UNIVERSITY OF CALIFORNIA

Annual Financial Report

17/18

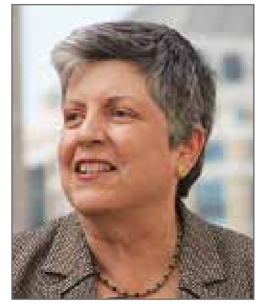
For 150 years, the University of California has educated the brightest minds and helped California become a beacon of innovation. UC is a national leader in developing new knowledge and moving our discoveries into the market so they can benefit our society, our economy and our planet.

UNIVERSITY OF CALIFORNIA

17/18 Annual Financial Report

TABLE OF CONTENTS

Letter from the President

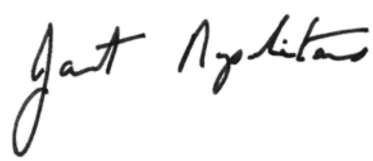


Over the past year, the University of California reaffirmed its commitment to working with state leaders to boost educational opportunity for students across California. Our campuses have added more than 15,000 California resident undergraduate students since 2014 and, in the fall of 2018, a record number of California resident transfer students enrolled at our campuses. UC's groundbreaking research also continues to make a great impact on the nation, state, and world.

As UC increased enrollment, we maintained our commitment to accessibility and affordability: 56 percent of our undergraduates had their tuition and fees covered thanks to financial aid. We also continued to enroll and graduate large numbers of first-generation and low-income students. Approximately 42 percent of our undergraduates are first-generation students, and 38 percent are Pell Grant recipients, which means they come from low-income families. UC campuses were named in the top five spots in an annual New York Times survey that ranks U.S. colleges that did the most for low-income students. Indeed, UC's role in promoting social mobility impacts not only our students and their families, but the entire State of California.

This year's State budget included an increase of $346.9 million in funding for the University. In addition to a three-percent increase in our base budget, the State provided one-time funds in lieu of a tuition increase, supporting our efforts to keep a UC education affordable for California residents. The budget increase also included one-time funds to support the record-high numbers of California students currently enrolled at the University, as well as to fund some enrollment growth in 2018-19. While we are grateful for the enhanced support from the State for 2019, we must continue to pursue ongoing funding to maintain access, affordability, and academic quality.

Meanwhile, the University was awarded more funding from the National Institutes of Health and the National Science Foundation than any other institution in the country. UC receives close to $5 billion in research awards annually, and the University's research has contributed to California's emergence as the intellectual and economic powerhouse it is today. Many of California's leading industries — including biotechnology, telecommunications, digital media, computers and semiconductors, and new environmental technologies — grew out of UC-based research. Since 1976, more than 1,000 startup companies have been founded around UC inventions, with 85 percent of the companies based in California. By sustaining the quality, access, and affordability of a UC education, we strive to further our mission of teaching, research, and public service, and to ensure that California remains at the forefront of innovation.



JANET NAPOLITANO
PRESIDENT, UNIVERSITY OF CALIFORNIA

Letter from the Executive Vice President, CFO

This has been another record-breaking year for the University of California. Demand from students grew across all our campuses, which continue to rank among the best in the world. We successfully went live at two of our campuses (Riverside and Merced) with UC Path, our priority program to implement a single payroll, benefits, human resources, and academic personnel solution for all University employees. Our aim to further diversify our revenues was aided by strong returns across our investment portfolio. We also made significant progress in expanding the number of new, affordable, student housing beds and by opening the first buildings in the Merced 2020 Project.

In the 13th straight year of record-breaking highs for applications, more than 221,000 students applied for undergraduate admission to the University for fall 2018, an overall jump of 5.7 percent. In this year's application cycle, over 181,000 freshmen students and over 40,000 transfer students applied to at least one campus. All nine undergraduate campuses saw gains in total applications, ranging from a 4.6 percent increase at Berkeley to a 12.4 percent increase at Riverside. Our rankings also continued to be strong, as Los Angeles and Berkeley were ranked as the top two public universities in the nation, and a total of six of our campuses were among the top 12 public universities in the nation, according to *U.S. News and World Report's 2019 Top Public Schools* rankings.

One of our overarching initiatives is to diversify our revenue sources so that the University is more resilient and less dependent on any one source. The strong performance of the Office of the CIO in the past year, with an 8.9 percent return on the endowment and a 7.8 percent return on the pension, strengthens our financial position and reduces burdens on the operating budget.

The cost of housing continues to be a major driver in a student's overall cost of attendance, so we have a multi-year initiative to add new beds at all of our campuses. To date we have delivered over 5,000 beds since the initiative launched in January 2016, and we are on track to deliver over 15,000 beds by fall of 2020. I am also proud to report that we opened our first buildings under the Merced 2020 Project, an ambitious $1.3 billion public-private partnership that will add approximately 1.2 million gross square feet of teaching, research, residential, and student-support facilities to our newest campus by 2020.

Tuition is another major driver in the overall cost of attendance, and this year we developed and passed a budget plan that provided a modest ($60) reduction in tuition for the first time in almost 20 years. While this was greeted with great enthusiasm by many of our students, we must continue to work with the State to create a long-term funding framework to ensure stable tuition for current and future students. While the last fiscal year was positive in many ways, we must continue to be diligent in managing our liabilities and addressing our capital needs with a focus on UC's long-term financial stability.

NATHAN BROSTROM
EXECUTIVE VICE PRESIDENT, CFO
UNIVERSITY OF CALIFORNIA

Facts in Brief *(Unaudited)*

	2018	2017	2016	2015	2014*
STUDENTS					
Undergraduate fall enrollment	216,904	210,369	199,127	195,078	191,369
Graduate fall enrollment	62,092	59,743	58,311	57,185	52,757
Total fall enrollment	**278,996**	**270,112**	**257,438**	**252,263**	**244,126**
University Extension course enrollments	348,645	346,365	371,240	374,442	367,355
FACULTY AND STAFF *(full-time equivalents)*	**158,877**	**154,522**	**149,312**	**144,765**	**139,208**
SUMMARY FINANCIAL INFORMATION *(in thousands of dollars, except for retirement plan information)*					
UNIVERSITY OF CALIFORNIA					
PRIMARY REVENUE SOURCES					
Student tuition and fees, net[1]	$4,838,764	$4,477,213	$4,132,352	$3,784,046	$3,585,859
Grants and contracts, net	5,709,180	5,440,977	5,272,595	5,204,761	5,117,736
Medical centers, educational activities and auxiliary enterprises, net	17,419,902	16,153,092	14,638,715	13,611,153	12,108,409
State educational, financing and capital appropriations	3,386,151	3,279,520	3,067,677	2,812,634	2,683,315
Federal Pell Grants	421,693	381,650	376,264	376,186	316,064
Private gifts, net	1,315,092	1,161,658	1,088,076	971,245	890,614
Capital gifts and grants, net	420,658	255,559	248,705	186,836	473,464
Department of Energy laboratories	1,062,428	1,147,233	1,278,186	1,234,509	1,250,820
OPERATING EXPENSES BY FUNCTION					
Instruction	6,939,892	6,966,479	6,814,684	6,200,694	5,477,857
Research	4,744,416	4,579,067	4,618,459	4,366,909	3,837,361
Public service	712,062	670,757	639,022	580,693	581,069
Academic support	2,742,160	2,416,824	2,460,694	2,022,401	1,835,476
Student services	1,206,080	1,168,883	1,099,934	1,012,422	923,284
Institutional support	1,437,887	1,443,208	1,583,783	1,597,486	1,463,248
Operation and maintenance of plant	657,883	677,034	656,635	590,602	618,030
Student financial aid[2]	752,261	721,538	649,258	553,340	580,807
Medical centers	10,749,409	10,451,455	10,004,181	8,513,134	7,965,944
Auxiliary enterprises	1,324,309	1,300,590	1,265,535	1,187,777	1,104,050
Depreciation and amortization	2,027,341	1,909,870	1,804,046	1,661,033	1,709,672
Impairment of capital assets	10,360	7,354	10,127	11,219	11,201
Department of Energy laboratories	1,054,475	1,139,232	1,271,260	1,234,958	1,244,335
Other	88,326	66,936	71,573	72,200	81,061
INCREASE (DECREASE) IN NET POSITION	1,812,445	1,061,191	(2,699,804)	(233,459)	1,381,385
FINANCIAL POSITION					
Investments, at fair value	27,368,997	24,478,362	22,208,767	22,492,804	21,748,774
Capital assets, at net book value	32,325,107	30,669,753	29,688,815	28,642,779	27,645,157
Other assets and deferred outflows	13,008,104	13,441,465	18,288,878	12,596,994	11,652,661
Outstanding debt, including capital leases	(23,658,777)	(20,502,876)	(19,951,287)	(19,020,755)	(18,030,749)
Obligations for pension and retiree health benefits	(28,637,382)	(30,029,779)	(36,920,138)	(29,331,031)	(16,165,378)
Other liabilities and deferred inflows	(16,239,128)	(15,702,449)	(12,021,750)	(11,359,071)	(15,137,452)
Net position	4,166,921	2,354,476	1,293,285	4,021,720	11,713,013

[1] *Scholarship allowances, including both financial aid and fee waivers that are not paid directly to students, are recorded primarily as a reduction of student tuition and fees in the statement of revenues, expenses and changes in net position.*

[2] *Includes only financial aid paid directly to students. The state-administered California grant awards are not included as expenses since the government determines grantees. College work study expenses are shown in the programs in which the student worked.*

**Amounts have not been restated to report the entire net retiree health benefits liability.*

	2018	2017	2016	2015	2014
SUMMARY FINANCIAL INFORMATION *(in thousands of dollars, except for retirement plan information)*					
UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS					
PRIMARY REVENUE SOURCES					
Private gifts	$1,340,158	$864,411	$789,267	$765,445	$789,573
PRIMARY EXPENSES					
Grants to campuses	1,100,287	939,784	889,163	827,467	958,873
INCREASE (DECREASE) IN NET POSITION	1,337,620	1,050,233	(3,498)	455,416	849,091
FINANCIAL POSITION					
Investments, at fair value	9,239,580	8,206,990	7,115,278	7,084,587	6,496,649
Pledges receivable, net	1,006,183	865,979	842,423	822,530	861,005
Net position	9,803,392	8,465,772	7,415,540	7,550,329	7,094,913
UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM					
PLAN PARTICIPATION					
Plan membership	298,420	289,429	280,185	266,254	262,988
Retirees and beneficiaries currently receiving payments	75,924	72,995	70,077	67,321	64,191
PRIMARY REVENUE SOURCES					
Contributions[1]	4,759,740	4,779,464	4,551,152	4,458,802	3,215,712
Interest, dividends and other investment income, net	1,555,260	1,435,299	1,316,116	1,323,449	1,344,731
Net appreciation (depreciation) in the fair value of investments	5,098,540	8,616,400	(2,300,033)	1,320,388	9,137,618
PRIMARY EXPENSES					
Benefit payments	3,438,840	3,185,062	2,974,331	2,803,627	2,583,223
Participant and member withdrawals	1,373,405	1,514,990	1,367,528	1,730,362	1,369,641
INCREASE (DECREASE) IN NET POSITION	6,563,074	10,079,633	(831,668)	2,515,920	9,701,107
FINANCIAL POSITION					
Investments, at fair value	90,872,718	82,574,019	73,196,935	71,595,607	68,747,604
Members' defined pension plan benefits	66,838,838	62,179,236	54,225,589	55,122,875	52,853,829
Participants' defined contribution plan benefits	24,386,104	22,482,632	20,356,646	20,291,028	20,044,154
ACTUARIAL INFORMATION *(as of the beginning of the year)*					
Actuarial value of assets	61,884,530	57,228,542	53,762,286	48,327,981	43,572,353
Actuarial accrued liability	72,965,272	69,305,423	65,841,255	60,417,177	57,380,961
UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST					
PLAN PARTICIPATION					
Plan membership	169,655	164,089	161,072	157,221	154,930
Retirees and beneficiaries currently receiving payments	42,325	41,157	39,774	38,488	37,207
PRIMARY REVENUE SOURCES					
Contributions	338,436	328,057	310,320	315,586	343,395
Interest, dividends and other investment income, net	1,634	606	155	41	13
PRIMARY EXPENSES					
Insurance premiums	309,344	290,234	284,836	327,019	318,490
INCREASE (DECREASE) IN NET POSITION	26,867	34,173	21,896	(14,539)	20,884
FINANCIAL POSITION					
Investments, at fair value	128,091	97,801	53,604	24,250	37,125
Net position for retiree health benefits	133,581	106,714	72,541	50,645	65,184
ACTUARIAL INFORMATION *(as of the beginning of the year)*					
Actuarial value of assets	106,714	72,541	50,645	65,184	44,300
Actuarial accrued liability	18,786,201	21,168,812	17,320,301	14,093,786	13,253,215

[1] *Total contributions to the University of California Retirement Plan and the University of California Retirement Savings Plan.*

Campus Facts in Brief *(Unaudited)*

	BERKELEY	DAVIS	IRVINE	LOS ANGELES	MERCED
STUDENTS					
Undergraduate fall enrollment	30,574	30,212	29,307	31,002	7,375
Graduate fall enrollment	11,336	8,157	6,651	14,426	592
Total fall enrollment	**41,910**	**38,369**	**35,958**	**45,428**	**7,967**
University Extension course enrollments[1]	46,415	65,831	25,972	99,226	195
DEGREES CONFERRED[2]					
Bachelor	7,906	7,855	7,148	8,471	1,295
Advanced	3,791	2,020	2,016	4,754	72
Cumulative	649,540	286,788	201,677	577,998	7,641
FACULTY AND STAFF *(full-time equivalents)*	13,950	24,245	14,777	36,587	1,989
LIBRARY COLLECTIONS[3] *(volumes)*	12,816,655	4,767,632	3,792,290	10,539,265	1,658,198
CAMPUS LAND AREA *(in acres)*	8,163	7,331	1,527	467	8,195
CAMPUS FINANCIAL FACTS[4] *(in thousands of dollars)*					
OPERATING EXPENSES BY FUNCTION					
Instruction	$801,114	$922,473	$722,946	$2,307,750	$69,261
Research	564,659	575,320	282,903	837,225	28,834
Public service	79,104	92,182	8,628	152,838	6,206
Academic support	119,521	270,105	200,349	731,861	25,553
Student services	232,364	156,546	124,040	185,237	28,966
Institutional support	257,320	167,791	65,266	192,284	61,513
Operation and maintenance of plant	86,722	102,808	56,849	86,976	18,570
Student financial aid	168,802	99,574	93,265	93,838	17,754
Medical centers		1,918,701	947,281	2,128,078	
Auxiliary enterprises	134,438	121,664	139,458	397,896	31,887
Depreciation and amortization	224,036	242,642	206,189	388,870	30,676
Impairment of capital assets	4,863	1,628	651	456	
Other[5]	15,759	3,208	15,275	33,688	6,453
Total	**$2,688,702**	**$4,674,642**	**$2,863,100**	**$7,536,997**	**$325,673**
GRANTS AND CONTRACTS REVENUE					
Federal government	$367,780	$402,968	$210,962	$601,936	$19,183
State government	93,563	145,391	34,857	80,420	3,207
Local government	13,368	14,412	2,964	61,540	198
Private	212,358	147,279	80,216	272,502	3,386
Total	**$687,069**	**$710,050**	**$328,999**	**$1,016,398**	**$25,974**
UNIVERSITY ENDOWMENTS					
Nonspendable endowments	$391,450	$121,600	$9,814	$297,959	$16,840
Other endowments	2,248,095	824,613	477,912	2,138,036	22,513
Annual income distribution	92,235	27,514	14,275	46,282	1,831
CAMPUS FOUNDATIONS' ENDOWMENTS					
Nonspendable endowments and gifts	1,158,752	260,849	316,583	1,191,701	8,412
Other endowments	840,304	181,766	135,658	934,051	3,491
CAPITAL ASSETS					
Capital assets, at net book value	3,957,810	3,354,231	2,900,805	6,237,447	1,209,104
Capital expenditures	356,403	316,455	374,866	455,104	542,510

[1]Total courses enrolled in by University Extension Students for academic year 2017-18.
[2]As of academic year 2016-17.
[3]As of June 30, 2017.
[4]Excludes DOE laboratories.
[5]Includes non-capitalized expenses associated with capital projects and write-off, cancellation and bad debt expenses for loans.

	RIVERSIDE	SAN DIEGO	SAN FRANCISCO	SANTA BARBARA	SANTA CRUZ	SYSTEMWIDE[6]
STUDENTS						
Undergraduate fall enrollment	20,074	28,587		22,196	17,577	
Graduate fall enrollment	3,230	8,034	4,925	2,861	1,880	
Total fall enrollment	**23,304**	**36,621**	**4,925**	**25,057**	**19,457**	
University Extension course enrollments[1]	23,056	69,717		4,081	14,152	
DEGREES CONFERRED[2]						
Bachelor	4,480	7,207		5,373	3,982	
Advanced	988	2,319	926	841	533	
Cumulative	119,150	204,469	54,538	236,682	119,123	
FACULTY AND STAFF *(full-time equivalents)*	5,699	24,288	23,272	6,463	4,646	2,961
LIBRARY COLLECTIONS[3] *(volumes)*	4,153,168	4,484,768	1,195,444	3,267,331	2,514,274	
CAMPUS LAND AREA *(in acres)*	2,050	2,162	196	1,127	6,088	27

CAMPUS FINANCIAL FACTS[4] *(in thousands of dollars)*	RIVERSIDE	SAN DIEGO	SAN FRANCISCO	SANTA BARBARA	SANTA CRUZ	SYSTEMWIDE[6]
OPERATING EXPENSES BY FUNCTION						
Instruction	$329,024	$798,322	$340,431	$303,603	$200,564	$144,404
Research	117,594	819,650	1,112,948	167,369	93,917	143,997
Public service	5,764	18,561	146,746	12,945	49,564	139,524
Academic support	46,573	740,012	340,044	63,088	39,728	165,326
Student services	93,505	141,582	24,919	99,322	97,187	22,412
Institutional support	69,214	137,885	200,076	66,114	42,729	177,695
Operation and maintenance of plant	52,731	85,404	76,405	45,670	38,406	7,342
Student financial aid	59,139	50,408	23,454	98,065	44,913	3,049
Medical centers		1,705,886	3,894,229			155,234
Auxiliary enterprises	72,131	163,218	34,484	106,631	109,793	12,709
Depreciation and amortization	69,392	292,000	349,096	85,064	64,157	75,219
Impairment of capital assets		1,609	799		354	
Other[5]	2,469	3,400	4,140	7,058	1,715	(4,839)
Total	**$917,536**	**$4,957,937**	**$6,547,771**	**$1,054,929**	**$783,027**	**$1,042,072**
GRANTS AND CONTRACTS REVENUE						
Federal government	$85,184	$672,874	$723,667	$118,452	$71,298	$28,142
State government	10,890	37,631	90,538	12,663	7,324	51,048
Local government	2,276	16,977	194,411	2,367	656	6,255
Private	29,391	262,324	430,953	51,118	26,681	7,570
Total	**$127,741**	**$989,806**	**$1,439,569**	**$184,600**	**$105,959**	**$93,015**
UNIVERSITY ENDOWMENTS						
Nonspendable endowments	$9,987	$43,428	$115,413	$29,332	$10,646	$102,230
Other endowments	65,703	809,289	1,664,650	114,550	85,012	1,229,896
Annual income distribution	2,420	27,280	44,404	5,147	3,488	50,245
CAMPUS FOUNDATIONS' ENDOWMENTS						
Nonspendable endowments and gifts	105,007	454,343	720,293	133,919	46,284	
Other endowments	67,103	291,347	712,506	80,087	57,602	
CAPITAL ASSETS						
Capital assets, at net book value	1,198,014	5,070,518	4,865,602	1,537,166	1,223,147	771,263
Capital expenditures	138,020	612,507	666,753	62,586	73,636	107,892

[1]Total courses enrolled in by University Extension Students for academic year 2017-18.

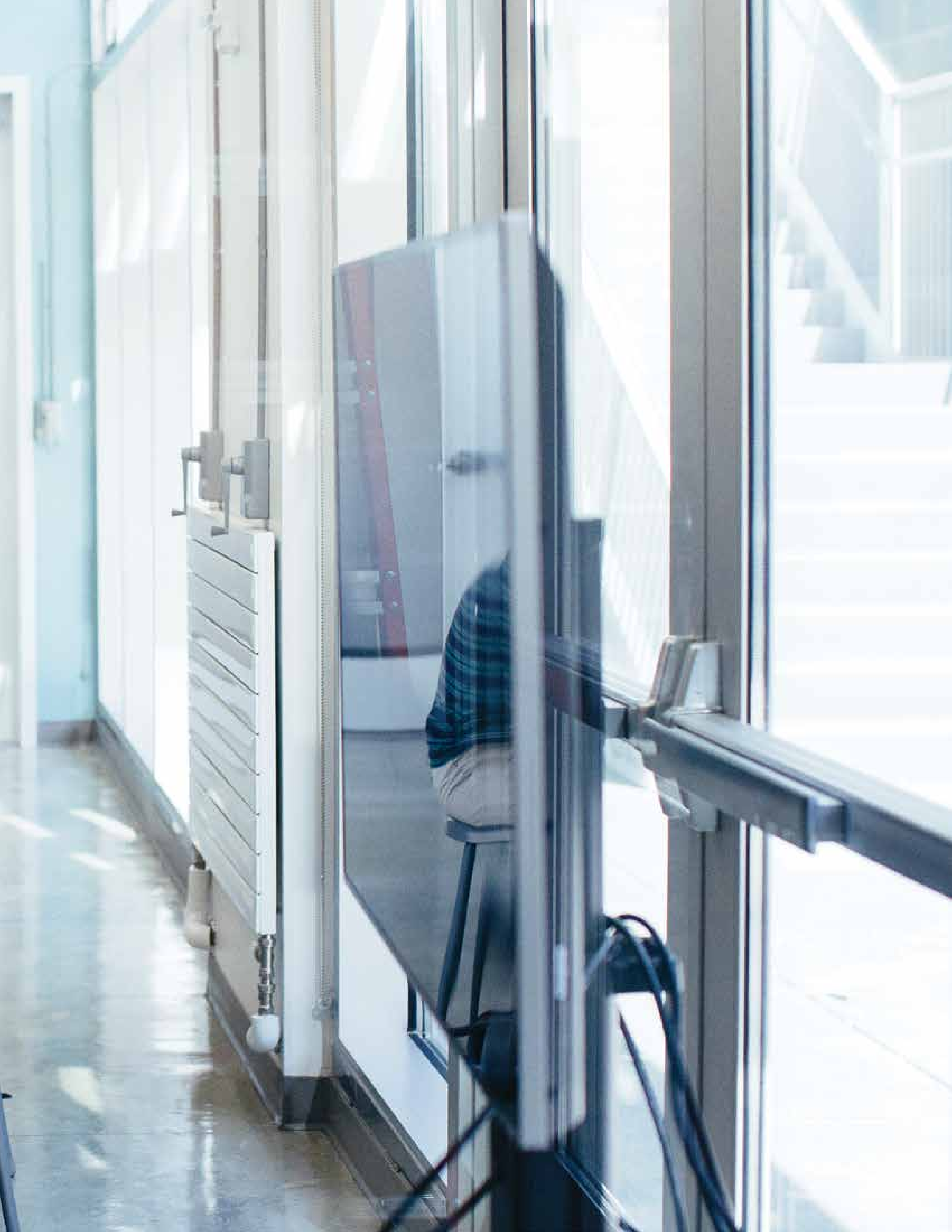
[2]As of academic year 2016-17.

[3]As of June 30, 2017.

[4]Excludes DOE laboratories.

[5]Includes non-capitalized expenses associated with capital projects and write-off, cancellation and bad debt expenses for loans.

[6]Includes expenses for systemwide and research programs, systemwide support services and administration. Full-time equivalents count, as of fall 2016, includes employees at all campuses involved in systemwide activities, including Agriculture and Natural Resources.



Management's Discussion and Analysis *(Unaudited)*

The objective of Management's Discussion and Analysis is to help readers of the University of California's financial statements better understand the financial position and operating activities for the year ended June 30, 2018, with selected comparative information for the years ended June 30, 2017 and 2016. This discussion has been prepared by management and should be read in conjunction with the financial statements and the notes to the financial statements. Unless otherwise indicated, years (2016, 2017 and 2018, etc.) in this discussion refer to the fiscal years ended June 30.

The University of California's financial report communicates financial information for the University of California (the "University"), the University of California campus foundations ("campus foundations"), the University of California Retirement System ("UCRS") and the University of California Retiree Health Benefit Trust ("UCRHBT") through five primary financial statements and notes to the financial statements. Three of the primary statements, the statements of net position, the statements of revenues, expenses and changes in net position and the statements of cash flows, present the financial position, changes in financial position and cash flows for the University and the affiliated campus foundations. The financial statements for the campus foundations are presented discretely from the University. Two of the primary statements, the statements of plans' and trust's fiduciary net position and the statements of changes in plans' and trust's fiduciary net position, present the financial position and operating activities for UCRS and UCRHBT. The notes to the financial statements provide additional information that is essential to a full understanding of the financial statements.

THE UNIVERSITY OF CALIFORNIA

The University of California, one of the largest and most acclaimed institutions of higher learning in the world, is dedicated to excellence in teaching, research, health care and public service. The University has annual resources of nearly $35.7 billion and encompasses ten campuses, five medical centers, four law schools and a statewide Division of Agriculture and Natural Resources. The University is also involved in the operation and management of three national laboratories for the U.S. Department of Energy ("DOE").

Campuses. The ten campuses are located in Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco, Santa Barbara and Santa Cruz. All of the campuses, except San Francisco, offer undergraduate, graduate and professional education; the San Francisco campus is devoted exclusively to graduate and professional education in health sciences.

Health sciences. The University operates one of the nation's largest health science and medical training programs. The instructional program is conducted in 16 health professional schools on six campuses. Our health programs include five medical centers, two dental schools, three nursing schools, two public health schools and two pharmacy schools, in addition to a school of optometry and a school of veterinary medicine. The University's medical schools play a leading role in the development of health services and advancement of medical science and research.

Law schools. The University has law schools at Berkeley, Davis, Irvine and Los Angeles. Also, the Hastings College of the Law in San Francisco is affiliated with the University, although not included in the financial reporting entity.

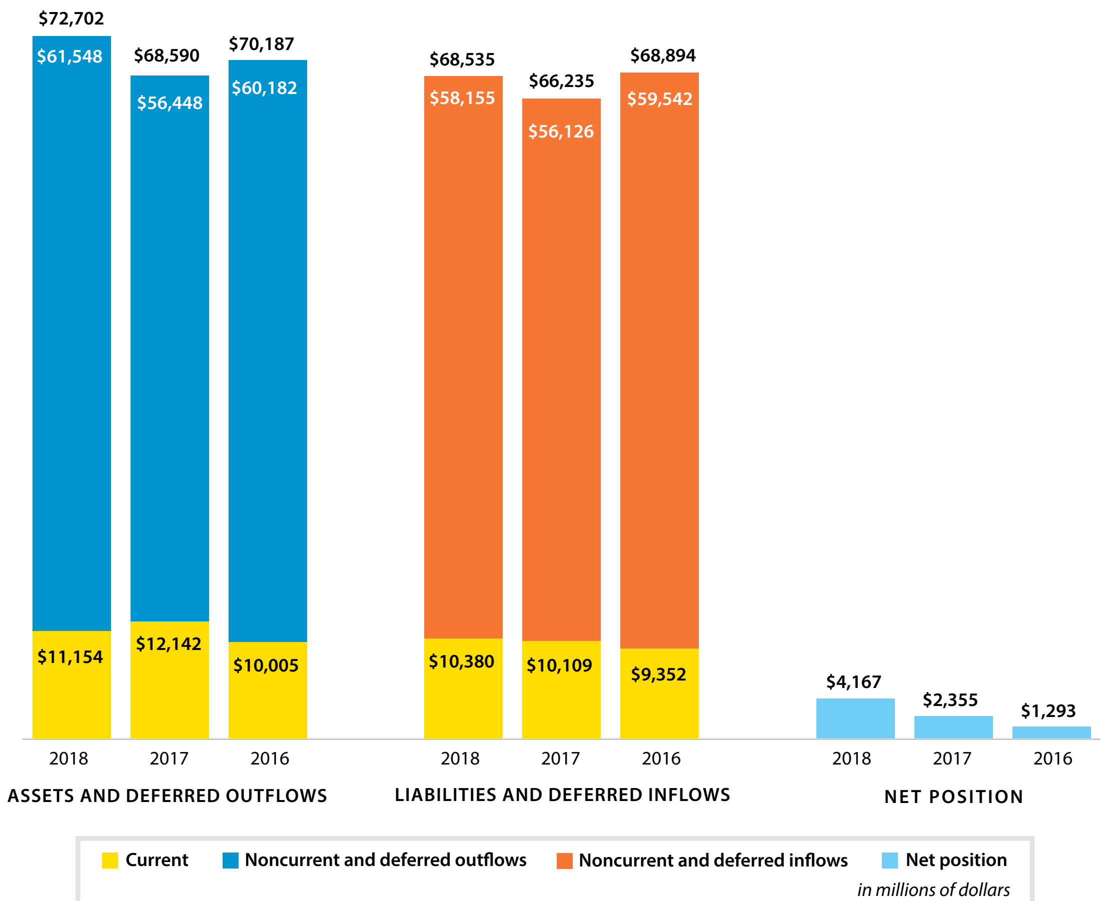
Agriculture and Natural Resources. The Division of Agriculture and Natural Resources is a statewide research and public service organization that serves a large and diverse agricultural community. The division collaborates on research with all campuses, and conducts studies at nine research and extension centers and on private land in cooperation with California producers. In addition, research and educational programs are conducted in each of the state's 58 counties.

University Extension. The foremost continuing education program of its kind in size, scope and quality of instruction, University Extension offers almost 20,000 self-supporting courses statewide and in several foreign countries.

National laboratories. Under contract with the DOE, the University operates and manages the Ernest Orlando Lawrence Berkeley National Laboratory (LBNL) in California. The University is also a member in two separate joint ventures, Los Alamos National Security, LLC (LANS) and Lawrence Livermore National Security, LLC (LLNS) that operate and manage the Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL), respectively, under contracts directly with the DOE. The laboratories conduct broad and diverse basic and applied research in nuclear science, energy production, national defense and environmental and health areas.

THE UNIVERSITY'S FINANCIAL POSITION

The University implemented new accounting policies for irrevocable split-interest agreements. These changes in accounting policies provide recognition and measurement guidance for agreements in which the University is a beneficiary. Financial information for 2017 and 2016 has been restated to retroactively apply these new accounting policies.



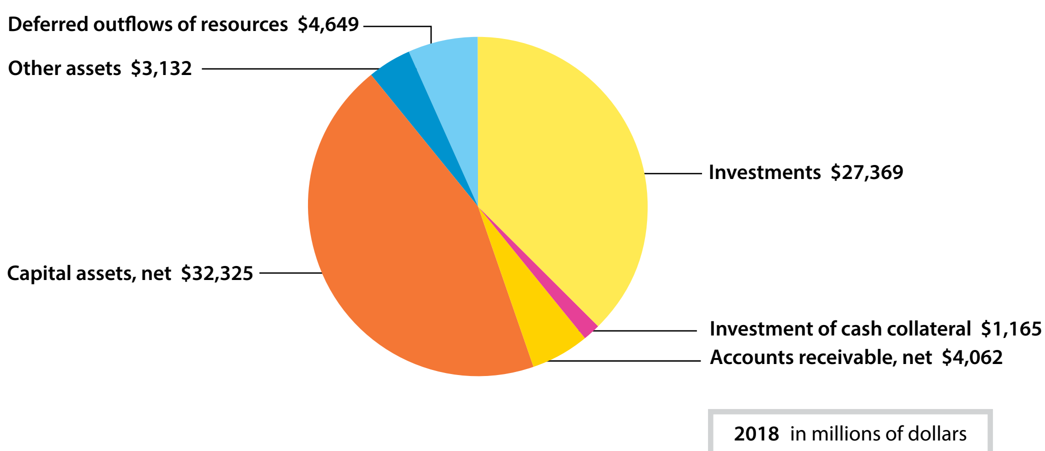
The statement of net position presents the financial position of the University at the end of each year. It displays all of the University's assets, deferred outflows, liabilities and deferred inflows. The difference between assets, deferred outflows, liabilities and deferred inflows is net position.

The major components of the assets, deferred outflows, liabilities, deferred inflows and net position as of June 30, 2018, 2017 and 2016 are as follows:

(in millions of dollars)

	2018	2017	2016
ASSETS			
Investments	$27,369	$24,478	$22,209
Investment of cash collateral	1,165	1,080	825
Accounts receivable, net	4,062	3,947	3,320
Capital assets, net	32,325	30,670	29,689
Other assets	3,132	2,865	3,974
Total assets	**68,053**	**63,040**	**60,017**
DEFERRED OUTFLOWS OF RESOURCES	**4,649**	**5,550**	**10,170**
LIABILITIES			
Debt, including commercial paper	23,659	20,503	19,951
Securities lending collateral	1,164	1,079	825
Net pension liability	9,775	10,739	15,125
Net retiree health benefits liability	18,862	19,290	21,795
Other liabilities	8,465	8,252	7,648
Total liabilities	**61,925**	**59,863**	**65,344**
DEFERRED INFLOWS OF RESOURCES	**6,610**	**6,372**	**3,550**
NET POSITION			
Net investment in capital assets	13,578	13,343	12,815
Restricted:			
Nonexpendable	1,183	1,156	1,130
Expendable	8,272	7,153	6,538
Unrestricted	(18,866)	(19,297)	(19,190)
Total net position	**$4,167**	**$2,355**	**$1,293**

The University's Assets and Deferred Outflows



The University's total assets and deferred outflows of resources have increased to $72.7 billion in 2018, compared to $68.6 billion in 2017 and $70.2 billion in 2016. Capital assets have increased due to continued investments in facilities in excess of depreciation. Investments increased due to positive financial market returns. Deferred outflows fluctuate primarily due to changes in the University's net pension and retiree health benefits liabilities.

Investments

Investments held by the University are principally carried in three investment pools: the Short Term Investment Pool (STIP), the Total Return Investment Pool (TRIP) and the General Endowment Pool (GEP). Cash for operations and bond proceeds for construction expenditures are invested in STIP. The University uses STIP to meet operational liquidity needs. TRIP provides the opportunity to maximize the return on long-term capital by taking advantage of the economies of scale of investing in a large pool across a broad range of asset classes. TRIP seeks to maximize to a total return objective and is intended to supplement STIP. The University maximizes its use of TRIP while still maintaining sufficient funds in STIP to meet operational and liquidity needs. The GEP is a balanced portfolio and the primary investment vehicle for individual endowments and funds functioning as endowments.

The Regents of the University of California ("The Regents") utilize asset allocation strategies that are intended to optimize investment returns over time in accordance with investment objectives and at acceptable levels of risk. GEP had a positive return of 8.9 percent in 2018, a positive return of 15.1 percent in 2017 and a negative return of 3.5 percent in 2016. TRIP had positive returns of 4.5 percent, 7.7 percent and 0.3 percent in 2018, 2017 and 2016, respectively. STIP had positive returns of 1.6 percent, 1.3 percent and 1.3 percent in 2018, 2017 and 2016, respectively.

Investment of cash collateral

The University participates in a securities lending program incorporating securities owned by both the University and UCRS as a means to augment income. Cash collateral fluctuates in response to changes in demand from borrowers and the availability of securities based on the University's asset allocation mix.

Accounts receivable, net

Accounts receivable include amounts due from state and federal governments on contracts and grants, patient receivables for medical centers and professional fees, investment income, proceeds from security sales and amounts due for private grants and contracts. Receivables fluctuate based on the timing of collections and investment sales activity.

Capital assets, net

The University's enrollment growth and continuing needs for renewal, modernization and seismic correction of existing facilities are the key drivers of capital investments. Capital spending continues at a brisk pace in order to provide the facilities necessary to support the University's teaching, research and public service mission and for patient care. Capital spending includes constructing and renovating academic buildings, research laboratories, libraries, student services, parking structures and infrastructure projects at all ten campuses and five medical centers. The University has a goal to increase affordable campus housing for more students given escalating living costs in many of the surrounding campus communities. In 2018, the largest portion of the capital asset additions were related to constructing housing facilities at several campuses. Additionally, construction continues to expand the Merced campus by 2020. The largest project in 2017 was the Jacobs Medical Center in San Diego. Total additions of capital assets were $3.7 billion in 2018 as compared to $3.0 billion in 2017 and $3.0 billion in 2016.

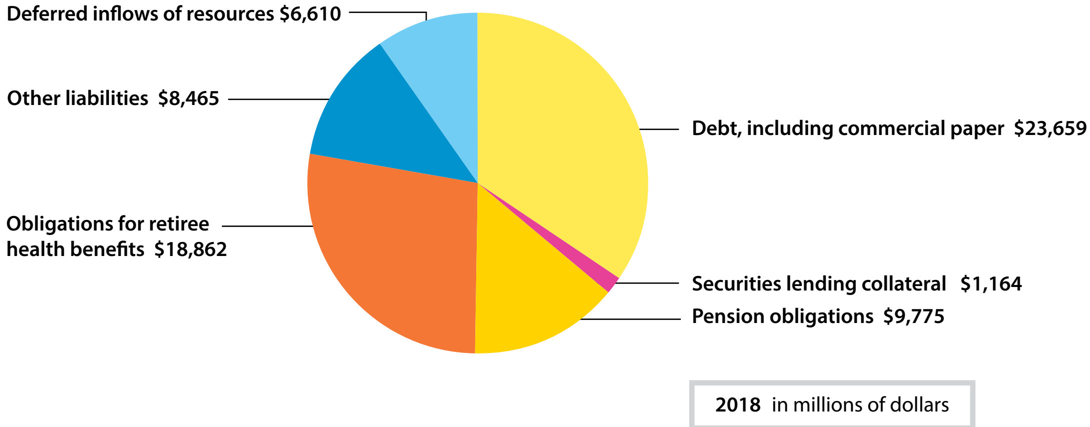
Other assets

Other assets include cash, investments held by trustees, pledge receivables, note and mortgage receivables, inventories and receivables from the DOE. The noncurrent receivable from the DOE, which fluctuates with the net pension and retiree health benefits liabilities due to the DOE's continuing responsibility to contribute for retired and terminated vested members of LLNS and LANL, decreased by $284.3 million in 2018 as compared to 2017 and decreased by $337.8 million in 2017 as compared to 2016. Investments held by trustees decreased by $0.7 billion in 2017 due to the transfer of self-insurance reserves to the University's wholly owned captive insurance company. Since the captive insurance company is blended with the University, the captive's investments are included with the University's investments.

Deferred outflows of resources

Changes in fair values of the University's interest rate swaps that are determined to be hedging derivatives, losses on debt refundings and certain changes in the net pension and net retiree health benefits liabilities are reported as deferred outflows of resources. In 2018 and 2017, deferred outflows decreased due to higher than expected investment returns in the University of California Retirement Plan (UCRP) portfolio and an increase in the discount rate for the retiree health benefit liability.

The University's Liabilities and Deferred Inflows



The University's liabilities and deferred inflows of resources increased to $68.5 billion in 2018 as compared to $66.2 billion in 2017 and $68.9 billion in 2016. The changes in both 2018 and 2017 were primarily related to the issuance of additional debt to finance capital projects offset by decreases in the liabilities for pension and retiree health benefits.

Debt, including commercial paper

Capital assets are financed from a variety of sources, including University equity contributions, state support, gifts, revenue bonds, bank loans and leases or structures that involve separate legal entities. Commercial paper and bank loans provide interim financing for capital assets during the construction period.

