

Office of the President

TO MEMBERS OF THE COMMITTEE ON FINANCE:

ACTION ITEM

For Meeting of September 18, 2008 **POWERPOINT PRESENTATION**

**A PROPOSED NEW FUNDING POLICY FOR THE UNIVERSITY OF CALIFORNIA
RETIREMENT PLAN**

EXECUTIVE SUMMARY

The Regents' Consulting Actuary has proposed a new funding policy that would determine recommended total contributions to the University of California Retirement Plan (UCRP or Plan).

Issue: A proposed new funding policy for UCRP that would be effective with the July 1, 2008 actuarial valuation and would determine recommended total contributions based on the Plan's Normal Cost adjusted for any surplus or underfunding, starting with the Plan Year beginning July 1, 2009.

Relevant Policy: UCRP Plan document - 4.01 University Contributions

- The University shall contribute to the Plan a percentage of total Covered Compensation at rates determined from time to time by the Regents. Such contributions shall be an amount, which when added to Member Contributions, if any, and amounts already credited to the Plan Trust (as defined in Article 14), shall be reasonably expected to maintain the Plan on an actuarially sound basis.

Previous Actions: **October 1990:** The Regents adopted a "full funding policy" under which contributions are suspended when the Plan's surplus is enough to cover the Plan's Normal Cost.

March 2006: The Regents updated the funding policy to incorporate a long-term targeted funding level of 100 percent.

University administrators have consulted with the appropriate representatives from the Academic Senate, including the University Committee on Faculty Welfare (UCFW) and the Task Force on Investments and Retirement (TFIR) regarding the proposed funding policy. Based on their recommendation, the Academic Council supports the proposed funding policy in order to preserve the fully-funded status of UCRP.

Additionally, following both TFIR and UCFW, the Academic Council reiterated that its endorsement of the UCRP Funding Policy is subject to the Academic Council Memorandum on the Resumption of Contributions to the University of California Retirement Plan, dated May 25, 2006. This memorandum states in part that salary increases need to accompany the resumption of contributions and be large enough “so that resumption of contributions to UCRP will not reduce overall remuneration of employees or damage the University’s competitive position.” While the proposed funding policy provides a recommended total contribution level for each year, the Regents would have to 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.

RECOMMENDATION

The President recommends that the Committee on Finance recommend to the Regents that:

- A. The proposed new funding policy, including a three-year amortization period for any initial surplus, be adopted for UCRP. The proposed new funding policy would be effective with the July 1, 2008 actuarial valuation and would determine recommended total contributions based on the Plan's Normal Cost adjusted for any surplus or underfunding, starting with the Plan Year beginning July 1, 2009.
- B. Authority be delegated to the Associate Vice President, Human Resources and Benefits, to amend the Plan as applicable to facilitate implementation of the new funding policy.

The proposed new UCRP funding policy would have the following structure and parameters:

- (1) The new funding policy would be effective with the July 1, 2008 actuarial valuation and would determine recommended total contributions starting with the Plan Year beginning July 1, 2009.
- (2) Each year the recommended contributions would be effective for the Plan Year starting one year after the date of the actuarial valuation.
- (3) Each year the Regents would determine the actual total contributions and the split between Member Contributions and University Contributions based on the recommended total contributions and various other factors, including the availability of funds, the impact of employee contributions on the competitiveness of UC's total remuneration package, and collective bargaining. In no event would the University Contributions be lower than the Member Contributions.
- (4) The new funding policy would determine recommended total contribution rates based on an actuarial valuation of the non-laboratory segment of UCRP (e.g., campuses, medical centers and Hastings College of the Law). The Lawrence Berkeley National Laboratory would contribute on the same basis as determined for the non-laboratory segment of UCRP, subject to the terms of the University's contract with the Department of Energy. The Lawrence Livermore National Laboratory and Los Alamos National Laboratory Retained Segments in UCRP would be subject to the funding policies outlined in the University's contracts with the Department of Energy. Throughout this document the term "UCRP" shall refer to the non-laboratory segment of UCRP.
- (5) The recommended total contributions to UCRP would consist of the Normal Cost plus an amortization charge for any Unfunded Actuarial Accrued Liability (UAAL) or minus an amortization credit for any surplus.
- (6) Consistent with current practice, the Regents' Consulting Actuary would conduct an annual actuarial valuation of UCRP. The Normal Cost and the Actuarial

Accrued Liability (AAL) in each actuarial valuation would be determined under the Entry Age Normal Actuarial Cost Method, using actuarial assumptions adopted by the Regents.

