separate for males and females) set back four years for members.
 RP-2000 Combined Healthy Mortality Table (separate for males and females) set back two years for beneficiaries.
 Disabled: RP-2000 Combined Healthy Mortality Table (separate for males and females) set back two years.
 The tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality, based on a review of mortality experience as of the measurement date.

#### EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method (continued)

# **Termination Rates Before Retirement:**

Pre-Retirement Mortality:

Mortality			
Age	Male	Female	
20	0.03	0.02	
25	0.04	0.02	
30	0.04	0.02	
35	0.05	0.03	
40	0.08	0.05	
45	0.11	0.08	
50	0.16	0.12	
55	0.24	0.19	
60	0.42	0.31	

All pre-retirement deaths are assumed to be service connected.

#### EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method (continued)

**Termination Rates Before Retirement (continued):** 

Rate (%) Withdrawal (< 5 Years of Service)					
Service	Fire	Police			
0 - 1	8.00	8.00			
1 - 2	3.00	4.00			
2 - 3	2.00	3.00			
3 – 4	1.00	3.00			
4 - 5	1.00	2.50			

Rate (%) Vested Termination (5+ Years of Service) *					
Age	Fire	Police			
20	1.50	2.50			
25	1.50	2.50			
30	1.20	2.20			
35	0.70	1.70			
40	0.41	1.20			
45	0.20	0.82			
50	0.04	0.28			
55	0.00	0.00			
60	0.00	0.00			

\* No vested termination is assumed after a member is eligible for retirement.

#### EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method (continued)

Retirement	Rates:
------------	--------

		Rate(%)						
		Fire			Police			
Age	Tiers 2&4	Tiers 3&5	Tier 6	Tiers 2&4	Tiers 3&5	Tier 6		
41	1.00%	0.00%	0.00%	8.00%	0.00%	0.00%		
42	1.00	0.00	0.00	8.00	0.00	0.00		
43	1.00	0.00	0.00	10.00	0.00	0.00		
44	1.00	0.00	0.00	10.00	0.00	0.00		
45	1.00	0.00	0.00	10.00	0.00	0.00		
46	1.00	0.00	0.00	8.00	0.00	0.00		
47	1.00	0.00	0.00	8.00	0.00	0.00		
48	2.00	0.00	0.00	8.00	0.00	0.00		
49	2.00	0.00	0.00	8.00	0.00	0.00		
50	3.00	5.00	3.00	8.00	10.00	8.00		
51	3.00	5.00	3.00	10.00	10.00	10.00		
52	4.00	5.00	4.00	10.00	10.00	10.00		
53	5.00	5.00	5.00	15.00	10.00	15.00		
54	5.00	8.00	5.00	15.00	13.00	15.00		
55	10.00	10.00	10.00	20.00	16.00	18.00		
56	15.00	12.00	12.00	20.00	18.00	18.00		
57	15.00	15.00	15.00	20.00	22.00	22.00		
58	15.00	18.00	18.00	25.00	25.00	25.00		
59	15.00	20.00	20.00	25.00	30.00	30.00		
60	20.00	25.00	25.00	25.00	30.00	30.00		
61	20.00	30.00	30.00	25.00	30.00	30.00		
62	20.00	30.00	30.00	25.00	30.00	30.00		
63	25.00	35.00	35.00	30.00	30.00	30.00		
64	30.00	40.00	40.00	40.00	30.00	30.00		
65	100.00	100.00	100.00	100.00	100.00	100.00		

Actuarial Assumptions and Actuarial Cost Method (continued)

**Salary Increases:** 

Annual Rate of Compensation Increase

Inflation: 3.50% per year; plus 0.75% "across the board" salary increases; plus the following Merit and Longevity increases based on age.

Years of Service	Additional Salary Increase
0	8.00%
1	7.00%
2	4.50%
3	4.00%
4	3.50%
5	3.20%
6	2.75%
7	2.50%
8	2.25%
9	2.25%
10	2.00%
11+	1.00%

## Actuarial Assumptions and Actuarial Cost Method (continued)

Measurement Date:	June 30, 2011
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Definition of Active Members:	First day of biweekly payroll following employment for new department employees or immediately following transfer from other city department.
	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a five year period. Unrecognized return established after July 1, 2008 is recognized over a seven-year period. The actuarial value of assets is further adjusted, if necessary, to be within 40% of the market value of assets.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the current age minus Vesting Credit. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation.
Funding Policy:	The City of Los Angeles Fire & Police Pension Plan makes contributions equal to the Normal Cost adjusted by amounts to amortize any Surplus or Unfunded Actuarial Accrued Liability (UAAL). Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age Normal cost method. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis.
	All the amortization bases on or before June 30, 2006 were combined and amortized over 30 years effective June 30, 2006. This valuation continues that amortization schedule by amortizing the entire June 30, 2011 UAAL over a 25 year period.

Actuarial Assumptions and Actuarial Cost Method (continued)

5.00% for all years

# Health Care Premium Cost Trend Rates:

Trends to be applied in following fiscal years, to all health plans.

Trend is to be applied to premium for shown fiscal year to calculate next fiscal year's projected premium.

First Fiscal Year (July 1, 2011 through June 30, 2012).

The fiscal year trend rates are the following:

Fiscal Year	Trend (applied to calculate following year premium)
2011-2012	9.00%
2012-2013	9.00%
2013-2014	8.50%
2014-2015	8.00%
2015-2016	7.50%
2016-2017	7.00%
2017-2018	6.50%
2018-2019	6.00%
2019-2020	5.50%
2020-& later	5.00%

Dental Premium Trend Medicare Part B Premium Trend

The 2012-2013 and all subsequent fiscal year premiums are assumed to 5% greater than the prior year premium.

**Trends** (continued)

	Expected annual rate of increase in the Board's health subsidy amount:	For employees not subject to freeze, we assume that the Board's health subsidy amount will:				
		<ul> <li>For all non-Medicare retirees, increase at lesser of 7% or medical trend as shown on page 32,</li> </ul>				
		<ul> <li>For Medicare retirees with single party premium, increase with medical trend as shown on page 32,</li> </ul>				
		For Medicare retirees with 2-Party premium less than or equal to the maximum subsidy as of July 1, 2011 (e.g, Fire Medical), increase with medical trend as shown on page 32, and				
		For Medicare retirees with 2-Party premium greater than the maximum subsidy as of July 1, 2011 (e.g., Police Blue Cross), increase with lesser of 7% or medical trend.				
Subsidy Freeze:		Since the prior valuation, the retiree health benefits program was changed to freeze the medical subsidy for non-retired members not enrolled in the DROP as of July 14, 2011 who did not begin to contribute an additional 2% of employee contributions to the Pension Plan.				
		> The frozen subsidy is different for Medicare and non-Medicare retirees.				
		> The freeze applies to the medical subsidy limits at the 2011/2012 plan year.				
		The freeze does not apply to the dental subsidy or the Medicare Part B premium reimbursement.				