Outstanding debt increased by $3.2 billion and $551.6 million in 2018 and 2017, respectively. A summary of the activity follows:

(in millions of dollars)

	2018	2017
ADDITIONS TO OUTSTANDING DEBT		
General Revenue Bonds	$1,853	$1,136
Medical Center Pooled Revenue Bonds		1,046
Limited Project Revenue Bonds	1,692	
Capital leases	47	55
Other borrowings	285	126
Blended Component Unit Revenue Bonds	320	54
Bond premium, net	494	223
Additions to outstanding debt	**4,691**	**2,640**
REDUCTIONS TO OUTSTANDING DEBT		
Refinancing and prepayments	(1,014)	(1,321)
Scheduled principal payments	(392)	(400)
Payments on other borrowings	(7)	(64)
Commercial paper, net	(31)	(225)
Amortization of bond premium	(91)	(78)
Reductions to outstanding debt	**(1,535)**	**(2,088)**
Net increase in outstanding debt	**$3,156**	**$552**

The University's debt, which is used to primarily finance capital assets, includes $781.8 million, $812.7 million and $1.0 billion of commercial paper outstanding at the end of 2018, 2017 and 2016, respectively. Total debt outstanding was $23.7 billion at the end of 2018 compared to $20.5 billion and $20.0 billion at the end of 2017 and 2016, respectively.

To take advantage of favorable interest rates for tax-exempt bonds, the University financed several projects in 2018 that were approved for construction or had recently started construction. The University also refinanced debt in December 2017 in advance of tax reform changes that were effective as of January 1, 2018. In 2018, $3.5 billion of debt was issued, including General Revenue Bonds totaling $1.9 billion and Limited Project Revenue Bonds totaling $1.7 billion to finance and refinance certain facilities and projects. Reductions to outstanding debt in 2018 were $1.5 billion, including $1.0 billion for one-time principal payments for the refinancing or refunding of previously outstanding debt. The refinancing and refunding of previously outstanding debt resulted in an economic gain of $83.2 million.

In 2017, $2.2 billion of debt was issued, including General Revenue Bonds totaling $1.1 billion and Medical Center Pooled Revenue Bonds totaling $1.0 billion to finance and refinance certain facilities and projects. Reductions to outstanding debt in 2017 were $2.1 billion, including $1.3 billion for one-time principal payments for the refinancing or refunding of previously outstanding debt. The refinancing and refunding of previously outstanding debt resulted in an economic gain of $151.2 million.

In August 2016, the University entered into an agreement with a developer to design, construct, finance, operate and maintain certain auxiliary, administrative, academic and research facilities at the Merced campus by 2020, for which the University will finance $600 million of the total costs. Other borrowings at June 2018 and 2017 include $296.9 million and $43.7 million, respectively, for the present value of the payments expected to be made over the term of the agreement through 2055 for the repayment of the private debt incurred by the developer during construction. In the event the agreement with the developer is terminated, the outstanding portion of the private debt incurred by the developer for construction phase will become an obligation of the University.

The University's General Revenue Bond ratings are currently affirmed at Aa2, AA and AA by Moody's Investors Service, Standard & Poor's and Fitch, respectively, all with stable outlooks. The University's Limited Project Revenue Bonds and Medical Center Pooled Revenue Bonds are currently affirmed at Aa3, AA- and AA- by Moody's Investors Service, Standard & Poor's and Fitch, respectively, all with stable outlooks.

Commercial paper borrowings decreased $30.9 million in 2018 as compared to 2017, and decreased by $225.2 million in 2017 compared to 2016. Commercial paper is primarily used as interim financing for construction projects and short-term financing for other needs. Commercial paper fluctuates based upon the timing of refinancing construction projects with the issuance of long-term revenue bonds. The University has various revolving credit agreements totaling $1.1 billion with major financial institutions for the purpose of providing additional liquidity for certain variable-rate demand bonds, commercial paper and for other liquidity needs.

Securities lending collateral

Under the securities lending program, the University records a liability to the borrower for cash collateral received and held by the University for securities on loan at the end of the year. 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 the securities lent. The amount of the securities lending collateral liability fluctuates directly with securities lending opportunities and the investment of cash collateral.

Net pension liability and retiree health benefits

The University has a financial responsibility for pension benefits associated with its defined benefit plans and for retiree health benefits. The University's net pension liability was $9.8 billion, $10.7 billion and $15.1 billion in 2018, 2017 and 2016, respectively. The changes in net pension liability for 2018 and 2017 were primarily driven by higher than expected investment returns on the UCRP investment portfolio. UCRP's total investment rate of return was positive 7.8 percent in 2018, positive 14.5 percent in 2017 and negative 2.0 percent in 2016. The discount rate used to estimate the net pension liability was 7.25 percent in 2018, 2017 and 2016.

LBNL participates in the University's defined benefit pension plan, although the DOE has an ongoing financial responsibility to reimburse the University for LBNL's share of the obligation to UCRP. In addition, under certain circumstances, the University makes contributions to UCRP for LANL and LLNL retirees and, based upon contractual arrangements with the DOE, is reimbursed by the DOE. The University recorded receivables from the DOE of $316.7 million, $615.1 million and $974.7 million for 2018, 2017 and 2016, respectively, representing the DOE's share of the net pension liability.

The University's net retiree health benefits liability was $18.9 billion, $19.3 billion and $21.8 billion, in 2018, 2017 and 2016, respectively.

The University funds the retiree health benefits through UCRHBT based on a projection of benefits on a pay-as-you-go basis and the assets in the trust are not sufficient to fund retiree health benefits. Therefore, the Bond Buyer 20-year tax-exempt general obligations municipal-bond index rate is used to discount the retiree health benefits liabilities. The changes in net retiree health benefits liability have been primarily driven by the changes in discount rates used to estimate the retiree health benefits liability. The discount rates as of June 30, 2018, 2017 and 2016 were 3.87 percent, 3.58 percent and 2.85 percent, respectively. Additionally, health care cost increases in 2018 were lower than expected.

LBNL participates in the University's retiree health benefits plans and, based on contractual arrangements with the DOE, the University is reimbursed for retiree health benefits costs associated with retirees who previously worked at LBNL. The University recorded receivables from the DOE of $656.9 million, $642.8 million and $621.1 million for 2018, 2017 and 2016, respectively, representing the DOE's share of the net retiree health benefits liability.

Other liabilities

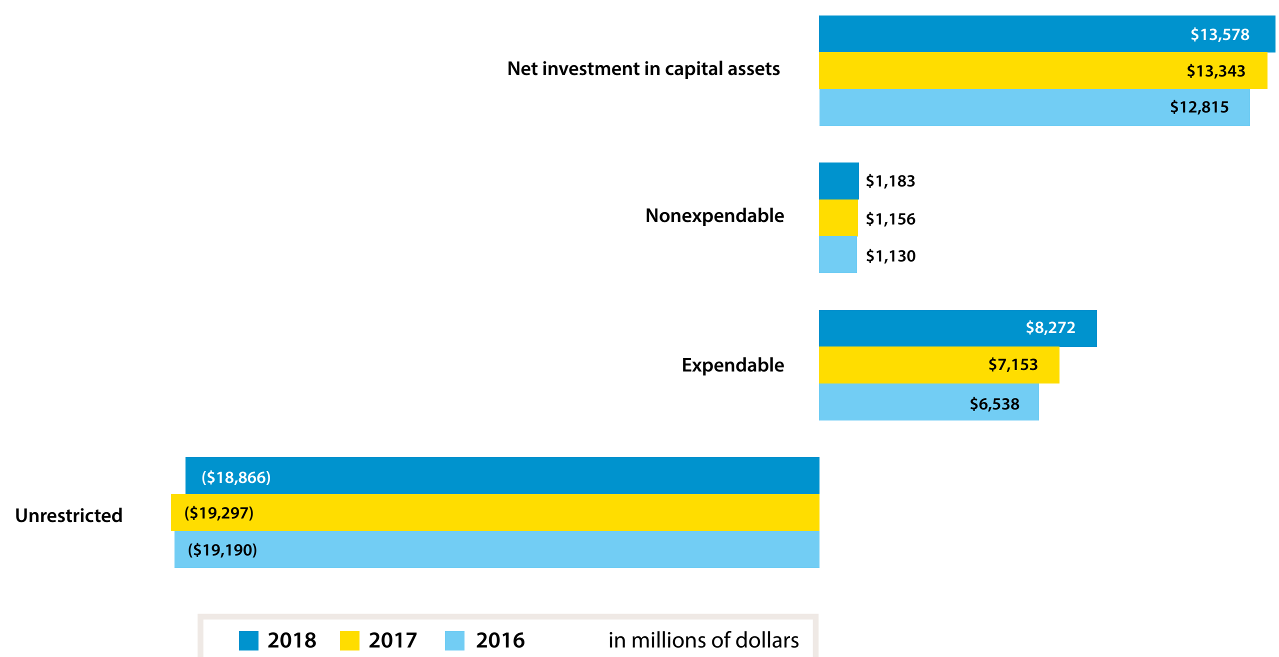
Other liabilities consist of accounts payable, accrued salaries, other employee benefits, unearned revenue, funds held for others, DOE laboratories' liabilities, federal refundable loans, self-insurance liabilities and obligations under split-interest agreements held by the University.

Deferred inflows of resources

Deferred inflows of resources are related to the University's service concession arrangements, gains on debt refundings, sales of certain future patent royalty revenues, changes in the estimated future value of irrevocable split-interest agreements and certain changes in the net pension and net retiree health benefits liabilities. Deferred inflows of resources increased in 2018 and 2017 primarily due to the decrease in the discount rate for estimating the net retiree health benefits liability.

The University's Net Position

Net position represents the residual interest in the University's assets and deferred outflows after all liabilities and deferred inflows are deducted. Net position was restated for 2017 and 2016 as a result of adopting new accounting rules for split-interest agreements. The University's net position was $4.2 billion in 2018 compared to $2.4 billion in 2017 and $1.3 billion in 2016. Net position is reported in the following categories: net investment in capital assets; restricted, nonexpendable; restricted, expendable; and unrestricted.



Net investment in capital assets

The portion of net position invested in capital assets, net of accumulated depreciation and the related outstanding debt used to finance the acquisition, construction or improvement of these capital assets, was $13.6 billion in 2018 compared to $13.3 billion in 2017 and $12.8 billion in 2016. The University continues to invest in its physical facilities, which are, in part, financed by debt, to support growth.

Restricted, nonexpendable

Restricted, nonexpendable net position includes the corpus of the University's permanent endowments. In 2018 and 2017, the increase in restricted nonexpendable net position was principally due to the receipt of new gifts.

Restricted, expendable

Restricted, expendable net position is subject to externally imposed restrictions governing their use. Net position may be spent only in accordance with the restrictions placed upon them and may include endowment income and gains, subject to the University's spending policy; support received from gifts, appropriations or capital projects and trustee-held investments. The increases or decreases in restricted, expendable funds are principally due to the timing of spending restricted gifts and endowment income and gains.

Unrestricted

Under generally accepted accounting principles, net position that is not subject to externally imposed restrictions governing their use must be classified as unrestricted for financial reporting purposes. Unrestricted net position is negative due primarily to obligations for pension and retiree health benefits exceeding University assets available to pay such obligations. Although unrestricted net position is not subject to externally imposed restrictions, substantially all of the University's reserves are allocated for academic and research initiatives or programs, for capital projects or other purposes.

THE UNIVERSITY'S RESULTS OF OPERATIONS

The statement of revenues, expenses and changes in net position is a presentation of the University's operating results and indicates whether the financial condition has improved or deteriorated. In accordance with the Governmental Accounting Standards Board (GASB) requirements, certain significant revenues relied upon and budgeted for fundamental operational support of the core instructional mission of the University are required to be recorded as nonoperating revenues, including state educational appropriations, private gifts and investment income. Results of operations for 2017 and 2016 have been restated as a result of adopting new accounting policies for irrevocable split-interest agreements. A summarized comparison of the operating results for 2018, 2017 and 2016, arranged in a format that matches the revenue supporting the core activities of the University with the expenses associated with core activities, is as follows:

(in millions of dollars)

	2018			2017			2016		
	OPERATING	NONOPERATING	TOTAL	OPERATING	NONOPERATING	TOTAL	OPERATING	NONOPERATING	TOTAL
REVENUES									
Student tuition and fees, net	$4,839		$4,839	$4,477		$4,477	$4,132		$4,132
State educational appropriations		$3,386	3,386		$3,278	3,278		$3,048	3,048
Federal Pell Grants		422	422		382	382		376	376
Grants and contracts, net	5,709		5,709	5,441		5,441	5,273		5,273
Medical centers, net	12,065	22	12,087	11,241	13	11,254	10,236	15	10,251
Educational activities, net	3,670		3,670	3,333		3,333	2,973		2,973
Auxiliary enterprises, net	1,685		1,685	1,579		1,579	1,430		1,430
Department of Energy laboratories	1,062		1,062	1,147		1,147	1,278		1,278
Private gifts, net		1,315	1,315		1,162	1,162		1,088	1,088
Investment income, net		413	413		299	299		311	311
Other revenues	971	128	1,099	939	68	1,007	962	51	1,013
Revenues supporting core activities	**30,001**	**5,686**	**35,687**	**28,157**	**5,202**	**33,359**	**26,284**	**4,889**	**31,173**
EXPENSES									
Salaries and wages	15,953		15,953	15,160		15,160	14,021		14,021
Pension benefits	1,339		1,339	1,888		1,888	2,687		2,687
Retiree health benefits	1,295		1,295	1,576		1,576	1,875		1,875
Other employee benefits	3,246		3,246	2,938		2,938	2,838		2,838
Scholarships and fellowships	767		767	729		729	652		652
Utilities	304		304	292		292	283		283
Supplies and materials	3,610		3,610	3,240		3,240	3,109		3,109
Depreciation and amortization	2,027		2,027	1,910		1,910	1,804		1,804
Department of Energy laboratories	1,055		1,055	1,139		1,139	1,271		1,271
Interest expense		746	746		721	721		693	693
Other expenses	4,851		4,851	4,648	60	4,708	4,411	47	4,458
Expenses associated with core activities	**34,447**	**746**	**35,193**	**33,520**	**781**	**34,301**	**32,951**	**740**	**33,691**
Income (loss) from core activities	**($4,446)**	**$4,940**	**$494**	**($5,363)**	**$4,421**	**($942)**	**($6,667)**	**$4,149**	**($2,518)**
OTHER NONOPERATING ACTIVITIES									
Net appreciation (depreciation) in fair value of investments			890			1,722			(472)
Income (loss) before other changes in net position			1,384			780			(2,990)
OTHER CHANGES IN NET POSITION									
State capital appropriations						2			4
Capital gifts and grants, net			403			256			249
Permanent endowments			25			24			34
Increase (decrease) in net position			**1,812**			**1,062**			**(2,703)**
NET POSITION									
Beginning of year, as previously reported			2,355			1,293			4,022
Cumulative effect of accounting changes									(26)
Beginning of year, restated			2,355			1,293			3,996
End of year			**$4,167**			**$2,355**			**$1,293**

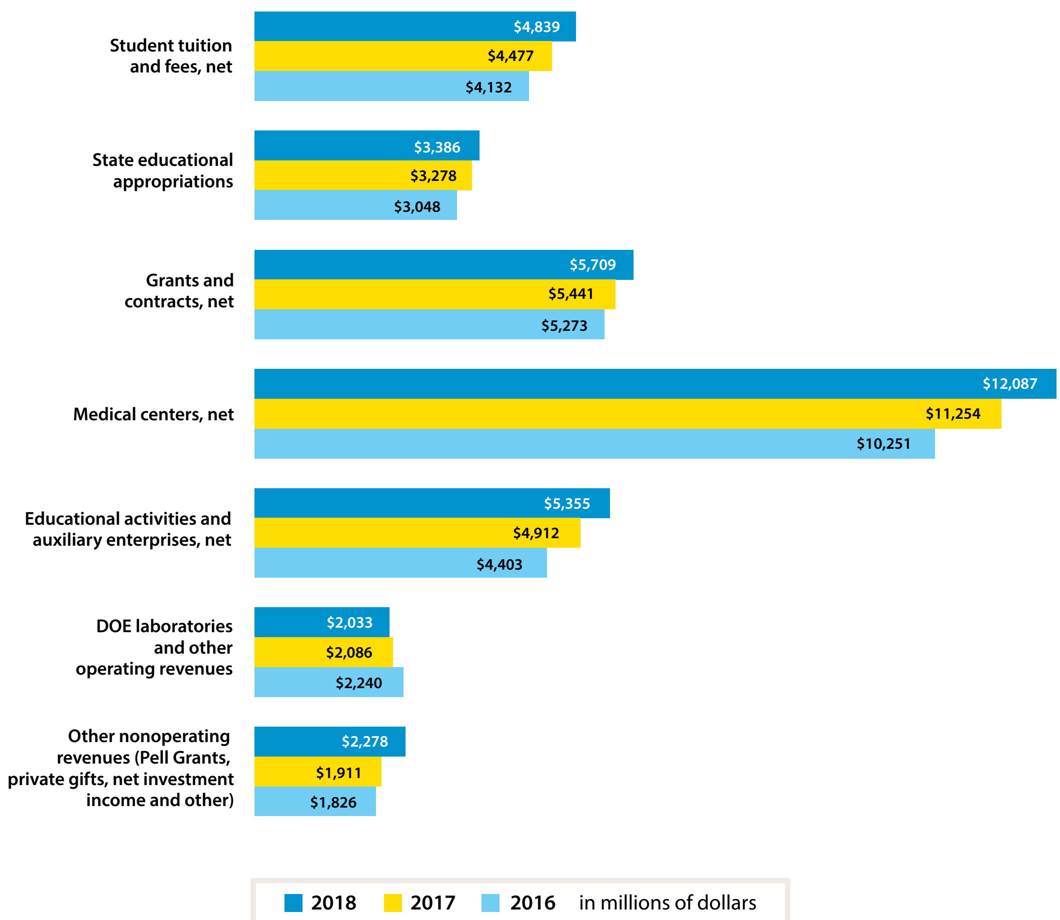
Revenues supporting core activities

Revenues to support the University's core activities, including those classified as nonoperating revenues, were $35.7 billion, $33.4 billion and $31.2 billion in 2018, 2017 and 2016, respectively. These diversified sources of revenue increased by $2.3 billion in 2018 and $2.2 billion in 2017.

The state of California's educational appropriations, in conjunction with student tuition and fees, are the core components that support the instructional mission of the University. Grants and contracts provide opportunities for undergraduate and graduate students to participate in basic research alongside some of the most prominent researchers in the country.

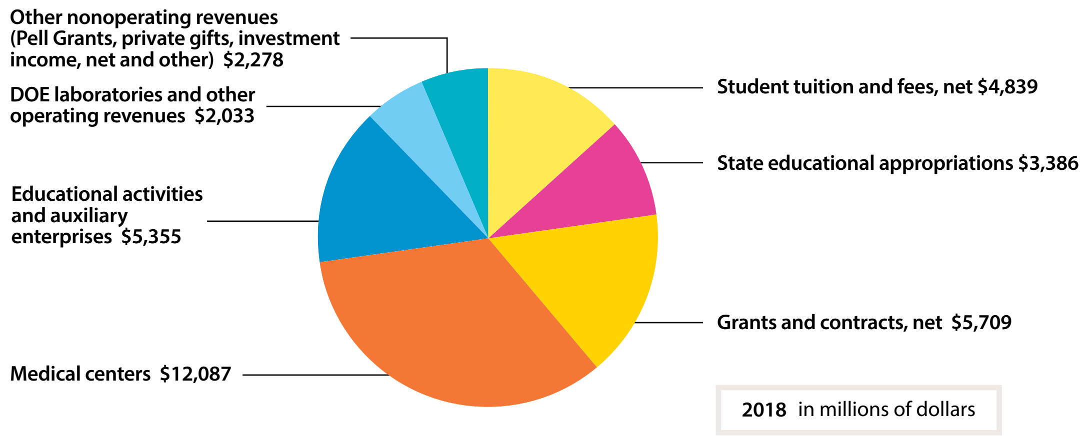
Gifts to the University allow crucial flexibility to faculty for support of their fundamental activities or new academic initiatives. Other significant revenues are from medical centers, educational activities and auxiliary enterprises such as student housing, food service operations and parking.

Revenues in the various categories have changed as follows:



A major financial strength of the University is its diverse source of revenues, including those from student fees, federally sponsored grants and contracts, medical centers, the state of California, private support and self-supporting enterprises. The variety of fund sources has become increasingly important over the past several years.

Categories of both operating and nonoperating revenue that supported the University's core activities in 2018 are as follows:



Student tuition and fees, net

Net student tuition and fees were $4.8 billion, $4.5 billion and $4.1 billion in 2018, 2017 and 2016, respectively. Scholarship allowances, or financial aid, are the difference between the stated charge for tuition and fees and the amount that is paid by the student and third parties on behalf of the student. Scholarship allowances, netted against student tuition and fees, were $1.3 billion, $1.1 billion and $1.1 billion in 2018, 2017 and 2016, respectively. Student tuition and fees, net of scholarship allowances, increased by $361.6 million and $344.9 million in 2018 and 2017, respectively, due to enrollment growth.

In 2018, enrollment grew by 3.3 percent and in 2017 enrollment grew by 4.9 percent. Mandatory tuition for resident undergraduates increased 2.5 percent in 2018 and did not change in 2017. Certain nonresident undergraduates and resident and nonresident graduate students experienced increases in mandatory tuition and fees. Professional degree supplemental tuition varies by discipline; certain increases were approved for 2018 and 2017.

State educational appropriations

Educational appropriations from the state of California were $3.4 billion, $3.3 billion and $3.0 billion in 2018, 2017 and 2016, respectively. State educational appropriations increased in 2018 and 2017 by $108.3 million and $229.4 million, respectively.

The budget framework agreed to with the governor in 2016 provided the University with base budget adjustments of four percent annually for 2016 through 2019. Additionally, the University also received $169.0 million, $171.0 million and $96.0 million in 2018, 2017 and 2016, respectively, in one-time funds for UCRP. The final budget approved for 2019 included a base budget adjustment of three percent and $248.8 million in one-time funds.

Grants and contracts, net

Revenue from federal, state, private and local government grants and contracts — including an overall facilities and administration cost recovery of $1.1 billion, $1.1 billion and $1.0 billion in 2018, 2017 and 2016, respectively — were $5.7 billion, $5.4 billion and $5.3 billion in 2018, 2017 and 2016, respectively.

In 2018, federal grants and contracts revenue increased $43.0 million, or 1.3%, as compared to 2017. In 2017, federal grants and contracts revenue increased $14.0 million, or 0.4%, as compared to 2016. Federal grants and contracts include federal facilities and administrative cost recovery of $782.0 million, $764.0 million and $745.6 million in 2018, 2017 and 2016, respectively. Changes in the federal budget impact the University's growth in federal grants and contracts. Grants and contracts revenue is from a variety of federal agencies as indicated below:

(in millions of dollars)

	2018	2017	2016
Department of Health and Human Services	$2,035	$1,987	$1,917
National Science Foundation	464	465	469
Department of Education	78	57	83
Department of Defense	261	275	258
National Aeronautics and Space Administration	86	95	135
Department of Energy (excluding national laboratories)	108	107	104
Other federal agencies	270	273	279
Federal grants and contracts net revenue	**$3,302**	**$3,259**	**$3,245**

Medical centers, net

Medical center revenues, net of allowances, increased $0.8 billion, or 7.4 percent, in 2018 and increased $1.0 billion, or 9.8 percent, in 2017. Revenues increased in 2018 due to a full year of operations for the new UCSD Jacobs Medical Center which opened in November 2016. Additionally, revenues increased in 2018 due to higher inpatient and outpatient utilization and supplemental revenues. Revenues increased in 2017 due to the opening of the Jacobs Medical Center mid-year, and higher supplemental revenues and utilization.

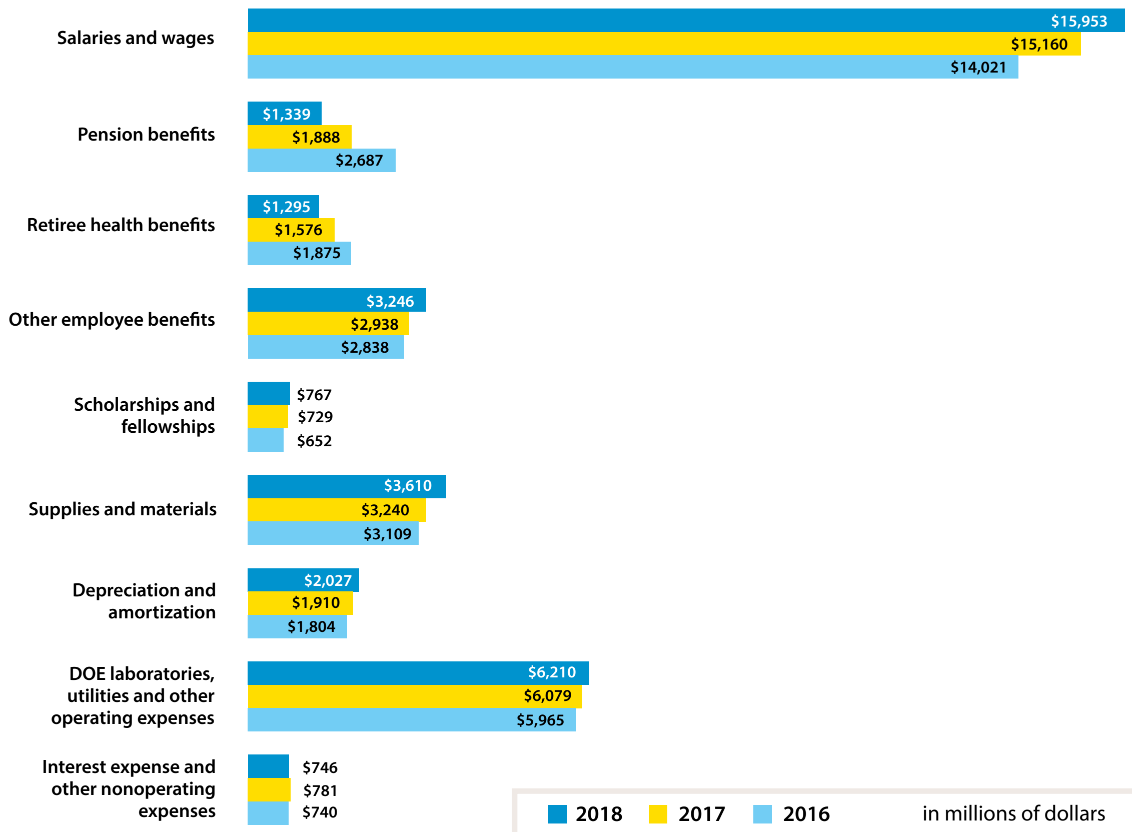
Educational activities and auxiliary enterprises, net

Revenue from educational activities, primarily medical professional fees, net of allowances, grew by $337.9 million, or 10.1 percent, in 2018 and $359.8 million, or 12.1 percent, in 2017. The growth is generally associated with an expanded patient base and improved collections.

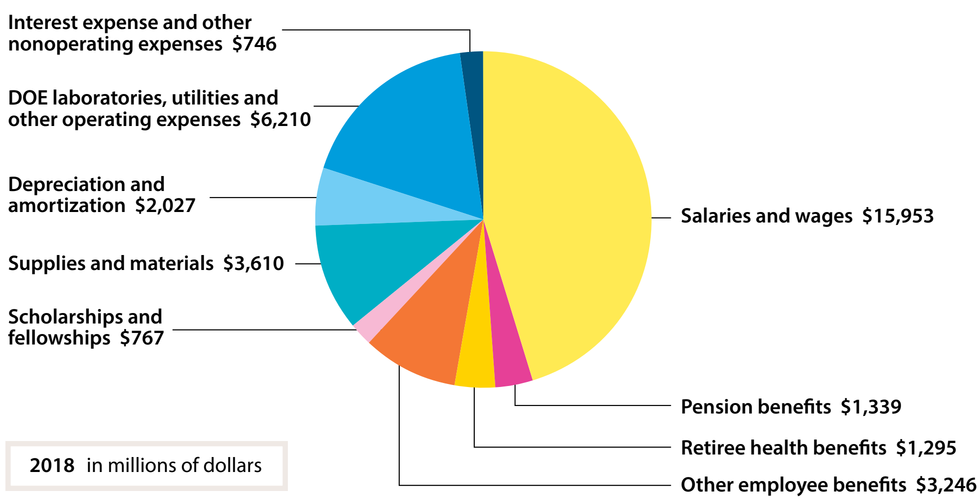
Auxiliary enterprises include housing, food service, parking, bookstores, student centers, unions and child care centers. Revenue from auxiliary enterprises, net of allowances, grew by $105.6 million, or 6.7 percent, in 2018 and $149.2 million, or 10.4 percent in 2017. Auxiliary revenues increased consistent with enrollment and the University's initiative to expand the supply of campus housing for students.

Expenses associated with core activities

Expenses associated with the University's core activities, including those classified as nonoperating expenses, were $35.2 billion, $34.3 billion and $33.7 billion in 2018, 2017 and 2016, respectively. Expenses increased in 2018 by $0.9 billion and in 2017 by $0.6 billion, primarily due to growth in the University's operations, principally at the medical centers. Pension expenses decreased in 2018 and 2017 as a result of higher actual investment returns as compared to expected earnings on the UCRP portfolio. Retiree health benefits expenses also decreased in 2018 and 2017 as a result of increases in the discount rate used to estimate the retiree health liabilities. Expenses in the various categories are as follows:



Categories of both operating and nonoperating expenses related to the University's core activities in 2018 are as follows:



Salaries and benefits

Approximately 62.1 percent of the University's expenses were related to salaries and benefits. There were 158,900 full-time equivalent (FTE) employees in 2018, excluding employees who were associated with LBNL, whose salaries and benefits were included as laboratory expenses, as compared to 154,500 FTEs in 2017.

Salaries and benefits increased by 1.3 percent in 2018. In 2018, salaries increased by 5.2 percent, 2.8 percent due to an increase in the number of FTEs and 2.3 percent due to an increase in the average salary per FTE. Employee benefits, excluding pension and post-retirement health care benefits, increased by $307.8 million, or 10.5 percent, in 2018 due to higher health insurance costs. Pension expense decreased by $548.1 million, or 29.0 percent, due to better than expected investment returns. Retiree health expense decreased by $280.8 million or 17.8 percent due to the higher discount rate in 2018.

Salaries and benefits increased by 0.7 percent in 2017. In 2017, salaries increased by 8.1 percent, 3.5 percent due to an increase in the number of FTEs and 4.5 percent due to an increase in the average salary per FTE. Employee benefits, excluding pension and post-retirement health care benefits, increased by $100.5 million, or 3.5 percent in 2017, due to higher health insurance costs. Pension expense decreased by $0.8 billion or 29.7 percent due to better than expected investment returns. Retiree health expense decreased by $298.8 million or 15.9 percent due to the higher discount rate in 2017.

Scholarships and fellowships

The University places a high priority on student financial aid as part of its commitment to affordability. Scholarship allowances, representing financial aid and fee waivers awarded by the University, were $2.3 billion, $2.1 billion and $2.0 billion in 2018, 2017 and 2016, respectively. Scholarships and fellowships, representing payments of financial aid made directly to students and reported as an operating expense were $766.9 million, $728.6 million and $651.6 million in 2018, 2017 and 2016, respectively. On a combined basis, as the University continues its commitment to provide financial support for needy students, financial aid in all forms increased by $180.8 million, or 8.7 percent, in 2018 as compared to 2017, and by $55.7 million, or 2.8 percent, in 2017 compared to 2016.

Supplies and materials

During 2018 and 2017, supplies and materials costs increased by $370.6 million, or 11.4 percent and $130.7 million, or 4.2 percent, respectively. The largest increases occurred at the medical centers due to higher patient volumes. In recent years, there has been inflationary pressure on the costs for medical supplies and laboratory instruments and higher costs for general supplies necessary to support expanded medical patient volumes. The University continues to find opportunities to manage the costs of supplies and materials.

Other expenses

Other expenses consist of a variety of expense categories, including travel, rent, insurance, legal settlements and repairs and maintenance, plus any gain or loss on disposals of capital assets and other nonoperating expenses.

Operating losses

In accordance with the GASB's reporting standards, operating losses were $4.4 billion, $5.4 billion and $6.7 billion in 2018, 2017 and 2016, respectively. The operating losses in 2018, 2017 and 2016 were offset by $4.9 billion, $4.4 billion and $4.1 billion, respectively, of net nonoperating revenue that supports core operating activities of the University. Revenues exceeded expenses associated with core activities in 2018 by $494.4 million. In 2017 and 2016, expenses exceeded revenue available to support core activities by $0.9 billion and $2.5 billion, respectively.

Other nonoperating activities

The University's other nonoperating activities, consisting of net appreciation or depreciation in the fair value of investments, are noncash transactions and, therefore, are not available to support operating expenses. In 2018, 2017 and 2016, the University recognized net appreciation in the fair value of investments of $0.9 billion, net appreciation of $1.7 billion and net depreciation of $471.7 million, respectively. The University's portfolio experienced positive returns in the equity markets in 2018 and 2017, as compared with negative returns in 2016.

Other changes in net position

Similar to other nonoperating activities discussed above, other changes in net position are also not available to support the University's operating expenses in the current year. State capital appropriations and capital gifts and grants may only be used for the purchase or construction of the specified capital assets. Only income earned from gifts of permanent endowments is available in future years to support the specified program.

THE UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS

Separate foundations at each individual campus provide valuable assistance in fundraising, public outreach and other support for the missions of the campus and the University. Although independent boards govern each of the foundations, they are affiliated with, and their assets are dedicated for, the benefit of the University of California. The Foundations implemented new accounting policies for irrevocable split-interest agreements. These changes in accounting policies provide recognition and measurement guidance for agreements in which the Foundations are a beneficiary.

The Campus Foundations' Financial Position

The campus foundations' statement of net position presents their combined financial position at the end of the year. It displays all of the campus foundations' assets, liabilities, deferred inflows and net position. The difference between assets, liabilities and deferred inflows is net position, representing a measure of the current financial condition of the campus foundation.

The major components of the combined assets, liabilities and net position of the campus foundations at June 30, 2018, 2017 and 2016 are as follows:

(in millions of dollars)

	2018	2017	2016
ASSETS			
Investments	$9,240	$8,207	$7,115
Investment of cash collateral	45	43	42
Accounts receivable, net	13	40	33
Pledges receivable, net	1,006	866	842
Other assets	567	348	285
Total assets	**10,871**	**9,504**	**8,317**
LIABILITIES			
Accounts payable and other current liabilities	52	113	71
Securities lending collateral	45	43	42
Obligation under life income agreements and funds held for others	467	420	382
Other noncurrent liabilities	272	253	220
Total liabilities	**836**	**829**	**715**
DEFERRED INFLOWS OF RESOURCES	**232**	**209**	**187**
NET POSITION			
Restricted:			
Nonexpendable	4,407	3,968	3,631
Expendable	4,966	4,305	3,689
Unrestricted	430	193	95
Total net position	**$9,803**	**$8,466**	**$7,415**

Investments increased in 2018 and 2017 due to the performance of the financial markets. The Board of Trustees for each campus foundation is responsible for its specific investment policy, although asset allocation guidelines are recommended to campus foundations by the Investments Subcommittee of The Regents. The Boards of Trustees may determine that all or a portion of their investments will be managed by the University's Chief Investment Officer. The Chief Investment Officer managed $2.6 billion, $2.2 billion and $1.6 billion of the campus foundations' investments at the end of 2018, 2017 and 2016, respectively.

Restricted, nonexpendable net position includes the corpus of the campus foundations' permanent endowments. Restricted, expendable net position is subject to externally imposed restrictions governing their use. Net position represents the residual interest in the assets after all liabilities and deferred inflows are deducted. It is only available in accordance with the restrictions placed upon them and may include endowment income and investment gains, subject to each individual campus foundation's spending policy; support received from gifts; trustee-held investments; or other third-party receipts. New gifts, net of gifts transferred to campuses, and changes in the fair value of investments were the primary reasons for the changes in net position in 2018 and 2017.

The Campus Foundations' Results of Operations

The campus foundations' combined statement of revenues, expenses and changes in net position is a presentation of their operating results for the year. It indicates whether their financial condition has improved or deteriorated during the year.

A summarized comparison of the operating results for 2018, 2017 and 2016 is as follows:

(in millions of dollars)

	2018	2017	2016
OPERATING REVENUES			
Private gifts and other revenues	$1,341	$868	$801
Total operating revenues	**1,341**	**868**	**801**
OPERATING EXPENSES			
Grants to campuses and other expenses	1,136	970	915
Total operating expenses	**1,136**	**970**	**915**
Operating income (loss)	**205**	**(102)**	**(114)**
NONOPERATING REVENUES (EXPENSES)			
Investment income	77	74	53
Net appreciation (depreciation) in fair value of investments	646	792	(229)
Other nonoperating revenues			4
Income (loss) before other changes in net position	**928**	**764**	**(286)**
OTHER CHANGES IN NET POSITION			
Permanent endowments	409	287	282
Increase (decrease) in net position	**1,337**	**1,051**	**(4)**
NET POSITION			
Beginning of year, as previously reported	8,466	7,415	7,552
Cumulative effect of accounting change			(133)
Beginning of year, as restated	8,466	7,415	7,419
End of year	**$9,803**	**$8,466**	**$7,415**

Operating expenses generally consist of grants to University campuses. Grants to the campuses include current-use donor gifts, the annual income distributions on endowments and gift fees. Grants to campuses typically follow the pattern indicated by private gift revenue; however, the campuses' programmatic needs are also taken into consideration, subject to abiding by the restricted purposes specified by the donor for the use of gifts and endowment income.

Since gifts are transferred only when the cash is received and investment income is classified as nonoperating income, operating losses can occur when grants distributed to the campuses exceed private gift revenue.

THE UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM (UCRS)

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 (Defined Benefit Plans) include the University of California Retirement Plan (UCRP) for members and the California Public Employees Retirement System (PERS) Voluntary Early Retirement Incentive Plan (UC-VERIP) for certain University employees that were members of PERS who elected early retirement. The University of California Retirement Savings Program (UCRSP) includes four defined contribution plans (Defined Contribution Plan, Supplemental Defined Contribution Plan, 403(b) Plan and 457(b) Plan), with several investment portfolio options for participants' elective and non-elective contributions.

UCRS' Financial Position and Result of Operations

The statement of plans' fiduciary net position presents the financial position of UCRS at the end of the fiscal year. It displays all of the retirement system's assets, liabilities and net position. The difference between assets and liabilities is the net position held in trust for pension benefits. These represent amounts available to provide pension benefits to members of UCRP and participants in the defined contribution plans and UC-VERIP. At June 30, 2018, UCRS' assets were $99.1 billion, liabilities were $7.9 billion and net position held in trust for pension benefits were $91.2 billion, an increase of $6.6 billion from 2017. At June 30, 2017, UCRS' assets were $94.0 billion, liabilities were $9.3 billion and net position held in trust for pension benefits were $84.7 billion, an increase of $10.1 billion from 2016.

