



**ALAMEDA COUNTY WATER DISTRICT  
RETIREE HEALTHCARE PLAN**

**June 30, 2013 GASB 45 Actuarial Valuation  
Final Results**

*Presented by* John E. Bartel, President  
*Prepared by* Bianca Lin, Assistant Vice President & Actuary  
Katherine Moore, Associate Actuary  
Adam Zimmerer, Actuarial Analyst  
**Bartel Associates, LLC**

March 28, 2014

**AGENDA**

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## BENEFIT SUMMARY

	Hired < 8/1/2002	8/1/02 ≤ Hired < 1/1/09	Hired ≥ 1/1/2009																								
<ul style="list-style-type: none"> <li>■ Medical Eligibility</li> </ul>	<ul style="list-style-type: none"> <li>■ Full-time employees that retire directly from the District under CalPERS (age 50 and 5 years of CalPERS service or disability)</li> <li>■ Current Active Directors not eligible</li> </ul>																										
<ul style="list-style-type: none"> <li>■ Medical Benefit</li> </ul>	<ul style="list-style-type: none"> <li>■ District pays premium up to a % of Cap</li> <li>■ Disabled retirees are entitled to 100% of the District cap</li> </ul>																										
<ul style="list-style-type: none"> <li>■ Cap</li> </ul>	<ul style="list-style-type: none"> <li>■ District Cap Tier I = Max (Bay Area highest cost HMO or PERS Choice PPO)</li> <li>■ For single, 2-party and family coverage</li> </ul>	<ul style="list-style-type: none"> <li>■ Same as Tier I</li> <li>■ For single, 2-party and family coverage</li> </ul>	<ul style="list-style-type: none"> <li>■ District Cap Tier III = Min (Bay Area lowest cost HMO or PERS Choice PPO)</li> <li>■ For single and 2-party coverage only</li> </ul>																								
<ul style="list-style-type: none"> <li>■ Cap %</li> </ul>	<ul style="list-style-type: none"> <li>■ 100%</li> </ul>	<ul style="list-style-type: none"> <li>■ Based on CalPERS service (min 5 yrs ACWD service):</li> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>Svc</u></td> <td style="text-align: center;"><u>Cap %</u></td> </tr> <tr> <td style="text-align: center;">&lt; 10</td> <td style="text-align: center;">PEMHCA Min</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">50%</td> </tr> <tr> <td style="text-align: center;">11</td> <td style="text-align: center;">55%</td> </tr> <tr> <td style="text-align: center;">⋮</td> <td style="text-align: center;">⋮</td> </tr> <tr> <td style="text-align: center;">20+</td> <td style="text-align: center;">100%</td> </tr> </table> </ul>	<u>Svc</u>	<u>Cap %</u>	< 10	PEMHCA Min	10	50%	11	55%	⋮	⋮	20+	100%	<ul style="list-style-type: none"> <li>■ Based on ACWD service:</li> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>Svc</u></td> <td style="text-align: center;"><u>Cap %</u></td> </tr> <tr> <td style="text-align: center;">&lt; 10</td> <td style="text-align: center;">PEMHCA Min</td> </tr> <tr> <td style="text-align: center;">10-14</td> <td style="text-align: center;">25%</td> </tr> <tr> <td style="text-align: center;">15-19</td> <td style="text-align: center;">50%</td> </tr> <tr> <td style="text-align: center;">20-24</td> <td style="text-align: center;">75%</td> </tr> <tr> <td style="text-align: center;">25 +</td> <td style="text-align: center;">100%</td> </tr> </table> </ul>	<u>Svc</u>	<u>Cap %</u>	< 10	PEMHCA Min	10-14	25%	15-19	50%	20-24	75%	25 +	100%
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## BENEFIT SUMMARY

	Union (Local 3)	MCP																								
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<ul style="list-style-type: none"> <li>■ Life Insurance</li> </ul>	<ul style="list-style-type: none"> <li>■ Hired &lt; 4/1/09: \$2,000</li> <li>■ Hired ≥ 4/1/09: none</li> </ul>	<ul style="list-style-type: none"> <li>■ Hired &lt; 4/1/09: \$4,000</li> <li>■ Hired ≥ 4/1/09: none</li> </ul>																								
<ul style="list-style-type: none"> <li>■ Surviving Spouse Benefit</li> </ul>	<ul style="list-style-type: none"> <li>■ Medical, Dental, and Vision benefits continue to surviving spouse</li> </ul>																									
<ul style="list-style-type: none"> <li>■ Cash Pay As You Go (\$000s)<sup>1</sup></li> </ul>	<table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;"><u>Medical</u></td> <td style="text-align: center;"><u>Dental</u></td> <td style="text-align: center;"><u>Vision</u></td> <td style="text-align: center;"><u>Life</u></td> <td style="text-align: center;"><u>Total</u></td> </tr> <tr> <td style="text-align: center;">2012/13</td> <td style="text-align: center;">\$ 1,604</td> <td style="text-align: center;">\$ 260</td> <td style="text-align: center;">\$ 37</td> <td style="text-align: center;">\$ 1</td> <td style="text-align: center;">\$ 1,902</td> </tr> <tr> <td style="text-align: center;">2011/12</td> <td style="text-align: center;">1,556</td> <td style="text-align: center;">247</td> <td style="text-align: center;">35</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1,839</td> </tr> <tr> <td style="text-align: center;">2010/11</td> <td style="text-align: center;">1,407</td> <td style="text-align: center;">230</td> <td style="text-align: center;">34</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1,672</td> </tr> </table>		<u>Medical</u>	<u>Dental</u>	<u>Vision</u>	<u>Life</u>	<u>Total</u>	2012/13	\$ 1,604	\$ 260	\$ 37	\$ 1	\$ 1,902	2011/12	1,556	247	35	1	1,839	2010/11	1,407	230	34	1	1,672	
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<sup>1</sup> Provided by District.



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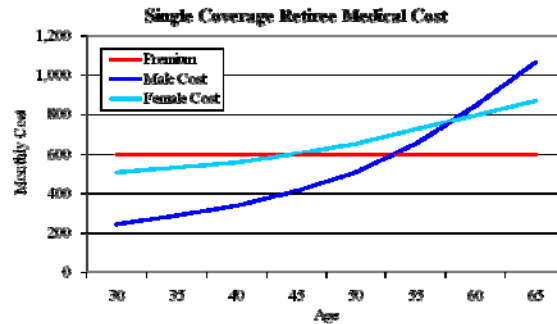
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## BENEFIT SUMMARY

### ■ 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



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## BENEFIT SUMMARY

### ■ Implied Subsidy (Continued)

- GASB 45 defers to Actuarial Standards of Practice (ASOP) for implied subsidy
- American Academy of Actuaries Exposure Draft Actuarial Standard of Practice No. 6:
  - Revision to current ASOP No. 6
  - Would require implied subsidy valued for community rated plans such as PEMHCA.
  - Timing:
    - First Exposure Draft issued April 2012 (July 15, 2012 comment deadline)
    - Second Exposure Draft issued March 2013 (August 30, 2013 comment deadline)
    - Current draft calls for effective date 1 year after final statement adopted with earlier implementation encouraged
- Valuation includes an implied subsidy based on estimated claims costs:
  - Claims data requested from CalPERS, but not yet available
  - Bartel Associates public agency client data used, approximately 110,000 total participants and spouses.



