

Office of the President

TO MEMBERS OF THE COMMITTEE ON FINANCE

DISCUSSION ITEM

For Meeting of November 19, 2008

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). Due to a new 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 now includes highlights of each of the segments as noted below. All UCRP assets will continue to be maintained in one trust account and be available to pay benefits of all members, regardless of the segment to which their benefits are allocated, as required by law. 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, 2008 overall market value of assets of UCRP was \$42.0 billion, down from \$48.1 billion for the prior year, reflecting a -5.6 percent net investment return after adjusting for benefit disbursements and plan expenses. The June 30, 2008 overall actuarial value of assets was \$43.8 billion.
- The July 1, 2008 overall actuarial accrued liability for UCRP grew to \$42.6 billion from \$41.4 billion for the prior year.
- UCRP's overall funded ratio on an actuarial value of assets basis decreased from 105 percent as of July 1, 2007 to 103 percent as of July 1, 2008.
- The UCRP normal cost for the 2008-2009 plan year is \$1.26 billion or 16.90 percent of the \$7.47 billion covered payroll at July 1, 2008.
- The July 1, 2008 actuarial valuation report reflects the transfer of assets and liabilities associated with UCRP benefits accrued by Lawrence Livermore National Laboratory employees who elected to participate in the Lawrence Livermore National Security, LLC (LLNS) Defined Benefit Pension Plan (LLNS Plan) effective October 1, 2007.

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

- The June 30, 2008 campus and medical center segment market value of assets was \$34.0 billion and the segment actuarial value of assets was \$35.6 billion.
- The July 1, 2008 segment actuarial accrued liability was \$34.4 billion.
- The segment funded ratio on an actuarial value of assets basis was 103 percent as of July 1, 2008.
- The segment normal cost for the 2008-2009 plan year is \$1.23 billion or 16.91 percent of the \$7.26 billion covered payroll at July 1, 2008.
- Based on the funding policy approved by the Regents at its September 2008 meeting, the recommended total contribution is 11.61 percent of projected covered payroll, or \$875 million effective for the 2009-2010 plan year.

UCRP Lawrence Berkeley National Laboratory (LBNL) Segment Valuation Results

- The June 30, 2008 LBNL segment market value of assets was \$1.67 billion and the segment actuarial value of assets was \$1.74 billion.
- The July 1, 2008 segment actuarial accrued liability is \$1.35 billion.
- As this segment is at the full funding limit, there are no recommended total contributions.

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

- The June 30, 2008 LLNL segment market value of assets was \$3.31 billion and the segment actuarial value of assets was \$3.32 billion.
- The July 1, 2008 segment actuarial accrued liability was \$3.67 billion.
- The July 1, 2008 segment actuarial valuation report reflects the transfer of assets and liabilities associated with UCRP benefits accrued by LLNL employees who elected to participate in the LLNS Plan effective October 1, 2007. Only LLNL retired, disabled or inactive members and their beneficiaries remain in the LLNL segment.
- 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. After application of the CRA, there is no contribution for this segment for the 2008-2009 plan year.

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

- The June 30, 2008 LANL segment market value of assets was \$3.04 billion and the segment actuarial value of assets was \$3.17 billion.
- The July 1, 2008 segment actuarial accrued liability was \$3.10 billion.
- Only LANL retired, disabled or inactive members and their beneficiaries remain in the LANL segment.
- Because segment actuarial assets exceed segment actuarial liabilities, there is no required contribution for this segment for the 2008-2009 plan year.

UC-PERS Plus 5 Plan Valuation Results

- The June 30, 2008 market value of assets of the UC-PERS Plus 5 Plan was \$76.3 million, down from \$86.1 million for the prior year, reflecting a -5.6 percent net investment return.
- The July 1, 2008 actuarial accrued liability for the UC-PERS Plus 5 Plan decreased to \$39.8 million from \$42.3 million for the prior year.
- As of July 1, 2008, there were 733 retired members and beneficiaries in the UC-PERS Plus 5 Plan.

