The Regents of the University of California

FINANCE AND CAPITAL STRATEGIES COMMITTEE

September 18, 2019

The Finance and Capital Strategies Committee met on the above date at the Luskin Conference Center, Los Angeles campus.

Members present: Regents Cohen, Estolano, Kounalakis, Leib, Makarechian, Park, Sherman,

Simmons, and Um; Ex officio member Napolitano; Advisory members Bhavnani, Mart, and Muwwakkil; Chancellors Christ, Gillman, and

Hawgood; Staff Advisor Jeffrey

In attendance: Secretary and Chief of Staff Shaw, Chief Investment Officer Bachher,

Executive Vice President and Chief Operating Officer Nava, Interim Executive Vice President and Chief Financial Officer Jenny, Chancellors Block and Wilcox, Interim Chancellor Brostrom, Chief of Staff and Special

Counsel Drumm, and Recording Secretary Johns

The meeting convened at 2:30 p.m. with Committee Chair Makarechian presiding.

1. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes the meeting of July 17, 2019 were approved.

2. APPROVAL OF THE UNIVERSITY OF CALIFORNIA 2020-21 BUDGET FOR STATE CAPITAL IMPROVEMENTS

The President of the University recommended that the 2020-21 Budget for State Capital Improvements be approved as shown below:

		State General Funds Financed (\$000s)
Los Angeles	Public Affairs Building Seismic Improvements	\$25,000
Riverside	School of Medicine Education Building II	\$100,000
Systemwide	UC Center in Sacramento	\$11,400
Systemwide	2020-21 UC Seismic Program Supported by State Resources	\$300,000
Systemwide	2020-21 Planning for Future State Capital Outlay	\$80,000

Capital Projects Total	\$516,400
2020-21 Systemwide State Deferred Maintenance Program	\$35,000
TOTAL STATE FUNDS FINANCED	\$551,400

-2-

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Makarechian briefly introduced the item.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

3. UNIVERSITY OF CALIFORNIA RETIREMENT PLAN – PROPOSAL TO ADOPT CHANGES IN ACTUARIAL ASSUMPTIONS AND AUTHORIZATION TO INCREASE THE EMPLOYER CONTRIBUTION RATES

The President of the University recommended that:

- A. For the UC Retirement Plan (UCRP or Plan), a 6.75 percent investment return assumption, a 2.5 percent inflation assumption, a 0.75 percent real "across the board" salary increase assumption, and the merit and promotion salary increase assumptions for Staff and Safety members as summarized in Attachment 1 be adopted.
- B. The Consulting Actuary's recommendations regarding all other economic and noneconomic actuarial valuation assumptions for the UCRP, other than those described above, summarized in Attachment 1 be adopted.
- C. With respect to the UC-PERS Plus 5 Plan and the UC Retiree Health Benefit Program, the actuarial valuation assumptions summarized in Attachment 2 be adopted.
- D. Authorize the Plan Administrator to implement the recommended changes.
- E. Approve the following schedule of increases in the University contribution rate on behalf of active members in the Campus and Medical Centers (C/MC) and Lawrence Berkeley National Laboratory (LBNL) segments of UCRP and on behalf of active participants in "Savings Choice" from 14 percent and six percent, respectively, to:

	UCRP Employer Contribution Rate	
Effective Date	UCRP Active	Savings Choice
	Members1	"UAAL Surcharge"2
July 1, 2020	14.5%	6.5%
July 1, 2021	15.0%	7.0%
July 1, 2022	15.5%	7.5%
July 1, 2023	16.0%	8.0%
July 1, 2024	16.5%	8.5%
July 1, 2025	17.0%	9.0%

F. It is the intent of the Board that members share in the normal cost increases over this same period. The Board hereby directs Office of the President staff to model options for increasing member contribution rates to achieve this cost-sharing for consideration at the November 2019 Board meeting.

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President and Chief Operating Officer Nava began the discussion by noting that this item was responsive to requests made by Regents at the July meeting. The current item contained two actions. The first was a proposal to adopt changes to the actuarial assumptions for the UC Retirement Plan (UCRP), including a 6.75 percent investment return assumption. The second action was to seek authorization to gradually increase employer contribution rates to help offset the increases in cost due to the recommended assumption changes. The Office of the President (UCOP) understood that it was the intention of the Board that UCRP members share in the Normal Cost increases over the same period, and the Regents had directed UCOP to model increasing member contribution rates to achieve this cost sharing for the November meeting.

Interim Executive Vice President and Chief Financial Officer Jenny stated that the current recommendations were an alternative to those proposed in July: specifically, a 6.75 investment return assumption, a 2.5 percent inflation assumption, and salary increase assumptions detailed in the item, with other assumptions included in the actuarial report remaining the same. With Regents' approval, the University planned to increase the employer contribution from 14 percent to 17 percent over six years, 50 basis points a year starting July 1, 2020. UCOP would present various options for the employee contribution at the November meeting.

Segal Consulting representative Paul Angelo presented a chart with four criteria used to measure the cost and liability of the UCRP. Under the proposed changes, the Normal Cost,

¹ Excludes UCRP member class known as "Tier Two", which is a frozen group that had four active members as of July 1, 2018. For Tier Two, employer rates are one-half of the rates for non-Tier Two members.

² The "UAAL Surcharge" is the employer contribution to UCRP on behalf of active employees who elected "Savings Choice" as their primary retirement benefit and are current participants in the Defined Contribution Plan. The UAAL Surcharge pays down UCRP's Unfunded Actuarial Accrued Liability (UAAL).

the annual cost accrued for active members, would increase by about 3.1 percent to a total of 21 percent of payroll. The actuarial accrued liability, the accrued cost to date, would increase by about \$7.2 billion, or 9.5 percent of that liability. This increase in liability also increases the unfunded liability by the same amount, and this decreases the funded ratio by about eight percentage points, from 87 to 79. The total funding policy contribution rate is a combination of the Normal Cost plus an amount to pay off or amortize the unfunded liability; this would increase by about 7.7 percent of payroll, 3.1 percent Normal Cost plus about 4.5 to 4.6 percent increased amortization to pay off the increased unfunded liability. Mr. Angelo briefly presented a chart with a ten-year projection of the total funding policy contribution, based on the current proposal, and a chart with the UCRP projected funded percentage on an Actuarial Value of Assets basis over many years, which was meant to demonstrate how the increasing the employer contribution from 14 percent to 17 percent would restore a path to full funding of the UCRP. The chart projected 90 percent funding by 2042.

