

# COUNTY OF NAPA RETIREE HEALTHCARE PROGRAM JANUARY 1, 2006 ACTUARIAL VALUATION

## **Preliminary Results**

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## Agenda

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## **Benefit Summary**

Sick Leave Conversion								
■ Eligibility	<ul> <li>Retire directly from the County, except extra helps and elected officials</li> <li>Minimum 120 hours unused sick leave</li> <li>One time choice at retirement</li> <li>Can not be banked to a later date</li> <li>Courts: See Page 4</li> </ul>							
■ Sick Leave	Law Enforcement	Management <sup>1</sup>	Public Service <sup>2</sup>					
Conversion	• 8 hrs/month – EE • 16 hrs/month – EE+1 • Max – 1,800 hrs	• 8 hrs/month – EE • 16 hrs/month – EE+1 • Max – 1,800 hrs	• 8 hrs/month – EE • Max – 1,248 hrs					
	<ul> <li>Apply accumulated sick leave hours to medical or dental premiums (Medical premium based on Kaiser \$5 plan)</li> <li>No surviving spouse benefit</li> </ul>							
■ Sick Leave Accrual	• 96 hours/year	• 96 hours/year	• 96 hours/year					

Includes Confidential, classified, non-classified and court employees in the same classification Includes court employees in the same classification

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## **Benefit Summary**

<b>Long-Term Service &amp; Other Benefits</b>								
	Law Enforcement	Management	Public Service					
■ Long-Term Service Conversion	• n/a	<ul> <li>Retire directly from the County, except extra helps</li> <li>50&amp;20</li> </ul>						
		• County pays single party medical premium until age 65						
		• Premium based on Kaiser	\$5 plan					
■ Lifetime Benefit	• n/a	<ul><li>Non-classified only</li><li>Incl. elected officials</li></ul>	• n/a					
		• 8 years County Svc						
		• 5+ yrs Non-Classified						
		County pays medical, dental and vision family coverage for life of retiree and spouse						
		• Termination – Deferred Benefits						





## **Benefit Summary**

Long-Term Service & Other Benefits								
• Include in County paid ben • Unequal method:    Active	Retirees							







## **Benefit Summary**

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	Long-	Term Sei	rvice &	Other Be	enefits		
■ PEMHCA							
Minimum				Miscellan	eous/General		
			Active Cap		Alternativ	e PEMHCA	Minimum
	<u>Year</u>	Single	2-Party	Family	Single	2-Party	Family
	2002	\$252.54	\$475.94	\$610.24	\$10.00	\$10.00	\$10.00
	2003	252.54	475.94	610.24	22.63	33.80	40.51
	2004	293.90	556.36	714.16	37.32	61.62	76.22
	2005	347.52	660.64	848.86	54.70	94.65	118.66
	2006	396.78	756.40	972.60	74.54	132.47	167.29
				Law En	forcement		
			Active Cap		Alternativ	e PEMHCA	Minimum
	Year	Single	2-Party	<u>Family</u>	<u>Single</u>	2-Party	<u>Family</u>
	2002	\$258.00	\$482.00	\$616.00	\$10.00	\$10.00	\$10.00
	2003	258.00	482.00	616.00	22.90	34.10	40.80
	2004	258.00	482.00	616.00	35.80	58.20	71.60
	2005	331.52	644.64	832.86	52.38	90.43	113.24
	2006	380.78	740.40	956.60	71.42	127.45	161.07
■ Courts	• Retired	d < 1/1/01	- County	responsib	ility		
	• Hired	< 1/1/01 -	County s	hare based	l on service	e as of 1/1/	01
	• Hired	> 1/1/01 -	Not Cou	nty respon	sibility		
	• Altern	ative Cour	ts separat	ion date: 7	7/1/97		
	<ul> <li>Alloca</li> </ul>	te benefit	payments	in the fut	ure?		



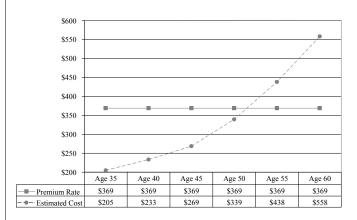


#### **Benefit Summary**

#### **Long-Term Service & Other Benefits**

■ Implied Subsidy

■ Participating retirees paying active rates vs. actual cost



- Community rated plans not required to value implied subsidy
- PEMHCA is, for most employers, community rated plan
- County Kaiser \$5 Plan value implied subsidy up to age 65



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#### **PEMHCA/County Kaiser \$5 Premium**

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## Non Medicare Eligible (Bay Area/Sacramento)

		2005		2006			
Plan	EE	<b>EE</b> +1	Family	EE	EE+1	Family	
Blue Shield	\$389.96	\$779.92	\$1,013.90	\$425.50	\$851.00	\$1,016.30	
Kaiser	354.69	709.38	922.19	389.38	778.76	1,012.39	
PERS Choice	369.74	739.48	961.32	404.59	809.18	1,051.93	
PERS Care	619.93	1,239.86	1,611.82	680.43	1,360.86	1,769.12	
PORAC	399.00	748.00	950.00	399.00	748.00	950.00	
WHA	322.47	644.94	838.42	354.07	708.14	920.58	
County Kaiser \$5	n/a	n/a	n/a	423.08	846.16	1,125.40	

