

A guide to reviewing the  
recommendations of the Retirement

Options Task Force

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The report from the Retirement Options Task Force is lengthy and complex. The review period is condensed. We encourage comments on every aspect of the report and intend to follow the Senate's recommendations and not constrain them; we do want to identify some points that will make the learning curve less steep. Although the most important point to make is that any changes to retirement plans will apply only to employees hired after July 1, 2016, it is equally true that the decisions the Regents will make in March, 2016 are of great importance for UC's budget, long-term finances, and the competitiveness of UC's total remuneration for new employees. We think there shall be in this review less concern about UC's financial stability, and the funded status of UCRP, as explained in item 7 below, and recommend focusing on competitiveness.

- 1) The Effect of the PEPRA cap: In the absence of any other retirement option, the PEPRA cap can cause a substantial reduction in potential retirement income, compared to UCRP's 2013 tier (Figure 1, below). Employees covered by the 2013 tier receive a pension defined by the product of their age factor at retirement, their Highest Average Plan Compensation (HAPC, average salary over highest 36 months), and service credit. The age factor ranges from 1.1% at age 55 to 2.5% at age 65. The cap operates by limiting the salaries used in calculating HAPC.
  - a) This reduction is illustrated in the Report for a "persona" based on an assistant professor whose age joining UC and starting salary, calculated over all disciplines, are at the UC averages of 36 and \$98,000, respectively, as shown in the chart on Page 32 of the report. Percentage reductions in retirement income due to the cap for a small number of other "personas" with different average starting ages and salaries are shown in the appendix on Page 83. Averages do not tell the entire story, however. We developed a program that replicates the results of the consultants' analyses to four significant figures.

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We used that program to explore the effects not only of the cap, but also of the Task Force recommendations for defined-contribution plans over a wider range of assumptions about service credit and starting salaries than were provided by the consultants. The 2013 Tier replaces the same percentage of working income, regardless of level, while the effects of the cap are small for someone hired at relatively low salary and become substantially greater as starting salary increases.

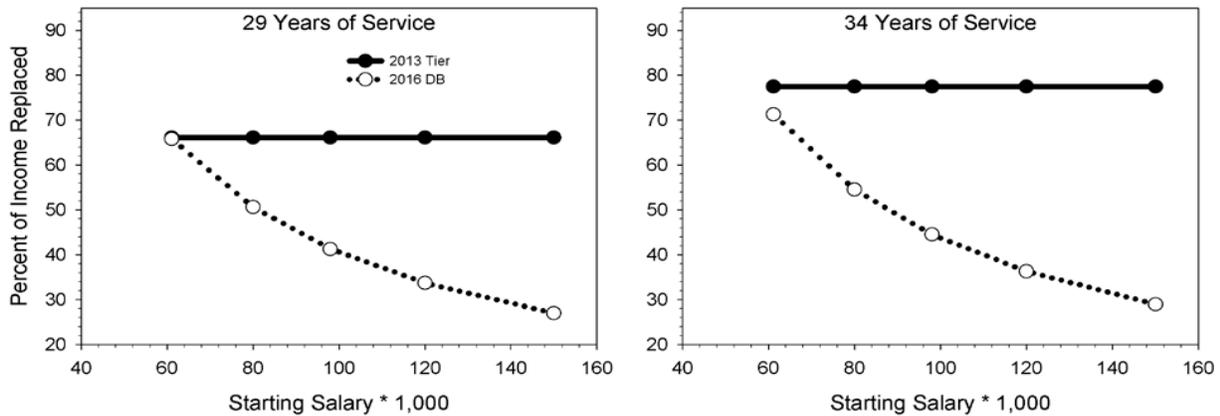


Figure 1. Percent of income replaced in retirement after 29 years of service (e.g., starting age = 36, retirement age = 65) or 34 years of service (starting age = 36, retirement age = 70) for individuals with varying initial salaries under the 2013 tier and the 2016 tier with the PEPR cap and no supplement. Starting salaries and the cap are projected to retirement using the actuarial assumptions described in the Report. The middle starting salary corresponds to Persona 3, LRF Assistant Professor, shown on Page 83 of the full report.

- b) Delaying retirement to increase pensions has a favorable effect, though it is limited. The main effect of the cap, once it is reached, is to remove the effect of salary increases on pensions; currently, salary increases raise the value of every year of service under the 1976 or 2013 Tiers. This is a key feature of most defined-benefit plans, and an important source of their value for retaining employees. The cap means that most faculty members, and a number of staff, will reach the point where salaries exceed the cap, after which they accumulate only service credit by remaining employed at UC.
- c) Under specified assumptions about the growth of salary due to merit increases, promotions, and inflation relative to the growth of the PEPR cap, which only grows with inflation, many employees whose starting salaries are below the PEPR cap will have final salaries that exceed the PEPR cap, as shown in the table on Page 13 of the report. We find it unfortunate that only the percentage of employees projected to be above the cap by Age 60 was calculated, because the targeted retirement age is 65, and have asked for a new set of calculations. The cap is eventually binding for each of the starting salaries in Figure 1; this

does not occur until the 29<sup>th</sup> year of service (at age 64) for the lowest salary modeled, while it occurs sooner for starting salaries of \$80,000 or the mean value of \$98,000; the two largest salaries modeled begin above the cap. This suggests at least three general conclusions:

