UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

ACTUARIAL BRIEFING

FOR COALITION OF UC UNIONS

William B. Fornia, FSA

Pension Trustee Advisors

November 1, 2012

PTA PENSION TRUSTEE ADVISORS

PTA

William B. Fornia, FSA | President

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CONFIDENTIAL

Coalition of UC Unions c/o
Jelger Kalmijn, President, *UPTE-CWA 9119*
Kathyrn Lybarger, President, *AFSCME Local 3299*
Janice Webb, RN, Chair, UC Statewide Bargaining Council, *California Nurses Association*

Dear Union Leaders:

Pension Trustee Advisors (PTA) and Dan McM Consulting have analyzed the actuarial reports and policies of the University of California Retirement Plan (UCRP). In the pages which follow, we wish to elaborate on our major findings.

- The UCRP is among the better funded plans in the country
- The UCRP employer contribution is relatively low
- UCRP has established a conservative funding policy
- UCRP does not contribute to the plan according to this conservative funding policy
- This results in plan costs which appear high in the short term
- This creates an inconsistency between purported costs of worker benefits and actual UC contributions

In addition, we have reviewed the proposed change to a Tier 2013 effective next year, in particular with regards to the impact on future funding requirements.

We are available to discuss this with you or other interested parties at your convenience.

Sincerely,

William B. Fornia, FSA
President

cc: Dan McMonagle

Claudia Preparata – AFSCME 3299

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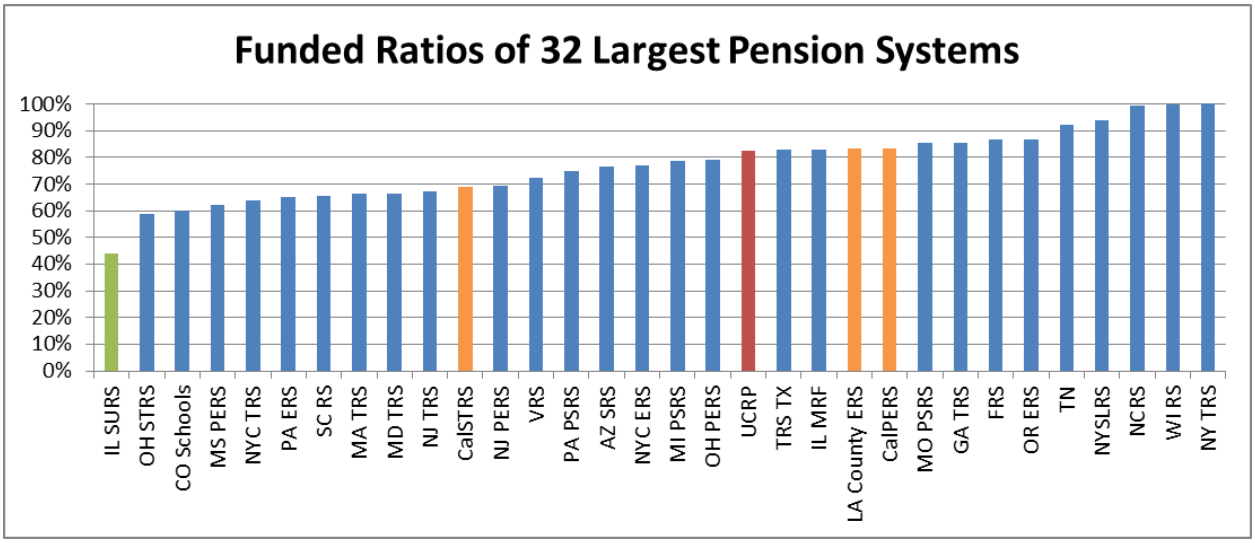
UCRP FUNDING POSITION

