## SECTION 2: Valuation Results for the University of California Retirement Plan

## A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographics of covered members, including active members, vested terminated members, retired members, disabled members and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A and B.

A historical perspective of how the participant population has changed over the past ten valuations can be seen in this chart.

CHART 1
Member Population: 1995-2004

| Year Ended <br> June 30 | Active <br> Members | Terminated Vested <br> Members* $^{*}$ | Retired Members, <br> Disabled Members and <br> Beneficiaries | Ratio of Retirees <br> to Actives |
| :---: | :---: | :---: | :---: | :---: |
| 1995 | 91,318 | 21,913 | 28,441 | 0.31 |
| 1996 | 92,194 | 25,422 | 28,918 | 0.31 |
| 1997 | 93,404 | 28,778 | 29,659 | 0.32 |
| 1998 | 93,363 | 21,998 | 30,346 | 0.33 |
| 1999 | 98,123 | 22,109 | 31,242 | 0.32 |
| 2000 | 103,382 | 21,950 | 32,770 | 0.32 |
| 2001 | 109,848 | 23,278 | 34,684 | 0.32 |
| 2002 | 117,776 | 25,198 | 36,165 | 0.31 |
| 2003 | 121,351 | 31,262 | 37,867 | 0.31 |
| 2004 | 123,717 | 39,874 | 39,738 | 0.32 |

[^0]
## Active Members

Plan costs and liabilities are affected by the age, service credit and compensation of active members. In this year's valuation, there are 123,717 active members with an average age of 44.0 years, average service credit of 9.4 years and average compensation of $\$ 63,332$.

## CHART 2

Distribution of Active Members by Age as of June 30, 2004 service credit. In Chart 3 there are 98 members who have 40 or more years of service credit.

## Inactive Members

In this year's valuation, there were 39,874 terminated members. Within this group of terminated members there are 21,328 members with a vested right to a deferred or immediate vested monthly benefit and 18,546 terminated nonvested members who are entitled to a return of their member contributions or a distribution of their CAP balance.

## CHART 3

Distribution of Active Members by Service Credit as of June 30, 2004


These graphs show a distribution of the current retired members, disabled members and beneficiaries based on their monthly benefit and age.
$\square$ Beneficiary

- Disabled Member
$\square$ Retired Member


## Retired Members, Disabled Members and Beneficiaries

As of June 30, 2004, 32,072 retired members, 2,194
disabled members and 5,472 beneficiaries were receiving total monthly benefits of $\$ 83,970,940$.

CHART 4
Distribution of Retired Members, Disabled Members and Beneficiaries by Monthly Benefit as of June 30, 2004


CHART 5
Distribution of Retired Members, Disabled Members and Beneficiaries by Age as of June 30, 2004


## B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information for UCRP, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D and E.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Regents have approved an asset valuation method for UCRP that smoothes market value investment gains and losses over a five-year period. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The chart shows the determination of the actuarial value of assets as of the valuation date.

## CHART 6

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

|  |  |  | (\$ in 000s) |
| :---: | :---: | :---: | :---: |
| 1. Market value of assets |  |  | \$39,216,094 |
|  | Original | Unrecognized |  |
| 2. Calculation of unrecognized return* | Amount* | Return** |  |
| (a) Year ended June 30, 2004 | \$2,420,256 | \$1,936,205 |  |
| (b) Year ended June 30, 2003 | $(653,657)$ | $(392,193)$ |  |
| (c) Year ended June 30, 2002 | $(6,340,338)$ | $(2,536,134)$ |  |
| (d) Year ended June 30, 2001 | $(5,424,170)$ | $(1,084,834)$ |  |
| (e) Year ended June 30, 2000 | 1,971,375 | 0 |  |
| (f) Total unrecognized return |  |  | $(2,076,956)$ |
| 3. Actuarial value of assets: (1)-(2f) |  |  | \$41,293,050 |
| 4. Actuarial value as a percentage of market value: $(3) \div(1)$ |  |  | 105.30\% |

[^1]
## SECTION 2: Valuation Results for the University of California Retirement Plan

This chart shows the change in the actuarial value of assets versus the market value over the past four years.
—Actuarial Value

- Market Value

CHART 7
Actuarial Value of Assets vs. Market Value of Assets for Years Ended June 30, 2001 - 2004


## SECTION 2: Valuation Results for the University of California Retirement Plan

## C. ACTUARIAL EXPERIENCE

To calculate contribution rates, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution rate will decrease from the previous year. On the other hand, the contribution rate will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term
development and that, over the long term, experience will return to the original assumptions. For contribution rates to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution rate is adjusted to take into account a change in experience anticipated for all future years.

The components of the total loss of $\$ 1.6$ billion are shown below. The net experience gain from sources other than investments was $1.26 \%$ of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

## CHART 8

Actuarial Experience for Year Ended June 30, 2004

|  |  | (\$ in 000s) |
| :--- | :--- | :---: |
| 1. | Net gain/(loss) from investments* | $(\$ 2,062,997)$ |
| 2. | Net gain/(loss) from salary increases less (greater) than assumed | 570,306 |
| 3. | Net gain/(loss) from other experience | $(130,192)$ |
| 4. | Net experience gain/(loss): (1) + (2) | $(\$ 1,622,883)$ |

* Details in Chart 9

This chart shows the gain/(loss) due to investment experience.

## SECTION 2: Valuation Results for the University of California Retirement Plan

## Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on UCRP's investment policy. For valuation purposes, the assumed rate of return is $7.50 \%$. As shown below, the actual rate of return on the actuarial value of assets for fiscal 2003-2004 was $2.45 \%$.

Since the actual return for the year was less than the assumed return, the Plan experienced an actuarial loss during the year ended June 30, 2004 with regard to its investments, when measured based on the actuarial value of assets. The amount of this loss is derived below.

## CHART 9

Investment Experience for Year Ended June 30, 2004

|  |  |
| :--- | ---: |
|  | June 30, 2004 |
| $\mathbf{( \$ ~ i n ~ \mathbf { 0 0 0 s } )}$ |  |
| 1. | Actual return on actuarial value of assets |
| 2. | Average actuarial value of assets |
| 3. | Actual rate of return: $(1) \div(2)$ |
| 4. | Assumed rate of return |
| 5. | Expected return: $(2) \mathrm{x}(4)$ |
| 6. | Actuarial gain/(loss): $(1)-(5)$ |

This chart illustrates how this leveling effect has actually worked over the years 1995-2004.

[^2]
## SECTION 2: Valuation Results for the University of California Retirement Plan

In the preceding subsection $B$ we described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this method is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs. This effect is clear in the chart below, where the year-to-year returns on actuarial value are less volatile than the returns on market value.

## CHART 10

Market and Actuarial Rates of Return for Years Ended June 30, 1995-2004


## SECTION 2: Valuation Results for the University of California Retirement Plan

## Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:
> the extent of turnover among the members,
> retirement experience (earlier or later than expected),
> mortality (more or fewer deaths than expected),
> the number of disability retirements, and
> salary increases different than assumed.
The net gain from this other experience for the year ended June 30, 2004 amounted to $\$ 440$ million which is $1.26 \%$ of the actuarial accrued liability.

The chart compares this valuation's recommended contribution with the prior valuation.

SECTION 2: Valuation Results for the University of California Retirement Plan

## D. RECOMMENDED CONTRIBUTION

Beginning with the 1990 plan year, the Regents adopted a full funding policy. Under that policy, the University will suspend contributions when the smaller of the market value or actuarial value of plan assets exceeds the lesser of:

- The actuarial accrued liability (including normal cost), or
- $150 \%$ of the estimated current liability (including normal cost).

Based on application of the full funding policy, the recommended contributions to the plan are $\$ 0$.

