

Office of the President

TO THE MEMBERS OF THE COMMITTEE ON FINANCE:

DISCUSSION ITEM

For the Meeting of November 20, 2015

ANNUAL ACTUARIAL VALUATION OF THE UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT PROGRAM

EXECUTIVE SUMMARY

Each year, the Regents' Consulting Health Actuary performs an actuarial valuation of the University's Retiree Health Benefit Program to fulfill the University's financial reporting obligations and to inform the Regents about these obligations. Significant findings from the July 1, 2015 valuation include:

- An Unfunded Actuarial Accrued Liability (UAAL) of \$17.3 billion, which represents an increase from the \$14 billion amount as of July 1, 2014. The increase is primarily due to a decrease in the discount rate assumption from 5.5 percent per year to 4.5 percent per year.
- An Annual Required Contribution (ARC¹) for fiscal year 2015-16 of \$2.1 billion, consisting of:
 - A Normal Cost of \$0.64 billion, approximately 6.6 percent of the University of California Retirement Plan (UCRP) covered payroll, and
 - An amortization cost of \$1.43 billion, approximately 14.8 percent of UCRP covered payroll
- Projected University cash costs for fiscal year 2015-16 of \$287 million, up from *actual* University cash costs of \$271 million in fiscal year 2014-15. This represents the projected pay-as-you-go cash costs of the retiree health benefits funded by a systemwide retiree health assessment.

Unless otherwise stated, results shown above and throughout this document are for the campuses, medical centers, Hastings College of the Law, and the Office of the President. The results for Lawrence Berkeley National Laboratory and combined results are presented in the valuation report separately.

¹Under governmental financial accounting and reporting requirements, the ARC is not required to be funded but it will be a component of the retiree health benefit expense recorded in the University's financial statements.

BACKGROUND

In fiscal year 2007-08, the Regents' Consulting Health Actuary, Deloitte Consulting LLP (Deloitte), began performing annual actuarial valuations of the University's Retiree Health Benefit Program (Program). The purpose is to report the Program's Unfunded Actuarial Accrued Liability (UAAL) at the beginning of the fiscal year and the Annual OPEB Expense for the fiscal year. (OPEB refers to "Other Post-Employment Benefits", *i.e.*, post-employment benefits other than pensions.) The valuation report also provides an analysis of the change in liability from the prior year's valuation.

Valuation results are based on the methods and assumptions that were initially approved by the Regents in May 2008 and updated based on recommendations from the latest UCRP experience study approved by the Regents in September 2015. Certain assumptions are updated annually (e.g., medical trend rates) and approved upon acceptance of the valuation. All of the assumptions are described in Section XI of the attached actuarial valuation report.

VALUATION RESULTS

Based on the valuation's assumptions, total UAAL is generally expected to increase every year because the Program is currently not pre-funded, and the benefits accrued by active participants during the year are greater than the benefits paid for retirees. As regularly reflected in the annual valuation of the Program, a number of factors can have an impact on the long-range estimates of the UAAL. Ongoing Program costs are expected to be managed by continued cost containment and design adjustments. Also, as has been communicated to employees and retirees over the years, retiree health benefits are not accrued or vested benefits entitlements. If all assumptions during the prior fiscal year had been exactly realized, the *expected* UAAL at July 1, 2015 would have been \$13.5 billion. The actual UAAL at July 1, 2015 was \$17.3 billion, \$3.8 billion more than expected. This difference is considered a loss to the Program resulting from the net effects of the following factors:

For the July 1, 2015 valuation, there was an actuarial gain due to actual experience of the Program over the past year being more favorable than expected. The overall experience of the Program resulted in a decrease in the UAAL of **\$714 million** (4.8 percent) and the Annual Required Contribution (ARC) of **\$49 million** (2.6 percent). This experience gain was primarily the result of decreases or lower-than-expected increases in healthcare premium rates.

For the July 1, 2015 valuation, there was a decrease in discount rate assumption from 5.5 percent per year to 4.5 percent per year as prescribed by the University. The discount rate assumption was decreased due to a change in the asset allocation policy and investment strategy in the University's Short Term Investment Pool (STIP) and Total Return Investment Pool (TRIP). The TRIP shifted to a more conservative asset allocation policy and more conservative expectations of real returns for the investment classes. This assumption change will effectively act as a transition to the new Governmental Accounting Standards Board Statements 74 and 75 (GASB 74/75), accounting standards that will go into effect next year and will require the use of a more conservative discount rate consistent with 20-year municipal bond indices (ranging from 3.5 to

four percent as of the valuation date). This assumption change resulted in an increase in the UAAL of **\$2,687 million** (17.9 percent) and the ARC of **\$325 million** (17.5 percent).

In September 2015, the Regents adopted changes to the actuarial assumptions used in the UCRP valuation based on recommendations from the UCRP experience study covering the period July 1, 2010 through June 30, 2014. The July 1, 2015 valuation of the Program reflects the applicable changes in assumptions (inflation, mortality, disability, withdrawal, retirement, and lump sum cash-out assumptions) that were adopted. See Section XI of the attached valuation report for additional details. The medical trend rates were also updated to maintain the grade-down period of 15 years from the initial trend rate to the ultimate rate. The assumption changes related to the experience study resulted in an increase in the UAAL of **\$351 million** (2.3 percent) and the ARC of **\$31 million** (1.7 percent).

Additional Information on the Valuation

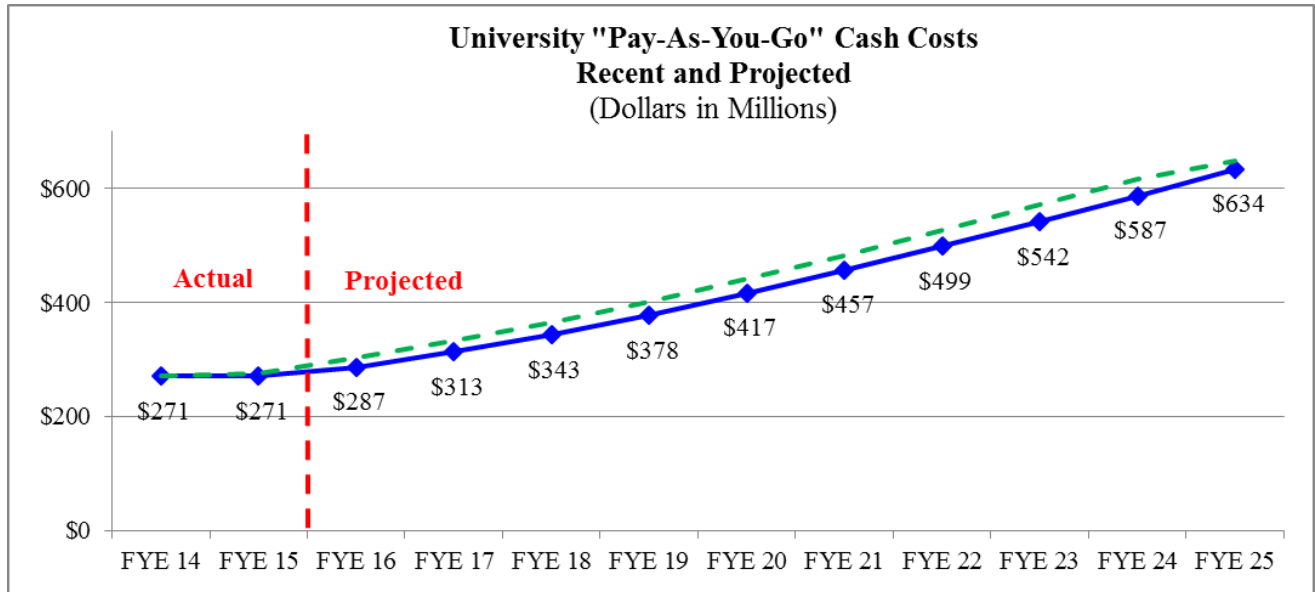
The Actuarial Value of Assets (AVA) of the Program as of July 1, 2015 was \$51 million. The Program is currently funded on a pay-as-you-go basis, but the year-end balance resulted from a combination of one-time funding for cash flow purposes to facilitate administration and the difference between the amounts collected from locations by the retiree health assessment and the actual pay-as-you-go benefit plan costs since inception.

The funded ratio of the Program, which is determined by dividing the AVA by the Actuarial Accrued Liability (AAL), was 0.3 percent as of July 1, 2015.

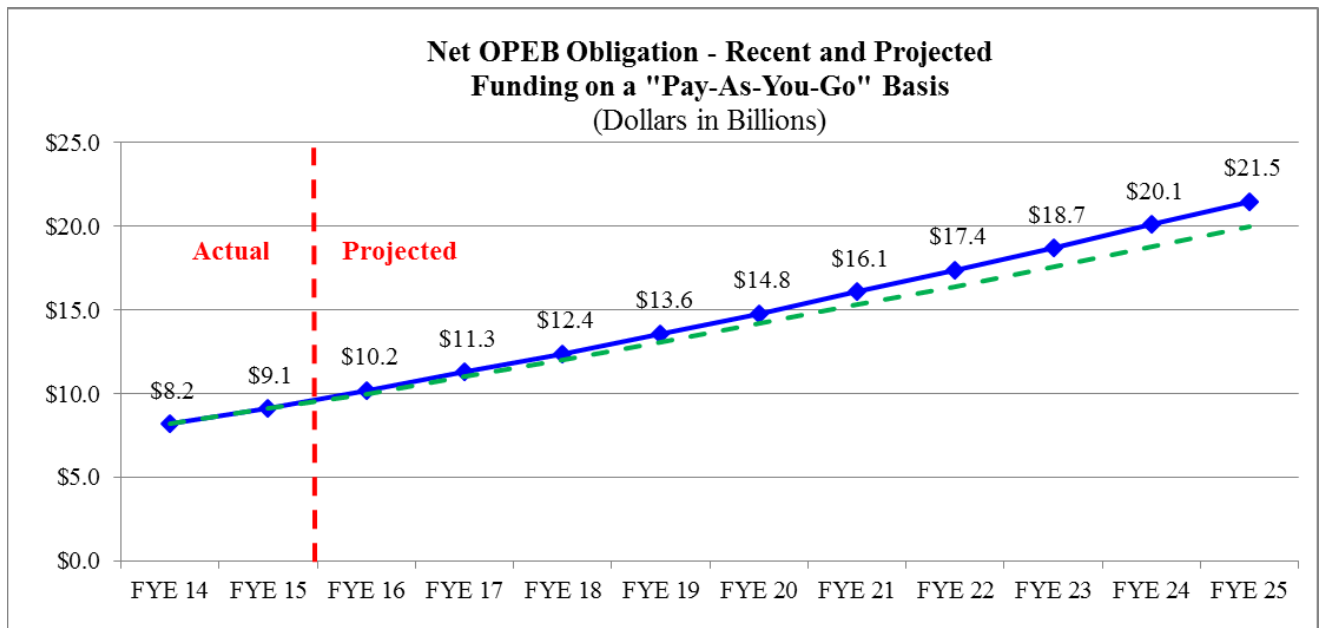
The Net OPEB Obligation (NOO), which is included in the University's balance sheet, was \$9.12 billion as of July 1, 2015. The current fiscal year's NOO equals the prior year's NOO plus the fiscal year 2014-15 OPEB expense less the University contributions to the Program.

The annual OPEB expense is the ARC plus interest on the NOO minus an ARC adjustment. For fiscal year 2015-16, the annual OPEB expense is \$1.45 billion. The annual OPEB expense for fiscal year 2014-15 was \$1.27 billion.

The expected University pay-as-you-go cash costs for fiscal year 2015-16 are \$287 million. The chart below shows recent history and a ten-year projection of the expected University pay-as-you-go cash costs, assuming no future programmatic or contribution policy changes. The blue line reflects current policy and assumptions. The dashed green line reflects policy and assumptions used in the July 1, 2014 actuarial valuation.

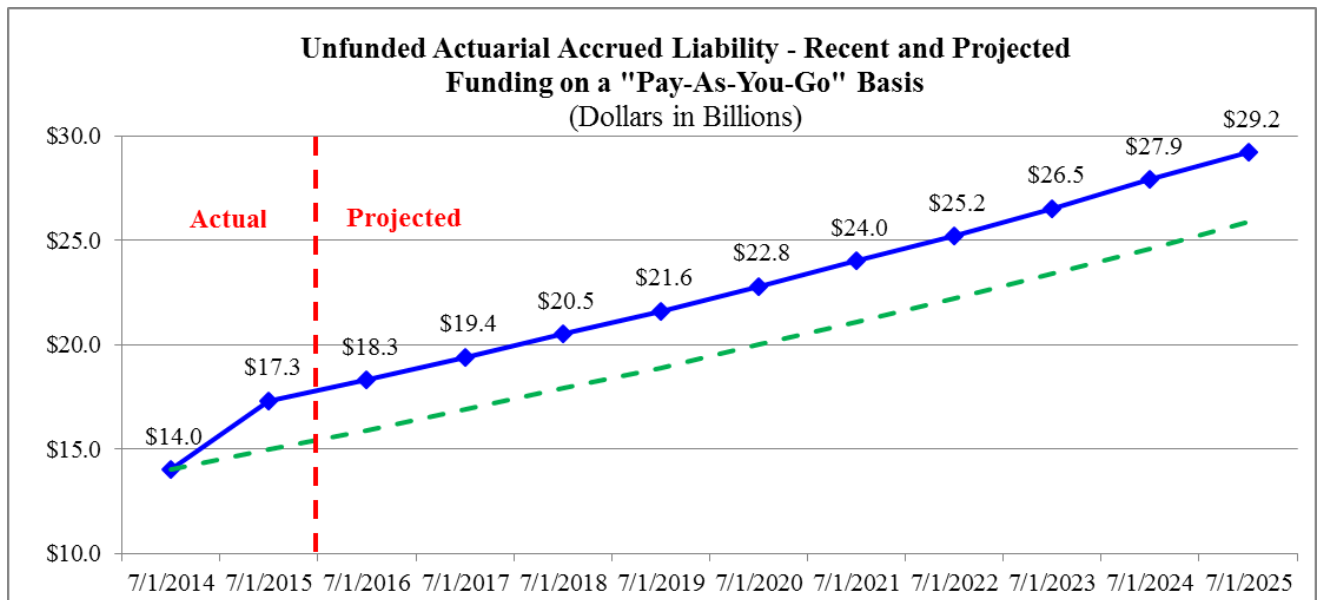


The expected NOO at June 30, 2016 is \$10.2 billion, assuming \$384 million of contributions on a pay-as-you-go basis. The chart below shows recent history and a ten-year projection of the expected NOO, assuming the Program is funded on a pay-as-you-go basis only and assuming no future programmatic or contribution policy changes other than assumed. The blue line reflects current policy and assumptions. The dashed green line reflects policy and assumptions used in the July 1, 2014 actuarial valuation.



The UAAL as of July 1, 2015 is \$17.3 billion. The chart below shows recent history and a ten-year projection of the expected UAAL, assuming the Program is funded on a pay-as-you-go basis only, and assuming no future programmatic or contribution policy changes. The blue line

reflects current policy and assumptions. The dashed green line reflects policy and assumptions used in the July 1, 2014 actuarial valuation.



As of July 1, 2015, there were 161,072 actual or potentially eligible participants in the Program, compared to 157,221 as of July 1, 2014. Participants include:

- 121,298 active employees (potentially eligible).
- 39,774 retirees, disabled participants, and surviving family members receiving benefits.

In addition, there were 20,528 covered family members (16,561 spouses/domestic partners and 3,967 children) receiving benefits.

Two of the key assumptions used in completing the valuation are the discount rate and the benefit cost trend rates. The discount rate of 4.5 percent is developed in accordance with the prescribed GASB requirements. The first-year medical trend rates range from 6.8 percent to 9.5 percent, decreasing to the ultimate rate of five percent over 15 years. The “decrement” assumptions, such as mortality, termination, and retirement, are consistent with those used in the UCRP actuarial valuation.

Retiree Health Benefit Trust

The University of California Retiree Health Benefit Trust (UCRHBT) allows certain University locations and affiliates that share the risks, rewards, and costs of providing for retiree health benefits to fund such benefits on a cost-sharing basis and accumulate funds on a tax-exempt basis under a trust account segregated from University assets. The Regents serve as the trustees of the UCRHBT. Currently, the University does not pre-fund retiree health benefits and instead provides for benefits on a pay-as-you-go basis through the UCRHBT. Pay-as-you-go financing for the campuses, medical centers, ASUCLA, Agricultural and Natural Resources, Office of the President, and Hastings College of the Law is accomplished via a common retiree health benefit

assessment that was set at 2.98 percent of covered UCRP payroll for fiscal year 2015-16. For the fiscal year ending June 30, 2015, the assessment was 2.65 percent. In accordance with the University's contract with the Department of Energy (DOE) to manage the Lawrence Berkeley National Laboratory (LBNL), the DOE reimburses the University for the actual benefit costs paid by the University attributable to LBNL retirees. For this reason, LBNL does not participate in either the UCRHBT or the retiree health benefit assessment. If pre-funding occurs in the future for campuses and medical centers, the assets will be maintained in the UCRHBT. Pre-funding is not permitted for LBNL retirees under the existing DOE contract, but the DOE is contractually obligated for LBNL retiree health costs.