#### **Medicare Eligible**

			0				
		2005		2006			
Plan	EE	EE+1	Family	EE	<b>EE</b> +1	Family	
Blue Shield	\$287.78	\$575.56	\$863.34	\$286.49	\$572.98	\$859.47	
Kaiser	243.22	486.44	729.66	218.59	437.18	655.77	
PERS Choice	279.60	559.20	838.80	322.03	644.06	966.09	
PERS Care	289.32	578.64	867.96	347.20	694.40	1,041.60	
PORAC	351.00	701.00	1,049.00	351.00	701.00	1,049.00	
WHA	280.24	560.48	840.72	277.44	554.88	832.32	
County Kaiser \$5	n/a	n/a	n/a	313.71	627.42	906.66	





#### **Dental/Vision Premiums**

## **Dental Monthly Composite Rates**

	Law Enforcement	Management	Public Service
Delta	\$125.83	\$103.11	\$ 86.95
Pacific Union	69.74	65.82	69.74

#### Vision Monthly Rate

	EE	EE+1	Family
Vision	\$ 8.00	\$16.00	\$ 21.30





## **Dental/Vision Premiums**

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## **Participant Statistics – Active**

	Law Enf	orcement	<u>N</u>	<u> Ianageme</u>	<u>nt</u>	<b>Public</b>	<u>Service</u>		
■ Actives:	<u>DSA</u>	LE-Supv	<b>Conf</b>	Classified	<u>NC</u>	<u>PSE</u>	<u>Supv</u>	<b>Courts</b>	<b>Total</b>
> Count	70	14	20	123	23	841	103	100	1,294
> Ave age	37.7	43.8	49.0	48.6	54.5	44.1	49.6	44.9	45.0
> Ave service	8.5	14.8	7.9	10.7	13.7	8.1	13.2	8.6	9.0
> Ave PERS Wages <sup>3</sup>	\$76,637	\$94,471	\$43,778	\$93,310	\$120,545	\$49,583	\$64,401	\$50,174	\$58,085
> PERS Payroll (000's) <sup>3</sup>	\$5,365	\$1,323	\$876	\$11,477	\$2,773	\$41,699	\$6,633	\$5,017	\$75,162
<ul><li>Unused Sick Leave Hours</li></ul>									
• Total (000's)	35	13	6	73	9	207	51	19	413
• Ave	504	926	290	591	406	246	495	185	319

<sup>&</sup>lt;sup>3</sup> Annualized pay as provided in the data



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## **Data Summary**

## **Participant Statistics - Inactive**

	<b>Law Enforcement</b>			<u>Management</u>			<u>Service</u>		
■ Retirees:	<u>DSA</u>	LE-Supv	Conf	Classified	<u>NC</u>	<u>PSE</u>	Supv	<b>Courts</b>	<b>Total</b>
> Service Retired									
• Count	13	-	3	45	35	167	30	21	314
• Ave Age	60.5	-	61.2	64.7	68.8	66.9	65.9	62.5	66.1
• Ave Ret Age	56.1	-	59.2	58.4	59.6	60.8	60.7	58.9	60.1
> Disable Retired									
<ul> <li>Count</li> </ul>	5	-	-	1	-	1	1	-	8
• Ave Age	56.4	-	-	59.0	-	49.6	57.0	-	55.9
• Ave Ret Age	53.5	-	-	58.8	-	-	-	-	54.4
■ Vested Terms:									
<ul> <li>Count</li> </ul>	-	-	-	-	3	-	-	-	3
<ul> <li>Ave Age</li> </ul>	-	_	-	-	52.0	_	-	_	52.0

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## **Participant Statistics – Courts Active**

	<u>N</u>	<u> Ianagemei</u>	<u>1t</u>	Public S	<u>Service</u>		
■ Actives:	<b>Conf</b>	Classified	<u>NC</u>	<u>PSE</u>	<u>Supv</u>	<u>Judge</u>	<b>Total</b>
> Count	4	7	1	75	8	5	100
> Ave age	36.8	46.8	60.0	43.7	49.3	57.2	44.9
> Ave service	3.9	9.6	4.6	8.2	9.0	16.9	8.6
> Ave PERS Wages	67,880	91,460	145,222	46,598	53,511	7,509	50,174
> PERS Payroll (000's)	272	640	145	3,495	428	38	5,017
<ul><li>Unused Sick Leave Hours</li></ul>							
• Total	1,194	2,168	57	13,562	1,562	-	18,543
• Ave	298	310	57	181	195	-	185







## **Data Summary**

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## **Participant Statistics – Courts Inactive**

	<u>M</u>	<b>Management</b>			<u>Service</u>			
■ Retirees:	Conf	Classified	<u>NC</u>	<u>PSE</u>	<u>Supv</u>	<u>Judge</u>	<b>Total</b>	
> Service Retired								
• Count	2	1	0	13	3	2	21	
• Ave Age	65.3	63.3	0.0	62.1	62.0	63.0	62.5	
<ul> <li>Ave Ret Age</li> </ul>	61.8	61.9	0.0	58.0	58.5	60.1	58.9	





#### Medical Coverage Active

<u>Plan</u>	<u>Single</u>	<u> 2 Party</u>	<u>Family</u>	<u>Total</u>
County KAISER \$5	116	100	137	353
PERS BLUE SHIELD	91	66	125	282
PERS KAISER	149	112	188	449
PERS CARE	2	-	-	2
PERS CHOICE	16	21	14	51
PERS PORAC	-	-	1	1
PERS WHA	-	1	-	1
Waived	N/A	<u>N/A</u>	<u>N/A</u>	<u>155</u>
Total	374	300	465	1,294