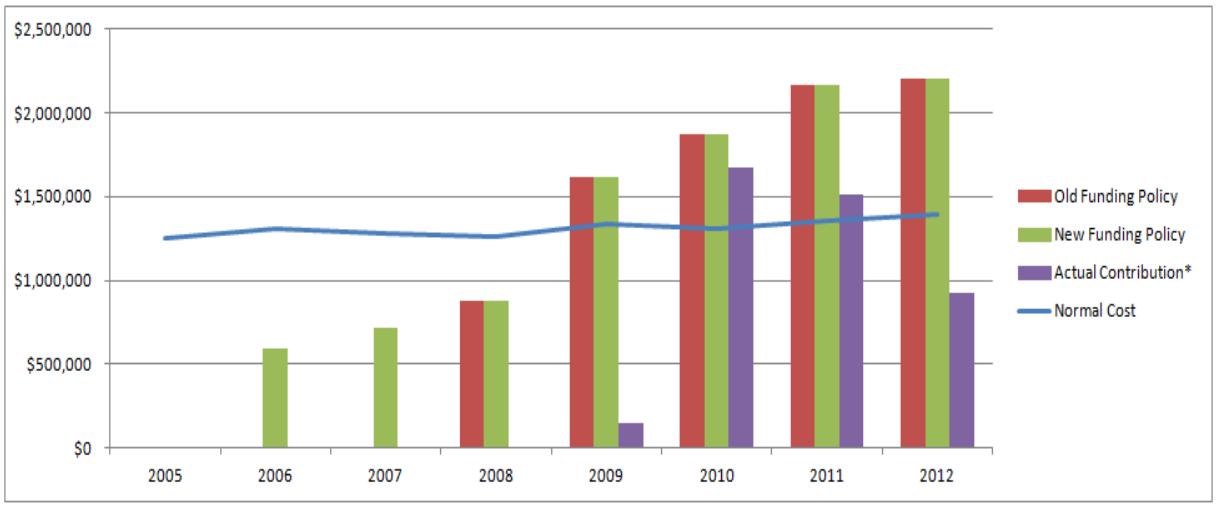
We analyzed the 32 largest pension systems in the United States based on their latest available actuarial information. This group includes the University of California Retirement Plan (UCRP). The chart below illustrates the funding positions of these large pension systems:



UCRP has a funding ratio of 82.5% as of the July 1, 2011 actuarial valuation. This is in the top half of the 32 plans and well above the average funded ratio of 77% of all large plans. The other three California plans range from 69% to 83%. The only other national university plan is the State University Retirement System of Illinois, which is 44% funded.

Those plans which are the highest funded did not take contribution holidays as did UCRP. This allowed them to maintain a strong funded position throughout the last decade.

The graph below compares UC's recent contributions to the plan normal cost and to the UCRP funding policy (as modified effective 2008). As you can see, UC has only recently begun to make contributions, and these are still are far short of the stated funding policy.



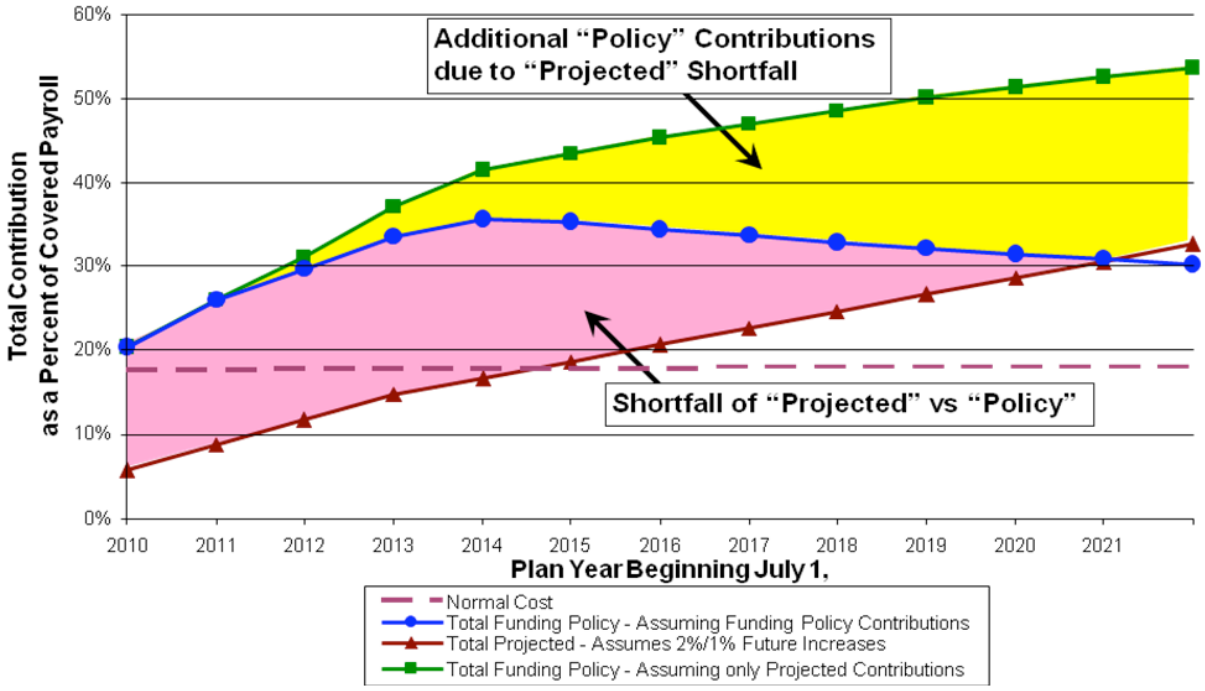
- 2011 contribution: UC 7% of payroll + Employee 3.5% of payroll + $935 million in July 2011
- 2012 contribution: UC 10% of payroll + Employee 5% of payroll