Mr. Jenny commented that the proposed action would result in significant increases in costs for the campuses, medical centers, and other UC operations. The total cost to the employer over the next one to six years would be \$1.5 billion, 30 percent from core funds and 70 percent from clinical operations, auxiliaries, and other activities. Even with these increases, the future unfunded liability was increasing. It was critical that UC secure Proposition 2 funding. The University could not borrow its way out. It needed to obtain funding from State, which had not made regular contributions to UCRP since 1990.

Committee Chair Makarechian asked about negotiations with the Governor or Legislature. Mr. Jenny responded that he knew that the Governor and Legislature were aware of this funding commitment, but he was not privy to any active conversations. This would be a key element of the budget that the University would submit to the State Department of Finance.

Committee Chair Makarechian suggested that the Regents might approve this item, contingent upon not receiving funding from the State. Earlier that day, in the public comment period, UCRP members expressed concern about an increase to their contributions.

Mr. Jenny responded that the amount of funding UC would likely receive from the State would not be sufficient to reduce the employer contribution. UCOP needed action by the Regents on this item in order to be able to provide financial statements in November, in order to complete actuarial studies and record liability in those statements. In response to Committee Chair Makarechian's suggestion, Mr. Jenny recommended that the Regents take this action, and if the State were to provide funding, the Regents could readjust and reduce the employer contribution in a future item.

Committee Chair Makarechian asked about the increased contribution amounts to the UCRP and how these would be shared between employer and employees. Mr. Jenny responded that, historically, increases in the Normal Cost have been covered by equal

contributions by employer and employees, while the unfunded liability has been covered by the employer turning to Proposition 2 or other funding vehicles from the State.

Committee Chair Makarechian stated that, in this case, this would be an increase of only three percent, and it would be shared.

Regent Cohen advised the University against using the phrase "funding commitment." There had been a voluntary commitment by the State to choose to participate in the UCRP, and this should inform the continuing discussion.

Regent Cohen referred to the projected unfunded liability and asked, if one were to address this \$1.2 billion, how this would affect the funded percentage. Mr. Angelo responded that the total funding policy contribution rate was a robust funding policy using a 20-year level dollar amortization. Contributions must cover the benefits that are promised. With the three percent increase, the University would cover all the benefits promised, including future benefits accrued by current members, but it would take a longer time to do so.

Regent Cohen remarked that the current proposal was an improvement over the item that had been presented in July. He asked why there was an assumption that UC would make up the 0.25 percent drop in the discount rate with a real wage increase. Mr. Angelo responded that real wages were only one component. This assumption was unchanged. Segal Consulting had proposed 3.25 percent for inflation and real wages. Based on the recommendation to lower price inflation, it did not want to lower expectations for future wage growth. The real wage increase assumption was increased from 0.5 percent to 0.75 percent, but the total did not change.

Regent Cohen noted that, in the July item, 0.5 percent of wage growth over the rate of inflation was projected for the next 20 to 30 years. He asked why the University was now expecting higher wage offerings. Associate Vice President Peggy Arrivas stated that the average wage increases over the last four, eight, 12, and 16 years were closer to 3.25 percent than to 3.0. When one considers both inflation and real wages combined, the University needs to be at 3.25 percent to reflect historical experience, even though there have been years when wages decreased or remained flat.

Regent Cohen asked what the rate of inflation had been over that time. Mr. Angelo responded that inflation had been below 2.5 percent. UC had experienced greater real wage growth in actual numbers in recent years.

Regent Cohen asked why the proposed assumption was 0.75 percent, if in fact real wage growth has exceeded 0.75 recently. Mr. Angelo responded that these were long-term assumptions. The building block approach must pass a test of reasonableness. He emphasized that the total 3.25 percent must be realistic. A decrease from 3.25 percent to three percent would be inconsistent with UC's historical data, regardless of the model.

Regent Cohen stressed that the wage increase must be adjusted for inflation. He suggested that these numbers did not match UC's historical actions. Ms. Arrivas countered that these numbers did match UC's historical actions.

Regent Cohen observed that inflation had not been at two percent for the past ten to 12 years.

Mr. Angelo responded that, ultimately, what mattered was the rate of wage growth, 3.25 percent. Most economic indicators showed that the inflation component might decrease. While it was reasonable to reduce the inflation component in the analysis, one did not wish to reduce real wage growth because this would be inconsistent with UC's actual experience. Ms. Arrivas explained that the investment return assumption had been decreased from seven percent to 6.75 percent. The University lowered the inflation assumption that is embedded in the investment return assumption from 2.75 percent to 2.5 percent. If one adds this 2.5 percent to the 0.5 percent in real wage growth, this results in a figure lower than UC's historical experience. UC had to make up the difference due to lowering the inflation rate to arrive at 3.25 percent, which represents UC's historical experience. She noted that UC has and could provide data for the past 16 years. Regent Cohen requested these data.

Committee Chair Makarechian stated that the Regents should review all these assumptions annually to determine if adjustments should be made.

Regent Cohen asked if a lower discount rate allows the University to take comfort in actions such as divesting from fossil fuel companies. Chief Investment Officer Bachher responded that UC was aiming to earn 6.75 percent annually over the long term. It could achieve this with stocks, bonds, and private market assets. This enables UC to be more realistic about the risk it can take to achieve this target, particularly in private market assets. He estimated that stocks would yield six to seven percent and bonds zero to two percent over a long horizon. In the current environment, it seemed prudent not to pursue an unrealistic target. With a less risky portfolio, UC could achieve 6.75 percent. Mr. Bachher stated that he looked at fossil fuel investments as the riskiest portion of the asset base, which is private market assets.

Committee Chair Makarechian observed that only a very small portion of the University's portfolio was in private equity. Private equity was the only segment of the portfolio that might provide returns of 18 to 20 percent. Returns on other segments would be much lower. The asset allocation would now have to change. Mr. Bachher concurred and noted that there were essentially two numbers to work with: public markets and private equity.

Regent Sherman recalled that discussions about reducing the discount rate had excluded any discussion of the inflation rate. In the current item, UCOP had adjusted the inflation assumption to keep wage growth at 3.25 percent. He asked about the consequences if UC were to keep the inflation assumption at 2.75 percent, and how the lowering of this assumption from 2.75 percent to 2.5 percent affected the calculations. Ms. Arrivas confirmed that the decrease in the inflation assumption did affect the calculations. The

University has traditionally picked assumptions on the conservative end of the range. An assumption of 2.75 percent would be in the middle of the range. An adjustment to 2.5 percent, at the lower end of the range, would be consistent with where UC has been in the past. This results in steady and comparable numbers.

