WEST CONTRA COSTA
UNIFIED SCHOOL DISTRICT

Actuarial Valuation of
Postemployment Health Benefits
Valuation Date: July 1, 2016

NICOLAY
CONSULTING

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PENSION CONSULTANTS AND ACTUARIES

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March10, 2017

Ms. Sheri Gamba
Associate Superintendent for Business Services
West Contra Costa Unified School District
1108 Bissell Avenue
Richmond, CA 94801-3135

Dear Ms. Gamba:

Re: <u>Actuarial Valuation of Postemployment Healthcare Plans</u>

The West Contra Costa Unified School District has retained Nicolay Consulting Group to complete this valuation of the West Contra Costa Unified School District postemployment medical program as of July 1, 2016.

The purpose of this valuation is to determine the value of the expected postretirement benefits for current and future retirees and the Actuarial Accrued Liability and Annual Required Contribution recognized under Government Accounting Standards Board Statement No. 45 (GASB 45) requirements for the fiscal year ending June 30, 2017. The amounts reported herein are not necessarily appropriate for use for a different fiscal year without adjustment.

In preparing this report we relied on employee data and plan information provided by the District. The results of the valuation are dependent on the accuracy of the data and other information provided. These data are not audited by Nicolay Consulting Group, although they were reviewed for reasonableness. Calculations presented in this valuation do not reflect any other postemployment benefits than those described in this report.

The financial projections presented in this report are intended for internal use in evaluating the potential cost of the retiree medical program and for the plan sponsor's financial statements. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Nicolay Consulting Group.

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On the basis of the data provided, this report has been prepared in accordance with generally accepted actuarial principles and methods. The assumptions for termination, retirement, mortality and health care claims morbidity rates are those used in the most recent California PERS and STRS Public Agency retirement plan valuations.

Mortality improvement was reflected based on the most recent tables published by the Society of Actuaries. Morbidity rates for age-adjusting claims rates are based on the most recent tables published by CalPERS. Certain other assumptions were selected specifically for this valuation, and in many cases, including assumed health care trend, reflect changes from that used in the prior valuation. For all other assumptions, we believe they are reasonable for the measurement of the obligation involved. It should be recognized, however, that there can be significant differences between actual experience and the assumptions. Moreover, other sets of reasonable assumptions can yield materially lesser or greater results.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Because of limited scope, we have not performed analysis of the potential range of such future differences.

Based on the foregoing, the cost results and actuarial exhibits presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures. We believe they fully and fairly disclose the actuarial position of the Plan based on the plan provisions, employee and plan cost data submitted.

The passage of healthcare reform in March 2010 ushered in a number of changes that might be expected to impact postretirement medical plans over time. We considered the possible effects of these changes for the District and summarized the results in this report.

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On December 18, 2015, President Obama signed the Omnibus Appropriations Act of 2015. There are significant provisions in this law relating to the Cadillac tax, the annual fee on health insurers, and the medical device tax. This valuation reflects this new legislation.

This report represents a statement of actuarial opinion by the undersigned actuary, who is a member of the American Academy of Actuaries (AAA) and is qualified to issue that opinion. Questions about the report should be directed to Gary Cline at (415) 512-5300 x231.

Sincerely,

By: ______________________________

Gary E. Cline, ASA, FCA, MAAA

WEST CONTRA COSTA
UNIFIED SCHOOL DISTRICT

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SECTION I

Summary of Valuation Results

Table 1-1

Summary of Valuation Results

	7/1/2016	7/1/2014
Present Value of Future Benefits		
Active	$95,202,650	$126,019,872
Retiree	$172,799,716	$261,518,204
Total	$268,002,366	$387,538,076
Actuarial Accrued Liability		
Active	$74,581,743	$91,304,642
Retiree	$172,799,716	$261,518,204
Total	$247,381,459	$352,822,846
Actuarial Value of Assets	$0	$0
Unfunded Actuarial Accrued Liability	$247,381,459	$352,822,846
Expected Employer Share of Current Year Plan Cost (Pay-As-You-Go)	$13,883,318*	$17,097,575
Annual Required Contribution	$20,963,662	$22,356,043
Number of Plan Participants		
Actives	2,288	2,410
Retirees and Surviving Spouses	2,239	2,407
Total	4,527	4,817
Discount Rate	7.28%	4.50%
Assumed Increase in Per-Capita Claim Costs		
Initial Rate		
Pre-65	8.0%	6.4%
Post-65	5.5%	6.4%
Ultimate Rate	5.0%	5.0%
Year Ultimate Rate Reached	2030	2021
PEMHCA Minimum	4.00%	4.00%

*Excludes implicit subsidy related to retiree premiums (since unadjusted premiums represent the current cash cost) and the implied subsidy related to active employee premiums (but the District can elect to recognize this as a retiree cash cost under GASB 45).

The Actuarial Accrued Liability (AAL) has decreased $105,441,387 from $352,822,846 as of July 1, 2014 to $247,381,459 as of July 1, 2016. A breakdown of the sources of this change in liability is shown in Table 1-2.

Table 1-2

Estimated Sources of Liability Change (millions)

	Amount	Percent
Expected Benefits Earned, Benefit Payments and Interest	$4.62	1%
Recognition of an Age-Related Implicit Subsidy	$65.09	18%
Actual 2016 and 2017 Premium Rates	$13.68	4%
Revised Medicare Plan Migration Assumption	$0.56	0%
Dental Benefits Eliminated For All Except Local 1	($34.83)	(10%)
Revised Discount Rate Assumption	($91.80)	(26%)
Actual Demographic and Other Experience	($62.76)	(18%)
Total*	($105.44)	(30%)

*Individual amounts may not add to total due to rounding.

Expected Benefits Earned, Benefit Payments and Interest: The liabilities were expected to increase 1% from the prior actuarial valuation due to net effect of active employees continuing to earn benefits, retirees receiving benefit payments, and interest.

Recognition of an Age-Related Implicit Subsidy: Since healthcare costs generally increase with age, an implied subsidy exists. This subsidy is caused by the difference between the flat-rate premiums participants are charged and the assumed average age-related claims costs.

Effective with measurement dates on or after March 31, 2016, Actuarial Standard of Practice No. 6 (ASOP 6) requires actuarial valuations to reflect the impact of aging on claims for “community-rated” plans. For the District, this means we were required to revise the pre and post-Medicare plan liabilities to base them on a claims cost curve as opposed to premiums. The resulting implicit subsidy identified from this assumption increased liabilities approximately $65,090,000, or roughly 18%. This subsidy is positive (an increase in the liability), which reflects the fact that the flat-rate premiums are lower than the assumed age-adjusted cost of coverage (e.g., for the pre-Medicare plans the younger active employees are subsidizing the older retired participants).

Actual 2016 and 2017 Premium Rates: The increase in medical premiums from 2014 and 2015 to 2016 and 2017 was higher than assumed, resulting in a 4% increase in liabilities.

Revised Medicare Plan Migration Assumption: We changed from assuming that the distribution of plans for future Medicare retirees will be that of all current retirees to assuming that the distribution will be that of all current Medicare retirees subject to caps of $450 per month or less. In addition, based on input from the District, we assumed that all participants in Blue Shield would migrate to United Healthcare at Medicare eligibility. This had a near zero impact on liabilities.

Dental Benefits Eliminated For All Except Local 1: Dental benefits have been eliminated for all groups except Local 1, resulting in a 10% decrease in liabilities.

Revised Discount Rate Assumption: The District has commenced prefunding. As a result, the discount rate assumption has changed from the expected long-term returns on internal assets, or 4.5%, to the expected long-term returns on CERBT assets under Asset Allocation Strategy 1, or 7.28%. This has decreased liabilities by 26%.

