



**METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
RETIREE HEALTHCARE PLAN**

**BARTEL**  
ASSOCIATES, LLC

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**Valuation Summary**

January 1, 2011 GASB 45 Actuarial Valuation

**JOHN E. BARTEL**  
**BARTEL ASSOCIATES, LLC**  
September 10, 2012

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## WHAT IS GASB 45?

- **OPEB: (Other than pension Post Employment Benefits)**
- **Historically accounted for as Pay-As-You-Go**
  - Generally ignored until employees retire
  - Pay \$1 / Account for \$1
- **GASB Statement No. 45 - Issued June 2004**
  - Requires agencies recognize OPEB costs over active service of employees rather than on a pay-as-you-go basis
  - “Annual Required Contribution” – how much should be set aside
  - Accrue difference between
    - ARC
    - Actual payments
  - District implemented GASB 45 for 2005/06 Fiscal Year
  - District has historically funded on a Pay-As-You-Go basis
  - Likely to be modified in 2013 consistent with new (GASB 68) pension standard



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## DEFINITIONS OF TERMS

- **Actuarial Accrued Liability (AAL)**
  - Liability for benefits “earned” for past service using actuarial assumptions
- **Normal Cost (NC)**
  - Value of benefits “earned” during the current year
- **Annual Required Contribution (ARC)**
  - Normal Cost, plus
  - Amortization of unfunded AAL (UAAL)
- **Net OPEB Obligation (NOO)**
  - Historical difference between ARC and actual contributions
- **PayGo**
  - Cash payments for retiree benefits



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## BENEFIT SUMMARY

<ul style="list-style-type: none"> <li>■ Eligibility</li> </ul>	<ul style="list-style-type: none"> <li>■ Full-time employees that retire directly from the District under CalPERS</li> <li>■ Age 50 and 5 years District service</li> </ul>
<ul style="list-style-type: none"> <li>■ Medical Benefit</li> </ul>	<ul style="list-style-type: none"> <li>■ District pays PEMHCA medical premium for retirees and eligible dependents up to:                             <ul style="list-style-type: none"> <li>• Represented Employees – 100% of Blue Shield Bay Area Basic Premium</li> <li>• Unrepresented Employees – 90% of PERSCare LA Basic Premium</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ Vesting Schedule for Hires <math>\geq</math> 1/1/12</li> </ul>	<ul style="list-style-type: none"> <li>■ Vesting schedule based on CalPERS service, with minimum 5 years District service</li> <li>■ Starts at 50% vested for 10 years CalPERS service, grades up to 100% for 20 years CalPERS service</li> <li>■ 100% vested for disability retirements or termination with 20 years District service</li> </ul>



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## PARTICIPANT STATISTICS

	January 1, 2009 Valuation	January 1, 2011 Valuation
<ul style="list-style-type: none"> <li>■ Actives                             <ul style="list-style-type: none"> <li>• Count</li> <li>• Average Age</li> <li>• Average District Service</li> <li>• Total Payroll</li> </ul> </li> </ul>	<p>1,923</p> <p>48.7</p> <p>13.5</p> <p>\$181,800,000</p>	<p>1,802</p> <p>49.5</p> <p>15.1</p> <p>\$179,200,000</p>
<ul style="list-style-type: none"> <li>■ Retirees                             <ul style="list-style-type: none"> <li>• Count</li> <li>• Average Age</li> <li>• Average Service Retirement Age</li> </ul> </li> </ul>	<p>1,336</p> <p>70.4</p> <p>59.3</p>	<p>1,443</p> <p>70.4</p> <p>59.4</p>



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## ACTUARIAL METHODS

<ul style="list-style-type: none"> <li>■ Funding Method</li> </ul>	<ul style="list-style-type: none"> <li>■ Entry Age Normal</li> <li>■ Spreads cost evenly over service as a level percent of pay for each participant</li> </ul>
<ul style="list-style-type: none"> <li>■ UAAL Amortization</li> </ul>	<ul style="list-style-type: none"> <li>■ Level percent of payroll amortization:                             <ul style="list-style-type: none"> <li>● 6/30/07 UAAL: 30 years starting 2007/08</li> <li>● Assumption Changes: 20 years</li> <li>● Experience Gains/Losses: 15 years</li> </ul> </li> </ul>



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## ACTUARIAL ASSUMPTIONS

<ul style="list-style-type: none"> <li>■ Discount Rate</li> </ul>	<ul style="list-style-type: none"> <li>■ 4.50%: Pay-As-You-Go</li> </ul>
<ul style="list-style-type: none"> <li>■ Inflation</li> </ul>	<ul style="list-style-type: none"> <li>■ 3.00%</li> </ul>
<ul style="list-style-type: none"> <li>■ Payroll Increases</li> </ul>	<ul style="list-style-type: none"> <li>■ 3.00%, used to amortize Unfunded AAL</li> </ul>
<ul style="list-style-type: none"> <li>■ Healthcare Trend</li> </ul>	<ul style="list-style-type: none"> <li>■ 9.0% (Non Medicare), 9.4% (Medicare) initial increase (2013)</li> <li>■ Grades down to 5.0% ultimate rate over 8 years</li> </ul>
<ul style="list-style-type: none"> <li>■ Medical Premium Load</li> </ul>	<ul style="list-style-type: none"> <li>■ Liabilities increased by 1/3 of medical premium gain</li> <li>■ PEMHCA premiums have not increased despite average per capita claims increases</li> </ul>
<ul style="list-style-type: none"> <li>■ Retirement Age</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS Assumptions: Misc 2%@55</li> <li>■ Average Retirement Age <math>\approx</math> 59.5</li> </ul>
<ul style="list-style-type: none"> <li>■ Demographic</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS Assumptions (termination, mortality, disability, individual pay increases)</li> <li>■ Mortality improvement projection Scale AA</li> </ul>