- (7) Consistent with current practice, the asset smoothing method used to determine the Actuarial Value of Assets would be based on the Market Value of Assets adjusted for “unrecognized returns” in each of the then last five years. Unrecognized return is the difference between actual and expected returns on a market value basis and is recognized over a five-year period.
- (8) As of the effective date of this policy, any initial surplus as of that date would be amortized as a level dollar amount over a period of three to seven years, as specified by the Regents in the adoption of this policy. The proposed period is three years.
 - a. Any changes in surplus after the effective date due to actuarial gains and losses (including contribution gains and losses) would be amortized as a level dollar amount over 15 years.
 - b. Any change in surplus due to a change in actuarial assumptions, cost method or asset smoothing method would be amortized as a level dollar amount over 15 years.
 - c. Any change in surplus due to a Plan amendment would be amortized as a level dollar amount over 15 years.
 - d. In the first year after the effective date when UCRP has a UAAL (as opposed to a continuation of the current surplus condition) all amortization bases would be considered fully amortized and contributions would be determined under the remaining provisions of this policy.
- (9) For any future year when UCRP has a UAAL (as opposed to a continuation of the current surplus condition), the calculation of the UAAL would be maintained by source (as listed below) and each new portion of or change in UAAL would be amortized as a level dollar amount over a fixed amortization period.
 - a. Any initial UAAL (after a period of surplus) or change in UAAL due to actuarial gains and losses (including contribution gains and losses) would be amortized over 15 years.
 - b. Any change in UAAL due to a change in actuarial assumptions, cost method or asset smoothing method would be amortized over 15 years.
 - c. Any change in UAAL due to a Plan amendment would be amortized over 15 years, unless the nature of the Plan amendment would suggest a shorter period.

- (10) For any future year in which UCRP has a surplus (other than a continuation of the current surplus condition), such surplus would be amortized as a level dollar amount over 30 years, and all prior UAAL amortization bases would be considered fully amortized.
- (11) This new funding policy would supersede any previous funding policies.

BACKGROUND

General Discussion of Pension Plan Funding Policies

A pension plan funding policy is designed to determine how much should be contributed each year in total by the employer and the active members to provide for the secure funding of benefits in a systematic fashion. The funding policy starts with an actuarial cost method that allocates a portion of the total present value of the members' benefits to each year of service. In theory, contributing that "Normal Cost" for each year of service will be sufficient to fund all plan benefits, assuming that all actuarial assumptions are met including the assumed rate of investment return. In that ideal situation, plan assets will always be exactly equal to the value today of all the past Normal Costs (the Actuarial Accrued Liability or AAL), and the current contribution will be only the current Normal Cost.

A glossary of these and other funding policy terms is provided in Appendix 1 of this item.

In practice, for a variety of reasons, the assets will be greater than or less than the AAL, leaving the plan overfunded (surplus) or underfunded (the Unfunded Actuarial Accrued Liability or UAAL). The funding policy adjusts contributions to reflect any surplus or UAAL in a way that reduces short term, year-by-year volatility, but still assures that future contributions, together with current assets, will be enough to provide all future benefits.

A comprehensive funding policy is made up of three components:

1. An **actuarial cost method**, which allocates the total present value of future benefits to each year (Normal Cost) including all past years (AAL).
2. An **asset smoothing method**, which reduces the effect of short term market volatility while still tracking the overall movement of the market value of plan assets.
3. A **contribution policy**, which determines the recommended contribution for each year based on the Normal Cost, the AAL and the smoothed value of assets.

For UCRP, as for many plans, the **actuarial cost method** and **asset smoothing method** are well established and reflect current industry standards. For that reason, this discussion of funding policy focuses on the **contribution policy** component. With that in mind, the more general term "funding policy" will continue to be used throughout this document.