- The UC-PERS Plus 5 Plan funded ratio decreased from 203 percent as of July 1, 2007 to 192 percent as of July 1, 2008.

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 recommended total contribution based on this segment's Normal Cost plus an amortization of the surplus or underfunding. The recommended 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.

Future Action: At a future meeting it is anticipated that the Regents will review the recommended total contribution for the campus and medical center segment of UCRP and set the actual total contribution level and the allocation of that total between employer and employee contributions, 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 recommend contribution rates for the coming year. The results of the actuarial valuation as of July 1, 2008 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, 2008 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.

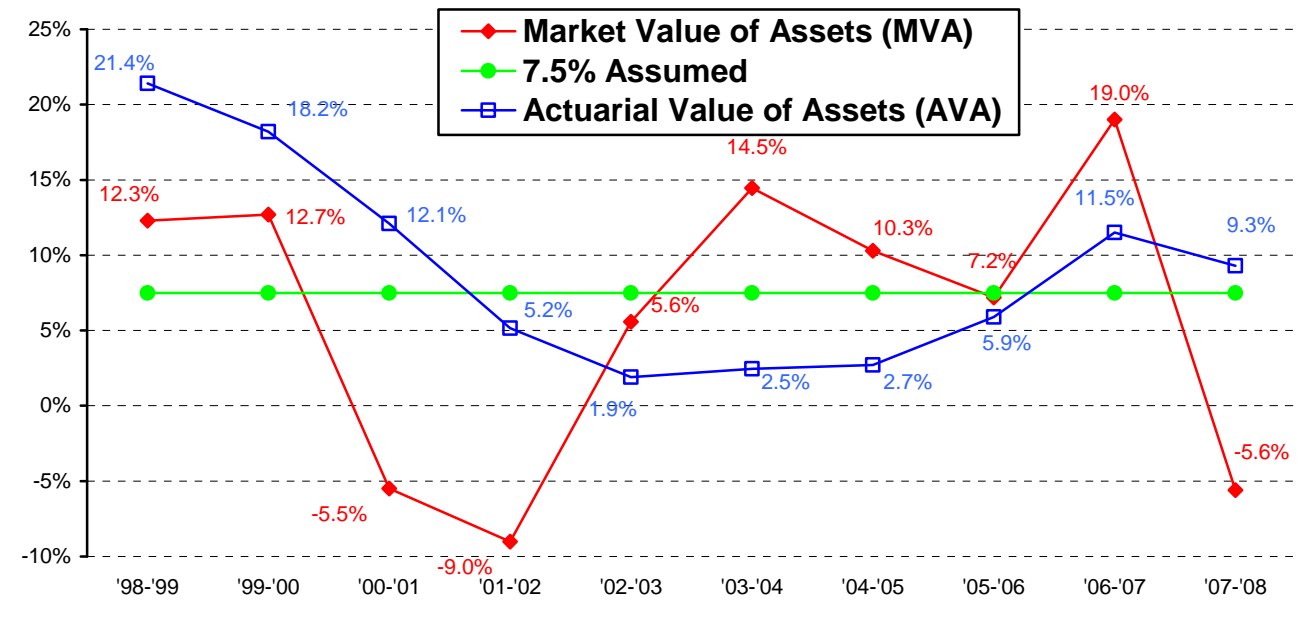
UCRP Valuation Results

As of July 1, 2008, there were 50,171 retired members and beneficiaries, 29,436 vested terminated members, 35,130 terminated non-vested members and 114,242 active members for a total of 228,979 members included in this valuation. This compares to a total of 225,623 included in the July 1, 2007 valuation.

As of June 30, 2008, the market value of assets of UCRP, after subtracting benefit claims currently payable and other current payables of UCRP, was \$42.0 billion as compared to \$48.1 billion as of the end of the prior plan year. During the 2007-2008 plan year UCRP experienced a -5.6 percent investment return on the market value of UCRP assets.

