

Office of the President

TO THE MEMBERS OF THE COMMITTEE ON FINANCE:

## DISCUSSION ITEM

*For Meeting of November 18, 2009*

### **ANNUAL ACTUARIAL VALUATIONS FOR THE UNIVERSITY OF CALIFORNIA RETIREMENT PLAN AND ITS SEGMENTS AND FOR THE 1991 UNIVERSITY OF CALIFORNIA-PUBLIC EMPLOYEES' RETIREMENT SYSTEM VOLUNTARY EARLY RETIREMENT INCENTIVE PROGRAM**

#### **EXECUTIVE SUMMARY**

Each year, The Regents' Consulting Actuary performs an actuarial valuation of the [University of California Retirement Plan](#) (UCRP). Consistent with the funding policy approved by The Regents for the campus and medical center portion of UCRP, and separate agreements with the Department of Energy (DOE) for the funding of each laboratory segment of UCRP, the annual valuation includes highlights of each of these segments as noted below. All UCRP assets will continue to be maintained in one trust account and are available to pay benefits of all members, regardless of the segment to which their benefits are allocated, as required by law. Additional information concerning the Academic Council recommendation on UCRP funding and the President's Task Force on Post-Employment Benefits follows. Highlights of the annual valuation of the 1991 University of California-Public Employees' Retirement System Voluntary Early Retirement Incentive Program ([UC-PERS Plus 5 Plan](#)) are also provided.

Summary Information:

#### ***UCRP Valuation Results***

- The June 30, 2009 overall market value of assets of UCRP was \$32.3 billion, down from \$42.0 billion for the prior year, reflecting a -19.2 percent net investment return after adjusting for benefit disbursements and plan expenses. The June 30, 2009 overall actuarial value of assets was \$42.8 billion.
- The July 1, 2009 overall actuarial accrued liability for UCRP grew to \$45.2 billion from \$42.6 billion for the prior year.
- UCRP's overall funded ratio on an actuarial value of assets basis decreased from 103 percent as of July 1, 2008 to 95 percent as of July 1, 2009.
- The UCRP normal cost for the 2009-2010 plan year is \$1.34 billion or 17.00 percent of the \$7.87 billion covered payroll at July 1, 2009.

***UCRP Campus and Medical Center Segment Valuation Results (Includes Hastings College of Law)***

- The June 30, 2009 campus and medical center segment market value of assets was \$26.3 billion and the segment actuarial value of assets was \$34.9 billion.
- The July 1, 2009 segment actuarial accrued liability was \$36.9 billion.
- The segment funded ratio on an actuarial value of assets basis was 95 percent as of July 1, 2009.
- The segment normal cost for the 2009-2010 plan year is \$1.30 billion or 17.02 percent of the \$7.66 billion covered payroll at July 1, 2009.
- Based on the funding policy approved by The Regents at its September 2008 meeting, the total funding policy contribution is 20.40 percent of projected covered payroll, or \$1.62 billion effective for the 2010-2011 plan year.
- At the February 2009 meeting, The Regents approved restarting contributions effective April 15, 2010, subject to collective bargaining as applicable. The University contribution rate will be 4 percent of covered payroll and the member rate will be the amount that is currently redirected to the Defined Contribution Plan.

***UCRP Lawrence Berkeley National Laboratory (LBNL) Segment Valuation Results***

- The June 30, 2009 LBNL segment market value of assets was \$1.30 billion and the segment actuarial value of assets was \$1.72 billion.
- The July 1, 2009 segment actuarial accrued liability is \$1.46 billion.
- The University contributions and the member contributions for the LBNL segment will be made on the same basis as determined for the campus and medical center segment of UCRP, effective April 15, 2010, subject to the terms of the University's contract with the Department of Energy and subject to collective bargaining, if applicable, for represented members at LBNL.