The major components of the assets, liabilities and net position available for pension benefits for 2018, 2017 and 2016 are as follows:

(in millions of dollars)

	2018	2017	2016
ASSETS			
Investments	$90,873	$82,574	$73,197
Participants' interests in mutual funds	1,585	3,351	2,768
Investment of cash collateral	6,158	6,842	6,751
Other assets	465	1,203	571
Total assets	**99,081**	**93,970**	**83,287**
LIABILITIES			
Securities lending collateral	6,157	6,838	6,750
Other liabilities	1,699	2,470	1,955
Total liabilities	**7,856**	**9,308**	**8,705**
NET POSITION HELD IN TRUST FOR PENSION BENEFITS			
Members' defined benefit plan benefits	66,839	62,179	54,225
Participants' defined contribution plan benefits	24,386	22,483	20,357
Total net position held in trust for pension benefits	**$91,225**	**$84,662**	**$74,582**

The statements of changes in the plans' fiduciary net position are a presentation of UCRS' operating results. The statements indicate whether the financial condition has improved or deteriorated during the year. A summarized comparison of the operating results for 2018, 2017 and 2016 is as follows:

(in millions of dollars)

	2018	2017	2016
ADDITIONS			
Contributions	$4,760	$4,779	$4,551
Net appreciation (depreciation) in fair value of investments	5,099	8,617	(2,300)
Investment and other income, net	1,556	1,437	1,318
Total additions	**11,415**	**14,833**	**3,569**
DEDUCTIONS			
Benefit payments and participant withdrawals	4,812	4,700	4,342
Plan expenses	40	53	59
Total deductions	**4,852**	**4,753**	**4,401**
Increase (decrease) in net position held in trust for pension benefits	**$6,563**	**$10,080**	**($832)**

The Regents' asset allocation strategies are intended to generate investment returns over time in accordance with investment objectives and at acceptable levels of risk. The overall investment return for UCRP was positive 7.8 percent in 2018 as compared to positive 14.5 percent in 2017 and negative 2.0 percent in 2016.

The participants' interests in mutual funds, representing defined contribution plan contributions to certain mutual funds on a custodial plan basis, fluctuate based upon market performance of the mutual funds and participant investment elections.

UCRS participates in the University's securities lending program as a means to augment income. All borrowers are required to provide collateral and the University records a liability to the borrower for cash collateral received and held by the University for securities on loan at the end of the year. Investments in cash collateral and the securities lending collateral liability fluctuate in response to changes in demand from borrowers and the availability of securities based upon the UCRS asset allocation mix.

Contributions to UCRP were $3.4 billion in 2018, 2017 and 2016. In 2018, 2017 and 2016, contributions include $169.0 million, $171.0 million and $96.0 million, respectively, received from the state of California under the budget agreement. Contributions include additional deposits of $391.8 million, $481.0 million and $563.5 million made by the University to UCRP in 2018, 2017 and 2016, respectively. University contribution rates to UCRP were 14.0 percent of covered payroll in 2018, 2017 and 2016. Employee contribution rates ranged between 7.0 percent and 9.0 percent in 2018, 2017 and 2016.

Benefit payments and participant withdrawals were $112.2 million more in 2018 than in 2017 and $358.2 million more in 2017 than in 2016. Payments from UCRP increase each year due to a growing number of retirees receiving payments and cost-of-living adjustments (COLAs). Benefit payments from UCRSP fluctuate based upon member withdrawals. Participant withdrawals decreased by $154.2 million, or 11.2 percent, in 2018 as compared to 2017, and $143.0 million, or 11.6 percent, in 2017 as compared to 2016. As of

June 30, 2018, there were 75,900 retirees and beneficiaries receiving payments from UCRS as compared to 73,000 as of June 30, 2017 and 70,000 as of June 30, 2016.

The net pension liability for UCRP was $9.8 billion in 2018, $10.7 billion in 2017 and $15.1 billion in 2016. The decrease in net pension liability for 2018 of $0.9 billion and in 2017 of $4.4 billion was due to higher than expected investment returns on the UCRP portfolio. The ratio of plan net position to total pension liability was 87.2 percent in 2018, 85.3 percent in 2017 and 78.2 percent in 2016.

Additional information on the retirement plans can be obtained from the 2018 annual reports of the University of California Retirement System by writing to the University of California, Office of the President, Human Resources and Benefits, Post Office Box 24570, Oakland, California 94623.

THE UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST (UCRHBT)

The UCRHBT was established on July 1, 2007 to allow certain University locations — primarily campuses and medical centers — that share the risks, rewards and costs of providing for retiree health benefits the opportunity to fund such benefits on a cost-sharing basis and accumulate funds under an arrangement segregated from University assets. The University contributes toward retiree medical and dental benefits, although it does not contribute toward the cost of other benefits available to retirees. The DOE laboratories do not participate in the UCRHBT, therefore the DOE has no interest in the trust's assets.

UCRHBT's Financial Position and Result of Operations

The statement of trust's fiduciary net position presents the financial position of the UCRHBT at the end of the fiscal year. It displays the UCRHBT's assets, liabilities and net position. The difference between assets and liabilities is the net position held in trust for retiree health benefits. This represents amounts available to provide retiree health benefits to participants.

The major components of the assets, liabilities and net position available for retiree health benefits for 2018, 2017 and 2016 are as follows:

(in millions of dollars)

	2018	2017	2016
ASSETS			
Investments	$128	$98	$54
Other assets	24	26	34
Total assets	**152**	**124**	**88**
LIABILITIES			
Total liabilities	**18**	**17**	**15**
NET POSITION HELD IN TRUST FOR RETIREE HEALTH BENEFITS			
Total net position held in trust for retiree health benefits	**$134**	**$107**	**$73**

The statement of changes in the trust's fiduciary net position is a presentation of the UCRHBT's operating results and indicates whether the financial condition has improved or deteriorated during the year. Summarized operating results for 2018, 2017 and 2016 are as follows:

(in millions of dollars)

	2018	2017	2016
ADDITIONS			
Contributions	$340	$328	$310
Total additions	**340**	**328**	**310**
DEDUCTIONS			
Insurance premiums and payments	309	290	284
Plan expenses	4	4	4
Total deductions	**313**	**294**	**288**
Increase in net position held in trust for retiree health benefits	**$27**	**$34**	**$22**

Contributions for retiree health benefits are made by the campuses and medical centers based upon projected pay-as-you-go financing. The University acts as a third-party administrative agent on behalf of the UCRHBT to pay health care insurers and administrators amounts currently due.

The retiree health benefits provided under the University's plan and any liabilities related to the future funding requirements for the retiree health benefits are reported by the University. The net retiree health liability for UCRHBT was $18.3 billion, $18.7 billion and $21.1 billion in 2018, 2017 and 2016, respectively.

LOOKING FORWARD

The University of California is a world center of learning, known for generating a steady stream of talent, knowledge and social benefits, and has always been at the center of California's capacity to innovate. The excellence of its programs attracts the best students, leverages hundreds of millions of dollars in state, federal and private funding and promotes discovery of new knowledge that fuels economic growth.

The budget framework agreed to with the governor in 2016 provided the University with base budget adjustments of four percent annually from 2016 through 2019. The final budget approved for 2019 included a base budget adjustment of three percent and $248.8 million in one-time funds. The framework also called for no tuition increases in 2016 and 2017, with tuition increases generally pegged to the rate of inflation beginning in 2018. The Student Services Fee increased five percent in 2016 and each year thereafter with the customary one-third of the increase being directed to financial aid. Fifty percent of the remaining revenue generated from the increase will be used to enhance student mental health services and the remaining 50.0 percent will be distributed to support other student services programs. The framework also acknowledged the University's plan for moderate increases in nonresident supplemental tuition. The framework also called for no increases in law school tuition through 2019. In addition to these funding elements, the budget framework included a number of performance-related provisions.

The University remains highly competitive in attracting federal grants and contracts revenue, with fluctuations in the awards received closely paralleling trends in the budgets of federal research granting agencies. Over two-thirds of the University's federal research revenue comes from two agencies, the Department of Health and Human Services, primarily through the National Institutes of Health, and the National Science Foundation. Other agencies that figure prominently in the University's awards are the Department of Education, Department of Defense, the National Aeronautics and Space Administration and the Department of Energy. The University is a unique national resource for helping the nation address competitiveness and economic initiatives.

The University's medical centers have positive operating margins, although they continue to face financial and competitive challenges in their regional markets, along with the added costs and responsibilities related to their function as academic institutions. The demand for health care services and the cost of providing them continue to increase significantly. In addition to the rising costs of salaries, benefits and medical supplies faced by hospitals across the state, along with the costs of maintaining and upgrading facilities, the University's medical centers also face additional costs associated with seismic retrofitting, new technologies, biomedical research, the education and training of health care professionals and the care for a disproportionate share of the medically underserved in California. Other than Medicare and Medi-Cal (California's Medicaid program), health insurance payments do not recognize the added cost of teaching in their payment to academic medical centers. The growth in costs of the publicly funded programs and health care reform will likely continue to reduce rates or limit payment growth, placing downward pressure on operating results for the medical centers.

The University must have a balanced array of many categories of facilities to meet its education, research and public service goals and continues to assess its long-term capital requirements. Support for the University's capital program is expected to be provided from a combination of sources, including the state of California, external financing, gifts and other sources.

Additional budget information can be found at http://universityofcalifornia.edu/news/budget/welcome.html. Additional information concerning state budget matters and the state's financial condition may be found on the website of the California Department of Finance at http://www.dof.ca.gov.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain information provided by the University, including written as outlined above or oral statements made by its representatives, may contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, which address activities, events or developments that the University expects or anticipates will or may occur in the future contain forward-looking information.

In reviewing such information, it should be kept in mind that actual results may differ materially from those projected or suggested in such forward-looking information. This forward-looking information is based upon various factors and was derived using various assumptions. The University does not undertake to update forward-looking information contained in this report or elsewhere to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking information.


Cell
Cell
Science
The Scientist

Report of Independent Auditors

TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

We have audited the accompanying financial statements of the University of California (the "University"), a component unit of the State of California, its aggregate discretely presented component units, the University of California Retirement System and the University of California Retiree Health Benefit Trust, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the University's basic financial statements as listed in the table of contents.

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

Auditors' Responsibility
Our responsibility is to express opinions on the financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the financial statements 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 the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the University, its aggregate discretely presented component units, the University of California Retirement System and the University of California Retiree Health Benefit Trust as of June 30, 2018 and 2017, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

The accompanying management's discussion and analysis on pages 12 through 30 and the required supplemental information on pages 104 through 111 are required by accounting principles generally accepted in the United States of America to supplement the basic financial statements. Such information, although not a part of the basic financial statements, 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 in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary 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.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
San Francisco, California
October 12, 2018

STATEMENTS OF NET POSITION

At June 30, 2018 and 2017 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA 2018	UNIVERSITY OF CALIFORNIA 2017	CAMPUS FOUNDATIONS 2018	CAMPUS FOUNDATIONS 2017
ASSETS				
Cash and cash equivalents	$249,523	$203,370	$447,377	$254,100
Short-term investments	4,890,075	6,249,657	857,844	674,868
Investment of cash collateral	1,054,406	947,353	40,999	37,357
Investments held by trustees	26,803	32,516		
Accounts receivable, net	4,061,888	3,946,891	13,102	40,012
Pledges receivable, net	25,049	23,181	234,294	192,484
Current portion of notes and mortgages receivable, net	68,482	50,137	181	6
Inventories	244,706	226,995		
Department of Energy receivable	133,472	123,896		
Other current assets	400,030	338,041	4,622	4,748
Current assets	**11,154,434**	**12,142,037**	**1,598,419**	**1,203,575**
Investments	22,478,922	18,228,705	8,381,736	7,532,122
Investment of cash collateral	110,301	132,476	4,289	5,224
Investments held by trustees	388,361	66,509		
Pledges receivable, net	32,690	33,031	771,889	673,495
Notes and mortgages receivable, net	386,342	314,018	250	427
Department of Energy receivable	973,652	1,257,926		
Capital assets, net	32,325,107	30,669,753		
Other noncurrent assets	202,996	195,481	115,177	89,090
Noncurrent assets	**56,898,371**	**50,897,899**	**9,273,341**	**8,300,358**
Total assets	**68,052,805**	**63,039,936**	**10,871,760**	**9,503,933**
DEFERRED OUTFLOWS OF RESOURCES	**4,649,403**	**5,549,644**		
LIABILITIES				
Accounts payable	2,178,244	2,394,554	22,071	21,501
Accrued salaries	642,753	644,500		
Employee benefits	393,296	394,673		
Unearned revenue	1,423,686	1,200,545	5,535	63,011
Collateral held for securities lending	1,164,481	1,079,318	45,288	42,581
Commercial paper	781,804	812,673		
Current portion of long-term debt	1,371,030	1,519,005		
Funds held for others	409,934	362,621	298,060	265,159
Department of Energy laboratories' liabilities	116,111	107,514		
Other current liabilities	1,898,204	1,593,297	44,180	45,470
Current liabilities	**10,379,543**	**10,108,700**	**415,134**	**437,722**
Federal refundable loans	244,852	246,131		
Self-insurance	584,186	584,232		
Obligations under life income agreements	35,293	34,479	149,391	137,713
Long-term debt	21,505,943	18,171,198		
Net pension liability	9,775,120	10,739,355		
Net retiree health liability	18,862,265	19,290,424		
Other noncurrent liabilities	538,381	688,802	271,825	253,288
Noncurrent liabilities	**51,546,040**	**49,754,621**	**421,216**	**391,001**
Total liabilities	**61,925,583**	**59,863,321**	**836,350**	**828,723**
DEFERRED INFLOWS OF RESOURCES	**6,609,704**	**6,371,783**	**232,018**	**209,438**
NET POSITION				
Net investment in capital assets	13,578,222	13,342,824		
Restricted:				
Nonexpendable: Endowments and gifts	1,148,699	1,121,743	4,408,143	3,967,219
Nonexpendable: Reserved for minority interests	33,754	33,507		
Expendable: Endowments and gifts	7,407,234	6,871,567	4,965,668	4,305,421
Expendable: Other, including debt service, loans, capital projects and appropriations	865,216	281,627		
Unrestricted	(18,866,204)	(19,296,792)	429,581	193,132
Total net position	**$4,166,921**	**$2,354,476**	**$9,803,392**	**$8,465,772**

See accompanying Notes to Financial Statements.

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	UNIVERSITY OF CALIFORNIA		CAMPUS FOUNDATIONS	
Years ended June 30, 2018 and 2017 (in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
OPERATING REVENUES				
Student tuition and fees, net	$4,838,764	$4,477,213		
Grants and contracts, net:				
Federal	3,302,446	3,258,526		
State	567,532	454,207		
Private	1,523,778	1,421,752		
Local	315,424	306,492		
Medical centers, net	12,064,598	11,241,269		
Educational activities, net	3,670,545	3,332,671		
Auxiliary enterprises, net	1,684,759	1,579,152		
Department of Energy laboratories	1,062,428	1,147,233		
Campus foundation private gifts			$1,340,158	$864,411
Other operating revenues, net	970,991	938,678	1,237	3,099
Total operating revenues	**30,001,265**	**28,157,193**	**1,341,395**	**867,510**
OPERATING EXPENSES				
Salaries and wages	15,952,983	15,159,736		
Pension benefits	1,339,462	1,887,570		
Retiree health benefits	1,294,888	1,575,663		
Other employee benefits	3,245,927	2,938,133		
Supplies and materials	3,610,171	3,239,587		
Depreciation and amortization	2,027,343	1,909,870		
Department of Energy laboratories	1,054,475	1,139,232		
Scholarships and fellowships	766,857	728,594		
Utilities	303,773	292,447		
Campus foundation grants			1,100,287	939,784
Other operating expenses	4,850,982	4,648,395	35,917	29,731
Total operating expenses	**34,446,861**	**33,519,227**	**1,136,204**	**969,515**
Operating income (loss)	**(4,445,596)**	**(5,362,034)**	**205,191**	**(102,005)**
NONOPERATING REVENUES (EXPENSES)				
State educational appropriations	3,386,119	3,277,808		
State hospital fee grants	21,670	13,303		
Build America bonds federal interest subsidies	57,179	58,424		
Federal Pell Grants	421,693	381,650		
Private gifts, net	1,315,092	1,161,658		
Investment income:				
Short Term Investment Pool and other, net	307,225	204,840		
Endowment, net	97,134	85,540		
Securities lending, net	8,958	8,504	366	419
Campus foundations			76,988	71,788
Net appreciation in fair value of investments	889,534	1,721,243	646,441	792,155
Interest expense	(746,476)	(721,243)	(50)	(85)
Gain (loss) on disposal of capital assets	7,779	(59,567)		
Other nonoperating revenues (expenses)	63,610	9,837	(23)	1,037
Net nonoperating revenues	**5,829,517**	**6,141,997**	**723,722**	**865,314**
Income before other changes in net position	**1,383,921**	**779,963**	**928,913**	**763,309**
OTHER CHANGES IN NET POSITION				
Capital gifts and grants, net	403,164	255,559		
State capital appropriations	32	1,712		
Permanent endowments	25,328	23,957	408,707	286,924
Increase in net position	**1,812,445**	**1,061,191**	**1,337,620**	**1,050,233**
NET POSITION				
Beginning of year, as previously reported	2,354,476	1,319,958	8,465,772	7,536,850
Cumulative effect of accounting changes		(26,673)		(121,311)
Beginning of year, restated	2,354,476	1,293,285	8,465,772	7,415,539
End of year	**$4,166,921**	**$2,354,476**	**$9,803,392**	**$8,465,772**

See accompanying Notes to Financial Statements.

STATEMENTS OF CASH FLOWS

	UNIVERSITY OF CALIFORNIA		CAMPUS FOUNDATIONS	
Years ended June 30, 2018 and 2017 (in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
CASH FLOWS FROM OPERATING ACTIVITIES				
Student tuition and fees	$4,820,829	$4,466,850		
Grants and contracts	5,571,346	4,808,226		
Medical centers	11,831,671	11,173,461		
Educational activities	3,646,918	3,306,961		
Auxiliary enterprises	1,686,540	1,578,093		
Collection of loans from students and employees	85,622	80,393		
Campus foundation private gifts			$997,932	$696,340
Payments to employees	(15,907,816)	(15,492,680)		
Payments to suppliers and utilities	(8,228,056)	(7,691,984)		
Payments for pension benefits	(2,208,680)	(1,881,289)		
Payments for retiree health benefits	(319,927)	(333,928)		
Payments for other employee benefits	(3,318,249)	(2,829,325)		
Payments for scholarships and fellowships	(766,797)	(728,428)		
Loans issued to students and employees	(176,940)	(63,972)		
Payments to campuses and beneficiaries			(1,157,983)	(982,389)
Other receipts (payments)	723,416	1,209,221	29,217	66,557
Net cash used by operating activities	**(2,560,123)**	**(2,398,401)**	**(130,834)**	**(219,492)**
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES				
State educational appropriations	3,371,735	3,277,402		
Federal Pell Grants	418,735	380,364		
State hospital fee grants	21,670	13,303		
Gifts received for other than capital purposes:				
Private gifts for endowment purposes	59,022	22,789	332,939	226,924
Other private gifts	1,306,915	1,129,424		
Receipt of retiree health contributions from UCRP	65,102	64,386		
Payment of retiree health contributions to UCRHBT	(82,597)	(58,198)		
Receipts from UCRHBT	372,702	348,291		
Payments for retiree health benefits made on behalf of UCRHBT	(385,462)	(360,210)		
Student direct lending receipts	562,158	772,234		
Student direct lending payments	(562,128)	(772,216)		
Proceeds from debt issuance		500,000		
Refinancing or prepayment of outstanding debt		(500,000)		
Commercial paper financing:				
Proceeds from issuance	7,576	23,497		
Payments of principal	(12,936)	(15,323)		
Interest paid on debt	(22,554)	(13,966)		
Other receipts	122,345	48,626	22,593	24,114
Net cash provided by noncapital financing activities	**5,242,283**	**4,860,403**	**355,532**	**251,038**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES				
Commercial paper financing:				
Proceeds from issuance	642,547	711,453		
Payments of principal	(668,056)	(944,811)		(192)
Interest paid	(10,693)	(4,825)		
State capital appropriations	(1,794)	9,602		
Build America bonds federal interest subsidies	57,845	58,421		
Capital gifts and grants	130,358	130,397		
Proceeds from debt issuance	4,645,296	2,088,512		
Proceeds from the sale of capital assets	3,348	17,720		
Purchase of capital assets	(3,557,917)	(2,679,314)		
Refinancing or prepayment of outstanding debt	(1,013,739)	(820,739)		
Scheduled principal paid on debt and capital leases	(394,905)	(461,183)		
Interest paid on debt and capital leases	(878,075)	(787,307)		
Net cash used by capital and related financing activities	**($1,045,785)**	**($2,682,074)**		**($192)**

See accompanying Notes to Financial Statements.

STATEMENTS OF CASH FLOWS *continued*

	UNIVERSITY OF CALIFORNIA		CAMPUS FOUNDATIONS	
Years ended June 30, 2018 and 2017 (in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
CASH FLOWS FROM INVESTING ACTIVITIES				
Proceeds from sales and maturities of investments	$83,531,008	$86,593,485	$1,642,416	$1,311,371
Purchase of investments	(85,520,749)	(86,745,271)	(1,751,480)	(1,355,524)
Investment income, net of investment expenses	399,519	308,663	77,643	71,985
Net cash provided (used) by investing activities	**(1,590,222)**	**156,877**	**(31,421)**	**27,832**
Net increase (decrease) in cash and cash equivalents	**46,153**	**(63,195)**	**193,277**	**59,186**
Cash and cash equivalents, beginning of year	203,370	266,565	254,100	194,914
Cash and cash equivalents, end of year	**$249,523**	**$203,370**	**$447,377**	**$254,100**
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH USED BY OPERATING ACTIVITIES				
Operating income (loss)	($4,445,596)	($5,362,034)	$205,191	($100,971)
Adjustments to reconcile operating loss to net cash used by operating activities:				
Depreciation and amortization expense	2,027,343	1,909,870		
Noncash gifts			(141,530)	(143,572)
Allowance for uncollectible accounts	257,198	266,431	3,775	19,653
Loss on impairment of capital assets	10,361	7,354		
Change in assets and liabilities:				
Investments held by trustees	10,254	737,280	(1,186)	10,408
Accounts receivable	(639,229)	(960,355)	6,796	(931)
Pledges receivable			(147,333)	(45,844)
Inventories	(17,712)	(12,315)		
Other assets	(179,961)	(2,584)	(7,095)	2,544
Accounts payable	110,295	121,451	(1,143)	1,022
Accrued salaries	(1,747)	(350,735)		
Employee benefits	15,765	(52,110)		
Unearned revenue	225,169	26,000	(55,807)	64,259
Department of Energy	298,366	337,841		
Self-insurance	116,108	73,802		
Obligations under life income agreements			(5,659)	(10,740)
Net pension liability	(1,200,507)	(730,435)		
Net retiree health benefits liability	874,018	1,509,674		
Other liabilities	(20,248)	82,464	13,157	(15,320)
Net cash used by operating activities	**($2,560,123)**	**($2,398,401)**	**($130,834)**	**($219,492)**
SUPPLEMENTAL NONCASH ACTIVITIES INFORMATION				
Capital assets acquired through capital leases	$47,225	$55,360		
Capital assets acquired with a liability at year end	76,120	98,916		
Change in fair value of interest rate swaps classified as hedging derivatives	35,393	61,891		
Gifts of capital assets	294,873	122,913		
Other noncash gifts	3,276	33,194	$203,015	$199,500
Interest added to principal			3,232	2,934
Beneficial interests in irrevocable split interest agreements administered by third-parties	1,114	(1,802)	12,818	5,479
Noncash gifts for University-administered irrevocable split-interest agreements			35,119	8,895

See accompanying Notes to Financial Statements.

UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM AND RETIREE HEALTH BENEFIT TRUST

STATEMENTS OF PLANS' AND TRUST'S FIDUCIARY NET POSITION

At June 30, 2018 and 2017 (in thousands of dollars)	**UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM (UCRS)**		**UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST (UCRHBT)**		**TOTAL UCRS AND UCRHBT**	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**
ASSETS						
Investments	$90,872,718	$82,574,019	$128,091	$97,801	$91,000,809	$82,671,820
Participants' interest in mutual funds	1,585,098	3,351,454			1,585,098	3,351,454
Investment of cash collateral	6,158,290	6,841,530			6,158,290	6,841,530
Participant 403(b) loans	184,388	180,511			184,388	180,511
Accounts receivable:						
Contributions from University and affiliates	113,353	57,552	6,537	9,656	119,890	67,208
Investment income	90,314	80,593			90,314	80,593
Security sales and other	76,615	884,657	200	147	76,815	884,804
Prepaid insurance premiums			17,300	16,125	17,300	16,125
Total assets	**99,080,776**	**93,970,316**	**152,128**	**123,729**	**99,232,904**	**94,094,045**
LIABILITIES						
Payable to University			18,547	17,015	18,547	17,015
Payable for securities purchased	1,612,039	2,380,442			1,612,039	2,380,442
Member withdrawals, refunds and other payables	86,664	89,590			86,664	89,590
Collateral held for securities lending	6,157,131	6,838,416			6,157,131	6,838,416
Total liabilities	**7,855,834**	**9,308,448**	**18,547**	**17,015**	**7,874,381**	**9,325,463**
NET POSITION HELD IN TRUST						
Members' defined benefit plan benefits	66,838,838	62,179,236			66,838,838	62,179,236
Participants' defined contribution plan benefits	24,386,104	22,482,632			24,386,104	22,482,632
Retiree health benefits			133,581	106,714	133,581	106,714
Total net position held in trust	**$91,224,942**	**$84,661,868**	**$133,581**	**$106,714**	**$91,358,523**	**$84,768,582**

See accompanying Notes to Financial Statements.

STATEMENTS OF CHANGES IN PLANS' AND TRUST'S FIDUCIARY NET POSITION

Years ended June 30, 2018 and 2017 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM (UCRS)		UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST (UCRHBT)		TOTAL UCRS AND UCRHBT	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**
ADDITIONS (REDUCTIONS)						
Contributions:						
Members and employees	$2,216,388	$2,206,455			$2,216,388	$2,206,455
State	169,000	171,000			169,000	171,000
University	2,374,352	2,402,009	$338,436	$328,057	2,712,788	2,730,066
Total contributions	**4,759,740**	**4,779,464**	**338,436**	**328,057**	**5,098,176**	**5,107,521**
Investment income (expense), net:						
Net appreciation (depreciation) in fair value of investments	5,098,540	8,616,400			5,098,540	8,616,400
Interest, dividends and other investment income	1,508,186	1,386,834	1,634	606	1,509,820	1,387,440
Securities lending income	136,099	89,075			136,099	89,075
Securities lending fees and rebates	(89,025)	(40,610)			(89,025)	(40,610)
Total investment income, net	**6,653,800**	**10,051,699**	**1,634**	**606**	**6,655,434**	**10,052,305**
Interest income from contributions receivable	1,148	1,472			1,148	1,472
Total additions	**11,414,688**	**14,832,635**	**340,070**	**328,663**	**11,754,758**	**15,161,298**
DEDUCTIONS						
Benefit payments:						
Retirement payments	2,495,200	2,330,361			2,495,200	2,330,361
Member withdrawals	153,324	140,666			153,324	140,666
Cost-of-living adjustments	517,646	474,815			517,646	474,815
Lump sum cashouts	336,966	292,270			336,966	292,270
Preretirement survivor payments	49,329	47,778			49,329	47,778
Disability payments	30,259	30,470			30,259	30,470
Death payments	9,440	9,368			9,440	9,368
Participant withdrawals	1,220,081	1,374,324			1,220,081	1,374,324
Total benefit payments	**4,812,245**	**4,700,052**			**4,812,245**	**4,700,052**
Insurance premiums:						
Insured plans			167,546	161,142	167,546	161,142
Self-insured plans			131,458	119,667	131,458	119,667
Medicare Part B reimbursements			10,340	9,425	10,340	9,425
Total insurance premiums, net			**309,344**	**290,234**	**309,344**	**290,234**
Other deductions:						
Plan administration	29,981	39,823	3,859	4,256	33,840	44,079
Other	9,388	13,127			9,388	13,127
Total other deductions	**39,369**	**52,950**	**3,859**	**4,256**	**43,228**	**57,206**
Total deductions	**4,851,614**	**4,753,002**	**313,203**	**294,490**	**5,164,817**	**5,047,492**
Increase in net position held in trust	**6,563,074**	**10,079,633**	**26,867**	**34,173**	**6,589,941**	**10,113,806**
NET POSITION HELD IN TRUST						
Beginning of year	84,661,868	74,582,235	106,714	72,541	84,768,582	74,654,776
End of year	**$91,224,942**	**$84,661,868**	**$133,581**	**$106,714**	**$91,358,523**	**$84,768,582**

See accompanying Notes to Financial Statements.

UNIVERSITY OF CALIFORNIA

Notes to Financial Statements

Years ended June 30, 2018 and 2017

ORGANIZATION

The University of California ("the University") was founded in 1868 as a public, state-supported institution. The California State Constitution provides that the University shall be a public trust administered by the corporation, "The Regents of the University of California," which is vested with full powers of organization and government, subject only to such legislative control necessary to ensure the security of its funds and compliance with certain statutory and administrative requirements. The majority of the 26-member independent governing board ("The Regents") is appointed by the governor and approved by the state Senate. Various University programs and capital outlay projects are funded through appropriations from the state's annual Budget Act. The University's financial statements are discretely presented in the state's basic financial statements as a component unit.

FINANCIAL REPORTING ENTITY AND SIGNIFICANT ACCOUNTING POLICIES

Financial Reporting Entity

The University's financial statements include the accounts of ten campuses, five medical centers, a statewide agricultural extension program and the operations of most student government or associated student organizations as part of the primary financial reporting entity because The Regents has certain oversight responsibilities for these organizations. In addition, the financial position and operating results of certain other legally separate organizations are included in the University's financial reporting entity on a blended basis if The Regents is determined to be financially accountable for the organization. Organizations that are not significant or for which the University is not financially accountable, such as booster and alumni organizations, are not included in the reporting entity. However, cash invested with the University by these organizations, along with the related liability, is included in the statement of net position. The statement of revenues, expenses and changes in net position excludes the activities associated with these organizations.

Fiat Lux Risk and Insurance Company ("Fiat Lux"), the University's wholly owned captive insurance company, is a blended component unit of the University. The Regents of the University of California are the sole corporate and voting member of Children's Hospital & Research Center Oakland ("CHRCO"), a private, not-for-profit 501(c)(3) corporation. Children's Hospital & Research Center Foundation, a nonprofit public benefit corporation, is organized and operated for the purpose of supporting CHRCO. CHRCO, combined with its foundation, is a blended component unit of the University.

The University has eleven legally separate, tax-exempt, affiliated campus foundations, one for each campus and the Lawrence Berkeley National Laboratory (LBNL). The economic resources received or held by the foundations are entirely for the benefit of the campuses. Because of the nature and significance of their relationship with the University, including their ongoing financial support, the campus foundations are reported under Governmental Accounting Standards Board (GASB) requirements as discretely presented component units of the University.

Specific assets and liabilities and all revenues and expenses associated with the LBNL, a major United States Department of Energy (DOE) national laboratory operated and managed by the University under contract directly with the DOE, are included in the accompanying financial statements.

The Regents has fiduciary responsibility for the University of California Retirement System (UCRS) which includes two defined benefit plans, the University of California Retirement Plan (UCRP) and the University of California Voluntary Early Retirement Incentive Plan (UC–VERIP), and four defined contribution plans in the University of California Retirement Savings Program (UCRSP), consisting of 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). As a result, the UCRS statements of plans' fiduciary net position and changes in plans' fiduciary net position are shown as a fiduciary fund in the University's financial statements.

The Regents also has fiduciary responsibility for the University of California Retiree Health Benefit Trust (UCRHBT). As a result, UCRHBT's statements of trust's fiduciary net position and changes in trust's fiduciary net position are shown as a fiduciary fund in the University's financial statements. UCRHBT allows certain University locations and affiliates, primarily campuses and medical centers that share the risks, rewards and costs of providing for retiree health benefits, the opportunity to fund such benefits on a cost-sharing basis and accumulate funds on a tax-exempt basis under an arrangement segregated from University assets. The Regents serves as Trustee of UCRHBT and has the authority to amend or terminate the trust.

Significant Accounting Policies

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, using the economic resources measurement focus and the accrual basis of accounting. The University follows accounting principles issued by the Governmental Accounting Standards Board (GASB).

GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, was implemented by the University as of July 1, 2017. The Statement establishes standards for accounting and financial reporting for irrevocable split-interest agreements. The Statement requires that the University recognize assets, liabilities and deferred inflows for split-interest agreements administered by the University at the inception of the agreement. The Statement also requires the University to recognize assets and deferred inflows representing its beneficial interests in irrevocable split-interest agreements that are administered by third parties. The Statement requires the University to recognize revenue when the resources become available to spend.

The adoption of Statement No. 81 did not result in any adjustments to the financial statements of UCRS or UCRHBT. The effects of reporting Statement No. 81 in the University's financial statements for the year ended June 30, 2017, were as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA AS OF AND FOR THE YEAR ENDED JUNE 30, 2017		
	AS PREVIOUSLY REPORTED	EFFECT OF ADOPTION OF STATEMENT NO. 81	AS RESTATED
STATEMENT OF NET POSITION			
Other noncurrent assets	$138,927	$56,554	$195,481
Noncurrent assets	50,841,345	56,554	50,897,899
Total assets	62,983,382	56,554	63,039,936
Deferred inflows of resources	6,284,371	87,412	6,371,783
Restricted net position - Nonexpendable: Endowments and gifts	1,143,067	(21,324)	1,121,743
Restricted net position - Expendable: Endowments and gifts	6,881,101	(9,534)	6,871,567
Total net position	2,385,334	(30,858)	2,354,476
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION			
Private gifts, net	$1,167,395	($5,737)	$1,161,658
Net appreciation in fair value of investments	1,721,798	(555)	1,721,243
Other nonoperating revenues	10,856	(1,019)	9,837
Net nonoperating revenues	6,149,308	(7,311)	6,141,997
Income before other changes in net position	787,274	(7,311)	779,963
Permanent endowments	20,831	3,126	23,957
Increase in net position	1,065,376	(4,185)	1,061,191

(in thousands of dollars)

	CAMPUS FOUNDATIONS AS OF AND FOR THE YEAR ENDED JUNE 30, 2017		
	AS PREVIOUSLY REPORTED	EFFECT OF ADOPTION OF STATEMENT NO. 81	AS RESTATED
STATEMENT OF NET POSITION			
Other noncurrent assets	$17,760	$71,330	$89,090
Noncurrent assets	8,229,028	71,330	8,300,358
Total assets	9,432,603	71,330	9,503,933
Deferred inflows of resources	1,723	207,715	209,438
Restricted net position - Nonexpendable: Endowments and gifts	4,045,925	(78,706)	3,967,219
Restricted net position - Expendable: Endowments and gifts	4,363,100	(57,679)	4,305,421
Total net position	8,602,157	(136,385)	8,465,772
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION			
Campus foundation private gifts	$866,190	($1,779)	$864,411
Investment income: Campus foundations	72,690	(902)	$71,788
Net appreciation in fair value of investments	799,242	(7,087)	792,155
Other nonoperating revenues	5,082	(4,045)	1,037
Net nonoperating revenues	877,348	(12,034)	865,314
Income before other changes in net position	777,122	(13,813)	763,309
Permanent endowments	288,185	(1,261)	286,924
Increase in net position	1,065,307	(15,074)	1,050,233

In March 2017, the GASB issued Statement No. 85, *Omnibus 2017*, effective for the University's fiscal year beginning July 1, 2017. The Statement addresses practice issues that have been identified during implementation and application of certain GASB Statements including issues related to blending component units, goodwill, fair value measurement and application and post-employment benefits. Implementation of Statement No. 85 had no impact on the financial statements.

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*, effective for the University's fiscal year beginning July 1, 2017. This Statement establishes standards of accounting and financial reporting for in-substance defeasance transactions in which cash and other monetary assets acquired with resources other than the proceeds of the refunding debt are placed in an irrevocable trust for the sole purpose of extinguishing debt. In addition, this Statement revises existing standards for prepaid insurance associated with extinguished debt. Implementation of Statement No. 86 had no impact on the financial statements.

The significant accounting policies of the University are as follows:

Cash and cash equivalents. The University and campus foundations consider all balances in demand deposit accounts to be cash. The University classifies all other highly liquid cash equivalents with original maturities less than one year as short-term investments. Certain campus foundations classify their deposits in the University's Short Term Investment Pool as a cash equivalent.

Investments. Investments are measured and recorded 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 a dealer who regularly trades in the security being valued. Investment in non-exchange traded debt and equity investments are valued using inputs provided by independent pricing services or by broker/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, real assets and international funds. Fair values for interests in private equity, absolute return partnerships and real estate partnerships are based on valuations provided by the general partners of the respective partnerships. The valuations are primarily based on the most recent 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, 2018 and 2017.

Interests in certain direct investments in real estate are estimated based upon independent appraisals. Because the private equity, real estate, real assets 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 University considers 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 University may review the investment's underlying portfolio as well as engage external appraisers, depending on the nature of the investment.

The University exercises 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 to the inputs of the external investment managers' valuation. 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 University's statement of revenues, expenses and changes in 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.

Campus foundations may invest all or a portion of their investments in University-managed investment pools. Certain securities in these investment pools are included in the University's security lending program. Accordingly, the campus foundations' investments in University-managed investment pools and their allocated share of the securities lending activities have been excluded from the University's financial statements and included in the Campus Foundations' column.

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.

The University has entered into interest rate swap agreements to limit the exposure of its variable-rate debt to changes in market interest rates. Interest rate swap agreements involve the exchange with a counterparty of fixed- and variable-rate interest payments periodically over the life of the agreement without exchange of the underlying notional principal amounts. The net differential to be paid or received is recognized over the life of the agreements as an adjustment to interest expense. The University's counterparties are major financial institutions.

Derivatives are recorded at estimated fair value as either assets or liabilities in the statement of net position. Certain derivatives are determined to be hedging derivatives and designated as either a fair value or cash flow hedge. Under hedge accounting, changes in the fair value of hedging derivatives are considered to be deferred inflows (for hedging derivatives with positive fair values) or deferred outflows (for hedging derivatives with negative fair values).

Changes in the fair value of derivatives that are not hedging derivatives are recorded as net appreciation or depreciation of investments in the statement of revenues, expenses and changes in net position.

Participants' interests in mutual funds. Participants in the University's defined contribution retirement plans may invest their account balances in funds managed by the University's Chief Investment Officer or in certain mutual funds.

Accounts receivable, net. Accounts receivable, net of allowance for uncollectible amounts, include reimbursements due from state and federal sponsors of externally funded research, patient billings, accrued income on investments and other receivables. Other receivables include local government and private grants and contracts, educational activities and amounts due from students, employees and faculty.

Pledges receivable, net. Unconditional pledges of private gifts to the University or campus foundations, net of allowance for uncollectible amounts, are recorded as pledges receivable and revenue in the year promised at the net present value of expected cash flows. Conditional pledges, including all pledges of endowments and intentions to pledge, are recognized as receivables and revenues when the specified conditions are met.

Beneficial interests in irrevocable split-interest agreements. The beneficial interests in irrevocable split-interest agreements represent the University's and the campus foundations' right to the portion of the benefits from the irrevocable split-interest agreements that are administered by third parties and are recognized as an asset and deferred inflows of resources. These are measured at fair value and are reported as other noncurrent assets in the statements of net position. Changes in the fair value of the beneficial interest asset are recognized as an increase or decrease in the related deferred inflows of resources. At the termination of the agreement, net assets received from the beneficial interests are recognized as revenues.

Notes and mortgages receivable, net. Loans to students, net of allowance for uncollectible amounts, are provided from federal student loan programs and from other University sources. Home mortgage loans, primarily to faculty, are provided from the University's Short Term Investment Pool and from other University sources. Mortgage loans provided by the Short Term Investment Pool are classified as investments and loans provided by other sources are classified as mortgages receivable in the statements of net position.