- i. Faculty members for whom the cap is binding very late in the careers experience relatively little reduction in pension benefits, but they are likely to be underpaid, relative to the market;
- ii. Faculty members for whom the cap is binding early in the career experience the greatest reduction in pension benefits, most likely relevant for disciplines where average salaries are highest;
- iii. Reaching the point where salary exceeds the cap in mid-career leaves enough time for the cap to significantly reduce pensions. This is the likely outcome for anyone paid a salary that is closer to competitive.

## 2. What were the Task Force's constraints?

- a. Where multiple plans were proposed, the total employer contribution should be held constant across all plans. This ensures that there is no incentive for the employer to direct a new employee to choose a plan that is cheaper for the employer if it is not in the best interest of the employee. This is only partially achieved by the options recommended by the majority of the Task Force; it would require adding the "UAAL surcharge" (described below) to compensation above the cap for employees who elect Plan A.
- b. Where multiple plans were proposed, the Task Force thought it important to offer employees a "second choice," i.e., an opportunity to reconsider the initial choice of one's retirement plan in case one's circumstances had changed. Details about the motivation for this option appear on pages 48 – 50 of the report. The most important detail is that offering choice requires holding employee contribution percentages constant across the options, as discussed in the report.
- c. UCRP continues to be less than fully funded; the Unfunded Accrued Actuarial Liability (UAAL) was \$10.7 B on a market-value basis, in the most recent valuation; \$12 B on an actuarial-value basis. Expressed as funded ratios, the plan is 84% funded using the market value of assets and 82% funded using the actuarial (smoothed) value.<sup>1</sup> There has been much concern expressed outside of the Task Force that employees opting out of the 2016

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<sup>1</sup> <http://regents.universityofcalifornia.edu/regmeet/nov15/f10.pdf>

Tier within UCRP will destabilize the Plan, perhaps reflecting a belief that the Plan requires new members and new funds on a continuing basis. First, it is important to emphasize that, unlike Social Security, UCRP is pre-funded; the pensions paid to retirees are funded from assets in the Plan, not from contributions from each year's active Plan members. A separate concern, however, is the ongoing unfunded liability. The Regents funding policy calls for contributing the cost of providing pensions earned from each year of service (the Normal Cost); the interest that would have been earned on the unfunded liability; and a portion of the liability itself, following an amortization schedule to achieve full funding. Employees and the employer both contribute to Normal Cost, and additional contributions from the employer (literally, the "funding source" for the employee's salary) apply to the interest and amortization components. In order to maintain the viability of UCRP, the Task Force recommended that for any alternative, defined-contribution plan that might be offered, the employer contribution should include a "UAAL surcharge" to UCRP to continue to fund these added components.

- d. No major changes to the 2016 tier, other than implementing the PEPRA cap, were permitted.
  - e. The majority of the Task Force also believed that UC had an obligation to provide options that would promote the "retirement readiness" of its employees.
  - f. As a result of these constraints, the Task Force was limited to working within a small universe of options bounded by a ~8 – 10% employer contribution, a ~4 – 6% employer-paid UAAL surcharge, and a 7% employee-paid contribution. All of the proposed plans would allow limited variations around this small range of parameters. The more generous the plan, the less feasible it is from a budgetary perspective; the cheaper the plan, on the other hand, the less competitive UC will be for recruitments and retentions of faculty necessary to maintain the University's excellence. Moreover, the combined contributions from employees and the University for cheaper plans will fall short of the amount required to achieve retirement readiness.
3. DC Supplement, or "Plan A": The Task Force was charged with trying to devise a "supplemental" retirement benefit that would mitigate the impact of the PEPRA cap for at least some employees. This is "Plan A" in the Task Force report; the majority of the Task Force recommended a supplement consisting of a defined-contribution plan for salaries above the cap each year. There would be an employer contribution of at least 10% and an employee contribution of 7% to this

supplemental plan. The value of the supplement at retirement varies with assumptions about the returns on investment, and the consultants modeled the value at two rates: 4.75% and 7.25% per year. The latter is equal to the actuarial rate of return for UCRP, and most Task Force members thought it unrealistic for individual investors to expect to achieve a personal rate of return greater than that for UCRP. The lower rate was also used to convert accumulated balances to annuities, in order to make direct comparisons between plans using the percentage of income replaced in retirement. Using the higher rate would be very unrealistic when compared to the current market for annuities. The Task Force found it impossible to design a supplement that would fully mitigate the effects of the PEPR cap when the additional benefit was paid only after an employee's salary exceeded the cap (Figure 2); every such plan falls short of the results from the 2013 Tier.

