



BARTEL
ASSOCIATES, LLC

**CITY OF VALLEJO
RETIREE HEALTHCARE PLAN**

June 30, 2012 GASB 45 Actuarial Valuation
Cost Study Preliminary Results

Bartel Associates, LLC

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April 15, 2013

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BENEFIT SUMMARY

<p>■ Eligibility</p>	<ul style="list-style-type: none"> Retire directly from City under CalPERS (age 50 and 5 years of CalPERS service or disability)
<p>■ Current Retiree Medical Benefit</p>	<ul style="list-style-type: none"> Council, Executives, IBEW, IAFF Retirees \geq 7/1/00 - \$300 per month, but not less than PEMHCA minimum IAFF Retirees $<$ 7/1/00 (pre-PERS 3%@50) - 75% of the Kaiser Bay Area non-Medicare premium for coverage elected CAMP - 80% of Kaiser Bay Area non-Medicare premium for coverage elected VPOA - 100% of Kaiser Bay Area non-Medicare premium for coverage elected
<p>■ Alternative Retiree Medical Benefit Study</p>	<ul style="list-style-type: none"> Current and future retirees of all employee groups and bargaining units - \$300 per month, but not less than PEMHCA minimum



BENEFIT SUMMARY

<p>■ Implied Subsidy Study</p>	<ul style="list-style-type: none"> 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 <div style="text-align: center;"> <p>Single Coverage Retiree Medical Cost</p> <table border="1"> <caption>Estimated Data for Single Coverage Retiree Medical Cost</caption> <thead> <tr> <th>Age</th> <th>Premium</th> <th>Male Cost</th> <th>Female Cost</th> </tr> </thead> <tbody> <tr> <td>30</td> <td>600</td> <td>250</td> <td>500</td> </tr> <tr> <td>35</td> <td>600</td> <td>300</td> <td>550</td> </tr> <tr> <td>40</td> <td>600</td> <td>350</td> <td>600</td> </tr> <tr> <td>45</td> <td>600</td> <td>450</td> <td>650</td> </tr> <tr> <td>50</td> <td>600</td> <td>550</td> <td>700</td> </tr> <tr> <td>55</td> <td>600</td> <td>700</td> <td>750</td> </tr> <tr> <td>60</td> <td>600</td> <td>900</td> <td>800</td> </tr> <tr> <td>65</td> <td>600</td> <td>1050</td> <td>850</td> </tr> </tbody> </table> </div> <ul style="list-style-type: none"> 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 	Age	Premium	Male Cost	Female Cost	30	600	250	500	35	600	300	550	40	600	350	600	45	600	450	650	50	600	550	700	55	600	700	750	60	600	900	800	65	600	1050	850
Age	Premium	Male Cost	Female Cost																																		
30	600	250	500																																		
35	600	300	550																																		
40	600	350	600																																		
45	600	450	650																																		
50	600	550	700																																		
55	600	700	750																																		
60	600	900	800																																		
65	600	1050	850																																		



BENEFIT SUMMARY

<p>■ Implied Subsidy Study (Continued)</p>	<ul style="list-style-type: none"> • GASB 45 defers to Actuarial Standards of Practice (ASOP) for implied subsidy • In April 2012, American Academy of Actuaries' Actuarial Standards Board (ASB) released exposure draft of revised ASOP No. 6 regarding retiree healthcare obligations. • In April 2013, ASB issued a second exposure draft of revised ASOP No. 6 • Revised ASOP would require implied subsidy be valued for community-rated plans • Study includes an estimate of the implied subsidy if applicable to PEMHCA employers
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ASSUMPTIONS

Assumption	June 30, 2012 Valuation
■ Valuation Date	<ul style="list-style-type: none"> • June 30, 2012
■ Valuation Assumptions	<ul style="list-style-type: none"> • Same as June 30, 2012 valuation
■ Claims Costs PEMHCA Implied Subsidy Study	<ul style="list-style-type: none"> • Claims costs used for the PEMHCA implied subsidy study are from the State of California's 6/30/12 OPEB valuation • Disability retirements: <ul style="list-style-type: none"> ➢ 30% Misc & 10% Safety assumed Medicare eligible - claims loaded 50% ➢ 70% Misc & 90% Safety assumed non-Medicare eligible - claims loaded 15%
■ Prefunding Study	<ul style="list-style-type: none"> • 6% discount rate beginning 2013/14 • Contributions: <ul style="list-style-type: none"> ➢ 2012/13 - pay-as-you-go ➢ 2013/14 - ARC + \$5 million ➢ 2014/15+ - ARC