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, 2008, 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 9.3 percent investment return for the 2007-2008 plan year on an actuarial value of assets basis.

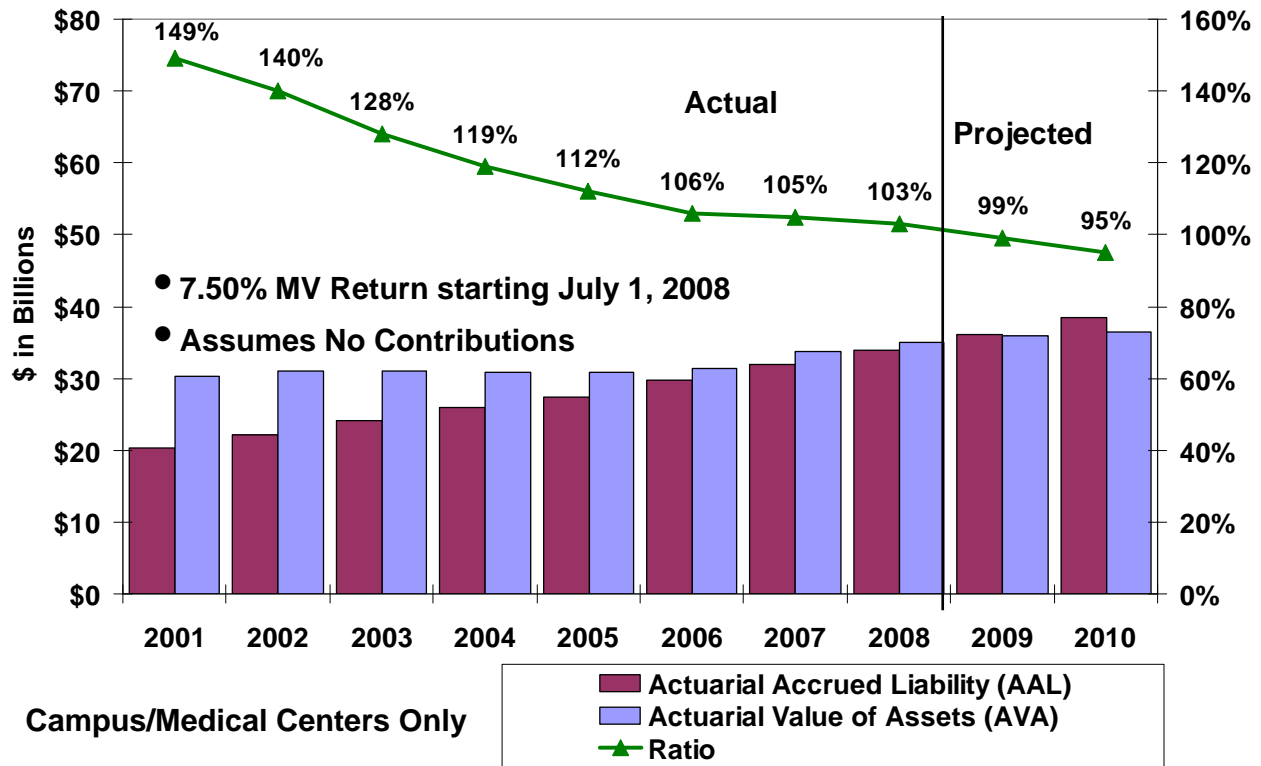
The following chart shows, for the most recent ten-year period, the investment rates of return on the market value of assets (MVA) (red line), and on the smoothed actuarial value of assets (AVA) (blue line) as compared to UCRP’s assumed earnings rate of 7.5 percent (green line).



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 and Projected Funded Status and Ratio (AVA/AAL) as of July 1



UCRP’s overall actuarial accrued liability increased from \$41.4 billion as of July 1, 2007 to \$42.6 billion as of July 1, 2008. UCRP’s funded status ratio decreased from 105 percent as of July 1, 2007 to 103 percent as of July 1, 2008 as a result of several factors, including:

- an investment gain on the smoothed (actuarial) value of assets, offset by
- the impact of no contributions being made to offset UCRP’s normal cost,
- the transfer of assets and liabilities to the LLNS Plan, and
- an actuarial loss due to salary increases being greater than expected.