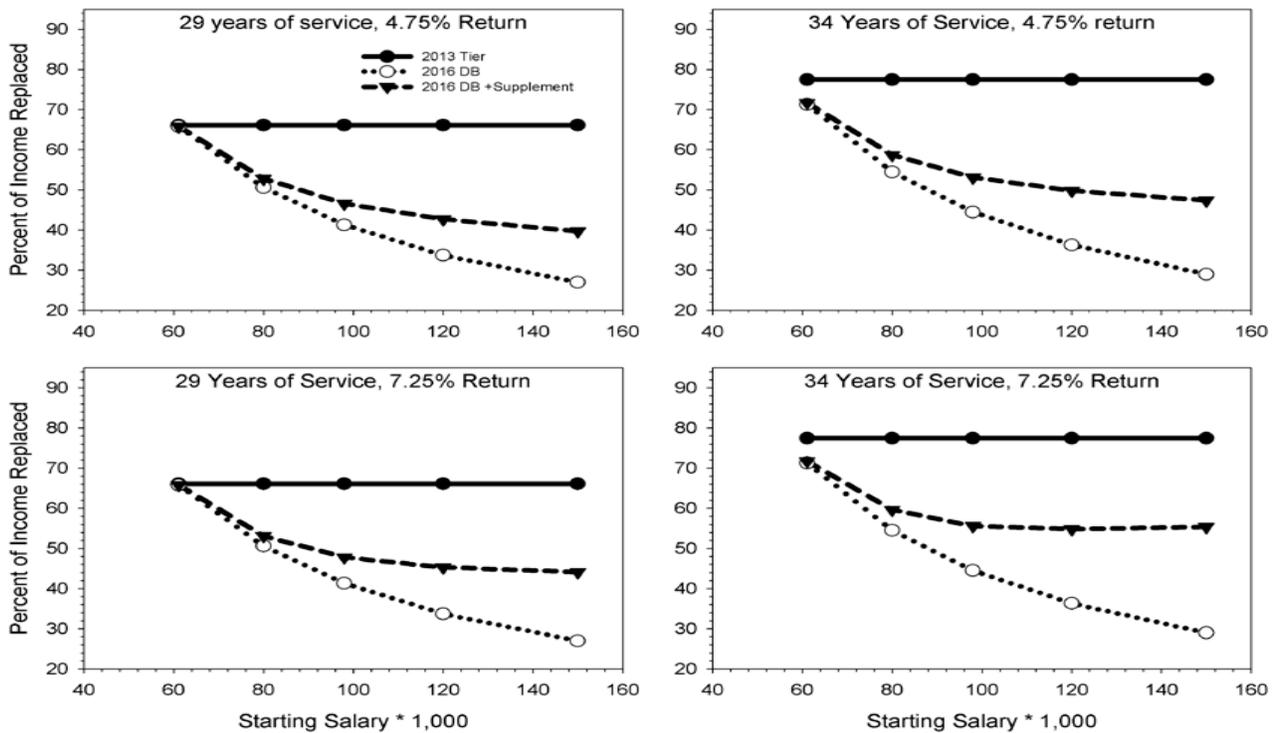


Figure 2. Percent of income replaced in retirement after 29 years of service (e.g., starting age = 36, retirement age = 65) or 34 years of service (starting age = 36, retirement age = 70) for individuals with varying initial salaries under the 2013 tier and the 2016 tier with the PEPR cap, and with a supplemental DC benefit funded by a 10% employer contribution and a 7% employee contribution when an employee's salary exceeds the cap. The supplemental DC benefit was modeled separately at a 4.75% and a 7.25% annual rate of return.

- a. Under such conditions, the value of the supplement, in terms of restoring a percentage of retirement income lost to the PEPR cap, varies with one's starting salary, holding all else constant. The supplement makes up a greater proportion of such losses for those with relatively higher starting salaries.
  - b. The reasons for this are two-fold: First, the sooner in one's career the salary cap is reached, the greater are the total contributions over one's career. Second, and related, the sooner one starts to invest, the longer is the period for compounded growth of those investments.
4. Full DC Plan or Plan B": The Task Force also considered a full DC plan. Reasons for doing so are described on Page 35 of the report. This also was modeled at the same rates of return as for the DC supplement, 4.75% and 7.25%. Again, for purposes of projecting pensions, it was assumed that the accumulated balances would be used to purchase an annuity, at the same rate as for Plan A. Modeling results varied