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**BENEFIT SUMMARY**

**2013 Monthly Premium Caps**

**Tier I & II**

<b>Medicare Eligibility</b>	<b>Premium Cap</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>
<b>Pre Medicare</b>	Blue Shield Access+ - Basic	\$ 784.63	\$ 1,569.26	\$2,040.04
<b>Post Medicare</b>	PERS Choice PPO - Medicare	325.74	651.48	977.22

**Tier III**

<b>Medicare Eligibility</b>	<b>Premium Cap</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>
<b>Pre Medicare</b>	PERS Choice PPO - Basic	\$ 667.03	\$ 1,334.06	n/a
<b>Post Medicare</b>	Blue Shield - Medicare	261.32	522.64	n/a



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**BENEFIT SUMMARY**

**2014 Monthly Premium Caps**

**Tier I & II**

<b>Medicare Eligibility</b>	<b>Premium Cap</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>
<b>Pre Medicare</b>	Blue Shield Access+ - Basic	\$836.59	\$1,673.18	\$2,175.13
<b>Post Medicare</b>	Anthem HMO - Medicare	341.12	682.24	1,023.36

**Tier III**

<b>Medicare Eligibility</b>	<b>Premium Cap</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>
<b>Pre Medicare</b>	Anthem Select Bay Area - Basic	\$657.33	\$1,314.66	n/a
<b>Post Medicare</b>	UnitedHealthcare - Medicare	193.33	386.66	n/a



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**DATA SUMMARY**

**Participant Statistics - June 30, 2013**

Participants	Union (Local 3)	MCP	Directors	Total
<b>■ Actives</b>				
• Count	119	87	-	206
• Average Age	44.4	47.2	n/a	45.6
• Average District Service	11.0	11.8	n/a	11.4
• Ave CalPERS Service	12.9	14.3	n/a	13.5
• Average Pay	\$87,828	\$132,505	n/a	\$106,696
• Total Pay (000's)	10,452	11,528	n/a	21,979
<b>■ Retirees</b>				
➢ Count < 65	41	21	-	62
➢ Count ≥ 65	<u>67</u>	<u>53</u>	<u>5</u>	<u>125</u>
➢ Total	108	74	5	187
• Average Age	68.5	71.8	83.4	70.2
• Average Retirement Age				
➢ Service Retirement	57.5	58.2	68.6	58.1
➢ Disability Retirement	40.6	n/a	n/a	40.6



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**DATA SUMMARY**

**Participant Statistics - June 30, 2011**

Participants	Union (Local 3)	MCP	Directors	Total
<b>■ Actives</b>				
• Count	131	86	-	217
• Average Age	44.8	46.4	n/a	45.4
• Average District Service	10.9	11.6	n/a	11.2
• Ave CalPERS Service	12.8	13.6	n/a	13.1
• Average Pay	\$ 80,469	\$ 119,302	n/a	\$ 95,859
• Total Pay (000's)	10,541	10,260	n/a	20,801
<b>■ Retirees</b>				
➢ Count < 65	39	21	-	60
➢ Count ≥ 65	<u>55</u>	<u>47</u>	<u>5</u>	<u>107</u>
➢ Total	94	68	5	167
• Average Age	68.3	71.5	81.4	70.0
• Average Retirement Age				
➢ Service Retirement	57.3	58.2	68.6	58.0
➢ Disability Retirement	40.6	n/a	n/a	40.6



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**ACTUARIAL ASSUMPTIONS HIGHLIGHTS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>																
■ Valuation Date	■ June 30, 2011 ■ 2012/13 & 2013/14 ARCs	■ June 30, 2013 ■ 2014/15 & 2015/16 ARCs																
■ Discount Rate	■ 7.25%, Pre-funded with CERBT investment option #1	■ Same ■ Sensitivity: 5.00% & 5.75%																
■ Service Retirement	■ CalPERS 1997-2007 Experience Study Benefit 2.5%@55 ERA 58.0	■ Same ■ CalPERS Miscellaneous 2%@62 for new members after 1/1/13																
■ PEMHCA Minimum	<table border="1"> <thead> <tr> <th>Year</th> <th>PEMHCA Minimum</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>\$ 108/month</td> </tr> <tr> <td>2012</td> <td>112/month</td> </tr> <tr> <td>2012+</td> <td>+ 4.5%/year</td> </tr> </tbody> </table>	Year	PEMHCA Minimum	2011	\$ 108/month	2012	112/month	2012+	+ 4.5%/year	<table border="1"> <thead> <tr> <th>Year</th> <th>PEMHCA Minimum</th> </tr> </thead> <tbody> <tr> <td>2013</td> <td>\$ 115/month</td> </tr> <tr> <td>2014</td> <td>119/month</td> </tr> <tr> <td>2015+</td> <td>+ 4.5%/year</td> </tr> </tbody> </table>	Year	PEMHCA Minimum	2013	\$ 115/month	2014	119/month	2015+	+ 4.5%/year
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**ACTUARIAL ASSUMPTIONS HIGHLIGHTS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>																																																										
■ Healthcare Trend	<table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2">Increase from Prior Year</th> </tr> <tr> <th>Non-Medicare</th> <th>Medicare</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td colspan="2">Actual Premiums</td> </tr> <tr> <td>2012</td> <td colspan="2">Actual Premiums</td> </tr> <tr> <td>2013</td> <td>9.0%</td> <td>9.4%</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>↓</td> <td>↓</td> <td>↓</td> </tr> <tr> <td>2021+</td> <td>5.0%</td> <td>5.0%</td> </tr> </tbody> </table>	Year	Increase from Prior Year		Non-Medicare	Medicare	2011	Actual Premiums		2012	Actual Premiums		2013	9.0%	9.4%	2014	8.5%	8.9%	2015	8.0%	8.3%	2016	7.5%	7.8%	↓	↓	↓	2021+	5.0%	5.0%	<table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2">Increase from Prior Year</th> </tr> <tr> <th>Non-Medicare</th> <th>Medicare</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td colspan="2">n/a</td> </tr> <tr> <td>2012</td> <td colspan="2">n/a</td> </tr> <tr> <td>2013</td> <td colspan="2">Actual Premiums</td> </tr> <tr> <td>2014</td> <td colspan="2">Actual Premiums</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>↓</td> <td>↓</td> <td>↓</td> </tr> <tr> <td>2021+</td> <td>5.0%</td> <td>5.0%</td> </tr> </tbody> </table>	Year	Increase from Prior Year		Non-Medicare	Medicare	2011	n/a		2012	n/a		2013	Actual Premiums		2014	Actual Premiums		2015	8.0%	8.3%	2016	7.5%	7.8%	↓	↓	↓	2021+	5.0%	5.0%
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■ Actuarial Loading	<ul style="list-style-type: none"> <li>■ 1/3 of premium gain</li> <li>■ PEMHCA premiums have not increased despite PEMHCA average per capita claims increases</li> </ul>	■ None																																																										
■ PEMHCA Administrative Fee	■ Not valued	<ul style="list-style-type: none"> <li>■ 0.33% of premium</li> <li>■ Included in valuation</li> </ul>																																																										



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**ACTUARIAL METHODS**

<b>Method</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>
■ Cost Method	■ Entry Age Normal	■ Same
■ Amortization Method	■ Level percent of payroll	■ Same
■ Actuarial Value of Assets	<ul style="list-style-type: none"> <li>■ Investment gains and losses spread over a 5-yr open period</li> <li>■ Not less than 80% nor more than 120% of market value</li> </ul>	■ Same
■ Amortization Period	<ul style="list-style-type: none"> <li>■ Initial UAAL – 30-year fixed (closed) period (28 years remaining for 2012/13 ARC)</li> <li>■ Assumption Changes, Experience Gains/Losses &amp; Contribution Gains/Losses – 15-year fixed (closed) period</li> <li>■ Maximum 30-year combined period</li> </ul>	<ul style="list-style-type: none"> <li>■ Initial UAAL – 30-year fixed (closed) period (26 years remaining for 2014/15 ARC)</li> <li>■ Assumption Changes, Experience Gains/Losses &amp; Contribution Gains/Losses – 15-year fixed (closed) period</li> <li>■ Maximum 30-year combined period</li> </ul>



**ACTUARIAL METHODS**

<b>Method</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>
■ Future New Entrants	■ None – closed group	■ Same
■ "Implied Subsidy"	<ul style="list-style-type: none"> <li>■ Employer cost for allowing retirees to participate at active rates</li> <li>■ Community rated plans not required to value implied subsidy</li> <li>■ Implied subsidy included in June 30, 2013 valuation</li> </ul>	



**ASSETS**

**Market Value of Plan Assets**

(Amounts in 000's)

	2008/09	2009/10	2010/11	2011/12 <sup>2</sup>	2012/13 <sup>3</sup>
■ Market Value at Beginning of Year	\$ -	\$ 3,496	\$ 4,606	\$5,639	\$ 6,806
• Contributions	5,041	2,406	2,658	2,856	3,742
• Benefit Payments	(1,545)	(1,397)	(1,672)	(1,735)	(1,902)
• Administration Expenses	-	-	-	-	(11)
• Investment Earnings	-	101	48	46	812
■ Market Value at End of Year	3,496	4,606	5,639	6,806	9,448
■ Approximate MVA Return	0.0%	3.6%	1.3%	0.8%	11.8%

<sup>2</sup> \$1,121,000 contributed to CERBT in June 2012.