PEMHCA IMPLIED SUBSIDY

Estimated PEMHCA Implied Subsidy

June 30, 2012 - 4.00% Discount Rate

(Amounts in 000's)

	Cash Subsidy	Implied Subsidy	Total
■ Present Value of Benefits	\$131,699	\$47,737	\$175,436
■ Funded Status			
• Actuarial Accrued Liability	106,628	31,253	137,881
• Assets	<u>0</u>	<u>0</u>	<u>0</u>
• Unfunded AAL	106,628	31,253	137,881
■ ARC 2012/13			
• Normal Cost	3,031	1,427	4,458
• UAAL Amortization	<u>4,505</u>	<u>1,321</u>	<u>5,826</u>
• ARC	7,536	2,748	10,284
• ARC % of Payroll	18.8%	6.8%	25.6%



BENEFIT STUDY

\$300 Benefit Study

June 30, 2012 - 4.00% Discount Rate

(Amounts in 000's)

	Current	\$300
■ PVB		
• Actives	\$ 60,102	\$ 20,781
• Retirees	<u>71,597</u>	<u>28,338</u>
• Total	131,699	49,119
■ AAL		
• Actives	35,031	11,630
• Retirees	<u>71,597</u>	<u>28,338</u>
• Total	106,628	39,968
■ ARC 2012/13		
• Normal Cost	3,031	1,121
• UAAL Amortization	<u>4,505</u>	<u>1,689</u>
• ARC	7,536	2,810
• ARC % of Payroll	18.8%	7.0%



BENEFIT STUDY

Actuarial Obligations - Current Plan

June 30, 2012 - 4.00% Discount Rate

(Amounts in 000's)

Obligations	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ PVB							
• 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
■ AAL							
• 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



BENEFIT STUDY

Actuarial Obligations - \$300 Benefit

June 30, 2012 - 4.00% Discount Rate

(Amounts in 000's)

Obligations	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ PVB							
• Actives	\$247	\$ 540	\$ 2,033	\$ 9,095	\$ 3,599	\$ 5,273	\$20,781
• Retirees	<u>84</u>	<u>1,102</u>	<u>3,461</u>	<u>8,594</u>	<u>5,970</u>	<u>9,128</u>	<u>28,338</u>
• Total	331	1,642	5,494	17,689	9,569	14,401	49,119
■ AAL							
• Actives	54	246	1,092	4,596	2,368	3,278	11,630
• Retirees	<u>84</u>	<u>1,102</u>	<u>3,461</u>	<u>8,594</u>	<u>5,970</u>	<u>9,128</u>	<u>28,338</u>
• Total	138	1,348	4,553	13,190	8,338	12,406	39,968



BENEFIT STUDY

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

ARC	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ ARC \$							
• 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
■ Projected Pay	65	1,845	4,546	13,685	8,833	11,141	40,115
■ ARC %							
• 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%



BENEFIT STUDY

Annual Required Contribution - \$300 Benefit
Fiscal Year 2012/13 - 4.00% Discount Rate
 (Amounts in 000's)

ARC	Council	Exec	CAMP	IBEW	IAFF	VPOA	Total
■ ARC \$							
• Normal Cost	\$32	\$37	\$ 119	\$ 526	\$ 148	\$ 260	\$1,121
• UAAL Amort	<u>6</u>	<u>57</u>	<u>192</u>	<u>557</u>	<u>352</u>	<u>524</u>	<u>1,689</u>
• Total ARC	38	94	311	1,084	500	784	2,810
■ Projected Pay	65	1,845	4,546	13,685	8,833	11,141	40,115
■ ARC %							
• Normal Cost	49.6%	2.0%	2.6%	3.8%	1.7%	2.3%	2.8%
• UAAL Amort	<u>9.0%</u>	<u>3.0%</u>	<u>4.2%</u>	<u>4.1%</u>	<u>4.0%</u>	<u>4.7%</u>	<u>4.2%</u>
• Total ARC%	58.6%	5.1%	6.8%	7.9%	5.7%	7.0%	7.0%



PREFUNDING STUDY

Pre-Funding Sensitivity

June 30, 2012

(Amounts in 000's)