EXHIBIT II					
Actuarial Assumptions and Actuarial Cost Method (continued)					
Plan Design:	Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.				
Administrative Expenses:	No administrative expenses were valued separately from the claim costs.				
Changes in Assumptions:	Future health care trend rates were updated.				
	Premiums and maximum subsidies were updated.				

The Board adopted the above assumptions, based on the Actuarial Experience Study as of June 30, 2010. The assumptions that changed from the previous valuation are as follows:

## **Mortality Rates**

- Healthy: RP-2000 Combined Healthy Mortality Table (separate for males and females) set back two years for members.RP-2000 Combined Healthy Mortality Table (separate for males and females) for beneficiaries.
- *Disabled:* RP-2000 Combined Healthy Mortality Table (separate for males and females) set forward one year.

# **Changes In Termination Rates Before Retirement:**

**Pre-Retirement Mortality:** 

	<b>Rate</b> (%)		
	Mortality		
Age	Male	Female	
20	0.03	0.02	
25	0.04	0.02	
30	0.04	0.02	
35	0.06	0.04	
40	0.10	0.06	
45	0.13	0.09	
50	0.19	0.14	
55	0.29	0.22	
60	0.53	0.39	

All pre-retirement deaths are assumed to be service connected.

# **Changes in Actuarial Assumptions (continued):**

	<b>Rate (%)</b>		
	Disability*		
Age	Fire	Police	
20	0.02	0.01	
25	0.02	0.04	
30	0.03	0.11	
35	0.06	0.17	
40	0.15	0.31	
45	0.29	0.49	
50	0.56	0.58	
55	2.08	1.14	
60	6.00	1.59	

\* 90% of disabilities are assumed to be service connected.

# **Changes in Actuarial Assumptions (continued):**

Rate (%)         Withdrawal (< 5 Years of Service)		
Service	Fire	Police
0 - 1	8.00	8.00
1 - 2	4.00	4.50
2-3	3.00	3.50
3 – 4	2.00	3.50
4 – 5	2.00	3.00

Rate (%) Vested Termination (5+ Years of Service) *		
Age	Fire	Police
20	2.00	3.00
25	2.00	3.00
30	1.52	2.70
35	0.90	2.20
40	0.55	1.70
45	0.30	1.20
50	0.00	0.00
55	0.00	0.00
60	0.00	0.00

\* No vested termination is assumed after a member is eligible for retirement.

# **Changes in Actuarial Assumptions (continued):**

		Rat	te(%)	
	Fi	ire	Pol	lice
Age	Tiers 2&4	Tiers 3&5	Tiers 2&4	Tiers 3&5
41	1.00%	0.00%	6.00%	0.00%
42	1.00	0.00	6.00	0.00
43	1.00	0.00	10.00	0.00
44	1.00	0.00	10.00	0.00
45	1.00	0.00	8.00	0.00
46	1.00	0.00	8.00	0.00
47	1.00	0.00	8.00	0.00
48	2.00	0.00	9.00	0.00
49	2.00	0.00	9.00	0.00
50	2.00	8.00	8.00	15.00
51	2.00	8.00	8.00	15.00
52	4.00	8.00	8.00	15.00
53	4.00	8.00	15.00	15.00
54	4.00	8.00	15.00	15.00
55	6.00	10.00	15.00	15.00
56	10.00	10.00	15.00	15.00
57	10.00	10.00	15.00	18.00
58	10.00	12.00	25.00	20.00
59	10.00	15.00	25.00	25.00
60	20.00	20.00	25.00	25.00
61	20.00	20.00	25.00	25.00
62	20.00	20.00	25.00	25.00
63	25.00	25.00	25.00	25.00
64	30.00	30.00	30.00	30.00
65	100.00	100.00	100.00	100.00

# **Change in Salary Increases:**

#### Annual Rate of Compensation Increase

Inflation: 3.50% per year; plus 0.75% "across the board" salary increases; plus the following Merit and Longevity increases based on age.

Age	Additional Salary Increase
20	5.84%
25	4.99%
30	3.87%
35	2.75%
40	1.75%
45	1.17%
50	0.87%
55	0.69%
60	0.65%

# Summary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

# SUBSIDY FOR MEMBERS NOT ELIGIBLE FOR MEDICARE A & B

Eligibility	Retired Members who retired with 10 or more years of service. Benefits commence no earlier than age 55. Members who retired prior to July 1, 1998 are subject to an eligibility requirement of age 60 with 10 or more years of service. Subsidy is paid only to Members on service or disability retirements.
	Surviving spouses and surviving domestic partners are eligible for health benefits upon the Member's date of death if the Member had attained age 55 prior to death. Otherwise, health benefits for survivors shall commence on the date that the Member would have reached age 55.
	Basic subsidy is paid until age 65, or after age 65 if Member is not covered by Medicare Parts A and B.
Amount of Subsidy	4% per year of service, to a maximum of 100%, times Maximum Subsidy, subject to a maximum of the actual premium paid to City approved health carrier.
Maximum Subsidy	As of July 1, 2011, maximum is \$1,097.41 per month. For surviving spouse or domestic partner, the maximum subsidy is \$595.60 per month.
Increase in Subsidy	For employees not subject to freeze, the Board's health subsidy amount may increase at lesser of 7% or medical trend as shown on page 32.
Dependent Portion	Difference between Basic Subsidy maximum amount and single-party premium.

