



MARIN MUNICIPAL
WATER DISTRICT

BARTEL
ASSOCIATES, LLC

RETIREE HEALTHCARE PLAN

June 30, 2012 GASB 45 Actuarial Valuation

Presented by **Doug Pryor, Vice President & Actuary**
Prepared by Daniel Park, Actuarial Analyst
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Bartel Associates, LLC

June 5, 2013

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BENEFIT SUMMARY

<ul style="list-style-type: none"> ■ Eligibility 	<ul style="list-style-type: none"> ■ Retire directly from District under CalPERS (10+ years of continuous District service for Dental) 																				
<ul style="list-style-type: none"> ■ Medical Benefit 	<ul style="list-style-type: none"> ■ District pays premium up to cap (middle cost pre-Medicare plan): <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: center;">2012</th> <th style="text-align: center;">2013</th> </tr> </thead> <tbody> <tr> <td>Plan</td> <td style="text-align: center;">Kaiser Bay Area</td> <td style="text-align: center;">Kaiser Bay Area</td> </tr> <tr> <td>Employee</td> <td style="text-align: center;">\$ 610.44</td> <td style="text-align: center;">\$ 668.63</td> </tr> <tr> <td>2-Party</td> <td style="text-align: center;">1,220.88</td> <td style="text-align: center;">1,337.26</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ■ Hired \geq 1/1/09: % of Cap based on District Service¹ <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">YOS</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">\geq 5 years</td> <td style="text-align: center;">25%</td> </tr> <tr> <td style="text-align: center;">10-15 years</td> <td style="text-align: center;">50%</td> </tr> <tr> <td style="text-align: center;">\geq 15 years</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>		2012	2013	Plan	Kaiser Bay Area	Kaiser Bay Area	Employee	\$ 610.44	\$ 668.63	2-Party	1,220.88	1,337.26	YOS	%	\geq 5 years	25%	10-15 years	50%	\geq 15 years	100%
	2012	2013																			
Plan	Kaiser Bay Area	Kaiser Bay Area																			
Employee	\$ 610.44	\$ 668.63																			
2-Party	1,220.88	1,337.26																			
YOS	%																				
\geq 5 years	25%																				
10-15 years	50%																				
\geq 15 years	100%																				
<ul style="list-style-type: none"> ■ Dental Benefit 	<ul style="list-style-type: none"> ■ Family dental coverage up to cap until age 65 ■ Cap: \$1,500 per individual covered up to total of \$3,000 																				

¹ Benefit not less than PEMHCA minimum (\$112 in 2012 & \$115 in 2013)



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BENEFIT SUMMARY

<ul style="list-style-type: none"> ■ Surviving Spouse 	<ul style="list-style-type: none"> ■ 100% of retiree benefit continues to surviving spouse if retiree elects CalPERS survivor allowance 												
<ul style="list-style-type: none"> ■ Other OPEB 	<ul style="list-style-type: none"> ■ The District does not provide Medicare Part B Reimbursement, Non-PEMHCA Premium, Vision, and Life 												
<ul style="list-style-type: none"> ■ Implied Subsidy 	<ul style="list-style-type: none"> ■ Not currently required and not included 												
<ul style="list-style-type: none"> ■ Pay-As-You-Go 	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Fiscal Year</u></th> <th style="text-align: center;"><u>Amount</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2011/12</td> <td style="text-align: center;">\$ 1,748,500²</td> </tr> <tr> <td style="text-align: center;">2010/11</td> <td style="text-align: center;">1,564,200²</td> </tr> <tr> <td style="text-align: center;">2009/10</td> <td style="text-align: center;">1,379,700³</td> </tr> <tr> <td style="text-align: center;">2008/09</td> <td style="text-align: center;">1,419,400</td> </tr> <tr> <td style="text-align: center;">2007/08</td> <td style="text-align: center;">1,355,900</td> </tr> </tbody> </table>	<u>Fiscal Year</u>	<u>Amount</u>	2011/12	\$ 1,748,500 ²	2010/11	1,564,200 ²	2009/10	1,379,700 ³	2008/09	1,419,400	2007/08	1,355,900
<u>Fiscal Year</u>	<u>Amount</u>												
2011/12	\$ 1,748,500 ²												
2010/11	1,564,200 ²												
2009/10	1,379,700 ³												
2008/09	1,419,400												
2007/08	1,355,900												

² 2010/11 & 2011/12 pay-as-you-go cost calculated based on contribution to trust assuming full ARC funding

³ Reflects CalPERS 2 month PPO premium holiday



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PARTICIPANT STATISTICS

Actives

	1/1/07	1/1/09	6/30/10	6/30/12
■ Count	255	253	254	225
■ Average:				
• Age	46.7	46.9	47.7	47.6
• Service	11.1	11.5	12.4	12.8
• CalPERS Service	11.8	12.3	13.2	13.5
• Pay	\$ 70,500	\$ 81,300	\$ 85,800	\$ 87,100
■ Total Payroll (000s)	17,967	20,581	21,789	19,600



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PARTICIPANT STATISTICS

Retirees

	1/1/07	1/1/09	6/30/10	6/30/12
■ Count				
• Receiving benefit				
➢ < 65	69	64	65	79
➢ ≥ 65	<u>93</u>	<u>105</u>	<u>110</u>	<u>124</u>
➢ Subtotal	162	169	175	203
• Not receiving benefit	<u>17</u>	<u>27</u>	<u>11</u>	<u>15</u>
• Total	179	196	186	218
■ Average				
• Age	67.6	69.1	70.0	69.9
• Retirement Age				
➢ Service retired	58.3	58.0	58.1	58.3
➢ Disabled retired	46.3	47.0	45.8	45.7



