

"The University of California is preeminent in educating the state's young people, in enhancing research and scholarship in every discipline, in fostering economic growth, medicine, the arts, its athletic and other programs. Simply put, UC is the gold standard."

PRESIDENT JANET NAPOLITANO

# university of California 15/16 Annual Financial Report

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### Letter from the President



It was a challenging year, but one of great promise for the future of the University of California. I am particularly proud of the significant progress we made expanding access to a world-class UC education for ever more Californians.

Systemwide, UC admitted more than 9,300 additional California freshmen to its campuses for the fall — a 15.1 percent increase over last year. We saw similar growth in the number of admitted transfer students. These diverse, high-achieving students represent the outcomes of the University's intensive effort to keep UC's doors wide open for first-generation college students, and to ensure that young Californians from historically underrepresented groups across our state have access to its celebrated public research universities. This progress was made possible by funding commitments from Governor Jerry Brown and the Legislature.

Through the Carbon Neutrality Initiative, we continued to put UC's research prowess to work in the global response to climate change. After we convened California leaders and UC's top climate experts last fall, UC faculty experts and student researchers took scalable solutions to the global climate summit in Paris. There, the University of California became a founding member and the lone university in the Breakthrough Energy Coalition, a group of investors led by Bill Gates, and committed to investing in technological solutions to climate change.

We also maintained our focus on the Global Food Initiative, the University's systemwide effort to help answer the question of how to sustainably and nutritiously feed a world population expected to reach 8 billion by 2025. Reflecting the goal of promoting a nutritious, sustainable food supply, I committed \$3.3 million in new funding over the next two years to help UC students access nutritious food on and off campus.

Once again, UC led the world among universities granted U.S. patents in 2015. And opportunities to foster innovation and entrepreneurship across the UC system continued to grow. The state budget provided UC \$22 million in one-time funds to support our Innovation and Entrepreneurship Initiative. This funding will help us strengthen the pipeline of cutting-edge UC research and innovation entering the marketplace.

Through these accomplishments and on countless other fronts, we continue to fulfill the University of California's teaching, research and public service missions. As we expand educational opportunity for current and future generations of Californians, the promise and the possibility of UC's future is stronger than ever.

JANET NAPOLITANO
PRESIDENT, UNIVERSITY OF CALIFORNIA

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# Letter from the Executive Vice President, CFO



Over the past year, the University of California embarked on bold plans for boosting college opportunity for students around the state.

Most immediately, we committed to enrolling 10,000 additional California students over the next three years, including about 5,000 more students during the 2016-17 academic year. We are pairing that expanded access with targeted outreach to ensure that prospective students from community colleges and underserved high schools know that UC is an affordable and accessible option for obtaining a world-class education.

UC has a long history of enrolling and graduating large numbers of first-generation and low-income students – so much so, in fact, that the New York Times recently referred to UC as California's "upward mobility machine." They assessed which top U.S. colleges did the most for low-income students, and found that six of the top seven were UC campuses.

One way we are looking to build on that distinction is through the UC Merced 2020 Project, which breaks ground in October. Over the next four years, our youngest campus will nearly double its physical capacity, allowing it to accommodate thousands more students.

This ambitious undertaking, driven by a novel public-private partnership, is expected to create more than 12,000 construction jobs and allow UC to better serve students and families in one of the fastest growing, but underresourced, parts of the state. Merced extends UC's principle of access for all Californians, in that nearly two-thirds of its students are the first in their families to attend college.

Merced is not alone in needing to find creative ways to accommodate the growing demand for a UC education.

Many of our campuses are in increasingly expensive real estate markets, adding urgency to our need to develop affordable, accessible student housing options. Accordingly, earlier this year we launched a Student Housing Initiative that aims to add 14,000 student beds by 2020. These beds will encompass a mix of undergraduate and graduate housing, as well as apartments open to all students. Campuses will both build new housing units, as well as evaluate acquiring existing housing stock.

That effort will help both UC and its students hold down college costs. UC also enacted a new pension tier for employees who join the University on or after July 1, 2016. The change stemmed from our budget agreement with the state, and reflects our ongoing efforts to contain costs and maintain our financial stability and excellence. For the first time, employees will be able to choose either a 401(k)-style retirement benefit or a traditional pension benefit, with pension benefits capped at \$117,000.

This is a financially prudent move for UC's long-term stability that will allow UC to remain competitive as we look to recruit and retain the very best faculty and staff. Even as we grow to accommodate our commitment to access, we need to be diligent in addressing longer-term liabilities of the University, particularly in the areas of postemployment benefits and in the physical maintenance of our facilities. In building a solid and sustainable financial model for the University, we will maintain our commitment to access and excellence and ensure our standing as one of the world's top research universities.

NATHAN BROSTROM
EXECUTIVE VICE PRESIDENT, CFO
UNIVERSITY OF CALIFORNIA



### Facts in Brief (Unaudited)

	2016	2015*	2014*	2013	2012
STUDENTS	,				
Undergraduate fall enrollment	199,127	195,078	191,369	183,498	184,562
Graduate fall enrollment	58,311	57,185	52,757	55,188	52,129
Total fall enrollment	257,438	252,263	244,126	238,686	236,691
University Extension enrollment	371,240	374,442	367,355	343,758	321,582
FACULTY AND STAFF¹ (full-time equivalents)	150,592	145,903	142,164	139,965	137,546
SUMMARY FINANCIAL INFORMATION (in thousands of dollars, e)	cept for retirement plan p	articipation)			
UNIVERSITY OF CALIFORNIA		, ,			
PRIMARY REVENUE SOURCES					
Student tuition and fees, net <sup>2</sup>	\$4,132,352	\$3,784,046	\$3,585,859	\$3,402,946	\$3,237,126
Grants and contracts, net	5,272,595	5,204,761	5,117,736	5,078,750	5,240,289
Medical centers, educational activities and auxiliary enterprises, net	14,638,715	13,611,153	12,108,409	10,890,244	10,067,147
State educational, financing and capital appropriations	3,052,540	2,812,634	2,683,315	2,484,877	2,303,330
Federal Pell Grants	376,264	376,186	316,064	345,910	359,408
Private gifts, net	1,091,519	971,245	890,614	801,940	804,691
Capital gifts and grants, net	248,705	186,836	473,464	256,670	198,023
Department of Energy laboratories	1,259,768	1,234,509	1,250,820	1,032,350	1,014,199
OPERATING EXPENSES BY FUNCTION					
Instruction	6,686,870	6,125,515	5,477,857	5,477,776	5,509,027
Research	4,554,222	4,327,864	3,837,361	4,287,561	4,533,125
Public service	630,085	575,327	581,069	554,231	620,884
Academic support	2,413,047	1,994,980	1,835,476	2,008,866	2,003,770
Student services	1,086,501	1,004,673	923,284	819,209	814,340
Institutional support	1,547,063	1,575,742	1,463,248	1,361,439	1,207,733
Operation and maintenance of plant	649,101	586,008	618,030	640,712	610,968
Student financial aid <sup>3</sup>	649,195	553,298	580,807	603,805	600,655
Medical centers	9,882,725	8,448,330	7,965,944	7,201,528	6,984,842
Auxiliary enterprises	1,253,283	1,180,142	1,104,050	1,153,775	1,124,704
Depreciation and amortization	1,804,046	1,661,033	1,709,672	1,555,254	1,478,254
Impairment of capital assets	10,127	11,219	11,201	31,441	
Department of Energy laboratories	1,252,842	1,228,125	1,244,335	1,026,088	1,007,804
Other	71,573	72,200	81,061	123,513	104,576
INCREASE (DECREASE) IN NET POSITION	(2,261,669)	20,054	1,381,385	(1,334,155)	(3,086,015)
FINANCIAL POSITION					
Investments, at fair value	22,208,767	22,492,804	21,748,774	18,942,008	18,292,398
Capital assets, at net book value	29,688,815	28,642,779	27,645,157	26,179,885	25,216,265
Other assets and deferred outflows	13,310,904	11,038,342	11,652,661	14,808,621	16,447,696
Outstanding debt, including capital leases	(19,951,287)	(19,020,755)	(18,030,749)	(17,236,225)	(17,459,934)
Obligations for pension and retiree health benefits	(25,581,530)	(20,061,032)	(16,165,378)	(19,915,231)	(22,738,325)
Other liabilities and deferred inflows	(10,204,271)	(11,359,071)	(15,137,452)	(12,866,312)	(8,387,164)
Net position	9,471,398	11,733,067	11,713,013	9,912,746	11,370,936

<sup>&</sup>lt;sup>1</sup> As of October 31.
<sup>2</sup> 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.
<sup>3</sup> 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.
<sup>6</sup> Contain sufficient in presentations or restatements have been made to prior year information in order to conform to current year presentation.