<sup>3</sup> All assets transferred to CERBT in July 2012.



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**ASSETS**

**Actuarial Value of Plan Assets**

(Amounts in 000's)

Actuarial Value of Assets	2008/09	2009/10	2010/11	2011/12	2012/13
■ Actuarial Value at BOY	\$ -	\$ 3,496	\$ 4,528	\$ 5,620	\$ 7,080
• Contributions	5,041	2,406	2,658	2,856	3,742
• Benefit Payments	(1,545)	(1,397)	(1,672)	(1,735)	(1,902)
• Expected Earnings	-	84	102	407	513
■ Expected AVA at EOY	3,496	4,528	5,615	7,149	9,433
■ Market Value at EOY	3,496	4,606	5,639	6,806	9,448
■ Preliminary AVA	3,496	4,528	5,620	7,080	9,436
■ Minimum AVA (80% of MVA)	2,797	3,621	4,511	5,445	7,558
■ Maximum AVA (120% of MVA)	4,195	5,432	6,767	8,168	11,337
■ Actuarial Value at EOY	3,496	4,528	5,620	7,080	9,436
■ Approximate AVA Return	0.0%	0.8%	2.9%	6.0%	7.3%



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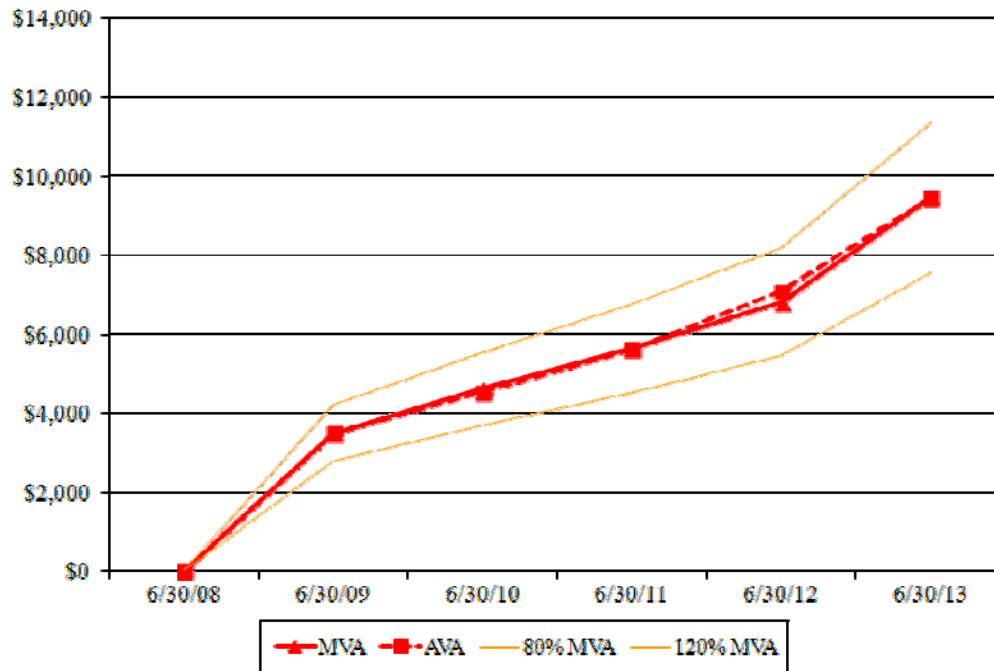
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## ASSETS

### Historical Assets (Amounts in 000's)



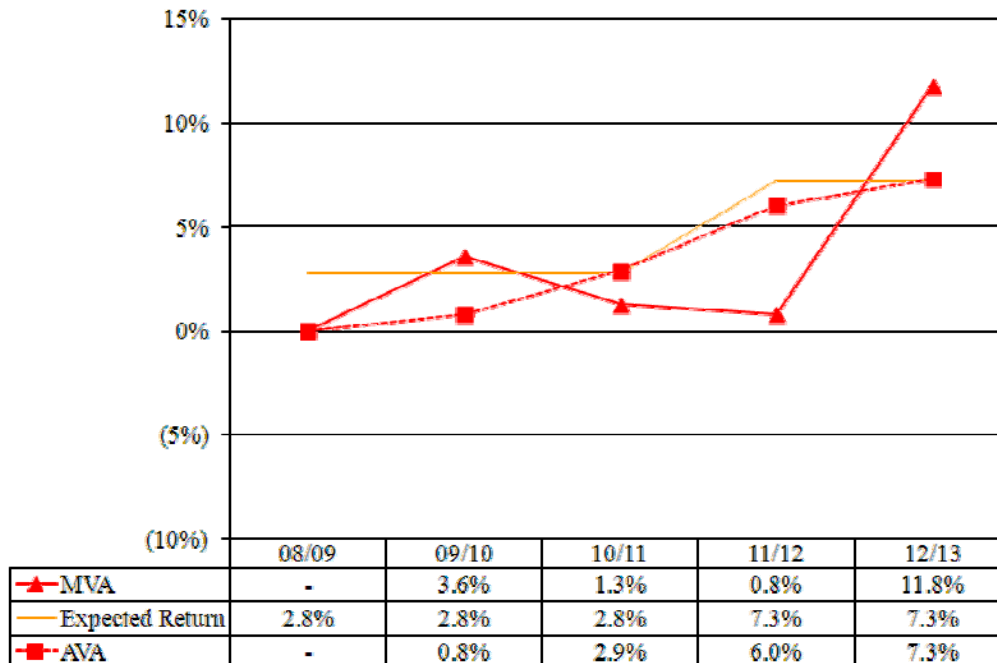
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## ASSETS

### Asset Returns



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## RESULTS

### Funded Status

(Amounts in 000's)

	June 30, 2011 Valuation		June 30, 2013 Valuation	
	6/30/2011	Proj. 6/30/12	6/30/2013	Proj. 6/30/14
<b>■ Present Value of Benefits</b>				
• Actives	\$ 28,783		\$ 30,519	
• Retirees	<u>22,666</u>		<u>26,500</u>	
• Total	51,449		57,019	
<b>■ Actuarial Accrued Liability</b>				
• Actives	18,899		20,019	
• Retirees	<u>22,666</u>		<u>26,500</u>	
• Total	41,565	\$ 44,077	46,519	\$ 48,737
<b>■ Actuarial Value of Assets</b>	<u>5,620</u>	<u>7,097</u>	<u>9,436</u>	<u>11,851</u>
<b>■ UAAL</b>	35,945	36,980	37,083	36,887
<b>■ Normal Cost</b>		1,314		1,412
<b>■ Pay-As-You-Go Cost</b>		1,829		2,555



