UNIVERSITY OF CALIFORNIA

Retirement Options Task Force
Report to the President

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I. EXECUTIVE SUMMARY

As part of the 2015/2016 Budget agreement between the University, the Governor, and the Legislature, the State will provide a total of $436 million for the University of California Retirement Plan (UCRP) over the next three years. In return, the University must implement a new pension tier within UCRP for employees hired on or after July 1, 2016. This new tier will have a limit on the amount of covered compensation that can be used in calculating retirement income (a covered compensation[1] limit or CCL). That limit will match the limit on State retirement plans enacted in the 2013 PEPRA[2] legislation ($117,020 in 2016). The University also has the option to create new benefits to supplement the capped UCRP pension benefit for employees entering the plan on or after July 1, 2016. Current University employees will be unaffected and will remain in their current UCRP plan.

Although most future University employees will retire with salaries below the new limit on covered compensation (CCL), the impact will be significant for those future employees with salaries above the CCL. To address this problem, President Napolitano appointed a thirteen-member Task Force of faculty, staff, and administrators, charging them to develop options for new plans or supplemental plans that would support the University's continued excellence, remain competitive enough to recruit and retain high quality employees, and ensure the continued financial stability of UCRP. The Task Force considered a wide range of designs, discussing eligibility, employee and employer contribution levels, effect on UCRP, cost impacts, and other aspects of new benefits designs. Consultants supplied data and modeling to inform Task Force deliberations. Members of the Task Force and the administration at the Office of the President shared updates on deliberations with the University community throughout the process. This report of the Task Force presents the

[1] Covered Compensation: For UCRP, covered compensation (eligible pay) is defined as base pay from the University for a regular appointment at the full-time rate. This includes pay for sabbaticals or other paid leave, as well as stipends. It does not include such components of total salary as Y or Z pay for Health Science faculty, overtime, summer session pay, uniform allowances or amounts over the established base pay rates or pay above the limits established in the Internal Revenue Code (IRC).

[2] Public Employees Pension Reform Act.

following recommendations to the President, along with analyses and discussions of the data and the options.

Task Force Recommendations

a. Plans: Effective July 1, 2016, the Task Force recommends that the University implement two new defined contribution[3] (DC) retirement plans. Employees eligible on/after that date[4] will participate in one or the other:

1. ***Plan A***: *UCRP 2016 Tier plus Defined Contribution (DC) Supplemental Plan*

   Eligible pay up to the CCL each year ($117,020 in 2016) is covered by the UCRP 2016 Tier; eligible pay above the CCL and up to the Internal Revenue Code limit ($265,000 in 2016) is covered by a new DC Supplemental Plan.

   Retirees covered by Plan A would receive a lifetime pension from the UCRP 2016 Tier based on the highest three-year average of eligible pay up to the CCL for each of the three years. In addition, employee and employer contributions to the DC Supplemental Plan plus earnings could be withdrawn at retirement or upon separation and these funds could be distributed in a variety of ways, including via periodic withdrawals from the accumulated plan balance, as a lump sum, or to purchase an annuity[5].

2. ***Plan B****: DC Choice Plan*

   This is an alternative to Plan A in the form of a defined contribution plan for all eligible pay up to the Internal Revenue Code limit ($265,000 in 2016). Members of Plan B would not participate in the UCRP 2016 Tier and they would receive no benefits from that Tier. Their retirement benefits would be based on employer and employee contributions to the DC Choice Plan, plus earnings. Those that elect the DC option would not create any additional unfunded liability for UCRP.

   Members of Plan B could withdraw the DC Choice Plan employee and employer contributions plus earnings at retirement or upon separation and these funds could be distributed in a variety of ways, including via periodic withdrawals from the accumulated plan balance, as a lump sum, or to purchase an annuity.

[3] A defined contribution plan is an individual savings account for employee and employer contributions; benefits are based on the plan's investment earnings.

[4] Subject to collective bargaining.

[5] An annuity pays a fixed amount of income in regular installments.

b. **Eligibility**: Eligible employees who are hired or rehired into a career appointment or attain career status on/after July 1, 2016 will participate in either Plan A or Plan B.

c. **Choice/Default:** Newly eligible employees may choose either Plan A or Plan B. If they do not make a positive election within a designated enrollment period, they will be enrolled in Plan A by default.

d. **Plan Design**:

Plan A – UCRP 2016 Tier with CCL plus DC Supplemental Plan
Contributions to UCRP 2016 Tier on eligible pay[6] (covered compensation):

- 7% mandatory employee contribution up to the CCL ($117,020 in 2016).
- 14% University contribution up to the CCL (approximately 6% of this amount is a contribution to the Unfunded Actuarial Accrued Liability (UAAL)[7]).

Contributions to DC Supplemental Plan on eligible pay:

- 7% mandatory employee contribution over the CCL, up to the IRC limit ($265,000 in 2016).
- 10% employer contribution over the CCL, up to the IRC limit

Plan B – DC Choice Plan
Contributions to DC Choice Plan on eligible pay:

- 7% mandatory employee contribution up to the IRC limit ($265,000 in 2016).
- 10% employer contribution up to the IRC limit ($265,000 in 2016).
- 4% contribution to the Unfunded Actuarial Accrued Liability up to the IRC limit ($265,000 in 2016).

e. **Vesting:**

Plan A (UCRP 2016 Tier plus DC Supplemental Plan) –
5 years UCRP service credit[8].

Plan B (DC Choice Plan) – 1 calendar year from eligibility date.

[6] For ease of reading, "eligible pay" will be used for "covered compensation" in this document.

[7] See II.f., UCRP Funded Status/Unfunded Actuarial Accrued Liability.

[8] UCRP service credit is based on actual time worked; e.g., a plan member appointed in an eligible position at 50% time earns one-half year of service credit in each calendar year worked.

f. **Default:** Employees who do not choose a plan will be defaulted to Plan A, UCRP 2016 Tier plus DC Supplemental Plan.

g. **New Choice Window[9]:**
At the end of a five-year window, the University expects to provide a new choice opportunity for those that chose Plan B to switch into Plan A.

Plan A – No new choice for employees who choose/default into Plan A.

Plan B – New choice to elect Plan A for employees who chose Plan B or who are rehired after a break-in-service. Plan participation would begin with the effective date of this election.

Based on the above recommended designs, the employer cash contribution will decrease from the current rate of 14% of eligible pay up to the IRC limit. The employer contributions among plans will depend on participant elections as follows:

- *Plan A*: 14% of eligible pay up to the CCL to UCRP (6% of which goes to UAAL), plus 10% of eligible pay over the CCL to the DC Supplemental Plan.
- *Plan B*: Approximately 14% of eligible pay up to the IRC limit (approximately 10% to the DC Choice plan plus 4% to UCRP to pay down the Unfunded Actuarial Accrued Liability – UAAL).

The reduction in the University's cash outlay results in either a reduction in benefits, or a reduction in the total amount being allocated to pay down UAAL.

The 15-year average annual cash outlay for future new hires was projected to have been $655 million if the UCRP 2013 Tier benefit structure had continued, but it is now projected to drop to $640 million under the new structure – an average annual cash savings of $15 million. This savings will be back-loaded, with most of it coming in the later years of the 15-year projection period as a greater percentage of the total population is affected by the benefit changes. As discussed in the background materials, under the Task Force majority recommendations, the cost of new benefits is actually projected to increase relative to the UCRP 2013 Tier, so any reduction in cash costs is attributable to a reduction in contributions allocated toward paying off the UAAL. There also are also reductions in the year-by-year

[9] Subject to favorable IRS Private Letter Ruling.

growth in the Actuarial Accrued Liability (AAL) for the new UCRP tier under Plan A and no additional AAL for the Plan A DC Supplemental Plan or the Plan B DC Choice Plan.

In modeling the cost of these recommendations, assumptions (discussed later) included workforce growth, numbers of new hires choosing an option, turnover and forfeitures, and the effect of choice on UCRP cost. In particular, under the majority recommended designs, the above results assume that 60% of future new hires would choose Plan A and 40% would choose Plan B. All modeling assumes a constant active member workforce headcount. Actual results will depend on actual experience.

In developing these recommendations and designing new retirement benefits plans, the Task Force sought to balance multiple goals that were not always fully compatible: to remain as competitive as possible in the context of total remuneration[10], support the recruitment of quality employees, maintain UCRP's current financial stability, and align with the new lower limit on pensionable pay. The Task Force also considered suggested savings targets that imposed cost constraints. These recommendations represent the Task Force's best efforts to design new retirement alternatives that sustain the excellence of the University and its workforce while adhering to the new limit on eligible pay.

[10] Total remuneration is the sum of an employee's compensation package, including basic pay and all benefits.

II. BACKGROUND

a. Budget Agreement and Announcement

In June 2015, Governor Brown signed a final 2015-16 State budget that confirmed a significant increase in financial support for the University of California, consistent with a multi-year funding framework agreement between the University, the Governor and the Legislature. Under the agreement, the University will receive $436 million in one-time Proposition 2 debt repayment funds over the next three years to help reduce the unfunded liability for the University of California Retirement Plan (UCRP), including $96 million in 2015-2016, and $170 million in both 2016/2017 and 2017/2018. These payments represent the first State funding for UCRP in 25 years. In return for this increased State funding, by July 1, 2016, the University must implement a lower cap on pensionable pay (UCRP eligible pay) for future University employees, mirroring the cap for state employees under the California Public Employees' Pension Reform Act of 2013 (PEPRA). Pensionable salary (eligible pay[11]) is the salary used to calculate a pension benefit and not the pension benefit itself. Under the UCRP 2013 Tier, an employee would receive a pension defined by his/her highest thirty-six month average eligible pay up to the Internal Revenue Code limit ($265,000 in 2016). Employees hired on/after July 1, 2016, will have a new indexed, limit on eligible pay used in the thirty-six month average pay calculation: $117,020 in 2016.

Recognizing that the limit on eligible pay represents a substantial reduction in retirement income (as well as in disability and survivor benefits) for some employees, the agreement also provided for a possible supplemental benefit. To explore all options in implementing the agreement, President Napolitano appointed a Systemwide Task Force of thirteen University faculty, staff, and administrators to help develop a new set of retirement benefit designs for her consideration.

The Task Force recommendations are presented in this report to the President; this report then will be shared with the Academic Senate for their review and comment.

[11] Covered Compensation (see footnote 1, p. 4).

Campus, union and staff leadership groups also will receive a copy of the report for review and comment. After this review, the President's proposal will be presented to The Regents for approval at their March 20, 2016 meeting. Eligible employees hired, or rehired, on or after July 1, 2016 will be covered by these new plans[12]. Current active UCRP members will remain in their current UCRP Tier without any change.

The Task Force understands that the availability of new benefit designs and the timing of their implementation for represented employees are subject to the collective bargaining process. Approximately 40% of those who will be affected by the CCL are in collective bargaining units, primarily the California Nurses Association. Under closed contracts, new hires will be covered by the terms in effect under the agreements. When those contracts are renegotiated, the new benefit plans will be part of the bargaining process and implemented as contracts are renewed.

b. Charge to/Scope of Task Force

The President charged Task Force members "…to ensure that UC retirement benefits continue to be competitive in the context of our total remuneration package and that the University of California Retirement Plan remains financially sustainable."

The Task Force was asked to look at the widest range of options, including the possibility of offering a supplemental benefit in the form of a defined contribution (DC) plan, or a DC plan that would completely replace the first alternative, or both, and to communicate with the full University community in developing recommendations for the President's consideration.

UCRP is a defined benefit (DB) plan, providing a lifetime pension depending on age at retirement, years of service, and salary history. Unlike Social Security, a pay-as-you-go program with active members paying for the benefits of retirees, UCRP is prefunded. Each year, contributions from both the employee and the funding source for the employee's salary (the "employer" for short) are used to prefund the future

[12] Subject to collective bargaining.

pension benefits to which the employee is entitled based on current service. The only sources of funds to pay pensions in the future are contributions plus earnings on the invested contributions.

The same is true of a defined contribution (DC) plan. Investments of funds typically contributed by both the employee and the employer are deposited into an account that the employee controls, and the earnings on those investments are intended to provide capital accumulation that will provide pensions in the form of withdrawals from the accumulated balance after retirement. Contributions and earnings together need to be enough to replace the targeted percentage of working income in retirement.

The fundamental difference between the two types of plans is that a DC plan yields a pension benefit based on earnings on the funds invested in the employee's account. A DB plan pays a pension that is determined by a formula, and the employer must make sure that the plan is sufficiently well funded to provide for those pensions from earnings on the contributed funds. The individual covered by a DC plan bears both longevity risks – the possibility of outliving accumulated savings in the plan and earnings risk. A DB plan handles longevity risk by averaging over plan members, and the earnings risk is borne by the institution. That is not to say that a DB plan is without any risk to the individual: leaving the University long before age 65 in UCRP's current design would bring about a substantial reduction in the pension benefits earned.

In addition to the goals noted above, The Task Force was charged with creating benefit designs that would support continued recruitment of quality academic and staff employees. Design simplicity for ease of communication and implementation also was considered important, as was demonstrating to the State that the UCRP design for future employees aligned with the limit on pensionable pay for California pension plans, according to the budget agreement between the University, the Governor and Legislature. It should be emphasized that this charge requires tradeoffs between goals of competitiveness, cost savings, simplicity of design, etc.; achieving all of these goals simultaneously was not feasible. For instance, a plan that generates cost savings through the reduction of costs due to the new eligible

pay limit must, by definition, provide a pension benefit that is far less valuable than the one provided by the UCRP 2013 Tier, and far less competitive. The Task Force recommendations attempt to strike a balance, generating some savings while still attempting to offer competitive designs.

The basic structure of the DB plan within UCRP, along with the definitions of eligibility and eligible pay, were considered out of scope for the Task Force. The same was true for any other post-employment benefits (see VII, c., Retiree Health and other UCRP-Related Benefits).

c. UCRP 2016 Tier Covered Compensation Limit (CCL)

By July 1, 2016, the University must implement a lower cap on covered compensation (CCL), i.e., eligible pay under UCRP for future University employees. The CCL is an indexed amount: $117,020 in 2016. It will determine the eligible pay on which UCRP benefits for new hires in the UCRP 2016 Tier will be calculated. In all other respects, the DB plan under the UCRP 2016 Tier is the same as the UCRP 2013 Tier. The CCL replaces eligible pay in the pension formula for salaries above the CCL. For example, an employee retiring at age 65 or older with all three years of salary used to calculate Highest Average Plan Compensation (HAPC) above the CCL and with 20 years of service, would receive an annual pension of 2.5% * 20 * CCL , rather than 2.5%*20*HAPC. This only affects employees with eligible pay above the CCL; employees whose eligible pay is less than the CCL have a pension benefit based on their HAPC just as it would have been before the new options were created.

<u>Groups Affected by the CCL</u>

Limiting the salary that can be used to calculate HAPC under UCRP will affect some University workforce segments more than others. The following table summarizes the hiring pattern for UCRP 2013 Tier members:

Summary of 2013 Tier New Hire Data

Summary of New Hire Data - 7/1/2013 - 6/30/2014 [1]						
Group	Count	Average Age at Hire	Average Eligible Pay at Hire	Percentage in Modified 2013 Tier	Percentage above 2016 Tier CCL	Percentage Above cap by age 60 [2]
LRF: Full Professor	28	51	184,000	0%	93%	100%
LRF: Associate Professor	30	42	115,000	0%	43%	90%
LRF: Assistant Professor [3]	202	36	98,000	0%	17%	95%
Non-LRF Faculty	350	39	61,000	1%	5%	21%
HS: Full Professor	16	53	154,000	0%	88%	94%
HS: Associate Professor	5	42	124,000	0%	80%	100%
HS: Assistant Professor [3]	46	36	98,000	0%	11%	100%
HS: Other	401	38	90,000	0%	8%	79%
Non-faculty & Academic	1,146	33	54,000	0%	2%	6%
UC Health: Represented (Excluding Nurses)	1,782	33	65,000	86%	6%	31%
UC Health Nurses: Represented	518	35	113,000	100%	33%	97%
UC Health: Non-represented	643	40	93,000	0%	21%	52%
Management & Executives	541	43	126,000	0%	53%	88%
Berkeley Lab	221	37	87,000	7%	14%	51%
Staff: Represented	2,853	32	42,000	62%	0%	2%
Staff: Non-represented	3,310	34	55,000	0%	0%	6%
Total	12,092	35	64,000	32%	8%	24%

1. **Rehires are excluded from the statistics as they returned to their respective Tiers upon reemployment. Average eligible pay at Hire is based on the same definition of eligible pay under the UCRP 2013 Tier (Health Science Faculty pay is based on X and X' and does not include Y or Z income.)**
2. **Projected using baseline eligible pay increase assumption described in Appendix E., Actuarial Assumptions/Methodologies.**
3. **The profiles for LRF: Assistant Professor and Health Sciences (HS) Assistant Professor are identical.**

As the table shows, the CCL will have different effects on different employees. Some employees may begin at a salary below the CCL and never reach it, whereas other employees may be hired with salaries above the 2016 CCL, in which case any future salary increases will have no effect on their UCRP pension benefits, except for the CCL indexing adjustments. Finally, some employees may appear to be unaffected, based on their initial salaries, but with sufficient salary growth, their salaries will eventually rise above the CCL.

Most Ladder rank faculty (LRF), Health Sciences Faculty, UC Health Nurses: Represented, and Management and Executives hired on/after July 1, 2016 will be among those who may be projected to earn more than the UCRP 2016 Tier CCL by the time they are age 60.

If new UCRP eligible employees entering the UCRP 2016 Tier have hiring patterns similar to those shown in the above table for the 2013 hires, initially at least 8% of this group would be affected by the UCRP 2016 Tier CCL. Although the CCL is indexed, individual salaries typically are expected to rise faster than the indexed limit. This is because an individual's real (i.e. inflation-adjusted) salary commonly increases with seniority, especially for employees who change job titles by taking on greater responsibilities and/or supervisory roles. In the future, therefore, a considerably larger number of employees will be affected by the CCL: 24% of these new hires are projected to earn pay above the 2016 CCL by age 60 if they remain with the University. This does not mean that 24% of the population will be over the CCL at any single point in time since not all newly hired employees will stay with the University until age 60 and those who do, will reach age 60 at different points in time. Over time, the number of employees in a single cohort affected by the CCL will increase far beyond the initial 8% estimate.

The goal of a pension is to provide some targeted level of income replacement in retirement. For those affected by the 2016 CCL, the limit applies to the salary used to calculate a pension benefit and not the pension benefit itself. Under the UCRP 2013 Tier, an employee would receive a pension defined by his/her highest thirty-six month average salary up to the Internal Revenue Code limit ($265,000 in 2016). The UCRP 2016 Tier replaces the IRC limit with the CCL ($117,020 in 2016 and indexed for inflation). Once an employee's salary exceeds the CCL, the salary used in the pension formula to calculate the HAPC (average eligible pay over 36 continuous months) is fixed at that level and increases only by as much as the indexed CCL increases. Since some University salaries will be higher than $117,000 and, generally, salaries are projected to increase at a higher rate than the indexed CCL, in the UCRP 2016 Tier, income replacement for employees affected by the CCL would continue to erode over time.

d. UCRP

UCRP is a DB plan providing retirement, survivor, disability and death benefits to eligible members. As noted above, employer and member contributions made each year are invested to fund future pension benefits for those members.

Employees appointed to work at the University continuously for at least 50% time for at least one year or (if appointed at less than 50% time or for less than one year) who accumulate 1,000 paid hours over twelve months, are eligible[13].

Employee and employer contributions to UCRP are based on eligible pay, which is limited depending on the year of entry into the plan, as shown below. The UCRP 1976 Tier and UCRP 2013 Tier eligible pay limits conform to the Internal Revenue Code (IRC) limit; the lower limit for the UCRP 2016 Tier limit aligns with the State's PEPRA legislation.

UCRP Tiers

	Eligibility	Employee Pays	University Pays	Active Membership July 1, 2015	Eligible Pay: Covered Compensation Limit (FY 2015-16)
UCRP	Appointment =>50% for =>1 year OR =>1,000 hours* in rolling 12 months			123,700	
1976 Tier	In UCRP on 6/30/2013	8% (9% for certain unions)	14%	96,300	Initial Membership before 7-1-94: $395,000 on/after 7-1-94: $265,000
2013 Tier	Hired (rehired after break-in-service) in eligible position on/after 7/1/13	7%	14%	18,000	$265,000
Modified 2013 Tier (AFSCME, CNA, UPTE)		9%	14%	9,400	
2016 Tier	Newly hired in an eligible position on/after 7/1/2016	7%	14%		$117,020

***750 hours for employees in a "Non-Senate Instructional Unit (NSI) title**

Notes:

- **Safety members (395) are in a separate member classification and not included in figures above.**
- **Benefit design under UCRP 2013 and 2016 Tiers is the same except for the Covered Compensation Limit (CCL)**
- **CCL is grandfathered for those rehired July 1, 2016 and later with previous UC employment before July 1, 2013.**

[13] Safe Harbor Plan: Part-time, seasonal, temporary employees, and non-exempt student employees participate in the Defined Contribution Plan (the "DC Plan"). Enrollment is automatic. Instead of contributing to Social Security, Safe Harbor participants automatically contribute, on a pretax basis, 7.5% of their wages beginning the first day of an eligible appointment to the DC Plan.

e. Retirement Savings Plans (RSP)

The University offers three supplemental plans under the Retirement Savings Program that provide eligible employees with the opportunity to make tax-deferred and after-tax contributions. These three plans include:

- The Defined Contribution Plan, which currently allows for
  - employee after-tax contributions,
  - pre-tax mandatory contributions for Safe Harbor employees who are not eligible for UCRP, and
  - University and employee fixed contributions for the Summer/Equivalent Term Salary Benefit;
- the voluntary Tax-Deferred 403(b) Plan and
- the voluntary 457(b) Deferred Compensation plan.

The 403(b) and 457(b) plans allow employees to contribute pre-tax salary amounts. Currently, for the vast majority of employees, the University makes no contributions to any of the RSP plans. (See Appendix C., Retirement Savings Plans and Contribution Limits for details.)

f. UCRP Funded Status/Unfunded Actuarial Accrued Liability (UAAL)

DB pension designs guarantee a lifetime payment to the member based on an age/service/salary formula and, thus, create a liability for the employer. The plan sponsor has an Accrued Actuarial Liability (AAL) that is based on the pensions projected to be paid based on service to date. If the funds invested in the plan are less than the AAL, then the employer is said to have an Unfunded Actuarial Accrued Liability (UAAL). The UAAL increases when assets earn less than the actuarially assumed rate or if an employer's current year contributions are less than the amount needed to provide for the cost of the benefit allocated to the current year of service for active members (i.e., the Normal Cost). The University's current funding shortfall is primarily due to the combination of a two-decade contribution holiday and the 2008-09 financial crisis. However, earnings on assets in the Plan that fall below the assumed rate of return, changes in employee or retiree demographics

that increase liability, or changes in underlying assumptions (e.g., mortality rates) also can cause an unfunded liability.