Regent Sherman asked whether, if UCOP had not reduced the investment return assumption, it would have adjusted the inflation assumption. Ms. Arrivas responded that, in that case, UCOP would probably not have changed the inflation assumption.

Regent Sherman opined that the inflation assumption should be reviewed annually, as part of an action item. Mr. Jenny responded that, since UCOP would be presenting a proposed employee contribution in November, this action could be included at that point.

Regent Estolano suggested that, if UC were successful in securing funding from the State, this could be used to offset the employee contribution. There might be a progressive allocation of that funding. The University should first provide relief for the employee contribution to employees with the lowest compensation. As UCOP considered employee contribution options, one of these options should be an analysis of how the University could lessen the burden for its lowest-paid employees. Mr. Jenny responded that, if State funding were forthcoming, there was some fungibility that would allow applying the funds to the employer or employee contribution. UCOP was considering the impact of a gradient in considering employee contributions.

Faculty Representative Bhavnani noted that decreasing the investment return assumption to 6.75 percent had different implications for the longer-term future than if it were going to be reconsidered every year. She asked about the inflation rate in California. Mr. Jenny responded that inflation in California had been about two percent for the past ten to 15 years.

Ms. Bhavnani asked whether the State is less inclined to help UC with contributions to UCRP when UC has already allocated funds to UCRP. Ms. Arrivas responded that the increase in contribution of three percent that was being proposed was the minimum needed to keep UCRP funded at a level to be able to pay benefits into distant future. It was possible, due to future events or further adjustments to the discount rate that the University might have to make further increases to the contribution. At this point, the University feels that it should propose the minimum to keep UCRP funded for the longer term. Any employee or State contributions would be over and above that.

Ms. Bhavnani reported that a number of economists within UC were uncertain that this would be the best discount rate to use at this moment.

Committee Chair Makarechian observed that, as long as the Regents review these assumptions every year, the numbers can be readjusted. He stressed that the University's assumptions are on the conservative side.

Staff Advisor Jeffrey stated that a principal concern for the Staff Advisors is equitable treatment across different employee groups. The University has a large and complex workforce, with both represented and policy-covered employees in lower salary bands. The employee contribution would affect them differently, since this issue would come up for represented staff only when contracts come open. The Staff Advisors were pleased that additional analysis and modeling would take place over the coming months and volunteered to work with UCOP on the modeling. Their primary concern was equity in the implementation of a program across different employee groups.

Ms. Bhavnani hoped that, for the sake of equity, that represented and non-represented staff would begin paying at the same time. If there is inequity in the start date of employee contributions, the University might wish to calculate how much would be contributed by non-represented staff for first few years before contracts open up for represented staff. This amount might turn out to be relatively small; in that case, it might not be worth risking a loss of morale by requiring non-represented staff to begin paying increased contributions before represented staff.

Committee Chair Makarechian and Regent Estolano stated that this item would be approved with the condition that the Regents would review assumptions annually and that, in the November proposal for increasing employee contribution rates, the University would include various options for State funding and how the contribution would be spread across different employee compensation levels.

Mr. Jenny responded that UCOP planned to return with a formal recommendation for the employee contribution. The action could include a requirement for regular review and would reference the present discussion.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

4. APPROVAL OF THE BUDGET, SCOPE, EXTERNAL FINANCING AND DESIGN, VERANO 8 GRADUATE STUDENT HOUSING AND APPROVAL OF LONG RANGE DEVELOPMENT PLAN STUDENT HOUSING AMENDMENT FOLLOWING ACTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, IRVINE CAMPUS

The President of the University recommended that:

A. The 2019-20 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

Irvine: Verano 8 Graduate Student Housing – design, construction, equipment, and interest during construction – \$284,583,000 to be funded from external financing (\$215,583,000), housing reserves (\$58 million), and campus funds (\$11 million).

- -9-
- B. The scope of the Verano 8 Graduate Student Housing project shall consist of approximately 421,800 gross square feet (312,100 assignable square feet) of housing space, including approximately 1,050 beds to primarily support single graduate and professional students; a community center for all Verano community residents of approximately 14,300 gross square feet (10,600 assignable square feet); a maintenance facility for all Graduate and Family Housing (GFH) communities of approximately 8,800 gross square feet (6,500 assignable square feet) included within the ground floor of an approximately 850-space parking structure of approximately 315,400 gross square feet to serve Verano 8 residents, visitors, fleet service vehicles, and general campus parking needs; and site improvements. The scope includes demolition of the existing 6,000-gross-square-foot maintenance building.
- C. The President of the University be authorized to obtain external financing in an amount not to exceed \$215,583,000 plus additional related financing costs to finance the Verano 8 Graduate Student Housing project. The President shall require that:
 - Interest only, based on the amount drawn, shall be paid on the outstanding (1) balance during the construction period.
 - (2) As long as the debt is outstanding, the general revenues of the Irvine campus shall be maintained in amounts sufficient to pay the debt service and to meet the requirements of the authorized financing.
 - (3) The general credit of the Regents shall not be pledged.
- Following review and consideration of the environmental consequences of the D. proposed Verano 8 Graduate Student Housing project and Long Range Development Plan Student Housing Amendment, as required by the California Environmental Quality Act (CEQA), including any written information addressing this item received by the Office of the Secretary and Chief of Staff no less than 24 hours in advance of the beginning of this Regents meeting, testimony or written materials presented to the Regents during the scheduled public comment period, and the item presentation, the Regents:
 - (1) Adopt the Initial Study/Mitigated Negative Declaration for the Verano 8 Graduate Student Housing project and Long Range Development Plan Student Housing Amendment in accordance with CEQA.
 - (2) Adopt the Mitigation Monitoring and Reporting Program for the Verano 8 Graduate Student Housing project and Long Range Development Plan Student Housing Amendment, and make a condition of approval the implementation of mitigation measures within the responsibility and jurisdiction of UC Irvine.

- (3) Adopt the CEQA Findings for Verano 8 Graduate Student Housing project and Long Range Development Plan Student Housing Amendment.
- (4) Approve the design of the Verano 8 Graduate Student Housing project.
- (5) Approve the Long Range Development Plan Student Housing Amendment.

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Interim Executive Vice President and Chief Financial Officer Jenny briefly introduced the item.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

5. HILGARD FACULTY HOUSING, LOS ANGELES CAMPUS

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Makarechian stated that UC housing projects should strive to provide rental rates that are at least 30 percent lower than market rates. He asked that, when this item was brought back for action, that it achieve this rental rate. Land costs in the UCLA area are high, but this land was free.