The contribution rates as of July 1, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

## CHART 11

Recommended Contribution

|  | Plan Year Beginning July 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 2004 \\ (\$ \text { in 000s) } \\ \hline \end{gathered}$ |  | $\begin{gathered} 2003 \\ (\$ \text { in } 000 \mathrm{~s}) \\ \hline \end{gathered}$ |  |
|  | Amount | \% of Payroll | Amount | \% of Payroll |
| 1. Normal cost |  |  |  |  |
| a. Non-safety members | \$1,172,344 | 15.02\% | \$1,170,156 | 15.19\% |
| b. Safety members | 6,284 | 22.39\% | 6,786 | 24.34\% |
| c. Total | 1,178,628 | 15.04\% | 1,176,942 | 15.22\% |
| 2. Full funding limitation* |  |  |  |  |
| a. Actuarial liability basis | 0 | N/A | 0 | N/A |
| b. Current liability basis | 5,067,319 | N/A | 4,642,972 | N/A |
| c. Lesser of actuarial and current liability basis | 0 | N/A | 0 | N/A |
| 3. Recommended contribution lesser of (1c) and (2c) | 0 | 0.00\% | 0 | 0.00\% |
| 4. Covered payroll | \$7,835,249 |  | \$7,733,777 |  |

* Details in Exhibit H


## SECTION 2: Valuation Results for the University of California Retirement Plan

## Components and Reconciliation of Normal Cost

Chart 12 below details the components of normal cost as of July 1, 2004. Chart 13 shows a reconciliation of the normal cost percentage from July 1, 2003 to July 1, 2004.

CHART 12
Components of Normal Cost as of July 1, 2004

|  | $\mathbf{( \$ ~ i n ~ 0 0 0 s )}$ | \% of Payroll |
| :--- | :---: | :---: |
| Retirement benefits | $\$ 879,974$ | $11.23 \%$ |
| Withdrawal benefits | 111,166 | $1.42 \%$ |
| Disability benefits | 111,528 | $1.42 \%$ |
| Death benefits | 36,784 | $0.47 \%$ |
| Administrative expenses | 39,176 | $0.50 \%$ |
| Total Normal Cost | $\$ 1,178,628$ | $15.04 \%$ |

## CHART 13

Reconciliation of the Normal Cost from July 1, 2003 to July 1, 2004

|  | \% of Payroll |
| :--- | :---: |
| Normal Cost as of July 1, 2003 | $15.22 \%$ |
| Change in demographic profile of participants | $(0.27) \%$ |
| Change in actuarial assumptions | $0.09 \%$ |
| Normal Cost as of July 1, 2004 | $15.04 \%$ |

## SECTION 2: Valuation Results for the University of California Retirement Plan

These graphs show key GASB factors.

## E. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. The information required is set forth in Governmental Accounting Standards (GAS) 25 and 27. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms

Critical information to GASB is the historical comparison of the GASB required contribution (\$0) to the actual contributions (\$0). This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements.

## CHART 14

Funded Ratio (Plan Year Beginning July 1)


The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the assets of the plan to the liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits I, II and III.

SECTION 3: SUPPLEMENTAL INFORMATION FROM THE VALUATION OF THE UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

| EXHIBIT A |  |  |  |
| :---: | :---: | :---: | :---: |
| Table of Plan Coverage <br> i. Active Members |  |  |  |
|  | Year Ended June 30 |  | Change From Prior Year |
| Category | 2004 | 2003 |  |
| Active members with Social Security: |  |  |  |
| Number | 117,129 | 113,939 | 2.80\% |
| Average age | 43.5 | 43.2 | N/A |
| Average service credit | 8.5 | 8.3 | 2.41\% |
| Total compensation | \$7,310,951,778 | \$7,134,858,000 | 2.47\% |
| Average compensation | 62,418 | 62,620 | -0.32\% |
| Active members without Social Security: |  |  |  |
| Number | 6,189 | 7,012 | -11.74\% |
| Average age | 53.7 | 53.4 | N/A |
| Average service credit | 24.7 | 24.0 | 2.92\% |
| Total compensation | \$496,229,405 | \$571,036,000 | -13.10\% |
| Average compensation | 80,179 | 81,437 | -1.54\% |
| Safety members: |  |  |  |
| Number | 399 | 400 | -0.25\% |
| Average age | 40.2 | 40.5 | N/A |
| Average service credit | 10.9 | 11.2 | -2.68\% |
| Total compensation | \$28,068,021 | \$27,884,000 | 0.66\% |
| Average compensation | 70,346 | 69,709 | 0.91\% |
| All active members: |  |  |  |
| Number | 123,717 | 121,351 | 1.95\% |
| Average age | 44.0 | 43.8 | N/A |
| Average service credit | 9.4 | 9.2 | 2.17\% |
| Total compensation | \$7,835,249,203 | \$7,733,778,000 | 1.31\% |
| Average compensation | 63,332 | 63,731 | -0.63\% |

## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

|  |  |  |  |
| :--- | ---: | ---: | ---: |
| EXHIBIT A |  |  |  |
| Table of Plan Coverage |  |  |  |
| ii. Nonactive Members |  |  |  |
|  |  |  |  |

SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT B

Members in Active Service and Average Compensation During Year Ended June 30, 2004
By Age and Service Credit
i. All Active Members

| Age | Service Credit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& over |
| Under 25 | 4,730 | 4,684 | 46 | -- | -- | -- | -- | -- | -- | -- |
|  | \$34,895 | \$34,867 | \$37,751 | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 11,031 | 9,810 | 1,205 | 16 | -- | -- | -- | -- | -- | -- |
|  | 43,392 | 43,241 | 44,592 | \$45,692 | -- | -- | -- | -- | -- | -- |
| 30-34 | 14,484 | 10,784 | 3,158 | 516 | 26 | -- | -- | -- | -- | -- |
|  | 52,149 | 51,648 | 53,882 | 52,473 | \$42,700 | -- | -- | -- | -- | -- |
| 35-39 | 15,920 | 8,893 | 4,501 | 1,963 | 541 | 22 | -- | -- | -- | -- |
|  | 58,841 | 55,822 | 63,463 | 63,150 | 54,307 | \$60,516 | -- | -- | -- | -- |
| 40-44 | 17,621 | 6,722 | 4,735 | 3,228 | 2,248 | 656 | 32 | -- | -- | -- |
|  | 63,600 | 57,430 | 66,044 | 70,220 | 66,858 | 65,537 | \$61,539 | -- | -- | -- |
| 45-49 | 19,869 | 5,597 | 4,021 |  | 3,446 | 2,189 | 862 | 35 | -- | -- |
|  | 66,889 | 58,156 | 65,479 | $71,504$ | 74,164 | $72,238$ | 67,914 | \$59,085 | -- | -- |
| 50-54 | 18,214 | 3,900 | 2,962 | 2,916 | 3,249 | 2,796 | 1,869 | 494 | 28 | -- |
|  | 70,539 | 60,438 | 65,441 | 70,437 | 75,653 | 80,983 | 76,052 | 68,372 | \$61,123 | -- |
| 55-59 |  |  |  |  | 2,124 | 1,930 | 1,976 | 1,001 | 278 | 7 |
|  | $75,121$ | $62,453$ | 66,297 | 69,803 | 75,830 | 85,150 | 90,490 | 84,254 | 74,537 | \$68,646 |
| 60-64 | 5,815 | 950 |  |  | 855 | 657 | 726 | 656 | 255 | 14 |
|  | 86,624 | 66,271 | 72,742 | 77,209 | 81,059 | 95,301 | 106,168 | 114,824 | 109,071 | 76,687 |
| 65-69 | 1,661 | 266 | 256 | 227 |  | 134 | 155 | 187 | 198 | 39 |
|  | 97,910 | 70,484 | 72,338 | 84,512 | 90,892 | 99,786 | 116,885 | 130,680 | 134,417 | 142,281 |
| 70 \& over | 502 | 101 |  |  | 55 | $40$ | 43 | 49 | 54 |  |
|  | 112,953 | 71,458 | 79,856 | 94,222 | 123,439 | 141,051 | 139,171 | 154,329 | 134,383 | 149,724 |
| Total | 123,717 | 54,174 | 23,862 | 15,518 | 12,743 | 8,424 | 5,663 | 2,422 | 813 | 98 |
|  | \$63,332 | \$52,260 | \$63,009 | \$69,679 | \$73,562 | \$80,110 | \$85,227 | \$93,933 | \$103,465 | \$130,537 |

## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT B

Members in Active Service and Average Compensation During Year Ended June 30, 2004 By Age and Service Credit

## ii. Members with Social Security

| Age | Service Credit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& over |
| Under 25 | 4,665 | 4,619 | 46 | -- | -- | -- | -- | -- | -- | -- |
|  | \$34,829 | \$34,800 | \$37,751 | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 10,723 | 9,507 | 1,200 | 16 | -- | -- | -- | -- | -- | -- |
|  | 43,406 | 43,254 | 44,576 | \$45,692 | -- | -- | -- | -- | -- | -- |
| 30-34 | 14,065 | 10,402 | 3,133 | 504 | 26 | -- | -- | -- | -- | -- |
|  | 52,408 | 52,030 | 53,817 | 51,960 | \$42,700 | -- | -- | -- | -- | -- |
| 35-39 | 15,565 | 8,589 | 4,477 | 1,942 | 535 | 22 | -- | -- | -- | -- |
|  | 59,098 | 56,261 | 63,434 | 63,010 | 54,087 | \$60,516 | -- | -- | -- | -- |
| 40-44 | 17,484 | 6,657 | 4,718 | 3,207 | 2,223 | 647 | 32 | -- | -- | -- |
|  | 63,608 | 57,525 | 66,055 | 70,197 | 66,692 | 65,206 | \$61,539 | -- | -- | -- |
| 45-49 | 19,514 | 5,508 | 4,016 | 3,701 | 3,414 | 2,149 | 722 | 4 | -- | -- |
|  | 67,001 | 58,384 | 65,475 | 71,511 | 74,110 | 72,224 | 69,018 | \$55,918 | -- | -- |
| 50-54 | 16,902 | 3,880 | 2,952 | 2,899 | 3,180 | 2,663 | 1,282 | 41 | 5 | -- |
|  | 70,457 | 60,375 | 65,414 | 70,397 | 75,642 | 81,411 | 77,229 | 68,325 | \$54,495 | -- |
| 55-59 | 11,761 | 2,453 | 2,037 | 2,001 | 2,054 | 1,790 | 1,290 | 118 | 18 | -- |
|  | 73,690 | 62,488 | 66,226 | 69,730 | 75,662 | 85,322 | 91,880 | 93,926 | 67,060 | -- |
| 60-64 | 4,748 | 945 | 857 | 819 | 823 | 604 | 466 | 161 | 69 | 4 |
|  | 82,257 | 66,150 | 72,698 | 76,765 | 81,130 | 94,438 | 108,631 | 122,916 | 120,930 | \$76,790 |
| 65-69 | 1,307 | 264 | 253 | 222 | 188 | 123 | 105 | 52 | 85 | 15 |
|  | 89,735 | 69,280 | 72,230 | 84,028 | 91,120 | 99,278 | 118,565 | 123,692 | 138,734 | 136,659 |
| 70 \& over | 395 | 99 | 65 | 55 | 52 | 38 | 29 | 18 | 22 | 17 |
|  | 104,085 | 70,835 | 79,856 | 93,383 | 120,300 | 143,754 | 136,526 | 150,814 | 131,900 | 145,909 |
| Total | 117,129 | 52,923 | 23,754 | 15,366 | 12,495 | 8,036 | 3,926 | 394 | 199 | 36 |
|  | \$62,418 | \$52,458 | \$62,987 | \$69,591 | \$73,423 | \$80,011 | \$85,676 | \$109,249 | \$123,206 | \$134,375 |

Average Age: 43.5
Average Service Credit: 8.5

SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT B

Members in Active Service and Average Compensation During Year Ended June 30, 2004
By Age and Service Credit
iii. Members without Social Security

| Age | Service Credit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& over |
| Under 25 | 52 | 52 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | \$35,907 | \$35,907 | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 263 | 262 | 1 | -- | -- | -- | - | -- | -- | -- |
|  | 41,087 | 41,145 | \$26,100 | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | 355 | 351 | 4 | -- | -- | -- | -- | -- | -- | -- |
|  | 40,048 | 39,748 | 66,350 | -- | -- | -- | -- | -- | -- | -- |
| 35-39 | 280 | 275 | 5 | -- | -- | -- | -- | -- | -- | -- |
|  | 42,316 | 41,777 | 71,943 | -- | -- | -- | -- | -- | -- | -- |
| 40-44 | 63 | 51 | 7 | 3 | 2 | -- | -- | -- | -- | -- |
|  | 48,342 | 44,951 | 60,570 | \$64,455 | \$67,864 | -- | -- | -- | -- | -- |
| 45-49 | 291 | 85 | 1 | 6 | 18 | 21 | 129 | 31 | -- | -- |
|  | 57,595 | 43,063 | 76,194 | 64,857 | 85,072 | \$68,862 | \$60,564 | \$59,494 | - | -- |
| 50-54 | 1,264 | 14 | 6 | 14 | 61 | 119 | 577 | 450 | 23 | -- |
|  | 71,056 | 67,138 | 67,293 | 76,686 | 75,709 | 70,922 | 73,179 | 68,170 | \$62,563 | -- |
| 55-59 | 2,096 | 13 | 13 | 32 | 68 | 138 | 684 | 881 | 260 | 7 |
|  | 83,029 | 52,016 | 77,368 | 72,279 | 80,567 | 82,854 | 87,862 | 82,893 | 75,055 | \$68,646 |
| 60-64 | 1,064 | 4 | 5 | 19 | 32 | 53 | 260 | 495 | 186 | 10 |
|  | 106,116 | 83,184 | 82,689 | 96,217 | 79,228 | 105,130 | 101,753 | 112,192 | 104,672 | 76,646 |
| 65-69 | 354 | 2 | 3 | 5 | 11 | 11 | 50 | 135 | 113 | 24 |
|  | 128,092 | 229,398 | 81,522 | 105,982 | 87,008 | 105,472 | 113,356 | 133,372 | 131,169 | 145,795 |
| 70 \& over | 107 | 2 | -- | 2 | 3 | 2 | 14 | 31 | 32 | 21 |
|  | 145,688 | 102,288 | -- | 117,311 | 177,848 | 89,688 | 144,651 | 156,371 | 136,090 | 152,812 |
| Total | 6,189 | 1,111 | 45 | 81 | 195 | 344 | 1,714 | 2,023 | 614 | 62 |
|  | \$80,179 | \$41,991 | \$71,532 | \$81,008 | \$80,973 | \$82,067 | \$84,180 | \$90,923 | \$97,067 | \$128,308 |