***UCRP Lawrence Livermore National Laboratory (LLNL) Retained Segment Valuation Results***

- The June 30, 2009 LLNL segment market value of assets was \$2.42 billion and the segment actuarial value of assets was \$3.16 billion.
- The July 1, 2009 segment actuarial accrued liability was \$3.71 billion.
- Only LLNL retired, disabled or inactive members and their beneficiaries remain in the LLNL segment.
- In 2007, in addition to retaining assets to cover 100 percent of the liabilities of the LLNL segment, UCRP retained an additional Contribution Reserve Amount (CRA) of \$140 million to offset future funding obligations for the LLNL segment. The required contribution for the 2009-2010 plan year, after application of the balance of the CRA, is \$52.7 million. The Department of Energy (DOE) has agreed to reimburse the University for this contribution.

***UCRP Los Alamos National Laboratory (LANL) Retained Segment Valuation Results***

- The June 30, 2009 LANL segment market value of assets was \$2.24 billion and the segment actuarial value of assets was \$2.97 billion.
- The July 1, 2009 segment actuarial accrued liability was \$3.12 billion.
- Only LANL retired, disabled or inactive members and their beneficiaries remain in the LANL segment.
- The required contribution for this segment is \$28.5 million for the 2009-2010 plan year. The DOE has agreed to reimburse the University for this contribution.

***UC-PERS Plus 5 Plan Valuation Results***

The June 30, 2009 market value of assets of the UC-PERS Plus 5 Plan was \$56.9 million, down from \$76.3 million for the prior year, reflecting a -19.5 percent net investment return.

- The July 1, 2009 actuarial accrued liability for the UC-PERS Plus 5 Plan decreased to \$37.8 million from \$39.8 million for the prior year.
- As of July 1, 2009, there were 718 retired members and beneficiaries in this Plan.
- The UC-PERS Plus 5 Plan funded ratio decreased from 192 percent as of July 1, 2008 to 151 percent as of July 1, 2009.

Previous Action:

**September 2008:** The Regents approved a new funding policy for the campus and medical center segment of UCRP. The new policy determines the total funding policy contribution based on this segment's Normal Cost plus an amortization of the surplus or underfunding. The calculation of the funding policy contribution excludes the LBNL segment, the LLNL segment and the LANL segment because the contribution basis for each of these segments is subject to the terms of the applicable contract between the University and the DOE.

**February 2009:** The Regents approved restarting contributions effective April 15, 2010, subject to collective bargaining as applicable. The University contribution rate will be 4 percent of covered payroll and the member rate will be the amount that is currently redirected to the Defined Contribution Plan.

Future Action: At a future meeting it is anticipated that The Regents will review the total funding policy contribution and determine if a change to the level of the currently approved contributions is necessary, considering available funding, the impact of contributions on the competitiveness of UC's total remuneration package, and collective bargaining.

**BACKGROUND**

Each year, the Regents' Consulting Actuary, The Segal Company, performs an actuarial valuation of UCRP and of the UC-PERS Plus 5 Plan.

The purpose of the annual actuarial valuation for UCRP is to disclose UCRP's funded position as of the beginning of the current plan year, analyze the preceding year's experience, and determine

total funding policy contribution rates for the coming year. The results of the actuarial valuation as of July 1, 2009 are summarized and presented in the Executive Summary section of the UCRP actuarial valuation report.

The purpose of the annual actuarial valuation for the UC-PERS Plus 5 Plan is to review the fiscal position of its trust account and funding status to assure that the UC-PERS Plus 5 Plan remains adequately funded. The results of the actuarial valuation as of July 1, 2009 are summarized and presented in the Executive Summary section of the UC-PERS Plus 5 actuarial valuation report.

A glossary of actuarial terms is provided in Appendix I of this item.