Regent Cohen referred to background materials indicating that the campus had briefly considered building student housing on this site. He asked if this site was not a good candidate for student housing. Administrative Vice Chancellor Michael Beck responded that UCLA was currently in the process of constructing 5,200 new beds for student housing. It was now critically important to incorporate an expansion of the faculty housing inventory. Housing was one of the primary concerns of faculty.

Regent Cohen asked if 5,200 new beds would resolve UCLA's student housing challenge. Mr. Beck responded that the new beds would not solve the student housing issue. UCLA was considering additional properties for potential acquisition. The faculty housing portfolio was a significant concern for UCLA and a factor in its ability to attract and retain faculty, particularly those in the early stages of a ladder-rank appointment.

Regent Cohen noted that a construction bond to appear on the State ballot would require that each campus have student housing plans in place. Mr. Beck responded that UCLA was in a good position. The campus currently housed about 19,000 students. When current projects were complete, this number would increase to about 24,000 students. The campus might increase these numbers by densification and additional potential acquisitions.

Regent Estolano expressed strong support for this project. It was extraordinarily difficult for the faculty members mentioned by Mr. Beck to find affordable housing near UCLA.

6. UPDATE ON THE 2020 PROJECT, MERCED CAMPUS

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Interim Chancellor Brostrom stated that it was a pleasure to report on the successful delivery of the second phase of the Merced 2020 Project. The final delivery of the Project would occur in summer 2020. In August, Chancellor Leland had presided over the opening of two new research buildings, the Sustainability Research and Engineering Building and the Arts and Computational Sciences Building, which together totaled over 175,000 assignable square feet. These are remarkable facilities with 25 wet laboratories, 31 dry laboratories, 58 computational laboratories, and 11 classroom laboratories. This would allow UC Merced to continue to grow its undergraduate and graduate student body. The delivery was on budget and ahead of schedule. There had been only 75 change orders, remarkable for a project of this size, and no litigation. He praised Chancellor Leland for her strong dedication to the project.

Vice Chancellor Michael McLeod discussed the three phases of the 2020 Project. The first phase covered 20 percent of the gross space of Project and was delivered in summer 2018. The second delivery in the summer of this year, also 20 percent of the gross space, included the two research buildings, a research server building, two bridges, a sports competition field, and 200 additional beds. The third delivery in 2020, representing 60 percent of the gross space, would provide a larger wet laboratory space, more student housing, a student health center, and a conference center. UC Merced had carried out a space comprehension plan for the entire campus.

Mr. McLeod presented aerial views of the campus which demonstrated how quickly the 2020 Project had progressed. The second delivery was complete. The Arts and Computational Sciences Building was in full use, and two floors of the Sustainability Research and Engineering Building had been moved into. To date there had been no stakeholder complaints about the move or the space. In the third delivery, all buildings were projected to be on time in June 2020. The entire Project was now moving from a requirement of Leadership in Energy and Environmental Design (LEED) Gold to having all buildings certified LEED Platinum. Mr. McLeod concluded his presentation with a chart showing the Project's governance structure, which had proved effective and allowed the Project to move forward quickly.

Committee Chair Makarechian praised the campus on this successful project, which could serve as a model for other campuses. He asked about the amounts of the various funding sources. Interim Chancellor Brostrom responded that, of \$1.3 billion, \$600 million came from campus external funding, partly from general obligation bonds, partly from limited project revenue bonds, and partly from a Century Bond. The developer contributed about \$600 million, and the University used some campus equity. The University is requiring the

developer to maintain at least \$100 million in equity through the term of the operation. While this increased the cost of capital, it would keep the developer focused on the operation until the developer cashes out in 35 years.

Regent Sherman praised the success of the Project. The limited number of change orders was remarkable for a project of this size. Given the length of time of the Project, he asked if there would be any changes in the development partner that the Regents should be concerned about, or if the same team would manage and operate the facilities. Interim Chancellor Brostrom responded that the operations would be managed by Johnson Controls. The overall equity partner is the Plenary Group. Johnson Controls had begun operations of the first phase. There were provisions for substitution during the 35-year period.

7. 2020 LONG RANGE DEVELOPMENT PLAN, MERCED CAMPUS

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Interim Chancellor Brostrom began the discussion by noting that this item concerned the future of UC Merced. The Merced 2020 Project had been accomplished under the campus' 2009 Long Range Development Plan (LRDP), which was amended three times to allow completion of the Project. He recalled that an LRDP is not a detailed implementation plan. It is not a commitment to enrollment targets, specific development projects, or capital funding, but it does set forth development principles, best guesses on campus land use, and estimates of needed building space and capital.

Chief Campus Counsel Elisabeth Gunther recalled that in 2007-08, UC Merced had about 2,800 students. At that time, there was a robust economy and a large commercial development was planned south of the campus. The campus was seeking federal and State permits for the entire site. The campus is located on sensitive wetlands and much work was needed to get permits. The approach to the 2009 LRDP and environmental analysis was twofold. The campus considered planning over a ten-year time frame, which is typical for campuses. This work provided a portion of the LRDP analysis for 2020 Project. But because the University was building an entire campus, it needed to consider the total impact of the campus when it was fully built out, with a projected population of 25,000 students. The year 2030 was as far out as the campus could project with environmental analysis. This LRDP and analysis foresaw an aggressive growth trajectory. Soon after this LRDP was adopted, there was an economic slowdown. The campus was constrained in the timing of buildings, and there was slower student growth than projected. Currently, the 2009 LRDP was out of date, and the 2009 environmental analysis no longer reflected the conditions in the area or on the campus. The 2020 LRDP did not reflect any change in the ultimate capacity of the campus. It provided a more accurate growth projection for the next ten years. There has been a change in the fundamental philosophy and objectives for the development of the campus, a reevaluation of how to build the best possible campus for students and faculty and how to make the most efficient use of the University's resources. The goal is a compact and efficient pedestrian-centered campus that maximizes reliance on

existing infrastructure and minimizes the need for costly new infrastructure in the future. The 2020 LRDP would focus on the mixed-use core of the campus, keeping development within that core for a compact campus. Future development could proceed building by building or with a larger project. The campus also envisions new and expanded land uses. The Research Open Space could provide opportunities for field research on the campus. Other areas would provide space for hiking and other recreational activities. There was a Campus Building Reserve, with no planned use at this time, which allowed for temporary and small structures. The Campus Parkway Open Space was a space for a regional roadway that would ultimately come from the south, although probably not during the period of this LRDP. The Environmental Impact Report for this LRDP would be issued that week. A public hearing was scheduled in October, and Ms. Gunther anticipated that the campus would return to the Regents in January 2020 adoption of the LRDP.