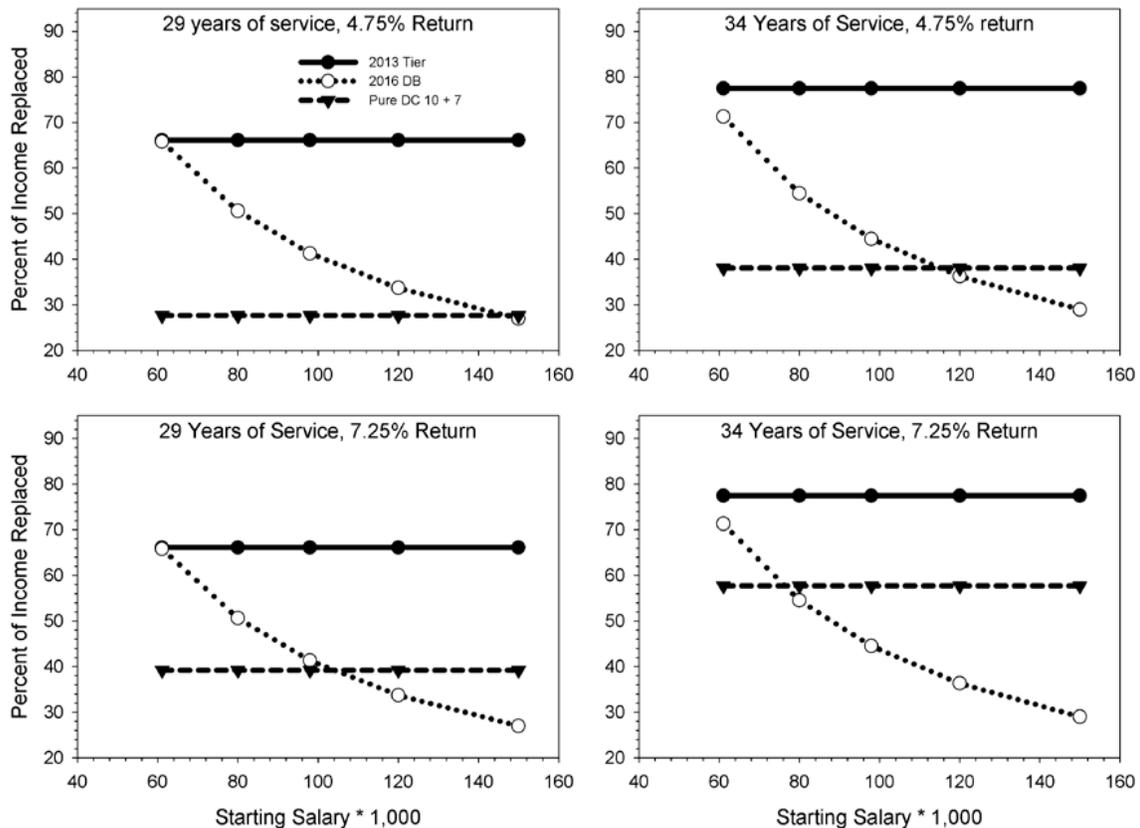


Figure 3. Percent of income replaced in retirement after 29 years of service (e.g., starting age = 36, retirement age = 65) or 34 years of service (starting age = 36, retirement age = 70) for individuals with varying initial salaries under the 2013 tier and the 2016 tier with the PEPR cap, and under Full DC Benefit (10% employer, 7% employee contributions) at the indicated rates of return.

substantially with the length of service and growth rate assumptions (Chart on Page 43 and Figure 3 below). None of the DC plans matched the 2013 tier, but they could exceed both the 2016 tier alone and the 2016 tier with a supplement when modeled at the higher rate of return and after 34 years of service (Chart on P. 44 and Figure 5, at the end of this document.)

5. DB vs. DC Plans: In 2010, the Post-Employment Task Force also considered DC plans but concluded that DB plans were more beneficial to the university than DC plans because DB plans “encouraged” (or perhaps coerced) long service and incentivized timely retirement. Quoting from the report:

“The value of PEB benefits that would be forfeited (the pension income for all future service and Retiree Health coverage) makes it economically unattractive for faculty and staff to leave the University in mid-career, thus helping UC retain faculty and staff who receive outside offers. The DB plan provides career faculty and staff with enough income security to afford to retire from service when the time is right for them.” (Final Report of the President’s Task Force on Post-Employment Benefits, July, 2010, Page 9).

Those conclusions were based upon DB plans capped at much higher salaries seldom approached by ladder-rank faculty—the IRC limits described in the Report—and we encourage the Senate to consider if the conclusions from the 2010 study still apply to DB plans capped at the PEPR limit.

- Under the 2016 Tier, mid-career faculty may find that the forfeiture now is insufficient to justify rejecting outside offers.
- Under the 2016 Tier, late-career faculty now may find the smaller retirement benefit an insufficient incentive to retire.

Put differently, many results shown in the Report and in this document suggest that it will be necessary to save a much higher percentage of discretionary income or work later in life to achieve a secure retirement. Senate readers should consider if the additional value provided by the DC supplement in Plan A is sufficient to mitigate the negative effects of the PEPR cap on retention and timely retirement.