UC HAS NOT CONTRIBUTED ACCORDING TO ITS FUNDING POLICY

What has been termed a "funding policy" is really a hypothetical funding policy. Contributions made to the UCRP have been less than this funding policy amount, often much less.

As was discussed in the July 2010 Task Force Report, the amounts actually funded are "substantially less than the total funding policy contribution rates of 11.61% for FY 2009/2010 and 20.40% for FY 2010/2011." This has not changed in the two years since UC was warned of this disparity.

This task force report also illustrates the consequences of contributing less than the funding policy. The graph below from that report illustrates the additional contributions due to that shortfall.



YET THE FUNDING POLICY IS QUITE CONSERVATIVE

That UC does not fund according to its funding policy is not unusual. In our experience, most large statewide retirement systems do not fund at this desired level. But the typical pension system does not use relatively conservative actuarial methods and assumptions in measuring the amount of contributions that they don't make. We don't see the point in using conservative approaches if they are not going to be adhered to.

One "point" in this approach may be to overstate the cost of the benefits for purposes of employee relations. Given that the conservative actuarial approach does not have any substantive consequence to UC, that conclusion seems appropriate.

We see three primary areas where the UCRP alleged funding policy is conservative.

First is the "level dollar" amortization approach. As discussed in the task force report, "by far most public plans use level percent of pay amortization where the payments increase each year in proportion to assumed payroll growth." We believe (but have not confirmed) that the UCRP is the only plan among the 32 largest public plans shown on page 1 that uses the level dollar approach rather than level percent of pay.

The UCRP method results in higher costs in the early years, which decrease as a percentage of pay as the amortization period continues. This is the reason that the blue line above (Total Funding Policy – Assuming Funding Policy Contributions) declines beginning in 2014.

A second area where the UCRP funding policy is more conservative than mainstream is with its 7.5% discount rate. While some systems (including CalPERS) are reducing their rates as low as 7.5%, most are still at 8.0% or above. By being ahead of the curve with the lower rate, the UCRP funding policy costs are higher than would be produced by more mainstream assumptions.

