Office of the President

TO MEMBERS OF THE COMMITTEE ON FINANCE:

DISCUSSION ITEM

For Meeting of November 14, 2013

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 or Plan). Consistent with the funding policy approved by the Regents for the campus and medical center segments 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 results for each of these segments as noted below. All UCRP assets are maintained in one trust and are available to pay benefits of all members, regardless of the segment to which their benefits are allocated. Highlights of the separate 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.

UCRP Valuation Results

- The June 30, 2013 overall market value of assets of UCRP was $45.3 billion, up from $41.8 billion for the prior Plan Year. The assets reflect approximately an 11.7 percent net investment return after adjusting for contributions, benefit disbursements, and plan expenses. The June 30, 2013 overall actuarial value of assets was $43.6 billion.

- The July 1, 2013 overall Actuarial Accrued Liability for UCRP grew to $57.4 billion from $54.6 billion for the prior Plan Year.

- UCRP’s overall funded ratio on an actuarial value of assets basis decreased from 79 percent as of July 1, 2012 to 76 percent as of July 1, 2013. On a market value of assets basis, the funded ratio increased from 77 percent to 79 percent.

- The UCRP Normal Cost calculated as of the beginning of Plan Year 2013-14 is $1.56 billion or 17.7 percent of the $8.84 billion covered payroll at July 1, 2013. After adjusting for contributions being made throughout the year, the UCRP Normal Cost is 18.35 percent of covered payroll.
Based on the funding policy approved by the Regents in September 2010, the total funding policy contribution rate for the campus and medical center segment is 30.33 percent of projected covered payroll, which results in an estimated annual dollar amount of $2.7 billion for Plan Year 2014-15.

A contribution loss of $453 million occurred during Plan Year 2012-13 in the Lawrence Livermore National Laboratory and Los Alamos National Laboratory Retained Segments of UCRP. The loss includes about $80 million that was not received from the DOE by February 28, 2013 as expected due to sequestration and continuing resolutions at the federal government. Additionally, $373 million that would be expected to be received by February 28, 2014, and normally would have been included as an asset as of June 30, 2013, was not reported as a contribution receivable. The estimated impact of the contribution loss decreased UCRP’s July 1, 2013 funded ratio by 0.8 percent and increased the required contributions for these two segments by about $85 million as the contribution loss is expected to be funded by the DOE over a period of seven years, including interest at 7.5 percent per year.

BACKGROUND

Each year, the Regents’ Consulting Actuary, Segal Consulting, 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 Plan Year. The results of the actuarial valuation as of July 1, 2013 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, 2013 are summarized and presented in the executive summary section of the UC-PERS Plus 5 Plan actuarial valuation report.

Appendix I of this item contains a summary of the annual actuarial valuation results by UCRP segment and for the UC-PERS Plus 5 Plan. A glossary of actuarial terms is provided in Appendix II of this item.

UCRP Valuation Results

As of July 1, 2013, there were 61,715 retired members and beneficiaries, 33,466 vested terminated members, 40,123 terminated non-vested members and 118,321 active members in UCRP for a total of 253,625 members included in this valuation. This compares to a total of 243,140 members included in the July 1, 2012 valuation.
As of June 30, 2013, the UCRP market value of assets, after subtracting benefit claims currently payable and other current payables of UCRP, was $45.3 billion as compared to $41.8 billion as of the end of the prior Plan Year. During Plan Year 2012-13 UCRP experienced an investment return on the market value of its assets of approximately 11.7 percent.

When determining UCRP’s funded status ratio, UCRP’s Actuarial Accrued Liability (AAL) 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, 2013, this five-year period includes two years of investment returns which were less favorable than UCRP’s assumed 7.5 percent earnings rate and three which were more favorable. The net result is a 4.5 percent investment return for Plan Year 2012-13 on an actuarial value of assets basis.