Actual Demographic and Other Experience: This is a catch-all category that refers to actual demographic experience (e.g., withdrawal, retirement, death, disability, marriage, etc.) and other experience (e.g., plan participation, plan selection, etc.) other than expected. Actual demographic experience is driven by the participant census data we collect from the District for our valuations. Demographic experience since the July 1, 2014 valuation resulted in an overall 18% decrease in the liability. This is largely due to higher-service employees in Local 1 and UTR terminating before retirement eligibility.

SECTION II
Development of ARC and GASB 45 Disclosures

Table 2-1 presents the Present Value of Future Benefits (i.e., liability based on all future service) and the Actuarial Accrued Liability (i.e., liability based on past service only) broken down by participant status and benefit type.

The implicit subsidy is the obligation associated with the difference between premiums and the assumed true per capita healthcare costs for District participants.

Table 2-1

West Contra Costa Unified School District
Present Value of Future Postemployment Healthcare Benefits
Attributable to Past Service
Based on a 7.28% discount rate
as of July 1, 2016

Total Present Value Attributable to Past Service (i.e., GASB 45 Actuarial Accrued Liability)

	Certificated UTR	Certificated WCCAA	Classified Local #1	Classified SSA	Unrep. Mgt., Confidential, Cabinet, Retired Board	Total
Medical						
Actives	$26,810,268	$1,212,941	$13,996,694	$2,262,717	$1,189,765	$45,472,384
Retirees	$82,095,654	$3,733,424	$47,068,688	$5,039,313	$8,641,506	$146,578,585
Total	$108,905,922	$4,946,365	$61,065,382	$7,302,030	$9,831,271	$192,050,969
Dental						
Actives	$0	$0	$3,928,696	$0	$0	$3,928,696
Retirees	$0	$0	$6,389,403	$0	$0	$6,389,403
Total	$0	$0	$10,318,099	$0	$0	$10,318,099
Subsidy						
Actives	$12,919,982	$959,911	$9,143,130	$1,468,594	$689,046	$25,180,663
Retirees	$10,300,498	$392,498	$7,289,134	$689,452	$1,160,146	$19,831,728
Total	$23,220,480	$1,352,409	$16,432,264	$2,158,046	$1,849,192	$45,012,391
Total						
Actives	$39,730,250	$2,172,852	$27,068,520	$3,731,311	$1,878,811	$74,581,743
Retirees	$92,396,152	$4,125,922	$60,747,225	$5,728,765	$9,801,652	$172,799,716
Total	$132,126,402	$6,298,774	$87,815,745	$9,460,076	$11,680,463	$247,381,459

Table 2-2

West Contra Costa Unified School District
Present Value of Future Postemployment Healthcare Benefits
Attributable to Future Service
Based on a 7.28% discount rate
as of July 1, 2016

Total Present Value Attributable to Future Service

	Certificated UTR	Certificated WCCAA	Classified Local #1	Classified SSA	Unrep. Mgt., Confidential, Cabinet, Retired Board	Total
Medical						
Actives	$4,781,749	$378,581	$4,269,914	$566,169	$405,324	$10,401,738
Retirees	$0	$0	$0	$0	$0	$0
Total	$4,781,749	$378,581	$4,269,914	$566,169	$405,324	$10,401,738
Dental						
Actives	$0	$0	$892,521	$0	$0	$892,521
Retirees	$0	$0	$0	$0	$0	$0
Total	$0	$0	$892,521	$0	$0	$892,521
Subsidy						
Actives	$4,248,746	$389,712	$3,840,542	$455,260	$392,388	$9,326,648
Retirees	$0	$0	$0	$0	$0	$0
Total	$4,248,746	$389,712	$3,840,542	$455,260	$392,388	$9,326,648
Total						
Actives	$9,030,495	$768,293	$9,002,977	$1,021,429	$797,712	$20,620,907
Retirees	$0	$0	$0	$0	$0	$0
Total	$9,030,495	$768,293	$9,002,977	$1,021,429	$797,712	$20,620,907

Table 2-3

West Contra Costa Unified School District
Total Present Value of Future Postemployment Healthcare Benefits
Based on a 7.28% discount rate
as of July 1, 2016

Total Present Value

	Certificated UTR	Certificated WCCAA	Classified Local #1	Classified SSA	Unrep. Mgt., Confidential, Cabinet, Retired Board	Total
Medical						
Actives	$31,592,017	$1,591,522	$18,266,608	$2,828,886	$1,595,089	$55,874,122
Retirees	$82,095,654	$3,733,424	$47,068,688	$5,039,313	$8,641,506	$146,578,585
Total	$113,687,671	$5,324,946	$65,335,296	$7,868,199	$10,236,595	$202,452,707
Dental						
Actives	$0	$0	$4,821,217	$0	$0	$4,821,217
Retirees	$0	$0	$6,389,403	$0	$0	$6,389,403
Total	$0	$0	$11,210,620	$0	$0	$11,210,620
Subsidy						
Actives	$17,168,728	$1,349,623	$12,983,672	$1,923,854	$1,081,434	$34,507,311
Retirees	$10,300,498	$392,498	$7,289,134	$689,452	$1,160,146	$19,831,728
Total	$27,469,226	$1,742,121	$20,272,806	$2,613,306	$2,241,580	$54,339,039
Total						
Actives	$48,760,745	$2,941,145	$36,071,497	$4,752,740	$2,676,523	$95,202,650
Retirees	$92,396,152	$4,125,922	$60,747,225	$5,728,765	$9,801,652	$172,799,716
Total	$141,156,897	$7,067,067	$96,818,722	$10,481,505	$12,478,175	$268,002,366

GASB 45 Benefit Cost

The District adopted GASB 45 in the 2007/08 fiscal year. Table 2-4 illustrates the District's GASB 45 Actuarial Accrued Liability (AAL) and 2016/17 financial statement expense assuming continuation of pay-as-you-go funding plus $21,000,000.

The Annual Required Contribution (ARC) consists of the Normal Cost plus the current year amortization of the Unfunded Actuarial Accrued Liability (UAAL). The amortization method used in this valuation is the level percentage of projected payroll method. The District elected to amortize the UAAL over a closed 30-year period. Nine years of amortization have occurred; 21 years remain.

Normal Cost is the portion of the actuarial present value of future benefits that is allocated to a particular year. Another interpretation is that the Normal Cost is the present value of future benefits that are "earned" by employees for service rendered during the current year. This valuation is based on the Entry Age Normal actuarial cost method. Under the Entry Age Normal cost method the actuarial present value of projected benefits is allocated on a level basis over the earnings or service (in this case earnings) of individuals between entry age and the assumed exit age(s). In this valuation each individual's attribution period extends from hire date to estimated retirement date. The valuation attributes the benefit assuming a 3.25% annual increase in payroll.

Table 2-4

Fiscal Year 2016/17 OPEB Annual Required Contribution

	2016	2014
Discount rate	7.28%	4.50%
Actuarial Accrued Liability	$247,381,459	$352,822,846
Actuarial Value of Assets	$0	$0
Unfunded Actuarial Accrued Liability	$247,381,459	$352,822,846
Remaining Amortization Period	21 years	23 years
Level percent of pay Amortization Factor (based on the discount rate and a 3.25% annual increase in payroll)	13.710	19.342
Normal Cost (based on the Entry Age Normal Method)	$2,919,227	$4,114,946
Annual Level Percentage of Pay Amort. of Unfunded AAL	$18,044,435	$18,241,097
Annual Required Contribution	$20,963,662	$22,356,043
Interest on Net OPEB Obligation	$8,092,921	$4,586,008
Adjustment to ARC	($8,108,678)	($5,268,858)
Annual OPEB Cost	$20,947,905	$21,673,193
Contribution	($34,883,318)	($17,097,575)
Increase in Net OPEB Obligation	($13,935,413)	$4,575,618
Net OPEB Obligation – Beginning of Year	$111,166,497	$101,911,283
Net OPEB Obligation – End of Year	$97,231,084	$106,486,901

A substantial change in GASB accounting rules has just been published which is scheduled to become effective for Fiscal Year 2017/18 and beyond. We have not attempted to quantify the change in actuarial liabilities that may result.

