



**BARTEL**  
ASSOCIATES, LLC

**CITY OF VALLEJO  
RETIREE HEALTHCARE PLAN**

June 30, 2012 GASB 45 Actuarial Valuation  
Final Results

**Bartel Associates, LLC**  
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Tak Frazita, Actuarial Analyst

**April 12, 2013**

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## BENEFIT SUMMARY

<p>■ Eligibility</p>	<ul style="list-style-type: none"> <li>Retire directly from City under CalPERS (age 50 and 5 years of CalPERS service or disability)</li> </ul>								
<p>■ Retiree Medical Benefit</p>	<ul style="list-style-type: none"> <li>Council, Executives, IBEW, IAFF Retirees <math>\geq</math> 7/1/00 - \$300 per month, but not less than PEMHCA minimum</li> <li>IAFF Retirees &lt; 7/1/00 (pre-PERS 3%@50) - 75% of the Kaiser Bay Area non-Medicare premium for coverage elected</li> <li>CAMP - 80% of Kaiser Bay Area non-Medicare premium for coverage elected</li> <li>VPOA - 100% of Kaiser Bay Area non-Medicare premium for coverage elected</li> </ul>								
<p>■ PEMHCA Minimum</p>	<table style="margin-left: 40px;"> <tr> <td>2012</td> <td>\$112/month</td> </tr> <tr> <td>2013</td> <td>\$115/month</td> </tr> <tr> <td>2014</td> <td>\$119/month</td> </tr> <tr> <td>2015+</td> <td>Medical CPI increases</td> </tr> </table> <ul style="list-style-type: none"> <li>PEMHCA minimum projected to exceed \$300 per month in 2036 (24 years) assuming 4.50% medical CPI</li> </ul>	2012	\$112/month	2013	\$115/month	2014	\$119/month	2015+	Medical CPI increases
2012	\$112/month								
2013	\$115/month								
2014	\$119/month								
2015+	Medical CPI increases								



## BENEFIT SUMMARY

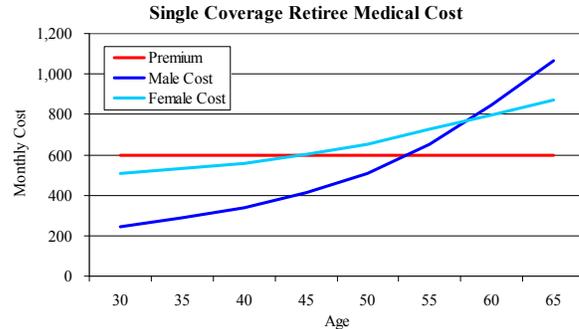
<p>■ Surviving Spouse Benefit</p>	<ul style="list-style-type: none"> <li>Retiree medical benefit continues to surviving spouse of retiree who elected CalPERS joint &amp; survivor payment option</li> <li>Retiree benefit paid to spouse of active employee who died while eligible to retire and who receives CalPERS survivor benefit</li> </ul>									
<p>■ PEMHCA Administration Fee</p>	<ul style="list-style-type: none"> <li>0.25% of retiree premium for 2012/13</li> <li>Paid by City and included with GASB 45 costs</li> </ul>									
<p>■ Other OPEB</p>	<ul style="list-style-type: none"> <li>No City contribution for dental, vision, life insurance, or Medicare Part B</li> </ul>									
<p>■ Pay-As-You-Go Cost ('000s)</p>	<table style="margin-left: 40px;"> <tr> <td>2012/13</td> <td>\$3,244</td> <td>City Estimate</td> </tr> <tr> <td>2011/12</td> <td>3,027</td> <td>City</td> </tr> <tr> <td>2010/11</td> <td>3,652</td> <td>CAFR</td> </tr> </table>	2012/13	\$3,244	City Estimate	2011/12	3,027	City	2010/11	3,652	CAFR
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2011/12	3,027	City								
2010/11	3,652	CAFR								



## BENEFIT SUMMARY

### ■ Implied Subsidy

- Non-Medicare eligible retirees pay blended active and retiree medical premium rates rather than actual retiree medical costs
- Active employee premiums subsidize non-Medicare eligible retiree medical costs



- GASB 45 includes active “implied subsidy” with retiree cost
- GASB 45 does not require community rated plans to value implied subsidy
- PEMHCA is a community-rated plan for most employers
- Valuation does not include implied subsidy



## BENEFIT SUMMARY

### ■ Implied Subsidy (Continued)

- GASB 45 defers to Actuarial Standards of Practice (ASOP) for implied subsidy
- In April 2012, American Academy of Actuaries’ Actuarial Standards Board released exposure draft of revised ASOP No. 6 regarding retiree healthcare obligations
- Revised ASOP would require implied subsidy be valued for community-rated plans
- Proposed final ASOP expected during 2013



**DATA SUMMARY**

**Active Employees**

Valuation Date	6/30/08	6/30/09	6/30/10	6/30/12
■ Employee Count				
• Miscellaneous	288	286	272	274
• Safety	<u>200</u>	<u>183</u>	<u>166</u>	<u>170</u>
• Total Employees	488	469	438	444
• Waived Coverage	<u>42</u>	<u>46</u>	<u>64</u>	<u>74</u>
• Total Participating	446	423	374	370
■ Total Miscellaneous				
• Average Age	47.6	46.9	47.2	46.7
• Average City Service	11.2	10.6	11.1	10.4
• Average Payroll	\$74,928	\$74,345	\$71,342	\$72,098
• Total Payroll (000's)	21,579	21,263	19,405	19,755
■ Total Safety				
• Average Age	41.8	41.6	42.6	42.1
• Average City Service	13.8	13.7	14.9	14.5
• Average Payroll	\$120,733	\$121,407	\$121,903	\$119,763
• Total Payroll (000's)	24,147	22,217	20,236	20,360
■ Total Payroll (000's)	45,726	43,480	39,641	40,115



**DATA SUMMARY**

**Retirees**

Valuation Date	6/30/08	6/30/09	6/30/10	6/30/12
■ Retiree Count				
• Miscellaneous	275	285	275	305
• Safety	<u>252</u>	<u>264</u>	<u>268</u>	<u>276</u>
• Total Retirees	527	549	543	581
• Waived Coverage	<u>62</u>	<u>72</u>	<u>56</u>	<u>87</u>
• Total Participating	465	477	487	494
■ Total Miscellaneous				
• Average Age	67.5	67.2	67.8	68.2
• Average Retirement Age - Service	58.5	58.3	58.4	58.1
• Average Retirement Age - Disabled	48.3	47.1	47.3	47.1
■ Total Safety				
• Average Age	63.3	63.2	63.6	64.0
• Average Retirement Age - Service	54.4	54.2	54.3	54.0
• Average Retirement Age - Disabled	46.2	46.7	46.6	46.5



## DATA SUMMARY

### Participant Reconciliation

Participants	Actives	Retirees			
		Service	Disabled	Survivors	Total
■ June 30, 2010	438	328	156	59	543
• Terminations <sup>1</sup>	(24)	-	-	-	-
• New Retirees & Survivors	(49)	43	5	1	49
• Retiree Deaths with Survivor	-	(4)	(3)	7	-
• Retiree Deaths without Survivor <sup>2</sup>	-	(9)	(5)	(8)	(22)
• New Hires	71	-	-	-	-
• Adjustments	8	(2)	2	11	11
■ June 30, 2012	444	356	155	70	581

<sup>1</sup> Active employees reported for the 6/30/10 valuation and not reported for the 6/30/12 valuation were assumed to be terminations and deaths before retirement.

<sup>2</sup> Retirees reported for the 6/30/10 valuation and not reported for the 6/30/12 valuation were assumed to be deaths without covered survivors.



## ASSUMPTIONS & METHODS HIGHLIGHTS

Assumption	June 30, 2010 Valuation	June 30, 2012 Valuation
■ Valuation Date	<ul style="list-style-type: none"> <li>• June 30, 2010</li> <li>• 2010/11 &amp; 2011/12 ARCs</li> </ul>	<ul style="list-style-type: none"> <li>• June 30, 2012</li> <li>• 2012/13 &amp; 2013/14 ARCs</li> </ul>
■ Funding Policy	<ul style="list-style-type: none"> <li>• Pay-as-you-go funding</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
■ Discount Rate	<ul style="list-style-type: none"> <li>• 4.50% - Not prefunded, assets in City's investment fund</li> </ul>	<ul style="list-style-type: none"> <li>• 4.00% - Not prefunded, assets in City's investment fund</li> </ul>
■ Fixed Dollar Cap Increase	<ul style="list-style-type: none"> <li>• 0%</li> <li>• Cap not less than PEMHCA minimum</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
■ PEMHCA Minimum Increases	<ul style="list-style-type: none"> <li>• 4.5% annually</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>



## ASSUMPTIONS & METHODS HIGHLIGHTS

Assumption	June 30, 2010 Valuation	June 30, 2012 Valuation
<b>■ Medical Trend</b>	Fiscal Year <u>Begin</u> 2010 Increase from Prior Year <u>Non-Medicare</u> HMO PPO <u>Medicare</u> HMO PPO Premiums Premiums	Fiscal Year <u>Begin</u> 2010 Increase from Prior Year <u>Non-Medicare</u> All Plans <u>Medicare</u> All Plans Premiums Premiums
	2011	2011
	2012 7.75% 8.25% 8.00% 8.50%	2012 n/a
	2013 7.10% 7.50% 7.30% 7.70%	2013 n/a
	2014 6.45% 6.75% 6.60% 6.90%	2014 8.5% 8.9%
	2015 5.80% 6.00% 5.90% 6.10%	2015 8.0% 8.3%
	2016 5.15% 5.25% 5.20% 5.30%	2016 7.5% 7.8%
	2017+ 4.50% 4.50% 4.50% 4.50%	2017 7.0% 7.2%
		2018 6.5% 6.7%
		2019 6.0% 6.1%
		2020 5.5% 5.6%
		2021+ 5.0% 5.0%
	<b>■ PEMHCA Premium Increases</b>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>