The following chart shows, for the most recent 20-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 (green line) which has been 7.5 percent since the 1994-95 Plan Year.
Comparing the market value of assets of $45.3 billion to the actuarial (smoothed) value of assets of $43.6 billion shows that the total unrecognized investment gain as of July 1, 2013 is $1.77 billion. This investment gain will be recognized in the determination of the actuarial value of assets for valuation purposes over the next few years. Thus, if the Plan earns the assumed rate of investment return of 7.5 percent per year (net of investment expenses) on a market value basis, there will be investment gains on the actuarial value of assets in the next few years. More information concerning the impact of these unrecognized investment gains is presented later in this discussion.

UCRP’s overall AAL increased from $54.6 billion as of July 1, 2012 to $57.4 billion as of July 1, 2013. UCRP’s funded status ratio decreased from 79 percent as of July 1, 2012 to 76 percent as of July 1, 2013 mainly due to actual contributions being less than those expected under the funding policy and the investment loss on the smoothed (actuarial) value of assets.

Note that on a market value of assets basis the funded status ratio increased from 77 percent to 79 percent.

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 active member to fully provide for future UCRP benefits, measured as of the valuation date. Under the entry age normal method, the UCRP Normal Cost calculated as of the beginning of the 2013-14 Plan Year is 17.7 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 AAL growth along with the decrease in the funded status ratio on an actuarial value of assets (AVA) basis.
**Total Funding Policy Contribution Rates for Plan Year 2014-2015**

After applying the UCRP funding policy to the results of this year’s UCRP campus and medical center segment, the total funding policy contribution rate for Plan Year 2014-15 is 30.3 percent of projected covered payroll. The components of the total funding policy contribution rate are shown below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Rate</th>
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<tr>
<td>Normal Cost</td>
<td>17.70%</td>
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<tr>
<td>Amortization of Unfunded Actuarial Accrued Liability (or Surplus)</td>
<td>11.55%</td>
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</table>

Total funding policy contribution rate, before timing adjustment: 29.25%

Total funding policy contribution rate, after timing adjustment: 30.33%

The total funding policy contribution rate includes a timing adjustment to account for contributions being made throughout the year. No additional adjustment is included to account for contributions at this rate not starting until the Plan Year beginning July 1, 2014.

The total funding policy contribution as an estimated dollar amount for the campus and medical center segment of UCRP is $2.703 billion based on projected covered payroll of $8.91 billion for Plan Year 2014-15.

**Actual Contribution Rates**

In February 2009, the Regents approved restarting contributions for the campus and medical center segment of UCRP. In September 2010, the Regents approved increases in these rates for the Plan Year beginning July 1, 2013. The University rate increased to 12 percent of covered payroll, while the pretax rate for most members increased to 6.5 percent of covered pay (less $19 per month). The member rate for the 2013 Tier was approved by the Regents in December 2010 at seven percent of covered pay (no $19 per month offset) effective July 1, 2013. In July 2013, the Regents again approved an increase in these rates for the Plan Year beginning July 1, 2014. The University rate will increase to 14 percent of covered payroll while the pretax rate for most current members will increase to eight percent of covered pay (less $19 per month). The member rate for the 2013 Tier remains at seven percent of covered pay (no $19 per month offset) as of July 1, 2014. Member rates are subject to collective bargaining for represented employees. It is important to note that the employer contribution rate effective July 1, 2014 and in future years will be uniform, applying to both current members and those hired under the terms of the 2013 Tier.

The University contributions and the member contributions for the Lawrence Berkeley National Laboratory (LBNL) segment are made on the same basis as determined for the campus and medical center segment of UCRP, subject to the terms of the University’s contract with the DOE and subject to collective bargaining for represented members at LBNL.
Since the approved contributions are less than the total funding policy contributions, this will create additional future actuarial losses that will lead to increases in future total funding policy contributions.

**Funding of “Modified” Annual Required Contribution**

In March 2011, the Regents delegated to the President the authority and discretion to make additional contributions toward the UCRP Annual Required Contribution (ARC) using one or more of the following options: borrowing from the Short Term Investment Pool (STIP), restructuring of University debt, or funding from other internal or external sources. The modified ARC consists of the Normal Cost plus interest on the Unfunded Actuarial Accrued Liability (UAAL). During 2012-13, there were no additional employer contributions towards the UCRP ARC.