Average Age: 53.7
Average Service Credit: 24.7

SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT B

Members in Active Service and Average Compensation During Year Ended June 30, 2004 By Age and Service Credit
iv. Safety Members

| Age | Service Credit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& over |
| Under 25 | 13 | 13 | - | -- | -- | -- | -- | -- | - | -- |
|  | \$54,428 | \$54,428 | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 45 | 41 | 4 | -- | -- | -- | -- | -- | -- | -- |
|  | 53,649 | 53,603 | \$54,128 | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | 64 | 31 | 21 | 12 | -- | -- | -- | -- | -- | -- |
|  | 62,291 | 58,393 | 61,345 | \$74,013 | -- | -- | -- | -- | -- | -- |
| 35-39 | 75 | 29 | 19 | 21 | 6 | -- | -- | -- | -- | -- |
|  | 67,364 | 59,181 | 68,076 | 76,141 | \$73,941 | -- | -- | -- | -- | -- |
| 40-44 | 74 | 14 | 10 | 18 | 23 | 9 | -- | - | -- | -- |
|  | 74,529 | 57,731 | 64,526 | 75,226 | 82,770 | \$89,318 | - | -- | -- | -- |
| 45-49 | 64 | 4 | 4 | 12 | 14 | 19 | 11 | -- | -- | -- |
|  | 74,956 | 64,526 | 66,682 | 72,804 | 73,389 | 77,526 | \$81,657 | -- | -- | -- |
| 50-54 | 48 | 6 | 4 | 3 | 8 | 14 | 10 | 3 | -- | -- |
|  | 85,767 | 85,266 | 83,004 | 79,777 | 79,451 | 85,108 | 90,890 | \$99,294 | -- | -- |
| 55-59 | 13 | 1 | -- | 4 | 2 | 2 | 2 | 2 | -- | -- |
|  | 94,224 | 113,300 | -- | 86,554 | 87,271 | 89,524 | 92,548 | 113,355 | -- | -- |
| 60-64 | 3 | 1 | 1 | 1 | -- | -- | -- | -- | -- | -- |
|  | 84,440 | 113,080 | 60,878 | 79,361 | -- | -- | -- | - | - | -- |
| 65-69 | - | -- | - | -- | -- | -- | -- | -- | -- | -- |
|  | -- | - | - | -- | -- | -- | -- | -- | -- | -- |
| 70 \& over | -- | - | - | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 399 | 140 | 63 | 71 | 53 | 44 | 23 | 5 | -- | -- |
|  | \$70,346 | \$58,829 | \$65,128 | \$75,771 | \$78,961 | \$82,896 | \$86,618 | \$104,918 | -- | -- |

[^3]
## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT C

Reconciliation of Member Data

|  | Active Members | Terminated Vested Members* | Retired Members | Disabled Members | Beneficiaries | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number as of July 1, 2003 | 121,351 | 20,418 | 30,655 | 2,129 | 5,083 | 179,636 |
| New members | 15,469 | N/A | N/A | N/A | N/A | 15,469 |
| Terminations - with vested rights | $(1,495)$ | 1,495 | 0 | 0 | 0 | 0 |
| Termination - without vested rights | $(4,300)$ | 0 | 0 | 0 | 0 | $(4,300)$ |
| Retirements | $(2,464)$ | (267) | 2,570 | 161 | N/A | 0 |
| Return to work | 353 | (353) | 0 | 0 | N/A | 0 |
| Died with beneficiary | ** | ** | (351) | (4) | 355 | 0 |
| Died without beneficiary | ** | ** | (885) | (68) | (526) | $(1,479)$ |
| Data adjustments | 0 | 1,816 | 83 | (24) | 560 | 2,435 |
| Contribution/CAP refunds** | $(5,197)$ | $(1,781)$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $(6,978)$ |
| Number as of July 1, 2004 | 123,717 | 21,328 | 32,072 | 2,194 | 5,472 | 184,783 |

* Excludes terminated nonvested members due a refund of member contributions or CAP balance payment.
** "Contributions/CAP refunds" also includes active and terminated vested member deaths


## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT D <br> Summary Statement of Income and Expenses

|  | Year Ended June 30, 2004 (\$ in 000s) | Year Ended June 30, 2003 (\$ in 000s) |
| :---: | :---: | :---: |
| Contribution income: |  |  |
| Employer contributions | \$5,150 | \$ 811 |
| Members contributions | 2,503 | 7,060 |
| Less administration expense | (24,053) | (27,696) |
| Net contribution income | $(\$ 16,400)$ | (\$19,825) |
| Investment income: |  |  |
| Interest, dividends and other income | \$1,091,918 | \$1,031,630 |
| Recognition of capital appreciation | $(39,183)$ | $(166,381)$ |
| Less investment fees | $(58,397)$ | $(84,864)$ |
| Net investment income | 994,338 | 780,385 |
| Other income | 7,196 | 7,502 |
| Total income available for benefits | \$985,134 | \$768,062 |
| Less benefit payments | (\$1,121,416) | $(\$ 987,552)$ |
| Change in reserve for future benefits | (\$136,282) | (\$219,490) |

SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT E

## Summary Statement of Assets

|  | Year Ended June 30, 2004 (\$ in 000s) |  | Year Ended June 30, 2003 (\$ in 000s) |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash equivalents |  | \$117,043 |  | \$66,939 |
| Accounts receivable: |  |  |  |  |
| Contributions | \$ 84,710 |  | \$ 89,014 |  |
| Interest and dividends | 146,570 |  | 139,662 |  |
| Investment of cash collateral | 6,237,691 |  | 5,413,706 |  |
| Securities sales and other | 168,130 |  | 28,783 |  |
| Total accounts receivable |  | 6,637,101 |  | 5,671,165 |
| Investments: |  |  |  |  |
| Equity securities | \$25,961,877 |  | \$23,602,769 |  |
| Fixed income securities | 12,601,118 |  | 11,541,619 |  |
| Commingled funds | 411,775 |  |  |  |
| Total investments at market value |  | 38,974,770 |  | 35,144,388 |
| Total assets |  | \$45,728,914 |  | \$40,882,492 |
| Less accounts payable: |  |  |  |  |
| Payable for securities purchased | (\$170,459) |  | $(\$ 107,005)$ |  |
| Member withdrawals, refunds and other payables | $(103,871)$ |  | $(35,074)$ |  |
| Collateral held for securities lending | (6,238,490) |  | $(5,413,601)$ |  |
| Total accounts payable |  | (\$6,512,820) |  | (\$5,555,680) |
| Net assets at market value |  | \$39,216,094 |  | \$35,326,812 |
| Net assets at actuarial value (for comparison purposes) |  | \$41,293,050 |  | \$41,429,332 |

## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT F

Development of Unfunded/(Overfunded) Actuarial Accrued Liability (\$ in 000s)


## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT G

Actuarial Liabilities

|  | $\begin{gathered} \text { July 1, } 2004 \\ (\$ \text { in 000s) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { July 1, } 2003 \\ (\$ \text { in 000s) } \end{gathered}$ |
| :---: | :---: | :---: |
| Actuarial Accrued Liability |  |  |
| Members in pay status: |  |  |
| Retirees | \$10,223,858 | \$9,206,927 |
| Beneficiaries | 929,883 | 835,294 |
| Disableds | 459,990 | 432,110 |
| Total in pay status | \$11,613,731 | \$10,474,331 |
| Active members |  |  |
| With Social Security | \$17,564,769 | \$16,572,730 |
| Without Social Security | 3,531,074 | 3,976,591 |
| Safety | 128,213 | 127,417 |
| Total Actives | \$21,224,056 | \$20,676,738 |
| Terminated members |  |  |
| Vested | \$2,159,647 | \$1,789,121 |
| Nonvested | 36,748 | 14,567 |
| Total terminated | \$2,196,396 | \$1,803,688 |
| Total actuarial accrued liability | \$35,034,183 | \$32,954,757 |
| Current Liability |  |  |
| Members in pay status | \$11,613,731 | \$10,474,331 |
| Active members | 14,602,669 | 13,207,426 |
| Terminated members | 2,196,396 | 1,803,688 |
| Total current liability | \$28,412,796 | \$25,485,445 |
| Actuarial Present Value of Projected Benefits |  |  |
| Members in pay status | \$11,613,731 | \$10,474,331 |
| Active members | 31,024,293 | 30,814,938 |
| Terminated Members | 2,196,396 | 1,803,688 |
| Total | \$44,834,420 | \$43,092,957 |

SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT H

Full Funding Limitations

| Assets | $\begin{array}{r} \text { July 1, } 2004 \\ (\$ \text { in 000s) } \end{array}$ | $\begin{array}{r} \text { July } 1,2003 \\ (\$ \text { in } 000 \mathrm{~s}) \end{array}$ |
| :---: | :---: | :---: |
| Actuarial Value of Assets at beginning of Plan Year | \$41,293,050 | \$41,429,332 |
| Market value of assets at beginning of Plan Year | 39,216,094 | 35,326,812 |
| Lesser of actuarial value and market value | 39,216,094 | 35,326,812 |
| Estimated benefit disbursements | $(1,373,931)$ | $(1,217,236)$ |
| Interest to end of Plan Year | 2,889,685 | 2,604,690 |
| Estimated assets at end of Plan Year | \$40,731,848 | \$36,714,266 |
| Full Funding Limitation - Actuarial Accrued Liability Basis |  |  |
| Actuarial accrued liability at beginning of Plan Year | \$35,034,183 | \$32,954,757 |
| Normal cost at beginning of Plan Year (net of expenses) | 1,139,451 | 1,138,274 |
| Estimated benefit disbursements | $(1,373,931)$ | $(1,217,236)$ |
| Interest to end of Plan Year | 2,661,500 | 2,512,156 |
| Estimated actuarial accrued liability at end of Plan Year | \$37,461,203 | \$35,387,951 |
| Estimated assets at end of Plan Year | 40,731,848 | 36,714,266 |
| Full funding limitation (minimum zero) | \$ 0 | \$ |
| Full Funding Limitation - Current Liability Basis |  |  |
| Current liability at beginning of Plan Year | \$28,412,796 | \$25,485,445 |
| Current liability normal cost at beginning of Plan Year | 1,315,793 | 1,336,461 |
| Estimated benefit disbursements | $(1,373,931)$ | $(1,217,236)$ |
| Interest to end of Plan Year | 2,178,120 | 1,966,822 |
| Estimated current liability at end of Plan Year | \$30,532,778 | \$27,571,492 |
| 150\% of estimated current liability | 45,799,167 | 41,357,238 |
| Estimated assets at end of Plan Year | 40,731,848 | 36,714,266 |
| Full funding limitation (minimum zero) | \$ 5,067,319 | \$ 4,642,972 |

## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## EXHIBIT I

Section 415 Limitations

## Section 415 of the Internal Revenue Code (IRC) specifies

 the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit indexed for inflation. That limit is $\$ 165,000$ for 2004. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, form of benefits chosen and after tax contributions.

The University pays benefits in excess of the limits through a non-qualified 415(m) Restoration Plan.

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

## EXHIBIT J

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

| Assumptions or Actuarial Assumptions: | The estimates on which the cost of the Plan is calculated including: <br> (a) Investment return - the rate of investment yield which the Plan will earn over the long-term future; <br> (b) Mortality rates - the death rates of employees and pensioners; life expectancy is based on these rates; <br> (c) Retirement rates - the rate or probability of retirement at a given age; <br> (d) Turnover rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement. |
| :---: | :---: |
| Normal Cost: | The amount of contributions required to fund the level cost allocated to the current year of service. |
| Actuarial Accrued Liability for Actives: | The accumulated value of normal costs allocated to the years before the valuation date. |
| Actuarial Accrued Liability for Pensioners: | The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and of the interest which the sum is expected to earn before it is entirely paid out in benefits. |
| Unfunded (Overfunded) Actuarial Accrued Liability: | The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There is a wide range of approaches to recognizing the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time. |

## SECTION 3: Supplemental Information from the Valuation of the University of California Retirement Plan

## Amortization of the Unfunded (Overfunded) Actuarial <br> Accrued Liability:

## Investment Return:

## Current Liability:

## Beneficiary:

Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.
The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return reflects a smoothing of market gains and losses to avoid significant swings in the value of assets from one year to the next.

The actuarial present value of accumulated plan benefits.
Used for statistical purposes only; includes Eligible Survivors, Contingent Annuitants and Spouses/Domestic Partners.

SECTION 4: REPORTING INFORMATION FROM THE VALUATION OF THE UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## EXHIBIT I

Supplementary Information Required by the GAS 25 - Schedule of Employer Contributions

| Plan Year <br> Ended June 30 | Annual Required <br> Contributions | Actual <br> Contributions | Percentage <br> Contributed |
| :---: | :---: | :---: | :---: |
| 2000 | $\$ 0$ | $\$ 0$ | $100.00 \%$ |
| 2001 | 0 | 0 | $100.00 \%$ |
| 2002 | 0 | 0 | $100.00 \%$ |
| 2003 | 0 | 0 | $100.00 \%$ |
| 2004 | 0 | 0 | $100.00 \%$ |
| 2005 | 0 | -- | -- |

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## EXHIBIT II

Supplementary Information Required by the GAS 25 - Schedule of Funding Progress (\$ in 000s)

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) <br> (b) | Unfunded/ (Overfunded) AAL (UAAL) <br> (b) - (a) | Funded Ratio <br> (a) / (b) | Covered Payroll <br> (c) | UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 07/01/1999 | \$32,089,610 | \$22,156,969 | (\$9,932,641) | 144.8\% | \$5,346,900 | (185.8\%) |
| 07/01/2000 | 37,026,168 | 24,067,231 | $(12,958,937)$ | 153.8\% | 5,903,227 | (219.5\%) |
| 07/01/2001 | 40,554,492 | 27,451,200 | $(13,103,292)$ | 147.7\% | 6,539,246 | (200.4\%) |
| 07/01/2002 | 41,648,822 | 30,099,594 | $(11,549,228)$ | 138.4\% | 7,226,529 | (159.8\%) |
| 07/01/2003 | 41,429,311 | 32,954,757 | $(8,474,554)$ | 125.7\% | 7,733,777 | (109.6\%) |
| 07/01/2004 | 41,293,050 | 35,034,183 | $(6,258,867)$ | 117.9\% | 7,835,249 | (79.9\%) |

# SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan 

## EXHIBIT III

## Supplementary Information Required by the GAS 25 and 27

| Valuation Date | July 1, 2004 |
| :--- | :--- |
| Actuarial Cost Method | Entry Age Normal Cost Method |
| Amortization Method | Level percent, Open |
| Remaining Amortization Period | 5.92 Years |
| Asset Valuation Method | The market value of asset less unrecognized returns in each of the last five years. |
|  | Unrecognized return is equal to the difference between the actual and the expected <br> returns on a market value basis and is recognized over a five year period. |
| Actuarial Assumptions: |  |
| Investment Rate of Return* | $7.50 \%$ |
| Projected Salary Increases* <br> Cost of Living Adjustments | $4.50 \%$ to $6.50 \%$ |
| Membership of the Plan | $2.00 \%$ |
| Retirees, disableds and beneficiaries receiving benefits <br> Terminated plan members entitled to, but not yet <br> receiving benefits** | 39,738 |
| Active plan members | 39,874 |
| Total | $\underline{123,717}$ |

* Includes inflation at $4.00 \%$
** Includes terminated nonvested members due a refund of member contributions or CAP balance payment.
Note: The projected salary increases will be 2.0\% lower for the period July 1, 2004 through June 30, 2007.

SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## EXHIBIT IV

Actuarial Assumptions and Methods

## Demographic Assumptions

Post - Retirement Mortality Rates:

| Healthy: | 1994 Group Annuity Reserving Mortality Table unloaded, projected with scale AA to <br> 2002. Ages are set back two years for males (from the male table) and set back one <br> year for females (from the female table). |
| :--- | :--- |
| Disabled: | Based upon 1987 Group Long Term Disability Table (composite select and ultimate <br> rates). |

## Sample Termination Rates Before Retirement:

Rate(\%)

| Age | Rate(\%) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Healthy Mortality |  | Disabled Mortality |  | Disability Incidence |  |
|  | Male | Female | Male | Female | Male | Female |
| 20 | 0.04 | 0.03 | 19.60 | 15.10 | 0.14 | 0.06 |
| 25 | 0.06 | 0.03 | 18.18 | 13.81 | 0.15 | 0.08 |
| 30 | 0.08 | 0.03 | 11.49 | 7.88 | 0.16 | 0.10 |
| 35 | 0.09 | 0.04 | 7.80 | 5.48 | 0.18 | 0.16 |
| 40 | 0.10 | 0.06 | 5.26 | 4.13 | 0.22 | 0.26 |
| 45 | 0.13 | 0.09 | 3.89 | 3.15 | 0.28 | 0.38 |
| 50 | 0.20 | 0.12 | 3.30 | 2.66 | 0.37 | 0.57 |
| 55 | 0.33 | 0.21 | 3.02 | 2.84 | 0.51 | 0.80 |
| 60 | 0.60 | 0.40 | 3.14 | 3.75 | 0.78 | 1.12 |
| 65 | 1.10 | 0.79 | 4.28 | 5.07 | 1.24 | 1.45 |