## ASSUMPTIONS & METHODS HIGHLIGHTS

Assumption	June 30, 2010 Valuation	June 30, 2012 Valuation																																																																																
<b>■ Service Retirement</b>	<ul style="list-style-type: none"> <li>• CalPERS 1997-2007 Experience Study</li> </ul>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: center;"><u>CalPERS</u></th> <th style="text-align: center;"><u>Misc</u></th> <th style="text-align: center;"><u>ERA</u><sup>3</sup></th> </tr> </thead> <tbody> <tr> <td>CalPERS Hire Age</td> <td></td> <td style="text-align: center;">35</td> <td></td> </tr> <tr> <td>Hire &lt; 1/1/13</td> <td></td> <td style="text-align: center;">2.7%@55</td> <td style="text-align: center;">58.1</td> </tr> <tr> <td>Hire ≥ 1/1/13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    &gt; Classic Member</td> <td></td> <td style="text-align: center;">2.7%@55</td> <td style="text-align: center;">58.1</td> </tr> <tr> <td>    &gt; New Member</td> <td></td> <td style="text-align: center;">2.5%@67</td> <td style="text-align: center;">59.4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>CalPERS</u></td> <td style="text-align: center;"><u>Fire</u></td> <td style="text-align: center;"><u>ERA</u></td> </tr> <tr> <td>CalPERS Hire Age</td> <td></td> <td style="text-align: center;">25</td> <td></td> </tr> <tr> <td>Hire &lt; 1/1/13</td> <td></td> <td style="text-align: center;">3%@50</td> <td style="text-align: center;">54.6</td> </tr> <tr> <td>Hire ≥ 1/1/13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    &gt; Classic Member</td> <td></td> <td style="text-align: center;">2%@50</td> <td style="text-align: center;">56.9</td> </tr> <tr> <td>    &gt; New Member</td> <td></td> <td style="text-align: center;">2.7%@57</td> <td style="text-align: center;">n/a</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>CalPERS</u></td> <td style="text-align: center;"><u>Police</u></td> <td style="text-align: center;"><u>ERA</u></td> </tr> <tr> <td>CalPERS Hire Age</td> <td></td> <td style="text-align: center;">25</td> <td></td> </tr> <tr> <td>Hire &lt; 1/1/13</td> <td></td> <td style="text-align: center;">3%@50</td> <td style="text-align: center;">53.6</td> </tr> <tr> <td>Hire ≥ 1/1/13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    &gt; Classic Member</td> <td></td> <td style="text-align: center;">3%@50</td> <td style="text-align: center;">53.6</td> </tr> <tr> <td>    &gt; New Member</td> <td></td> <td style="text-align: center;">2.7%@57</td> <td style="text-align: center;">55.8</td> </tr> </tbody> </table>		<u>CalPERS</u>	<u>Misc</u>	<u>ERA</u> <sup>3</sup>	CalPERS Hire Age		35		Hire < 1/1/13		2.7%@55	58.1	Hire ≥ 1/1/13				> Classic Member		2.7%@55	58.1	> New Member		2.5%@67	59.4						<u>CalPERS</u>	<u>Fire</u>	<u>ERA</u>	CalPERS Hire Age		25		Hire < 1/1/13		3%@50	54.6	Hire ≥ 1/1/13				> Classic Member		2%@50	56.9	> New Member		2.7%@57	n/a						<u>CalPERS</u>	<u>Police</u>	<u>ERA</u>	CalPERS Hire Age		25		Hire < 1/1/13		3%@50	53.6	Hire ≥ 1/1/13				> Classic Member		3%@50	53.6	> New Member		2.7%@57	55.8
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<sup>3</sup> Expected Retirement Ages for members ≥ 1/1/13 based on CalPERS retirement assumptions for their AB 340 cost analysis.



**ASSUMPTIONS & METHODS HIGHLIGHTS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>															
<ul style="list-style-type: none"> <li>■ Mortality, Termination, Disability</li> </ul>	<ul style="list-style-type: none"> <li>• CalPERS 1997-2007 Experience Study</li> </ul>	<ul style="list-style-type: none"> <li>• CalPERS 1997-2007 Experience Study</li> <li>• Mortality improvement projection Scale AA: <table border="1"> <thead> <tr> <th><u>Age</u></th> <th><u>Male</u></th> <th><u>Female</u></th> </tr> </thead> <tbody> <tr> <td>50</td> <td>1.8%</td> <td>1.7%</td> </tr> <tr> <td>60</td> <td>1.6%</td> <td>0.5%</td> </tr> <tr> <td>70</td> <td>1.5%</td> <td>0.5%</td> </tr> <tr> <td>80</td> <td>1.0%</td> <td>0.7%</td> </tr> </tbody> </table> </li> </ul>	<u>Age</u>	<u>Male</u>	<u>Female</u>	50	1.8%	1.7%	60	1.6%	0.5%	70	1.5%	0.5%	80	1.0%	0.7%
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<ul style="list-style-type: none"> <li>■ Participation at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>• Actives: <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived - 90%</li> </ul> </li> <li>• Retirees &amp; Surviving Spouse: <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived &lt; 65 - 20% at 65</li> <li>➢ Waived ≥ 65 - 0%</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Actives &amp; Surviving Spouse: <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived - 90%</li> </ul> </li> <li>• Retirees &amp; Surviving Spouse: <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived &lt; 65 - 20% at 65</li> <li>➢ Waived ≥ 65 - 0%</li> </ul> </li> </ul>															



**ASSUMPTIONS & METHODS HIGHLIGHTS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>																		
<ul style="list-style-type: none"> <li>■ Medicare Eligibility</li> </ul>	<table border="1"> <thead> <tr> <th><u>Hire</u></th> <th><u>Misc</u></th> <th><u>Safety</u></th> </tr> </thead> <tbody> <tr> <td>&lt; 4/1/86</td> <td>100%</td> <td>95%</td> </tr> <tr> <td>≥ 4/1/86</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 5.4% of Safety retirees over 65 hired before 4/1/86 are not in Medicare per retiree data</li> <li>• Hire date for retirees was estimated from CalPERS retirement date and service</li> </ul>	<u>Hire</u>	<u>Misc</u>	<u>Safety</u>	< 4/1/86	100%	95%	≥ 4/1/86	100%	100%	<table border="1"> <thead> <tr> <th><u>Hire</u></th> <th><u>Misc</u></th> <th><u>Safety</u></th> </tr> </thead> <tbody> <tr> <td>&lt; 4/1/86</td> <td>100%</td> <td>95%</td> </tr> <tr> <td>≥ 4/1/86</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 3.5% of Safety retirees over 65 hired before 4/1/86 are not in Medicare per retiree data</li> <li>• Hire date for retirees was estimated from CalPERS retirement date and service</li> </ul>	<u>Hire</u>	<u>Misc</u>	<u>Safety</u>	< 4/1/86	100%	95%	≥ 4/1/86	100%	100%
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<ul style="list-style-type: none"> <li>■ Cost Method</li> </ul>	<ul style="list-style-type: none"> <li>• Entry Age Normal</li> <li>• Normal Cost is a level percentage of payroll</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>																		
<ul style="list-style-type: none"> <li>■ Amortization Method</li> </ul>	<ul style="list-style-type: none"> <li>• Level percentage of payroll</li> <li>• 29-year fixed (closed) period for 2010/11 ARC</li> </ul>	<ul style="list-style-type: none"> <li>• Level percentage of payroll</li> <li>• 27-year fixed (closed) period for 2012/13 ARC</li> </ul>																		



**RESULTS**

**Actuarial Obligations**

(Amounts in 000's)

Actuarial Obligations	<u>6/30/10 Valuation</u>		<u>6/30/12 Valuation</u>	
	Actual 6/30/10	Projected 6/30/12	Actual 6/30/12	Projected 6/30/13
■ <b>Discount Rate</b>	4.50%	4.50%	4.00%	4.00%
■ <b>Present Value of Benefits</b>				
• Actives	\$46,900	n/a	\$60,102	n/a
• Retirees	<u>57,123</u>	<u>n/a</u>	<u>71,597</u>	<u>n/a</u>
• Total	104,023	106,997	131,699	133,505
■ <b>Actuarial Accrued Liability</b>				
• Actives	24,929	n/a	35,031	n/a
• Retirees	<u>57,123</u>	<u>n/a</u>	<u>71,597</u>	<u>n/a</u>
• Total	82,052	88,100	106,628	110,462
■ <b>Actuarial Value of Assets</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
■ <b>Unfunded AAL</b>	82,052	88,100	106,628	110,462
■ <b>Normal Cost</b>	2,452	2,615	3,031	3,129
■ <b>Normal Cost %Pay</b>	6.0%	6.0%	7.6%	7.6%
■ <b>Pay-As-You-Go Cost</b>	3,102	3,503	3,394	3,630



**RESULTS**

**Actuarial Gains & Losses**

(Amounts in 000's)

Actuarial Gains & Losses	NC%	AAL
■ <b>6/30/10 Actual</b>	6.0%	\$ 82,052
■ <b>6/30/12 Expected</b>	6.0%	88,100
■ <b>Experience Losses (Gains)</b>		
• Actual versus expected premiums	(0.2%)	(4,938)
• Premium gain retention (1/3 premium gain)	0.1%	1,646
• PEMHCA administration fee	0.0%	(190)
• Demographic & other <sup>4</sup>	<u>(0.3%)</u>	<u>(971)</u>
• Total experience losses (gains)	(0.4%)	(4,453)
■ <b>Assumption Changes</b>		
• Projected mortality improvement	0.2%	3,144
• Medical trend	0.9%	11,867
• Preretirement survivor death benefit	0.0%	172
• Discount rate	<u>0.9%</u>	<u>7,798</u>
• Total assumption changes	2.0%	22,981
■ <b>Total Changes</b>	1.6%	18,528
■ <b>6/30/12 Actual</b>	7.6%	106,628

<sup>4</sup> Includes the impact of expected versus actual average payroll for the normal cost percentage.