Inventories. Inventories for the campuses, consisting primarily of supplies and merchandise for resale, are valued at cost, typically determined under the weighted average method, which is not in excess of estimated net realizable value. Inventories for the medical centers consist primarily of pharmaceuticals and medical supplies which are stated on a first-in, first-out basis at the lower of cost or market.

DOE national laboratories. The University operates and manages LBNL under a contract directly with the DOE. Specific assets and liabilities and all revenues and expenses associated with LBNL are included in the financial statements. Other assets, such as cash, property and equipment and other liabilities of LBNL are owned by the United States government rather than the University and, therefore, are not included in the statement of net position. The statement of cash flows excludes the cash flows associated with LBNL other than reimbursements, primarily related to pension and health benefits, since all other cash transactions are recorded in bank accounts owned by the DOE.

The University is a member in two separate joint ventures, Los Alamos National Security, LLC (LANS), and Lawrence Livermore National Security, LLC (LLNS), that operate and manage two other DOE laboratories, Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL), respectively, under contracts directly with the DOE. The University's investment in LANS and LLNS is accounted for using the equity method. Accordingly, the University's statement of net position includes its equity interest in LANS and LLNS, adjusted for the equity in undistributed earnings or losses and the statement of revenues, expenses and changes in net position includes its equity in the current earnings or losses of LANS and LLNS.

The DOE is financially responsible for substantially all of the current and future costs incurred at any of the national laboratories, including pension and retiree health benefit costs. Accordingly, to the extent there is a liability on the University's statement of net position for pension or retiree health obligations related to these laboratories, the University records a receivable from the DOE.

Capital assets, net. Land, infrastructure, buildings and improvements, intangible assets, equipment, libraries, collections and special collections are recorded at cost at the date of acquisition, or estimated acquisition value at the date of donation in the case of gifts. Estimates of acquisition value involve assumptions and estimation methods that are uncertain and, therefore, the estimates could differ from actual value. Intangible assets include easements, land rights, trademarks, patents and other similar arrangements. Capital leases are recorded at the estimated present value of future minimum lease payments. Significant additions, replacements, major repairs and renovations to infrastructure and buildings are generally capitalized if the cost exceeds $35,000 and if they have a useful life of more than one year. Minor renovations are charged to operations. Equipment with a cost in excess of $5,000 and a useful life of more than one year is capitalized. Incremental costs, including salaries and employee benefits, directly related to the acquisition, development and installation of major software projects are included in the cost of the capital assets. All costs of land, library collections and special collections are capitalized.

Depreciation is calculated using the straight-line method over the estimated economic life of the asset. Equipment under capital leases is amortized over the estimated useful life of the equipment. Leasehold improvements are amortized using the straight-line method over the shorter of the life of the applicable lease or the economic life of the asset.

Estimated economic lives are generally as follows:

	YEARS
Infrastructure	25
Buildings and improvements	15-33
Equipment	2-20
Computer software	3-7
Intangible assets	2-indefinite
Library books and collections	15

Capital assets acquired through federal grants and contracts where the federal government retains a reversionary interest are also capitalized and depreciated.

Inexhaustible capital assets, such as land or special collections that are protected, preserved and held for public exhibition, education or research, including art, museum, scientific and rare book collections are not depreciated.

Interest on borrowings to finance facilities is capitalized during construction, net of any investment income earned on tax-exempt borrowings during the temporary investment of project-related borrowings.

Service concession arrangements. The University has entered into service concession arrangements with third parties for parking, student housing and certain other faculty and student services. Under these arrangements, the University enters into ground leases with third parties at minimal or no cost, and gives the third party the right to construct, operate and maintain a facility, primarily for the benefit of students and faculty at competitive rates. Rate increases for use of the facilities are subject to certain constraints and ownership of the facilities reverts to the University upon expiration of the ground lease. The facilities are reported as capital assets by the University when placed in service, and a corresponding deferred inflow of resources is reported. The University has not provided guarantees on financing obtained by the third parties under these arrangements.

Unearned revenue. Unearned revenue primarily includes amounts received from grant and contract sponsors that have not been earned under the terms of the agreement and other revenue billed in advance of the event, such as student tuition and fees for housing and dining services.

Funds held for others. Funds held for others result from the University or the campus foundations acting as an agent, or fiduciary, on behalf of organizations that are not significant or financially accountable to the University or campus foundations.

Federal refundable loans. Certain loans to students are administered by the University with funding primarily supported by the federal government. The University's statement of net position includes both the notes receivable and the related federal refundable loan liability representing federal capital contributions owed upon termination of the program.

Bond premium. The premium received in the issuance of long-term debt is amortized as a reduction to interest expense over the term of the related long-term debt.

Self-insurance programs. The University is self-insured or insured through a wholly owned captive insurance company for medical malpractice, workers' compensation, employee health care and general liability claims. These risks are subject to various claim and aggregate limits, with excess liability coverage provided by an independent insurer. Liabilities are recorded when it is probable a loss has occurred and the amount of the loss can be reasonably estimated. These losses include an estimate for claims that have been incurred, but not reported. The estimated liabilities are based upon an independent actuarial determination of the present value of the anticipated future payments. Settlements did not exceed self-insured or supplementally insured coverage for each program in any of the past three fiscal years.

Obligations under life income agreements. Obligations under life income agreements represent trusts with living income beneficiaries where the University has a residual interest. The investments associated with these agreements are recorded at fair value. The discounted present value of the income beneficiary interest is reported as a liability in the statement of net position. Gifts subject to such agreements administered by the University are recorded as deferred inflows of resources, net of the income beneficiary share, at the date of the gift. Actuarial gains and losses are included in deferred inflows of resources in the statement of net position. At the termination of the agreement, the University's residual interest is recorded as gift revenue in the statement of revenues, expenses and changes in net position.

Pollution remediation obligations. Upon an obligating event, the University estimates the components of any expected pollution remediation costs and recoveries from third parties. The costs, estimated using the expected cash flow technique, are accrued as a liability. Pollution remediation liabilities generally involve groundwater, soil and sediment contamination at certain sites where state and other regulatory agencies have indicated that the University is among the responsible parties. The liabilities are reviewed annually and may increase or decrease the cost of recovery from third parties, if any, as a result of additional information that refines the estimates, or from payments made from revenue sources that support the activity. There were no expected recoveries at June 30, 2018 and 2017 reducing the pollution remediation liability.

Deferred outflows of resources and deferred inflows of resources. Deferred outflows of resources and deferred inflows of resources represent a consumption and acquisition of net position that apply to a future period, respectively. The University classifies gains on refunding of debt as deferred inflows of resources and losses as deferred outflows of resources and amortizes such amounts as a component of interest expense over the shorter of the remaining life of the old or new debt.

The University classifies changes in irrevocable split-interest agreements as deferred inflows of resources.

The University classifies an increase in the fair value of the hedging derivatives as deferred inflows of resources, and a decrease as deferred outflows of resources. Payments received or to be received by the University from service concession arrangements are reported as deferred inflows of resources.

Changes in net pension liability and net retiree health benefit liability not included in pension expense and retiree health benefits expense, respectively, are reported as deferred outflows of resources or deferred inflows of resources. Employer contributions subsequent to the measurement date of the net pension and retiree health liabilities are reported as deferred outflows of resources.

Net position. Net position is required to be classified for accounting and reporting purposes into the following categories:

Net investment in capital assets. This category includes all of the University's capital assets, net of accumulated depreciation, reduced by outstanding debt attributable to the acquisition, construction or improvement of those assets.

Restricted. The University and campus foundations classify the net position resulting from transactions with purpose restrictions as restricted net position until the specific resources are used for the required purpose or for as long as the provider requires the resources to remain intact.

Nonexpendable. The net position subject to externally imposed restrictions, which must be retained in perpetuity by the University or campus foundations, is classified as nonexpendable net position. This includes the University and campus foundation permanent endowment funds.

Also included in nonexpendable net position are minority interests, which include the net position of legally separate organizations attributable to other participants.

Expendable. The net position whose use by the University or campus foundations is subject to externally imposed restrictions that can be fulfilled by actions of the University or campus foundations pursuant to those restrictions or that expire by the passage of time is classified as expendable net position.

Unrestricted. The net position that is not subject to externally imposed restrictions governing its use is classified as unrestricted net position. The University's unrestricted net position may be designated for specific purposes by management or The Regents. The campus foundations' unrestricted net position may be designated for specific purposes by their Boards of Trustees. Substantially all of the University's unrestricted net position is allocated for academic and research initiatives or programs, for capital programs or for other purposes.

Restricted or unrestricted resources are spent based upon a variety of factors, including funding restrictions, consideration of prior and future revenue sources, the type of expense incurred, the University's budgetary policies surrounding the various revenue sources or whether the expense is a recurring cost. Unrestricted net position is negative due primarily to liabilities for pension and retiree health benefits exceeding University assets available to pay such obligations.

Revenues and expenses. Operating revenues of the University include receipts from student tuition and fees, grants and contracts for specific operating activities and sales and services from medical centers, educational activities and auxiliary enterprises. Operating expenses incurred in conducting the programs and services of the University are presented in the statement of revenues, expenses and changes in net position as operating activities. The University's equity in current earnings or losses of LANS and LLNS is also an operating transaction.

Certain significant revenues relied upon and budgeted for fundamental operational support of the core instructional mission of the University are mandated by the GASB to be recorded as nonoperating revenues, including state educational appropriations, certain federal grants for student financial aid, private gifts and investment income, since the GASB does not consider them to be related to the principal operating activities of the University.

Campus foundations are established to financially support the University. Private gifts to campus foundations are recognized as operating revenues since, in contrast to the University, such contributions are fundamental to the core mission of the campus foundations. Foundation grants to the University are recognized as operating expenses by the foundations. Private gift or capital gift revenues associated with campus foundation grants to the University are recorded by the University as gifts when the foundations transfer the gifts to the University.

Nonoperating revenues and expenses include state educational appropriations, state financing appropriations, state hospital fee grants, Build America Bonds federal interest subsidies, Federal Pell Grants, private gifts for other than capital purposes, investment income, net appreciation (or depreciation) in the fair value of investments, interest expense and the loss on the disposal of capital assets.

State capital appropriations, capital gifts and grants and gifts for endowment purposes are classified as other changes in net position.

Student tuition and fees. Substantially all student tuition and fees provide for the current operations of the University. A small portion of the student fees, reported as capital gifts and grants, is required for debt service associated with student union and recreational centers.

The University recognizes scholarship allowances as the difference between the stated charge for tuition and fees, housing and dining charges, recreational center and other fees, and the amount that is paid by the student and third parties on behalf of the student. Payments of financial aid made directly to students are classified as scholarship and fellowship expenses.

Scholarship allowances are netted against student tuition and fees in the statement of revenues, expenses and changes in net position for the years ended June 30 as follows:

(in thousands of dollars)

	2018	2017
Student tuition and fees	$1,250,300	$1,129,720
Auxiliary enterprises	206,012	185,038
Other operating revenues	30,602	29,654
Scholarship allowances	**$1,486,914**	**$1,344,412**

State appropriations. The state of California provides appropriations to the University on an annual basis. State educational appropriations are recognized as nonoperating revenue; however, the related expenses for educational, retirement or other specific operating purposes are reported as operating expenses. State appropriations for capital projects are recorded as revenue under other changes in net position when the related expenditures are incurred. Special state appropriations for AIDS, tobacco and breast cancer research are reported as grant operating revenue.

Grant and contract revenue. The University receives grant and contract revenue from governmental and private sources. The University recognizes revenue associated with the direct costs of sponsored programs as the related expenditures are incurred. Recovery of facilities and administrative costs of federally sponsored programs is at cost reimbursement rates negotiated with the University's federal cognizant agency, the U.S. Department of Health and Human Services. For the year ended June 30, 2018, the facilities and administrative cost recovery totaled $1.1 billion, which consisted of $782.0 million from federally sponsored programs and $333.8 million from other sponsors. For the year ended June 30, 2017, the facilities and administrative cost recovery totaled $1.1 billion, which consisted of $764.0 million from federally sponsored programs and $312.3 million from other sponsors.

Medical center revenue. Medical center revenue is reported at the estimated net realizable amounts from patients and third-party payors, including Medicare, Medi-Cal and others, for services rendered, as well as estimated retroactive adjustments under reimbursement agreements with third-party payors. Laws and regulations governing Medicare and Medi-Cal are complex and subject to interpretation. Retroactive adjustments are accrued on an estimated basis in the period the related services are rendered and adjusted in future periods as final settlements are determined. It is reasonably possible that estimated amounts accrued could change significantly based upon settlement, or as additional information becomes available.

Net pension liability. The University records net pension liability equal to the net pension liability for its defined benefit plans. The net pension liability is measured as the total pension liability, less the amount of the pension plans' fiduciary net positions. The fiduciary net position and changes in net position of the defined benefit plans has been measured consistent with the accounting policies used by the plans. The total pension liability is determined based upon discounting projected benefit payments based on the benefit terms and legal agreements existing at the pension plan's 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.

Pension expense is recognized for benefits earned during the period, interest on the unfunded liability and changes in benefit terms. The differences between expected and actual experience and changes in assumptions about future economic or demographic factors are reported as deferred inflows or outflows and are recognized over the average expected remaining service period for employees eligible for pension benefits. The differences between expected and actual returns are reported as deferred inflows or outflows and are recognized over five years.

Both current employees and retirees at LBNL participate in UCRP. The University makes contributions to UCRP for LBNL employees based upon rates authorized by The Regents and is reimbursed by the DOE. The University also makes contributions to UCRP for LANL and LLNL retirees and terminated vested members, whose benefits were retained in UCRP at the time the joint ventures were formed. The University records a receivable for the net pension liability that is expected to be collected from the DOE. The University deposits funds in UCRP when the DOE makes payments for these contributions. The contributions from the DOE and deposits into UCRP on behalf of DOE are included as DOE laboratory revenue in the statement of revenues, expenses and changes in net position.

Retiree health benefits and liability. The University's net retiree health benefits liability is measured as the total retiree health benefits liability, less the amount of the University of California Retiree Health Benefit Trust (UCRHBT) fiduciary net position. The fiduciary net position and changes in net position of UCRHBT has been measured consistent with the accounting policies used by the trust. The total retiree health benefits liability is determined based upon discounting projected benefit payments based on the benefit terms and legal agreements existing at the health benefit trust's 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.

Expense for retiree health benefits is recognized for benefits earned during the period, interest on the unfunded liability and changes in benefit terms. The differences between expected and actual experience and changes in assumptions about future economic or demographic factors are reported as deferred inflows or outflows and are recognized over the average expected remaining service period for employees eligible for retiree health benefits. The differences between expected and actual returns are reported as deferred inflows or outflows and are recognized over five years.

LBNL participates in the University's retiree health plans. The net retiree health benefits liability for LBNL is determined independently from the University's campuses and medical centers. Retiree health benefits expense for LBNL is included with the DOE laboratory expense in the statement of revenues, expenses and changes in net position. The contributions from the DOE are included as DOE laboratory revenue in the statement of revenues, expenses and changes in net position.

The University records a receivable from the DOE for the DOE's portion of the University's net retiree health benefits liability attributable to LBNL. The University does not have any retiree health benefits liability for LANL or LLNL retiree health benefit costs since they do not participate in the University's retiree health plans.

Campus and medical center contributions toward retiree health costs made to UCRHBT, the University's LBNL-related payments made directly to health care insurers and administrators and the corresponding reimbursements from the DOE, are shown as operating activities in the statement of cash flows. Cash flows resulting from retiree health contributions from retirees are shown as noncapital financing activities in the statement of cash flows.

University of California Retiree Health Benefit Trust. UCRHBT receives the University's contributions toward retiree health benefits from campuses, medical centers and University affiliates. The University receives retiree health contributions from University affiliates and campus and medical center retirees that are deducted from their UCRP benefit payments. The University also remits these retiree contributions to UCRHBT.

The University acts as a third-party administrator on behalf of UCRHBT and pays health care insurers and administrators amounts currently due under the University's retiree health benefit plans for retirees. UCRHBT reimburses the University for these amounts.

LBNL does not participate in UCRHBT; therefore, the DOE has no interest in the Trust's assets.

Compensated absences. The University accrues annual leave, including employer-related costs, for employees at rates based upon length of service and job classification and compensatory time based upon job classification and hours worked.

Endowment spending. Under provisions of California law, the Uniform Prudent Management of Institutional Funds Act allows for investment income, as well as a portion of realized and unrealized gains, to be expended for the operational requirements of University programs.

Tax exemption. The University is recognized as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code (IRC), except for tax on unrelated business income under IRC Section 511. The University is also exempt from federal income tax under IRC Section 115(a) as a state institution. In addition, the University is exempt from state income taxes imposed under the California Revenue and Taxation Code. UCRS plans are qualified under IRC Section 401(a) and the related trusts are tax-exempt under Section 501(c)(3). The campus foundations are also qualified for tax exemption under IRC Section 501(c)(3). CHRCO and its component unit, the Children's Hospital and Research Center Foundation, are qualified for exemption under IRC Section 501(c)(3). Income received by UCRHBT is tax-exempt under IRC Section 115(a).

Use of estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 December 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*, effective for the University's fiscal year beginning July 1, 2018. This Statement establishes guidance for determining the timing and pattern of recognition for liabilities and corresponding deferred outflow of resources related to asset retirement obligations. The Statement requires the measurement of an asset retirement obligation to be based on the best estimate of the current value of outlays expected to be incurred. The deferred outflow of resources associated with an asset retirement obligation will be measured at the amount of the corresponding liability upon initial measurement and generally recognized as an expense during the reporting periods that the asset provides service. Disclosure requirements include a general description of the asset retirement obligation and associated tangible capital assets, the source of the obligation to retire the assets, the methods and assumptions used to measure the liability, and other relevant information. The University is evaluating the effect that Statement No. 83 will have on its financial statements.

In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*, effective for the University's fiscal year beginning July 1, 2019. This Statement establishes criteria for identifying fiduciary activities of all state and local governments. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or an equivalent arrangement that meets specific criteria. The University is evaluating the effect that Statement No. 84 will have on its financial statements.

In June 2017, the GASB issued Statement No. 87, *Leases*, effective for the University's fiscal year beginning July 1, 2020. This Statement establishes a single approach to accounting for and reporting leases based on the principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. Limited exceptions to the single-approach guidance are provided for short-term leases, defined as lasting a maximum of twelve months at inception, including any options to extend, financed purchases, leases of assets that are investments and certain regulated leases. The University is evaluating the effect Statement No. 87 will have on its financial statements.

In April 2018, the GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, effective for the University's fiscal year beginning July 1, 2018. This Statement defines debt for purposes of disclosures in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires additional disclosures related to debt including providing additional information for direct borrowings and direct placements of debt separately from other debt. The University is evaluating the effect that Statement No. 88 will have on its financial statements.

In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period,* effective prospectively for the University's fiscal year beginning July 1, 2020. The Statement requires that interest cost incurred before the end of a construction period to be recognized as an expense in the period in which the cost is incurred. As a result, interest costs would not be capitalized as part of the asset's historical cost. For construction in progress, interest cost incurred after applying this Statement No. 89 will not be capitalized. The University is evaluating the effect that Statement No. 89 will have on its financial statements.

In August 2018, the GASB issued Statement No. 90, *Majority Equity Interests — An Amendment of GASB Statements No. 14 and No. 61*, effective for the University's fiscal year beginning July 1, 2019. The Statement defines a majority equity interest in a legally separate organization and clarifies the accounting and financial reporting for majority equity interests, classified as either investments or component units, in the financial statements. The University is evaluating the effect that Statement No. 90 will have on its financial statements.

1. CASH AND CASH EQUIVALENTS

The University maintains centralized management for substantially all of its cash and cash equivalents. Cash in demand deposit accounts is minimized by sweeping available cash balances into investment accounts on a daily basis.

Under University policy, deposits are only held at financial institutions that maintain an issuer rating on long-term debt of A3 or higher by Moody's, A- or higher by Standard & Poor's or an Asset Peer Group rating of 65 or higher as defined by Sheshunoff Bank Rating Reports. At June 30, 2018 and 2017, the carrying amount of the University's demand deposits, generally held in five nationally recognized banking institutions, was $249.5 million and $203.4 million, respectively, compared to bank balances of $169.7 million and $159.7 million, respectively. Deposits in transit and cash awaiting investment are the primary differences. The University's deposits are uninsured and uncollateralized.

The University does not have significant exposure to foreign currency risk in demand deposit accounts. Accounts held in foreign countries maintain minimum operating balances with the intent to reduce potential foreign exchange risk while providing an adequate level of liquidity to meet the obligations of the academic programs established abroad. The equivalent U.S. dollar balances required to support research groups and education abroad programs in foreign countries was $4.4 million at June 30, 2018 and $6.7 million at June 30, 2017.

The carrying amount of the campus foundations' cash and cash equivalents at June 30, 2018 and 2017 was $447.4 million and $254.1 million, respectively, compared to bank balances of $58.0 million and $94.3 million, respectively. Deposits in transit and cash awaiting investment are the primary differences. Included in bank balances are deposits in the University's Short Term Investment Pool of $387.6 million at June 30, 2018 and $157.6 million at June 30, 2017, with the remaining uncollateralized bank balances insured by the Federal Deposit Insurance Corporation (FDIC). Uncollateralized bank balances include $8.7 million and $6.5 million in excess of the FDIC limits at June 30, 2018 and 2017, respectively. The campus foundations do not have exposure to foreign currency risk in their cash and cash equivalents.

2. INVESTMENTS

The Regents, as the governing Board, is responsible for the oversight of the University's, UCRS' and UCRHBT's investments and establishes an investment policy, which is carried out by the Chief Investment Officer. These investments are associated with the Short Term Investment Pool (STIP), Total Return Investment Pool (TRIP), General Endowment Pool (GEP), UCRS, UCRHBT and other investment pools managed by the Chief Investment Officer, or are separately invested. Pursuant to The Regents' policies on campus foundations, the Board of Trustees for each campus foundation may determine that all or a portion of their investments will be managed by the Chief Investment Officer. Asset and Risk Allocation Policy guidelines are provided to the campus foundations by the Investments Subcommittee of The Regents.

STIP allows participants to maximize the returns on their short-term cash balances by taking advantage of the economies of scale of investing in a large pool with a broad range of maturities and is managed to maximize current earned income. Cash to provide for payroll, construction expenditures and other operating expenses for campuses and medical centers is invested in STIP. The available cash in UCRS or endowment investment pools awaiting investment, or cash for administrative expenses, is also invested in STIP.

Investments authorized by The Regents for STIP include fixed-income securities with a maximum maturity of five and one-half years. In addition, for STIP, The Regents has also authorized loans, primarily to faculty members residing in California, under the University's Mortgage Origination Program with terms of up to 40 years.

TRIP allows participants the opportunity to maximize the return on their intermediate-term working capital by taking advantage of the economies of scale of investing in a large pool across a broad range of asset classes. TRIP is managed to a total return objective and is intended to supplement STIP. Investments authorized by The Regents for TRIP include a diversified portfolio of equity, fixed income and alternative investments.

GEP is an investment pool in which a large number of individual endowments participate in order to benefit from diversification and economies of scale. GEP is a balanced portfolio and the primary investment vehicle for endowed gift funds. Where donor agreements place constraints on allowable investments, assets associated with endowments are invested in accordance with the terms of the agreements.

Other investment pools primarily facilitate annuity and life income arrangements. Separate investments are those that cannot be pooled due to investment restrictions or income requirements.

Investments authorized by The Regents for GEP, UCRS, other investment pools and separate investments include equity securities, fixed-income securities and certain other asset classes. The equity portion of the investment portfolios include both domestic and foreign common and preferred stocks which may be included in actively or passively managed strategies, along with exposure to private equities. The University's investment portfolios may include 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 are authorized for all pools except for STIP. Absolute return strategies, which may incorporate short sales, plus derivative positions to implement or hedge an investment position, are also authorized for all pools except for STIP.

Derivative instruments, including futures, forward contracts, options and swap contracts are authorized for portfolio rebalancing in accordance with The Regents' asset allocation policy and as substitutes for physical securities. Derivatives are not used for speculative purposes.

The Regents has also authorized certain employee account balances in defined contribution plans included as part of UCRS' investments to be invested in mutual funds. The participants' interests in mutual funds are not managed by the Chief Investment Officer and totaled $1.6 billion and $3.4 billion at June 30, 2018 and 2017, respectively.

Investments authorized by The Regents for the UCRHBT are restricted to a portfolio of high-quality money market instruments in a commingled fund that is managed externally. The average credit quality of the portfolio is A-1/P-1 with an average maturity of 17 days and 26 days at June 30, 2018 and 2017, respectively. The fair values of UCRHBT's investment in this portfolio were $128.1 million and $97.8 million at June 30, 2018 and 2017, respectively. These are measured at net asset value as of June 30, 2018 and 2017, respectively.

The composition of investments, by investment type at June 30 is as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**
Equity securities:						
Domestic	$2,981,893	$2,641,778	$258,339	$224,555	$19,851,801	$19,308,688
Foreign	2,575,283	2,322,774	23,255	26,056	13,473,111	10,124,433
Equity securities	**5,557,176**	**4,964,552**	**281,594**	**250,611**	**33,324,912**	**29,433,121**
Fixed- or variable-income securities:						
U.S. government-guaranteed:						
U.S. Treasury bills, notes and bonds	2,726,553	1,342,026	375,054	380,834	1,896,840	1,819,707
U.S. Treasury strips	538,903	370,436	212	215	1,464,655	900,066
U.S. TIPS	124,756	379,808			2,512,561	2,422,599
U.S. government-backed securities			15	24		
U.S. government-backed - asset-backed securities	9,358	13,695	11,386	991	7,214	10,146
U.S. government-guaranteed	**3,399,570**	**2,105,965**	**386,667**	**382,064**	**5,881,270**	**5,152,518**
Other U.S. dollar-denominated:						
Corporate bonds	3,776,818	7,945,898	28,768	28,301	4,490,273	4,750,525
Commercial paper	4,248,162	63,553			2,012,845	918,088
U.S. agencies	1,917,652	1,408,734			4,035,120	4,155,225
U.S. agencies - asset-backed securities	687,546	671,434	36,588	48,264	2,953,252	3,323,667
Corporate - asset-backed securities	621,817	504,652	59,824	49,518	1,639,967	1,607,426
Supranational/foreign	1,422,310	1,026,235	4,207	5,492	2,804,258	2,544,718
Other	116,497	120,314	805	1,478	175,279	26,996
Other U.S. dollar-denominated	**12,790,802**	**11,740,820**	**130,192**	**133,053**	**18,110,994**	**17,326,645**
Foreign currency-denominated:						
Corporate	113				576	
Foreign currency-denominated	**113**				**576**	
Commingled funds:						
Absolute return funds	3,957,859	3,962,553	2,589,828	2,177,012	4,475,682	4,987,355
Non-U.S. equity funds	2,172,821	2,077,584	1,031,849	991,267	8,958,098	9,264,782
Private equity	1,701,059	1,388,163	954,534	708,680	3,178,252	2,939,524
Money market funds	681,658	814,888	1,060,958	935,429	5,817,621	5,020,007
U.S. equity funds	193,547	145,967	771,075	664,627	4,069,653	2,341,302
Real estate investment trusts	310,119	460,025	162,111	150,846	1,475,420	1,633,123
Real assets	381,533	206,076			1,146,296	866,245
U.S. bond funds	402,336	218,839	146,316	131,541	1,076,196	1,055,611
Non-U.S. bond funds	135,862	132,608	21,697	16,433	14	15
Balanced funds	234,375	212,079	1,330,673	1,222,549		
Commingled funds	**10,171,169**	**9,618,782**	**8,069,041**	**6,998,384**	**30,197,232**	**28,107,964**
Investment derivatives	(5,520)	(241)	(355)	1,995	(19,142)	(3,002)
Publicly traded real estate investment trusts	224,036	152,636			1,711,685	722,541
Mortgage loans	510,765	358,890				
Real estate	428,590	354,597	135,731	119,516	1,665,191	1,834,232
Other investments	27,701	12,390	236,710	321,367		
Campus foundations' investments with the University	(2,611,651)	(2,151,497)				
UCRS investment in the STIP	(3,123,754)	(2,678,532)				
Total investments	**27,368,997**	**24,478,362**	**9,239,580**	**8,206,990**	**$90,872,718**	**$82,574,019**
Less: Current portion	(4,890,075)	(6,249,657)	(857,844)	(674,868)		
Noncurrent portion	**$22,478,922**	**$18,228,705**	**$8,381,736**	**$7,532,122**		

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 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 or principal in a timely manner, or the possibility 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, primarily obligations of the U.S. government or those explicitly guaranteed by the U.S. government, are considered to have minimal 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 benchmark for STIP is a weighted average of the two-year Treasury income note and Citigroup 3-month Treasury bill). No more than 5 percent of the total market value of the STIP portfolio may be invested in securities rated below investment grade (BB, Ba or lower). The average credit quality of STIP must be A or better and commercial paper must be rated at least A-1, P-1 or F-1.

The University recognizes that credit risk is appropriate in balanced investment pools such as TRIP, UCRS and GEP by virtue of the benchmarks chosen for the fixed-income portion of those pools.

The core fixed-income benchmark for UCRS, GEP and TRIP is the Barclays Capital U.S. Aggregate Bond Index, comprised of 25.0 percent corporate bonds and 30.6 percent mortgage/asset-backed bonds, all of which carry some degree of credit risk. The remaining 44.4 percent is government issued bonds.

Credit risk in TRIP, UCRS and GEP is managed primarily by diversifying across issuers. In addition, portfolio guidelines for UCRS and GEP through March 2018 mandate that no more than 15 percent of the market value of fixed-income securities may be invested in issues with credit ratings below investment grade. Further, the weighted average credit rating must be A or higher.

In addition, the asset and risk allocation policies for both UCRP and GEP allow for dedicated allocations to non-investment grade and emerging market bonds, an investment which entails credit, default and/or sovereign risk.

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

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
	2018	2017	2018	2017	2018	2017
Fixed- or variable-income securities:						
U.S. government-guaranteed	$3,399,570	$2,105,965	$386,667	$382,064	$5,881,270	$5,152,518
Other U.S. dollar-denominated:						
AAA	686,606	394,656	20,817	12,538	1,798,100	1,465,322
AA	1,866,014	1,284,954	24,932	37,676	3,115,678	3,390,694
A	1,712,026	1,294,567	7,045	3,781	1,472,752	1,243,993
BBB	2,067,115	2,068,030	23,815	23,963	2,587,735	2,946,777
BB	461,019	450,708	592	2,095	1,176,085	1,242,851
B	302,023	296,788	1,242	3,088	1,069,331	1,057,297
CCC or below	42,513	42,151	19,629	19,898	200,111	192,950
Not rated	5,653,486	5,908,966	32,120	30,014	6,691,202	5,786,761
Foreign currency-denominated:						
B	113				576	
Commingled funds:						
U.S. bond funds: Not rated	402,336	218,839	146,316	131,541	1,076,196	1,055,611
Non-U.S. bond funds: Not rated	135,862	132,608	21,697	16,433	14	15
Money market funds: Not rated	681,658	814,888	1,060,958	935,429	5,817,621	5,020,007
Mortgage loans: Not rated	510,765	358,890				

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 University's, campus foundations' and UCRS' securities are registered in the University's name by the custodial bank as an agent for the University. Other types of investments 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 the organization to greater risks resulting from adverse economic, political, regulatory, geographic or credit developments.

The U.S. and non-U.S. equity portions of the University and UCRS portfolios may be managed either passively or actively. For the portions 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 University considers that passive management results in an absence of concentration of credit risk. For the portions 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.

Investment guidelines addressing concentration of credit risk related to the core investment grade fixed-income portion of the University and UCRS portfolios include a limit of no more than 3 percent of each portfolio's market value to be invested in any single issuer (except for securities issued by the U.S. government or its agencies). These same guidelines apply to STIP. For high-yield and emerging market debt, the corresponding limit is 5 percent.

Each campus foundation may have its own individual investment policy designed to limit exposure to a concentration of credit risk. Securities issued or explicitly guaranteed by the U.S. government, mutual funds, external investment pools, other investment pools or investments that are invested by the University for the campus foundations are not subject to concentration of credit risk. Most of the campus foundations that hold other types of investments have policies to limit the exposure to an individual issuer.

Investments in issuers other than U.S. government-guaranteed securities that represent 5 percent or more of investments held by the respective foundation at June 30 are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	
	2018	**2017**
Bayside Partners, LP		$88,257

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 price of a security resulting from a 100-basis-point (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 five and one-half years. 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 fixed-income portion of TRIP, UCRS and GEP limit weighted average effective duration to the effective duration of the benchmarks (Barclays Capital U.S. Aggregate Index), 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 durations for fixed- or variable-income securities at June 30 are as follows:

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
	2018	2017	2018	2017	2018	2017
Fixed- or variable-income securities:						
U.S. government-guaranteed:						
U.S. Treasury bills, notes and bonds	2.4	3.1	2.9	2.8	2.7	2.9
U.S. Treasury strips	9.2	11.7	16.5	18.1	10.3	10.6
U.S. TIPS	5.9	2.9			6.1	3.8
U.S. government-backed securities			1.4	1.8		
U.S. government-backed - asset-backed securities	1.6	2.3	2.9	10.1	2.9	3.1
Other U.S. dollar-denominated:						
Corporate bonds	3.5	2.8	2.7	2.4	5.7	6.1
U.S. agencies	2.0	2.6			2.0	2.1
U.S. agencies - asset-backed securities	4.2	3.9	5.0	4.2	3.9	3.7
Corporate - asset-backed securities	3.9	4.2	2.2	2.1	2.6	2.5
Supranational/foreign	3.6	3.2	3.4	3.8	5.2	5.8
Other	8.5	16.9	5.3	1.8	15.6	15.7
Foreign currency-denominated:						
Corporate	0.6				0.6	
Commingled funds:						
U.S. bond funds*	2.4	2.5	4.6	4.8		1.9
Non-U.S. bond funds	3.4	3.2	5.3	6.9		7.0
Money market funds**			2.0	1.5		

**The University considers the modified durations for commingled funds.*
***Foundation and UCRS investment in STIP.*

The University considers the effective durations for commercial paper, mortgage loans, insurance contracts and money market funds to be zero. The terms of the mortgage loans include variable interest rates. Insurance contracts can be liquidated without loss of principal and money market funds consist of underlying securities that are of a short-term, liquid nature.

Investments 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. The effective durations of these securities, however, may be low.

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

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
	2018	2017	2018	2017	2018	2017
Mortgage-backed securities	$669,109	$581,019	$53,471	$62,552	$2,795,428	$3,094,839
Collateralized mortgage obligations	501,265	142,379	22,540	17,079	830,356	308,119
Other asset-backed securities	271,890	147,305	27,612	14,889	1,266,122	928,928
Variable-rate securities	582,299	401,499			2,413,025	1,674,974
Callable bonds	4,067,934	2,773,741			8,466,784	8,281,157
Convertible bonds	455	317			4,618	2,529
Total	**$6,092,952**	**$4,046,260**	**$103,623**	**$94,520**	**$15,776,333**	**$14,290,546**

Mortgage-Backed Securities. These securities are issued primarily by Fannie Mae, Ginnie Mae and Freddie Mac, and various commercial entities and 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 either the payment of 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 either the payment of 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 change. 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 University must then replace the called bond 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, the effective durations for these securities are as follows:

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**
Mortgage-backed securities	4.3	4.0	1.5	4.5	4.1	3.8
Collateralized mortgage obligations	4.7	2.7	8.3	12.5	4.1	2.7
Other asset-backed securities	1.1	1.5	0.2	5.1	0.8	1.0
Variable-rate securities	3.2	1.9			1.6	1.1
Callable bonds	3.3	3.4			3.8	4.0
Convertible bonds	1.7	2.6			1.7	2.5

Foreign Currency Risk

The University's strategic asset allocation policy for TRIP, UCRS and GEP includes allocations to non-U.S. equities and non-dollar-denominated bonds. The benchmarks for these investments are not hedged; therefore foreign currency risk is part of the investment strategies. 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 University's 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, the foreign currency risk expressed in U.S. dollars, organized by currency denomination and investment type, are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**
Equity securities:						
Euro	$960,899	$759,929	$259	$769	$3,895,404	$2,986,605
British Pound	272,005	262,100	1,109	1,474	1,988,754	1,499,151
Japanese Yen	438,014	369,665			2,562,213	1,550,471
Canadian Dollar	127,083	144,272	1,918	6,248	722,719	633,561
Swiss Franc	122,133	124,593	634	531	839,277	663,977
Australian Dollar	91,454	103,068	2,915	569	511,526	430,715
Hong Kong Dollar	150,506	128,176			676,822	307,976
Swedish Krona	69,163	69,605			289,024	263,079
Singapore Dollar	18,752	19,405			106,094	81,366
Danish Krone	23,938	23,677			167,934	142,740
Norwegian Krone	14,399	11,842			98,172	57,344
South Korean Won	74,413	84,359	16,337	16,356	482,103	473,711
Brazilian Real	24,203	25,154			74,405	29,725
Indian Rupee	23,632				275,785	256,239
New Taiwan Dollar	57,938	69,843			234,014	204,806
South African Rand	27,963	31,699			153,225	147,473
Thailand Baht	9,046	10,014			106,332	115,393
Mexican Peso	13,332				54,541	
Other	56,409	85,373	83	109	234,769	280,101
Subtotal	**2,575,282**	**2,322,774**	**23,255**	**26,056**	**13,473,113**	**10,124,433**
Fixed-income securities:						
Euro	113				576	
Subtotal	**113**				**576**	
Commingled funds (various currency denominations):						
Absolute return funds			835,996	706,875		
Non-U.S. equity funds	2,172,821	2,077,584	1,016,679	980,635	8,958,098	9,264,782
Private equity	7,255	1,029	82,228	67,320	98,116	114,400
Real estate investment trusts			16,402	19,710		
Real assets	32,301	14,304	67,946	49,514	149,441	81,055
Non U.S. bond funds	135,861	132,608	21,697	16,434	14	15
Balanced funds			139,769	129,917		
Subtotal	**2,348,238**	**2,225,525**	**2,180,717**	**1,970,405**	**9,205,669**	**9,460,252**
Investment derivatives:						
Australian Dollar	1	5			58	(10)
Canadian Dollar	32	(3)			59	(40)
British Pound	30	(10)			177	(244)
Japanese Yen	(20)	(52)			(666)	(584)
Hong Kong Dollar						(7)
Euro	120				369	
Other		85			27	(103)
Subtotal	**163**	**25**			**24**	**(988)**
Publicly traded real estate investment trusts:						
Australian Dollar	11,568	10,092			64,239	44,367
Euro	14,112	9,243			87,183	42,055
British Pound	15,004	7,163			86,648	30,546
Japanese Yen	9,817	9,295			52,635	29,856
South African Rand	1,499	2,578			7,704	10,100
Singapore Dollar	4,059	4,139			21,148	12,441
Canadian Dollar	1,633	1,724			9,360	6,342
Mexican Peso	595	952			2,944	3,047
Other	2,521	2,386			11,232	5,913
Subtotal	**60,808**	**47,572**			**343,093**	**184,667**
Total exposure to foreign currency risk	**$4,984,604**	**$4,595,896**	**$2,203,972**	**$1,996,461**	**$23,022,475**	**$19,768,364**

The University's Investment Pools

The composition of the University's investments at June 30, 2018, by investment pool, are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA				
	STIP	TRIP	GEP	OTHER	TOTAL
Equity securities:					
Domestic		$1,747,569	$1,097,837	$136,487	$2,981,893
Foreign		1,422,238	1,109,393	43,652	2,575,283
Fixed- or variable-income securities:					
U.S. government-guaranteed	$2,284,617	694,153	355,374	65,426	3,399,570
Other U.S. dollar-denominated	8,212,850	3,447,620	904,769	225,563	12,790,802
Foreign currency-denominated			113		113
Commingled funds	62,531	1,517,144	7,545,543	1,045,951	10,171,169
Investment derivatives		(572)	(4,912)	(36)	(5,520)
Publicly traded real estate investment trusts		98,739	120,248	5,049	224,036
Mortgage loans	510,765				510,765
Real estate		126,476	276,569	25,545	428,590
Other investments				27,701	27,701
Subtotal	**11,070,763**	**9,053,367**	**11,404,934**	**1,575,338**	**33,104,402**
Campus foundations' investments with the University	(1,395,676)	(26,298)	(981,095)	(208,582)	(2,611,651)
UCRS investment in the STIP	(3,123,754)				(3,123,754)
Total investments	**$6,551,333**	**$9,027,069**	**$10,423,839**	**$1,366,756**	**$27,368,997**

The composition of the University's investments at June 30, 2017, by investment pool, are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA				
	STIP	TRIP	GEP	OTHER	TOTAL
Equity securities:					
Domestic		$1,650,101	$877,439	$114,238	$2,641,778
Foreign		1,399,551	880,977	42,246	2,322,774
Fixed- or variable-income securities:					
U.S. government-guaranteed	$969,940	637,044	491,287	7,694	2,105,965
Other U.S. dollar-denominated	7,667,967	3,390,550	660,701	21,602	11,740,820
Commingled funds	68,175	1,711,540	6,605,800	1,233,267	9,618,782
Investment derivatives		(162)	(73)	(6)	(241)
Publicly traded real estate investment trusts		103,542	44,677	4,417	152,636
Mortgage loans	358,890				358,890
Real estate		137,615	177,927	39,055	354,597
Other investments				12,390	12,390
Subtotal	**9,064,972**	**9,029,781**	**9,738,735**	**1,474,903**	**29,308,391**
Campus foundations' investments with the University	(1,048,911)	(26,701)	(918,008)	(157,877)	(2,151,497)
UCRS investment in the STIP	(2,678,532)				(2,678,532)
Total investments	**$5,337,529**	**$9,003,080**	**$8,820,727**	**$1,317,026**	**$24,478,362**

The total investment returns based upon unit values, representing the combined income plus net appreciation or depreciation in the fair value of investments, for the year ended June 30, 2018 were 4.5 percent for TRIP, 8.9 percent for GEP and 7.8 percent for UCRP. The total investment returns based upon unit values, representing the combined income plus net appreciation or depreciation in the fair value of investments, for the year ended June 30, 2017, were 7.7 percent for TRIP, 15.1 percent for GEP and 14.5 percent for UCRP. The investment return for STIP distributed to participants, representing combined income and realized gains or losses, during the same periods, was 1.6 percent and 1.3 percent, respectively. Other investments consist of numerous, small portfolios of investment or individual securities, each with its own individual rate of return.