	2016	2015	2014	2013	2012
SUMMARY FINANCIAL INFORMATION (in thousands of dollars, excep	ot for participant infor	mation)			
UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS					
PRIMARY REVENUE SOURCES Private gifts, net	\$780,983	\$765,445	\$789,573	\$711,363	\$596,242
PRIMARY EXPENSES Grants to campuses	889,278	827,467	958,873	632,132	559,301
INCREASE (DECREASE) IN NET POSITION	(13,479)	455,416	849,091	746,263	125,506
FINANCIAL POSITION	7 115 270	7.004.507	6.406.640	F 700 700	5 161 217
Investments, at fair value Pledges receivable, net	7,115,278 842,423	7,084,587 822,530	6,496,649 861,005	5,799,788 713,710	5,161,217 641,134
Net position	7,536,850	7,550,329	7,094,913	6,245,822	5,535,441
·	7,550,050	7,550,525	7,007,713	0,243,022	3,333,441
UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM					
PLAN PARTICIPATION Plan membership	280,185	266,254	262,988	243,140	232,767
Retirees and beneficiaries currently receiving payments	70,077	67,321	64,191	58,934	56,296
PRIMARY REVENUE SOURCES	70,077	07,321	04,151	50,754	30,230
Contributions <sup>1</sup>	\$4,551,152	\$4,458,802	\$3,215,712	\$2,175,983	\$3,101,629
Interest, dividends and other investment income, net	1,316,116	1,323,449	1,344,731	1,254,981	907,739
Net appreciation (depreciation) in the fair value of investments	(2,300,033)	1,320,388	9,137,618	5,106,081	(597,030)
PRIMARY EXPENSES					
Benefit payments	2,974,331	2,803,627	2,583,223	2,396,577	2,184,450
Participant and member withdrawals	1,367,528	1,730,362	1,369,641	1,364,304	940,367
INCREASE (DECREASE) IN NET POSITION	(831,668)	2,515,920	9,701,107	4,731,316	249,762
FINANCIAL POSITION					
Investments, at fair value	73,196,935	71,595,607	68,747,604	60,104,811	54,408,678
Members' defined benefit pension plan benefits	54,225,589	55,122,875	52,853,829	45,404,828	41,868,728
Participants' defined contribution plan benefits	20,356,646	20,291,028	20,044,154	17,792,048	16,596,832
ACTUARIAL INFORMATION (as of the beginning of the year) Actuarial value of assets	53,762,286	48,327,981	43,572,353	42,965,028	42,757,271
Actuarial accrued liability	65,841,255	60,417,177	57,380,961	54,619,620	51,831,306
,			21,223,221	- 1,5 12,5 25	2 1,22 1,222
UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST					
PLAN PARTICIPATION Plan membership	161,072	157,221	154,930	151,458	148,704
Retirees and beneficiaries currently receiving benefits	39,774	38,488	37,207	35,872	34,559
PRIMARY REVENUE SOURCES	33,77		3.,20.	33,67.2	3 1,000
Contributions	\$376,025	\$315,586	\$343,395	\$267,886	\$329,529
Interest, dividends and other investment income, net	155	41	13		14
PRIMARY EXPENSES					
Insurance premiums	350,541	327,019	318,490	313,105	311,297
INCREASE (DECREASE) IN NET POSITION	21,896	(14,539)	20,884	(45,219)	18,246
FINANCIAL POSITION Investments, at fair value	53,604	24,250	37,125	7,750	65,053
Net position for retiree health benefits	72,541	50,645	65,184	7,730 44,300	89,519
ACTUARIAL INFORMATION (as of the beginning of the year)	, 2,371	30,043	55,104		ر ۱ دررن
ACTUARIAL INFORMATION (as or the beginning or the year)  Actuarial value of assets	50,645	65,184	44,300	97,435	77,907
Actuarial accrued liability	17,320,301	14,093,786	13,253,215	14,559,017	14,726,665
. lecalitat decided hability	1,,520,501	. 1,023,700	13,233,213	. 1,555,617	,, 20,003

 $<sup>^{1}</sup> Total\ contributions\ to\ the\ University\ of\ California\ Retirement\ Plan\ and\ the\ University\ of\ California\ Retirement\ Savings\ Plan.$ 

## Campus Facts in Brief (Unaudited)

	BERKELEY	DAVIS	IRVINE	LOS ANGELES	MERCED	RIVERSIDE
STUDENTS						
Undergraduate fall enrollment	27,496	28,384	25,352	29,585	6,237	18,637
Graduate fall enrollment	10,708	7,720	6,199	13,716	448	3,007
Total fall enrollment	38,204	36,104	31,551	43,301	6,685	21,644
University Extension enrollment <sup>1</sup>	38,581	61,159	29,270	125,328		31,069
DEGREES CONFERRED <sup>2</sup>						
Bachelor	7,647	7,120	6,414	8,030	1,057	4,587
Advanced	3,551	2,101	2,004	4,378	63	793
Cumulative	626,494	267,240	183,811	552,200	5,038	108,442
FACULTY AND STAFF <sup>3</sup> (full-time equivalents)	14,611	23,044	14,612	34,154	1,898	5,424
LIBRARY COLLECTIONS <sup>4</sup> (volumes)	12,674,985	4,604,128	3,680,004	10,207,432	1,346,752	3,869,411
CAMPUS LAND AREA (in acres)	6,679	7,335	1,527	468	7,593	2,151
CAMPUS FINANCIAL FACTS <sup>5</sup> (in thousands of dol.	lars)					
OPERATING EXPENSES BY FUNCTION						
Instruction	\$747,059	\$804,992	\$659,044	\$1,966,742	\$57,168	\$281,475
Research	562,308	547,535	247,673	752,572	22,763	111,458
Public service	81,266	84,839	10,341	127,842	4,667	5,976
Academic support	135,325	279,397	168,153	614,672	23,504	39,103
Student services	214,347	142,922	92,303	160,945	22,970	78,242
Institutional support	276,140	125,445	100,468	254,252	70,890	63,517
Operation and maintenance of plant	83,825	92,104	46,916	103,320	18,413	37,952
Student financial aid	138,556	88,472	84,603	60,764	14,733	62,790
Medical centers		1,766,259	923,593	2,013,066		
Auxiliary enterprises	140,420	94,830	146,951	342,662	20,660	70,190
Depreciation and amortization	218,932	220,563	186,922	364,284	26,705	68,256
Impairment of capital assets		1,740	1,191	3,712		
Other <sup>6</sup>	16,483	4,247	9,615	26,624	2,744	1,437
Total	\$2,614,661	\$4,253,345	\$2,677,773	\$6,791,457	\$285,217	\$820,396
GRANTS AND CONTRACTS REVENUE						
Federal government	\$406,094	\$391,549	\$190,490	\$586,208	\$16,772	\$76,459
State government	74,699	146,606	23,686	47,427	758	7,922
Local government	11,901	11,516	3,757	65,465	191	2,050
Private	173,983	143,188	68,852	231,601	3,811	26,715
Total	\$666,677	\$692,859	\$286,785	\$930,701	\$21,532	\$113,146
UNIVERSITY ENDOWMENTS						
Nonspendable endowment	\$385,637	\$118,934	\$12,501	\$265,900	\$16,309	\$13,062
Funds functioning as endowments	1,864,692	521,374	146,674	1,772,628	16,108	49,173
Annual income distribution	84,823	24,622	6,229	39,596	1,517	2,531
CAMPUS FOUNDATIONS' ENDOWMENTS	•	,	•	•	•	•
Nonspendable endowments	1,046,331	218,394	220,902	1,011,088	7,592	91,380
Funds functioning as endowments	672,189	112,252	103,316	692,499	1,844	40,880
CAPITAL ASSETS			. 30,5 . 3	,	.,	.5,550
	2.062.014	2 225 126	2 606 254	6.067.296	E00.060	1 105 215
Capital assets, at net book value	3,962,014	3,225,126	2,686,254	6,067,286	599,969	1,105,315
Capital expenditures	266,618	296,062	243,028	574,763	62,119	50,098

<sup>&</sup>lt;sup>1</sup> For academic year 2015-16.