Generally, employer and employee contributions to a pension plan are set to cover a plan's Normal Cost, plus an amount to amortize any existing UAAL. Calculations are based on the assumed rate of return on investments, currently 7.25% per year. The assumed rate of return not only affects the amortization payment on the UAAL, but it also affects the Normal Cost. This is because the Normal Cost calculation assumes that the contributions will be invested to fund the cost of future pension benefits allocated to the current year of service credit. Currently, UCRP's Normal Cost is about 18% of covered payroll, approximately $1.8 billion/year as of the beginning of Plan Year 2015-2016.

Comparison of the AAL to the value of the assets in the plan yields a measure of the Plan's funded status. This calculation commonly uses either the Market Value of Assets (MVA) or the Actuarial Value of Assets (AVA); in the case of UCRP, the AVA recognizes annual returns greater or lesser than assumed over a five-year period to produce a less volatile measure of funded status. The actuarial rate of return is, in effect, a five-year moving average of actual rates of return.

UCRP was more than 100% funded for many years, but after the economic downturn in 2008/2009 and two decades with no employee or employer contributions, the funded status fell to 95%. Since the market losses are recognized gradually over a five-year period in the determination of the actuarial value of assets, the UAAL increased as losses were recognized in the valuation. The current actuarial funded status for campuses and medical centers[14] is approximately 80%, leaving an unfunded liability of $10.9 billion as of July 1, 2015. On a market value basis, the funded status for campuses and medical centers is approximately 83%, with an unfunded liability of $9.8 billion.

[14] Though not included in the actuarial and market value figures shown here, Lawrence Berkeley National Laboratory employees participate in UCRP. Any increase in LBNL's UCRP employer cost would require approval from the Department of Energy.

The full 2015 valuation presented to The Regents may be found at:
http://regents.universityofcalifornia.edu/regmeet/nov15/f10.pdf

Employer contributions were restarted in 2010 at 4% of eligible pay, an amount that, when combined with employee contributions, did not cover Normal Cost, so the UAAL continued to grow. In order to ease the burden on both funding sources and employees, contributions were gradually increased to their current levels – 14% for the funding source (the "employer" for short) and either 8% for employees in the UCRP 1976 Tier or 7%[15] for employees in the UCRP 2013 Tier. Given a Normal Cost of around 18%, this leaves approximately a 4% contribution above the Normal Cost that is used to reduce the UAAL. In three instances, the University has also used short-term borrowing to make lump-sum contributions above the employer rate. Most recently, funds were borrowed from the Short Term Investment Pool (STIP) and applied towards the UAAL. In July 2014, $700 million was transferred and will be repaid by an employer assessment on eligible pay. Combined with previous borrowing, the University has contributed an additional $2.7 billion to date. This represents an improvement in current funded status of roughly 5 percent. At their November 2015 meeting, The Regents approved additional borrowing from STIP to fund the UAAL for campuses and medical centers: up to $563.6 million in FY 2015-16, $481 million in FY 2016-17 and $391.8 million in FY 2016-18.

Implementation of the UCRP 2016 Tier will reduce the UCRP Normal Cost over time as a greater share of the University's workforce is covered by the new Tier, allowing the same 14% employer contribution to provide a greater UAAL contribution (around 6%) on earnings up to the CCL for members in the UCRP 2016 Tier, as shown in the following table. The following chart assumes all Normal Cost savings are directed to the UAAL; however, new benefits were designed using the reductions in Normal Cost to provide a combination of contributions to the new

[15] Some represented employees are covered by an arrangement (called the Modified 2013 Tier) that provides benefits similar to the UCRP 1976 Tier, with a higher employee contribution, currently 9%.

plans and to the UAAL. The chart does not include the cost of the new benefits or choice between the designs[16] recommended by the Task Force.

Summary of Normal Cost and UAAL Contributions

Normal Cost (% of Pay)	1976 Tier(1)	2013 Tier(1)	Modified 2013 Tier(1)	2016 Tier (Up to CCL Only)(2)
1. Total Normal Cost	18.7%	16.0%	17.0%(3)	~15.0%
2. Employee Contributions	8.0%	7.0%	9.0%	7.0%
3. Employer Normal Cost (1. – 2.)	10.7%	9.0%	8.0%	~8.0%(4)
UAAL Contributions (% of Pay)				
4. Total Employer Contribution Rate to UCRP	14.0%	14.0%	14.0%	14.0%
5. Employer Normal Cost (= 3.)	10.7%	9.0%	8.0%	~8.0%
6. UAAL Contribution (4. – 5.)	3.3%	5.0%	6.0%	~6.0%

1. **These results are from the July 1, 2015 UCRP Actuarial Valuation and are based on the actual members in those Tiers.**
2. **These results are estimated based on the demographics of non-represented members currently in the UCRP 2013 Tier, assuming new benefits recommended by the Task Force apply equally to all future UC employees. (See V., Task Force Recommendations.)**
3. **Increase in Normal Cost due to adoption of the Modified 2013 Tier was around 3% of pay for UCRP Modified 2013 Tier members. An increase in the member rate was negotiated for not only UCRP Modified 2013 Tier members but also UCRP 1976 Tier members in the same bargaining units. This was so that UCRP's projected funded status at the time of adoption would be approximately the same both before and after the change.**
4. **Excludes the cost of initial choice and prospective second choice, as discussed later. (See Appendix G., Cost of Choice)**

In summary, UCRP's Normal Cost is funded by a combination of University and employee contributions. With University contributions held constant at 14%, the difference between Normal Cost and 14% currently is used to pay down the unfunded liability – a UAAL contribution that varies by tier as shown in line 6 of the chart.

[16] Described in III., New Benefit Designs and Appendix G., Cost of Choice.

Finally, in evaluating any new design options, and possibilities for "savings" to be produced by less expensive plan designs, it is important to understand that any savings represent benefits cuts; there are no inefficiencies in the current plan, and therefore no savings to be generated by reducing inefficiencies. The only way to save money is to reduce benefits, which has a direct impact on employees' total remuneration. There are two uses for savings generated by reducing Normal Cost. First, contributions beyond the amount needed to cover Normal Cost can be used to reduce the UAAL for the plan, as is currently the case. Alternatively, the employer contribution might be reduced from 14%: e.g. for all pay, for pay above the CCL, etc.). This would be a reduced budgetary cost in the current year, but it also has an opportunity cost: any savings not contributed to the plan represents available funding that was not invested and therefore could not earn an assumed 7.25%[17] per year. In the following year, the unfunded portion of the liability will have grown by each dollar that was not contributed in the current year, plus 7.25%. This is a form of "borrowing" at 7.25%, since the required repayment to UCRP in future years would be the original amount, plus the assumed 7.25% earnings. This sets a high bar for generating cash savings by choosing not to pay down the UAAL – the funds should be used in a way that justifies that interest cost. Since over two-thirds of the savings would accrue to non-state funding sources (for instance, funding agencies for contracts and grants, hospitals and auxiliaries), the tradeoff between reducing current spending or reducing the UAAL as much as is feasible was a difficult issue for the Task Force.

g. External Perspectives

In addition to the original charge from the President at the first meeting, there were several Task Force presentations and discussions of internal and external perspectives. Nathan Brostrom, the University's Chief Financial Officer (CFO), updated the group on discussions with State representatives and the Governor relative to budget issues. Arthur Guimaraes, Associate Chief Investment Officer, Office of the Chief Investment Officer for the University; Bernie Jones, Deputy Chief

[17] Actuarially assumed UCRP earnings rate as of 2015/2016.

of Staff, President's Office and Vera Potapenko, Chief Human Resources and Diversity Officer for Lawrence Berkeley National Laboratory also provided background. The group had a conversation about retirement planning and pension reform with Marty Morgenstern, a long-time labor relations expert and a current member of the Covered California Board. TIAA-CREF representatives and Fidelity executives gave presentations on investment trends and new opportunities in the field. Generally, individuals external and internal to the University helped inform discussions, along with the update process engaged in by Task Force Members (see VI., Stakeholder Briefing).

h. Cost Structure and Budget Constraints

As the Task Force began considering designs, one working assumption was the continuation of employer contributions at 14% and employee contributions at 7% for those eligible for UCRP on/after July 1, 2016. (These are the same amounts currently contributed for policy-covered staff[18] in the UCRP 2013 Tier.)

The new limit on eligible pay in the UCRP 2016 Tier will lower costs in two ways:

- The University will not make a 14% contribution on eligible pay above the CCL since no defined-benefit pension will be paid based on that pay, (This contribution previously consisted of approximately 9% towards Normal Cost and 5% towards the UAAL.)

- There will be a lower Normal Cost (the amount needed to fund the cost of future pension benefits allocated to the current year of service for active plan members). The reduced Normal Cost represents approximately 1% of eligible pay up to the CCL and 9% above the CCL due to elimination of Normal Cost above that limit.

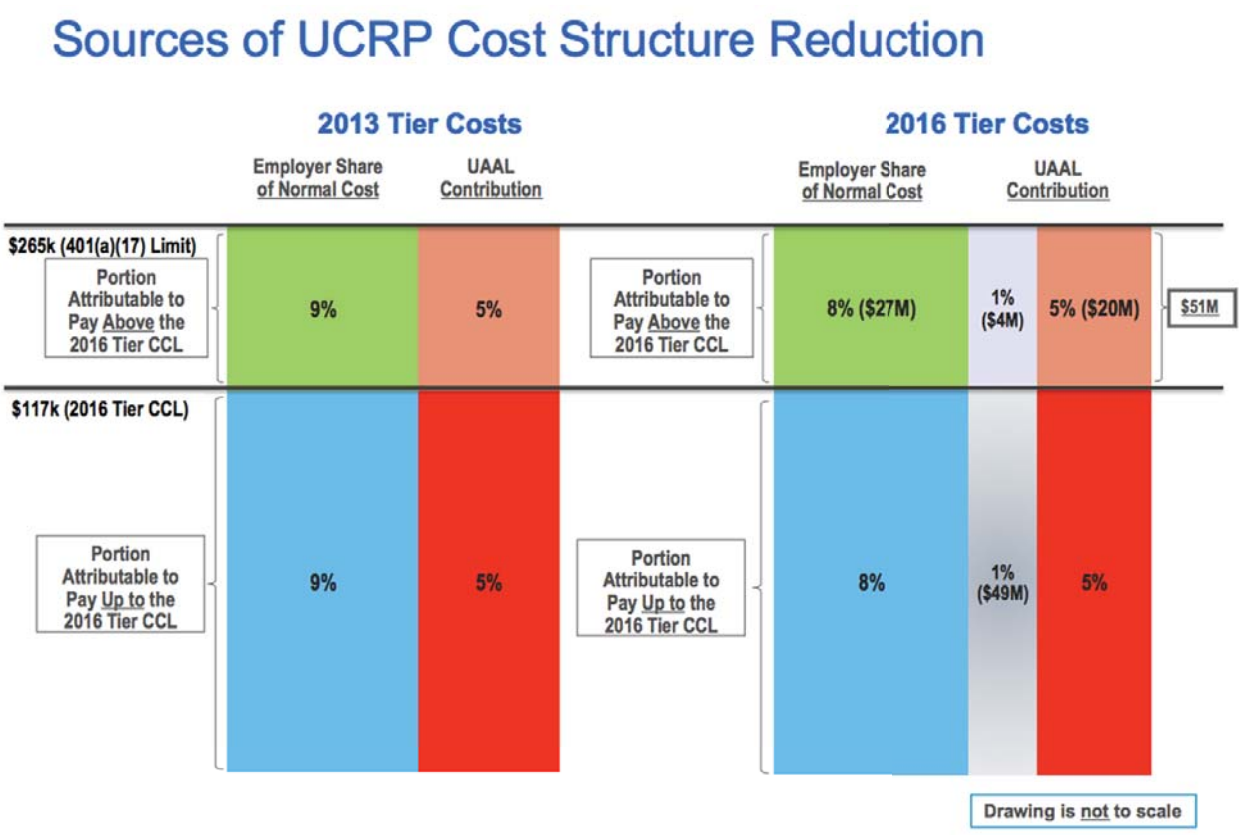
The Task Force noted, as already indicated, that any savings are the result of reductions in benefits. As every analysis presented to the Task Force showed, the percentage of income replaced in retirement can be equalized between the UCRP

[18] Employees not represented by a collective bargaining unit.

2013 and 2016 Tiers only by increased spending on supplemental benefits for members in the UCRP 2016 Tier. Without increased spending, these future employees will be worse off. The Task Force was charged with creating new supplemental benefits designs in the form of DC plans, a less effective design for providing pensions than the DB design of the UCRP 2013 Tier. The Task Force believes, even with the new designs described in Section III, the lesser benefits for employees hired on/after July 1, 2016 will create significant recruitment problems for the University, impacting the ability to attract quality employees. Given this benefit reduction, some other form of compensation should be substituted.

The chart that follows provides a visual representation of how the UCRP cost structure is lowered, based on fifteen-year average dollar amounts. On the left, the employer contributions to the UCRP 2013 Tier are approximately 9% of eligible pay for the employer's share of Normal Cost, taking into account the 7% contributed by employees and the approximately 16% Normal Cost[19] for this Tier. This means that the employer contributes approximately 5% of eligible pay toward reducing the UAAL for UCRP 2013 members. The chart distinguishes between the portions of eligible pay below and above the CCL to facilitate comparison to the UCRP 2016 Tier.

[19] The Normal Cost for the UCRP 2013 Tier is 16%; the 18% Normal Cost shown on p. 18 is a blended figure for UCRP 1976 and 2013 Tiers.



Dollar amounts based on 15-year average annual dollar amounts.
In practice, these percentages and amounts may project out differently due to a variety of reasons.

Employer costs associated with the UCRP 2016 Tier are represented on the right side of the chart[20]. The 1% reduction in Normal Cost below the CCL is reflected by the addition of the gray bar. This amount represents 1% of eligible pay up to the CCL as noted earlier, or around $49M annually, averaged over 15 years. This amount is available in addition to the 5% already used to pay down the UAAL. Above the CCL, employer contributions can be reduced by the same 1% shown in gray, plus the entire 8% that remains, which would have been required for Normal Cost under the UCRP 2013 Tier.

The higher contributions to UAAL below the CCL – an additional 1% of eligible pay up to the CCL – make it possible to forego contributing the 5% in orange, in the

[20] These calculations assume that all employees hired on/after July 1, 2016 are in the UCRP 2016 Tier plus the recommended design for a supplemental benefit. See V., Task Force Recommendations.

upper right, averaging $20M. The entire 14% University contribution not paid on compensation above the CCL (averaging $51M annually) would therefore allow a reduction in cash outlays for the UCRP 2016 Tier, with some to remain as savings and some to be spent providing a supplemental benefit. In contrast, the lower Normal Cost below the CCL would not represent a reduction in cash outlays, as long as the employer contribution remains at 14%, but it would allow for more contributions to go towards the UAAL. If it is felt that additional cash savings must be generated, reducing the UAAL contributions on eligible pay below the CCL could achieve this. If it is felt that more of the savings should go toward funding the UAAL, there could be a continuation of the total 14% employer contributions above the CCL, with some going to fund DC plans and the remainder available for paying down the UAAL.

The projected cost savings are based on two main factors: first, the UCRP 2016 Tier costs less; second, holding the size of the workforce constant, the University will spend less on benefits as more employees are covered by the lower-cost UCRP 2016 Tier and DC plans over time. To gauge the longer-run effects, a 15-year average cost figure is used; the savings will be small in the early years because relatively few people will be covered by the new options. The 15-year average annual dollar amounts shown in the chart have not been discounted for inflation or interest and assume that the UCRP 2016 Tier will cover all new hires after July 1, 2016. To summarize, the chart reflects:

- $51M cash flow reduction on annual University contributions on pay above the 2016 CCL: $27M plus $4M per year on Normal Cost, and $20M per year on UAAL (all three top colored bars above the CCL, green plus upper grey and light red).

- $80M total Normal Cost reduction: $27M plus $4M per year employer Normal Cost contributions above the 2016 CCL, and $49M per year on UAAL contribution up to the 2016 CCL (green plus two grey bars).

(Note that these two savings measures are not additive as the Normal Cost savings above the 2016 CCL are included in both.)

After the Task Force began its work, the University's CFO suggested that, to continue paying down the unfunded liability and to demonstrate the University's commitment to further reductions, the University should direct ⅔ to ¾ of the costs savings to the UAAL, with the remaining ¼ to ⅓ to be used to fund a supplemental DC option for those affected by the 2016 CCL.

Based on the amounts in the chart above, ¼ to ⅓ of the Normal Cost reduction of $80 million would give a suggested target cost for the supplemental benefit of $20-$27M per year. This would fall well short of the amount needed to provide the recommended supplemental benefit to all employees affected by the CCL; as is demonstrated later, the recommended supplement itself also falls short of reproducing the pension benefits from the UCRP 2013 Tier. Perhaps in recognition of these facts, the CFO also suggested offering the supplemental benefits only to faculty; non-faculty employees would receive pensions based only on the UCRP 2016 Tier with the CCL (see III.c, Faculty and Staff Eligibility). However, a majority of the Task Force did not support separating employees who are affected by the CCL. There are many non-faculty employees who are critically important to the academic mission and those whose duties are primarily non-academic also play critical roles in fulfilling the University's mission. The majority felt that the concerns over providing competitive benefits extend to all employee groups affected by the CCL.

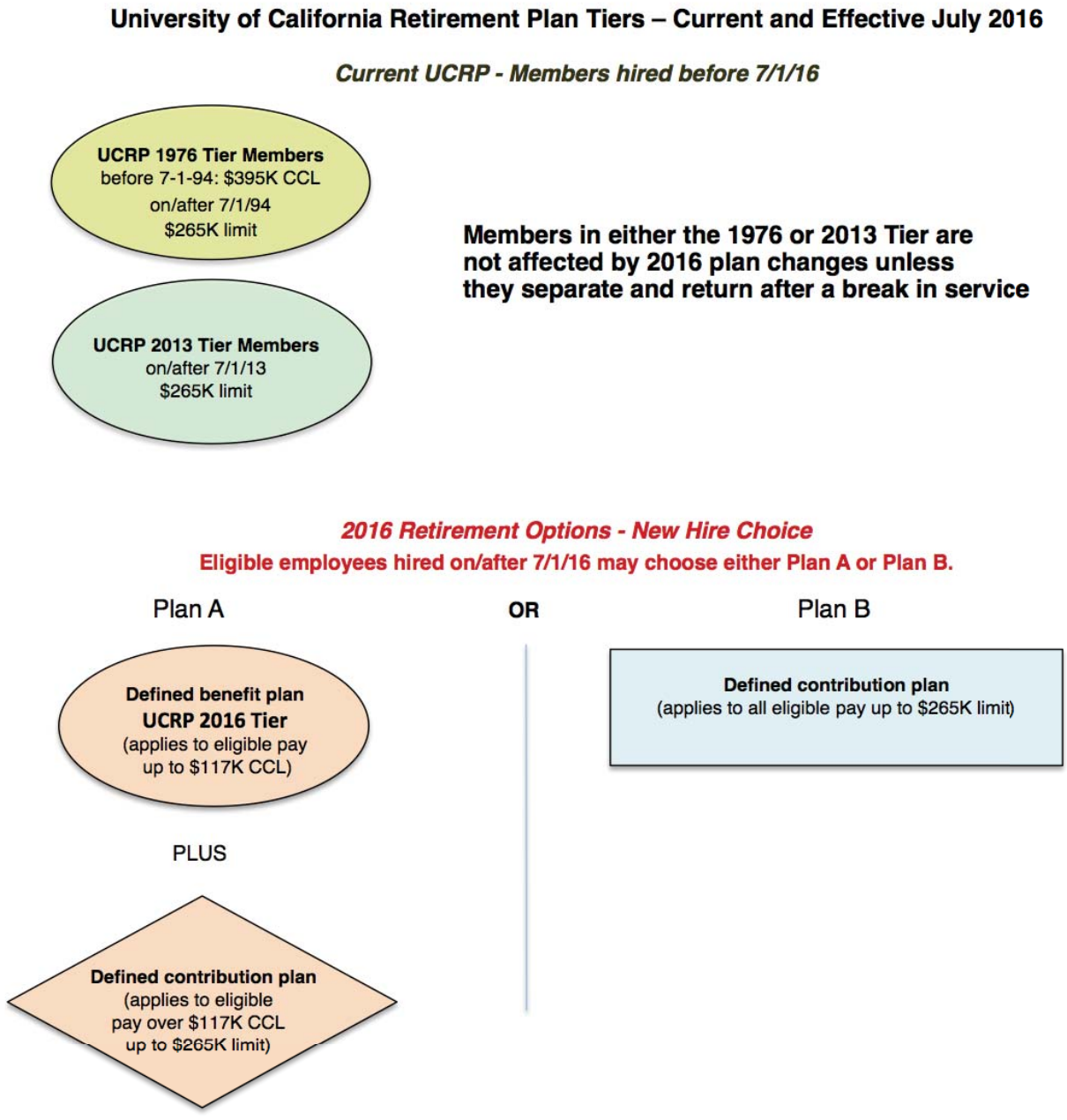
The Task Force carefully reviewed many alternatives for reducing costs, considering both long- and short-term factors, keeping in mind the intent of the University and State budget agreement. Key policy decisions revolved around the reduction in UCRP cost structure – first, how much should be spent on any supplemental plan? Concerning the rest of the reduction, should it be used to increase the UAAL contribution (with no change in employer contributions), accelerating the pay down of the long-term unfunded liability? Should it instead be used to reduce the University's annual contribution rate, creating current year cash flow that would

accrue to the funding source? As noted earlier, Task Force members pointed out that reducing the University's annual contribution rate to UCRP to generate additional cash flow savings or additional cash for new benefits actually borrows from UCRP at an implied interest rate of 7.25%, potentially undermining the University's efforts over the past several years to reduce the UAAL. UAAL was a major consideration for the Task Force and they reviewed a wide range of options for reducing the liability over time – trying to maintain a difficult balance between guidelines for continued fiscal sustainability and competitive benefits. This balance was complicated by uncertainty about the level of need to demonstrate reduced cash outlays.

The design options recommended by the Task Force exceed the CFO's target for spending on supplemental benefits; however, the Task Force believes that offering more competitive benefits designs better supports recruitment and retention of quality employees and sustains University excellence over the long term. The University should not risk hiring less talented employees to achieve a greater degree of savings by offering less competitive benefits.