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## **Data Summary**

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#### Medical Coverage Inactive

<u>Plan</u>	<b>Single</b>	2 Party	<b>Family</b>	<b>Total</b>
County KAISER \$5	84	53	1	138
PERS BLUE SHIELD	23	15	6	44
PERS KAISER	27	11	2	40
PERS CARE	5	11	2	18
PERS CHOICE	35	19	1	55
PERS PORAC	2	-	1	3
Vested Term	N/A	N/A	N/A	3
Dental & Vision Only	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>24</u>
Total	176	109	13	325





#### **Dental Coverage** Active

	<u>Single</u>	<u> 2 Party</u>	<u>Family</u>	<u>Total</u>
Delta Dental	101	117	948	1,166
Pacific Union	8	4	38	50
Waived	<u>N/A</u>	N/A	N/A	<u>78</u>
Total	109	121	986	1,294

#### Inactive

	<u>Single</u>	2 Party	<b>Family</b>	<u>Total</u>
Delta Dental	10	67	5	82
Vested Term	N/A	N/A	N/A	3
Waived	N/A	<u>N/A</u>	<u>N/A</u>	<u>240</u>
Total	10	67	5	325





## **Data Summary**

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#### Vision Coverage Active

	<u>Single</u>	2 Party	<b>Family</b>	<u>Total</u>
Vision	208	180	248	636
Waived	N/A	<u>N/A</u>	N/A	<u>658</u>
Total	208	180	248	1,294

#### Inactive

	<b>Single</b>	2 Party	<b>Family</b>	<b>Total</b>
Vision	23	36	6	65
Vested Term	N/A	N/A	N/A	3
Waived	<u>N/A</u>	N/A	<u>N/A</u>	<u>257</u>
Total	23	36	6	325





## **Inactive by Benefit Types**

Medical			Dental			
	<b>SLC</b>	<b>Lifetime</b>	EE paid	<b>Waived</b>	<b>Total</b>	
Sick Leave Conversion	5	-	8	86	99	
<b>Long Term Service</b>	18	-	3	36	57	
Lifetime	-	34	0	0	34	
<b>EE Paid County Kaiser</b>	-	-	2	52	54	
<b>PEHMCA Minimum Only</b>	-	-	-	57	57	
Waived	<u>7</u>	<u>3</u>	<u>5</u>	<u>9</u> <sup>4</sup>	<u>24</u>	
Total	30	37	18	240	325	

<sup>4</sup> Vision only



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## **Data Summary**

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#### **Actives – Law Enforcement**

			Service							
Age		Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	Total	
Under 25	Count	1	-	-	-	-	-	-	1	
	Average Salary	30,254	-	-	-	-	-	-	30,254	
25-29	Count	2	6	2	-	-	-	-	10	
	Average Salary	48,123	63,890	70,857	-	-	-	-	62,130	
30-34	Count	1	6	7	-	-	-	-	14	
	Average Salary	36,379	75,325	78,898	-	-	-	-	74,330	
35-39	Count	-	7	9	6	2	-	-	24	
	Average Salary	-	73,751	81,167	86,642	88,345	-	-	80,971	
40-44	Count	-	2	2	4	8	1	-	17	
	Average Salary	-	81,055	83,085	88,644	85,601	85,356	-	85,472	
45-49	Count	-	-	5	1	5	3	-	14	
	Average Salary	-	-	85,124	98,318	89,328	94,843	-	89,650	
50-54	Count	-	1	-	1	-	-	-	2	
	Average Salary	-	90,760	-	79,513	-	-	-	85,137	
55-59	Count	-	-	1	-	-	-	1	2	
	Average Salary	-	-	91,469	-	-	-	81,884	86,676	
60-64	Count	-	-	-	-	-	-	-	-	
	Average Salary	-	-	-	-	-	-	-	-	
65 & Over	Count	-	-	-	-	-	-	-	-	
	Average Salary	-	-	-	-	-	-	-	-	
Total	Count	4	22	26	12	15	4	1	84	
	Average Salary	40,720	72,928	81,068	87,688	87,209	92,471	81,884	79,610	

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Actives – Management

					Ser	vice			Service							
Age		Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	Total							
Under 25	Count	-	-	-	-	-	-	-	-							
	Average Salary	-	-	_	-	-	-	-	-							
25-29	Count	-	2	-	-	-	-	-	2							
	Average Salary	-	68,153	-	-	-	-	-	68,153							
30-34	Count	2	2	2	1	-	_	-	7							
	Average Salary	45,837	69,507	80,421	72,734	-	-	-	66,324							
35-39	Count	1	6	4	2	1	-	-	14							
	Average Salary	61,490	90,688	90,008	82,651	89,548	-	-	87,178							
40-44	Count	3	7	11	3	4	1	-	29							
	Average Salary	57,873	90,560	94,080	81,836	95,838	95,434	-	88,507							
45-49	Count	3	5	8	2	1	6	-	25							
	Average Salary	46,363	109,247	98,370	88,535	46,534	86,212	-	88,527							
50-54	Count	3	7	10	4	11	8	5	48							
	Average Salary	69,927	94,842	68,030	89,840	96,408	101,123	96,536	88,864							
55-59	Count	3	3	6	4	4	2	3	25							
	Average Salary	85,469	99,524	112,049	102,419	112,177	55,582	98,325	99,672							
60-64	Count	-	2	4	-	5	1	1	13							
	Average Salary	-	68,217	95,827	-	122,169	129,517	163,074	109,475							
65 & Over	Count	-	1	2	-	-	-	-	3							
	Average Salary	-	158,268	92,743	-	-	-	-	114,584							
Total	Count	15	35	47	16	26	18	9	166							
	Average Salary	62,137	93,050	90,726	89,353	101,518	92,354	104,526	91,115							