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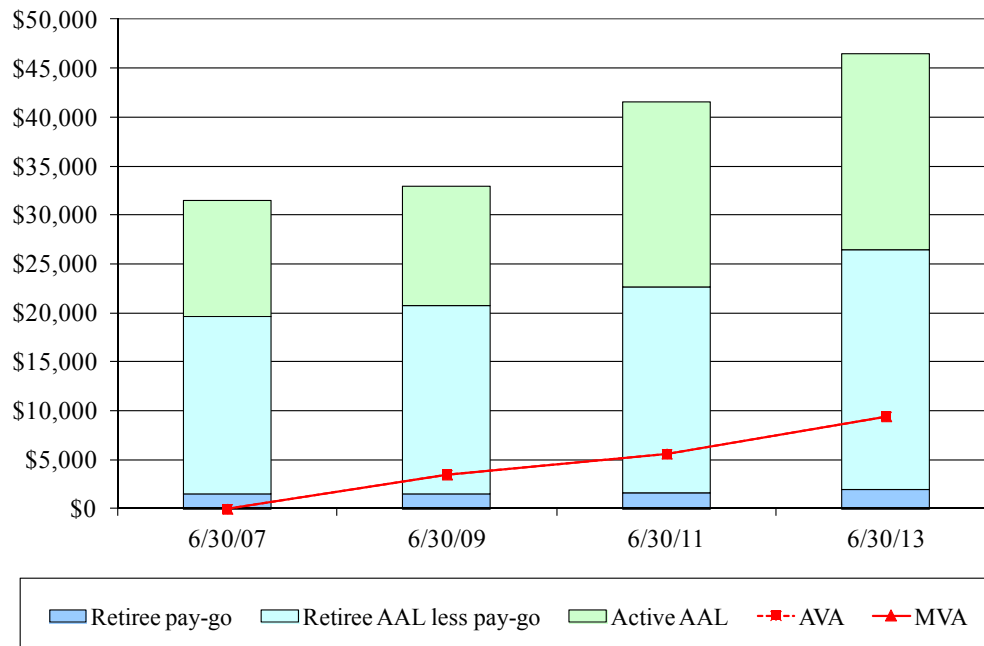
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## RESULTS

### Funded Status

(Amounts in 000's)



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**RESULTS**

**Actuarial Gain/Loss Analysis**

(Amounts in 000's)

	AAL	AVA	UAAL
■ <b>Actual @ 6/30/11</b>	\$ 41,565	\$ 5,620	\$ 35,945
■ <b>Projected @ 6/30/12</b>	44,077	7,097	36,980
■ <b>Expected @ 6/30/14</b>	49,396	11,971	37,425
■ <b>Source of Change:</b>			
• Release of premium reserve (eliminated actuarial loading)	(1,640)		(1,640)
• Premiums & caps lower than expected	(6,517)		(6,517)
• PEMHCA administrative fee	228		228
• Implied subsidy	4,877		4,877
• Asset loss		(120)	120
• Demographic & other <sup>4</sup>	<u>2,394</u>		<u>2,394</u>
■ <b>Total Change</b>	(658)	(120)	(538)
■ <b>Actual @ 6/30/14</b>	48,737	11,851	36,887

<sup>4</sup> Includes approximate \$1,800,000 retirement loss.



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**RESULTS**

**Schedule of Funding Progress**

(Amounts in 000's)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Liability (b)	Unfunded Actuarial Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as Percentage of Covered Payroll ((b-a)/c)
6/30/09	\$3,496	\$32,915	\$29,419	10.6%	\$19,001	154.8%
6/30/11	5,620	41,565	35,945	13.5%	22,175	162.1%
6/30/13	9,436	46,519	37,083	20.3%	21,979	168.7%



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## RESULTS

### Annual Required Contributions (ARC)

(Amounts in 000's)

	6/30/11 Valuation		6/30/13 Valuation	
	2012/13	2013/14	2014/15	2015/16
<b>■ ARC - \$</b>				
• Normal Cost	\$ 1,314	\$ 1,357	\$ 1,412	\$ 1,458
• UAAL Amortization	<u>2,428</u>	<u>2,507</u>	<u>2,538</u>	<u>2,621</u>
• Total	3,742	3,864	3,950	4,079
<b>■ Projected Payroll</b>	22,175	22,896	23,059	23,809
<b>■ ARC - %</b>				
• Normal Cost	5.9%	5.9%	6.1%	6.1%
• UAAL Amortization	<u>10.9%</u>	<u>10.9%</u>	<u>11.0%</u>	<u>11.0%</u>
• Total	16.9%	16.9%	17.1%	17.1%
<b>■ Average Amortization Years</b>	24.7	23.7	22.9	21.9



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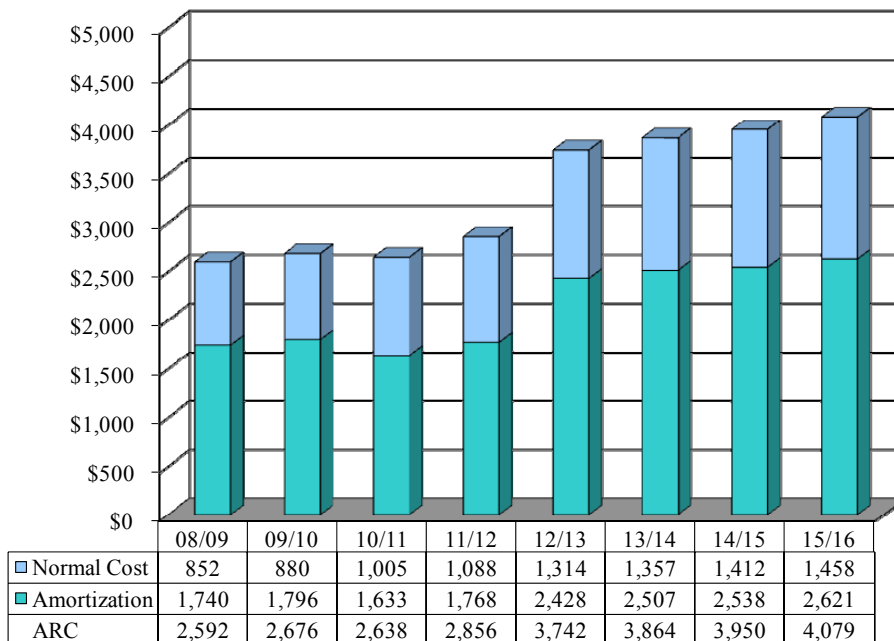
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## RESULTS

### Annual Required Contributions (ARC)

(Amounts in 000's)



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**RESULTS**

**Amortization Bases**

(Amounts in 000's)

	6/30/2011 Valuation		6/30/2013 Valuation	
	6/30/2012	6/30/2013	6/30/2014	6/30/2015
<b>■ Outstanding Balance</b>				
• Initial UAAL	\$ 31,509	\$ 31,869	\$ 32,193	\$ 32,476
• (Gains)/Losses 2011	7,380	7,235	7,059	6,846
• (Gains)/Losses 2013			(538)	(528)
• Contribution gain	<u>(1,909)</u>	<u>(1,872)</u>	<u>(1,827)</u>	<u>(1,772)</u>
• Total	36,980	37,233	36,887	37,023



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**RESULTS**

**Amortization Payments**

(Amounts in 000's)

	6/30/2011 Valuation		6/30/2013 Valuation	
	2012/13	2013/14	2014/15	2015/16
<b>■ Amortization Payment</b>				
• Initial UAAL	\$ 1,924	\$ 1,987	\$ 2,051	\$ 2,118
• (Gains)/Losses 2011	679	701	724	748
• (Gains)/Losses 2013			(50)	(51)
• Contribution gain	<u>(176)</u>	<u>(181)</u>	<u>(187)</u>	<u>(193)</u>
• Total	2,428	2,507	2,538	2,621



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**RESULTS**

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

(Amounts in 000's)