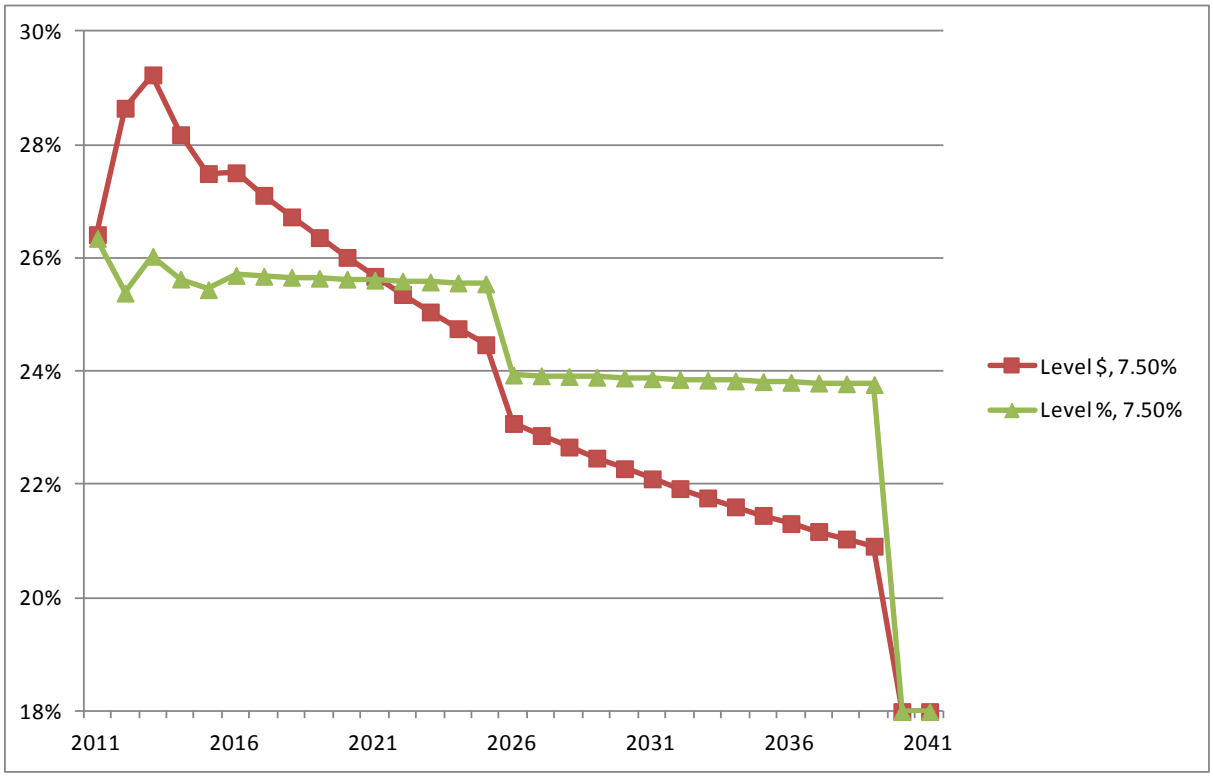
Finally, the assumed salary growth assumptions may be high, based on recent experience and future expectations. The most recent actuarial experience study reported salary growth much lower than the actuarial assumptions. Although this is more of a "judgment call", the use of high salary growth rates increases the reported cost of UCRP workers' benefits.

Since UC has no intention of funding the higher amounts presented by the conservative assumptions and methods, we believe it would be reasonable to use the more mainstream "level percent" approach, and less conservative investment return and salary growth assumptions. UC contributions still may not reach the target level, but this avoids setting a higher bogey for no apparent purpose other than to illustrate high costs in order to justify benefit reductions.