The locations are assessed a separate supplementary amount to pay for the debt service on the supplemental contributions to UCRP. The additional assessment for fiscal year 2011-12 was 0.63 percent (10.63 percent total) and 0.65 percent for fiscal year 2012-13 (12.65 percent total).¹

¹ The additional assessment is repaid to the University accounts that provided the borrowed funds; it is not contributed into UCRP. The assessment amount will be reset each year and is projected to range from 0.6 percent – 1.1 percent of covered payroll over the next five- to ten-year period.
Impact of Unrecognized Investment Gains for UCRP

The unrecognized investment gains represent about four percent of UCRP’s market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $1.77 billion in market gains is expected to have an 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 gains were recognized immediately in the actuarial value of assets, the funded percentage would increase from 75.9 percent to 79 percent.
- If the deferred gains were recognized immediately in the actuarial value of assets, the total funding policy contribution rate would decrease from 30.33 percent of covered payroll to 28.91 percent of covered payroll.

Contribution Loss for LANL and LLNL Retained Segments

The required contributions for the Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL) Retained Segments of UCRP are actuarially determined based upon contractual arrangements with the DOE. The required contributions are calculated annually and use a methodology that targets 100 percent funding for those segments by amortizing actuarial gains and losses over a period of seven years.

The contribution receivable for the year ended June 30, 2012 that was included in UCRP assets as of June 30, 2012 for the LANL and LLNL Retained Segment was $306 million and this amount was expected to be received from the DOE by February 28, 2013. However, during 2012-13 only $226 million of this amount was paid by the DOE due to sequestration and continuing resolutions at the federal government, leaving an outstanding balance of $80 million. The University understands that the DOE has identified a source of funds to pay the remaining balance; however, there are additional steps that the DOE must take (including obtaining authority from Congress to reprogram funds) before it has the authority to remit the balance of those funds to the University.

Accordingly, as of June 30, 2013, the outstanding balance of $80 million was no longer included as a receivable for the LANL and LLNL Retained Segments and therefore is not included as an asset for this actuarial valuation. In addition, the contribution receivable of $373 million for the year ended June 30, 2013 that would be expected to be received from the DOE by February 28, 2014 and that would normally be included as an asset as of June 30, 2013 was also not reported as a receivable and therefore not included as an asset for this actuarial valuation.

These changes result in a contribution loss to the LANL and LLNL Retained Segments of UCRP of about $453 million for the 2012-13 year. The estimated impact of the $453 million contribution loss was to decrease UCRP’s July 1, 2013 funded ratio by 0.8 percent. The contribution loss has been amortized over a period of seven years, consistent with the amortization period used for actuarial gains and losses for the Retained Segments. This means that this amount is expected to be funded by the DOE over a period of seven years, including interest at 7.5 percent per year. Therefore, the combined required contributions for the LANL and LLNL Retained Segments determined in this valuation have increased by about $85 million from $410 million to $495 million due to the contribution loss.
New Pension Tier for UCRP

In December 2010 the Regents approved a new tier of UCRP benefits for members hired (or rehired after a break in service) on or after July 1, 2013 (the 2013 Tier), which would increase the earliest retirement age from 50 to 55, but retain many of the current features of UCRP. The 2013 Tier has a maximum age factor of 2.5 percent at age 65. The 2013 Tier does not offer lump sum cashouts, inactive member cost-of-living adjustments (COLAs), or subsidized survivor annuities for spouses and domestic partners. The initial member rate for the 2013 Tier is seven percent of covered compensation. The University rate is uniform across all tiers and is 12 percent of covered compensation, increasing to 14 percent beginning July 1, 2014.

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.

