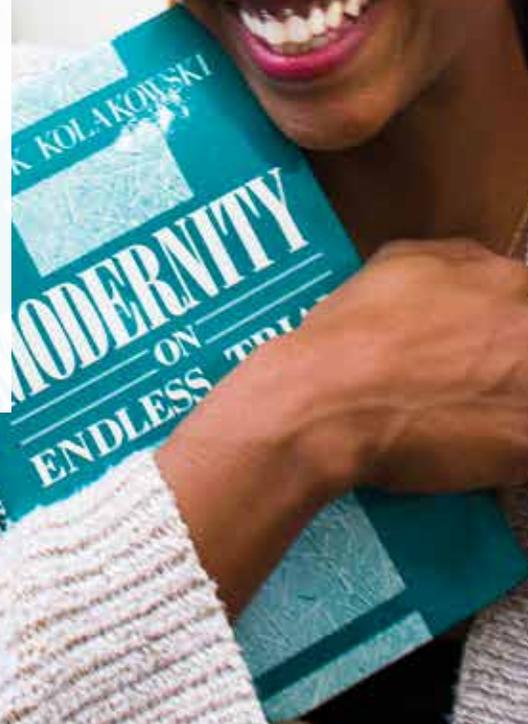


UNIVERSITY
OF
CALIFORNIA

Annual Financial Report

Retirement System

21/22



The University of California is renowned the world over for combining academic and research excellence with unparalleled student access. We've provided a ladder of opportunity for generations of scientists, engineers, lawyers, doctors, public servants, and other champions of change who have helped our nation reach new heights.

UNIVERSITY OF CALIFORNIA
Retirement System
21/22 Annual Financial Report

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University of California Retirement System

The University of California Retirement System (UCRS) is a valuable component of the comprehensive benefits package offered to employees of the University of California (the University). UCRS consists of two defined benefit plans and four defined contribution plans. The defined benefit plans (DB Plans) include the University of California Retirement Plan (UCRP) for members and the Voluntary Early Retirement Incentive Plan (UC-VERIP) for certain University employees that were members of the California Public Employees' Retirement System (CalPERS) who elected early retirement. The University of California Retirement Savings Program (UCRSP) includes four defined contribution plans, collectively referred to as the UCRSP Plans: the Defined Contribution Plan (DC Plan), the Supplemental Defined Contribution Plan (SDC Plan), the Tax-Deferred 403(b) Plan (403(b) Plan) and the 457(b) Deferred Compensation Plan (457(b) Plan). The Regents of the University of California (The Regents) act as trustee associated with each of the UCRS plans, with the Office of the Chief Investment Officer (UC Investments or OCIO) of The Regents acting as custodian. Administrative authority with respect to the UCRS Plans is vested in the President of the University (the President) as plan administrator, and the President has delegated that authority within UCRS, under University policies and procedures, to the Vice President — Human Resources.

SUMMARY STATEMENT

This section contains information on the DB Plans, which provide lifetime retirement income, disability income, death benefits and postretirement and preretirement survivor benefits to eligible employees of the University and its affiliate, Hastings College of the Law (Hastings), and the employees' survivors and beneficiaries as of and for the plan year ended June 30, 2022. Significant statistics relating to the DB Plans' financial information and membership base for UCRP for the fiscal year ended June 30, 2022, are as follows:

Net position as of June 30	\$81.4 billion
Net investment (loss)	\$(9.8) billion
Total contributions	\$4.0 billion
Benefit payments (excluding member withdrawals and lump sum cashouts)	\$4.0 billion
Plan administrative and other expenses	\$84.8 million
ACTIVE PLAN MEMBERSHIP AS OF JUNE 30	
Senate faculty and non-faculty academics	22,905 members
Management/senior professional	14,696 members
Professional/support staff	97,299 members
TOTAL	134,900 members
AVERAGE ANNUAL SALARY	
Senate faculty	\$166,568
Non-faculty academics	\$115,797
Management/senior professional	\$158,093
Professional/support staff	\$90,661
AVERAGE AGE	
Senate faculty	51 years
Non-faculty academics	48 years
Management/senior professional	49 years
Professional/support staff	43 years
INACTIVE PLAN MEMBERSHIP/OTHER AS OF JUNE 30 (Not yet receiving benefits)¹	
TOTAL	112,927 members
RETIREE MEMBERSHIP AS OF JUNE 30 (Receiving benefits)	
Faculty	8,271 members
Management/senior professional	11,391 members
Professional/support staff	54,806 members
Total retired members	74,468 members
AVERAGE RETIREMENT AGE	
Faculty	65 years
Management/senior professional	61 years
Professional/support staff	60 years
AVERAGE SERVICE CREDIT AT RETIREMENT	
Faculty	23 years
Management/senior professional	20 years
Professional/support staff	19 years
AVERAGE ANNUAL UCRP INCOME	
Faculty	\$96,985
Management/senior professional	\$68,966
Professional/support staff	\$40,831
Survivor/beneficiary	9,929 members
Disabled	1,069 members
TOTAL (receiving benefits)	85,466 members

¹Includes terminated nonvested members eligible for a refund of Plan accumulations and/or Capital Accumulation Payment (CAP) distribution and members that were employed by Los Alamos National Laboratory (LANL) or Lawrence Livermore National Laboratory (LLNL) prior to the transition of management of these laboratories from UC to holding companies, and are eligible for a CAP payment from UCRP after they separate from employment at LANL or LLNL.

PLAN OVERVIEW AND ADMINISTRATION

UCRP is a key component of the comprehensive benefits package offered to employees of the University and its affiliate, Hastings. UCRP is a governmental defined benefit pension plan intended to be qualified under §401(a) of the Internal Revenue Code (IRC).

The University's pension program dates back to 1904, with a plan that provided for the purchase of commercial annuities for retiring professors at UC Berkeley and UC San Francisco. The current retirement pension plan was designed in 1961, before the University's participation in Social Security and before the introduction of employee life and disability insurance coverage. Over the years, UCRP has evolved to include provisions for:

- Basic retirement income (includes postretirement survivor benefits) and four alternative monthly payment options;
- Lump sum cashouts in lieu of monthly retirement income (except for the 2013 Tier and 2016 Tier);
- Disability income;
- Death benefits; and
- Preretirement survivor benefits.

Further, in lieu of lifetime retirement benefits, members may choose a refund of their accumulated employee contributions and credited interest.

At June 30, 2022, active UCRP members included 134,900 employees at the University's 10 campuses, five medical centers, Lawrence Berkeley National Laboratory (LBNL) and Hastings.

The Vice President — Human Resources of the University carries out administrative duties delegated by the President for the day-to-day management and operation of UCRP. These duties include conducting policy research, implementing changes to the UCRP plan document and regulations to preserve UCRP's qualification under the IRC, and overseeing the recordkeeping and accounting functions and the receipt and disbursement of UCRP assets to eligible members, their beneficiaries and survivors.

Summary plan descriptions are updated periodically to reflect legislative, Plan and administrative changes. These booklets are available online on UCnet (<https://ucnet.universityofcalifornia.edu/compensation-and-benefits/index.html>) or through the local benefits offices.

PLAN MEMBERSHIP

Employees participate in UCRP in one of five plan membership categories/tiers:

- Members of the 1976 Tier
- Members of the 2013 Tier (including the Modified 2013 Tier for certain collectively bargained units)
- Members of the 2016 Tier
- Safety Members (police and firefighters)
- Tier Two Members

The following table reflects UCRP plan membership by category over the past 10 years ended June 30:

ACTIVE AND INACTIVE PLAN MEMBERSHIP

YEAR ENDED JUNE 30	1976 TIER	2013 TIER	MODIFIED 2013 TIER	2016 TIER	SAFETY MEMBERS	TIER TWO	TOTAL ACTIVE	INACTIVE MEMBERS/ OTHERS	TOTAL ACTIVE AND INACTIVE PLAN MEMBERSHIP
2022	55,328	14,351	37,518	27,309	392	2	134,900 ^{1,2}	112,927	247,827
2021	59,631	16,063	30,373	24,652	376	3	131,098	106,291	237,389
2020	65,353	18,561	27,549	23,062	424	4	134,953	99,156	234,109
2019	69,082	18,874	23,255	16,306	406	4	127,927	100,864	228,791
2018	75,100	21,307	22,672	10,384	412	4	129,879	92,617	222,496
2017	81,270	24,531	18,680	4,494	403	4	129,382	87,052	216,434
2016	88,148	25,450	14,510		399	6	128,513	81,595	210,108
2015	96,270	17,710	9,385		395	8	123,768	75,165	198,933
2014	106,162	9,510	4,482		404	10	120,568	78,229	198,797
2013	117,922				390	9	118,321	73,589	191,910

¹Includes 128 members whose 1976 Tier or Tier Two service is not coordinated with Social Security.

²Includes 14,223 members who have service in more than one tier ("multi-tier" members).

PLAN BENEFITS

UCRP paid approximately \$4.0 billion in periodic retirement, disability and preretirement survivor benefits during the fiscal year ended June 30, 2022. As of June 30, 2022, there were 85,466 members in pay status, including beneficiaries and survivors. The retirement payments described included cost-of-living adjustments (COLAs) and excluded lump sum cashouts and member withdrawals. Payments to survivors included basic death payments and survivor annuities. The table below reflects total benefits paid in each category over the past 10 years.

UCRP BENEFIT PAYMENTS¹ (\$ in thousands)

YEAR ENDED JUNE 30	RETIREMENT	DISABILITY	DEATH & SURVIVOR	TOTAL ²
2022	\$3,861,891	\$26,717	\$67,856	\$3,956,464
2021	3,636,152	30,583	64,698	3,731,433
2020	3,431,245	30,181	63,487	3,524,913
2019	3,309,505	30,102	59,039	3,398,646
2018	3,008,236	30,259	58,769	3,097,264
2017	2,800,437	30,470	57,146	2,888,053
2016	2,596,632	30,769	56,212	2,683,613
2015	2,412,393	32,201	53,753	2,498,347
2014	2,240,565	33,411	50,271	2,324,247
2013	2,068,402	34,376	49,212	2,151,990

¹Amounts do not include benefit payments to UC-VERIP annuitants.

²Does not include nonperiodic member withdrawals (including Capital Accumulation Payment (CAP) distributions and lump sum cashouts).

The number of UCRP benefit recipients in each category as of June 30 for each of the past 10 plan years is shown below.

UCRP BENEFIT RECIPIENTS

YEAR ENDED JUNE 30	RETIRED MEMBERS	DISABLED MEMBERS	SURVIVORS	TOTAL
2022	74,468	1,069	9,929	85,466
2021	72,042	1,197	9,773	83,012
2020	69,898	1,250	9,597	80,745
2019	68,346	1,338	9,400	79,084
2018	65,438	1,386	9,100	75,924
2017	62,753	1,440	8,802	72,995
2016	60,178	1,519	8,380	70,077
2015	57,581	1,620	8,120	67,321
2014	54,714	1,763	7,714	64,191
2013	52,300	1,897	7,518	61,715

INVESTMENT AND PROXY POLICIES

The DB Plans bear the mortality and investment risk because members' benefits are based on the employer's promise rather than the contributions or plan assets and their earnings available to pay the benefits.

UC Investments has primary responsibility for investing the DB Plan assets consistent with policies established by The Regents. The Regents have fiduciary responsibility for establishing the investment policy for the DB Plans and for overseeing the implementation of that policy.

The assets of the DB Plans are held in trust by The Regents separately from the University's assets and are maintained in a custodial account at State Street Bank & Trust Co. The bank carries insurance against loss of property caused by employee dishonesty, theft, misplacement, damage, distribution or mysterious disappearance.

HISTORICAL INVESTMENT PERFORMANCE

ANNUALIZED RATES OF RETURN AT JUNE 30, 2022 (shown as percentage)

	1-YEAR	3-YEAR	5-YEAR	10-YEAR
UCRP	(10.8%)	5.7%	6.2%	7.6%
Policy Benchmark	(10.8)	5.7	6.3	7.2
PUBLIC EQUITY	(18.8)	6.0	6.7	9.1
UCRP Public Equity	(17.9)	5.4	6.4	8.6
FIXED-INCOME				
Core Fixed-Income	(5.2)	0.5	1.8	2.3
Barclays U.S. Aggregate Bond Index	(5.2)	1.2	2.1	2.2
High Yield	(13.0)	(0.1)	1.9	4.4
Merrill Lynch High Yield Cash Pay Index	(12.8)	(0.4)	1.8	4.3
Emerging Market Debt	(20.8)	(5.1)	(1.1)	1.4
JP Morgan Emerging Markets Bond Index	(21.2)	(5.2)	(1.2)	2.2
OTHER INVESTMENTS				
Private Equity	0.8%	19.5%	18.2%	15.7%
Private Equity Benchmark	(10.9)	12.4	12.8	13.0
Absolute Return	(2.1)	5.2	5.8	5.8
Custom Absolute Return Benchmark	(5.5)	3.8	3.6	2.9
Real Estate	29.1	11.2	9.8	11.0
NCREIF-ODCE Index	28.3	12.0	9.9	10.5
Real Assets	9.4	8.8	7.8	3.9
Private Credit	3.4			
Private Credit Benchmark	(3.7)			
Cash and Equivalents	1.1	1.6	1.8	



SUMMARY STATEMENT

This section contains information about the UCRSP Plans which were created to provide savings incentives and additional retirement security for eligible University employees. The DC Plan was established by resolution of The Regents to accept after-tax contributions effective July 1, 1967, and pretax contributions effective November 1, 1990. The Regents established the SDC Plan effective January 1, 2009, to provide retirement benefits to designated employees of the University and their beneficiaries. The 403(b) Plan, also established by Regental resolution, became effective July 1, 1969. The Regents established the 457(b) Plan effective September 1, 2004. Significant statistics relating to the UCRSP Plans' financial information for the fiscal year ended June 30, 2022, are as follows:

Net position as of June 30	\$29.9 billion
Net investment (loss)	\$(4.9) billion
Total contributions	\$2.0 billion
Benefit payments and participant withdrawals	\$1.9 billion
Program administrative expenses	\$3.9 million

The participant counts below reflect the fact that participants may have an account in more than one UCRSP Plan and may also have more than one account in one or more of the UCRSP Plans. Significant statistics relating to the UCRSP Plans and their participants for plan year ended June 30, 2022 and as of June 30, 2022, are as follows:

DEFINED CONTRIBUTION PLAN		TAX-DEFERRED 403(b) PLAN	
Pretax active participants:		Active participants:	
Faculty/other academic	5,944	Faculty/other academic	16,166
Management/senior professional	14,492	Management/senior professional	13,351
Professional/support staff/other	23,709	Professional/support staff/other	65,102
Hastings College of the Law	138	Hastings College of the Law	156
Total pretax active participants	44,283	Total	94,775
Average pretax monthly contribution	\$489	Average monthly contribution	\$872
Average pretax account balance ¹	\$29,605	Average plan account balance ¹	\$93,848
After-tax account active participants:		Outstanding loan program loans	19,683
Faculty/other academic	1,499	Aggregate outstanding loan principal	\$195.7 million
Management/senior professional	1,175	Inactive participants	103,836
Professional/support staff/other	7,502		
Hastings College of the Law	6		
Total after-tax account active participants	10,182	457(b) DEFERRED COMPENSATION PLAN	
Average after-tax monthly contribution	\$910	Active participants:	
Average after-tax Account balance ¹	\$32,255	Faculty/other academic	5,113
Inactive plan participation (Including Pretax accounts and after-tax accounts)	309,634	Management/senior professional	4,029
		Professional/support staff/other	16,130
		Hastings College of the Law	40
		Total	25,312
		Average monthly contribution	\$992
		Average plan account balance ¹	\$91,030
		Inactive participants	27,361

¹For active participants only.

PLAN OVERVIEW AND ADMINISTRATION

Benefits from the UCRSP Plans are based on participants' mandatory and voluntary contributions and certain University contributions, plus earnings. While their savings accumulate, employees have the benefit of reductions in their personal income taxes for pretax contributions.

A defined contribution plan was first made available to University employees in 1967. Employees could invest after-tax contributions in two University-managed annuity funds. Two years later, the 403(b) Plan was added for voluntary pretax savings. Over the years, 403(b) Plan features have been expanded to include a diversified mix of investment options, including 11 single, diversified target date investment funds for building retirement savings; 13 core asset class options; a brokerage window and a loan program through which participants can borrow from their 403(b) Plan savings.

The 457(b) Plan was established effective September 1, 2004. Although 457(b) plans have been available for many years, the IRC salary deferral contribution limits were applicable to participants' combined annual contributions to both 457(b) and 403(b) plans, so there was no advantage in offering both. A change in tax law, however, now allows the maximum limit to be applied separately to each kind of plan. Thus, with the addition of the 457(b) Plan, University faculty and staff can double the amount of their voluntary, pretax retirement savings.

All employee salary deferral and after-tax contributions to the UCRSP Plans are deducted from participants' wages. University contributions are made on behalf of academic employees who earn summer term or equivalent salary and eligible senior managers.

The Regents have fiduciary oversight for the UCRSP Plans through the Governance, Compensation and Investments Committees, overseeing the administration of the UCRSP Plans carried out by the Human Resources Department and the investment management function carried out by UC Investments, respectively.