For governmental or public defined benefit plans, like UCRP, there are no specific external funding or funding policy requirements such as those established for single employer (corporate) and multi-employer (Taft-Hartley) defined benefit pension plans under the Employee Retirement

Income Security Act (ERISA) and the Internal Revenue Code (IRC). The accounting standards promulgated by the Governmental Accounting Standards Board (GASB) define an Annual Required Contribution (ARC) that, despite its name, is actually the amount of expense that the employer must recognize each year. Also, the GASB accounting standards provide considerable policy latitude when determining the ARC.

Even though this leaves governmental or public plans relatively free to set funding policy, it is worth noting that all long term funding policy structures – corporate, multi-employer and GASB – take the same form, at least for underfunded plans (plans with a UAAL):

1. Contribute the Normal Cost for the year, and
2. Contribute an additional amount that will fully fund (“amortize”) any UAAL over a period of years.

Implicit in this form of policy is a *funding target of 100 percent*, since at the end of the amortization period the plan will be fully funded. This is in contrast to “corridor” methods that allow contributions equal to only the Normal Cost as long as the plan is within, for example, 5 percent of being fully funded. The funding policy proposed here is based on the UAAL amortization method because it is well established for all types of pension plans as it targets 100 percent funding of the AAL and is consistent with the Regents’ prior action in 2006 to establish a target of 100 percent funding.

For UCRP, the actuarial cost method (Entry Age Normal) and the asset smoothing method (five year smoothing of market earnings above or below the assumed earnings rate) are well established policies that represent best industry practices. Within the model for a UAAL contribution policy, the only component not already in place is how to amortize the UAAL. The proposal for the amortization component includes the amortization periods and the structure of the amortization payments.

The selection of the UAAL amortization period is discussed in a later section. For now note only that, for UAAL, longer amortization periods result in lower contributions and a longer period before the contribution reverts to the Normal Cost. Longer periods also produce lower contribution volatility. Shorter amortization periods get to full funding more rapidly but at the price of higher contributions and higher contribution volatility.

That leaves the question of funding policy for overfunded plans, those that have a surplus instead of a UAAL. Here the ERISA and IRC rules differ significantly from the GASB rules.

The GASB policy structure is used by most public plans when determining contribution amounts when there is a surplus. The surplus is amortized the same way as a UAAL, except that instead of producing an amortization *charge*, there is an amortization *credit*. This means that the contribution amount is the Normal Cost *minus* an amount that will in effect spend the surplus down over the amortization period. This policy structure still reflects a funding target of 100 percent.

Unlike for UAAL, longer amortization periods now result in a lower amortization credit, and so produce a higher contribution (but still less than the Normal Cost). Shorter amortization periods for surplus take credit for the surplus more quickly. This produces a lower contribution, but it also means a shorter period before the contribution reverts up to the full Normal Cost.

The ERISA/IRC rules for corporate and multi-employer plans take an entirely different approach to surplus. Because current UCRP policy is based on the ERISA/IRC rules for plans in surplus, those rules are discussed in the context of UCRP's current funding policy.

The current UCRP "Full Funding Policy"

In October 1990, the Regents adopted a funding policy for UCRP based on a provision of the ERISA/IRC funding rules called the "Full Funding Limit" (FFL). Technically, the FFL is a limit on tax deductible contributions to a plan by a taxpaying plan sponsor, so in practice for corporations it acts as an absolute limit on contributions.

The FFL limits contributions to the Normal Cost reduced by any excess of assets over liabilities. This requires that any surplus is applied directly, dollar-for-dollar against the Normal Cost when determining the allowable contribution. While not usually expressed as such, this is in effect a policy to amortize any surplus over one year. This means that, if the current surplus equals or exceeds the current year Normal Cost, then no contributions are made for that year.

This method was originally included in the IRC for tax policy reasons, so as to control the amount of "tax expenditures," and not as part of any national retirement policy. From a retirement policy perspective it led to the undesirable result that even if plan sponsors wanted to provide a funding cushion for future adverse experience, they were effectively precluded from doing so.

The FFL leads to contribution reductions and "contribution holidays" of zero contributions faster than any policy using a multi-year surplus amortization period. Recent experience has led to a reconsideration of the advantages and disadvantages of contribution holidays. Any plan with active members continues to incur the Normal Cost as a salary related cost even if it is funded out of surplus. This fact can be forgotten when members, budgets and funding sources become accustomed to not having to fund the Normal Cost.