## Summary of Plan (continued)

#### SUBSIDY FOR MEMBERS ELIGIBLE FOR MEDICARE A & B

Eligibility	Retired Members over age 65 Parts A & B.	with 10 or more years of service who participate in Medicare	
Amount of Subsidy to Participant:	For retirees, health subsidy is provided subject to the following vesting schedule:		
_	Completed Years	Vested	
	*	ercentage	
	10-14	75%	
	15-19	90%	
	20+	100%	
Maximum Subsidy	<ul><li>Surviving spouses or surviving domestic partners are eligible for benefits upon the death of the Member.</li><li>As of July 1, 2011, the single coverage maximum subsidy for retirees and surviving spouse or domestic partner is \$480.41. The multi-person coverage maximum subsidy is \$873.02.</li></ul>		
	For employees not subject to f	reeze, the Board's health subsidy amount may:	
	<ul> <li>For Medicare retirees with page 32,</li> </ul>	single party premium, increase with medical trend as shown on	
	<ul> <li>For Medicare retirees with 2-Party premium less than or equal to the maximum subsidy as of July 1, 2011 (e.g, Fire Medical), increase with medical trend as shown on page 32, and</li> </ul>		
		2-Party premium greater than the maximum subsidy as of July 1, ross), increase with lesser of 7% or medical trend as shown on	

# EXHIBIT III

# Summary of Plan (continued)

SUBSIDY FREEZE:	<ul> <li>Since the prior valuation, the retiree health benefits program was changed to freeze the medical subsidy for non-retired members not enrolled in the DROP as of July 14, 2011 who did not begin to contribute an additional 2% of employee contributions to the Pension Plan.</li> <li>The frozen subsidy is different for Medicare and non-Medicare retirees.</li> <li>The freeze applies to the medical subsidy limits at the 2011/2012 plan year.</li> </ul>		
	<ul> <li>The freeze does not apply to the dental subsidy or the Medicare Part B premium reimbursement.</li> </ul>		
Dependent Portion SPECIAL SUBSIDY	Calculation based on Board of Fire and Police Pension Commissioners Resolution No. 9320: equal to the amount payable on behalf of the dependents of a retired member in the same plan, with the same years of service, who qualifies for an under 65 or Part B only subsidy, whichever is greater, providing such subsidy does not exceed the civilian retiree dependent subsidy.		
	Various based on affactive data of ratirement, re-	nk at ratirament years of service and type of	
Eligibility	Various, based on effective date of retirement, rank at retirement, years of service and type of pension.		
Amount of Subsidy	Flat Amount Based on Years of Service		
	20-24 years	\$75 - \$150 per month	
	25-29 years	\$150 - \$225 per month	
	30 and over \$225 - \$300 per month		

EXHIBIT III			
Summary of Plan (continued)			
Medicare Part B -Relat	ed Subsidy		
Medicare Part B Premium Reimbursement	For retired Members enrolled in Medicare A & B who are receiving a subsidy, the Plan provides payment of Part B premiums (\$96.40/\$110.50/\$115.40* per month for calendar year 2011 and \$99.90 for calendar year 2012, for all eligible retirees and beneficiaries).		
Dental Subsidy			
Eligibility	Retired Members who retired with 10 or more years of service. Benefits commence no earlier than age 55. Subsidy is paid only to Members on service or disability retirements. Surviving spouses/domestic partners are not eligible for benefits upon the death of the Member.		
Amount of Subsidy	4% per year of service, to a maximum of 100%, times Maximum Subsidy, subject to a maximum of the single-party premium paid to City approved dental carrier.		
Maximum Subsidy	Lesser of monthly amount paid to active Fire and Police Members and retired CERS Members. Effective July 1, 2011, maximum is \$36.16 per month		
Retiree Contributions:	To the extent the subsidies are less than the medical or dental premiums, the retiree contributes the cost difference.		

\*It is assumed in this valuation that \$96.40 will be paid in 2011.

#### EXHIBIT IV

# **Definitions of Terms**

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial	The	stimates on which the cost of the Display is coloulated including.
Assumptions:	I ne e	estimates on which the cost of the Plan is calculated including:
	(a)	<u>Investment return</u> — the rate of investment yield that the Plan will earn over the long-term future;
	(b)	<u>Mortality rates</u> — the death rates of employees and pensioners; life expectancy is based on these rates;
	(c)	<u>Retirement rates</u> — the rate or probability of retirement at a given age;
	(d)	<u>Turnover rates</u> — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
Actuarial Present Value of Total		
Projected Benefits (APB):	takin	nt value of all future benefit payments for current retirees and active employees g into account assumptions about demographics, turnover, mortality, disability, ment, health care trends, and other actuarial assumptions.
Normal Cost:	The a of set	mount of contributions required to fund the benefit allocated to the current year vice.
Actuarial Accrued Liability		
For Actives:		equivalent of the accumulated normal costs allocated to the years before the tion date.
Actuarial Accrued Liability		
For Retirees:	of life	ingle sum value of lifetime benefits to existing retirees. This sum takes account e expectancies appropriate to the ages of the retirees and of the interest which the s expected to earn before it is entirely paid out in benefits.

Actuarial Value of Assets (AVA):	The value of assets used by the actuary in the valution. These may be at market value or some other method used to smooth variations in market value from one valuation to the next.
Funded Ratio:	The ratio AVA/AAL.
Unfunded Actuarial Accrued Liability (UAAL):	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
Amortization of the Unfunded Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return (discount rate):	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next. If the plan is funded on a pay-as-you-go basis, the discount rate is tied to the expected rate of return on day-to-day employer funds.
Covered Payroll:	Annual reported salaries for all active participants on the valuation date.
ARC as a Percentage of Covered Payroll:	The ratio of the annual required contribution to covered payroll.
Health Care Cost Trend Rates:	The annual rate of increase in net claims costs per individual benefiting from the Plan.
Annual Required Contribution (ARC):	The ARC is equal to the sum of the normal cost and the amortization of the unfunded actuarial accrued liability.

**Net OPEB Obligation (NOO):** 

The NOO is the cumulative difference between the ARC and actual contributions made. If the plan is not pre-funded, the actual contribution would be equal to the annual benefit payments less retiree contributions. There are additional adjustments in the NOO calculations to adjust for timing differences between cash and accrual accounting, and to prevent double counting of OPEB plan costs.

# EXHIBIT V

#### Accounting Requirements

The Governmental Accounting Standards Board (GASB) issued Statement Number 43 -- Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and Statement Number 45 - Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Under these statements, all state and local government entities that provide other post employment benefits (OPEB) are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. The benefits valued in this report are limited to those described in Exhibit III of Section 4, which are based on those provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits is not limited by legal or contractual limits on funding the plan unless those limits clearly translate into benefit limits on the substantive plan being valued.