III. NEW BENEFIT DESIGNS

The following chart shows the current UCRP Tiers, plus the framework for exploring new designs. The Task Force considered alternatives for a supplement to the UCRP 2016 Tier and for a stand-alone DC plan. They looked at each set of alternatives separately and then considered them in the context of choice between plans.



a. Pension Value and Income Replacement

Generally, a DC design produces more value early in a career, due to the effect of compound interest over time, while a DB design produces more value later in a career, based on both accumulated service credit and on salary growth that raises the value of all past service (Since a UCRP pension is based on the average of the highest three years of salary, each year of service is worth more when salary increases.) To some extent, the attribution of value from a DB plan to any particular year involves some assumptions, and varies according to actuarial methods used. A DC plan, on the other hand, is easy to value and compare to other plans because it is based solely on the employer contribution in any single year. In its deliberations, the Task Force focused on employer costs, but also used a simple measure of value for pensions: the percentage of income replaced in retirement. Financial planners, such as those with Fidelity and TIAA-CREF, suggest that at least 80% of income should be replaced in retirement; a greater percentage may be more appropriate, depending on the extent to which the pension is protected from inflation, as well as an individual's other resources, health-care coverage, and more.

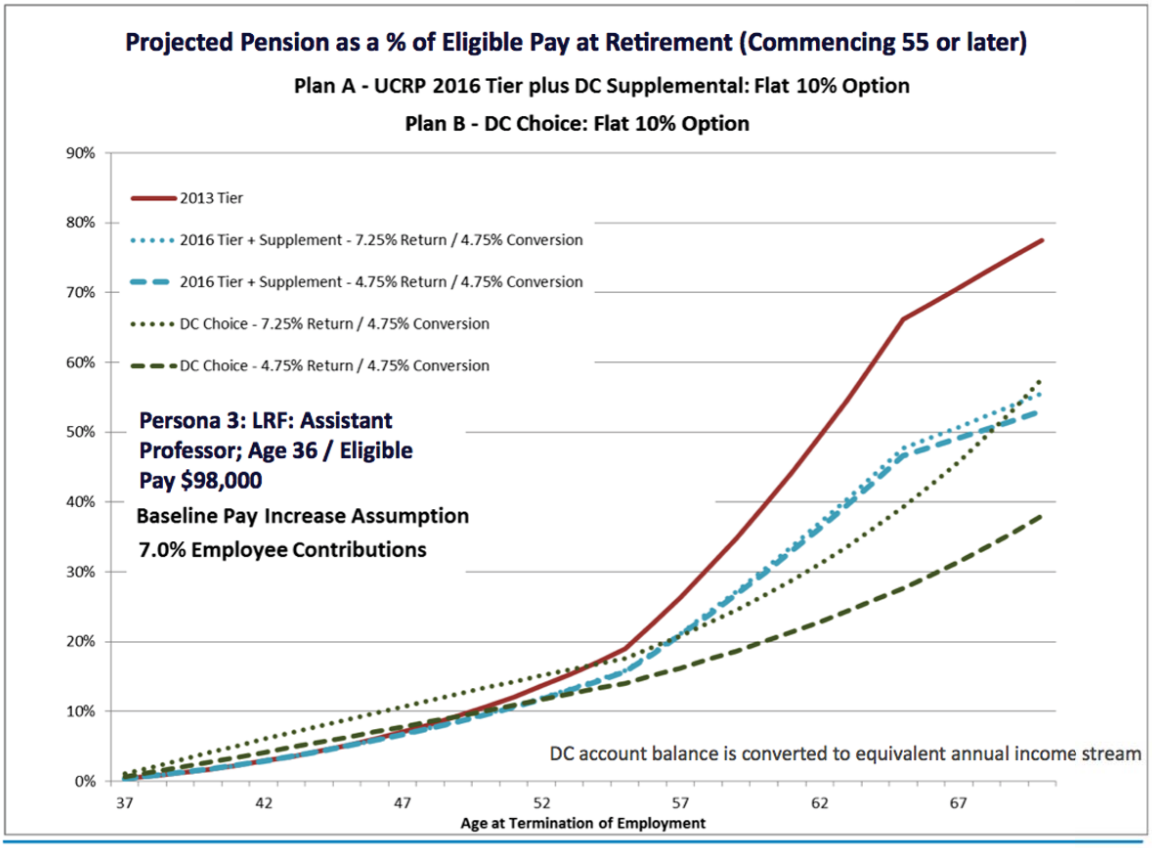
Consultants to the Task Force provided projected pensions, expressed as the percentage of the final-year salary, for various personas, each of these based on the average age at hire and average salary, for the employee groups shown in the table in Appendix F.7., Projected Pension Income for Personas.

(Note that these models and all other models done by the consultants are based on the campus and medical center segments of UCRP; the Lawrence Berkeley Laboratory segment is not included in any population, UAAL, or plan design modeling.)

The chart below displays the percentage of income replaced (on the vertical axis) to show the value of the UCRP 2013 Tier versus a DC plan[21] at various ages. The horizontal axis shows the retirement age; as one would expect, a greater percentage of income is replaced at later retirement ages. For individuals hired in their twenties or thirties, the DC plan may be more valuable, assuming they do not intend

[21] With annual employer contributions of 10% of pay and employee contributions of 7% of pay.

to remain with the employer until retirement, but around age 50, the comparative value of the UCRP 2016 Tier tends to be greater[22]. This chart also includes the UCRP 2016 Tier plus DC Supplemental benefits (based on 10% employer contributions above CCL up to $265K in 2016[23]), demonstrating how that compares against the UCRP 2013 Tier and a 10% DC plan. Similarly, the DC plan is expected to be more valuable at early years, until around age 52 and age 57 (based on 4.75% and 7.25% investment return scenarios respectively). For purposes of this comparison, value is expressed as the annual income provided by each plan as a percentage of eligible pay at retirement. The value shown at each age reflects the benefit earned assuming the employee terminated employment at that age and began receiving payments from the plan at age 55 (or age at termination for ages later than 55).



[22] See Appendix E for a description of assumptions used in making this comparison.

[23] Plan A, see V. Task Force Recommendations.

The red line shows that the projected income replacement for this persona, using data described in greater detail in Appendix F-7, would be approximately 66.1% under the UCRP 2013 Tier at age 65. The cap would cause this replacement percentage to fall to approximately 41.3% at age 65, under the UCRP 2016 Tier; the gap between the two replacement percentages is reduced when a supplemental DC benefit is included. The chart shows the effects of such a supplement, for two assumed rates of return. If the DC Supplemental Plan were to earn 7.25%, matching the assumed earnings for UCRP investments, this persona would replace approximately 47.8% of income (UCRP 2016 Tier plus DC Supplemental) when retiring at age 65; lower returns of course mean reduced income replacement: if the supplemental DC plan earned only 4.75%, this persona would replace approximately 46.6% of income (UCRP 2016 Tier plus DC Supplemental) when retiring at age 65. The percentage of income replaced by DC Supplemental benefits (at different investment returns) varies depending on the age at which eligible pay exceeds the CCL and salary growth.

The chart also shows projected income replacement for a stand-alone DC plan (based on 10% employer contributions on eligible pay up to $265K in 2016[24]), using the same two rates of return. A DC alternative replaces approximately 39.2% of income at age 65 if it earns 7.25% investment return every year, and approximately 27.7% if it earns 4.75%. Thus, the DC alternative falls around 8.6% and 18.9% short of either Plan A outcome based on 7.25% and 4.75% return respectively. While the projected income replacement for Plan B is expected to be lower than Plan A at age 65, Plan B offers portability, and provides a higher income replacement at early termination age and late retirement ages (at around ages 70 and 79 for 7.25% and 4.75% returns respectively). The two Plan A outcomes differ little at age 65.

These general patterns indicate that a DB plan can bring substantial benefits to the employer, by retaining employees during their 40s and 50s, while the portability of a DC plan has the opposite effect. Similarly, a DB plan encourages retirement near a

[24] Plan B, see V., Task Force Recommendations.

targeted age, i.e., the slope of the DB (UCRP 2013 Tier and 2016 Tier) lines reduces as the value of the benefit grows more slowly with the employee's age beyond the point at which they attain the maximum age factor; there is no such tendency in a DC plan. As a result, the value of the DC plan benefits begin to climb, relative to the UCRP 2016 Tier plus a DC Supplemental Plan, after age 65 and, in some scenarios, may surpass that plan's value.

Modeling the difference between the UCRP 2013 Tier and the UCRP 2016 Tier shows the effect of the CCL on various illustrative Personas[25], given different ages at hire, beginning eligible pay and growth in eligible pay.

The following table summarizes the reduction in UCRP retirement income replacement due to imposition of the UCRP 2016 Tier CCL at sample retirement ages (age 65 and age 70), before the addition of any supplemental DC benefit. The figure shown is the amount (expressed as a percentage of eligible pay at retirement) by which retirement income under the UCRP 2016 Tier is reduced from what would have been provided under the UCRP 2013 Tier, based on the average age and eligible pay at hire for each illustrative Persona.

[25] Personas are illustrative profiles from recent new hires, which are grouped based on similar employment characteristics (such as job titles, location and represented status). Average demographic information for each selected illustrative profile was used for modeling different DC supplemental designs. (See Appendix F.5, Comparison Data and Personas Methodology, Personas.)

Summary of Difference between 2013 Tier and 2016 Tier UCRP Benefits (before supplemental DC benefit)

Illustrative Persona	Average Age at Hire	Average Eligible Pay at Hire ($)	Reduction in Income Replacement	
			Age 65	Age 70
1. LRF: Full Professor	51	184,000	17%	22%
2. LRF: Associate Professor	42	115,000	22%	29%
3. LRF: Assistant Professor	36	98,000	25%	34%
4. Non-LRF Faculty	39	61,000	0%	2%
5. UC Health: Non-represented	40	93,000	7%	10%
6. Management & Executives	43	126,000	17%	22%
7. Staff: Non-represented	34	55,000	0%	0%
8. UC Health Nurses: Represented	35	113,000	21%	26%
9. HS: Assistant Professor	36	98,000	25%	34%
10. HS: Full Professor	53	154,000	12%	19%
11. HS: Associate Professor	42	124,000	24%	32%
12. Staff: Represented	32	42,000	0%	0%
13. UC Health: Represented (Excluding Nurses)	33	65,000	0%	0%

(See F.7., Projected Pension Income for Selected Personas for benefit estimates under the UCRP 2013 and 2016 Tiers and each design recommended by the Task Force.)

For example, using Persona 3, for a Ladder Rank Faculty Assistant Professor who enters UCRP at age 36 with eligible pay of $98,000 at hire and retires at age 65 with 29 years of service, the reduction in retirement income replacement is determined as follows:

a. Retirement income replacement under the UCRP 2013 Tier is projected to be approximately 66% of eligible pay at retirement;

b. Retirement income replacement under the UCRP 2016 Tier with the CCL is projected to be approximately 41% of eligible pay at retirement;

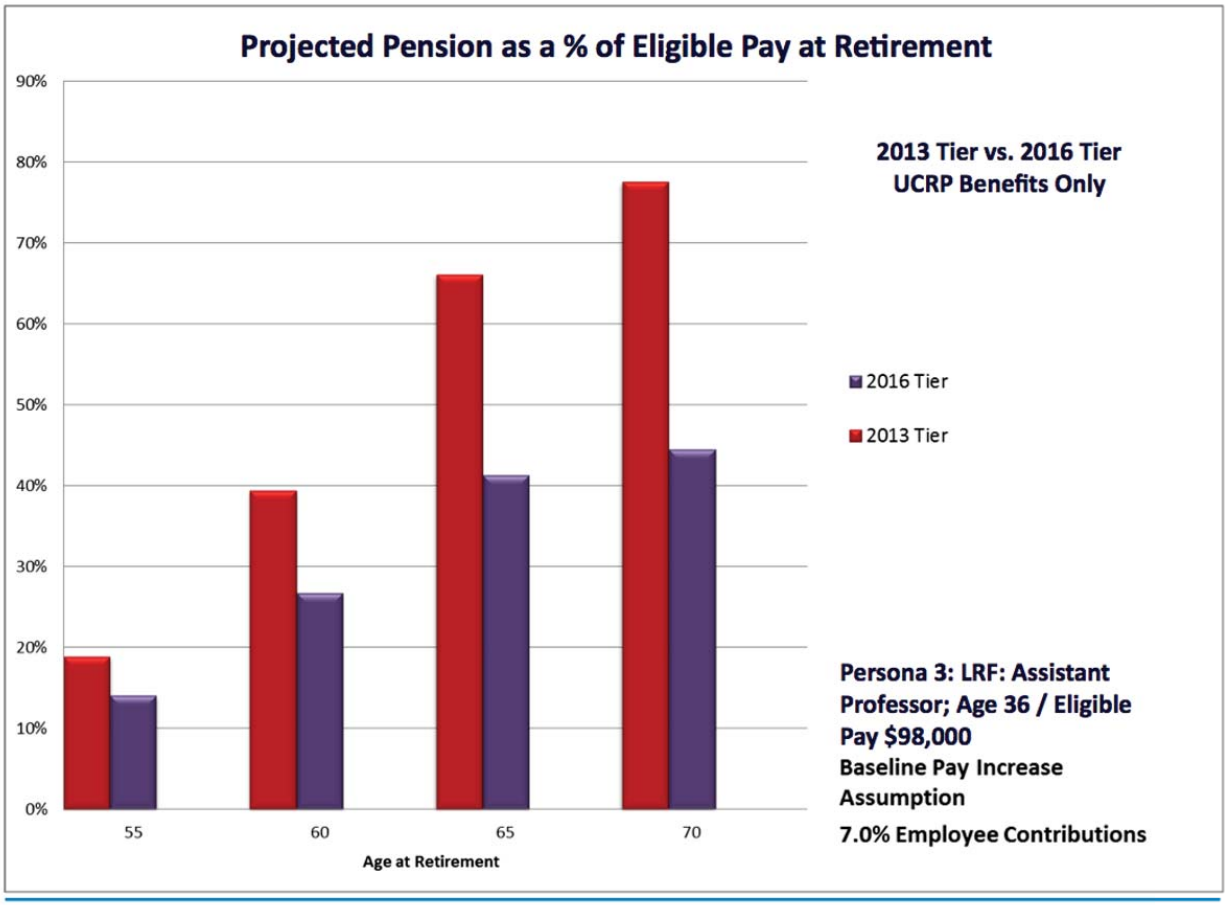
c. Reduction in the percent of retirement income replacement is 25%

(i.e., c = a – b, the difference between 66% and 41%).

This 25% gap is based on the average starting salary, salary growth and career length data for Persona 3, Ladder Rank Faculty Assistant Professor. The gap for other Personas ranges from 0% to 22% at age 65, with similar results at age 70. The

actual gap for an individual would depend on that person's age at retirement, service and eligible pay.

The following chart illustrates the difference in retirement income replacement between the UCRP 2013 Tier and the UCRP 2016 Tier before the addition of any DC supplemental benefits for Persona 3 at different retirement ages.



The red bars show the percent of retirement income under the UCRP 2013 Tier for various retirement ages; the purple bars are the percent of retirement income under the UCRP 2016 Tier. The difference between the two represents the effect of the 2016 CCL on Persona 3 for each retirement age.

The Task Force is recommending new benefits designs to address the benefit difference for employees affected by the CCL. The analyses of the alternatives in

III.g., Income Replacement Comparisons, show to what extent each option closes this gap for Persona 3.

b. Considerations

A complex set of questions formed the background for the Task Force's deliberations and modeling of options. Maintaining a balance between using reductions in cash flow cost and Normal Cost to reduce the UCRP UAAL and offering a supplemental DC option was a critical problem, as was the definition of cost reduction and its components as current or long-term.

The President's charge indicated "competitiveness" as one of the major goals of the new benefits designs and it was a priority for the Task Force. The recent study on faculty total remuneration found that faculty total remuneration was 10% below market. The UCRP 2013 Tier retirement plan values in isolation were slightly below market (-2%). It is important to note that the study found that salaries were 12% below market, thus impacting the retirement value position, while the plan design itself was better than market. No total remuneration analysis has been performed for the new plan design proposals.

To understand the impact on competitiveness, the Task Force reviewed the proposed plan designs against the Comp 26[26], not taking into account any salary differences. It found that the proposed plan designs exceeded the market median for the Comp 26 when looking at the benefits delivered under two scenarios: benefits delivered at age 65 and benefits delivered after ten years of service. The availability of choice also helps improve competiveness as it allows a potential new hire to evaluate future retirement benefits with different career perspectives in mind. For example, despite the reduction in CCL under the UCRP 2016 Tier, the addition of the proposed DC Choice Plan will actually improve the University's relative position for some Personas – particularly when considering benefits

[26] The California Postsecondary Education Commission (CPEC) established the list of the Comparison 26 Universities as a reasonable mix of public and private institutions with whom the University competes for talent.

delivered after ten years of service. (See Appendix F.,8, Comparison Data and Personas Methodology, Percentile Ranking by Personas.)

The Task Force considered competitiveness in the context of total remuneration for various segments of the workforce. Different segments of the workforce operate in different competitive marketplaces, so national laboratory employees, medical center employees, academic employees, and non-academic employees might have distinct interests or employment patterns. The University competes with a variety of institutions or businesses for these segments of its workforce, each of which might offer different sorts of retirement options, and it is crucial that it be competitive in each area, especially in the academic marketplace.

If different University groups have different comparators, should the same plan design and/or contribution levels apply for all work segments? Is retention more important for some segments? University Health and Lawrence Berkeley National Laboratory representatives noted that their market competitors are not the same as academic competitors, nor are the career patterns the same for some segments of their workforce; they tend to have more short-term and early or late career hires for which the choice of a DC option might be more appropriate.

The cost impact of offering the choice of a DC option or the UCRP 2016 Tier also was modeled. Currently, UCRP members who terminate before vesting at five years forfeit the University contributions, leaving them in the plan. Future new hires electing the stand-alone DC design and leaving before five years have a portable benefit and could take the University contributions in addition to their own contributions as a lump sum withdrawal, depending on the vesting requirements.

Revocability of choice was a key question. Should eligible faculty and policy-covered employees (including rehires) be allowed a subsequent opportunity to choose between the UCRP 2016 Tier and any new DC benefits? Building revocability into the new options constrains the plan design since the Internal Revenue Code (IRC) requires employee contributions to be mandatory in both

options, and the employee contribution amounts and eligible pay would need to be the same in both options at the time the employee makes the subsequent choice.

In modeling designs, assumptions included numbers of new hires choosing an option, turnover and forfeitures, and the effect of choice on UCRP cost.

Employer and employee contributions to the DC benefit designs were modeled for flat amounts, as well as amounts based on age/service or salary. The Task Force also discussed whether employee contributions should be elective (variable) or a mandatory fixed amount.

c. Faculty and Staff Eligibility

Assigned the task of designing plans that would allow the University to compete with peer institutions for the best faculty and staff, the Task Force was asked to consider, and discussed at length, whether all employees[27] should be eligible for all plans or whether distinctions should be made between "faculty" and "staff." In considering whether all employees should be eligible for a supplemental plan, the Task Force noted that 75% of University employees would not be expected to be eligible for the plan in any case since their retirement income would not be expected to exceed the CCL. The question, then, was whether it was appropriate, or possible, to differentiate among employees in the approximately 25% of the workforce expected to exceed the CCL in future years.

A small minority (two Task Force members) felt that staff should be excluded from the supplemental plan because the employers with whom the University competes to recruit and retain them generally do not offer comparable DB plans and supplemental DC plans, and because these employees often change jobs frequently and appear to value compensation over retirement benefits. The potential for political fallout if the University were perceived to be providing a supplemental DC plan to every employee also concerned them.

[27] Subject to collective bargaining.

The large majority of the Task Force felt that, as a matter of principle, all University employees should be treated equally in these retirement options. Beyond this question of principle, however, the Task Force concluded that it was difficult to define "faculty" in this context, as opposed to other equally important academic positions. Adequately defining and differentiating various "faculty" and "academic" titles and positions would be complex, contentious, and difficult to accomplish and implement in the short time period available. (See Appendix D, Faculty Definition for the current definition.)

The faculty titles included by the consultants in their models include a variety of positions besides professors, such as Coordinator of Field Work and Supervisor of Physical Education but they exclude numerous Academic Personnel titles that are held by important academic employees who are not faculty, such as Professional Researcher, Project Scientist, Specialist, Astronomer, Agronomist, Academic Coordinator, Academic Administrator, and Librarian. Many of these academic employees have credentials and careers that are comparable to professors and they are central to the research and teaching missions of the University. Limiting "faculty" to Academic Senate members (or ladder-rank faculty) would exclude certain "faculty" appointees, such as Health Sciences Clinical Professor, Adjunct Professor, and Professor in Residence. Many "faculty" are Unit 18 Lecturers in a represented unit and thus are not included in these considerations. Furthermore, some key senior staff crucial to academic programs do not hold Academic Personnel titles. These tend to be long-term, career employees whose expertise and institutional knowledge are of great value to the University. All of these issues complicate any discussion of limiting benefits to "faculty."

After considering how best to support the academic mission of the University of California and to ensure that we will be able to compete with peer institutions for the core academic employees central to the excellence of the University, the Task Force nearly unanimously recommended that the supplemental DC plan be available to all University employees. Insofar as political considerations are a factor, the Task Force nearly unanimously believes that it should be possible to explain that 75% of

University employees are expected to retire with salaries below the PEPRA cap, and of the 25% of employees that can be expected to have higher incomes, a significant percentage are expected to select the stand-alone DC choice option. Maintaining eligibility for the supplemental plan for a relatively small percentage of long-term University employees central to the academic mission for whom we compete in the academic marketplace can be explained and justified in the same way that we justify salaries for academic employees that are higher than some state employees. It also will encourage more essential employees to join UCRP, which will make UCRP more financially sustainable and encourage employee loyalty and retention.

d. Choice at Hire

The Task Force supported creation of two new DC plans, one as a supplement to the UCRP 2016 Tier, covering pay above the CCL up to the IRC limit and the other as an alternative, stand-alone DC plan covering all pay up to the IRC limit. Upon first becoming eligible, employees would be offered a choice between the two plans. The UCRP 2016 Tier plus a DC supplement might better serve those planning a University career or anticipating a longer employment period, while an alternative DC plan might provide a more competitive benefit to employees hired only for a fixed term or who may not expect to spend their career at the University.

The next sections describe Task Force discussions around designs for each alternative, with charts comparing the recommended designs to the UCRP 2013 Tier following the discussions.

e. Plan A: DC Supplemental Plan Design

The Task Force reviewed flat percent of pay contributions ranging from 3% to 10% of pay above the UCRP 2016 Tier CCL for employees. It also considered combinations that provided different contributions for faculty and non-faculty[28] and options that started contributions once an employee reaches 75%, 80% or 90% of the UCRP 2016 Tier CCL.

[28] See III.c., Faculty and Staff Eligibility.

A plan that began contributions below 100% of CCL would increase the period of time in which earnings compound, but would be very complex to administer and, based on modeling, would not provide any significant change in retirement benefits. It also provides a benefit to some employees who will never exceed the CCL.