Committee Chair Makarechian asked about the total acreage of the campus. Ms. Gunther responded that the entire property encompassed about 1,026 acres, including the original campus. The University Community Land Company (UCLC) property had been split. The Regents now controlled half of that land closest to the campus.

Committee Chair Makarechian asked about land to the south of the campus area owned by the Virginia Smith Trust. Ms. Gunther responded that in the 2009 LRDP, federal agencies pushed the campus further south. The campus was planned over a portion of the land owned by the UCLC. Over the years, because no development had gone forward, the campus made the decision, working with the Office of the President, to split the land. The Virginia Smith Trust owns the southern half, while the Regents own the northern half of what used to be the UCLC land.

Committee Chair Makarechian asked about infrastructure costs. Interim Chancellor Brostrom responded that consideration of infrastructure costs was a reason to develop the campus in a compact manner. Infill and densifying would be more cost-effective for the campus.

Committee Chair Makarechian praised the campus plans and cautioned that further densification or additions must be thoughtfully implemented. Interim Chancellor Brostrom responded that UC Merced would have to carry out a building-by-building analysis for further densifying the site.

Committee Chair Makarechian asked when the campus would present specifics such as square footage and cost projections. Interim Chancellor Brostrom anticipated that a few years would pass before the campus would present another building project. The next project would likely be a Psychology and Behavioral Science building.

Committee Chair Makarechian asked if any outside consultants had reviewed the LRDP. Ms. Gunther responded that the Project developer did some master planning for the campus and reviewed connectivity issues to ensure that the campus would be able to grow. The LRDP was developed by the Director of Physical and Environmental Planning Phillip Woods. The campus worked with consultants on environmental impact issues.

Committee Chair Makarechian asked about roads and circulation. Ms. Gunther responded that the campus was fortunate with the 2020 Project, which created a construction road that would become a loop road at the end of the Project.

Regent Sherman asked about the campus' engagement with the City of Merced on the LRDP. Ms. Gunther responded that the campus works with both the City and the County. The campus is technically in the County but receives urban services from the City. The campus presented the LRDP to them early on, and they had an opportunity to review and provide comments. The campus also provided a draft of its traffic analysis. The campus is working with the City on water and fire services.

Regent Leib noted that an upcoming meeting of the Public Engagement and Development Committee would be held at the Merced campus and he encouraged Regents to attend and visit this impressive site.

Regent Park asked about the reduction in projected student numbers from 25,000 to 15,000. Ms. Gunther explained that she would not characterize this as a reduction. The campus had considered the full building out of the campus, projected for 2030, for the purposes of environmental analysis and permits. The campus projected 25,000 students, but it is not typical for an LRDP to look at the distant future. This analysis was still in place. The campus was anticipating growth by 5,000 students over the next ten years. By the time the campus is fully built out, the student population would be at 25,000 or more, and the site would be able to accommodate them.

Regent Park asked why the number had changed at all. Ms. Gunther responded that the campus had carried out a twofold analysis in 2009. It projected the impact of the campus when fully built out, with 25,000 students and a horizon of 2030. But this document also considered development over ten years, to 2020, which took the campus from 2,800 to 10,000 students.

Regent Park suggested that there might be growth in online enrollment or partnerships with local community colleges. She asked why the campus would not wish to keep the number higher and to keep the possibility open.

Committee Chair Makarechian recalled that LRDPs are constantly being updated. In this case, projecting a larger number at this point in time might upset the economics of the development, such as in the projection of future water use. At this point it was desirable to have an economically feasible model to which adjustments could be made in the future.

Ms. Gunther further explained that there are practical land use planning concerns underlying the LRDP. The LRDP creates a physical envelope for growth of the campus. When the campus adopts an LRDP, it is required to mitigate for the impacts of development. If the campus overstates a projected impact, it will be required to mitigate for an impact that might not occur until many years later. From the standpoint of land use, one wants to have a realistic projection, because traffic, fire service, and air quality impacts depend on what has been projected.

Interim Chancellor Brostrom noted that the LRDP did not include programs that UC Merced is pursuing aggressively: a degree completion program, dual enrollment programs with community colleges, and Extension programs. Many cities and towns in the Central Valley were eager to have a UC Merced presence in their community. These programs are not taken into account in the LRDP enrollment or land use projections.

Regent Park asked the campus to give serious consideration to and keep an open mind about numbers of transfer students and how they would affect the campus size over the next decade.

Regent Estolano stated that the future expansion of the University would combine traditional physical development and virtual enrollment. She asked the campus to be a little more flexible and consider alternatives in its Environmental Impact Report for more growth if more transfer students were to come to the campus. UC Merced represented the future of UC in all its potential flexibility and creativity. She acknowledged that there are cost implications associated with alternatives for more growth.

8. INTEGRATED CAPITAL ASSET MANAGEMENT PROGRAM

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Interim Executive Vice President and Chief Financial Officer Jenny suggested that discussion of this item be deferred to a future meeting.

9. UPDATE REGARDING THE NEW HOSPITAL UCSF HELEN DILLER MEDICAL CENTER PROGRAM AT PARNASSUS HEIGHTS INTEGRATED FORM OF AGREEMENT AND PROCUREMENT STRATEGY, SAN FRANCISCO CAMPUS

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Makarechian introduced the item and recalled that earlier discussions of this project had focused on the advantages of the proposed Integrated Form of Agreement (IFOA).

Chancellor Hawgood commented that an important element of the IFOA is that it pools profits. IFOA had become a preferred model for major projects, and in particular for major hospital projects, due to the fact that the owner is deeply engaged as member of the team throughout. The owner has direct access to the trades and other components of the team. While this has been questioned as an advantage, the openness and transparency of this model for projects of this complexity, time duration, and size had led to a dramatic decrease in disputes and challenges. This project at UCSF would last nine to ten years.

Hanson Bridgett representative Howard Ashcraft stated that the IFOA aims at creating a collaborative team, avoiding disputes, and incentivizing problem-solving. The common profit pool is one economic element of the IFOA. There is also a waiver among the parties, including in this case UCSF, for various types of claims. There would be no indemnifications. UCSF would waive the ability to sue if there is cost overrun; instead, it would absorb all the profit of the team. Essentially, UCSF receives a buffer which it can take if there is a cost overrun. Delay can also become an issue of cost in building projects. UCSF would also waive the ability to sue a party for delay itself, unless that party committed fraud or some other willful misconduct. UCSF would be waiving these two abilities, but, on the other hand, these waivers would work to the benefit of UCSF. Delay and impact claims, among the most expensive types of litigation, would be almost impossible to bring against UCSF. The waivers work in both directions.