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PARTICIPANT STATISTICS

Participant Reconciliation

	Actives	Service Retirees	Survivors	Disabled
■ June 30, 2010	254	154	18	14
• Withdrawal/Death	(8)	(5)	(2)	-
• New Retirees	(33)	33	-	-
• New Survivors from Retirees	-	(4)	4	-
• New Hires	12	-	-	-
• Data Corrections	-	-	6	-
■ June 30, 2012	225	178	26	14



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PARTICIPANT STATISTICS

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CERBT INVESTMENT OPTIONS

- Additional CERBT asset allocations and revised discount rate assumption
 - Agency selects one option with June 30, 2011 valuation report submission.
- Target asset allocations

Asset Classifications	Option 1	Option 2	Option 3
Global Equity	66%	50%	32%
US Nominal Bonds	18%	24%	42%
REIT's	8%	8%	8%
U.S. Inflation Linked Bonds	5%	15%	15%
Commodities	<u>3%</u>	<u>3%</u>	<u>3%</u>
Total	100%	100%	100%

- CalPERS reported expected returns (20 year period):

	Option 1	Option 2	Option 3
75% Confidence Limit ⁴	5.80%	5.60%	5.25%
50% Confidence Limit	7.61%	7.06%	6.39%
25% Confidence Limit	9.43%	8.52%	7.47%
Standard Deviation	11.73%	9.46%	7.27%

⁴ Confidence Limits – Actual Return will exceed the given rate with indicated probabilities, rates vary by year.



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CERBT INVESTMENT OPTIONS

- CalPERS discount rate development:
 - 1st 10 year expected returns – based on asset advisors 10 year projections
 - Significantly higher returns assumed after 10 years
 - based on long term historical returns
 - implies actuarial losses in 1st 10 years
 - achievable?
- Requirement that discount rate cannot be greater than 50% confidence limit rate
- Bartel Associates Recommendation: select rate at 55% or 60% confidence limit

	Option 1	Option 2	Option 3
55% Confidence Limit			
Discount Rate	7.25%	6.75%	6.25%
Maximum Discount Rate	<u>7.61%</u>	<u>7.06%</u>	<u>6.39%</u>
Margin for Adverse Deviation	(0.36%)	(0.31%)	(0.14%)
60% Confidence Limit			
Discount Rate	7.00%	6.50%	6.00%
Maximum Discount Rate	<u>7.61%</u>	<u>7.06%</u>	<u>6.39%</u>
Margin for Adverse Deviation	(0.61%)	(0.56%)	(0.39%)



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ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2010 Valuation	June 30, 2012 Valuation
■ Valuation Date	<ul style="list-style-type: none"> ■ June 30, 2010 ■ 2012/13 and 2013/14 	<ul style="list-style-type: none"> ■ June 30, 2012 ■ 2014/15
■ Funding Policy	<ul style="list-style-type: none"> ■ Contribute full ARC (net of pay-go) to CERBT 	<ul style="list-style-type: none"> ■ Same
■ Discount Rate	<ul style="list-style-type: none"> ■ 7.75% Pre-funded through CalPERS CERBT ■ Required by CERBT for valuation dates < 6/30/2011 	<ul style="list-style-type: none"> ■ 7.25% pre-funded with CalPERS CERBT fund #1 ■ 7.61% maximum discount rate ■ 0.36% margin for adverse deviation
■ Dental Trend	<ul style="list-style-type: none"> ■ 4.00% per year 	<ul style="list-style-type: none"> ■ Same
■ Medical Cap Increase	<ul style="list-style-type: none"> ■ Non-Medicare Healthcare trend 	<ul style="list-style-type: none"> ■ Same
■ Medical Plan at Retirement	<ul style="list-style-type: none"> ■ Medical plan at 65 consistent with current elections for retirees over 65 	<ul style="list-style-type: none"> ■ Same



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ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2010 Valuation	June 30, 2012 Valuation
■ Dental Cap Increase	<ul style="list-style-type: none"> ■ None 	<ul style="list-style-type: none"> ■ Same
■ Mortality, Withdrawal, Disability	<ul style="list-style-type: none"> ■ CalPERS 1997-2007 Experience Study 	<ul style="list-style-type: none"> ■ CalPERS 1997-2007 Experience Study ■ Fully-generational Scale AA mortality improvement applied to post-retirement mortality



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ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2010 Valuation			June 30, 2012 Valuation		
■ Healthcare Trend	Increase from Prior Year			Increase from Prior Year		
	<u>Non-Medicare</u>	<u>Medicare</u>		<u>Non-Medicare</u>	<u>Medicare</u>	
	<u>Year</u>	<u>All Plans</u>	<u>All Plans</u>	<u>Year</u>	<u>All Plans</u>	<u>All Plans</u>
	2011	Actual Premiums		2011	n/a	
	2012	9.5%	10.0%	2012	Actual Premiums	
	2013	9.0%	9.4%	2013	Actual Premiums	
	2014	8.5%	8.9%	2014	8.5%	8.9%
	2015	8.0%	8.3%	2015	8.0%	8.3%
	2016	7.5%	7.8%	2016	7.5%	7.8%
	2017	7.0%	7.2%	2017	7.0%	7.2%
	2018	6.5%	6.7%	2018	6.5%	6.7%
	2019	6.0%	6.1%	2019	6.0%	6.1%
	2020	5.5%	5.6%	2020	5.5%	5.6%
	2021	5.0%	5.0%	2021+	5.0%	5.0%