Graded designs that provided one contribution amount upon hire and a higher contribution amount after a specific number of years' service were explored. While the graded design delivers more benefits to longer career employees, it was recognized as complicated to communicate and implement. Members also thought that the relatively small reward for lengthier service would have little impact on retention. This option also provides lesser value for younger, shorter-term employees. (See Appendix F.,6, Comparison Data and Personas Methodology, Personas Modeling.)

The estimated costs of the DC Supplemental Plan designs are shown in the table below. These costs assume all new hires choose Plan A. As discussed in III.c., Faculty and Staff Eligibility, the titles used for "faculty" to develop this model and subsequent models are a broader group than ladder-rank faculty alone. Generally, creating a new definition of faculty or academic employees for the purposes of these new benefits would be very complex and time-consuming.

Summary of DC Supplemental Design Options - All

DC Supplement Option (5-year vesting)	15-year Average Annual Dollar Cost* ($ Millions)			15-year Average % of Pay Above 2016 Tier CCL*	Long-term Projected % of Pay Above 2016 Tier CCL*
	Faculty Only	Non-Faculty	Total		
1. Flat 8% Option – 8% of pay above 2016 Tier CCL	$6	$20	$26	7.1%	7.6%
2. Combination Option (10%/6%) – 10% for Faculty / 6% for Non-Faculty of pay above 2016 Tier CCL	$8	$15	$23	6.2%	6.7%
3. Flat 10% Option – 10% of pay above the 2016 Tier CCL	$8	$24	$32	8.8%	9.4%
Available funding based on CFO Guidelines: 1/4 to 1/3 of total normal cost savings	$20-$27			5.5%-7.4%	4.4%-5.9%

***Reflects impact of forfeitures: approximately 12% reduction in 15-year average cost and 6% reduction in long-term cost. Note that the long-run cost is higher because more new hires are projected to have compensation above the CCL the farther out projections are made.**

DC Supplemental Plan designs apply to pay over the CCL up to the Internal Revenue Code (IRC) §401(a)(17) limit ($265,000 in 2016), with benefits below the CCL provided by the UCRP 2016 Tier.

A flat 8% of pay above the UCRP 2016 Tier is within the target cost suggested by the CFO. A similar annual cost also can be achieved with a 10% contribution for faculty (considered competitive in the academic market) and 6% for non-faculty (close to median for non-faculty market in most cases). The Task Force considered 8% for faculty to be generally non-competitive, though some felt it would generate more savings, and they did not support differentiating between faculty and non-faculty. The Task Force felt a flat 10% contribution was the least uncompetitive for faculty. While it does not achieve all of annual savings requested by the CFO, it does create some cost reductions because the 10% DC Supplemental Plan contribution above the CCL is still less than the full 14% that was paid above the CCL under the UCRP 2013 Tier. The savings are based on reducing the UAAL contribution since the

design assumes no UAAL contributions for UCRP 2016 Tier members on pay above the CCL (see Section III.l, Impact on UCRP Funded Status/UAAL.

f. Plan B: DC Choice Plan Design

Consultants modeled various designs that, for comparison purposes, were close to the cost of designs for the UCRP 2016 Tier plus DC Supplemental Plan.

Three flat contribution levels with a one-year vesting requirement are shown: two with either 8% or 10% of all pay up to the IRC limit and one with 8% of pay up to the CCL and 10% of pay between the CCL and the IRC limit. This last design more closely parallels the contributions under Plan A to the UCRP 2016 Tier plus DC Supplemental Plan (8% employer Normal Cost for the UCRP 2016 Tier and 10% for the Supplemental Plan). It was noted that DC plans of comparators are more in the 9% - 10% range. Finally, a graded option with 6% for the first 5 years, 8% for the next and 10% thereafter, with the same one-year vesting requirement, was discussed. This design might support retention but is more complex to administer.

The costs of these DC Choice Plan (Plan B) designs are shown in the table below. These costs assume all new hires choose Plan B and are before any UAAL contribution. The Plan A (UCRP 2016 Tier plus DC Supplemental Plan) costs shown at the bottom of the slide are for comparison purposes and assume that all new hires choose Plan A. (See Appendix G. the cost impact of choice and second choice.)

Summary of DC Choice Design Options – 1-Year Vesting
Excludes UAAL Contribution

DC Choice Option (1-Year Vesting)	Vesting	15-year Average Annual Dollar Cost* ($ Millions)			15-year Average % of Pay up to IRC 401(a)(17)	Long-term Projected % of Pay up to IRC 401(a)(17)*	
		Faculty Only	Non-Faculty	Total			
Flat 8% Option – 8% of pay up to IRC 401(a)(17) Compensation Limit	1-year cliff	$58	$308	$366	7.8%	7.9%	Costs as if all participants elect DC Choice Option
Flat 10% Option – 10% of pay up to IRC 401(a)(17) Compensation Limit	1-year cliff	$73	$384	$457	9.8%	9.9%	
Flat 8%/10% Option – 8% of pay up to 2016 Tier CCL/10% above CCL up to IRC 401(a)(17) Compensation Limit	1-year cliff	$60	$313	$373	7.9%	8.1%	
Graded Option – 6%/8%/10% of pay up to IRC 401(a)(17) Compensation Limit	1-year cliff	$49	$263	$312	6.7%	8.1%	
Cost Comparison to 2016 Tier with DC Supplemental Benefits							
A. Potential Range of Costs for 2016 Tier DC Supplemental Benefits	5-year cliff	$20-$32			0.4%-0.7%	0.4%-0.8%	Costs as if all participants elect 2016 Tier plus DC Supplemental Option
B. 2016 Tier Employer DB Normal Cost	5-year cliff	$320			6.8%	6.1%	
C. Total 2016 Tier Employer Costs (DB + DC Supplemental) = A. + B.	5-year cliff	$335-$352#			7.2%-7.5%#	6.5%-6.9%	

Cost of combined program will be a blend of DC Choice and 2016 Tier + DC Supplemental costs

For comparison purposes, corresponding number based on 2013 Tier is 8.6%, with 15-year average annual dollar cost of $403 million.

Cost of combined program will be a blend of DC Choice and UCRP 2016 Tier + DC Supplemental Plan costs.

#For comparison purposes, corresponding number based on UCRP 2013 Tier is 8.6%, with 15 year average annual dollar cost of $403 million.

DC Choice designs apply to all eligible pay (see footnote 1, p. 4) up to the IRC limit.

Most of the Task Force favored a flat 10% contribution on all pay up to the IRC limit as being closer to the range of competitive plans. However, this plan is more expensive than the current employer Normal Cost for the UCRP 2013 Tier benefits (15-year average employer Normal Cost of approximately 8.6% of pay up to the IRC limit). As discussed in III.l, Impact on UCRP Funded Status/UAAL, the 10% DC plan will not result in an increased cash flow cost only because the UAAL contribution would be reduced so as to keep the total cost at the current level of 14% of compensation. This lower UAAL contribution will increase the period over which UCRP's UAAL is paid off. The Task Force thought this could be considered a trade-

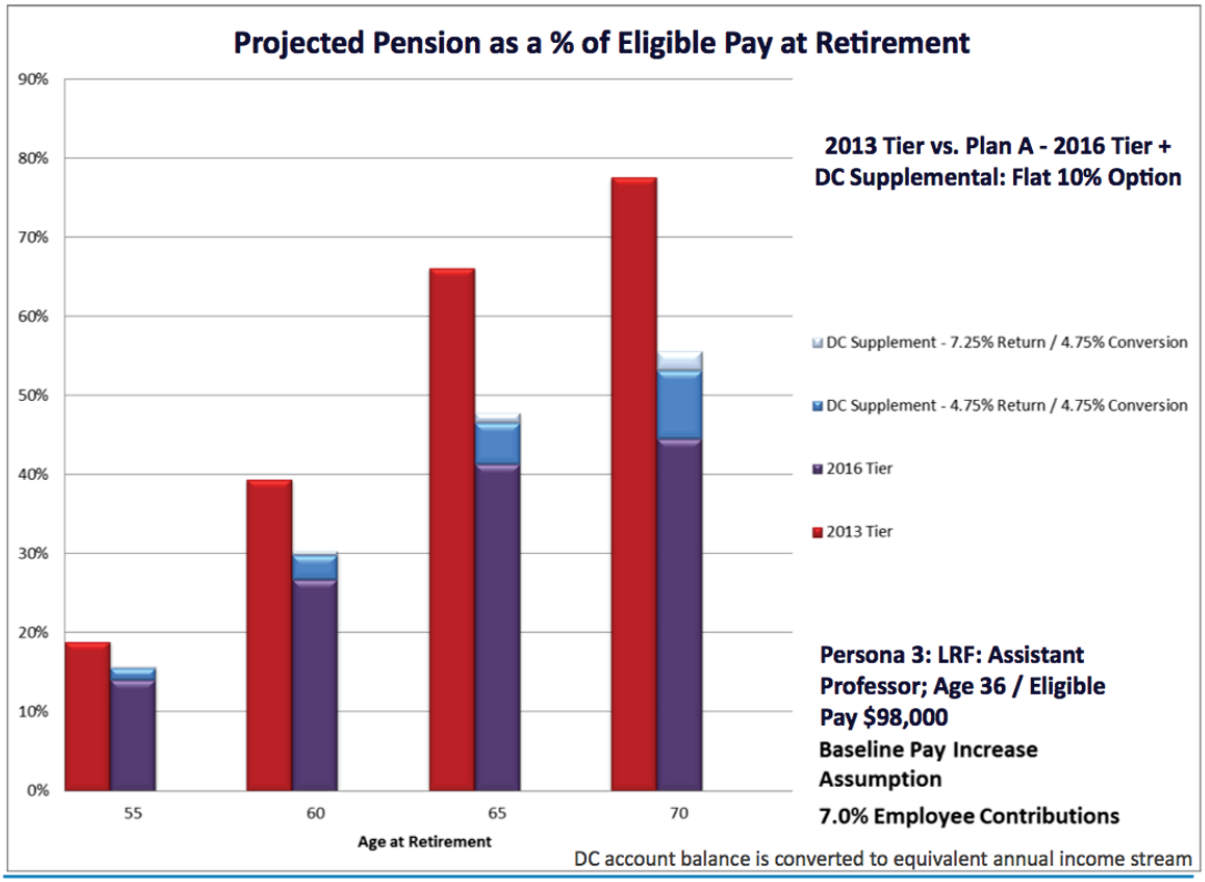
off not only for the higher benefits, but also for the lack of any additional unfunded liability for those electing the Plan B, DC Choice Plan at any time in the future[29].

Some members preferred a design with 8% on pay up to the CCL and 10% on pay between the CCL and the IRC limit since it closely parallels the contributions that would be made under Plan A to the UCRP 2016 Tier (including payments on the UAAL) and the DC Supplemental Plan, as well as being less costly than a flat 10%. A small number preferred the graded option because it might better support retention by shifting contributions towards longer-service employees. It also is the least expensive plan over the long term and produces more current cash flow savings with the lower contribution for the first five years of service.

g. Income Replacement Comparisons

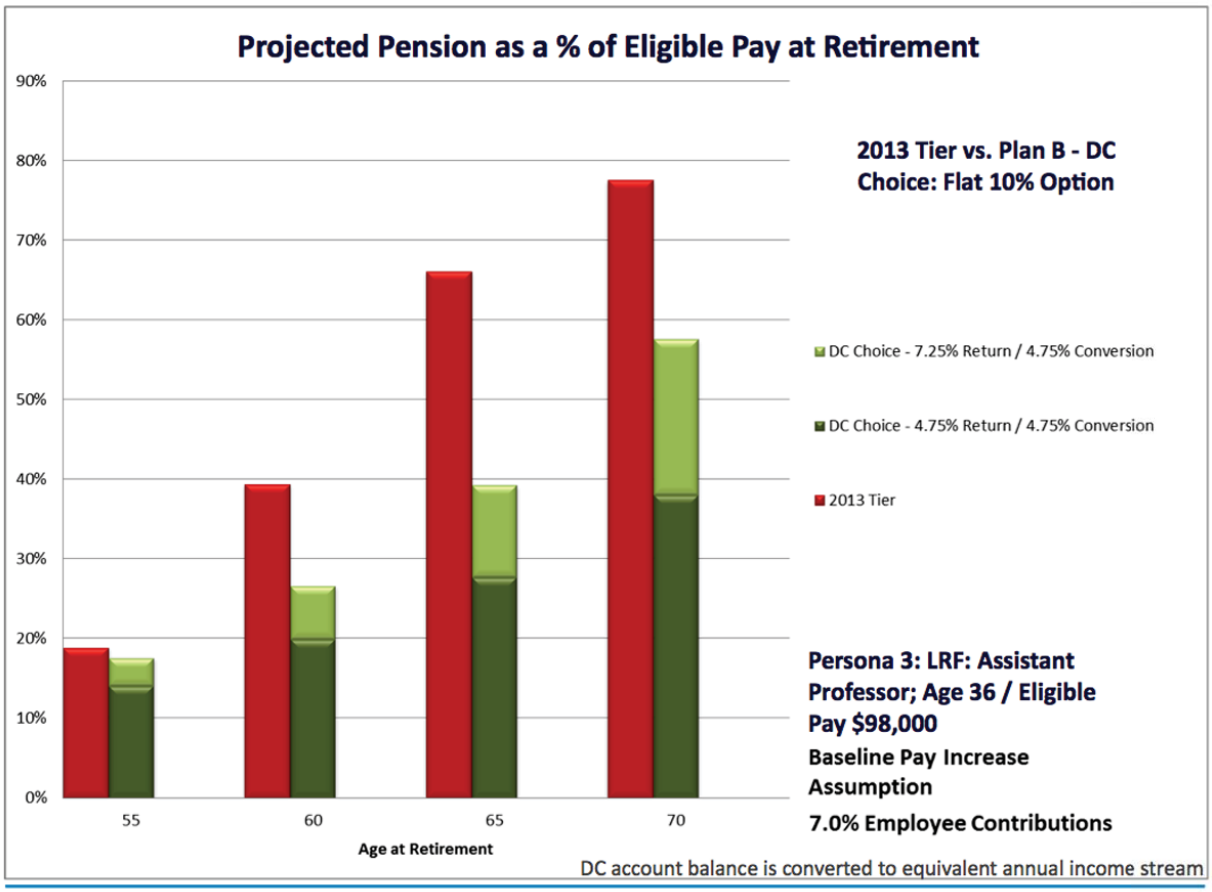
The following chart is an example of the difference in income replacement between the UCRP 2013 Tier and the UCRP 2016 Tier including the flat 10% DC Supplemental Plan (above CCL) using Persona 3, Ladder Rank Faculty Assistant Professor. The percentage of income replaced by the DC Supplemental Plan varies by Persona, depending on the starting salary, age at hire, and salary growth. The DC Supplemental Plan is intended to reduce the gap in income replacement between the UCRP 2013 Tier and the UCRP 2016 Tier. For purposes of comparing DB and DC benefits, the DC account balance is assumed to earn the investment return from current age to age 55, and is then converted to an annuity based on 4.75% conversion rate, as requested by the Task Force. This rate represents an estimated long-term market annuity conversion rate, but is higher than current annuity conversion rates.

[29] While additional unfunded liability is not projected for new hires selecting Plan A (UCRP 2016 Tier), the cost uncertainty associated with a DB plan makes further growth in unfunded liability a possibility. In other words, there is a higher level of unpredictability for projected Plan A costs.



The red bar on the left of each group represents the UCRP 2013 Tier; the purple bar on the right of each group represents the UCRP 2016 Tier with the blue flat 10% DC Supplemental Plan benefit stacked on top of it, showing differing rates of investment return and purchase rate for an annuity.

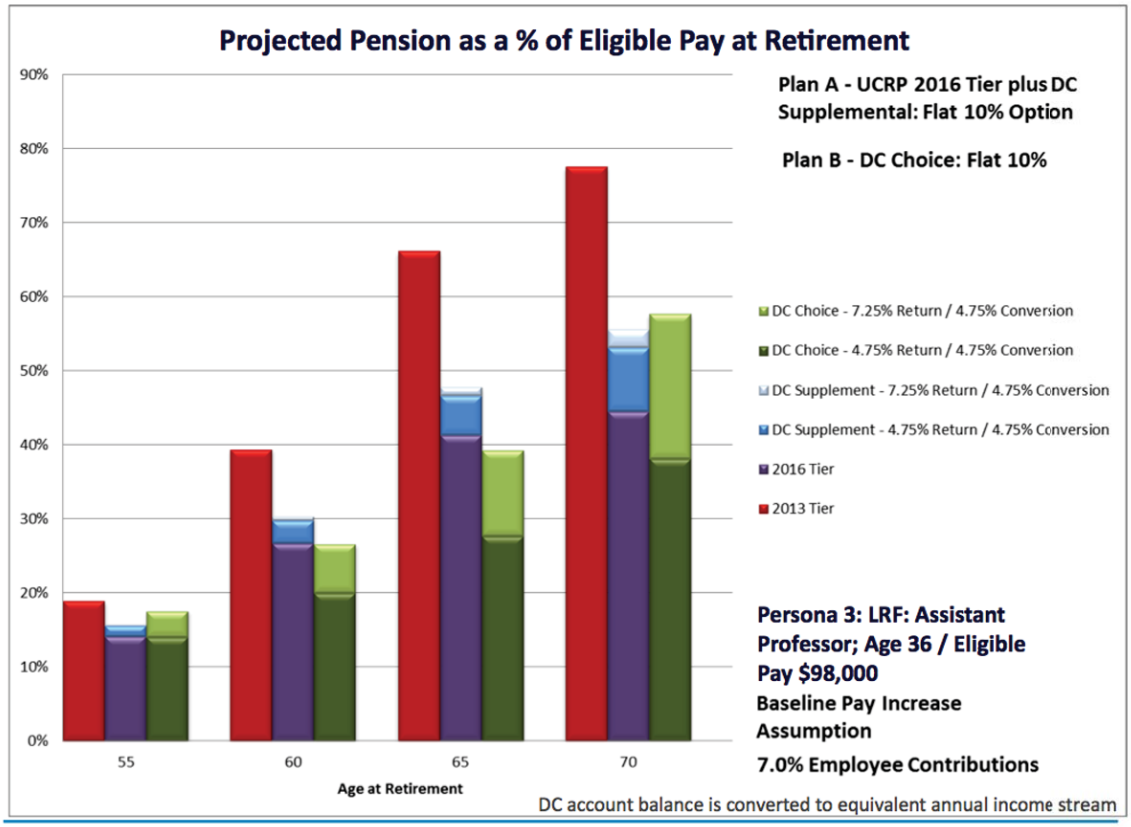
The following chart illustrates the income replacement gap for Persona 3 between UCRP 2013 Tier UCRP benefits vs. DC Choice Plan flat 10% option, the Task Force recommendation for Plan B.



The red bar on the left of each group represents the UCRP 2013 Tier; the green bar represents the DC Choice Plan, stacked to show differing rates of investment return and purchase rate for an annuity.

The last chart in this sequence compares the UCRP 2013 Tier benefits to Plan A (UCRP 2016 Tier plus the DC Supplemental Plan) and Plan B (DC Choice Plan) for Persona 3. For this persona, the income replacement for UCRP 2013 Tier benefits at age 65 is projected to be approximately 66.1% at age 65, and approximately 41.3% for UCRP 2016 Tier benefits (when eligible pay is capped at the CCL). With the DC Supplemental Plan included, income replacement under Plan A is 47.8% and 46.6% based on investment return of 7.25% and 4.75% respectively. Income replacement under Plan B is 39.2% and 27.7% based on investment return of 7.25% and 4.75% respectively. As can be seen in this chart, neither plan fully replaces benefits that

would have been paid under the UCRP 2013 Tier. Comparing Plan A and Plan B benefits for this persona shows that, at age 65, Plan A has a higher value but, by age 70, Plan B produces a higher benefit based on the 7.25% investment return.



(See Appendix F., 7, Comparison Data and Personas Methodology, Projected Pension Income for Personas, for details on income replacement with the UCRP 2013 Tier and each of the plan designs for selected Personas.)

h. Vesting

Participation in and employee/employer contributions to either Plan A or Plan B begin with the date of eligibility. Vesting is a required time period of membership before an employee is eligible to receive plan benefits or withdraw the employer contributions in a lump sum.

For the Plan A, DC Supplemental Plan, the Task Force agreed on a five-year service credit requirement matching the UCRP 2016 Tier vesting requirement. Both immediate vesting and a one-year vesting requirement were considered for Plan B, DC Choice Plan. DOE Laboratory and Medical Center representatives noted that many of their new hires come from environments that have DC plans with immediate vesting. After reviewing data from the latest UCRP experience study that showed slightly more than a 20% turnover rate in the first year of University employment, the Task Force supported a one calendar year vesting period from the eligibility date for the Plan B DC Choice Plan. This provided value to shorter-term and temporary employees, without incurring employer costs for very short-term employees. Under all options, employees would be immediately vested for their own contributions.

i. Default for New Hires

Most Task Force members felt that eligible employees who do not make a choice should be placed in Plan A (UCRP 2016 Tier plus DC Supplemental Plan) as this design supports retirement readiness. Based on the experience of other employers offering a choice of plans, the majority of new hires either do not make a positive election or are satisfied with the default. Over time, a DB plan tends to produce a higher benefit, as well as a lifetime guaranteed pension, so generally, it is a better plan for long-term employees.

Other Task Force members viewed the Plan B (DC Choice Plan) as a better default, particularly for shorter service employees. A few thought a default to Plan B might also raise awareness of the University's Retirement Savings Plans, encouraging more individual saving.

The Task Force was concerned about an irrevocable default to Plan A if only Plan B members would have the opportunity for a new choice later in their careers (see III.j., New Choice Window). However, designating Plan B, the DC Choice Plan as the default would increase UCRP's projected UAAL, as discussed in Section III.l, Impact on UCRP Funded Status/UAAL.

Data for the Comparison 26 Universities and for Public Retirement Systems who offer choice between a DB and a DC plan shows that most use the DB plan as the default. Allowing conversion from one plan to the other later in the career is less common. However, these plans do not cap eligible pay at an amount lower than the IRC allowable amount.

j. New Choice Window for New Hires/Rehired Employees

Treasury Regulations permit an employer to offer new hires a choice between retirement plan options when the employee is first eligible to participate in any employer plan. For an employee who has an initial choice window (or defaults into a plan), a new choice window could potentially be offered so long as the options result in the same amount of employee contributions to either plan. In addition, private letter rulings (PLRs) issued by the IRS have approved subsequent choice arrangements that allowed rehired employees to choose among different plan options where all options resulted in the same amount of employee contributions being made to the elected plan. The PLRs indicate that offering choice to rehired employees is not likely to raise issues with the IRS but only the employer requesting the ruling can rely on the PLRs. Nevertheless, if the facts of another employer's situation are similar, it is highly unlikely the IRS will come to a different conclusion for a different employer absent an intervening change in the law.