Amounts that can be counted as contributions towards the ARC include:

- Contributions made to a Trust
- Employer paid premium payments for retirees made directly to providers net of any reimbursements from the Trust
- Implicit rate subsidy payments related to premium payments for active employees, if elected.
- Interest on the above amounts to the end of the measurement period

Table 2-5 presents a projection of the District funding policy contributions. The funding policy contributions shown below include (i) pay-go costs unreimbursed by the Trust, (ii) cash contributions of $5,439,293 to the Trust and (iii) active implicit rate subsidy contributions that could be transferred to OPEB accounting.

Table 2-5

Total Trust and Non-Trust OPEB Contributions for Year Ending June 30, 2017

Cash, Active Benefit Expense Transfer of Premium Implicit Subsidies and Pay-go Costs

	FYE June 30, 2017
Cash Contributions to the Trust	$21,000,000
Projected Pay-go Costs[1]	$13,883,318
Active Implicit Rate Subsidy[2]	$0
Cross-Employer Active Implicit Rate Subsidy[3]	$0
Estimated Total OPEB Contributions	$34,883,318
ARC Explicit Subsidy[4]	$16,473,527
ARC Implicit Subsidy[5]	$4,490,135
Total ARC	$20,963,662

[1] Retiree premiums paid by the District.

[2] The active implicit rate subsidy represents a subsidy toward pre-Medicare retiree medical costs paid via active premiums, since the claims from both groups are combined to calculate a blended premium. This amount can be transferred from active employee benefit expense to OPEB expense and counted as a contribution toward the ARC. The amount is zero because the active demographic group is older, on average, than the CalPERS total population. Therefore, any implicit subsidies for District retirees will come from other CalPERS employer active employee premiums (i.e., a cross-employer active implicit rate subsidy).

[3] A Cross-Employer Subsidy of $1,977,949 comes from an Active Implicit Rate Subsidy that is not subsidizing the employer's own retirees. This **may** be counted as a contribution to OPEB, but GASB has not yet provided guidance on this issue. To consider it a contribution to OPEB, the District should seek approval from their auditor. Some auditors have allowed it to be considered a contribution on the basis that there is lack of guidance, but have stipulated that should guidance indicate it should not be counted as a contribution then the employer would have to retroactively reverse the accounting entry.

[4] The portion of the ARC attributable to current and future retiree premiums paid by the City.

[5] The portion of the ARC attributable to pre-Medicare retiree average claims costs in excess of premiums.

Table 2-6 contains a ten-year projection of the District's pay-as-you-go cost to provide postemployment medical and dental benefits to current and future retirees.

Table 2-6a

West Contra Costa Unified School District
Estimated Annual Postemployment Explicit Pay-as-you-go Cost

Explicit Subsidy

Year	Certificated UTR	Certificated WCCAA	Classified Local #1	Classified SSA	Unrep. Mgt., Confidential, Cabinet, Retired Board	Total
2016/17	$7,489,103	$302,289	$4,843,553	$461,704	$786,670	$13,883,318
2017/18	$7,503,256	$301,294	$4,815,886	$477,735	$785,686	$13,883,857
2018/19	$7,765,063	$310,217	$4,940,507	$483,228	$796,492	$14,295,508
2019/20	$8,065,663	$318,564	$5,004,741	$477,273	$784,957	$14,651,197
2020/21	$8,323,129	$329,610	$5,150,149	$496,374	$794,475	$15,093,737
2021/22	$8,622,640	$347,011	$5,239,530	$515,143	$801,181	$15,525,504
2022/23	$8,824,857	$367,920	$5,378,155	$516,773	$807,288	$15,894,992
2023/24	$9,050,835	$386,324	$5,503,099	$538,811	$806,019	$16,285,088
2024/25	$9,244,489	$392,102	$5,601,794	$552,399	$809,278	$16,600,062
2025/26	$9,383,832	$405,793	$5,728,786	$568,327	$810,175	$16,896,913

Table 2-6b

West Contra Costa Unified School District

Estimated Annual Postemployment Implicit Pay-as-you-go Cost

Implicit Subsidy

Year	Certificated UTR	Certificated WCCAA	Classified Local #1	Classified SSA	Unrep. Mgt., Confidential, Cabinet, Retired Board	Total
2016/17	$853,072	$25,494	$872,744	$108,807	$117,832	$1,977,949
2017/18	$866,262	$31,115	$918,708	$125,575	$122,403	$2,064,063
2018/19	$996,510	$38,997	$1,027,269	$136,243	$128,619	$2,327,638
2019/20	$1,131,289	$44,389	$1,069,113	$129,612	$117,608	$2,492,011
2020/21	$1,223,368	$55,446	$1,182,345	$141,758	$129,433	$2,732,350
2021/22	$1,429,344	$70,642	$1,233,997	$159,919	$132,420	$3,026,322
2022/23	$1,548,664	$93,222	$1,335,732	$162,462	$146,312	$3,286,392
2023/24	$1,674,437	$109,365	$1,378,847	$177,903	$160,758	$3,501,310
2024/25	$1,836,122	$121,030	$1,462,153	$191,894	$178,192	$3,789,391
2025/26	$1,917,718	$115,744	$1,528,242	$209,540	$194,690	$3,965,934

Table 2-6c

West Contra Costa Unified School District

Estimated Annual Postemployment Explicit and Implicit Pay-as-you-go Cost

Total Explicit and Implicit Subsidies

Year	Certificated UTR	Certificated WCCAA	Classified Local #1	Classified SSA	Unrep. Mgt., Confidential, Cabinet, Retired Board	Total
2016/17	$8,342,175	$327,783	$5,716,297	$570,511	$904,502	$15,861,267
2017/18	$8,369,518	$332,409	$5,734,594	$603,310	$908,089	$15,947,920
2018/19	$8,761,573	$349,214	$5,967,776	$619,471	$925,111	$16,623,146
2019/20	$9,196,952	$362,953	$6,073,854	$606,885	$902,565	$17,143,208
2020/21	$9,546,497	$385,056	$6,332,494	$638,132	$923,908	$17,826,087
2021/22	$10,051,984	$417,653	$6,473,527	$675,062	$933,601	$18,551,826
2022/23	$10,373,521	$461,142	$6,713,887	$679,235	$953,600	$19,181,384
2023/24	$10,725,272	$495,689	$6,881,946	$716,714	$966,777	$19,786,398
2024/25	$11,080,611	$513,132	$7,063,947	$744,293	$987,470	$20,389,453
2025/26	$11,301,550	$521,537	$7,257,028	$777,867	$1,004,865	$20,862,847

SECTION III
Plan Description and Demographic Summary

Retiree Coverage

Medical

Eligible retirees may enroll in any plan offered through the CalPERS medical program. Retirees who are eligible must enroll in Medicare Part A & B coverage in order for their coverage to continue beyond 65. If an eligible retiree does not qualify for premium free Part A they will remain enrolled in the basic plan.

District provided medical benefits continue throughout the lifetime of the retiree. A surviving spouse of the retiree must receive a monthly allowance from either CalPERS or CalSTRS to continue their health benefits.

Dental (Local One only)

Dental benefits are provided by Delta Dental. District employees who have a minimum of 10 years of service with the District, and whose age plus years of service is 75 or more, retire from the District and begin receiving a PERS or STRS pension are eligible for postemployment dental benefits.

Dental benefits continue throughout the lifetime of the retiree. However, surviving spouses are not eligible for postemployment dental coverage.

The District contributes 100% of the composite cost of retiree dental coverage.