6. Choice of Retirement Plans and the Cost of Choice: A design parameter of both the 1976 and 2013 tiers is that employees need five years of service before becoming vested. Employees who leave before becoming vested are refunded their employee contributions and earnings on those contributions. However, they do not receive the contributions made on their behalf by the employer, or the

associated earnings on those contributions. Those “forfeited” employer contributions and earnings stay within UCRP, in effect subsidizing the cost of providing pensions to vested employees. By contrast, the employer contributions to a DC plan become the property of the employee when those contributions are made, so employees in a DC plan take both the employee contribution and the employer contribution, and earnings on both, when they leave employment; DC plans are “portable”.

- a. Some faculty will argue that UCRP needs the forfeitures of short-term employees to keep the cost of the defined-benefit plan (Plan A) low; therefore, Plan A should be the only plan offered. We recommend that the Senate not take a position against offering choice based upon the economic benefit to UCRP of forfeitures by unvested employees. We believe this position to be unfair for employees who know that they will not remain with UC for their full career. We also think this position to be politically naïve and likely to provide support for those seeking to eliminate defined benefits plans in general. We acknowledge that the effects of forfeitures were also present in the older tiers, and that the Senate has not objected. In the past, as was already noted, the advantages of the defined-benefit model were sufficiently compelling to prevent this implicit subsidy from receiving much notice; UC also was not actively considering a DC alternative.
- b. Cost of the First Choice at Hire: The Task Force therefore investigated the “cost” of choice at hire, and the cost of a second choice five years later. If two alternatives are offered, and employees select into the one that benefits them most, costs are by definition greater than under either Plan alone. However, such costs can instead be thought of as the cost to UCRP to eliminate a portion of the subsidy that forfeitures provide. It is important to know that this was a new area of analysis for the consultants, and they cautioned the Task Force regarding the uncertainty of their calculations. Details of the calculations are presented in pp. 88 – 90 of the report; adding the option of a choice between Plan A and Plan B at time of hire was estimated as about 0.3% of salary. We encourage scrutiny of this modeling.
- c. Cost of the Second Choice: The Task Force was strongly in favor of offering employees choosing the DC plan (Plan B) an opportunity later to choose Plan A, (pp. 48-50) to encourage long service for employees who might become more inclined to remain with the University over time (i.e. after receiving a favorable appraisal or tenure). The cost of a second choice was estimated at about 0.7% of salary. The Report suggests that this happen after five years of

service, but that may not be the optimal point in the career, and the emphasis was more on providing the second choice than on the exact point in time it should occur.

- d. The costs of both choices combined would increase the total normal cost of plans by 1% of eligible pay. Balanced against the cost of the second choice could be 1) legal expenses avoided by reducing the number of employees who bring suit against the University for being improperly advised and making the “wrong” choice at hire, and 2) reclaiming some good will by eliminating the practice of exploiting the forfeitures of unvested employees.

## 7. Projections of the UAAL.

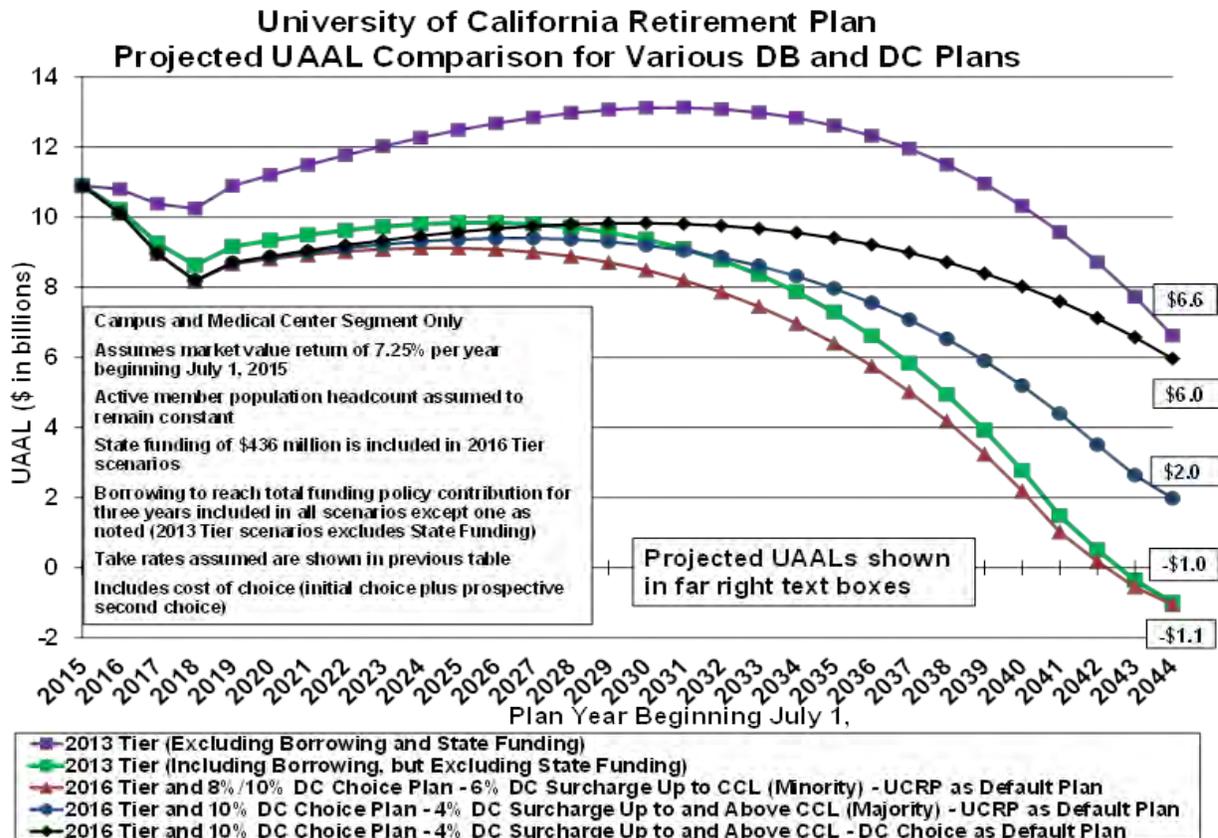
- a. The Task Force considered projections for the funded status of UCRP for the options recommended in the Report, under an assumption that the assets in the Plan earn the actuarial rate of 7.25% ever year. Because of the decision to impose a “UAAL surcharge” paid by the employer for all employees irrespective of their choice plan, the time required to eliminate the UAAL in these projections is little affected by either Plan A or Plan B (chart, page 57 and next page), though there are small differences projected due to different dollar amounts in the respective UAAL surcharges from the two plans and different assumptions about the number of employees electing each Plan. The main drivers of the projection to pay down the UAAL, other than annual rates of return, are the employee and employer contributions already in effect, the three-year “borrowing” proposal recently approved by the Regents<sup>2</sup>, and the addition of \$436 M in Proposition 2 “rainy day” funds. This is illustrated in the graph by comparing the trajectories of the purple curve (2013 tier with no borrowing or Prop 2 funds) with the green curve (2013 tier with borrowing and Prop. 2 funds), or any of the three that correspond to the 2016 options.