	No Pre-Funding	Pre-Funding
■ Discount Rate	4.00%	6.00%¹
■ Present Value of Benefits	\$131,699	\$95,398
■ Actuarial Accrued Liability	106,628	79,991
■ ARC 2013/14		
• Normal Cost	3,129	2,200
• UAAL Amortization	<u>4,830</u>	<u>4,547</u>
• ARC	7,959	6,747
• ARC % of Payroll	19.2%	16.3%
■ ARC 2014/15		
• Normal Cost	3,231	2,272
• UAAL Amortization	<u>5,179</u>	<u>4,404</u>
• ARC	8,410	6,675
• ARC % of Payroll	19.7%	15.6%

¹ 4.00% for 2012/13 and 6.00% thereafter.



PREFUNDING STUDY

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PREFUNDING STUDY

No Pre-Funding Projection

4.00% Discount Rate

(Amounts in 000's)

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



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PREFUNDING STUDY

Full ARC Pre-Funding Projection²

6.00% Discount Rate (2013/14+)

(Amounts in 000's)

Fiscal Year End	Begin Year NOO	ARC	AOC	City Contribution			ARC % of Pay	BOY UAAL	UAAL % of Pay	BOY Fund %
				Benefit Pmts	Trust Funding	City Contr				
2013	\$19,151	\$7,536	\$7,493	\$3,244	\$ 0	\$ 3,244	18.8%	\$106,628	266%	0%
2014	23,400	6,747	6,851	3,630	8,117	11,747	16.3%	81,860	198%	0%
2015	18,504	6,675	6,728	3,940	2,735	6,675	15.6%	77,119	180%	10%
2016	18,558	6,885	6,907	4,268	2,617	6,885	15.6%	77,227	175%	13%
2017	18,581	7,101	7,090	4,572	2,529	7,101	15.6%	77,196	169%	16%
2018	18,569	7,323	7,275	4,883	2,440	7,323	15.6%	77,015	164%	19%
2019	18,521	7,552	7,462	5,203	2,349	7,552	15.5%	76,667	158%	22%
2020	18,431	7,787	7,653	5,461	2,326	7,787	15.5%	76,142	152%	25%
2021	18,298	8,029	7,847	5,714	2,315	8,029	15.5%	75,428	146%	28%
2022	18,115	8,277	8,043	5,957	2,320	8,277	15.5%	74,508	139%	31%

² Assumes City will make a contributions of ARC plus \$5 million for 2013/14.



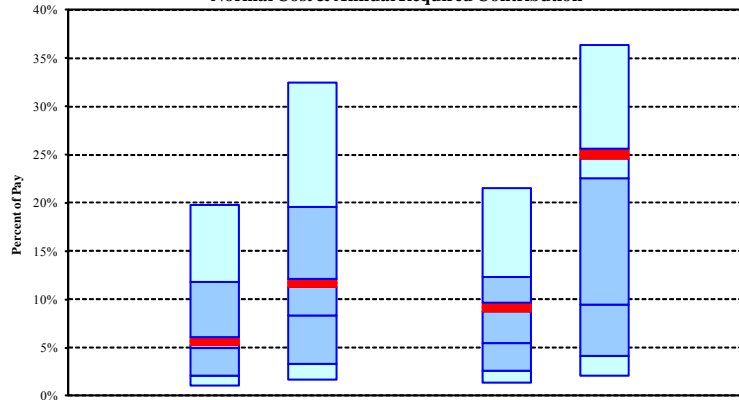
April 15, 2013



BARTEL ASSOCIATES GASB 45 DATABASE

City Total

**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%
Percent of Pay	5.6%	11.7%	9.2%	25.1%
Percentile	53%	57%	68%	80%

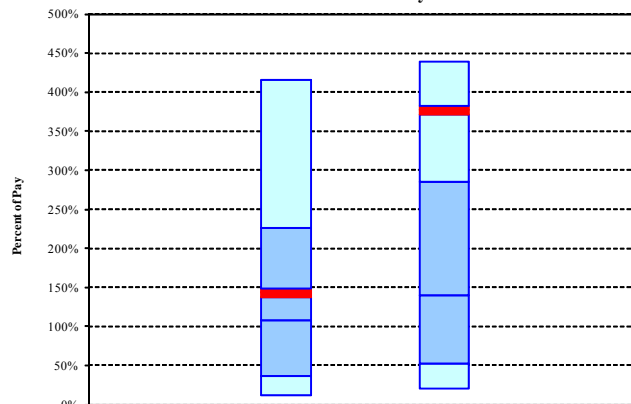
Discount Rate = 4.00%, Average Amortization Period = 27.0 Years