Eligibility and Benefits - Medical

Described on the following pages.

United Teachers of Richmond (UTR)

UTR employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

UTR employees who retired between January 1, 2007 and June 30, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 100% of the cost of CalPERS Bay Area Kaiser coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

UTR employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 9	$0
10 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$750

UTR employees hired on, or after, January 1, 2007

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 9	$0
10 or more	The CalPERS Health Benefits Program Minimum Employer Contribution

UTR employees hired after July 1, 2016

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 14	$0
15 or more	The CalPERS Health Benefits Program Minimum Employer Contribution

UTR employees hired after July 1, 2017

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 24	$0
25 or more	The CalPERS Health Benefits Program Minimum Employer Contribution

School Supervisors Association (SSA)

SSA employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

SSA employees who retired between January 1, 2007 and June 30, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 110% of the cost of CalPERS Bay Area Blue Shield coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

SSA employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$550

SSA employees hired after January 1, 2007 but prior to July 15, 2009

Continuous years of service with the District	Maximum monthly District contribution
0 through 9	$0
10 or more	$450

SSA employees hired on, or after, July 15, 2009.

Year of Service under <u>CalPERS rules</u>	Maximum monthly <u>District contribution</u>
0 through 4	$0
5 through 24	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

West Contra Costa Administrators Association (WCCAA)

WCCAA employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

WCCAA employees who retired between January 1, 2007 and June 30, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 110% of the cost of CalPERS Bay Area Blue Shield coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

WCCAA employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 through 9	$250
10 or more	$450
Exceptions: if 20 or more years of service as of June 30, 2010	$550
if 25 or more years of service as of June 30, 2010	$750

WCCAA employees hired on, or after, January 1, 2007

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 4	$0
5 through 24	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

Public Employees, Local 1

Local 1 employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

Local 1 employees who retired between January 1, 2007 and June 30, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 110% of the cost of CalPERS Bay Area Blue Shield coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

Local 1 employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$550

Local 1 employees hired after January 1, 2007 but prior to July 15, 2009

Continuous years of service with the District	Maximum monthly District contribution
0 through 9	$0
10 or more	$450

Local 1 employees hired on, or after, July 15, 2009

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 4	$0
5 through 24	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

Unrepresented Certificated Employees

Unrepresented Certificated employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

Unrepresented Certificated employees who retired between January 1, 2007 and December 31, 2007

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 110% of the cost of CalPERS Bay Area Blue Shield coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

Unrepresented Certificated employees who retired between January 1, 2008 and July 1, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute a maximum annual contribution of $5,400 for a single retiree, $11,040 for a retiree and spouse and $14,400 for a retiree and family.

Unrepresented Certificated employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 through 9	$250
10 or more	$450
Exceptions: if 20 or more years of service as of June 30, 2010	$550
if 25 or more years of service as of June 30, 2010	$750

Unrepresented Certificated employees hired on, or after, January 1, 2007

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 4	$0
5 through 24	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

Unrepresented Certificated employees hired prior to July 1, 2009 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 through 9	$250
10 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$550
Exception: if 25 or more years of service as of June 30, 2010	$750

Unrepresented Certificated employees hired on, or after, July 1, 2009

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 4	$0
5 through 24	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

Unrepresented Classified Employees

Unrepresented Classified employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

Unrepresented Classified employees who retired between January 1, 2007 and December 31, 2007

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 110% of the cost of CalPERS Bay Area Blue Shield coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

Unrepresented Classified employees who retired between January 1, 2008 and July 1, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute a maximum annual contribution of $5,400 for a single retiree, $11,040 for a retiree and spouse and $14,400 for a retiree and family.

Unrepresented Classified employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$550

Unrepresented Classified employees hired after January 1, 2007 but prior to July 1, 2009

Continuous years of service with the District	Maximum monthly District contribution
0 through 9	$0
10 or more	$450

Unrepresented Classified employees hired prior to July 1, 2009 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$550

Unrepresented Classified employees hired on, or after, July 1, 2009

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 4	$0
5 through 24	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

Confidential Employees

Confidential employees who retired prior to January 1, 2007

The District pays the cost of medical coverage for retirees, spouses and surviving spouses up to the higher of the BlueShield Bay Arear or Kaiser Bay Area premium rates.

As of January 2017, CalPERS will only offer BlueShield Basic coverage plans for non-Medicare (basic) subscribers. As a result BlueShield rates do not exist for Supplemental Medicare and Supplemental Medicare/Basic Combination coverage plans. Therefore, as of January 2017, basic coverage plan caps are based on BlueShield HMO Bay Area premium rates and all other coverage plan caps are based on United Healthcare HMO Bay Area premium rates.

Confidential employees who retired between January 1, 2007 and June 30, 2010

The District pays the cost of medical coverage for retirees, their spouses and surviving spouse up to a specified cap on the District's contribution.

The District will contribute up to 110% of the cost of CalPERS Bay Area Blue Shield coverage based on each retiree's enrollment category. Retirees who enroll in a more expensive plan must pay the difference.

Confidential employees hired prior to January 1, 2007 who retire after June 30, 2010

The District contributes up the following maximum annual contributions to eligible retirees:

Continuous years of service with the District	Maximum monthly District contribution
0 through 4	$0
5 or more	$450
Exception: if 20 or more years of service as of June 30, 2010	$550

Confidential employees hired after January 1, 2007 but prior to July 1, 2009

Continuous years of service with the District	Maximum monthly District contribution
0 through 9	$0
10 or more	$450

Confidential employees hired on, or after, July 1, 2009

Year of Service under CalPERS rules	Maximum monthly District contribution
0 through 4	$0
5 or more	The CalPERS Health Benefits Program Minimum Employer Contribution
25 or more	$450 per month until the retiree reaches age 65. Thereafter, the CalPERS Health Benefits Program Minimum Employer Contribution

Demographic Data

The District provided demographic information on all current active and retired employees. Tables 3-1 to 3-8 contain summaries of the demographic information used in the valuation.

Table 3-1
Age and Service Table
Active Certificated UTR Employees
as of July 1, 2016

Years of Service

Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Under 25	28	0	0	0	0	0	0	28
25 - 29	111	4	0	0	0	0	0	115
30 - 34	80	37	9	0	0	0	0	126
35 - 39	47	49	40	3	0	0	0	139
40 - 44	36	34	44	22	0	0	0	136
45 - 49	43	30	45	54	6	0	0	178
50 - 54	32	19	40	39	18	14	1	163
55 - 59	16	26	42	51	17	30	6	188
60 - 64	15	18	34	46	14	21	14	162
65 - 69	4	7	16	31	5	10	10	83
70 +	1	3	7	11	6	3	3	34
Total	**413**	**227**	**277**	**257**	**66**	**78**	**34**	**1,352**

Table 3-2
Age and Service Table
Active Certificated Administrators (WCCAA) Employees
as of July 1, 2016

Years of Service

Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Under 25	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0
30 - 34	0	10	0	0	0	0	0	10
35 - 39	3	5	6	0	0	0	0	14
40 - 44	2	5	5	0	0	0	0	12
45 - 49	3	2	6	1	2	0	0	14
50 - 54	2	5	2	1	1	0	0	11
55 - 59	7	4	1	2	0	1	1	16
60 - 64	0	2	1	2	0	2	0	7
65 - 69	0	1	0	0	1	0	0	2
70 +	0	0	0	0	0	0	0	0
Total	**17**	**34**	**21**	**6**	**4**	**3**	**1**	**86**