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## **Data Summary**

#### **Actives – Public Service**

			Service								
Age		Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	Total		
Under 25	Count	16	8	2		-	-	-	26		
	Average Salary	33,928	37,653	56,218	-	-	-	-	36,788		
25-29	Count	17	54	11	-	-	-	-	82		
	Average Salary	36,409	46,943	45,169	-	-	-	-	44,521		
30-34	Count	19	48	36	4	-	-	-	107		
	Average Salary	37,060	53,913	57,209	40,043	-	-	-	51,511		
35-39	Count	16	36	48	16	4	-	-	120		
	Average Salary	38,888	48,028	49,643	60,578	48,805	-	-	49,155		
40-44	Count	16	33	36	27	13	3	-	128		
	Average Salary	36,755	53,987	57,197	55,629	58,822	56,505	-	53,632		
45-49	Count	10	33	40	28	25	12	3	151		
	Average Salary	34,802	47,247	53,862	57,540	59,506	58,986	47,792	53,057		
50-54	Count	6	24	35	24	31	13	11	144		
	Average Salary	47,033	51,123	51,565	55,240	58,608	48,079	57,577	53,576		
55-59	Count	2	25	23	18	19	16	9	112		
	Average Salary	41,618	56,250	50,897	51,489	54,141	53,728	63,075	53,955		
60-64	Count	1	10	14	8	14	2	6	55		
	Average Salary	11,384	46,112	53,696	48,446	46,883	48,151	61,114	49,657		
65 & Over		1	3	3	1	4	4	3	19		
	Average Salary	58,365	48,873	40,455	41,336	64,663	49,992	41,048	49,971		
Total	Count	104	274	248	126	110	50	32	944		
	Average Salary	37,110	50,126	52,878	54,952	56,437	53,166	57,320	51,200		

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## **Actives - Courts**

		Service							
Age		Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	Total
Under 25	Count	-	1	-	-	-	-	-	1
	Average Salary	-	36,428	-	-	-	-		36,428
25-29	Count	2	2	3	-	-	-		7
	Average Salary	19,867	45,244	46,624	-	-	-		38,585
30-34	Count	3	3	1	1	-	_		8
	Average Salary	35,550	38,372	45,191	45,166	-	-		39,015
35-39	Count	1	1	7	3	4	-	-	16
	Average Salary	41,074	43,857	53,378	59,200	44,410	-		50,863
40-44	Count	2	3	7	2	2	2		18
	Average Salary	47,992	49,478	59,267	47,889	50,763	61,533	-	54,425
45-49	Count	2	4	5	2	2	2	1	18
	Average Salary	44,246	61,550	56,457	68,798	33,219	54,779	45,250	54,212
50-54	Count	1	4	4	2	3	1	1	16
	Average Salary	24,284	42,429	61,980	26,326	48,039	51,307	58,248	46,765
55-59	Count	1	4	1	2	1	3	-	12
	Average Salary	18,719	88,889	55,576	22,798	126,622	7,509	-	52,050
60-64	Count	-	3	1	-	-	-	-	4
	Average Salary	-	55,749	89,386	-	-	-	-	64,158
65 & Over	Count	-	-	-	-	-	-	-	-
	Average Salary	-	-	-	-	-	-	-	-
Total	Count	12	25	29	12	12	8	2	100
	Average Salary	34,578	54,922	56,853	46,199	51,362	38,307	51,749	50,174



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## **Data Summary**

#### **Actives - Total**

			Service						
Age		Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	Total
Under 25	Count	17	9	2			-	-	28
	Average Salary	33,711	37,517	56,218	_	-	-	-	36,542
25-29	Count	21	64	16	-	•	-	-	101
	Average Salary	35,950	49,142	48,653	-	-	-	-	46,321
30-34	Count	25	59	46	6	1	-	-	136
	Average Salary	37,554	55,829	61,258	46,346	-	-	-	53,887
35-39	Count	18	50	68	27	11	-	-	174
	Average Salary	40,266	56,665	56,574	67,852	58,100	-	-	56,760
40-44	Count	21	45	56	36	27	7	-	192
	Average Salary	40,842	60,578	65,625	61,051	71,644	67,624	-	61,793
45-49	Count	15	42	58	33	33	23	4	208
	Average Salary	38,374	55,990	62,920	61,336	62,038	70,400	47,157	59,883
50-54	Count	10	36	49	31	45	22	17	210
	Average Salary	51,627	59,759	55,776	58,622	67,143	67,514	69,075	61,423
55-59	Count	6	32	31	24	24	21	13	151
	Average Salary	59,727	64,387	64,193	57,586	66,834	47,302	72,656	61,806
60-64	Count	1	15	19	8	19	3	7	72
	Average Salary	11,384	50,987	64,444	48,446	66,695	75,273	75,680	61,263
65 & Over		1	4	5	1	4	4	3	22
	Average Salary	58,365	76,222	61,370	41,336	64,663	49,992	41,048	58,782
Total	Count	135	356	350	166	163	80	44	1,294
	Average Salary	39,773	56,092	60,384	60,002	66,086	62,463	67,280	58,085