For any plan with active members (and so a current Normal Cost) that is in surplus, the FFL has another drawback, one immediately relevant to UCRP. Under the FFL the entire Normal Cost is being funded out of surplus on a dollar-for-dollar basis. This means that when the surplus is exhausted the contribution will jump from zero to the full Normal Cost level in only one or two years. This can be a budgetary shock for an employer that has not been required – or allowed – to make pension contributions for a number of years.

Even if the plan sponsor wanted to anticipate the eventual need to restart contributions by phasing in contributions, the FFL would not allow it. And once the surplus is gone, the only way to avoid creation of a UAAL is for contributions to resume at the full Normal Cost level. In effect, by the time the surplus drops to zero, it is too late to restart contributions other than abruptly.

For these reasons the proposed policy moves away from the FFL policy and applies the amortization approach to surplus as well as to UAAL.

Amortization Policy: Selection of Amortization Structure and Methods

Setting an amortization policy involves a few choices in addition to selecting the amortization periods. Here is a brief description of the alternatives, followed by the bases for the proposed policy.

- Single amortization layer for the entire UAAL or surplus, or separate amortization layers for each source of UAAL or surplus.
- Closed (fixed) period amortization or open (rolling) period amortization.
- Level dollar or level percent of pay amortization payments.
- For separate amortization layers, when is it appropriate to “restart” the amortization layers.

For any future UAAL, the proposed policy is to use separate, fixed period amortization layers for each source of UAAL. This has the advantage of tracking separately each new portion of underfunding and identifying a date certain by which each will be funded. This is the structure required by the ERISA/IRC rules for corporate and multiemployer plans, and is increasingly common for public pension plans, especially in California. This same approach is proposed for amortizing the current surplus as long as the current surplus condition continues.

For any future surplus (other than a continuation of the current surplus) the proposed policy is to use a single rolling amortization period for the entire surplus. In effect, each year of surplus is treated as the first year and reamortized over the full amortization period. The reasons for recommending this different treatment were introduced in the earlier discussion of the FFL, and stem from industry experience over the last several years suggesting that surplus should be used sparingly when producing contribution levels less than Normal Cost. This point will be visited once again under the discussion of amortization periods.

Level Dollar vs. Level Percent of Pay Amortization

The amortization payments may be patterned in one of two ways, as a level dollar amount or as a level percentage of pay. The ERISA/IRC rules for corporate and multiemployer plans require level dollar amortization, similar to a typical home mortgage. However, by far most public plans use level percent of pay amortization where the payments increase each year in proportion to assumed payroll growth. That means they start lower than the corresponding level dollar payments, but then increase until they are higher.

The level dollar method is more conservative in that it funds the UAAL faster in the early years. For the same reason it also incurs less interest cost over the amortization period.

The justification for most public pension funds using level percent of pay payments is that it is consistent with the Normal Cost (which for pay related plans is always determined as a percentage of pay) and that it provides a total cost that remains level as a percentage of pay. In contrast, level dollar amortization of UAAL will produce a total cost that decreases as a percentage of pay over the amortization period.

The proposed policy uses level dollar amortization. For years when UCRP has a UAAL it provides somewhat earlier funding, consistent with the Regents' generally prudent approach to funding policy issues. Furthermore, for the current surplus condition it provides a somewhat more gradual restart of contributions, since the amortization credit starts out greater than it would be under level percent of pay amortization.

Another advantage of level dollar amortization is that it avoids the possibility of "negative amortization." With level percent of pay amortization the lower early payments can actually be less than interest on the outstanding balance, so that the outstanding balance increases instead of decreases. For typical public plan assumptions, this happens whenever the amortization period is longer than about 17 years. Level dollar amortization precludes the possibility of negative amortization, regardless of the amortization period.

When is it appropriate to "restart" the amortization layers

As discussed above, the proposed policy uses separate, fixed period amortization layers for each source of UAAL. Under this approach, over time there will be a series of these layers, one for each year's gain or loss as well as for any other changes in UAAL. This is perfectly manageable and in fact provides a history of sources of the UCRP UAAL in any year. Also note that, in practice the number of layers will be limited by the length of the amortization period as eventually layers are fully amortized, and so are no longer part of the series of layers.