Table 3-3

Age and Service Table for

Active Classified Local #1 Employees

as of July 1, 2016

Years of Service

Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Under 25	12	0	0	0	0	0	0	12
25 - 29	31	6	0	0	0	0	0	37
30 - 34	30	22	2	0	0	0	0	54
35 - 39	17	25	9	2	0	0	0	53
40 - 44	28	25	11	14	4	0	0	82
45 - 49	24	36	26	13	6	5	0	110
50 - 54	16	27	24	22	8	8	4	109
55 - 59	13	30	25	23	10	12	9	122
60 - 64	10	19	20	14	6	3	4	76
65 - 69	2	8	4	5	2	3	8	32
70 +	0	3	1	3	1	0	2	10
Total	**183**	**201**	**122**	**96**	**37**	**31**	**27**	**697**

Table 3-4

Age and Service Table for

Active Classified Supervisors (SSA) Employees

as of July 1, 2016

Years of Service

Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Under 25	0	0	0	0	0	0	0	0
25 - 29	2	0	0	0	0	0	0	2
30 - 34	5	2	0	0	0	0	0	7
35 - 39	4	1	3	1	0	0	0	9
40 - 44	4	3	0	1	1	0	0	9
45 - 49	1	2	1	6	4	1	0	15
50 - 54	2	2	6	3	0	2	1	16
55 - 59	2	0	9	4	1	3	2	21
60 - 64	2	0	6	4	1	0	0	13
65 - 69	0	1	1	1	0	0	0	3
70 +	0	0	0	0	0	0	0	0
Total	**22**	**11**	**26**	**20**	**7**	**6**	**3**	**95**

Table 3-5

Age and Service Table for
Active Unrepresented Management, Confidential,
Superintendent's Cabinet and Board Members

as of July 1, 2016

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total**
Under 25	0	0	0	0	0	0	0	0
25 - 29	0	1	0	0	0	0	0	1
30 - 34	0	0	0	0	0	0	0	0
35 - 39	3	0	0	0	0	0	0	3
40 - 44	4	3	0	1	0	0	0	8
45 - 49	4	0	2	1	1	0	0	8
50 - 54	3	4	0	4	0	1	1	13
55 - 59	6	0	0	0	1	1	0	8
60 - 64	2	0	3	2	1	1	1	10
65 - 69	1	2	0	1	0	0	2	6
70 +	1	0	0	0	0	0	0	1
Total	**24**	**10**	**5**	**9**	**3**	**3**	**4**	**58**

Table 3-6

Age and Service Table for
All Active Employees

as of July 1, 2016

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total**
Under 25	40	0	0	0	0	0	0	40
25 - 29	144	11	0	0	0	0	0	155
30 - 34	115	71	11	0	0	0	0	197
35 - 39	74	80	58	6	0	0	0	218
40 - 44	74	70	60	38	5	0	0	247
45 - 49	75	70	80	75	19	6	0	325
50 - 54	55	57	72	69	27	25	7	312
55 - 59	44	60	77	80	29	47	18	355
60 - 64	29	39	64	68	22	27	19	268
65 - 69	7	19	21	38	8	13	20	126
70 +	2	6	8	14	7	3	5	45
Total	**659**	**483**	**451**	**388**	**117**	**121**	**69**	**2,288**

Table 3-7

Age and Sex Table for Retirees and Surviving Spouses
Currently Receiving Medical and/or Dental Benefits

as of July 1, 2016

Age	Female	Male	Total
Under 50	2	1	3
50-54	2	3	5
55-59	39	13	52
60-64	133	45	178
65-69	335	139	474
70-74	381	132	513
75-79	271	99	370
80-84	222	76	298
85-89	137	46	183
90-94	82	24	106
95 and Older	43	14	57
Total	**1,647**	**592**	**2,239***

* 440 retirees and surviving spouses are enrolled in medical and dental plans, 1,751 are enrolled in medical but not dental, and 48 are enrolled in dental but not medical.

* In addition, 855 spouses of retirees are receiving postemployment medical and/or dental benefits.

Table 3-8

Retiree Enrollment by Medical Plan

as of July 1, 2016

Medical Plan	Total
Anthem Blue Cross	10
Blue Shield	67
HealthNet SmartCare	1
Kaiser	1,146
PERSCare	113
PERS Choice	294
PERS Select	9
United Healthcare	599
Total	**2,239**

SECTION IV
Actuarial Method and Assumptions

In order to project the District's liabilities into the future, a number of economic, demographic, and baseline cost assumptions are necessary. For this valuation, we have used assumptions consistent with those specified in the "OPEB Assumption Model" released by the CalPERS Health Benefits Committee.

Actuarial Cost Method

The valuation was completed using the Entry Age Normal Cost Method. An Actuarial Cost Method is a procedure for allocating the actuarial present value of benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability. The Entry Age Normal cost method allocates the present value of future benefits on a level basis over the earnings or service (in this case earnings) of each employee between the hire date and assumed retirement age. The portion of the present value of future benefits allocated to a valuation year is called the Normal Cost. The portion allocated to all prior years is called the Actuarial Accrued Liability.

Valuation Date

The valuation date is July 1, 2016. This date is the starting point from which current health premium costs are increased according to the assumed annual rates of health care cost trend. The District census is projected from the valuation date to the date of the final benefit payment for each employee and retiree on the census. After calculating future costs for the projected retiree and dependent population, all liabilities are discounted back to the valuation date to obtain the present value of future costs.

Plan Assets

Effective April 2017 the District commenced prefunding the plan using the CERBT.

Investment Policy

The District adopted investement Strategy 1 in the CERBT. The long term rate of return anticipated by CalPERS under this investment strategy is 7.28%.

Funding Policy

The District's funding policy is to contribute $1 million annually to the trust and pay ongoing benefits without reimbursement from the trust until the plan is fully funded. In April 2017, the District will pay an addional one-time contribution of $20 million.

Accounting Policy—Active Implicit Rate Subsidy

The district has cross-employer active implicit rate subsidies and anticipates reflecting them as a contribution to OPEB after GASB provides guidance on their inclusion.

Economic Assumptions

Discount Rate

A discount rate is required to calculate the present value of future benefit payments which are used to determine financial statement expense. We used a 7.28% discount rate for this valuation, which is calculated based on GASB 75 methodology.

Health Care Trend

The rate of increase in per capita health care costs is commonly referred to as the *health care trend* rate.

Based on our extensive experience with postemployment health plans, we selected the following annual trend rates for use in this valuation:

Table 4-1

Annual Health Care Cost
Trend Rate Assumption

Year Beginning	Increase in CalPERS Regional Premium Rates Pre-65	Post-65
January 1, 2018	8.00%	5.50%
January 1, 2019	7.75%	5.25%
January 1, 2020	7.50%	5.00%
January 1, 2021	7.25%	5.00%
January 1, 2022	7.00%	5.00%
January 1, 2023	6.75%	5.00%
January 1, 2024	6.50%	5.00%
January 1, 2025	6.25%	5.00%
January 1, 2026	6.00%	5.00%
January 1, 2027	5.75%	5.00%
January 1, 2028	5.50%	5.00%
January 1, 2029	5.25%	5.00%
January 1, 2030 and later	5.00%	5.00%

CalPERS Minimum benefits are assumed to increase at a flat 4% annual rate.

The initial trend rate assumption represents an estimate of short term cost increases based on recent health care marketplace experience, and taking into consideration the cost characteristics of plans available to District retirees. Annual increases in national health expenditures have exceeded the general growth in GDP for many years.

However, there are practical limitations to how long these trends can continue. It is unrealistic to assume that health care expenditures will be allowed to consume the majority of the economy. Therefore, over the long term we expect that health care costs will be constrained by the public's ability and willingness to pay the higher cost of health care coverage. This assumption implies that the ultimate trend rate should be related to the expected long-term growth in the economy.

Therefore, we assume the ultimate rate to be comprised of real growth in per capita GDP, long-term growth attributable to technology innovations, and the assumed long-term inflation rate. The initial trend is assumed to decrease ratably to this ultimate rate over time.