<sup>&</sup>lt;sup>2</sup> As of academic year 2014-15.

<sup>&</sup>lt;sup>3</sup> As of October 31, 2015.

<sup>&</sup>lt;sup>4</sup> As of June 30, 2015.

 $<sup>{}^{\</sup>scriptscriptstyle 5}\textit{Excludes DOE laboratories}.$ 

 $<sup>{}^{6}</sup> Includes \, non-capitalized \, expenses \, associated \, with \, capital \, projects \, and \, write-off, \, cancellation \, and \, bad \, debt \, expense \, for \, loans.$ 

	SAN DIEGO	SAN FRANCISCO	SANTA BARBARA	SANTA CRUZ	SYSTEMWIDE <sup>7</sup>
STUDENTS					
Undergraduate fall enrollment	26,590		20,615	16,231	
Graduate fall enrollment	7,145	4,849	2,882	1,637	
Total fall enrollment	33,735	4,849	23,497	17,868	
University Extension enrollment <sup>1</sup>	63,618		6,648	15,567	
DEGREES CONFERRED <sup>2</sup>					
Bachelor	5,600		4,873	3,896	
Advanced	1,840	895	868	439	
Cumulative	186,686	52,674	224,277	110,040	
FACULTY AND STAFF <sup>3</sup> (full-time equivalents)	21,846	21,247	6,423	4,650	2,682
LIBRARY COLLECTIONS <sup>4</sup> (volumes)	5,365,746	1,161,145	3,150,333	2,403,050	•
	, ,				27
CAMPUS LAND AREA (in acres)	2,150	204	1,127	6,088	27
CAMPUS FINANCIAL FACTS <sup>5</sup> (in thousands of de	ollars)				
OPERATING EXPENSES BY FUNCTION					
Instruction	\$816,561	\$321,623	\$268,519	\$167,328	\$596,359
Research	767,261	915,192	169,764	110,717	346,979
Public service	19,060	103,709	10,226	16,979	165,180
Academic support	453,480	349,112	41,054	34,507	274,740
Student services	122,209	24,519	88,825	79,060	60,159
Institutional support	167,670	195,733	66,504	52,717	173,727
Operation and maintenance of plant	84,546	74,629	46,067	33,428	27,901
Student financial aid	59,372	16,970	81,491	39,072	2,372
Medical centers	1,345,810	3,365,014	2.,	/	468,983
Auxiliary enterprises	147,397	30,669	102,068	95,496	61,940
Depreciation and amortization	240,151	327,885	80,430	57,371	12,547
Impairment of capital assets	2,327	845	239	73	,
Other <sup>6</sup>	1,529	3,002	5,219	121	552
Total	\$4,227,373	\$5,728,902	\$960,406	\$686,869	\$2,191,439
GRANTS AND CONTRACTS REVENUE					
Federal government	\$643,082	\$686,056	\$120,885	\$96,453	\$30,481
State government	35,791	63,659	6,178	7,350	29,118
Local government	14,113	185,127	1,608	86	4,305
Private	207,548	354,672	47,927	22,319	4,137
Total	\$900,534	\$1,289,514	\$176,598	\$126,208	\$68,041
UNIVERSITY ENDOWMENTS					
Nonspendable endowments	\$44,304	\$138,500	\$29,753	\$9,761	\$76,422
Funds functioning as endowments	593,847	1,042,349	92,586	70,072	1,087,178
Annual income distribution	16,564	40,872	4,441	2,979	36,343
CAMPUS FOUNDATIONS' ENDOWMENTS					
Nonspendable endowments	382,628	560,768	110,996	40,064	
Funds functioning as endowments	167,280	413,940	50,082	41,916	
CAPITAL ASSETS	, . ,	-,-	,	,-	
	4 2F0 F00	A 611 651	1 445 570	1 167 510	AEO 613
Capital assets, at net book value	4,358,500	4,611,651	1,445,578	1,167,510	459,612
Capital expenditures	642,710	364,264	206,167	167,421	82,984

<sup>&</sup>lt;sup>1</sup> For academic year 2015-16.

<sup>&</sup>lt;sup>2</sup> As of academic year 2014-15.

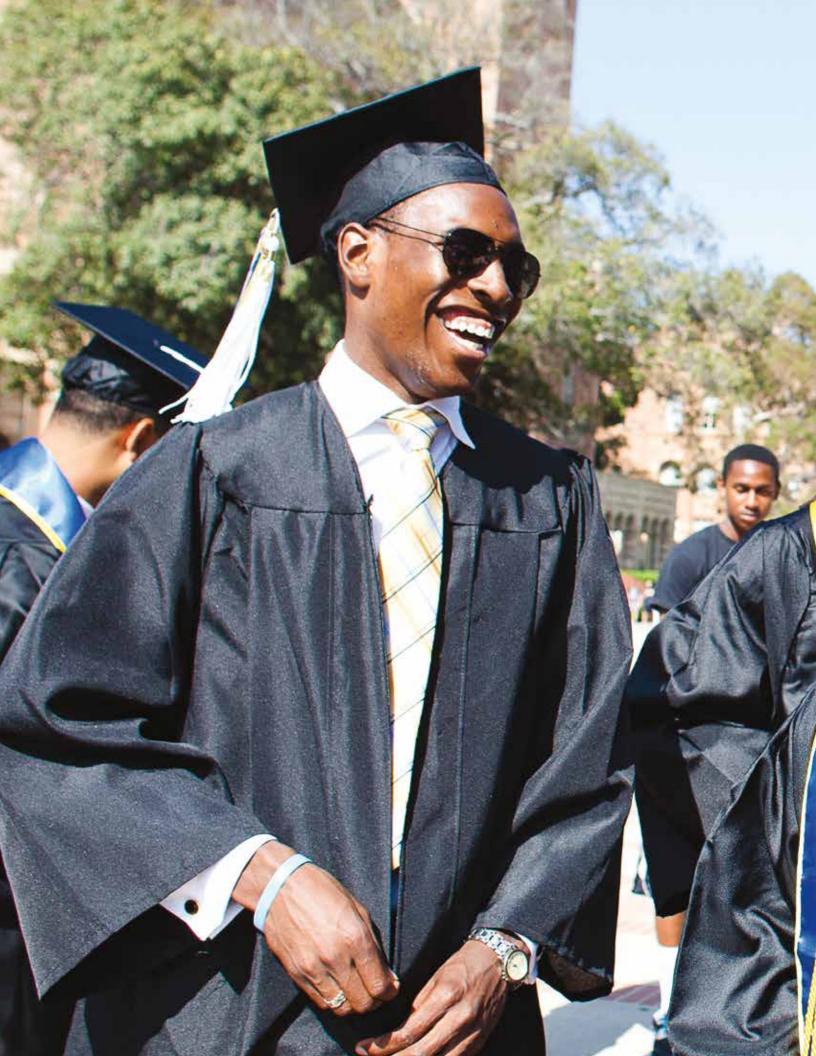
<sup>&</sup>lt;sup>3</sup> As of October 2015.

<sup>&</sup>lt;sup>4</sup> As of June 30, 2015.

<sup>&</sup>lt;sup>5</sup>Excludes DOE laboratories.