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ACTUARIAL METHODS

	June 30, 2010 Valuation	June 30, 2012 Valuation
■ Cost Method	■ Entry Age Normal	■ Same
■ Amortization Method	■ Level percentage of payroll	■ Same
■ Funding Policy	■ Full pre-funding in CalPERS OPEB Trust (CERBT)	■ Same
■ Actuarial Value of Assets	■ Valuation assets based on actual assets provided by CERBT ■ Investment gains/losses spread over a 5-year rolling period ■ Not less than 80% nor more than 120% of market value	■ Same
■ Unfunded Liability Amortization	■ Multiple periods (see page 24)	■ Unfunded liability amortized over 21 period commencing 2014/15



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ASSETS

Market Value of Plan Assets

(Amounts in 000's)

	2008/09	2009/10	2010/11	2011/12
■ MVA (Beginning of Year)	\$ -	\$ 2,317	\$ 5,068	\$ 7,849
• Employer Contribution	2,200	2,521	1,503	1,419
• Benefit Payment ⁵	-	-	-	-
• Administrative Expenses	-	(3)	(8)	(9)
• Investment Return	117	233	1,286	12
■ MVA (End of Year)	2,317	5,068	7,849	9,270
■ Approximate Annual Return	44.7%	8.8%	25.2%	0.0%

⁵ All benefit payments made by the District outside of trust. Contributions made to trust are net of benefit payments.



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ASSETS

Actuarial Value of Plan Assets

(Amounts in 000's)

	2008/09	2009/10	2010/11	2011/12
■ AVA (Beginning of Year)	\$ -	\$ 2,229	\$ 4,725	\$ 7,006
• Employer Contribution ⁶	2,200	2,320	1,704	1,419
• Benefit Payment	-	-	-	-
• Credited Investment Return	<u>29</u>	<u>176</u>	<u>577</u>	<u>604</u>
■ AVA (End of Year)	2,229	4,725	7,006	9,028
■ Approximate Annual Return	9.8%	7.9%	12.2%	8.6%

⁶ 2009/10 contribution based on projected market value of assets from 1/1/2009 valuation.

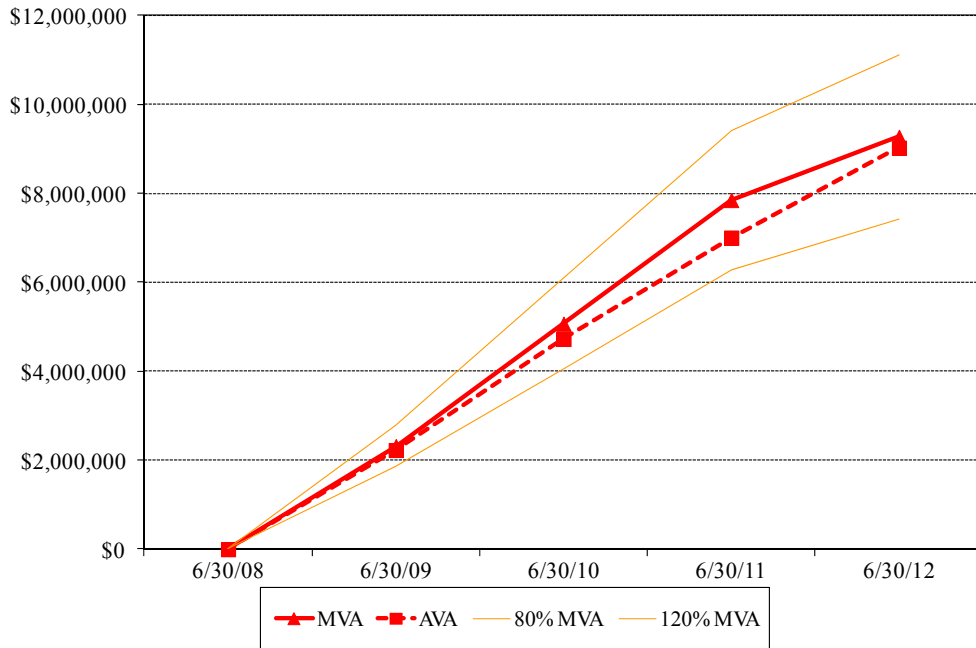


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ASSETS

Historical Value of Plan Assets
(Amounts in 000's)