ESTIMATED IMPACT OF LESS CONSERVATIVE ASSUMPTIONS AND METHODS

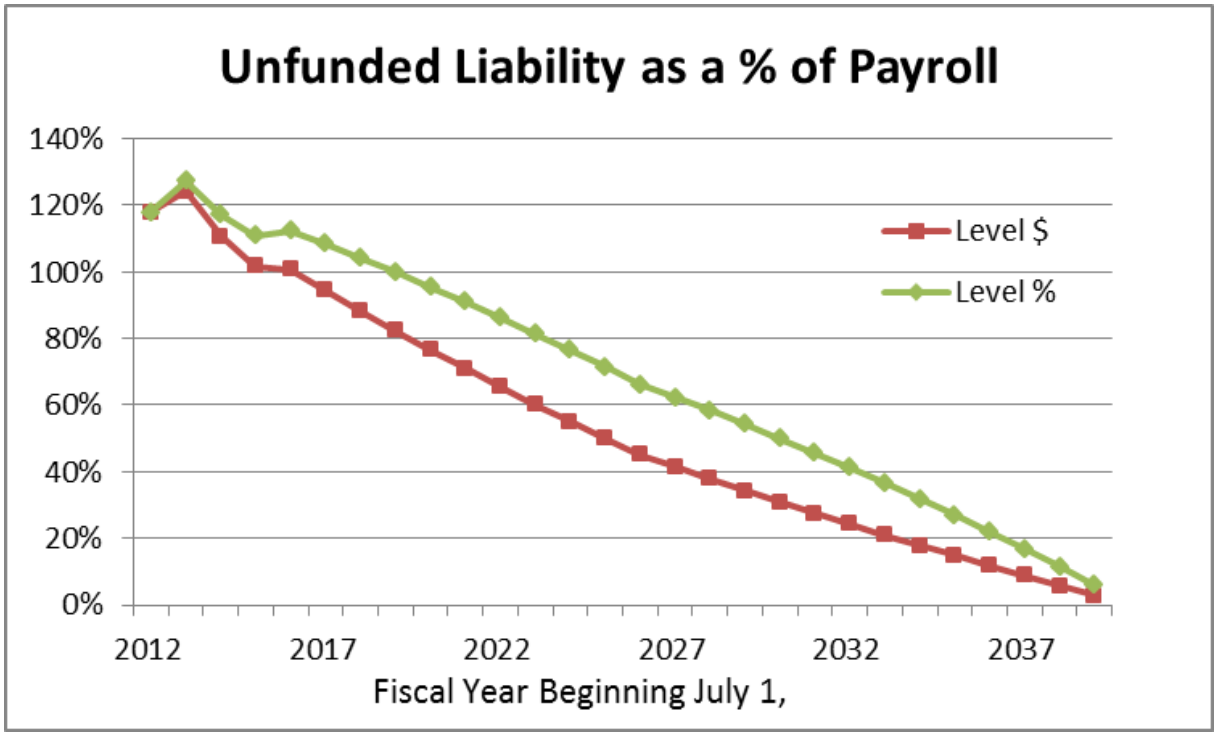
Although changing to more mainstream assumptions and methods will not reduce the actuarially calculated contribution down to the level being contributed, it does have a significant impact. The cost would be more than 3% lower in the first year if the amortization method is changed, and would be more than 6% lower if the discount rate were. This is shown in the following graphs of our estimated total (employer plus employee) costs.

Projected Total Contribution Pattern Under More Mainstream Assumptions and Method