 $<sup>^6</sup>$  Includes non-capitalized expenses associated with capital projects and write-off, cancellation and bad debt expense for loans.

Includes expenses for systemwide education and research programs, systemwide support services and administration. Full-time equivalents count, as of fall 2015, 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, 2016, with selected comparative information for the years ended June 30, 2015 and 2014. 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 (2014, 2015, 2016 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 \$31.2 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.

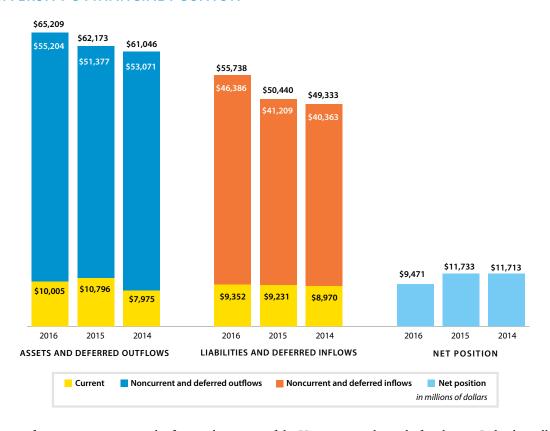
*Law schools.* The University has law schools at Berkeley, Davis, Irvine and Los Angeles. Also, the Hastings College of the Law in San Francisco is affiliated with the University, although not included in the financial reporting entity.

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



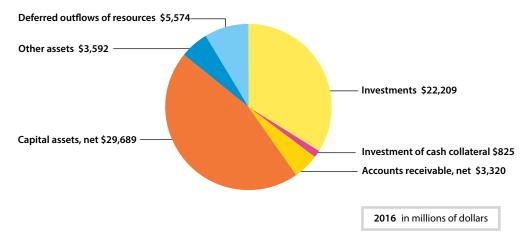
The statement of net position presents the financial position of the University at the end of each year. It displays all of the University's assets, deferred outflows, liabilities and deferred inflows. The difference between assets, deferred outflows, liabilities and deferred inflows is net position.

The major components of the assets, deferred outflows, liabilities, deferred inflows and net position as of June 30, 2016, 2015 and 2014 are as follows:

(in	mil	lions	of do	llarc)

	2016	2015	2014
ASSETS			
Investments	\$22,209	\$22,493	\$21,749
Investment of cash collateral	825	775	1,218
Accounts receivable, net	3,320	3,281	3,038
Capital assets, net	29,689	28,643	27,645
Other assets	3,592	3,500	3,691
Total assets	59,635	58,692	57,341
DEFERRED OUTFLOWS OF RESOURCES	5,574	3,481	3,705
LIABILITIES			
Debt, including commercial paper	19,951	19,021	18,031
Securities lending collateral	825	775	1,218
Net pension liability	15,125	10,671	7,725
Obligations for retiree health benefits	10,457	9,390	8,440
Other liabilities	7,648	7,426	6,811
Total liabilities	54,006	47,283	42,225
DEFERRED INFLOWS OF RESOURCES	1,732	3,157	7,108
NET POSITION			
Net investment in capital assets	12,816	12,138	12,167
Restricted:			
Nonexpendable	1,148	1,111	1,081
Expendable	6,546	7,206	6,975
Unrestricted	(11,039)	(8,722)	(8,510)
Total net position	\$9,471	\$11,733	\$11,713

#### The University's Assets and Deferred Outflows



The University's total assets and deferred outflows of resources have grown to \$65.2 billion in 2016, compared to \$62.2 billion in 2015 and \$61.0 billion in 2014. Capital assets have increased due to continued investments in facilities and investments changed due to financial market returns. Deferred outflows increased due to changes in the University's net pension liability.

#### 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. As a result of continued low interest rates, the University increased its use of TRIP to enhance investment returns, while still maintaining sufficient funds in STIP to meet operational 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 negative return of 3.4 percent in 2016, and positive returns of 7.2 percent and 19.0 percent in 2015 and 2014, respectively. TRIP had positive returns of 0.3 percent, 2.6 percent and 14.7 percent in 2016, 2015 and 2014, respectively. STIP had positive returns of 1.3 percent, 1.4 percent and 1.6 percent in 2016, 2015 and 2014, respectively. Short-term investments were held at the end of 2015 to facilitate the execution of asset allocation changes in the investment portfolios, resulting in a decrease of \$1.3 billion in 2016 and an increase of \$2.9 billion in 2015 in short-term investments.

#### 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 upon 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

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, housing facilities, medical centers and clinical facilities, parking structures and infrastructure projects at all ten campuses and five medical centers. The largest project in 2016 was the Jacobs Medical Center in San Diego. The largest project in 2015 was the Mission Bay Hospital in San Francisco. Total additions of capital assets were \$3.0 billion in 2016 as compared to \$2.8 billion in 2015 and \$2.9 billion in 2014.

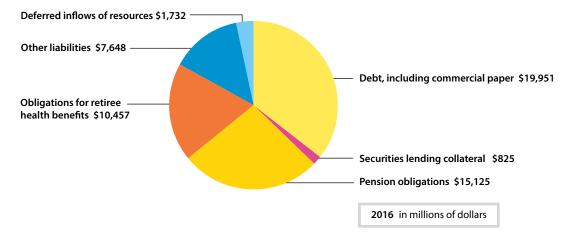
#### Other assets

Other assets include cash, investments held by trustees, pledge receivables, note and mortgage receivables, inventories and a receivable from the DOE. The noncurrent receivable from the DOE, which fluctuates with the net pension liability due to the DOE's continuing responsibility to contribute for retired and terminated vested members of LLNS and LANL, decreased by \$41.1 million in 2016 as compared to 2015 and decreased by \$178.8 million in 2015 as compared to 2014.

#### 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 liability are reported as deferred outflows of resources. In both 2016 and 2015, deferred outflows increased due to lower than expected investment returns in the University of California Retirement Plan (UCRP) portfolio. In 2015, deferred outflows also increased due to changes in the net pension liability as a result of changes in assumptions for mortality and expected investment returns.

#### The University's Liabilities and Deferred Inflows



The University's liabilities and deferred inflows of resources increased to \$55.7 billion in 2016 as compared to \$50.4 billion in 2015 and \$49.3 billion in 2014. The increase in both 2016 and 2015 was primarily related to the issuance of additional debt to finance capital projects and the increases in the liabilities for net pension liability and retiree health benefits offset by a reduction in deferred inflows of resources.

#### Debt, including commercial paper

Capital assets are financed from a variety of sources, including University equity contributions, federal and state support, 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 \$931.0 million and \$990.0 million in 2016 and 2015, respectively. A summary of the activity follows:

	2016	2015
ADDITIONS TO OUTSTANDING DEBT		
General Revenue Bonds	\$813	\$1,679
Limited Project Revenue Bonds	532	1,671
Capital leases	67	43
Other borrowings	200	
Blended Component Unit Revenue Bonds	283	
Commercial paper		91
Bond premium, net	195	242
Additions to outstanding debt	2,090	3,726
REDUCTIONS TO OUTSTANDING DEBT		
Refinancing and prepayments	(528)	(2,325)
Scheduled principal payments	(340)	(336)
Payments on other borrowings	(180)	(26)
Commercial paper	(47)	
Other <sup>1</sup>	(64)	(49)
Reductions to outstanding debt	(1,159)	(2,736)
Net increase in outstanding debt	\$931	\$990

<sup>1</sup>Amortization of bond premium.

The University's debt, which is used to primarily finance capital assets, includes \$1.0 billion, \$1.1 billion and \$1.0 billion of commercial paper outstanding at the end of 2016, 2015 and 2014, respectively. Total debt outstanding was \$20.0 billion at the end of 2016 compared to \$19.0 billion and \$18.0 billion at the end of 2015 and 2014, respectively.