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 2008-2009 plan year is 16.90 percent of covered payroll.

VALUATION HIGHLIGHTS

There are several important changes reflected in this year's valuation.

UCRP Funding Policy

In September 2008, the Regents approved a new funding policy for UCRP. UCRP's former funding policy defined the conditions under which contributions would be suspended, but did not provide a framework for restarting contributions. The new funding policy is based on the UAAL (Unfunded Actuarial Accrued Liability) amortization method because this method is well established for all types of pension plans and is consistent with the Regents' prior action in March 2006 that established a target of 100 percent funding of the AAL. A funding target of 100 percent is implicit in the UAAL amortization method, since at the end of the amortization period the plan is expected to be fully funded.

The components of the new funding policy include the contribution policy, the actuarial cost method, and the asset smoothing method. The entry age normal cost method and the five-year asset smoothing method are well established UCRP policies and reflect current industry standards. The new contribution policy defines the recommended contribution to be the annual normal cost plus (or minus) an amortization payment of the unfunded accrued actuarial liability (or surplus).

The Regents will set the actual contribution level, taking into account the availability of funds, the impact of employee contributions on the competitiveness of UC's total remuneration package, and collective bargaining. The Regents will also determine the employer and employee portions of the recommended contribution levels. The employer contribution percentage level of contributions will never be lower than the employee level.

This funding policy applies only to the campus and medical center segment of UCRP because each of the laboratory segments of UCRP is subject to its respective funding policy outlined in the University's contracts with the DOE. At the request of the DOE, a separate addendum report for each laboratory has been prepared since 1990.

Recommended Contributions 2009-2010

Applying the new UCRP funding policy to the results of this year's UCRP campus and medical center segment, the recommended total contribution for the 2009-2010 plan year is 11.61 percent of projected covered payroll. The components of the total recommended contribution rate are shown below:

Normal Cost	16.91%
Amortization of Unfunded Actuarial Accrued Liability (or Surplus)	(5.71%)
	=====
Recommended total contribution rate, before timing adjustment	11.20%
Recommended total contribution rate, after timing adjustment	11.61%

The recommended total 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, 2009.

The recommended total contribution as an estimated dollar amount for the campus and medical center segment of UCRP is \$875 million based on projected covered payroll of \$7.54 billion for the

2009-2010 plan year. Actual recommended total contributions will be based on actual 2009-2010 payroll.

At a future meeting it is anticipated that the Regents will review the recommended total contribution for the campus and medical center segment of UCRP and set the actual total contribution level and the allocation of that total between employer and employee contributions, considering available funding, the impact of contributions on the competitiveness of UC's total remuneration package, and collective bargaining.

Lawrence Livermore National Laboratory Transfer of Assets and Liabilities

The University of California contract to manage LLNL expired on September 30, 2007. The Department of Energy/National Nuclear Security Administration (DOE/NNSA) executed a new management and operations contract effective October 1, 2007 with LLNS.

During the 2007-2008 plan year, the Regents approved an agreement with the DOE/NNSA on the transfer of assets and liabilities from UCRP to the LLNS Plan on behalf of former UC employees who elected to participate in the LLNS Plan. The University retained assets to fund 100 percent of the liabilities for benefits of the retired, inactive or disabled LLNL members and survivors of deceased LLNL members, accrued prior to October 1, 2007 that were retained in UCRP. The amount retained in UCRP included a \$140 million CRA that provides the DOE with an initial identified funding source to apply against any future DOE/NNSA funding obligations to the LLNL segment of UCRP.

In addition, the Regents approved a funding agreement between the University and the DOE/NNSA that confirmed the DOE's ongoing funding obligations for UCRP benefits of the retired, inactive and disabled LLNL members and survivors of deceased LLNL members that were retained in UCRP. A similar agreement exists for the LANL segment of UCRP.