## **Actuarial Assumptions**

	<u>1/1/2006 Valuation</u>				
■ Valuation Date	<ul> <li>January 1, 2006</li> <li>2006/07 Fiscal Year</li> </ul>				
■ Discount rate	> 4.25% (assets invested in General Fund, not prefunded)				
	> 7.0% (pre-funded & assets invested in separate trust)				
<ul><li>Aggregate Payroll Increases</li></ul>	3.25%				
■ Inflation	3.00%				
<ul><li>Healthcare cost increases</li></ul>	<u>Year HMO PPO</u> 2007 11.0% 12.0%				
	2008 10.3% 11.3% ↓ ↓ ↓ 2017+ 4.0% 5.0%				





## **Actuarial Assumptions**

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	1/1/2006 Valuation					
■ DEMIICA minimum		<u>Ac</u>	ctives	Retirees		
■ PEMHCA minimum	2006	(	64.60	18.06		
Increases	2007	8	80.80	22.10		
	2008	Ģ	97.00	26.95		
	2009+	Increased b	y PPO healthcare trend			
■ Dental Increase	3.00%					
■ Vision Increase	3.00%					
■ Mortality, Disability, Withdrawal	CalPERS' 1997-2002 Experience Study					
■ Retirement	CalPI	ERS' 1997-20	002 Experienc	e Study		
	Miscella	aneous	<u>S</u>	afet <u>y</u>		
	Level	2.5%@55	Level	3%@50		
	Male ERA	≈ 60	ERA(25YOS	$(S) \approx 54$		
	Female ERA	≈ <b>5</b> 9				

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## **Actuarial Assumptions**

	<u>1/1/2006 Valuation</u>
<ul><li>Deferred retirement age</li></ul>	50
<ul><li>Participation</li></ul>	> Currently covered 100%
■ Dependents	<ul> <li>Not currently covered 90%</li> <li>Actives         <ul> <li>Currently covered – current marital status</li> <li>Not currently covered – 80% married</li> </ul> </li> <li>Retirees – current marital status</li> </ul>
■ Spouse Age	> Males 3 years older than females
■ Future Sick Leave Accumulation	> 96 hours/year
■ Future Sick Leave Usage	> 50% > Based on 2005 actual usage





## **Actuarial Assumptions**

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	<u>1/1/2006 Valuation</u>
Health plan at	> Same as current coverage, except,
retirement	> 7.5% have family coverage at retirement
	> 0% beyond age 57
	> Current waived – weighted average premium
Medicare eligible rate	> 100%
C	<ul> <li>Everyone eligible for Medicare will elect Part B coverage</li> </ul>
Benefit Coordination	> If eligible for both Sick Leave Conversion and Long Term Service Conversion => Elect longer benefit
Future New Entrants	None – Closed Group

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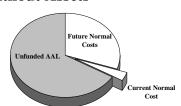




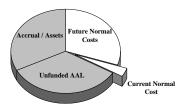
#### **Definitions**

## Present Value of Projected Benefits (PVPB)

#### **Without Assets**



#### With Assets



- PVPB Present Value of all Projected Benefits:
  - Discounted value, at measurement (valuation date 1/1/2006), of all future expected benefit payments
  - Expected benefit payments based on various (actuarial) assumptions



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## **Definitions**

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- AAL Actuarial Accrued Liability / Actuarial Obligations:
  - Discounted value, at measurement (valuation date -1/1/2006), of benefits "earned" (based on actuarial cost method) through measurement
  - Portion of PVPB "earned" at measurement
- 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

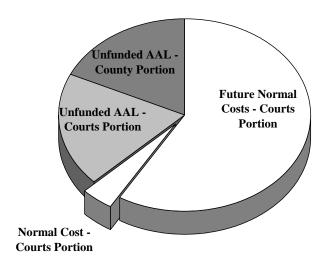
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#### **Actuarial Methods**

#### Present Value of Benefits Total Courts







#### **Actuarial Methods**

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- Courts Liability Allocation
  - PVPB: Allocated based on Courts separation date for County and Courts portions
  - AAL County Portion Same as PVPB County Portion
  - AAL Courts Portion Portion of PVPB Courts Portion "earned" at measurement

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- NC goes to Courts
- Future NC goes to Courts





## **Actuarial Methods**

	Comments
■ Cost Method	<ul> <li>Choice of 6 methods: Entry Age; Frozen Entry Age; Attained Age; Frozen Attained Age; Projected Unit Credit; &amp; Aggregate</li> <li>Entry Age Normal consistent with CalPERS and acceptable to GASB</li> </ul>
■ Initial Unfunded Liability Amortization	<ul> <li>Amortized as level percentage of pay over 20 (30?) years</li> <li>Acceptable to GASB</li> </ul>
■ "Implied Subsidy"	<ul> <li>Employer cost for allowing retirees to participate, irrespective of employer contribution</li> <li>Community rated plans not required to value</li> </ul>
	implied subsidy
	■ PEMHCA is, for most employers, community rated plan
	■ County Kaiser \$5 Plan - need to value implied subsidy