Post-Employment Benefit Changes

In December 2010, the Regents approved the recommendations of the President of the University's Post-Employment Benefits Task Force to gradually reduce the University's maximum contribution to 70 percent of total health care premiums. For valuation purposes, it has been assumed that the pattern of a three percentage point annual decrease in the contribution percentage will continue until the floor of 70 percent is reached (separately for Medicare-eligible retirees and non-Medicare-eligible retirees under age 65). Each year the administration will reassess the level of the University contribution, the appropriateness of an additional three percent reduction in the contribution percentage, and whether the floor should remain at 70 percent or be changed to a different amount. This assessment is typically done during the annual health plan renewal process, taking into consideration overall budget resources, salary adjustments for active employees, and cost-of-living adjustments (COLAs) for retirees.

For calendar year 2016, the University will determine its maximum contribution for retirees, as a percentage of total premiums (including standard Medicare Part B premiums) as follows:

- Medicare-eligible retirees: 74 percent of aggregate premiums (including Medicare Part B premiums)
- Non-Medicare-eligible retirees under age 65: 70 percent of aggregate premiums
- Non-Medicare-eligible retirees age 65 and older: The same dollar amount as employees in Pay Band 2.

The University will take appropriate action concerning proposed changes that may trigger notice, consultation, and meeting and conferring obligations under the Higher Education Employer-Employee Relations Act, if any such action is required. The recommendations as they apply to represented employees are subject to collective bargaining requirements.

Health Care Reform

The Patient Protection and Affordable Care Act (ACA) was signed into law on March 23, 2010. Its primary objective is to increase the number of Americans with health insurance coverage. The applicable provisions of ACA were first accounted for in the July 1, 2010 valuation. There have been no changes to the provisions determined to be applicable to this valuation; however, some methods and assumptions have changed that were used to value these provisions. In future years,

there may continue to be an increased cost impact to the extent the Program experiences increased utilization due to these changes, all of which are assumed to be in place indefinitely.

The provisions of ACA considered in the valuation are as follows:

- Prohibiting lifetime and annual limits on the dollar value of coverage for “essential health benefits”
- Increasing the dependent child age limit to age 26
- Elimination of cost sharing for preventive services
- Reflecting manufacturer discounts available to certain Medicare beneficiaries receiving applicable covered Part D drugs (mostly brand) while in the coverage gap
- Transitional reinsurance fee
- Out-of-pocket limit includes both medical and Rx expense
- Excise tax on “Cadillac Plans” effective in 2018

Attachment 1 – July 1, 2015 Actuarial Valuation Report of the University of California Retiree Health Benefit Program

Key to Acronyms

AAL – Actuarial Accrued Liability

ACA – Patient Protection and Affordable Care Act

ARC – Annual Required Contribution

ASUCLA – Associated Students of the University of California, Los Angeles

AVA – Actuarial Value of Assets

COLA – Cost-of-living Adjustment

DOE – Department of Energy

GASB – Governmental Accounting Standards Board

LBNL – Lawrence Berkeley National Laboratory

NOO – Net OPEB Obligation

OPEB – Other Post-Employment Benefits

Rx – Prescription

STIP – Short Term Investment Pool

TRIP – Total Return Investment Pool

UAAL – Unfunded Actuarial Accrued Liability

UCRHBT – University of California Retiree Health Benefit Trust

UCRP – University of California Retirement Plan

Deloitte.

**University of California
Retiree Health Benefit
Program**



Actuarial Valuation as of July 1, 2015

Table of Contents

<u>Section</u>	<u>Description</u>	<u>Page</u>
	Actuarial Valuation Opinion.....	ii
I.	Executive Summary	1
II.	Background and Comments.....	3
III.	Summary of Actuarial Valuation Results	7
IV.	Development of Unfunded Actuarial Accrued Liability	13
V.	Summary of Assets.....	16
VI.	Determination of Annual Required Contribution	17
VII.	Actuarial Experience	24
VIII.	GASB Statement No. 45 Notes to the Financial Statements and RSI	27
IX.	10-Year Projection of Employer Benefit Payments	37
X.	Summary of Program Provisions	40
XI.	Summary of Actuarial Methods and Assumptions.....	54
XII.	Summary of Demographic Information.....	75
XIII.	Assumption Sensitivity	78
XIV.	Glossary.....	80

Actuarial Valuation Opinion

This report presents results of the actuarial valuation of the University of California Retiree Health Benefit Program (“the Plan”) as of July 1, 2015. In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

The University of California provided the participant data, financial information and plan descriptions used in this valuation. The actuary has analyzed the data and other information provided for reasonableness, but has not independently audited the data or other information provided. The actuary has no reason to believe the data or other information provided is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

Actuarial information under Government Accounting Standards Board Statement No. 45 (GASB 45) is for purposes of fulfilling employer financial accounting requirements. The results have been made on a basis consistent with our understanding of GASB 45 and are based upon assumptions prescribed by the University of California. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein.

In our opinion, all costs, liabilities, rates of interest, and other factors underlying these actuarial computations have been determined on the basis of actuarial assumptions and methods that are each reasonable (or consistent with authoritative guidance) for the purposes herein taking into account the experience of the Plan and future expectations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operations of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in program provisions or applicable law.

Our scope for this actuarial valuation did not include analyzing the potential range of such future measurements, and we did not perform that analysis.

The undersigned with actuarial credentials collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

This report was prepared solely for the benefit and internal use of the plan sponsor. This report is not intended for the benefit of any other party and may not be relied upon by any third party for any purpose, and Deloitte Consulting accepts no responsibility or liability with respect to any party other than the plan sponsor.

Any tax advice included in this written communication was not intended or written to be used, and it cannot be used by the taxpayer, for the purpose of avoiding any penalties that may be imposed by any governmental taxing authority or agency.

To the best of our knowledge, no employee of the Deloitte U.S. Firms is an officer or director of the employer. In addition, we are not aware of any relationship between the Deloitte U.S. Firms and the employer that may impair or appear to impair the objectivity of the work detailed in this report.

Deloitte Consulting LLP



Michael de Leon, FCA, ASA, EA, MAAA
Specialist Leader



John Schubert, FCA, ASA, MAAA
Specialist Leader

Executive Summary

Governmental Accounting Requirements and Report Purposes

The Governmental Accounting Standards Board released the Statement of Governmental Accounting Standards No. 43 (“GASB 43”) and No. 45 (“GASB 45”) in 2004. These statements require trusts (GASB 43) and employers (GASB 45) to accrue the cost of post-employment benefits other than pensions while eligible employees are providing services to the employer. The University of California (“the University” or “UC”) adopted GASB 45 for the fiscal year beginning July 1, 2007.

The purposes of this actuarial valuation report are to: 1) measure the retiree health benefit plan’s accrued liabilities and normal cost, 2) provide GASB 45 disclosure information for the University’s financial reporting, and 3) project expected cash flows (pay-as-you-go costs).

Summary of Results

For the Campuses, Medical Centers, and Hastings, the key measures for the July 1, 2015 retiree health actuarial valuation are:

- The July 1, 2015 Unfunded Actuarial Accrued Liability (UAAL) is **\$17.3 billion**.
- The Annual Required Contribution (ARC) for Fiscal Year 2015/2016 is **\$2.07 billion**, consisting of:
 - A normal cost of **\$0.64 billion**, approximately 6.6% of University of California Retirement Plan (“UCRP”) covered payroll, and
 - An amortization cost of **\$1.43 billion**, approximately 14.8% of UCRP covered payroll.

Under governmental accounting rules, the ARC is not required to be funded but will be a component of the retiree health benefit expense recorded in the University’s financial statements.

- As of July 1, 2015, the funded ratio for retiree health benefits was 0.3%, given the University’s current policy of funding only projected pay-as-you-go cash costs (as described on the following page).
- Projected cash contributions for 2015/2016 are **\$287 million**. This represents the projected pay-as-you-go cash costs of the retiree benefits funded by a system-wide retiree health assessment.

Executive Summary (cont.)

Funding Policy

On July 1, 2007, the University of California Retiree Health Benefit Trust (“UCRHBT”) was created. The UCRHBT was established to allow certain University locations and affiliates (primarily Campuses, Medical Centers, and Hastings) that share the risks, rewards, and costs of providing for retiree health benefits to fund such benefits on a cost-sharing basis and accumulate funds on a tax-exempt basis under an arrangement segregated from University assets.

Currently, the University does not pre-fund retiree health benefits and instead provides for benefits on a pay-as-you-go basis. If pre-funding occurs in the future, the UCRHBT will be used as the vehicle for those assets. There is a balance in the UCRHBT as of July 1, 2015 of **\$51 million**. This balance was created by a combination of one-time initial funding for cash flow purposes to facilitate administration and the timing of contributions and payments in and out of the trust. Minor differences between the amount collected from locations via the retiree health assessment and the actual pay-as-you-go benefit plan costs also affects the annual balance.

The retiree health assessment for the fiscal year ending June 30, 2016 was set at 2.98% of UCRP covered payroll (2.65% for the fiscal year ending June 30, 2015).

Background and Comments

Overview of Plans

The University of California's current policy is to provide a continuation of the active health benefit program for eligible retirees, including a choice of medical, dental and wellness benefits. The retiree health benefits are not accrued or vested benefit entitlements. Depending on an employee's service at retirement, the University of California will pay up to 100% of the maximum University contribution determined for each year. The contribution will not exceed the gross premium for selected coverage; however, the contribution can be used to reimburse all or a portion of an eligible member's standard Medicare Part B premiums (up to \$104.90 in 2016). Spouses/eligible domestic partners and dependents of retirees are also eligible for post-employment health coverage. A summary of the current substantive plan benefits are described in Section X of this report.

Significant Changes from the Previous Actuarial Valuation

For the July 1, 2015 valuation, there was a gain due to actual experience of the program over the past year being different than expected. The overall experience of the program resulted in a decrease in the Actuarial Accrued Liability of **\$714 million** (4.8%) and the ARC of **\$49 million** (2.6%). This experience gain was caused primarily by decreases or lower than expected increases in health care premium rates.

For the July 1, 2015 valuation, there was a loss due to the decrease in discount rate from 5.5% to 4.5% as prescribed by the University. The discount rate assumption was decreased due to a change in the asset allocation policy and investment strategy in the STIP and TRIP. The TRIP shifted to a more conservative asset allocation policy and more conservative expectations of real returns for the investment classes. This assumption change will effectively act as a transition to the new GASB 74/75 accounting standards that will go into effect next year and will require the use of a more conservative discount rate consistent with 20-year municipal bond indices (3.5%-4.0% as of the valuation date). This assumption change resulted in an increase in the Actuarial Accrued Liability of **\$2,687 million** (17.9%) and the ARC of **\$325 million** (17.5%).

In September 2015, the Regents adopted changes to the actuarial assumptions used in the University of California Retirement Plan based on recommendations from the UCRP experience study covering the period July 1, 2010 through June 30, 2014. This valuation reflects the applicable changes in assumptions (inflation, mortality, disability, withdrawal, retirement, and lump sum cash-out assumptions) that were adopted. See Section XI for additional details. The medical trend rates were also updated to maintain the grade-down period of 15 years from the initial trend rate to the ultimate rate. The assumption changes related to the experience study resulted in an increase in the Actuarial Accrued Liability of **\$351 million** (2.3%) and the ARC of **\$31 million** (1.7%).

Background and Comments (cont.)

Health Care Reform

The Patient Protection and Affordable Care Act (“PPACA”) was signed into law on March 23, 2010. The primary objective of the act is to increase the number of Americans with health insurance coverage. There are several provisions within PPACA with potentially significant short- and long-term cost implications for employers. The applicable provisions of PPACA were first accounted for in the July 1, 2010 valuation. There have been no changes to the provisions determined to be applicable to this valuation; however, some methods and assumptions have changed that were used to value these provisions. In future years, there may continue to be increased cost impact to the extent the health & welfare program experiences increased utilization due to these changes, all of which are assumed to be in place indefinitely.

The provisions of PPACA considered are as follows:

- Prohibiting lifetime and annual limits on the dollar value of coverage for “essential health benefits”
- Increasing the dependent child age limit to age 26
- Elimination of cost sharing for in-network preventive services
- Reflecting manufacturer discounts available to certain Medicare beneficiaries receiving applicable covered Part D drugs (mostly brand) while in the coverage gap
- Transitional reinsurance fee
- Out-of-pocket limit includes both medical and Rx expenses
- Excise tax on “Cadillac Plans” effective in 2018

University Reporting Entities

For financial reporting purposes, the associated liabilities, expenses and other disclosure items are reported for different covered populations:

- The primary results are presented for the Campuses and Medical Centers of the University, which also includes the Office of the President, Agricultural & Natural Resources, the Associated Students of UCLA, and UC Hastings College of the Law. This combined entity is referred to as “Campus/Medical Center/Hastings/Other (CMCHO)”.
- In addition, results are presented separately for Lawrence Berkeley National Laboratory (LBNL), a Department of Energy (DOE) laboratory managed and operated by the University.
- This report includes the combined results for both entities.

Background and Comments (cont.)

Actuarial Methods and Assumptions

The University of California Retirement Plan performs experience studies periodically to determine reasonable and appropriate economic and demographic assumptions for purposes of valuing the defined benefit pension plan. The most recent UCRP experience study covered the four-year period ending June 30, 2014 and was presented by the Regents in September 2015. The approved recommendations from that study were used to determine the assumptions for this valuation, where applicable. In addition, Deloitte periodically reviews actuarial assumptions only applicable to the retiree health benefit plan outside of the experience study, such as medical trend rates and age-graded medical rates.

One significant assumption where the recommendation of the experience study is not applicable to this retiree health benefit valuation is the discount rate. Since the University's retiree health benefits are effectively funded on only a pay-as-you-go cash cost basis, GASB 45 requires that the discount rate be based on the estimated long-term investment yield on the general assets. The University of California elected to use a discount rate of 4.5%. As of June 30, 2015, approximately 54% of general assets remained in the Short Term Investment Pool ("STIP") and 46% were held in the Total Returns Investment Pool ("TRIP"). The combination of assets held in the STIP and TRIP are generally more liquid and risk averse than the assets of UCRP; therefore, the expected long-term investment yield is lower for the STIP/TRIP than that for the assets of UCRP.

The actuarial methods and assumptions are described in Section XI of this report. Additionally, Section XIII illustrates the impact that changes to the discount and benefit cost trend rate assumptions would have on the Actuarial Accrued Liability and Normal Cost. This is not part of GASB 45 disclosure requirements, but it is provided for the University's information.

Background and Comments (cont.)

Cash Costs vs. Implicit Rate Subsidy

GASB Statement Nos. 43 and 45 require that trusts and employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the University's Retiree Health Benefit Program) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

Another way of considering the Implicit Rate Subsidy is to assume the retirees were removed from a blended plan and, instead, separately rated. In this scenario, the premium rate for the remaining active population would be lower; therefore, the retirees' premium rate is being subsidized by the premiums for active employees. Since the employer generally pays a portion of the premiums for the active employees, this subsidy creates a liability for the employer.

By comparison, the cash costs are the actual dollars paid by the employer to cover a portion or all of the retirees' premium rates. This is sometimes referred to as the "Explicit Rate Subsidy". This is the benefit that is explicitly stated by the University that will be paid on behalf of retirees. Before implementing GASB 45, the University accounted for the annual costs of retiree health benefits solely based on these cash costs.

The Implicit Rate Subsidy for the Campuses, Medical Centers, and Hastings creates a liability of **\$3,066 million** as of July 1, 2015 and benefit payments of **\$97 million** for fiscal year 2015/2016. This is approximately 18% of the total actuarial accrued liability and 25% of the total benefit payments for the Campuses, Medical Centers, and Hastings.

Final Disclosures

Most values reported here are final amounts for disclosures in the University's financial statements; however, amounts related to the University cash benefit payments for Fiscal Year 2015/2016 are currently based on estimated benefit payments. The University's final disclosures will be updated to reflect the actual benefit payments during the fiscal year.

Summary of Actuarial Valuation Results

This section provides a summary of the actuarial valuation results. All information is provided as of the measurement date except for GASB 45 disclosure information. GASB 45 disclosure information is shown as of the end of the Fiscal Year to reflect when it will actually be disclosed. All liabilities are net of expected retiree contributions.