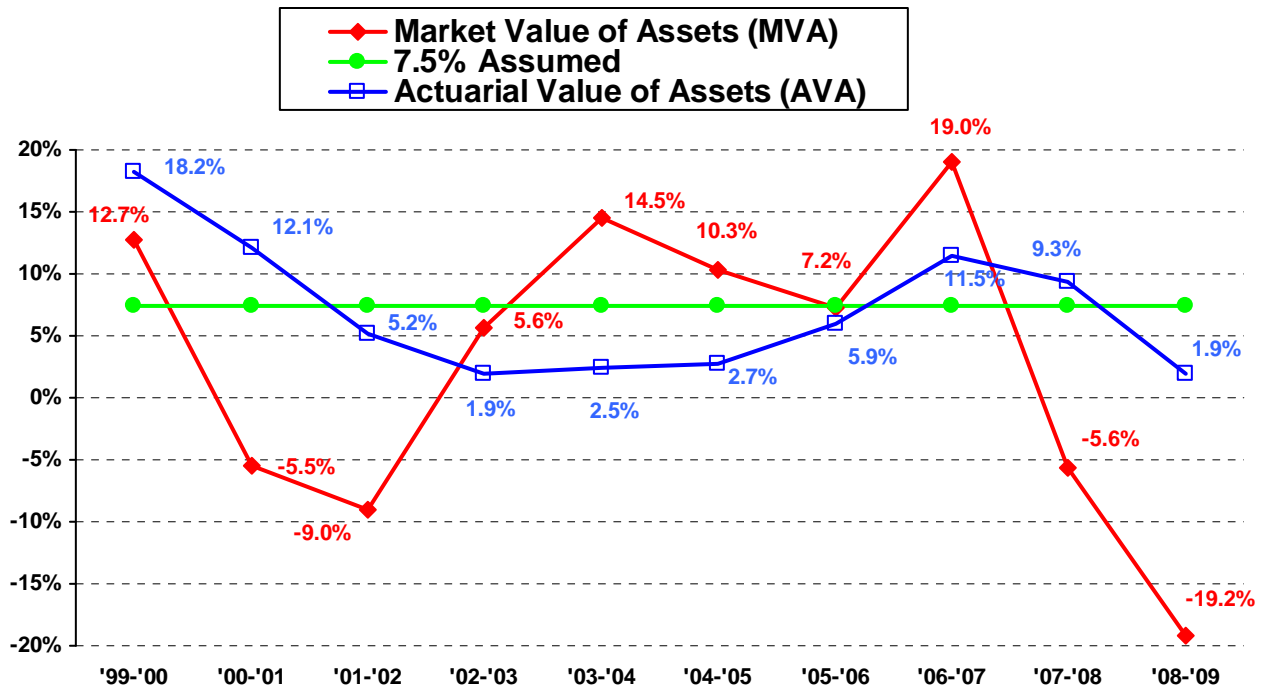
### ***UCRP Valuation Results***

As of July 1, 2009, there were 51,653 retired members and beneficiaries, 31,215 vested terminated members, 23,668 terminated non-vested members and 115,745 active members for a total of 222,281 members included in this valuation. This compares to a total of 228,979 included in the July 1, 2008 valuation.

As of June 30, 2009, the market value of assets of UCRP, after subtracting benefit claims currently payable and other current payables of UCRP, was \$32.3 billion as compared to \$42.0 billion as of the end of the prior plan year. During the 2008-2009 plan year UCRP experienced a -19.2 percent investment return on the market value of UCRP assets. This return differs from the -18.8 percent investment return reported by the Plan Custodian due to small differences in methodology.

When determining UCRP's funded status ratio, UCRP's actuarial accrued liability is compared to the actuarial (smoothed) value of assets. The "smoothing" method reduces the impact of market volatility by recognizing, in each year, only 20 percent of the investment gains and losses in each of the preceding five years. As of June 30, 2009, this five-year period includes three years of investment returns which were less favorable than UCRP's assumed 7.5 percent earnings rate and two which were more favorable. The net result is a 1.91 percent investment return for the 2008-2009 plan year on an actuarial value of assets basis.

The following chart shows, for the most recent ten-year period, the investment rates of return on the market value of assets (MVA) (red line), and on the smoothed actuarial value of assets (AVA) (blue line) as compared to UCRP's assumed earnings rate of 7.5 percent (green line).



Comparing the market value of assets of \$32.3 billion to the actuarial (smoothed) value of assets of \$42.8 billion shows that the total unrecognized investment loss as of July 1, 2009 is \$10.5 billion. This investment loss will be recognized in the determination of the actuarial value of assets for valuation purposes over the next few years. This implies that, if the Plan earns the assumed rate of investment return of 7.50 percent per year (net of investment expenses) on a **market value** basis, there will be investment losses on the actuarial value of assets in the next few years. More information concerning the impact of these unrecognized investment losses is presented later in this discussion.