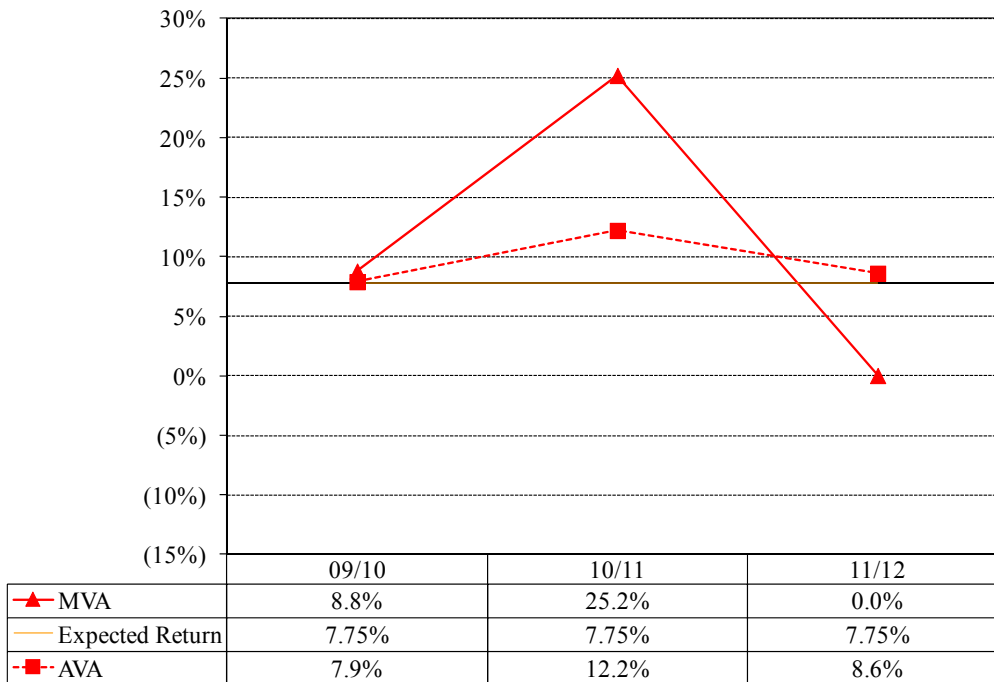


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ASSETS

Historical Annualized Asset Returns



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RESULTS

Actuarial Obligations (Amounts in 000's)

	6/30/10 Valuation	6/30/12 Valuation
■ Present Value of Benefits		
• Actives	\$ 28,480	\$ 28,205
• Retirees	<u>20,215</u>	<u>23,445</u>
• Total	48,695	51,650
■ Actuarial Accrued Liability		
• Actives	18,774	18,974
• Retirees	<u>20,215</u>	<u>23,445</u>
• Total	38,989	42,419
■ Actuarial Value of Assets	<u>4,725</u>	<u>9,028</u>
■ Unfunded Liability	34,264	33,391
■ Normal Cost	1,517	1,436
■ Pay-As-You-Go Cost	2,005	2,285



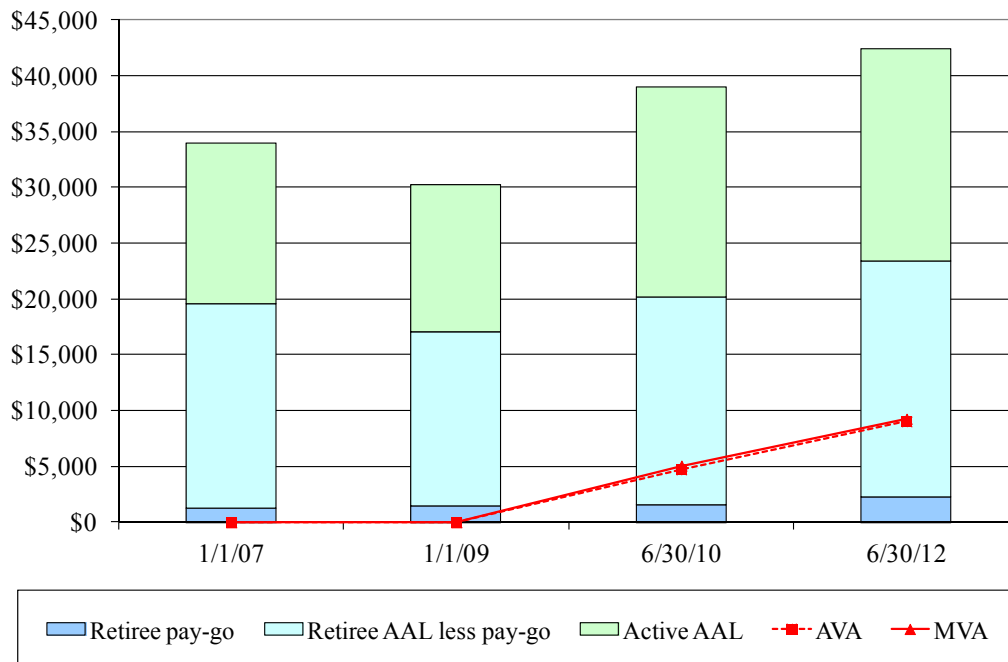
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RESULTS

Historical Funded Status (Amounts in 000's)



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RESULTS

Actuarial (Gain)/Loss Analysis

(Amounts in 000's)

	AAL
■ 6/30/10 Actual	\$ 38,989
■ 6/30/12 Expected	44,769
■ Experience (Gains)/Losses	
• Premiums Less Than Expected	(6,684)
• Demographic & Other	<u>823</u>
• Total	(5,861)
■ Assumption Changes	
• Discount Rate Change (7.75% → 7.25%)	2,405
• Mortality Improvement	<u>1,106</u>
• Total	3,511
■ Total Liability (Gain)/Loss	(2,350)
■ 6/30/12 Actual	42,419



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RESULTS

Schedule of Funding Progress

(Amounts in 000's)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as Percentage of Covered Payroll ((b-a)/c)
1/1/2009	\$ -	\$ 30,211	\$ 30,211	0.0%	\$ 21,593	140%
6/30/2010	4,725	38,989	34,264	12.1%	22,385	153%
6/30/2012	9,028	42,419	33,391	21.3%	21,231	157%



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RESULTS

Annual Required Contribution (ARC)
(Amounts in 000's)

	6/30/10 Valuation		6/30/12 Valuation
	2012/13	2013/14	2014/15
■ ARC - \$			
• Normal Cost	\$ 1,517	\$ 1,536	\$ 1,436
• UAAL Amortization	<u>2,534</u>	<u>2,616</u>	<u>2,381</u>
• Total ARC	4,051	4,153	3,817
■ Total Agency Payroll (in 000's)	23,603	24,370	21,231
■ ARC - % of Total Agency Payroll			
• Normal Cost	6.4%	6.3%	6.8%
• UAAL Amortization	<u>10.7%</u>	<u>10.7%</u>	<u>11.2%</u>
• Total ARC	17.2%	17.0%	18.0%