To put these results in perspective, there is an inflation assumption included (3% per year), and any dollar values in 2044 are therefore “2044 dollars” and not expressed in real, 2016 terms. The projected value for the Accrued Actuarial Liability (AAL) in 2044, for the two 2013-tier scenarios, is \$166.2B,

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<sup>2</sup> <http://regents.universityofcalifornia.edu/regmeet/nov15/f2.pdf>

so the funded ratio for the plan is projected to be either 96.02% (the purple curve, representing no borrowing or state funding) or 100.6% (the green curve, borrowing only). The difference represents around \$7B in the projected UAAL and reflects the pure effect of borrowing, with everything else held constant between these two scenarios. The 2013 scenarios reflect gradual improvements in the funded status, due to an ever-increasing percentage of employees covered by the 2013 tier and not the 1976 tier,



but they otherwise represent the status quo.

All three of the 2016 scenarios have lower values for the AAL, because of the adoption of the 2016 tier. Differences between the three scenarios are due to the different percentages of employees assumed to elect a full DC plan instead of the 2016 defined-benefit plan. The best outcome from the perspective of funded status is the scenario corresponding to the less-generous option for the DC plan (Plan B); providing only an 8% employer contribution up to the cap corresponds to fewer employees electing the DC alternative, an AAL of \$144.2B, and a funded ratio of 100.7% in 2044 (the red curve). An increase in the employer contribution to 10% for salaries up to the cap, for the DC alternative, corresponds to fewer employees in Plan A of the 2016 tier. This reduces the AAL somewhat, to \$136.3B, but also reduces the UAAL assessments. The

approximately \$2B UAAL that remains, in 2044, corresponds to a funded status of 98.6% (the blue curve). Both of these 2016 scenarios assumed that Plan A would be the default; changing the default to Plan B, and making the assumptions described in the Report, the projected AAL drops to \$126.8B, but the funded status declines to a projected 95.3% (the black curve)

- b. We ask the Senate to carefully consider the minority view of Plan A, which was to collect the 14% employer contribution up to the IRC limit, and not just up to the CCL. By doing so, then the employer costs will be equalized across plans, and the UAAL will be reduced somewhat more than is shown in the chart on Page 57 as a result of the 4% UAAL surcharge for salaries between the CCL and the IRC limit. As the Report notes, the “savings” from not collecting the surcharge on all compensation does reduce cash outlays for the Plan each year, but at the cost of contributing less to pay down the UAAL. In effect, this is borrowing at 7.25% interest to generate “savings,” most of which benefit outside funding sources.
  - c. Variation around the trajectories shown is caused by differences in assumptions about the proportions of new employees choosing Plan A or Plan B, ranging from 25% to 60% choosing Plan B. Faculty should consider that these projections were made “deterministically” and do not include variation in the assumed earnings rate of 7.25%. The absence of modeling with variation means that the differences in 2044 may appear to be more certain or more meaningful than they actually are. We encourage faculty to consider whether the projected differences shown are sufficiently large and “certain” in projections to 2044 to justify making policy decisions on the basis of those differences in 2016.
8. Beyond the Task Force Recommendations: It is possible to try to compensate for the PEPRA cap, but it would require far higher employer contributions to the supplement, or to the Full DC plan as a percent of salary, than the Task force has proposed. Plot A in Figure 4 shows the effects of increased contributions to the DC supplement for individuals with different starting salaries. The variation with starting salaries also suggests that the approach of providing a supplement when salaries exceed the cap may never work very well. Plot B in Figure 4 shows the effect of providing DC plans with 2% – 10% additional contributions of salary beyond the 10% employer and 7% employee contributions that the Task Force recommended. These additional contributions could be made entirely by the