**RESULTS**

**Annual Required Contributions (ARC)**

(Amounts in 000's)

Annual Required Contribution	<u>6/30/10 Valuation</u>		<u>6/30/12 Valuation</u>	
	2010/11	2011/12	2012/13	2013/14
■ <b>Discount Rate</b>	4.50%	4.50%	4.00%	4.00%
■ <b>ARC - \$</b>				
• Normal Cost	\$2,452	\$2,467 <sup>5</sup>	3,031	\$3,129
• UAAL Amortization	<u>3,482</u>	<u>3,716</u>	<u>4,505</u>	<u>4,830</u>
• Total ARC	5,934	6,183	7,536	7,959
■ <b>Projected Payroll</b>	40,982	41,286	40,115	41,419
■ <b>ARC - %</b>				
• Normal Cost	6.0%	6.0%	7.6%	7.6%
• UAAL Amortization	<u>8.5%</u>	<u>9.0%</u>	<u>11.2%</u>	<u>11.7%</u>
• Total ARC%	14.5%	15.0%	18.8%	19.2%
■ <b>UAAL Amortization Years</b>	29	28	27	26

<sup>5</sup> Normal Cost calculated as level Normal Cost percentage multiplied by 2011/12 projected payroll provided by the City rather than \$2,615,000 normal cost from valuation projection assuming payroll increases 3.25%.



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**RESULTS**

**Benefit Payment Projection**

(Amounts in 000's)

Fiscal Year	Current Actives	Current Retirees	Total Payments
2012/13	\$ 0	\$3,394	\$3,394 <sup>6</sup>
2013/14	214	3,416	3,630
2014/15	392	3,548	3,940
2015/16	590	3,678	4,267
2016/17	794	3,776	4,571
2017/18	1,036	3,848	4,884
2018/19	1,291	3,912	5,204
2019/20	1,545	3,916	5,461
2020/21	1,807	3,907	5,714
2021/22	2,066	3,891	5,957

<sup>6</sup> City estimate is \$3,244,000.



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**RESULTS**

**Estimated Net OPEB Obligation (NOO) Projection**

Estimated Net OPEB Obligation (Amounts in '000s)	CAFR 2010/11	Estimate 2011/12	Estimate 2012/13	Estimate 2013/14
■ <b>Discount Rate</b>	4.50%	4.50%	4.00%	4.00%
■ <b>NOO at Beginning of Year</b>	\$14,033	\$15,974	\$19,151	\$23,400
■ <b>Annual OPEB Cost</b>				
• Annual Required Contribution	5,934	6,183	7,536	7,959
• Interest on NOO	631	719	766	936
• NOO Adjustment	<u>(972)</u>	<u>(698)</u>	<u>(809)</u>	<u>(1,023)</u>
• Annual OPEB Cost	5,593	6,204	7,493	7,872
■ <b>Contributions<sup>7</sup></b>				
• Benefit Payments Outside of Trust	3,652	3,027	3,244	3,630
• Trust Funding	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
• Total Contributions	3,652	3,027	3,244	3,630
■ <b>NOO at End of Year</b>	15,974	19,151	23,400	27,642
■ <b>NOO Amortization Years</b>	29	28	27	26
■ <b>NOO Amortization Factor</b>	n/a	22.88	23.67	22.87

<sup>7</sup> Estimated contributions for years after 2011/12. The benefit payment estimate for 2012/13 was provided by the City. Estimated PEMHCA administration expenses are included with estimated cash benefit payments. Estimated items other than the ARC must be revised when actual contributions are known.



**RESULTS**

**No Pre-Funding Projection**

**4.00% Discount Rate**

(Amounts in 000's)

Fiscal Year End	Begin Year NOO	ARC	AOC	City Contribution			Payroll	ARC % of Pay	BOY UAAL	UAAL % of Pay <sup>8</sup>
				Benefit Pmts	Trust Funding	City Contr				
2013	\$19,151	\$7,536	\$7,493	\$3,244	\$0	\$3,244	\$40,115	18.8%	\$106,628	266%
2014	23,400	7,959	7,872	3,630	0	3,630	41,419	19.2%	110,462	267%
2015	27,642	8,410	8,264	3,940	0	3,940	42,765	19.7%	114,309	267%
2016	31,965	8,890	8,665	4,268	0	4,268	44,155	20.1%	118,094	267%
2017	36,363	9,401	9,077	4,572	0	4,572	45,590	20.6%	121,802	267%
2018	40,868	9,948	9,501	4,883	0	4,883	47,071	21.1%	125,457	267%
2019	45,486	10,536	9,936	5,203	0	5,203	48,601	21.7%	129,051	266%
2020	50,219	11,169	10,383	5,461	0	5,461	50,181	22.3%	132,577	264%
2021	55,141	11,859	10,846	5,714	0	5,714	51,812	22.9%	136,102	263%
2022	60,273	12,615	11,325	5,957	0	5,957	53,496	23.6%	139,633	261%

<sup>8</sup> UAAL/Pay remains stable over the 10-year period because expected benefits payments exceed the normal cost, causing the UAAL to grow by less than the discount rate of 4% per year. The plan is mature with a retiree to active ratio of 131%.



**RESULTS**

**Actuarial Obligations**  
**June 30, 2012 - 4.00% Discount Rate**  
 (Amounts in 000's)

Obligations	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ <b>PVB</b>							
• Actives	\$247	\$ 540	\$ 9,697	\$ 9,095	\$ 3,599	\$36,924	\$60,102
• Retirees	<u>84</u>	<u>1,102</u>	<u>10,173</u>	<u>8,594</u>	<u>9,387</u>	<u>42,257</u>	<u>71,597</u>
• Total	331	1,642	19,870	17,689	12,986	79,181	131,699
■ <b>AAL</b>							
• Actives	54	246	5,025	4,596	2,368	22,743	35,031
• Retirees	<u>84</u>	<u>1,102</u>	<u>10,173</u>	<u>8,594</u>	<u>9,387</u>	<u>42,257</u>	<u>71,597</u>
• Total	138	1,348	15,198	13,190	11,755	65,000	106,628
■ <b>Normal Cost</b>	32	37	538	526	148	1,750	3,031
■ <b>PayGo</b>	8	75	545	602	501	1,662	3,394



**RESULTS**

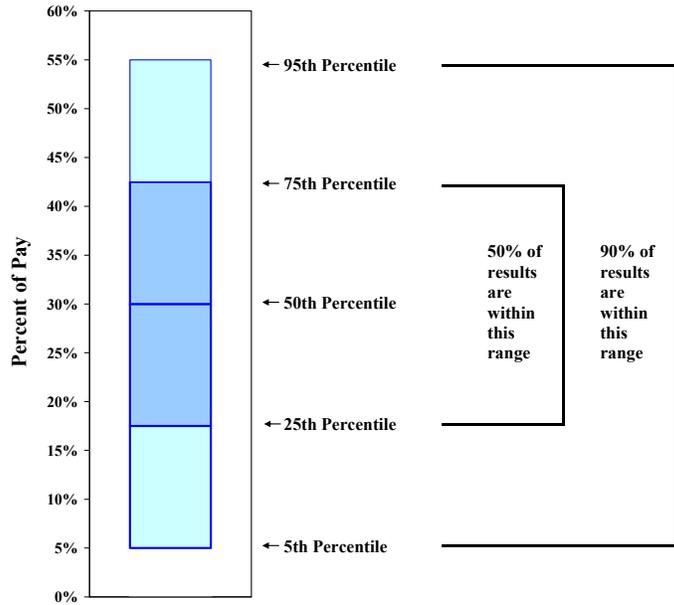
**Annual Required Contribution**  
**Fiscal Year 2012/13 - 4.00% Discount Rate**  
 (Amounts in 000's)

ARC	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ <b>ARC \$</b>							
• Normal Cost	\$32	\$37	\$ 538	\$ 526	\$148	\$1,750	\$3,031
• UAAL Amort	<u>6</u>	<u>57</u>	<u>642</u>	<u>557</u>	<u>497</u>	<u>2,746</u>	<u>4,505</u>
• Total ARC	38	94	1,180	1,084	644	4,497	7,536
■ <b>Projected Pay</b>	65	1,845	4,546	13,685	8,833	11,141	40,115
■ <b>ARC %</b>							
• Normal Cost	49.6%	2.0%	11.8%	3.8%	1.7%	15.7%	7.6%
• UAAL Amort	<u>9.0%</u>	<u>3.0%</u>	<u>14.1%</u>	<u>4.1%</u>	<u>5.6%</u>	<u>24.7%</u>	<u>11.2%</u>
• Total ARC%	58.6%	5.1%	25.9%	7.9%	7.3%	40.4%	18.8%