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**VALUATION RESULTS**

**Actuarial Obligations**

(Amounts in \$000's)

	<b>January 1, 2009 Valuation</b>	<b>January 1, 2011 Valuation</b>
■ <b>Present Value of Benefits</b>	\$ 545,000	\$ 718,000
■ <b>Actuarial Accrued Liability (AAL)</b>		
• Actives	213,000	299,000
• Retirees	<u>191,000</u>	<u>246,000</u>
• Total	404,000	545,000
■ <b>Assets</b>	<u>          -</u>	<u>          -</u>
■ <b>Unfunded AAL</b>	404,000	545,000
■ <b>PayGo Cost</b>	11,000	13,300



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**VALUATION RESULTS**

**Annual Required Contribution (ARC)**

(Amounts in \$000's)

	<b>January 1, 2009 Valuation</b>		<b>January 1, 2011 Valuation</b>	
	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>
■ <b>ARC - \$</b>				
• Normal Cost	\$ 16,400	\$ 17,000	\$ 20,600	\$ 21,200
• UAAL Amortization	<u>17,700</u>	<u>20,200</u>	<u>28,600</u>	<u>32,300</u>
• Total	34,100	37,200	49,200	53,500
■ <b>Projected Payroll</b>	185,400	192,800	181,900	187,400
■ <b>ARC - % of Payroll</b>				
• Normal Cost	8.8%	8.8%	11.3%	11.3%
• UAAL Amortization	<u>9.6%</u>	<u>10.5%</u>	<u>15.7%</u>	<u>17.2%</u>
• Total	18.4%	19.3%	27.0%	28.5%



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## VALUATION RESULTS

### Discount Rate Sensitivity

(Amounts in \$000's)

	Continue PayGo 4.50%	Full Pre-Funding Example CERBT Fund #1 7.25%
<b>■ 1/1/11 Funded Status</b> <ul style="list-style-type: none"> <li>• Actuarial Accrued Liability (AAL)</li> <li>• Assets</li> <li>• Unfunded AAL (UAAL)</li> </ul>	\$ 545,000  _____ 545,000	\$ 367,000  _____ 367,000
<b>■ 2011/12 ARC</b> <ul style="list-style-type: none"> <li>• Normal Cost</li> <li>• UAAL Amortization</li> <li>• ARC</li> <li>• ARC as % of payroll</li> </ul>	20,600  _____ 28,600  49,200  27.0%	10,900  _____ 25,900  36,800  20.2%
<b>■ PayGo Cost 2011/12</b>	13,300	13,300



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## VALUATION RESULTS

### Summary

- January 1, 2011 Valuation:**
  - UAAL = \$545 million
  - Net OPEB Obligation (NOO) on 6/30/11 = \$128.9 million
  
- UAAL and NOO will continue to grow unless District pre-funds into an irrevocable trust (e.g. CalPERS CERBT Fund #1)**
  - UAAL reduced to \$367 million
  - Requires additional cash contribution
  - \$36.8 million compared to \$13.3 million for Pay-As-You-Go for 2011/12



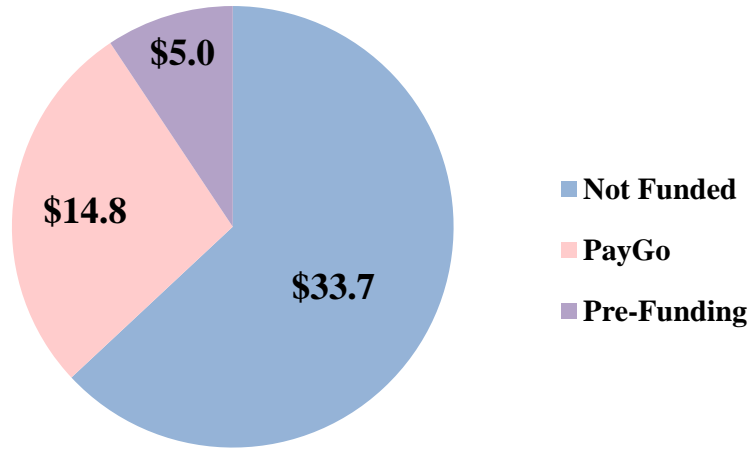
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**VALUATION RESULTS**

**2012/13 Annual Required Contribution**  
**4.5% Discount Rate, 3.0% Aggregate Payroll Increases**  
(Amounts in \$ Millions)



**Estimated 2012/13 ARC totals \$53.5 million**



**VALUATION RESULTS**