In 2016, \$1.6 billion of debt was issued. The University issued General Revenue Bonds totaling \$813.1 million and Limited Project Revenue Bonds totaling \$532.1 million to primarily finance and refinance certain facilities and projects of the

University. In addition, \$282.6 million of revenue bonds were issued through a conduit issuer to refund outstanding bonds which financed the construction of student housing facilities. Reductions to outstanding debt in 2016 were \$1.2 billion, including \$527.9 million 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 \$31.5 million. In August 2016, subsequent to year-end, Medical Center Pooled Revenue Bonds totaling \$1.0 billion were issued and a standby bond purchase agreement for \$70.9 million of tax-exempt variable-rate demand bond was terminated.

In 2015, \$3.4 billion of debt was issued. The University issued General Revenue Bonds totaling \$1.7 billion and Limited Project Revenue Bonds totaling \$1.7 billion to primarily finance and refinance certain facilities and projects of the University. Reductions to outstanding debt in 2015 were \$2.7 billion, including \$2.3 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 \$276.0 million. The General Revenue Bonds issued included \$500.0 million of bonds maturing in 2115 to finance capital projects of the University or for such other purposes as authorized by The Regents.

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 by \$47.1 million in 2016 as compared to 2015, and increased by \$91.3 million in 2015 compared to 2014. Commercial paper is primarily used as interim financing for construction projects and equipment financing. 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 \$1.2 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 \$15.1 billion, \$10.7 billion and \$7.7 billion in 2016, 2015 and 2014, respectively. The change in net pension liability for 2016 was primarily driven by lower than expected investment returns on the UCRP investment portfolio. The change in net pension liability for 2015 was primarily driven by changes in assumptions from the experience study and lower than expected returns on the UCRP investment portfolio. UCRP's total investment rate of return was negative 2.0 percent in 2016, positive 4.5 percent in 2015 and positive 17.4 percent in 2014. The discount rate used to estimate the net pension liability was 7.25 percent in 2016, 7.25 percent in 2015 and 7.5 percent in 2014.

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 \$974.7 million, \$1.0 billion and \$1.2 billion for 2016, 2015 and 2014, respectively, representing the DOE's share of the net pension liability.

The University's obligation for retiree health benefits is based upon an actuarial determination of the annual retiree health benefit expense. The University funds the retiree health expense through UCRHBT based upon a projection of benefits on a pay-as-you-go basis. The increases of \$1.1 billion and \$950.0 million in 2016 and 2015, respectively, in the obligation for retiree health benefits is due to the impact of amortizing the University's unfunded obligation. The unfunded liability for the campuses and medical centers as of the July 1, 2015 actuarial valuation was \$17.3 billion.

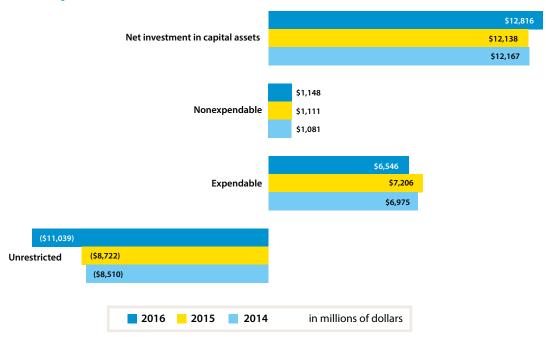
#### Other liabilities

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 and obligations under life income agreements.

#### 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 and certain changes in the net pension liability. In March 2016, the University sold the rights to receive future royalty payments to a third-party and received \$520.2 million in net proceeds. The proceeds are reported as deferred inflows of resources and will be recognized through the expiration of the patents in 2027. Deferred inflows of resources decreased in 2016 by \$1.4 billion due to lower than expected investment returns on the UCRP portfolio offset by sales of certain future royalty revenues. Deferred inflows of resources decreased in 2015 by \$4.0 billion due to changes in net pension liability as a result of changes in assumptions for inflation and lower than expected returns on the UCRP investment portfolio.

#### 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. The University's net position was \$9.5 billion in 2016 compared to \$11.7 billion in 2015 and 2014. 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 \$12.8 billion in 2016 compared to \$12.1 billion and \$12.2 billion for the years ended June 30, 2015 and 2014, respectively. The University continues to invest in its physical facilities to support the growth in the University.

#### Restricted, nonexpendable

Restricted, nonexpendable net position includes the corpus of the University's permanent endowments and the estimated fair value of certain planned giving arrangements. In 2016 and 2015, 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; trustee-held investments; or other third-party receipts. The increases or decreases in restricted, expendable funds are principally due to unrealized appreciation or depreciation respectively in the fair value of investments related to restricted gifts and funds functioning as endowments.

#### 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 reserves. 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 and for capital and other purposes. As of June 30, 2016 and 2015, unrestricted net position is in a deficit position. The increases in the deficit in 2016 and 2015 are primarily due to increases in the net pension liability and retiree health benefit obligations.

#### 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. A summarized comparison of the operating results for 2016, 2015 and 2014, 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)

	2016			2015			2014		
	OPERATING	NONOPERATING	TOTAL	OPERATING	NONOPERATING	TOTAL	OPERATING	NONOPERATING	TOTAL
REVENUES									
Student tuition and fees, net	\$4,132		\$4,132	\$3,784		\$3,784	\$3,586		\$3,586
State educational appropriations		\$3,048	3,048		\$2,792	2,792		\$2,638	2,638
Federal Pell Grants		376	376		376	376		316	316
Grants and contracts, net	5,273		5,273	5,205		5,205	5,118		5,118
Medical centers, net	10,236	15	10,251	9,477	22	9,499	8,414	2	8,416
Educational activities, net	2,973		2,973	2,740		2,740	2,378		2,378
Auxiliary enterprises, net	1,430		1,430	1,394		1,394	1,316		1,316
Department of Energy laboratories	1,260		1,260	1,235		1,235	1,251		1,251
Private gifts, net		1,092	1,092		971	971		891	891
Investment income, net		311	311		319	319		337	337
Other revenues	962	51	1,013	911	38	949	733	84	817
Revenues supporting core activities	26,266	4,893	31,159	24,746	4,518	29,264	22,796	4,268	27,064
EXPENSES									
Salaries and benefits	14,021		14,021	13,109		13,109	12,262		12,262
Pension benefits	2,687		2,687	1,515		1,515	1,292		1,292
Other employee benefits	4,272		4,272	3,941		3,941	3,714		3,714
Scholarships and fellowships	652		652	547		547	577		577
Utilities	283		283	273		273	290		290
Supplies and materials	3,109		3,109	2,876		2,876	2,585		2,585
Depreciation and amortization	1,804		1,804	1,698		1,698	1,740		1,740
Department of Energy laboratories	1,253		1,253	1,228		1,228	1,244		1,244
Interest expense		693	693		662	662		617	617
Other expenses	4,411	46	4,457	4,157	17	4,174	3,729	3	3,732
Expenses associated with core activities	32,492	739	33,231	29,344	679	30,023	27,433	620	28,053
Income (loss) from core activities	\$(6,226)	\$4,154	\$(2,072)	\$(4,598)	\$3,838	\$(759)	\$(4,637)	\$3,648	\$(989
OTHER NONOPERATING ACTIVITIES									
Net appreciation (depreciation) in fair value of investments			(473)			544			1,831
Income (loss) before other changes in net position			(2,545)			(215)			842
OTHER CHANGES IN NET POSITION									
State capital appropriations			4			21			45
Capital gifts and grants, net			249			187			474
Permanent endowments			30			27			20
Increase (decrease) in net position			(2,262)			20			1,381
NET POSITION									
Beginning of year, as previously reported			11,733			11,713			9,913
Cumulative effect of accounting and reporting entity changes									419
Beginning of year, restated			11,733			11,713			10,332
End of year			\$9,471			\$11,733			\$11,713

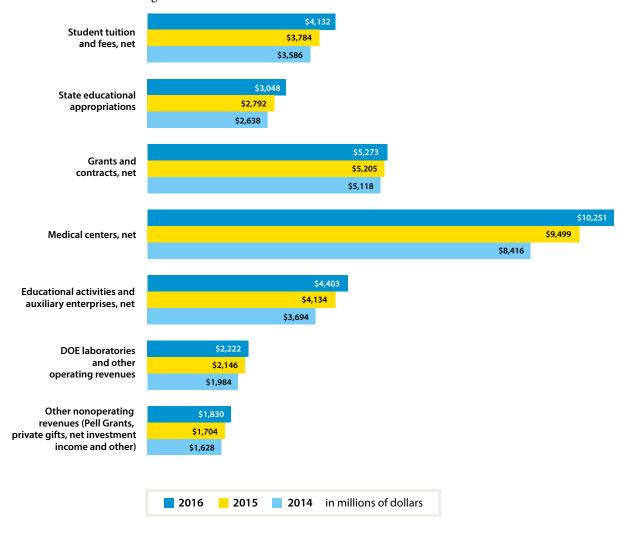
#### Revenues supporting core activities

Revenues to support the University's core activities, including those classified as nonoperating revenues, were \$31.2 billion, \$29.3 billion and \$27.1 billion in 2016, 2015 and 2014, respectively. These diversified sources of revenue increased by \$1.9 billion in 2016 and increased by \$2.2 billion in 2015.