The new standards introduce an accrual-basis accounting requirement, thereby recognizing the employer cost of postemployment benefits over an employee's career. The standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. These assumptions are summarized in Exhibit II of Section 4. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the Net OPEB Obligation (NOO). In addition, Required Supplementary Information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan. Exhibits IV and VI of Section 4 contain a definition of terms as well as more information about GASB 43/45 concepts.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short term volatility in accrued liabilities and the actuarial value of assets, if any.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

5169517v3/07916.003

# **APPENDIX:**

Revision to June 30, 2010 OPEB Actuarial Valuation to Reflect Freeze in Medical Subsidy Effective with the 2011-2012 Fiscal Year



THE SEGAL COMPANY 100 Montgomery Street Suite 500 San Francisco, CA 94104-4308 T 415.263.8200 F 415.263.8290 www.segalco.com

## VIA E-MAIL AND USPS

November 22, 2011

Mr. Michael A. Perez General Manager Los Angeles Fire and Police Pension Plan 360 East Second Street, 6<sup>th</sup> Floor Los Angeles, CA 90012

## Re: City of Los Angeles Fire and Police Pension Plan Revision to June 30, 2010 OPEB Actuarial Valuation to Reflect Freeze in Medical Subsidy Effective with the 2011-2012 Fiscal Year

Dear Mike:

We have prepared a study to determine the cost impact to LAFPP of freezing the medical subsidy for future retirees retiring on or after July 15, 2011. In order to avoid the freeze, an active member may elect to retire from the Plan or sign up to participate in the DROP on or before July 14, 2011. An active member may also avoid the freeze if the member agrees to pay a 2% contribution on his/her base salary. The 2% would be paid retroactive to August 15, 2011 and would continue in effect until an individual employee has paid such contributions for a period of 25 years or retired from the Plan. It is our understanding that in order for the additional employee contributions to be refundable to the members upon termination from LAFPP, and for other tax considerations, the City has concluded that the 2% additional employee contributions should be designated as pension plan (instead of retiree health plan) contributions.

#### Background

The contribution rates for the 2011-2012 Fiscal Year were approved by the Board last year upon the completion of the June 30, 2010 actuarial valuations. Based on a contribution payment date of July 15, 2011, the City's and Harbor's contribution requirements were determined to be \$472.1 million and \$3.6 million, respectively, using budgeted payrolls provided by the City and by Harbor.

Mr. Michael A. Perez November 22, 2011 Page 2

After the above prepayment amounts were determined by LAFPP, steps were taken by the City and Harbor to freeze the health subsidy for certain members unless those members make 2% additional employee contributions. As a result, the actual amounts prepaid by the City and by Harbor were different from the above amounts. In particular, the actual amount contributed by the City was \$428.1 million. The Board, pursuant to a request by the City, has requested that Segal recalculate the contribution rate requirements for the retiree health plan for the 2011-2012 Fiscal Year to reflect the freeze on the health subsidy and the 2% additional employee contributions.

The membership data as of July 1, 2011 would not have been available at the time of the June 30, 2010 valuation on which the contribution rates for the 2011-2012 Fiscal Year are based. Accordingly, the costs in this study have been estimated as of June 30, 2010 assuming the savings from this benefit change will become effective for all retirements on or after July 1, 2010, unless the member had already elected to participate in the DROP as of June 30, 2010. The rationale behind this procedure was discussed in our letter dated October 19, 2011 and this approach was approved by the Board at its November 3, 2011 Board Meeting.

The reductions in cost for the entire Plan and for each tier that take into consideration only the impact of the subsidy freeze (i.e., but not the 2% additional employee contributions) are shown in the enclosed Exhibits A through D. As the City and Harbor prepaid part of their contributions for the 2011-2012 Fiscal Year on July 15, 2011, we have provided in Exhibits E and F the City's and Harbor's prepaid contribution requirements before and after reflecting the subsidy freeze.

Finally, in Exhibit G, we have provided the present value of the 2% additional employee contributions as of July 15, 2011. A reconciliation of the City's and Harbor's remaining contribution requirements that takes into consideration both the impact of the subsidy freeze and the 2% additional employee contributions is provided in the body of this report. That reconciliation assumes settlement of the underpayment on either January 3, 2012 or June 27, 2012, as requested by the City and Harbor.

## **Methodology and Assumptions**

All assumptions, actuarial methodologies, plan provisions, membership data and financial information used in this study are the same as those shown in the actuarial valuation report as of June 30, 2010, except where otherwise noted.

As outlined in our letter dated October 19, 2011, our recommendations and the associated discussions to revise the June 30, 2010 valuation are as follows.

1. Estimate the value of the 2% contribution on the base salary for the 2011-2012 Fiscal Year based on the list of such active members (as of September 30, 2011) provided by LAFPP.

- 2. Based on the active membership data provided and used in the June 30, 2010 pension and retiree health valuations, isolate those active members who had not made an election to participate in the DROP or retire from the Plan as of June 30, 2010.
- 3. Determine the decrease in present value of the retiree health subsidy from the freeze for the group of active members in (2) except for those members who elected to make the 2% contributions as discussed in (1).
- 4. Calculate the new employer Normal Cost rate and Unfunded Actuarial Accrued Liability (UAAL) rate to reflect the adjustments in (1) and (3). As the active membership data provided for the June 30, 2010 actuarial valuations would be used in this step, we would only take into consideration the 2% opted in contributions from those members who were active as of June 30, 2010 in this calculation.

The above steps are based on the general principle that we would not be revising the classification of active members (i.e., from non-DROP to DROP) after the original 2010 pension and retiree health valuations had been completed. As we noted in our October 19, 2011 letter, this may potentially overstate the reduction in the retiree health subsidy from the freeze if there were to be a significant shift in the proportion of actives who were in non-DROP classification after June 30, 2010. However, this approach allows us to redo just the June 30, 2010 retiree health valuation but not the June 30, 2010 pension valuation, as the same active data file was used in both the pension and the retiree health valuations. Also, to the extent that there were any changes in the members' decision to retire or to enter the DROP based on a Letter of Agreement reached in June 2011 to avoid the freeze, it may be appropriate to measure that impact only in the June 30, 2011 and later valuations.