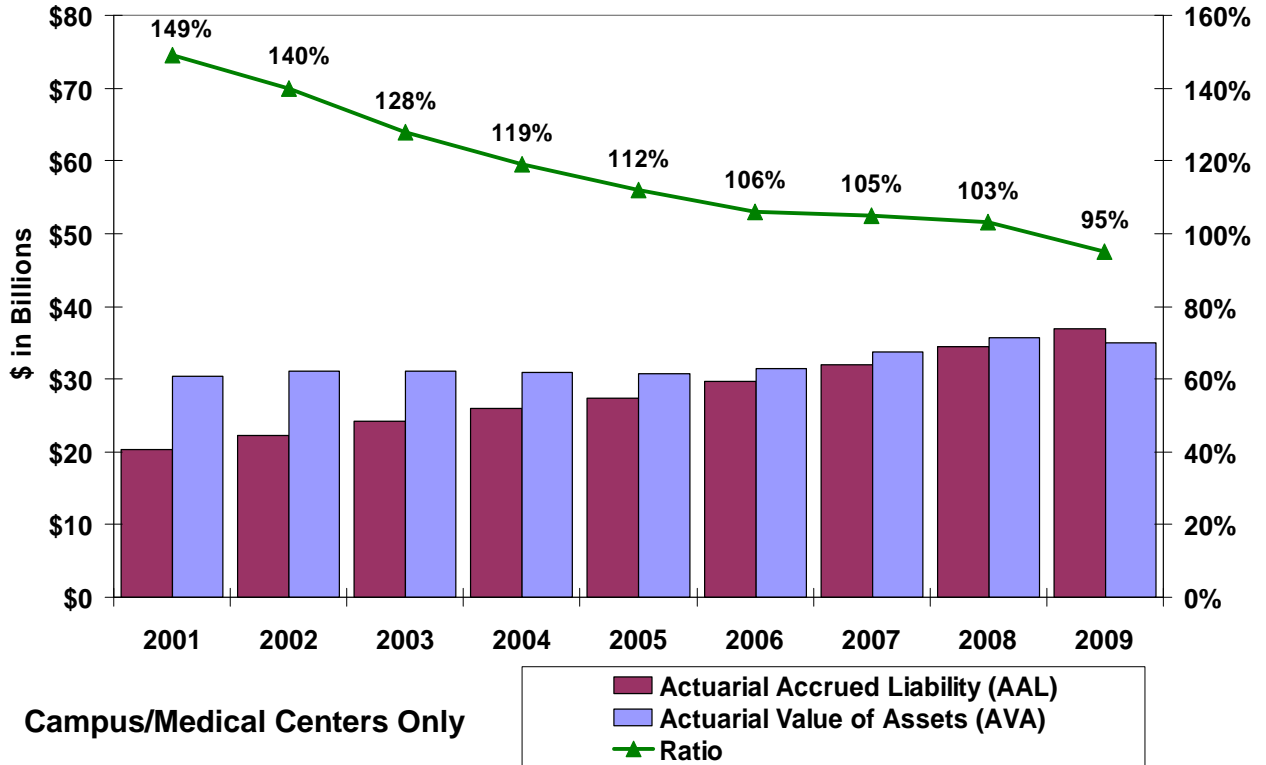
UCRP's overall actuarial accrued liability increased from \$42.6 billion as of July 1, 2008 to \$45.2 billion as of July 1, 2009. UCRP's funded status ratio decreased from 103 percent as of July 1, 2008 to 95 percent as of July 1, 2009 as a result of several factors, including:

- an investment loss on the smoothed (actuarial) value of assets, and
  - the impact of no contributions being made to offset UCRP's normal cost since 1990
- The "normal cost" of UCRP is the annual amount, expressed as a percent of payroll (the "normal cost rate") that must be accrued over the total career of each employee to fully provide for future UCRP benefits, measured as of the valuation date. Under the entry age normal method, the UCRP normal cost payable at the beginning of the 2009-2010 plan year is 17.00 percent of covered payroll.

*Overview of Funded Status of Campus and Medical Center Segment of UCRP*

The following chart shows the recent history of the campus and medical center segment of UCRP's overall actuarial accrued liability (AAL) growth along with the decrease in the funded status ratio on an actuarial value of assets (AVA) basis.