The Vice President — Human Resources serves as the Plan Administrator and oversees policy research, implements regulations to preserve the UCRSP Plans' qualification and/or tax-advantaged status under the IRC and provides administrative services as needed.

The UCRSP Plans' administration and investment management activities are reviewed semiannually by the Retirement Savings Program Advisory Committee.

Fidelity Workplace Services LLC (FWS) acts as the master recordkeeper for the UCRSP Plans. The master recordkeeping and participant services include daily valuation, daily exchanges, processing of distributions, loans and withdrawals, administration and a consolidated recordkeeping platform for the UCRSP Plans and all the funds offered under the UCRSP.

For services rendered in connection with the UCRSP Plans, a per-participant quarterly administrative fee is deducted from each participant's account to cover the costs of plan administrative services such as investor education, accounting, audit, legal and recordkeeping services. Since October 1, 2020, the quarterly administrative fee has been \$8.25. There are no front-end or deferred sales loads or other marketing expenses associated with the single, diversified investments and primary asset class options managed by UC Investments. In addition, any fees paid by participants, including loan fees and brokerage window account fees, and any credits that may be awarded for FWS' failure to meet certain performance standards, will be credited to the UCRSP Plans' recordkeeping fee account.

A participant can obtain information on investment management fees charged by an investment option by reviewing the fund prospectus or fund fact sheet available on the FWS website (netbenefits.fidelity.com).

Summary plan descriptions are updated periodically to reflect legislative, UCRSP Plan and administrative changes. These booklets are available online at UCnet (<https://ucnet.universityofcalifornia.edu/compensation-and-benefits/index.html>) or through the local benefits offices.

CONTRIBUTIONS AND INVESTMENTS

Effective July 1, 2016, UCRP was amended to provide a new tier of pension benefits under the Retirement Choice Program. The new program tier provides eligible University employees hired (or becoming eligible) on or after July 1, 2016 (and certain eligible rehires who return to work after a tier break in service) a choice between two primary retirement benefit options: (1) Pension Choice, which is the UCRP pension benefit with covered compensation for new hires capped at the California Public Employees' Pension Reform Act salary pensionable compensation limit (PEPRA maximum) or (2) Savings Choice, where the primary retirement benefit is provided from contributions to the DC Plan on eligible pay up to the IRC §401(a)(17) compensation limit (IRC limit).

For eligible employees who elect Pension Choice and who are subject to the PEPRA maximum for members coordinated with Social Security, both the University and eligible participants make mandatory DC Plan retirement contributions on a pretax basis for the supplemental benefit to the DC Plan. For designated faculty, the University contributes 5.0 percent on all eligible pay up to the IRC limit. For staff, the University contributes 3.0 percent on eligible pay above the PEPRA maximum up to the IRC limit. The University supplemental contributions are fully vested after five years of service credit. Both designated faculty and staff contribute 7.0 percent on eligible pay above the PEPRA maximum up to the IRC limit.

For Savings Choice, each participant currently contributes 7.0 percent on a pretax basis, and the University currently contributes 8.0 percent. University contributions under Savings Choice are fully vested after one year of employment.

After five years of service, Savings Choice participants are permitted to prospectively elect Pension Choice. The second choice window opens on January 1 of the fifth anniversary of the calendar year in which Savings Choice was initially elected and closes on May 31 five years later. The Pension Choice election becomes effective on the next July 1.

Voluntary DC Plan contributions, which employees make on an after-tax basis, are held in the DC Plan's After-Tax Account. The maximum amount employees may contribute annually as after-tax voluntary contributions is determined by the IRC §415(c) limit. Generally, this amount is the lesser of 100 percent of the participant's adjusted gross University salary or \$61,000 for calendar year 2022 and \$58,000 for calendar year 2021. This limit takes into account all annual additions, including any pretax employee and University contributions to the DC Plan. After-tax contributions are deducted from net income and also may be invested in and transferred among any of the investment options available to the UCRSP Plans. The University may also contribute to the DC Plan on behalf of eligible senior managers.

403(b) Plan contributions are made on the summer salaries of eligible academic appointees who teach, conduct research or provide administrative service during the summer session or an equivalent term. To be eligible, the academic appointee must hold an academic year appointment, be an active member of UCRP or another defined benefit plan to which the University contributes, be a Savings Choice participant, or be eligible for a primary retirement benefit option under the Retirement Choice Program even if not yet participating. The contribution rate is 7.0 percent of eligible summer salary, of which 3.5 percent is University-paid and 3.5 percent is employee-paid, both on a pretax basis.

The 403(b) Plan includes voluntary employee salary deferral contributions that are made on a pretax basis. Within IRC limits, a 403(b) Plan participant may make contributions as a percentage of their salary or in a flat dollar amount. Contributions to the 403(b) Plan may be invested in and transferred among any of the investment options available to the UCRSP Plans. The University may also contribute on behalf of eligible senior managers.

The 457(b) Plan includes voluntary salary deferral employee contributions. University contributions may also be made for eligible senior managers on a pretax basis. Within IRC limits, a 457(b) Plan participant may make contributions as a percentage of their salary or in a flat dollar amount. Contributions to the 457(b) Plan may be invested in and transferred among any of the investment options available to the UCRSP Plans.

All four UCRSP Plans accept rollovers of pretax distributions from other University-sponsored plans, including lump sum cashouts and Capital Accumulation Payment (CAP) distributions from UCRP, 401(a), 401(k), 403(b) and governmental 457(b) Plans, and from traditional IRAs. In addition, the DC and 403(b) Plans accept direct rollovers of after-tax amounts from 401(a), 401(k) and 403(b) Plans. The 457(b) Plan does not accept rollovers of after-tax distributions.

INVESTMENTS

UC Investments has primary responsibility for selecting appropriate asset classes and specific investment options, establishing investment guidelines and benchmarks against which performance is measured, and making changes in the UC funds menu as it deems appropriate based on its periodic evaluations. UC Investment's selection and monitoring responsibilities do not extend to the mutual funds available through the Fidelity brokerage account option. The Regents have fiduciary responsibility for establishing broad investment policy and overseeing the performance of the investment functions.

Proxy Voting Policy

UC Investments has instructed The Regents' custodian bank to vote all proxies on behalf of The Regents according to its guidelines.

Investment Options

During the fiscal year ended June 30, 2022, all UCRSP participants had the following investment options:

- Tier I: UC Pathway Funds, with specific target dates
- Tier II: Main Fund Menu — Bond and Stock Investments
- Tier III: BrokerageLink®

Current detailed information regarding the UC funds and other investment options is available on the FWS website (netbenefits.fidelity.com).

UC Funds Investment Performance

UC funds investment performance for periods ended June 30, 2022:

<i>(shown as percentage)</i>				<i>(shown as percentage)</i>			
	1-YEAR	3-YEAR	5-YEAR		1-YEAR	3-YEAR	5-YEAR
TARGET DATE FUNDS				U.S. SMALL/MID CAP EQUITY			
Pathway Income Fund	(6.9%)	3.6%	4.0%	UC Domestic Small Cap Index Fund	(25.2%)	4.5%	5.5%
Policy Benchmark ¹	(7.0)	3.6	4.1	Russell 2000 Tobacco Free Index	(25.2)	4.2	5.2
Pathway Fund 2020	(8.1)	4.4	5.0	GLOBAL/WORLD EX-US EQUITY			
Policy Benchmark ¹	(8.3)	4.5	5.0	UC International Equity Index Fund	(17.9)	1.9	2.9
Pathway Fund 2025	(12.0)	4.5	5.2	Policy Benchmark ¹	(17.9)	1.7	2.6
Policy Benchmark ¹	(12.2)	4.6	5.3	GLOBAL EQUITY EX-FOSSIL FUEL			
Pathway Fund 2030	(14.5)	4.6	5.4	UC Global Equity Ex-Fossil Fuel Fund	(17.4)		
Policy Benchmark ¹	(14.7)	4.6	5.5	Policy Benchmark ¹	(17.9)		
Pathway Fund 2035	(15.4)	4.9	5.7	CAPITAL PRESERVATION			
Policy Benchmark ¹	(15.6)	4.9	5.7	Savings Fund	0.6	1.0	1.2
Pathway Fund 2040	(16.0)	5.1	5.9	2-Year U.S. Treasury Notes Inc Ret Index	1.0	0.8	1.4
Policy Benchmark ¹	(16.1)	5.2	6.0	INFLATION SENSITIVE			
Pathway Fund 2045	(16.5)	5.4	6.2	UC Short-Term TIPS Fund	2.2	3.6	3.1
Policy Benchmark ¹	(16.7)	5.4	6.3	Barclays 1-3-Year U.S. TIPS Index	2.1	3.5	2.9
Pathway Fund 2050	(17.0)	5.5	6.4	UC TIPS Fund	(4.7)	3.2	3.4
Policy Benchmark ¹	(17.2)	5.5	6.5	Barclays U.S. TIPS Index	(5.1)	3.0	3.2
Pathway Fund 2055	(17.0)	5.5	6.4	DIVERSIFIED FIXED-INCOME			
Policy Benchmark ¹	(17.2)	5.5	6.5	UC Bond Fund	(10.1)	(1.0)	0.9
Pathway Fund 2060	(17.0)	5.5	6.4	Barclays Aggregate Fixed-Income Index	(10.3)	(0.9)	0.9
Policy Benchmark ¹	(17.2)	5.5	6.5	NEW LARGE EQUITY			
Pathway Fund 2065	(17.0)			UC Growth Company Fund	(29.3)	16.3	16.3
Policy Benchmark ¹	(17.2)			Russell 3000 Growth Index	(19.8)	11.8	13.6
U.S. LARGE EQUITY				WORLD EX-U.S. EQUITY			
UC Domestic Equity Index Fund	(13.9)	9.9	10.9	UC Diversified Intl. Fund	(22.5)	3.1	3.6
Russell 3000 TF Index	(14.0)	9.8	10.7	MSCI EAFE Index	(17.8)	1.1	2.2
UC Social Equity Index Fund	(14.9)	10.4	11.6	UC Emerging Markets Fund	(24.4)	(0.1)	1.4
Spliced Social Index	(15.0)	10.4	11.6	MSCI Emerging Markets Index	(25.3)	0.6	2.2
				REAL ESTATE			
				UC Real Estate Fund	(6.4)	4.2	5.1
				REIT Spliced Index	(6.4)	4.0	5.0

¹Blend of the benchmarks of the individual underlying funds based on holdings according to the asset allocation mix.

TAX-DEFERRED 403(b) PLAN LOAN PROGRAM

As permitted by IRC §72(p), active participants with a 403(b) Plan balance of at least \$1,000 may generally borrow from their total 403(b) Plan account balance without incurring taxes or penalties. Certain limitations apply to the available borrowing amount depending on account balance, previous loan activity and highest outstanding loan balance within the past 12 months.

The 403(b) Plan Loan Program offers short-term general-purpose loans with repayment terms of five years or less, and long-term principal-residence loans with repayment terms of up to 15 years. A participant may have one general-purpose loan and one principal-residence loan outstanding at one time but may not take out more than one loan within a 12-month period. Monthly repayments of principal and interest are credited proportionately to the investment fund(s) according to the current 403(b) Plan contribution investment mix established by the participant. A nonrefundable loan initiation fee of \$35 is deducted from the 403(b) Plan account balance at the end of the calendar quarter in which the loan is taken. An annual maintenance fee of \$15 is deducted (\$3.75 per calendar quarter) from the participant's 403(b) Plan account balance.

The interest rate is fixed at the time the loan is granted and equals the prevailing bank Prime Rate as published by The Wall Street Journal plus 1.0 percent. The Loan Program interest rate for new loans as of June 30, 2022 and June 30, 2021 was 5 percent and 4.25 percent, respectively.

The aggregate outstanding loan balance of 19,683 active loans was \$195.7 million at June 30, 2022, compared to 19,644 active loans with an aggregate outstanding balance of \$189.0 million at June 30, 2021.

The following table reflects new participant loans for the 10 years ended June 30:

YEAR ENDED JUNE 30	NUMBER OF NEW LOANS	\$ IN THOUSANDS
2022	6,104	\$85,514
2021	4,658	72,017
2020	5,619	78,120
2019	6,131	81,736
2018	6,148	77,281
2017	6,116	74,081
2016	5,839	71,857
2015	5,876	73,465
2014	6,003	75,361
2013	5,938	72,417

CARES Act

The Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law on March 27, 2020, with mandatory and optional distribution and loan provisions that apply to the UCRSP Plans and were adopted by The Regents on May 20, 2020. The adopted CARES Act provisions related to the 403(b) Plan Loan Program are as follows:

1. Qualified participants, as defined under the CARES Act, may request coronavirus-related loans from the 403(b) Plan, provided that:
 - a. The participant is an active UC employee with a balance of at least \$1,000 in the 403(b) Plan;
 - b. The participant does not already have an outstanding general-purpose loan from the 403(b) Plan;
 - c. The coronavirus-related loan amount does not exceed the lesser of \$100,000 or 100 percent of the participant's vested contributions in all three UCRSP Plans, plus interest or earnings; and
 - d. The coronavirus-related loan is requested no later than September 22, 2020.

To facilitate these CARES Act loan provisions, the current plan provision which limits a participant to receive only one general-purpose loan every 12-month period is temporarily suspended, allowing a participant to initiate and pay off a general-purpose loan and take another within a 12-month period.

2. Active participants with an outstanding plan loan are allowed a grace period of one year during which they may suspend any loan repayments that otherwise would have been owed through December 31, 2020.

The provisions of the CARES Act, as applicable to the UCRSP plans, were effective through December 31, 2020.



Management's Discussion and Analysis *(Unaudited)*

The University of California Retirement System (UCRS) comprises two defined benefit pension plans (DB Plans) and four defined contribution plans (UCRSP). The objective of Management's Discussion and Analysis is to help readers of UCRS' financial statements better understand the financial position and operating activities for the fiscal year ended June 30, 2022, with selected comparative information for the years ended June 30, 2021 and 2020. This discussion should be read in conjunction with the financial statements and the notes to the financial statements. Unless otherwise indicated, years (2020, 2021, 2022, etc.) in this discussion refer to the fiscal years ended June 30.

This discussion and analysis is intended to serve as an introduction to UCRS' financial statements, which comprise the following:

- Statements of Fiduciary Net Position
- Statements of Changes in Fiduciary Net Position
- Notes to Financial Statements
- Required Supplementary Information
- Note to Required Supplementary Information

The Statements of Fiduciary Net Position present information on UCRS' assets and liabilities and the resulting net position for pension benefits. These statements reflect UCRS' investments at fair value, along with cash and short-term investments, receivables and other assets and liabilities.

The Statements of Changes in Fiduciary Net Position present information showing how UCRS' net position for pension benefits changed during the years ended June 30, 2022, 2021 and 2020. They reflect contributions along with investment income or losses during the period from investing and securities lending activities. Deductions for retirement benefits, withdrawals, cost-of-living adjustments, survivor, disability and death benefits and administrative expenses are also presented.

The Notes to Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The Required Supplementary Information (RSI) contains schedules with actuarial information, the net pension liability and contributions for the University of California Retirement Plan (UCRP), and the Voluntary Early Retirement Incentive Program (UC-VERIP). The Notes to the RSI provide additional descriptions.

The Vice President — Human Resources has primary fiduciary responsibility for UCRP administrative functions, and UC Investments has primary fiduciary responsibility for implementing UCRP investment policy. The Regents determine investment policy and retains fiduciary responsibility for investment and administrative functions for the UCRS Plans.