	CAFR 2012/13	Estimate 2013/14	Estimate 2014/15	Estimate 2015/16
■ <b>Estimated NOO, Beg of Year</b>	\$ (1,909)	\$ (1,872)	\$ (1,827)	\$ (1,772)
■ <b>Annual OPEB Cost</b>				
• Annual Required Contribution	3,742	3,864	3,950	4,079
• Interest on NOO	(138)	(136)	(132)	(128)
• Adjustment of NOO	<u>176</u>	<u>181</u>	<u>187</u>	<u>193</u>
• Annual OPEB Cost	3,779	3,910	4,005	4,144
■ <b>Contributions</b>				
• Cash Benefit Payments	1,902	2,136	2,240	2,389
• Implied Subsidy Benefit Payments	-	-	315	310
• Trust Pre-Funding	<u>1,840</u>	<u>1,728</u>	<u>1,395</u>	<u>1,380</u>
• Total Contribution	3,742	3,864	3,950	4,079
■ <b>Estimated NOO, End of Year</b>	(1,872)	(1,827)	(1,772)	(1,707)



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**RESULTS**

**Projected NOO**  
**7.25% Discount Rate**  
 (Amounts in 000's)

Fiscal Year	Begin Year NOO	Contribution				Annual OPEB Cost (AOC)	Payroll	Contrib % of Payroll
		Cash Ben Pmts	Implied Subsidy Ben Pmts	Pre Funding	Total Contrib			
2014/15	\$ (1,827)	\$2,240	\$315	\$ 1,395	\$3,950	\$ 4,005	\$23,059	17.1%
2015/16	(1,772)	2,389	310	1,380	4,079	4,144	23,809	17.1%
2016/17	(1,707)	2,579	365	1,267	4,211	4,287	24,582	17.1%
2017/18	(1,631)	2,712	372	1,264	4,348	4,436	25,381	17.1%
2018/19	(1,543)	2,859	378	1,252	4,489	4,591	26,206	17.1%
2019/20	(1,441)	3,044	420	1,171	4,635	4,751	27,058	17.1%
2020/21	(1,326)	3,227	454	1,105	4,786	4,917	27,937	17.1%
2021/22	(1,195)	3,400	489	1,053	4,942	5,089	28,845	17.1%
2022/23	(1,047)	3,533	488	1,081	5,102	5,268	29,783	17.1%
2023/24	(881)	3,771	579	918	5,268	5,454	30,751	17.1%



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**RESULTS**

**Actuarial Obligations – by Benefit**

**June 30, 2013**

(Amounts in 000's)

	<b>Medical<sup>5</sup></b>	<b>Dental</b>	<b>Vision</b>	<b>Life</b>	<b>Total</b>
<b>■ Present Value of Benefits</b>					
• Actives	\$ 28,348	\$ 2,007	\$ 158	\$ 6	\$ 30,519
• Retirees	<u>22,943</u>	<u>3,151</u>	<u>396</u>	<u>11</u>	<u>26,500</u>
• Total	51,291	5,158	554	17	57,019
<b>■ Actuarial Accrued Liability</b>					
• Actives	18,436	1,461	118	4	20,019
• Retirees	<u>22,943</u>	<u>3,151</u>	<u>396</u>	<u>11</u>	<u>26,500</u>
• Total	41,379	4,612	514	15	46,519
<b>■ Actuarial Value of Assets<sup>6</sup></b>	<u>8,394</u>	<u>936</u>	<u>104</u>	<u>3</u>	<u>9,436</u>
<b>■ UAAL</b>	32,985	3,676	410	12	37,083
<b>■ Normal Cost</b>	1,331	75	6	-	1,412
<b>■ Pay-As-You-Go Cost</b>	2,232	282	40	1	2,555

<sup>5</sup> Includes implied subsidy.

<sup>6</sup> Allocated based on actuarial accrued liability. Assets allocated to Dental, Vision and Life decreased from preliminary results due to inclusion of implied subsidy with Medical.



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**RESULTS**

**Annual Required Contributions (ARC) – by Benefit**

**Fiscal Year 2014/15**

(Amounts in 000's)

	<b>Medical<sup>7</sup></b>	<b>Dental</b>	<b>Vision</b>	<b>Life</b>	<b>Total</b>
<b>■ ARC - \$</b>					
• Normal Cost	\$ 1,331	\$ 75	\$ 6	\$ -	\$ 1,412
• UAAL Amortization	<u>2,264</u>	<u>247</u>	<u>27</u>	<u>1</u>	<u>2,538</u>
• Total	3,595	322	32	1	3,950
<b>■ Projected Payroll</b>	23,059	23,059	23,059	23,059	23,059
<b>■ ARC - %</b>					
• Normal Cost	5.8%	0.3%	0.0%	-	6.1%
• UAAL Amortization	<u>9.8%</u>	<u>1.1%</u>	<u>0.1%</u>	<u>0.0%</u>	<u>11.0%</u>
• Total	15.6%	1.4%	0.1%	0.0%	17.1%

<sup>7</sup> Includes implied subsidy.



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**RESULTS**

**Retirees Only**  
**7.25% Discount Rate**  
 (Amounts in 000's)

<b>■ Retirement Formula<sup>8</sup></b>	<b>Before 2.5%@55</b>	<b>After 2.5%@55</b>	<b>Total</b>
<b>■ Counts</b>	109	78	187
<b>■ PVPB @ 6/30/13</b>	\$ 10,475	\$ 16,025	\$ 26,500
<b>■ Funded Status @ 6/30/13</b>			
• Actuarial Accrued Liability	10,475	16,025	26,500
• Actuarial Value of Assets <sup>9</sup>	<u>2,125</u>	<u>3,251</u>	<u>5,375</u>
• Unfunded Actuarial Accrued Liability	8,350	12,774	21,125
<b>■ 2014/15 Annual Required Contribution</b>			
• Normal Cost	-	-	-
• UAAL Amortization	<u>534</u>	<u>818</u>	<u>1,352</u>
• ARC	534	818	1,352
• ARC % of Payroll	n/a	n/a	n/a

<sup>8</sup> 2.5%@55 effective 12/22/03

<sup>9</sup> Allocated based on actuarial accrued liability.



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**RESULTS**

**Discount Rate Sensitivity**  
 (Amounts in 000's)

<b>■ Discount Rate</b>	<b>5.00%</b>	<b>5.75%</b>	<b>7.25%</b>
<b>■ PVPB @ 6/30/13</b>	\$ 81,566	\$ 71,792	\$ 57,019
<b>■ Funded Status @ 6/30/13</b>			
• Actuarial Accrued Liability	61,612	55,811	46,519
• Actuarial Value of Assets	<u>9,436</u>	<u>9,436</u>	<u>9,436</u>
• Unfunded Actuarial Accrued Liability	52,176	46,375	37,083
<b>■ 2014/15 Annual Required Contribution</b>			
• Normal Cost	2,263	1,923	1,412
• UAAL Amortization <sup>10</sup>	<u>3,768</u>	<u>3,338</u>	<u>2,538</u>
• ARC	6,030	5,261	3,950
• ARC % of Payroll	26.2%	22.8%	17.1%

<sup>10</sup> Loss from discount rate change amortized over 15 years.



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## CALPERS RATE CHANGES

- On April 17, 2013, CalPERS Board approved contribution policy changes:
  - Reasons:
    - Asset corridor generates volatility with extreme events
    - Slow funded status progress
    - Improved transparency
    - GASB 68 discount rate implications
  - “Direct Rate Smoothing” effective for 2015/16 rates:
    - Use market value of assets, eliminate actuarial asset value
    - Fixed amortization periods for future gains and losses  
5-year ramp up; 20 years full payment; 5-year ramp down
    - Fixed amortization periods for future assumption changes –  
5-year ramp up; 10 years full payment; 5-year ramp down
    - Rolling amortization eliminated for existing amortization bases
    - Normal Cost not smoothed.
  - Impact:
    - Likely higher contribution rates and higher volatility in normal years but much less volatility for extreme events
    - Chief Actuary believes easier for Board to accept assumption changes (see



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## CALPERS RATE CHANGES

below)

- CalPERS starting assumption study and Chief Actuary will likely recommend generational mortality improvement
- CalPERS starting asset allocation study and Chief Actuary will:
  - Likely recommend 0.25% margin for adverse returns
  - Not likely (but does not know until asset allocation study is done).recommend any reduction in real rate of return Timing:
- Direct Rate Smoothing:
  - Included in 6/30/13 valuation (first impact 2015/16 rates)
  - Full impact in 2019/20 rates.
  - Estimated contribution rate projections in 6/30/12 valuation reports.
  - Assumption changes likely first impact 2016/17 rates.