(All dollar amounts are in thousands)

	Campus/Medical Center/Hastings/Other (CMCHO)					
	July 1, 2015			July 1, 2014		
	Explicit Subsidy	Implicit Subsidy	Total	Explicit Subsidy	Implicit Subsidy	Total
a. Actuarial Accrued Liability						
(1) Active Participants	\$ 9,390,386	\$ 1,573,449	\$ 10,963,835	\$ 7,210,555	\$ 1,419,495	\$ 8,630,050
(2) Retired Participants*	4,863,977	1,492,489	6,356,466	4,169,364	1,294,372	5,463,736
(3) Total	\$ 14,254,363	\$ 3,065,938	\$ 17,320,301	\$ 11,379,919	\$ 2,713,867	\$ 14,093,786
b. Actuarial Value of UCRHBT Assets	\$ 50,646	\$ -	\$ 50,646	\$ 65,184	\$ -	\$ 65,184
c. Unfunded Actuarial Accrued Liability (UAAL): (a) - (b)	\$ 14,203,717	\$ 3,065,938	\$ 17,269,655	\$ 11,314,735	\$ 2,713,867	\$ 14,028,602
d. Funded Ratio: (b) / (a)	0.4%	0.0%	0.3%	0.6%	0.0%	0.5%
e. UAAL as a Percentage of Covered Payroll: (c) / (l)	147.0%	31.7%	178.8%	125.2%	30.0%	155.3%
f. Annual Required Contribution (ARC) at Year End	\$ 1,732,244	\$ 342,029	\$ 2,074,273	\$ 1,455,784	\$ 320,276	\$ 1,776,060
g. Annual Retiree Health Benefit Expense at Year End	\$ 1,195,696	\$ 253,137	\$ 1,448,833	\$ 1,024,646	\$ 250,221	\$ 1,274,867

* Retired participants include retirees, disabled participants, and surviving family members

Summary of Actuarial Valuation Results (cont.)

(All dollar amounts are in thousands)

	Campus/Medical Center/Hastings/Other (CMCHO)					
	July 1, 2015			July 1, 2014**		
	Explicit Subsidy	Implicit Subsidy	Total	Explicit Subsidy	Implicit Subsidy	Total
h. University Contributions***						
(1) To UCRHBT	\$ (286,872)	\$ -	\$ (286,872)	\$ (259,246)	\$ -	\$ (259,246)
(2) To Health Care Insurers and Administrators	-	-	-	-	-	-
(3) Implicit Subsidy	-	(97,002)	(97,002)	-	(91,602)	(91,602)
(4) Total Contributions	\$ (286,872)	\$ (97,002)	\$ (383,874)	\$ (259,246)	\$ (91,602)	\$ (350,848)
i. Increase in Obligations for Retiree Health Benefits: (g) + (h)	\$ 908,824	\$ 156,135	\$ 1,064,959	\$ 765,400	\$ 158,619	\$ 924,019
j. Obligations for Retiree Health Benefits						
(1) Beginning of Year	\$ 7,799,187	\$ 1,322,069	\$ 9,121,256	\$ 7,033,787	\$ 1,163,450	\$ 8,197,237
(2) End of Year: (j.1) + (i)	\$ 8,708,011	\$ 1,478,204	\$ 10,186,215	\$ 7,799,187	\$ 1,322,069	\$ 9,121,256
k. Participant Counts						
(1) Active Participants			121,298			118,733
(2) Retired Participants*			39,774			38,488
(3) Total			161,072			157,221
l. Covered Payroll			\$ 9,659,652			\$ 9,034,755

* Retired participants include retirees, disabled participants, and surviving family members.

** Results updated to reflect actual contributions made for FY 2014/2015

*** Actual contributions shown for FY 2014/2015; Expected contributions shown for FY 2015/2016

Summary of Actuarial Valuation Results (cont.)

(All dollar amounts are in thousands)

	Lawrence Berkeley National Laboratory (LBNL)					
	July 1, 2015			July 1, 2014		
	Explicit Subsidy	Implicit Subsidy	Total	Explicit Subsidy	Implicit Subsidy	Total
a. Actuarial Accrued Liability						
(1) Active Participants	\$ 249,031	\$ 40,760	\$ 289,791	\$ 205,117	\$ 39,734	\$ 244,851
(2) Retired Participants*	<u>214,290</u>	<u>65,302</u>	<u>279,592</u>	<u>187,509</u>	<u>57,774</u>	<u>245,283</u>
(3) Total	\$ 463,321	\$ 106,062	\$ 569,383	\$ 392,626	\$ 97,508	\$ 490,134
b. Actuarial Value of UCRHBT Assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
c. Unfunded Actuarial Accrued Liability (UAAL): (a) - (b)	\$ 463,321	\$ 106,062	\$ 569,383	\$ 392,626	\$ 97,508	\$ 490,134
d. Funded Ratio: (b) / (a)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
e. UAAL as a Percentage of Covered Payroll: (c) / (l)	172.8%	39.5%	212.3%	148.1%	36.8%	184.9%
f. Annual Required Contribution (ARC) at Year End	\$ 50,716	\$ 10,554	\$ 61,270	\$ 46,641	\$ 10,869	\$ 57,510
g. Annual Retiree Health Benefit Expense at Year End	\$ 35,020	\$ 7,871	\$ 42,891	\$ 33,984	\$ 8,742	\$ 42,726

* Retired participants include retirees, disabled participants, and surviving family members

Summary of Actuarial Valuation Results (cont.)

(All dollar amounts are in thousands)

	Lawrence Berkeley National Laboratory (LBNL)					
	July 1, 2015			July 1, 2014**		
	Explicit Subsidy	Implicit Subsidy	Total	Explicit Subsidy	Implicit Subsidy	Total
h. University Contributions***						
(1) To UCRHBT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) To Health Care Insurers and Administrators	(13,162)	-	(13,162)	(12,787)	-	(12,787)
(3) Implicit Subsidy	-	(4,348)	(4,348)	-	(4,176)	(4,176)
(4) Total Contributions	\$ (13,162)	\$ (4,348)	\$ (17,510)	\$ (12,787)	\$ (4,176)	\$ (16,963)
i. Increase in Obligations for Retiree Health Benefits: (g) + (h)	\$ 21,858	\$ 3,523	\$ 25,381	\$ 21,197	\$ 4,566	\$ 25,763
j. Obligations for Retiree Health Benefits						
(1) Beginning of Year	\$ 228,895	\$ 39,966	\$ 268,861	\$ 207,698	\$ 35,400	\$ 243,098
(2) End of Year: (j.1) + (i)	\$ 250,753	\$ 43,489	\$ 294,242	\$ 228,895	\$ 39,966	\$ 268,861
k. Participant Counts						
(1) Active Participants			3,019			3,168
(2) Retired Participants*			<u>1,777</u>			<u>1,747</u>
(3) Total			4,796			4,915
l. Covered Payroll			\$ 268,182			\$ 265,062

* Retired participants include retirees, disabled participants, and surviving family members.

** Results updated to reflect actual contributions made for FY 2014/2015

*** Actual contributions shown for FY 2014/2015; Expected contributions shown for FY 2015/2016

Summary of Actuarial Valuation Results (cont.)

(All dollar amounts are in thousands)

	Combined - All Locations					
	July 1, 2015			July 1, 2014		
	Explicit Subsidy	Implicit Subsidy	Total	Explicit Subsidy	Implicit Subsidy	Total
a. Actuarial Accrued Liability						
(1) Active Participants	\$ 9,639,417	\$ 1,614,209	\$ 11,253,626	\$ 7,415,672	\$ 1,459,229	\$ 8,874,901
(2) Retired Participants*	<u>5,078,267</u>	<u>1,557,791</u>	<u>6,636,058</u>	<u>4,356,873</u>	<u>1,352,146</u>	<u>5,709,019</u>
(3) Total	\$ 14,717,684	\$ 3,172,000	\$ 17,889,684	\$ 11,772,545	\$ 2,811,375	\$ 14,583,920
b. Actuarial Value of UCRHBT Assets	\$ 50,646	\$ -	\$ 50,646	\$ 65,184	\$ -	\$ 65,184
c. Unfunded Actuarial Accrued Liability (UAAL): (a) - (b)	\$ 14,667,038	\$ 3,172,000	\$ 17,839,038	\$ 11,707,361	\$ 2,811,375	\$ 14,518,736
d. Funded Ratio: (b) / (a)	0.3%	0.0%	0.3%	0.6%	0.0%	0.4%
e. UAAL as a Percentage of Covered Payroll: (c) / (l)	147.7%	32.0%	179.7%	125.9%	30.2%	156.1%
f. Annual Required Contribution (ARC) at Year End	\$ 1,782,960	\$ 352,583	\$ 2,135,543	\$ 1,502,425	\$ 331,145	\$ 1,833,570
g. Annual Retiree Health Benefit Expense at Year End	\$ 1,230,716	\$ 261,008	\$ 1,491,724	\$ 1,058,630	\$ 258,963	\$ 1,317,593

* Retired participants include retirees, disabled participants, and surviving family members

Summary of Actuarial Valuation Results (cont.)

(All dollar amounts are in thousands)

	Combined - All Locations					
	July 1, 2015			July 1, 2014**		
	Explicit Subsidy	Implicit Subsidy	Total	Explicit Subsidy	Implicit Subsidy	Total
h. University Contributions***						
(1) To UCRHBT	\$ (286,872)	\$ -	\$ (286,872)	\$ (259,246)	\$ -	\$ (259,246)
(2) To Health Care Insurers and Administrators	(13,162)	-	(13,162)	(12,787)	-	(12,787)
(3) Implicit Subsidy	-	(101,350)	(101,350)	-	(95,778)	(95,778)
(4) Total Contributions	\$ (300,034)	\$ (101,350)	\$ (401,384)	\$ (272,033)	\$ (95,778)	\$ (367,811)
i. Increase in Obligations for Retiree Health Benefits: (g) + (h)	\$ 930,682	\$ 159,658	\$ 1,090,340	\$ 786,597	\$ 163,185	\$ 949,782
j. Obligations for Retiree Health Benefits						
(1) Beginning of Year	\$ 8,028,082	\$ 1,362,035	\$ 9,390,117	\$ 7,241,485	\$ 1,198,850	\$ 8,440,335
(2) End of Year: (j.1) + (i)	\$ 8,958,764	\$ 1,521,693	\$ 10,480,457	\$ 8,028,082	\$ 1,362,035	\$ 9,390,117
k. Participant Counts						
(1) Active Participants			124,317			121,901
(2) Retired Participants*			<u>41,551</u>			<u>40,235</u>
(3) Total			165,868			162,136
l. Covered Payroll			\$ 9,927,834			\$ 9,299,817

* Retired participants include retirees, disabled participants, and surviving family members.

** Results updated to reflect actual contributions made for FY 2014/2015

*** Actual contributions shown for FY 2014/2015; Expected contributions shown for FY 2015/2016

Development of Unfunded Actuarial Accrued Liability

This section develops the Unfunded Actuarial Accrued Liability (UAAL), which is the actuarial accrued liability net of the actuarial value of plan assets. The actuarial accrued liability is the portion of the present value of future benefits (PVFB) accrued to date. The present value of future normal costs represents the portion of the PVFB expected to accrue in the future, based on the current population.

(All dollar amounts are in thousands)

		<i>CMCHO</i>		
		July 1, 2015		
		Explicit Subsidy	Implicit Subsidy	Total
a.	Present Value of Future Benefits			
	Active Participants	\$ 13,497,495	\$ 2,331,814	\$ 15,829,309
	Retired Participants*	4,863,977	1,492,489	6,356,466
	Total	\$ 18,361,472	\$ 3,824,303	\$ 22,185,775
b.	Total Present Value of Future Normal Costs	\$ 4,107,109	\$ 758,365	\$ 4,865,474
c.	Actuarial Accrued Liability: (a) - (b)	\$ 14,254,363	\$ 3,065,938	\$ 17,320,301
d.	Actuarial Value of UCRHBT Assets	\$ 50,646	\$ -	\$ 50,646
e.	Unfunded Actuarial Accrued Liability (UAAL): (c) - (d)	\$ 14,203,717	\$ 3,065,938	\$ 17,269,655

* Retired participants include retirees, disabled participants, and surviving family members

Development of Unfunded Actuarial Accrued Liability (cont.)

(All dollar amounts are in thousands)

		<i>LBNL</i>		
		July 1, 2015		
		Explicit Subsidy	Implicit Subsidy	Total
a.	Present Value of Future Benefits			
	Active Participants	\$ 350,354	\$ 60,525	\$ 410,879
	Retired Participants*	214,290	65,302	279,592
	Total	\$ 564,644	\$ 125,827	\$ 690,471
b.	Total Present Value of Future Normal Costs	\$ 101,323	\$ 19,765	\$ 121,088
c.	Actuarial Accrued Liability: (a) - (b)	\$ 463,321	\$ 106,062	\$ 569,383
d.	Actuarial Value of UCRHBT Assets	\$ -	\$ -	\$ -
e.	Unfunded Actuarial Accrued Liability (UAAL): (c) - (d)	\$ 463,321	\$ 106,062	\$ 569,383

* Retired participants include retirees, disabled participants, and surviving family members

Development of Unfunded Actuarial Accrued Liability (cont.)

(All dollar amounts are in thousands)

		<i>Combined - All Locations</i>		
		July 1, 2015		
		Explicit Subsidy	Implicit Subsidy	Total
a.	Present Value of Future Benefits			
	Active Participants	\$ 13,847,849	\$ 2,392,339	\$ 16,240,188
	Retired Participants*	5,078,267	1,557,791	6,636,058
	Total	\$ 18,926,116	\$ 3,950,130	\$ 22,876,246
b.	Total Present Value of Future Normal Costs	\$ 4,208,432	\$ 778,130	\$ 4,986,562
c.	Actuarial Accrued Liability: (a) - (b)	\$ 14,717,684	\$ 3,172,000	\$ 17,889,684
d.	Actuarial Value of UCRHBT Assets	\$ 50,646	\$ -	\$ 50,646
e.	Unfunded Actuarial Accrued Liability (UAAL): (c) - (d)	\$ 14,667,038	\$ 3,172,000	\$ 17,839,038

* Retired participants include retirees, disabled participants, and surviving family members

Summary of Assets

The Retiree Health Benefit Program is currently funded on a pay-as-you-go basis; however, there are some plan assets created by a combination of initial funding to facilitate administration and the difference between the amount collected from locations via the retiree health assessment and the actual benefit plan costs since inception. The DOE laboratory (LBNL) reimburses the University for the benefit costs paid by the University attributable to LBNL retirees and does not participate in the UCRHBT.

The following table contains the summary of transactions for UCRHBT during the year.

Summary of Transactions (All dollar amounts are in thousands)

	<u>CMCHO</u>
	<u>July 1, 2015</u>
1. Net assets available for plan benefits as of July 1, 2014	\$ 65,184
<u>Income</u>	
2. Employer contributions	\$ 259,246
3. Retiree contributions	56,340
4. Investment income	<u>41</u>
	\$ 315,627
<u>Disbursements</u>	
5. Benefit premiums and payments	\$ (316,112)
6. Medicare Part B reimbursements	(10,907)
7. Expenses & fees	<u>(3,146)</u>
	<u>\$ (330,165)</u>
8. Net assets available for Plan benefits as of July 1, 2015	\$ 50,646

Determination of Annual Required Contribution

GASB 45 requires the disclosure of the annual post-employment benefits other than pensions (“OPEB”) cost. A component of the annual OPEB cost is the Annual Required Contribution. The following is a brief explanation of the components of the Annual Required Contribution:

- **Normal Cost:** The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method.
- **Amortization Payments:** Closed, 30-year, level dollar amortization of the initial Unfunded Actuarial Accrued Liability; closed, 15-year, level dollar amortizations of any future experience gains and losses; and closed, 30-year, level dollar amortization of any gains and losses due to assumption changes or changes in program provisions.
- **Interest to End of Year:** The Annual Required Contribution is determined as a year-end value. The Normal Cost and Amortization Payments are determined at the valuation date and have a full year of interest applied to determine the end of year value. The Annual Required Contribution is compared to the plan contributions (with interest) made during the year to determine the increase in the Net OPEB Obligation. Since the University uses a pay-as-you-go funding policy, the benefit payments with interest should be used to determine contributions. To simplify the determination of year-end plan contributions, the benefit payments will be determined without interest. Instead, the interest on *expected* benefit payments will be used to offset the determination of the Annual Required Contribution.

The next three pages present the Annual Required Contribution development for the fiscal year ending June 30, 2016. The development of amortization payments for each location follows the Annual Required Contribution development exhibits.

Determination of Annual Required Contribution (cont.)