Committee Chair Makarechian asked why UCSF could not simply include these waiver conditions in a contract provision without entering into a common profit pool. He stated his concern regarding uncertainty about bonding and which parties might be able to call bonds in case of lack of performance.

Mr. Ashcraft responded that UCSF would gain advantages through the IFOA. In the design-build model, UCSF would lose the ability as the owner to be involved in managing a major complex project, which is critical to the delivery of major complex infrastructure. If a contract is misbalanced in one direction and only, on paper, favors the University, this reduces the number of qualified parties who want to undertake the project. This type of approach would not be viewed well by the most qualified participants in the market.

Committee Chair Makarechian presented a hypothetical example of a project with a cost of \$100 million and profit of \$10 million. He asked if UC would be protected for the cost overruns up to \$10 million. Mr. Ashcraft responded in the affirmative. Committee Chair Makarechian asked what would happen after the \$10 million had been expended. Mr. Ashcraft responded that UC would then pay to complete the project at cost with no profit.

Committee Chair Makarechian objected that this was the only advantage, and that it benefited the contractors rather than the University. In the case of cost overruns in a normal design-build contract, UC can make claims against contractors or subcontractors, except for cases in which the University is at fault. He saw the \$10 million to cover cost overruns as the only advantage of this model.

Chancellor Hawgood stated that the IFOA provides a powerful incentive for the members of the team to complete the project at or below cost, because this protects their profit. This incentive does not exist in the other models.

Regent Estolano asked if it was the case that this model works because the profit pool is large enough, a large enough percentage, and that this creates incentive for value engineering and working together. Chancellor Hawgood responded that the profit percentage would be typical; however, if the team members are able to complete the project

below the target cost, they share the additional profit. The possibility of an upside is a powerful incentive.

Regent Estolano referred to the condition that UCSF would not be able to sue for delay. She asked if this was not a concern because the team members would have every incentive to complete the project on schedule, given that delay would reduce their profit. Chancellor Hawgood responded in the affirmative.

Pete Caputo, Vice President of Operations at Truebeck Construction, commented that in the IFOA, the inability to make claims for delay is a benefit. In some cases, contractors come forward with a delay and make claims against the project owner. Claims can be made against project owners as well as against contractors. In case of cost overruns in the IFOA, UC would be paying pure cost and the least amount of cost. In most cases of change orders, contractors include the direct cost of work, overhead, and profit, with no transparency about these costs. This leads to disputes about the actual amounts of these costs. The IFOA provides complete transparency, with no need to guess at numbers. He stated his view that outcomes that have been achieved using the IFOA could not be achieved using another contracting mechanism. An example was the California Pacific Medical Center Van Ness Campus in San Francisco, a \$2 billion project that had only three change orders.

Regent Estolano asked why the IFOA model was particularly well suited for a hospital project. Mr. Caputo responded that the logistics of planning a hospital are difficult. The IFOA provides a space for collaboration to develop the best possible plan.

Chancellor Hawgood commented that the likelihood of having to make modifications during the ten years of this project was high. Under the IFOA, there would be an incentive to innovate and achieve modifications without affecting the direct cost. Using another model, UCSF would have to lock in a precise design for features and equipment well in advance, while there might be changes in equipment and technology, such as MRI design, in the next ten years.

Committee Chair Makarechian referred to the success of the Merced 2020 Project discussed earlier. In his view, this success was attributable to the fact that the University holds bonds for performance and delay; this was an incentive for the contractors. He expressed concern about UC being part of the shared pool along with the contractors.

Chancellor Hawgood responded that the success of this model was due to the fact that the project owner is part of the profit pool. Mr. Ashcraft stated that the project would have normal bonding, including payment and performance bonds. The IFOA gives the owner more control over a project than any other project delivery system. Each party in the IFOA has separate roles and responsibilities; UCSF is not a designer or contractor, but has other responsibilities.

In response to another question by Committee Chair Makarechian, Mr. Ashcraft stated that the bonds would be to the University's benefit. While UC was in the shared profit pool, the bond was basically a surety for the performance of the contract. The University is a party

to the contract, but the University can call the bond. The contractors have waived the right to sue the University. He noted that, in 160 projects using the IFOA, there had been no mediation.

Regent Sherman asked how UCSF would know how medicine might develop over the next five to ten years and how this would affect this large investment. Chancellor Hawgood responded that UCSF would have the same ability to make projections as other hospital systems. He recalled that the Mission Bay Hospital had also taken ten years to build, from 2005 to 2015. While the need for surgery would likely not go away, there might be other changes. New therapies might come into use that need specific facilities. One could manage this kind of change more effectively under the IFOA than through the conventional change order process.

Regent Sherman asked if such a change, initiated by the project owner, would increase the profit pool. Chancellor Hawgood responded that a situation like this is considered ahead of time as part of the contract. A huge change in scope would be an issue for the project owner.

Regent Sherman asked what would happen to the profit pool in case of a major change in scope. Mr. Caputo responded that the profit pool would be increased commensurate with the cost to take on that change. There is transparency about the cost, which would be only the cost of the actual change. In response to another question by Regent Sherman, Mr. Caputo confirmed that the scope change would increase the profit pool at risk for all team members.

Regent Park asked if the incentives in the IFOA really work to help resolve differences. She asked if there were any other factors that had contributed to the success of past IFOA projects and that would help UCSF replicate that success. She stated that UCSF was clearly motivated to move to this model, with confidence that appropriate protections were in place. Mr. Caputo responded that it had been difficult to move from a traditional contract model to the IFOA. But when one sees the IFOA work and understand how it works, it proves itself to be effective. He recommended the IFOA for this UCSF project over other models he had worked with in the past.

Committee Chair Makarechian requested to see a typical IFOA contract document under this scenario, including information on bonding.

Mr. Ashcraft observed that there are specific requirements that UC must meet, and these would need to be reviewed by the Office of the General Counsel.

Regent Estolano suggested that UCSF and Mr. Ashcraft could provide a "form document" to give a sense of what is typically included in a contract of this type.