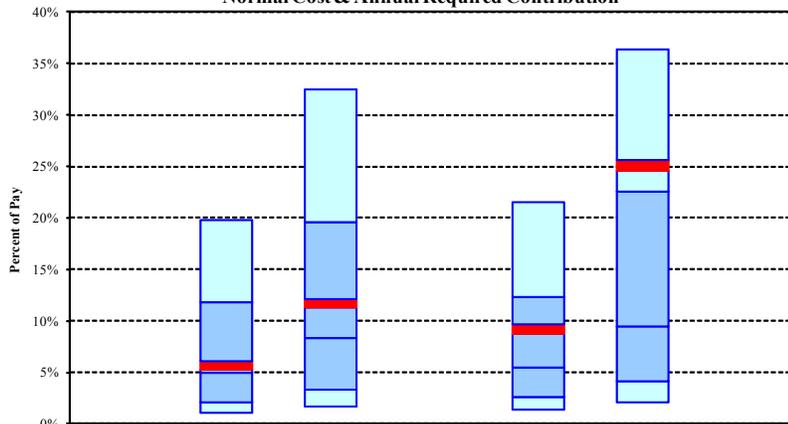
# BARTEL ASSOCIATES GASB 45 DATABASE

### Bartel Associates GASB 45 OPEB Database Sample Percentile Graph



# BARTEL ASSOCIATES GASB 45 DATABASE

### Bartel Associates GASB 45 OPEB Database Normal Cost & Annual Required Contribution



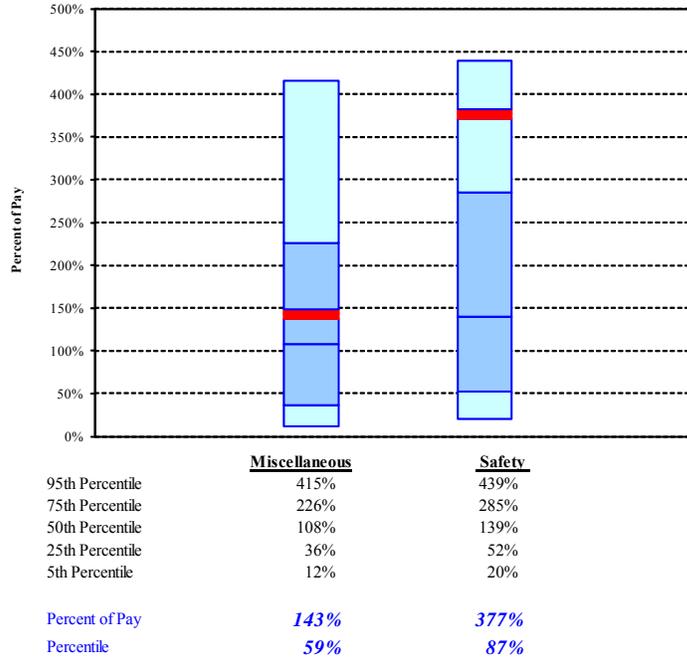
	Miscellaneous		Safety	
	NC	ARC	NC	ARC
95th Percentile	19.8%	32.4%	21.6%	36.3%
75th Percentile	11.8%	19.6%	12.3%	22.6%
50th Percentile	5.0%	8.4%	5.5%	9.4%
25th Percentile	2.1%	3.3%	2.6%	4.2%
5th Percentile	1.0%	1.7%	1.4%	2.1%
<b>Percent of Pay</b>	<b>5.6%</b>	<b>11.7%</b>	<b>9.2%</b>	<b>25.1%</b>
<b>Percentile</b>	<b>53%</b>	<b>57%</b>	<b>68%</b>	<b>80%</b>

Discount Rate = 4.00%, Average Amortization Period = 27.0 Years



# BARTEL ASSOCIATES GASB 45 DATABASE

## Bartel Associates GASB 45 OPEB Database Actuarial Accrued Liability



Discount Rate = 4.00%



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## ACTUARIAL CERTIFICATION

This report presents the City of Vallejo Retiree Healthcare Plan ("Plan") June 30, 2012 actuarial valuation. The purpose of this valuation is to:

- Determine the Governmental Accounting Standards Board Statement No. 45 June 30, 2012 Benefit Obligations,
- Determine the Plan's June 30, 2012 Funded Status, and
- Calculate the 2012/13 and 2013/14 Annual Required Contributions.

The report provides information intended for reporting under GASB 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the City for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and asset information provided by the City as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principals and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASB 45. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

John E. Bartel, ASA, MAAA, FCA  
President  
Bartel Associates, LLC  
April 12, 2013

Joseph R. D'Onofrio, FSA, EA, MAAA, FCA  
Assistant Vice President  
Bartel Associates, LLC  
April 12, 2013



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EXHIBITS

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Definitions	E-31



EXHIBITS

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**PREMIUMS**

**2012 PEMHCA Monthly Premiums**

**Bay Area**

Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	\$711.10	\$1,422.20	\$1,848.86	\$337.99	\$675.98	\$1,013.97
Blue Shield NetValue	611.59	1,223.18	1,590.13	337.99	675.98	1,013.97
Kaiser	610.44	1,220.88	1,587.14	277.81	555.62	833.43
PERS Choice	574.15	1,148.30	1,492.79	383.44	766.88	1,150.32
PERS Select	487.39	974.78	1,267.21	383.44	766.88	1,150.32
PERSCare	1,029.23	2,058.46	2,676.00	432.43	864.86	1,297.29
PORAC	556.00	1,041.00	1,323.00	418.00	833.00	1,331.00



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**PREMIUMS**

**2013 PEMHCA Monthly Premiums**

**Bay Area**

Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	\$784.63	\$1,569.26	\$2,040.04	\$261.32	\$522.64	\$783.96
Blue Shield NetValue	670.21	1,340.42	1,742.55	261.32	522.64	783.96
Kaiser	668.63	1,337.26	1,738.44	288.37	576.74	865.11
PERS Choice	667.03	1,334.06	1,734.28	325.74	651.48	977.22
PERS Select	487.20	974.40	1,266.72	325.74	651.48	977.22
PERSCare	1,083.11	2,166.22	2,816.09	370.43	740.86	1,111.29
PORAC	581.00	1,088.00	1,382.00	418.00	833.00	1,331.00



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**PREMIUMS**

**PEMHCA Monthly Premium Increases**  
**Bay Area**

Medical Plan	2012-2013		2011-2013	
	Non Medicare	Medicare	Non Medicare	Medicare
Blue Shield	10.3%	(22.7%)	16.2%	(22.7%)
Blue Shield NetValue	9.6%	(22.7%)	15.3%	(22.7%)
Kaiser	9.5%	3.8%	17.5%	2.2%
PERS Choice	16.2%	(15.0%)	18.4%	(13.3%)
PERS Select	0.0%	(15.0%)	(1.1%)	(13.3%)
PERSCare	5.2%	(14.3%)	21.2%	(14.6%)
PORAC	4.5%	0.0%	10.2%	0.0%



**PARTICIPANT STATISTICS**

**Eligible Participants - June 30, 2012**

Participants	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ Actives	6	10	43	217	75	93	444
● Average Age	56.2	50.0	49.2	45.9	41.2	42.5	45.0
● Ave City Service	4.2	10.1	12.2	10.2	13.6	15.1	11.9
● Ave CalPERS Svc	8.4	19.1	14.3	11.5	14.8	17.8	13.8
● Average Pay	\$10,800	\$184,451	\$105,731	\$63,064	\$117,775	\$119,792	\$90,348
● Total Pay (000's)	65	1,845	4,546	13,685	8,833	11,141	40,115
■ Retirees <sup>9</sup>							
● Retired	3	21	64	175	39	54	356
● Disabled	0	1	3	21	49	81	155
● Survivors	<u>0</u>	<u>0</u>	<u>8</u>	<u>22</u>	<u>25</u>	<u>15</u>	<u>70</u>
● Total	3	22	75	218	113	150	581
● Average Age	69.1	68.0	69.7	67.9	65.4	62.3	66.2
● Ave Retire Age							
➢ Service Retired	56.6	58.5	58.0	58.0	54.2	53.5	56.9
➢ Disabled	n/a	47.0	55.7	46.2	49.3	44.8	46.6

<sup>9</sup> 10 waived surviving spouses over age 65 placed without bargaining unit data (Misc/Police/Fire to IBEW/VPOA/IAFF).



**PARTICIPANT STATISTICS**

**Eligible Participants – June 30, 2010**

<b>Participants</b>	<b>Council</b>	<b>Exec</b>	<b>CAMP</b>	<b>IBEW</b>	<b>IAFF</b>	<b>VPOA</b>	<b>Total</b>
■ Actives	7	7	41	219	67	97	438
● Average Age	54.0	57.6	48.4	46.5	42.8	42.2	45.5
● Ave City Service	4.3	18.0	11.5	11.1	14.9	14.7	12.5
● Ave CalPERS Svc	7.4	24.2	13.8	12.5	16.5	17.0	14.3
● Average Pay <sup>10</sup>	\$14,700	\$175,954	\$107,316	\$64,180	\$118,065	\$123,100	\$90,504
● Total Pay (000's)	103	1,232	4,400	14,055	7,910	11,941	39,641
■ Retirees							
● Retired	4	16	62	154	38	54	328
● Disabled	0	0	3	22	51	80	156
● Survivors	<u>0</u>	<u>0</u>	<u>5</u>	<u>16</u>	<u>25</u>	<u>13</u>	<u>59</u>
● Total	4	16	70	192	114	147	543
● Average Age	72.2	65.3	68.1	67.6	65.7	61.9	65.7
● Ave Retire Age							
➢ Service Retired	61.7	58.4	58.1	58.3	54.4	53.8	57.1
➢ Disabled	n/a	n/a	55.8	46.2	49.5	44.8	46.7

<sup>10</sup> Average pay assumed for 7 actives with missing pay (1 CAMP & 6 VPOA).