In preparing the regular valuation as of June 30, 2010, the entire UAAL for the medical Plan was amortized over 26 years. It is our understanding that neither the Charter nor the Administrative Code provides specific instructions on the length of the amortization period for use in this type of plan change for the medical plan. For the purpose of this study, we have continued to use a 26-year period to amortize the change in the UAAL in this study.

We understand that the medical subsidy amounts for the current 2011-2012 Fiscal Year would be frozen indefinitely for the group noted above. Rather than to use the actual monthly premiums, the actual maximum subsidy amounts and the updated election participation percentages among the different health plans effective for the 2011-2012 Fiscal Year that were not available (or reflected) in the data provided for the June 30, 2010 valuation, we have continued to use the election percentages, the starting costs and the assumed rate of medical inflation used in the June 30, 2010 valuation to estimate the monthly premiums after June 30, 2010. However, we have estimated the impact of the freeze in the maximum subsidy amounts effective July 1, 2011 by adjusting the 2010-2011 Fiscal Year maximum subsidy amounts by 7% for all medical plans offered to retirees under age 65 and by 9% for all the medical plans offered to retirees over 65. The 7% and 9% were the approximate increases in the maximum subsidy amounts granted by the Board on July 1, 2011 for single members who are under age 65 and over age 65, respectively.

Unlike the medical subsidy amounts, it is our understanding that the Medicare Part B and the dental subsidies are not frozen. They continue to be fully indexed with trend for Medicare Part B premiums and the dental plan premiums.

#### Results

The reductions in costs are provided in the following Exhibits attached to this report.

- Exhibit A Change in Cost Due to Freezing the Medical Subsidy for the Entire Plan
- Exhibit B Cost Savings Due to Freezing the Medical Subsidy for Each Tier
- Exhibit C Cost After Freezing the Medical Subsidy for Each Tier
- Exhibit D Cost Before Freezing the Medical Subsidy for Each Tier
- Exhibit E Development of July 15, 2011 Prepayment Amount Before Reflecting Changes in Retiree Health Plan – This exhibit is developed based on budgeted payrolls for the 2011-2012 provided earlier by the City and Harbor.
- Exhibit F Development of July 15, 2011 Prepayment Amount After Reflecting Changes in Retiree Health Plan (But Before Reflecting Savings from 2% Additional Employee Contributions)
- Exhibit G Development of Savings from 2% Additional Employee Contributions In reviewing this schedule, please note that other than reflecting a change in the salary from a redefinition of base pay effective October 9, 2011 as provided by LAFPP, it is assumed that pay will remain constant for all the pay periods provided in this Exhibit.
- The results for the entire plan are summarized in the schedule below.

Part One - Change in Employer Contribution Rate to Retiree Health Plan Before Refle	cting 2%
Additional Employee Contributions (payable July 15, 2011) - Exhibit A	
1) Cost of Retiree Health Plan Before Reflecting Subsidy Freeze	11.86%
2) Change to Subsidy Freeze	<u>-1.55%</u>
3) Cost of Retiree Health Plan After Reflecting Subsidy Freeze	10.31%
<ul> <li><u>Part Two</u> – Change in Employer Prepaid Dollar Contribution to Pension and Retiree H After Reflecting 2% Additional Employee Contributions (Calculated on Or Prepayment Date of July 15, 2011)</li> <li>4) Dollar Contribution to Pension and Retiree Health Plans Before Reflecting Subsidy Freeze - Exhibit E</li> </ul>	
a) City Only	\$472 120 728

a) City Only	\$472,120,728
b) Harbor Only	<u>\$3,639,569</u>
c) City and Harbor Combined	\$475,760,297
Deduction to Dellar Contribution to Dension and Detimes Health Dise	

5) Reduction to Dollar Contribution to Pension and Retiree Health Plans From Freeze in Health Subsidy – (Exhibit E Minus Exhibit F)

<ul> <li>a) City Only (\$472,120,728 - \$453,461,720)</li> <li>b) Harbor Only (\$3,639,569 - \$3,565,181)</li> <li>c) City and Harbor Combined</li> <li>6) Reduction to Dollar Contribution to Pension and Retiree Health Plans From 2% Additional Employee Contributions - Exhibit G</li> </ul>	\$18,659,008 <u>\$74,388</u> \$18,733,396
a) City Only	\$12,114,018
b) Harbor Only	<u>\$124,120</u>
<ul><li>c) City and Harbor Combined</li><li>7) Final Dollar Contribution to Pension and Retiree Health Plans After</li></ul>	\$12,238,138
Reflecting Subsidy Freeze and 2% Additional Employee Contributions	
a) City Only	\$441,347,702
b) Harbor Only	\$3,441,061
c) City and Harbor Combined	\$444,788,763
<ul> <li><u>Part Three</u> – Reconciliation Between Actual and Required Employer Contributio on Original Prepayment Date of July 15, 2011)</li> <li>8) Actual Dollar Contribution Paid on July 15, 2011</li> </ul>	ons (Calculated
a) City Only	\$428,120,728
b) Harbor Only	\$3,623,130
c) City and Harbor Combined	\$431,743,858
9) Amount Underpaid/(Overpaid) as of July 15, 2011 (7 – 8)	
a) City Only	\$13,226,974
b) Harbor Only	<u>-\$182,069</u>
c) City and Harbor Combined	\$13,044,905
<ul> <li><u>Part Four</u> – Amount Required to Settle Underpayment/(Overpayment) on Either or June 27, 2012</li> <li>10) Alternative One - Actual Dollar Contribution to Settle</li> </ul>	January 3, 2012
Underpayment/(Overpayment) on January 3, 2012	¢12 700 505
<ul><li>a) City Only</li><li>b) Harbor Only</li></ul>	\$13,700,505 <u>-\$188,587</u>
c) City and Harbor Combined	\$13,511,918
11) Alternative Two - Actual Dollar Contribution to Settle	ψ15,511,510
Underpayment/(Overpayment) on June 27, 2012	
a) City Only	\$14,202,603
b) Harbor Only	<u>-\$195,499</u>
c) City and Harbor Combined	\$14,007,104

Again, in preparing the above results, we have used an amortization period of 26 years to amortize the reduction in UAAL as of June 30, 2010, which is consistent with the amortization of the UAAL before these changes. We are available to recalculate the additional cost reductions relative to those provided in the attached Exhibits if a shorter amortization period is considered by the Board. Note that even if it were to be determined that the Charter or the Administrative Code would allow a shorter amortization period for this amendment and the Board of Retirement would adopt such a period, it would be important to confirm that the Mr. Michael A. Perez November 22, 2011 Page 6

equivalent single amortization period under GASB 43 and 45 for the combined existing and reduced UAAL as a result of this study would be no longer than 30 years.