Financial Highlights, Results and Analysis

The UCRS Plans provide retirement benefits to University employees. Plan benefits are funded by member, participant and University contributions and by investment income. Below are condensed statements of net position and changes in net position for the UCRS Plans:

(in thousands of dollars)

JUNE 30	DEFINED BENEFIT PLANS			UCRSP		
	2022	2021	2020	2022	2021	2020
ASSETS						
Investments (including STIP)	\$81,530,003	\$92,105,197	\$71,790,217	\$27,609,798	\$32,471,296	\$25,488,065
Investment of securities lending collateral	7,204,653	5,470,316	4,622,877	3,196,346	3,898,876	2,965,803
Participants' interests in mutual funds				2,012,040	2,406,949	1,828,837
Participant 403(b) Plan loans				195,668	188,974	194,829
Receivables	814,443	600,096	2,257,546	148,588	47,452	375,128
Total Assets	89,549,099	98,175,609	78,670,640	33,162,440	39,013,547	30,852,662
LIABILITIES						
Payable for securities purchased, member withdrawals, refunds and other payables	916,395	879,291	3,069,792	32,387	366,773	619,814
Collateral held for securities lending	7,204,652	5,470,316	4,622,926	3,196,347	3,898,876	2,965,834
Total Liabilities	8,121,047	6,349,607	7,692,718	3,228,734	4,265,649	3,585,648
Net Position	\$81,428,052	\$91,826,002	\$70,977,922	\$29,933,706	\$34,747,898	\$27,267,014

(in thousands of dollars)

YEAR ENDED JUNE 30	DEFINED BENEFIT PLANS			UCRSP		
	2022	2021	2020	2022	2021	2020
ADDITIONS						
University and state contributions	\$2,892,621	\$2,705,058	\$2,444,025	\$99,943	\$102,705	\$85,401
Member and participant contributions	1,105,405	1,053,939	1,019,302	1,911,542	1,754,149	1,558,390
Investment income (loss)	(9,773,728)	21,457,573	1,185,573	(4,898,496)	7,304,010	1,381,931
Other income			414			
Total Additions, net	(5,775,702)	25,216,570	4,649,314	(2,887,011)	9,160,864	3,025,722
DEDUCTIONS						
Retirement, cost-of-living adjustments, lump sum cashouts, survivor, disability and death payments	4,363,593	4,144,612	3,800,561			
Member withdrawals	173,892	159,048	148,579			
UCRSP benefit payments and participant withdrawals				1,923,293	1,675,914	1,531,954
Administrative and other expenses	84,763	64,830	65,993	3,888	4,066	5,811
Total Deductions	4,622,248	4,368,490	4,015,133	1,927,181	1,679,980	1,537,765
Change in net position	(10,397,950)	20,848,080	634,181	(4,814,192)	7,480,884	1,487,957
Net Position						
Beginning of Year	91,826,002	70,977,922	70,343,741	34,747,898	27,267,014	25,779,057
End of Year	\$81,428,052	\$91,826,002	\$70,977,922	\$29,933,706	\$34,747,898	\$27,267,014

Defined Benefit Plans

The DB Plans' net position at June 30, 2022 was \$81.4 billion compared to \$91.8 billion at June 30, 2021 and \$71.0 billion at June 30, 2020. The net position is available to meet the DB Plans' ongoing obligations to plan members, retirees and their beneficiaries. The net position of the DB Plans decreased by \$(10.4) billion, or (11.3) percent, during the fiscal year ended June 30, 2022 compared to an increase of \$20.8 billion, or 29.4 percent, during the fiscal year ended June 30, 2021 and an increase of \$0.6 billion, or 0.9 percent, during the fiscal year ended June 30, 2020.

The net pension liability is measured as the total pension liability, less the DB Plans' fiduciary net position. The total pension liability is determined based upon discounting projected benefit payments based on the benefit terms and legal agreements existing at the DB Plans' fiscal year end. Projected benefit payments are discounted using a single rate that reflects the expected rate of return on investments, to the extent that plan assets are available to pay benefits, and a tax-exempt, high-quality municipal bond rate when plan assets are not available. UCRP is projected to have assets sufficient to make benefit payments for current members for all future years.

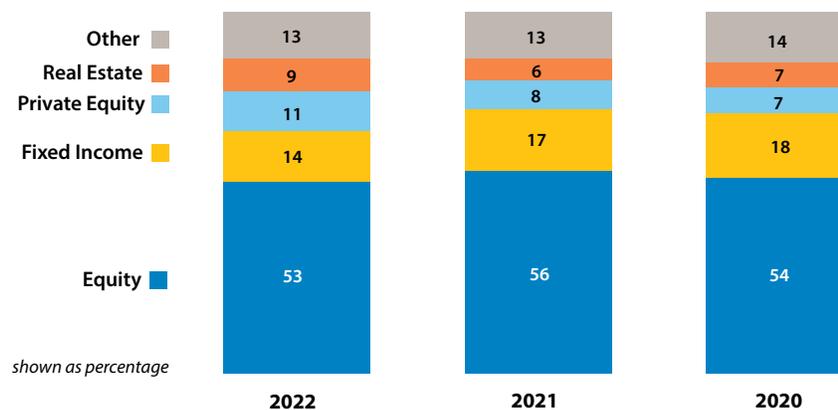
The net pension liability for the DB Plans was \$21.2 billion at June 30, 2022, \$5.9 billion at June 30, 2021 and \$21.7 billion at June 30, 2020. The increase in net pension liability for the fiscal year ended June 30, 2022 of \$15.4 billion was primarily due to the (10.6) percent rate of return on market value of assets for the fiscal year ended June 30, 2022, which was significantly less than the expected rate of return of 6.75 percent. The decrease in net pension liability for the fiscal year ended June 30, 2021 of \$15.8 billion was primarily due to the 30.2 percent rate of return on market value of assets for the fiscal year ended June 30, 2021, which was significantly greater than the expected rate of return of 6.75 percent. The ratio of plan net position to total pension liability was 79.3 percent, 93.9 percent and 76.6 percent at June 30, 2022, 2021 and 2020, respectively. For June 30, 2022, this indicates that, for every dollar of total pension liability, plan assets of \$0.79 are available to cover such obligations as compared to \$0.94 at June 30, 2021 and \$0.77 at June 30, 2020.

An analysis of the funding progress and University contributions and a discussion of actuarial assumptions and methods is set forth in the required supplementary information section of the financial statements. While all of the DB Plans' assets are available to pay any member's benefits, for UCRP, assets and liabilities for the campus and medical center segment are tracked internally and separately from the Department of Energy (DOE) national laboratory segments, and the DOE has a continuing obligation to fund UCRP benefits for the retirees of the national laboratory segments.

Investments

The DB Plans' total investment rate of return (net of fees) was (10.8) percent for the fiscal year ended June 30, 2022, 30.5 percent for the fiscal year ended June 30, 2021 and 1.7 percent for the fiscal year ended June 30, 2020, compared to the DB Plans' total fund benchmark returns of (10.8) percent, 28.5 percent and 3.1 percent, respectively.

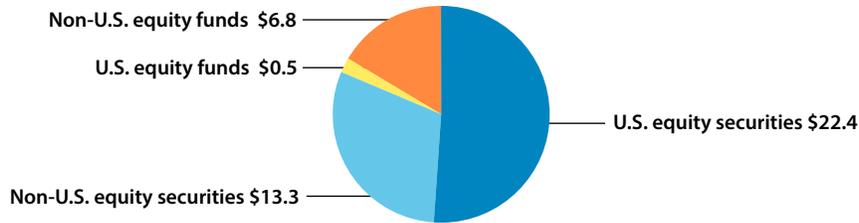
The asset allocation for the DB Plans' investment portfolio as of June 30, 2022, 2021 and 2020 is as follows:



The DB Plans' investment portfolio has a standalone volatility risk measure of 16.8 percent. Approximately 90.0 percent of the risk measure is explained by global macroeconomic growth risk factors represented by broad, developed market equity index returns. Other risk factors include real interest rates, inflation, long-term and short-term fixed-income returns, commodities, and emerging markets represented by benchmark indexes relative to the underlying fixed income and other asset classes. The DB Plans' investment performance is attributed to these average weighted asset class percentages: 55.8 percent for public equities, 14.7 percent for fixed income, 27.9 percent for alternative and other investments, and 1.6 percent for cash.

Equity Portfolio

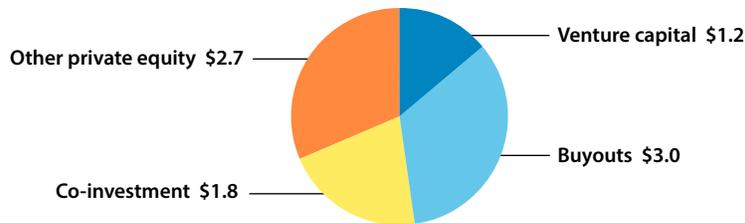
The \$43.0 billion public equity portfolio (including commingled equity funds) at June 30, 2022 is diversified across multiple strategic global economic and industry sectors within actively managed accounts of equity securities and passively managed index funds. Of the equity portfolio, \$35.7 billion, or 83.0 percent, was invested in U.S. and non-U.S. equity securities and \$7.3 billion, or 17.0 percent, was invested in U.S. and non-U.S. equity commingled funds. U.S. equity securities and commingled funds totaled \$22.9 billion, or 53.3 percent, and non-U.S. equity securities and commingled funds totaled \$20.1 billion, or 46.7 percent.



2022 in billions of dollars

Private Equity Portfolio

The \$8.7 billion private equity portfolio at June 30, 2022 is invested in venture capital partnerships, buyout funds and international private equity. The private equity portfolio includes \$1.2 billion in venture capital, \$3.0 billion in buyout funds, \$1.8 billion in co-investment and \$2.7 billion in other private equity investments. The private equity portfolio return was 0.8 percent for the fiscal year ended June 30, 2022, 54.7 percent for the fiscal year ended June 30, 2021 and 9.4 percent for the fiscal year ended June 30, 2020.



2022 in billions of dollars

Fixed Income Portfolio

The fixed-income portfolio of \$11.2 billion at June 30, 2022 is invested primarily in high-quality, call-protected, global bonds. The fixed-income portfolio is comprised of U.S. government-guaranteed, fixed-income securities of \$3.6 billion, or 32.3 percent and other U.S. dollar-denominated, fixed-income securities of \$7.6 billion, or 67.7 percent.

At June 30, 2022, the DB Plans held \$11.2 billion in its fixed-income portfolio, compared to \$16.0 billion at June 30, 2021 and \$12.7 billion at June 30, 2020. The fixed-income portfolio (excluding the TIPS portfolio) earned a total return of (5.2) percent for the fiscal year ended June 30, 2022, 10.0 percent for the fiscal year ended June 30, 2021 and 6.8 percent for the fiscal year ended June 30, 2020, compared to the DB Plans' fixed-income policy benchmark returns of (5.2) percent, 40.0 percent and 8.7 percent, respectively.

As of June 30, 2021, TIPS were no longer part of the DB Plans' fixed income portfolio. There was \$0.3 billion in TIPS at June 30, 2020. The TIPS portfolio earned a total return of 6.7 percent for the fiscal year ended June 30, 2021 and 8.1 percent for the fiscal year ended June 30, 2020, compared to the DB Plan's TIPS policy benchmark returns of 6.5 percent and 8.3 percent, respectively.

Approximately 32.3 percent of the \$11.2 billion fixed-income portfolio consists of U.S. government-guaranteed securities, and 67.7 percent of the portfolio consists of high-quality corporate issues rated investment-grade or better and government agency and asset-backed securities. There were no U.S. and non-U.S. bond funds and other lower-quality fixed-income securities in this year's portfolio.

The quality and diversification of fixed-income portfolio investments are allocated among the sectors illustrated below.



*Credit Ratings for U.S. Treasury Obligations: Guaranteed by the full faith and credit of the United States and rated AAA by Moody's and AA+ by Standard & Poor's.

Standard & Poor's (S&P):

- Investment grade: AAA through BBB rated considered extremely strong capacity to adequate capacity to meet financial commitments.
- Non-investment grade: BB through CCC or below considered less vulnerable in the near-term to currently highly vulnerable.

Alternative Investments

At June 30, 2022, the DB Plans held \$7.0 billion in institutional real estate investments compared to \$5.5 billion at June 30, 2021 and \$5.1 billion at June 30, 2020. The private real estate portfolio earned a total return of 29.1 percent for the fiscal year ended June 30, 2022, 8.2 percent for the fiscal year ended June 30, 2021 and (1.6) percent for the fiscal year ended June 30, 2020, compared to policy benchmark returns of 28.3 percent, 5.2 percent and 3.9 percent, respectively.

At June 30, 2022, the DB Plans also held \$2.8 billion in absolute return diversified investments compared to \$4.7 billion at June 30, 2021 and \$4.5 billion at June 30, 2020. The absolute return diversified investments earned a total return of (2.1) percent for the fiscal year ended June 30, 2022, 21.8 percent for the fiscal year ended June 30, 2021 and (2.4) percent for the fiscal year ended June 30, 2020 compared to policy benchmark returns of (5.5) percent, 18.5 percent and (0.1) percent, respectively.

Separately, at June 30, 2022, the DB Plans held \$3.3 billion in real asset investments compared to \$3.2 billion at June 30, 2021 and \$2.4 billion at June 30, 2020. The real asset investments earned a total return of 9.4 percent for the fiscal year ended June 30, 2022 compared to 11.5 percent for the fiscal year ended June 30, 2021 and 5.5 percent for the fiscal year ended June 30, 2020.

For liquidity purposes, the DB Plans held \$2.7 billion, \$3.3 billion, and \$3.3 billion in money market funds and the UC Short Term Investment Pool (STIP) at June 30, 2022, 2021, and 2020, respectively.

UCRSP PLANS

The UCRSP Plans provide savings incentives and the opportunity for additional retirement security for all eligible University of California employees. The University makes contributions to the UCRSP for Savings Choice participants, on the summer salaries of eligible academic appointees who teach, conduct research or provide administrative service during the summer session or an equivalent term, supplemental contributions on behalf of Pension Choice members and eligible senior managers. Participants' interests in the UCRSP Plans from contributions and investment income are fully and immediately vested. University contributions for Savings Choice participants vest after one year of employment.

The UCRSP's net position at June 30, 2022 amounted to \$29.9 billion compared to \$34.7 billion at June 30, 2021 and \$27.3 billion at June 30, 2020. Additions to the UCRSP's net position include contributions, rollovers and investment income. Participant and University contributions and rollovers amounted to \$2.0 billion for the fiscal year ended June 30, 2022, \$1.8 billion for the fiscal year ended June 30, 2021 and \$1.6 billion for the fiscal year ended June 30, 2020.

The UCRSP recognized net investment loss of \$(4.9) billion for the fiscal year ended June 30, 2022 compared to net investment income of \$7.3 billion for the fiscal year ended June 30, 2021 and net investment income of \$1.4 billion for the fiscal year ended June 30, 2020. UCRSP Plan participants' investment selections influence the net investment income earned by the investment funds in the UCRSP Plans.

Deductions from the UCRSP's net position include benefit payments to participants, participant withdrawals and administrative expenses. Deductions were \$1.9 billion, \$1.7 billion and \$1.5 billion for the fiscal years ended June 30, 2022, 2021 and 2020, respectively. Deductions fluctuate based upon withdrawals due to retirements and other factors including minimum required distributions and rollovers out of the UCRSP Plans.

The investments of the UCRSP are available to the securities lending program as a means to augment income. Cash collateral fluctuates in response to changes in demand from borrowers and the availability of securities. The UCRSP's investment of cash collateral received for securities lending totaled \$3.2 billion at June 30, 2022, compared to \$3.9 billion at June 30, 2021 and \$3.0 billion at June 30, 2020. Securities lending activity contributed \$10.9 million in net investment income, after fees and rebates, for the fiscal year ended June 30, 2022, compared to \$11.9 million for the fiscal year ended June 30, 2021 and \$41.7 million for the fiscal year ended June 30, 2020.







Report of Independent Auditors

TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Opinions

We have audited the accompanying individual financial statements of the Defined Benefit Plans of the University of California Retirement System and the University of California Retirement Savings Program ("UCRSP") of the University of California Retirement System, collectively referred to herein as the "Plans" (Note 1 further describes the components of the Plans), which comprise the individual statements of fiduciary net position as of June 30, 2022 and 2021, and the related individual statements of changes in fiduciary net position for the years then ended, including the related notes (collectively referred to as the "basic financial statements" or "individual financial statements").

In our opinion, the individual financial statements referred to above present fairly, in all material respects, the individual financial positions of the Plans as of June 30, 2022 and 2021, and the respective changes in their individual financial positions for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Individual Financial Statements section of our report. We are required to be independent of the Plans and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Individual Financial Statements

Management is responsible for the preparation and fair presentation of the individual financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the individual financial statements that are free from material misstatement, whether due to fraud or error.

Management is also responsible for maintaining current plan instruments, including all amendments to the Plans, administering the Plans, and determining that the Plans' transactions that are presented and disclosed in the individual financial statements are in conformity with the Plans' provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditors' Responsibilities for the Audits of the Individual Financial Statements

Our objectives are to obtain reasonable assurance about whether the individual financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the individual financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.
- Identify and assess the risks of material misstatement of the individual financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the individual financial statements.
- Obtain an understanding of internal control relevant to the audits in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of each individual Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the individual financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audits, significant audit findings, and certain internal control-related matters that we identified during the audits.

Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 16 through 21 and the required supplementary information on pages 54 through 58 be presented to supplement each Plan's basic financial statements. Such information is the responsibility of management, although not a part of the basic financial statements of the Plans, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements of each Plan in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises pages 1 through 14 but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

PricewaterhouseCoopers LLP

San Francisco, California
October 14, 2022

UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
STATEMENTS OF FIDUCIARY NET POSITION

At June 30, 2022 and 2021 (in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
ASSETS				
Investments, at fair value:				
Equity securities	\$35,700,106	\$42,805,295	\$14,742,018	\$17,865,194
<i>Fixed-income securities:</i>				
U.S. government	3,609,184	5,678,406	3,676,470	4,241,663
Other U.S. dollar-denominated	7,574,456	10,353,220	5,590,345	5,938,144
Commingled funds	30,451,929	30,492,853	2,587,039	3,301,568
Real estate	1,811,614	1,689,993		
Publicly traded real estate investment trusts	1,793,774	1,080,701	1,016,967	1,124,364
Other investments	576,364			
Investment derivatives	12,576	4,729	(3,041)	363
Total investments	81,530,003	92,105,197	27,609,798	32,471,296
Investment of cash collateral	7,204,653	5,470,316	3,196,346	3,898,876
Participants' interests in mutual funds			2,012,040	2,406,949
Participant 403(b) Plan loans			195,668	188,974
<i>Receivables:</i>				
Contributions	194,130	176,838	10	10
Interest and dividends	51,504	64,446	24,677	23,113
Securities sales and other	568,809	358,812	123,901	24,329
Total receivables	814,443	600,096	148,588	47,452
Total assets	89,549,099	98,175,609	33,162,440	39,013,547
LIABILITIES				
Payable for securities purchased	162,181	188,915	28,438	362,725
Member withdrawals, refunds and other payables	754,214	690,376	3,949	4,048
Collateral held for securities lending	7,204,652	5,470,316	3,196,347	3,898,876
Total liabilities	8,121,047	6,349,607	3,228,734	4,265,649
Net position	\$81,428,052	\$91,826,002	\$29,933,706	\$34,747,898

See accompanying notes to financial statements.

UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the years ended June 30, 2022 and 2021 (in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
ADDITIONS				
Contributions:				
University	\$2,892,621	\$2,705,058	\$99,943	\$102,705
Members	1,105,405	1,053,939		
Participants			1,911,542	1,754,149
Total contributions	3,998,026	3,758,997	2,011,485	1,856,854
Investment income:				
Net appreciation (depreciation) in fair value of investments	(10,837,409)	19,003,955	(5,612,919)	6,734,363
Interest, dividends and other investment income	1,058,585	2,428,033	703,514	557,698
Securities lending income	21,679	32,291	19,261	16,161
Less securities lending fees and rebates	(16,583)	(6,706)	(8,352)	(4,212)
Total investment income (loss)	(9,773,728)	21,457,573	(4,898,496)	7,304,010
Total additions, net	(5,775,702)	25,216,570	(2,887,011)	9,160,864
DEDUCTIONS				
Benefit payments and withdrawals:				
Retirement payments	3,181,330	2,997,875		
Member withdrawals	173,892	159,048		
Cost-of-living adjustments	683,885	642,027		
Lump sum cashouts	403,805	409,429		
Preretirement survivor payments	58,363	56,132		
Disability payments	26,717	30,583		
Death payments	9,493	8,566		
UCRSP benefit payments and participant withdrawals			1,923,293	1,675,914
Total benefit payments and withdrawals	4,537,485	4,303,660	1,923,293	1,675,914
Expenses:				
Administrative and other expenses	84,763	64,830	3,888	4,066
Total expenses	84,763	64,830	3,888	4,066
Total deductions	4,622,248	4,368,490	1,927,181	1,679,980
Change in net position	(10,397,950)	20,848,080	(4,814,192)	7,480,884
NET POSITION				
Beginning of Year	91,826,002	70,977,922	34,747,898	27,267,014
End of Year	\$81,428,052	\$91,826,002	\$29,933,706	\$34,747,898

See accompanying notes to financial statements.

Notes to Financial Statements

Years ended June 30, 2022 and 2021

1. DESCRIPTION OF THE PLANS AND SIGNIFICANT ACCOUNTING POLICIES

General Introduction

The University of California Retirement System (UCRS) is a valuable component of the comprehensive benefits package offered to employees of the University. UCRS consists of two defined benefit plans and four defined contribution plans. The defined benefit plans (DB Plans) include the University of California Retirement Plan (UCRP) for members and the Voluntary Early Retirement Incentive Plan (UC-VERIP) for certain University employees that were members of the California Public Employees' Retirement System (CalPERS) who elected early retirement. The University of California Retirement Savings Program (UCRSP) includes four defined contribution plans, collectively referred to as the UCRSP Plans: the Defined Contribution Plan (DC Plan), the Supplemental Defined Contribution Plan (SDC Plan), the Tax-Deferred 403(b) Plan (403(b) Plan) and the 457(b) Deferred Compensation Plan (457(b) Plan). The Regents of the University of California (The Regents) act as the trustee associated with each of the UCRS Plans, with the Office of the Chief Investment Officer (UC Investments or OCIO) of The Regents acting as custodian. Administrative authority with respect to the UCRS Plans is vested in the President of the University (the President) as plan administrator, and the President has delegated that authority within UCRS, under University policies and procedures, to the Vice President — Human Resources.

Defined Benefit Plans

University of California Retirement Plan

UCRP is a single-employer defined benefit pension plan providing lifetime retirement income, disability protection, death benefits and postretirement and preretirement survivor benefits to certain eligible employees of the University and its affiliate, Hastings College of the Law (Hastings), and their survivors and beneficiaries.

UCRP was established in 1961 and, prior to July 1, 2016, membership was required for all employees appointed to work at least 50 percent time for one year or more or for an indefinite period. Certain academic employees were also eligible for UCRP membership after working 1,000 hours (750 hours for the Non-Senate Instructional Unit) in a continuous 12-month period. Under the Retirement Choice Program, effective July 1, 2016, employees could elect to participate in Savings Choice in lieu of UCRP membership.

Generally, an employee is required to work for five years in order to become entitled to UCRP benefits. The amount of the monthly pension benefit is determined under the basic formula of covered compensation times age factor times years of service credit. The maximum monthly benefit cannot exceed 100 percent of the employee's eligible highest average plan compensation over a 36-month period. The annual benefit is also subject to limitations established by Internal Revenue Code (IRC) §415. Annual cost-of-living adjustments (COLAs) are made to monthly retirement benefits according to a specified formula based on the Consumer Price Index (CPI). Ad hoc COLAs may be granted subject to funding availability. Service accrued by a member with coordinated or noncoordinated benefits before July 1, 2013, is deemed to have been accrued in the 1976 Tier. If the member continues as an eligible employee after June 30, 2013, the member continues to accrue in the 1976 Tier until they incur a break of service.

For the period from July 1, 1987 to July 1, 1990, qualifying UCRP members could elect to participate in a noncontributory UCRP membership known as Tier Two. Tier Two provides a lower level of retirement income, disability protection and survivor benefits, calculated using specific Tier Two formulas based on the member's covered compensation times age factor times years of service credit.

Effective July 1, 2013, UCRP was amended to provide a new tier of pension benefits applicable to employees hired, or who returned to work after a tier break in service, on or after July 1, 2013 (2013 Tier). In the 2013 Tier, the earliest retirement age was increased from 50 to 55 and the age for the maximum age factor was increased to 65. There are no lump sum cashouts, inactive member COLAs or subsidized survivor annuities for spouses and domestic partners for 2013 Tier members.

Effective July 1, 2016, UCRP was amended to provide a new tier of pension benefits under the Retirement Choice Program. The new program tier provides eligible University employees hired (or becoming eligible) on or after July 1, 2016 (and certain eligible rehires who return to work after a tier break in service) a choice between two primary retirement benefits options: (1) Pension Choice, which is the UCRP pension benefit with covered compensation for new hires capped at the California Public Employees' Pension Reform Act of 2013 (PEPRA) salary pensionable compensation limit (PEPRA maximum), \$128,059 and \$126,291 for the fiscal years ended June 30, 2022 and June 30, 2021, respectively, plus for new hires subject to the PEPRA maximum, a supplemental benefit to the DC Plan on eligible pay up to the IRC §401(a)(17) compensation limit (IRC compensation limit), \$290,000 and \$285,000 for fiscal years ended June 30, 2022 and June 30, 2021, respectively; or (2) Savings Choice, which is a defined contribution plan option on eligible pay up to the IRC compensation limit.

On behalf of employees who participate in Savings Choice, the University also contributes 7.0 percent and 6.5 percent for the fiscal years ended June 30, 2022 and June 30, 2021, respective, on eligible pay up to the IRC compensation limit into UCRP.

Members' contributions are recorded separately and accrue interest at a rate determined by The Regents. Currently, member contributions accrue interest at an annual compounded rate of 6.0 percent, credited monthly. Upon termination, members may elect a refund of their contributions plus accumulated interest (and their Capital Accumulation Payment (CAP) balance as described below, if any). Vested terminated members who are eligible to retire may also elect a lump sum payment (excluding 2013 Tier and 2016 Tier) equal to the actuarially equivalent present value of their accrued benefits. Both actions forfeit the member's right to monthly benefits based on the same service credit.

From July 1, 1966, to June 30, 1971, UCRP contributions were required only from members who had reached age 30 and had at least one year of service. Member plan accounts designated Plan 02 were established to keep track of contributions that would have been made had a member been contributing during this period. Future retirement benefits for members with Plan 02 accounts are reduced to account for the contributions that were not made, unless the member repays the Plan 02 balance or attains a benefit percentage equal to 100 percent, based on service credit excluding the noncontributory period.

Certain UCRP members may also have a balance in UCRP consisting of CAP allocations, which were credited on behalf of eligible members on various dates in 1992, 1993, 1994, 2002 and 2003. Provided to supplement basic UCRP benefits, the allocations were equal to a percentage of the eligible member's covered compensation paid during the specified period. The CAP balance is generally payable in a lump sum at retirement or separation from service and includes interest credited monthly equal to an annual percentage yield (APY) of 8.5 percent for allocations made in 1992, 1993 and 1994. For allocations made in 2002 and 2003, the interest credited monthly is equal to the discount rate component of the actuarial equivalence basis under UCRP, which equated to an APY of 6.75 percent for the fiscal years ended June 30, 2022 and June 30, 2021. The APY applied to the 2002 and 2003 allocation will vary according to changes in the discount rate.

At June 30, 2022 and 2021, UCRP membership included:

	UCRP RETIREES AND MEMBERS	
	2022	2021
Retirees and beneficiaries receiving benefits	85,466	83,012
Inactive plan members entitled to, but not yet receiving benefits	112,927	106,291
Active plan members:		
Vested	83,619	82,376
Nonvested	51,281	48,722
Total active plan members	134,900	131,098
Total membership	333,293	320,401

Employer contributions are made to UCRP on behalf of all members. The annual rate of University contributions is established pursuant to The Regents' funding policy.

University of California Voluntary Early Retirement Incentive Program

Some University employees became members of the California Public Employees' Retirement System (CalPERS) before UCRP was established and continued to participate in CalPERS during their University employment after UCRP was established. The University of California contributed to CalPERS on behalf of these members. The UC-VERIP is a single-employer defined benefit pension plan established by the University that provides lifetime supplemental retirement income and survivor benefits to UC-VERIP members who elected early retirement under CalPERS.

Generally, to participate in the UC-VERIP, an eligible employee was required to elect concurrent retirement under CalPERS and the UC-VERIP effective October 1, 1991, and must have had a combined age plus service credit equal to 80 years as of September 30, 1991, if classified as a Qualified Academic Senate Faculty Member, or equal to 75 years if not classified as a Qualified Academic Senate Faculty Member. Of 1,579 eligible employees, 879 elected to retire under the UC-VERIP. As of June 30, 2022 and 2021, there were 334 and 384 retirees and beneficiaries, respectively, receiving benefits under the UC-VERIP. After eligible employees elected to participate, the UC-VERIP was closed to future participation.

No contributions are required as long as the UC-VERIP remains fully funded under the actuarial assumptions used in the actuarial valuation.

Effective July 1, 2011, the UC-VERIP was amended, subject to funding availability, to provide annual COLAs to monthly benefits according to the formula based on the Consumer Price Index that is used for UCRP. Ad hoc COLAs may also be granted subject to funding availability.

University of California Retirement Savings Program

UC Investments oversees the investment choices of the UCRSP. The fund choices are segmented into Tiers I, II and III. Participants may direct investment of their contributions and transfer their UCRSP plan accumulations to any of these funds. Participants' interests in the UCRSP plans are fully and immediately vested and are distributable at death, retirement or termination of employment. University contributions for Savings Choice participants vest after one year of employment and University contributions under Pension Choice are fully vested after five years of service credit. Participants may elect to defer distribution until age 72 (age 70 ½ for those born prior to July 1, 1949), or separation from service, whichever is later, in accordance with IRC §401(a)(9) minimum distribution requirements. In-service withdrawals are permitted in conformance with the IRC regulations applicable to each plan.

TIER I — Target Date Funds

UC Pathway Funds:

· Income, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055, 2060 and 2065

TIER II — Main Fund Menu - Bond and Stock Investments

Bond Investments:

· UC Savings Fund
· UC Bond Fund
· UC Short-Term TIPS Fund
· UC TIPS Fund

Foreign Stock Investments:

· UC International Equity Index Fund
· UC Diversified International Fund
· UC Emerging Markets Equity Fund

Domestic Stock Investments:

· UC Domestic Equity Index Fund
· UC Growth Company Fund
· UC Domestic Small Cap Index Fund

Specialty Stock Funds:

· UC Global Equity Ex-Fossil Fuel Fund
· UC Real Estate Fund
· UC Social Equity Fund

TIER III — BrokerageLink®

Fidelity BrokerageLink combines the convenience of a workplace retirement plan with the additional flexibility of a brokerage account, and expanded investment choices to manage retirement contributions. The UCRSP plan fiduciary neither evaluates nor monitors the investments available through BrokerageLink. It is the participants' responsibility to ensure that the investments selected are suitable for participants' situation(s), including goals, time horizon and risk tolerance.

Defined Contribution Plan

Under the Retirement Choice Program, for employees who elect Savings Choice, which works much like a 401(k) plan, both the University and the participants make mandatory DC Plan retirement contributions, on a pretax basis, on eligible pay up to the IRC compensation limit. The participant contributes 7.0 percent, and the University contributes 8.0 percent. University contributions under Savings Choice are fully vested after one year of employment. For employees who elect Pension Choice and who are subject to the PEPPA maximum, both the University and the participants make mandatory DC Plan retirement contributions on a pretax basis. University contributions under Pension Choice are fully vested after five years of service credit. For designated faculty, the University contributes 5.0 percent on all eligible pay up to the IRC compensation limit. For staff, the University contributes 3.0 percent on eligible pay above the PEPPA maximum up to the IRC compensation limit. Both designated faculty and staff contribute 7.0 percent on eligible pay above the PEPPA maximum up to the IRC compensation limit. The University may also contribute on behalf of eligible senior managers.

After five years of service, Savings Choice participants are permitted to prospectively elect Pension Choice. The second choice window opens on January 1 of the fifth anniversary of the calendar year in which Savings Choice was initially elected and closes on May 31 five years later. The Pension Choice election becomes effective on the next July 1.

The DC Plan Pretax Account also includes mandatory contributions from part-time, seasonal and temporary employees at the University who are not currently participating in UCRP or another defined benefit plan to which the University contributes (Pretax account participants). Pretax participation includes certain University student employees and resident aliens with F-1 and J-1 visa status. Pretax participants contribute 7.5 percent of their gross salary (up to the Social Security wage base) to the DC Plan in lieu of deductions for Social Security taxes.

All University employees, except students who normally work fewer than 20 hours per week, are eligible to make voluntary contributions to the DC Plan After-Tax Account and defer taxation on their earnings until the accumulations are withdrawn. The maximum amount that participants may contribute annually to the After-Tax Account is determined by the IRC §415(c) limit.

Pursuant to the March 27, 2020 adoption of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, on May 20, 2020 The Regents approved an amendment to the DC Plan permitting qualified participants to request coronavirus-related in-service distributions, subject to restrictions defined under the CARES Act. The provisions of the CARES Act amendment were effective through December 31, 2020.

The Supplemental Defined Contribution Plan (SDC Plan) accepts employer contributions on behalf of certain designated employees. Employer contributions are fully vested, and there is no provision for employee contributions. For the years ended June 30, 2022 and 2021, the SDC Plan did not have any participants, assets or contributions.

Tax-Deferred 403(b) Plan

The University makes 403(b) Plan retirement contributions on the summer salaries of eligible academic appointees who teach, conduct research or provide administrative service during the summer session or an equivalent term. To be eligible, the academic appointee must hold an academic year appointment and be an active member of UCRP or another defined benefit plan to which the University contributes, be a Savings Choice participant, or be eligible for a primary retirement benefit option under the Retirement Choice Program even if not yet participating. The contribution rate is 7.0 percent of eligible summer salary, of which 3.5 percent is University-paid and 3.5 percent is employee-paid, both on a pretax basis.

The 403(b) Plan is available to all University employees except students who normally work fewer than 20 hours per week. Employees who want to participate in the 403(b) Plan designate a portion of their gross salary within the IRC limits to be contributed on a pretax basis, thus reducing their taxable income. Income taxes on contributions and any earnings are deferred until the participant withdraws the money. The University also makes 403(b) Plan contributions on behalf of eligible senior managers.

Annual salary deferral contribution limits for the 403(b) Plan during the fiscal year ended June 30, 2022 were as follows: the maximum annual contribution limit for participants under age 50 was \$20,500 (or 100 percent of adjusted gross salary, if less) and \$19,500 for the calendar years 2022 and 2021, respectively. For participants age 50 or older, the total annual contribution limit was \$27,000, (or 100 percent of adjusted gross salary, if less) and \$26,000 for calendar year 2022 and 2021, respectively. Participants with 15 or more years of service may be able to increase their limit under additional catch-up provisions.

Pursuant to the March 27, 2020 adoption of the CARES Act, on May 20, 2020 The Regents approved amendments to the 403(b) Plan permitting qualified participants to request coronavirus-related loans, subject to restrictions defined under the CARES Act, and allow active participants with an outstanding plan loan a grace period of one year during which the participant may suspend any loan repayments that otherwise would have been owed. The provisions of the CARES Act amendments were effective through December 31, 2020.