Annual Required Contribution for Fiscal Year Ending June 30, 2016

(All dollar amounts are in thousands)

		<i>CMCHO</i>		
		Explicit Subsidy	Implicit Subsidy	Total
a.	Normal Cost*	\$ 519,106	\$ 94,760	\$ 613,866
b.	Amortization Payment*	1,144,720	234,629	1,379,349
c.	Interest to End of Year** [(a) + (b)] x 4.5% + (e) x [4.5% / 2]	68,418	12,640	81,058
d.	Annual Required Contribution As of June 30, 2016	\$ 1,732,244	\$ 342,029	\$ 2,074,273
e.	Expected University Contribution	\$ (286,872)	\$ (97,002)	\$ (383,874)

* If Normal Cost and Amortization Payment are expressed on an end of year basis, their values are \$641 million and \$1,433 million, respectively.

** Includes interest on expected benefit payments made throughout the year

Determination of Annual Required Contribution (cont.)

Annual Required Contribution for Fiscal Year Ending June 30, 2016

(All dollar amounts are in thousands)

	<i>LBNL</i>		Total
	Explicit Subsidy	Implicit Subsidy	
a. Normal Cost*	\$ 13,292	\$ 2,605	\$ 15,897
b. Amortization Payment*	35,523	7,589	43,112
c. Interest to End of Year** [(a) + (b)] x 4.5% + (e) x [4.5% / 2]	1,901	360	2,261
d. Annual Required Contribution As of June 30, 2016	\$ 50,716	\$ 10,554	\$ 61,270
e. Expected University Contribution	\$ (13,162)	\$ (4,348)	\$ (17,510)

* If Normal Cost and Amortization Payment are expressed on an end of year basis, their values are \$17 million and \$45 million, respectively.

** Includes interest on expected benefit payments made throughout the year

Determination of Annual Required Contribution (cont.)

Annual Required Contribution for Fiscal Year Ending June 30, 2016

(All dollar amounts are in thousands)

		<i>Combined - All Locations</i>		
		Explicit Subsidy	Implicit Subsidy	Total
a.	Normal Cost*	\$ 532,398	\$ 97,365	\$ 629,763
b.	Amortization Payment*	1,180,243	242,218	1,422,461
c.	Interest to End of Year** [(a) + (b)] x 4.5% + (e) x [4.5% / 2]	70,319	13,000	83,319
d.	Annual Required Contribution As of June 30, 2016	\$ 1,782,960	\$ 352,583	\$ 2,135,543
e.	Expected University Contribution	\$ (300,034)	\$ (101,350)	\$ (401,384)

* If Normal Cost and Amortization Payment are expressed on an end of year basis, their values are \$658 million and \$1,478 million, respectively.

** Includes interest on expected benefit payments made throughout the year

Determination of Annual Required Contribution (cont.)

(All dollar amounts are in thousands)

<u>CMCHO</u>		Schedule of Amortization Payments				
<u>Date Established</u>	<u>Description</u>	<u>Initial Amount</u>	<u>Initial Years</u>	<u>Remaining Years</u>	<u>7/1/2015 Balance</u>	<u>Amortization Amount</u>
7/1/2007	Initial UAAL	\$ 12,104,357	30	22	\$ 10,479,814	\$ 727,526
7/1/2008	Experience (Gain)/Loss	257,096	15	8	162,249	23,539
	Contribution (Gain)/Loss	1,089,169	15	8	687,358	99,723
7/1/2009	Experience (Gain)/Loss	663,998	15	9	459,896	60,545
	Contribution (Gain)/Loss	1,274,634	15	9	882,833	116,225
	Plan Change (Gain)/Loss	(486,202)	30	24	(439,968)	(29,045)
7/1/2010	Experience (Gain)/Loss	(267,503)	15	10	(200,879)	(24,294)
	Contribution (Gain)/Loss	1,470,279	15	10	1,104,092	133,525
	Plan Change (Gain)/Loss	(394,926)	30	25	(364,497)	(23,523)
	Assumption (Gain)/Loss	441,044	30	25	407,062	26,270
7/1/2011	Experience (Gain)/Loss	(2,177,516)	15	11	(1,755,565)	(196,973)
	Contribution (Gain)/Loss	1,612,476	15	11	1,300,016	145,861
	Assumption (Gain)/Loss	196,099	30	26	184,344	11,647
7/1/2012	Experience (Gain)/Loss	(1,757,257)	15	12	(1,508,825)	(158,342)
	Contribution (Gain)/Loss	1,414,173	15	12	1,214,244	127,427
	Assumption (Gain)/Loss	557,081	30	27	532,717	32,992
7/1/2013	Experience (Gain)/Loss	(1,361,681)	15	13	(1,236,807)	(122,231)
	Contribution (Gain)/Loss	1,437,048	15	13	1,305,263	128,997
	Plan Change (Gain)/Loss	(718,202)	30	28	(697,827)	(42,418)
	Assumption (Gain)/Loss	(194,214)	30	28	(188,704)	(11,470)
7/1/2014	Experience (Gain)/Loss	(43,629)	15	14	(41,682)	(3,902)
	Contribution (Gain)/Loss	1,258,399	15	14	1,202,242	112,539
	Plan Change (Gain)/Loss	(7,597)	30	29	(7,492)	(447)
	Assumption (Gain)/Loss	41,759	30	29	41,183	2,460
7/1/2015	Experience (Gain)/Loss	(684,107)	15	15	(684,107)	(60,957)
	Contribution (Gain)/Loss	1,425,212	15	15	1,425,212	126,992
	Plan Change (Gain)/Loss	(20,732)	30	30	(20,732)	(1,218)
	Assumption (Gain)/Loss	3,028,215	30	30	3,028,215	177,901
	Total				\$ 17,269,655	\$ 1,379,349

Determination of Annual Required Contribution (cont.)

(All dollar amounts are in thousands)

<u>LBNL</u>		Schedule of Amortization Payments					
Date Established	Description	Initial Amount	Initial Years	Remaining Years	7/1/2015 Balance	Amortization Amount	
7/1/2007	Initial UAAL	\$ 459,779	30	22	\$ 398,074	\$ 27,635	
7/1/2008	Experience (Gain)/Loss	12,817	15	8	8,089	1,174	
	Contribution (Gain)/Loss	31,494	15	8	19,875	2,883	
7/1/2009	Experience (Gain)/Loss	7,111	15	9	4,925	648	
	Contribution (Gain)/Loss	36,350	15	9	25,177	3,315	
	Plan Change (Gain)/Loss	(12,275)	30	24	(11,108)	(733)	
7/1/2010	Experience (Gain)/Loss	(501)	15	10	(376)	(45)	
	Contribution (Gain)/Loss	41,096	15	10	30,861	3,732	
	Plan Change (Gain)/Loss	(10,772)	30	25	(9,942)	(642)	
	Assumption (Gain)/Loss	15,797	30	25	14,580	941	
7/1/2011	Experience (Gain)/Loss	(62,077)	15	11	(50,048)	(5,615)	
	Contribution (Gain)/Loss	48,028	15	11	38,721	4,344	
	Assumption (Gain)/Loss	13,661	30	26	12,842	811	
7/1/2012	Experience (Gain)/Loss	(80,520)	15	12	(69,136)	(7,255)	
	Contribution (Gain)/Loss	45,181	15	12	38,794	4,071	
	Assumption (Gain)/Loss	19,580	30	27	18,724	1,160	
7/1/2013	Experience (Gain)/Loss	(41,809)	15	13	(37,975)	(3,753)	
	Contribution (Gain)/Loss	41,662	15	13	37,841	3,740	
	Plan Change (Gain)/Loss	(19,033)	30	28	(18,493)	(1,124)	
	Assumption (Gain)/Loss	(7,343)	30	28	(7,135)	(434)	
7/1/2014	Experience (Gain)/Loss	(8,366)	15	14	(7,993)	(748)	
	Contribution (Gain)/Loss	38,779	15	14	37,048	3,468	
	Plan Change (Gain)/Loss	(264)	30	29	(260)	(16)	
	Assumption (Gain)/Loss	1,452	30	29	1,432	86	
7/1/2015	Experience (Gain)/Loss	(43,971)	15	15	(43,971)	(3,918)	
	Contribution (Gain)/Loss	40,547	15	15	40,547	3,613	
	Plan Change (Gain)/Loss	(1,259)	30	30	(1,259)	(74)	
	Assumption (Gain)/Loss	99,549	30	30	99,549	5,848	
	Total				\$ 569,383	\$ 43,112	

Determination of Annual Required Contribution (cont.)

(All dollar amounts are in thousands)

<u>Combined - All Locations</u>		Schedule of Amortization Payments				
<u>Date Established</u>	<u>Description</u>	<u>Initial Amount</u>	<u>Initial Years</u>	<u>Remaining Years</u>	<u>7/1/2015 Balance</u>	<u>Amortization Amount</u>
7/1/2007	Initial UAAL	\$ 12,564,136	30	22	\$ 10,877,888	\$ 755,161
7/1/2008	Experience (Gain)/Loss	269,913	15	8	170,338	24,713
	Contribution (Gain)/Loss	1,120,663	15	8	707,233	102,606
7/1/2009	Experience (Gain)/Loss	671,109	15	9	464,821	61,193
	Contribution (Gain)/Loss	1,310,984	15	9	908,010	119,540
	Plan Change (Gain)/Loss	(498,477)	30	24	(451,076)	(29,778)
7/1/2010	Experience (Gain)/Loss	(268,005)	15	10	(201,255)	(24,339)
	Contribution (Gain)/Loss	1,511,375	15	10	1,134,953	137,257
	Plan Change (Gain)/Loss	(405,698)	30	25	(374,439)	(24,165)
	Assumption (Gain)/Loss	456,841	30	25	421,642	27,211
7/1/2011	Experience (Gain)/Loss	(2,239,593)	15	11	(1,805,613)	(202,588)
	Contribution (Gain)/Loss	1,660,504	15	11	1,338,737	150,205
	Assumption (Gain)/Loss	209,760	30	26	197,186	12,458
7/1/2012	Experience (Gain)/Loss	(1,837,777)	15	12	(1,577,961)	(165,597)
	Contribution (Gain)/Loss	1,459,354	15	12	1,253,038	131,498
	Assumption (Gain)/Loss	576,661	30	27	551,441	34,152
7/1/2013	Experience (Gain)/Loss	(1,403,490)	15	13	(1,274,782)	(125,984)
	Contribution (Gain)/Loss	1,478,710	15	13	1,343,104	132,737
	Plan Change (Gain)/Loss	(737,235)	30	28	(716,320)	(43,542)
	Assumption (Gain)/Loss	(201,557)	30	28	(195,839)	(11,904)
7/1/2014	Experience (Gain)/Loss	(51,995)	15	14	(49,675)	(4,650)
	Contribution (Gain)/Loss	1,297,178	15	14	1,239,290	116,007
	Plan Change (Gain)/Loss	(7,861)	30	29	(7,752)	(463)
	Assumption (Gain)/Loss	43,211	30	29	42,615	2,546
7/1/2015	Experience (Gain)/Loss	(728,078)	15	15	(728,078)	(64,875)
	Contribution (Gain)/Loss	1,465,759	15	15	1,465,759	130,605
	Plan Change (Gain)/Loss	(21,991)	30	30	(21,991)	(1,292)
	Assumption (Gain)/Loss	3,127,764	30	30	3,127,764	183,749
	Total				17,839,038	1,422,461

Actuarial Experience

Actuarial gains and losses arise from experience different from that previously assumed, changes in actuarial assumptions and methods, and changes in program provisions.

For the Campuses, Medical Centers, and Hastings, the plan change due to the discontinuation of the wellness benefit and incentive program effective January 1, 2016 resulted in a gain of \$30 million. The plan change due to transferring liability associated with LBNL employees who retired with less than five years of DOE contracted service to CMCHO resulted in a loss of \$9 million. There is an offsetting gain to the LBNL liability in the same amount. The change in assumptions resulted in a loss of \$3,028 million primarily due to the discount rate decreasing from 5.5% to 4.5%. Since the University uses a pay-as-you-go funding policy, the contributions were less than the ARC, creating a loss of \$1,425 million. Finally, there was a \$684 million experience gain due to actual experience of the program being different than expected.

(All dollar amounts are in thousands)

	<u>CMCHO</u>
	<u>July 1, 2015</u>
1. Unfunded liability as of July 1, 2014	\$ 14,028,602
2. Normal cost for prior year	480,616
3. Annual Required Contribution for prior year (EOY)	1,776,060
4. Interest to end of prior year*	<u>787,909</u>
5. Expected unfunded liability as of July 1, 2015 (1) + (2) - (3) + (4)	\$ 13,521,067
6. (Gain)/Loss due to (over)/underpayment of ARC	1,425,212
7. Increase (decrease) in plan liability due to plan change	(20,732)
8. Increase (decrease) in plan liability due to assumption change	3,028,215
9. Unfunded liability as of July 1, 2015	<u>17,269,655</u>
10. (Gain)/loss due to experience: (9) - [(5) + (6) + (7) + (8)]	<u>\$ (684,107)</u>

* Includes interest on unfunded liability, normal cost, and expected benefit payments

Actuarial Experience (cont.)

(All dollar amounts are in thousands)

	<u><i>LBNL</i></u>
	<u>July 1, 2015</u>
1. Unfunded liability as of July 1, 2014	\$ 490,134
2. Normal cost for prior year	14,602
3. Annual Required Contribution for prior year (EOY)	57,510
4. Interest to end of prior year*	<u>27,291</u>
5. Expected unfunded liability as of July 1, 2015 (1) + (2) - (3) + (4)	\$ 474,517
6. (Gain)/Loss due to (over)/underpayment of ARC	40,547
7. Increase (decrease) in plan liability due to plan change	(1,259)
8. Increase (decrease) in plan liability due to assumption change	99,549
9. Unfunded liability as of July 1, 2015	<u>569,383</u>
10. (Gain)/loss due to experience: (9) - [(5) + (6) + (7) + (8)]	<u><u>\$ (43,971)</u></u>

* Includes interest on unfunded liability, normal cost, and expected benefit payments

Actuarial Experience (cont.)

(All dollar amounts are in thousands)

	<i>Combined - All Locations</i>
	<u>July 1, 2015</u>
1. Unfunded liability as of July 1, 2014	\$ 14,518,736
2. Normal cost for prior year	495,218
3. Annual Required Contribution for prior year (EOY)	1,833,570
4. Interest to end of prior year*	<u>815,200</u>
5. Expected unfunded liability as of July 1, 2015 (1) + (2) - (3) + (4)	\$ 13,995,584
6. (Gain)/Loss due to (over)/underpayment of ARC	1,465,759
7. Increase (decrease) in plan liability due to plan change	(21,991)
8. Increase (decrease) in plan liability due to assumption change	3,127,764
9. Unfunded liability as of July 1, 2015	<u>17,839,038</u>
10. (Gain)/loss due to experience: (9) - [(5) + (6) + (7) + (8)]	<u><u>\$ (728,078)</u></u>

* Includes interest on unfunded liability, normal cost, and expected benefit payments

GASB Statement No. 45 Notes to the Financial Statements and Required Supplementary Information (RSI)

GASB Statement No. 45 requires disclosure of notes to the financial statements and required supplementary information that includes information shown in three schedules: the Schedule of Funding Progress (Table A), the Schedule of Employer Contributions (Table B), and the Development of Net OPEB Obligation (NOO) and Annual OPEB Cost (Table C).

The values shown in Table A are the final amounts for disclosure. Selected values in Tables B and C related to the University's contribution (specifically, the employer cash benefit costs) are estimated and will change in the financial disclosures to reflect actual University cash costs.