The results in this report have been prepared under the supervision of Andy Yeung, ASA, EA, MAAA and Patrick Twomey, ASA, EA, MAAA. They are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.

Please let us know if you have any questions.

Sincerely,

Paul Crylo

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary

Bren Yeung

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Associate Actuary

TXB/gxk Enclosures

#### Exhibit A – Revised June 30, 2010 Retiree Health Valuation Results Change in Cost Due to Freezing the Medical Subsidy Indefinitely Cost Impact on Entire Plan

	Determined as of June 30, 2010					
	Before Plan Changes	After Plan Changes	Difference			
Actuarial Accrued Liability						
Current Retirees	\$1,450,500,242	\$1,450,500,242	\$0			
Future Retirees	<u>\$1,087,324,774</u>	\$932,703,560	-\$154,621,214			
Total	\$2,537,825,016	\$2,383,203,802	-\$154,621,214			
Annual Payment (in dollars)						
Normal Cost	\$62,677,377	\$50,389,410	-\$12,287,967			
Unfunded Actuarial Accrued Liability	\$97,731,938	\$89,015,828	-\$8,716,110			
Interest Adjustment (payable July 15)	<u>\$517,988</u>	<u>\$450,163</u>	-\$67,825			
Total	\$160,927,303	\$139,855,401	-\$21,071,902			
Payroll (used in June 30, 2010 valuation)	\$1,356,986,476	\$1,356,986,476	\$1,356,986,476			
Annual Payment (percent of pay)						
Normal Cost	4.62%	3.71%	-0.91%			
Unfunded Actuarial Accrued Liability	7.20%	6.57%	-0.63%			
Interest Adjustment (payable July 15)	<u>0.04%</u>	0.03%	-0.01%			
Total	11.86%	10.31%	-1.55%			

Note: Please refer to the body of this report for the impact that the 2% additional employee contribution has on the cost of the Plan.

#### Exhibit B – Revised June 30, 2010 Retiree Health Valuation Results Cost Savings Due to Freezing the Medical Subsidy Indefinitely Cost Impact on Each Tier

	Determined as of June 30, 2010					
	Tier 5					
	Tier 1	Tier 2	Tier 3	Tier 4	(Without HPP)	Tier 5 (HPP)
Decrease in Annual Payment (in dollars)						
Normal Cost	\$0	-\$39,277	-\$878,627	-\$435,867	-\$10,867,154	-\$67,042
Unfunded Actuarial Accrued Liability	\$0	-\$91,121	-\$943,605	-\$464,490	-\$7,210,176	-\$6,718
Interest Adjustment (payable July 15)	<u>\$0</u>	<u>-\$421</u>	<u>-\$5,884</u>	<u>-\$2,907</u>	<u>-\$58,375</u>	<u>-\$238</u>
Total	\$0	-\$130,819	-\$1,828,116	-\$903,264	-\$18,135,705	-\$73,998
Payroll (used in June 30, 2010 valuation)	N/A	\$1,356,986,476	\$97,967,569	\$45,131,204	\$1,186,271,650	\$10,381,200
Decrease in Annual Payment (percent of pay)						
Normal Cost	N/A	-0.01%	-0.90%	-0.96%	-0.91%	-0.64%
Unfunded Actuarial Accrued Liability	N/A	0.00%	-0.96%	-1.03%	-0.61%	-0.07%
Interest Adjustment (payable July 15)	<u>N/A</u>	0.00%	<u>-0.01%</u>	<u>-0.01%</u>	<u>-0.01%</u>	0.00%
Total	N/A	-0.01%	-1.87%	-2.00%	-1.53%	-0.71%

*Note: Please refer to the body of this report for the impact that the 2% additional employee contribution has on the cost of the Plan.* 

#### Exhibit C – Revised June 30, 2010 Retiree Health Valuation Results Cost After Freezing the Medical Subsidy Indefinitely Cost Impact on Each Tier

		Determined as of June 30, 2010						
	Tier 5							
	Tier 1	Tier 2	Tier 3	Tier 4	(Without HPP)	Tier 5 (HPP)		
Annual Payment (in dollars)								
Normal Cost	\$0	\$594,685	\$3,877,218	\$1,523,379	\$43,875,509	\$518,619		
Unfunded Actuarial Accrued Liability	\$2,260,741	\$49,196,089	\$3,613,728	\$2,444,088	\$31,442,652	\$58,530		
Interest Adjustment (payable July 15)	<u>7,300</u>	<u>\$160,783</u>	\$24,190	<u>\$12,812</u>	<u>\$243,215</u>	<u>\$1,864</u>		
Total	\$2,268,041	\$49,951,557	\$7,515,136	\$3,980,279	\$75,561,376	\$579,013		
Payroll (used in June 30, 2010 valuation)	N/A	\$1,356,986,476	\$97,967,569	\$45,131,204	\$1,186,271,650	\$10,381,200		
Annual Payment (percent of pay)								
Normal Cost	N/A	0.04%	3.96%	3.38%	3.70%	5.00%		
Unfunded Actuarial Accrued Liability	N/A	3.63%	3.69%	5.42%	2.65%	0.56%		
Interest Adjustment (payable July 15)	<u>N/A</u>	0.01%	0.02%	0.02%	0.02%	0.02%		
Total	N/A	3.68%	7.67%	8.82%	6.37%	5.58%		

Note: Please refer to the body of this report for the impact that the 2% additional employee contribution has on the cost of the Plan.