Appendix E Restoration Benefit

Appendix E is an amendment to UCRP that was approved by the Regents in February 1999, effective January 1, 2000, subject to an Internal Revenue Service (IRS) determination that the form of the Plan is consistent with the tax-qualification requirements of the Internal Revenue Code (IRC). Following a lengthy moratorium on determination letter requests for certain defined benefit plans, during plan year 2007-2008 the IRS issued a favorable determination letter on UCRP, including Appendix E. Appendix E is designed to restore benefits that would be accrued under the standard UCRP benefit formula but for the application of IRC Section 401(a)(17), which limits the compensation that can be taken into account to determine benefits under a tax-qualified retirement plan. The compensation limit is indexed for inflation and reviewed annually.

Appendix E represents one of two measures previously approved by the Regents to restore UCRP benefits affected by IRC limits; the other measure is the 415(m) Restoration Plan, implemented January 1, 2000, which restores UCRP benefits limited by the IRC Section 415(b) limit on the amount of benefits that can be paid from a tax-qualified retirement plan.

Appendix E has not yet been implemented and no benefits have been paid under the provision. The estimated increase to UCRP's actuarial accrued liability (AAL) of \$50.6 million and the increase in the normal cost of approximately \$5.5 million that would result from Appendix E are included in the current valuation results. The increase in AAL represents 0.12 percent of the total UCRP AAL.

Since the time of the valuation report, the IRS released higher than expected limits for the 2009 year, which are expected to reduce the estimated impact of the Appendix E provision to \$42.5 million in AAL and \$4.8 million in normal cost.

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, 2008.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

Overall Actuarial Valuation Highlights

(Dollars in 000,000's)

Valuation Date	7/1/1999	7/1/2000	7/1/2001	7/1/2002	7/1/2003	7/1/2004 ¹	7/1/2005	7/1/2006	7/1/2007 ²	7/1/2008
Asset Information										
(1) Plan Assets at Fair Market Value (MV)	\$38,099	\$42,071	\$38,870	\$34,442	\$35,327	\$39,216	\$41,858	\$43,362	\$48,105	\$42,023
(2) Actuarial Value of Assets (AVA) ³	32,090	37,026	40,554	41,649	41,429	41,293	41,085	41,972	43,434	43,840
Actuarial Valuation Results – Contribution Basis										
(3) Normal Cost (Beginning of Plan Year)	761	849	975	1,095	1,177	1,179	1,250	1,305	1,276	1,262
(4) % Payroll (Beginning of Plan Year)	14.24%	14.38%	14.91%	15.15%	15.22%	15.04%	15.34%	15.81%	16.76%	16.90%
(5) Actuarial Accrued Liability (AAL: Entry Age) ⁴	22,157	24,067	27,451	30,100	32,955	35,034	37,252	40,302	41,437	42,577
(6) Actuarial Value of Assets in Excess of AAL	9,933	12,959	13,103	11,549	8,474	6,259	3,832	1,671	1,997	1,263

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

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

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

⁴ 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 IRC Section 401(a) .

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 IRS 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, 2008, the net assets of the wasting trust were \$76.3 million and the actuarial accrued liability was \$39.8 million. The surplus decreased by approximately \$7.2 million as investment performance was less favorable than assumed (a -5.6 percent investment return versus the assumed 7.5 percent investment return).

As of July 1, 2008, there were 733 retired members and beneficiaries in the UC-PERS Plus 5 Plan, down from 758 as of July 1, 2007.

Attachments: [July 1, 2008 Valuation Presentation](#); [UCRP Actuarial Valuation Report as of July 1, 2008](#); [UC-PERS Plus 5 Plan Actuarial Valuation Report as of July 1, 2008](#);

APPENDIX 1: GLOSSARY OF ACTUARIAL TERMS

- **Present Value of Benefits (PVB) or total cost:** 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.