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table A – GASB No. 45 Schedule of Funding Progress

(All dollar amounts are in thousands)

<u>CMCHO</u>						
Actuarial Valuation Date	Actuarial Value of Assets*	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
	(a)	(b)	(c) (b) - (a)	(d) (a) / (b)	(e)	(f) [(b) - (a)] / (e)
July 1, 2007	\$ -	\$ 12,104,357	\$ 12,104,357	0.0%	\$ 6,738,094	179.6%
July 1, 2008	51,355	13,334,872	13,283,517	0.4%	7,264,460	182.9%
July 1, 2009	77,101	14,576,674	14,499,573	0.5%	7,657,289	189.4%
July 1, 2010	74,450	15,493,742	15,419,292	0.5%	7,743,680	199.1%
July 1, 2011	77,907	14,726,665	14,648,758	0.5%	7,899,551	185.4%
July 1, 2012	97,435	14,559,017	14,461,582	0.7%	8,333,654	173.5%
July 1, 2013	44,299	13,253,215	13,208,916	0.3%	8,569,794	154.1%
July 1, 2014	65,184	14,093,786	14,028,602	0.5%	9,034,755	155.3%
July 1, 2015	50,646	17,320,301	17,269,655	0.3%	9,659,652	178.8%

* Effective July 1, 2013, the Actuarial Value of Assets is the Market Value of Assets

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table A – GASB No. 45 Schedule of Funding Progress

(All dollar amounts are in thousands)

<u>LBNL</u>						
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
	(a)	(b)	(c) (b) - (a)	(d) (a) / (b)	(e)	(f) [(b) - (a)] / (e)
July 1, 2007	\$ -	\$ 459,779	\$ 459,779	0.0%	\$ 192,678	238.6%
July 1, 2008	-	497,743	497,743	0.0%	204,349	243.6%
July 1, 2009	-	520,255	520,255	0.0%	216,355	240.5%
July 1, 2010	-	554,954	554,954	0.0%	251,741	220.4%
July 1, 2011	-	541,164	541,164	0.0%	263,470	205.4%
July 1, 2012	-	511,704	511,704	0.0%	264,460	193.5%
July 1, 2013	-	472,033	472,033	0.0%	266,976	176.8%
July 1, 2014	-	490,134	490,134	0.0%	265,062	184.9%
July 1, 2015	-	569,383	569,383	0.0%	268,182	212.3%

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table A – GASB No. 45 Schedule of Funding Progress

(All dollar amounts are in thousands)

<u>Combined - All Locations</u>						
Actuarial Valuation Date	Actuarial Value of Assets*	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
	(a)	(b)	(c) (b) - (a)	(d) (a) / (b)	(e)	(f) [(b) - (a)] / (e)
July 1, 2007	\$ -	\$ 12,564,136	\$ 12,564,136	0.0%	\$ 6,930,772	181.3%
July 1, 2008	51,355	13,832,615	13,781,260	0.4%	7,468,809	184.5%
July 1, 2009	77,101	15,096,929	15,019,828	0.5%	7,873,644	190.8%
July 1, 2010	74,450	16,048,696	15,974,246	0.5%	7,995,421	199.8%
July 1, 2011	77,907	15,267,829	15,189,922	0.5%	8,163,021	186.1%
July 1, 2012	97,435	15,070,721	14,973,286	0.6%	8,598,114	174.1%
July 1, 2013	44,299	13,725,248	13,680,949	0.3%	8,836,771	154.8%
July 1, 2014	65,184	14,583,920	14,518,736	0.4%	9,299,817	156.1%
July 1, 2015	50,646	17,889,684	17,839,038	0.3%	9,927,834	179.7%

* Effective July 1, 2013, the Actuarial Value of Assets is the Market Value of Assets

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table B – GASB No. 45 Schedule of Employer Contributions

(All dollar amounts are in thousands)

<u>CMCHO</u>				
<u>Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Employer Contribution</u>	<u>Percentage Contributed</u>	<u>Net OPEB Obligation</u>
June 30, 2008	\$ 1,358,527	\$ 269,358	19.8%	\$ 1,089,169
June 30, 2009	1,505,360	279,330	18.6%	2,315,199
June 30, 2010	1,646,468	284,348	17.3%	3,677,319
June 30, 2011	1,747,439	314,683	18.0%	5,110,075
June 30, 2012	1,499,784	347,175	23.1%	6,262,684
June 30, 2013	1,409,823	311,833	22.1%	7,360,674
June 30, 2014	1,217,428	380,865	31.3%	8,197,237
June 30, 2015	1,274,867	350,848	27.5%	9,121,256
June 30, 2016*	1,448,833	383,874	26.5%	10,186,215

* Projected Net OPEB Obligation based on expected Employer Contribution

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table B – GASB No. 45 Schedule of Employer Contributions

(All dollar amounts are in thousands)

<u>LBNL</u>				
<u>Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Employer Contribution</u>	<u>Percentage Contributed</u>	<u>Net OPEB Obligation</u>
June 30, 2008	\$ 44,426	\$ 12,932	29.1%	\$ 31,494
June 30, 2009	48,625	13,681	28.1%	66,438
June 30, 2010	52,645	14,654	27.8%	104,429
June 30, 2011	58,284	15,366	26.4%	147,347
June 30, 2012	53,301	15,654	29.4%	184,994
June 30, 2013	48,644	16,947	34.8%	216,691
June 30, 2014	42,939	16,532	38.5%	243,098
June 30, 2015	42,726	16,963	39.7%	268,861
June 30, 2016*	42,891	17,510	40.8%	294,242

* Projected Net OPEB Obligation based on expected Employer Contribution

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table B – GASB No. 45 Schedule of Employer Contributions

(All dollar amounts are in thousands)

<u><i>Combined - All Locations</i></u>				
<u>Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Employer Contribution</u>	<u>Percentage Contributed</u>	<u>Net OPEB Obligation</u>
June 30, 2008	\$ 1,402,953	\$ 282,290	20.1%	\$ 1,120,663
June 30, 2009	1,553,985	293,011	18.9%	2,381,637
June 30, 2010	1,699,113	299,002	17.6%	3,781,748
June 30, 2011	1,805,723	330,049	18.3%	5,257,422
June 30, 2012	1,553,085	362,829	23.4%	6,447,678
June 30, 2013	1,458,467	328,780	22.5%	7,577,365
June 30, 2014	1,260,367	397,397	31.5%	8,440,335
June 30, 2015	1,317,593	367,811	27.9%	9,390,117
June 30, 2016*	1,491,724	401,384	26.9%	10,480,457

* Projected Net OPEB Obligation based on expected Employer Contribution

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table C – Development of NOO and Annual OPEB Cost Pursuant to GASB No. 45

(All dollar amounts are in thousands)

<u>CMCHO</u>								
Year Ended	Annual Required Contribution (ARC)	Interest on NOO	Amortization Factor*	ARC Adjustment with Interest	Annual OPEB Cost	Employer Contribution	Change in NOO	NOO Balance
	(a)	(b)	(c)	(d)	(e) (a) + (b) - (d)	(f)	(g) (e) - (f)	(h) Prior Year + (g)
June 30, 2008	\$ 1,358,527	\$ -	N/A	\$ -	\$ 1,358,527	\$ 269,358	\$ 1,089,169	\$ 1,089,169
June 30, 2009	1,553,964	59,905	N/A	108,509	1,505,360	279,330	1,226,030	2,315,199
June 30, 2010	1,754,627	127,336	N/A	235,495	1,646,468	284,348	1,362,120	3,677,319
June 30, 2011	1,927,159	202,253	N/A	381,973	1,747,439	314,683	1,432,756	5,110,075
June 30, 2012	1,761,348	281,054	N/A	542,618	1,499,784	347,175	1,152,609	6,262,684
June 30, 2013	1,748,881	344,448	N/A	683,506	1,409,823	311,833	1,097,990	7,360,674
June 30, 2014	1,639,264	404,837	N/A	826,673	1,217,428	380,865	836,563	8,197,237
June 30, 2015	1,776,060	450,848	N/A	952,041	1,274,867	350,848	924,019	9,121,256
June 30, 2016	2,074,273	410,457	N/A	1,035,897	1,448,833	383,874	1,064,959	10,186,215

* The ARC Adjustment is determined as the sum of amortization amounts (with interest to the end of the year) for contribution gains and losses as permitted by GASB Technical Bulletin 2008-1; therefore, an amortization factor is not used.

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table C – Development of NOO and Annual OPEB Cost Pursuant to GASB No. 45

(All dollar amounts are in thousands)

<u>LBNL</u>								
Year Ended	Annual Required Contribution (ARC)	Interest on NOO	Amortization Factor*	ARC Adjustment with Interest	Annual OPEB Cost	Employer Contribution	Change in NOO	NOO Balance
	(a)	(b)	(c)	(d)	(e) (a) + (b) - (d)	(f)	(g) (e) - (f)	(h) Prior Year + (g)
June 30, 2008	\$ 44,426	\$ -	N/A	\$ -	\$ 44,426	\$ 12,932	\$ 31,494	\$ 31,494
June 30, 2009	50,031	1,732	N/A	3,138	48,625	13,681	34,944	66,438
June 30, 2010	55,750	3,654	N/A	6,759	52,645	14,654	37,991	104,429
June 30, 2011	63,394	5,744	N/A	10,854	58,284	15,366	42,918	147,347
June 30, 2012	60,835	8,104	N/A	15,638	53,301	15,654	37,647	184,994
June 30, 2013	58,609	10,175	N/A	20,140	48,644	16,947	31,697	216,691
June 30, 2014	55,311	11,918	N/A	24,290	42,939	16,532	26,407	243,098
June 30, 2015	57,510	13,370	N/A	28,154	42,726	16,963	25,763	268,861
June 30, 2016	61,270	12,099	N/A	30,478	42,891	17,510	25,381	294,242

* The ARC Adjustment is determined as the sum of amortization amounts (with interest to the end of the year) for contribution gains and losses as permitted by GASB Technical Bulletin 2008-1; therefore, an amortization factor is not used.

GASB Statement No. 45 Notes to the Financial Statements and RSI (cont.)

Table C – Development of NOO and Annual OPEB Cost Pursuant to GASB No. 45

(All dollar amounts are in thousands)

<u>Combined - All Locations</u>								
Year Ended	Annual Required Contribution (ARC)	Interest on NOO	Amortization Factor*	ARC Adjustment with Interest	Annual OPEB Cost	Employer Contribution	Change in NOO	NOO Balance
	(a)	(b)	(c)	(d)	(e) (a) + (b) - (d)	(f)	(g) (e) - (f)	(h) Prior Year + (g)
June 30, 2008	\$ 1,402,953	\$ -	N/A	\$ -	\$ 1,402,953	\$ 282,290	\$ 1,120,663	\$ 1,120,663
June 30, 2009	1,603,995	61,637	N/A	111,647	1,553,985	293,011	1,260,974	2,381,637
June 30, 2010	1,810,377	130,990	N/A	242,254	1,699,113	299,002	1,400,111	3,781,748
June 30, 2011	1,990,553	207,997	N/A	392,827	1,805,723	330,049	1,475,674	5,257,422
June 30, 2012	1,822,183	289,158	N/A	558,256	1,553,085	362,829	1,190,256	6,447,678
June 30, 2013	1,807,490	354,623	N/A	703,646	1,458,467	328,780	1,129,687	7,577,365
June 30, 2014	1,694,575	416,755	N/A	850,963	1,260,367	397,397	862,970	8,440,335
June 30, 2015	1,833,570	464,218	N/A	980,195	1,317,593	367,811	949,782	9,390,117
June 30, 2016	2,135,543	422,556	N/A	1,066,375	1,491,724	401,384	1,090,340	10,480,457

* The ARC Adjustment is determined as the sum of amortization amounts (with interest to the end of the year) for contribution gains and losses as permitted by GASB Technical Bulletin 2008-1; therefore, an amortization factor is not used.

10-Year Projection of Employer Benefit Payments

Presented in this section are the projected employer benefit payments for the next ten years based on the program design effective in calendar year 2016. These projected benefit payments are based on the actuarial assumptions shown in Section XI. If actual experience differs from that expected by the actuarial assumptions, the actual employer benefit payments will vary from those presented below.

(All dollar amounts are in thousands)

<u>CMCHO</u>						
<u>Fiscal Year Ending 6/30</u>	<u>Number of Members Receiving Benefits*</u>	<u>Projected Employer Cash Payouts</u>			<u>Medical Implicit Subsidy</u>	<u>Grand Total</u>
		<u>Medical</u>	<u>Dental</u>	<u>Subtotal</u>		
2016	56,372	\$ 258,142	\$ 28,730	\$ 286,872	\$ 97,002	\$ 383,874
2017	58,664	281,901	31,037	312,938	111,426	424,364
2018	61,608	309,223	34,070	343,293	124,142	467,435
2019	64,551	341,127	37,326	378,453	136,657	515,110
2020	67,474	375,918	40,781	416,699	149,376	566,075
2021	70,303	412,244	44,454	456,698	161,559	618,257
2022	73,038	450,200	48,348	498,548	174,097	672,645
2023	75,669	489,673	52,462	542,135	186,631	728,766
2024	78,190	530,475	56,781	587,256	199,307	786,563
2025	80,557	572,524	61,302	633,826	211,999	845,825

* Total members estimated to receive benefits during the year, including both "retired participants" (retirees, disabled participants, surviving family members), and the covered spouses/domestic partners of these participants.

10-Year Projection of Employer Benefit Payments (cont.)

(All dollar amounts are in thousands)

<u>LBNL</u>						
<u>Fiscal Year Ending 6/30</u>	<u>Number of Members Receiving Benefits*</u>	<u>Projected Employer Cash Payouts</u>			<u>Medical Implicit Subsidy</u>	<u>Grand Total</u>
		<u>Medical</u>	<u>Dental</u>	<u>Subtotal</u>		
2016	2,589	\$ 11,837	\$ 1,325	\$ 13,162	\$ 4,348	\$ 17,510
2017	2,591	12,325	1,372	13,697	4,651	18,348
2018	2,633	13,113	1,461	14,574	4,996	19,570
2019	2,673	14,069	1,554	15,623	5,346	20,969
2020	2,709	15,101	1,651	16,752	5,658	22,410
2021	2,742	16,167	1,752	17,919	5,969	23,888
2022	2,772	17,240	1,857	19,097	6,252	25,349
2023	2,801	18,364	1,968	20,332	6,618	26,950
2024	2,827	19,461	2,083	21,544	6,920	28,464
2025	2,851	20,565	2,201	22,766	7,207	29,973

* Total members estimated to receive benefits during the year, including both "retired participants" (retirees, disabled participants, surviving family members), and the covered spouses/domestic partners of these participants.

10-Year Projection of Employer Benefit Payments (cont.)

(All dollar amounts are in thousands)

<u>Combined - All Locations</u>						
<u>Fiscal Year Ending 6/30</u>	<u>Number of Members Receiving Benefits*</u>	<u>Projected Employer Cash Payouts</u>			<u>Medical Implicit Subsidy</u>	<u>Grand Total</u>
		<u>Medical</u>	<u>Dental</u>	<u>Subtotal</u>		
2016	58,961	\$ 269,979	\$ 30,055	\$ 300,034	\$ 101,350	\$ 401,384
2017	61,256	294,226	32,409	326,635	116,077	442,712
2018	64,242	322,336	35,531	357,867	129,138	487,005
2019	67,223	355,196	38,880	394,076	142,003	536,079
2020	70,183	391,019	42,432	433,451	155,034	588,485
2021	73,045	428,411	46,206	474,617	167,528	642,145
2022	75,810	467,440	50,205	517,645	180,349	697,994
2023	78,469	508,037	54,430	562,467	193,249	755,716
2024	81,018	549,936	58,864	608,800	206,227	815,027
2025	83,407	593,089	63,503	656,592	219,206	875,798

* Total members estimated to receive benefits during the year, including both "retired participants" (retirees, disabled participants, surviving family members), and the covered spouses/domestic partners of these participants.

Summary of Program Provisions

This section summarizes overall eligibility provisions for retiree health coverage, graduated eligibility provisions, the various plans offered by the University, and Medicare integration methods by plan. Unless otherwise stated, the plan designs are the same for both non-Medicare and Medicare members.

Covered Employees: University of California employees who are eligible for retirement under a University-sponsored defined benefit plan and elect monthly retirement income are eligible for retiree health coverage offered by the University if:

- At the time of separation, the employee was enrolled in medical and dental insurance coverage or was eligible but had “suspended” coverage;
- The employee’s retirement date is within 120 days of his or her separation from UC employment; and
- The employee meets the UCRP’s service credit requirements (see “Graduated Eligibility” below) at the time of retirement.

The retiree health benefits are not accrued or vested benefit entitlements. Only an employee’s earned UCRP service credit counts toward eligibility for retiree health benefits.

Once retired, eligible retirees may “suspend” or continue to suspend their health coverage and retain the right to become covered under the University’s retiree health plans in the future. If the University’s coverage is suspended and a retiree’s other health coverage has been continuous, the retiree may enroll:

- During any future open enrollment period;
- Following a qualifying life event; or
- When a retiree’s other health coverage is lost.

Covered Family

Members:

Spouses, eligible domestic partners, adult dependent relatives (enrolled by 12/31/2003), child(ren), step-child(ren), grandchild(ren), adult disabled child(ren), and legal ward(s) of an eligible retiree may be covered if certain eligibility requirements are met.

The PPACA, signed into law on March 23, 2010, increased the dependent child age limit to age 26 and applied to the University effective January 1, 2011.

Eligible domestic partners include same-sex domestic partners meeting certain requirements and opposite-sex domestic partners if either the retiree or the domestic partner is age 62 or older and eligible to receive Social Security benefits based on age.

Graduated Eligibility: For an employee who retires and meets the definition of a covered employee, the following provisions apply in determining the University’s contribution toward retiree health coverage. Note that the “Maximum University Contribution” referred to below is determined each year and may be lower than the actual cost of any specific health coverage options. The Maximum University Contribution is determined separately for retirees eligible for Medicare, those not eligible for Medicare who are under 65, and those not eligible for Medicare who are age 65 and older.