**UCRP Historical Funded Status and Ratio (AVA/AAL) as of July 1**



## VALUATION HIGHLIGHTS

### *Total Funding Policy Contributions for 2010-2011*

Applying the UCRP funding policy to the results of this year's UCRP campus and medical center segment, the total funding policy contribution for the 2010-2011 plan year is 20.40 percent of projected covered payroll. The components of the total funding policy contribution rate are shown below:

Normal Cost	17.02%
Amortization of Unfunded Actuarial Accrued Liability (or Surplus)	2.66%
	=====
Total funding policy contribution rate, before timing adjustment	19.68%
Total funding policy contribution rate, after timing adjustment	20.40%

The total funding policy contribution includes a timing adjustment to account for contributions being made throughout the year. No additional adjustment is included to account for contributions not starting until the plan year beginning July 1, 2010.

The total funding policy contribution as an estimated dollar amount for the campus and medical center segment of UCRP is \$1.621 billion based on projected covered payroll of \$7.94 billion for the 2010-2011 plan year.

### *Restart of Contributions*

In February 2009, The Regents approved restarting contributions for the campus and medical center segment of UCRP effective April 15, 2010, subject to collective bargaining as applicable. The University contribution rate will be 4 percent of covered payroll and the member rate will be the amount that is currently redirected to the Defined Contribution Plan.

The University contributions and the member contributions for the LBNL segment will be made on the same basis as determined for the campus and medical center segment of UCRP, effective April 15, 2010, subject to the terms of the University's contract with the Department of Energy and subject to collective bargaining, if applicable, for represented members at LBNL.

Since the approved contributions are less than the total funding policy contributions, this will create future actuarial losses that will lead to increases in future total funding policy contributions. The accumulated total of these contribution losses is reported under Governmental Accounting Standard (GAS) 27 as a Net Pension Obligation (NPO).

At a future meeting it is anticipated that The Regents will review the total funding policy contribution and determine if a change to the level of the currently approved contributions is necessary, considering available funding, the impact of contributions on the competitiveness of UC's total remuneration package, and collective bargaining.

***Impact of Unrecognized Investment Losses for UCRP***

The unrecognized investment losses represent about 33 percent of UCRP's market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$10.5 billion market losses is expected to have a significant impact on the Plan's future funded ratio and future total funding policy contributions. This potential impact may be illustrated as follows:

- If the deferred losses were recognized immediately in the actuarial value of assets, the funded percentage would decrease from 95 percent to 71 percent.
- If the deferred losses were recognized immediately in the actuarial value of assets, the total funding policy contribution would increase from 20.40 percent of covered payroll to 32.74 percent of covered payroll.

***Impact of Furlough/Salary Reduction Plan***

The July 1, 2009 actuarial valuation report does not reflect the impact of the Furlough/Salary Reduction Plan approved by the Regents in July 2009. It also does not reflect the amendment to UCRP adopted by the Regents at the same time to ensure that the Furlough/Salary Reduction Plan has no impact on the calculation of member benefits. Therefore, this amendment will not result in increasing benefits above what would otherwise have been expected. However, we estimate that about \$10 million less in employer and member contributions would be made from April 15, 2010 through August 31, 2010 as a result of the Furlough/Salary Reduction Plan because contributions will be based on actual pay.

More detailed schedules and descriptions related to the UCRP actuarial valuation are included in the Supplemental Information and Reporting Information sections of the UCRP Actuarial Valuation Report as of July 1, 2009.

**ACADEMIC COUNCIL RECOMMENDATION ON UCRP FUNDING**

***Academic Council Recommendation***

The Academic Council, in a letter to the President dated June 3, 2009, recommends dramatically increasing contributions in accordance with the UCRP funding policy adopted by The Regents in September 2008. The Academic Council believes that the current plan to increase contributions gradually and to start contributions in April 2010 is inadequate to restore the health of the system.

The Council recommendation states that because the long-term prospects for UCRP are dire unless contributions to the fund increase significantly, the Council urges The Regents to begin full implementation of the UCRP funding policy as soon as possible, but no later than July 1, 2011. The Council stresses that for each dollar of state funds not contributed to UCRP, an additional two dollars of non-state funded contributions are lost. The Council is fully aware of the difficulties inherent in following this recommendation, but believes that the severity of the situation demands no less.