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## Sample Termination Rates Before Retirement (continued):

|  | Rate (\%) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Withdrawal - Faculty |  |  |  |
|  | Less than one Year of Service | At least one, but less than two Years of Service | At least two, but less than three Years of Service | Three or more Years of Service |
| Age | Unisex | Unisex | Unisex | Unisex |
| 20 | 24.00 | 22.00 | 21.00 | 21.00 |
| 25 | 24.00 | 20.00 | 18.00 | 16.00 |
| 30 | 21.00 | 10.00 | 9.00 | 9.00 |
| 35 | 12.00 | 8.00 | 5.00 | 4.00 |
| 40 | 12.00 | 6.00 | 5.00 | 4.00 |
| 45 | 12.00 | 5.00 | 5.00 | 2.00 |
| 50 | 12.00 | 3.00 | 3.00 | 2.00 |
| 55 | 12.00 | 3.00 | 3.00 | 2.00 |
| 60 | 12.00 | 3.00 | 3.00 | 2.00 |

SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

Sample Termination Rates Before Retirement (continued):

| Rate (\%) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Withdrawal - Staff |  |  |  |
|  | Less than one Year of Service | At least one, but less than two Years of Service | At least two, but less than three Years of Service | Three or more Years of Service |
| Age | Unisex | Unisex | Unisex | Unisex |
| 20 | 27.00 | 20.00 | 16.00 | 16.00 |
| 25 | 25.00 | 20.00 | 16.00 | 15.00 |
| 30 | 23.00 | 18.00 | 12.00 | 10.00 |
| 35 | 18.00 | 15.00 | 10.00 | 7.00 |
| 40 | 15.00 | 10.00 | 8.00 | 5.00 |
| 45 | 15.00 | 7.00 | 6.00 | 3.00 |
| 50 | 12.00 | 7.00 | 6.00 | 3.00 |
| 55 | 12.00 | 7.00 | 4.00 | 2.00 |
| 60 | 12.00 | 7.00 | 4.00 | 2.00 |

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## Sample Termination Rates Before Retirement (continued):



SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## Retirement Rates:

| Retirement Probability - Unisex |  |  |  |
| :---: | :---: | :---: | :---: |
| Age | Faculty | Staff | Safety |
| 50 | 3.00\% | 8.00\% | 20.00\% |
| 51 | 2.00\% | 5.00\% | 5.00\% |
| 52 | 2.00\% | 5.00\% | 5.00\% |
| 53 | 2.00\% | 5.00\% | 5.00\% |
| 54 | 2.00\% | 6.00\% | 5.00\% |
| 55 | 2.00\% | 6.00\% | 25.00\% |
| 56 | 2.00\% | 6.00\% | 25.00\% |
| 57 | 2.00\% | 6.00\% | 25.00\% |
| 58 | 2.00\% | 8.00\% | 25.00\% |
| 59 | 4.00\% | 20.00\% | 25.00\% |
| 60 | 5.00\% | 20.00\% | 25.00\% |
| 61 | 5.00\% | 20.00\% | 25.00\% |
| 62 | 5.00\% | 20.00\% | 50.00\% |
| 63 | 5.00\% | 20.00\% | 50.00\% |
| 64 | 5.00\% | 30.00\% | 75.00\% |
| 65 | 6.00\% | 30.00\% | 100.00\% |
| 66 | 6.00\% | 25.00\% | 100.00\% |
| 67 | 10.00\% | 25.00\% | 100.00\% |
| 68 | 10.00\% | 25.00\% | 100.00\% |
| 69 | 15.00\% | 30.00\% | 100.00\% |
| 70 | 100.00\% | 100.00\% | 100.00\% |

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

| Retirement Age and Benefit |  |
| :--- | :--- |
| for Deferred Vested Members: |  |
| Form of Payment: | Deferred vested members are assumed to retire at age 50. |
|  | Life annuity for single members; |
|  | $25 \%$ contingent annuity for members with Social Security in a relationship for at least |
|  | one year; |
|  | $50 \%$ contingent annuity for members without Social Security in a relationship for at |
|  | least one year; |
|  | $50 \%$ contingent annuity for Safety members in a relationship for at least one year. |
| Future Benefit Accruals: | 1.0 year of service per year for the full-time employees. Part-time employees are <br> assumed to earn full-time service for all future years. |$.$| and |
| :--- |.

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

Percent with Eligible Dependents (Samples):

| Age | Male | Female |
| :---: | :---: | :---: |
| 20 | 58.00\% | 66.50\% |
| 25 | 85.00 | 89.50 |
| 30 | 91.50 | 92.50 |
| 35 | 93.00 | 94.00 |
| 40 | 93.50 | 93.50 |
| 45 | 94.00 | 92.50 |
| 50 | 95.00 | 91.00 |
| 55 | 94.50 | 89.00 |
| 60 | 94.00 | 85.00 |
| 65 | 93.00 | 80.00 |

Spouse/Domestic Partner Ages: Members assumed to have an opposite sex spouse or domestic partner, with females three years younger than males.

## Number of Dependents (Samples):

Number of Eligible Dependents per Active

|  | Number of Eligible Dependents per Active <br> Member with Dependents |  |
| :---: | :---: | :---: |
| Age | Male | Female |
| 20 | 1.0 | 1.0 |
| 25 | 1.8 | 2.3 |
| 30 |  | 2.3 |
| 35 | 3.0 | 3.2 |
| 35 |  | 3.5 |
| 45 | 3.0 | 2.5 |
| 50 |  | 2.5 |
| 55 | 2.0 | 2.0 |
| 60 |  | 1.5 |
| 65 | 1.3 | 1.5 |
|  |  |  |

## Ecomomic Assumptions

| Net Investment Return: | $7.50 \%$ (including $4.00 \%$ for inflation) |  |
| :--- | :---: | :---: |
| Consumer Price Index: | Increase of $4.00 \%$ per year. |  |
| Salary Increases (Samples): | Annual Rate of Compensation Increase |  |
|  | The sum of 4.00\% inflation (at all ages) plus |  |
| the following Merit and Longevity |  |  |
| Age |  |  |
|  | 20 |  |
| 25 | $2.50 \%$ |  |
|  | 30 |  |
| 35 | $2.50 \%$ |  |
|  | 40 |  |
| 45 | $1.70 \%$ |  |
|  | 50 |  |
| 55 | $1.50 \%$ |  |
|  | 60 |  |

The assumed salary increases will be $2.0 \%$ lower overall for the period July 1, 2004 through June 30, 2007.

## Administrative Expenses:

$0.5 \%$ of payroll added to normal cost.

## Actuarial Methods <br> Actuarial Value of Assets:

## Actuarial Cost Method:

The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected returns on a market value basis and is recognized over a five-year period.
Entry Age Normal Actuarial Cost Method. Entry Age is calculated as the valuation date minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salaries, as if the current benefit accrual rate has always been in effect.

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## Other Actuarial Assumptions

## Lump Sum Assumptions:

Discount Rate: $\quad 7.50 \%$

COLA:
Take-rate:
Mortality:

None assumed.
1994 Group Annuity Reserving Mortality Table unloaded for males set back three years, projected with scale AA to 2002.

## Approximations:

Guaranteed Survivor and
Disability Benefits

Sick Leave
Liability and normal cost for guaranteed survivor and disability benefits for members who elected Social Security was estimated as $10 \%$ of their basic liability and normal cost.

Service has been increased by $0.2 \%$ for faculty, $1.4 \%$ for staff, and $2.5 \%$ for safety members to account for unused sick leave.