Payroll Increases

In this valuation we assumed a 3.25% annual rate of increase in payroll. This rate is a component of the Entry Age Normal Actuarial Cost Method and is used in the calculation of the amortization component of the Annual Required Contribution and in calculation of the Normal Cost.

Employer Caps

Based on input from the District we have assumed that the fixed dollar caps described in **Section III** will not increase in future years.

Amortization Methodology

GASB 45 allows amortization of the Unfunded Actuarial Accrued Liability based on a level dollar approach or as a level percentage of covered payroll. The maximum amortization period is 30 years.

This valuation is based on a closed, 30-year amortization of the Unfunded Actuarial Accrued Liability. The amortization payment is a level percentage of covered payroll and will increase each year as covered payroll increases. The amortization will continue for the next 21 years.

Per Capita Health Plan Costs

Due to the small size of the retiree population, the per capita claims were developed using the age adjusted premiums for the current CalPERS population. These premiums are assumed to include administrative costs. The premiums for CalPERS are based on community-rated claims experience by region for all CalPERS member agencies.

Administrative Expenses

We assumed administrative expenses of 1.48% of medical benefit payouts.

Age-Adjusted Costs

The gender distinct age morbidity factors for pre- and post-Medicare morbidity were developed by CalPERS based on 2013 data. CalPERS developed these tables for use in complying with ASOP 6. Table 4-2 illustrates the age-graded premiums based on the premiums and the male and female morbidity factors that were provided by CalPERS for HMO and PPO plans.

Table 4-2

Age-Adjusted Costs at Selected Ages as of July 1, 2016

Expected Annual Cost per retiree, dependent spouse or surviving spouse

	HMO		PPO	
Age	Male	Female	Male	Female
50	9,303	10,493	8,485	10,272
55	12,465	12,037	11,440	11,761
60	15,430	13,178	14,203	12,988
65	3,862	4,053	4,561	5,050
70	3,463	3,207	3,916	3,865
75	3,816	3,815	4,590	4,468
80	4,099	4,302	5,171	4,978
85	4,205	4,496	5,422	5,238

We assumed that all future retirees who retire prior to Medicare eligibility will elect HMO's, and that 20% of retirees who become eligible for Medicare will elect PPO's while the other 80% elect HMO's.

Demographic Assumptions

In estimating this obligation, a number of demographic assumptions are needed. In most cases, the same demographic assumptions used in valuing an employer's pension obligation can be used in projecting retiree health care obligations. We used the same demographic assumptions as those used in the most recent California PERS (for Classified employees) and STRS (for Certificated employees) pension valuations.

Census Data

The District provided census data as of July 2016.

Health Plan Participation

We assumed that 100% of eligible employees will enroll in the postemployment medical and dental plans.

Dependents

Eligible retirees are allowed to enroll their dependents. The District contributes some, or all, of the cost of dependent coverage. Based on the enrollment pattern of retirees who are younger than age 65, we assumed that 50% of future certified retirees will enroll a spouse and 60% of non-certified future retirees will enroll a spouse. Female spouses are assumed to be three years younger than male spouses.

Medicare Coverage

We assumed that all PERS employees and retirees and their spouses will qualify for Medicare coverage and enroll in Part A and Part B when they reach age 65.

We assumed that all STRS employees and retirees and their spouses who are currently younger than age 65 will either qualify for Medicare coverage and enroll in Part A and Part B when they reach age 65, or if they are not qualified for Medicare coverage they will pay the required Medicare Part B premium and enroll.

Withdrawal

Sample withdrawal rates are shown below. These rates are based on a withdrawal study over the interval from July 1, 2008, to July 1, 2014. We compared the expected number of withdrawals, from one valuation to the next, with the actual number of withdrawals, based on the census files for all the valuations from 2008 to 2014, and on prior withdrawal rates. PERS school employees' withdrawal rates have been increased by 50% for employees with more than 10 years of service; STRS rates have been given separate multipliers for 5 years of service or less, 6 to 10 years of service, and more than 10 years of service, to match with the actual experience of the District.

Table 4-4

PERS School Employees - Annual Withdrawal Rates

Service	Entry Age 20	25	30	35	40	45	50
0	0.1730	0.1627	0.1525	0.1422	0.1319	0.1217	0.1114
1	0.1585	0.1482	0.1379	0.1277	0.1174	0.1071	0.0968
2	0.1440	0.1336	0.1234	0.1131	0.1028	0.0926	0.0823
3	0.1295	0.1192	0.1089	0.0987	0.0884	0.0781	0.0677
4	0.1149	0.1046	0.0944	0.0841	0.0738	0.0636	0.0533
5	0.1094	0.0982	0.0870	0.0758	0.0646	0.0135	0.0107
6	0.1036	0.0924	0.0812	0.0699	0.0587	0.0117	0.0089
7	0.0978	0.0866	0.0752	0.0639	0.0526	0.0098	0.0071
8	0.0920	0.0807	0.0693	0.0580	0.0466	0.0081	0.0055
9	0.0862	0.0748	0.0634	0.0519	0.0406	0.0065	0.0039
10	0.1202	0.1031	0.0858	0.0686	0.0111	0.0074	0.0038
15	0.0978	0.0801	0.0627	0.0080	0.0048	0.0017	0.0003
20	0.0740	0.0558	0.0057	0.0030	0.0003	0.0003	0.0003
25	0.0492	0.0035	0.0015	0.0003	0.0003	0.0003	0.0003
30	0.0023	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003
35+	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0000

Table 4-5

STRS Employees - Annual Withdrawal Rates

Service	Male	Female
0	0.305	0.286
1	0.248	0.229
2	0.171	0.162
3	0.122	0.122
4	0.088	0.088
5	0.074	0.074
10	0.043	0.043
15	0.03	0.03
20	0.017	0.017
25	0.01	0.01
30	0.007	0.007

Retirement Rates

The rates shown in Table 4-6 match those used by PERS in the most recent California PERS pension valuation. Our retirement study showed no significant differences between PERS school employee retirement rates and actual experience for the District.

Table 4-6

PERS School Employees - Annual Rates of Retirement

	Years of Service						
Age	5	10	15	20	25	30	35
50	0.0050	0.0090	0.0130	0.0150	0.0160	0.0180	0.0220
51	0.0050	0.0100	0.0140	0.0170	0.0190	0.0210	0.0250
52	0.0060	0.0120	0.0170	0.0200	0.0220	0.0250	0.0290
53	0.0070	0.0140	0.0190	0.0230	0.0260	0.0290	0.0330
54	0.0120	0.0240	0.0330	0.0390	0.0440	0.0490	0.0570
55	0.0240	0.0480	0.0670	0.0790	0.0880	0.0990	0.1160
56	0.0200	0.0390	0.0550	0.0650	0.0720	0.0810	0.0950
57	0.0210	0.0420	0.0590	0.0700	0.0780	0.0870	0.1020
58	0.0250	0.0500	0.0700	0.0830	0.0920	0.1030	0.1210
59	0.0290	0.0570	0.0800	0.0950	0.1050	0.1180	0.1380
60	0.0370	0.0730	0.1020	0.1210	0.1340	0.1500	0.1760
61	0.0460	0.0900	0.1260	0.1490	0.1660	0.1860	0.2180
62	0.0760	0.1510	0.2120	0.2500	0.2780	0.3110	0.3660
63	0.0690	0.1360	0.1910	0.2250	0.2510	0.2810	0.3300
64	0.0670	0.1330	0.1850	0.2190	0.2440	0.2730	0.3200
65	0.0910	0.1800	0.2510	0.2970	0.3310	0.3700	0.4350
66	0.0720	0.1430	0.2000	0.2370	0.2640	0.2950	0.3470
67	0.0670	0.1320	0.1850	0.2180	0.2430	0.2720	0.3190
68	0.0600	0.1180	0.1650	0.1950	0.2170	0.2430	0.2860
69	0.0670	0.1330	0.1870	0.2200	0.2460	0.2750	0.3230
70	0.0660	0.1310	0.1830	0.2160	0.2410	0.2700	0.3160
71	0.0510	0.1020	0.1430	0.1680	0.1880	0.2100	0.2460
72	0.0450	0.0900	0.1260	0.1490	0.1660	0.1850	0.2180
73	0.0440	0.0880	0.1220	0.1450	0.1610	0.1800	0.2120
74	0.0550	0.1090	0.1530	0.1800	0.2010	0.2250	0.2640
75	0.0550	0.1080	0.1510	0.1790	0.1990	0.2230	0.2620
76	0.0440	0.0860	0.1210	0.1430	0.1590	0.1780	0.2090
77	0.0500	0.0980	0.1370	0.1620	0.1810	0.2020	0.2380
78	0.0500	0.1000	0.1400	0.1650	0.1840	0.2060	0.2420
79	0.0930	0.1850	0.2580	0.3050	0.3400	0.3800	0.4470
80	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