BARTEL ASSOCIATES GASB 45 DATABASE

City Total

**Bartel Associates GASB 45 OPEB Database
Actuarial Accrued Liability**



	Miscellaneous	Safety
95th Percentile	415%	439%
75th Percentile	226%	285%
50th Percentile	108%	139%
25th Percentile	36%	52%
5th Percentile	12%	20%
Percent of Pay	143%	377%
Percentile	59%	87%

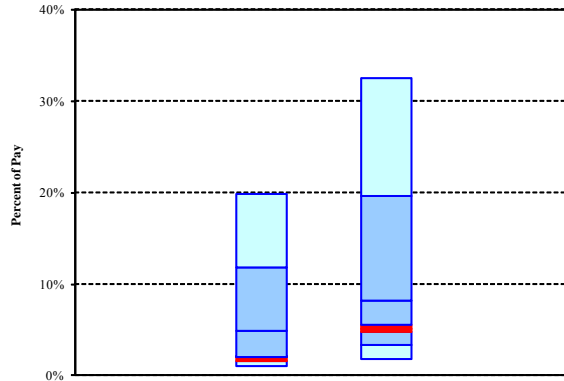
Discount Rate = 4.00%



BARTEL ASSOCIATES GASB 45 DATABASE

Executives

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



	<u>Miscellaneous</u>	
	<u>NC</u>	<u>ARC</u>
95th Percentile	19.8%	32.4%
75th Percentile	11.8%	19.6%
50th Percentile	4.9%	8.1%
25th Percentile	2.0%	3.3%
5th Percentile	1.0%	1.7%
Percent of Pay	2.0%	5.1%
Percentile	24%	34%

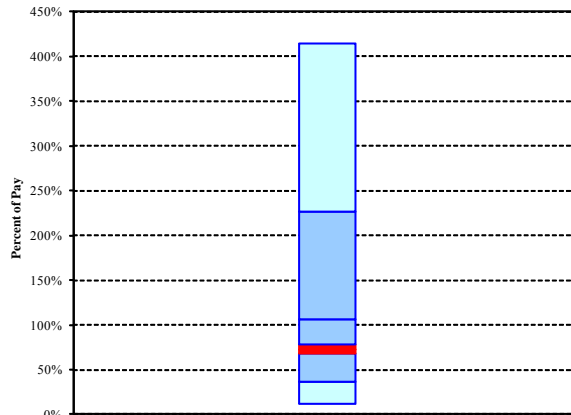
Discount Rate = 4.00%, Average Amortization Period = 27.0 Years



BARTEL ASSOCIATES GASB 45 DATABASE

Executives

Bartel Associates GASB 45 OPEB Database Actuarial Accrued Liability



	<u>Miscellaneous</u>
95th Percentile	415%
75th Percentile	226%
50th Percentile	107%
25th Percentile	36%
5th Percentile	12%
Percent of Pay	73%
Percentile	39%

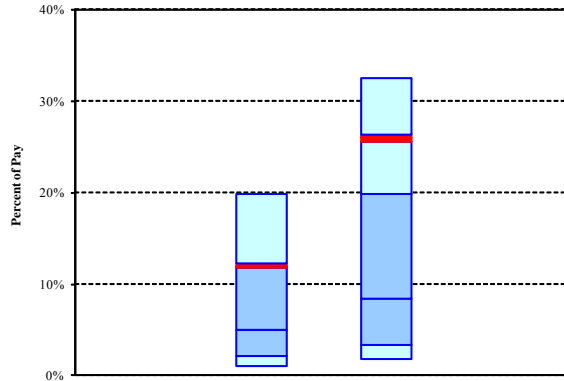
Discount Rate = 4.00%



BARTEL ASSOCIATES GASB 45 DATABASE

CAMP

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



	<u>Miscellaneous</u>	
	<u>NC</u>	<u>ARC</u>
95th Percentile	19.8%	32.4%
75th Percentile	11.8%	19.8%
50th Percentile	5.0%	8.4%
25th Percentile	2.1%	3.3%
5th Percentile	1.0%	1.7%
Percent of Pay	11.8%	25.9%
Percentile	75%	86%