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

| Changes in Assumptions: | Based on the October, 2003 Review of Plan Experience for the Period from July 1, <br> 1995 through June 30, 2002, many actuarial assumptions were changed. These <br> assumptions were previously as follows: |
| :--- | :--- |
| Post - Retirement Mortality Rates: |  |
| Healthy: 1983 Group Annuity Mortality Table with ages set back two years. <br> Disabled: 1987 Group Long Term Disability Table (composite select and ultimate rates). |  |

## Sample Termination Rates Before Retirement:

| Age | Rate(\%) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Healthy Mortality |  | Disabled Mortality |  | Disability Incidence |  |
|  | Male | Female | Male | Female | Male | Female |
| 20 | 0.04 | 0.02 | 19.60 | 16.70 | 0.20 | 0.05 |
| 25 | 0.04 | 0.02 | 18.18 | 15.27 | 0.20 | 0.05 |
| 30 | 0.05 | 0.03 | 11.49 | 8.72 | 0.20 | 0.05 |
| 35 | 0.07 | 0.04 | 7.80 | 5.38 | 0.22 | 0.08 |
| 40 | 0.10 | 0.06 | 4.88 | 3.85 | 0.25 | 0.19 |
| 45 | 0.17 | 0.08 | 2.92 | 2.92 | 0.29 | 0.34 |
| 50 | 0.31 | 0.14 | 3.34 | 3.34 | 0.36 | 0.52 |
| 55 | 0.52 | 0.21 | 3.60 | 3.60 | 0.47 | 0.75 |
| 60 | 0.77 | 0.34 | 3.77 | 3.77 | 0.72 | 1.06 |
| 65 | 1.24 | 0.58 | 4.32 | 4.32 | 1.20 | 1.41 |

## Changes in Assumptions - Previous Assumptions (continued):

Sample Termination Rates Before Retirement (continued):

|  | Rate (\%) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Withdrawal - Faculty |  |  |  |
|  | Less than one Year of Service | At least one, but less than two Years of Service | At least two, but less than three Years of Service | Three or more Years of Service |
| Age | Unisex | Unisex | Unisex | Unisex |
| 20 | 24.00 | 22.00 | 21.00 | 21.00 |
| 25 | 24.00 | 22.00 | 21.00 | 21.00 |
| 30 | 23.00 | 20.00 | 18.00 | 13.00 |
| 35 | 22.00 | 19.00 | 16.00 | 8.00 |
| 40 | 20.00 | 18.00 | 13.00 | 5.00 |
| 45 | 19.00 | 18.00 | 12.00 | 3.00 |
| 50 | 18.00 | 16.00 | 10.00 | 2.00 |
| 55 | 0.00 | 0.00 | 0.00 | 0.00 |
| 60 | 0.00 | 0.00 | 0.00 | 0.00 |

## Changes in Assumptions - Previous Assumptions (continued):

Sample Termination Rates Before Retirement (continued):

|  | Rate (\%) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Less } \\ & \text { Year } \end{aligned}$ | n one ervice | At <br> but le Years | one, an two Service | At but less Years | two, n three Service | Three o of | re Years ice |
| Age | Male | Female | Male | Female | Male | Female | Male | Female |
| 20 | 27.00 | 27.00 | 24.00 | 24.00 | 21.00 | 21.00 | 18.00 | 18.00 |
| 25 | 27.00 | 27.00 | 24.00 | 24.00 | 21.00 | 21.00 | 18.00 | 18.00 |
| 30 | 26.00 | 26.00 | 22.00 | 22.00 | 17.00 | 17.00 | 10.00 | 11.00 |
| 35 | 25.00 | 25.00 | 20.00 | 20.00 | 15.00 | 15.00 | 6.00 | 7.00 |
| 40 | 25.00 | 25.00 | 18.00 | 18.00 | 13.00 | 13.00 | 4.00 | 6.00 |
| 45 | 24.00 | 24.00 | 16.00 | 16.00 | 11.00 | 11.00 | 3.00 | 6.00 |
| 50 | 23.00 | 23.00 | 15.00 | 15.00 | 10.00 | 10.00 | 2.00 | 5.00 |
| 55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

Changes in Assumptions - Previous Assumptions (continued):

## Retirement Rates:

| Retirement Probability - Unisex |  |  |  |
| :---: | :---: | :---: | :---: |
| Age | Faculty | Staff | Safety |
| 50 | 3.00\% | 8.00\% | 20.00\% |
| 51 | 1.00\% | 5.00\% | 5.00\% |
| 52 | 1.00\% | 5.00\% | 5.00\% |
| 53 | 1.00\% | 5.00\% | 5.00\% |
| 54 | 1.00\% | 5.00\% | 5.00\% |
| 55 | 1.00\% | 5.00\% | 25.00\% |
| 56 | 1.00\% | 5.00\% | 25.00\% |
| 57 | 1.00\% | 5.00\% | 25.00\% |
| 58 | 1.00\% | 5.00\% | 25.00\% |
| 59 | 1.00\% | 5.00\% | 25.00\% |
| 60 | 3.00\% | 10.00\% | 25.00\% |
| 61 | 3.00\% | 12.00\% | 25.00\% |
| 62 | 3.00\% | 25.00\% | 50.00\% |
| 63 | 3.00\% | 20.00\% | 50.00\% |
| 64 | 5.00\% | 20.00\% | 75.00\% |
| 65 | 10.00\% | 35.00\% | 100.00\% |
| 66 | 7.00\% | 25.00\% | 100.00\% |
| 67 | 10.00\% | 25.00\% | 100.00\% |
| 68 | 10.00\% | 25.00\% | 100.00\% |
| 69 | 10.00\% | 30.00\% | 100.00\% |
| 70 | 100.00\% | 100.00\% | 100.00\% |

## Changes in Assumptions - Previous Assumptions (continued):

Salary Increases (Samples):
Annual Rate of Compensation Increase
The sum of $4.00 \%$ inflation (at all ages) plus the following Merit and Longevity

| Age |  |
| :---: | :---: |
| 20 | $2.50 \%$ |
| 25 | $2.50 \%$ |
| 30 | $2.10 \%$ |
| 35 | $1.70 \%$ |
| 40 | $1.50 \%$ |
| 45 | $1.30 \%$ |
| 50 | $1.20 \%$ |
| 55 | $1.10 \%$ |
| 60 | $0.90 \%$ |

## Lump Sum Assumptions:

Discount Rate
7.50\%

COLA:
Take-rate:
Mortality:
2.00\%

None assumed.
1983 Group Annuity Mortality Table with ages set back two years.

## SECTION 4: Reporting Information from the Valuation of the University of California Retirement Plan

## EXHIBIT V <br> Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

| Effective Date: | April 24, 1954. Includes amendments through July 1, 2004. |
| :--- | :--- |
| Covered Employees: | Generally all employees who are not members of another retirement system to which <br> the Regents contribute, and who: |
|  | a. Are appointed to work $50 \%$ time or more for one year or longer or <br> b. Have generally accumulated at least 1,000 hours in a 12-month period. |
| Highest Average Plan <br> Compensation (HAPC): | Highest average monthly full-time-equivalent base compensation rate received during <br> any period of 36 consecutive months. |



| Service Retirement: |  |
| :--- | :--- |
| Eligibility | Age 50 with 5 years of service credit, or <br> Age 62 regardless of service credit if membership began on or before July 1, 1989, or <br> Retirement on Normal Retirement Date. |
| Benefit | BRI. |
| Form of Payment | Single Life Annuity. |
| Payment Options | Full continuance to contingent annuitant; two-thirds continuance to contingent <br> annuitant; one-half continuance to contingent annuitant; one-half continuance <br> (including post-retirement survivor continuance) to surviving spouse or domestic <br> partner (for members with Social Security only). |
|  | May be elected in lieu of monthly retirement income. |