Thus, counsel has advised the Task Force that there is low risk the IRS will object to offering a choice window for new hires and rehires (other than those rehires who were UCRP members before July 1, 1994) and rehires first employed on/after July 1, 2016, who already have had a choice window, as the employee contribution amount will the same and fixed under either option. The Task Force understands that Counsel has strongly advised that the University obtain a private letter ruling before allowing any employee who has had a choice window to have a new choice window. The Task Force therefore recommends filing for a private letter ruling as part of the implementation plan.

Employees Hired on/after July 1, 2016

The Task Force wanted an opportunity after the first five years of service for employees who select Plan B (DC Choice Plan) to enter Plan A (UCRP 2016 Tier with the DC Supplemental Plan) at a later date. If someone were to initially choose Plan B and later select Plan A for future service, contributions made to Plan B during the first five years would remain in the DC Choice Plan and UCRP 2016 Tier service credit would begin with the effective date of the second election. However, the first five years of service (time worked based on appointment percentage) would be credited for vesting, so the employee would be immediately vested in UCRP, assuming a 100% appointment for the first five years. For a variety of reasons, the Task Force did not think that a member who chooses or defaults into Plan A when first eligible should be given a new choice. It seemed likely that only employees who decide to leave the University would want to move from Plan A to Plan B, and allowing that choice could provide some encouragement to accept employment offers elsewhere.

The intention behind offering an opportunity to move from Plan B to Plan A was to encourage long service at the University, recognizing that many employees would become more likely to commit to doing so over time. Allowing employees to change plans after five years of University employment may support recruitment and especially retention, as individual goals may change with longer service, changes in appointment, the prospect of obtaining tenure, or other life events. The Task Force understands that it also will help deal with appeals based on lack of understanding, alleged misunderstanding or misinformation regarding the employee's initial choice of Plan B.

Even with the best possible communication effort to new academic and policy-covered employees, there will be those who regret their choices or who believe they were not adequately informed. Having a set future time to alter a choice will provide an opportunity for employees to do so.

Choice for Rehired Employees

The Task Force desired choice for rehired former University employees to the extent allowable under the Internal Revenue Code. They recommended a choice for employees rehired after a break-in-service, subject to Internal Revenue Service guidance. Since the University annually rehires more than 1,000 former employees, allowing them choice was considered important. Rehired University employees may be offered a choice between options for this first time only if the choices have the same fixed member rate, and the same overall eligible pay limit (resulting in the same amount contributed).

Consultants modeled the costs of an initial choice and a new choice window after five years (see Appendix G, Cost of Choice), estimating it at less than 1% of compensation over 15 years on average; changing this assumption would alter the estimated costs.

k. Contributions

i. Employee

With one exception, Task Force members agreed that the current mandatory employee contribution of 7% of eligible pay should continue for the UCRP 2016 Tier (about one-half of Normal Cost). One member proposed voluntary, variable contributions for the DC Choice Plan, but there was no support for this design since the Task Force was concerned about retirement readiness and felt a voluntary model would lead to many employees beginning retirement savings too late in their careers to be effective. Also, any option that had a voluntary contribution would not allow a new choice window.

For Plan A, employees would contribute 7% of eligible pay up to the CCL into UCRP and the Task Force proposed that 7% of eligible pay would also be contributed over the CCL[30], into the DC Supplemental Plan. For Plan B, a

[30] Up to the IRC §401(a)(17) limit; $265,000 in 2016.

fixed employee contribution of 7% of pay below and above the CCL[30] would go into the DC Choice Plan.

ii. Employer

Generally, the Task Force wanted a contribution structure that did not vary significantly between the designs, or create an incentive for the University to channel members towards one or the other. This meant that a choice between any plans should have generally similar contribution amounts and benefits so that there would be no perceived institutional bias. Not all plan designs met this objective. The Task Force considered a variety of contributions for each option.

Plan A – UCRP 2016 Tier plus DC Supplemental Plan:

The majority of members proposed a flat 10% employer contribution on pay above the CCL (currently $117,020) up to the IRC limit (currently $265,000) for all new hires to best partially replace the benefits lost due to the lower cap on eligible pay. Rather than including a 4% UAAL contribution, for a total of 14% above the CCL, the recommended contribution was limited to 10% in response to concerns about cash flow savings.

Plan B – (DC Choice Plan):

The majority of Task Force members felt that a flat employer contribution of 10% would be the most competitive, particularly for academic employees and for specialized non-academic positions likely to exceed the CCL. (Titles in finance, real estate, nursing, etc. are some examples of positions with pay levels that start above the CCL or will exceed the CCL before retirement.) A 10% employer contribution to a DC plan is at the upper end of the range observed in the Comparison 26 Universities, but even 10% does not provide academic and policy-covered employees in this plan with a pension comparable to the pension benefit they could have anticipated from the UCRP 2013 Tier.

Several members expressed concern that a 10% contribution for all academic and policy-covered employees exceeds the 8% employer Normal Cost rate for UCRP's 2016 Tier, as well as being above the Normal Cost for the UCRP 2013 Tier, and favored a fixed employer of 8% as being more in line with their labor market segments.

A graded contribution for Plan B also was considered, with the employer contribution beginning at 6% and scaling up at five-year service points to 8% and 10%. This is more affordable and might encourage retention (though some members felt 2% increments were not enough incentive to keep highly marketable faculty and non-faculty).

In summary, the Task Force concluded that none of the DC plans considered provided a benefit comparable to the UCRP 2013 Tier at a comparable cost.

l. Impact on UAAL Contribution/UCRP Funded Status

A guiding principle of the Task Force was that, regardless of the retirement options recommended, the University's employer contribution would continue to include a component to pay down the unfunded UCRP liability. As detailed in the table in II.f., UCRP Funded Status/Unfunded Actuarial Accrued Liability, the Normal Cost for the UCRP 2016 Tier is lower than both the UCRP 1976 Tier and the UCRP 2013 Tier Normal Cost. If the University holds the employer and employee contributions to UCRP constant, any contribution amount not required to fund the Normal Cost would serve to fund the UAAL. As more new hires in the UCRP 2016 Tier replace those in the UCRP 1976 and 2013 Tiers, the total Normal Cost declines and the UAAL contribution increases, accelerating the pay down of that liability. One important result the Task Force considered was that, even without UAAL contributions on earnings above the CCL for those in the UCRP 2016 Tier, the reduction in Normal Cost and the accelerated funding of the UAAL will continue with little effect on the date UCRP reaches full funding. However, not all of the DC Choice designs under consideration maintain the same level of UAAL funding as

under the UCRP 2016 Tier. The recommended DC Choice design uses a decrease in the UAAL contribution to fund higher contributions to the new DC Choice benefits.

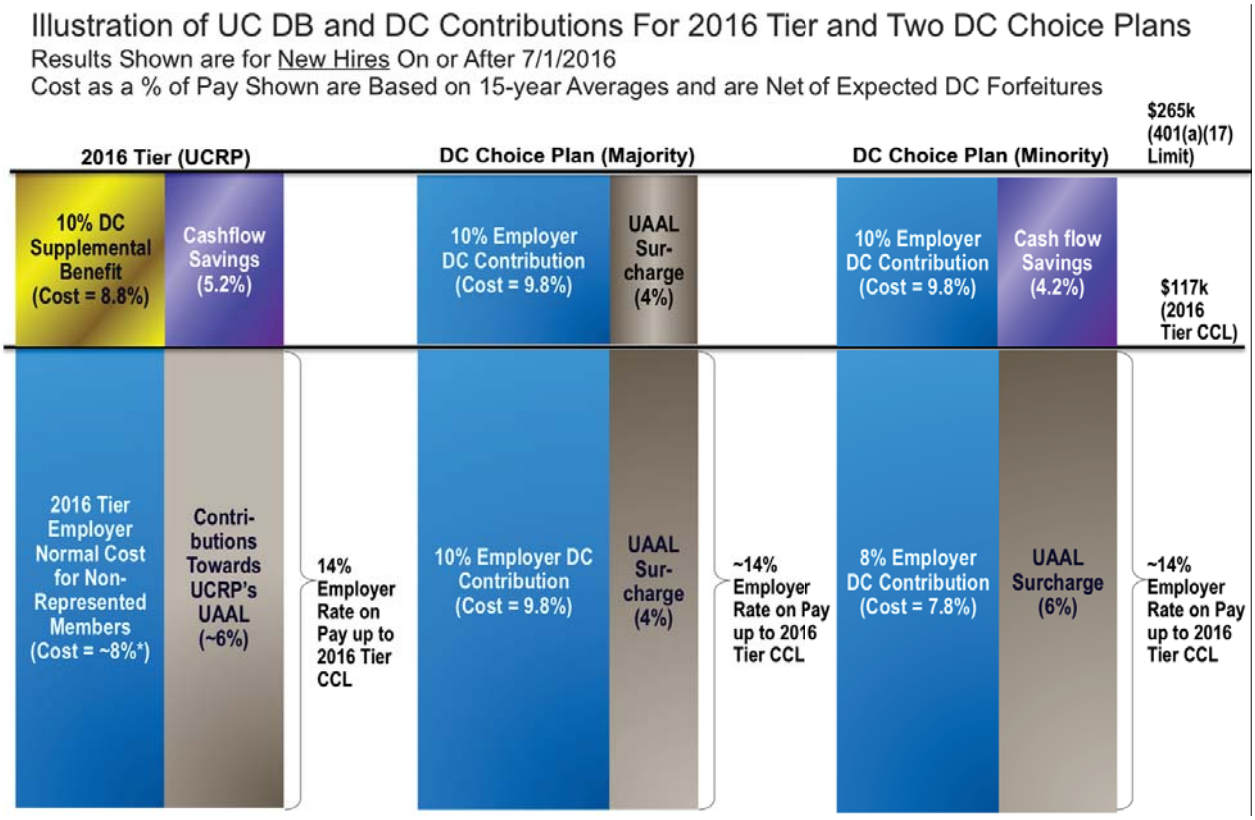
The Task Force discussed a variety of approaches to the UAAL contribution, arriving at recommendations supporting new benefit options and continued payment of the UAAL. Recommended designs and the level of UAAL contribution were linked; higher contributions to the DC plans resulted in lower UAAL contributions while lower DC contributions resulted in higher UAAL contributions.

For *Plan A (UCRP 2016 Tier plus DC Supplemental Plan)*: Most of the Task Force members recommended applying the UAAL contribution only up to the CCL. That UAAL contribution is about 6% of pay up to the CCL based on the total 14% University contribution minus the UCRP 2016 Tier Normal Cost of 8%. For the 10% DC Supplemental benefit, the result is a projected cash flow savings of approximately 5% of pay above the CCL for those in the UCRP 2016 Tier, as seen in the first set of bars in the following chart. (Note that the 10% DC Supplemental benefit actually costs only approximately 9% because of the five-year vesting requirement and forfeitures from members leaving University employment before they vest.)

Plan B (DC Choice Plan): With the majority recommendation of a 10% DC Choice Plan employer contribution on all pay up to the IRC limit, the recommended UAAL contribution would be 4%, based on the total University contribution of 14%. The majority felt that providing this higher benefit (for the reasons discussed in III.f., Plan B Choice Design) justified reducing the payments towards the UAAL as compared to Plan A. However, to mitigate that reduction in UAAL funding, the 4% UAAL contribution would apply to all pay up to the IRC limit, the same as the 10% DC Choice Plan contributions. This is shown in the middle bars in the following chart. As discussed at the end of Section II.f., the UAAL will grow by each dollar that is not contributed in the current year, plus 7.25%. Funding the increased 10% DC Choice Plan benefits through reduced UAAL contributions is also a form of

"borrowing" at 7.25%, as repayment to fund UCRP's UAAL in future years would include the original amount that was not funded, plus the assumed 7.25% earnings.

In contrast, Task Force members who recommended an 8% University contribution on pay below the CCL and 10% on pay above the CCL also recommended a 6% UAAL contribution on pay below the CCL and no UAAL contribution above the CCL. This recommendation provides a less generous benefit than the majority recommendation but maintains the same level of funding for UCRP's UAAL as well as producing additional cash flow savings. This means that the funding of the UAAL would not be affected by how many members choose Plan A versus Plan B. This minority recommendation is shown in the third set of bars in the following chart.



***Excludes cost of initial choice and prospective second choice, which is an additional 0.7% to 0.8% of pay.**

In this chart, the blue bars below the CCL reflect University contributions to the UCRP 2016 Tier Normal Cost (Plan A) and to the DC Choice Plan (Plan B). Gray bars below the CCL show the UAAL contribution amount. Above the CCL line, bars on the

left of each graph show contributions for either the DC Supplemental Plan or the DC Choice Plan. The purple bars above the CCL (if any) show projected savings.

Plan A: In general, each new employee choosing the UCRP 2016 Tier plus the supplemental plan generates cash flow savings around 5% of pay over the CCL.

Plan B - Majority: Assuming a flat 10% DC plan design, new hires choosing it generate very small cash flow savings, because the 4% UAAL payments are continued above the CCL. The only savings under the Plan B 10% DC Choice Plan design are those from employee DC forfeitures for those who terminate within their first year of employment and, because this is a small amount, it does not vary significantly with different take rates. The 15-year average annual cash outlay for future new hires was projected to be $655 million if the UCRP 2013 Tier benefit structure had continued. Assuming 60% of new hires would choose Plan A and 40% would choose Plan B, the 15-year average annual cash outlay for future new hires is projected to drop to $640 million under the majority recommended structure – an average annual cash savings of $15 million.

Plan B - Minority: As shown in the chart, with the 8%/10% DC plan design (Plan B), new hires choosing this plan generate cash flow savings of around 4% of pay over the CCL plus savings due to employee DC forfeitures. Assuming 75% of new hires go into Plan A and 25% into Plan B, the 15-year average annual cash outlay for future new hires is projected to drop to $635 million under the minority recommended structure – an average annual cash savings of $20 million.

Note that all cost and UAAL impact calculations depend critically on "take rate" assumptions as to what proportion of new members participate in each plan.

The election (take rate) assumptions were derived by considering two main factors:

- What is the default Plan (Plan A or Plan B)?
- What is the underlying relative value of the Plan B DC Choice Plan to the UCRP 2016 Tier?

The consultants started with setting the take rate assumptions based on the UCRP 2016 Tier plus the DC Supplemental Plan (Plan A) as the default. Then, based on whether the Plan B DC Choice Plan was either 8% or 10%, the take rates shown in the following table were assumed.

The higher election rate for the flat 10% DC Choice option is assumed because this plan provides more than the 8%/10% design.

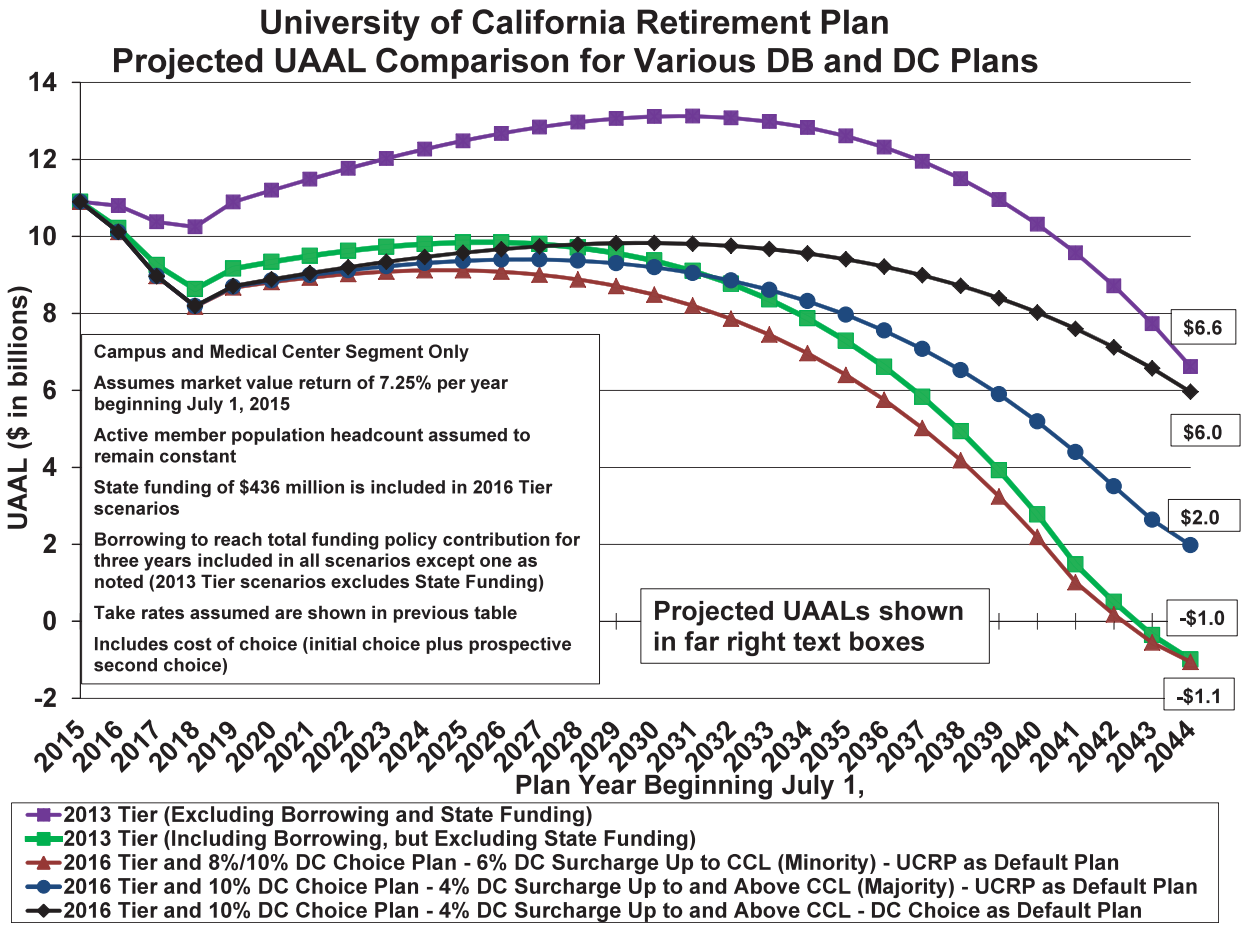
A scenario also was modeled with the 10% DC Choice Plan as the default and, as shown in the following table, this results in an increase in the number of members assumed to elect that plan.

Default Plan	Level of DC Choice Plan Employer Contribution	UCRP 2016 Tier Take Rate (Plan A)	DC Choice Plan Take Rate (Plan B)
UCRP 2016 Tier	8%/10%	75%	25%
UCRP 2016 Tier	10%	60%	40%
DC Choice Plan	10%	40%	60%

Note that there is a potential for significant variability in the actual take rates as compared to those assumed since no plan-specific take rate experience is currently available. To the extent that the actual take rates are different, it will impact the combined cost of the two programs and the projection of UCRP's UAAL.

Consultants then modeled the effect on the unfunded liability, comparing the projected date that the employer contribution reduces below 14% for the UCRP 2013 Tier and for each of the Plan A and Plan B designs. All projections except one include three years of borrowing from the STIP fund. (see II.f, UCRP Funded Status/Unfunded Actuarial Accrued Liability). The UCRP 2016 Tier also includes three years of State funding.

Using the same scenarios as in the above table, the following chart compares the impact on the UAAL of the combination of the UCRP 2016 Tier and either of the two DC Choice designs to the projected UAAL if the UCRP 2013 Tier were to continue. These projections assume that Plan A is the default plan.



- The purple line is the UCRP 2013 Tier, excluding three years of borrowing from STIP and State funding.

- The green line is the UCRP 2013 Tier including three years of borrowing from STIP, but excluding State funding. The rest of the projections for the 2016 Tier include both borrowing from STIP and State funding.

- The red line is the combination of the UCRP 2016 Tier and a DC Choice Plan with 8% University contributions below the UCRP 2016 Tier CCL and 10% above (up to the IRC limit). The take rates are as shown in the table above: 75% choose the UCRP 2016 Tier and the remaining 25% choose the DC plan.

- The blue line is the combination of the UCRP 2016 Tier and a DC Choice Plan with 10% University contributions for all pay up to the IRC limit. Again the take rates are as shown in the table above: 60% choose the UCRP 2016 Tier and the remaining 40% choose the DC plan.

The chart also shows the impact on the UAAL of the combination of the UCRP 2016 Tier and the 10% DC Choice Plan, but assuming that the DC Choice Plan is the default.

- The black line is the combination of the UCRP 2016 Tier and a DC Choice Plan (default) with 10% University contributions for all pay up to the IRC limit. The take rates are as shown in the table above: 40% choose the UCRP 2016 Tier and the remaining 60% choose the DC plan.

Note that projections, by their nature, are not a guarantee of future results. There is a potential for significant variability in the outcomes. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available at the time the modeling is done, with the assumptions and methodologies as described in Appendix E. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual results may differ due to such variables as demographic experience, take rate experience, the economy and stock market performance. As can be seen in the graph, these projections are particularly sensitive to the "take rates" of what proportion of new members participate in each plan.

To summarize the results[31], under the UCRP 2013 Tier projection without including borrowing from STIP or State funding (purple line):

- The UCRP employer contribution reduces below 14% in 2044.
- UCRP would have a projected UAAL of $6.6 billion in 2044, with a projected funded ratio around 96%.

With the UCRP 2013 Tier and borrowing from STIP, but excluding State funding (green line):

- The UCRP employer contribution reduces below 14% in 2041.
- UCRP would be fully funded in 2043.
- There is a projected surplus of $1.0 billion in 2044.

With the combination of the UCRP 2016 Tier (default plan) and an 8%/10% DC Choice Plan design (red line):

- The UCRP employer contribution rate reduces below 14% in 2041.
- UCRP would be fully funded in 2043.
- There is a projected surplus of $1.1 billion in 2044.
- The projected UAAL's under this scenario are all less than or equal to those under the UCRP 2013 Tier for all years.

With the combination of the UCRP 2016 Tier (default plan) and a flat 10% DC Choice Plan design (blue line):

- The UCRP employer contribution rate reduces below 14% in 2042.
- UCRP would have a projected UAAL of about $2 billion in 2044 with a projected funded ratio around 99%.

[31] Take rates are shown earlier in this section and are as follows for reference:
- 75% UCRP/25% DC Choice for the 2016 Tier and 8%/10% DC Choice Plan (red line).
- 60% UCRP/40% DC Choice for the 2016 Tier and 10% DC Choice Plan, with UCRP as default plan (blue line).
- 40% UCRP/60% DC Choice for the 2016 Tier and 10% DC Choice Plan, with DC Choice as default plan (black line).

- The higher UAAL under this scenario is due to the lower UAAL contributions under the flat 10% DC Choice Plan.

