

**SUMMARY OF CONSULTING PENSION ACTUARY'S RECOMMENDATIONS REGARDING
ACTUARIAL VALUATION ASSUMPTIONS FOR UCRP**

Economic Assumptions

| Assumption | Description | Recommendation |
|-------------------------|--|--|
| Inflation | Future increases in the Consumer Price Index (CPI), which drives investment returns and active member salary increases as well as cost-of-living adjustments (COLA). | Maintain rate at 2.50 percent per annum |
| Investment Return | Estimated average future net rate of return on current and future assets of UCRP as of the valuation date. This rate is used to discount liabilities. | Maintain rate at 6.75 percent per annum |
| Administrative Expenses | Fees for administrative, legal, accounting and actuarial services, as well as routine costs for printing, mailings, computer-related activities and other functions carried out for Plan operation are paid from Plan assets. | Increase from 0.40 percent of covered payroll to 0.45 percent of covered payroll |
| Salary Increases | Increases in the salary of a member between the date of the valuation to the date of separation from active service. It includes components of inflation, real "across the board" (real ATB) salary increases and merit and promotion (M-P) increases in salary. | <ul style="list-style-type: none"> • Inflation: see above • Real ATB: Maintain at 0.75 percent • M-P: Increases for both Faculty and Staff/Safety members |

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Non-Economic Assumptions

| Assumption | Description | Recommendation |
|-------------------|--|--|
| Mortality Rates | Estimates the probability of dying at each age. Mortality rates are used to project life expectancies. | <p>Pre-Retirement – Pub-2010 Teacher Employee Amount-Weighted Above-Median Mortality Table, table rates decreased by 10% for males and decreased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021</p> <p>Healthy Retirees – Pub-2010 Teacher Healthy Retiree Amount-Weighted Above-Median Mortality Table, projected generationally with the two-dimensional mortality improvement scale MP-2021. For Faculty, table rates are decreased by 15% for males and decreased by 5% for females. For Staff & Safety, table rates are not adjusted for males and increased by 5% for females.</p> <p>Beneficiaries in Pay Status as of Valuation – Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table, table rates are not adjusted for males and decreased by 10% for females, projected generationally with two-dimensional mortality improvement scale MP-2021.</p> <p>Beneficiaries not in Pay Status as of Valuation – When calculating the liability for the continuance to a beneficiary of a surviving member, the Staff & Safety Healthy Retiree mortality tables will be used for beneficiary mortality both before and after the expected death of the Faculty, Staff, or Safety member. Upon the actual death of the member (i.e. for all beneficiaries in pay status as of the valuation date), the</p> |

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| | | <p>Contingent Survivor mortality tables as stated above will be used.</p> <p>Disabled Retirees – Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table, table rates are not adjusted for males and decreased by 5% for females, projected generationally with two-dimensional mortality improvement scale MP-2021</p> <p>Members who have “crossed over” will continue to be valued using disabled mortality tables</p> <p>Separate tables for males and females</p> |
| Mortality for Actuarial Equivalence Basis | Mortality table used for converting Plan benefits under one form of payment to an actuarially-equivalent amount under a different form of payment. | Use “static” version of mortality table that approximates the generational mortality table recommended for healthy retirees and beneficiaries shown above |
| Disability Incidence Rates | Estimates the probability of becoming disabled at each age. | Overall decreases in the rates and change to unisex based disability rates |
| Termination Rates | Estimates the probability of leaving active UCRP membership after attaining each level of service credit. | Overall decreases in the rates |
| Retirement Rates for Members Retiring from Active Membership | Estimates the probability of retirement at each age at which members are eligible to retire, given attainment of that age. | <p>1976 Tier Faculty:</p> <ul style="list-style-type: none"> • < 20 years of service: Increases • 20+ years of service: Increases <p>1976 Tier Staff:</p> <ul style="list-style-type: none"> • < 20 years of service: Decreases • 20+ years of service: Increases • Extend the retirement rates from age 75 to age 80 <p>Safety Members – Decreases and extend the retirement rates from age 65 to 67.</p> |

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| | | <p>2013 & 2016 Tier Faculty: Increases</p> <p>2013 & 2016 Tier Staff: Increases and extend the retirement rates from age 75 to 80.</p> <p>Modified 2013 Tier Staff:</p> <ul style="list-style-type: none"> • < 20 years of service: Increases • 20+ years of service: Decreases • Extend the retirement rates from age 75 to age 80 <p>Adjust retirement timing to assume members will retire at the middle of the year on average.</p> <p>Reduce the assumed Inactive COLA applied to new retirements from active status from 2 percent to 1 percent to reflect the assumption above regarding retirement timing.</p> |
| <p>Retirements for Members Retiring from Inactive Membership</p> | <p>Inactive vested members assumed to retire at a fixed age.</p> | <p>2013 & 2016 Tier Members – Maintain at age 63</p> <p>Maintain at age 60 for all other inactive vested members</p> |

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| Eligible Survivor Assumptions | Assumptions regarding how many non-retired members will have eligible survivors at retirement, the age and gender of the eligible survivor(s) and the number of eligible survivors. | For actives and deferred vested members, maintain the percent married at retirement assumption at 80 percent for males and 60 for females. Maintain the spouse age difference and gender assumption as follows: <ul style="list-style-type: none"> • Male Members – Three years older than their female spouses • Female Members – Two years younger than their male spouses |
| Assumption for Unused Sick Leave Converted to Service Credit | Estimated proportion of unused sick leave at separation converted to service credit. | Maintain the current sick leave conversion rates |
| Lump Sum Cashout (LSC) Take-Rate | Rate at which retirement-eligible members opt to receive a LSC in lieu of monthly retirement income. | Overall decreases in the rates |
| Unknown Data for Members | Assumed demographic data for members with unknown information. | For unknown gender assume all members with unknown gender at the Lawrence Berkeley National Laboratory are male, and all others are female |
| Future Benefit Accruals | Amount of Service Credit projected to be earned by active members in years after the valuation date. | Maintain the current assumption that all active members earn one year of Service Credit each year in the future |

The recommendation for any current assumption not listed here is to maintain the current assumption for the July 1, 2023 valuation.