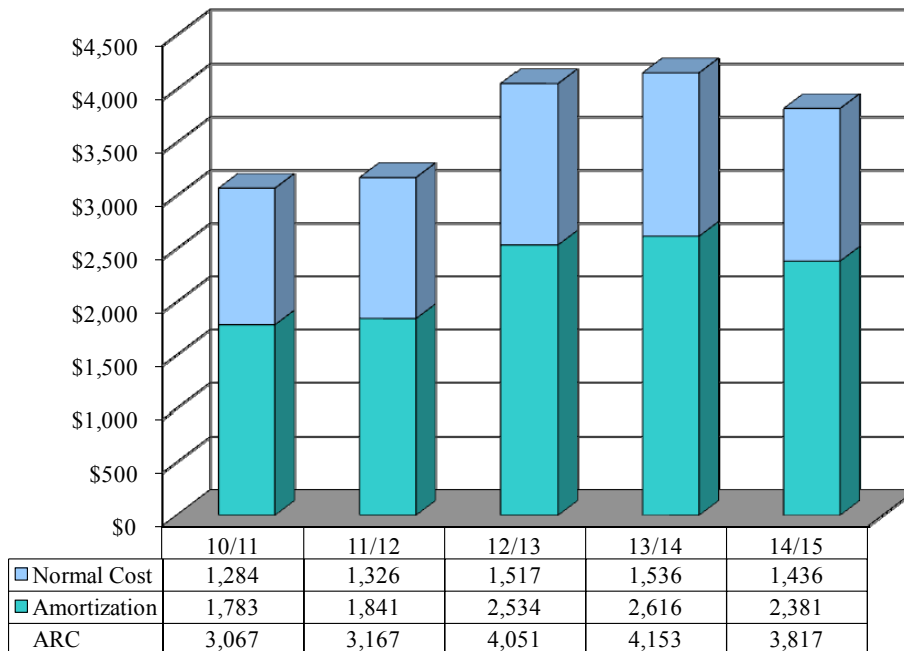


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RESULTS

Annual Required Contributions
(Amounts in 000's)



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RESULTS

Amortization Bases

(Amounts in 000's)

	6/30/2010 Valuation		6/30/2012 Valuation
	6/30/12	6/30/13	6/30/14
■ Outstanding Balance			
• Initial UAAL	\$ 29,443	\$ 29,825	\$ 30,174
• (Gain)/Loss			
> 6/30/10	6,652	6,534	6,387
> 6/30/12	n/a	n/a	(3,830)
• Contributions < ARC	-	-	-
• Total	36,095	36,359	32,731



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RESULTS

Amortization Payments

(Amounts in 000's)

	6/30/2010 Valuation		6/30/2012 Valuation
	2012/13	2013/14	2014/15
■ Amortization Payment - \$⁷			
• Initial UAAL	\$ 1,901	\$ 1,962	\$ 2,195
• (Gain)/Loss			
> 6/30/10	633	654	465
> 6/30/12	n/a	n/a	(279)
• Contributions < ARC	-	-	-
• Total	2,534	2,616	2,381
■ Average Amortization Years	24.0	23.0	21.0

⁷ Initial UAAL amortized over 28, 27, and 21 years for 2012/13, 2013/14 and 2014/15, respectively.
6/30/10 Loss amortized over 15, 14, and 21 years for 2012/13, 2013/14 and 2014/15, respectively.
6/30/12 Gain amortized over 21 years for 2014/15



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RESULTS

Estimated Net OPEB Obligation (NOO)

(Amounts in 000's)

	CAFR 2009/10	CAFR 2010/11	CAFR 2011/12	Est. 2012/13	Est. 2013/14	Est. 2014/15
■ NOO at BOY	\$ 78	\$ -	\$ -	\$ -	\$ -	\$ -
■ Annual OPEB Cost						
• ARC	3,817	3,067	3,167	4,051	4,153	3,817
• Interest on NOO	6	-	-	-	-	-
• Amortization of NOO	-	-	-	-	-	-
• Annual OPEB Cost	<u>3,823</u>	<u>3,067</u>	<u>3,167</u>	<u>4,051</u>	<u>4,153</u>	<u>3,817</u>
■ Contributions						
• Benefit Payments ⁸	1,380	1,564	1,748	2,005	2,263	2,285
• Trust Pre-Funding	<u>2,521</u>	<u>1,503</u>	<u>1,419</u>	<u>2,046</u>	<u>1,890</u>	<u>1,532</u>
• Total Contribution	3,901	3,067	3,167	4,051	4,153	3,817
■ Estimated NOO at EOY	-	-	-	-	-	-

⁸ Estimated benefit payments used for 2012/13+. Actual benefit payments should be used to calculate actual NOO.



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RESULTS

10-Year Projection Illustration

(Amounts in 000's)

Fiscal Year	Begin Year NOO	ARC	Annual OPEB Cost (AOC)	Contribution			Total Agency Payroll	ARC % of Total Pay	Contr % of Total Pay
				Benefit Pmts	Pre-Fund	Total Contrib			
2014/15	\$ -	\$ 3,817	\$ 3,817	\$ 2,285	\$ 1,532	\$ 3,817	\$ 21,231	18.0%	18.0%
2015/16	-	3,941	3,941	2,547	1,394	3,941	21,921	18.0%	18.0%
2016/17	-	4,069	4,069	2,790	1,279	4,069	22,634	18.0%	18.0%
2017/18	-	4,201	4,201	3,051	1,150	4,201	23,369	18.0%	18.0%
2018/19	-	4,338	4,338	3,353	985	4,338	24,129	18.0%	18.0%
2019/20	-	4,479	4,479	3,600	879	4,479	24,913	18.0%	18.0%
2020/21	-	4,625	4,625	3,797	828	4,625	25,723	18.0%	18.0%
2021/22	-	4,775	4,775	3,935	840	4,775	26,559	18.0%	18.0%
2022/23	-	4,930	4,930	4,038	892	4,930	27,422	18.0%	18.0%
2023/24	-	5,090	5,090	4,207	883	5,090	28,313	18.0%	18.0%



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ACTUARIAL CERTIFICATION

This report presents the Marin Municipal Water District 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 2014/15 Annual Required Contribution.