The Council recommendation is based on an analysis of the financial state of UCRP and the contributions necessary to restore and maintain its financial strength that was completed by the University Committee on Faculty Welfare (UCFW) and its Task Force on Investment and Retirement (TFIR). The complete Academic Council recommendation can be found at: <http://www.universityofcalifornia.edu/senate/reports/mctoyudof.ucrpfunding.june09.pdf>

## **PRESIDENT'S TASK FORCE ON POST EMPLOYMENT BENEFITS**

### *Post-Employment Benefits Task Force*

President Yudof has formed a Task Force to study and recommend funding, policy and benefits design alternatives that reflect the University's commitment to provide competitive pay and benefits programs to attract and retain excellent faculty and staff while supporting sustainable post-employment benefits for current and future retirees. The Task Force consists of two components: a Steering Committee and a Work Group. Representatives from a cross section of UC stakeholders including the Academic Senate, campus and medical center leadership, as well as staff and retiree representatives are serving on the Task Force. Members of the Steering Committee and Work Group are participating on one of three Work Teams on Finance, Pension Benefits, and Retiree Health.

The Task Force is studying issues such as market competitiveness, talent management, workforce development and renewal, workforce behavior, affordability and sustainability and is engaging in a robust consultation and communication process with all key stakeholders of the University. As part of this process, the Task Force is holding forums at UC locations this fall to give faculty, staff and retirees the opportunity to ask questions and learn about how fiscal pressures are affecting the University's pension and retiree health programs.

The Task Force is expected to present recommendations to the President on or before September 2010 that will enable The Regents to meet its educational obligations to attract and retain outstanding faculty and staff, as well as meet its fiduciary obligations for all current and future UC post-employment benefits, while supporting sustainable benefits for current and future retirees. These recommendations will include an analysis based on a number of financial criteria, including cost, long-term funding options, and cash flow, as well as an assessment of the impact on the long-term financial integrity of the University.

As the Task Force considers benefit alternatives and makes recommendations to the President, it will take appropriate action to observe all requirements for notice, consultation, and meeting and conferring under the Higher Education Employer-Employee Relations Act (HEERA).

## UNIVERSITY OF CALIFORNIA RETIREMENT PLAN Overall Actuarial Valuation Highlights

(Dollars in 000,000's)

Valuation Date	7/1/2000	7/1/2001	7/1/2002	7/1/2003	7/1/2004 <sup>1</sup>	7/1/2005	7/1/2006	7/1/2007 <sup>2</sup>	7/1/2008	7/1/2009
<b>Asset Information</b>										
(1) Plan Assets at Fair Market Value (MV)	\$42,071	\$38,870	\$34,442	\$35,327	\$39,216	\$41,858	\$43,362	\$48,105	\$42,023	\$32,259
(2) Actuarial Value of Assets (AVA) <sup>3</sup>	37,026	40,554	41,649	41,429	41,293	41,085	41,972	43,434	43,840	42,799
<b>Actuarial Valuation Results – Contribution Basis</b>										
(3) Normal Cost (Beginning of Plan Year)	849	975	1,095	1,177	1,179	1,250	1,305	1,276	1,262	1,339
(4) % Payroll (Beginning of Plan Year)	14.38%	14.91%	15.15%	15.22%	15.04%	15.34%	15.81%	16.76%	16.90%	17.00%
(5) Actuarial Accrued Liability (AAL: Entry Age) <sup>4</sup>	24,067	27,451	30,100	32,955	35,034	37,252	40,302	41,437	42,577	45,161
(6) Actuarial Value of Assets in Excess of AAL	12,959	13,103	11,549	8,474	6,259	3,832	1,671	1,997	1,263	-2,362

<sup>1</sup> Liabilities and costs reflect the economic and demographic assumptions adopted 7/1/2004.

<sup>2</sup> Liabilities and costs reflect the economic and demographic assumptions adopted 7/1/2007.