10. PRELIMINARY DISCUSSION OF THE UNIVERSITY'S 2020-21 BUDGET

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Regent Park noted that the item included a list of UC Student Association (UCSA) priorities; some coincided with UC priorities while other did not. She requested clarification. Associate Vice President David Alcocer explained that the Office of the President (UCOP) regularly consults with UCSA and seeks its feedback on student priorities, so that these can be shared with the Regents.

Regent Park asked if the UCSA priorities would be integrated in the action item to be submitted to the Regents. Mr. Alcocer responded that the action item for the budget, typically approved in November, is a specific plan for the next year. There would be an opportunity to revisit these priorities. Some would be incorporated in the University's budget. With regard to UCSA priorities not included in the budget, the Board or individual Regents could take a position on these. One example might be expanding Cal Grants to the summer. This was not a request to the University and would not be part of the UC budget plan, but it is of interest to UC and many Regents. It is helpful for the Board to be informed of student priorities

Regent Park referred to background materials and a line item for philanthropy, showing \$102 million in fiscal year 2023-24. Mr. Alcocer responded that these were cumulative amounts, calling for approximately \$20 million increases per year. Regent Park suggested that this would amount to about \$2 million per campus, and this seemed conservative in relation to UC goals for increased philanthropy.

Mr. Alcocer responded that these figures represented permanent ongoing funds, incremental over prior years, not the sum total of philanthropy, but an increase. The most reliable way of securing permanent ongoing funds of \$20 million per year would be through an endowment. An annual payout of \$20 million would require an endowment 20 times that amount, or \$400 million. That \$400 million is greater than the sum total of endowment growth for all but one of the last ten years. Endowment growth is largely restricted; only about one percent is unrestricted. Many restricted dollars, such as endowed chairs and scholarships, can help offset core budget expenses. These proposed targets were in fact quite ambitious.

Regent Park requested that there be further discussion about how these projections, which suggested an increase of \$2 million per campus per year, fit in with campuses' plans for fundraising campaigns and campus budgets, as well as discussion of revenues from technology transfer.

Regent Cohen recalled that the current-year budget was approximately \$100 million short of ongoing funds, compared to the budget proposed the past November. He asked how the current budget had been adjusted to account for starting from a lower base. Mr. Alcocer responded that UC had pushed out the investment for student success funding and the

incremental costs associated with the framework budget agreement with the State, such as increases in faculty hiring and improvement of student services. UC still has ambitious goals for closing student achievement gaps. Considering the funding received this year, and the increase over the previous year, which was very modest due to the loss of one-time funding, the University was not expecting dramatic progress this year. Investment in hiring ladder-rank faculty would be pushed out, and campuses would have to rely on lower-paid lecturers in the meantime.

Regent Cohen suggested that the Regents should consider, as part of the budget request, to promote Cal Grant reform, which is important not just for UC, but all California higher education. He asked about the implications of this budget for the UCOP budget. Mr. Alcocer responded that this would depend on the budget that the Board approves for UCOP. Regent Cohen asked if, in April 2020, UC would have additional requests for the UCOP budget. Mr. Alcocer responded that the University would very much like the State to revert to the assessment funding model for UCOP. He did not anticipate any additional requests for UCOP later. The Governor's January budget proposal included no increases for the UCOP budget. UC wanted to clarify that, in addition to some of the funding needs that the Governor endorsed in the January proposal, there were other compelling needs included in the November 2018 budget that warrant consideration for the May Revision. Regent Cohen suggested that, if UC assumes the return of the campus-based assessment, this should be made very clear. The University should clearly rank or prioritize its various funding needs, including for UCOP and for students.

Regent Cohen referred to a slide with a chart demonstrating that core funds had not kept pace with enrollment growth. He stated that this chart had cherry picked a peak year of State funding in 2000-01, a level which was unsustainable in the overall picture of State funding. During the recession years, UC had had to achieve efficiencies. This chart suggested that there was no value in these efficiencies and discredited all the efforts made during these difficult years.

Regent Anguiano asked how the distribution of funds would affect campuses like Riverside, Merced, and Santa Cruz, which have the most Pell Grant recipients, and how this would be considered when distributing State funds. Mr. Alcocer responded that there was a substantial change in the University's process for distributing core funds beginning in 2007-08, when UC introduced the concept of funding streams. Campuses would retain the revenues that they generated. There was a separate policy on the allocation of State funds. The University was now starting an assessment, now that the State fund allocation model had been phased in and in place for two to three years, to see what impact this has had on total resources available at each campus and to determine if this has reduced or exacerbated resource disparities among the campuses.

Regent Kieffer requested figures over a longer period of time for State and other contributions to the UC budget, in constant dollars. He noted that funding for public higher education had decreased across the U.S. and suggested that UC examine the experience of its peer institutions to determine how much UC has been affected, relative to others. He requested more detail on savings, and how these were made and used. He asked why the

UCOP budget would not be incorporated in this budget. Mr. Alcocer responded that part of the University's request in the last few years has been that the State return to the assessment model for funding UCOP, because the University believes that this is a fair way to allocate costs across the UC system, and that it is more appropriate for State dollars to go directly to the campuses rather than funding administration at UCOP. None of this has had any impact on the total amount that the University would request from the State. The essential issue was that UCOP funding under the assessment model is determined by the Board, whereas under direct funding model it is determined by the State.

Regent Kieffer suggested that this budget presentation include the UCOP budget as an item of the budget. UC is one University, with one budget for the entire University. The campus assessment was a way to try to judge the costs of each campus and balance costs more fairly. Under an older model, all funds were distributed by UCOP; it was clear that the President and the Regents made judgments and had flexibility to determine where funds were needed. The assessment model looks like taxation and confuses the Legislature. The Regents want the President to have flexibility to meet campus needs.

Interim Executive Vice President and Chief Financial Officer Jenny remarked that the longitudinal trend line for UC and most public universities indicates that State investment has decreased, while investment by students and their families has increased. Many universities have reached a point where they receive more support from students and families than from the State. This trend was fairly uniform across the U.S.

The meeting adjourned at 5:05 p.m.