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,



Doug Pryor, ASA, EA, MAAA
Vice President
Bartel Associates, LLC
June 5, 2013



June 5, 2013



ACTUARIAL CERTIFICATION

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PREMIUMS

2012 PEMHCA Monthly Medical Premiums
Bay Area Region

Plan	Non-Medicare			Medicare		
	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



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E-1



PREMIUMS

2013 PEMHCA Monthly Medical Premiums
Bay Area Region

Plan	Non-Medicare			Medicare		
	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



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PREMIUMS

2012 Delta Dental Premium

- \$122.07/employee/month composite rate

2013 Delta Dental Premium¹⁰

- \$127.97/employee/month composite rate

¹⁰ Assumed annual average dental claim is \$820 per participant



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DATA SUMMARY

Medical Plan Participation

June 30, 2012

Plan	Active	Retiree		
		Pre-65	Post-65	Total
Blue Shield	13%	27%	22%	24%
Blue Shield NetValue	1%	1%	2%	2%
Kaiser	76%	56%	39%	45%
PERS Choice	9%	14%	22%	19%
PERS Select	1%	0%	0%	0%
PERSCare	0%	2%	15%	10%
Total	100%	100%	100%	100%



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DATA SUMMARY

Active Medical Plan Coverage

Plan	Region	Single	2-Party	Family	Waived	Total
Blue Shield	Bay Area	7	10	11	-	28
Blue Shield NV	Bay Area	-	-	1	-	1
Kaiser	Bay Area	46	49	60	-	155
	Sacramento	-	1	-	-	1
PERS Choice	Bay Area	5	6	8	-	19
PERS Select	Bay Area	-	-	1	-	1
Waived		-	-	-	20	20
Total		58	66	81	20	225



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DATA SUMMARY

Retiree Medical Plan Coverage
Under Age 65

Plan	Region	Single	2-Party	Family	Waived	Total
Blue Shield	Bay Area	5	8	5	-	18
	Northern CA	-	2	-	-	2
	Southern CA	-	1	-	-	1
Blue Shield NV	Bay Area	-	1	-	-	1
Kaiser	Bay Area	12	21	5	-	38
	Sacramento	1	2	-	-	3
	Southern CA	1	1	-	-	2
	Out of State	1	-	-	-	1
PERS Choice	Bay Area	2	1	1	-	4
	Out of State	1	4	2	-	7
PERSCare	Bay Area	1	-	-	-	1
	Northern CA	-	1	-	-	1
Waived		-	-	-	2	2
Total		24	42	13	2	81



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DATA SUMMARY

Retiree Medical Plan Coverage
Over Age 65

Plan	Region	Single	2-Party	Family	Waived	Total
Blue Shield	Bay Area	15	11	-	-	26
	Northern CA	1	1	-	-	2
Blue Shield NV	Bay Area	-	1	-	-	1
	Sacramento	1	-	-	-	1
Kaiser	Bay Area	19	26	-	-	45
	Sacramento	-	1	1	-	2
	Southern CA	-	1	-	-	1
PERS Choice	Bay Area	4	8	2	-	14
	Sacramento	-	1	-	-	1
	Northern CA	1	3	-	-	4
	Southern CA	1	-	-	-	1
	Out of State	2	6	-	-	8
PERSCare	Bay Area	4	6	-	-	10
	Northern CA	-	1	-	-	1
	Out of State	2	4	1	-	7
Waived		-	-	-	13	13
Total		50	70	4	13	137



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DATA SUMMARY

Actives by Age and Service

Age	District Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	1	-	-	-	-	-	-	1
25-29	2	7	2	-	-	-	-	11
30-34	1	9	5	1	-	-	-	16
35-39	1	5	6	7	1	-	-	20
40-44	1	7	6	9	6	2	-	31
45-49	1	3	13	12	8	7	3	47
50-54	-	1	10	13	7	8	10	49
55-59	-	1	8	10	5	6	6	36
60-64	-	2	6	-	1	2	1	12
≥ 65	-	-	-	1	-	-	1	2
Total	7	35	56	53	28	25	21	225