With the combination of the UCRP 2016 Tier and a flat 10% DC Choice Plan design (black line) with DC Choice as being the default plan:

- The UCRP employer contribution rate reduces below 14% in 2044.
- UCRP would have a projected UAAL of about $6 billion in 2044 with a projected funded ratio around 95%.
- The higher UAAL under this scenario is due to the lower UAAL contributions under the flat 10% DC Choice Plan combined with more members assumed to elect that plan.

IV. Comparison Data and Modeling

To model plan designs, consultants developed representative new hire Personas based on new hire data for campuses and medical centers[32] provided by Segal for the period July 1, 2013 to June 30, 2014 and job categories identified by the University. Each Persona represents the average characteristics (age, eligible pay, etc.) of a newly hired employee in that particular category. The Personas provide a range of ages and eligible pay levels. Using thirteen (13) Personas, Mercer modeled various plan design options, including comparisons between the current UCRP benefits and plan design options for UCRP 2016 Tier plus DC Supplemental Plans or DC Choice Plans, as well as comparing preliminary design options against competitors' retirement benefits. They also referred to the 2014 Faculty Total Remuneration study. Salaries that the study found were 12% below market impacted the retirement value position while the plan design itself was better than market. No total remuneration analysis was performed for the new plan design proposals; but Mercer did compare proposed plan designs against the Comparison 26 Universities, not taking into account any salary differences. They found that the plan design and choice proposed exceeded the market median for the Comparison 26 Universities when looking at the benefits delivered under two scenarios: benefits

[32] Modeling and recommendations do not include the Lawrence Berkeley Laboratory segment since their Normal Cost, employer contribution rate and UAAL are separately evaluated according to the University agreement with the Department of Energy.

delivered at age 65 and benefits delivered after 10 years of service. The availability of choice also helps improve competiveness as it allows a potential new hire to evaluate future retirement benefits with different career perspectives in mind. For example, despite the reduction in CCL under the UCRP 2016 Tier, the addition of the proposed DC Choice Plan will actually improve the University's relative position for some Personas – particularly when considering benefits delivered after 10 years of service. (See Appendix F. for details on comparators and methodology and Personas.) These modeling results were included in materials provided to the Task Force, along with selected Persona modeling presented at Task Force meetings.

V. TASK FORCE RECOMMENDATIONS

a. Plans: Effective July 1, 2016, the University will implement two new defined contribution (DC) retirement options for employees eligible on/after that date[33]:

1. Plan A: *UCRP 2016 Tier plus Defined Contribution (DC) Supplemental Plan*

Eligible pay up to the CCL each year ($117,020 in 2016) is covered by the UCRP 2016 Tier; eligible pay above the CCL and up to the Internal Revenue Code limit ($265,000 in 2016) is covered by a new DC Supplemental Plan.

Retirees covered by Plan A would receive a lifetime pension from the UCRP 2016 Tier based on the highest three-year average of eligible pay up to the CCL for each of the three years. In addition, employee and employer contributions to the DC Supplemental Plan plus earnings could be withdrawn at retirement or upon separation and these funds could be distributed in a variety of ways, including via periodic withdrawals from the accumulated plan balance, as a lump sum, or to purchase an annuity.

2. Plan B*: DC Choice Plan*

This is an alternative to Plan A in the form of a DC plan for all eligible pay up to the Internal Revenue Code limit ($265,000 in 2016). Members of Plan B would not participate in the UCRP 2016 Tier and they would receive no benefits from that Tier. Their retirement benefits would be based on employer and employee contributions to the DC Choice Plan, plus earnings. Those that elect the DC option would not create any additional unfunded liability for UCRP.

[33] Subject to collective bargaining.

Members of Plan B could withdraw the DC Choice Plan employee and employer contributions plus earnings at retirement or upon separation and these funds could be distributed in a variety of ways, including via periodic withdrawals from the accumulated plan balance, as a lump sum, or to purchase an annuity.

b. **Eligibility**: Eligible employees who are hired or rehired into a career appointment or attain career status on/after July 1, 2016 will participate in either Plan A or Plan B. (See II.d., UCRP.)

c. **Choice/Default:** Newly eligible employees may choose either Plan A or Plan B. If they do not make a positive election within a designated enrollment period, they will be enrolled in Plan A by default.

d. **Plan Design**:

Plan A – UCRP 2016 Tier with CCL plus DC Supplemental Plan
Contributions to UCRP 2016 Tier on eligible pay (covered compensation):

- 7% mandatory employee contribution up to the CCL ($117,020 in 2016).
- 14% University contribution up to the CCL (approximately 6% of this amount is a contribution to the UAAL).

Contributions to DC Supplemental Plan on eligible pay:

- 7% mandatory employee contribution over the CCL, up to the IRC limit ($265,000 in 2016).
- 10% employer contribution over the CCL, up to the IRC limit

Plan B – DC Choice Plan
Contributions to DC Choice Plan on eligible pay:

- 7% mandatory employee contribution up to the IRC limit ($265,000 in 2016).
- 10% employer contribution up to the IRC limit ($265,000 in 2016).
- 4% contribution to Unfunded Actuarial Accrued Liability up to the IRC limit ($265,000 in 2016).

Some Task Force members favored a graded plan for Plan B, with an employer contribution that would increase in five year increments (6%, 8%, 10%) or one that would provide an 8% employer contribution on covered pay up to the CCL and 10% over the CCL (up to IRC limit, currently $265,000)

mirroring the 8%/10% concept of the Plan A UCRP 2016 Tier plus DC Supplemental plan recommendation

e. Vesting:

Plan A (UCRP 2016 Tier plus DC Supplemental Plan) –
5 years UCRP service credit[34].

Plan B (DC Choice Plan) – 1 calendar year from eligibility date.

f. Default: Employees who do not choose a plan will be defaulted to Plan A, UCRP 2016 Tier plus DC Supplemental Plan.

g. New Choice Window[35]:
At the end of a five-year window, the University expects to provide a new choice opportunity for those that chose Plan B to switch into Plan A.

Plan A – No new choice for employees who choose/default into Plan A.

Plan B – New choice to elect Plan A for employees who chose Plan B or who are rehired after a break-in-service. Plan A participation would begin with the effective date of an election.

VI. STAKEHOLDER BRIEFING

Within the boundaries of confidentiality, Task Force members and Office of the President staff briefed the University community throughout this process, meeting with the Academic Senate, Academic Council, Faculty Welfare committees, the UCRS Advisory Board, Council of University of California Staff Assemblies, Chancellors, Provosts, Deans, Vice Chancellors, other campus leadership groups, the union coalition and many others. The briefings included updates on issues under discussion but did not include detail about the content of those discussions. There also were meetings between University leaders, individuals in the Governor's Office and state budget officials.

[34] UCRP service credit is based on actual time worked; e.g., a plan member appointed in an eligible position at 50% time earns one-half year of service credit in each calendar year worked.

[35] Subject to favorable IRS Private Letter Ruling..

VII. RELATED ISSUES

a. Compensation for Health Science Faculty

Currently, the faculty who participate in the Health Sciences Compensation Plan (HSCP)[36] have only a portion of their salaries as eligible pay i.e., the "base salary" (known as X and X') or the approved rate on the HSCP salary associated with a faculty member's academic rank, step and academic program. Any additional negotiated salary amounts are not included as eligible pay though this may be a sizable portion of an HSCP faculty member's salary. Consequently, the UCRP 2016 Tier CCL will have a major effect on these individuals. A future work group should address this issue.

b. Total Remuneration

Total remuneration was a major concern for some members of the Task Force. The 2014 study of faculty remuneration indicated a 12% lag in cash compensation, relative to the Comparison 8 universities; with a 10% lag in total remuneration overall. Because of salary lags and the CCL, none of the DC Choice or DC Supplemental plans fully compensate for the impact of the CCL on retirement income relative to the UCRP 2013 Tier. Any of the options considered will reduce the total remuneration of faculty in the UCRP 2016 Tier relative to that of faculty in the UCRP 2013 Tier, though the designs of Plan A and Plan B are above the median for the University's comparators. There is a general belief within the University community that staff salaries, at least in some areas, also lag based on evident recruiting challenges. In addition to offering market-competitive plans in the UCRP 2016 Tier through either a Supplemental DC plan or a stand-alone DC Choice Plan, the Task Force recommends continued work to improve University salaries during the period of the five-year agreement negotiated with the State.

Noting that the last study of the full workforce was done in 2009 and the most recent study was limited to faculty titles and thus did not provide the group current

[36] Approximately 7,200 faculty are in the HSCP.

information on the rest of the University's workforce, several Task Force members suggested undertaking a staff Total Remuneration Study.

c. Retiree Health and Other UCRP-Related Benefits

Employees in either the UCRP 2016 Tier with the DC Supplemental Plan or in the DC Choice Plan will be eligible for retiree health on the same basis as others entering UCRP on/after July 1, 2016. To receive the maximum University contribution, an individual must retire at age 65 with 20 or more years of service credit/time worked.

Retirees in the UCRP 2016 Tier will have their share of the University health plan premiums deducted from their monthly pension check. Retirees in the DC choice option will pay their premium share directly as is currently done for members whose premiums are larger than their UCRP benefit amount. The existing administrative structure will need to be modified in the future to meet this need.

The chart below outlines the percentage of the University contribution for all eligible ages and years of service credit.

Service Credit	50-55*	56	57	58	59	60	61	62	63	64	65
10	0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	45.0%	50.0%
11	0%	5.5%	11.0%	16.5%	22.0%	27.5%	33.0%	38.5%	44.0%	49.5%	55.0%
12	0%	6.0%	12.0%	18.0%	24.0%	30.0%	36.0%	42.0%	48.0%	54.0%	60.0%
13	0%	6.5%	13.0%	19.5%	26.0%	32.5%	39.0%	45.5%	52.0%	58.5%	65.0%
14	0%	7.0%	14.0%	21.0%	28.0%	35.0%	42.0%	49.0%	56.0%	63.0%	70.0%
15	0%	7.5%	15.0%	22.5%	30.0%	37.5%	45.0%	52.5%	60.0%	67.5%	75.0%
16	0%	8.0%	16.0%	24.0%	32.0%	40.0%	48.0%	56.0%	64.0%	72.0%	80.0%
17	0%	8.5%	17.0%	25.5%	34.0%	42.5%	51.0%	59.5%	68.0%	76.5%	85.0%
18	0%	9.0%	18.0%	27.0%	36.0%	45.0%	54.0%	63.0%	72.0%	81.0%	90.0%
19	0%	9.5%	19.0%	28.5%	38.0%	47.5%	57.0%	66.5%	76.0%	85.5%	95.0%
20 or more	0%	10.0%	20.0%	30.0%	40.0%	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%

*** Those who retire between ages 50 and 55 are eligible to enroll in UC-sponsored health insurance for retirees but will not receive a University contribution.**

An individual who leaves University employment and later returns to work at UC, will be subject to the eligibility rules in place at the time of rehire.

Plan benefits and contributions are subject to change, based on available coverage and funding.

There are other benefits linked to UCRP membership. Dental and vision coverage for active and retired employees requires UCRP membership/a UCRP pension benefit. Active employees must be UCRP members to enroll in Short-Term Disability, long-term disability, and employer-paid life insurance plans.

The Task Force wishes to avoid any institutional bias between the options as much as possible, recommending that other benefits, including health and welfare, be aligned between the choices to the extent possible as long as they do not increase costs. It is understood that not all benefits can be replicated in a DC environment, e.g., benefits traditionally provided in DB designs such as survivor or long-term disability income. These benefits can be replicated by an employee electing UC-provided and employee paid life or disability insurance.

APPENDICES

A. Committee Membership and Support Teams

Members of Retirement Options Task Force

Rachael Nava, Chair of the Task Force, Executive Vice President and Chief Operating Officer, University of California

Deidre Acker, Systemwide UC Staff Advisor and Ombudsperson, UC Merced

Maria Anguiano, Vice Chancellor for Planning and Budget, UC Riverside

Greta Carl-Halle, Business Officer, UC Santa Barbara

James Chalfant, Professor of Agricultural and Resource Economics, UC Davis

Michael Fehr, UC Labor Coalition Representative (University Professional and Technical Employees) and UCLA Computer Resource Specialist

Dan Hare, Professor of Entomology, UC Riverside; incoming Chair of the UC Academic Senate

David Lawlor, Vice Chancellor and Chief Financial Officer, UC Davis

Lori Lubin, Professor of Physics, UC Davis

David Marshall, Executive Vice Chancellor, UC Santa Barbara

David Odato, Associate Vice Chancellor and Chief Administrative Officer, UC San Francisco Medical Center

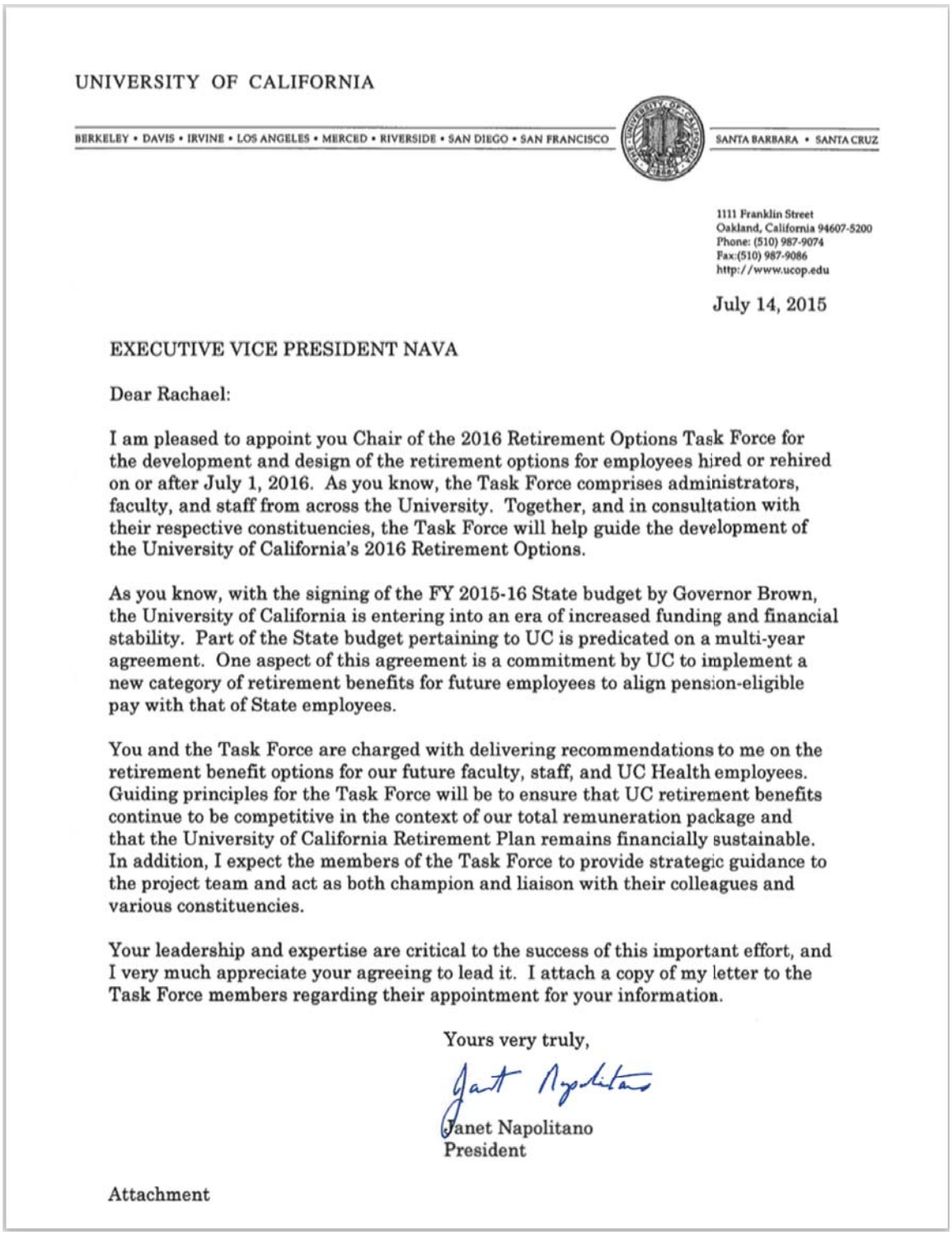
Pierre Ouillet, Vice Chancellor and Chief Financial Officer, UC San Diego

Shane White, Professor, UCLA School of Dentistry

The Task Force was supported by Office of the President personnel, led by the Task Force Chair - Rachael Nava, Executive Vice President and Chief Operating Officer. Project co-Directors were Dwaine Duckett, Vice President of Human Resources, and Gary Schlimgen, Executive Director of Retirement Programs & Services. Robert Judd of the UCOP Program Management Office supported project management. Payroll / UCPath implementation is led by Peggy Arrivas, Associate Vice President, Systemwide Controller, and her teams. Staff of UCOP Retirement Programs & Services, the Office of General Counsel, as well as the Segal and Mercer consulting groups provided technical assistance. Paul Schwartz, Director of Internal Communications, leads the communications efforts. The consultant responsible for drafting the Task Force report also participated on this team.

B. President's Letters Appointing Task Force Chair and Members

President Napolitano's letter appointing Rachael Nava as Task Force Chair:



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1111 Franklin Street
Oakland, California 94607-5200
Phone: (510) 987-9074
Fax:(510) 987-9086
http://www.ucop.edu

July 14, 2015

EXECUTIVE VICE PRESIDENT NAVA

Dear Rachael:

I am pleased to appoint you Chair of the 2016 Retirement Options Task Force for the development and design of the retirement options for employees hired or rehired on or after July 1, 2016. As you know, the Task Force comprises administrators, faculty, and staff from across the University. Together, and in consultation with their respective constituencies, the Task Force will help guide the development of the University of California's 2016 Retirement Options.

As you know, with the signing of the FY 2015-16 State budget by Governor Brown, the University of California is entering into an era of increased funding and financial stability. Part of the State budget pertaining to UC is predicated on a multi-year agreement. One aspect of this agreement is a commitment by UC to implement a new category of retirement benefits for future employees to align pension-eligible pay with that of State employees.

You and the Task Force are charged with delivering recommendations to me on the retirement benefit options for our future faculty, staff, and UC Health employees. Guiding principles for the Task Force will be to ensure that UC retirement benefits continue to be competitive in the context of our total remuneration package and that the University of California Retirement Plan remains financially sustainable. In addition, I expect the members of the Task Force to provide strategic guidance to the project team and act as both champion and liaison with their colleagues and various constituencies.

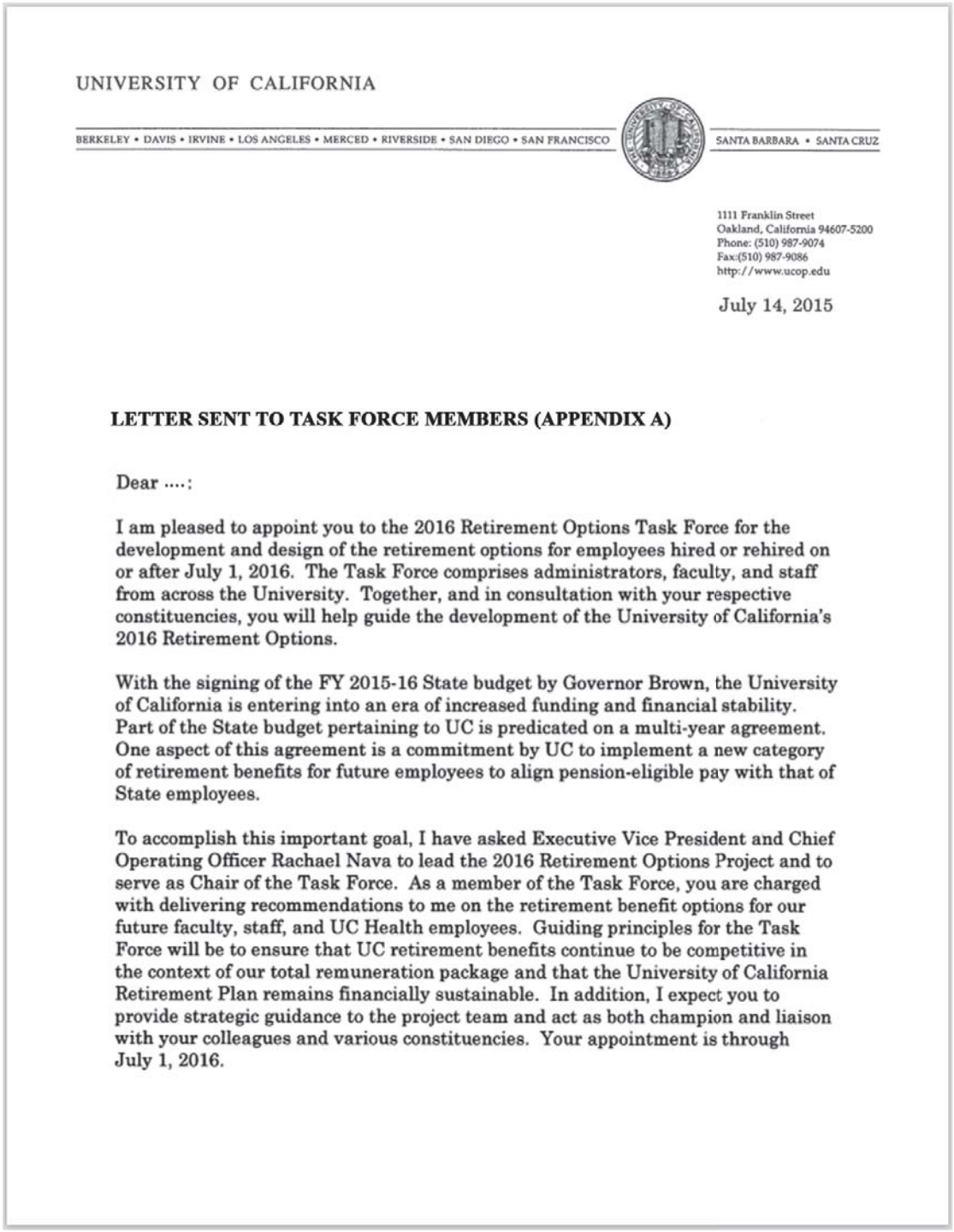
Your leadership and expertise are critical to the success of this important effort, and I very much appreciate your agreeing to lead it. I attach a copy of my letter to the Task Force members regarding their appointment for your information.

Yours very truly,

Janet Napolitano
President

Attachment

President Napolitano's letter appointing Task Force members:



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1111 Franklin Street
Oakland, California 94607-5200
Phone: (510) 987-9074
Fax:(510) 987-9086
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July 14, 2015

LETTER SENT TO TASK FORCE MEMBERS (APPENDIX A)

Dear ....:

I am pleased to appoint you to the 2016 Retirement Options Task Force for the development and design of the retirement options for employees hired or rehired on or after July 1, 2016. The Task Force comprises administrators, faculty, and staff from across the University. Together, and in consultation with your respective constituencies, you will help guide the development of the University of California's 2016 Retirement Options.