The rates shown in Table 4-7 are based on a retirement study over the interval from July 1, 2008, to July 1, 2014. We compared the expected number of retirements, from one valuation to the next, with the actual number of retirements, based on the census files for all the valuations from 2008 to 2014. As a result, we multiplied all CalSTRS assumed retirement rates by 1.127 to match the actual experience of the District.

Table 4-7

STRS Employees - Annual Rates of Retirement

	Male		**Female**		
	Years of Service		**Years of Service**		
Age	**0-29**	**30+**	**0-29**	**30**	**31+**
50	0.00000	0.01690	0.00000	0.02820	0.02820
51	0.00000	0.01690	0.00000	0.02820	0.02820
52	0.00000	0.01690	0.00000	0.02820	0.02820
53	0.00000	0.02250	0.00000	0.02820	0.02820
54	0.00000	0.02250	0.00000	0.03380	0.03380
55	0.03040	0.09020	0.05070	0.10140	0.10140
56	0.02030	0.09020	0.03610	0.10140	0.10140
57	0.02030	0.11270	0.03610	0.12400	0.12400
58	0.03040	0.15780	0.04620	0.18030	0.18030
59	0.05070	0.20290	0.06090	0.20290	0.21410
60	0.07100	0.30430	0.10140	0.30430	0.34940
61	0.07100	0.53530	0.10140	0.53530	0.53530
62	0.12170	0.47900	0.12170	0.47900	0.50720
63	0.13190	0.39450	0.18260	0.39450	0.45080
64	0.12170	0.33810	0.15210	0.33810	0.39450
65	0.15210	0.36630	0.16230	0.36630	0.42260
66	0.12170	0.33810	0.15210	0.33810	0.36060
67	0.12170	0.33810	0.15210	0.33810	0.36060
68	0.12170	0.33810	0.15210	0.33810	0.36060
69	0.12170	0.33810	0.15210	0.33810	0.36060
70	0.12170	0.33810	0.15210	0.33810	0.39450
71	0.12170	0.33810	0.15210	0.33810	0.39450
72	0.12170	0.33810	0.15210	0.33810	0.39450
73	0.12170	0.33810	0.15210	0.33810	0.39450
74	0.12170	0.33810	0.15210	0.33810	0.39450
75	1.00000	1.00000	1.00000	1.00000	1.00000

Note: The rates shown above are doubled for employees who retire with at least 25 but fewer than 28 years of service.

Mortality Rates

Table 4-8 and Table 4-9 contain samples of mortality rates used in the valuation. These rates match rates used by in recent PERS and STRS pension valuations.

The PERS mortality rates used in this valuation are based on the most recent California PERS pension valuations. These rates provide a starting point for the projection of future mortality rates. The mortality rates for each future year were determined based on a generational mortality projection using Projection Scale MP-2014. This scale consists of a set of Annual Mortality improvement factors as a function of age and sex. The resulting projected mortality rates were applied to each employee and retiree.

Table 4-8

Sample California PERS Mortality Rates

(prior to the application of Scale MP-2014)

	Active Employees		**Retired Employees**	
Age	**Male**	**Female**	**Male**	**Female**
55	0.228%	0.138%	0.599%	0.416%
60	0.308%	0.182%	0.710%	0.436%
65	0.400%	0.257%	0.829%	0.588%
70	0.524%	0.367%	1.305%	0.993%
75			2.205%	1.722%
80			3.899%	2.902%
85			6.969%	5.243%
90			12.974%	9.887%

The STRS mortality rates used in this valuation are those used in the most recent California STRS pension valuations.

The rates for healthy retirees are the RP2000 rates, projected to the year 2025; with a 2 year setback for males until age 70 and a 4 year setback for females until age 75. For ages higher than 70 for males and 75 for females the setbacks were then graduated and smoothed to a 0 year setback for males at age 90 and a 1 year setback for females at age 90.

The rates for active employees are equal to the rates for healthy retirees with an additional 2 year setback to account for future mortality improvements.

Table 4-9

Sample California STRS Mortality Rates

Age	Preretirement Male	Preretirement Female	Postemployment Male	Postemployment Female
25	0.023%	0.013%		
30	0.033%	0.014%		
35	0.034%	0.018%		
40	0.057%	0.034%		
45	0.076%	0.041%		
50	0.103%	0.063%	0.114%	0.073%
55	0.143%	0.093%	0.164%	0.118%
60	0.238%	0.179%	0.300%	0.254%
65	0.435%	0.368%	0.596%	0.468%
70			1.095%	0.864%
75			1.886%	1.451%
80			3.772%	2.759%
85			7.619%	5.596%
90			14.212%	11.702%
95			22.860%	17.780%

Health Care Reform Considerations

Health care delivery is going through an evolution due to enactment of Health Care Reform. The Patient Protection and Affordable Care Act (PPACA), was signed March 23, 2010, with further changes enacted by the Health Care and Education Affordability Reconciliation Act (HCEARA), signed March 30, 2010. This valuation uses various assumptions that may have been modified based on considerations under PPACA. This section discusses particular legislative changes that were reflected in our assumptions. We have not identified any other specific provision of PPACA that would be expected to have a significant impact on the measured obligation. As additional guidance on the Act continues to be issued, we'll continue to monitor impacts.

Individual Mandate

Under PPACA, individuals (whether actively employed or otherwise) must be covered by health insurance or else pay a penalty tax to the government. While it is not anticipated that the Act will result in universal coverage, it is expected to increase the overall portion of the population with coverage. We believe this will result in an increased demand on health care providers, resulting in higher trend for medical services for non-Medicare eligible retirees. (Medicare costs are constrained by Medicare payment mechanisms already in place, plus additional reforms added by PPACA and HCERA.) While we believe that the mandate may result in somewhat higher participation overall, this issue is moot since we assume 100% participation upon retirement.

Employer Mandate

Health Care Reform includes various provisions mandating employer coverage for active employees, with penalties for non-compliance. Those provisions do not directly apply to the postemployment coverage included in this valuation.

Medicare Advantage Plans

Effective January 1, 2011, the Law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. We considered the effect of these reductions in federal payments to Medicare Advantage plans when setting our trend assumption.

Expansion of Child Coverage to Age 26

Health Care Reform mandates that coverage be offered to any child, dependent or not, through age 26, consistent with coverage for any other dependent. We assume that this change has been reflected in current premium rates. While this plan covers dependents, we do not currently assume non-spouse dependent coverage. We believe the impact this assumption has on the valuation is immaterial due to the lack of retirees that have had or are expected to have non-spouse dependents for any significant amount of time during retirement.

Elimination of Annual or Lifetime Maximums

Health Care Reform provides that annual or lifetime maximums have to be eliminated for all "essential services." We assume that current premium rates already reflect the elimination of any historic maximums.