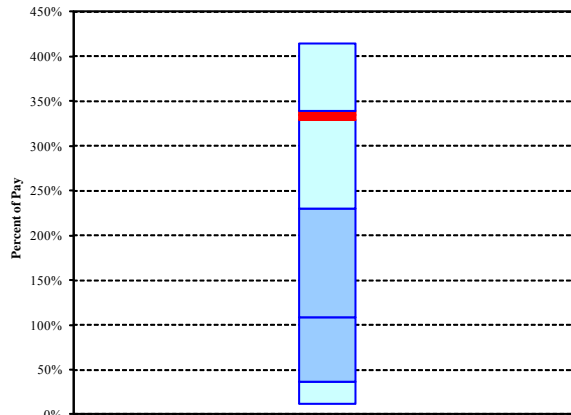
Discount Rate = 4.00%, Average Amortization Period = 27.0 Years



BARTEL ASSOCIATES GASB 45 DATABASE

CAMP

Bartel Associates GASB 45 OPEB Database Actuarial Accrued Liability



	<u>Miscellaneous</u>
95th Percentile	415%
75th Percentile	231%
50th Percentile	108%
25th Percentile	36%
5th Percentile	12%
Percent of Pay	334%
Percentile	91%

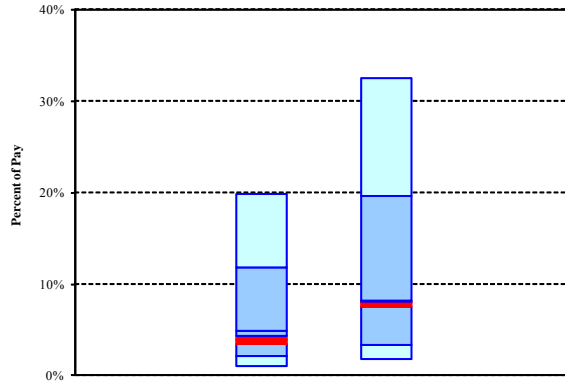
Discount Rate = 4.00%



BARTEL ASSOCIATES GASB 45 DATABASE

IBEW

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



	<u>Miscellaneous</u>	
	<u>NC</u>	<u>ARC</u>
95th Percentile	19.8%	32.4%
75th Percentile	11.8%	19.6%
50th Percentile	4.9%	8.1%
25th Percentile	2.1%	3.3%
5th Percentile	1.0%	1.7%
Percent of Pay	3.8%	7.9%
Percentile	40%	49%

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



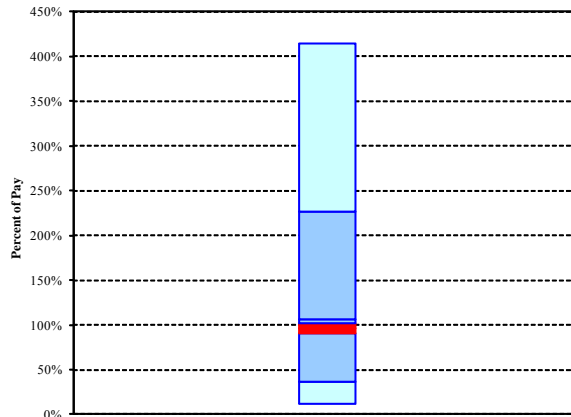
April 15, 2013



BARTEL ASSOCIATES GASB 45 DATABASE

IBEW

Bartel Associates GASB 45 OPEB Database Actuarial Accrued Liability



	<u>Miscellaneous</u>
95th Percentile	415%
75th Percentile	226%
50th Percentile	107%
25th Percentile	36%
5th Percentile	12%
Percent of Pay	96%
Percentile	48%

Discount Rate = 4.00%



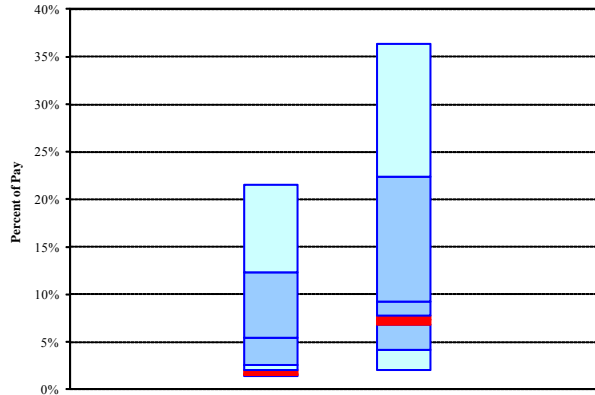
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BARTEL ASSOCIATES GASB 45 DATABASE