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.

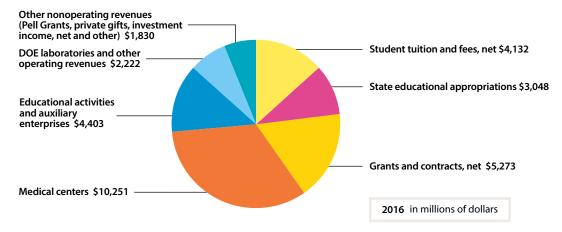
Gifts to the University allow crucial flexibility to faculty for support of their fundamental activities or new academic initiatives. Other significant revenues are from medical centers, educational activities and auxiliary enterprises such as student housing, food service operations and parking.

Revenues in the various categories have increased and decreased as follows:



A major financial strength of the University includes a 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 2016 are as follows:



#### Student tuition and fees, net

Net student tuition and fees were \$4.1 billion, \$3.8 billion and \$3.6 billion in 2016, 2015 and 2014, 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 and are reported as an offset to revenue. Scholarship allowances of \$1.1 billion and \$1.2 billion in 2016 and 2015, respectively, were netted against student tuition and fees. Student tuition and fees, net of scholarship allowances, increased by \$348.3 million and \$198.2 million in 2016 and 2015, respectively.

In 2016, enrollment grew by 2.1 percent and in 2015 enrollment grew by 3.3 percent. Mandatory tuition and fees for resident undergraduates were not changed in 2016 and 2015. Certain nonresident undergraduates and resident and nonresident graduate students experienced increases in mandatory tuition and fees. Professional degree supplemental tuition varies by discipline; no increases were approved for 2016 and 2015.

#### State educational appropriations

Educational appropriations from the state of California were \$3.0 billion, \$2.8 billion and \$2.6 billion in 2016, 2015 and 2014, respectively. State educational appropriations increased in 2016 and 2015 by \$256.7 million and \$153.8 million, respectively.

The budget framework agreed to with the governor called for base budget adjustments of four percent annually over the next four years, through 2019. 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 service fee increased five percent in 2016 and each year thereafter, with the customary one-third of the increase being directed to financial aid. The framework also acknowledged the University's plan to increase nonresident supplemental tuition by up to eight percent for 2016 and 2017 and five percent thereafter. The framework recognized the increases in professional degree supplemental tuition approved by The Regents in November 2014 for existing and new programs and called for no increases in law school tuition for the next four years. The framework provided \$25.0 million in one-time funding for deferred maintenance and \$96.0 million in one-time funds for UCRP in 2016.

State educational appropriations increased in 2015 as a result of state tax initiatives approved by the voters in California in 2012. In connection with the passage of these tax initiatives, the University did not raise resident tuition from 2013 through 2015.

#### Grants and contracts, net

Revenue from federal, state, private and local government grants and contracts — including an overall facilities and administration cost recovery of \$1.0 billion, \$993.5 million and \$978.4 million in 2016, 2015 and 2014, respectively — were \$5.3 billion, \$5.2 billion and \$5.1 billion in 2016, 2015 and 2014, respectively.

In 2016, federal grants and contracts revenue increased \$37.2 million, or 1.2 percent, as compared to 2015. In 2015, federal grants and contracts revenue increased \$10.1 million, or 0.3 percent, as compared to 2014. Federal grants and contracts include federal facilities and administrative cost recovery of \$745.6 million, \$720.3 million and \$709.6 million in 2016, 2015 and 2014,

respectively. Expiring federal grants and federal budget cuts have slowed the University's growth in federal grants and contracts. Grant and contract revenue is from a variety of federal agencies as indicated below:

(in millions of dollars)

	2016	2015	2014
Department of Health and Human Services	\$1,917	\$1,847	\$1,922
National Science Foundation	469	498	469
Department of Education	83	70	124
Department of Defense	258	259	256
National Aeronautics and Space Administration	135	137	102
Department of Energy (excluding national laboratories)	104	100	109
Other federal agencies	279	296	215
Federal grants and contracts net revenue	\$3,245	\$3,207	\$3,197

#### Medical centers, net

Medical center revenues, including state hospital fee grants and net of allowances, increased \$752.2 million, or 7.9 percent, in 2016 and increased \$1.1 billion, or 12.9 percent, in 2015. Revenues increased in 2016 due to improved collections and higher inpatient and outpatient utilization at all of the medical centers. The new UCSF Mission Bay facility, which opened in February 2015, was open for all of 2016, contributing to a significant portion of the growth in revenues. Revenues increased in 2015 due to higher patient volumes, a continuing increase in the complexity of cases, slight improvements in payor mix and higher reimbursement rates. In response to health care reform and increasing employee costs, the medical centers continue to invest in expanding services.

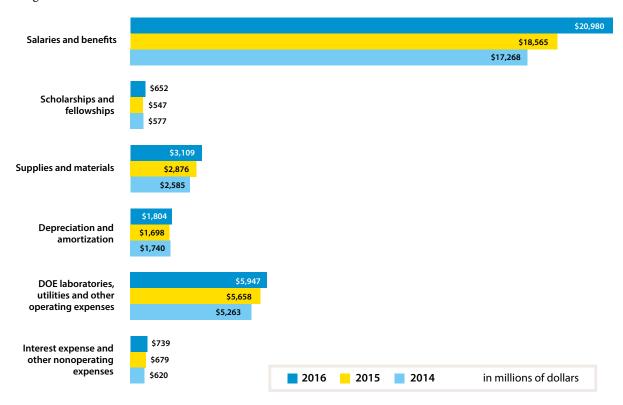
#### Educational activities and auxiliary enterprises, net

Revenue from educational activities, primarily medical professional fees, net of allowances, grew by \$232.6 million, or 8.5 percent, in 2016 and \$361.7 million, or 15.2 percent, in 2015. The growth is generally associated with an expanded patient base and improved collections.

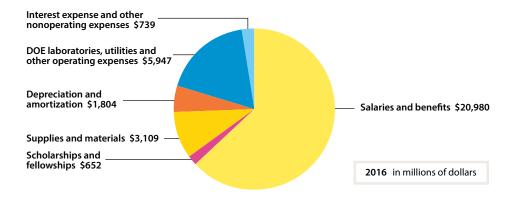
Auxiliary enterprises include housing, food service, parking, bookstores, student centers and unions, childcare centers and certain athletic programs. Revenue from auxiliary enterprises, net of allowances, grew by \$35.9 million, or 2.6 percent, in 2016 and \$77.6 million, or 5.9 percent in 2015.