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## ACTUARIAL CERTIFICATION

This report presents the Alameda County Water District's Retiree Healthcare Plan ("Plan") June 30, 2013 actuarial valuation. The purpose of this valuation is to:

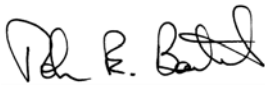
- Determine the Governmental Accounting Standards Board Statement Nos. 43 and 45 June 30, 2013 Benefit Obligations,
- Determine the Plan's June 30, 2013 Funded Status, and
- Calculate the 2014/15 and 2015/16 Annual Required Contributions.

The report provides information intended for reporting under GASB 43 and 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the District 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 District 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 principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASB 43 and 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  
March 28, 2014



Bianca Lin, FSA, MAAA, EA  
Assistant Vice President  
Bartel Associates, LLC  
March 28, 2014



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## ACTUARIAL CERTIFICATION

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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**

**2014 PEMHCA Monthly Premiums**  
**Bay Area**

Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$ 657.33	\$1,314.66	\$ 1,709.06	\$341.12	\$682.24	\$1,023.36
Anthem Traditional	728.41	1,456.82	1,893.87	341.12	682.24	1,023.36
Blue Shield	836.59	1,673.18	2,175.13	298.21	596.42	894.63
Blue Shield NetValue	704.01	1,408.02	1,830.43	298.21	596.42	894.63
Kaiser	742.72	1,485.44	1,931.07	294.97	589.94	884.91
UnitedHealthcare	764.24	1,528.48	1,987.02	193.33	386.66	579.99
PERS Choice	690.77	1,381.54	1,796.00	307.23	614.46	921.69
PERS Select	661.52	1,323.04	1,719.95	307.23	614.46	921.69
PERSCare	720.04	1,440.08	1,872.10	327.36	654.72	982.08
PORAC	634.00	1,186.00	1,507.00	397.00	791.00	1,264.00



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**PREMIUMS**

**2013 Monthly Dental, Vision & Life Premiums**

	<b>Single</b>	<b>Family</b>
Dental	\$ 82.51	\$ 187.75
Vision	22.02	22.02
Life	\$0.203 per \$1,000	



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**PREMIUMS**

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**PARTICIPANT STATISTICS**

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

Medical Plan	Actives	Retirees	
		< 65	≥ 65
Blue Shield	32%	27%	6%
Blue Shield NetValue	-	2%	-
Kaiser	51%	29%	41%
PERS Choice	16%	42%	40%
PERS Select	1%	-	-
PERSCare	-	-	13%
Total	100%	100%	100%



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**PARTICIPANT STATISTICS**

**Active Medical Coverage**

Medical Plan	Single	2-Party	Family	Waived	Total
Blue Shield	9	13	30	-	52
Kaiser	18	20	45	-	83
PERS Choice	7	7	12	-	26
PERS Select	-	1	-	-	1
Waived	-	-	-	44	44
Total	34	41	87	44	206



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PARTICIPANT STATISTICS

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

Medical Plan	Single	2-Party	Family	Waived	Total
Blue Shield	6	3	8	-	17
Blue Shield NetValue	-	-	1	-	1
Kaiser	4	8	6	-	18
PERS Choice	8	11	7	-	26
PERSCare	-	-	-	-	-
Waived	-	-	-	-	-
Total	18	22	22	-	62



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PARTICIPANT STATISTICS

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

Medical Plan	Single	2-Party	Family	Waived	Total
Blue Shield	2	4	1	-	7
Blue Shield NetValue	-	-	-	-	-
Kaiser	25	25	2	-	52
PERS Choice	21	27	2	-	50
PERSCare	9	7	-	-	16
Waived	-	-	-	-	-
Total	57	63	5	-	125



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**PARTICIPANT STATISTICS**

**Active Dental & Vision Coverage**

	Single	Family	Waived	Total
Dental	32	174	-	206
Vision	32	174	-	206

**Retiree Dental & Vision Coverage**

	Single	Family	Waived	Total
Dental	53	101	33	187
Vision	48	101	38	187



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**PARTICIPANT STATISTICS**

**Actives by Age and Agency Service**

**Union**

Age	District Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	1	1	-	-	-	-	-	2
25-29	2	4	-	-	-	-	-	6
30-34	-	6	5	1	-	-	-	12
35-39	-	3	7	7	-	-	-	17
40-44	2	2	7	7	3	2	-	23
45-49	1	4	7	6	2	4	2	26
50-54	-	-	5	5	3	2	3	18
55-59	-	2	2	-	2	2	2	10
60-64	-	-	3	-	-	-	2	5
≥ 65	-	-	-	-	-	-	-	-
<b>Total</b>	<b>6</b>	<b>22</b>	<b>36</b>	<b>26</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>119</b>



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**PARTICIPANT STATISTICS**

**Actives by Age and Agency Service**  
**MCP**

Age	District Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	-	-	-	-	-	-	-
25-29	1	1	-	-	-	-	-	2
30-34	-	2	4	1	-	-	-	7
35-39	2	1	5	4	-	-	-	12
40-44	-	1	3	3	2	-	-	9
45-49	-	4	5	4	2	2	-	17
50-54	1	2	6	6	3	6	3	27
55-59	-	2	1	2	2	1	3	11
60-64	-	-	-	1	-	-	1	2
≥ 65	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4</b>	<b>13</b>	<b>24</b>	<b>21</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>87</b>



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**PARTICIPANT STATISTICS**

**Actives by Age and Agency Service**  
**Total**

Age	District Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	1	1	-	-	-	-	-	2
25-29	3	5	-	-	-	-	-	8
30-34	-	8	9	2	-	-	-	19
35-39	2	4	12	11	-	-	-	29
40-44	2	3	10	10	5	2	-	32
45-49	1	8	12	10	4	6	2	43
50-54	1	2	11	11	6	8	6	45
55-59	-	4	3	2	4	3	5	21
60-64	-	-	3	1	-	-	3	7
≥ 65	-	-	-	-	-	-	-	-
<b>Total</b>	<b>10</b>	<b>35</b>	<b>60</b>	<b>47</b>	<b>19</b>	<b>19</b>	<b>16</b>	<b>206</b>



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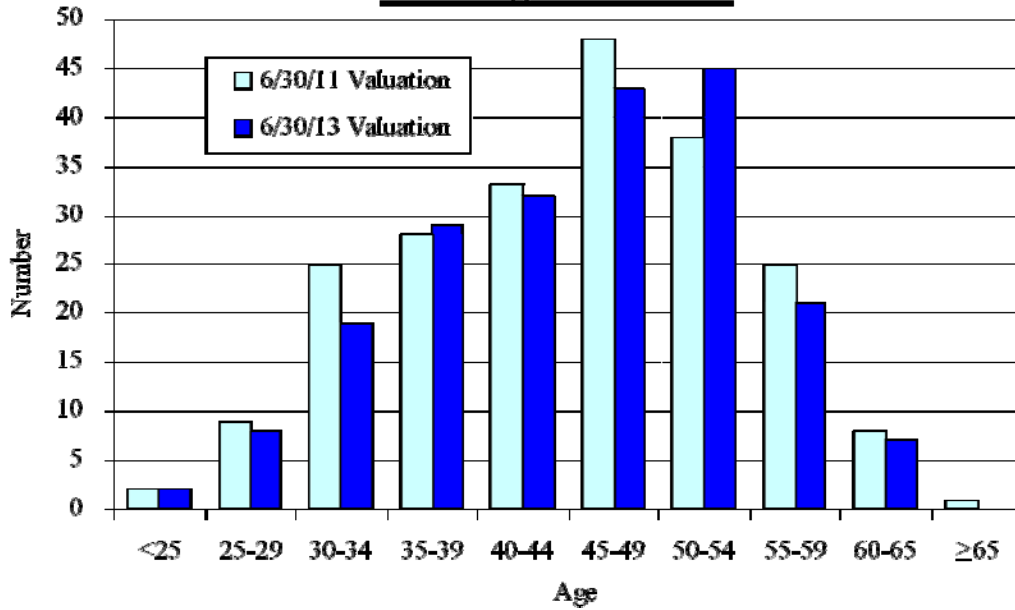
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## PARTICIPANT STATISTICS