457(b) Deferred Compensation Plan

The 457(b) Plan is available to all University employees except students who normally work fewer than 20 hours per week. Taxes on contributions and earnings thereon are deferred until the accumulations are withdrawn. The University may also make 457(b) Plan contributions on behalf of eligible senior managers. The deferred compensation limits for the 457(b) Plan were the same as the 403(b) Plan limits (described in the previous section) during fiscal year ended June 30, 2022.

Pursuant to the March 27, 2020 adoption of the CARES Act, on May 20, 2020 The Regents approved an amendment to the 457(b) Plan permitting qualified participants to request coronavirus-related in-service distributions, subject to restrictions defined under the CARES Act. The provisions of the CARES Act amendment were effective through December 31, 2020.

Basis of Accounting

The financial statements have been prepared in accordance with U.S. generally accepted accounting principles using the economic resources measurement focus and the accrual basis of accounting. The UCRS Plans follow accounting principles issued by the Governmental Accounting Standards Board (GASB). The DB Plans and UCRSP Plans are not legally separate entities and therefore, under GASB requirements, a going concern evaluation at the level of the DB Plans and UCRSP Plans is not required and has not been performed by management.

Valuation of Investments

Investments are measured and reported at fair value. Securities are generally valued at the last sale price on the last business day of the fiscal year, as quoted on a recognized exchange or by utilizing an industry-standard pricing service, when available. Securities for which no sale was reported as of the close of the last business day of the fiscal year are valued at the quoted bid price of an exchange or a dealer who regularly trades in the security being valued. Investment in nonexchange traded debt and equity investments are valued using inputs provided by independent pricing services or by brokers/dealers who actively trade in these markets. Certain securities may be valued on a basis of a price provided by a single source.

Investments also include private equities, absolute return funds, real estate, real asset and certain corporate asset-backed securities. Private equities include venture capital partnerships, buyout and international funds. Fair values for interests in private equity, absolute return partnerships, real assets and real estate partnerships are based on valuations provided by the general partners of the respective partnerships. The valuations are primarily based on the net asset value (NAV) of the underlying investments. The NAV is reported by the external investment managers, including general partners, in accordance with their policies as described in their respective financial statements and offering memoranda. The most recent NAV is adjusted for capital calls, distributions and significant known valuation changes, if any, of its related portfolio through June 30, 2022 and 2021, respectively.

Interests in certain direct investments in real estate are estimated based upon independent appraisals. Because the private equity, real estate and absolute return partnerships, along with direct investments in real estate, are not readily marketable, their estimated value is subject to uncertainty and, therefore, may differ significantly from the value that would be used had a ready market for such investments existed. These investments are generally less liquid than other investments, and the value reported may differ from the values that would have been reported had a ready market for these investments existed.

For other investments, the UCRS Plans consider various factors to estimate fair value, such as the timing of the transaction, the market in which the company operates, comparable transactions, company performance and projections as well as discounted cash flow analysis. The selection of an appropriate technique may be affected by the availability and general reliability of relevant inputs. In some cases, one valuation technique may provide the best indication of fair value, while in other circumstances, multiple valuation techniques may be appropriate. Furthermore, the UCRS Plans may review the investment's underlying portfolio as well as engage external appraisers, depending on the nature of the investment.

The UCRS Plans exercise due diligence in assessing the external managers' use of and adherence to fair value principles. In conjunction with these procedures, estimated fair value is determined by consideration of a wide range of factors, including market conditions, redemption terms and restrictions, and risks inherent in the inputs of the external investment managers' valuations. In situations where the information provided by the external manager is deemed to not be representative of the fair value as of the measurement date, management evaluates specific features of the investment and utilizes supplemental fair value information provided by the external manager along with any relevant market data to measure the investment's fair value.

Investments in registered investment companies are valued based upon the reported net asset value of those companies. Mortgage loans, held as investments, are valued on the basis of their future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. Insurance contracts are valued at contract value, plus reinvested interest, which approximates fair value.

Investments denominated in foreign currencies are translated into U.S. dollar equivalents using year-end spot foreign currency exchange rates. Purchases and sales of investments and their related income are translated at the rate of exchange on the respective transaction dates. Realized and unrealized gains and losses resulting from foreign currency changes are included in the UCRS Plans' statement of changes in fiduciary net position.

Investment transactions are recorded on the date the securities are purchased or sold (trade date). Realized gains or losses are recorded as the difference between the proceeds from the sale and the average cost of the investment sold. Dividend income is recorded on the ex-dividend date, and interest income is accrued as earned. Gifts of securities are recorded based on fair value at the date of donation.

Derivative Financial Instruments

Derivative instruments are recorded at fair value. Futures contracts, foreign currency exchange contracts, stock rights and warrants, options and swaptions are valued at the settlement price on the last day of the fiscal year, as quoted on a recognized exchange or by utilizing an industry-standard pricing service, when available. Financial institutions or independent advisors have estimated the fair value of the interest rate swaps and total return swaps using quoted market prices when available or discounted expected future net cash flows.

Administrative Expenses

Administrative expenses are incurred in connection with the operation of UCRS for costs such as staff salaries and benefits, UC Investments operations, information systems, leased space, supplies and equipment, and professional services rendered by the benefits consultants, legal counsel and independent auditor, which are paid from UCRS' assets.

For the UCRSP Plans, investment management, trading, trust and custody expenses are deducted from investment income. The UCRSP Plans charge a per-participant administrative fee to cover costs of plan administrative services. The single quarterly fee applies regardless of how many plan accounts a participant holds.

Administrative expenses; other than actuarial consulting fees, which are paid directly from plan assets; are assessed to the UC-VERIP through an annual account servicing charge of \$10 per retiree.

Status Under the IRC

UCRP is intended to qualify under IRC §401(a) and the regulations thereunder and the UCRP trust is intended to be exempt from taxation under IRC §501(a). Most recently, the University received a favorable determination from the IRS for UCRP in a letter dated April 5, 2017.

The UC-VERIP is intended to satisfy the qualification requirements under IRC §401(a) and its trust is intended to be exempt from taxation under IRC §501(a).

The DC Plan is intended to meet the requirements for qualification under IRC §401(a). Most recently, the University received a favorable determination from the IRS for the DC Plan in a letter dated April 5, 2017.

Separately, the University has requested that the IRS issue a favorable determination letter on the SDC Plan. The SDC Plan is intended to satisfy the qualification requirements of IRC §401(a) and its trust is intended to be exempt from taxation under IRC §501(a). The SDC Plan was intended to be used in conjunction with a defined contribution plan described in IRC §415(m). However, the IRS declined to rule on the 415(m) portion, so the University opted to withdraw its request for a determination on the SDC Plan.

The 403(b) Plan is intended to satisfy the requirements of IRC §403(b). The 457(b) Plan is intended to satisfy the requirements of IRC §457(b).

To the best of tax counsel's knowledge, the UCRS Plans have been administered in accordance with their terms and the applicable provisions of the IRC and the regulations thereunder, in all material respects.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Although management believes the estimates and assumptions are reasonable, they are based upon information available at the time the estimate or judgment is made, and actual amounts could differ from those estimates.

New Accounting Pronouncements

In June 2022, the GASB issued Statement No. 100, Accounting Changes and Error Corrections — an amendment of GASB Statement No. 62, effective for the University's fiscal year beginning July 1, 2023. The Statement requires disclosures of descriptive information about accounting changes and error corrections and addresses how information that is affected by a change in accounting principle or error correction should be presented in required supplementary information and supplementary information. The University is evaluating the effect these requirements will have on their financial statements.

2. INVESTMENTS

The Regents, as the governing board and as trustee, are responsible for the oversight of the UCRS Plans' investments and establishes investment policies for the DB Plans and the UCRSP, which are carried out by UC Investments. UC Investments has primary fiduciary responsibility for investing UCRS' assets consistent with the policies established by The Regents.

Participation in the UC Short Term Investment Pool (STIP) maximizes the returns on short-term cash balances in the UCRS Plans by taking advantage of the economies of scale of investing in a large pool with a broad range of maturities. STIP is managed to maximize current earned income. The available cash in UCRS Plans awaiting investment or for administrative expenses is also invested in STIP. Investments authorized by The Regents for STIP include fixed-income securities with a maximum maturity of 5.5 years. In addition, for STIP, The Regents have also authorized loans, primarily to faculty members residing in California, under the University's Mortgage Origination Program with terms of up to 40 years.

Investments authorized by The Regents for the UCRS Plans' investment pools and separate investments include equity securities, fixed-income securities and certain other asset classes. The equity portion of the investment portfolios may include both domestic and foreign common and preferred stocks, and actively managed and passive strategies, along with exposure to private equities. Private equities include venture capital partnerships, buyouts and international funds. Investment portfolios may include certain foreign currency-denominated equity securities.

The fixed-income portion of the investment portfolios may include both domestic and foreign securities, along with certain securitized investments, including mortgage-backed and asset-backed securities. Fixed-income investment guidelines permit the use of futures and options on fixed-income instruments in the ongoing management of the portfolios. Real estate investments and real assets are authorized for the UCRS Plans. Absolute return strategies, which may incorporate short sales, plus derivative positions to implement or hedge an investment position, are also authorized for the UCRS Plans.

The following is the target asset allocation policy for the DB Plans investment pool as of June 30, 2022:

	TARGET ALLOCATION
Asset class	
U.S. equity	32.1%
Developed international equity	14.7
Emerging market equity	6.2
Core fixed income	13.0
High-yield bonds	2.5
Emerging market debt	1.5
Real estate	7.0
Private credit	3.5
Private equity	12.0
Absolute return	3.5
Real assets	4.0
Total	100.0%

Annual Money-Weighted Rates of Return

A money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. For the DB Plans, the annual money-weighted rates of return, net of investment expenses, adjusted for changing amounts actually invested were (10.6) percent and 30.2 percent for the fiscal years ended June 30, 2022 and 2021, respectively.

The composition of investments and derivative instruments, by investment type, at June 30, 2022 and 2021, is as follows:

(in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
Equity securities	\$35,700,106	\$42,805,295	\$14,742,018	\$17,865,194
<i>Fixed-income securities:</i>				
U.S. government-guaranteed:				
U.S. Treasury bills, notes and bonds	3,180,058	4,695,277	2,080,268	2,682,513
U.S. Treasury strips	274,119	483,855		
U.S. TIPS			1,439,960	1,398,240
U.S. government-backed securities			3,000	
U.S. government-backed mortgage-backed securities	155,007	499,274	153,242	160,910
U.S. Government-Guaranteed	3,609,184	5,678,406	3,676,470	4,241,663
Other U.S. dollar-denominated:				
Corporate bonds	4,354,329	4,695,376	1,000,029	1,208,370
U.S. agencies			3,635,557	3,805
U.S. agencies asset-backed securities	585,163	1,730,391	618,757	4,364,748
Corporate asset-backed securities			47,678	50,445
Supranational/foreign	2,626,443	3,921,935	271,722	295,217
Other	8,521	5,518	16,602	15,559
Other U.S. Dollar-Denominated	7,574,456	10,353,220	5,590,345	5,938,144
<i>Commingled funds:</i>				
Absolute return	2,843,897	4,695,036		
U.S. equity funds	528,747	413,374	1,961,169	2,560,893
Non-U.S. equity funds	6,824,969	8,042,236		
U.S. bond funds			101,827	121,562
Non-U.S. bond funds	11	14		
Private equity	8,746,627	7,337,326		
Private credit	2,127,956	741,901		
Real assets	3,333,596	3,235,720		
Real estate investment trusts	3,395,281	2,714,303		
Money market funds*	2,650,845	3,312,943	524,043	619,113
Commingled Funds	30,451,929	30,492,853	2,587,039	3,301,568
Real estate	1,811,614	1,689,993		
Publicly traded real estate investment trusts	1,793,774	1,080,701	1,016,967	1,124,364
Other investments	576,364			
Investment derivatives	12,576	4,729	(3,041)	363
Total Investments	\$81,530,003	\$92,105,197	\$27,609,798	\$32,471,296

*Amounts include investments of \$1,815,664 by DB Plans and \$214,775 by UCRSP in STIP at June 30, 2022. The amounts at June 30, 2021 were \$2,190,510 and \$250,536, respectively.

Investment Risk Factors

There are many factors that can affect the value of investments. Some, such as custodial credit risk, concentration of credit risk and foreign currency risk, may affect both equity and fixed-income securities. Equity securities respond to such factors as economic conditions, individual company earnings performance and market liquidity, while fixed-income securities are particularly sensitive to credit risks and changes in interest rates. Alternative investment strategies and their underlying assets and rights are also subject to an array of economic and market vagaries that can limit or erode value.

Credit Risk

Fixed-income securities are subject to credit risk, which is the chance that a bond issuer will fail to pay interest on principal in a timely manner, or that negative perceptions of the issuer's ability to make these payments will cause security prices to decline. These circumstances may arise due to a variety of factors, such as financial weakness, bankruptcy, litigation and/or adverse political developments.

A bond's credit quality is an assessment of the issuer's ability to pay interest on the bond, and ultimately to pay the principal. Credit quality is evaluated by one of the independent bond rating agencies, for example, Moody's Investors Service (Moody's) or Standard and Poor's (S&P). The lower the rating, the greater the chance, in the rating agency's opinion, that the bond issuer will default or fail to meet its payment obligations. Generally, the lower a bond's credit rating, the higher its yield should be to compensate for the additional risk.

Certain fixed-income securities, including obligations of the U.S. government or those explicitly guaranteed by the U.S. government, are not considered to have credit risk.

Asset-backed securities are debt obligations that represent claims to the cash flows from pools of commercial, mortgage, credit card or student loans. Mortgage-backed securities issued by Ginnie Mae are backed by the full faith and credit of the U.S. government.

The investment guidelines for STIP recognize that a limited amount of credit risk, properly managed and monitored, is prudent and provides incremental risk-adjusted return over its benchmark. The combined benchmark for STIP is a 50/50 weighted average of the yield on a constant maturity one-year U.S. Treasury Note and U.S. 30-day Treasury Bills.

The Regents recognize that credit risk is appropriate in balanced investment pools such as UCRS Plans by virtue of the benchmark chosen for the fixed-income portion of the pool.

The Barclays Capital U.S. Aggregate Bond Index is the fixed-income benchmark for the UCRSP, and it is composed of approximately 24.0 percent corporate bonds and 30.1 percent mortgage/asset-backed securities, all of which carry some degree of credit risk. The remaining 45.9 percent is composed of government-issued bonds. The core fixed-income benchmark for the DB Plans is the Barclays 1-5 Year US Government/Credit Index, comprised of 25.6 percent corporate bonds and 6.1 percent non-corporate bonds, all of which carry some degree of credit risk. The remaining 68.3 percent is government issued bonds.

In addition, the investment policies for UCRS Plans allow for dedicated allocations to non-investment-grade and emerging market bonds, investment that entails credit, default and/or sovereign risk.

The credit risk profile for fixed- or variable-income securities at June 30, 2022 and 2021, is as follows:

(in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
U.S. government-guaranteed	\$3,609,184	\$5,678,406	\$3,676,470	\$4,241,663
<i>Other U.S. dollar-denominated:</i>				
AAA	443,676	711,897	922,798	1,501,669
AA	314,994	506,577	2,889,674	2,426,597
A	1,349,624	2,026,453	282,260	328,141
BBB	1,853,311	2,957,761	441,699	534,593
BB	1,397,203	977,438	205,635	250,898
B	1,165,477	899,597	146,613	148,867
CCC	329,474	288,360	42,988	58,751
D	13,567	14,671		
Not rated	707,130	1,970,466	658,678	688,628
<i>Commingled funds:</i>				
U.S. bond funds: not rated			101,827	121,562
Non-U.S. bond funds: not rated	11	14		
Money market funds: not rated	2,650,845	3,312,943	524,043	619,113

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of the custodian, the investments may not be returned. Substantially all of the UCRS Plans' securities are registered in the name of The Regents by the custodial bank. Other types of investments, such as private investments, commingled funds, real estate and derivatives, represent ownership interests that do not exist in physical or book-entry form. As a result, custodial credit risk for such investments is remote.

Concentration of Credit Risk

Concentration of credit risk is the risk associated with a lack of diversification, such as having substantial investments in a few individual issuers, thereby exposing UCRS Plans to greater risks resulting from adverse economic, political, regulatory, geographic or credit developments.

The U.S. and non-U.S. equity portions of UCRS may be managed either passively or actively. For the portion managed passively, the concentration of individual securities is similar to their concentration in the benchmark. While some securities have a larger representation in the benchmark than others, The Regents consider that passive management results in an absence of concentration of credit risk. For the portion managed actively, asset class guidelines do not specifically address concentration risk, but do state that the equity asset class in the aggregate will be appropriately diversified to control overall risk and will exhibit portfolio characteristics similar to the asset class benchmark (including concentration of credit risk). Concentration risk for individual portfolios is monitored relative to their individual benchmarks and agreed-upon risk parameters in their guidelines.

At June 30, 2022 and 2021, no single issuer comprised more than 5 percent or more of investments held by the UCRS Plans.