| Temporary Social Security Supplement: |  |
| :--- | :--- |
| Eligibility | For members with Social Security only and retirement must occur before age 65. |
| Benefit | Temporary annuity payable to age 65 in the amount of $\$ 133$ per month multiplied by |
|  | Benefit Percentage. |
| Form of Payment | Single Life Annuity. |
| Payment Options | None. |


| Disability: |  |
| :---: | :---: |
| Eligibility | Disablement after five years of service credit; safety members are eligible for duty disability without regard to years of service credit. Service credit continues to accrue during disabled period. |
| Benefit |  |
| Member without Social Security | $25 \%$ of final salary, plus $5 \%$ of final salary per year of service credit greater than two, total not to exceed $40 \%$ of final salary, plus $5 \%$ of final salary for each eligible child, total not to exceed $20 \%$ of final salary. |
| Member with Social Security | $15 \%$ of final salary, plus $2.5 \%$ of final salary per year of service credit greater than two, total not to exceed $40 \%$ of final salary, less $\$ 106.40$ per month. |
| Safety Members(Non-duty) | Same as for members without Social Security; includes eligible child's benefit. |
| Safety Members(Duty) | $50 \%$ of HAPC, or non-duty disability benefit if greater. |
| Form of Payment | Single life annuity payable until end of disability income period or retirement date if earlier. |
| Disability Income Period |  |
| Members disabled before <br> November 5, 1990 <br> To earliest of: |  |
|  | Date member is eligible to retire and retirement income equals or exceeds disability income; <br> Age 62 (age 67 for members without Social Security); or Date member retires. |
| Members disabled on or after <br> November 5, 1990 | If under age 65 at disablement: |
|  | Members with Social Security: to age 65 or five years if longer. <br> Members without Social Security: to age 67 or five years if longer. <br> If age 65 or older at disablement: to age 70 or 12 months if longer. <br> Disability income ends if member is no longer disabled. |


| Vested Termination: |  |
| :--- | :--- |
| Eligibility | Five years of service credit, or age 62 regardless of service credit if membership <br> began on or before July 1, 1989. |
| Benefit | BRI beginning at age 50 or later, calculated using HAPC at termination date, adjusting <br> for CPI changes (see Cost-of-Living Adjustment), and benefit formula in effect when <br> benefits commence. |
| Form of Payment | As for retirement. |
| Payment Options | As for retirement. |
| Refund Option | Member may elect a refund of contributions with interest, thereby forfeiting all other <br> benefits. |
| Lump Sum Cashout | May be elected in lieu of retirement income, available only if at least age 50 with five <br> years service credit at date of termination. |



| Post-retirement Survivor Continuance: |  |
| :---: | :---: |
| Eligibility | Eligible survivor of deceased retired member. |
| Benefit |  |
| Member without Social |  |
| Security | $50 \%$ of BRI including COLA. |
| Member with Social Security | $25 \%$ of BRI including COLA, plus $25 \%$ of Temporary Social Security Supplement (ends when member would have reached age 65). |
| Safety Members | $50 \%$ of BRI including COLA. |
| Lump Sum Death Benefit: |  |
| Eligibility | Active, inactive, disabled, or retired member. |
| Basic Benefit |  |
| Active member who became a member before |  |
|  | Greater of : |
|  | \$1,500 plus one month's final salary, or \$7,500. |
| All others | \$7,500 |
| Residual Benefit | Refund of member contributions plus interest, reduced by a portion of benefits received ( $100 \%$ of retirement income, $50 \%$ of pre-retirement survivor income or disability income) payable to beneficiary if no survivor, surviving spouse, domestic partner, or contingent annuitant. |
| Normal Retirement Date: | Attainment of age 60 with five years of service credit. |


| Eligible Survivor: |  |
| :---: | :---: |
| Eligible Spouse or Domestic Partner |  |
|  | Spouse or domestic partner of deceased active or disabled member in relationship for at least one year before date of death and who is: |
|  | Responsible for care of eligible child, disabled, or age 60 (age 50 if spouse of member without Social Security and in Plan prior to October 19, 1973). |
| Eligible Child | Child that is either under age 18 , under age 22 and full-time student, or disabled, if disability occurred prior to age 18 or age 22 if a full-time student. |
| Eligible Dependent Parent | Parent of deceased active, disabled or retired member, supported by $50 \%$ or more by member for one year prior to earliest of death, disablement or retirement. |
| Inactive Member: | Former UCRP member who retains right to vested benefits. |
| Cost-of-Living Adjustment: |  |
| Basic | $100 \%$ of annual Consumer Price Index (CPI) increase up to $2 \%$ per year. |
| Supplemental | Greater of: $75 \%$ of annual CPI increase above $4 \%$, or accumulated increment. |
|  | Accumulated increment: $2 \%$ compounded annually from the member's COLA eligibility date through the current date, less $2 \%$. |
|  | The sum of the Basic and Supplemental COLA's cannot exceed 6\% in a year. |
| COLA applies to: |  |
| Retired members, survivors, <br> disabled members, and <br> contingent annuitants receiving <br> retirement income <br> Benefits in pay status one or more years on July 1. |  |
| Inactive members | HAPC (used to calculate retirement income) adjusted for COLA up to $2 \%$ per year from separation date to retirement date; retirement income adjusted using COLA formula. |
| Disabled members receiving disability income since before |  |
| November 5, 1990 | HAPC (used to calculate retirement income) adjusted for COLA up to COLA formula above for years from disablement to retirement date. |


| Capital Accumulation Provision(CAP): |  |
| :---: | :---: |
| Eligibility | Active member on specified date; benefits immediately vested. |
| Allocation Dates |  |
| April 1, 1992 | Active member from December 31, 1991 through April 1, 1992: 5.0\% of 1991 calendar year covered compensation. |
| July 1, 1992 | Active member on July 1, 1992: 2.5\% of 1991-1992 fiscal year covered compensation. |
| July 1, 1993 | Active member on July 1, 1993: 2.5\% of 1992-1993 fiscal year covered compensation. |
| November 1, 1993 | Active member on October 1, 1993 and subject to 1993-1994 salary plan: 5.26\% of July through October 1993 covered compensation. |
| July 1, 1994 | Active member on June 1, 1994 and subject to 1993-1994 salary plan: $2.67 \%$ of November 1993 through June 1994 covered compensation. |
| May 1, 2002 | Active member on April 1, 2002: 3.0\% of April 2001 through March 2002 covered compensation. |
| May 1, 2003 | Active member on April 1, 2003: 5.0\% of April 2002 through March 2003 covered compensation. |
| Interest Credit | Regent's approved interest rate; currently $8.5 \%$ per year for pre-2002 CAPs and $7.5 \%$ for post-2001 2002 CAPs (CAP II). |
| Payment | Lump sum payment upon termination, retirement or death. |
| University Contributions: | Determined by the Entry-Age Normal Cost method. Beginning with the 1990 plan year, the Regents adopted a full funding policy. Under that policy, the University will suspend contributions when the smaller of the market value or the actuarial value of plan assets exceeds the lesser of: |
|  | The actuarial accrued liability (including normal cost), or |
|  | $150 \%$ of the estimated current liability (including normal cost). |


| Member Contributions: |  |
| :--- | :--- |
| Members without Social Security | $3.0 \%$ of covered compensation, less $\$ 19$ per month. |
| Members with Social Security | $2.0 \%$ of covered compensation up to the Social Security wage base, plus $4.0 \%$ of <br> excess covered compensation, minus $\$ 19$ per month. <br> Safety Members <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Member contributions are currently being redirected to the UC Defined Contribution <br> Plans |
| Changes in Plan Provisions: | There have been no changes in plan provisions since the last valuation that have a <br> material impact on Plan liabilities and normal cost. |


[^0]:    * Includes terminated nonvested members due a refund of member contributions or CAP balance payment.

[^1]:    * Total return minus expected return on a market value basis
    ** Recognition at 20\% per year over 5 years

[^2]:    $\longrightarrow$ Actuarial Value

    - Market Value

[^3]:    Average Age: 40.2
    Average Service Credit: 10.9