With the signing of the FY 2015-16 State budget by Governor Brown, the University of California is entering into an era of increased funding and financial stability. Part of the State budget pertaining to UC is predicated on a multi-year agreement. One aspect of this agreement is a commitment by UC to implement a new category of retirement benefits for future employees to align pension-eligible pay with that of State employees.

To accomplish this important goal, I have asked Executive Vice President and Chief Operating Officer Rachael Nava to lead the 2016 Retirement Options Project and to serve as Chair of the Task Force. As a member of the Task Force, you are charged with delivering recommendations to me on the retirement benefit options for our future faculty, staff, and UC Health employees. Guiding principles for the Task Force will be to ensure that UC retirement benefits continue to be competitive in the context of our total remuneration package and that the University of California Retirement Plan remains financially sustainable. In addition, I expect you to provide strategic guidance to the project team and act as both champion and liaison with your colleagues and various constituencies. Your appointment is through July 1, 2016.

July 14, 2015
Page 2

The Task Force will meet approximately every two weeks through December 2015, and then periodically during the remainder of your appointment. The first meeting is scheduled for August 7, from 10:00 a.m. to 3:00 p.m., at the Office of the President in Oakland. While there may be select work in between meetings, the primary commitment is to engage during meetings.

Given the aggressive timeframe and the enormous importance of this project, please let Executive Vice President Nava know by the end of this week if you feel you will be unable to participate in this Task Force. She can be reached by phone at (510) 987-0500, or by email at Rachael.Nava@ucop.edu.

Your leadership and expertise are critical to the success of this important effort. I look forward to speaking with you at the kick-off meeting on August 7.

Yours very truly,

Janet Napolitano
President

cc: Chancellors
Executive Vice Chancellors
Provost Dorr
Executive Vice President Brostrom
Executive Vice President Nava
Executive Vice President Stobo
Chief Investment Officer Bachher
Senior Vice President Henderson
Senior Vice President Peacock
Vice President Duckett
General Counsel Robinson
Academic Senate Chair Gilly
Secretary and Chief of Staff Shaw
Executive Director Schlimgen

C. Retirement Savings Plans and Contribution Limits

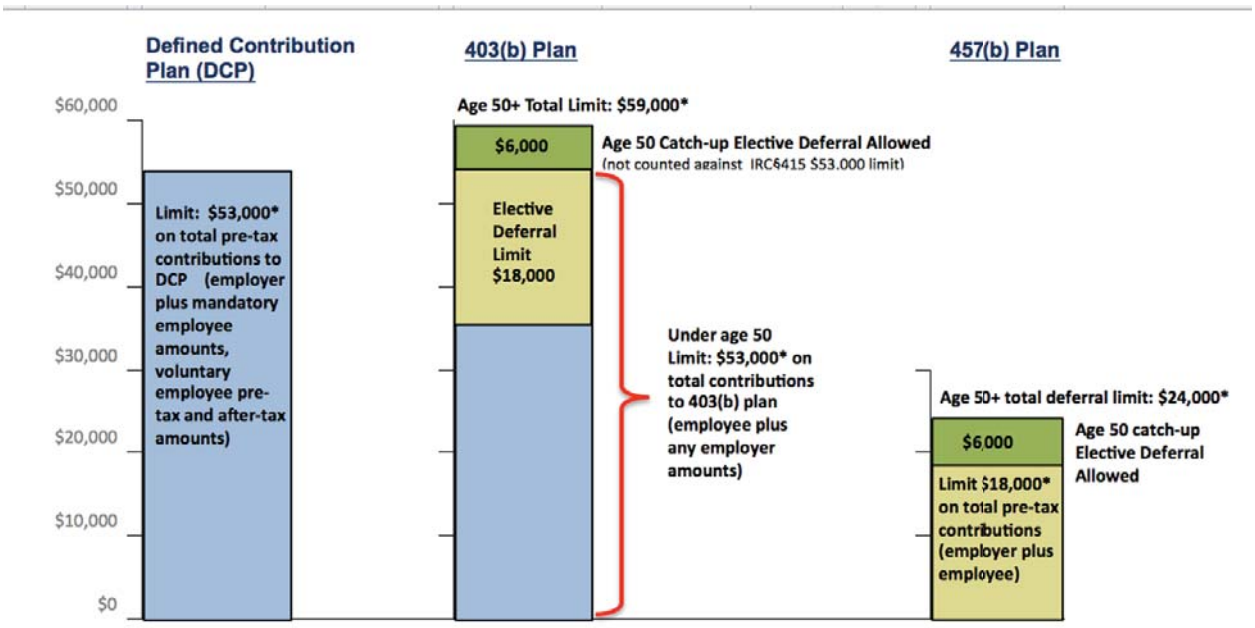
The following chart provides some basic information on the types of savings plans currently offered to University employees, eligibility and membership, plus contribution requirements and limits.

Retirement Savings Plans (defined contribution)

Voluntary Contributions	Eligibility	Employee Pays	University Pays	Active Membership July 1, 2015	Eligible Pay Limit 2015-16
403(b) employee pre-tax	all employees except students working less than 20 hours/wk	elective amount	NA	62,000	$265,000
457(b) employee pre-tax				17,000	
DC plan, after tax				4,200	
Fixed, Mandatory Contributions					
DC plan, pre-tax	Safe Harbor employees: (ineligible for UCRP)	7.50%	NA	36,000	$265,000

Summer or equivalent term academic employees contribute 3.5% to the DC Plan.

The contribution limits to the Retirement Savings Program plans are illustrated in the following chart:



***Or 100% of participant's compensation, whichever is less.**

Each Plan has a separate annual limit; eligible employees may participate in all three plans.

Using the DCP Plan for DC Choice Plan B and the DC Supplemental Plan would allow an employee to separately contribute the maximum elective deferral amounts to the 403(b) and 457(b) plans.

If the 403(b) plan were used for the DC Choice Plan B, those contributions would be included in the total contribution limit and reduce the amount an employee may contribute voluntarily.

Mandatory employee contributions include such things as Safe Harbor, summer/equivalent term salary, etc. and are included in the DCP $53,000 limit.

For each employee, there are annual limits on the total tax-deferred employee and employer contributions to the three savings plans, plus after-tax contributions to the DC Plan, regardless of the distribution of contributions across the plans. Each plan has its own limit (indexed annually) and contributions to one plan do not affect another plan's limit.

- An employee's elective annual pre-tax contributions to the 403(b) are limited to $18,000 in 2016; this amount also counts against the total $53,000 limit. Employees age 50 and older may contribute an additional $6,000, which does NOT count against the $53,000 limit.

- For the 457(b) Plan, an employee's annual pre-tax limit on contributions is $18,000 in 2016, plus an additional $6,000 for employees age 50 and older.

- Voluntary pre-tax employee contributions can be made only to the 403(b) and 457(b) plans[37].

IRC§ 401(a)(17)) Limit

The DC Plan and the 403(b) plan also have a limit on covered compensation established under IRC§ 401(a)(17)); in 2016, the limit is:

- $265,000 for members who entered the plan on/after July 1, 1994 and
- $395,000 for members who entered the plan before July 1, 1994 (higher limit in DC Plan only.)

The 457(b) Plan does not have an IRC §415(c) limit; the limit on total contributions is the same as the limit on elective deferrals. Amounts contributed to the 457(b) plan do not count against the DCP or 403(b) Plan IRC §415(c) limit.

The following DCP contributions count against the DC Plan IRC §415(c) limit:

- Employee mandatory Safe Harbor contributions,

- Any DCP pre-tax required employer and employee contributions (e.g., summer/equivalent term salary, SMSBP),

- Employee voluntary after-tax contributions,

- Amounts paid for service credit purchases and buybacks under UCRP – if taken into account at the year made.

The following contributions count against the 403(b) Plan IRC §415(c) limit:

- Employee pre-tax elective deferral contributions.

- Any other employer (e.g., SMSBP) contributions.

- Any other employee contributions (whether mandatory or elective).

- Amounts paid for service credit purchases and buybacks under UCRP – if taken into account at the year made.

Age 50 catch-up deferrals do not count against the 403(b) IRC §415(c) limit.

[37] Government entities, such as the University, cannot offer a 401(k) plan; the 403(b) is the equivalent for them.

D. FACULTY DEFINITION

"Faculty" is defined in Academic Personnel Manual section 1110-4 (15) and includes those who have responsibility for "conducting approved regular University courses for credit." Students in a UC degree program who teach are excluded from the definition. The Academic Personnel Manual definition does not exactly match the titles used by consultants to model new benefit design costs for faculty.

• These non-represented titles are included, with a current headcount of 17, 174:

- Professorial (tenured, tenure-eligible)
- Professor in Residence
- Professor of Clinical X
- Health Sciences Clinical Professor
- Acting Professor or Assistant Professor
- Lecturer and Senior Lecturer with Potential Security of Employment
- Lecturer and Senior Lecturer with Security of Employment
- Adjunct Professors, Visiting Professors, Clinical Professor of Dentistry

• These represented titles are also defined as faculty:

- Unit 18 Lecturers (headcount of 3,504)
- Supervisor of Teacher Education, Coordinator of Field Work, Field Work Supervisor,
- Field Work Consultant (headcount of 76)

• The APM definition of faculty includes Senate and non-Senate titles.

• The definition does NOT include Professional Researchers or others who play key academic roles in the educational and research missions of the University.

• Academic administrators with underlying faculty titles remain faculty.

E. ACTUARIAL ASSUMPTIONS AND METHODOLOGY

Actuarial Assumptions / Methodologies (Segal)

Unless otherwise noted, the cost calculations and projections were made using generally accepted actuarial practices and are based on either the July 1, 2014 actuarial valuation results for DC Supplemental Plan and DC Choice cost calculations or July 1, 2015 actuarial valuation results for UAAL projections. This includes the participant data and actuarial assumptions on which those valuations were based. Here are some of the important assumptions used:

- Includes campus and medical center segment of UCRP only.
- Reflects changes in actuarial assumptions adopted by The Regents as part of the actuarial experience study.
- Assumes market value returns of 7.25% per year beginning July 1, 2015.
- Reflects UCRP 2016 Tier starting July 1, 2016 including UCRP 2016 Tier CCL.
- Other provisions of the UCRP 2016 Tier are the same as those in the UCRP 2013 and Modified 2013 Tier.
- As requested by the Task Force, the cost modeling is based on an assumption of 0% per year workforce growth. The Task Force believed this assumption would help reflect the impact of benefit changes only. Other projections outside the Task Force charge have been based on an assumption of 0.7% per year workforce growth which results in around an 11% increase by the end of a 15-year period. The annual valuation presented to The Regents is performed on a closed-group basis (no new entrants) and so does not use a workforce growth assumption.
- UAAL contributions modeled vary and are detailed in the report for each scenario.
- Borrowing from STIP for three years as approved by The Regents is included as noted in the scenarios.
- $436 million in total State funding is included in UCRP 2016 Tier scenarios only.
- Total of UCRP employer and member contribution rates are assumed to be no greater than the total Funding Policy Contribution rate for any year.
- Demographics for future new entrants are assumed to be the same as those for members hired during the two years prior to July 1, 2015 (July 1, 2014 for DC Supplemental and DC Choice costs).
- UCRP and DC Choice take rates are modeled as shown and detailed in this report.

- The impact of choice upon hire ("initial choice") shown in this report was first modeled as a theoretical maximum cost of initial choice as follows:

- Treat UCRP as if it had a cash balance feature with immediate vesting and 7.25% return.

  – Cash balance represents contributions that, in the absence of choice, would have remained in UCRP and were assumed to earn 7.25%.

  – Contributions for employer and member based on the DC Choice design being valued.

  – At termination all members get the better (greater value) of cash balance account or present value of Plan A – UCRP 2016 Tier benefit (DB plus 10% DC supplemental).

  – These amounts are assumed to be taken out of UCRP in all situations where these contributions exceed the value of the UCRP benefit.

- This assumes that all members would have made optimal choice at hire for every potential termination or retirement age (non-death or disability).

- Cost increases were developed on that basis.

- In practice, not all members will make the optimal choice for every possible termination age, so the maximum theoretical costs were adjusted by the assumed net number of members that make the optimal choice rather than make the suboptimal choice (shown earlier in the report).

- The impact of second choice after five years of service shown in this report was modeled assuming that members will initially elect DC Choice plan and then elect UCRP five years later.

  – Cost impacts assuming all members would take advantage of second choice were then adjusted by the percentage of members assumed to utilize the second choice as shown earlier in the report.

All cost calculations and UAAL projections were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary who is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Actuarial Assumptions / Methodologies (Mercer)
In general, assumptions are based on Segal's Proposed Assumptions from the recent UCRP Actuarial Experience Study; key assumptions from the experience study are summarized below:

- Inflation: 3%

- Real wage growth: 0.5%
- Pay increases: Service graded schedule (e.g., ranging from 2.65% to 1.25% for faculty from 0 to 20 years of service, respectively, plus inflation and real wage growth; somewhat lower for staff).
- Mortality: RP-2014 White Collar with improvements projected to 2029 using Scale MP-2014 and one-year set forward.
- Retiree cost of living adjustments: 2%.

For purposes of modeling DC Supplemental and DC Choice design options, as well as comparisons between UCRP and DC benefits, Mercer used the following assumptions/scenarios:

- Retirement age:
  - Retirement income replacement ratio and lump sum value comparisons show the benefit that would be payable at age 55 (or immediately if age of termination is after 55).
  - Comparator relative value comparisons show the employer-provided share of benefits at age 65 and at 10 years of service.
- Investment return on DC account balances – 2 scenarios:
  - 7.25% (matches Segal's proposed assumptions).
  - 4.75% (to provide a reasonable range of outcomes).

Reduced return scenarios recognize that the 7.25% return is not a risk-free rate and some participants may choose to invest more conservatively to reduce investment volatility.

- Interest rate to determine annuity and lump sum equivalence: 4.75%
  - For purposes of converting the DC account balance to an equivalent annuity, the account is assumed to earn the investment return from the current age until age 55, and then is converted to an annuity based on the 4.75% assumption.
  - For purposes of converting the UCRP benefit to an equivalent lump sum, the conversion rate of 4.75% is applied from current age; 4.75% rate represents a long-term cost of annuitization and is somewhat higher than current rates.

Other assumptions:

- Groups in the modified UCRP 2013 Tier are assumed to be in a similarly modified UCRP 2016 Tier.

F. COMPARISON DATA AND PERSONAS MODELING

1. Comparison Data

As part of the 2016 Retirement Options Project, University of California (UC) requested that Mercer include retirement benefit comparisons against selected universities and medical providers.

Comparators Selected by UC

A. Comp 26 Universities

As requested by UC, the following 26 universities (Comp 26) were selected for retirement plan benchmarking comparisons. Comp 8 universities used in a recent total remuneration study for Ladder-Rank Faculty were part of the Comp 26 as noted below.

1. Brown University
2. California Institute of Technology
3. Columbia University
4. Cornell University
5. Harvard University[38]
6. Johns Hopkins University
7. Massachusetts Institute of Technology[38]
8. Northwestern University
9. Stanford University[38]
10. State University of New York – Buffalo[38]
11. State University of New York Stony Brook
12. University of Chicago
13. University of Colorado - System
14. University of Colorado at Denver
15. University of Illinois, Chicago
16. University of Illinois, Urbana-Champaign[38]
17. University of Michigan[38]
18. University of Minnesota - System
19. University of Minnesota - Duluth
20. University of Minnesota - Twin Cities
21. University of Pennsylvania
22. University of Texas System
23. University of Virginia[38]
24. University of Washington
25. University of Wisconsin – Madison
26. Yale University[38]

[38] Member of Comp 8.

B. Selected California Medical Providers and National Academic Medical Centers

As requested by UC Health through UCOP (University of California Office of President), the following California Medical Providers and National Academic Medical Centers were selected for retirement plan benchmarking comparison:

Thirteen (13) Selected National Academic Medical Centers

1. Baylor College of Medicine
2. Cornell University
3. Houston Methodist
4. Oregon Health and Science University
5. Johns Hopkins Hospital
6. University of Texas Health Science Center at Houston
7. University of Michigan Medical Center
8. University of Pennsylvania Health System
9. University of Pittsburgh Medical Center
10. University of Southern California
11. University of Virginia Health System
12. University of Washington
13. Vanderbilt Medical Center

Nine (9) Selected California Medical Providers

1. City of Hope
2. Dignity Health
3. Kaiser Permanente, Northern California
4. Kaiser Permanente, Southern California
5. Memorial Care Health System – CA
6. John Muir
7. St. Joseph Health System CA
8. Stanford Hospital and Clinics
9. Sutter Health

2. Data Sources

A primary source of data was Mercer's benefit database – Mercer maintains a database of over 1,000 organizations; data is collected and updated annually with some organizations updating every 2 or 3 years. All primary employee benefits are included in the database such as Retirement/Savings plans (defined benefit and defined contribution plans), Health and Group plans (active and post-retirement medical, dental and life insurance) and Time Off plans (vacation, holiday, sick leave, personal leave, short term disability and long term disability. For the above universities and medical organizations not in the database, Mercer gathered the most current defined benefit and defined contribution plan provisions[39] for the above universities and medical organizations from the following three sources:

[39] Mercer was able to collect the current (2015) defined benefit and defined contribution plan provisions for most comparators, with the exception of Harvard University (plan provisions are as of 2014), and Kaiser Permanente, Northern and Southern California (plan provisions are as of 2013).

1. Internet Search: Mercer first performed a search for publicly available information. Most plan provisions were collected through Internet search.

2. Information from Mercer Consultants: Mercer also collected information internally, specifically, from consultants who worked with universities or organizations that were part of the list of comparators.

3. Information Directly from Universities / Medical Organizations: If there were still missing information after going through the above two routes, Mercer requested plan documents or plan summaries directly from the universities / medical organizations.

3. Benchmarking Comparison

Mercer compared the following plan provisions against the comparators. They were summarized and presented at the Task Force meetings:

- Employees covered
- Defined benefit plan formula
- Defined contribution employer contribution
- Mandatory employee contribution
- Employer matching contribution
- Vesting schedule
- Cost of living adjustment (COLA)
- DB (Defined Benefit) plan type
- Options and provisions for plans that provide pension choice

Comparator Relative Value Comparison

Mercer also compared the current UCRP (University of California Retirement Plan) and proposed DC (Defined Contribution) Supplemental / DC Choice design options against retirement benefits provided by the following comparators for each of the selected Personas.

- Comp 26[40]
- Selected California Medical Providers and National Academic Medical Center comparators[40]

Relative value comparisons were based on employer-provided share of benefits only (for DB plans, this represented the total value of benefits less the accumulated value of employee contributions) at age 65 and 10 years of service. If a DB / DC choice was available, the more valuable of the two was used in the comparison, assuming individuals would make the choice that produces the greatest value for their career pattern.

[40] Two (2) universities and three (3) healthcare organizations are excluded in the comparison, due to complexity of their plan design (and the timeframe available). We do not expect the results to be significantly different if they are included.

These relative value comparison results were included in materials provided to the Task Force, along with selected Persona modeling illustrations presented at Task Force meetings.

4. Other Comparison Data

In addition to Comp 26 and Selected California Medical Providers and National Academic Medical Centers, Task Force members requested retirement benefits comparison against large California employers (specifically companies in the technology industry). Based on information available in the Mercer benefits database and publicly available information for companies in the technology industry, Mercer summarized the pension plan design information (including employees covered, Defined Benefit plan type, Defined Benefit plan formula, DC employer matching contributions, profit sharing plan contribution, and vesting schedule) for the following companies (including the Comparator Relative Value Comparison):

- Adobe Systems Inc.[41]
- AECOM Corp.
- Bechtel Corp.
- Chevron Corp.
- Cisco System Inc.
- eBay Inc. [41]
- Google Inc. [41]
- Hewlett-Packard Company[41]
- Pacific Gas & Electric Company
- PayPal Holdings Inc. [41]
- URS Corp.
- Wells Fargo & Company

For comparator information related to default, second choice and revocability, Mercer also summarized related information for public retirement systems that offered retirement choice, based on information from research "Decision, Decisions: Retirement Plan Choices for Public Employee and Employer" published by Milliman/National Institute on Retirement Security in September 2011.

5. Personas

As part of the 2016 Retirement Options project, the University asked Mercer to select representative new hire Personas for purposes of plan design modeling. Based on new hire data provided by Segal for the period July 1, 2013 to June 30, 2014, the University identified thirteen (13) Personas for modeling various plan design options, including comparisons between the current UCRP (University of California Retirement Plan) benefits and plan design options for UCRP 2016 Tier plus DC (Defined Contribution) Supplemental/DC Choice Plans, as well as how preliminary UCRP 2016 Tier plus DC Supplemental/DC Choice Plans design options compared against competitors' retirement benefits.

[41] Research from publicly available information.

Data Source and Analysis

Based on UCRP 2013 Tier and Modified UCRP 2013 Tier new hire data (from July 1, 2013 to June 30, 2014) provided by Segal, title codes for specific employee groups (including Ladder Rank Faculty, UC Health and Health Sciences Faculty) provided by UCOP (University of California Office of the President), and employee group input from UCOP, Mercer divided the new hire population into sixteen (16) employee groups to be considered in Persona selection. Mercer developed the following illustrative profile statistics for each employee group:

- Average age
- Average eligible pay (based on the definition of Covered Compensation applicable to the UCRP 2013 Tier)
- Percentage of the group in the Modified UCRP 2013 Tier (these participants contribute to the plan at a higher rate and are eligible for better early retirement benefits)
- Percentage of the group with projected eligible pay above the UCRP 2016 Tier CCL (Covered Compensation Limit), and
- Percentage of the group projected to earn above the projected UCRP 2016 Tier CCL by age 60 (based on the eligible pay increase and inflation assumptions provided by Segal reflecting their recent experience study results).

Rehires are excluded from the employee grouping statistics as they returned to their respective Tier upon re-employment. Potential changes in future hiring trends are also not reflected in Persona development.

From this initial group of 16 Personas, UC selected 13 illustrative Personas for detailed modeling. Although there is considerable variation in starting eligible pay for each of the employee groupings summarized above, the Persona modeling reflected only the average eligible pay for the group, as shown below. Differences in average eligible pay between the different Persona profiles provide some insight into how the UCRP 2016 Tier CCL affects employees at different pay levels.