Interest Rate Risk

Interest rate risk is the risk that the value of fixed-income securities will decline because of changing interest rates. The prices of fixed-income securities with a longer time to maturity, measured by effective duration, tend to be more sensitive to changes in interest rates and, therefore, more volatile than those with shorter durations. Effective duration is the approximate change in the price of a security resulting from a 1-percentage-point change in the level of interest rates. It is not a measure of time.

Interest rate risk for STIP is managed by constraining the maturity of all individual securities to be less than or equal to 12 months. There is no restriction on weighted average maturity of the portfolio as it is managed relative to the liquidity demands of the investors. The nature and maturity of individual securities in STIP allow for the use of weighted average maturity as an effective risk management tool, rather than the more complex measure, effective duration.

Portfolio guidelines for the core fixed-income portion of the UCRS Plans' investment portfolio limit the weighted average effective duration of the portfolio to the effective duration of the Barclays Capital Aggregate Bond Index benchmark, plus or minus 20 percent. These portfolio guidelines constrain the potential price movement due to interest rate changes of the portfolio being similar to that of the benchmark. There are similar restrictions for the high-yield and emerging market debt portfolios relative to their benchmarks.

The effective duration for fixed-income securities at June 30, 2022 and 2021, is as follows:

(in years)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
Fixed-income securities:				
<i>U.S. government-guaranteed:</i>				
U.S. treasury bills, notes and bonds	2.6	2.6	8.3	8.9
U.S. treasury strips	2.3	3.4		
U.S. TIPS			5.2	5.7
U.S. government-backed securities			15.2	
U.S. government-backed mortgage-backed securities	5.8	4.1	5.4	3.9
<i>Other U.S. dollar-denominated:</i>				
Corporate bonds	3.7	3.1	6.7	7.3
U.S. agencies			2.5	18.0
U.S. agencies asset-backed securities	5.9	4.6	5.4	2.4
Corporate asset-backed securities			3.6	4.5
Supranational/foreign	4.5	5.6	5.2	5.8
Other	0.9	2.4	8.4	13.1
<i>Commingled funds:</i>				
U.S. bond funds			15.3	6.6
Non-U.S. bond funds	7.4	8.5		

Investments may also include various mortgage-backed securities, collateralized mortgage obligations, structured notes, variable-rate securities and callable bonds that may be considered to be highly sensitive to changes in interest rates due to the existence of prepayment or conversion features. Although the effective durations of the securities may be low, they are considered to be highly sensitive to changes in interest rates.

At June 30, 2022 and 2021, the fair values of such investments are as follows:

(in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
Mortgage-backed securities	\$740,170	\$2,229,666	\$748,514	\$3,894,105
Collateralized mortgage obligations			59,903	70,108
Other asset-backed securities	1,932		11,260	612,642
Variable-rate securities	743,548	1,136,378	182,707	157,447
Callable bonds	4,831,570	4,578,465	4,397,036	4,567,904
Structured notes	585,115	670,045	1,550,569	1,501,504
Convertible bonds	4,245	2,526	4,383	778
Total	\$6,906,580	\$8,617,080	\$6,954,372	\$10,804,488

Mortgage-Backed Securities. These securities are issued by Fannie Mae, Ginnie Mae and Freddie Mac, and various commercial entities and may include short embedded prepayment options. Unanticipated prepayments by the obligees of the underlying asset reduce the total expected rate of return.

Collateralized Mortgage Obligations. Collateralized mortgage obligations (CMOs) generate a return based upon the payment of either interest or principal on mortgages in an underlying pool. The relationship between interest rates and prepayments makes the fair value highly sensitive to changes in interest rates. In falling interest rate environments, the underlying mortgages are subject to a higher propensity of prepayments. In rising interest rate environments, the opposite is true.

Other Asset-Backed Securities. Other asset-backed securities also generate a return based upon the payment of either interest or principal on obligations in an underlying pool, generally associated with auto loans or credit cards. As with CMOs, the relationship between interest rates and prepayments makes the fair value highly sensitive to changes in interest rates.

Variable-Rate Securities. These securities are investments with terms that provide for the adjustment of their interest rates on set dates and are expected to have fair values that will be relatively unaffected by interest rate changes. Variable-rate securities may have limits on how high or low the interest rate may go. These constraints may affect the market value of the security.

Callable Bonds. Although bonds are issued with clearly defined maturities, an issuer may be able to redeem, or call, a bond earlier than its maturity date. The called bond must then be replaced with a bond that may have a lower yield than the original. The call feature causes the fair value to be highly sensitive to changes in interest rates.

At June 30, 2022 and 2021, the effective durations for these securities are as follows:

(in years)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
Mortgage-backed securities	5.9	4.5	5.4	2.6
Collateralized mortgage obligations			4.6	5.3
Other asset-backed securities	3.0		3.0	1.5
Variable-rate securities	3.4	3.6	4.8	5.1
Structured notes	2.8	2.9	5.2	5.7
Callable bonds	3.9	3.8	3.6	3.5
Convertible bonds	1.1	2.6	1.3	2.4

Foreign Currency Risk

The Regents’ strategic asset allocation policies include allocations to non-U.S. equities and non-dollar-denominated bonds. The benchmarks for these investments are not hedged; therefore, the investment strategies include foreign currency risk. Portfolio guidelines for U.S. investment-grade, fixed-income securities also allow exposure to non-U.S. dollar-denominated bonds up to 10 percent of the total portfolio market value. Exposure to foreign currency risk from these securities is permitted, and it may be fully or partially hedged using forward foreign currency exchange contracts. Under The Regents’ investment policies, such instruments are not permitted for speculative use or to create leverage. Similar limits on foreign exchange exposure apply to the high-yield debt and emerging market debt portfolios.

At June 30, 2022 and 2021, the foreign currency risk expressed in U.S. dollars, organized by currency denomination and investment type, are as follows:

<i>(in thousands of dollars)</i>	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
<i>Equity securities:</i>				
Euro	\$2,615,351	\$4,080,689	\$967,787	\$1,092,079
British Pound	1,042,331	1,640,066	482,554	489,906
Japanese Yen	1,617,603	2,345,553	656,695	804,141
Swiss Franc	879,006	1,173,436	296,621	306,814
South Korean Won	488,606	851,114	111,068	151,448
Canadian Dollar	762,807	1,012,185	342,100	365,612
New Taiwan Dollar	650,536	739,613	144,002	139,207
Indian Rupee	841,435	588,703	124,834	112,675
Australian Dollar	440,310	624,805	227,856	241,332
Hong Kong Dollar	1,077,692	1,622,509	334,293	395,569
Swedish Krona	280,058	466,415	108,702	146,671
South African Rand	108,731	165,157	34,071	39,813
Thailand Baht	83,226	94,563	18,793	18,597
Danish Krone	192,283	252,213	76,715	86,373
Singapore Dollar	109,639	88,048	36,456	31,794
Norwegian Krone	55,230	120,488	31,502	32,157
Brazilian Real	111,538	192,283	47,337	59,725
Mexican Peso	60,619	78,410	20,361	19,367
Chinese Yuan	323,380	210,589	92,570	55,122
Other	496,177	519,639	249,337	140,611
Subtotal	12,236,558	16,866,478	4,403,654	4,729,013
Commingled funds				
<i>Various currency denominations:</i>				
Non-U.S. equity funds	6,824,969	8,042,236		
Real assets	118,786	211,571		
Private equity	451,283	434,925		
Non-U.S. bond funds	11	14		
Subtotal	7,395,049	8,688,746		
<i>Investment derivatives:</i>				
Hong Kong Dollar			1	(53)
Australian Dollar	18	8	7	(36)
Canadian Dollar	69	185	32	115
British Pound				(137)
Japanese Yen				(225)
Euro	679	168	5	(260)
Other	28	131	1	(29)
Subtotal	794	492	46	(625)
<i>Real estate:</i>				
<i>Publicly traded real estate investment trusts</i>				
Euro	20,999	33,927	8,189	11,682
Australian Dollar	37,453	51,539	15,273	18,281
British Pound	28,406	39,282	12,555	13,475
Japanese Yen	46,780	71,008	19,002	24,814
Singapore Dollar	21,221	24,482	9,142	8,929
Canadian Dollar	11,395	13,388	4,162	4,504
Other	21,675	27,389	5,733	6,409
Subtotal	187,929	261,015	74,056	88,094
Total exposure to foreign currency risk	\$19,820,330	\$25,816,731	\$4,477,756	\$4,816,482

3. SECURITIES LENDING

The UCRS Plans participate in a securities lending program as a means to augment income. Securities invested by the Plans are lent to selected brokerage firms for which collateral received equals or exceeds the fair value of such investments during the period of the loan. Securities loans immediately terminate upon notice by either the UCRS Plans or the borrower. Collateral may be cash or securities issued by the U.S. government or its agencies, or the sovereign or provincial debt of foreign countries. Collateral securities cannot be pledged or sold by the UCRS Plans unless the borrower defaults.

Loans of domestic equities and all fixed-income securities are initially collateralized at 102 percent of the fair value of securities lent. Loans of foreign equities are initially collateralized at 105 percent. All borrowers are required to provide additional collateral by the next business day if the value of the collateral falls to less than 100 percent of the fair value of securities lent.

Cash collateral received from the borrower is invested by lending agents, as agents for the UCRS Plans, in investment pools in the name of the UCRS Plans, with guidelines approved by the UCRS Plans. These investments are shown as investment of cash collateral in the statements of net position. At June 30, 2022 and 2021, the securities in these pools had a weighted average maturity of 3 and 24 days, respectively. UCRS Plans record a liability for the return of the cash collateral shown as collateral held for securities lending in the statements of net position. Securities collateral received from the borrower is held in an investment pool by the UCRS Plans' custodial bank.

At June 30, 2022 and 2021, the UCRS Plans had little exposure to borrowers because the amounts the UCRS Plans owed the borrowers were substantially the same as the amounts the borrowers owed the UCRS Plans. UCRS Plans are fully indemnified by their lending agents against any losses incurred as a result of borrower default.

Securities lending transactions at June 30, 2022 and 2021, are as follows:

(in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
SECURITIES LENT				
For cash collateral:				
<i>Equity securities:</i>				
Domestic	\$4,970,549	\$2,876,370	\$2,332,733	\$2,404,241
Foreign	648,003	228,786	337,496	106,592
<i>Fixed-income securities:</i>				
U.S. government-guaranteed	92,999	815,541	115,930	735,624
U.S. agency		44,367	41,733	77,336
Other U.S. dollar-denominated	1,235,959	1,358,455	255,696	490,522
Foreign currency-denominated	15,754	18,828		
Lent for cash collateral	6,963,264	5,342,347	3,083,588	3,814,315
For securities collateral:				
<i>Equity securities:</i>				
Domestic	51	1,407,281	63	903,959
Foreign	2,803	1,513,792	854	610,582
<i>Publicly traded real estate investment trusts:</i>				
Publicly traded real estate investment trust	5		8	
<i>Fixed-income securities:</i>				
U.S. government		480,232		1,100,847
Other U.S. dollar-denominated		285,824		257,089
Foreign currency-denominated		61,512		
Lent for securities collateral	2,859	3,748,641	925	2,872,477
Total securities lent	\$6,966,123	\$9,090,988	\$3,084,513	\$6,686,792
COLLATERAL RECEIVED				
Cash	\$7,204,652	\$5,470,316	\$3,196,347	\$3,898,876
Securities	3,065	4,033,078	991	3,090,432
Total collateral received	\$7,207,717	\$9,503,394	\$3,197,338	\$6,989,308
INVESTMENT OF CASH RECEIVED				
Fixed- or variable-income securities:				
<i>Other U.S. dollar-denominated:</i>				
Corporate bonds	\$57,358	\$145,100	\$25,447	\$103,417
Commercial paper	595,111	351,202	264,021	250,313
Repurchase agreements	3,490,239	3,218,040	1,548,446	2,293,604
Certificates of deposit/time deposits	3,066,797	1,732,454	1,360,585	1,234,778
Supranational/foreign		25,590		18,239
Other assets (liabilities), net*	(4,852)	(2,070)	(2,153)	(1,475)
Total investment of cash collateral	\$7,204,653	\$5,470,316	\$3,196,346	\$3,898,876

*Other assets (liabilities), net is composed of pending settlements of cash collateral investments.

UCRS Plans earn interest and dividends on the collateral held during the loan period, as well as a fee from the brokerage firm, and are obligated to pay a fee and rebate to the borrower. UCRS receives the net investment income.

Investment Risk Factors

There are a variety of potential risk factors involved in a securities lending program. Risks associated with the investment of cash collateral may include the credit risk from fixed-income securities, concentration of credit risk, interest rate risk and foreign currency risk. In addition, there may be custodial credit risk associated with both cash and securities received as collateral for securities lent.

The UCRS Plans' investment policies and other information related to each of these risks are summarized below.

Credit Risk

The UCRS Plans' investment policies for the investment of cash collateral maintained in separately managed collateral pools restrict the credit rating of issuers to no less than A-1, P-1 or F-1 for short-term securities and no less than A2/A for long-term securities. Asset-backed securities must have a rating of AAA at the time of purchase.

The credit risk profile for fixed- or variable-income securities and commingled funds associated with the investment of cash collateral at June 30, 2022 and 2021, is as follows:

(in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
<i>Other U.S. dollar-denominated:</i>				
AAA		\$25,590		\$18,239
AA-	\$548,200	465,901	\$243,208	332,063
A+	1,401,293	531,064	621,685	378,506
A	639,023	244,295	283,504	174,119
A-1+	367,092		162,861	
A-1	763,658		338,799	
A1/P1/F1	1,130,750	987,496	501,660	703,821
Other liability, net	(4,852)	(2,070)	(2,153)	(1,475)

Custodial Credit Risk

Cash collateral received for securities lent is invested in pools by the UCRS Plans' lending agents. The UCRS Plans' securities related to the investment of cash collateral are registered in the UCRS Plans' name by the lending agent. Securities collateral received for securities lent are held in investment pools by the UCRS Plans' lending agent. As a result, custodial credit risk is remote.

Concentration of Credit Risk

The UCRS Plans' investment guidelines, with respect to the concentration of credit risk associated with the investment of cash collateral in the separately managed collateral pools, restricts investments in any single issuer of corporate debt securities, time deposits, certificates of deposit, banker's acceptances and in money market funds generally limited to no more than 5 percent of the portfolio value at the time of purchase.

Investments in issuers other than U.S. government-guaranteed securities that represent 5 percent or more of the total investment of cash collateral held at June 30, 2022 and 2021, are as follows:

(in thousands of dollars)

	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
Morgan Stanley & Co LLC		\$524,996		\$374,182
Goldman Sachs & Co.		279,646		199,314
Citigroup Global Markets Inc.	\$421,008	522,358	\$186,781	372,303
JP Morgan Securities LLC	473,204	435,826	209,936	310,627
Barclays Bank PLC		641,075		456,917

Interest Rate Risk

The nature of individual securities in the collateral pools allows for the use of weighted average maturity as an effective risk management measure. The UCRS Plans' investment guidelines with respect to the interest rate risk associated with the investment of cash collateral in the separately managed collateral pools requires the weighted average maturity of the entire collateral pool to be less than 120 days. The maturity of securities issued by the U.S. government and asset-backed securities must be less than five years, corporate debt obligations must be less than two years and time deposits must be less than 190 days.

The weighted average maturity expressed in days outstanding for fixed- or variable-income securities associated with the investment of cash collateral at June 30, 2022 and 2021, is as follows:

<i>(in days)</i>	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
<i>Other U.S. dollar-denominated:</i>				
Corporate bonds	1	35	1	35
Commercial paper	6	97	6	97
Repurchase agreements	3	1	3	1
Certificates of deposit/time deposits	5	49	5	49
Supranational/foreign		21		21

Investment of cash collateral may include various asset-backed securities, structured notes and variable-rate securities that may be considered highly sensitive to changes in interest rates due to the existence of prepayment or conversion features, although the weighted average maturity may be short.

At June 30, 2022 and 2021, the fair value of investments that are considered to be highly sensitive to changes in interest rates is as follows:

<i>(in thousands of dollars)</i>	DEFINED BENEFIT PLANS		UCRSP	
	2022	2021	2022	2021
Other asset-backed securities		\$25,590		\$18,239
Variable-rate investments	\$5,810,318	3,854,631	\$2,577,750	2,747,324

At June 30, 2022 and 2021, the weighted average maturity expressed in days for asset-backed securities was less than 1 day and 21 days, respectively and for variable-rate investments was less than 1 day and 18 days, respectively.

Foreign Currency Risk

The UCRS Plans' investment guidelines with respect to the foreign currency risk associated with the investment of cash collateral maintained in separate collateral pools restrict investments to U.S. dollar-denominated securities. Therefore, there is no foreign currency risk.

4. FINANCIAL DERIVATIVE INSTRUMENTS

The UCRS Plans' investments may use derivatives including futures, foreign currency exchange contracts, options, forward contracts, stock rights and warrants as a substitute for investment in equity and fixed-income securities or to reduce the effect of fluctuating foreign currencies on foreign currency-denominated investments or to limit the exposure of variable-rate bonds to changes in market interest rates.