**PARTICIPANT STATISTICS**

**Medical Plan Participation**  
**Non-Waived Participants**

<b>Medical Plan</b>	<b>Actives</b>	<b>Retirees</b>	
		<b>&lt; 65</b>	<b>≥ 65</b>
Blue Shield	13%	10%	2%
Blue Shield Net Value	2%	1%	0%
Kaiser	79%	66%	73%
PERS Choice	2%	12%	10%
PERS Select	0%	1%	0%
PERSCare	0%	2%	12%
PORAC	4%	8%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>



**PARTICIPANT STATISTICS**

**Active Medical Coverage**

Medical Plan	Single	2-Party	Family	Waived	Total
Blue Shield	10	8	31		49
Blue Shield NetValue		1	5		6
Kaiser	89	52	154		295
PERS Choice	2	1	3		6
PERS Select					0
PERSCare					0
PORAC	2	3	9		14
Waived				74	74
<b>Total</b>	<b>103</b>	<b>65</b>	<b>202</b>	<b>74</b>	<b>444</b>

Election %	28%	17%	55%		
Waived %				17%	



**PARTICIPANT STATISTICS**

**Retiree Medical Coverage**  
**Under Age 65**

	Single	2-Party	Family	Waived	Total
Blue Shield	10	6	9		25
Blue Shield NetValue	2		1		3
Kaiser	75	52	40		167
PERS Choice	12	16	3		31
PERS Select	1				1
PERSCare	4	1			5
PORAC	4	8	8		20
Waived				32	32
<b>Total</b>	<b>108</b>	<b>83</b>	<b>61</b>	<b>32</b>	<b>284</b>

Election %	43%	33%	24%		
Waived %				11%	



**PARTICIPANT STATISTICS**

**Retiree Medical Coverage**  
**Age 65 & Over**

	Single	2-Party	Family	Waived	Total
Blue Shield	5				5
Blue Shield NetValue					0
Kaiser	84	88	4		176
PERS Choice	8	16	1		25
PERS Select					0
PERSCare	19	11			30
PORAC	2	4			6
Waived				55	55
<b>Total</b>	<b>118</b>	<b>119</b>	<b>5</b>	<b>55</b>	<b>297</b>

Election %	49%	49%	2%		
Waived %				19%	



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**PARTICIPANT STATISTICS**

**Actives by Age and City Service**  
**Miscellaneous**

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	3							3
25-29	6	10	2					18
30-34	4	10	8	3				25
35-39	4	14	2	7				27
40-44	3	6	7	7	1	2	1	27
45-49	5	13	11	16	5	8	4	62
50-54	4	5	8	8	6	11	9	51
55-59		4	4	15	6	7	2	38
60-64		3	3	3	3	1	4	17
≥ 65	2	3		1				6
<b>Total</b>	<b>31</b>	<b>68</b>	<b>45</b>	<b>60</b>	<b>21</b>	<b>29</b>	<b>20</b>	<b>274</b>



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**PARTICIPANT STATISTICS**

**Actives by Age and City Service**  
**Safety**

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25								
25-29	16		2					18
30-34	3	2	10	3				18
35-39			5	21				26
40-44		1	7	21	5	5		39
45-49				9	5	22	11	47
50-54				2	4	9	2	17
55-59						2	1	3
60-64							1	1
≥ 65					1			1
<b>Total</b>	<b>19</b>	<b>3</b>	<b>24</b>	<b>56</b>	<b>15</b>	<b>38</b>	<b>15</b>	<b>170</b>



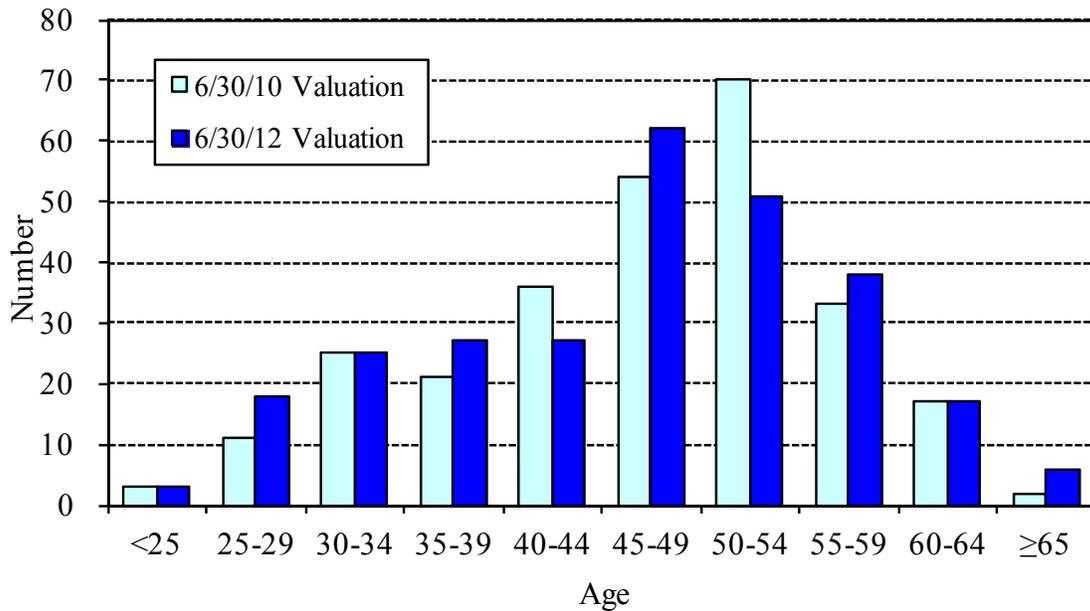
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**PARTICIPANT STATISTICS**

**Active Age Distribution**  
**Miscellaneous**



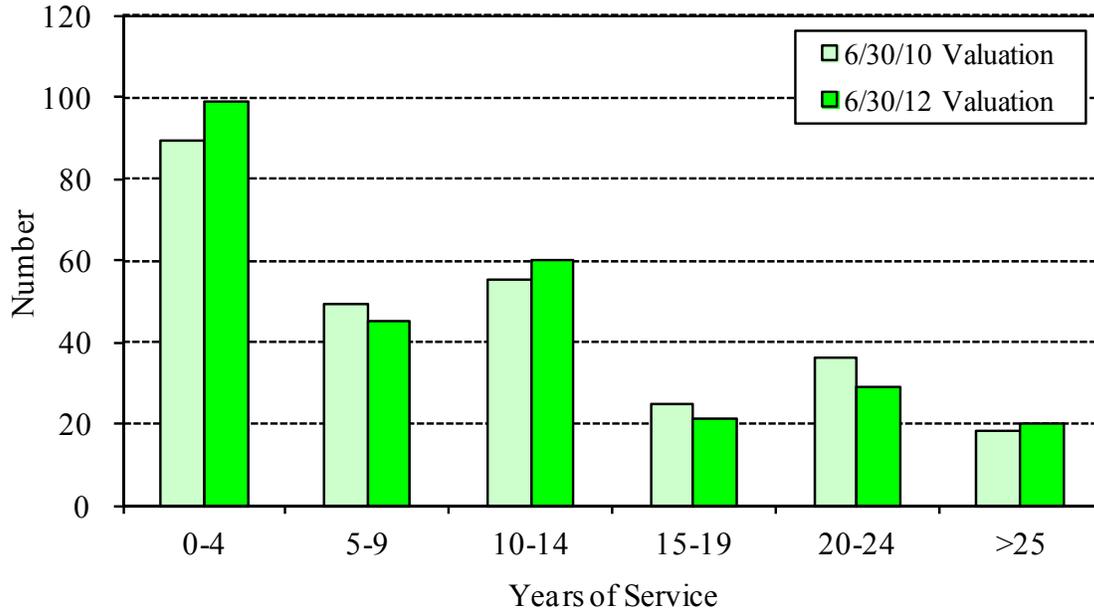
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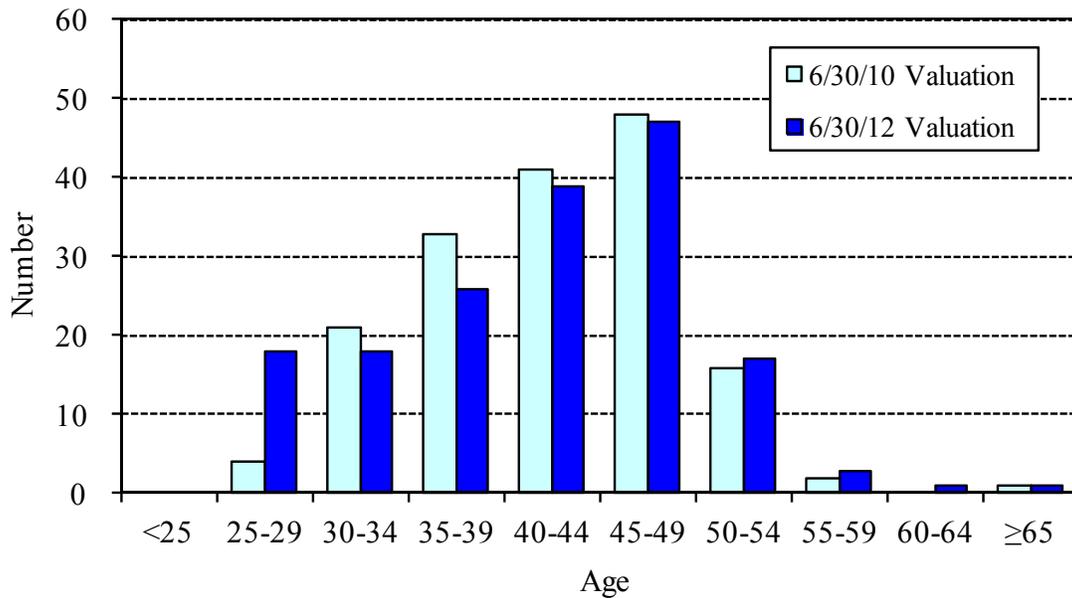
PARTICIPANT STATISTICS