employer, entirely by the employee, or both. For the DC plan, we expect that the additional 10% needed to approach the income replaced by the 2013 tier will be judged excessive, were it to come all from the employer (for a total of 20% of salary). The additional 10% of salary could be contributed by the employee, for a total of 17%, but this will cause a reduction in take-home pay and a reduction in total remuneration, compared to the 2013 tier; it is the *employer-provided* portion of benefits that enhances competitiveness of total remuneration.

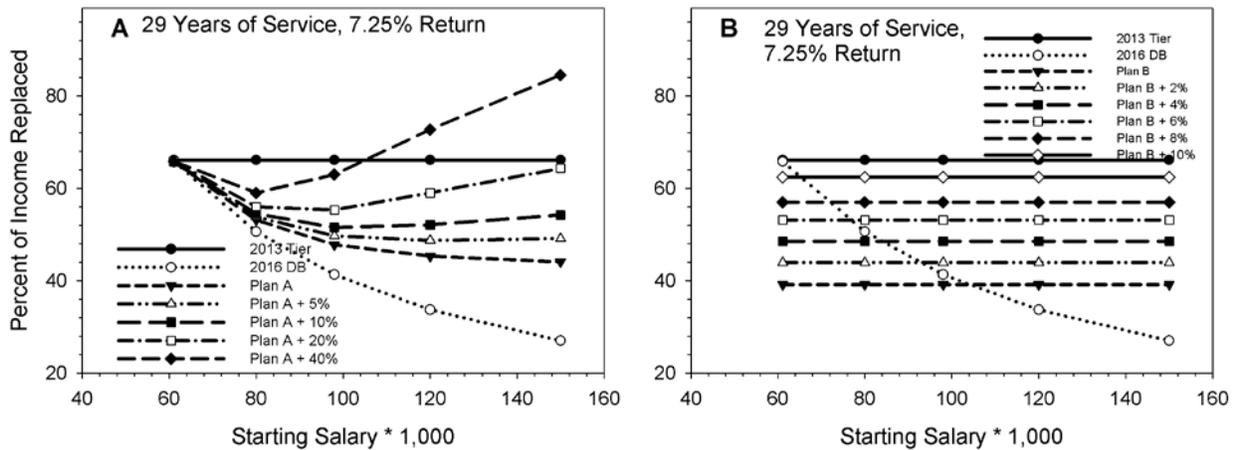


Figure 4. Percent of income replaced in retirement after 29 years of service (e.g., starting age = 36, retirement age = 65) or 34 years of service (starting age = 36, retirement age = 70) for individuals with varying initial salaries under the 2013 tier and the 2016 tier. Plot “A” shows DC supplement rates beyond those recommended by the Task Force. “Plan A” is merely the 10% employer, 7% employee contributions as in Figure 2. The additional plots show the effect of adding an additional 5 – 40% of salary to the DC supplement. Plot “B” shows an additional 2 – 10% of salary invested Full DC plan (“Plan B”) beyond the Task Force Recommendation of 10% employer contribution, 7% employee contribution. In both cases, the additional contributions could be provided by either the employer or the employee.

9. Total Remuneration and the Recruitment and Retention of a High-Quality Faculty:
  - a. Impact on Total Remuneration: The Task Force did not receive an analysis of the impacts on total remuneration of any of the recommended plans that could be directly compared to the 2014 total remuneration analysis but such a study is now underway. But, recognizing that replacement income in retirement will be substantially reduced under all plans, we can anticipate that the value of retirement contributions to total remuneration will be similarly reduced. A study is now underway, using the most recent study as the benchmark.<sup>3</sup>

<sup>3</sup><http://compensation.universityofcalifornia.edu/total-remuneration-ladder-rank-faculty-2014.pdf>

Similar analyses of proposed options for the 2013 tier were developed for the report of the 2009 Post-Employment Benefits Task Force: <http://ucrcfuture.universityofcalifornia.edu/task-force-report/>