Related Party Relationships with the University

UCRS and campus foundations may invest available cash in STIP. Shares are purchased or redeemed in STIP at a constant value of $1 per share. Actual income earned, including any realized gains or losses on the sale of STIP investments, is allocated to UCRS and campus foundations based upon the number of shares held. Unrealized gains and losses associated with the fluctuation in the fair value of investments included in STIP are recorded by the University as the manager of the pool. The net asset value for STIP is held at a constant value of $1 and is not adjusted for unrealized gains and losses associated with the fluctuation in the fair value of investments included in STIP.

The campus foundations may also purchase or redeem shares in GEP, TRIP or other investment pools at the unitized value of the portfolio at the time of purchase or redemption. Actual income earned is allocated to the campus foundations based upon the number of shares held.

Campus Foundations

The campus foundations' cash and cash equivalents and investments that are invested with the University and managed by the Chief Investment Officer are excluded from the University's statement of net position and included in the campus foundations' statement of net position. Under the accounting policies elected by each campus foundation, certain component units classify all or a portion of their investment in STIP and TRIP as cash and cash equivalents, rather than investments. Substantially, all of the campus foundations' investments managed by the Chief Investment Officer are categorized as commingled funds or commingled money market funds by the campus foundations in the composition of investments.

The fair value of the campus foundations' cash and cash equivalents and investments that are invested with the University, by investment pool, at June 30 are as follows:

(in thousands of dollars)	2018	2017
STIP	$1,398,634	$1,048,910
TRIP	26,298	26,701
GEP	981,095	918,008
Other investment pools	205,624	157,878
Campus foundations' investments with the University	**2,611,651**	**2,151,497**
Classified as cash and cash equivalents by campus foundations	(386,391)	(154,662)
Classified as investments by campus foundations	**$2,225,260**	**$1,996,835**

Investment income in the University's statement of revenues, expenses and changes in net position is net of income earned by, and distributed to, the campus foundations totaling $31.8 million and $21.9 million for the years ended June 30, 2018 and 2017, respectively.

UCRS

UCRS had $3.1 billion and $2.7 billion invested in STIP at June 30, 2018 and 2017, respectively. These investments are excluded from the University's statement of net position and are included in UCRS' statement of plans' fiduciary net position. They are categorized as commingled money market funds in the composition of investments for UCRS. STIP investment income in the University's statement of revenues, expenses and changes in net position is net of income earned by, and distributed to, UCRS totaling $43.4 million and $31.2 million for the years ended June 30, 2018 and 2017, respectively.

Agency Relationships with the University

STIP and GEP are external investment pools and include investments on behalf of external organizations that are associated with the University, although not financially accountable to the University. These organizations are not required to invest in these pools. Participants purchase or redeem shares in STIP at a constant value of $1 per share and purchase or redeem shares in GEP at the unitized value of the portfolio at the time of purchase or redemption. Actual income earned is allocated to participants based upon the number of shares held.

The fair value of these investments in each investment pool and the related liability associated with these organizations that are included in the University's statement of net position at June 30 are as follows:

(in thousands of dollars)	2018	2017
STIP	$95,502	$103,291
GEP	309,627	259,330
Other investment pools	4,805	
Total agency assets	**$409,934**	**$362,621**
Funds held for others	**$409,934**	**$362,621**

The composition of the net position at June 30 for STIP and GEP are as follows:

	STIP		GEP	
(in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
Investments	$11,070,763	$9,064,972	$11,404,934	$9,738,735
Investment of cash collateral	126,019	44,176	256,407	342,833
Securities lending collateral	(125,995)	(44,155)	(256,357)	(342,677)
Other assets, net	2,929,104	2,437,063	607,907	850,451
Net position	**$13,999,891**	**$11,502,056**	**$12,012,891**	**$10,589,342**

Other assets include amounts receivable for pension benefits from the campuses and medical centers of $3.0 billion and $2.7 billion at June 30, 2018 and 2017, respectively.

The changes in net position for STIP and GEP for the year ending June 30 are as follows:

	STIP		GEP	
(in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
Net position, beginning of year	$11,502,056	$10,730,675	$10,589,342	$8,929,136
Investment income	227,622	159,038	102,914	92,781
Net appreciation (depreciation) in fair value of investments	(82,872)	(28,695)	887,999	1,309,458
Transfer to TRIP	(416,703)	(60,000)		
Participant contributions, net	2,769,788	701,038	432,636	257,967
Net position, end of year	**$13,999,891**	**$11,502,056**	**$12,012,891**	**$10,589,342**

3. SECURITIES LENDING

The University and UCRS jointly participate in a securities lending program as a means to augment income. The campus foundations' investments that are invested with the University and managed by the Chief Investment Officer are included in the University's investment pools that participate in the securities lending program.

The campus foundations' allocated share of the program's cash collateral received, investment of cash collateral and collateral held for securities lending is determined based upon their equity in the investment pools. The Board of Trustees for each campus foundation may also authorize participation in a direct securities lending program.

Securities are lent to selected brokerage firms for which collateral received equals or exceeds the fair value of such investments lent during the period of the loan. Securities loans immediately terminate upon notice by either the University 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. Securities collateral cannot be pledged or sold by the University 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 University, in investment pools in the name of the University, with guidelines approved by the University. These investments are shown as investment of cash collateral in the statement of net position. At June 30, 2018 and 2017, the securities in these pools had a weighted average maturity of 15 days and 20 days, respectively. The University records a liability for the return of the cash collateral shown as collateral held for securities lending in the statement of net position. Securities collateral received from the borrower is held in investment pools by the University's custodial bank.

At June 30, 2018 and 2017, the University had insignificant exposure to borrowers because the amounts the University owed the borrowers were substantially the same as the amounts the borrowers owed the University. The University is indemnified by its lending agents against any losses incurred as a result of borrower default.

The composition of the securities lending programs at June 30 are as follows:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA 2018	UNIVERSITY OF CALIFORNIA 2017	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS 2018	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS 2017	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM 2018	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM 2017
SECURITIES LENT						
For cash collateral:						
Equity securities:						
Domestic	$468,126	$522,489			$3,186,668	$2,789,711
Foreign	3,975	40,881				129,824
Fixed-income securities:						
U.S. government-guaranteed	171,984	73,204			1,744,379	803,431
Other U.S. dollar-denominated	497,720	449,910			1,138,667	2,856,772
Foreign currency-denominated		11,173				109,797
Foundations' share	(45,288)	(42,581)	$45,288	$42,581		
Lent for cash collateral	**1,096,517**	**1,055,076**	**45,288**	**42,581**	**6,069,714**	**6,689,535**
For securities collateral:						
Equity securities:						
Domestic	358,657	444,681			3,057,625	3,025,219
Foreign	147,358	271,071			1,242,195	826,781
Fixed-income securities:						
U.S. government-guaranteed	376,684	164,400			3,174,988	2,132,793
Other U.S. dollar-denominated	123,429	77,881			710,653	505,610
Foreign currency-denominated		1,959				15,081
Lent for securities collateral	**1,006,128**	**959,992**			**8,185,461**	**6,505,484**
Total securities lent	**$2,102,645**	**$2,015,068**	**$45,288**	**$42,581**	**$14,255,175**	**$13,195,019**
COLLATERAL RECEIVED						
Cash	$1,209,769	$1,121,899			$6,157,131	$6,838,416
Foundations' share	(45,288)	(42,581)	45,288	42,581		
Total cash collateral received	**1,164,481**	**1,079,318**	**45,288**	**42,581**	**6,157,131**	**6,838,416**
Securities	1,095,763	1,032,497			8,914,709	6,992,564
Total collateral received	**$2,260,244**	**$2,111,815**	**$45,288**	**$42,581**	**$15,071,840**	**$13,830,980**
INVESTMENT OF CASH COLLATERAL						
Fixed-income securities:						
Other U.S. dollar-denominated:						
Corporate bonds	$32,858	$105,460			$167,234	$642,818
Commercial paper	146,215	77,753			744,164	473,932
Repurchase agreements	555,710	309,356			2,828,291	1,885,644
Corporate - asset-backed securities	5,803	28,855			29,534	175,884
Certificates of deposit/time deposits	381,408	542,834			1,941,184	3,308,794
Supranational/foreign	88,252	58,751			449,163	358,112
Other assets (liabilities), net*	(251)	(599)			(1,280)	(3,654)
Foundations' share	(45,288)	(42,581)	$45,288	$42,581		
Investment of cash collateral	**1,164,707**	**1,079,829**	**45,288**	**42,581**	**$6,158,290**	**$6,841,530**
Less: Current portion	(1,054,406)	(947,353)	(40,999)	(37,357)		
Noncurrent portion	**$110,301**	**$132,476**	**$4,289**	**$5,224**		

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

The University earns interest and dividends on the collateral held during the loan period, as well as a fee from the brokerage firm, and is obligated to pay a fee and rebate to the borrower. The University receives the net investment income. The securities lending income and fees and rebates for the year ended June 30 are as follows:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA 2018	UNIVERSITY OF CALIFORNIA 2017	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS 2018	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS 2017	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM 2018	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM 2017
Securities lending income	$23,743	$15,628	$1,008	$771	$136,099	$89,075
Securities lending fees and rebates	(14,785)	(7,124)	(642)	(352)	(89,025)	(40,610)
Securities lending investment income, net	**$8,958**	**$8,504**	**$366**	**$419**	**$47,074**	**$48,465**

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 University's and UCRS' investment guidelines and other information related to each of these risks are summarized below. Campus foundations that participate in a securities lending program may have their own individual investment policies designed to limit the same risks.

Credit Risk

The University's and UCRS' investment guidelines for the investment of cash collateral maintained in separately managed collateral pools restrict the credit rating of issuers at the time of purchase 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 associated with the investment of cash collateral at June 30 are as follows:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA 2018	UNIVERSITY OF CALIFORNIA 2017	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS 2018	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS 2017	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM 2018	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM 2017
Fixed- or variable-income securities:						
Other U.S. dollar-denominated:						
AAA	$94,055	$84,224			478,695	513,378
AA-	118,258	146,141			601,875	890,788
A+	10,185	130,473			51,834	795,284
A	243,045	123,225			1,236,981	751,104
A-		50,772				309,473
A-1 / A-2 / P-1/ F-1	188,995	278,819			961,888	1,699,513
Other assets (liabilities) net*: Not rated	(251)	(599)			(1,280)	(3,654)
Campus foundations' share	(45,288)	(42,581)	$45,288	$42,581		

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

Custodial Credit Risk

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

Concentration of Credit Risk

The University's and UCRS' 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, bankers acceptances and money market funds to no more than 5 percent of the portfolio value at the time of purchase. Campus foundations that directly participate in a securities lending program do not have specific investment policies related to concentration of credit risk, although the lending agreements with the agents establish restrictions for the type of investments and minimum credit ratings.

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

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
(in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
Goldman Sachs & Company	$73,898	$63,421	$376,102	$386,579
Morgan Stanley & Co LLC	98,530	84,562	501,471	515,438
Nomura Securities International Inc.	63,716		324,284	
RCap Securities Inc.	102,307		520,693	

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 University's and UCRS' 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. Floating rate debt may be used, but it is limited to 65 percent of the market value of the portfolio.

The weighted average maturity expressed in days for fixed- or variable-income securities associated with the investment of cash collateral at June 30 are as follows:

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
(in days)	**2018**	**2017**	**2018**	**2017**
Fixed- or variable-income securities:				
Other U.S. dollar-denominated:				
Corporate bonds	26	38	26	38
Commercial paper	22	19	22	19
Repurchase agreements	6	9	6	9
Corporate-asset-backed securities	20	97	20	97
Certificates of deposit/time deposits	24	19	24	19
Supranational/foreign	16	17	16	17

Investment of cash collateral may include various asset-backed securities, structured notes and variable-rate securities that may be considered to be 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, the fair value of investments that are considered to be highly sensitive to changes in interest rates are as follows:

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM	
(in thousands of dollars)	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Other asset-backed securities	$94,055	$87,606			$478,695	$533,996
Variable-rate investments	865,249	802,491			4,403,692	4,891,500
Campus foundations' share	(35,905)	(33,767)	$35,905	$33,767		
Total	**$923,399**	**$856,330**	**$35,905**	**$33,767**	**$4,882,387**	**$5,425,496**

At June 30, 2018 and 2017, the weighted average maturity expressed in days for asset-backed securities was 16 days and 43 days, respectively and for variable-rate investments was 136 days and 19 days, respectively.

Foreign Currency Risk

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

4. DERIVATIVE FINANCIAL INSTRUMENTS

The University may use derivatives including futures, forward contracts, options and interest rate swap contracts as a substitute for investment in equity and fixed-income securities, to reduce the effect of fluctuating foreign currencies on foreign currency-denominated investments, or to limit its exposure of variable-rate bonds to changes in market interest rates. The Board of Trustees for each campus foundation may also authorize derivatives in its investment policy.

The University enters 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, the University is 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, the University agrees 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 revenues, expenses and changes in 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.

An option contract gives the University the right, but not the obligation, to buy or sell a specified security or index at a fixed price during a specified period for a nonrefundable fee (the "premium"). The maximum loss to the University is limited to the premium originally paid for covered options. The University initially records premiums paid for the purchase of these options in the statement of net position as an investment which is subsequently adjusted to reflect the fair value of the options, with unrealized gains and losses included in the statement of revenues, expenses and changes in net position.

Rights and warrants provide the holder with the right, but not the obligation, to buy a stock at a predetermined price for a finite period of time. Warrants usually have a longer time period to expiration. The holder of a right or warrant is permitted to buy at a price that may be below the actual market price for that stock. Warrants and rights cease to exist and become worthless if not used by their expiration date.

An interest rate swap is a contractual agreement entered into between the University 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, an interest rate or to currency. A credit default swap is an agreement whereby the seller will compensate the buyer in the event of a loan default. A swaption is an option granting its owner the right but not the obligation to enter into an underlying swap. The University considers its futures, forward contracts, options, credit default swaps, swaptions, rights, warrants and certain interest rate swaps to be investment derivatives.

As a means to lower the University's borrowing costs, when compared against fixed-rate bonds at the time of issuance, the University entered into interest rate swap agreements in connection with certain of its variable-rate Medical Center Pooled Revenue Bonds and General Revenue Bonds. The University determined that certain of its interest rate swaps are derivative instruments that meet the criteria for an effective hedge. Certain of the interest rate swaps are considered hybrid instruments since, at the time of execution, the fixed rate on each of the swaps was off-market and the University received an up-front payment. As such, these swaps are comprised of a derivative instrument, an at-the-market swap that is an effective hedge, and a companion instrument, a borrowing represented by the up-front payment. The unamortized amount of the borrowing under the companion instruments was $75.2 million and $79.0 million at June 30, 2018 and 2017, respectively.

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

University of California

(in thousands of dollars)

	NOTIONAL AMOUNT		FAIR VALUE–POSITIVE (NEGATIVE)			CHANGES IN FAIR VALUE		
CATEGORY	2018	2017	CLASSIFICATION	2018	2017	CLASSIFICATION	2018	2017
INVESTMENT DERIVATIVES								
Futures contracts:								
Domestic equity futures:								
Long positions	$211,945	$21	Investments	($5,755)	($360)	Net appreciation (depreciation)	($5,789)	($361)
Short positions			Investments			Net appreciation (depreciation)		
Foreign equity futures:								
Long positions	6,492	78	Investments	15	(47)	Net appreciation (depreciation)	8,090	7,998
Short positions			Investments			Net appreciation (depreciation)		(17,090)
Futures contracts, net				**(5,740)**	**(407)**		**2,301**	**(9,453)**
Foreign currency exchange contracts, net:*								
Long positions	1,636	217,069	Investments	(15)	(46)	Net appreciation (depreciation)	(1)	6,800
Short positions			Investments			Net appreciation (depreciation)	(7)	15,053
Foreign currency exchange contracts, net				**(15)**	**(46)**		**(8)**	**21,853**
Other:								
Stock rights/warrants		680	Investments	235	212	Net appreciation (depreciation)	38	22
Other, net				**235**	**212**		**38**	**22**
Total investment derivatives				**($5,520)**	**($241)**		**$2,331**	**$12,422**
CASH FLOW HEDGES								
Effective interest rate swaps:								
Pay fixed, receive variable	$838,850	$842,315	Other assets (liabilities)	($54,839)	($90,232)	Deferred (inflows) outflows	$35,393	$61,891

**Notional amount reported in local currency.*

University of California Campus Foundations

(in thousands of dollars)

	NOTIONAL AMOUNT		FAIR VALUE–POSITIVE (NEGATIVE)			CHANGES IN FAIR VALUE		
CATEGORY	2018	2017	CLASSIFICATION	2018	2017	CLASSIFICATION	2018	2017
INVESTMENT DERIVATIVES								
Options/swaptions	$54,231	$50,658	Investments	($355)	$7	Net appreciation (depreciation)	$3,168	$692
Swaps	250,603	226,752	Investments		1,988	Net appreciation (depreciation)	16,090	32,340
Total investment derivatives				**($355)**	**$1,995**		**$19,258**	**$33,032**

University of California Retirement System

(in thousands of dollars)

CATEGORY	NOTIONAL AMOUNT 2018	NOTIONAL AMOUNT 2017	FAIR VALUE–POSITIVE (NEGATIVE) CLASSIFICATION	FAIR VALUE 2018	FAIR VALUE 2017	CHANGES IN FAIR VALUE CLASSIFICATION	CHANGES 2018	CHANGES 2017
INVESTMENT DERIVATIVES								
Futures contracts:								
Domestic equity futures:								
Long positions	$926,476	$8,688	Investments	($20,156)	($2,323)	Net appreciation (depreciation)	($19,697)	($2,323)
Short positions	(16,189)	(17,400)	Investments	665	(19)	Net appreciation (depreciation)	947	(19)
Foreign equity futures:								
Long positions	58,219	1,237	Investments	(924)	(1,060)	Net appreciation (depreciation)	61,531	126,127
Short positions	(11,875)		Investments	77		Net appreciation (depreciation)	(1,077)	(10,495)
Futures contracts, net				**(20,338)**	**(3,402)**		**41,704**	**113,290**
Foreign currency exchange contracts, net:*								
Long positions	35,282	2,482,250	Investments	(320)	(528)	Net appreciation (depreciation)	7,332	26,347
Short positions		(1,611)	Investments		(26)	Net appreciation (depreciation)	(10,695)	55,504
Foreign currency exchange contracts, net				**(320)**	**(554)**		**(3,363)**	**81,851**
Other:								
Stock rights/warrants	2	1,583	Investments	1,516	954	Net appreciation (depreciation)	332	(33)
Other, net				**1,516**	**954**		**332**	**(33)**
Total investment derivatives				**($19,142)**	**($3,002)**		**$38,673**	**$195,108**

**Notional amount reported in local currency.*

Objectives and Terms of Hedging Derivative Instruments

The objectives and terms of the hedging derivative instruments outstanding at June 30, along with the credit rating of the associated counterparty, are as follows:

(in thousands of dollars)

TYPE	OBJECTIVE	NOTIONAL AMOUNT 2018	NOTIONAL AMOUNT 2017	EFFECTIVE DATE	MATURITY DATE	CASH PAID OR RECEIVED	TERMS	COUNTERPARTY CREDIT RATING	FAIR VALUE 2018	FAIR VALUE 2017
UNIVERSITY OF CALIFORNIA										
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	$64,075	$67,540	2007	2032	None	Pay fixed 3.5897%; receive 58% of 1-Month LIBOR* plus 0.48%	Aa3/A+	($6,435)	($9,423)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	124,775	124,775	2016	2030 through 2043	None	Pay fixed 4.6359%; receive 67% of 3-Month LIBOR* plus 0.69%**	Aa2/A+	(31,577)	(40,420)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate General Revenue Bonds	400,000	400,000	2013	2023	None	Pay fixed 1.8982%; receive 70% of 1-Month LIBOR*	Aa2/AA-	466	(12,552)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate General Revenue Bonds	100,000	100,000	2013	2023	None	Pay fixed 1.9057%; receive 70% of 1-Month LIBOR*	Aa2/AA-	80	(3,182)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate General Revenue Bonds	100,000	100,000	2013	2023	None	Pay fixed 1.8980%; receive 70% of 1-Month LIBOR*	Aa2/A+	118	(3,137)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	24,250	24,250	2016	2045	None	Pay fixed 4.741%; receive 67% of 3-Month LIBOR* +0.79%	Aa2/A+	(8,307)	(10,252)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	25,750	25,750	2016	2047	None	Pay fixed 4.741%; receive 67% of 3-Month LIBOR* +0.79%	Aa2/A+	(9,184)	(11,266)
Interest rate swaps, net		**$838,850**	**$842,315**						**($54,839)**	**($90,232)**

** London Interbank Offered Rate (LIBOR).*
***Weighted average spread.*

Hedging Derivative Instrument Risk Factors

Credit Risk

The University could be exposed to credit risk if the interest rate swap counterparties to the contracts are unable to meet the terms of the contracts. Contracts with positive fair values are exposed to credit risk. The University faces a maximum possible loss equivalent to the amount of the derivative's fair value, less any collateral held by the University provided by the counterparty. Contracts with negative fair values are not exposed to credit risk.

Although the University has entered into the interest rate swaps with creditworthy financial institutions to hedge its variable-rate debt, there is credit risk for losses in the event of non-performance by counterparties or unfavorable interest rate movements.

There are no collateral requirements related to the interest rate swap with the $64.1 million notional amount. Depending on the fair value and the counterparty credit rating for the swaps related to the Medical Center Pooled Revenue Bonds with the counterparty that is currently rated Aa2/A+ with a combined notional amount of $174.8 million, the University may be entitled to receive collateral to the extent the positive fair value exceeds $20.0 million as of June 30, 2018. At June 30, 2018 and 2017, there was no collateral required.

Depending on the fair value and the counterparty credit rating for the swaps related to the General Revenue Bonds with the counterparty that is currently rated Aa2/AA- with a combined notional amount of $500.0 million, the University may be entitled to receive collateral to the extent the positive fair value with the counterparty exceeds $30.0 million. At June 30, 2018 and 2017, there was no collateral required.

Depending on the fair value and the counterparty credit rating for the swap related to the General Revenue Bonds with the counterparty that is currently rated Aa2/A+ with a notional amount of $100.0 million, the University may be entitled to receive collateral to the extent the positive fair value with the counterparty exceeds $20.0 million. At June 30, 2018 and 2017, there was no collateral required.

Interest Rate Risk

There is a risk that the value of the interest rate swaps will decline because of changing interest rates. The values of the interest rate swaps with longer maturities tend to be more sensitive to changing interest rates and, therefore, more volatile than those with shorter maturities.

Basis Risk

There is a risk that the basis for the variable payment received on interest rate swaps will not match the variable payment on the bonds. This exposes the University to basis risk whenever the interest rates on the bonds are reset. The interest rate on the bonds is a tax-exempt interest rate, while the basis of the variable receipt on the interest rate swaps is taxable. Tax-exempt interest rates can change without a corresponding change in the LIBOR rate due to factors affecting the tax-exempt market which do not have a similar effect on the taxable market. However, there is no basis or tax risk related to the swap with the $149.0 million notional amount since the variable rate the University pays to the bondholders matches the variable-rate payments received from the swap counterparty and the interest rates are reset at the same intervals.

Termination Risk

There is termination risk for interest rate swaps associated with variable-rate bonds in the event of non-performance by counterparties in an adverse market resulting in cancellation of the synthetic interest rate and returning the interest rate payments to the variable interest rates on the bonds. In addition, depending on the agreement, certain interest rate swaps may be terminated if a counterparty's credit quality rating, as issued by Moody's or Standard & Poor's, falls below certain thresholds. For the interest rate swap with the $64.1 million notional amount, the termination threshold is reached when the credit quality rating for either the underlying Medical Center Pooled Revenue Bonds or swap counterparty falls below Baa2 or BBB. For the swaps with the combined $174.8 million notional amount, the termination threshold is reached when the credit quality rating for the underlying Medical Center Pooled Revenue Bonds falls below Baa3/BBB-, or the interest rate swap counterparty's rating falls below Baa2 or BBB.

For the swaps with notional amounts of $400.0 million and $100.0 million with a counterparty that is currently rated Aa2/AA-, the termination threshold is reached when the credit quality rating for the underlying General Revenue Bonds falls below Baa2 or BBB, or the swap counterparty's rating falls below A3 or A-. For the swap with a notional amount of $100.0 million with a counterparty that is currently rated Aa2/A+, the termination threshold is reached when the credit quality rating for the underlying General Revenue Bonds falls below Baa2 or BBB, or the swap counterparty's rating falls below A3 or A-. Upon termination, the University may also owe a termination payment if there is a realized loss based on the fair value of each interest rate swap.

Rollover Risk

The University is exposed to rollover risk on hedging derivative instruments that are hedges of debt that mature or may be terminated prior to the maturity of the hedged debt. When these hedging derivative instruments terminate, the University will be re-exposed to the risks being hedged by the hedging derivative instruments. The University is exposed to rollover risk on the interest rate swaps that mature in October 2023 because the hedged debt is scheduled to mature in May 2048.

5. FAIR VALUE

Fair value is defined in the accounting standards 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 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, certain derivatives and other assets that are valued using market information.

Level 3 – Investments and other assets 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 and other assets are based upon the best information in the circumstance and may require significant management judgment. Level 3 financial instruments include private equity investments, real estate and beneficial interests in irrevocable split-interest agreements.

Net Asset Value (NAV) – Investments whose fair value is measured at NAV are excluded from the fair value hierarchy. Investments in non-governmental 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 Leveled – 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, 2018:

	UNIVERSITY OF CALIFORNIA					
	Total	**Quoted Prices in Active Markets**	**Other Observable Inputs**	**Unobservable Inputs**	**Net Asset Value**	**Not Leveled**
(in thousands of dollars)		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	$5,557,176	$5,551,780		$5,396		
Fixed- or variable-income securities:						
U.S. government-guaranteed	3,399,570	57,592	$3,341,978			
Other U.S. dollar-denominated	12,790,802	217,954	12,483,517	89,331		
Foreign currency-denominated	113		113			
Commingled funds	10,171,169	796,878	62,531	72,717	$9,205,816	$33,227
Investment derivatives	(5,520)	234	(5,754)			
Publicly traded real estate investment trusts	224,036	224,036				
Mortgage loans	510,765			510,765		
Real estate	428,590			25,562	403,028	
Other investments	27,701	13,750		13,951		
Campus foundations' investments with the University	(2,611,651)					(2,611,651)
UCRS investment in STIP	(3,123,754)					(3,123,754)
Total investments	**27,368,997**	**6,862,224**	**15,882,385**	**717,722**	**9,608,844**	**(5,702,178)**
Securities lending investments of cash collateral	**$1,164,707**		**$1,164,958**			**($251)**
Investments held by trustees	**$415,164**				**$382,162**	**$33,002**
Beneficial interests included in other noncurrent assets	**$55,440**			**$55,440**		

	CAMPUS FOUNDATIONS					
	Total	**Quoted Prices in Active Markets**	**Other Observable Inputs**	**Unobservable Inputs**	**Net Asset Value**	**Not Leveled**
(in thousands of dollars)		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	$281,594	$266,168	$5,147	$10,265	$14	
Fixed- or variable-income securities:						
U.S. government-guaranteed	386,667		386,667			
Other U.S. dollar-denominated	130,192	666	129,472	54		
Commingled funds	8,069,041	692,240	351	1,511	$7,352,650	$22,289
Investment derivatives	(355)		(355)			
Real estate	135,731		3,709	54,224	77,798	
Other investments	236,710	5,161		38,202	191,959	1,388
Total investments	**$9,239,580**	**$964,235**	**$524,991**	**$104,256**	**$7,622,421**	**$23,677**
Securities lending investments of cash collateral	**$45,288**		**$45,297**			**($9)**
Beneficial interests included in other noncurrent assets	**$75,132**			**$75,132**		

	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM					
	Total	**Quoted Prices in Active Markets**	**Other Observable Inputs**	**Unobservable Inputs**	**Net Asset Value**	**Not Leveled**
(in thousands of dollars)		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	$33,324,912	$32,764,711		$1,282	$558,919	
Fixed- or variable-income securities:						
U.S. government-guaranteed	5,881,270		$5,881,270			
Other U.S. dollar-denominated	18,110,994	365,653	17,745,294	47		
Foreign currency-denominated	576		576			
Commingled funds	30,197,232	5,064,965	2,115		25,461,548	($331,396)
Investment derivatives	(19,142)	1,516	(20,658)			
Publicly traded real estate investment trusts	1,711,685	1,711,685				
Real estate	1,665,191				1,665,191	
Total investments	**$90,872,718**	**$39,908,530**	**$23,608,597**	**$1,329**	**$27,685,658**	**($331,396)**
Securities lending investments of cash collateral	**$6,158,290**		**$6,159,570**			**($1,280)**

The following tables summarize the investments and other assets reported at fair value within the fair value hierarchy as of June 30, 2017:

	UNIVERSITY OF CALIFORNIA					
	Total	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs	Net Asset Value	Not Leveled
(in thousands of dollars)		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	$4,964,552	$4,875,376		$22,941	$66,235	
Fixed- or variable-income securities:						
U.S. government-guaranteed	2,105,965		$2,105,965			
Other U.S. dollar-denominated	11,740,820		11,617,785	123,035		
Commingled funds	9,618,782	981,669	106	393,441	8,242,947	$619
Investment derivatives	(241)	(195)	(46)			
Publicly traded real estate investment trusts	152,636	152,636				
Mortgage loans	358,890			358,890		
Real estate	354,597			42,817	311,780	
Other investments	12,390			12,390		
Campus foundations' investments with the University	(2,151,497)					(2,151,497)
UCRS investment in STIP	(2,678,532)					(2,678,532)
Total investments	**$24,478,362**	**$6,009,486**	**$13,723,810**	**$953,514**	**$8,620,962**	**($4,829,410)**
Securities lending investments of cash collateral	**$1,079,829**		**$1,080,405**			**($576)**
Investments held by trustees	**$99,025**				**$60,194**	**$38,831**
Beneficial interests included in other noncurrent assets	**$56,554**			**$56,554**		

	CAMPUS FOUNDATIONS					
	Total	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs	Net Asset Value	Not Leveled
(in thousands of dollars)		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	$250,611	$235,916	$4,103	$10,575	$17	
Fixed- or variable-income securities:						
U.S. government-guaranteed	382,064		382,064			
Other U.S. dollar-denominated	133,053	654	132,344	55		
Commingled funds	6,998,384	650,644	389	1,330	6,322,655	$23,366
Investment derivatives	1,995		1,995			
Real estate	119,516		3,819	49,569	66,128	
Other investments	321,367	7,151		158,326	153,702	2,188
Total investments	**$8,206,990**	**$894,365**	**$524,714**	**$219,855**	**$6,542,502**	**$25,554**
Securities lending investments of cash collateral	**$42,581**		**$39,260**	**$3,321**		
Beneficial interests included in other noncurrent assets	**$71,330**			**$71,330**		

	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM					
	Total	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs	Net Asset Value	Not Leveled
(in thousands of dollars)		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	$29,433,121	$28,589,132		$1,181	$842,808	
Fixed- or variable-income securities:						
U.S. government-guaranteed	5,152,518		$5,152,518			
Other U.S. dollar-denominated	17,326,645		17,275,601	51,044		
Commingled funds	28,107,964	3,676,570	1,898	275,890	24,153,119	$487
Investment derivatives	(3,002)	(2,448)	(554)			
Publicly traded real estate investment trusts	722,541	722,541				
Real estate	1,834,232			10,096	1,824,136	
Total investments	**$82,574,019**	**$32,985,795**	**$22,429,463**	**$338,211**	**$26,820,063**	**$487**
Securities lending investments of cash collateral	**$6,841,530**		**$6,845,184**			**($3,654)**

The following table presents significant terms of certain investments at June 30, 2018:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA			
Investment Type	**Fair Value**	**Unfunded Commitments**	**Remaining Life (Years)**	**Redemption Terms and Restrictions**
Absolute return	$3,957,859	$543,569	0 to 5	Not eligible for redemption and lock-up provisions ranging from 0 to 3 years. For securities not eligible for redemption 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 5 to 95 days' prior notification.
Private equity	1,701,059	1,568,945	0 to 15	Not eligible for redemption.
Real assets	381,533	551,803	0 to 15	Not eligible for redemption.
Real estate and real estate investment trusts	738,709	455,525	0 to 10	Closed end funds not eligible for redemption. Open end funds are generally redeemable within 0-90 days.
U.S. equity funds	193,547			Redemptions generally require at least 0-90 days written notice of intention to terminate as of a date specified in the notice. Payments of withdrawal requests are generally made within 0-120 days.
Balanced funds	234,375			Redemptions require at least twelve months prior written notice of intention to terminate as of a date specified in the notice. Withdrawals will occur on the last business day of the month and are subject to certain withdrawal guidelines.

(in thousands of dollars)	CAMPUS FOUNDATIONS			
Investment Type	**Fair Value**	**Unfunded Commitments**	**Remaining Life (Years)**	**Redemption Terms and Restrictions**
Absolute return	$2,589,828	$94,494	0 to 12	Generally, lock-up provisions ranging from 0 to 12 years. After initial lock-up expires, redemptions are available require 0 to 180 days' prior notification.
Private equity	954,534	729,801	0 to 15	Generally, lock-up provisions ranging from 0 to 15 years. After initial lock-up expires, redemptions are available require 30 days' prior notification.
Other investments	236,710	79,436	0 to 10	Generally, lock-up provisions ranging from 0 to 10 years. After initial lock-up expires, redemptions are available require 30 days' prior notification.
Real estate and real estate investment trusts	297,842	87,322	9	Not eligible for redemption.

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM			
Investment Type	**Fair Value**	**Unfunded Commitments**	**Remaining Life (Years)**	**Redemption Terms and Restrictions**
Absolute return	$4,475,682	$750,319	0 to 5	Not eligible for redemption and lock-up provisions ranging from 0 to 3 years. For securities not eligible for redemption 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 5 to 95 days' prior notification.
Private equity	3,178,252	3,721,105	0 to 15	Not eligible for redemption.
Real assets	1,146,296	952,555	0 to 15	Not eligible for redemption.
U.S. equity funds	4,069,653			Redemptions generally require at least 0-90 days written notice of intention to terminate as of a date specified in the notice. Payments of withdrawal requests are generally made within 0-120 days.
Real estate and real estate investment trusts	3,140,611	1,061,649	0 to 10	Closed end funds not eligible for redemption. Open end funds are generally redeemable within 0-90 days.

6. INVESTMENTS HELD BY TRUSTEES

The University has entered into agreements with trustees to maintain trusts for the University's self-insurance programs, long-term debt requirements, capital projects and certain other requirements. In addition, the state of California retained on deposit certain proceeds from the sale of lease-revenue bonds to be used for capital projects.

Self-Insurance Programs

Investments held by trustees for self-insurance programs include bank accounts for the workers' compensation, general liability and professional medical and hospital liability programs. Cash held by the trustee in the name of the University totaled $10.9 million and $23.0 million at June 30, 2018 and 2017, respectively.

Long-Term Debt

Investments held by trustees for future payment of principal and interest in accordance with various indenture and other long-term debt requirements totaled $12.9 million and $6.7 million at June 30, 2018 and 2017, respectively. Securities held by trustees are held in the name of the University and these trust agreements permit trustees to invest in U.S. and state government or agency obligations, commercial paper or other corporate obligations meeting certain credit rating requirements.

Capital Projects

Proceeds from the sale of the state of California's lease revenue bonds to be used for financing certain University capital projects were deposited in a commingled U.S. bond fund managed by the state of California Treasurer's Office, as trustee, and distributed to the University as the projects are constructed. The fair value of these deposits was $2.6 million and $5.0 million at June 30, 2018 and 2017, respectively.

In addition, proceeds from the sale of bonds and certain University funds are held by trustees to be used for financing and operating third-party capital projects. The fair value of these investments was $385.7 million and $63.1 million at June 30, 2018 and 2017, respectively. Substantially, all of these investments are of a highly liquid, short-term nature.

7. ACCOUNTS RECEIVABLE

Accounts receivable and the allowance for uncollectible accounts are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA							UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS
	STATE AND FEDERAL GOVERNMENT	MEDICAL CENTERS	INVESTMENT INCOME	PRIVATE GRANTS AND CONTRACTS	MEDICAL PROFESSIONAL FEES	OTHER	TOTAL	
At June 30, 2018								
Accounts receivable	$730,025	$2,239,409	$66,905	$438,819	$413,682	$640,109	$4,528,949	$13,102
Allowance for uncollectible accounts	(6,382)	(265,029)		(23,359)	(140,118)	(32,173)	(467,061)	
Accounts receivable, net	**$723,643**	**$1,974,380**	**$66,905**	**$415,460**	**$273,564**	**$607,936**	**$4,061,888**	**$13,102**
At June 30, 2017								
Accounts receivable	$693,453	$1,931,470	$47,138	$318,964	$345,098	$990,061	$4,326,184	$40,012
Allowance for uncollectible accounts	(2,658)	(223,461)		(26,219)	(95,163)	(31,792)	(379,293)	
Accounts receivable, net	**$690,795**	**$1,708,009**	**$47,138**	**$292,745**	**$249,935**	**$958,269**	**$3,946,891**	**$40,012**

The University's other accounts receivable are primarily related to investment sales, tuition and fees, auxiliary enterprises, insurance rebates and legal settlements.