UCRS Plans enter into futures contracts for the purpose of acting as a substitute for investment in equity and fixed-income securities. A futures contract is an agreement between two parties to buy and sell a security or financial index, interest rate or foreign currency at a set price on a future date. They are standardized contracts that can be easily bought and sold and are exchange-traded. Upon entering into such a contract, UCRS Plans are required to pledge to the broker an amount of cash or securities equal to the minimum initial margin requirements of the exchange on which the contract is traded. Pursuant to the contract, UCRS Plans agree to receive from, or pay to, the counterparty an amount of cash equal to the daily fluctuation in the value of the contract. These contracts are settled on a daily basis, with the resulting realized gain or loss included in the statement of changes in fiduciary net position. The settlement amount at the end of each day for each of the contracts, or variation margin, is included in investments and represents the fair value of the contracts.

Forward contracts are similar to futures contracts, although they are not exchange-traded. Foreign currency exchange contracts are forward contracts used to hedge against foreign currency exchange rate risks on non-U.S. dollar-denominated investment securities and to increase or decrease exposure to various foreign currencies.

A swap is a contractual agreement entered into between the UCRS Plans and a counterparty under which each agrees to exchange periodic fixed or variable payments for an agreed period of time based upon a notional amount of principal or value of the underlying contract. The payments correspond to an equity index, interest rate or currency. The UCRS Plans consider their futures, forward contracts, rights, warrants and interest rate swaps to be investment derivatives.

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2022 and 2021, categorized by type, and the changes in fair value of such derivatives for the years then ended are as follows:

DEFINED BENEFIT PLANS (in thousands of dollars)

CATEGORY	NOTIONAL AMOUNT		FAIR VALUE-POSITIVE (NEGATIVE)			CHANGES IN FAIR VALUE		
	2022	2021	CLASSIFICATION	2022	2021	CLASSIFICATION	2022	2021
INVESTMENT DERIVATIVES								
Futures contracts, net:								
<i>Domestic equity futures:</i>								
Long positions	\$527,160	\$713,181	Investments	(\$3,282)	\$2,150	Net appreciation (depreciation)	(\$85,074)	\$174,568
<i>Foreign equity futures:</i>								
Long positions	7,086	8,547	Investments	(459)	102	Net appreciation (depreciation)	(141)	2,134
Futures contracts, net	534,246	721,728		(3,741)	2,252		(85,215)	176,702
<i>Foreign currency exchange contracts, net:</i>								
Long positions	1,644		Investments	(16)		Net appreciation	814	461
Short positions	340,938	319,622	Investments	15,422	1,636	Net appreciation (depreciation)	32,506	(8,185)
Foreign currency exchange contracts, net	342,582	319,622		15,406	1,636		33,320	(7,724)
<i>Other, net:</i>								
Stock rights/warrants	167		Investments	911	841	Net appreciation (depreciation)	(1,879)	601
Other, net	167			911	841		(1,879)	601
Total investment derivatives	\$876,995	\$1,041,350		\$12,576	\$4,729		(\$53,774)	\$169,579

UCRSP (in thousands of dollars)

CATEGORY	NOTIONAL AMOUNT		FAIR VALUE-POSITIVE (NEGATIVE)			CHANGES IN FAIR VALUE		
	2022	2021	CLASSIFICATION	2022	2021	CLASSIFICATION	2022	2021
Futures contracts, net:								
<i>Domestic equity futures:</i>								
Long positions	\$110,772	\$162,474	Investments	(\$1,219)	\$644	Net appreciation (depreciation)	(\$22,318)	\$61,604
<i>Foreign equity futures:</i>								
Long positions	48,236	54,942	Investments	(1,793)	(490)	Net appreciation (depreciation)	(3,665)	10,633
Futures contracts, net	159,008	217,416		(3,012)	154		(25,983)	72,237
<i>Foreign currency exchange contracts, net:</i>								
Long positions	11,186	13,196	Investments	(256)	(241)	Net (depreciation)	(2,544)	(100)
Short positions			Investments			Net appreciation (depreciation)	397	(15)
Foreign currency exchange contracts, net	11,186	13,196		(256)	(241)		(2,147)	(115)
<i>Other, net:</i>								
Stock rights/warrants	1		Investments	227	450	Net appreciation (depreciation)	(1,501)	130
Other, net	1			227	450		(1,501)	130
Total investment derivatives	\$170,195	\$230,612		(\$3,041)	\$363		(\$29,631)	\$72,252

5. FAIR VALUE

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities reported at fair value are organized into a hierarchy based on the levels of inputs observable in the marketplace that are used to measure fair value. Inputs are used in applying the various valuation techniques and take into account the assumptions that market participants use to make valuation decisions. Inputs may include price information, credit data, liquidity statistics and other factors specific to the financial instrument. Observable inputs reflect market data obtained from independent sources. In contrast, unobservable inputs reflect the entity's assumptions about how market participants would value the financial instrument.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used for financial instruments measured at fair value on a recurring basis:

Level 1 — Prices based on unadjusted quoted prices in active markets that are accessible for identical assets or liabilities are classified as Level 1. Level 1 investments include equity securities, commingled funds (exchange-traded funds and mutual funds), certain exchange-traded derivatives (warrants, rights, options and futures) and other publicly traded securities.

Level 2 — Quoted prices in markets that are not considered to be active, dealer quotations or alternative pricing sources for similar assets or liabilities for which all significant inputs are observable, either directly or indirectly, are classified as Level 2. Level 2 investments include fixed- or variable-income securities, commingled funds (institutional funds not listed in active markets), certain nonexchange-traded derivatives (warrants, rights, options, futures, repurchase agreements, swaptions and swaps) and other assets that are valued using market information.

Level 3 — Investments classified as Level 3 have significant unobservable inputs, as they trade infrequently or not at all. The inputs into the determination of fair value of these investments are based upon the best information in the circumstance and may require significant management judgment. Level 3 investments include private equity investments, real assets and real estate.

Net Asset Value (NAV) — Investments whose fair value is measured at NAV are excluded from the fair value hierarchy. Investments in nongovernmental entities that do not have a readily determinable fair value may be valued at NAV. Investments measured at NAV include hedge funds, private equity investments and commingled funds.

Not Levelled — Cash and cash equivalents are not measured at fair value and, thus, are not subject to the fair value disclosure requirements.

The following tables summarize the investments and other assets reported at fair value within the fair value hierarchy as of June 30, 2022 and 2021:

DEFINED BENEFIT PLANS 2022 *(in thousands of dollars)*

		QUOTED PRICES IN ACTIVE MARKETS	OTHER OBSERVABLE INPUTS	UNOBSERVABLE INPUTS	NET ASSET VALUE	NOT LEVELED
	TOTAL	(LEVEL 1)	(LEVEL 2)	(LEVEL 3)	(NAV)	
Equity securities	\$35,700,106	\$35,700,106				
<i>Fixed- or variable-income securities:</i>						
U.S. government-guaranteed	3,609,184		\$3,609,184			
Other U.S. dollar-denominated	7,574,456	4,810	7,569,646			
Commingled funds	30,451,929	836,016	911	\$1,043,286	\$28,314,517	\$257,199
Investment derivatives	12,576	21,460	(8,884)			
Publicly traded real estate investment trusts	1,793,774	1,793,774				
Other investments	576,364			379,465	196,899	
Real estate	1,811,614			1,379	1,810,235	
Total investments	\$81,530,003	\$38,356,166	\$11,170,857	\$1,424,130	\$30,321,651	\$257,199
Securities lending investments of cash collateral	\$7,204,653		\$7,209,498			(\$4,845)

DEFINED BENEFIT PLANS 2021 (in thousands of dollars)

	TOTAL	QUOTED PRICES IN ACTIVE MARKETS	OTHER OBSERVABLE INPUTS	UNOBSERVABLE INPUTS	NET ASSET VALUE	NOT LEVELED
		(LEVEL 1)	(LEVEL 2)	(LEVEL 3)	(NAV)	
Equity securities	\$42,805,295	\$42,805,272		\$23		
<i>Fixed- or variable-income securities:</i>						
U.S. government-guaranteed	5,678,406		\$5,678,406			
Other U.S. dollar-denominated	10,353,220		10,353,220			
Commingled funds	30,492,853	1,024,937		901,102	\$28,469,306	\$97,508
Investment derivatives	4,729	842	3,887			
Publicly traded real estate investment trusts	1,080,701	1,080,229			472	
Real estate	1,689,993				1,689,993	
Total investments	\$92,105,197	\$44,911,280	\$16,035,513	\$901,125	\$30,159,771	\$97,508
Securities lending investments of cash collateral	\$5,470,316		\$5,472,386			(\$2,070)

UCRSP 2022 (in thousands of dollars)

	TOTAL	QUOTED PRICES IN ACTIVE MARKETS	OTHER OBSERVABLE INPUTS	UNOBSERVABLE INPUTS	NET ASSET VALUE	NOT LEVELED
		(LEVEL 1)	(LEVEL 2)	(LEVEL 3)	(NAV)	
Equity securities	\$14,742,018	\$14,742,018				
<i>Fixed- or variable-income securities:</i>						
U.S. government-guaranteed	3,676,470		\$3,676,470			
Other U.S. dollar-denominated	5,590,345	4,286	5,586,059			
Commingled funds	2,587,039	370,696	204		\$2,133,081	\$83,058
Investment derivatives	(3,041)	204	(3,245)			
Publicly traded real estate investment trusts	1,016,967	1,016,967				
Total investments	\$27,609,798	\$16,134,171	\$9,259,488		\$2,133,081	\$83,058
Securities lending investments of cash collateral	\$3,196,346		\$3,198,499			(\$2,153)

UCRSP 2021 (in thousands of dollars)

	TOTAL	QUOTED PRICES IN ACTIVE MARKETS	OTHER OBSERVABLE INPUTS	UNOBSERVABLE INPUTS	NET ASSET VALUE	NOT LEVELED
		(LEVEL 1)	(LEVEL 2)	(LEVEL 3)	(NAV)	
Equity securities	\$17,865,194	\$17,587,505	\$119,308		\$158,381	
<i>Fixed- or variable-income securities:</i>						
U.S. government-guaranteed	4,241,663		4,241,663			
Other U.S. dollar-denominated	5,938,144		5,938,144			
Commingled funds	3,301,568	346,008			2,932,992	\$22,568
Investment derivatives	363	429	(66)			
Publicly traded real estate investment trusts	1,124,364	1,123,238	848		278	
Total investments	\$32,471,296	\$19,057,180	\$10,299,897		\$3,091,651	\$22,568
Securities lending investments of cash collateral	\$3,898,876		\$3,900,351			(\$1,475)

The following table presents significant terms of certain investments at June 30, 2022:

DEFINED BENEFIT PLANS *(in thousands of dollars)*

INVESTMENT TYPE	FAIR VALUE	UNFUNDED COMMITMENTS	REMAINING LIFE (YEARS)	REDEMPTION TERMS AND RESTRICTIONS
Absolute return	\$2,843,897			Not eligible for redemption and lock-up provisions ranging from 0 to 3 years. For securities not eligible for redemptions the underlying assets are estimated to be liquidated within 3 to 5 years. For securities eligible for redemptions, after initial lock-up expires, redemptions are available on a rolling basis and require 30 to 365 days' prior notification.
Private equity	8,746,627	\$4,376,541	0 to 15	Not eligible for redemption.
Private credit	2,127,956	542,443	0 to 10	Not eligible for redemption and lock-up provisions ranging from 0 to 10 years. For securities not eligible for redemptions the underlying assets are estimated to be liquidated within 3 to 7 years. For securities eligible for redemptions, after initial lock-up expires, redemptions are available on a rolling basis and require 30 to 365 days prior notification before winding down.
Real assets	3,333,596	1,296,449	0 to 15	Not eligible for redemption.
U.S. equity funds	528,747			Redemption generally requires at least 0 to 90 days written notice of intention to terminate as of a date specified in the notice. Payments of withdrawal requests are generally made within 0 to 120 days.
Non-U.S. equity funds	6,824,969			Redemption requires at least 0 to 180 days prior written notice of intention to terminate as of a date determined by the legal agreement between the investment manager and The Regents. Withdrawals may occur on the last business day of the month and are subject to certain withdrawal guidelines.
Real estate and real estate investment trusts	5,206,895	808,518	0 to 10	Closed-end funds are not eligible for redemption. For open-end funds, redemptions are generally on a quarterly basis where the redemption date is the last day of each quarter. Payments of withdrawal requests are generally made within four quarters.

UCRSP *(in thousands of dollars)*

INVESTMENT TYPE	FAIR VALUE	UNFUNDED COMMITMENTS	REMAINING LIFE (YEARS)	REDEMPTION TERMS AND RESTRICTIONS
U.S. equity funds	\$1,961,169			Redemption generally requires at least 0 to 90 days written notice of intention to terminate as of a date specified in the notice. Payments of withdrawal requests are generally made within 0 to 120 days.

6. CONTRIBUTIONS

Contributions to UCRP are based upon rates determined by The Regents. The Regents' funding policy provides for contributions at rates which are reasonably expected to maintain UCRP on an actuarially sound basis. While the University's independent actuary annually determines the total funding policy contributions, the University is not required to contribute an amount equal to the total funding policy contributions. The actual contributions and the contribution rates of the University and employees are based on numerous factors, including the availability of funds to the University, the impact of employee contributions on the competitiveness of the University's total remuneration package and collective bargaining agreements.

The Regents determine the portion of the total contribution to be made by the employer (University) and by the employees (members). The University pays a uniform contribution rate on behalf of all UCRP active members on covered payroll. The contribution rate was 15.0 percent and 14.5 percent for the fiscal years ended June 30, 2022 and 2021, respectively. In order to pay down the unfunded liability of UCRP, effective July 1, 2016, the University pays a separate uniform contribution rate into UCRP on covered payroll on behalf of all active Savings Choice participants, which is generally 8 percent less than the contribution rate the University pays on behalf of UCRP active members. This separate University contribution rate was 7.0 percent and 6.5 percent for the fiscal years ended June 30, 2022 and 2021, respectively. Future University contribution rates, as approved by The Regents, are shown below:

EFFECTIVE	UNIVERSITY RATE TO UCRP ON BEHALF OF	
	UCRP ACTIVES	SAVINGS CHOICE ACTIVES*
7/1/2022	14.0%	6.0%
7/1/2023	14.0	6.0
7/1/2024	15.0	7.0
7/1/2025	15.5	7.5
7/1/2026	16.0	8.0
7/1/2027	16.5	8.5
7/1/2028	17.0	9.0

* Contributed towards UCRP unfunded liability.

Mandatory employee contributions, made as a condition of employment, are based upon covered University wages less a specified monthly reduction, determined periodically by The Regents. Effective July 1, 2014, member contribution rates, by tier are as shown below:

MEMBER TIER	MEMBER CONTRIBUTION RATE
1976 TIER*	8.0%
2013 TIER/2016 TIER (Eff. 7/1/2016)	7.0
SAFETY*	9.0

* Contributions offset by \$19 per month.

Under current collective bargaining agreements, employees represented by several unions participate in a modified version of the 2013 Tier (Modified 2013 Tier), where the retirement ages and age factors are not increased and lump sum cashouts are available. In exchange for these modifications, all employees represented by these unions (including those who are 1976 Tier members) pay 9.0 percent of their retirement covered gross salary effective July 1, 2014.

Member contributions to UCRP are accounted for separately and currently accrue interest at 6.0 percent annually. Upon termination, members may elect a refund of their contributions plus accumulated interest. Vested terminated members who are eligible to retire may also elect monthly retirement income or, if entitled, a lump sum equal to the present value of their accrued benefits.

The Lawrence Berkeley National Laboratory (LBNL), as a separate segment of UCRP, is required to make employer and employee contributions in conformity with The Regents' contract with the Department of Energy (DOE). In addition, under certain circumstances the University contributes to UCRP based upon a contractual arrangement with the DOE designed to achieve 100 percent funding within seven years for each of the Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL) retained segments within UCRP, with these contributions reimbursed by the DOE.

7. NET PENSION LIABILITY

The components of the net pension liability of UCRP and the UC-VERIP at June 30, 2022 and 2021, are as follows:

(in thousands of dollars)

	UCRP		UC-VERIP*	
	2022	2021	2022	2021
Total pension liability	\$102,635,910	\$97,663,860	\$20,227	\$22,059
Plan net position	81,363,028	91,749,798	65,024	76,204
Net pension liability (surplus)	\$21,272,882	\$5,914,062	(\$44,797)	(\$54,145)
Ratio of plan net position to total pension liability	79.3%	93.9%	321.5%	345.5%
Covered payroll	\$13,921,086	\$13,215,494		
Net pension liability as a percentage of covered payroll	152.8%	44.8%		

*There is no covered payroll for the UC-VERIP.

Actuarial Assumptions

The net pension liability was measured as of June 30, 2022 and June 30, 2021. Plan net position was valued as of the measurement date (June 30), while the total pension liability was determined based upon rolling forward the total pension liability from the July 1, 2021 and 2020 actuarial valuations, respectively. The actuarial assumptions used as of June 30, 2022, were based on the results of the most recent experience study covering the period of July 1, 2014 through June 30, 2018. The following assumptions are used:

(shown as percentage)

Discount rate	6.75%
Inflation	2.50
Investment rate of return	6.75
Projected salary increases	3.65 - 5.95
Cost-of-living adjustments*	4.41% for those who retired 7/2/2019 - 7/1/2020; 3.69% for all others eligible for COLA

*Greater than the 2.00% assumption from the most recent experience study.