The proposed funding policy includes conditions where all the amortization layers are wiped out ("considered fully amortized") and the series is restarted based on the UAAL or surplus at that time. This happens whenever the total UCRP funded status goes from surplus to UAAL, or from UAAL to surplus. This is done to avoid possible anomalies as well as results that might fail to comply with the GASB accounting standards.

In particular, under the layered approach, it is possible for a plan with a UAAL to nevertheless have a net amortization credit in the current year. While that result is actuarially consistent it is also very counterintuitive, since a UAAL would seem to require a net amortization charge. In fact, for that very reason this result would fail to meet a GASB requirement that a plan with a UAAL must have a net amortization charge. Both those drawbacks can be readily avoided by the proposed policy of treating each "new" UAAL or surplus condition as the beginning of a new series of amortization layers.

Amortization Policy: Selection of Amortization Periods

Currently, UAAL amortization periods for public plans typically range from 15 to 30 years, with 30 years being the maximum allowable period under the GASB accounting standards. The amortization period should not be set so short that it creates too much volatility in the

contributions yet it should not be so long that it contributes a shift of cost to future funding sources.

Plans that amortize the UAAL in layers by source (as is proposed for UCRP) sometimes use different amortization periods for different sources of UAAL. Generally such plans amortize actuarial gains and losses over shorter periods (15 years or less) and UAAL changes due to assumption or method changes over longer periods (often the 30 year GASB limit). This is also the approach used in the ERISA/IRC rules for multi-employer plans and also for corporate plans prior to the 2006 overhaul of the corporate pension funding rules. However, this policy also leads to inconsistencies and even short term conflicts with the GASB 30 year standard. For that reason the proposed policy uses the same periods for all sources of UAAL.

As for selecting the period, here again, recent experience is instructive. By the late 1990s, as plans came close to being fully funded or even over funded there was a trend toward amortization periods as short as 10 or even 5 years. For example, in 1987, the ERISA/IRC rules for corporate plans were changed to reduce the amortization period for gains and losses from the original 15 years to 5 years. This led to rapid reductions in contributions when the large investment gains from that period were recognized over such short periods. The investment losses in the early 2000s led to similar cost increases except for public plans that lengthened their amortization periods substantially once those losses started to arise.

Based on this experience the proposed policy uses a 15 year amortization for actuarial gains and losses and for changes in UAAL resulting from assumption or method changes. For plan amendments the proposed policy is the same 15 year period, unless the nature of the plan amendment would suggest a shorter period.

Amortization of Surplus

As was discussed in the earlier sections on the Full Funding Limit and on amortization structure, one of the most significant changes in industry thinking and practice to come from the market experience around the turn of the 21st century is the way surplus is recognized in public pension funding policy. In many cases, short amortization periods for surplus in the late 1990s led to reductions in contributions below the level of Normal Cost, sometimes even to complete “contribution holidays” of zero contributions. The long UCRP contribution holiday is a dramatic example of this, resulting from both the very high level of surplus and from the FFL based funding policy, which is in effect the shortest possible amortization period.

As the market reversals in the early 2000s led to resumption of contributions in most pension plans, the general lesson was that the contribution levels less than the Normal Cost (that is, funding the Normal Cost out of surplus) should always be viewed with caution, as ultimately the Normal Cost will reemerge as the basic cost of the plan.

One possible response would be to require that contributions never fall below the Normal Cost level. However, that would be inconsistent both with the GASB accounting standards and with the actuarial principle that funding policy should target 100 percent funding, and not sustain a level that is either higher or lower than 100 percent. That leads to the general conclusion that surplus should be amortized over the longest permissible period of 30 years. For UCRP, that is

the proposed policy for any future surplus that might arise after an intervening period of underfunding.

Note that this is the same surplus amortization policy adopted by CalPERS in April 2005. It is also to be found as Recommendation 7 in the Report of the (California) Public Employee Post-Employment Benefits Commission.