#### Expenses associated with core activities

Expenses associated with the University's core activities, including those classified as nonoperating expenses, were \$33.2 billion, \$30.0 billion and \$28.1 billion in 2016, 2015 and 2014, respectively. Expenses increased in 2016 by \$3.2 billion and in 2015 by \$1.9 billion, primarily due to growth in the University's operations, principally at the medical centers, and due to higher pension expenses as a result of significantly lower than expected earnings on the UCRP portfolio. Expenses in the various categories are as follows:



Categories of both operating and nonoperating expenses related to the University's core activities in 2016 are as follows:



#### Salaries and benefits

Approximately 63.0 percent of the University's expenses were related to salaries and benefits. There were 153,400 full-time equivalent (FTE) employees in the University in April 2016, excluding employees who were associated with LBNL whose salaries and benefits were included as laboratory expenses, as compared to 147,600 FTEs in April 2015.

Salaries and benefits increased by 13.0 percent in 2016 due to growth in the University's operations. In 2016, salaries increased by 7.0 percent, 3.9 percent due to an increase in the number of FTEs and 3.0 percent due to an increase in the average salary per FTE. Employee benefits, excluding pension and post-retirement health care benefits, increased by 5.9 percent in 2016, due to higher health insurance costs. Pension expense increased by \$1.2 billion or 77.3 percent due to lower than expected investment returns.

Salaries and benefits increased by 7.5 percent in 2015 due to growth in the University's operations. In 2015, salaries increased by 6.9 percent, 2.6 percent due to an increase in the number of FTEs and 4.2 percent due to an increase in the average salary per FTE. Employee benefits, excluding pension and post-retirement health care benefits, increased by 6.8 percent in 2015, due to higher health insurance costs. Pension expense increased by 17.0 percent due to lower than expected investment returns and assumption changes.

#### 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 \$2.0 billion in 2016 and 2015 and \$1.9 billion in 2014. Scholarships and fellowships, representing payments of financial aid made directly to students and reported as an operating expense were \$651.6 million, \$547.1 million and \$577.2 million in 2016, 2015 and 2014, 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 \$34.2 million, or 1.7 percent, in 2016 as compared to 2015.

#### Supplies and materials

During 2016 and 2015, supplies and materials costs increased by \$232.5 million, or 8.1 percent and \$291.5 million, or 11.3 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 research activity and increased 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 \$6.2 billion, \$4.6 billion and \$4.6 billion in 2016, 2015 and 2014, respectively. The operating losses in 2016, 2015 and 2014 were partially offset by \$4.1 billion, \$3.8 billion and \$3.6 billion, respectively, of net nonoperating revenue that clearly supports core operating activities of the University. Expenses associated with core activities in 2016, 2015 and 2014 exceeded revenue available to support core activities by \$2.1 billion, \$0.8 billion and \$1.0 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 2016, the University recognized net depreciation in the fair value of investments of \$473.3 million, as compared to net appreciation of \$543.6 million and \$1.8 billion during 2015 and 2014, respectively. The University's portfolio experienced declines in 2016 principally due to declines in the equity markets, as compared to a positive performance in previous years due to returns in both the equity and bond markets.

#### 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's enrollment growth requires new facilities, in addition to continuing needs for renewal, modernization and seismic correction of existing facilities. Capital appropriations, representing proceeds from bond measures approved by California voters decreased by \$16.6 million and \$24.2 million in 2016 and 2015, respectively. Capital gifts and grants increased by \$61.9 million in 2016 from 2015 and decreased by \$286.6 million in 2015 from 2014 due to large gifts received in 2014 for the construction of the San Francisco Medical Center at Mission Bay.

#### 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 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, 2016, 2015 and 2014 are as follows:

(in millions of dollars)			
	2016	2015	2014
ASSETS			
Investments	\$7,115	\$7,085	\$6,497
Investment of cash collateral	42	37	51
Accounts receivable, net	33	79	8
Pledges receivable, net	842	823	861
Other assets	221	224	203
Total assets	8,253	8,248	7,620
LIABILITIES			
Accounts payable and other current liabilities	71	247	75
Securities lending collateral	42	37	51
Obligation under life income agreements and funds held for others	382	370	380
Other noncurrent liabilities	221	42	19
Total liabilities	715	696	525
DEFERRED INFLOWS OF RESOURCES	1	2	
NET POSITION			
Restricted:			
Nonexpendable	3,700	3,422	3,156
Expendable	3,742	4,030	3,820
Unrestricted	95	98	120
Total net position	\$7,537	\$7,550	\$7,095

Investments were flat in 2016 and increased in 2015 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 Committee on Investments 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 \$1.6 billion, \$1.3 billion and \$1.4 billion of the campus foundations' investments at the end of 2016, 2015 and 2014, respectively.

Restricted, nonexpendable net position includes the corpus of the campus foundations' permanent endowments and the estimated fair value of certain planned giving arrangements. Restricted, expendable net position is subject to externally imposed restrictions governing their use. Net position represents the residual interest in the assets and deferred outflows 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 and net appreciation in the fair value of investments were the primary reasons for the changes in value in 2016 and 2015.

#### 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 2016, 2015 and 2014 is as follows:

	2016	2015	2014
OPERATING REVENUES			
Private gifts and other revenues	\$792	\$767	\$793
Total operating revenues	792	767	793
OPERATING EXPENSES			
Grants to campuses and other expenses	915	852	980
Total operating expenses	915	852	980
Operating loss	(123)	(85)	(187)
NONOPERATING REVENUES (EXPENSES)			
Investment income	53	65	71
Net appreciation (depreciation) in fair value of investments	(225)	207	674
Other nonoperating revenues (expenses)	4	(5)	17
Income (loss) before other changes in net position	(291)	182	575
OTHER CHANGES IN NET POSITION			
Permanent endowments	278	274	274
Increase (decrease) in net position	(13)	456	849
NET POSITION			
Beginning of year	7,550	7,094	6,245
End of year	\$7,537	\$7,550	\$7,094

Operating expenses generally consist of grants to University campuses, comprised of current-use gifts and endowment income and other expenses, including 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 of gifts to the endowment and the amounts available for grants in any particular year.

Grants to the campuses can only be made when the cash is received and, in addition, also include endowment investment income, classified as nonoperating income. Therefore, operating losses can occur when grants distributed to the campuses in any particular year 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 the University of California Retirement Plan (UCRP), a defined benefit plan for members; the University of California Retirement Savings Program (UCRSP) that includes four defined contribution plans (Defined Contribution Plan, Supplemental Defined Contribution Plan, 403(b) Plan and 457(b) Plan) to complement the defined benefit plan, with several investment portfolio options for participants' elective and non-elective contributions; and the California Public Employees Retirement System (PERS) Voluntary Early Retirement Incentive Plan (PERS-VERIP) for certain University employees that were members of PERS who elected early retirement.

#### **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 PERS-VERIP. At June 30, 2016, UCRS' assets were \$83.3 billion, liabilities \$8.7 billion and net position held in trust for pension benefits \$74.6 billion, a decrease of \$831.7 million from 2015.

The major components of the assets, liabilities and net position available for pension benefits for 2016, 2015 and 2014 are as follows:

(in millions of dollars)			
	2016	2015	2014
ASSETS			
Investments	\$73,197	\$71,596	\$68,748
Participants' interests in mutual funds	2,768	4,948	5,044
Investment of cash collateral	6,751	5,177	6,563
Other assets	571	516	464
Total assets	83,287	82,237	80,819
LIABILITIES			
Securities lending collateral	6,750	5,178	6,562
Other liabilities	1,955	1,645	1,359
Total liabilities	8,705	6,823	7,921
NET POSITION HELD IN TRUST FOR PENSION BENEFITS			
Members' defined benefit plan benefits	54,225	55,123	52,854
Participants' defined contribution plan benefits	20,357	20,291	20,044
Total net position held in trust for pension benefits	\$74,582	\$75,414	\$72,898

The statements of changes in the plans' fiduciary net position is a presentation of UCRS' operating results. It indicates whether the financial condition has improved or deteriorated during the year. A summarized comparison of the operating results for 2016, 2015 and 2014 is as follows:

(in millions of dollars)			
	2016	2015	2014
ADDITIONS			
Contributions	\$4,551	\$4,459	\$3,216
Net appreciation (depreciation) in fair value of investments	(2,300)	1,320	9,137
Investment and other income, net	1,318	1,326	1,347
Total additions	3,569	7,105	13,700
DEDUCTIONS			
Benefit payments and participant withdrawals	4,342	4,534	3,953
Plan expenses	59	55	46
Total deductions	4,401	4,589	3,999
Increase (decrease) in net position held in trust for pension benefits	\$(832)	\$2,516	\$9,701

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 loss based upon unit values for UCRS was negative 2.0 percent in 2016 as compared to investment gains of 4.5 percent in 2015 and 14.0 percent in 2014.