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## **Actuarial Methods**

GASB Terminology	Definition
■ Annual Required Contribution (ARC)	<ul> <li>Actuarially determined contribution, using funding method, amortization period, assumptions, etc.</li> </ul>
■ Annual Other Post Employment Benefit (OPEB) Cost (AOC)	<ul> <li>Similar to GASB 27 Annual Pension Cost</li> <li>ARC, adjusted for:         <ul> <li>Interest on NOO and</li> <li>Amortization of NOO</li> </ul> </li> </ul>
■ Net OPEB Obligation (NOO)	<ul> <li>Historical difference between actual contribution and ARC</li> <li>NOO (end of year) =         NOO (beginning of year)         + AOC (for year)         - actual contributions (made during year)</li> </ul>

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## **Simplified Example - Active**

(Assumes 0% Interest and Other Simplifying Assumptions)

If:			Age	Service		PERSable Wages
	At Hire:		35	0		-
	Current:		45	10		\$ 60,000
	At Retirement:		60	25		-
The	en:					
	PVPB <sub>45</sub>	=				\$ 100,000
	$AAL_{45}$	=	(10/25	) x 100,000	=	40,000
	Assets	=				0
	UAAL	=				40,000
	$NC_{45/46}$	=	(1/25	) x 100,000	=	4,000







## **Simplified Example - Active**

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#### **Annual Required Contribution**

Normal Cost	=			\$ 4,000
<b>UAAL</b> Amortization	=	(1/20) x 40,000	=	2,000
ARC - \$	=			6,000
ARC - %	=	6,000 / 60,000	=	10%

Pay as You Go Cost		0
Net OPEB Obligation	Without Trust	With Trus

0			
■ BoY NOO	=	\$ 0	\$ 0
■ + ARC	=	6,000	6,000
<ul><li>Payments</li></ul>	=	0	(6,000)
■ EoY NOO	=	6,000	0





## **Simplified Example - Retiree**

(Assumes 0% Interest and Other Simplifying Assumptions)

If:			Age Service		Annual Payment
	At retirement:		60 25	<del></del>	-
	Current Age:		62 25		\$ 4,000
The	en:				
	PVPB <sub>62</sub>	=			\$ 100,000
	$AAL_{62}$	=	(25/25) x 100,000	=	100,000
	Assets	=			0
	UAAL	=			100,000
	$NC_{62/63}$	=	(0/25) x 100,000	=	0



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## **Simplified Example - Retiree**

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#### **Annual Required Contribution**

Pay as You Go Cost				4,000
ARC - %	=			N/A
ARC - \$	=			5,000
<b>UAAL</b> Amortization	=	(1/20) x 100,000	=	5,000
Normal Cost	=			\$ 0

<b>Net OPEB Obligation</b>		Without Trust	With Trust
■ BoY NOO	=	\$ 0	\$ 0
■ + ARC	=	5,000	5,000
■ - Payments	=	<u>(4,000)</u>	(5,000)
■ EoY NOO	=	1,000	0





#### **Results – Total County**

#### **Actuarial Obligations** 4.25% Discount Rate (000's Omitted)

	County		
	County Only	Portion of Courts	Total County
■ Present Value of Benefits			
> Actives	\$71,378	\$1,811	\$73,189
Retirees	15,635	460	16,096
> Total	87,013	2,271	89,285
■ AAL			
> Actives	\$33,330	\$1,811	\$35,141
Retirees	15,635	460	16,096
> Total	48,966	2,271	51,237
■ Normal Cost	3,525	N/A	3,525
■ Pay-as-you-go Cost	1,347	63	1,410



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#### **Results – Total County**

#### **Annual Required Contribution (ARC)** 2006/07 Fiscal Year 4.25% Discount Rate (000's Omitted)

	County Only	Portion of Courts	Total County
■ ARC - \$			
Normal cost	\$ 3,525	N/A	\$ 3,525
UAAL Amortization <sup>5</sup>	2,793	\$ 130	2,922
> Total ARC	6,318	130	6,447
■ Total Payroll <sup>6</sup>	80,700	80,700	80,700
■ ARC - %			
Normal cost	4.4%	N/A	4.4%
UAAL Amortization	3.5%	0.2%	3.6%
> Total ARC	7.8%	0.2%	8.0%

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UAAL Amortized as a level percent of payroll over 20 years. Projected 2006/07 payroll to be consistent with 6/30/05 CalPERS reports





#### **Results – Total Courts**

#### Actuarial Obligations 4.25% Discount Rate (000's Omitted)

	County Portion of Courts	Courts Portion of Courts	Total Courts
<b>Present Value of Benefits</b>			
> Actives	\$1,811	\$4,821	\$6,631
Retirees	460	73	534
> Total	2,271	4,894	7,165
AAL			
> Actives	\$1,811	\$1,518	\$3,329
Retirees	460	73	534
> Total	2,271	1,591	3,863
Normal Cost	N/A	336	336
Pay-as-you-go Cost	63	15	78



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#### **Results – Total Courts**

#### Annual Required Contribution (ARC) 2006/07 Fiscal Year 4.25% Discount Rate (000's Omitted)

	County Portion of Courts	Courts Portion of Courts	Total Courts
■ ARC - \$			
Normal cost	N/A	\$ 336	\$ 336
➤ UAAL Amortization <sup>7</sup>	\$ 130	91	220
> Total ARC	130	427	556
■ Total Payroll	5,098	5,098	5,098
■ ARC - %			
Normal cost	N/A	6.6%	6.6%
UAAL Amortization	2.6%	1.8%	4.3%
➤ Total ARC	2.6%	8.4%	10.9%

<sup>&</sup>lt;sup>7</sup> UAAL Amortized as a level percent of payroll over 20 years.