Retiree Health Eligibility

- **Employees who entered UCRP before January 1, 1990** and have not had a break in covered service of more than 120 days following that date receive 100% of the Maximum University Contribution toward medical and/or dental coverage if the following service credit requirements are met:
 - Employees retire before age 55 and have at least 10 years of UCRP service credit (5 years for Safety);
 - Employees retire at age 55 or later and have least 5 years of UCRP service credit; or
 - Employees retire on disability and have at least 5 years of service credit.
- **Employees who entered UCRP or were rehired (following a break in service of more than 120 days) on or after January 1, 1990 and prior to July 1, 2013⁽¹⁾**, and all Public Safety employees hired after January 1, 1990, receive a percentage of the Maximum University Contribution toward medical and/or dental coverage, defined as follows:

Years of Service			Percentage of the Maximum University Contribution
Retirees	Survivors	Disabled Members	
0-4	N/A	N/A	Not Eligible
5-9	N/A	N/A	If age plus years of service credit equal at least 75, then 50%; otherwise not eligible
10	2-10	5-10	50%
11 - 20	11 - 20	11 - 20	Increases in 5% increments to 100% (55%, 60% ... 95%, 100%)

Graduated Eligibility (continued):

- **Employees hired or rehired (following a break in service) on or after July 1, 2013⁽¹⁾**, receive a percentage of the Maximum University Contribution toward medical and/or dental coverage determined by their age and total number of years of UCRP service credit as shown in the table below. For survivors and disabled members, once eligibility is met, the percentage of maximum UC contribution received is at least 50%.

⁽¹⁾ November 27, 2013 for employees represented by CNA in the NX (Nurses) unit; December 21, 2013 for employees represented by UPTE in the HX (Residual Health Care Professionals), TX (Technical), and RX (Research Support Professionals) units; and January 1, 2014 for employees represented by AFSCME in the EX (Patient Care Technical), SX (Service Workers), and K7 (UC Santa Cruz Skilled Craft) units.

Service Credit	Age at Retirement										
	50-55*	56	57	58	59	60	61	62	63	64	65
10	0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	45.0%	50.0%
11	0%	5.5%	11.0%	16.5%	22.0%	27.5%	33.0%	38.5%	44.0%	49.5%	55.0%
12	0%	6.0%	12.0%	18.0%	24.0%	30.0%	36.0%	42.0%	48.0%	54.0%	60.0%
13	0%	6.5%	13.0%	19.5%	26.0%	32.5%	39.0%	45.5%	52.0%	58.5%	65.0%
14	0%	7.0%	14.0%	21.0%	28.0%	35.0%	42.0%	49.0%	56.0%	63.0%	70.0%
15	0%	7.5%	15.0%	22.5%	30.0%	37.5%	45.0%	52.5%	60.0%	67.5%	75.0%
16	0%	8.0%	16.0%	24.0%	32.0%	40.0%	48.0%	56.0%	64.0%	72.0%	80.0%
17	0%	8.5%	17.0%	25.5%	34.0%	42.5%	51.0%	59.5%	68.0%	76.5%	85.0%
18	0%	9.0%	18.0%	27.0%	36.0%	45.0%	54.0%	63.0%	72.0%	81.0%	90.0%
19	0%	9.5%	19.0%	28.5%	38.0%	47.5%	57.0%	66.5%	76.0%	85.5%	95.0%
20+	0%	10.0%	20.0%	30.0%	40.0%	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%

*Retirees have access to UC's group medical and dental plans but there is no UC contribution

Medical Plans: Below is a high-level summary of benefit coverage that each University of California medical plan provides for its covered members who are not yet Medicare eligible or are Medicare eligible and living within California. Medicare eligible retirees with all covered family members in Medicare living outside of California are only eligible for the Medicare Exchange/Coordinator Program administered by OneExchange.

- Hospital Coverage
- Surgical/Medical
- Diagnostic
- Doctor Office Visits
- Medical Equipment
- Prescription Drugs
- Chiropractor/Acupuncture
- Mental Health/Substance Abuse

The following tables list the individual medical plans as of January 1, 2016 offered to retirees and provide the basic benefit provisions and eligibility for each.

Medical	Benefit Provisions		Eligibility
<p>Health Net Blue & Gold, Health Net Seniority Plus, and Western Health Advantage (WHA) (HMOs)</p>	<p>Deductible Out-of-Pocket Limit</p> <p>Doctor Office Visits Inpatient Prescription Drug Co-pays</p> <p>Lifetime Maximum</p>	<p>None</p> <p>\$1,000 per non-Medicare eligible individual (includes Rx expenses) / \$3,000 per non-Medicare eligible family (includes Rx expenses) / \$1,500 per Medicare eligible individual (excludes Rx expenses)</p> <p>\$20 co-pay</p> <p>\$250 co-pay per admittance</p> <p>Retail: \$5 Generic / \$25 Brand / \$40 Non-Formulary</p> <p>Mail Order: \$10 Generic / \$50 Brand / \$80 Non-Formulary</p> <p>None</p>	<p><u>Health Net Blue & Gold and Health Net Seniority Plus:</u> Annuitants retired from the University of California and their eligible dependents living within the HMO service area.</p> <p><u>Western Health Advantage (WHA):</u> Non-Medicare eligible annuitants retired from the University of California and their non-Medicare eligible dependents living within the HMO service area.</p>

Medical Plans (continued):

Medical	Benefit Provisions	Eligibility
UC Care (PPO)	<p><u>UC Select</u></p> <p>Deductible None</p> <p>Out-of-Pocket Limit (including Deductible and Co-pays) Medical: \$1,500 Individual / \$4,500 Family Pharmacy: \$3,600 Individual / \$4,200 Family</p> <p>Doctor Office Visits \$20 co-pay</p> <p>Inpatient \$250 co-pay per admittance</p> <p>Prescription Drug Co-pays \$5 Generic / \$25 Brand / \$40 Non-Formulary</p> <p>Lifetime Maximum None</p> <p><u>Blue Shield Preferred</u></p> <p>Deductible \$250</p> <p>Out-of-Pocket Limit (including Deductible and Co-pays) Medical: \$3,000 Individual / \$9,000 Family Pharmacy: \$3,600 Individual / \$4,200 Family</p> <p>Coinsurance 20%</p> <p>Prescription Drug Co-pays \$5 Generic / \$25 Brand / \$40 Non-Formulary</p> <p>Lifetime Maximum None</p> <p><u>Non-Preferred Providers</u></p> <p>Deductible \$500 Individual / \$1,500 Family</p> <p>Out-of-Pocket Limit (including Deductible) \$5,000 Individual / \$15,000 Family</p> <p>Coinsurance 50%</p> <p>Prescription Drug Coinsurance 50%</p> <p>Lifetime Maximum None</p>	<p>Non-Medicare eligible annuitants retired from The University of California and their non-Medicare eligible dependents.</p> <p>Medicare eligible members in Split-Medicare families are enrolled in Blue Shield Medicare PPO.</p>

Medical Plans (continued):

Medical	Benefit Provisions		Eligibility
<p>Kaiser California and Kaiser Senior Advantage (HMOs)</p>	<p>Deductible Out-of-Pocket Limit</p> <p>Doctor Office Visits Inpatient Prescription Drug Co-pays Lifetime Maximum</p>	<p>None \$1,500 Individual / \$3,000 Family (Includes Rx expense for non-Medicare and excludes Rx expense for Medicare) \$20 co-pay \$250 co-pay per admittance \$5 Generic / \$25 Brand None</p>	<p>Annuitants retired from the University of California and their eligible dependents living within the HMO service area.</p>
<p>CORE (Indemnity/Fee-for-Service Plan)</p>	<p>Deductible Out-of-Pocket Limit (including Deductible) Coinsurance Inpatient Prescription Drug Coinsurance Lifetime Maximum</p>	<p>\$3,000 per member \$6,350 Individual / \$12,700 Family</p> <p>20% 20% 20% None</p>	<p>Non-Medicare eligible annuitants retired from the University of California and their non-Medicare eligible dependents.</p> <p>Medicare eligible members in Split-Medicare families are enrolled in Blue Shield Medicare PPO.</p>
<p>Blue Shield Medicare PPO</p>	<p>Deductible Out-of-Pocket Limit (including deductible) Coinsurance Inpatient Prescription Drug Co-pays Lifetime Maximum</p>	<p>\$100 per member \$1,500 per member</p> <p>20% 20%</p> <p>Retail: \$10 Generic / \$30 Brand / \$45 Non-Formulary Mail Order: \$20 Generic / \$60 Brand / \$90 Non-Formulary None</p>	<p>Medicare eligible annuitants retired from the University of California and their Medicare eligible dependents living within the PPO service area</p>

Medical Plans (continued):

Medical	Benefit Provisions	Eligibility
Blue Shield Health Savings Plan	<p>University’s Contribution to HSA \$500 Individual / \$1,000 All Others</p> <p><u>In-Network</u></p> <p>Deductible \$1,300 Individual / \$2,600 All Others</p> <p>Out-of-Pocket Limit (including Deductible and Rx expenses) \$4,000 Individual / \$6,400 All Others</p> <p>Coinsurance 20%</p> <p>Prescription Drug Coinsurance 20%</p> <p>Lifetime Maximum None</p> <p><u>Out-of-Network</u></p> <p>Deductible \$2,500 Individual / \$5,000 All Others</p> <p>Out-of-Pocket Limit (including Deductible and Rx expenses) \$8,000 Individual / \$16,000 All Others</p> <p>Coinsurance 40%</p> <p>Prescription Drug Co-pays 40%</p> <p>Lifetime Maximum None</p>	<p>Only available to annuitants who: (1) are not Medicare eligible and (2) were enrolled in the Blue Shield Health Savings Plan prior to retiring (or the predecessor to this plan, the Anthem Lumenos PPO with HRA). If the annuitant or their dependent(s) are or become Medicare eligible, they are no longer eligible for the plan.</p>
High Option Supplement to Medicare	<p>Deductible \$50 per member</p> <p>Out-of-Pocket Limit (including deductible) \$1,050 Medical per member / \$1,000 Rx per member</p> <p>Coinsurance No charge for Medicare covered services; 20% for non-Medicare covered services</p> <p>Prescription Drug Co-pays Retail: \$10 Generic / \$30 Brand / \$45 Non-Formulary Mail Order: \$20 Generic / \$60 Brand / \$90 Non-Formulary</p> <p>Lifetime Maximum None</p>	<p>Medicare eligible annuitants retired from the University of California and their Medicare eligible dependents.</p>

Dental Plans: Below is a high-level summary of benefit coverage that each University of California dental plan provides for its covered members.

- Preventive
- Basic
- Restorative
- Orthodontics

The following tables list the individual dental plans offered to retirees and provide the basic benefit provisions and eligibility for each.

Dental	Benefit Provisions	Eligibility
Dental PPO	<p><u>Preventive Services</u> Deductible None Coinsurance 0%</p> <p><u>Basic and Restorative Services</u> Deductible \$50 per person Coinsurance 20% in-network/25% out-of-network for most basic services; 50% for restorative</p> <p><u>Orthodontics</u> Coinsurance 50% Lifetime Maximum \$1,500 for children; \$500 for adults</p> <p><u>Annual Plan Maximum</u> \$1,700 (excludes orthodontia) for PPO provider and \$1,500 (excludes orthodontia) for non-PPO provider</p>	<p>Annuitants retired from the University of California and their eligible dependents.</p>

Dental Plans (continued):

Dental	Benefit Provisions	Eligibility
DeltaCare USA (DHMO)	<u>Preventive Services</u> Deductible	None
	Co-pay	\$45 for adult/\$35 for children
	<u>Basic and Restorative Services</u> Deductible	None
	Co-pay	Varies by service
	<u>Orthodontics</u> Co-pay	\$1,000 (up to 36 months) \$75/month for office visit (after 36-month period)
	Lifetime Maximum	None
	<u>Annual Plan Maximum</u>	None

**Reimbursement
Accounts:**

For Medicare-eligible retirees with all covered family members in Medicare living outside of California, the University will fund a Health Reimbursement Account (HRA), which retirees will use to purchase individual coverage on an Exchange administered by OneExchange. The University will provide a maximum annual contribution of \$3,000 per member, subject to Graduated Eligibility, to the HRA. Each year, the administration will reassess the maximum annual contribution to determine if an adjustment should be made.

**Medicare Part B
Reimbursement:**

If the Maximum University Contribution (after any reduction for graduated eligibility, if applicable) is greater than the rate for the plan chosen by a Medicare-eligible retiree, then the difference will be used to reimburse the retiree for all or a portion of the standard Medicare Part B premium. The standard is the premium that most retirees pay. It is not based on the higher premium rates that apply to late entrants or high income individuals. This premium reimbursement is applicable only for Medicare-eligible retirees or other Medicare-eligible covered members. Retirees participating in the Medicare Exchange/Coordinator Program will not receive a separate reimbursement for Medicare Part B, but they can use balances in their HRA to pay these premiums.

The University has decided to cap the Medicare Part B premium reimbursement at \$104.90 per month in 2016, which is consistent with the standard 2015 Medicare Part B premium. Each year the administration may reassess the basis for determining Medicare Part B reimbursements. This assessment is typically done during the annual health plan renewal process, taking into consideration overall budget resources, salary adjustments for active employees, and COLAs for retirees.

Medicare Integration:	Medical Plan	Integration Method
	Health Net	N/A (Medicare Advantage)
	Kaiser	N/A (Medicare Advantage)
	Blue Shield Medicare PPO	Exclusion
	High Option Supplement to Medicare	Coordination of Benefits/Supplement
	Blue Shield Health Savings Plan	N/A (Non-Medicare Coverage only)
	CORE	N/A (Non-Medicare Coverage only)
	UC Care	N/A (Non-Medicare Coverage only)
	Western Health Advantage	N/A (Non-Medicare Coverage only)

Medicare Integration Types – Brief Definitions:

Exclusion	Benefits provisions of the plan (e.g., deductible, coinsurance, co-pay) are applied to the <u>difference</u> between the total covered charge and Medicare reimbursement.
Coordination of Benefits/ Supplement	Benefits are paid by the plan in accordance with a schedule. For the High Option Supplement to Medicare, this schedule calls for the plan to first pay the member’s share of costs (e.g., the Medicare deductibles and coinsurance amounts) for most Medicare-covered services. However, some covered services are subject to either co-pays (e.g., prescription drugs) or a separate deductible and coinsurance.

Retiree-Pay-All Plans: The University offers the following postemployment plans on a voluntary, “retiree-pay-all” basis with no University cost (explicit or implicit) provided or valued:

- Group Legal Plan
- Group Auto Insurance Plan
- Accidental Death and Dismemberment Plan
- Group Vision Plan

Maximum

Contribution Policy:

In December 2010, the Regents approved the recommendation of the President’s Post-Employment Benefits Task Force to gradually reduce the University’s contribution to 70% of total premiums.

Each year the administration may reassess the level of the University contribution, the appropriateness of an additional 3% reduction in the contribution, and whether the floor should be 70% or a different amount. This assessment is typically done during the annual health plan renewal process, taking into consideration overall budget resources, salary adjustments for active employees, and COLAs for retirees.

For calendar year 2016, the maximum contribution policy is:

- Medicare eligible retirees: 74% of aggregate premiums (including Medicare Part B premiums) for all Medicare eligible retirees covering only Medicare members.
- Non-Medicare eligible retirees under age 65: 70% of aggregate premiums for all non-Medicare retirees under age 65 covering only non-Medicare members.
- Non-Medicare eligible retirees age 65 and older: The same dollar amount as employees in Pay Band 2.

**Collective
Bargaining:**

The University will take appropriate action concerning proposed changes that may trigger notice, consultation, and meeting and conferring obligations under the Higher Education Employer-Employee Relations Act, if any such action is required. The recommendations as they apply to represented employees are subject to collective bargaining requirements.

Liability Transfer between

LBNL and CMCHO: Effective January 1, 2018, the University will not be reimbursed for employees retiring from LBNL who worked less than five years under a DOE cost reimbursement contract; however the DOE will reimburse the University for employees retiring from CMCHO locations who worked less than five years at all CMCHO locations.

**Changes in Plan
Provisions:**

The following change was made from the prior valuation:

- Wellness benefits and incentives have been discontinued effective January 1, 2016.
- Liability associated with employees retiring from LBNL with less than five years of DOE contracted service will be transferred from LBNL to CMCHO.

Summary of Actuarial Methods and Assumptions

Actuarial Methods

Actuarial

Cost Method:

The Actuarial Cost Method used to determine the Actuarial Accrued Liability and the Annual Required Contribution is the Entry Age Normal (EAN) method. This actuarial cost method is one of the GASB 45 approved methods. This method is in the family of future benefit cost methods, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.

The Normal Cost (NC) is the annual allocation required for each participant from entry date to the assumed retirement date so that the accumulated allocation at retirement is equal to the liability for the projected benefit. The projected benefits are based on estimates of future years of service and projected health benefit costs. The normal cost is developed as a level dollar allocation.

The Present Value of Future Benefits is equal to the value of the projected benefit payable at retirement discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost allocations is equal to the discounted value of the normal costs allocated from the member's current age to retirement age.