The campus foundations' accounts receivable are primarily related to investment income.

Uncollectible accounts have decreased the following revenues for the years ended June 30:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA	
	2018	**2017**
Student tuition and fees	($1,002)	($6,528)
Grants and contracts:		
Federal	(4,656)	(1,509)
State	(778)	25
Private	73	(11,515)
Local	(40)	32
Medical centers	(255,445)	(221,508)
Educational activities	(9,994)	(22,630)
Auxiliary enterprises	101	(1,441)
Other operating revenues	(2,041)	(1,357)
Expense for uncollectible accounts	**($273,782)**	**($266,431)**

Retirement System Contribution

The state of California agreed to make contributions related to certain prior years to the University for UCRP in annual installments over 30 years. During each of the years ended June 30, 2018 and 2017, under the terms of these agreements, the state of California contributed $5.3 million, including interest at 8.5 percent. At June 30, 2018 and 2017, the remaining amount owed to UCRP by the state was $9.4 million and $13.6 million, respectively. These amounts are recorded in the University's statement of net position as a receivable from the state of California and as a liability owed to UCRP.

8. PLEDGES RECEIVABLE

The composition of pledges receivable at June 30 is summarized as follows:

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	
(in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
Total pledges receivable outstanding	$67,676	$72,315	$1,208,349	$1,064,512
Less: Unamortized discount to present value	(632)	(896)	(136,882)	(137,406)
Allowance for uncollectible pledges	(9,305)	(15,207)	(65,284)	(61,127)
Total pledges receivable, net	**57,739**	**56,212**	**1,006,183**	**865,979**
Less: Current portion of pledges receivable	(25,049)	(23,181)	(234,294)	(192,484)
Noncurrent portion of pledges receivable	**$32,690**	**$33,031**	**$771,889**	**$673,495**

Future receipts under pledge agreements for each of the five fiscal years subsequent to June 30, 2018 and thereafter are as follows:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS
Year Ending June 30		
2019	$32,885	$256,919
2020	15,984	183,296
2021	7,473	136,931
2022	8,464	97,523
2023	1,270	84,030
2024-2028	350	212,735
Beyond 2028	1,250	236,915
Total payments on pledges receivable	**$67,676**	**$1,208,349**

Adjustments to the allowance for uncollectible pledges for the University have increased (decreased) the following revenues for the years ended June 30, 2018 and 2017:

(in thousands of dollars)	**2018**	**2017**
Private gifts	($4,096)	($863)
Capital gifts and grants		(25)

9. NOTES AND MORTGAGES RECEIVABLE

Notes and mortgages receivable at June 30, 2018 and 2017 along with the allowance for uncollectible amounts, are as follows:

	UNIVERSITY OF CALIFORNIA				UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		
		NONCURRENT					
(in thousands of dollars)	CURRENT	NOTES	MORTGAGES	TOTAL	CURRENT	NONCURRENT	TOTAL
At June 30, 2018							
Notes and mortgages receivable	$77,411	$387,236	$19,105	$406,341	$181	$250	$431
Allowance for uncollectible amounts	(8,929)	(19,885)	(114)	(19,999)			
Notes and mortgages receivable, net	**$68,482**	**$367,351**	**$18,991**	**$386,342**	**$181**	**$250**	**$431**
At June 30, 2017							
Notes and mortgages receivable	$58,338	$309,459	$22,301	$331,760	$6	$427	$433
Allowance for uncollectible amounts	(8,201)	(17,621)	(121)	(17,742)			
Notes and mortgages receivable, net	**$50,137**	**$291,838**	**$22,180**	**$314,018**	**$6**	**$427**	**$433**

10. DOE NATIONAL LABORATORY CONTRACTS

Los Alamos National Security, LLC (LANS)

LANS operates and manages the DOE's LANL. LANS' current earnings or losses are dependent on the percentage of base and incentive fees earned under the terms of the contract, offset by any unallowable or disallowed costs. While the University has a 50-percent membership interest in LANS, its equity in the current earnings or losses is subject to certain limitations and special allocations of both the fees and costs. As a result, the University's equity in the current earnings or losses may range from 17.0 to 50.0 percent. For the years ended June 30, 2018 and 2017, the University recorded $14.4 million and $13.5 million, respectively, as its equity in the current earnings of LANS and received $16.7 million and $17.6 million, respectively, in cash distributions.

Subsequent Event

The University is a member of Triad National Security, LLC (Triad) with two other organizations. Effective November 1, 2018, Triad will assume the management and operations of LANL under a contract with the DOE.

Lawrence Livermore National Security, LLC (LLNS)

LLNS manages and operates the DOE's LLNL. LLNS' current earnings or losses are dependent on the percentage of base and incentive fees earned under the terms of the contract, offset by any unallowable or disallowed costs. While the University has a 50-percent membership interest in LLNS, its equity in the current earnings or losses is 36.3 percent as of June 30, 2018 and 2017, respectively. For the years ended June 30, 2018 and 2017, the University recorded $12.2 million and $11.5 million, respectively, as its equity in the current earnings of LLNS and received $12.2 million and $11.1 million, respectively, in cash distributions.

11. CAPITAL ASSETS

The University's capital asset activity for the years ended June 30 is as follows:

(in thousands of dollars)

	2016	ADDITIONS	DISPOSALS	2017	ADDITIONS	DISPOSALS	2018
ORIGINAL COST							
Land	$1,163,095	$9,551	($9,735)	$1,162,911	$45,985	($17,768)	$1,191,128
Infrastructure	663,873	30,987		694,860	49,827	(6,687)	738,000
Buildings and improvements	35,428,593	2,604,022	(7,292)	38,025,323	1,823,695	(26,959)	39,822,059
Equipment, software and intangibles	7,171,492	696,869	(259,278)	7,609,083	1,157,142	(256,657)	8,509,568
Libraries and collections	4,060,109	154,873	(62,294)	4,152,688	147,676	(24,460)	4,275,904
Special collections	434,738	25,254	(36)	459,956	71,303	(103)	531,156
Construction in progress	3,065,029	(544,879)		2,520,150	411,104		2,931,254
Capital assets, at original cost	**$51,986,929**	**$2,976,677**	**($338,635)**	**$54,624,971**	**$3,706,732**	**($332,634)**	**$57,999,069**

	2016	DEPRECIATION AND AMORTIZATION	DISPOSALS	2017	DEPRECIATION AND AMORTIZATION	DISPOSALS	2018
ACCUMULATED DEPRECIATION AND AMORTIZATION							
Infrastructure	$348,605	$23,093		$371,698	$23,774	($4,431)	$391,041
Buildings and improvements	14,157,451	1,167,408	($5,998)	15,318,861	1,212,499	(26,609)	16,504,751
Equipment, software and intangibles	4,800,503	588,597	(224,314)	5,164,786	658,487	(223,448)	5,599,825
Libraries and collections	2,991,555	130,772	(22,454)	3,099,873	132,583	(54,111)	3,178,345
Accumulated depreciation and amortization	**22,298,114**	**1,909,870**	**(252,766)**	**23,955,218**	**2,027,343**	**(308,599)**	**25,673,962**
Capital assets, net	**$29,688,815**			**$30,669,753**			**$32,325,107**

Service concession arrangements, reported as buildings and improvements, are $202.1 million of original cost and $25.6 million of accumulated depreciation at June 30, 2018. Service concession arrangements, reported as buildings and improvements, are $118.2 million of original cost and $22.5 million of accumulated depreciation at June 30, 2017.

12. SELF-INSURANCE, OBLIGATIONS UNDER LIFE INCOME AGREEMENTS AND OTHER LIABILITIES

The University's self-insurance, obligations under life income agreements and other liabilities at June 30, 2018 and 2017 are as follows:

	UNIVERSITY OF CALIFORNIA				UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS			
	2018		2017		2018		2017	
(in thousands of dollars)	CURRENT	NONCURRENT	CURRENT	NONCURRENT	CURRENT	NONCURRENT	CURRENT	NONCURRENT
Self-insurance programs	$392,634	**$584,186**	$276,480	**$584,232**				
Obligations under life income agreements	1,474	**$35,293**	1,601	**$34,479**	$19,314	**$149,391**	$17,428	**$137,713**
Other liabilities:								
Compensated absences	614,056	315,659	578,012	340,353				
UCRP *	4,509	4,891	4,157	9,400				
Accrued interest	121,812		107,672					
Fair value of interest rate swaps		54,839		90,232				
Third-party payor settlements	497,751		415,988					
Deposits	152,591		148,061					
Other	113,377	162,992	61,326	248,817	24,866	271,825	28,042	253,288
Total	**$1,898,204**	**$538,381**	**$1,593,297**	**$688,802**	**$44,180**	**$271,825**	**$45,470**	**$253,288**

** UCRP has an equivalent amount recorded as a contribution receivable from the University in its statement of fiduciary net position.*

Self-Insurance Programs

Self-insured liabilities changed as follows for the years ended June 30:

(in thousands of dollars)	MEDICAL MALPRACTICE	WORKERS' COMPENSATION	EMPLOYEE & STUDENT HEALTH CARE	GENERAL LIABILITY AND OTHER	TOTAL
Year Ended June 30, 2018					
Liabilities at June 30, 2017	$193,155	$409,007	$90,178	$168,372	$860,712
Claims incurred and changes in estimates	75,112	129,808	973,303	63,290	1,241,513
Claim payments	(52,960)	(82,852)	(948,681)	(40,912)	(1,125,405)
Liabilities at June 30, 2018	**$215,307**	**$455,963**	**$114,800**	**$190,750**	**$976,820**
Discount rate	**3.0%**	**3.0%**	**Undiscounted**	**3.0%**	
Year Ended June 30, 2017					
Liabilities at June 30, 2016	$198,440	$391,440	$88,510	$108,519	$786,909
Claims incurred and changes in estimates	51,074	104,089	811,137	99,538	1,065,838
Claim payments	(56,359)	(86,522)	(809,469)	(39,685)	(992,035)
Liabilities at June 30, 2017	**$193,155**	**$409,007**	**$90,178**	**$168,372**	**$860,712**
Discount rate	**2.6% to 4.7%**	**2.6% to 4.7%**	**Undiscounted**	**2.6% to 4.7%**	
Year Ended June 30, 2016					
Liabilities at June 30, 2015	$187,236	$353,138	$75,433	$94,481	$710,288
Claims incurred and changes in estimates	73,520	119,972	666,442	41,190	901,124
Claim payments	(62,316)	(81,670)	(653,365)	(27,152)	(824,503)
Liabilities at June 30, 2016	**$198,440**	**$391,440**	**$88,510**	**$108,519**	**$786,909**
Discount rate	**5.0%**	**5.0%**	**Undiscounted**	**2.0%**	

Obligations Under Life Income Agreements

Changes in current and noncurrent obligations under life income agreements for the years ended June 30 are as follows:

	UNIVERSITY OF CALIFORNIA		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	
(in thousands of dollars)	ANNUITIES	LIFE BENEFICIARIES	ANNUITIES	LIFE BENEFICIARIES
Year Ended June 30, 2018				
Balance at June 30, 2017	$16,735	$19,345	$50,843	$104,298
New obligations to beneficiaries and changes in liability, net	3,577	778	19,971	9,287
Payments to beneficiaries	(2,403)	(1,265)	(5,952)	(9,742)
Obligations under life income agreements at June 30, 2018	**17,909**	**18,858**	**64,862**	**103,843**
Less: Current portion	(825)	(649)	(7,436)	(11,878)
Noncurrent portion at June 30, 2018	**$17,084**	**$18,209**	**$57,426**	**$91,965**
Year Ended June 30, 2017				
Balance at June 30, 2016	$15,588	$17,779	$48,898	$98,134
New obligations to beneficiaries and changes in liability, net	3,353	2,961	7,921	15,733
Payments to beneficiaries	(2,206)	(1,395)	(5,976)	(9,569)
Obligations under life income agreements at June 30, 2017	**16,735**	**19,345**	**50,843**	**104,298**
Less: Current portion	(763)	(838)	(6,166)	(11,262)
Noncurrent portion at June 30, 2017	**$15,972**	**$18,507**	**$44,677**	**$93,036**

13. DEBT

The University directly finances the construction, renovation and acquisition of facilities and equipment, or for such other purposes as are authorized by The Regents through the issuance of debt obligations or indirectly through structures that involve legally separate entities reported as blended component units. Commercial paper and bank loans provide interim financing. Long-term financing includes revenue bonds, capital lease obligations and other borrowings.

The University's outstanding debt at June 30 is as follows:

(in thousands of dollars)	WEIGHTED AVERAGE INTEREST RATE	INTEREST RATE RANGE	MATURITY YEARS	2018	2017
INTERIM FINANCING:					
Commercial paper		1.1 - 2.3%	2018	$781,804	$812,673
LONG-TERM FINANCING:					
University of California General Revenue Bonds					
Fixed Rate	4.7%	1.2 - 7.6%	2019 - 2115	11,192,530	9,959,700
Variable Rate	1.4%	1.3 - 1.9%	2037 - 2048	750,000	750,000
University of California Limited Project Revenue Bonds	4.8%	1.2 - 6.3%	2019 - 2058	5,019,785	3,702,630
University of California Medical Center Pooled Revenue Bonds					
Fixed Rate	5.5%	1.1 - 6.6%	2019 - 2049	2,501,820	2,763,295
Variable Rate	1.9%	1.2 - 2.4%	2019 - 2047	244,400	247,865
Unamortized bond premium				1,368,889	1,020,465
University of California revenue bonds	**4.6%**			**21,077,424**	**18,443,955**
Capital lease obligations		0.5 - 11.8%	2019 - 2042	207,118	195,022
Other University borrowings		Various	2019 - 2053	556,513	378,659
Blended component unit revenue bonds, net	5.6%	4.0 - 6.5%	2019 - 2052	1,035,918	672,567
Total outstanding debt				**23,658,777**	**20,502,876**
Less: Commercial paper				(781,804)	(812,673)
Current portion of outstanding debt				(1,371,030)	(1,519,005)
Noncurrent portion of outstanding debt				**$21,505,943**	**$18,171,198**

Interest expense associated with financing projects during construction, net of any investment income earned on tax-exempt bond proceeds during construction, is capitalized. Total interest expense during the years ended June 30, 2018 and 2017 was $821.2 million and $782.0 million, respectively. Interest expense, net of investment income, totaling $74.6 million and $60.8 million was capitalized during the years ended June 30, 2018 and 2017, respectively. The remaining $746.6 million and $721.2 million in 2018 and 2017 is reported as interest expense in the statement of revenues, expenses and changes in net position.

Outstanding Debt Activity

The activity with respect to the University's current and noncurrent debt, including the revenue bonds associated with blended component units, for the years ended June 30 is as follows:

(in thousands of dollars)	UNIVERSITY REVENUE BONDS	FINANCING OBLIGATIONS	OTHER UNIVERSITY BORROWINGS	BLENDED COMPONENT UNIT REVENUE BONDS	TOTAL
Year Ended June 30, 2018					
Long-term debt and financing obligations at June 30, 2017	$18,443,955	$195,022	$378,659	$672,567	$19,690,203
New obligations	3,544,885	47,225	284,583	319,530	4,196,223
Bond premium, net	430,715			63,217	493,932
Refinancing or prepayment of outstanding debt	(913,690)		(100,049)		(1,013,739)
Scheduled principal payments	(346,150)	(35,129)	(6,680)	(10,750)	(398,709)
Amortization of bond premium	(82,291)			(8,646)	(90,937)
Long-term debt and financing obligations at June 30, 2018	**21,077,424**	**207,118**	**556,513**	**1,035,918**	**22,876,973**
Less: Current portion	(1,308,152)	(38,581)	(6,326)	(17,971)	(1,371,030)
Noncurrent portion at June 30, 2018	**$19,769,272**	**$168,537**	**$550,187**	**$1,017,947**	**$21,505,943**
Year Ended June 30, 2017					
Long-term debt and financing obligations at June 30, 2016	$17,687,259	$176,753	$356,847	$692,571	$18,913,430
New obligations	2,181,755	55,360	126,105	54,280	2,417,500
Bond premium, net	213,621			9,107	222,728
Refinancing or prepayment of outstanding debt	(1,224,530)		(39,999)	(56,210)	(1,320,739)
Scheduled principal payments	(339,180)	(37,091)	(64,294)	(24,026)	(464,591)
Amortization of bond premium	(74,970)			(3,155)	(78,125)
Long-term debt and financing obligations at June 30, 2017	**18,443,955**	**195,022**	**378,659**	**672,567**	**19,690,203**
Less: Current portion	(1,263,157)	(34,351)	(206,567)	(14,930)	(1,519,005)
Noncurrent portion at June 30, 2017	**$17,180,798**	**$160,671**	**$172,092**	**$657,637**	**$18,171,198**

Commercial Paper

The University has available a $2.0 billion commercial paper program, issued in two series, with tax-exempt and taxable components. Commercial paper may be issued for interim financing for capital projects, interim financing of equipment, financing of working capital for the medical centers, standby or interim financing for gift financed projects and working capital for the University.

The program's liquidity is primarily supported by available investments in STIP and TRIP. Commercial paper is collateralized by a pledge of the revenues derived from the ownership or operation of the projects financed and constitute limited obligations of the University. There is no encumbrance, mortgage or other pledge of property securing commercial paper and the paper does not constitute general obligations of the University.

Commercial paper outstanding, including interest rates, at June 30 is as follows:

(in thousands of dollars)

	2018		2017	
	INTEREST RATES	OUTSTANDING	INTEREST RATES	OUTSTANDING
Tax-exempt	1.10 - 1.71%	$457,000		
Taxable	1.88 - 2.30%	324,804	0.93 - 1.26%	$812,673
Total outstanding		**$781,804**		**$812,673**

The expectation is that the University will continue to utilize available investments for liquidity support of the commercial paper program. Alternatively, the University may utilize lines of credit from external banks for the purpose of providing additional liquidity support for the commercial paper program. As of June 30, 2018, the University has two revolving credit agreements totaling $700.0 million. There were no borrowings against the revolving credit lines as of June 30, 2018.

University of California Revenue Bonds

Revenue bonds have financed various auxiliary, administrative, academic, medical center and research facilities of the University. The bonds generally have annual principal and semiannual or monthly interest payments, serial and term maturities, contain sinking fund requirements and may have optional redemption provisions. Revenue bonds are not collateralized by any encumbrance, mortgage or other pledge of property, except pledged revenues, and do not constitute general obligations of The Regents. Revenue Bond Indentures require the University to use the facilities in a way which will not cause the interest on the tax-exempt bonds to be included in the gross income of the bondholders for federal tax purposes. The Indentures permit the University to issue additional bonds as long as certain conditions are met.

General Revenue Bonds are collateralized solely by General Revenues as defined in the General Revenue Bond Indenture. General Revenues are certain operating and nonoperating revenues of the University consisting of gross student tuition and fees; a portion of state appropriations; facilities and administrative cost recovery from contracts and grants; revenues from educational, auxiliary and other activities; and other revenues, including unrestricted investment income. The General Revenue Bond Indenture requires the University to set rates, charges and fees each year sufficient for General Revenues to pay for the annual principal and interest on the bonds and certain other covenants. The pledge of General Revenues for interest rate swap agreements is on a parity basis with the University's General Revenue Bonds. General Revenues for the years ended June 30, 2018 and 2017 were $16.8 billion and $16.2 billion, respectively.

Limited Project Revenue Bonds are issued to finance auxiliary enterprises and are collateralized by a pledge consisting of the sum of the gross revenues of the specific projects. The Limited Project Revenue Bond Indenture requires the University to achieve the sum of gross project revenues equal to 1.1 times debt service and maintain certain other covenants. The pledge of revenues for Limited Project Revenue Bonds is subordinate to the pledge of revenues for General Revenue Bonds, but senior to pledges for commercial paper notes. Pledged revenues for the years ended June 30, 2018 and 2017 were $1.5 billion and $1.4 billion, respectively.

Medical Center Pooled Revenue Bonds are issued to finance the University's medical center facilities and are collateralized by a joint and several pledges of the gross revenues of all five of the University's medical centers. Medical center gross revenues are excluded from General Revenues. The Medical Center Pooled Revenue Bond Indenture requires the medical centers to set rates, charges and fees each year sufficient for the Medical Centers' total operating and nonoperating revenues to pay for the annual principal and interest on the bonds and certain other covenants. The pledge of medical center revenues for interest rate swap agreements may be at parity with, or subordinate to, Medical Center Pooled Revenue Bonds. Pledged revenues of the medical centers for the years ended June 30, 2018 and 2017 were $12.2 billion and $11.4 billion, respectively.

2018 Activity

In September 2017, Limited Project Revenue Bonds totaling $860.4 million, including $733.5 million tax-exempt bonds and $126.9 million taxable bonds, were issued to finance the acquisition, construction, improvement and renovation of certain facilities of the University. The bonds mature at various dates through 2052. Proceeds, including a bond premium of $124.2 million, were used to pay for project construction and issuance costs. The taxable bonds have a stated weighted average rate of 2.9 percent. The tax-exempt bonds have a stated weighted average interest rate of 4.9 percent. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds.

In December 2017, General Revenue Bonds totaling $625.5 million of tax-exempt bonds were issued to advance refund a portion of General Revenue Bonds, Limited Project Revenue Bonds and Medical Center Pooled Revenue Bonds. The bonds mature at various dates through 2041. The bonds have a stated weighted average interest rate of 4.7 percent. The bond premium of $113.1 million will be amortized as a reduction to interest expense over the term of the bonds. The refinancing and refunding of previously outstanding bonds resulted in cash flow savings of $74.6 million and an economic gain of $59.3 million.

In June 2018, General Revenue Bonds totaling $1.2 billion, including $945.8 million in tax-exempt bonds and $281.9 million in taxable bonds, were issued to finance or refinance the acquisition, construction, improvement and renovation of certain facilities of the University. The bonds mature at various dates through 2058. Proceeds, including a bond premium of $144.3 million, were used to pay for project construction and issuance costs and to refund $112.7 million of outstanding General Revenue Bonds. The tax-exempt bonds have a stated weighted average interest rate of 4.9 percent. The taxable bonds have a stated weighted average interest rate of 4.3 percent. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds. The refinancing and refunding of previously outstanding bonds resulted in cash flow savings of $13.0 million and an economic gain of $10.2 million.

In June 2018, Limited Project Revenue Bonds totaling $831.3 million, including $736.2 million tax-exempt bonds and $95.1 million taxable bonds, were issued to finance or refinance the acquisition, construction, improvement and renovation of certain facilities of the University. The bonds mature at various dates through 2058. Proceeds, including a bond premium of $108.5 million, were used to pay for project construction and issuance costs and to refund $151.3 million of outstanding Limited Project Revenue Bonds. The taxable bonds have a stated weighted average rate of 3.9 percent. The tax-exempt bonds have a stated weighted average interest rate of 4.9 percent. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds. The refinancing and refunding of previously outstanding bonds resulted in cash flow savings of $17.7 million and an economic gain of $13.7 million.

2017 Activity

In August 2016, Medical Center Pooled Revenue Bonds totaling $1.0 billion, including $872.8 million of tax-exempt bonds and $173.4 million taxable bonds, were issued to finance and refinance certain facilities and projects of the Medical Centers. Proceeds, including a net bond premium of $155.8 million, were used to pay for project construction, issuance costs and refund $724.5 million of outstanding Medical Center Pooled Revenue Bonds and all of the outstanding Medical Center Revenue Bonds. The bonds mature at various dates through 2047. Simultaneously, a bank standby bond purchase agreement for certain of the University's variable-rate demand bonds was terminated. The University will provide its own liquidity in connection with mandatory and optional tenders and remarketing of these bonds and does not plan to provide any third-party liquidity facility to support this obligation. The interest rates on the variable-rate demand bonds reset daily and an interest rate swap is being used to limit exposure to changes in market interest rates. In the event of a failed remarketing, the variable-rate demand bonds can be put back to The Regents for tender. The tax-exempt and taxable bonds have a stated weighted average interest rate of 4.5 percent and 3.0 percent, respectively. The refunding of the outstanding Medical Center Pooled Revenue Bonds and Medical Center Revenue Bonds resulted in a loss of $8.0 million, recorded as a deferred outflow of resources, that will be amortized as interest expense over the term of the refunded bonds. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds. The refinancing and refunding of previously outstanding Medical Center Revenue Bonds resulted in cash flow savings of $193.5 million and an economic gain of $151.2 million.

In April 2017, General Revenue Bonds totaling $1.1 billion, including $449.7 million in tax-exempt bonds, $185.9 million in taxable bonds and $500.0 million of taxable fixed-rate notes, were issued to finance or refinance certain capital projects and working capital borrowings of the University. The bonds mature at various dates through 2049 and the taxable fixed-rate notes mature in 2025. Proceeds, including a bond premium of $68.0 million, were used to pay for project construction and issuance costs and to refund $500.0 million of outstanding General Revenue Bonds. The tax-exempt bonds have a stated weighted average interest rate of 4.8 percent. The taxable bonds have a stated weighted average interest rate of 3.8 percent. The taxable fixed rate notes have a stated interest rate of 3.1 percent. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds.

Capital Leases

Capital leases entered into with other lessors, typically for equipment, totaled $47.2 million and $55.4 million for the years ended June 30, 2018 and 2017, respectively.

Other University Borrowings

Other University borrowings consist of contractual obligations resulting from the acquisition of land or buildings and the construction and renovation of certain facilities, along with the borrowing component associated with a hybrid derivative instrument.

The University may use uncollateralized revolving lines of credit with commercial banks for general corporate purposes and to provide interim financing for buildings and equipment. Lines of credit commitments for general corporate purposes, with various expiration dates through May 3, 2021, totaled $400.0 million at June 30, 2018 and $415.0 million at June 30, 2017 . Outstanding borrowings under these bank lines totaled $150.0 million and $250.0 million at June 30, 2018 and 2017, respectively.

Certain of the interest rate swaps are considered hybrid instruments. As such, the interest rate swaps are comprised of a derivative instrument and a companion instrument recorded as a borrowing. The unamortized amount of the borrowing was $75.2 million and $79.0 million at June 30, 2018 and 2017, respectively.

In August 2016, the University entered into an agreement with a developer to design, construct, finance, operate and maintain certain auxiliary, administrative, academic and research facilities of one of its campuses, for which the University will finance $600.0 million of the total costs. Of this amount, $585.0 million will be paid to the developer over a 48-month period through a series of monthly progress payments. The remainder will cover invoiced costs for infrastructure improvements and equipment. Upon completion of the design-build phase of the project, the University will enter into an ongoing Operations and Maintenance Agreement with the developer through 2055. Payments under this agreement will have two components: the first component of the agreement is related to the operations and maintenance of the facilities, the second component is to service the private debt incurred by the developer during the construction phase. The operations and maintenance component of the payment will be expensed as incurred. The payments for the private debt are being treated as capital leases and are recorded as other borrowings by the University. In the event that the operations and maintenance agreement with the developer is terminated, the outstanding portion of the private debt incurred by the developer would become an obligation of the University. The outstanding amount of the borrowing was $296.9 million and $43.7 million at June 30, 2018 and 2017, respectively.

As of June 30, 2018, CHRCO had no amounts outstanding under its revolving credit facility for $25.0 million. The interest rate on the credit facility is 3.2 percent as of June 30, 2018 and the facility expires on August 31, 2020.

Blended Component Unit Revenue Bonds

Student Housing

The University has entered into ground leases with a legally separate, nonprofit corporation that develops and owns student housing projects and related amenities and improvements on a University campus through the use of a single-project limited liability corporation (LLC). The LLC manages the premises. The University's reversionary interest in the land is not subordinated. All costs associated with the ownership, operation and management of the improvements are the obligation of the LLC. Student rental rates are established in order to provide for operating expenses and maintain the required debt service coverage ratios. The University is not responsible for any payments related to the ownership, operation or financing of the student housing. However, under accounting requirements, the financial position and operating results of this legally separate organization are blended into the University's financial reporting entity.

The LLC, through its conduit issuer, has outstanding Student Housing LLC Revenue Bonds to finance the construction of the student housing facilities. The bonds generally have annual principal and semiannual interest payments, serial and term maturities, certain sinking fund requirements and optional redemption provisions. They are not collateralized by any encumbrance, mortgage or other pledge of property, except pledged revenues of the student housing projects, and do not constitute general obligations of The Regents.

In August 2017, the LLC, through its conduit issuer, issued additional Student Housing LLC Revenue Bonds totaling $148.6 million. The bonds mature at various dates through 2050 and have a stated weighted average interest rate of 5.0 percent. Proceeds, including a bond premium of $24.2 million, were used to pay for project construction and issuance costs. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds.

At June 30, 2018 and 2017, the LLC, through its conduit issuer, has outstanding Student Housing LLC Revenue Bonds totaling $501.3 million and $362.2 million, respectively. The bonds mature at various dates through 2050 and have a weighted average interest rate of 5.1 percent.

Research Facilities

The University has a public/private partnership, for the purpose of developing, constructing and managing a neuroscience research and laboratory building and a psychiatry youth and family center with a legally separate, nonprofit corporation (the Corporation). In connection with these facilities, the University entered into ground leases with the Corporation. The Corporation has entered into a sub-ground leases with a developer to construct, own and manage the facilities. The University agreed to lease all of the space in the building from the developer. The University's base rent payments are equal to the principal and interest payments on the bonds issued by a conduit issuer and loaned to the nonprofit corporation to finance the construction of the building. As security on the bonds, the developer has assigned all payments received from the University for the space lease to the bond trustee.

All of the board members of the Corporation are appointed by the University and the University has the authority to determine the budget for the nonprofit corporation. Under accounting requirements, the financial position and operating results of this legally separate organization are blended into the University's financial reporting entity.

In December 2017, the Corporation, through its conduit issuer, issued additional revenue bonds totaling $171.0 million. The bonds mature at various dates through 2052 and have a stated weighted average interest rate of 5.0 percent. Proceeds, including a bond premium of $39.0 million, were used to pay for construction and issuance costs of the psychiatry youth and family center. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds.

At June 30, 2018, the Corporation, through a conduit issuer, has outstanding tax-exempt revenue bonds totaling $190.7 million and taxable revenue bonds totaling $188.0 million. The tax-exempt revenue bonds mature at various dates from 2021 to 2052 and have a weighted average interest rate of 5.0 percent. The tax-exempt revenue bonds generally have annual serial maturities, semi-annual interest payments and optional redemption provisions. The taxable bonds mature in 2049 and have an interest rate of 6.5 percent. The taxable bonds were issued as Build America Bonds, under which the U.S. Treasury is expected to send the conduit issuer 35.0 percent of the semi-annual interest cost on the taxable bonds, making the net interest rate 4.2 percent post-subsidy. The taxable bonds have a term maturity with various certain annual sinking fund requirements, semi-annual interest payments and optional redemption provisions.

In addition, the University entered into a ground lease with another legally separate, nonprofit corporation (the Consortium). The Consortium entered into an agreement with a developer to develop and own a research laboratory facility designed to expand collaborative work in stem cell research and facilitate its translation into tools and techniques to diagnose and treat degenerative diseases and other ailments. The developer constructed the research laboratory facility. All costs associated with the ownership, operation and management of the laboratory research facility are the obligation of the Consortium. The University, along with the other collaborative research partners, will lease space in the building. Under accounting requirements, the financial position and operating results of this legally separate organization are blended into the University's financial reporting entity.

The Consortium, through its conduit issuer, has outstanding revenue bonds totaling $52.0 million and $53.3 million at June 30, 2018 and 2017, respectively. The bonds mature at various dates through 2040 and have a weighted average interest rate of 4.5 percent. The bonds generally have annual principal and semiannual interest payments, serial and term maturities, certain sinking fund requirements and optional redemption provisions. Lease payments from the occupants of the building are pledged as collateral on the bonds. To the extent the lease payments are not sufficient to pay the debt service, the University is obligated to pay the shortfall.

Future Debt Service and Hedging Derivative Interest Rate Swaps

Future debt service payments for the University's fixed- and variable-rate debt for each of the five fiscal years subsequent to June 30, 2018, and thereafter are as presented below. Although not a prediction by the University of the future interest cost of the variable-rate bonds, these amounts assume that current interest rates on variable-rate bonds will not change. As these rates vary, variable-rate bond interest payments will vary.

(in thousands of dollars)	COMMERCIAL PAPER	MEDICAL CENTER REVENUE BONDS	UNIVERSITY REVENUE BONDS	CAPITAL LEASES	OTHER UNIVERSITY BORROWINGS	BLENDED COMPONENT UNIT REVENUE BONDS	TOTAL PAYMENTS	PRINCIPAL	INTEREST
Year Ending June 30									
2019	$784,758	$187,204	$1,073,658	$45,471	$16,107	$60,188	$2,167,386	$1,218,885	$948,501
2020		192,920	1,372,540	43,027	159,269	60,184	1,827,940	895,277	932,663
2021		202,776	1,308,195	37,848	12,283	68,067	1,629,169	716,048	913,121
2022		201,737	1,086,149	15,464	12,377	68,271	1,383,998	494,186	889,812
2023		201,111	1,083,396	10,116	12,440	68,276	1,375,339	505,825	869,514
2024 - 2028		956,826	5,929,881	37,293	62,246	341,307	7,327,553	3,382,997	3,944,556
2029 - 2033		890,058	5,140,036	37,334	62,153	339,280	6,468,861	3,253,051	3,215,810
2034 - 2038		883,305	4,717,136	35,138	74,058	335,731	6,045,368	3,644,952	2,400,416
2039 - 2043		951,386	3,717,648	30,184	50,347	211,326	4,960,891	3,462,243	1,498,648
2044 - 2048		785,996	2,459,473		45,884	170,619	3,461,972	2,689,889	772,083
2049 - 2053		22,217	705,514		64,711	75,507	867,949	463,221	404,728
2054 - 2115			5,418,990				5,418,990	1,460,085	3,958,905
Total future debt service	**784,758**	**5,475,536**	**34,012,616**	**291,875**	**571,875**	**1,798,756**	**42,935,416**	**$22,186,659**	**$20,748,757**
Less: Interest component of future payments	(2,954)	(2,729,316)	(17,050,301)	(84,063)	(15,362)	(866,761)	(20,748,757)		
Principal portion of future payments	**781,804**	**2,746,220**	**16,962,315**	**207,812**	**556,513**	**931,995**	**22,186,659**		
Adjusted by:									
Unamortized bond premium		181,348	1,187,541			103,923	1,472,812		
Present value of net minimum leases included in long-term debt				(694)			(694)		
Total debt	**$781,804**	**$2,927,568**	**$18,149,856**	**$207,118**	**$556,513**	**$1,035,918**	**$23,658,777**		

Long-term debt does not include $2.6 billion of defeased liabilities at June 30, 2018. Investments that have maturities and interest rates sufficient to fund retirement of these liabilities are being held in irrevocable trusts for the debt service payments. Neither the assets of the trusts nor the outstanding obligations are included in the University's statement of net position.

General Revenue Bonds of $750.0 million are variable-rate demand bonds which reset weekly and, in the event of a failed remarketing, can be put back to The Regents for tender. The University has classified these bonds as current liabilities as of June 30, 2018.

Medical Center Pooled Revenue Bonds of $95.4 million are variable-rate demand bonds which give the debt holders the ability to tender the bonds back to the University upon demand. The University has classified these bonds as current liabilities as of June 30, 2018.

For the University's cash flow hedges, future debt service payments for the University's variable-rate debt and net receipts or payments on the associated hedging derivative instruments for each of the five fiscal years subsequent to June 30, 2018, and thereafter are as presented below. Although not a prediction by the University of the future interest cost of the variable-rate bonds or the impact of the interest rate swaps, using rates as of June 30, 2018, combined debt service requirements of the variable-rate debt and net swap payments are as follows:

	VARIABLE-RATE BONDS		INTEREST RATE SWAP, NET	TOTAL PAYMENTS
(in thousands of dollars)	PRINCIPAL	INTEREST		
Year Ending June 30				
2019	$3,590	$12,098	$8,014	$23,702
2020	3,725	12,104	7,948	23,777
2021	3,860	12,079	7,873	23,812
2022	3,995	12,028	7,798	23,821
2023	7,510	11,980	7,721	27,211
2024-2028	42,350	58,016	23,857	124,223
2029-2033	45,745	54,184	18,082	118,011
2034-2038	30,175	50,603	13,903	94,681
2039-2043	55,030	46,237	9,363	110,630
2044-2048	642,870	25,051	2,073	669,994
Total	**$838,850**	**$294,380**	**$106,632**	**$1,239,862**

14. DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The University's composition of deferred outflows and inflows of resources at June 30 are summarized as follows:

(in thousands of dollars)	SERVICE CONCESSION ARRANGEMENTS	NET PENSION LIABILITY	NET RETIREE HEALTH BENEFITS LIABILITY	DEBT REFUNDING	INTEREST RATE SWAP AGREEMENTS	ROYALTY SALES	IRREVOCABLE SPLIT-INTEREST AGREEMENTS	TOTAL
At June 30, 2018								
Deferred outflows of resources		$727,344	$3,515,860	$351,360	$54,839			$4,649,403
Deferred inflows of resources	$176,447	275,145	5,645,528	1,388		$421,341	$89,855	6,609,704
At June 30, 2017								
Deferred outflows of resources		$1,001,165	$4,106,941	$351,306	$90,232			$5,549,644
Deferred inflows of resources	$95,725	785,238	4,934,470	1,436		$467,502	$87,412	6,371,783

The campus foundations' deferred inflows of resources are primarily related to irrevocable split-interest agreements.

15. THE UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM (UCRS)

Most University employees participate in UCRS. UCRS consists of UCRP, a defined benefit plan funded with University and employee contributions; UCRSP, which includes defined contribution plans with options to participate in internally or externally managed investment portfolios generally funded with employee non-elective and elective contributions; UC-VERIP, a defined benefit plan for University employees who were members of PERS and who elected early retirement; and the CHRCO Pension Plan, a defined benefit plan fully funded with CHRCO contributions. The Regents has the authority to establish and amend the benefit plans except for the CHRCO Pension Plan. Administration authority with respect to UCRS plans is vested with the President of the University as plan administrator. CHRCO administers the CHRCO Pension Plan as the Sponsor and plan assets are held by US Bank (the Trustee).