- b. Impact on Recruiting and Retention: We think that there is no question that salaries in initial offers must be increased to offset this reduction in benefits, if UC is to continue to attract a top-quality faculty. If this occurs, then this will continue a trend documented in the 2014 Total Remuneration report showing a reduction in benefits being compensated by increases in salary, with little change in total remuneration
- c. Do Employees Really Not Care about the Value of Benefits? It is commonly stated that employees care far more about their salary than their benefits, especially post-employment benefits that will only be received far in the future. This leads to the view that it is safe to reduce benefits without affecting recruiting. Whereas salaries are negotiable, benefits generally are not. Department chairs cannot offer to pick up the employee contribution to UCRP in lieu of an increase in salary, for example. Neither can they offer a medical plan and pick up the full employee premium in lieu of an increase in salary. We believe that the proper conclusion to draw is simply that prospective faculty members are wise enough to negotiate what is negotiable and to not negotiate what isn't. The inference that benefits might be cut without affecting recruiting or retention could be very wrong.
- d. If salaries don't increase to compensate for these reduced benefits, then UC will have to settle for a lower-quality of faculty who did not receive better offers elsewhere. Many UC faculty members were hired in spite of more lucrative salary offers elsewhere, just as many have either declined outside offers or declined to pursue them. It may have been true at one time that benefits made up for our uncompetitive salaries. The 2014 Total Remuneration Study showed that no longer to be the case. While salaries and benefits continue to lag, and we are contemplating making the lag even greater with the new-tier options, it is important to note that most of the non-pecuniary attributes of UC employment also are declining. As Dan stated in his remarks to the Regents in September:

“Any reduction in either salary or benefits surely will have consequences for the ability of UC to build and retain a future faculty that is as distinguished as the current faculty. As recommendations are brought forward in early 2016, I encourage the Regents to carefully consider not only the budgetary cost of future retirement options, but also their impact on how faculty members behave in terms of recruitment and retention. If we are not careful, small budgetary savings will risk far greater costs to the University, our students, and the citizens of California”.

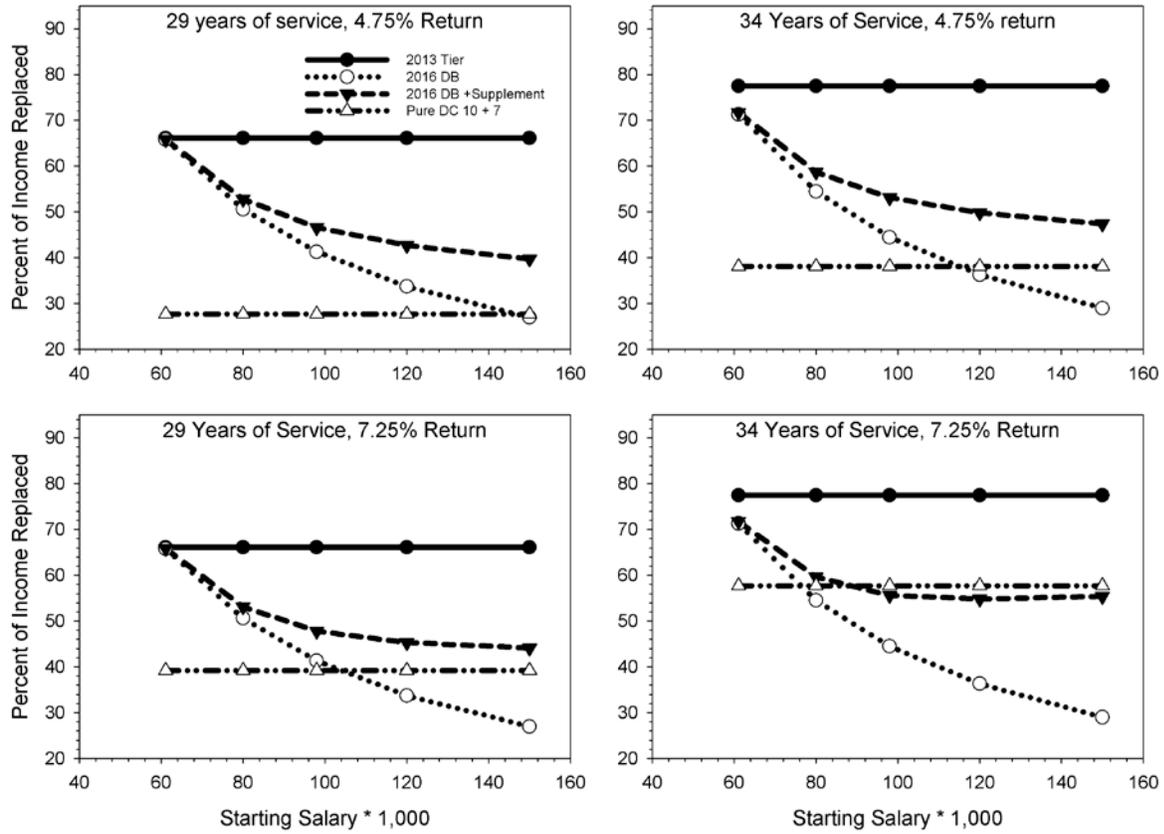


Figure 5. Combined plot of the data from Figures 1, 2, and 3. Details as per those figures.