Disclosures and Reporting

The Governmental Accounting Standards Board (GASB) recently approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. It is important to note that the new GASB rules redefine pension expense only for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices. Because these new Statements are not effective until the fiscal year ending June 30, 2014 for Plan reporting and the fiscal year ending June 30, 2015 for employer reporting, the financial reporting information in this report continues to be prepared in accordance with Statements 25 and 27.
# UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

## Overall Actuarial Valuation Highlights

(Dollars in 000,000's)

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<tbody>
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<td><strong>Asset Information</strong></td>
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<tr>
<td>(1) Plan Assets at Fair Market Value (MV)</td>
<td>$39,216</td>
<td>$41,858</td>
<td>$43,362</td>
<td>$48,105</td>
<td>$42,023</td>
<td>$32,259</td>
<td>$34,574</td>
<td>$41,873</td>
<td>$41,806</td>
<td>$45,341</td>
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<tr>
<td>(2) Actuarial Value of Assets (AVA)⁴</td>
<td>41,293</td>
<td>41,085</td>
<td>41,972</td>
<td>43,434</td>
<td>43,840</td>
<td>42,799</td>
<td>41,195</td>
<td>42,757</td>
<td>42,965</td>
<td>43,572</td>
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<tr>
<td><strong>Actuarial Valuation Results – Contribution Basis</strong></td>
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<tr>
<td>(3) Normal Cost (Beginning of Plan Year)</td>
<td>1,179</td>
<td>1,250</td>
<td>1,305</td>
<td>1,276</td>
<td>1,262</td>
<td>1,339</td>
<td>1,354</td>
<td>1,404</td>
<td>1,500</td>
<td>1,563</td>
</tr>
<tr>
<td>(4) % Payroll (Beginning of Plan Year)</td>
<td>15.04%</td>
<td>15.34%</td>
<td>15.81%</td>
<td>16.76%</td>
<td>16.90%</td>
<td>17.00%</td>
<td>16.94%</td>
<td>17.20%</td>
<td>17.44%</td>
<td>17.70%</td>
</tr>
<tr>
<td>(5) Actuarial Accrued Liability (AAL: Entry Age)⁵</td>
<td>35,034</td>
<td>37,252</td>
<td>40,302</td>
<td>41,437</td>
<td>42,577</td>
<td>45,161</td>
<td>47,504</td>
<td>51,831</td>
<td>54,620</td>
<td>57,381</td>
</tr>
<tr>
<td>(6) Actuarial Value of Assets in Excess of AAL</td>
<td>6,259</td>
<td>3,832</td>
<td>1,671</td>
<td>1,997</td>
<td>1,263</td>
<td>-2,362</td>
<td>-6,309</td>
<td>-9,074</td>
<td>-11,655</td>
<td>-13,809</td>
</tr>
</tbody>
</table>

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

³ Liabilities and costs reflect the economic and demographic assumptions adopted 7/1/2011.

⁴ Actuarial Value of Assets: The expected market value plus investment gains/losses recognized over a five-year period.

⁵ 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 described in 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 a period 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 a smoothed value, is used for actuarial valuation purposes. The Regents’ Consulting Actuary, Segal Consulting, reviews the trust’s fiscal position and funding status annually to assure that the UC-PERS Plus 5 Plan is adequately funded.

In December 2010, the Regents approved a one-time ad hoc cost-of-living adjustment (COLA) of 15.19 percent for all PERS Plus 5 Plan annuitants as of April 1, 2011 and an annual COLA provision, effective July 1, 2011, using the equivalent UCRP COLA formula.

As of July 1, 2013, the net assets of the wasting trust were $64.1 million and the Actuarial Accrued Liability was $40.7 million. The primary reason for the increase in the surplus was investment performance that was more favorable than assumed (approximately a 12 percent investment return versus the assumed 7.5 percent investment return).

As of July 1, 2013, there were 634 retired members and beneficiaries in the UC-PERS Plus 5 Plan, down from 659 as of July 1, 2012.