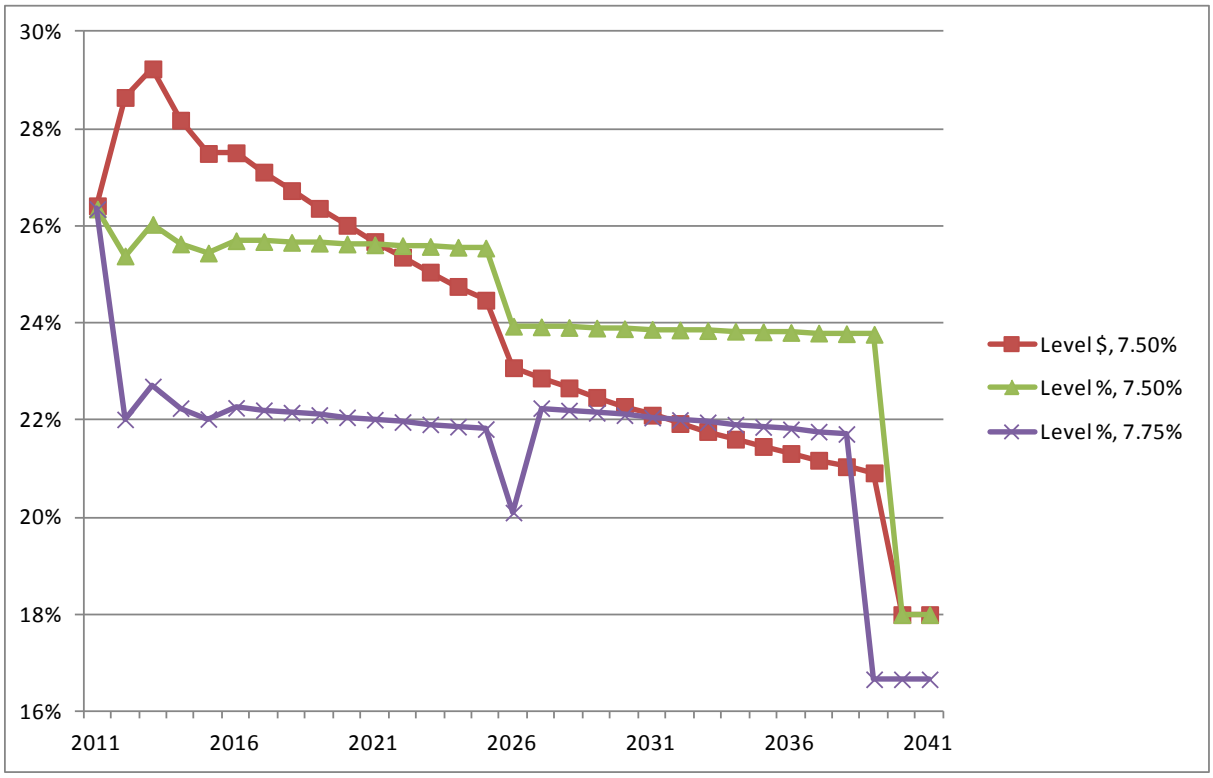


As you can see, the (green triangles) level % line is relatively flat, while the (red squares) level $ line starts high and declines. Note that, even if the discount remains at the conservative 7.5% rate, the savings due to changing method are substantial.

As shown on the following chart, the level % method, like the level $ method results in payoff of the unfunded liability over a thirty year period.

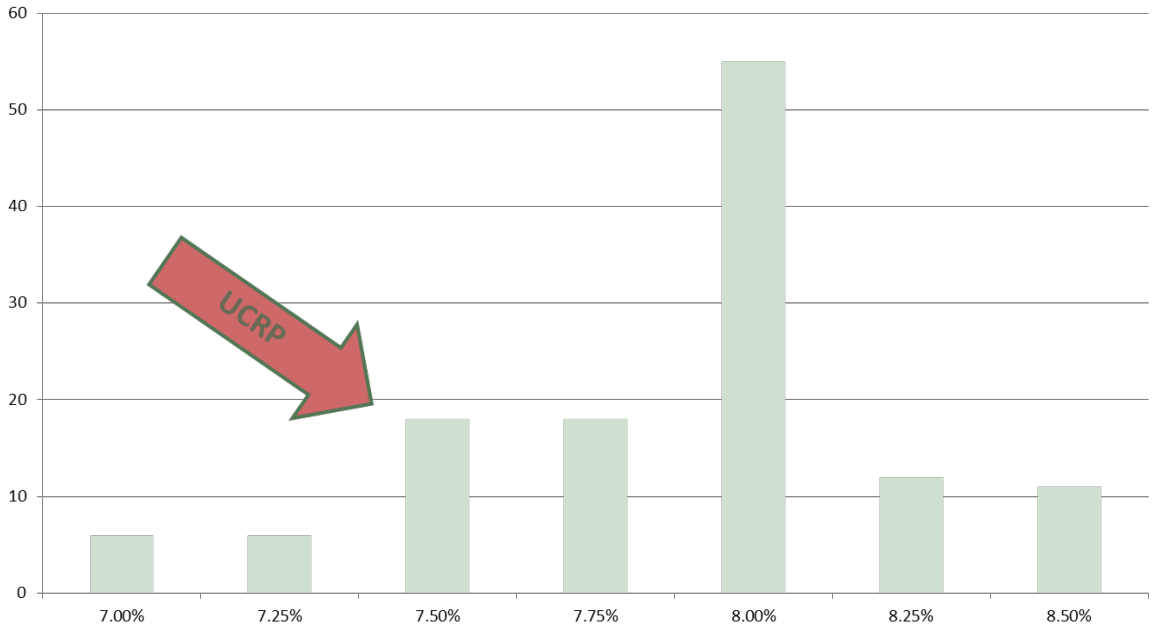


If the discount rate were increased to 7.75%, the additional savings would be even more substantial. This is shown by the following graph.



The relative assumption of UCRP compared to those used by 128 large systems in *Public Fund Survey* as of October is illustrated below.

UCRP's 7.5% Assumed Rate of Return is Among the Most Conservative



All the cost graphs above are based on data as of July 1, 2011, but assume a poor year of investment return from July 1, 2011 to June 30, 2012. The UCRP actuary will be completing more precise actuarial calculations based on complete information as of July 1, 2012. We encourage them to measure costs at level % and 7.75% to confirm our findings.