Summary of Selected Personas from 2013 Tier New Hire Data

Illustrative Personas Selected	Count	Average Age at Hire	Average Eligible Pay at Hire ($)[38]
1. Ladder Rank Faculty: Full Professor	28	51	184,000
2. Ladder Rank Faculty: Associate Professor	30	42	115,000
3. Ladder Rank Faculty: Assistant Professor[39]	202	36	98,000
4. Non-Ladder Rank Faculty	350	39	61,000
5. UC Health: Non-represented	643	40	93,000
6. Management & Executives	541	43	126,000
7. Staff: Non-represented	3,310	34	55,000
8. UC Health Nurses: Represented	518	35	113,000
9. Health Sciences Faculty: Assistant Professor[39]	46	36	98,000
10. Health Sciences Faculty: Full Professor	16	53	154,000
11. Health Sciences Faculty: Associate Professor	5	42	124,000
12. Staff: Represented	2,853	32	42,000
13. UC Health: Represented (Excluding Nurses)	1,782	33	65,000

6. Persona Modeling

For each of these Personas, Mercer produced the following modeling:

- Projected pay compared against UCRP 2016 Tier CCL projection (reflecting the baseline salary growth assumption, and +/-1% sensitivities).
- Comparison of current UCRP benefits to various UCRP 2016 Tier plus DC Supplemental design option.
- Comparison of current UCRP benefits to various DC Choice design options
- Retirement benefit comparisons and percentile rankings.

Selected California Medical Providers and National Academic Medical Center comparator retirement benefit comparisons and percentile rankings (only for Health related Personas 3, 5, 8, 10 and 11).

7. Projected Pension for Personas

The following chart shows retirement income for selected Personas for the design alternatives considered by the Task Force.

Projected Pension as a % of Eligible Pay at Retirement - Summary

Pension benefits	Age 55	Age 60	Age 65	Age 70
Persona 3 – LRF: Assistant Professor				
1. 2013 Tier UCRP benefits	18.9%	39.4%	66.1%	77.5%
2. 2016 Tier UCRP benefits	14.1%	26.8%	41.3%	44.5%
3. DC Supplemental Flat 10% Option *(4.75% return / 4.75% conversion)*	1.5%	3.1%	5.3%	8.6%
4. DC Supplemental Flat 10% Option *(7.25% return / 4.75% conversion)*	1.7%	3.6%	6.5%	11.1%
5. DC Choice Flat 10% Option *(4.75% return / 4.75% conversion)*	14.1%	20.0%	27.7%	38.1%
6. DC Choice Flat 10% Option *(7.25% return / 4.75% conversion)*	17.6%	26.6%	39.2%	57.6%
Persona 7 – Staff: Non-represented				
1. 2013 Tier UCRP benefits	21.5%	43.5%	72.0%	83.6%
2. 2016 Tier UCRP benefits	21.5%	43.5%	72.0%	83.6%
3. DC Supplemental Flat 10% Option *(4.75% return / 4.75% conversion)*	0.0%	0.0%	0.0%	0.0%
4. DC Supplemental Flat 10% Option *(7.25% return / 4.75% conversion)*	0.0%	0.0%	0.0%	0.0%
5. DC Choice Flat 10% Option *(4.75% return / 4.75% conversion)*	17.7%	25.2%	35.1%	48.9%
6. DC Choice Flat 10% Option *(7.25% return / 4.75% conversion)*	22.9%	34.8%	52.1%	78.0%
Persona 8 - UC Health Nurses: Represented				
1. 2013 Tier UCRP benefits	33.4%	58.1%	69.7%	81.3%
2. 2016 Tier UCRP benefits	25.3%	42.4%	49.0%	55.2%
3. DC Supplemental Flat 10% Option *(4.75% return / 4.75% conversion)*	2.7%	4.5%	7.0%	10.7%
4. DC Supplemental Flat 10% Option *(7.25% return / 4.75% conversion)*	3.2%	5.6%	9.3%	15.1%
5. DC Choice Flat 10% Option *(4.75% return / 4.75% conversion)*	18.7%	26.9%	37.7%	52.8%
6. DC Choice Flat 10% Option *(7.25% return / 4.75% conversion)*	23.9%	36.7%	55.2%	83.0%
Persona 12 - Staff: Represented				
1. 2013 Tier UCRP benefits	38.5%	65.1%	76.7%	88.3%
2. 2016 Tier UCRP benefits	38.5%	65.1%	76.7%	88.3%
3. DC Supplemental Flat 10% Option *(4.75% return / 4.75% conversion)*	0.0%	0.0%	0.0%	0.0%
4. DC Supplemental Flat 10% Option *(7.25% return / 4.75% conversion)*	0.0%	0.0%	0.0%	0.0%
5. DC Choice Flat 10% Option *(4.75% return / 4.75% conversion)*	22.0%	30.7%	42.2%	58.3%
6. DC Choice Flat 10% Option *(7.25% return / 4.75% conversion)*	29.3%	43.7%	64.5%	95.8%
Persona 13 - UC Health: Represented (Excluding Nurses)				
1. 2013 Tier UCRP benefits	36.8%	62.7%	74.4%	86.0%
2. 2016 Tier UCRP benefits	36.8%	62.7%	74.4%	86.0%
3. DC Supplemental Flat 10% Option *(4.75% return / 4.75% conversion)*	0.0%	0.0%	0.0%	0.0%
4. DC Supplemental Flat 10% Option *(7.25% return / 4.75% conversion)*	0.0%	0.0%	0.0%	0.0%
5. DC Choice Flat 10% Option *(4.75% return / 4.75% conversion)*	20.9%	29.4%	40.7%	56.5%
6. DC Choice Flat 10% Option *(7.25% return / 4.75% conversion)*	27.4%	41.3%	61.3%	91.4%

DC account balance is converted to equivalent annual income stream.

8. Percentile Ranking by Personas

The following two charts show the percentile ranking for the two new DC plans (Plan A and B). The first shows ranking for Plan A and B against the Comp 26; the second shows ranking against California Medical Providers and National Academic Medical Centers. In all cases, the benefits designs are well above the median 50%.

Percentile Ranking by Persona
Flat 10% DC Supplemental & Flat 10% DC Choice
4.75% Annuity Conversion Rate

Comp 26 Percentile Ranking of Proposed UCRP Benefit
UC Supplemental: 10% Above CCL / UC Choice: Flat 10% Option
Based on Better of Plan A - 2016 Tier + Supplemental or Plan B - DC Choice Benefits

Persona		At Age 65	At 10 Years of Service
1	LRF: Full Professor	71%	76%
2	LRF: Associate Professor	76%	92%
3	LRF: Assistant Professor	76%	97%
4	Non-LRF Faculty	92%	92%
5	UC Health: Non-represented	92%	92%
6	Management & Executives	82%	92%
7	Staff: Non-represented	92%	97%
8	UC Health Nurses (Represented)	76%	97%
9	HS: Assistant Professor	76%	97%
10	HS: Full Professor	82%	82%
11	HS: Associate Professor	76%	87%
12	Staff: Represented	92%	97%
13	UC Health: Represented	92%	97%

Shows the percentile ranking against the Comp 26 of the most valuable plan design choice (Plan A – UCRP 2016 Tier + 10% DC supplemental or Plan B – Flat 10% DC Choice). A number higher than 50% represents a plan design above the median and a number lower than 50% represents a plan design below the median.

Comparisons assume 7.25% interest rate and 4.75% conversion rate assumption; the interest rate is consistent with Segal's valuation assumptions for UCRP, and the conversion rate is closer to (although still somewhat higher than) the current rate an insurer would charge for an immediate annuity at the specified ages.

Personas 8, 12 and 13 are represented employees. We have assumed a 9% employee contribution rate. The value of the Modified Tier early retirement subsidy is not reflected in the comparison of value at 10 years of service or at age 65.

The above chart ranks Plan A and Plan B against the Comp 26 Institutions.

Percentile Ranking by Persona
Flat 10% DC Supplemental & Flat 10% DC Choice
4.75% Annuity Conversion Rate

California Medical Providers and National Academic Medical Center
Percentile Ranking of Proposed UCRP Benefits
UCRP Supplemental: Flat 10% Option / DC Choice: Flat 10% Option
Based on Better of Plan A - 2016 Tier + Supplemental or Plan B - DC Choice Benefits

Persona		At Age 65	At 10 Years of Service
3	LRF: Assistant Professor	78%	83%
5	UC Health: Non-represented	88%	83%
8	UC Health Nurses (Represented)	78%	93%
9	HS: Assistant Professor	78%	83%
10	HS: Full Professor	83%	83%
11	HS: Associate Professor	78%	83%
13	UC Health: Represented	88%	83%

Shows the percentile ranking against the California Medical Providers and National Academic Medical Center comparators of the most valuable plan design choice (Plan A – UCRP 2016 Tier + 10% DC supplemental or Plan B – Flat 10% DC Choice). A number higher than 50% represents a plan design above the median and a number lower than 50% represents a plan design below the median.

Comparisons assume 7.25% interest rate and 4.75% conversion rate assumption; the interest rate is consistent with Segal's valuation assumptions for UCRP, and the conversion rate is closer to (although still somewhat higher than) the current rate an insurer would charge for an immediate annuity at the specified ages.

Personas 8, 12 and 13 are represented employees. We have assumed a 9% employee contribution rate. The value of the Modified Tier early retirement subsidy is not reflected in the comparison of value at 10 years of service or at age 65.

The above chart ranks Plan A and Plan B against California Medical Providers and National Academic Medical Centers.

The next two charts show the percentile ranking of the UCRP 2013 Tier benefits against the same comparator institutions. A few Personas are below the median at 10 years of service, but those same Personas exceed the median at age 65.

Percentile Ranking by Persona
2013 Tier UCRP Benefits
4.75% Annuity Conversion Rate

		Comp 26 Percentile Ranking of UCRP 2013 Tier Benefits	
		At Age 65	At 10 Years of Service
Persona			
1	LRF: Full Professor	92%	92%
2	LRF: Associate Professor	92%	92%
3	LRF: Assistant Professor	92%	29%
4	Non-LRF Faculty	92%	92%
5	UC Health: Non-represented	92%	92%
6	Management & Executives	92%	92%
7	Staff: Non-represented	92%	18%
8	UC Health Nurses (Represented)	92%	13%
9	HS: Assistant Professor	92%	29%
10	HS: Full Professor	92%	92%
11	HS: Associate Professor	92%	92%
12	Staff: Represented	92%	3%
13	UC Health: Represented	92%	3%

Shows the percentile ranking against the Comp 26 of the UCRP 2013 Tier Benefits. A number higher than 50% represents a plan design above the median and a number lower than 50% represents a plan design below the median.

Comparisons assume 7.25% interest rate and 4.75% conversion rate assumption; the interest rate is consistent with Segal's valuation assumptions for UCRP, and the conversion rate is closer to (although still somewhat higher than) the current rate an insurer would charge for an immediate annuity at the specified ages.

Personas 8, 12 and 13 are represented employees. We have assumed a 9% employee contribution rate. The value of the Modified Tier early retirement subsidy is not reflected in the comparison of value at 10 years of service or at age 65.

The above chart ranks the UCRP 2013 Tier against the Comp 26 institutions.

Percentile Ranking by Persona
2013 Tier UCRP Benefits
4.75% Annuity Conversion Rate

		California Medical Providers and National Academic Medical Center Percentile Ranking of UCRP 2013 Tier Benefits	
		At Age 65	At 10 Years of Service
Persona			
3	LRF: Assistant Professor	98%	58%
5	UC Health: Non-represented	98%	83%
8	UC Health Nurses (Represented)	98%	18%
9	HS: Assistant Professor	98%	58%
10	HS: Full Professor	98%	98%
11	HS: Associate Professor	98%	88%
13	UC Health: Represented	88%	3%

Shows the percentile ranking against the California Medical Providers and National Academic Medical Center comparators of the UCRP 2013 Tier Benefits. A number higher than 50% represents a plan design above the median and a number lower than 50% represents a plan design below the median.

Comparisons assume 7.25% interest rate and 4.75% conversion rate assumption; the interest rate is consistent with Segal's valuation assumptions for UCRP, and the conversion rate is closer to (although still somewhat higher than) the current rate an insurer would charge for an immediate annuity at the specified ages.

Personas 8, 12 and 13 are represented employees. We have assumed a 9% employee contribution rate. The value of the Modified Tier early retirement subsidy is not reflected in the comparison of value at 10 years of service or at age 65.

The above chart ranks the UCRP 2013 Tier against the California Medical Providers and National Academic Medical Centers.

G. COST OF CHOICE

Consultants modeled the cost of allowing choice upon hire and second choice after five years. These costs are in addition to the basic costs for the DB and DC plans shown earlier. There is a potential for significant variability in these estimates since no plan specific experience is currently available.

For initial choice upon hire, actual cost impacts will emerge over long-term in two ways:

- Members specifically electing Plan B (DC Choice Plan) will not be part of future UCRP valuations. If younger new hires elect Plan B, this leaves UCRP with higher entry age members who will increase UCRP's normal cost for new hires.
- Turnover assumptions may change in future experience studies. If new hires who are younger and more likely to leave service before retirement may

choose Plan B, it could lead to a higher Normal Cost over time since the remaining new hires would have lower termination rates.

Neither of these immediately changes UCRP's employer contribution rate. However, a higher Normal Cost results in smaller contributions towards the UAAL that could result in the UCRP employer contribution rate needing to stay at 14% of pay for a longer period of time.

Allowing members a second choice after five years of service also increases costs. This cost increase is mostly due to a higher UCRP 2016 Tier normal cost with members entering five years later plus the faster vesting schedule under Plan B (DC Choice Plan).

A general summary of the assumptions on the ratio of eligible new hires choosing Plan A and Plan B and for the second choice is shown in the table below. Note that the number of new hires defaulting includes those new hires that would elect UCRP if it were not the default. Those members do not submit an election, as they know they will be defaulted to UCRP.

Cost of Initial and Second Choice for DC Choice Plans

	Cost of First Choice		Cost of Second Choice
DC Choice Design	% New Hires who Default to 2016 Tier + DC Supplemental	Net % of Remaining New Hires who Make Optimal Choice at Hire	% of New Hires Switching from DC to DB upon Second Choice
Flat 8% Option	50%	10%	20%
Flat 10% Option	40%	7.5%	30%
Flat 8%/10% Option	50%	10%	20%
Graded Option	50%	10%	20%

The following charts show the details of the projected costs for the initial choice and the second choice for each design. The combined employer UCRP 2016 Tier Normal Cost and DC Choice Plan costs are shown in the four tables below. These costs do not include UAAL contributions. There is one table for each Plan B, DC Choice Plan modeled earlier. The costs also include the estimated cost for initial choice upon hire and second choice after five years. The election (take rate) assumptions shown in the tables were derived based on the default plan (UCRP) and the relative value of the Plan B, DC Choice Plan to the UCRP 2016 Tier.

Combined Employer Normal Cost/DC Cost
Flat 10% DC Supplemental / Flat 8% DC Choice

Design Options	Vesting	Take Rate Scenario	15-year Average Annual Dollar Cost ($ Millions)	15-year Average % of Pay up to IRC 401(a)(17)	Long-term Projected % of Pay up to IRC 401(a)(17)
Initial Choice					
DEFAULT: 2016 Tier + DC Supplemental Flat 10% Option	5-year cliff	75%	$264	5.6%	5.2%
DC Choice Flat 8% Option	1-year cliff	25%	$92	2.0%	2.0%
Cost of Initial Choice	N/A	See Above	$15	0.3%	0.3%
Cost of Second Choice (Prospective)			$19	0.4%	0.8%
Total Combined Cost			$390	8.3%	8.3%

Combined Employer Normal Cost/DC Cost
Flat 10% DC Supplemental / Flat 10% DC Choice

Design Options	Vesting	Take Rate Scenario	15-year Average Annual Dollar Cost ($ Millions)	15-year Average % of Pay up to IRC 401(a)(17)	Long-term Projected % of Pay up to IRC 401(a)(17)
Initial Choice					
DEFAULT: 2016 Tier + DC Supplemental Flat 10% Option	5-year cliff	60%	$211	4.5%	4.1%
DC Choice Flat 10% Option	1-year cliff	40%	$183	3.9%	4.0%
Cost of Initial Choice	N/A	See Above	$14	0.3%	0.3%
Cost of Second Choice (Prospective)			$25	0.5%	0.7%
Total Combined Cost			$433	9.2%	9.1%

Combined Employer Normal Cost/DC Cost
Flat 10% DC Supplemental / Flat 8%/10% DC Choice

Design Options	Vesting	Take Rate Scenario	15-year Average Annual Dollar Cost ($ Millions)	15-year Average % of Pay up to IRC 401(a)(17)	Long-term Projected % of Pay up to IRC 401(a)(17)
Initial Choice					
DEFAULT: 2016 Tier + DC Supplemental Flat 10% Option	5-year cliff	75%	$264	5.6%	5.2%
DC Choice Flat 8%/10% Option	1-year cliff	25%	$93	2.0%	2.0%
Cost of Initial Choice	N/A	See Above	$15	0.3%	0.3%
Cost of Second Choice (Prospective)			$19	0.4%	0.8%
Total Combined Cost			$391	8.3%	8.3%

Combined Employer Normal Cost/DC Cost
Flat 10% DC Supplemental / Graded Option DC Choice

Design Options	Vesting	Take Rate Scenario	15-year Average Annual Dollar Cost ($ Millions)	15-year Average % of Pay up to IRC 401(a)(17)	Long-term Projected % of Pay up to IRC 401(a)(17)
Initial Choice					
DEFAULT: 2016 Tier + DC Supplemental Flat 10% Option	5-year cliff	75%	$264	5.6%	5.2%
DC Choice Graded Option (6%/8%/10%)	1-year cliff	25%	$78	1.7%	2.0%
Cost of Initial Choice	N/A	See Above	$13	0.3%	0.3%
Cost of Second Choice (Prospective)			$0	0.0%	0.6%
Total Combined Cost			$355	7.6%	8.1%

As can be seen, the additional cost of the initial choice does not vary significantly between the designs; there is a greater difference in the cost of the second choice between the recommended flat 10% design and the other design options. There is no cost of second choice for graded option due to the lower initial contribution under that option (6% for the first five years of service). In all cases, the estimated combined cost of both a first and a second choice would increase the normal cost of the plans by less than 1% of eligible pay.

H. **IMPLEMENTATION** of the proposed retirement plan changes requires changes to the payroll, pension administration, recordkeeping and financial systems and processes. Since the payroll and pension administration systems are in the process of being replaced, both the legacy and the new systems will require modifications to implement the retirement plan changes as of July 1, 2016. Additionally, Fidelity, the University's master record keeper for the defined contribution plans will be making changes to the University portal and their processes to accommodate the Supplemental DC and DC Choice changes. Communications to support and educate members on the retirement plan changes and support the member election process will be required to implement the changes. Resources at all campuses and medical centers will require training to support the retirement plan changes.

I. **COMMUNICATIONS**

A variety of communications were employed to keep the University community and other stakeholders apprised about the Task Force's work. These communications included news stories, a website dedicated to the work of the Task Force (http://ucal.us/2016retbens), and summaries of Task Force meetings. Once the University Board of Regents approves new benefits proposed by the President, a comprehensive communications and training program will be rolled out to ensure (1) current employees and administrative groups are informed of the Regents' decisions, (2) the relevant University personnel (e.g., retirement benefits counselors and academic personnel officers) are trained on the new benefits, and (3) future employees (i.e., new, rehired and newly eligible employees hired on or after July 1, 2016) have the information and decision tools they need to make informed choices about their retirement benefits. Print materials (benefits booklets, fact sheets, FAQs, etc.), an instructional video, an informational website and a possible interactive "chooser" tool that allows online modeling of individual retirement benefits choices are all possible elements of the communication and training program.

J. **LINK TO FACULTY REMUNERATION STUDY**

http://regents.universityofcalifornia.edu/regmeet/july15/c10.pdf

K. **LINK TO UCRP VALUATION**

http://regents.universityofcalifornia.edu/regmeet/nov15/f10.pdf

L. DEFINITIONS

Accrued benefits: benefits earned to date by plan members under the plan's provisions.

Actuarial Value: a mathematical calculation of a pension plan's status using assets, liabilities, contributions and actuarial assumptions about future investment earnings, retirements, terminations and mortality. It includes the present value of benefits payable to present members, and the present value of future employer and member contributions, factoring in mortality among active and retired members and the rates of disability, retirement, withdrawal from service, salary and interest. It is the value of cash, investments, and other property belonging to a pension plan, as used by the actuary for the purpose of an actuarial valuation. The actuarial value of assets may represent an average value over time, and normally differs from the market value (what the plan's investments could be traded for at a particular in time, given market prices for its assets).

Actuarial Value of Assets: Actuarial Value of Assets: a calculated value of assets that spreads investment losses and gains over a five-year period (for UCRP).

Age factor: In the UCRP retirement benefit formula, the percent of pay for each year of credited service.

Amortize: to spread a debt in equal installments over a fixed period. Similar to a mortgage, a pension amortization period has fixed annual amounts with differing levels of principal and interest.

Actuarially Determined Contribution (ADC): A measure of needed plan funding used by GASB (Governmental Accounting Standards Board). The ADC has two parts: the Normal Cost and the Amortization, which is the annual amount needed to eliminate the unfunded liability over the plan's amortization period.

Annuity: payment of a fixed income in regular installments.

Assumed earnings rate: the rate of investment return (including inflation) that a pension plan is expected to earn over the long term; used in projecting the future value of a plan's assets.

Covered Compensation: For UCRP, covered compensation (or eligible pay) is base pay from the University for a regular appointment at the full-time rate. This includes pay for sabbaticals or other paid leave, as well as stipends. It does not include such things as overtime, summer session pay, uniform allowances or amounts over the established base pay rates or pay above the limits established in the Internal Revenue Code (IRC) or by the University.

Covered Payroll: eligible pay (or covered compensation) for UCRP.

A **Defined Benefit plan (DB)** guarantees a benefit based on a formula, usually based on some combination of age, years of service, and pre-retirement earnings.

The amount of retirement income is not affected by market fluctuations. The employer bears the investment risk and combined employer/member contributions and investment earnings fund benefits.

A **Defined Contribution plan (DC)**: contributions are put into funds whose investments are directed by the member and are subject to market fluctuations. Participants bear the investment risk. Defined contribution plan benefits generally are more portable than other types of retirement plans.

Eligible Pay: See Covered Compensation.

Funded ratio/funded status: A percentage based on plan assets divided by plan liabilities. It indicates relative financial stability.

HAPC or Highest Average Plan Compensation is the salary, or covered earnings, averaged over 36 consecutive months. It is used to calculate UCRP pension benefits.

Health Science faculty have academic appointments in a health science school which include such departments as Medicine, Nursing, Dentistry, Pharmacy.

Market Value is the price at which a plan's assets could be traded at a particular point in time.

Normal Cost is the cost of an additional year of service credit for all active UCRP members.

"Smoothing:" UCRP "smoothes" or spreads investment gains/losses over five years to avoid short-term effects of market swings on planning based on thirty-year projections.

Total Remuneration: The market measure of the value of cash compensation, health, welfare and retirement benefits to faculty and staff.

Vest or vesting: a right to an asset, such as pension benefits earned to date, that cannot be taken away by any third party.