Discount Rate

To calculate the discount rate, cash flows into and out of the DB Plans were projected in order to determine whether each DB Plan has sufficient cash in future periods for projected benefit payments for current members. For this purpose, University contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected University, state and member contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions of future plan members, are not included. The DB Plans are projected to have assets sufficient to make projected benefit payments for current members for all future years.

Investment Rate of Return

The long-term expected investment rate of return assumption for the DB Plans was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected expenses and a risk margin. The projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

(shown as percentage)

	TARGET ALLOCATION	PROJECTED REAL RATE OF RETURN
<i>Asset class:</i>		
U.S. equity	27.6%	5.6%
Developed international equity	16.8	6.5
Emerging market equity	5.6	8.6
Core bonds	13.0	1.5
High-yield bonds	2.5	3.7
Treasury inflation-protected securities	2.0	1.2
Emerging market debt	2.5	3.9
Private equity	10.0	9.2
Real estate	7.0	6.6
Absolute return	10.0	3.3
Real assets	3.0	5.6
Weighted average	100.0%	5.4%

Mortality Rates

Mortality rates used to calculate the total pension liability were:

MORTALITY RATES	
Preretirement	Pub-2010 Teacher Employee Amount-Weighted Above-Median Mortality Table
Postretirement healthy members	Pub-2010 Healthy Teacher Amount-Weighted Above-Median Mortality Table multiplied by 90 percent for male faculty members, 95 percent for female faculty members, 100 percent for other male members and 110 percent for other female members
Postretirement disabled members	Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table
Beneficiaries of retired members	Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table multiplied by 100 percent for males and 90 percent for females

All mortality tables above were projected generationally with the two-dimensional mortality improvement scale MP-2018.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the current-period net pension liability (surplus) of UCRP and the UC-VERIP calculated using the current-period discount rate assumption of 6.75 percent, as well as what the net pension liability (surplus) would be if it were calculated using a discount rate different than the current assumption:

(in thousands of dollars)

	1% DECREASE (5.75%)	CURRENT ASSUMPTION (6.75%)	1% INCREASE (7.75%)
UCRP	\$35,119,760	\$21,272,882	\$9,893,394
UC-VERIP	(43,826)	(44,797)	(45,675)

8. PLAN TERMINATION

The Regents expect to continue the UCRS Plans indefinitely but reserves the right to amend or discontinue the UCRS Plans at any time provided that any such action shall not lessen accrued benefits of any members. In the event that either DB Plan is terminated, UCRS Plan assets shall be applied solely for the benefit of retired, vested or active participants and beneficiaries, until all liabilities of the UCRS Plans have been satisfied. Once all liabilities have been satisfied, any excess assets of the DB Plans shall revert to The Regents.

The benefits of UCRS noted above are not insured by the Pension Benefit Guaranty Corporation, a federal insurance agency established under Title IV of the Employee Retirement Income Security Act of 1974.

Required Supplementary Information (Unaudited)

UCRP

The schedule of changes in net pension liability includes multiyear trend information about whether the pension assets are increasing or decreasing over time relative to the pension liabilities. The schedule of changes in the net pension liability for UCRP as of June 30 is:

(in thousands of dollars)

	2022	2021	2020	2019	2018
TOTAL PENSION LIABILITY					
Service cost	\$2,588,194	\$2,564,134	\$2,466,497	\$1,946,612	\$1,873,004
Interest on the total pension liability	6,633,210	6,311,412	5,981,599	5,576,660	5,295,733
Difference between expected and actual experience	284,807	462,839	(282,321)	334,605	138,419
Changes of assumptions or other inputs				7,816,717	
Benefits paid, including refunds of employee contributions	(4,534,161)	(4,299,910)	(3,944,998)	(3,816,434)	(3,587,554)
Net change in total pension liability	4,972,050	5,038,475	4,220,777	11,858,160	3,719,602
Total pension liability - beginning of year	97,663,860	92,625,385	88,404,608	76,546,448	72,826,846
Total pension liability - end of year	102,635,910	97,663,860	92,625,385	88,404,608	76,546,448
PLAN NET POSITION					
Contributions - employer	2,892,621	2,705,058	2,444,025	2,408,650	2,335,874
Contributions - member	1,105,405	1,053,939	1,019,302	956,543	941,144
Contributions - state					169,000
Net investment income (loss)	(9,765,875)	21,439,296	1,184,938	4,018,595	4,837,552
Benefits paid, including refunds of employee contributions	(4,534,161)	(4,299,910)	(3,944,998)	(3,816,434)	(3,587,554)
Administrative expense	(84,760)	(64,826)	(65,989)	(61,981)	(36,684)
Net change in plan net position	(10,386,770)	20,833,557	637,278	3,505,373	4,659,332
Plan net position - beginning of year	91,749,798	70,916,241	70,278,963	66,773,590	62,114,258
Plan net position - end of year	81,363,028	91,749,798	70,916,241	70,278,963	66,773,590
Net pension liability - end of year	\$21,272,882	\$5,914,062	\$21,709,144	\$18,125,645	\$9,772,858

(in thousands of dollars)

	2017	2016	2015	2014	2013
TOTAL PENSION LIABILITY					
Service cost	\$1,807,143	\$1,710,241	\$1,589,267	\$1,519,183	\$1,456,761
Interest on the total pension liability	5,035,267	4,784,904	4,538,846	4,316,728	4,112,461
Difference between expected and actual experience	74,664	136,167	(112,155)	(320,624)	(183,253)
Changes of assumptions or other inputs			2,136,793		(3,312,815)
Benefits paid, including refunds of employee contributions	(3,320,990)	(3,105,641)	(2,976,992)	(2,687,540)	(2,487,369)
Net change in total pension liability	3,596,084	3,525,671	5,175,759	2,827,747	(414,215)
Total pension liability - beginning of year	69,230,762	65,705,091	60,529,332	57,701,585	58,115,800
Total pension liability - end of year	72,826,846	69,230,762	65,705,091	60,529,332	57,701,585
PLAN NET POSITION					
Contributions - employer	2,385,576	2,426,683	2,510,046	1,580,876	810,056
Contributions - member	891,987	845,036	793,012	577,466	415,641
Contributions - state	171,000	96,000			
Net investment income (loss)	7,866,281	(1,104,655)	1,993,801	8,009,980	4,833,339
Benefits paid, including refunds of employee contributions	(3,320,990)	(3,105,642)	(2,976,993)	(2,687,540)	(2,487,369)
Administrative expense	(44,128)	(48,340)	(48,283)	(37,641)	(37,426)
Net change in plan net position	7,949,726	(890,918)	2,271,583	7,443,141	3,534,241
Plan net position - beginning of year	54,164,532	55,055,450	52,783,867	45,340,726	41,806,485
Plan net position - end of year	62,114,258	54,164,532	55,055,450	52,783,867	45,340,726
Net pension liability - end of year	\$10,712,588	\$15,066,230	\$10,649,641	\$7,745,465	\$12,360,859

There were no changes in benefit terms, the size or composition of the covered population and/or actuarial assumptions that significantly affected the total pension liability for the fiscal year ended June 30, 2022.

All plan assets are available to pay any member's benefit. UCRP's net pension liability is measured as of June 30. Plan fiduciary net position (plan assets) is valued as of the measurement date, while the total pension liability is determined based upon rolling forward the total pension liability from the July 1 actuarial valuations.

(in thousands of dollars)

	2022	2021	2020	2019	2018
Total pension liability	\$102,635,910	\$97,663,860	\$92,625,385	\$88,404,608	\$76,546,448
Plan net position	81,363,028	91,749,798	70,916,241	70,278,963	66,773,590
Net pension liability	\$21,272,882	\$5,914,062	\$21,709,144	\$18,125,645	\$9,772,858
Ratio of plan net position to total pension liability	79.3%	93.9%	76.6%	79.5%	87.2%
Covered payroll	\$13,921,086	\$13,215,494	\$13,056,696	\$12,168,209	\$11,923,489
Net pension liability as a percentage of covered payroll	152.8%	44.8%	166.3%	149.0%	82.0%

(in thousands of dollars)

	2017	2016	2015	2014	2013
Total pension liability	\$72,826,846	\$69,230,762	\$65,705,091	\$60,529,332	\$57,701,585
Plan net position	62,114,258	54,164,532	55,055,450	52,783,867	45,340,726
Net pension liability	\$10,712,588	\$15,066,230	\$10,649,641	\$7,745,465	\$12,360,859
Ratio of plan net position to total pension liability	85.3%	78.2%	83.8%	87.2%	78.6%
Covered payroll	\$11,301,506	\$10,689,424	\$10,047,570	\$9,372,583	\$8,921,077
Net pension liability as a percentage of covered payroll	94.8%	140.9%	106.0%	82.6%	138.6%

The Regents' funding policy provides for actuarially determined contributions at rates reasonably expected to maintain UCRP on an actuarially sound basis. LBNL is required to make employer and employee contributions in conformity with The Regents' contract with the DOE. The annual contribution deficiency as of June 30 is:

(in thousands of dollars)

YEAR ENDED JUNE 30	ACTUARIALLY DETERMINED CONTRIBUTIONS	CONTRIBUTIONS IN RELATION TO ACTUARIAL CONTRIBUTIONS	CONTRIBUTION DEFICIENCY	COVERED PAYROLL	CONTRIBUTIONS AS A PERCENTAGE OF COVERED PAYROLL
2022	\$3,712,774	\$2,892,621	\$820,153	\$13,921,086	20.8%
2021	3,523,568	2,705,058	818,510	13,215,494	20.5
2020	2,516,234	2,444,025	72,209	13,056,696	18.7
2019	2,742,671	2,408,650	334,021	12,168,209	19.8
2018	2,669,169	2,504,874	164,295	11,923,489	21.0
2017	2,654,710	2,556,576	98,134	11,301,506	22.6
2016	2,610,953	2,522,683	88,270	10,689,424	23.6
2015	2,664,384	2,510,046	154,338	10,047,570	25.0
2014	2,472,697	1,580,876	891,821	9,372,583	16.9
2013	2,062,022	810,056	1,251,966	8,921,077	9.1

NOTES TO SCHEDULE

Methods and assumptions used to determine contribution rates:

Valuation date	Actuarially determined contribution rates are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported.
Actuarial cost method	Entry age actuarial cost method.
Amortization method	Level dollar, closed periods.
Remaining amortization period	16.62 years as of July 1, 2021. The July 1, 2010 amortization bases were combined into a single amortization base and amortized over 30 years. Any changes in Unfunded Actuarial Accrued Liability (UAAL) due to actuarial experience gains or losses after July 1, 2010, are separately amortized over a fixed (closed) 30-year period effective with that valuation. Any changes in UAAL due to a change in actuarial assumptions or plan provisions are separately amortized over a fixed (closed) 15-year period. Any changes in UAAL due to actuarial experience gains or losses or a change in actuarial assumptions after July 1, 2014, are separately amortized over a fixed (closed) 20-year period.
Asset valuation method	The market value of assets less unrecognized returns in each of the last five years. An unrecognized return is equal to the difference between the actual and the expected return on a market value basis and is recognized over a five-year period.
Inflation	2.50%.
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation.
Projected salary increases	3.65-5.95%, varying by service, including inflation.
Cost-of-living adjustments*	4.41% for those who retired 7/2/2019 - 7/1/2020; 3.69% for all others eligible for COLA
Mortality	<i>Active and inactive:</i> Pub-2010 Teacher Employee Amount-Weighted Above-Median Mortality Table. <i>Healthy:</i> Pub-2010 Healthy Teacher Amount-Weighted Above-Median Mortality Table, multiplied by 90 percent for male faculty members, 95 percent for female faculty members, 100 percent for other male members and 110 percent for other female members. <i>Beneficiaries of retired members:</i> Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table multiplied by 100 percent for males and 90 percent for females. <i>Disabled:</i> Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table. All mortality tables listed above are projected generationally with the two-dimensional mortality improvement scale MP-2018.

* Greater than the 2.00% assumption from the most recent experience study

A money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. The annual money-weighted rates of return, net of investment expense adjusted for changing amounts actually invested for the years ended June 30 are as follows:

(shown as percentage)

LAST 10 FISCAL YEARS ENDING JUNE 30	ANNUAL MONEY-WEIGHTED RATE OF RETURN, NET OF INVESTMENT EXPENSE
2022	(10.6)%
2021	30.2
2020	1.7
2019	6.0
2018	7.7
2017	14.5
2016	(2.0)
2015	3.4
2014	17.3
2013	11.2

UC-VERIP

The schedule of changes in net pension liability includes multiyear trend information about whether the pension assets are increasing or decreasing over time relative to the pension liabilities. The schedule of changes in the net pension liability for the UC-VERIP as of June 30 is:

(in thousands of dollars)

	2022	2021	2020	2019	2018
TOTAL PENSION LIABILITY					
Interest on the total pension liability	\$1,384	\$1,513	\$1,656	\$1,983	\$2,042
Difference between expected and actual experience	108	179	(1,342)	(79)	(436)
Changes of assumptions or other inputs				714	
Benefits paid, including refunds of employee contributions	(3,324)	(3,750)	(4,142)	(4,213)	(4,610)
Net change in total pension surplus	(1,832)	(2,058)	(3,828)	(1,595)	(3,004)
Total pension liability - beginning of year	22,059	24,117	27,945	29,540	32,544
Total pension liability - end of year	20,227	22,059	24,117	27,945	29,540
PLAN NET POSITION					
Net investment income	(7,853)	18,277	1,049	3,748	4,885
Benefits paid, including refunds of employee contributions	(3,324)	(3,750)	(4,142)	(4,213)	(4,610)
Administrative expense	(3)	(4)	(4)	(5)	(5)
Net change in plan net position	(11,180)	14,523	(3,097)	(470)	270
Plan net position - beginning of year	76,204	61,681	64,778	65,248	64,978
Plan net position - end of year	65,024	76,204	61,681	64,778	65,248
Net pension surplus - end of year	(\$44,797)	(\$54,145)	(\$37,564)	(\$36,833)	(\$35,708)

(in thousands of dollars)

	2017	2016	2015	2014	2013
TOTAL PENSION LIABILITY					
Interest on the total pension liability	\$2,463	\$2,533	\$2,704	\$2,857	\$3,052
Difference between expected and actual experience	(189)	(650)	242	(436)	(241)
Changes of assumptions or other inputs			1837		
Benefits paid, including refunds of employee contributions	(4,738)	(4,937)	(5,081)	(5,169)	(5,278)
Net change in total pension liability (surplus)	(2,464)	(3,054)	(298)	(2,748)	(2,467)
Total pension liability - beginning of year	35,008	38,062	38,360	41,108	43,575
Total pension liability - end of year	32,544	35,008	38,062	38,360	41,108
PLAN NET POSITION					
Net investment income (loss)	8,666	(1,425)	2,550	11,035	7,144
Benefits paid, including refunds of employee contributions	(4,738)	(4,937)	(5,081)	(5,169)	(5,278)
Administrative expense	(6)	(7)	(6)	(6)	(7)
Net change in plan net position	3,922	(6,369)	(2,537)	5,860	1,859
Plan net position - beginning of year	61,056	67,425	69,962	64,102	62,243
Plan net position - end of year	64,978	61,056	67,425	69,962	64,102
Net pension surplus - end of year	(\$32,434)	(\$26,048)	(\$29,363)	(\$31,602)	(\$22,994)

There were no changes in benefit terms, the size or composition of the covered population and/or actuarial assumptions that significantly affected the total pension liability for the fiscal year ended June 30, 2022.

Plan fiduciary net position (plan assets) is valued as of the measurement date, while the total pension liability is determined based upon rolling forward the total pension liability from the July 1 actuarial valuations. The schedule of net pension surplus for the UC-VERIP as of June 30 is:

(in thousands of dollars)

	2022	2021	2020	2019	2018
Total pension liability	\$20,227	\$22,059	\$24,117	\$27,945	\$29,540
Plan net position	65,024	76,204	61,681	64,778	65,248
Net pension surplus	(\$44,797)	(\$54,145)	(\$37,564)	(\$36,833)	(\$35,708)
Ratio of plan net position to total pension liability	321.5%	345.5%	255.8%	231.8%	220.9%

(in thousands of dollars)

	2017	2016	2015	2014	2013
Total pension liability	\$32,544	\$35,008	\$38,062	\$38,360	\$41,108
Plan net position	64,978	61,056	67,425	69,962	64,102
Net pension surplus	(\$32,434)	(\$26,048)	(\$29,363)	(\$31,602)	(\$22,994)
Ratio of plan net position to total pension liability	199.7%	174.4%	177.1%	182.4%	155.9%

There is no covered payroll for the UC-VERIP and the University has not been required to contribute to the plan since 1996.

UNIVERSITY OF CALIFORNIA

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Requests for Information: This financial report is designed to provide The Regents, the Plans' retirees and others with a general overview of the Plans' financial positions and results. Questions concerning this report should be addressed to:

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