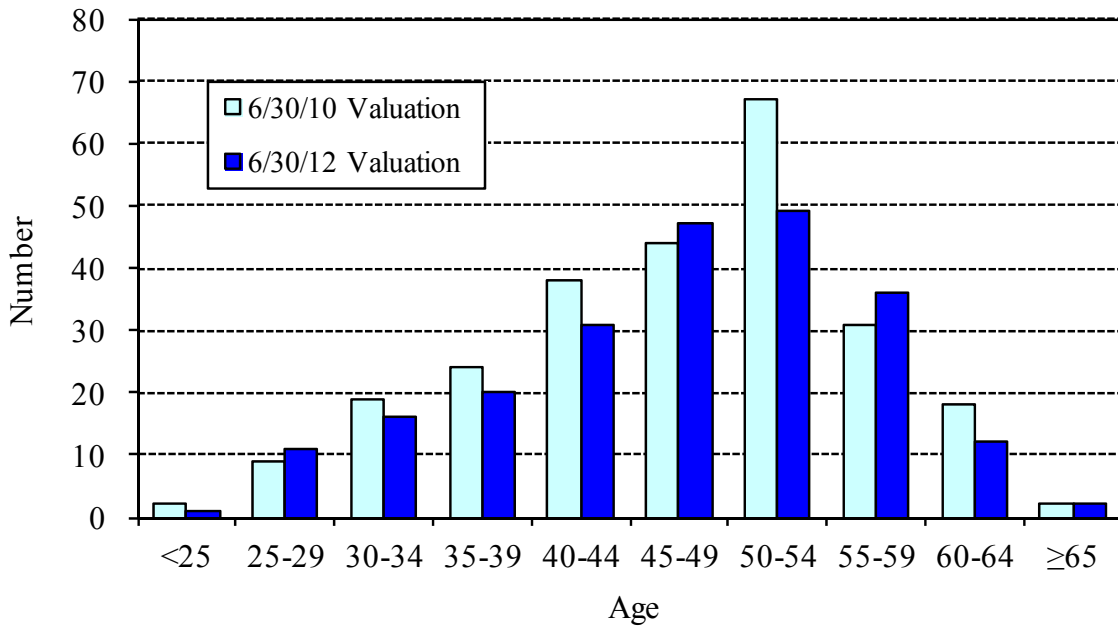
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DATA SUMMARY

Active Age Distribution



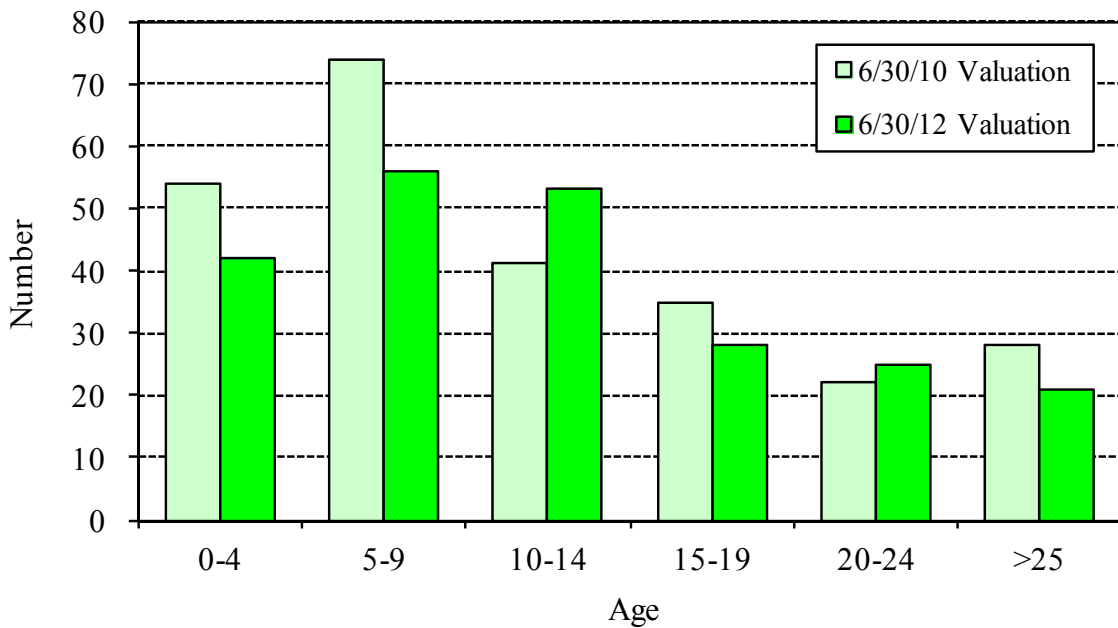
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DATA SUMMARY

Active Service Distribution



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DATA SUMMARY

Retiree Medical Coverage by Age Group

Age	Single	2-Party	Family	Waived	Total
Under 50	-	1	1	-	2
50-54	2	2	2	-	6
55-59	8	15	5	-	28
60-64	14	24	5	2	45
65-69	18	17	3	3	41
70-74	5	20	1	1	27
75-79	13	19	-	1	33
80-84	5	8	-	3	16
85 & Over	9	6	-	5	20
Total < 65	24	42	13	2	81
Total ≥ 65	50	70	4	13	137
Total	74	112	17	15	218
Average Age	71.0	69.5	60.0	78.3	69.9