<sup>3</sup> Actuarial Value of Assets: Adjusted market value method – the expected market value plus investment gains/losses amortized over a five-year period.

<sup>4</sup> AAL: The actuarial accrued liability based on the funding method used to value UCRP. The actuarial present value of plan benefits and expenses allocated to years prior to the valuation date.

*UC-PERS Plus 5 Plan Valuation Results*

On October 18, 1990, The Regents approved an early retirement incentive program for University employees who were covered under the California Public Employees' Retirement System (CalPERS) pension plan. The most tax-effective method to provide this group with a benefit generally comparable to the incentive offered to UCRP Members was to establish a "frozen" defined benefit plan under Section 401(a) of the Internal Revenue Code.

The UC-PERS Plus 5 Plan required campus and laboratory locations to fund their individual liabilities over no longer than five years. The UC-PERS Plus 5 Plan is a standard terminal funding arrangement under a wasting trust which, in this instance, is obligated to make fixed lifetime payments under either a single life or joint and survivor annuity option. The assets must remain in the trust until all benefit obligations have been satisfied. Market value of assets, rather than smoothed value, is used for actuarial purposes.

In Revenue Ruling 89-87, the Internal Revenue Service clarified that a wasting trust is subject to the standard pension plan qualification, funding and reporting requirements. As such, The Regents' Consulting Actuary, The Segal Company, reviews the trust's fiscal position and funding status annually to assure that the UC-PERS Plus 5 Plan is adequately funded.

As of July 1, 2009, the net assets of the wasting trust were \$56.9 million and the actuarial accrued liability was \$37.8 million. The surplus decreased by approximately \$17.5 million as investment performance was less favorable than assumed (a -19.5 percent investment return versus the assumed 7.5 percent investment return).

As of July 1, 2009, there were 718 retired members and beneficiaries in the UC-PERS Plus 5 Plan, down from 733 as of July 1, 2008.

Attachments:

[July 1, 2009 Valuation Presentation](#)

[UCRP Actuarial Valuation Report as of July 1, 2009](#)

[UC-PERS Plus 5 Plan Actuarial Valuation Report as of July 1, 2009](#)

## APPENDIX I: GLOSSARY OF ACTUARIAL TERMS

- **Present Value of Benefits (PVB):** the “value” at a particular point in time of all projected future benefit payments for current plan members. The “future benefit payments” and the “value” of those payments are determined using actuarial assumptions as to future events. Examples of these assumptions are estimates of retirement patterns, salary increases, investment returns, etc. Another way to think of the PVB is that if the plan has assets equal to the PVB and all actuarial assumptions are met, then no future contributions would be needed to provide all future service benefits for all members, including future service and salary increases for active members.
- **Actuarial Cost Method:** allocates a portion of the total cost (PVB) to each year of service, both past service and future service.
- **Normal Cost (NC):** the cost allocated under the Actuarial Cost Method to each year of active member service.
- **Actuarial Accrued Liability (AAL):** the value at a particular point in time of all past Normal Costs. This is the amount of assets the plan would have today if the current plan provisions, actuarial assumptions and participant data had always been in effect, contributions equal to the Normal Cost had been made and all actuarial assumptions came true.
- **Actuarial Value of Assets (AVA) or smoothed value:** a market-related value of the plan assets for determining contribution requirements. The AVA tracks the market value of assets over time, smoothes out short-term fluctuations in market values and produces a smoother pattern of contributions than would result from using market value.
- **Market Value of Assets:** the fair value of assets of the plan as reported by the plan’s trustee, typically shown in the plan’s audited financial statements
- **Unfunded Actuarial Accrued Liability (UAAL):** the positive difference, if any, between the AAL and the AVA.
- **Surplus:** the positive difference, if any, between the AVA and the AAL.
- **Actuarial Value Funded Ratio:** the ratio of the AVA to the AAL
- **Market Value Funded Ratio:** the ratio of the MVA to the AAL
- **Actuarial Gains and Losses:** changes in UAAL or surplus due to actual experience different from what is assumed in the actuarial valuation. For example, if during a given year the assets earn more than the current assumption of 7.5 percent, the amount of earnings above 7.5 percent will cause an unexpected reduction in UAAL, or “actuarial gain” as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.