Attest:

Secretary and Chief of Staff

SUMMARY OF RECOMMENDATIONS REGARDING CHANGES IN ACTUARIAL VALUATION ASSUMPTIONS FOR UCRP

Economic Assumptions

Assumption	Description	Recommendation
Inflation	Affects projections of investment returns, active member	Decrease rate from 3.00 percent per annum to 2.50
	salary increases, cost-of-living adjustments (COLA) for	percent per annum
	retirees	
Investment Return	Estimates average future net rate of return on assets over	Decrease rate from 7.25 percent per annum to 6.75
	projected lifetime of the Plan as of the valuation date	percent per annum
Individual Salary	Includes components of inflation, real "across the board"	Inflation: see above
Increases	(ATB) salary increases and merit and promotion (M-P)	ATB: Increase from 0.50 percent to 0.75 percent
	increases in salary.	M-P: Increases for both Faculty and Staff/Safety
		members. For Staff/Safety use recommended
		assumptions as shown at the end of this Attachment.
Administrative	Fees for administrative, legal, accounting and actuarial	Decrease load on Normal Cost from 0.50 percent of
Expenses	services, as well as routine costs for printing, mailings,	covered payroll to 0.40 percent of covered payroll
	computer-related activities and other functions carried	
	out for Plan operation are paid from Plan assets.	

Non-Economic Assumptions

Assumption	Description	Recommendation
Retirement Rates for	Predicts the conditional probability of retirement at each	1976 Tier Faculty:
Members Retiring	age at which members are eligible to retire, given	 < 20 years of service: Decreases
from Active	attainment of that age	20+ years of service: Decreases
Membership		1976 Tier Staff:
		• < 10 years of service: Decreases
		• 10-20 years of service: Decreases
		20+ years of service: Increases
		2013 & 2016 Tier Faculty & Staff – Decreases
		Modified 2013 Tier Staff – Increases
		Safety Members – Increases
		New Assumption – No retirements occur until the next
		July 1 following the valuation date
		New Assumption – All future retirees with either a 1976
		Tier benefit or Safety benefit will receive an increase in
		benefit reflecting the assumed Inactive COLA that occurs
		just prior to the member's July 1 retirement date.
Retirements for	Inactive vested members assumed to retire at a fixed age.	2013 & 2016 Tier Members – Increase from age 60 to age
Members Retiring		63
from Inactive		Maintain at age 60 for all other inactive vested members
Membership		
Refunds of	Current assumption: Immediate refund at valuation date	Change to assume receipt of refund over a five-year
Accumulations for		period
Current Terminated		
Non-Vested Members		

Non-Economic Assumptions (continued)

Assumption	Description	Recommendation
•		
Mortality Rates for	Estimates the conditional probability of dying at each age,	Pre-Retirement – Change to the Pub-2010 Teacher
Non-disabled	after attaining that age	Employee Amount-Weighted Above-Median Mortality
Members		Table, projected generationally with the two-dimensional
		mortality improvement scale MP-2018
		Post-Retirement – Change to the Pub-2010 Healthy
		Teachers Employee Amount-Weighted Above-Median
		Mortality Table, projected generationally with the two-
		dimensional mortality improvement scale MP-2018. For
		Faculty, table rates adjusted by 90% for males and 95%
		for females. For Staff & Safety, table rates adjusted by
		100% for males and 110% for females.
		Separate tables for males and females
Mortality Rates for	The probability of dying for members who are either	Pre- and Post-Retirement – Use the Pub-2010 Non-Safety
Disabled Members	receiving Disability Income or who have "crossed over" to	Disabled Retiree Amount-Weighted Mortality Table,
Disabled Weinbers	receive retirement income is assumed to be different	projected generationally with two-dimensional mortality
	than for members not in this group.	improvement scale MP-2018
	than for members not in this group.	improvement scale ivir-2018
		Separate tables for males and females
		Members who have "crossed over" will continue to be
		valued using disabled mortality tables

Non-Economic Assumptions (continued)

Assumption	Description	Recommendation
Mortality Rates for Beneficiaries	Current assumption: Same as that used for healthy retirees	Pub-2010 Contingent Survivor Amount-Weighted Mortality Table, projected generationally with two-
		dimensional mortality improvement scale MP-2018. Table rates adjusted by 100% for males and 90% for females.
		Separate tables for males and females
Mortality for Actuarial	Mortality table used for converting Plan benefits under	Change to "static" version that approximates
Equivalence Basis	one form of payment to an actuarially-equivalent amount	generational mortality table recommended for
	under a different form of payment	non-disabled members above
Rates of Separation	Estimates the probability of leaving active UCRP	Overall decreases in the rates
Prior to Retirement	membership after attaining each level of service credit	
Incidence of Disability	Estimates the probability of becoming disabled at each age	Overall decreases in the rates
Eligible Survivor Assumptions	Assumptions for how many non-retired members will have eligible survivors at retirement or pre-retirement death, the age of the eligible survivor(s) and the number of eligible survivors	 Age difference of Member compared to Eligible Survivor: Male Survivors – Reduce from three years older to two years older Female Survivors – Maintain current assumption
Assumption for	Unused sick leave hours at separation are converted to	Faculty and Staff – Maintain current assumption
Unused Sick Leave	service credit	Safety – Increase in load from 1.90 percent to 2.00
Converted to Service Credit		percent
Lump Sum Cashout (LSC) Take-Rate	The rate at which retirement-eligible members opt to receive a LSC in lieu of monthly retirement income	Overall decreases in the rates

The recommendation for any current assumption not listed here is to maintain the current assumption for the July 1, 2019 valuation.

Recommended Merit and Promotion Salary Increase Assumptions for Staff and Safety:

Years of Service	Staff/Safety
Less than 1	2.50
1-2	2.30
2 – 3	2.10
3 – 4	1.90
4-5	1.80
5 – 6	1.65
6-7	1.50
7 – 8	1.45
8-9	1.40
9 – 10	1.35
10 – 11	1.25
11 – 12	1.10
12 – 13	1.00
13 – 14	1.00
14 – 15	0.95
15 – 16	0.95
16 – 17	0.90
17 – 18	0.85
18 – 19	0.80
19 – 20	0.80
20 – 21	0.75
21 – 22	0.70
22 – 23	0.65
23 – 24	0.65
24 – 25	0.65
25 – 26	0.65
26 – 27	0.65
27 – 28	0.65
28 – 29	0.65
29 – 30	0.50
30 & Over	0.40

SUMMARY OF CONSULTING ACTUARY'S RECOMMENDATIONS THAT ALSO APPLY TO OTHER UC BENEFIT PLANS

Recommended changes to also be applied to the actuarial valuations of other UC benefit plans—

UC-PERS Plus 5 Plan:

- Investment Return,
- Inflation, and
- Mortality Rates.

UC Retiree Health Benefit Program:

- Retirement Rates
- Mortality Rates
- Termination Rates
- Incidence of Disability Rates
- Conversion of Unused Sick Leave, and
- Lump Sum Cashout Take-Rate.