### Active Age Distribution



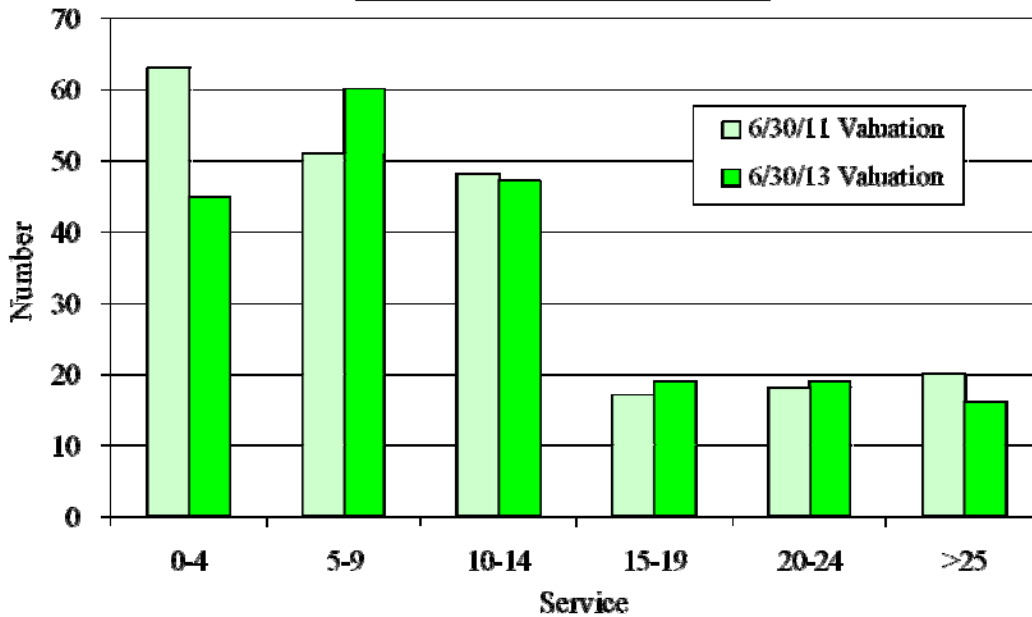
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## PARTICIPANT STATISTICS

### Active Service Distribution



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**PARTICIPANT STATISTICS**

**Retiree Medical Coverage by Age Group**  
**Union**

Age	Single	2-Party	Family	Total
Under 50	-	1	-	1
50-54	2	-	3	5
55-59	4	4	6	14
60-64	7	10	4	21
65-69	10	10	5	25
70-74	11	6	-	17
75-79	2	5	-	7
80-84	4	5	-	9
Over 85	5	4	-	9
Total	45	45	18	108
Average Age	70.5	69.9	60.2	68.5



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**PARTICIPANT STATISTICS**

**Retiree Medical Coverage by Age Group**  
**MCP & Directors**

Age	Single	2-Party	Family	Total
Under 50	-	-	-	-
50-54	-	-	1	1
55-59	-	2	5	7
60-64	5	5	3	13
65-69	6	10	-	16
70-74	3	9	-	12
75-79	3	8	-	11
80-84	4	3	-	7
Over 85	9	3	-	12
Total	30	40	9	79
Average Age	76.9	72.2	59.5	72.5



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**PARTICIPANT STATISTICS**

**Retiree Medical Coverage by Age Group**  
Total

Age	Single	2-Party	Family	Total
Under 50	0	1	0	1
50-54	2	0	4	6
55-59	4	6	11	21
60-64	12	15	7	34
65-69	16	20	5	41
70-74	14	15	0	29
75-79	5	13	0	18
80-84	8	8	0	16
Over 85	14	7	0	21
Total	75	85	27	187
Average Age	73.1	71.0	60.0	70.2



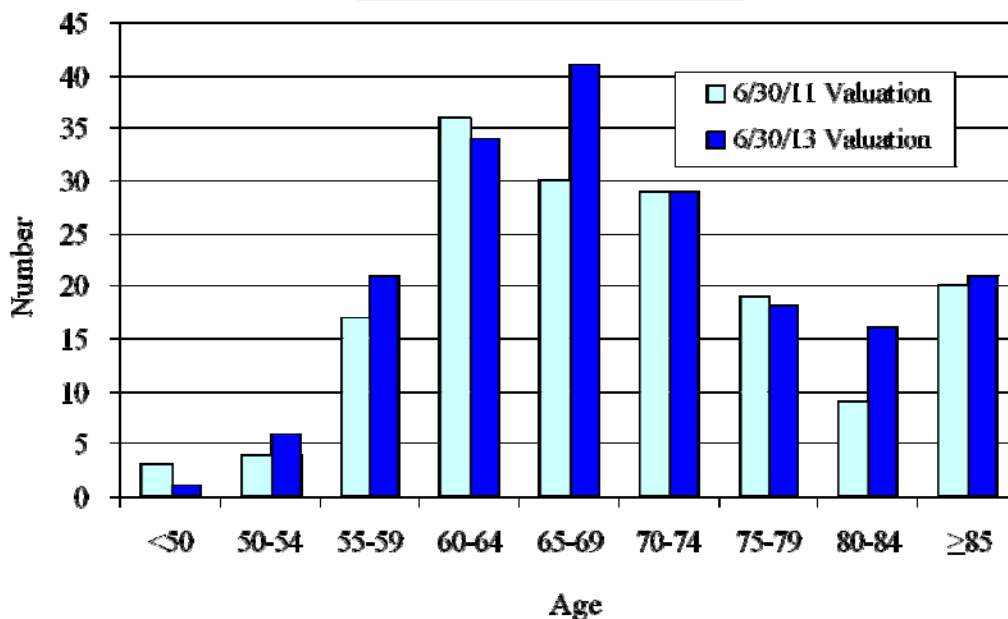
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**PARTICIPANT STATISTICS**

**Retiree Age Distribution**



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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>
■ Valuation Date	■ June 30, 2011 ■ 2012/13 & 2013/14 ARCs	■ June 30, 2013 ■ 2014/15 & 2015/16 ARCs
■ Discount Rate	■ 7.25%, Pre-funded with CERBT investment option #1	■ Same ■ Sensitivity: 5.00% & 5.75%
■ General Inflation	■ 3%	■ Same
■ Service Retirement	■ CalPERS 1997-2007 Experience Study Benefit 2.5%@55 ERA 58.0	■ Same ■ CalPERS Miscellaneous 2%@62 for new members after 1/1/13
■ Payroll Increases	■ Aggregate Increases – 3.25% ■ Merit Increases – CalPERS 1997-2007 Experience Study	■ Same