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#### Results – Total County by Benefit Sick Leave Conversion

#### Actuarial Obligations 4.25% Discount Rate (000's Omitted)

	County		
	County	Portion of	Total
	Only	Courts	County
<b>Present Value of Benefits</b>			
> Actives	\$38,609	\$ 488	\$39,096
Retirees	2,330	94	2,425
> Total	40,939	582	41,521
AAL			
> Actives	\$18,230	\$ 488	\$18,718
Retirees	2,330	94	2,425
> Total	20,560	582	21,142
Normal Cost	1,870	N/A	1,870



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#### **Results – Total County by Benefit** Sick Leave Conversion

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## Annual Required Contribution (ARC) 2006/07 Fiscal Year 4.25% Discount Rate (000's Omitted)

	· ·	County Only	County Portion of Courts	Total County
■ ARC - \$				
Normal co	st	\$ 1,870	N/A	\$ 1,870
UAAL Am	ortization <sup>8</sup>	1,173	\$ 29	1,206
Total ARC		3,043	29	3,076
■ Total Payroll		80,700	80,700	80,700
■ ARC - %				
Normal cos	st	2.3%	N/A	2.3%
UAAL Am	ortization	1.5%	0.0%	1.5%
Total ARC		3.8%	0.0%	3.8%

<sup>&</sup>lt;sup>8</sup> UAAL Amortized as a level percent of payroll over 20 years.





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#### Results – Total County by Benefit Long Term Service & Other

#### Actuarial Obligations 4.25% Discount Rate (000's Omitted)

	County		
	County	Portion of	Total
	Only	Courts	County
<b>Present Value of Benefits</b>			
> Actives	\$32,769	\$1,323	\$34,092
Retirees	13,305	366	13,671
> Total	46,075	1,689	47,764
AAL			
> Actives	\$15,100	\$1,323	\$16,423
Retirees	13,305	366	13,671
> Total	28,406	1,689	30,095
Normal Cost	1,655	N/A	1,655



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#### Results – Total County by Benefit Long Term Service & Other

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## Annual Required Contribution (ARC) 2006/07 Fiscal Year 4.25% Discount Rate (000's Omitted)

	County Only	County Portion of Courts	Total County
ARC - \$			
Normal cost	\$ 1,655	N/A	\$ 1,655
➤ UAAL Amortization <sup>9</sup>	1,620	\$ 84	1,716
➤ Total ARC	3,275	84	3,371
Total Payroll	80,700	80,700	80,700
ARC - %			
Normal cost	2.1%	N/A	2.1%
UAAL Amortization	2.0%	0.1%	2.1%
➤ Total ARC	4.1%	0.1%	4.2%

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<sup>&</sup>lt;sup>9</sup> UAAL Amortized as a level percent of payroll over 20 years.





## **Sensitivity**

## Interest Rate Sensitivity Total County (000's Omitted)

	Discount Rate		
	4.25%	7.0%	
■ PVPB	\$89,285	\$55,322	
■ Funded Status			
> AAL	51,237	37,061	
> Assets	0	0	
Unfunded AAL	51,237	37,061	
■ 2006/07 ARC			
Normal Cost	3,525	2,097	
➤ UAAL Amortization <sup>10</sup>	2,922	2,725	
> Total Accrual	6,447	4,822	
Accrual as % of payroll	8.0%	6.0%	

UAAL Amortized as a level percent of payroll over 20 years.



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## Sensitivity

## Amortization Sensitivity Total County (000's Omitted)

■ Discount Rate	4.2.	5%	7.00%	
■ Amortization	20 Years	30 Years	20 Years	30 Years
■ PVPB	\$89,285	\$89,285	\$55,322	\$55,322
<b>■ Funded Status</b>				
> AAL	51,237	51,237	37,061	37,061
> Assets	0	0	0	0
Unfunded AAL	51,237	51,237	37,061	37,061
■ 2006/07 ARC				
<ul><li>Normal Cost</li></ul>	3,525	3,525	2,097	2,097
➤ UAAL Amortization <sup>11</sup>	2,922	2,040	2,725	2,115
<ul><li>Total Accrual</li></ul>	6,447	5,565	4,822	4,212
Accrual as % of payroll	8.0%	6.9%	6.0%	5.2%

UAAL Amortized as a level percent of payroll over 20 years.





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## **Sensitivity**

## Alternative PEMHCA Minimum 4.25% Discount Rate Total County (000's Omitted)

PEMHCA Minimum

	I EMITTOA MIMMUM	
	Current	Alternative
■ PVPB	\$89,285	\$261,108
<ul><li>Funded Status</li></ul>		
> AAL	51,237	133,748
> Assets	0	0
Unfunded AAL	51,237	133,748
■ 2006/07 ARC		
Normal Cost	3,525	11,725
> UAAL Amortization 12	2,922	7,628
<ul><li>Total Accrual</li></ul>	6,447	19,353
Accrual as % of payroll	8.0%	24.0%

UAAL Amortized as a level percent of payroll over 20 years.