ACTUARIAL BASIS CONCLUSIONS

As actuaries, we generally applaud somewhat more conservative methods and assumptions. Used properly, they result in well-funded, secure retirement plans. But in a case where they have no linkage to actual contributions, their use seems to have no purpose other than to increase the apparent cost of benefits for labor negotiations. We would be interested in learning from UC whether they understand that while they are using conservative assumptions and methods, it has no bearing on actual contributions. We question whether it is appropriate to measure the cost of benefits to its workers on one basis, while ignoring that basis for purposes of funding the plan.

ESTIMATED IMPACT OF PROPOSED TIER 2013

We have also reviewed the proposed change to a Tier 2013 effective next year, including the following changes in our analysis:

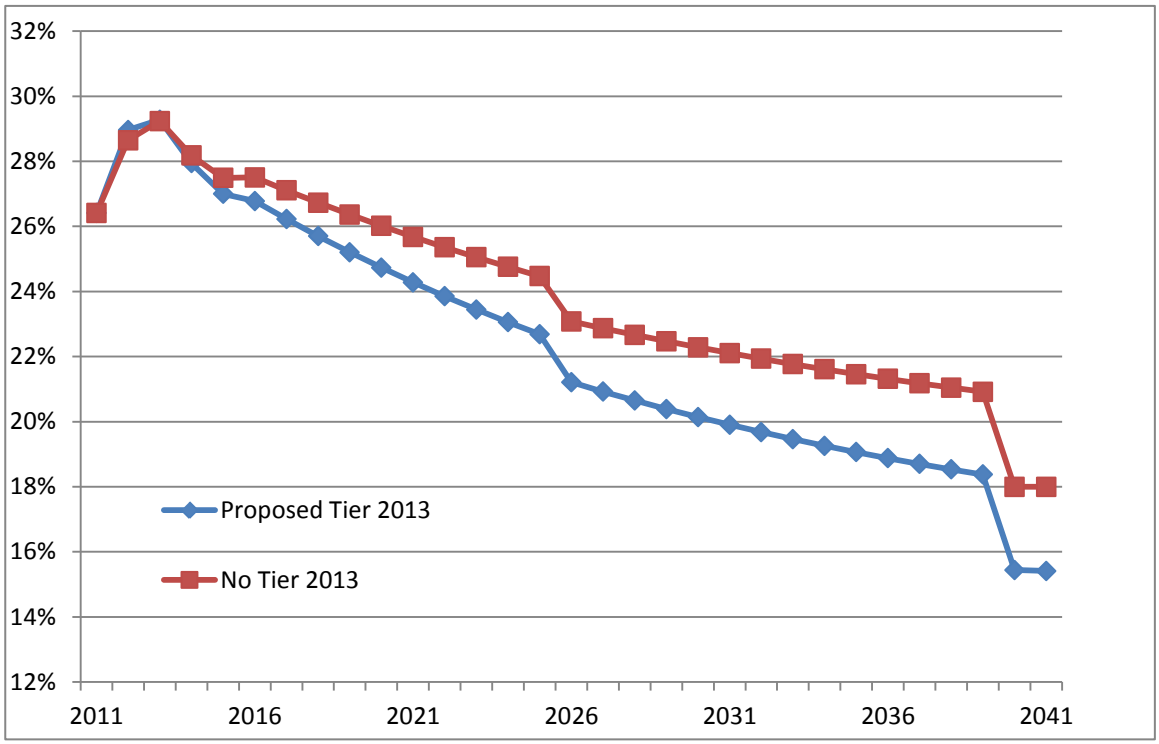
- Increased retirement age for those hired after July 1, 2013
- Member contributions of 7% for those under Tier 2013
- Member contributions increasing to 8% for those not under Tier 2013
- Elimination of the $19 per month contribution offset

First, we estimate that the elimination of the $19 per month contribution offset will save about 0.3% of pay today, but in 30 years will only be 0.1%. Because of inflation and wage increases, the $19 is automatically phasing out in its importance.

We also calculate that the impact of the total change will save UC 1.6% per year in the long run.