The difference between the Present Value of Future Benefits and the present value of future normal cost allocations represents the Actuarial Liability at the participant's current age.

The Actuarial Accrued Liability for participants currently receiving payments is calculated as the actuarial present value of future benefits expected to be paid. No normal cost is allocated for these participants.

**Amortization of
Unfunded
Liabilities:**

The Unfunded Actuarial Accrued Liability (UAAL) is the excess of the Actuarial Accrued Liability over the Assets. This excess will be amortized in the following ways:

- For the initial UAAL: 30-year, level dollar amount, closed amortization period; and
- For experience gains/losses: 15-year, level dollar amount, closed amortization periods. Annual gains/losses include changes due to contributions different from the ARC and experience different from expected.
- For assumption changes: 30-year, level dollar amount, closed amortization periods.
- For plan provision changes: 30-year, level dollar amount, closed amortization periods.

The total amortization of the UAAL, determined by the preceding method, will not be less than the amount necessary to create an equivalent single amortization period of 30 years (consistent with GASB 45 requirements for disclosure). This may occur, for example, if a large gain occurs in the near future. Since the gain would be amortized over a shorter period than the initial UAAL, the resulting total amortization amount may be smaller than the amount necessary to amortize the remaining UAAL over 30 years.

**Actuarial
Value of Assets:**

The actuarial value of assets on the valuation date is the market value of assets

Census Date:

March 1, 2015

Measurement Date:

July 1, 2015

Economic Assumptions

Discount Rate:	4.50% annually
Inflation¹:	3.00% annually
Payroll Growth¹:	Not applicable

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

Demographic Assumptions

Mortality¹:

Pre-Retirement

RP-2014 White Collar Mortality Table projected with the two-dimensional MP-2014 projection scale to 2029.

Post-Retirement

Healthy Participants

RP-2014 White Collar Mortality Table projected with the two-dimensional MP-2014 projection scale to 2029. Ages are set forward one year for males and females.

Disabled Participants

RP-2014 Disabled Retiree Mortality Table projected with the two-dimensional MP-2014 projection scale to 2029. Ages are set back one year for males and set forward five years for females.

The RP-2014 mortality tables projected with the two-dimensional scale MP-2014 projection scale to 2029 and adjusted as noted above reasonably reflects the projected mortality experience as of the measurement date. The additional projection to 2029 is a provision for future mortality improvement.

Age	Sample Pre-Retirement Mortality Rates (%)			
	Healthy Mortality*		Disabled Mortality**	
	Male	Female	Male	Female
20	0.02	0.01	0.50	0.20
25	0.03	0.01	0.73	0.26
30	0.03	0.02	0.64	0.34
35	0.03	0.02	0.74	0.46
40	0.04	0.03	0.86	0.75
45	0.06	0.05	1.24	1.00
50	0.10	0.08	1.59	1.25
55	0.16	0.12	1.88	1.45
60	0.28	0.18	2.21	1.73
65	0.49	0.26	2.59	2.29

* All pre-retirement deaths are assumed to be non-duty related

**Assumed to apply only while receiving UCRP Disability Income

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

Disability Incidence¹: Percent of employees expected to become disabled each year is based on age and sex.

Sample Disability Incidence Rates* (%)		
Age	Male	Female
20	0.01	0.01
25	0.02	0.02
30	0.03	0.03
35	0.04	0.04
40	0.07	0.08
45	0.10	0.16
50	0.17	0.26
55	0.25	0.33
60	0.28	0.38
65	0.20	0.28

** All disabilities are assumed to be non-duty related*

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

Withdrawal¹: Percent of employees expected to terminate each year is based on employee type and years of service. No withdrawal is assumed after a member is first assumed to retire.

Years of Service	Sample Withdrawal Rates (%)	
	Faculty	Staff and Safety
Less than 1	20.00	21.00
1	13.00	17.00
2	8.50	14.00
3	7.00	11.00
4	5.75	9.00
5	5.75	8.25
6	5.50	7.25
7	5.25	6.75
8	5.00	6.25
9	4.75	5.75
10	4.25	5.25
11	4.00	5.00
12	3.75	4.75
13	3.50	4.50
14	3.25	4.25
15	3.00	4.00
16	2.75	3.75
17	2.50	3.50
18	2.25	3.25
19	2.00	3.00
20 and over	1.75	2.75

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

Retirement¹: Percent of employees expected to retire each year is based on employee type, age, years of service, and tier.

Age	Retirement Rates (%)					
	Faculty		Staff*			Safety
	1976 Tier	2013 Tier	1976 Tier	Modified 2013 Tier**	2013 Tier	
50	2.00	0.00	3.50	2.00	0.00	20.00
51	1.00	0.00	2.50	1.50	0.00	15.00
52	1.00	0.00	2.75	1.50	0.00	10.00
53	1.00	0.00	2.75	1.50	0.00	15.00
54	1.00	0.00	3.50	2.00	0.00	15.00
55	2.00	2.00	4.00	2.00	5.00	25.00
56	2.00	1.00	5.00	2.50	1.50	25.00
57	2.00	1.00	5.00	3.00	2.00	25.00
58	2.00	1.00	7.00	3.50	2.50	25.00
59	3.00	1.00	9.00	5.00	3.00	25.00
60	5.00	2.00	12.00	12.00	3.50	25.00
61	5.00	2.00	14.00	10.00	6.00	30.00
62	5.00	2.00	16.00	10.00	9.00	40.00
63	5.00	2.00	16.00	10.00	10.00	50.00
64	7.00	3.00	20.00	12.00	12.00	60.00
65	9.00	20.00	25.00	40.00	40.00	100.00
66	10.00	13.00	22.00	30.00	30.00	100.00
67	11.00	15.00	22.00	30.00	45.00	100.00
68	12.00	15.00	22.00	30.00	30.00	100.00
69	15.00	15.00	22.00	22.00	30.00	100.00
70	15.00	15.00	20.00	20.00	20.00	100.00
71	12.00	12.00	20.00	20.00	20.00	100.00
72	12.00	12.00	20.00	20.00	20.00	100.00
73	12.00	12.00	20.00	20.00	20.00	100.00
74	12.00	12.00	20.00	20.00	20.00	100.00
75	100.00	100.00	100.00	100.00	100.00	100.00

* These rates apply for those with ten to twenty years of service. For ages under 65, 70% of these rates will be used for those with less than ten years of service and 160% of these rates will be used for those with twenty or more years of service, with the exception that the age 64 rate is set equal to the age 63 rate for those with twenty or more years of service.

** Adopted for employees represented by CNA in the NX (Nurses) unit, UPTE in the HX (Residual Health Care Professionals), TX (Technical), and RX (Research Support Professionals) units, and AFSCME in the EX (Patient Care Technical), SX (Service Workers), and K7 (UC Santa Cruz Skilled Craft) units.

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

**Lump Sum Cash-out
Election Rate¹:**

2013 Tier Faculty and Staff: Not eligible for lump sum cash-out

Safety, 1976 Tier Faculty and Staff, Modified 2013 Tier Staff and eligible Disabled members: Percent of employees who retire each year that are expected to take a lump sum cash-out and forgo their Retiree Health benefits is based on service. Members receiving Disability Income are assumed to “crossover” at age 65.

Percent of Members Eligible to Elect a Lump Sum Cashout Assumed to Elect a Lump Sum Cashout		
Years of Service	Actives	Disability Crossovers
Less than 5	45.0%	17.0%
6	42.0%	17.0%
7	40.0%	17.0%
8	35.0%	17.0%
9	25.0%	17.0%
10	20.0%	13.0%
11	18.0%	13.0%
12	16.0%	13.0%
13	14.0%	13.0%
14	12.0%	13.0%
15 - 19	11.0%	10.0%
20 - 24	7.0%	7.0%
25 - 29	5.0%	5.0%
30 & over	4.0%	4.0%

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

Future Service¹: All members earn a full year of service in each fiscal year.

**Proportion of Retirees
Covering a Spouse or
Eligible Domestic
Partner:**

Actives are assumed to cover an adult member at retirement if they are currently in the “Two Adults” or “Family” coverage categories.

Retirees are assumed to continue their current coverage status.

Employees currently opting out of active employee health coverage are assumed to return to active coverage just before retirement and enroll in retiree coverage, covering an adult member.

This assumption and the following one are based on the experience of the active population. Due to the level of benefits, employees in this program are not expected to change their behavior regarding spousal coverage upon retirement.

**Age of Spouse or
Eligible Domestic
Partner¹:**

For current retirees, the age of the spouse or eligible domestic partner is based on actual dates of birth. For current active employees, male employees are assumed to be three years older than the covered spouse or eligible domestic partner and female employees are assumed to be three years younger than the covered spouse or eligible domestic partner.

Liability Transfer between

LBNL and CMCHO: 3% of all current active LBNL employees are assumed to have worked less than five years under a DOE cost reimbursement contract at retirement.

100% of all current active CMCHO employees are assumed to have worked at least five years at all CMCHO locations at retirement.

¹ For consistency with UCRP, these assumptions are based on those used for the UCRP Actuarial Valuation Report as of July 1, 2015 and experience study approved by the Regents in September 2015.

Benefit Assumptions

Plan Costs:

The valuation of future benefit costs are based on the plans currently offered to University retirees, as described earlier in the “Summary of Program Provisions” section. These plans include: medical benefits (including behavioral health, prescription drugs, and potential reimbursement for Medicare Part B premiums); dental benefits; and wellness benefits/incentives.

The following postemployment plans are offered on a voluntary, “retiree-pay-all” basis and are not valued: Group Legal Plan, Group Auto Insurance Plan, Accidental Death and Dismemberment Plan, and Voluntary “Retiree-Pay-All” Vision Plan.

Per Capita Costs

The per capita costs used in the valuation were developed from insured premiums (HMOs and Dental), projected self-funded accrual rates reflecting estimated claim and administrative costs (PPOs, High Option Supplement to Medicare, and CORE), and projected administrative costs and other assumptions (Wellness fees and incentives). These data and assumptions were provided by the University of California and plan insurers/administrators.

For the July 1, 2015 valuation, the 2016 fiscal year (7/1/2015 – 6/30/2016) costs are based on a 50/50 blend of calendar year 2015 and 2016 insured premiums and self-funded accrual rates for all plans. The blended first fiscal year costs were then adjusted with the appropriate trend assumption to reflect costs as of July 1, 2016. The 2016 rates will be finalized in September during the annual renewal process.

These first-year rates are on a “net basis” – they reflect plan costs after reduction of total benefit costs for member cost-sharing (deductibles, coinsurance, co-pays, provider savings, Medicare, etc.). Future year per capita costs were projected by applying trend assumptions to the July 1, 2016 costs.

Plan Costs (cont.): **Medical Plan Costs**

Medical net rates for covered adults have been developed and expressed in two ways for the valuation:

- Age-Graded Rates.
 - Non-Medicare. For employees/retirees and spouses/eligible domestic partners who will not be/are not eligible for Medicare, the 2016 fiscal year rates (by plan and coverage category) and the current enrollment mix by plan, age and gender were used to develop net rates by age band. Rates were age-graded using the total (active employee and retiree age and gender distribution) non-Medicare covered population for each plan, so that the age-graded rates for a retiree-only group would composite to a higher cost appropriate for that group.

These age-graded rates are the basis for projecting the gross cost for each individual, before member contributions for coverage.

As described under “Medicare Assumptions” later in this section, some current retirees age 65 and older are not eligible for Medicare, and some future retirees age 65 and older will not be eligible for Medicare. Net rates for non-Medicare coverage reflect this, with premiums extending to the 84 & over age band.
 - Medicare. Age-graded rates are not necessary for employees/retirees and spouses/eligible domestic partners who will be/are eligible for Medicare. These Medicare plans develop rates based on a population of only Medicare retirees. Since there is no group that is affected by higher premiums due to these retirees (i.e., there are no active employees in these plans), there is no implicit subsidy.
- “Flat” Rates. These rates, referred to as ‘flat’ because they are not age-graded, are used in combination with the maximum University contribution levels to project future retiree contributions for health coverage.

Age-graded and “flat” rates were developed separately for retirees and spouses/eligible domestic partners, reflecting the relationship between the coverage categories “Single” and “Two Adults” used by the University for both gross premiums and the University contributions by coverage category.

Plan Costs (cont.):

Costs for child coverage were developed for all members based on the proportion of child coverage by current retirees. The non-Medicare spouse/eligible domestic partner age-graded and “flat” rates were loaded to reflect this child coverage.

For Medicare-eligible retirees, “flat” net rates include the Medicare Part B premium. This reflects that the University will reimburse all or a portion of this premium if the maximum University contribution for that retiree is below the medical rate.

For the life and duration of the current collective bargaining agreement, an employee represented by AFSCME in the EX (Patient Care Technical), SX (Service Workers), or K7 (UC Santa Cruz Skilled Craft) unit, in either the 1976 or the 2013 tier, who retires and who meets the minimum eligibility criteria, will pay for Kaiser at the rate in place at the time of ratification regardless of when he/she retires during the life of the Agreement. Since this is a temporary provision, the impact on the valuation is negligible and was not measured.

University Share of Medical Costs

Maximum University contributions are also developed separately by plan for retirees and spouses/eligible domestic partners.

- For retirees with graduated eligibility of 100%, these projected University contributions are subtracted from the projected “flat” rates to determine the retiree contributions in each year. These retiree contributions are then subtracted from the age-based cost for a member to determine the University cost in each year.
- If a retiree’s graduated eligibility is less than 100%, this maximum University contribution is first prorated before determining the projected retiree contribution in future years.

For purposes of this valuation, it has been assumed that the pattern of three percentage points annual decreases in the contribution percentage will continue until the floor of 70% is reached (separately for Medicare eligible retirees and non-Medicare eligible retirees under 65).

For purposes of the Medicare Exchange/Coordinator Program, the Maximum University Contribution is assumed to remain at the current amount per out-of-State retiree or spouse/eligible domestic partner.

Plan Costs (cont.):

For purposes of the Medicare Exchange/Coordinator Program, the Maximum University Contribution is assumed to remain at the current amount per out-of-State retiree or spouse/eligible domestic partner.

The table below illustrates calendar year 2016 non-Medicare age-grading factors, weighted average claims at age 62, “flat” net rates, and maximum University contributions by plan. For purposes of the valuation, the rates shown here were blended 50/50 with calendar year 2015 rates to represent costs for the period 7/1/2015 to 6/30/2016. Note that the Blue Shield Health Savings Plan is not used in the development of Plan Costs due to its minimal current and potential future retiree enrollment (measured as a percentage of total University Retirees).

Sample Aging Factors					
<u>Age</u>	<u>Factor</u>	<u>Age</u>	<u>Factor</u>		
Under 25	0.00%	53-57	3.85%		
25-27	4.22%	58-62	4.56%		
28-32	2.73%	63-67	3.09%		
33-37	1.11%	68-72	3.33%		
38-42	2.01%	73-77	2.69%		
43-47	3.27%	78-82	1.43%		
48-52	4.65%	83+	0.10%		
Sample CY 2016 Rates and Contributions by Plan: Non-Medicare					
	<u>Health Net B&G</u>	<u>Kaiser California</u>	<u>WHA</u>	<u>UC Care</u>	<u>CORE</u>
Age 62 Weighted Average Claims*	\$1,144.39	\$929.07	\$1,134.15	\$1,334.11	\$330.61
<u>Retiree</u>					
Flat Rate	\$670.59	\$586.86	\$577.81	\$751.67	\$235.87
Maximum UC Contribution					
Retirees under age 65	\$465.79	\$465.79	\$465.79	\$465.79	\$465.79
Retirees age 65 and over	\$600.70	\$535.03	\$525.98	\$600.70	\$600.70
<u>Spouse/Eligible Domestic Partner</u>					
Flat Rate	\$737.65	\$645.55	\$635.60	\$826.85	\$259.46
Maximum UC Contribution					
Retirees under age 65	\$472.15	\$472.15	\$472.15	\$472.15	\$472.15
Retirees age 65 and over	\$599.19	\$580.52	\$570.57	\$599.19	\$599.19

* Weighted average claims developed based on a 50/50 blend of calendar year 2015 and 2016 premiums.

Plan Costs (cont.): The table below illustrates calendar year 2016 Medicare “flat” net rates and maximum University contributions by plan. For purposes of the valuation, the standard 2016 Medicare Part B premium of \$104.90 was added to the “flat” net rates. These total rates shown here were blended 50/50 with calendar year 2015 rates to represent costs for period 7/1/2015 to 6/30/2016. As described above, age graded rates are not applicable for employees/retirees and spouses/eligible domestic partners who will be/are eligible for Medicare.