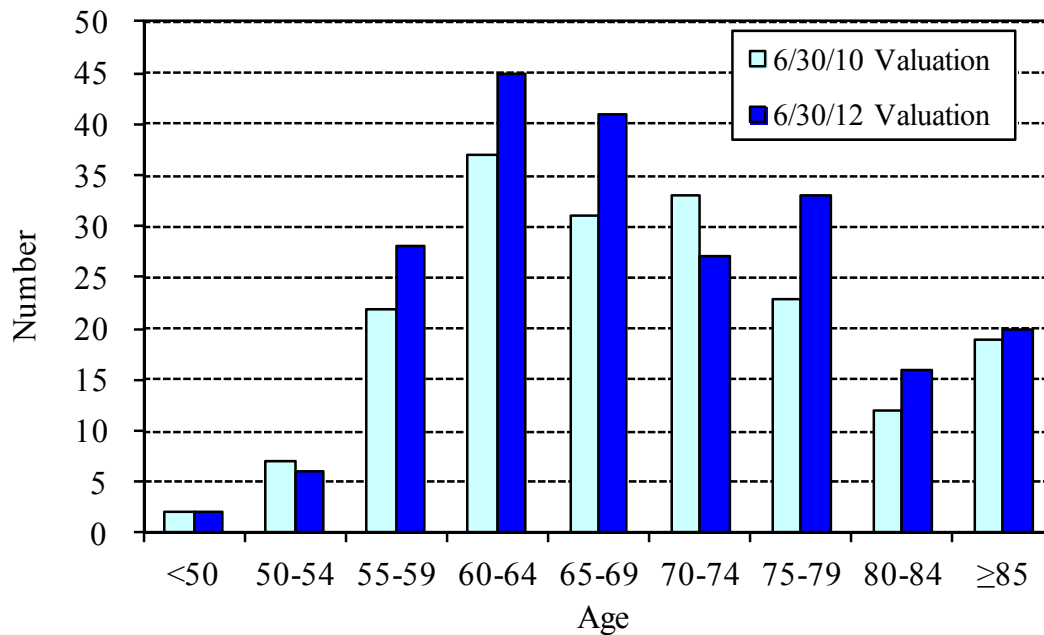
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DATA SUMMARY

Retiree Age Distribution



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ACTUARIAL ASSUMPTIONS

	June 30, 2010 Valuation	June 30, 2012 Valuation
■ Payroll Increases	<ul style="list-style-type: none"> ■ Aggregate increase: 3.25% ■ Merit increase: CalPERS 1997-2007 Experience Study 	<ul style="list-style-type: none"> ■ Aggregate increase: same ■ Merit increase: same
■ General Inflation	<ul style="list-style-type: none"> ■ 3.00% 	<ul style="list-style-type: none"> ■ Same
■ Retirement	<ul style="list-style-type: none"> ■ CalPERS 1997-2007 Experience Study ■ Hire Age: 35.4 ■ Miscellaneous: 2.7% @ 55 ■ Expected Ret Age: 58.1 	<ul style="list-style-type: none"> ■ CalPERS 1997-2007 Experience Study ■ Hire Age: 34.8 ■ Miscellaneous: 2.7% @ 55 ■ Expected Ret Age: 58.1
■ Medical Participation at Retirement	<ul style="list-style-type: none"> ■ Currently covered: 100% ■ Currently waived: 50% 	<ul style="list-style-type: none"> ■ Same
■ Waived Retiree Re-election	<ul style="list-style-type: none"> ■ 10% are assumed to elect at age 65 	<ul style="list-style-type: none"> ■ Same



ACTUARIAL ASSUMPTIONS

	June 30, 2010 Valuation	June 30, 2012 Valuation
■ Marital Status	<ul style="list-style-type: none"> ■ Currently covered: current marital status ■ Not currently covered: 80% married 	<ul style="list-style-type: none"> ■ Same
■ Medicare Eligible Rate	<ul style="list-style-type: none"> ■ 100% ■ Everyone eligible for Medicare will elect Part B coverage 	<ul style="list-style-type: none"> ■ Same
■ Spouse Age	<ul style="list-style-type: none"> ■ Actives: Males 3 years older than females ■ Retirees: Males 3 years older than females if spouse birth date not provided 	<ul style="list-style-type: none"> ■ Same
■ Dependents	<ul style="list-style-type: none"> ■ Actives: 20% have family coverage < 65 ■ Dental coverage: 2 children 	<ul style="list-style-type: none"> ■ Same



ACTUARIAL METHODS

<ul style="list-style-type: none"> ■ Unfunded Liability Amortization 	<ul style="list-style-type: none"> ■ 1/1/09 UAAL: 30-year fixed (closed) period (28 years remaining at 6/30/12) ■ 20-year fixed (closed) period for plan changes ■ 15-year fixed (closed) period for method and assumption changes, and experience and contribution gains and losses ■ Maximum 30-year combined period 	<ul style="list-style-type: none"> ■ 6/30/12 UAAL: 21-year fixed (closed) period remaining at 6/30/14.
<ul style="list-style-type: none"> ■ Implied Subsidy 	<ul style="list-style-type: none"> ■ Community rated plans not required to value implied subsidy. PEMHCA is, for most employers, a community rated plan. ■ No implied subsidy valued 	



DEFINITIONS

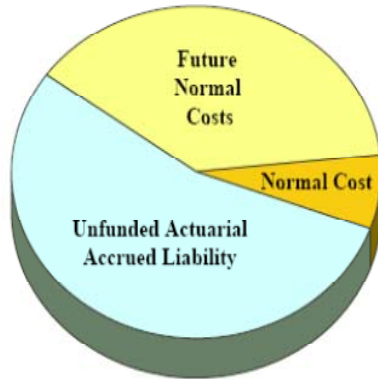
<ul style="list-style-type: none"> ■ GASB 45 Accrual Accounting 	<ul style="list-style-type: none"> ■ Project future employer-provided benefit cash flows for current active employees and current retirees ■ Discount projected cash flow to valuation date using discount rate (assumed return on assets used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



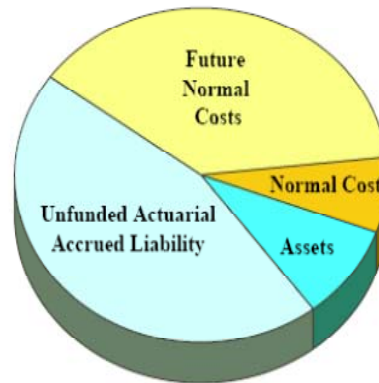
DEFINITIONS

Present Value of Benefits

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



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



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DEFINITIONS

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



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