**Active Service Distribution**  
**Miscellaneous**



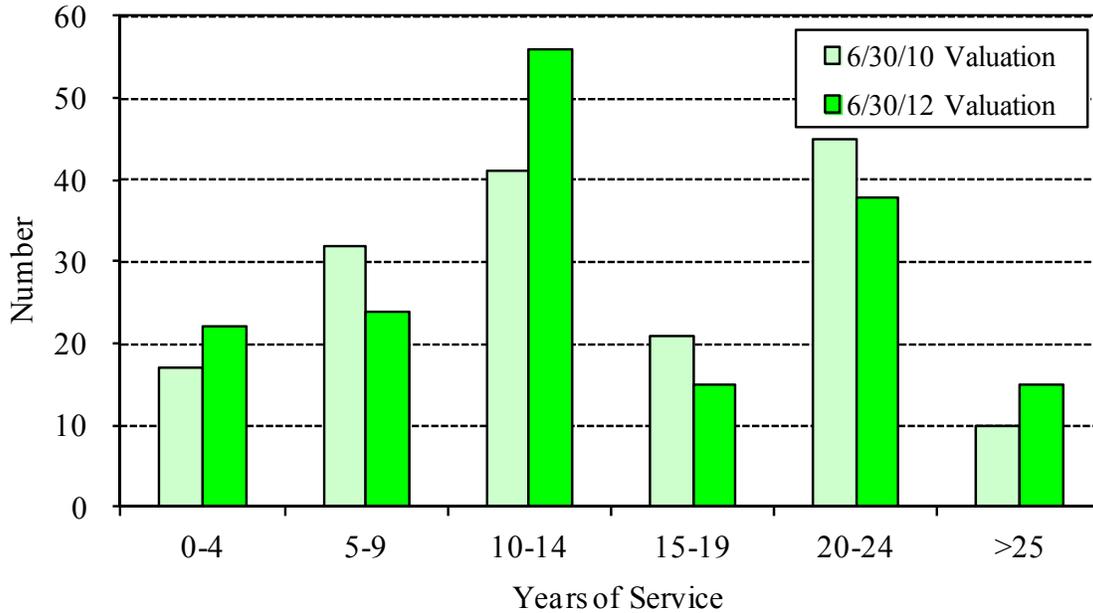
PARTICIPANT STATISTICS

**Active Age Distribution**  
**Safety**



**PARTICIPANT STATISTICS**

**Active Service Distribution**  
**Safety**



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**PARTICIPANT STATISTICS**

**Retiree Healthcare Coverage by Age Group**  
**Miscellaneous**

Age	Single	2-Party	Family	Waived	Total
Under 50	1	1		1	3
50-54	7	1		5	13
55-59	25	14	6	8	53
60-64	32	17	7	9	65
65-69	22	18	1	18	59
70-74	12	17		5	34
75-79	9	13		6	28
80-84	12	8		7	27
Over 85	10	7		6	23
<b>Total</b>	<b>130</b>	<b>96</b>	<b>14</b>	<b>65</b>	<b>305</b>

Average Age	67.6	69.6	60.6	69.0	68.2
< 65 Election %	58%	30%	12%	17%	
≥ 65 Election %	50%	49%	1%	25%	
<b>Total Election %</b>	<b>54%</b>	<b>40%</b>	<b>6%</b>	<b>21%</b>	



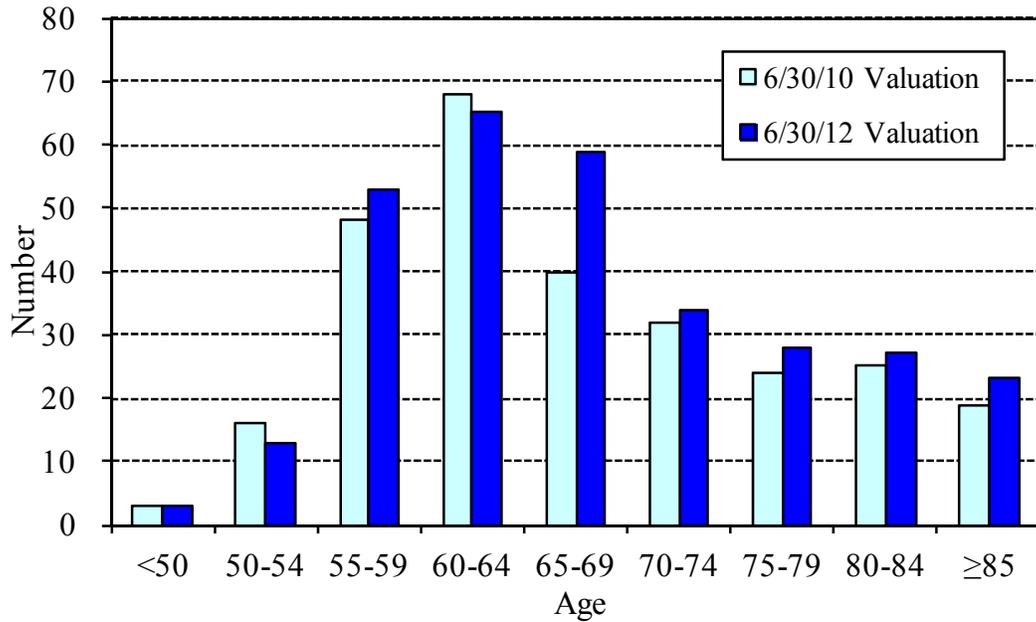
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**PARTICIPANT STATISTICS**

**Retiree Age Distribution**  
**Miscellaneous**



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**PARTICIPANT STATISTICS**

**Retiree Healthcare Coverage by Age Group**  
**Safety**

Age	Single	2-Party	Family	Waived	Total
Under 50	6	7	17		30
50-54	7	9	18	5	39
55-59	15	21	8	4	48
60-64	15	13	5		33
65-69	14	21	1	4	40
70-74	11	21	2	4	38
75-79	9	7	1	2	19
80-84	10	4		3	17
Over 85	9	3			12
<b>Total</b>	<b>96</b>	<b>106</b>	<b>52</b>	<b>22</b>	<b>276</b>
<b>Average Age</b>	<b>68.0</b>	<b>65.1</b>	<b>53.5</b>	<b>66.7</b>	<b>64.0</b>
<b>&lt; 65 Election %</b>	<b>31%</b>	<b>35%</b>	<b>34%</b>	<b>6%</b>	
<b>≥ 65 Election %</b>	<b>47%</b>	<b>50%</b>	<b>3%</b>	<b>10%</b>	
<b>Total Election %</b>	<b>38%</b>	<b>42%</b>	<b>20%</b>	<b>8%</b>	