Sample CY 2016 Rates and Contribution by Plan:
Medicare (Medicare Part B Not Included)

	Health Net B&G	Kaiser California	High Option Supplement to Medicare	Blue Cross PPO
<u>Retiree</u>				
Flat Rate	\$372.52	\$245.24	\$473.87	\$359.70
Maximum UC Contribution	\$334.43	\$334.43	\$334.43	\$334.43
<u>Spouse/Eligible Domestic Partner</u>				
Flat Rate	\$372.52	\$245.24	\$473.87	\$359.70
Maximum UC Contribution	\$334.43	\$334.43	\$334.43	\$334.43

Plan Costs (cont.): Dental Plan Costs

Projected retiree dental costs are based on a per-covered-adult net rate developed from the current retiree enrollment distribution by plan and coverage category. This rate includes the effect of children coverage.

The calendar year 2016 dental rates used to develop this per-covered-adult net rate are shown in the table below. For purposes of the valuation, the rates were based on a 50/50 blend of calendar year 2015 and 2016 insured premiums to represent costs for period 7/1/2015 to 6/30/2016.

Plan	Single	Adult + Child(ren)	Two Adults	Family
Dental PPO	\$42.24	\$86.87	\$79.15	\$141.86
Dental HMO	\$19.88	\$34.66	\$34.11	\$48.90

The University’s share of dental costs depends on the “graduated eligibility” level for each retiree.

- For retirees with 100% graduated eligibility, the University pays the full cost of dental.
- If a retiree’s graduated eligibility is less than 100%, the University pays that portion of the dental net rates.

Expenses:

All net rates, age-graded and “flat,” were developed to include administrative expenses as a component in the total rate (medical and dental).

Medical Trend

(Net Rates):

The trend rates illustrated on the next page are used to project the net medical rates (age-graded and “flat”) shown above into future years.

- The initial trend assumptions are based on a review of the University’s historic trend rates for HMO, PPO and Indemnity plans during the years 2005 through 2013 and emerging experience. This review was done separately for non-Medicare and Medicare plans. Regression curves were fit to the data to help predict short-term future per capita cost increases. The final estimates for initial trend were based on this information adjusted for the expected impact of health care reform due to industry pass-through costs. Under health reform, various industry fees will be imposed on health insurance providers, pharmaceutical manufacturers, and medical device manufacturers. In addition, much investment will be necessary by insurers, hospitals, and other providers to fund required infrastructure and technology enhancements in order to comply with the requirements of PPACA. The short-term rates were graded steadily to a level of 5% annually after 15 years. This grade down period is consistent with industry expectations of medical cost increases over time.
- Separate trend projections are used to reflect the differences in benefit design of each plan type.

Medical Trend (cont.)
(Net Rates):

Fiscal Year Ending ⁽¹⁾		Annual Medical Trend (%)					
		Non-Medicare			Medicare		
		HMO Plans ⁽²⁾	PPO Plans ⁽²⁾	Indemnity Plan ⁽²⁾	HMO Plans ⁽²⁾	PPO Plans ⁽²⁾	Part B
<u>From</u>	<u>To</u>						
2016	2017	7.10	7.10	9.50	8.00	6.80	6.40
2017	2018	6.90	6.90	9.00	7.75	6.60	6.30
2018	2019	6.70	6.70	8.50	7.50	6.40	6.20
2019	2020	6.50	6.50	8.00	7.25	6.20	6.10
2020	2021	6.30	6.30	7.50	7.00	6.00	6.00
2021	2022	6.10	6.10	7.25	6.75	5.90	5.90
2022	2023	5.90	5.90	7.00	6.50	5.80	5.80
2023	2024	5.70	5.70	6.75	6.25	5.70	5.70
2024	2025	5.60	5.60	6.50	6.00	5.60	5.60
2025	2026	5.50	5.50	6.25	5.80	5.50	5.50
2026	2027	5.40	5.40	6.00	5.60	5.40	5.40
2027	2028	5.30	5.30	5.75	5.40	5.30	5.30
2028	2029	5.20	5.20	5.50	5.20	5.20	5.20
2029	2030	5.10	5.10	5.25	5.10	5.10	5.10
All Future Years		5.00	5.00	5.00	5.00	5.00	5.00

(1) Trend is defined as the increase in plan cost from one fiscal year to the next; for example, in a Medicare PPO Plan, medical net rates in Fiscal Year 2017 are assumed to be 6.80% higher than they were in Fiscal Year 2016

(2) **HMO Plans:** Health Net B&G, Kaiser California, and Western Health Advantage
PPO Plans: UC Care, Blue Shield PPO, and High Option Supplement to Medicare
Indemnity Plan: CORE Major Medical

Maximum University

Contribution Trend: The maximum University contributions shown earlier, reflecting the University’s 2016 contribution policy, are projected using the same medical trends for net rates (included in the tables on the preceding page). This approach assumes that the University contribution level will increase by the same percentage as the net rates increase (before adjusting for assumed changes in the contribution policy).

Dental Trend: Dental rates are assumed to increase by 5% each year.

Plan Participation: 100% of future retirees (regardless of current University health coverage) who become eligible for a benefit are assumed to elect retiree coverage. This includes employees who are eligible for but currently opt out of active health coverage. Retirees who are currently electing to suspend their coverage are assumed to remain uncovered in the future.

Excise Tax: Effective in the 2018 calendar year, an excise tax on “Cadillac Plans” will apply as a result of PPACA. HMOs and other healthcare insurers, who offer plans with a higher cost than the excise tax threshold, will be charged a 40% tax on the costs exceeding the threshold. However, because the University’s rates are much lower than the thresholds after adjusting for the average age of the primary individuals covered by the University’s benefit plans, which is significantly higher than that of the national workforce, the excise tax has a negligible effect on the liability.

Coverage: Current retirees are assumed to remain in their currently elected plan. Future retirees are assumed to enroll in the existing plans in the same proportion as the current retiree mix. These proportions are established separately for non-Medicare and Medicare coverage for each plan.

Coverage (cont.): As described under “Plan Costs” above, rates and contributions for non-Medicare spouses/eligible domestic partners are increased by a “child load” to reflect coverage of children and other non-adult members. This is developed separately for age-graded net rates, “flat” net rates, and maximum University contributions on a blended basis for all plans. The “child loads” are:

	Age-graded net rates	“Flat” net rates	Maximum University Contributions
Campus/Medical Center/Hastings/Other	38.7%	38.7%	41.4%
Lawrence Berkeley National Laboratory	35.5%	35.0%	37.4%

The table below shows the enrollment percentage by plan and location.

	Enrollment Distribution: Non-Medicare				
	Health Net Blue Gold	Kaiser California	WHA	UC Care	CORE
Campus/Medical Center/Hastings/Other					
Retirees	32.0%	32.3%	4.4%	27.5%	3.8%
Spouses/Eligible Domestic Partners	29.5%	33.7%	3.9%	27.9%	5.0%
Lawrence Berkeley National Laboratory					
Retirees	30.6%	49.5%	0.5%	17.0%	2.4%
Spouses/Eligible Domestic Partners	31.6%	49.6%	0.4%	15.1%	3.3%
	Enrollment Distribution: Medicare				
	Health Net Blue Gold	Kaiser Senior Advantage	High Option Supplement to Medicare	Blue Shield PPO	Medicare Coordinator/ Exchange
Campus/Medical Center/Hastings/Other					
Retirees	26.3%	25.8%	12.4%	24.7%	10.8%
Spouses/Eligible Domestic Partners	27.2%	24.9%	9.8%	28.7%	9.4%
Lawrence Berkeley National Laboratory					
Retirees	22.7%	44.4%	9.9%	14.2%	8.8%
Spouses/Eligible Domestic Partners	24.9%	44.0%	8.2%	15.8%	7.1%

Medicare Assumptions

Medicare Eligibility: Given the University’s public sector status, a portion of University employees and retirees are not eligible for Medicare coverage when they reach age 65. Based on the data provided by the University, the valuation made the following assumptions about the future eligibility of each retiree’s Medicare status in the future. These assumptions are based on the current coverage category for current retirees and a “Social Security” flag for current employees (indicating if deductions are currently taken for employees).

Retirees

Current Medicare Coverage (of Retiree or Spouse/Eligible Domestic Partner)	Retiree Age Range	Medicare Eligibility Assumption
At Least One Medicare	Any Age	Retiree and spouse/eligible domestic partner (if covered) are assumed to be Medicare eligible at age 65.
Neither Medicare	Post-65	Retiree and spouse/eligible domestic partner (if covered) are assumed to <u>not</u> be eligible for Medicare eligible at any time in the future.
Neither Medicare	Pre-65	<p>A proportion of these retirees and covered spouses/eligible domestic partners (if covered) are assumed to be Medicare-eligible at age 65.</p> <ul style="list-style-type: none"> The proportion assumed is 85% Medicare-eligible at age 65 and 15% not Medicare-eligible. This assumption is based on the observed proportion of Medicare coverage at age 65 for retirees who were in this situation and reached age 65 during recent years. This assumption is needed due to the lack of a reliable data field indicating what the Medicare eligibility will be for retirees when they reach age 65.

**Medicare Eligibility
(continued):**

Employees

Current Social Security Flag for Employee	Medicare Eligibility Assumption
Social Security Deductions Currently Taken	Retiree and spouse/eligible domestic partner (if covered) are assumed to be Medicare eligible at age 65.
Social Security Deductions <u>Not</u> Taken	<p>Of employees flagged as not eligible for Social Security/Medicare, 50% are assumed to not be Medicare-eligible at age 65.</p> <ul style="list-style-type: none"> • This reflects that some may become eligible for Medicare at age 65 through a spouse or other employment. • The 50% assumption reflects the absence of additional data to project future Medicare status and also that a minority of employees are flagged in this manner.

These assumptions are implemented, as described earlier, by using blended non-Medicare and Medicare rates where appropriate.

Changes in Assumptions

The following changes were made from the prior valuation:

- The inflation, mortality, disability, withdrawal, retirement, and lump sum cash-out assumptions were changed based on the results of the UCRP experience study for the four-year period ending June 30, 2014;
- The discount rate was reduced from 5.5% to 4.5% as prescribed by the University;
- The grading down of medical trend rates were adjusted so that the ultimate trend rate of 5.0% was reached in 2030/2031, previously 2029/2030.

Summary of Demographic Information

The participant data used in the valuation was provided by the University of California as of March 1, 2015. It is assumed that this data is representative of the population as of July 1, 2015. While the participant data was checked for reasonableness, the data was not audited, and the valuation results presented in this report are dependent upon the accuracy of the participant data provided. The table below and on the subsequent page present a summary of the basic participant information for the active and retired participants covered under the terms of the Plan.

Table 1

Participant Information			
	Campus/Medical Center/Hastings/Other	Lawrence Berkeley National Laboratory	Total
<u>Active Participants*</u>			
Total Counts	121,298	3,019	124,317
Average Age	44.74	44.72	44.74
Average Service	9.37	9.26	9.37
<u>Retired Participants**</u>			
Counts			
Under age 65	8,674	304	8,978
Age 65 and over			
Not Medicare eligible	2,436	139	2,575
Medicare eligible	28,664	1,334	29,998
Total Counts	39,774	1,777	41,551
Average Age	72.18	74.26	72.27
Total Participants	161,072	4,796	165,868
<u>Covered Dependents of Retired Participants**</u>			
Counts			
Spouses / Domestic Partners	16,561	811	17,372
Children	3,967	173	4,140
Total Counts	20,528	984	21,512

* Active participants who are eligible for but currently opt out of active health coverage are included.

** Retired participants include retirees, disabled participants, and surviving family members.

Summary of Demographic Information (cont.)

Age Group	Retired* Participants	Active Participants - Years of Service							Total
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	
< 20	19	14	0	0	0	0	0	0	14
20 - 24	8	3,312	13	0	0	0	0	0	3,325
25 - 29	3	9,634	1,138	20	0	0	0	0	10,792
30 - 34	4	9,878	4,913	801	14	0	0	0	15,606
35 - 39	13	8,096	5,452	2,695	532	6	0	0	16,781
40 - 44	31	5,075	5,286	3,763	1,640	318	13	0	16,095
45 - 49	100	3,599	4,022	3,988	2,462	1,056	345	10	15,482
50 - 54	481	2,873	3,198	3,434	2,763	1,899	1,231	312	15,710
55 - 59	1,974	2,120	2,451	2,601	2,385	1,957	1,949	1,314	14,777
60 - 64	6,345	1,296	1,682	1,846	1,537	1,289	1,273	1,164	10,087
65 - 69	9,400	444	721	721	579	457	433	698	4,053
70 - 74	7,883	113	165	179	136	102	116	368	1,179
75 - 79	5,650	39	33	34	27	32	30	121	316
80 - 84	4,287	12	3	8	4	9	11	36	83
85 - 89	3,095	2	3	0	0	2	1	7	15
90 +	2,258	2	0	0	0	0	0	0	2
Total	41,551	46,509	29,080	20,090	12,079	7,127	5,402	4,030	124,317

* Retired participants include retirees, disabled participants, and surviving family members. Does not include 21,512 covered dependents.

Summary of Demographic Information (cont.)

Table 3

Participant Reconciliation - All Locations

	<u>Active Opt-In</u>	<u>Active Opt-Out</u>	<u>Retired Participant Opt-In*</u>	<u>Total</u>
Beginning of Year (7/1/2014)	114,332	7,569	40,235	162,136
New Hire/Data Correction	15,275	1,874	455	17,604
Return to Full-Time	13	0	(13)	0
Retired/Disabled	(2,199)	(4)	2,203	0
Death/Termination	(11,190)	(1,353)	(1,416)	(13,959)
Change in Opt-Out Status	249	(249)	87	87
End of Year (7/1/2015)	116,480	7,837	41,551	165,868

* Retired participants include retirees, disabled participants, and surviving family members. Does not include 21,512 covered dependents.

Assumption Sensitivity

This section provides information about the sensitivity of the Actuarial Accrued Liability and the Normal Cost to certain assumptions made in this actuarial valuation. The discount rate and benefit cost trend rate are the most significant assumptions used in this valuation. The tables below show the effect of increasing and decreasing those assumptions by 100 basis points above/below their projected levels in all future years.

Discount Rate

(All dollar amounts are in thousands)

<u>Actuarial Accrued Liability</u>	Current	+1%		-1%	
		\$ Change	% Change	\$ Change	% Change
CMCHO	\$ 17,320,301	\$ (2,672,913)	-15.4%	\$ 3,422,139	19.8%
LBNL	\$ 569,383	\$ (81,236)	-14.3%	\$ 102,957	18.1%
Combined - All Locations	\$ 17,889,684	\$ (2,754,149)	-15.4%	\$ 3,525,096	19.7%
<u>Normal Cost</u>					
	Current	+1%		-1%	
		\$ Change	% Change	\$ Change	% Change
CMCHO	\$ 613,866	\$ (152,101)	-24.8%	\$ 212,168	34.6%
LBNL	\$ 15,897	\$ (3,960)	-24.9%	\$ 5,522	34.7%
Combined - All Locations	\$ 629,763	\$ (156,061)	-24.8%	\$ 217,690	34.6%

Assumption Sensitivity (cont.)

Benefit Cost Trend

(All dollar amounts are in thousands)

<u>Actuarial Accrued Liability</u>	Current	+1%		-1%	
		\$ Change	% Change	\$ Change	% Change
<i>CMCHO</i>	\$ 17,320,301	\$ 3,487,222	20.1%	\$ (2,699,087)	-15.6%
<i>LBNL</i>	\$ 569,383	\$ 102,092	17.9%	\$ (80,309)	-14.1%
<i>Combined - All Locations</i>	\$ 17,889,684	\$ 3,589,314	20.1%	\$ (2,779,396)	-15.5%
 <u>Normal Cost</u>					
	Current	+1%		-1%	
		\$ Change	% Change	\$ Change	% Change
<i>CMCHO</i>	\$ 613,866	\$ 195,204	31.8%	\$ (140,151)	-22.8%
<i>LBNL</i>	\$ 15,897	\$ 5,095	32.1%	\$ (3,657)	-23.0%
<i>Combined - All Locations</i>	\$ 629,763	\$ 200,299	31.8%	\$ (143,808)	-22.8%

Glossary

Brief explanations of terms used in this report:

Actuarial Accrued Liability (AAL). The portion of the Present Value of Future Benefits that is attributed to accrued service as of the valuation date, based on the actuarial cost method.

Annual OPEB Expense. The amount recognized by an employer in each accounting period for contributions to a defined benefit OPEB plan on the modified accrual basis of accounting.

Annual Required Contribution (ARC). The employer's annual required contributions to an OPEB plan calculated in accordance with GASB 45.

Covered Payroll. Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.

Net OPEB Obligation (NOO). The cumulative difference between the annual OPEB cost and employer contributions since the adoption date of GASB 45.

Normal Cost (NC). The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method.

Other Postemployment Benefits (OPEB). Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).

Present Value of Future Benefits (PVFB). The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability.

Unfunded Actuarial Accrued Liability (UAAL). The portion of the Actuarial Accrued Liability that exceeds the current plan assets.

Deloitte.