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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>																																																						
■ Healthcare Trend	<p align="center"><u>Increase from Prior Year</u></p> <table border="0"> <thead> <tr> <th><u>Year</u></th> <th><u>Non-Medicare</u></th> <th><u>Medicare</u></th> </tr> </thead> <tbody> <tr> <td>2011</td> <td colspan="2">Actual Premiums</td> </tr> <tr> <td>2012</td> <td colspan="2">Actual Premiums</td> </tr> <tr> <td>2013</td> <td>9.0%</td> <td>9.4%</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>↓</td> <td>↓</td> <td>↓</td> </tr> <tr> <td>2021+</td> <td>5.0%</td> <td>5.0%</td> </tr> </tbody> </table>	<u>Year</u>	<u>Non-Medicare</u>	<u>Medicare</u>	2011	Actual Premiums		2012	Actual Premiums		2013	9.0%	9.4%	2014	8.5%	8.9%	2015	8.0%	8.3%	2016	7.5%	7.8%	↓	↓	↓	2021+	5.0%	5.0%	<p align="center"><u>Increase from Prior Year</u></p> <table border="0"> <thead> <tr> <th><u>Year</u></th> <th><u>Non-Medicare</u></th> <th><u>Medicare</u></th> </tr> </thead> <tbody> <tr> <td>2011</td> <td colspan="2">n/a</td> </tr> <tr> <td>2012</td> <td colspan="2">n/a</td> </tr> <tr> <td>2013</td> <td colspan="2">Actual Premiums</td> </tr> <tr> <td>2014</td> <td colspan="2">Actual Premiums</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>↓</td> <td>↓</td> <td>↓</td> </tr> <tr> <td>2021+</td> <td>5.0%</td> <td>5.0%</td> </tr> </tbody> </table>	<u>Year</u>	<u>Non-Medicare</u>	<u>Medicare</u>	2011	n/a		2012	n/a		2013	Actual Premiums		2014	Actual Premiums		2015	8.0%	8.3%	2016	7.5%	7.8%	↓	↓	↓	2021+	5.0%	5.0%
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■ Actuarial Loading	<p>■ 1/3 of premium gain</p> <p>■ PEMHCA premiums have not increased despite PEMHCA average per capita claims increases</p>	■ None																																																						



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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>
■ PEMHCA Administrative Fee	■ Not valued	■ 0.33% of premium ■ Included in valuation
■ Mortality, Withdrawal, Disability	■ CalPERS 1997-2007 Experience Study ■ Projected with Scale AA	■ Same
■ CalPERS Service	■ Provided by District	■ Same
■ Medicare Eligible Rate	■ 100% ■ Everyone eligible for Medicare will elect Part B coverage	■ Same
■ Cap Increases	■ District cap – Healthcare trend ■ State 100/90 – Healthcare trend	■ Same



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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>		<b>June 30, 2013 Valuation</b>	
■ PEMHCA Minimum	Year	PEMHCA Minimum	Year	PEMHCA Minimum
	2011	\$ 108/month	2013	\$ 115/month
	2012	112/month	2014	119/month
	2013+	+ 4.5%/year	2015+	+ 4.5%/year
■ Dental, Vision, & Life Trend	■ Dental	3%	■ Same	
	■ Vision	0%		
	■ Life	0%		
■ Participation at Retirement	■ Medical	100%	■ Same	
	■ Dental	80%		
	■ Vision	80%		
	■ Life	100%		



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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>															
<p>■ Medical Plan at Retirement</p>	<p>■ Actives:</p> <table border="1"> <thead> <tr> <th><u>Medical Plan</u></th> <th><u>Pre-65</u></th> <th><u>Post-65</u></th> </tr> </thead> <tbody> <tr> <td>Blue Shield</td> <td>25%</td> <td>5%</td> </tr> <tr> <td>Kaiser</td> <td>35%</td> <td>35%</td> </tr> <tr> <td>PERS Choice</td> <td>40%</td> <td>45%</td> </tr> <tr> <td>PERSCare</td> <td>0%</td> <td>15%</td> </tr> </tbody> </table> <p>■ Retirees &lt; 65:</p> <ul style="list-style-type: none"> <li>● Pre-65: Same as current election</li> <li>● Post 65: Post 65 assumptions for actives</li> </ul> <p>■ Retirees ≥ 65: Same as current election</p>	<u>Medical Plan</u>	<u>Pre-65</u>	<u>Post-65</u>	Blue Shield	25%	5%	Kaiser	35%	35%	PERS Choice	40%	45%	PERSCare	0%	15%	<p>■ Same</p>
<u>Medical Plan</u>	<u>Pre-65</u>	<u>Post-65</u>															
Blue Shield	25%	5%															
Kaiser	35%	35%															
PERS Choice	40%	45%															
PERSCare	0%	15%															



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**ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2011 Valuation</b>	<b>June 30, 2013 Valuation</b>
<p>■ Marital Status at Retirement</p>	<p>■ Married if 2-party or family coverage</p> <p>■ 80% married for waived actives</p>	<p>■ Same</p>
<p>■ Spouse Age</p>	<p>■ Males 3 years older than females if spouse birth date not provided</p>	<p>■ Same</p>
<p>■ Dependents</p>	<p>■ 20% have family coverage, temporary until age 65</p>	<p>■ Same</p>



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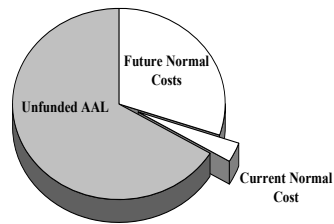
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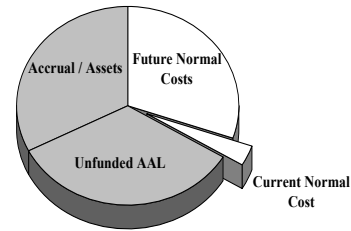
## DEFINITIONS

### Present Value of Projected Benefits (PVPB)

**Without Assets**



**With Assets**



#### ■ PVPB - Present Value of all Projected Benefits

- Discounted value, at measurement date (valuation date) of all future expected benefit payments
- Expected benefit payments based on various actuarial assumptions



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## DEFINITIONS

#### ■ AAL – Actuarial Accrued Liability / Actuarial Obligation

- Discounted value at measurement date (valuation date) of benefits “earned” through measurement date based on actuarial cost method
- Portion of PVPB “earned” at measurement

#### ■ NC - Normal Cost

- Value of benefits “earned” during current year
- Portion of PVPB allocated to current year

#### ■ Actuarial Cost Method

- Determines how benefits are “earned” or allocated to each year of service
- Has no effect on PVPB
- Has significant effect on Actuarial Obligations and Normal Cost

#### ■ Pay-As-You-Go Cost (PayGo)

- Cash Subsidy – Actual cash benefit payments to retirees
- Implied Subsidy – Difference between cost of retiree benefits and retiree premiums (not valued for PEMHCA)
- PayGo is the expected retiree benefit payments for the year while Normal Cost is the expense for benefits accrued by active employees during the year



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## GASB 45 SUMMARY

<p>■ <b>Accrual Accounting</b></p>	<p>■ Project future employer-provided benefit cash flows</p> <p>■ Discount projected cash flows to determine present value of benefits</p> <p>■ Allocate present value of benefits to past, current, and future periods</p> <p>■ Normal Cost is amount allocated to current period</p> <p>■ Actuarial Accrued Liability (AAL) is amount allocated to prior periods</p> <p>■ Unfunded AAL is AAL less plan assets pre-funded in a segregated and restricted trust</p>
<p>■ <b>Annual Required Contribution (ARC)</b></p>	<p>■ “Required contribution” for the current period including:</p> <ul style="list-style-type: none"> <li>• Normal Cost</li> <li>• Amortization of: <ul style="list-style-type: none"> <li>➢ Initial Unfunded AAL</li> <li>➢ AAL for plan, assumption, and method changes</li> <li>➢ Experience gains and losses (expected vs. actual)</li> <li>➢ Contribution gains and losses (expected vs. actual)</li> </ul> </li> </ul> <p>■ ARC in excess of pay-as-you-go costs not required to be funded</p>
<p>■ <b>Annual OPEB Cost (AOC)</b></p>	<p>■ Expense for current period including:</p> <ul style="list-style-type: none"> <li>• ARC</li> <li>• Interest on NOO</li> <li>• Adjustment of NOO</li> </ul>



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## GASB 45 SUMMARY

<p>■ <b>Net OPEB Obligation (NOO)</b></p>	<p>■ Accumulation of amounts expensed and not funded (contribution losses)</p>
<p>■ <b>NOO Adjustment</b></p>	<p>■ NOO adjustment (amortization) prevents double counting of expense since future ARCs include amortizations of contribution gains and losses previously expensed</p>



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