Proposed Amortization of Current UCRP Surplus

The current UCRP surplus condition presents a unique situation for which the proposed policy takes a pragmatic approach. As discussed earlier, simply continuing the current FFL policy would eventually lead to an abrupt restart of contributions at the full Normal Cost level (currently about \$1.2 billion) once the surplus is exhausted. However, by amortizing the surplus over a period of years, contributions in effect can be restarted in two phases.

The initial contribution level would be an amount that is less than the Normal Cost by the level portion of the surplus that is amortized each year. That contribution level would persist for the length of the current surplus amortization period. After that period the contributions would increase to the full Normal Cost level.

Of course in practice this simplified description would be complicated by any gains or losses that occur during the current surplus amortization period. Nevertheless, by selecting the effective date and the amortization period appropriately, this policy should provide a fairly predictable period of transition between zero contributions and full Normal Cost contributions. This is particularly important given the budgetary effects for the University of going from no contributions to an ultimate annual Normal Cost of about \$1.2 billion.

Based on a review of projected contributions under various current surplus amortization periods, the proposed policy uses a three-year amortization period for any surplus as of the July 1, 2008 actuarial valuation.

Comparison to CalPERS Funding Policy

One of the natural comparators for a UCRP funding policy is the funding policy used by CalPERS. In April 2005, based on a set of desired policy characteristics and extensive statistical modeling, CalPERS adopted a substantial revision of its funding policy. A comparison of the new CalPERS policy versus the proposed UCRP policy is shown in Appendix 2.

Academic Senate Review

The Task Force on Investments and Retirement (TFIR) reviewed the details of the proposed funding policy and unanimously agreed with the appropriateness of the choices recommended by the Regents' Consulting Actuary regarding the asset smoothing method, the choice of level dollar versus level percent of pay amortization, the layering structure in which different sources of surplus/deficit would be tracked and amortized separately, and the amortization periods for surpluses and deficits. TFIR indicated that they would be comfortable with any choice of amortization period for the initial surplus within the three-to-seven year range.

The University Committee on Faculty Welfare (UCFW) also supports the proposed funding policy as a good procedure for determining the recommended total contribution amount each year and urges the Regents to seek funding from the Legislature and the Governor for this purpose. UCFW noted that the longer contributions are delayed, the larger the amount that will have to be contributed.

In addition, UCFW noted that approximately two-thirds of any employer contribution will be paid by sources other than State funds, such as the federal government and the clinical enterprises. Each year without contributions represents a year of additional pension benefit liability that these funding sources do not have to fund. Deferring the restart of contributions will therefore mean that UC and the State will continue to accrue a liability for collecting any contributions from those funding sources. UC can expect non-State funding sources to contribute funds to meet the obligation for service credit that accrues each year, but there is no guarantee that these funding sources will provide extra contributions to cover shortfalls from pension benefits earned in the past. Obtaining contributions now on behalf of all employees will thus help protect UC and the State from the risk of having to fund this liability.

The Academic Council, following both TFIR and UCFW, reiterated that its endorsement of the UCRP Funding Policy is subject to the Academic Council Memorandum on the Resumption of Contributions to the University of California Retirement Plan, dated May 25, 2006. This memorandum states in part that salary increases need to accompany the resumption of contributions and be large enough “so that resumption of contributions to UCRP will not reduce overall remuneration of employees or damage the University’s competitive position.”

While the proposed funding policy provides a recommended total contribution level for each year, the Regents would have to 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 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 restart of employee contributions to UCRP is subject to collective bargaining requirements.

APPENDIX 1: GLOSSARY OF FUNDING POLICY 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.

APPENDIX 2: Comparison of Current CalPERS and Proposed UCRP Funding Policies

Parameter	Current CalPERS Policy	Proposed UCRP Policy
Actuarial Cost Method	Entry Age Normal	Entry Age Normal (current method)
Asset Smoothing	15 Year Asset Smoothing	5 Year Asset Smoothing (current method)
Amortization Method	Level Percent of Pay	Level Dollar
Current Surplus Amortization Period	N/A	3 Years
Gain/Loss Amortization Period	30 Years single layer, rolling period	15 Years, separate layers, fixed periods
Assumption, Method, Benefit Change Amortization Period	20 Years	15 Years
Future Surplus Amortization Period	30 Years	30 Years