Cadillac Tax (High Cost Plan Excise Tax)

The PPACA legislation added a new High-Cost Plan Excise Tax (also known as the "Cadillac Tax") starting in calendar year 2020. For valuation purposes, we assumed that the value of the tax will be passed back to the plan in higher premium rates.

- The tax is 40% of the excess of (a) the cost of coverage over (b) the limit. We modeled the cost of the tax by calculating (a) using the working rates projected with trend. We calculated (b) starting with the statutory limits ($10,200 single and $27,500 family), adjusted for the following:
    - Limits will increase from 2020 to 2021 by 4.25% (CPI plus 1%);
    - Limits will increase after 2021 by 3.25% (CPI); and
    - For retirees over age 55 and not on Medicare, the limit is increased by an additional dollar amount of $1,650 for single coverage and $3,450 for family coverage.
- Based on the above assumptions, we estimate that the tax will apply as early as 2020 for some of the District's pre-Medicare plans. In addition, we estimate that the tax will not apply to any of the post-Medicare plans.

Other Revenue Raisers

The Health Care Reform includes a variety of other revenue raisers that involve additional costs on providers (such as medical device manufacturers) and insurers. We considered these factors when developing the trend assumptions.

SECTION V
Glossary

- Accrual Accounting – A method of matching the cost of an employee's service, including long term obligations such as OPEB, to that employee's period of active service.
- Actuarial Accrued Liability (AAL) – The Actuarial Present Value of all postemployment benefits attributable to past service. Note: the AAL is sometimes referred to as the Past Service Liability.
- Actuarial Cost Method – A procedure for allocating the actuarial present value of benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
- Actuarial Present Value – The value of an amount or series of amounts payable or receivable at various times. Each such amount or series of amounts is:

  a. adjusted for the probable financial effect of certain intervening events (such as changes in healthcare costs, compensation levels, Medicare, marital status, etc.)

  b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

  c. discounted according to an assumed rate (or rates) of return to reflect the time value of money

- Actuarial Valuation – The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and related Actuarial Present Values.
- Actuarial Value of Assets – The value of cash, investments and other property belonging to a plan. These are amounts that may be applied to fund the Actuarial Accrued Liability. Note: assets must be segregated and placed in a Trust in order to be considered OPEB assets
- Age-Adjusted Costs – The process of converting flat premiums to average annual health care costs that vary by age.

- Amortization Payment – That portion of the Annual OPEB cost which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

  In the year that Statement 45 becomes effective an employer is allowed to commence amortization of the Unfunded Actuarial Accrued Liability, over a period not to exceed 30 years.

- Annual Other Postemployment Benefit (OPEB) Cost - An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan. The annual OPEB cost is the amount that must be calculated and reported as an expense.

  When an employer has no net OPEB obligation (e.g., in the year of implementation) the annual OPEB cost is equal to the Annual Required Contribution (ARC).

  In subsequent years the Annual OPEB cost will include:

  - the ARC (equal to the Normal Cost plus one year's amortization of the Unfunded Actuarial Accrued Liability);
  - one year's interest on the net OPEB obligation at the beginning of the year using the valuation discount rate; and
  - an adjustment to the ARC. This adjustment is intended to provide a reasonable approximation of that portion of the ARC that consists of interest associated with past contribution deficiencies. GASB Statement No. 45 specifies that this adjustment should be equal to an amortization of the discounted present value of the net OPEB obligation at the beginning of the year. The amortization should be calculated using the same amortization method and period used in determining the ARC for that year. If the net OPEB obligation is positive the adjustment should be deducted from the ARC.
  - Note: As long as the net OPEB obligation is zero, there will not be any interest charge or adjustment to the ARC. However, if an employer does not contribute the full amount of the ARC, a net OPEB obligation will emerge.

- Annual required contributions of the employer (ARC) - The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

- ASOP 6 – Actuarial Standards of Practice No. 6 (ASOP 6) – *Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions*, is published by the American Academy of Actuary's Actuarial Standards Board.

- Cadillac Tax – The Patient Protection and Affordability Care Act's (PPACA) high-cost plan tax (HCPT), popularly known as the "Cadillac tax," is a 40% excise tax on employer health plans exceeding $10,200 in premiums per year for individuals and $27,500 for families. The tax only applies on amounts exceeding these thresholds and is scheduled to take effect in 2020.

- Defined benefit OPEB plan - An OPEB plan having terms that specify the *benefits* to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors, such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

- Defined contribution plan - A pension or OPEB plan having terms that (a) provide an individual account for each plan member and (b) specify how contributions to an active plan member's account are to be determined, rather than the income or other benefits the member or his beneficiaries are to receive at or after separation from employment. Those benefits will depend only on the amounts contributed to the member's account, earnings on investments of those contributions, and forfeitures of contributions made for other members that may be allocated to the member's account. For example, an employer may contribute a specified amount to each active member's postemployment healthcare account each month. At or after separation from employment, the balance of the account may be used by the member or on the member's behalf for the purchase of health insurance or other healthcare benefits.

- Employer's contributions - Contributions made in relation to the annual required contributions of the employer (ARC). An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or an equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.

- Entry Age Normal Actuarial Cost Method – An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in the valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

- Explicit Subsidy – The portion of the retiree health premium borne by the employer.

- HCEARA - The Health Care and Education Affordability Reconciliation Act of 2010 was signed into law on March 30, 2010. Together HCEARA and PPACA, or Patient

Protection and Affordability Care Act of 2010 (signed into law on March 23, 2010), comprise what we usually think of as "ObamaCare".

- Healthcare cost trend rate - The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

- Implicit Subsidy – The implicit subsidy is the difference between average claims cost and the premiums paid for retirees. CalPERS charges the same flat premium for both active employees and retirees. However, retirees are observed to have a higher incidence of ill health (morbidity) on average than active employees. As a result, active employee premiums are subsidizing the cost of the retiree medical plan premiums. Therefore, basing retiree medical valuations on premiums would tend to understate the true liabilities of the plan.

- Investment return assumption (discount rate) - The rate used to adjust a series of future payments to reflect the time value of money.

- Morbidity and Mortality – Morbidity refers to the incidence of ill health within a population. Mortality refers to the incidence of death within a population.

- Net OPEB obligation - The cumulative difference since the effective date of GASB Statement 45 between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

  Most employers will have no net OPEB obligation at the beginning of the year in which Statement 45 is implemented.

  If an employer contributes the annual OPEB cost to the plan each year, and there are no actuarial or investment gains or losses then the net OPEB Obligation will remain zero.

- Normal Cost - That portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Another interpretation is that the Normal Cost is the present value of future benefits that are "earned" by employees for service rendered during the current year.

- OPEB assets - The amount recognized by an employer for contributions to an OPEB plan greater than OPEB expenses.

- OPEB expense - The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the accrual basis of accounting.

- Other postemployment benefits (OPEB) - Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, except benefits defined as special termination benefits.

- Plan assets - Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or in an equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.

- PPACA - The Patient Protection and Affordability Care Act of 2010 was signed into law on March 23, 2010. Together PPACA and HCEARA, or Health Care and Education Affordability Reconciliation Act of 2010 (signed into law on March 30, 2010), comprise what we usually think of as "ObamaCare".

- Present Value – See Actuarial Present Value.

- Projected Unit Credit Cost Method – An actuarial cost method under which the projected benefits of each individual included in an Actuarial Valuation are separately calculated and allocated to each year service by a consistent formula.

- Substantive plan - The terms of an OPEB plan as understood by the employer(s) and plan members.

- Unfunded Actuarial Accrued Liability (UAAL) – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

- Valuation date – The date as of which the postemployment benefit obligation is determined.

- Withdrawal Rates – The incidence of termination from active employment within a population.