Condensed financial information related to each plan in UCRS and the changes in pension liability for UCRP, UC-VERIP and the CHRCO Pension Plan for the year ended June 30, 2018 is as follows:

	UNIVERSITY OF CALIFORNIA					
(in thousands of dollars)	UNIVERSITY OF CALIFORNIA RETIREMENT PLAN	UNIVERSITY OF CALIFORNIA UC-VERIP	SUBTOTAL	UNIVERSITY OF CALIFORNIA RETIREMENT SAVINGS PROGRAM	TOTAL	CHILDREN'S HOSPITAL & RESEARCH CENTER AT OAKLAND PENSION PLAN
CONDENSED STATEMENT OF PLAN FIDUCIARY NET POSITION						
Investments at fair value	$67,871,988	$66,370	$67,938,358	$22,934,360	$90,872,718	$460,061
Participants' interests in mutual funds				1,585,098	1,585,098	
Investment of cash collateral	3,863,753	3,770	3,867,523	2,290,767	6,158,290	
Other assets	156,883	87	156,970	307,700	464,670	
Total assets	**71,892,624**	**70,227**	**71,962,851**	**27,117,925**	**99,080,776**	**460,061**
Collateral held for securities lending	3,863,026	3,769	3,866,795	2,290,336	6,157,131	
Other liabilities	1,256,008	1,210	1,257,218	441,485	1,698,703	
Total liabilities	**5,119,034**	**4,979**	**5,124,013**	**2,731,821**	**7,855,834**	
Net position held in trust	**$66,773,590**	**$65,248**	**$66,838,838**	**$24,386,104**	**$91,224,942**	**$460,061**
CONDENSED STATEMENT OF CHANGES IN PLANS' FIDUCIARY NET POSITION						
Contributions	$3,446,018		$3,446,018	$1,313,722	$4,759,740	$33,600
Net appreciation (depreciation) in fair value of investments	3,743,725	$3,735	3,747,460	1,351,080	5,098,540	
Investment and other income, net	1,093,828	1,149	1,094,977	461,431	1,556,408	33,269
Total additions	**8,283,571**	**4,884**	**8,288,455**	**3,126,233**	**11,414,688**	**66,869**
Benefit payment and participant withdrawals	3,587,554	4,610	3,592,164	1,220,081	4,812,245	12,802
Other deductions	36,685	4	36,689	2,680	39,369	3,014
Total deductions	**3,624,239**	**4,614**	**3,628,853**	**1,222,761**	**4,851,614**	**15,816**
Increase in net position held in trust	**4,659,332**	**270**	**4,659,602**	**1,903,472**	**6,563,074**	**51,053**
Net position held in trust						
Beginning of year	62,114,258	64,978	62,179,236	22,482,632	84,661,868	409,008
End of year	**$66,773,590**	**$65,248**	**$66,838,838**	**$24,386,104**	**$91,224,942**	**$460,061**
CHANGES IN TOTAL PENSION LIABILITY						
Service cost	$1,873,004		$1,873,004			$11,304
Interest	5,295,733	$2,042	5,297,775			31,854
Difference between expected and actual experience	138,419	(436)	137,983			92
Changes of benefit terms						3,609
Benefits paid, including refunds of employee contributions	(3,587,554)	(4,610)	(3,592,164)			(12,802)
Net change in total pension liability	**3,719,602**	**(3,004)**	**3,716,598**			**34,057**
Total pension liability						
Beginning of year	72,826,846	32,544	72,859,390			450,152
End of year	**$76,546,448**	**$29,540**	**$76,575,988**			**$484,209**
Net pension liability (asset), end of year	**$9,772,858**	**($35,708)**	**$9,737,150**			**$24,148**

Additional information on the retirement plans can be obtained from the 2017-2018 annual reports of the University of California Retirement System which can be obtained at http://reportingtransparency.universityofcalifornia.edu/.

University of California Retirement Plan

UCRP provides lifetime retirement income, disability protection, death benefits, and post-retirement and pre-retirement survivor benefits to eligible employees of the University, and its affiliates. Membership is required in UCRP for all employees appointed to work at least 50 percent time for one year or more or for an indefinite period or for a definite period of a year or more. An employee may also become eligible by completing 1,000 hours within a 12-month period. Generally, five years of service are required for entitlement to plan benefits. The amount of 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 highest average plan compensation over a 36-month period, subject to certain limits imposed under the Internal Revenue Code or plan provisions. Annual cost-of-living adjustments are made to monthly benefits according to a specified formula based on the Consumer Price Index. Ad hoc COLAs may be granted subject to funding availability.

The University's membership in UCRP consisted of the following at June 30, 2018:

	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	UNIVERSITY OF CALIFORNIA
Retirees and beneficiaries receiving benefits	62,704	13,220	75,924
Inactive members entitled to, but not receiving benefits	82,855	9,762	92,617
Active members:			
Vested	75,290	1,643	76,933
Nonvested	52,216	730	52,946
Total active members	**127,506**	**2,373**	**129,879**
Total membership	**273,065**	**25,355**	**298,420**

Contributions

Contributions to UCRP are based upon rates determined by The Regents. The Regents' funding policy provides for contributions at rates 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 contribution. 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 determines the portion of the total contribution to be made by the employer and by the employees, and employee contribution rates for represented employees are subject to collective bargaining. Effective July 1, 2014, employee member contributions range from 7.0 percent to 9.0 percent. The University pays a uniform contribution rate of 14.0 percent of covered payroll on behalf of all UCRP members.

Employee 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 possibly a lump sum equal to the present value of their accrued benefits. Both current employees and retirees at LBNL participate in UCRP. The University makes contributions to UCRP for LBNL employees based upon rates authorized by The Regents and is reimbursed by the DOE. The University also makes contributions to UCRP for LANL and LLNL retirees and terminated vested members whose benefits were retained in UCRP at the time the joint ventures were formed. The contributions for the LANL and LLNL are actuarially determined based upon a contractual arrangement with the DOE that incorporates a formula targeted to maintain the LANL and LLNL segments within UCRP at a 100-percent funded level. The University is reimbursed by the DOE for these contributions. To the extent the University has recorded a net pension liability (and related deferred inflows and outflows of resources) that will be reimbursed under DOE contracts, a receivable from the DOE is recorded. As of June 30, 2018 and 2017, the University reported $316.7 million and $615.1 million, respectively, as other noncurrent Department of Energy receivables for pension liabilities. Contributions of $307.9 million and $367.7 million were reported as DOE laboratory revenue and expense in the statement of revenues, expenses and changes in net position, and were deposited into UCRP on behalf of the DOE for the years ended June 30, 2018 and 2017, respectively.

Net Pension Liability

All UCRP assets are available to pay any member's benefit. However, assets and liabilities for the campus and medical center segment of UCRP are internally tracked separately from the DOE national laboratory segments of UCRP. The net pension liability for UCRP was as follows:

(in thousands of dollars)	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	UNIVERSITY OF CALIFORNIA
At June 30, 2018			
UCRP net position	$57,608,162	$9,165,428	$66,773,590
Total pension liability	67,065,682	9,480,766	76,546,448
Net pension liability	**$9,457,520**	**$315,338**	**$9,772,858**
At June 30, 2017			
UCRP net position	$53,251,580	$8,862,678	$62,114,258
Total pension liability	63,355,934	9,470,912	72,826,846
Net pension liability	**$10,104,354**	**$608,234**	**$10,712,588**

The University's net pension liability was measured as of June 30 and was calculated using the plan net position valued as of the measurement date and total pension liability determined based upon rolling forward the total pension liability from the results of the actuarial valuations as of July 1, one year prior to the measurement date. Actuarial valuations represent a long-term perspective and involve estimates of the value of reported benefits and assumptions about the probability of occurrence of events far into the future. The University's net pension liability was calculated using the following methods and assumptions:

	2018	2017
Inflation	3.0 %	3.0 %
Investment rate of return	7.25	7.25
Projected salary increases	3.8 - 6.2	3.8 - 6.2
Cost-of-living adjustments	2.0	2.0

Actuarial assumptions are subject to periodic revisions as actual results are compared with past expectations and new estimates are made about the future. The actuarial assumptions used as of June 30, 2018 and 2017 were based upon the results of an experience study conducted for the period of July 1, 2010 through June 30, 2014. For active members, inactive members and healthy retirees, the RP-2014 White Collar Mortality Tables are used (separate tables for males and females), projected with the two-dimensional MP-2014 projection scale to 2029, and with ages then set forward one year. For disabled members, rates are based on the RP-2014 Disabled Retiree Mortality Table, projected with the two-dimensional MP-2014 projection scale to 2029, and with ages then set back one year for males and set forward five years for females.

The long-term expected investment rate of return assumption for UCRP was determined in 2015 based on 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 investment expenses and a risk margin. The target allocation and 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 as of June 30, 2018 and 2017 are summarized in the following table:

	TARGET ALLOCATION	LONG-TERM EXPECTED REAL RATE OF RETURN
Asset class		
U.S. Equity	28.5%	6.1%
Developed International Equity	18.5	7.0
Emerging Market Equity	8.0	8.6
Core Fixed Income	12.5	0.8
High-Yield Bonds	2.5	3.0
Emerging Market Debt	2.5	3.9
Treasury Inflation Protected Securities	4.5	0.4
Real Estate	5.5	4.8
Private Equity	8.0	11.2
Absolute Return	6.5	4.2
Real Assets	3.0	4.4
Total	**100.0%**	**5.6%**

Discount Rate

The discount rate used to estimate the net pension liability as of June 30, 2018 and 2017 was 7.25 percent. To calculate the discount rate, cash flows into and out of UCRP were projected in order to determine whether UCRS has sufficient cash in future periods for projected benefit payments for current members. For this purpose, University, state and member contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected University and member contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions of future plan members, are not included. UCRP was projected to have assets sufficient to make projected benefit payments for current members for all future years as of June 30, 2018 and 2017.

Sensitivity of the Net Pension Liability to the Discount Rate Assumption

The following presents the June 30, 2018 net pension liability of the University calculated using the June 30, 2018 discount rate assumption of 7.25 percent, as well as what the net pension liability would be if it were calculated using a discount rate different than the current assumption:

(in thousands of dollars)	1% DECREASE (6.25%)	CURRENT DISCOUNT (7.25%)	1% INCREASE (8.25%)
UCRP	$19,331,895	$9,772,858	$1,764,796
UC-VERIP	(34,194)	(35,708)	(37,109)

Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred outflows of resources and deferred inflows of resources for pensions were related to the following sources:

(in thousands of dollars)	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	TOTAL UCRP	UC-VERIP	TOTAL
At June 30, 2018					
DEFERRED OUTFLOWS OF RESOURCES					
Difference between expected and actual experience	$244,188	$1,696	$245,884		$245,884
Changes of assumptions or other inputs	458,349		458,349		458,349
Total	**$702,537**	**$1,696**	**$704,233**		**$704,233**
DEFERRED INFLOWS OF RESOURCES					
Difference between expected and actual experience	$55,427		$55,427		$55,427
Net difference between projected and actual earnings on pension plan investments	208,589	$4,484	213,073	$14	213,087
Total	**$264,016**	**$4,484**	**$268,500**	**$14**	**$268,514**

(in thousands of dollars)	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	TOTAL UCRP	UC-VERIP	TOTAL
At June 30, 2017					
DEFERRED OUTFLOWS OF RESOURCES					
Difference between expected and actual experience	$179,399		$179,399		$179,399
Changes of assumptions or other inputs	785,741		785,741		785,741
Net difference between projected and actual earnings on pension plan investments		$7,275	7,275		7,275
Total	**$965,140**	**$7,275**	**$972,415**		**$972,415**
DEFERRED INFLOWS OF RESOURCES					
Difference between expected and actual experience	$151,067	$7,410	$158,477		$158,477
Changes of assumptions or other inputs	378,815		378,815		378,815
Net difference between projected and actual earnings on pension plan investments	244,430		244,430		244,430
Total	**$774,312**	**$7,410**	**$781,722**		**$781,722**

The net amount of deferred outflows of resources and deferred inflows of resources as of June 30, 2018 related to pensions that will be recognized in pension expense during the next five years are as follows:

(in thousands of dollars)	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	TOTAL UCRP	UC-VERIP	TOTAL
2019	$814,090	$96,351	$910,441	$773	$911,214
2020	323,732	32,666	356,398	272	356,670
2021	(676,822)	(119,396)	(796,218)	(954)	(797,172)
2022	(33,815)	(12,409)	(46,224)	(105)	(46,329)
2023	11,336		11,336		11,336
Total	**$438,521**	**($2,788)**	**$435,733**	**($14)**	**$435,719**

Defined Contribution Plan

Effective July 1, 2016, newly hired (or becoming eligible) employees can elect a defined contribution option instead of participating in UCRP. For employees who elect this option, both the University and the participants make mandatory contributions, on a pretax basis, on eligible pay up to the IRS compensation limit. The participant contributes 7.0 percent and the University contributes 8.0 percent. University contributions are fully vested after one year of service. For certain newly hired (or becoming eligible) employees who elect to participate in UCRP, the University and the participants make mandatory contributions to the DC Plan on eligible pay up to the IRS limit. Participants contribute 7.0 percent on eligible pay and the University contributes 5.0 percent for designated faculty and 3.0 percent for staff. University contributions fully vest after five years service.

The University also makes DC Plan retirement contributions on the summer or equivalent term salaries of eligible academic employees who teach, conduct research or provide administrative service during the summer session or an equivalent term. To be eligible, employees must hold academic year appointments and be active members of UCRP or another defined benefit plan to which the University contributes. The contribution rate is 7.0 percent of eligible salary, of which 3.5 percent is University-paid and 3.5 percent is employee-paid, both on a pretax basis. The University may also contribute on behalf of eligible senior managers. Employer contributions to the DC Plan were $29.8 million and $13.2 million for the years ended June 30, 2018 and 2017, respectively.

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 (Safe Harbor participants). Safe Harbor participation includes certain University student employees and resident aliens with F-1 and J-1 visa status. Safe Harbor participants contribute 7.5 percent of their gross salary (up to the Social Security wage base) to the 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 the earnings until the accumulations are withdrawn. The maximum amount participants may contribute annually to the After-Tax Account is determined by the IRC §415(c) limit. The University may also make DC Plan contributions on behalf of eligible senior managers.

The Supplemental Defined Contribution Plan (SDC Plan) accepts employer contributions in behalf of certain designated employees. Employer contributions are fully vested and there is no provision for employee contributions. There were no assets or employer contributions to the SDC Plan for the years ended June 30, 2018 and 2017.

Tax Deferred 403(b) Plan

The University's Tax-Deferred 403(b) Plan (403(b) Plan) accepts pretax employee contributions. The University may also make contributions in behalf of certain members of management. Employer contributions to the 403(b) Plan were $8.7 million and $3.2 million for the years ended June 30, 2018 and 2017.

457(b) Deferred Compensation Plan

The University's 457(b) Deferred Compensation Plan (457(b) Plan) accepts pretax employee contributions. The University may also make contributions in behalf of certain members of management. There were no employer contributions to the 457(b) Plan for the years ended June 30, 2018 and 2017.

Participants in the DC Plan, the SDC Plan, the 403(b) Plan and the 457(b) Plan may direct their elective and nonelective contributions to investment funds managed by the Chief Investment Officer. They may also invest account balances in certain mutual funds. The participants' interests in mutual funds is shown separately in the statement of plans' fiduciary net position.

University of California Voluntary Early Retirement Incentive Program (UC-PERS)

UC-PERS is a defined benefit pension plan providing lifetime supplemental retirement income and survivor benefits to UC–PERS members who elected early retirement under provisions of the Plan. The University contributed to PERS on behalf of these UC–PERS members. As of July 1, 2018, there are 492 retirees or beneficiaries receiving benefits under this voluntary early retirement program.

The University and the DOE laboratories previously made contributions to the Plan sufficient to maintain the promised benefits. The actuarially determined contributions are zero for the years ended June 30, 2018 and 2017.

Children's Hospital and Research Center at Oakland Pension Plan

CHRCO has a noncontributory defined benefit plan subject to the single employer defined benefit under ERISA rules that covers active and retired employees. The CHRCO Pension Plan was amended effective January 1, 2012 to exclude unrepresented employees hired or rehired on or after January 1, 2012. The CHRCO Pension Plan provides retirement, disability and death benefits to plan participants. Benefits are based on a participant's length of service, age at retirement and average compensation as defined by the CHRCO Pension Plan.

The net pension liability for the Plan was calculated based upon the following assumptions as of June 30, 2018 and 2017: 3.0 percent inflation, 7.0 percent investment rate of return, 5.0 percent salary increases through 2017, 4.0 percent afterward and no cost-of-living adjustments. CHRCO recognized pension expense of $22.3 million and $20.0 million for the years ended June 30, 2018 and 2017, respectively.

Mortality rates were based on the RP-2016 Mortality Table with fully generational projected mortality improvements using modified scale MP-2016. The MP-2016 projection scale was modified for this valuation to utilize the Social Security administration's intermediate cost projection scale and a 15-year convergence period.

Additional information on the CHRCO Pension Plan can be found in the annual reports, which can be obtained by contacting CHRCO.

Membership in the CHRCO Plan consisted of the following at June 30, 2018:

Retirees and beneficiaries receiving benefits	957
Inactive members entitled to, but not yet receiving benefits	1,144
Active members	1,856
Total membership	**3,957**

Contributions

Employer contributions are determined under IRC Section 430. Employees are not required or permitted to contribute to the Plan.

Net Pension Liability

The net pension liability for CHRCO was measured as of June 30, 2018 and 2017, and the total pension liability was determined by an actuarial valuation as of January 1, 2018 and 2017 rolled forward to June 30, 2018 and 2017, respectively. The actuarial assumptions used in the June 30, 2018 and 2017 valuation were based on the results of an experience review conducted during 2015. The target allocation and projected arithmetic real rates of return, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption for each major asset class are as follows:

	PORTFOLIO PERCENTAGE	LONG-TERM EXPECTED REAL RATE OF RETURN
Asset class		
U.S. Equity	51.5%	4.3%
Developed International Equity	13.5	4.9
Emerging Market Equity	1.9	7.8
Core Fixed Income	33.1	1.4
Total	**100.0%**	

Discount Rate

The discount rate used to measure the total pension liability was 7.0 percent for June 30, 2018 and 2017. The projection of cash flows used to determine the discount rate assumes that CHRCO will make contributions to the Plan under IRC Section 430's minimum requirements for a period of eight years, and that all future assumptions are met. Based on these assumptions, the pension Plan's fiduciary net position is projected to be available to make all projected future benefit payments for current active and inactive employees.

Sensitivity of the Net Pension Liability to the Discount Rate Assumption

The following presents the June 30, 2018 net pension liability calculated using the June 30, 2018 discount rate assumption of 7.0 percent, as well as what the net pension liability would be if it were calculated using a discount rate different than the current assumption:

(in thousands of dollars)	1% DECREASE (6.0%)	CURRENT DISCOUNT (7.0%)	1% INCREASE (8.0%)
Net pension liability	$91,671	$24,148	($31,644)

Deferred Outflows of Resources and Deferred Inflows of Resources

As of June 30, deferred outflows of resources and deferred inflows of resources were as follows:

(in thousands of dollars)	**2018**	**2017**
DEFERRED OUTFLOWS OF RESOURCES		
Difference between expected and actual experience	$5,714	$4,356
Changes of benefit terms	178	195
Changes of assumptions	15,659	21,768
Net difference between projected and actual earnings on pension plan investments		1,355
Total	**$21,551**	**$27,674**
DEFERRED INFLOWS OF RESOURCES		
Difference between expected and actual experience	$1,709	$2,370
Net difference between projected and actual earnings on pension plan investments	267	
Total	**$1,976**	**$2,370**

The net amount of deferred outflows of resources and deferred inflows of resources related to pensions that will be recognized in pension expense during the next five years is as follows:

(in thousands of dollars)	
Year Ending June 30	
2019	$10,597
2020	8,236
2021	152
2022	158
2023	432
Total	**$19,575**

Orange County Employees Retirement System

Orange County Employees Retirement System (OCERS) administers a cost-sharing, multi-employer defined benefit pension plan for the County of Orange, City of San Juan Capistrano and thirteen special districts. Certain employees of one of the University's medical centers were eligible to continue to participate in OCERS at the time the county hospital was acquired by the University.

OCERS provides retirement, disability and death benefits. Plan retirement benefits are tiered based upon date of OCERS membership. Participation in the Plan by the University's employees is closed to new members. The University's share of net pension liability, deferred inflows of resources, deferred outflows of resources and pension expense have been determined based upon its specific actuarial accrued liability and a share of assets allocated in accordance with a formula set forth in OCERS' policy. The fiduciary net position and changes in net position have been measured consistent with the accounting policies used by the OCERS Plan.

Additional information on OCERS can be obtained from the 2017-2018 annual reports of the Orange County Employees Retirement System at http://www.ocers.org.

Membership in the OCERS Plan consisted of the following at December 31, 2017: 16,947 retired members and beneficiaries, 5,803 inactive members, 21,721 active members.

Contributions

Contribution rates are set by the OCERS Board of Trustees.

Net Pension Liability

The University's proportionate share of the net pension liability was $13.8 million and $18.1 million as of June 30, 2018 and 2017, respectively. The net pension liability for OCERS was measured as of June 30, 2018 and 2017, and the total pension liability was determined by an actuarial valuation as of December 31, 2017 and 2016 rolled forward to June 30, 2018 and 2017, respectively. The actuarial assumptions used in 2018 and 2017 were based on the results of an experience study for the period from January 1, 2011 through December 31, 2013.

The net pension liability for the Plan was calculated based upon the following assumptions as of June 30, 2018: 2.8 percent inflation, 7.0 percent investment rate of return, 4.25-12.25 percent projected salary increases and 3.0 percent cost-of-living adjustments. The net pension liability for the Plan was calculated based upon the following assumptions as of June 30, 2017: 3.0 percent inflation, 7.25 percent investment rate of return, 4.25-13.5 percent projected salary increases and 3.0 percent cost-of-living adjustments.

The target allocation and projected arithmetic real rates of return, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption for each major asset class for the OCERS Plan are as follows:

	ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM	
	TARGET ALLOCATION	LONG-TERM EXPECTED REAL RATE OF RETURN
Asset class		
Global Equity	35.0%	6.4%
Core Bonds	13.0	1.0
High-Yield Bonds	4.0	3.5
Bank Loan	2.0	2.9
TIPS	4.0	1.0
Emerging Market Debt	4.0	3.8
Real Estate	10.0	4.3
Core Infrastructure	2.0	5.5
Natural Resources	10.0	7.9
Risk Mitigation	5.0	4.7
Mezzanine/Distressed Debts	3.0	6.5
Private Equity	8.0	9.5
Total	**100.0%**	

Discount Rate

The discount rate used to measure the total pension liability was 7.0 percent and 7.25 percent for June 30, 2018 and 2017, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rate. For this purpose, only employer contributions will be made at rates equal to the actuarially determined contribution rates.

Sensitivity of the Net Pension Liability to the Discount Rate Assumption

The following presents the current-period net pension liability calculated using the June 30, 2018 discount rate assumption of 7.0 percent, as well as what the net pension liability would be if it were calculated using a discount rate different than the current assumption:

	ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM		
(in thousands of dollars)	1% Decrease (6.0%)	Current Discount Rate (7.0%)	1% Increase (8.0%)
Net pension liability	$21,989	$13,822	$7,189

Deferred Outflows of Resources and Deferred Inflows of Resources

As of June 30, deferred outflows of resources and deferred inflows of resources were as follows:

(in thousands of dollars)	2018	2017
DEFERRED OUTFLOWS OF RESOURCES		
Changes of assumptions or other inputs	$1,186	
Difference between expected and actual experience	374	491
Net difference between projected and actual earnings on pension plan investments		586
Total	**$1,560**	**$1,077**
DEFERRED INFLOWS OF RESOURCES		
Difference between expected and actual experience	$2,286	$443
Changes of assumptions or other inputs	482	703
Net difference between projected and actual earnings on pension plan investments	1,887	
Total	**$4,655**	**$1,146**

The net amount of deferred outflows of resources and deferred inflows of resources related to pensions that will be recognized in pension expense during the next five years and thereafter is as follows:

(in thousands of dollars)	
Year Ending June 30	
2019	($848)
2020	(511)
2021	(856)
2022	(720)
2023	(159)
2024	(1)
Total	**($3,095)**

16. RETIREE HEALTH BENEFIT COSTS AND OBLIGATIONS

The University administers single-employer health and welfare plans to provide health and welfare benefits, primarily medical, dental and vision, to eligible retirees (and their eligible family members) of the University of California and its affiliates through the University of California Retiree Health Benefit Trust (UCRHBT). The Regents has the authority to establish and amend the plan.

Campus and medical center contributions toward retiree health benefits, at rates determined by the University, are made to UCRHBT. The University receives retiree health contributions from retirees that are deducted from their UCRP benefit payments. The University acts as a third-party administrator on behalf of UCRHBT and pays health care insurers and administrators amounts currently due under the University's retiree health benefit plans for retirees. UCRHBT reimburses the University for these amounts.

LBNL participates in the University's retiree health plans. LBNL does not participate in UCRHBT; therefore, the DOE has no interest in the Trust's assets. The University directly pays health care insurers and administrators amounts currently due under the University's retiree health benefit plans for retirees who previously worked at LBNL, and is reimbursed by the DOE.

Condensed financial information for the changes in retiree health benefits liability for the year ended June 30, 2018 is as follows:

(in thousands of dollars)	CAMPUSES AND MEDICAL CENTERS	LBNL	UNIVERSITY OF CALIFORNIA
Contributions	$512,571	$21,266	$533,837
Investment income, net	1,634		1,634
Total additions	**514,205**	**21,266**	**535,471**
Insurance premiums, net	(483,479)	(21,266)	(504,745)
Other deductions	(3,859)		(3,859)
Total deductions	**(487,338)**	**($21,266)**	**(508,604)**
Increase in net position held in UCRHBT	26,867		26,867
Net position held in UCRHBT, beginning of year	106,714		106,714
Net position held in UCRHBT, end of year	**$133,581**		**$133,581**

(in thousands of dollars)	CAMPUSES AND MEDICAL CENTERS	LBNL	UNIVERSITY OF CALIFORNIA
CHANGES IN TOTAL RETIREE HEALTH BENEFITS LIABILITY			
Service cost	$816,483	$18,671	$835,154
Interest	694,562	22,215	716,777
Difference between expected and actual experience	(1,149,032)	(24,710)	(1,173,742)
Changes of assumptions and other inputs	(353,516)	(1,069)	(354,585)
Benefits paid	(483,479)	(21,266)	(504,745)
Retiree contributions	76,873	2,976	79,849
Net change in total retiree health benefits liability	**(398,109)**	**(3,183)**	**(401,292)**
Total retiree health benefits liability			
Beginning of year	18,786,201	610,937	19,397,138
End of year	**$18,388,092**	**$607,754**	**$18,995,846**
Net retiree health benefit liability, end of year	**$18,254,511**	**$607,754**	**$18,862,265**

Benefits

Retirees are eligible for medical and dental benefits. The costs of the medical and dental benefits are shared between the University and the retiree. The University does not contribute toward the cost of other benefits available to retirees. Retirees who are employed by the University after July 1, 2013, and retire at the age of 56 or older, become eligible for a percentage of the University's contribution based on age and years of service. Retirees are eligible for the maximum University contribution at age 65 with 20 or more years of service. Retirees employed by the University prior to 1990 and not rehired after that date are eligible for the University's maximum contribution if they retire before age 55 and have at least 10 years of service, or if they retire at age 55 or later and have at least 5 years of service. Retirees employed by the University after 1989 are subject to graduated eligibility provisions that generally require 10 years of service before becoming eligible for 50 percent of the maximum University contribution, increasing to 100 percent after 20 years of service. Retirees pay the excess, if any, of the premium over the applicable portion of the University's contribution.

Membership in UCRP is required to become eligible for retiree health benefits. Participation in the retiree health benefit plans consisted of the following at June 30, 2018:

	CAMPUSES AND MEDICAL CENTERS	LBNL	UNIVERSITY OF CALIFORNIA
Retirees and beneficiaries receiving benefits	42,325	1,841	44,166
Active members entitled to, but not yet receiving benefits	127,330	2,534	129,864
Total membership	**169,655**	**4,375**	**174,030**

Contributions

The University does not pre-fund retiree health benefits and instead provides for benefits based upon projected pay-as-you-go financing. University and retiree contributions toward premiums made under purchased plan arrangements are determined by applying the health plan contract rates across the number of participants in the respective plans. Premium rates for the self-insured plan contributions are set by the University based upon a trend analysis of the historic cost, utilization, demographics and administrative expenses to provide for the claims incurred and the actuarially determined level of incurred but not reported liability. The assessment rates were $2.80 and $2.93 per $100 of UCRP covered payroll effective July 1, 2017 and 2016, respectively.

In addition to the explicit University contribution provided to retirees, there is an "implicit subsidy." The gross premiums for members that are not currently eligible for Medicare benefits are the same for active employees and retirees, based on a blend of their health costs. Retirees, on average, are expected to have higher health care costs than active employees. This is primarily due to the older average age of retirees. Since the same gross premiums apply to both groups, the premiums paid for active employees by the University are subsidizing the premiums for retirees. This effect is called the implicit subsidy. The implicit subsidy associated with retiree health costs paid during the past year is also considered to be a contribution from the University.

Net Retiree Health Benefits Liability

The University's net retiree health benefits liability was measured as of June 30 based on rolling forward the results of the actuarial valuations as of July 1, one year prior to the measurement date. Actuarial valuations represent a long-term perspective and involve estimates of the value of reported benefits and assumptions about the probability of occurrence of events far into the future. Significant actuarial methods and assumptions used to calculate the University's net retiree health benefits liability were:

(shown as percentage)	**2018**	**2017**
Discount rate	3.9%	3.6%
Inflation	3.0	3.0
Investment rate of return	3.0	3.0
Health care cost trend rates	Initially ranges from 5.0 to 9.3 decreasing to an ultimate rate of 5.0 for 2033 and later years.	Initially ranges from 5.0 to 9.5 decreasing to an ultimate rate of 5.0 for 2032 and later years.

The actuarial assumptions are based upon the results of an experience study conducted for the period of July 1, 2010 through June 30, 2014. For active members and healthy retirees, the RP-2014 White Collar Mortality Tables are used (separate tables for males and females), projected with the two-dimensional MP-2014 projection scale to 2029, and with ages then set forward one year. For disabled members, rates are based on the RP-2014 Disabled Retiree Mortality Table, projected with the two-dimensional MP-2014 projection scale to 2029 and with ages then set back one year for males and set forward five years for females.

Sensitivity of Net Retiree Health Benefits Liability to the Health Care Cost Trend Rate

The following presents the June 30, 2018 net retiree health benefits liability of the University calculated using the June 30, 2018 health care cost trend rate assumption with initial trend ranging from 5.0 percent to 9.3 percent grading down to an ultimate trend of 5.0 percent over 15 years, as well as what the net retiree health benefits liability would be if it were calculated using a health care cost trend rate different than the current assumption:

(in thousands of dollars)	**1% DECREASE** (4.0% TO 8.3% DECREASING TO 4.0%)	**CURRENT DISCOUNT** (5.0% TO 9.3% DECREASING TO 5.0%)	**1% INCREASE** (6.0% - 10.3% INCREASING TO 6.0%)
Net retiree health benefits liability	$16,021,231	$18,862,265	$22,517,469

Discount Rate

The discount rate used to estimate the net retiree health benefits liability as of June 30, 2018 and 2017 was 3.87 percent and 3.58 percent, respectively. The discount rate was based on the Bond Buyer 20-year tax-exempt general obligations municipal bond index rate since UCHRBT plan assets are not sufficient to make benefit payments.

Sensitivity of Net Retiree Health Benefits Liability to the Discount Rate Assumption

The following presents the June 30, 2018 net retiree health benefits liability of the University calculated using the June 30, 2018 discount rate assumption of 3.87 percent, as well as what the net retiree health benefits liability would be if it were calculated using a discount rate different than the current assumption:

(in thousands of dollars)	**1% DECREASE** (2.87%)	**CURRENT TREND** (3.87%)	**1% INCREASE** (4.87%)
Net retiree health benefits liability	$22,371,868	$18,862,265	$16,069,882

Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred outflows of resources and deferred inflows of resources for retiree health benefits were related to the following sources:

(in thousands of dollars)

2018	**CAMPUSES AND MEDICAL CENTERS**	**LBNL**	**UNIVERSITY OF CALIFORNIA**
DEFERRED OUTFLOWS OF RESOURCES			
Difference between expected and actual experience	$74,770	$4,142	$78,912
Changes of assumptions or other inputs	3,340,913	92,220	3,433,133
Net difference between projected and actual earnings on plan investments	3,815		3,815
Total	**$3,419,498**	**$96,362**	**$3,515,860**
DEFERRED INFLOWS OF RESOURCES			
Difference between expected and actual experience	$2,279,073	$62,148	$2,341,221
Changes of assumptions or other inputs	3,220,923	83,384	3,304,307
Total	**$5,499,996**	**$145,532**	**$5,645,528**

(in thousands of dollars)

2017	**CAMPUSES AND MEDICAL CENTERS**	**LBNL**	**UNIVERSITY OF CALIFORNIA**
DEFERRED OUTFLOWS OF RESOURCES			
Difference between expected and actual experience	$85,012	$5,084	$90,096
Changes of assumptions or other inputs	3,897,003	116,490	4,013,493
Net difference between projected and actual earnings on plan investments	3,352		3,352
Total	**$3,985,367**	**$121,574**	**$4,106,941**
DEFERRED INFLOWS OF RESOURCES			
Difference between expected and actual experience	$1,471,781	$52,216	$1,523,997
Changes of assumptions or other inputs	3,309,220	101,253	3,410,473
Total	**$4,781,001**	**$153,469**	**$4,934,470**

The net amount of deferred outflows of resources and deferred inflows of resources as of June 30, 2018 related to retiree health benefits that will be recognized in retiree health benefit expense during the next five years and thereafter are as follows:

(in thousands of dollars)	**CAMPUSES AND MEDICAL CENTERS**	**LBNL**	**UNIVERSITY OF CALIFORNIA**
2019	($215,739)	($8,504)	($224,243)
2020	(216,078)	(8,504)	(224,582)
2021	(216,418)	(8,504)	(224,922)
2022	(216,831)	(13,365)	(230,196)
2023	(217,224)	(10,293)	(227,517)
Thereafter	(998,208)		(998,208)
Total	**($2,080,498)**	**($49,170)**	**($2,129,668)**

17. ENDOWMENTS AND GIFTS

Endowments and gifts are held and administered either by the University or by the campus foundations.

University of California

The value of endowments and gifts held and administered by the University, exclusive of income distributed to be used for operating purposes, at June 30, 2018 and 2017 are as follows:

	UNIVERSITY OF CALIFORNIA			
(in thousands of dollars)	RESTRICTED NONEXPENDABLE	RESTRICTED EXPENDABLE	UNRESTRICTED	TOTAL
At June 30, 2018				
Endowments	$1,148,699	$3,123,815	$5,861	$4,278,375
Funds functioning as endowments		2,653,219	4,439,270	7,092,489
Gifts		1,630,200		1,630,200
University endowments and gifts	**$1,148,699**	**$7,407,234**	**$4,445,131**	**$13,001,064**
At June 30, 2017				
Endowments	$1,121,743	$2,921,277	$5,414	$4,048,434
Funds functioning as endowments		2,526,811	3,742,764	6,269,575
Gifts		1,423,479		1,423,479
University endowments and gifts	**$1,121,743**	**$6,871,567**	**$3,748,178**	**$11,741,488**

The University's endowment income distribution policies are designed to preserve the value of the endowment in real terms (after inflation) and to generate a predictable stream of spendable income. Endowment investments are managed to achieve the maximum long-term total return. As a result of this emphasis on total return, the proportion of the annual income distribution provided by dividend and interest income and by capital gains may vary significantly from year to year. The University's policy is to retain the realized and unrealized appreciation with the endowment after the annual income distribution has been made. The net appreciation available to meet future spending needs is subject to the approval of The Regents and amounted to $2.6 billion and $2.4 billion at June 30, 2018 and 2017, respectively.

The portion of investment returns earned on endowments held by the University and distributed at the end of each year to support current operations for the following year is based upon a rate that is approved by The Regents. The annual income distribution transferred to the campuses from endowments held by the University was $315.1 million and $277.2 million for the years ended June 30, 2018 and 2017, respectively. The portion of this annual income distribution from accumulated capital gains, in addition to the dividend and interest income earned during the year, was $283.4 million and $253.8 million for the years ended June 30, 2018 and 2017, respectively. Accumulated endowment income available for spending in the future, including the annual income distribution, was $689.4 million and $629.8 million at June 30, 2018 and 2017, respectively.

Campus Foundations

The value of endowments and gifts held by the campus foundations and administered by each of their independent Board of Trustees at June 30 are as follows:

	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS			
(in thousands of dollars)	RESTRICTED NONEXPENDABLE	RESTRICTED EXPENDABLE	UNRESTRICTED	TOTAL
At June 30, 2018				
Endowments	$4,408,143	$1,465,623		$5,873,766
Funds functioning as endowments		1,839,813		1,839,813
Gifts		1,660,232	$429,581	2,089,813
Campus foundations' endowments and gifts	**$4,408,143**	**$4,965,668**	**$429,581**	**$9,803,392**
At June 30, 2017				
Endowments	$3,967,219	$1,246,890		$5,214,109
Funds functioning as endowments		1,515,774		1,515,774
Gifts		1,542,757	$193,132	1,735,889
Campus foundations' endowments and gifts	**$3,967,219**	**$4,305,421**	**$193,132**	**$8,465,772**

18. SEGMENT INFORMATION

The University's medical centers' and CHRCO's revenues are pledged in support of the outstanding University of California Medical Center Pooled Revenue Bonds. The medical centers' operating revenues and expenses consist primarily of revenues associated with patient care and the related costs of providing that care.