### Exhibit D – June 30, 2010 Retiree Health Valuation Results Cost Before Freezing the Medical Subsidy Indefinitely

	Determined as of June 30, 2010						
					Tier 5		
	Tier 1	Tier 2	Tier 3	Tier 4	(Without HPP)	Tier 5 (HPP)	
Annual Payment (in dollars)							
Normal Cost	\$0	\$633,962	\$4,755,845	\$1,959,246	\$54,742,663	\$585,661	
Unfunded Actuarial Accrued Liability	\$2,260,741	\$49,287,210	\$4,557,333	\$2,908,578	\$38,652,828	\$65,248	
Interest Adjustment (payable July 15)	7,300	<u>\$161,204</u>	<u>\$30,074</u>	<u>\$15,719</u>	<u>\$301,590</u>	<u>\$2,102</u>	
Total	\$2,268,041	\$50,082,376	\$9,343,252	\$4,883,543	\$93,697,081	\$653,011	
Payroll (used in June 30, 2010 valuation)	N/A	\$1,356,986,476	\$97,967,569	\$45,131,204	\$1,186,271,650	\$10,381,200	
Annual Payment (percent of pay)							
Normal Cost	N/A	0.05%	4.86%	4.34%	4.61%	5.64%	
Unfunded Actuarial Accrued Liability	N/A	3.63%	4.65%	6.45%	3.26%	0.63%	
Interest Adjustment (payable July 15)	<u>N/A</u>	<u>0.01%</u>	<u>0.03%</u>	0.03%	0.03%	0.02%	
Total	N/A	3.69%	9.54%	10.82%	7.90%	6.29%	

# Exhibit E – Development of July 15, 2011 Prepayment Amount for the 2011/-2012 Fiscal Year Before Reflecting Changes in Retiree Health Plan

				Req. Contrib.
			Covered Payroll*	<u>On 7/15/2011</u>
D : DI		Tier 1 requiren	nents:	
Pension Plan	1. Normal Cost	NT A	NT A	¢16 926 790
II. th Di	2. UAAL	NA	NA	\$16,836,780
Health Plan	1. Normal Cost	<b>N7</b> 4	N7.4	¢2.260.041
0.11	2. UAAL	NA	NA	\$2,268,041
Subtotal		Tion 2 manimum	aanta.	\$19,104,821
D DI	1. No	Tier 2 requiren		\$2.007.467
Pension Plan	<ol> <li>Normal Cost</li> <li>UAAL**</li> </ol>	25.96%	\$15,360,042	\$3,987,467
		-1.03%	\$1,202,739,870	-\$12,388,221
Health Plan	1. Normal Cost	3.69%	\$15,360,042	\$566,786
0.11	2. UAAL**	3.64%	\$1,202,739,870	<u>\$43,779,731</u>
Subtotal		T. 2		\$35,945,763
Danaian Dian	1. Normal Cost	Tier 3 requiren		¢15.051.090
Pension Plan		18.26%	\$87,360,242	\$15,951,980
II. H. DI.	2. UAAL	7.79%	\$87,360,242	\$6,805,363
Health Plan	1. Normal Cost	4.87%	\$87,360,242	\$4,254,444
	2. UAAL	4.67%	\$87,360,242	\$4,079,723
Subtotal				\$31,091,510
		Tier 4 requiren		
Pension Plan	1. Normal Cost	16.92%	\$40,200,111	\$6,801,859
	2. UAAL	9.76%	\$40,200,111	\$3,923,531
Health Plan	1. Normal Cost	4.35%	\$40,200,111	\$1,748,705
	2. UAAL	6.46%	\$40,200,111	\$2,596,927
Subtotal				\$15,071,022
	Tier	5 requirements (	City Only):	
Pension Plan	1. Normal Cost	20.40%	\$1,057,082,923	\$215,644,916
	2. UAAL	6.71%	\$1,057,082,923	\$70,930,264
Health Plan	1. Normal Cost	4.63%	\$1,057,082,923	\$48,942,939
	2. UAAL	3.27%	\$1,057,082,923	\$34,566,612
Subtotal				\$370,084,731
	Tier	6 requirements (		
Pension Plan	1. Normal Cost	15.14%	\$2,736,552	\$414,314
	2. UAAL	6.71%	\$2,736,552	\$183,623
Health Plan	1. Normal Cost	4.95%	\$2,736,552	\$135,459
	2. UAAL	3.27%	\$2,736,552	\$89,485
Subtotal				\$822,881
		5 requirements (H		
Pension Plan	1. Normal Cost	20.43%	\$10,450,467	\$2,135,030
	2. UAAL	7.38%	\$10,450,467	\$771,244
Health Plan	1. Normal Cost	5.66%	\$10,450,467	\$591,496
	2. UAAL	0.63%	\$10,450,467	\$65,838
Subtotal				\$3,563,609
	Tier 6	5 requirements (H	Iarbor Only):	
Pension Plan	1. Normal Cost	15.14%	\$270,318	\$40,926
	2. UAAL	7.38%	\$270,318	\$19,949
Health Plan	1. Normal Cost	4.95%	\$270,318	\$13,381
	2. UAAL	0.63%	\$270,318	\$1,703
Subtotal				\$75,959
Tiers 1 to 6:0	City Contributions			\$472,120,728
Tiers 5 to 6: I	Harbor			\$3,639,569
Total City and				\$475,760,297
			arbor for the 2011-2	2012 Fiscal Year
** Payroll is	Based on Total Bu	depted Dayroll fo	r City	

\*\* Payroll is Based on Total Budgeted Payroll for City.

Results may not add due to rounding.

## Exhibit F – Development of July 15, 2011 Prepayment Amount for the 2011/-2012 Fiscal Year After Reflecting Changes in Retiree Health Plan