APPENDIX I – Summary of Annual Actuarial Valuation Results by UCRP Segment and for the UC-PERS Plus 5 Plan

APPENDIX II - Glossary of Actuarial Terms

Attachment 1 - UCRP Actuarial Valuation Report as of July 1, 2013;
Attachment 2 - UC-PERS Plus 5 Plan Actuarial Valuation Report as of July 1, 2013
APPENDIX I
SUMMARY OF ANNUAL ACTUARIAL VALUATION RESULTS BY UCRP SEGMENT
AND FOR THE UC-PERS PLUS 5 PLAN

**UCRP Campus and Medical Center Segment Valuation Results**
- The June 30, 2013 campus and medical center segment market value of assets was $38.2 billion and the segment actuarial value of assets was $36.7 billion.
- The July 1, 2013 segment Actuarial Accrued Liability was $48.4 billion.
- The segment funded ratio on an actuarial value of assets basis was 76 percent as of July 1, 2013.
- The segment Normal Cost calculated as of the beginning of Plan Year 2013-14 is $1.52 billion or 17.7 percent of the $8.57 billion covered payroll at July 1, 2013. After adjusting for contributions being made throughout the year, the segment Normal Cost is 18.35 percent of covered payroll.
- Based on the funding policy approved by the Regents, the total funding policy contribution rate is 30.33 percent of projected covered payroll, which results in an estimated annual dollar amount of $2.70 billion for Plan Year 2014-15.

**UCRP Lawrence Berkeley National Laboratory (LBNL) Segment Valuation Results**
- The June 30, 2013 LBNL segment market value of assets was $1.8 billion and the segment actuarial value of assets was $1.73 billion.
- The July 1, 2013 segment Actuarial Accrued Liability is $1.91 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, subject to the terms of the University’s contract with the Department of Energy and subject to collective bargaining for represented members at LBNL.

**UCRP Lawrence Livermore National Laboratory (LLNL) Retained Segment Valuation Results**
- The June 30, 2013 LLNL segment market value of assets was $2.84 billion and the segment actuarial value of assets was $2.73 billion.
- The July 1, 2013 segment Actuarial Accrued Liability was $3.85 billion.
- Based on a contractual obligation, the required contribution from the Department of Energy (DOE) for Plan Year 2013-14 (due by February 28, 2015) is $307 million.
- The contribution loss of $292 million during 2012-2013 includes $60 million that was expected to be received from the DOE by February 28, 2013 that was not received due to sequestration and continuing resolutions at the federal government and $232 million that would be expected to be received by February 28, 2014 and normally would have been included as an asset as of June 30, 2013 that was not reported as a contribution receivable.
- The estimated impact of the contribution loss was to increase the required contribution by about $55 million from $252 million to $307 million as the contribution loss is expected to be funded by the DOE over a period of seven years, including interest at 7.5 percent per year.
UCRP Los Alamos National Laboratory (LANL) Retained Segment Valuation Results

- The June 30, 2013 LANL segment market value of assets was $2.52 billion and the segment actuarial value of assets was $2.42 billion.
- The July 1, 2013 segment Actuarial Accrued Liability was $3.19 billion.
- Based on a contractual obligation, the required contribution from the Department of Energy (DOE) for Plan Year 2013-14 (due by February 28, 2015) is $188.4 million.
- The contribution loss of $161 million during 2012-13 includes $19 million that was expected to be received from the DOE by February 28, 2013 that was not received due to sequestration and continuing resolutions at the federal government and $142 million that would be expected to be received by February 28, 2014 and normally would have been included as an asset as of June 30, 2013 that was not reported as a contribution receivable.
- The estimated impact of the contribution loss was to increase the required contribution by about $30 million from $158 million to $188 million as the contribution loss is expected to be funded by the DOE over a period of seven years, including interest at 7.5 percent per year.

UC-PERS Plus 5 Plan Valuation Results

- The June 30, 2013 market value of assets of the UC-PERS Plus 5 Plan was $64.1 million, up from $62.2 million for the prior year, reflecting approximately a 12 percent net investment return.
- The July 1, 2013 Actuarial Accrued Liability for the UC-PERS Plus 5 Plan decreased to $40.7 million from $43.3 million for the prior year.
- The UC-PERS Plus 5 Plan funded ratio increased from 144 percent as of July 1, 2012 to 158 percent as of July 1, 2013.
APPENDIX II: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 current 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. Plan assets would match this amount 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 funding policy.