Condensed financial statement information related to each of the University's medical centers for the year ended June 30, 2018 is as follows:

	UNIVERSITY OF CALIFORNIA MEDICAL CENTERS				
(in thousands of dollars)	DAVIS	IRVINE	LOS ANGELES	SAN DIEGO	SAN FRANCISCO
Year Ended June 30, 2018					
Revenue bonds outstanding	$319,685	$316,560	$717,840	$700,975	$910,600
Related debt service payments	31,566	18,199	41,504	42,372	56,315
Bonds due serially through	2048	2049	2049	2049	2049
CONDENSED STATEMENT OF NET POSITION					
Current assets	$1,139,430	$588,986	$1,666,222	$754,844	$1,648,154
Capital assets, net	1,080,332	759,413	1,717,689	1,661,760	2,375,485
Other assets	151,231	41,547	105,689	24,352	293,397
Total assets	**2,370,993**	**1,389,946**	**3,489,600**	**2,440,956**	**4,317,036**
Total deferred outflows of resources	**330,997**	**128,954**	**454,015**	**401,567**	**775,863**
Current liabilities	408,938	230,244	471,304	246,776	655,904
Long-term debt	342,030	335,335	908,811	792,429	922,666
Other noncurrent liabilities	2,126,078	979,793	2,454,479	1,619,329	3,105,237
Total liabilities	**2,877,046**	**1,545,372**	**3,834,594**	**2,658,534**	**4,683,807**
Total deferred inflows of resources	**388,442**	**234,578**	**447,245**	**274,761**	**583,859**
Net investment in capital assets	698,049	421,341	780,373	847,607	1,447,759
Restricted	45,783	41,547	10,884		77,245
Unrestricted	(1,307,330)	(723,938)	(1,129,481)	(938,379)	(1,699,771)
Total net position	**($563,498)**	**($261,050)**	**($338,224)**	**($90,772)**	**($174,767)**

	UNIVERSITY OF CALIFORNIA MEDICAL CENTERS				
(in thousands of dollars)	DAVIS	IRVINE	LOS ANGELES	SAN DIEGO	SAN FRANCISCO
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION					
Operating revenues	$2,221,761	$1,177,504	$2,514,065	$1,938,229	$4,370,406
Operating expenses	(1,969,238)	(963,940)	(2,246,262)	(1,720,386)	(4,025,824)
Depreciation expense	(76,331)	(78,723)	(147,785)	(93,379)	(216,292)
Operating income	**176,192**	**134,841**	**120,018**	**124,464**	**128,290**
Nonoperating revenues (expenses), net	15,612	(12,761)	9,872	(24,959)	46,189
Income before other changes in net position	**191,804**	**122,080**	**129,890**	**99,505**	**174,479**
Health systems support	(30,285)	(48,173)	(212,827)	(124,055)	(116,286)
Transfers (to) from University, net	(19,570)	6,198	12,629	(3,034)	15,850
Changes in allocation for pension payable to University	2,032	9,523	(1,148)	(10,528)	(3,175)
Other, including donated assets	1,066	1,566	(466)	(17,984)	122,071
Increase (decrease) in net position	**145,047**	**91,194**	**(71,922)**	**(56,096)**	**192,939**
Net position - beginning of year	(708,545)	(352,244)	(266,302)	(34,676)	(367,706)
Net position - June 30, 2018	**($563,498)**	**($261,050)**	**($338,224)**	**($90,772)**	**($174,767)**
CONDENSED STATEMENT OF CASH FLOWS					
Net cash provided (used) by:					
Operating activities	$237,543	$126,943	$353,639	$170,516	$380,406
Noncapital financing activities	(42,810)	(49,646)	(268,614)	(129,729)	(78,010)
Capital and related financing activities	(137,245)	(109,604)	(171,333)	(154,010)	(134,092)
Investing activities	55,262	21,289	22,477	11,949	28,383
Net increase (decrease) in cash and cash equivalents	**112,750**	**(11,018)**	**(63,831)**	**(101,274)**	**196,687**
Cash and cash equivalents* – June 30, 2017	628,409	342,862	1,007,761	394,822	626,724
Cash and cash equivalents* – June 30, 2018	**$741,159**	**$331,844**	**$943,930**	**$293,548**	**$823,411**

**Cash and cash equivalents on the medical centers' financial statements are included in the University's Short Term Investment Pool.*

Condensed financial statement information related to each of the University's medical centers for the year ended June 30, 2017 is as follows:

	UNIVERSITY OF CALIFORNIA MEDICAL CENTERS				
(in thousands of dollars)	DAVIS	IRVINE	LOS ANGELES	SAN DIEGO	SAN FRANCISCO
Year Ended June 30, 2017					
Revenue bonds outstanding	$337,570	$317,870	$729,825	$711,085	$914,810
Related debt service payments	32,491	18,190	46,008	42,662	57,013
Bonds due serially through	2047	2049	2049	2049	2049
CONDENSED STATEMENT OF NET POSITION					
Current assets	$999,025	$527,151	$1,471,268	$740,767	$1,335,527
Capital assets, net	1,030,246	734,509	1,749,540	1,620,948	2,349,538
Other assets	104,942	69,703	322,112	31,380	285,796
Total assets	**2,134,213**	**1,331,363**	**3,542,920**	**2,393,095**	**3,970,861**
Total deferred outflows of resources	**362,917**	**160,399**	**516,101**	**345,110**	**836,506**
Current liabilities	328,609	270,520	404,441	231,802	592,470
Long-term debt	362,743	338,340	934,794	754,170	928,264
Other noncurrent liabilities	2,145,257	1,030,129	2,564,310	1,535,743	3,106,945
Total liabilities	**2,836,609**	**1,638,989**	**3,903,545**	**2,521,715**	**4,627,679**
Total deferred inflows of resources	**369,066**	**205,017**	**421,778**	**251,166**	**547,394**
Net investment in capital assets	640,415	393,404	790,467	857,221	1,396,747
Restricted	86,748	69,703	11,138		89,739
Unrestricted	(1,435,708)	(815,351)	(1,067,907)	(891,897)	(1,854,192)
Total net position	**($708,545)**	**($352,244)**	**($266,302)**	**($34,676)**	**($367,706)**

	UNIVERSITY OF CALIFORNIA MEDICAL CENTERS				
(in thousands of dollars)	DAVIS	IRVINE	LOS ANGELES	SAN DIEGO	SAN FRANCISCO
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION					
Operating revenues	$2,147,374	$1,116,327	$2,502,552	$1,688,162	$3,951,754
Operating expenses	(1,904,823)	(981,506)	(2,241,931)	(1,591,807)	(3,792,538)
Depreciation expense	(78,839)	(69,271)	(142,841)	(76,779)	(210,913)
Operating income	**163,712**	**65,550**	**117,780**	**19,576**	**(51,697)**
Nonoperating revenues (expenses), net	9,467	(17,961)	(36,579)	(10,470)	24,134
Income before other changes in net position	**173,179**	**47,589**	**81,201**	**9,106**	**(27,563)**
Health systems support	(28,088)	(59,727)	(175,341)	(109,586)	(84,898)
Transfers (to) from University, net	(4,349)			(404)	89
Changes in allocation for pension payable to University	1,892	7,266	5,834	(9,130)	6,506
Other, including donated assets	983	1,756	3,500	30,218	30,715
Increase (decrease) in net position	**143,617**	**(3,116)**	**(84,806)**	**(79,796)**	**(75,151)**
Net position - beginning of year:					
Beginning of year, as previously reported	(852,162)	(349,128)	(181,496)	45,120	(291,416)
Cumulative effect of accounting change					(1,139)
Beginning of year, as restated	(852,162)	(349,128)	(181,496)	45,120	(292,555)
Net position - June 30, 2017	**($708,545)**	**($352,244)**	**($266,302)**	**($34,676)**	**($367,706)**
CONDENSED STATEMENT OF CASH FLOWS					
Net cash provided (used) by:					
Operating activities	$289,030	$257,072	$304,081	$166,061	$390,971
Noncapital financing activities	(29,396)	(59,134)	(173,112)	(112,361)	(62,856)
Capital and related financing activities	(25,665)	(30,292)	(43,206)	(135,525)	(136,759)
Investing activities	(70,468)	(78,116)	16,381	11,058	(15,333)
Net increase (decrease) in cash and cash equivalents	**163,501**	**89,530**	**104,144**	**(70,767)**	**176,023**
Cash and cash equivalents* – June 30, 2016	464,908	253,332	903,617	465,589	450,701
Cash and cash equivalents* – June 30, 2017	**$628,409**	**$342,862**	**$1,007,761**	**$394,822**	**$626,724**

**Cash and cash equivalents on the medical centers' financial statements are included in the University's Short Term Investment Pool.*

Summarized financial information for each medical center is from the medical centers' audited financial statements. Certain revenue, such as financial support from the state for clinical teaching programs, is classified as state educational appropriations rather than medical center revenue in the University's statement of revenues, expenses and changes in net position. However, in the medical centers' audited financial statements and for segment reporting purposes, these revenues are classified as operating revenue. Additional information on the individual University of California medical centers can be obtained from their audited financial statements which are available at http://reportingtransparency.universityofcalifornia.edu.

Certain revenue generating projects (including student and faculty housing, parking facilities, student centers, recreation and events facilities, student health facilities and athletics facilities) are also financed by Limited Project Revenue Bonds; however, assets and liabilities are not required to be accounted for separately.

19. BLENDED COMPONENT UNIT INFORMATION

Condensed financial statement information related to certain of the University's blended component units for the years ended June 30, are as follows:

	FIAT LUX		CHRCO	
(in thousands of dollars)	**2018**	**2017**	**2018**	**2017**
CONDENSED STATEMENTS OF NET POSITION				
Current assets	$314,210	$543,817	$311,603	$249,445
Capital assets, net			325,396	295,766
Other assets	775,010	393,049	269,174	266,607
Total assets	**1,089,220**	**936,866**	**906,173**	**811,818**
Total deferred outflows of resources			**21,551**	**27,674**
Current liabilities	282,264	205,073	193,228	104,878
Other noncurrent liabilities	685,574	583,779	156,024	174,519
Total liabilities	**967,838**	**788,852**	**349,252**	**279,397**
Total deferred inflows of resources			**15,942**	**16,714**
Net investment in capital assets			222,341	191,683
Restricted			66,759	79,945
Unrestricted	121,382	148,014	273,430	271,753
Total net position	**$121,382**	**$148,014**	**$562,530**	**$543,381**
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION				
Operating revenues	$239,201	$216,407	$591,608	$597,564
Operating expenses	(283,309)	(242,706)	(582,955)	(558,460)
Depreciation expense			(35,946)	(33,842)
Operating income (loss)	**(44,108)**	**(26,299)**	**(27,293)**	**5,262**
Nonoperating revenues (expenses), net	17,473	12,767	44,428	42,218
Income (loss) before other changes in net position	**(26,635)**	**(13,532)**	**17,135**	**47,480**
Transfers from University		157,129		
Other, including donated assets	3		2,014	17,450
Increase (decrease) in net position	**(26,632)**	**143,597**	**19,149**	**64,930**
Net position – beginning of year:				
Beginning of year, as previously reported	148,014	4,417	543,381	479,590
Cumulative effect of accounting change				(1,139)
Beginning of year, as restated	148,014	4,417	543,381	478,451
Net position – end of year	**$121,382**	**$148,014**	**$562,530**	**$543,381**
CONDENSED STATEMENT OF CASH FLOWS				
Net cash provided (used) by:				
Operating activities	$67,426	$49,463	$37,520	$37,041
Noncapital financing activities	3		23,462	19,523
Capital and related financing activities		786,167	(56,953)	5,336
Investing activities	(11,810)	(850,563)	18,657	(14,452)
Net increase (decrease) in cash and cash equivalents	**55,619**	**(14,933)**	**22,686**	**47,448**
Cash and cash equivalents – beginning of year	702	15,635	118,862	71,414
Cash and cash equivalents – end of year	**$56,321**	**$702**	**$141,548**	**$118,862**

CHRCO's other assets include investments in the UCSF Foundation's Endowed Investment Pool of $234.4 million and $212.7 million at June 30, 2018 and 2017.

Additional information for Fiat Lux is available in their audited financial statements, which can be obtained by contacting Fiat Lux.

20. CAMPUS FOUNDATIONS INFORMATION

Under University policies approved by The Regents, each individual campus may establish a separate foundation to provide valuable assistance in fundraising, public outreach and other support for the missions of the campus and the University. Although independent boards govern these foundations, their assets are dedicated for the benefit of the University of California.

Condensed financial statement information related to the University's campus foundations, including their allocated share of the assets and liabilities associated with securities lending transactions in the University's investment pools, for the year ended June 30, 2018 is as follows:

	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS				
(in thousands of dollars)	BERKELEY	SAN FRANCISCO	LOS ANGELES	ALL OTHER	TOTAL
CONDENSED STATEMENT OF NET POSITION					
Current assets	$107,922	$474,253	$686,801	$329,443	$1,598,419
Noncurrent assets	2,192,958	1,715,100	2,875,851	2,489,432	9,273,341
Total assets	**2,300,880**	**2,189,353**	**3,562,652**	**2,818,875**	**10,871,760**
Current liabilities	16,540	37,777	301,390	59,427	415,134
Noncurrent liabilities	79,454	272,184	32,680	36,898	421,216
Total liabilities	**95,994**	**309,961**	**334,070**	**96,325**	**836,350**
Total deferred inflows of resources	69,523	28,909	50,826	82,760	232,018
Restricted	2,132,259	1,850,079	2,785,000	2,606,473	9,373,811
Unrestricted	3,104	404	392,756	33,317	429,581
Total net position	**$2,135,363**	**$1,850,483**	**$3,177,756**	**$2,639,790**	**$9,803,392**
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION					
Operating revenues	$181,523	$356,891	$526,446	$276,535	$1,341,395
Operating expenses	(237,177)	(293,986)	(354,556)	(250,485)	(1,136,204)
Operating income (loss)	**(55,654)**	**62,905**	**171,890**	**26,050**	**205,191**
Nonoperating revenues	156,996	198,747	202,766	165,213	723,722
Income before other changes in net position	**101,342**	**261,652**	**374,656**	**191,263**	**928,913**
Permanent endowments	79,970	104,342	79,895	144,500	408,707
Increase in net position	**181,312**	**365,994**	**454,551**	**335,763**	**1,337,620**
Net position - June 30, 2017					
Beginning of year	1,954,051	1,484,489	2,723,205	2,304,027	8,465,772
Net position - June 30, 2018	**$2,135,363**	**$1,850,483**	**$3,177,756**	**$2,639,790**	**$9,803,392**
CONDENSED STATEMENT OF CASH FLOWS					
Net cash provided (used) by:					
Operating activities	($82,042)	($81,653)	$116,294	($83,433)	($130,834)
Noncapital financing activities	61,846	105,665	67,843	120,178	355,532
Investing activities	21,888	161,997	(184,816)	(30,490)	(31,421)
Net increase (decrease) in cash and cash equivalents	**1,692**	**186,009**	**(679)**	**6,255**	**193,277**
Cash and cash equivalents – June 30, 2017	4,587	210,860	5,278	33,375	254,100
Cash and cash equivalents – June 30, 2018	**$6,279**	**$396,869**	**$4,599**	**$39,630**	**$447,377**

Condensed financial statement information related to the University's campus foundations, including their allocated share of the assets and liabilities associated with securities lending transactions in the University's investment pools, for the year ended June 30, 2017 is as follows:

	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS				
(in thousands of dollars)	BERKELEY	SAN FRANCISCO	LOS ANGELES	ALL OTHER	TOTAL
CONDENSED STATEMENT OF NET POSITION					
Current assets	$76,070	$286,739	$490,034	$350,732	$1,203,575
Noncurrent assets	2,040,520	1,513,089	2,575,961	2,170,788	8,300,358
Total assets	**2,116,590**	**1,799,828**	**3,065,995**	**2,521,520**	**9,503,933**
Current liabilities	16,379	39,032	263,015	119,296	437,722
Noncurrent liabilities	78,392	254,620	32,449	25,540	391,001
Total liabilities	**94,771**	**293,652**	**295,464**	**144,836**	**828,723**
Total deferred inflows of resources	**67,768**	**21,687**	**47,326**	**72,657**	**209,438**
Restricted	1,949,666	1,484,076	2,565,752	2,273,146	8,272,640
Unrestricted	4,385	413	157,453	30,881	193,132
Total net position	**$1,954,051**	**$1,484,489**	**$2,723,205**	**$2,304,027**	**$8,465,772**
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION					
Operating revenues	$115,579	$155,086	$302,778	$294,067	$867,510
Operating expenses	(208,956)	(231,647)	(292,156)	(236,756)	(969,515)
Operating income (loss)	**(93,377)**	**(76,561)**	**10,622**	**57,311**	**(102,005)**
Nonoperating revenues	211,334	154,270	260,271	239,439	865,314
Income before other changes in net position	**117,957**	**77,709**	**270,893**	**296,750**	**763,309**
Permanent endowments	67,632	41,513	69,673	108,106	286,924
Increase in net position	**185,589**	**119,222**	**340,566**	**404,856**	**1,050,233**
Net Position – June 30, 2016					
Beginning of year, as previously reported	1,828,044	1,381,590	2,411,412	1,915,804	7,536,850
Cumulative effect of accounting change	(59,582)	(16,323)	(28,773)	(16,633)	(121,311)
Beginning of year, as restated	1,768,462	1,365,267	2,382,639	1,899,171	7,415,539
Net position – June 30, 2017	**$1,954,051**	**$1,484,489**	**$2,723,205**	**$2,304,027**	**$8,465,772**
CONDENSED STATEMENT OF CASH FLOWS					
Net cash provided (used) by:					
Operating activities	($97,936)	($101,825)	($39,570)	$19,839	($219,492)
Noncapital financing activities	49,682	55,862	51,395	94,099	251,038
Capital and related financing activities				(192)	(192)
Investing activities	49,184	104,796	(12,123)	(114,025)	27,832
Net increase (decrease) in cash and cash equivalents	**930**	**58,833**	**(298)**	**(279)**	**59,186**
Cash and cash equivalents – June 30, 2016	3,657	152,027	5,576	33,654	194,914
Cash and cash equivalents – June 30, 2017	**$4,587**	**$210,860**	**$5,278**	**$33,375**	**$254,100**

Additional information on the foundations can be found in the foundations' separately issued annual reports, which can be obtained by contacting the individual foundation.

21. COMMITMENTS AND CONTINGENCIES

Contractual Commitments

Amounts committed but unexpended for construction projects totaled $2.8 billion at June 30, 2018. Amounts committed to the developer for the design, construction and financing of the facilities at one of its campuses is $1.3 billion at June 30, 2018. The University has made a commitment to contribute $49.8 million for an investment in a joint venture to fund construction projects.

Under an agreement with a private, non-profit hospital, the University paid $20.0 million of contributions in September 2018, and committed to provide $90.0 million in aggregate capital investments through a series of newly formed joint ventures with one of its medical centers over the course of the initial 10 years of the agreement. An additional service agreement was signed for the medical center to operate certain outpatient clinics whose sole corporate member is the same non-profit hospital.

The University leases land, buildings and equipment under agreements recorded as operating leases. Operating lease expenses for the years ended June 30, 2018 and 2017 were $335.5 million and $271.4 million, respectively. The terms of operating leases extend through March 2042.

Future minimum payments on operating leases with an initial or remaining non-cancelable term in excess of one year are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA
Year Ending June 30	
2019	$260,836
2020	224,417
2021	177,867
2022	139,792
2023	105,760
2024 - 2028	255,274
2029 - 2033	114,608
2034 - 2038	42,047
2039 - 2043	14,982
Total	**$1,335,583**

Contingencies

Substantial amounts are received and expended by the University, including its medical centers, under federal and state programs, and are subject to audit by cognizant governmental agencies. This funding relates to research, student aid, medical center operations and other programs. University management believes that any liabilities arising from such audits will not have a material effect on the University's financial position.

The University and the campus foundations are contingently liable in connection with certain other claims and contracts, including those currently in litigation, arising in the normal course of its activities. Although there are inherent uncertainties in any litigation, University management and general counsel are of the opinion that the outcome of such matters will not have a material effect on the University's financial position.

Required Supplementary Information *(Unaudited)*

UCRP

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

(in thousands of dollars)	2018	2017	2016	2015
TOTAL PENSION LIABILITY				
Service cost	$1,873,004	$1,807,143	$1,710,241	$1,589,267
Interest on the total pension liability	5,295,733	5,035,267	4,784,904	4,538,846
Difference between expected and actual experience	138,419	74,664	136,167	(112,155)
Changes of assumptions or other inputs				2,136,793
Benefits paid, including refunds of employee contributions	(3,587,554)	(3,320,990)	(3,105,641)	(2,976,992)
Net change in total pension liability	**3,719,602**	**3,596,084**	**3,525,671**	**5,175,759**
Total pension liability - beginning of year	72,826,846	69,230,762	65,705,091	60,529,332
Total pension liability - end of year	**76,546,448**	**72,826,846**	**69,230,762**	**65,705,091**
PLAN NET POSITION				
Contributions - employer	2,335,874	2,385,576	2,426,683	2,510,046
Contributions - member	941,144	891,987	845,036	793,012
Contributions - state	169,000	171,000	96,000	
Net investment income	4,837,552	7,866,281	(1,104,655)	1,993,801
Benefits paid, including refunds of employee contributions	(3,587,554)	(3,320,990)	(3,105,642)	(2,976,993)
Administrative expense	(36,684)	(44,128)	(48,340)	(48,283)
Net change in plan net position	**4,659,332**	**7,949,726**	**(890,918)**	**2,271,583**
Plan net position - beginning of year	62,114,258	54,164,532	55,055,450	52,783,867
Plan net position - end of year	**66,773,590**	**62,114,258**	**54,164,532**	**55,055,450**
Net pension liability - end of year	**$9,772,858**	**$10,712,588**	**$15,066,230**	**$10,649,641**

(in thousands of dollars)	2014	2013	2012
TOTAL PENSION LIABILITY			
Service cost	$1,519,183	$1,456,761	$1,531,094
Interest on the total pension liability	4,316,728	4,112,461	3,871,146
Difference between expected and actual experience	(320,624)	(183,253)	(212,758)
Changes of assumptions or other inputs		(3,312,815)	4,923,778
Benefits paid, including refunds of employee contributions	(2,687,540)	(2,487,369)	(2,273,071)
Net change in total pension liability	**2,827,747**	**(414,215)**	**7,840,189**
Total pension liability - beginning of year	57,701,585	58,115,800	50,275,611
Total pension liability - end of year	**60,529,332**	**57,701,585**	**58,115,800**
PLAN NET POSITION			
Contributions - employer	1,580,876	810,056	1,851,460
Contributions - member	577,466	415,641	272,420
Net investment income	8,009,980	4,833,339	115,863
Benefits paid, including refunds of employee contributions	(2,687,540)	(2,487,369)	(2,273,071)
Administrative expense	(37,641)	(37,426)	(32,839)
Net change in plan net position	**7,443,141**	**3,534,241**	**(66,167)**
Plan net position - beginning of year	45,340,726	41,806,485	41,872,652
Plan net position - end of year	**52,783,867**	**45,340,726**	**41,806,485**
Net pension liability - end of year	**$7,745,465**	**$12,360,859**	**$16,309,315**

The University's schedule of net pension liability for UCRP as of June 30 is:

(in thousands of dollars)	**2018**	**2017**	**2016**	**2015**
Total pension liability	$76,546,448	$72,826,846	$69,230,762	$65,705,091
Plan net position	66,773,590	62,114,258	54,164,532	55,055,450
Net pension liability	**$9,772,858**	**$10,712,588**	**$15,066,230**	**$10,649,641**
Ratio of plan net position to total pension liability	87.2%	85.3%	78.2%	83.8%
Covered payroll	$11,923,489	$11,301,506	$10,689,424	$10,047,570
Net pension liability as a percentage of covered payroll	82.0%	94.8%	140.9%	106.0%

(in thousands of dollars)	**2014**	**2013**	**2012**
Total pension liability	$60,529,332	$57,701,585	$58,115,800
Plan net position	52,783,867	45,340,726	41,806,485
Net pension liability	**$7,745,465**	**$12,360,859**	**$16,309,315**
Ratio of plan net position to total pension liability	87.2%	78.6%	71.9%
Covered payroll	$9,372,583	$8,921,077	$8,594,147
Net pension liability as a percentage of covered payroll	82.6%	138.6%	189.8%

The University's schedule of employer contributions for UCRP as of June 30 is:

(in thousands of dollars)

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to Actuarial Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2018	$2,669,169	$2,504,874	$164,295	$11,923,489	21%
2017	2,654,710	2,556,576	98,134	11,301,506	23
2016	2,610,953	2,522,683	88,270	10,689,424	24
2015	2,664,384	2,510,046	154,338	10,047,570	25
2014	2,472,697	1,580,876	891,821	9,372,583	17
2013	2,062,022	810,056	1,251,966	8,921,077	9
2012	1,806,205	1,851,459	(45,254)	8,594,147	22
2011	1,695,137	1,677,921	17,216	8,140,629	21
2010	454	148,445	(147,991)	7,973,921	2
2009	2,657	454	2,203	7,468,809	0

Notes to Schedule

Methods and assumptions used to establish "actuarially determined contribution" rates for the campus and medical center segment of UCRP:

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	19.85 years as of July 1, 2017. 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.
Investment rate of return	7.25%, net of pension plan investment expense, including inflation.
Inflation	3.00%.
Projected salary increases	3.75% - 6.15%, includes inflation.
Cost-of-living adjustments	2.00%.
Mortality	Post-retirement Healthy: RP-2014 White Collar Healthy Annuitant Mortality Table projected with the two-dimensional MP-2014 projection scale to 2029, set forward one year.
Other assumptions	Same as those used in the July 1, 2018 funding actuarial valuation.

UC-VERIP

The University's schedule of changes in net pension liability for UC-VERIP as of June 30 is:

(in thousands of dollars)	2018	2017	2016	2015
TOTAL PENSION LIABILITY				
Interest on the total pension liability	$2,042	$2,463	$2,533	$2,704
Difference between expected and actual experience	(436)	(189)	(650)	242
Changes of assumptions or other inputs				1,837
Benefits paid, including refunds of employee contributions	(4,610)	(4,738)	(4,937)	(5,081)
Net change in total pension liability	**(3,004)**	**(2,464)**	**(3,054)**	**(298)**
Total pension liability - beginning of year	32,544	35,008	38,062	38,360
Total pension liability - end of year	**29,540**	**32,544**	**35,008**	**38,062**
PLAN NET POSITION				
Net investment income	4,885	8,666	(1,425)	2,550
Benefits paid, including refunds of employee contributions	(4,610)	(4,738)	(4,937)	(5,081)
Administrative expense	(5)	(6)	(7)	(6)
Net change in plan net position	**270**	**3,922**	**(6,369)**	**(2,537)**
Plan net position - beginning of year	64,978	61,056	67,425	69,962
Plan net position - end of year	**65,248**	**64,978**	**61,056**	**67,425**
Net pension liability (asset) - end of year	**($35,708)**	**($32,434)**	**($26,048)**	**($29,363)**

(in thousands of dollars)	2014	2013	2012
TOTAL PENSION LIABILITY			
Interest on the total pension liability	$2,857	$3,052	$3,227
Changes of benefit terms			11,186
Difference between expected and actual experience	(436)	(241)	172
Changes of assumptions or other inputs			1,268
Benefits paid, including refunds of employee contributions	(5,169)	(5,278)	(5,369)
Net change in total pension liability	**(2,748)**	**(2,467)**	**10,484**
Total pension liability - beginning of year	41,108	43,575	33,091
Total pension liability - end of year	**38,360**	**41,108**	**43,575**
PLAN NET POSITION			
Net investment income	11,035	7,144	90
Benefits paid, including refunds of employee contributions	(5,169)	(5,278)	(5,369)
Administrative expense	(6)	(7)	(7)
Net change in plan net position	**5,860**	**1,859**	**(5,286)**
Plan net position - beginning of year	64,102	62,243	67,529
Plan net position - end of year	**69,962**	**64,102**	**62,243**
Net pension liability (asset) - end of year	**($31,602)**	**($22,994)**	**($18,668)**

The University's schedule of net pension asset for UC-VERIP as of June 30 is:

(in thousands of dollars)	2018	2017	2016	2015
Total pension liability	$29,540	$32,544	$35,008	$38,062
Plan net position	65,248	64,978	61,056	67,425
Net pension asset	**($35,708)**	**($32,434)**	**($26,048)**	**($29,363)**
Ratio of plan net position to total pension liability (asset)	220.9%	199.7%	174.4%	177.1%

(in thousands of dollars)	2014	2013	2012
Total pension liability	$38,360	$41,108	$43,575
Plan net position	69,962	64,102	62,243
Net pension asset	**($31,602)**	**($22,994)**	**($18,668)**
Ratio of plan net position to total pension liability (asset)	182.4%	155.9%	142.8%

The University is not required to make contributions to the UC-VERIP due to its fully funded status.

CHRCO PENSION PLAN

The schedule of changes in the net pension liability for the CHRCO Pension Plan as of June 30:

(in thousands of dollars)	2018	2017	2016	2015	2014
TOTAL PENSION LIABILITY					
Service cost	$11,304	$9,910	$10,410	$9,448	$9,274
Interest on the total pension liability	31,854	29,672	27,782	24,683	22,453
Changes of benefit terms	92	33	24	40	142
Difference between expected and actual experience	3,609	2,442	(3,690)	762	2,487
Changes of assumptions or other inputs			3,613	33,105	
Benefits paid, including refunds of employee contributions	(12,802)	(11,767)	(9,509)	(8,082)	(6,994)
Net change in total pension liability	**34,057**	**30,290**	**28,630**	**59,956**	**27,362**
Total pension liability - beginning of year	450,152	419,862	391,232	331,276	303,914
Total pension liability - end of year	**484,209**	**450,152**	**419,862**	**391,232**	**331,276**
PLAN NET POSITION					
Contributions - employer	33,600	28,800	24,000	18,000	14,500
Net investment income	33,269	41,256	214	11,797	48,704
Benefits paid, including refunds of employee contributions	(12,802)	(11,767)	(9,509)	(8,082)	(6,994)
Administrative expense	(3,014)	(2,727)	(1,816)	(1,222)	(718)
Net change in plan net position	**51,053**	**55,562**	**12,889**	**20,493**	**55,492**
Plan net position - beginning of year	409,008	353,446	340,557	320,064	264,572
Plan net position - end of year	**460,061**	**409,008**	**353,446**	**340,557**	**320,064**
Net pension liability - end of year	**$24,148**	**$41,144**	**$66,416**	**$50,675**	**$11,212**

The schedule of net pension liability for the CHRCO Pension Plan as of June 30 is:

(in thousands of dollars)	2018	2017	2016	2015	2014
Total pension liability	$484,209	$450,152	$419,862	$391,232	$331,276
Plan net position	460,061	409,008	353,446	340,557	320,064
Net pension liability	$24,148	$41,144	$66,416	$50,675	$11,212
Ratio of plan net position to total pension liability	95.0%	90.9%	84.2%	87.0%	96.6%
Covered payroll	$187,639	$184,083	$165,672	$177,986	$175,189
Net pension liability as a percentage of covered payroll	12.9%	22.4%	40.1%	28.5%	6.4%

The schedule of employer contributions for the CHRCO Pension Plan as of June 30 is:

(in thousands of dollars)	**2018**	**2017**	**2016**	**2015**	**2014**
Actuarially calculated employer contributions	$7,710	$5,642	$7,823	$12,239	$21,282
Contributions in relation to the actuarially calculated employer contribution	33,600	28,800	24,000	18,000	14,500
Annual contribution deficiency (excess)	**($25,890)**	**($23,158)**	**($16,177)**	**($5,761)**	**$6,782**
Covered payroll	$187,639	$184,083	$165,672	$177,986	$175,189
Actual contributions as a percentage of covered payroll	17.9%	15.6%	14.5%	10.1%	8.3%

Notes to schedule

Methods and assumptions used to determine contribution rates

Valuation date	Actuarially calculated contributions are calculated as of January 1 of the end of the fiscal year in which contributions are reported.
Actuarially determined contribution	The Plan is subject to funding requirements under ERISA. The contribution shown is the IRC Section 430 minimum contribution prior to offset by credit balances prorated for the number of months in the fiscal year. For the period January 1, 2014 to June 30, 2014, the amount shown does not reflect changes in the Highway and Transportation Funding Act of 2014 (HATFA). The contribution for July 1, 2014 and thereafter includes HATFA.
Contributions in relation to the actuarially determined contribution	The amount shown is equal to the contributions contributed to the Plan during the fiscal year shown.
Actuarial cost method	Unit Credit Actuarial Cost Method.
Amortization method	Level dollar, closed amortization.
Remaining amortization period	7 years for changes in unfunded liabilities that occur each valuation date.
Asset valuation method	The actuarial value of assets is equal to the two-year average of Plan asset values as of the valuation date. The two-year average is the average of the two prior years' adjusted market value of assets and the current year's market value of assets. For this purpose, the prior years' market value of assets is adjusted to reflect benefit payments, administrative expenses, contributions and expected returns for the prior years. The resulting actuarial value of assets is adjusted to be within 10% of the market value of assets at the valuation date, as required by IRC Section 430.
Inflation	3.0%.
Investment rate of return	7.0%, net of pension plan investment expenses, including inflation.
Projected salary increases	5.0%, including inflation through 2017, 4.0% afterward.
Cost-of-living adjustments	N/A.
Mortality	Adjusted RP-2014 Mortality Table for males or females with back up base table to 2006, as appropriate, with generational adjustments for mortality improvements based on Scale MP-2016.

OCERS

The schedule of the University's proportionate share of OCERS' net pension liability is presented below:

(in thousands of dollars)

AS OF JUNE 30	PROPORTION OF THE NET PENSION LIABILITY	PROPORTIONATE SHARE OF NET PENSION LIABILITY	COVERED PAYROLL	PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS A PERCENTAGE OF ITS COVERED PAYROLL	PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY
2018	0.3%	$13,822	$15	92,146.7%	37.6%
2017	0.3%	18,057	44	41,038.6%	34.5%
2016	0.3%	18,092	285	6,348.1%	34.8%

University Retiree Health Benefits Plan

The schedule of changes in the net retiree health benefits liability includes multi-year trend information about whether the net retiree health benefits liability is increasing or decreasing over time. The University's net retiree health benefits liability includes liabilities for campuses, medical centers and LBNL. The University's schedule of changes in the net retiree health benefits liability as of, and for, the year ending June 30 is:

(in thousands of dollars)	2018	2017	2016	2015
TOTAL RETIREE HEALTH BENEFIT LIABILITY				
Service cost	$835,154	$1,004,644	$830,041	$702,935
Interest on the total retiree health benefits liability	716,777	646,279	735,294	719,853
Difference between expected and actual experience	(1,173,742)	101,280	(1,948,111)	
Changes of assumptions or other inputs	(354,585)	(3,827,924)	3,925,503	1,402,476
Retiree contributions	79,849	72,716	65,705	56,340
Benefits paid	(504,745)	(467,846)	(451,166)	(435,189)
Net change in total retiree health benefits liability	**(401,292)**	**(2,470,851)**	**3,157,266**	**2,446,415**
Total retiree health benefits liability - beginning of year	19,397,138	21,867,989	18,710,723	16,264,308
Total retiree health benefits liability - end of year	**18,995,846**	**19,397,138**	**21,867,989**	**18,710,723**
PLAN NET POSITION				
University contributions	453,988	432,953	410,945	367,416
Retiree contributions	79,849	72,716	65,705	56,340
Net investment income	1,634	606	155	41
Insurance premiums	(504,745)	(467,846)	(451,166)	(435,189)
Other deductions	(3,859)	(4,256)	(3,743)	(3,147)
Net change in UCRHBT net position	**26,867**	**34,173**	**21,896**	**(14,539)**
UCRHBT net position - beginning of year	106,714	72,541	50,645	65,184
UCRHBT net position - end of year	**133,581**	**106,714**	**72,541**	**50,645**
Net retiree health benefits liability - end of year	**$18,862,265**	**$19,290,424**	**$21,795,448**	**$18,660,078**

The University's schedule of net retiree health benefits liability as of June 30 is:

(in thousands of dollars)	2018	2017	2016	2015
Total retiree health benefits liability	$18,995,846	$18,995,846	$21,867,989	$18,710,723
UCRHBT net position	133,581	133,581	72,541	50,645
Net retiree health benefits liability	**$18,862,265**	**$18,862,265**	**$21,795,448**	**$18,660,078**
Ratio of UCRHBT net position to total retiree health benefits liability	0.7%	0.7%	0.3%	0.3%
Covered payroll	$12,381,616	$11,495,997	$10,689,424	$10,047,570
Net retiree health benefits liability as a percentage of covered payroll	152.3%	164.1%	203.9%	185.7%

University of California Retiree Health Benefit Trust

The schedule of changes in the net retiree health benefits liability includes multi-year trend information about whether the trust assets are increasing or decreasing over time relative to the total retiree health benefits liability for the campuses and medical centers. UCRHBT's schedule of changes in net retiree health benefit liability as of, and for, the year ending June 30 is:

(in thousands of dollars)	**2018**	**2017**	**2016**	**2015**
TOTAL RETIREE HEALTH BENEFIT LIABILITY				
Service cost	$816,483	$981,745	$806,817	$683,220
Interest on the total retiree health benefits liability	694,562	625,947	711,365	695,999
Difference between expected and actual experience	(1,149,032)	95,254	(1,875,009)	
Changes of assumptions or other inputs	(353,516)	(3,707,921)	3,798,113	1,358,761
Retiree contributions	76,873	69,968	65,705	56,340
Benefits paid	(483,479)	(447,604)	(433,849)	(418,244)
Net change in total retiree health benefits liability	**(398,109)**	**(2,382,611)**	**3,073,142**	**2,376,076**
Total retiree health benefits liability - beginning of year	18,786,101	21,168,712	18,095,570	15,719,494
Total retiree health benefits liability - end of year	**18,387,992**	**18,786,101**	**21,168,712**	**18,095,570**
PLAN NET POSITION				
University contributions	435,698	415,459	393,628	350,471
Retiree contributions	76,873	69,968	65,705	56,340
Net investment income	1,634	606	155	41
Insurance premiums	(483,479)	(447,604)	(433,849)	(418,244)
Other deductions	(3,859)	(4,256)	(3,743)	(3,147)
Net change in UCRHBT net position	**26,867**	**34,173**	**21,896**	**(14,539)**
UCRHBT net position - beginning of year	106,714	72,541	50,645	65,184
UCRHBT net position - end of year	**133,581**	**106,714**	**72,541**	**50,645**
Net retiree health benefits liability - end of year	**$18,254,411**	**$18,679,387**	**$21,096,171**	**$18,044,925**

UCRHBT's schedule of net retiree health benefits liability as of June 30 is:

(in thousands of dollars)	**2018**	**2017**	**2016**	**2015**
Total retiree health benefits liability	$18,387,992	$18,786,101	$21,168,712	$18,095,570
UCRHBT net position	133,581	106,714	72,541	50,645
Net retiree health benefits liability	**$18,254,411**	**$18,679,387**	**$21,096,171**	**$18,044,925**
Ratio of UCRHBT net position to total retiree health benefits liability	0.7%	0.6%	0.3%	0.3%
Covered payroll	$12,087,000	$11,196,485	$10,396,827	$9,758,795
Net retiree health benefits liability as a percentage of covered payroll	151.0%	166.8%	202.9%	184.9%

UNIVERSITY OF CALIFORNIA

Regents and Officers

APPOINTED REGENTS

(In alphabetical order of last name)

Maria Anguiano
Richard C. Blum
Laphonza Butler
Michael Cohen
Gareth Elliott
Cecilia Estolano
Howard "Peter" Guber
George D. Kieffer
Sherry L. Lansing
Richard Leib
Hadi Makarechian
Eloy Ortiz Oakley
Lark Park
John A. Perez
Richard Sherman
Ellen Tauscher
Charlene R. Zettel

EX OFFICIO REGENTS

Jerry Brown, *Governor of California*
Gavin Newsom, *Lieutenant Governor*
Anthony Rendon, *Speaker of the Assembly*
Tom Torlakson, *State Superintendent of Public Instruction*
Janet Napolitano, *President of the University*

ALUMNI REGENTS

Darin Anderson, *President, Alumni Associations of the University of California*
Jason Morimoto, *Vice President, Alumni Associations of the University of California*

REGENTS-DESIGNATE

Christine Simmons, *Treasurer, Alumni Associations of the University of California*
William Um, *Secretary, Alumni Associations of the University of California*
Hayley Weddle, *Student Regent Designate*

FACULTY REPRESENTATIVES *(non-voting)*

Robert May, *Chair, Assembly of the Academic Senate*
Kum-Kum Bhavnani, *Vice Chair, Assembly of the Academic Senate*

OFFICERS OF THE REGENTS

Alexander Bustamante, *Senior Vice President-Chief Compliance and Audit Officer*
Charles F. Robinson, *General Counsel and Vice President-Legal Affairs*
Jagdeep Singh Bachher, *Chief Investment Officer and Vice President-Investments*
Anne Shaw, *Secretary and Chief of Staff*

OFFICE OF THE PRESIDENT

Janet Napolitano, *President of University*
Michael Brown, *Provost and Executive Vice President-Academic Affairs*
Nathan Brostrom, *Executive Vice President-Chief Financial Officer*
Rachael Nava, *Executive Vice President-Chief Operating Officer*
John D. "Jack" Stobo, *Executive Vice President-UC Health*
Claire Holmes, *Senior Vice President-External Relations & Communications*
Christine Gulbranson, *Senior Vice President-Innovation and Entrepreneurship*
Charles F. Robinson, *General Counsel and Vice President-Legal Affairs*
Alexander Bustamante, *Senior Vice President-Chief Compliance and Audit Officer*
Jagdeep Singh Bachher, *Chief Investment Officer and Vice President-Investments*

CHANCELLORS

Carol T. Christ, *Berkeley*
Gary May, *Davis*
Howard Gillman, *Irvine*
Gene D. Block, *Los Angeles*
Dorothy Leland, *Merced*
Kim Wilcox, *Riverside*
Pradeep K. Khosla, *San Diego*
Sam Hawgood, *San Francisco*
Henry T. Y. Yang, *Santa Barbara*
George R. Blumenthal, *Santa Cruz*

DIRECTOR OF DOE LABORATORY

Michael Witherell, *Director, Lawrence Berkeley National Laboratory*

University of California
Office of the President
1111 Franklin Street
Oakland, CA 94607

ucop.edu