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## Sensitivity

#### Alternative Courts Separation Date 4.25% Discount Rate County Portion of Courts (000's Omitted)

	Courts Separation Date	
	1/1/2001	7/1/1997
■ PVPB	\$2,271	\$1,576
<ul><li>Funded Status</li></ul>		
> AAL	2,271	1,576
> Assets	0	0
Unfunded AAL	2,271	1,576
■ 2006/07 ARC		
Normal Cost	N/A	N/A
➤ UAAL Amortization <sup>13</sup>	130	90
Total Accrual	130	90
> Accrual as % of payroll <sup>14</sup>	0.2%	0.1%

UAAL Amortized as a level percent of payroll over 20 years.
 Total County Payroll





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#### **GASB Information**

Estimated NOO
Total County
4.25% Discount Rate
(000's Omitted)

N	\$ -	
•	2006/07 ARC	6,447
•	Estimated Benefit Payment	(1,535)
Es	timated NOO 6/30/2007 <sup>15</sup>	4,913

<sup>15</sup> Actual NOO depends on actual benefit payment



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## **GASB Information**

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## **Projections**

# Cash and Accrual Projections 4.25%Discount Rate / 20 years amortization Total County (000's Omitted)

Fiscal Year Beginning July 1,	Beginning of Year Net OPEB Obligation	Pay As You Go (Estimated Open Group)	Annual OPEB Cost (AOC)	<u>Payroll</u>
2006	\$ -	\$1,535	\$6,447	\$80,700
2007	4,913	1,778	6,591	83,322
2008	9,727	2,076	6,743	86,030
2009	14,394	2,388	6,904	88,826
2010	18,911	2,697	7,075	91,713
2011	23,288	3,083	7,254	94,694
2012	27,459	3,445	7,444	97,772
2013	31,458	3,768	7,645	100,949
2014	35,335	4,160	7,855	104,230
2015	39,029	4,429	8,076	107,617



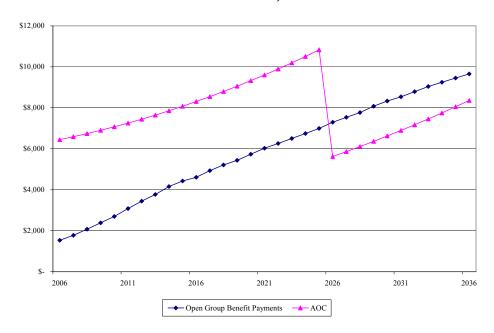
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## **Projections**

#### 30 Year Projection



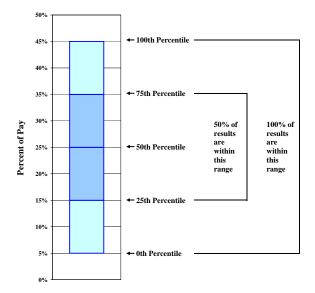
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#### **Bartel Associates GASB 45 Data Base**

GASB 45 Retiree Medical Benefits Survey Sample Percentile Graph



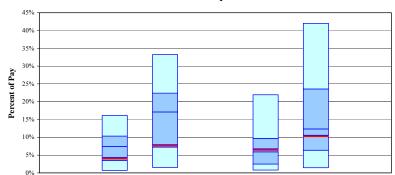




#### **Bartel Associates GASB 45 Data Base**

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GASB 45 Retiree Medical Benefits Survey Normal Cost & Annual Required Contribution



	Miscellaneous		Safe	ety
	NC	ARC	NC	ARC
100th Percentile	16.1%	33.2%	22.0%	42.0%
75th Percentile	10.3%	22.4%	9.7%	23.6%
50th Percentile	7.5%	17.1%	5.9%	12.3%
25th Percentile	3.5%	7.2%	2.5%	6.4%
0th Percentile	0.7%	1.5%	0.8%	1.4%
Napa County	4.1%	7.7%	6.6%	10.4%
Percentile	27.6%	25.5%	54.8%	41.9%

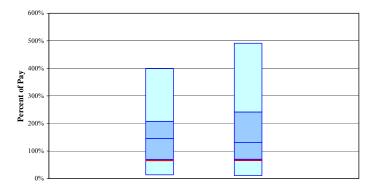
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#### **Bartel Associates GASB 45 Data Base**

GASB 45 Retiree Medical Benefits Survey Actuarial Accrued Liability



	<u>Miscellaneous</u>	Safety
100th Percentile	396%	491%
75th Percentile	205%	242%
50th Percentile	143%	131%
25th Percentile	62%	65%
0th Percentile	11%	11%
Napa County	63%	67%
Percentile	26%	29%





#### **Other Issues**

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- Comments:
  - If County Kaiser Plan goes away:
    - ☐ Sick Leave Conversion & Long Term Service Conversion liabilities likely decrease and
    - ☐ Implied subsidy liability goes away
- Timing:

lacktriangle	Discuss methods and assumptions	March 1, 2006
lacktriangle	Present preliminary results	April 3, 2006
lacktriangle	Revised result	April 18, 2006
lacktriangle	Executive summary & report	May 2, 2006
•	Revised Executive summary & result	Nov 6, 2006