Atter	kenecting	Changes 1	n Retiree H	eann Plan			
				Req. Contrib.			
	% of Payroll Covered Payroll* On 7/15/20						
		Tier 1 requiren	nents:	<u> </u>			
Pension Plan	1. Normal Cost	· · · · ·					
•	2. UAAL	NA	NA	\$16,836,780			
Health Plan	1. Normal Cost			+,,			
1100001111	2. UAAL	NA	NA	\$2,268,041			
Subtotal	2. UAAL	INA	NA	\$19,104,821			
Subtotal		Tier 2 requiren	aanta	\$19,104,621			
	1.11.1.0			#2.007.4 <i>C</i> 7			
Pension Plan	1. Normal Cost	25.96%	\$15,360,042	\$3,987,467			
	2. UAAL**	-1.03%	\$1,202,739,870	-\$12,388,221			
Health Plan	1. Normal Cost	3.46%	\$15,360,042	\$531,457			
	2. UAAL**	3.64%	\$1,202,739,870	\$43,779,731			
Subtotal				\$35,910,435			
		Tier 3 requiren	nents:				
Pension Plan	1. Normal Cost	18.26%	\$87,360,242	\$15,951,980			
	2. UAAL	7.79%	\$87,360,242	\$6,805,363			
Health Plan	1. Normal Cost	3.97%	\$87,360,242	\$3,468,202			
	2. UAAL	3.70%	\$87,360,242	\$3,232,329			
Subtotal	2. 0.1.12	511070	\$07,000,212	\$29,457,873			
Subiotai		Tion 4 magnimum	aanta	\$29,437,873			
		Tier 4 requiren		<b>*</b> < 001 0 <b>*</b> 0			
Pension Plan	1. Normal Cost	16.92%	\$40,200,111	\$6,801,859			
·	2. UAAL	9.76%	\$40,200,111	\$3,923,531			
Health Plan	1. Normal Cost	3.39%	\$40,200,111	\$1,362,784			
	2. UAAL	5.43%	\$40,200,111	\$2,182,866			
Subtotal				\$14,271,039			
	Tier	5 requirements (	City Only):				
Pension Plan	1. Normal Cost	20.40%	\$1,057,082,923	\$215,644,916			
	2. UAAL	6.71%	\$1,057,082,923	\$70,930,264			
Health Plan	1. Normal Cost	3.71%	\$1,057,082,923	\$39,217,776			
- Ticaun T an	2. UAAL	2.66%	\$1,057,082,923	\$28,118,406			
Subtotal	2. 0/012	2.00%	\$1,057,002,725	\$353,911,363			
Subtotal	Tior	6 raquiramante (	City Only)	\$555,711,505			
Donsion Dlan	1. Normal Cost	6 requirements ( 15.14%	\$2,736,552	\$414,314			
reision ran							
	2. UAAL	6.71%	\$2,736,552	\$183,623			
Health Plan	1. Normal Cost	4.95%	\$2,736,552	\$135,459			
	2. UAAL	2.66%	\$2,736,552	<u>\$72,792</u>			
Subtotal				\$806,188			
•		5 requirements (H					
Pension Plan	1. Normal Cost	20.43%	\$10,450,467	\$2,135,030			
	2. UAAL	7.38%	\$10,450,467	\$771,244			
Health Plan	1. Normal Cost	5.02%	\$10,450,467	\$524,613			
	2. UAAL	0.56%	\$10,450,467	\$58,523			
Subtotal				\$3,489,411			
	Tier (	6 requirements (H	larbor Only).	++,,			
Dansian Dlan	1. Normal Cost			\$40.026			
r cision r ian		15.14%	\$270,318	\$40,926			
	2. UAAL	7.38%	\$270,318	\$19,949			
Health Plan	1. Normal Cost	4.95%	\$270,318	\$13,381			
	2. UAAL	0.56%	\$270,318	<u>\$1,514</u>			
Subtotal				\$75,770			
	City Contributions			\$453,461,720			
Tiers 5 to 6:1				<u>\$3,565,181</u>			
Total City an	d Harbor			\$457,026,901			

\* Budgeted Payroll as Determined by the City/Harbor for the 2011-2012 Fiscal Year

\*\* Payroll is Based on Total Budgeted Payroll for City.

Results may not add due to rounding.

Note: Please refer to the body of this report for the impact that the additional 2% employee contribution has on the cost of the Plan.

Base Pay By Pay	Period *	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>	<u>Tier 4</u>	City Tier 5	Harbor Tier 5	Total
Beg. Dt.	End Dt.							
08/14/2011	08/27/2011		\$36,262	\$2,222,469	\$782,183	\$24,452,052	\$301,595	\$27,794,560
08/28/2011	09/10/2011		\$36,262	\$2,222,469	\$782,183	\$24,452,052	\$301,595	\$27,794,560
09/11/2011	09/24/2011		\$36,262	\$2,222,469	\$782,183	\$24,452,052	\$301,595	\$27,794,560
09/25/2011	10/08/2011		\$36,262	\$2,222,469	\$782,183	\$24,452,052	\$301,595	\$27,794,560
10/09/2011	10/22/2011		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
10/23/2011	11/05/2011		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
11/06/2011	11/19/2011		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
11/20/2011	12/03/2011		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
12/04/2011	12/17/2011		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
12/18/2011	12/31/2011		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
01/01/2012	01/14/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
01/15/2012	01/28/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
01/29/2012	02/11/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
02/12/2012	02/25/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
02/26/2012	03/10/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
03/11/2012	03/24/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
03/25/2012	04/07/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
04/08/2012	04/21/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
04/22/2012	05/05/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
05/06/2012	05/19/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
05/20/2012	06/02/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
06/03/2012	06/16/2012		\$36,611	\$2,321,213	\$824,756	\$25,297,065	\$302,775	\$28,782,419
06/17/2012	06/30/2012		<u>\$36,611</u>	<u>\$2,321,213</u>	<u>\$824,756</u>	<u>\$25,297,065</u>	<u>\$302,775</u>	\$28,782,419
Total Projected Base Pay		\$0	\$840,655	\$52,992,923	\$18,799,094	\$578,452,434	\$6,959,094	\$658,044,199
Present Value of Total Bas	se Pay as of							
7/15/2011 Present Value of 2% Cont	ribution on Total	\$0	\$807,569	\$50,899,213	\$18,055,562	\$555,622,725	\$6,685,386	\$632,070,455
Base Pay as of 7/15/2011		\$0	\$16,151	\$1,017,984	\$361,111	\$11,112,454	\$133,708	\$12,641,409
Non-Refundability Factor		N/A	99.76%	99.79%	99.77%	96.48%	92.83%	ψ12,0+1,+0 <i>)</i>
Present Value of 2% Cont		11/1	JJ.1070	JJ.1J/0	<i>)).11/</i> 0	20.4070	12.0370	
Adjustment for Non-Refu								
of 7/15/2011	inability racior as	\$0	\$16,113	\$1,015,879	\$360,277	\$10,721,749	\$124,120	\$12,238,138
01 //15/2011		φŪ	φ10,113	\$1,015,679	φ300,277	φ10,721,749	φ12 <del>4</del> ,120	φ12,230,130

Exhibit G – – Development of Savings from 2% Additional Employee Contributions

\* Other than to reflect a change in the salary from a redefinition of base pay effective 10/09/2011 as provided by LAFPP, it is assumed that salary will remain constant for all the pay periods provided in this Exhibit.