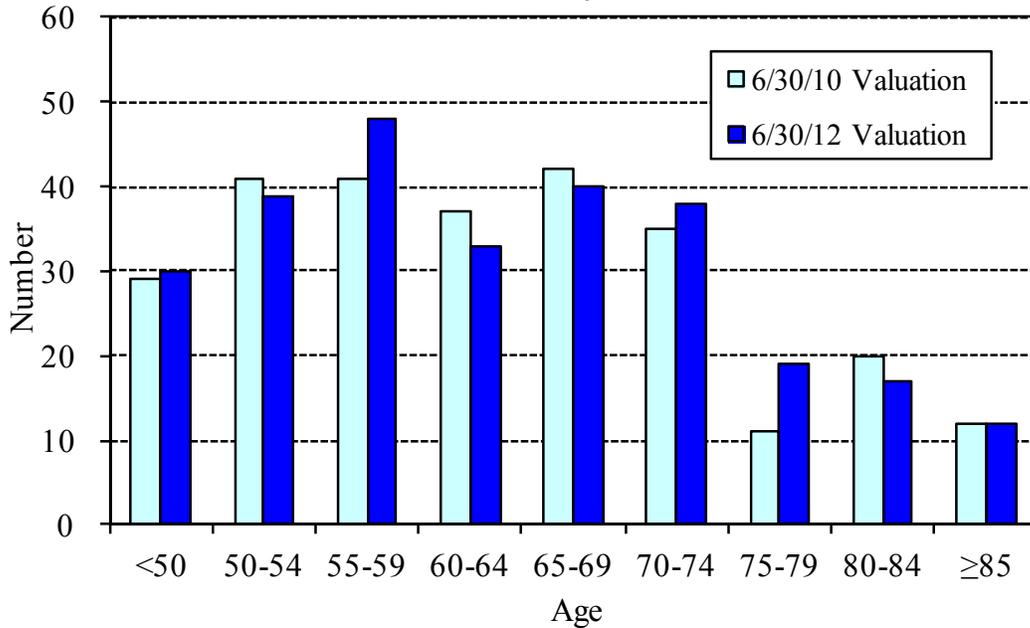
April 12, 2013

E-18



## PARTICIPANT STATISTICS

### Retiree Age Distribution Safety



## ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2010 Valuation	June 30, 2012 Valuation
<b>■ Valuation Date</b>	<ul style="list-style-type: none"> <li>• June 30, 2010</li> <li>• 2010/11 &amp; 2011/12 ARCs</li> <li>• ARC calculated as of beginning of the year with interest to end of year</li> <li>• No lag period</li> </ul>	<ul style="list-style-type: none"> <li>• June 30, 2012</li> <li>• 2012/13 &amp; 2013/14 ARCs</li> <li>• ARC calculated as of beginning of the year with interest to end of year</li> <li>• No lag period</li> </ul>
<b>■ Funding Policy</b>	<ul style="list-style-type: none"> <li>• Pay-as-you-go funding</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
<b>■ Discount Rate</b>	<ul style="list-style-type: none"> <li>• 4.50% - Not prefunded, assets in City's investment fund</li> </ul>	<ul style="list-style-type: none"> <li>• 4.00% - Not prefunded, assets in City's investment fund</li> </ul>
<b>■ General Inflation</b>	<ul style="list-style-type: none"> <li>• 3% annually</li> <li>• Basis for aggregate payroll and discount rate assumptions</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>
■ Aggregate Payroll Increases	<ul style="list-style-type: none"> <li>• 3.25% annually</li> <li>• Inflation plus 0.25%</li> <li>• For Normal Cost calculation and UAAL amortization</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
■ Merit Payroll Increases	<ul style="list-style-type: none"> <li>• CalPERS 1997-2007 Experience Study</li> <li>• Added to aggregate payroll increase assumption for Normal Cost calculation</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
■ Fixed Dollar Cap Increase	<ul style="list-style-type: none"> <li>• 0%</li> <li>• Cap not less than PEMHCA minimum</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>																																																																																																		
■ Medical Trend	<table border="0"> <tr> <td rowspan="2">Fiscal Year</td> <td colspan="4"><u>Increase from Prior Year</u></td> </tr> <tr> <td colspan="2"><u>Non-Medicare</u></td> <td colspan="2"><u>Medicare</u></td> </tr> <tr> <td><u>Begin</u></td> <td><u>HMO</u></td> <td><u>PPO</u></td> <td><u>HMO</u></td> <td><u>PPO</u></td> </tr> <tr> <td>2010</td> <td colspan="4">Premiums</td> </tr> <tr> <td>2011</td> <td colspan="4">Premiums</td> </tr> <tr> <td>2012</td> <td>7.75%</td> <td>8.25%</td> <td>8.00%</td> <td>8.50%</td> </tr> <tr> <td>2013</td> <td>7.10%</td> <td>7.50%</td> <td>7.30%</td> <td>7.70%</td> </tr> <tr> <td>2014</td> <td>6.45%</td> <td>6.75%</td> <td>6.60%</td> <td>6.90%</td> </tr> <tr> <td>2015</td> <td>5.80%</td> <td>6.00%</td> <td>5.90%</td> <td>6.10%</td> </tr> <tr> <td>2016</td> <td>5.15%</td> <td>5.25%</td> <td>5.20%</td> <td>5.30%</td> </tr> <tr> <td>2017+</td> <td>4.50%</td> <td>4.50%</td> <td>4.50%</td> <td>4.50%</td> </tr> </table>	Fiscal Year	<u>Increase from Prior Year</u>				<u>Non-Medicare</u>		<u>Medicare</u>		<u>Begin</u>	<u>HMO</u>	<u>PPO</u>	<u>HMO</u>	<u>PPO</u>	2010	Premiums				2011	Premiums				2012	7.75%	8.25%	8.00%	8.50%	2013	7.10%	7.50%	7.30%	7.70%	2014	6.45%	6.75%	6.60%	6.90%	2015	5.80%	6.00%	5.90%	6.10%	2016	5.15%	5.25%	5.20%	5.30%	2017+	4.50%	4.50%	4.50%	4.50%	<table border="0"> <tr> <td rowspan="2">Fiscal Year</td> <td colspan="2"><u>Increase from Prior Year</u></td> </tr> <tr> <td><u>Non-Medicare</u></td> <td><u>Medicare</u></td> </tr> <tr> <td><u>Begin</u></td> <td colspan="2"><u>All Plans</u></td> </tr> <tr> <td>2010</td> <td colspan="2">n/a</td> </tr> <tr> <td>2011</td> <td colspan="2">n/a</td> </tr> <tr> <td>2012</td> <td colspan="2">Premiums</td> </tr> <tr> <td>2013</td> <td colspan="2">Premiums</td> </tr> <tr> <td>2014</td> <td>8.5%</td> <td>8.9%</td> </tr> <tr> <td>2015</td> <td>8.0%</td> <td>8.3%</td> </tr> <tr> <td>2016</td> <td>7.5%</td> <td>7.8%</td> </tr> <tr> <td>2017</td> <td>7.0%</td> <td>7.2%</td> </tr> <tr> <td>2018</td> <td>6.5%</td> <td>6.7%</td> </tr> <tr> <td>2019</td> <td>6.0%</td> <td>6.1%</td> </tr> <tr> <td>2020</td> <td>5.5%</td> <td>5.6%</td> </tr> <tr> <td>2021+</td> <td>5.0%</td> <td>5.0%</td> </tr> </table>	Fiscal Year	<u>Increase from Prior Year</u>		<u>Non-Medicare</u>	<u>Medicare</u>	<u>Begin</u>	<u>All Plans</u>		2010	n/a		2011	n/a		2012	Premiums		2013	Premiums		2014	8.5%	8.9%	2015	8.0%	8.3%	2016	7.5%	7.8%	2017	7.0%	7.2%	2018	6.5%	6.7%	2019	6.0%	6.1%	2020	5.5%	5.6%	2021+	5.0%	5.0%
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■ PEMHCA Premium Increases	<ul style="list-style-type: none"> <li>• n/a</li> </ul>	<ul style="list-style-type: none"> <li>• CalPERS may be using reserves to mitigate PEMHCA premium increases</li> <li>• 1.6% load on AAL equal to 1/3 of premium gain</li> </ul>																																																																																																		



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>															
■ PEMHCA Minimum Increases	• 4.5% annually	• Same															
■ Mortality, Termination, Disability	• CalPERS 1997-2007 Experience Study	<ul style="list-style-type: none"> <li>• CalPERS 1997-2007 Experience Study</li> <li>• Mortality improvement projection Scale AA. Sample annual longevity increases:</li> </ul> <table border="1"> <thead> <tr> <th><u>Age</u></th> <th><u>Male</u></th> <th><u>Female</u></th> </tr> </thead> <tbody> <tr> <td>50</td> <td>1.8%</td> <td>1.7%</td> </tr> <tr> <td>60</td> <td>1.6%</td> <td>0.5%</td> </tr> <tr> <td>70</td> <td>1.5%</td> <td>0.5%</td> </tr> <tr> <td>80</td> <td>1.0%</td> <td>0.7%</td> </tr> </tbody> </table>	<u>Age</u>	<u>Male</u>	<u>Female</u>	50	1.8%	1.7%	60	1.6%	0.5%	70	1.5%	0.5%	80	1.0%	0.7%
<u>Age</u>	<u>Male</u>	<u>Female</u>															
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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>																																																																																				
■ Service Retirement	<ul style="list-style-type: none"> <li>• CalPERS 1997-2007 Experience Study</li> </ul> <table border="1"> <thead> <tr> <th></th> <th><u>Misc</u></th> <th><u>Fire</u></th> <th><u>Police</u></th> </tr> </thead> <tbody> <tr> <td>PERS Hire</td> <td>2.7%@55</td> <td>3%@50</td> <td>3%@50</td> </tr> <tr> <td>ERA</td> <td>58</td> <td>55</td> <td>54</td> </tr> </tbody> </table>		<u>Misc</u>	<u>Fire</u>	<u>Police</u>	PERS Hire	2.7%@55	3%@50	3%@50	ERA	58	55	54	<table border="1"> <thead> <tr> <th></th> <th><u>CalPERS</u></th> <th><u>Misc</u></th> <th><u>ERA<sup>11</sup></u></th> </tr> </thead> <tbody> <tr> <td>CalPERS Hire Age</td> <td></td> <td>35</td> <td></td> </tr> <tr> <td>Hire &lt; 1/1/13</td> <td></td> <td>2.7%@55</td> <td>58.1</td> </tr> <tr> <td>Hire ≥ 1/1/13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>➤ Classic Member</td> <td></td> <td>2.7%@55</td> <td>58.1</td> </tr> <tr> <td>➤ New Member</td> <td></td> <td>2.5%@67</td> <td>59.4</td> </tr> <tr> <td></td> <td><u>CalPERS</u></td> <td><u>Fire</u></td> <td><u>ERA</u></td> </tr> <tr> <td>CalPERS Hire Age</td> <td></td> <td>25</td> <td></td> </tr> <tr> <td>Hire &lt; 1/1/13</td> <td></td> <td>3%@50</td> <td>54.6</td> </tr> <tr> <td>Hire ≥ 1/1/13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>➤ Classic Member</td> <td></td> <td>2%@50</td> <td>56.9</td> </tr> <tr> <td>➤ New Member</td> <td></td> <td>2.7%@57</td> <td>n/a</td> </tr> <tr> <td></td> <td><u>CalPERS</u></td> <td><u>Police</u></td> <td><u>ERA</u></td> </tr> <tr> <td>CalPERS Hire Age</td> <td></td> <td>25</td> <td></td> </tr> <tr> <td>Hire &lt; 1/1/13</td> <td></td> <td>3%@50</td> <td>53.6</td> </tr> <tr> <td>Hire ≥ 1/1/13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>➤ Classic Member</td> <td></td> <td>3%@50</td> <td>53.6</td> </tr> <tr> <td>➤ New Member</td> <td></td> <td>2.7%@57</td> <td>55.8</td> </tr> </tbody> </table>		<u>CalPERS</u>	<u>Misc</u>	<u>ERA<sup>11</sup></u>	CalPERS Hire Age		35		Hire < 1/1/13		2.7%@55	58.1	Hire ≥ 1/1/13				➤ Classic Member		2.7%@55	58.1	➤ New Member		2.5%@67	59.4		<u>CalPERS</u>	<u>Fire</u>	<u>ERA</u>	CalPERS Hire Age		25		Hire < 1/1/13		3%@50	54.6	Hire ≥ 1/1/13				➤ Classic Member		2%@50	56.9	➤ New Member		2.7%@57	n/a		<u>CalPERS</u>	<u>Police</u>	<u>ERA</u>	CalPERS Hire Age		25		Hire < 1/1/13		3%@50	53.6	Hire ≥ 1/1/13				➤ Classic Member		3%@50	53.6	➤ New Member		2.7%@57	55.8
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<sup>11</sup> Expected Retirement Ages for members ≥ 1/1/13 based on CalPERS retirement assumptions for their AB 340 cost analysis.