IAFF

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



	<u>Safety</u>	
	<u>NC</u>	<u>ARC</u>
95th Percentile	21.6%	36.3%
75th Percentile	12.3%	22.4%
50th Percentile	5.5%	9.3%
25th Percentile	2.6%	4.2%
5th Percentile	1.4%	2.1%
Percent of Pay	1.7%	7.3%
Percentile	10%	40%

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



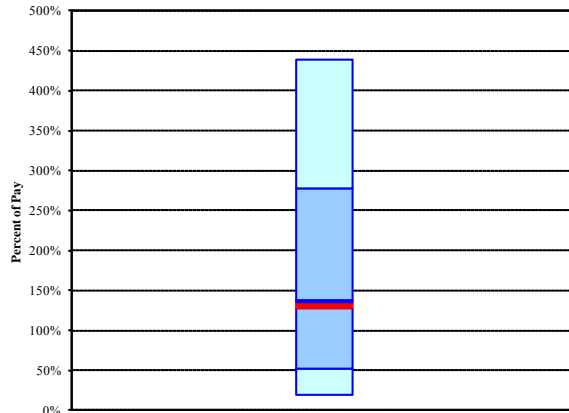
April 15, 2013



BARTEL ASSOCIATES GASB 45 DATABASE

IAFF

Bartel Associates GASB 45 OPEB Database Actuarial Accrued Liability



	<u>Safety</u>
95th Percentile	439%
75th Percentile	278%
50th Percentile	138%
25th Percentile	52%
5th Percentile	0%
Percent of Pay	133%
Percentile	49%

Discount Rate = 4.00%



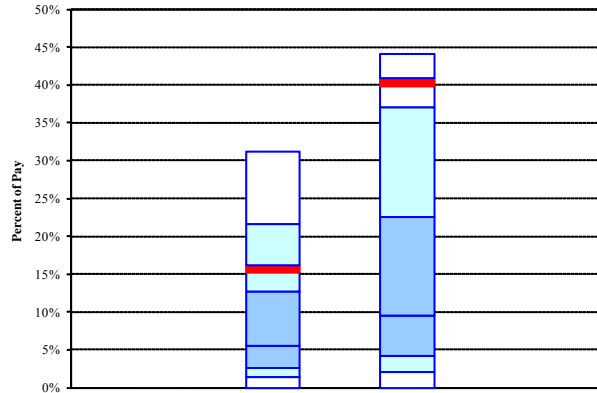
April 15, 2013



BARTEL ASSOCIATES GASB 45 DATABASE

VPOA

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



Safety

	<u>NC</u>	<u>ARC</u>
95th Percentile	21.6%	37.0%
75th Percentile	12.7%	22.6%
50th Percentile	5.5%	9.4%
25th Percentile	2.6%	4.2%
5th Percentile	1.4%	2.1%
Percent of Pay	15.7%	40.4%
Percentile	84%	98%

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



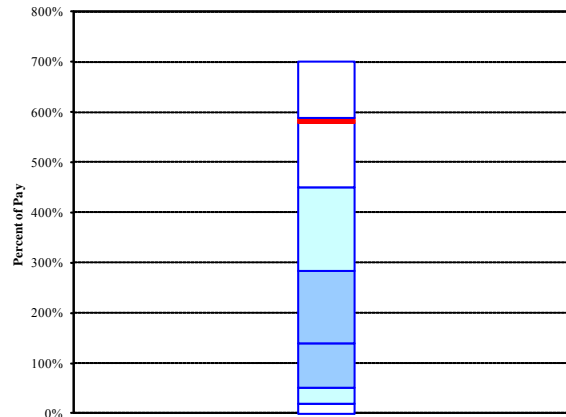
April 15, 2013



BARTEL ASSOCIATES GASB 45 DATABASE

VPOA

Bartel Associates GASB 45 OPEB Database Actuarial Accrued Liability



Safety

95th Percentile	450%
75th Percentile	285%
50th Percentile	139%
25th Percentile	52%
5th Percentile	20%
Percent of Pay	583%
Percentile	98%

Discount Rate = 4.00%



April 15, 2013