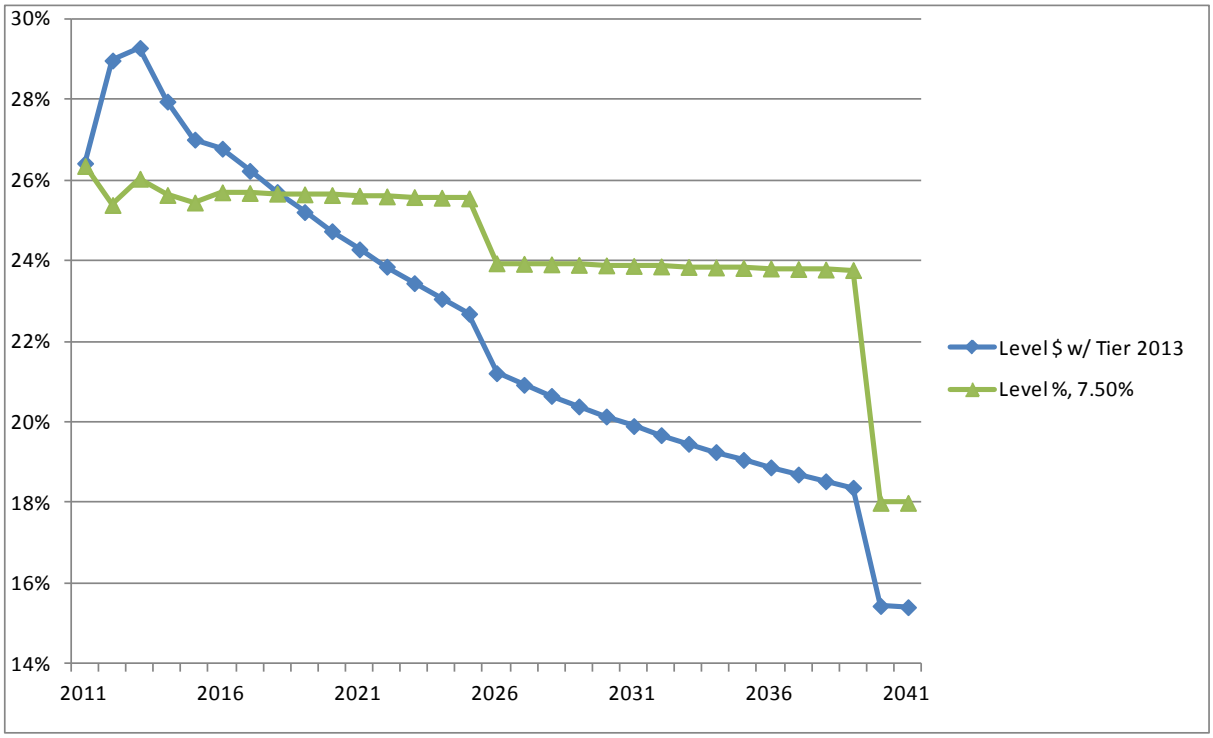
The following chart illustrates those savings. As you can see, in the long run, there is a 2.6% difference in total cost. But since the future workers would be paying 7%, while the current workers would be paying 8% (which is assumed in Segal's projections), there is only a 1.6% cost savings to UC. Of course, if the current tier workers do not increase their contribution, then the savings for Tier 2013 would be higher. The important point is that the reduced benefits only save a total of about 2.6% of pay.

ILLUSTRATION OF TOTAL COSTS OF UCRP – WITH AND WITHOUT NEW TIER



We also compared the proposed Tier 2013 under the current UCRP funding policy (level $ amortization and 7.50% expected return on assets) with our proposal to use a less conservative funding policy based on a level % amortization.

ILLUSTRATION OF TOTAL COSTS OF UCRP – CHANGE TO MAINSTREAM FUNDING POLICY VS. ADD NEW TIER



In the above graph, the green line shows estimated costs assuming that all participants remain in the current tier but the method is changed to level % of pay. As can be seen on the graph, changing the funding policy to use a level % of pay initially provides UC with higher annual savings than adding a new Tier. If the UC were to concurrently switch to a 7.75% discount rate, the additional savings would outweigh the cost benefits of adding Tier 2013 until approximately 2026.

The graphs illustrate that if UC is interested in reducing immediate costs, changing from a conservative funding policy to a more mainstream one and actually contributing on that basis will save as much money in the immediate future as reducing benefits for a new tier of workers.

We are happy to discuss this further at your convenience.