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>
<ul style="list-style-type: none"> <li>■ CalPERS Service</li> </ul>	<ul style="list-style-type: none"> <li>• CalPERS service</li> <li>• Used for CalPERS demographic tables which are based on total CalPERS service</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
<ul style="list-style-type: none"> <li>■ PEMHCA Admin Fee</li> </ul>	<ul style="list-style-type: none"> <li>• 0.37% of premium</li> </ul>	<ul style="list-style-type: none"> <li>• 0.25% of premium</li> </ul>
<ul style="list-style-type: none"> <li>■ Participation at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>• Actives:                             <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived - 90%</li> </ul> </li> <li>• Retirees &amp; Surviving Spouse:                             <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived &lt; 65 - 20% at 65</li> <li>➢ Waived ≥ 65 - 0%</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Actives &amp; Surviving Spouse:                             <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived - 90%</li> </ul> </li> <li>• Retirees &amp; Surviving Spouse:                             <ul style="list-style-type: none"> <li>➢ Covered - 100%</li> <li>➢ Waived &lt; 65 - 20% at 65</li> <li>➢ Waived ≥ 65 - 0%</li> </ul> </li> </ul>



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>
<ul style="list-style-type: none"> <li>■ Medical Plan at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>• Actives:                             <ul style="list-style-type: none"> <li>➢ Covered - same as current plan election</li> <li>➢ Waived - weighted current retiree non-Medicare eligible and Medicare eligible plan elections</li> </ul> </li> <li>• Retirees currently &lt; 65:                             <ul style="list-style-type: none"> <li>➢ Coverage &lt; 65 - Same as current plan election</li> </ul> </li> <li>• Retirees currently ≥ 65 - Same as current plan election</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Retiree Coverage Election at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>• Covered – based on current coverage election</li> <li>• Waived – 80% married and elect 2-party coverage</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>
<p>■ Spouse &amp; Dependent Coverage at Retirement</p>	<ul style="list-style-type: none"> <li>• Spouse coverage - current coverage election</li> <li>• Family coverage:                             <ul style="list-style-type: none"> <li>➢ Current actives:                                     <ul style="list-style-type: none"> <li>- CAMP - 20% until 65</li> <li>- VPOA - 35% until 65</li> <li>- Others - n/a</li> </ul> </li> <li>➢ Current retirees - current coverage until 65</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> <li>• Family coverage data for retirees &lt; 65:                             <ul style="list-style-type: none"> <li>➢ CAMP - 22%</li> <li>➢ VPOA - 40%</li> </ul> </li> </ul>



**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2010 Valuation</b>	<b>June 30, 2012 Valuation</b>																		
<p>■ Medicare Eligibility</p>	<table border="0"> <tr> <td><u>Hire</u></td> <td><u>Misc</u></td> <td><u>Safety</u></td> </tr> <tr> <td>&lt; 4/1/86</td> <td>100%</td> <td>95%</td> </tr> <tr> <td>≥ 4/1/86</td> <td>100%</td> <td>100%</td> </tr> </table> <ul style="list-style-type: none"> <li>• 5.4% of Safety retirees over 65 hired before 4/1/86 are not in Medicare per retiree data</li> <li>• Everyone eligible for Medicare will elect Part B coverage</li> <li>• Hire date for retirees was estimated from CalPERS retirement date and service</li> </ul>	<u>Hire</u>	<u>Misc</u>	<u>Safety</u>	< 4/1/86	100%	95%	≥ 4/1/86	100%	100%	<table border="0"> <tr> <td><u>Hire</u></td> <td><u>Misc</u></td> <td><u>Safety</u></td> </tr> <tr> <td>&lt; 4/1/86</td> <td>100%</td> <td>95%</td> </tr> <tr> <td>≥ 4/1/86</td> <td>100%</td> <td>100%</td> </tr> </table> <ul style="list-style-type: none"> <li>• 3.5% of Safety retirees over 65 hired before 4/1/86 are not in Medicare per retiree data</li> <li>• Everyone eligible for Medicare will elect Part B coverage</li> <li>• Hire date for retirees was estimated from CalPERS retirement date and service</li> </ul>	<u>Hire</u>	<u>Misc</u>	<u>Safety</u>	< 4/1/86	100%	95%	≥ 4/1/86	100%	100%
<u>Hire</u>	<u>Misc</u>	<u>Safety</u>																		
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≥ 4/1/86	100%	100%																		
<u>Hire</u>	<u>Misc</u>	<u>Safety</u>																		
< 4/1/86	100%	95%																		
≥ 4/1/86	100%	100%																		
<p>■ Spouse Age</p>	<ul style="list-style-type: none"> <li>• Actives - males 3 years older than females</li> <li>• Retirees - males 3 years older than females if spouse birth date not provided</li> </ul>	<ul style="list-style-type: none"> <li>• Same</li> </ul>																		



**ACTUARIAL METHODS**

<b>Method</b>	<b>June 30, 2012 Valuation</b>
■ Cost Method	<ul style="list-style-type: none"> <li>• Entry Age Normal</li> <li>• Normal Cost is a level percentage of payroll</li> <li>• City date of hire used for entry age</li> </ul>
■ Amortization Method	<ul style="list-style-type: none"> <li>• Level percent of payroll</li> </ul>
■ Amortization Period for ARC & NOO	<ul style="list-style-type: none"> <li>• 30-year fixed (closed) period for 6/30/09 UAAL for 2009/10 ARC</li> <li>• 27-year fixed (closed) period for 6/30/12 UAAL for 2012/13 ARC</li> <li>• Amortization period decreases by one year each fiscal year</li> <li>• When amortization period reaches 15 years, experience gains and losses will be amortized over fixed (closed) 15-year periods and plan and assumption changes will be amortized over fixed (closed) 20-year periods</li> </ul>
■ PEMHCA Premiums	<ul style="list-style-type: none"> <li>• Prorated from calendar year to fiscal year</li> <li>• Calendar year premiums used for FY for 6/30/10 valuation</li> </ul>



**ACTUARIAL METHODS**

<b>Method</b>	<b>June 30, 2012 Valuation</b>
■ Implied Subsidy	<ul style="list-style-type: none"> <li>• Employer cost for allowing non-Medicare eligible retirees to participate at active rates</li> <li>• Community rated plans are not required to value an implied subsidy</li> <li>• Valuation does not include an implied subsidy</li> <li>• Valuation study includes an estimate of implied subsidy under PEMHCA if later required by new ASOP 6</li> </ul>
■ Future New Entrants	<ul style="list-style-type: none"> <li>• Valuation Results – Closed group, no new hires for first year ARC</li> <li>• Projections and second year ARCs:             <ul style="list-style-type: none"> <li>➢ Actives – Total active pay increased in accordance with aggregate payroll assumption</li> <li>➢ Retirees – no additional retirees from new hires over 10-year projection period</li> </ul> </li> </ul>
■ Rounding	<ul style="list-style-type: none"> <li>• Numbers in this report may not add to totals due to rounding</li> </ul>



## DEFINITIONS

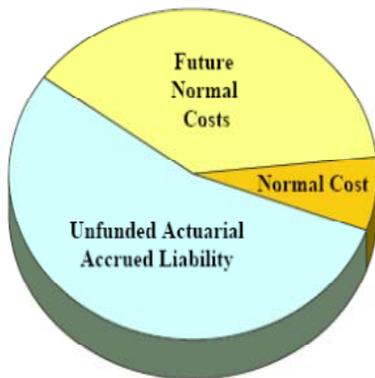
<p>■ GASB 45 Accrual Accounting</p>	<ul style="list-style-type: none"> <li>• Project future employer-provided benefit cash flow for current active employees and current retirees</li> <li>• Discount projected cash flow to valuation date using discount rate and actuarial assumptions to determine present value of benefits (PVB)</li> <li>• Discount rate is expected long-term return on plan assets</li> <li>• Allocate PVB to past, current, and future periods</li> <li>• Normal Cost is portion of PVB allocated to current fiscal year</li> <li>• Actuarial cost method used for valuation is Entry Age Normal Cost method which determines Normal Cost as a level percent of payroll</li> <li>• Actuarial Accrued Liability (AAL) is portion of PVB allocated to prior service with the employer</li> <li>• Unfunded AAL (UAAL) is AAL less Plan Assets</li> <li>• Assets must be in segregated and restricted trust to be considered Plan Assets for GASB 45</li> </ul>
<p>■ PayGo Cost</p>	<ul style="list-style-type: none"> <li>• Cash subsidy is employer pay-as-you-go benefit payments for retirees</li> <li>• Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums</li> </ul>



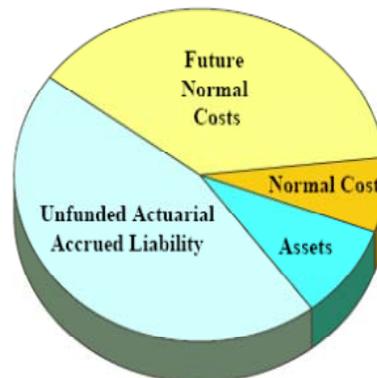
## DEFINITIONS

### Present Value of Benefits

**Present Value of Benefits  
(Without Plan Assets)**



**Present Value of Benefits  
(With Plan Assets)**



## DEFINITIONS

■ Annual Required Contribution (ARC)	● GASB 45 contribution is Normal Cost plus amortization of: <ul style="list-style-type: none"><li>➢ Initial UAAL and AAL for plan, assumption, and method changes</li><li>➢ Experience gains and losses (difference between actual experience and that expected from assumptions)</li><li>➢ Contribution gains and losses (difference between ARC and actual contributions)</li></ul>
■ Net OPEB Obligation (NOO)	● NOO is accumulated amounts expensed but not funded ● Net OPEB Asset if amounts funded exceed those expensed
■ Annual OPEB Cost (AOC)	● Expense for current period including: <ul style="list-style-type: none"><li>➢ ARC</li><li>➢ Interest on NOO</li><li>➢ Adjustment of NOO</li></ul> ● Adjustment of NOO prevents double counting of expense since ARCs include amortization of prior contribution gains and losses previously expensed



## DEFINITIONS

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