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 in 2016, 2015 and 2014 were \$4.6 billion, \$4.5 billion and \$3.2 billion, respectively. In 2016, contributions increased due to \$96.0 million received from the state of California under the budget agreement. Contributions include additional deposits of \$563.6 million and \$700.0 million made by the University to UCRP in 2016 and 2015, respectively. University contribution rates to UCRP were 14.0 percent of covered payroll in 2016, 2015 and 2014. Employee contribution rates ranged between 7.0 percent and 9.0 percent in 2016, 2015 and 2014.

Benefit payments and participant withdrawals were \$192.1 million less in 2016 than in 2015 and \$581.0 million more in 2015 than in 2014. Payments from UCRP increase each year due to a growing number of retirees receiving payments and cost-of-living adjustments. Benefit payments from UCRSP fluctuate based upon member withdrawals. Participant withdrawals decreased by \$320.6 million, or 20.7 percent, in 2016 as compared to 2015, and increased by \$291.8 million, or 23.1 percent, in 2015 as compared to 2014. As of June 30, 2016, there were 70,000 retirees and beneficiaries receiving payments from UCRS as compared to 67,300 as of June 30, 2015 and 64,200 as of June 30, 2014.

The net pension liability for UCRP was \$15.1 billion in 2016, \$10.6 billion in 2015 and \$7.7 billion in 2014. The increase in net pension liability for 2016 of \$4.5 billion was due to lower than expected investment returns on the UCRP portfolio. The increase in net pension liability for 2015 of \$2.9 billion was primarily due to lower than expected investment returns on the UCRP investment portfolio and assumption changes, including longer mortality and lower inflation. The ratio of plan net position to total pension liability was 78.3 percent in 2016, 83.8 percent in 2015 and 87.2 percent in 2014.

Additional information on the retirement plans can be obtained from the 2016 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 on a tax-exempt basis 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 all of 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 2016, 2015 and 2014 are as follows:

2016	2015	2014
\$54	\$24	\$37
34	39	39
88	63	76
15	12	11
\$73	\$51	\$65
	\$54 34 <b>88</b>	\$54 \$24 34 39 <b>88 63</b> 15 12

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 2016, 2015 and 2014 are as follows:

Increase (decrease) in net position held in trust for retiree health benefits	\$22	\$(14)	\$21
Total deductions	354	330	322
Plan expenses	4	3	4
Insurance premiums and payments	350	327	318
DEDUCTIONS			
Total additions	376	316	343
Contributions	\$376	\$316	\$343
ADDITIONS			
	2016	2015	2014
(in millions of dollars)			

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 unfunded actuarial accrued liability for eligible participants as of July 1, 2015, the date of the latest actuarial valuation, was \$17.8 billion.

#### 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 provided the University with base budget adjustments of four percent annually from 2016 through 2019. 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 to increase nonresident supplemental tuition by up to eight percent in 2016 and 2017 and five percent thereafter. The framework also recognized the increases in professional degree supplemental tuition approved by The Regents in November 2014 for existing and new programs and calls for no increases in law school tuition through 2019. In addition to these funding elements, the budget framework includes 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.

Effective July 1, 2016, UCRP was amended to provide a new tier of pension benefits applicable to eligible employees hired (or becoming eligible), on or after July 1, 2016. The new tier would provide future UC employees a choice between two retirement benefits options (1) the current UCRP pension benefit capped at the California Public Employees' Pension Reform Act (PEPRA) salary limit (currently \$117,020) plus a supplemental contribution for eligible employees to a defined contribution plan on pay up to the Internal Revenue Service limit (currently \$265,000); or (2) a defined contribution benefit option for eligible employee pay up to the Internal Revenue Service limit (currently \$265,000). Under the budget framework, the University will receive \$438.0 million in one-time funds for UCRP as a result of making these benefit changes. The funds are being paid over three years, \$96.0 million was received in 2016, and \$171.0 million each year in 2017 and 2018.

Currently, the University does not pre-fund retiree health benefits and provides for benefits on a pay-as-you-go basis. The unfunded liability for the campuses and medical centers as of the July 1, 2016 actuarial valuation was \$21 billion based upon using a discount rate of 2.85 percent. The University's retiree health benefit obligations reported in the financial statements are expected to increase as a result of new accounting pronouncements that will be effective in the future.

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 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.



### 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 year ended June 30, 2016, 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 audit. We conducted our audit 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, 2016 and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Emphasis of Matter**

As discussed under "Significant Accounting Policies" in the notes to the financial statements, the University changed the manner in which it presents certain fair value hierarchy disclosures related to investments and the manner in which it accounts for certain components as blended components in fiscal 2016. Our opinions are not modified with respect to this matter.

#### Other Matter

Accounting principles generally accepted in the United States of America require that management's discussion and analysis on pages 12 to 30 and the required supplemental information on pages 99 through 104 be presented 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 audit 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.

SAN FRANCISCO, CALIFORNIA OCTOBER 12, 2016

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#### STATEMENTS OF NET POSITION

At June 30, 2016 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA	CAMPUS FOUNDATIONS
ASSETS		
Cash and cash equivalents	\$266,565	\$194,912
Short-term investments	4,944,611	479,410
Investment of cash collateral	680,838	34,641
Investments held by trustees	85,467	
Accounts receivable, net	3,319,518	32,562
Pledges receivable, net	17,056	217,971
Notes and mortgages receivable, net	52,672	6
Inventories	214,680	
Department of Energy receivable	94,307	
Other current assets	328,932	5,945
Current assets	10,004,646	965,447
Investments	17,264,156	6,635,868
Investment of cash collateral	144,093	7,332
Investments held by trustees	765,417	
Pledges receivable, net	30,050	624,452
Notes and mortgages receivable, net	327,169	1,014
Department of Energy receivable	1,268,771	
Capital assets, net	29,688,815	
Other noncurrent assets	141,505	19,471
Noncurrent assets	49,629,976	7,288,137
Total assets	59,634,622	8,253,584
DEFERRED OUTFLOWS OF RESOURCES	5,573,864	
LIABILITIES		
Accounts payable	1,623,237	18,485
Accrued salaries	995,235	
Employee benefits	440,270	
Unearned revenue	1,172,308	921
Collateral held for securities lending	824,677	41,973
Commercial paper	1,037,857	,-
Current portion of long-term debt	1,413,265	
Funds held for others	327,429	251,472
Department of Energy laboratories' liabilities	78,862	23 ., ., 2
Other current liabilities	1,438,527	51,875
Current liabilities	9,351,667	364,726
		20.,, 20
Federal refundable loans Self-insurance	243,913	
	558,158	120 214
Obligations under life income agreements	32,021 17,500,165	130,314
Long-term debt		
Net pension liability	15,124,690	
Obligations for retiree health benefits	10,456,840	220.224
Other noncurrent liabilities	737,355	220,234
Noncurrent liabilities	44,653,142	350,548
Total liabilities	54,004,809	715,274
DEFERRED INFLOWS OF RESOURCES	1,732,279	1,460
NET POSITION		
Net investment in capital assets	12,816,190	
Restricted:		
Nonexpendable: Endowments and gifts	1,111,083	3,700,049
Nonexpendable: Minority interests	36,766	
Expendable: Endowments and gifts	6,084,997	3,741,932
Expendable: Other, including debt service, loans, capital projects and appropriations	461,402	
Unrestricted	(11,039,040)	94,869
Total net position	\$9,471,398	\$7,536,850

See accompanying Notes to Financial Statements.

## STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

Year ended June 30, 2016 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA	CAMPUS FOUNDATIONS
OPERATING REVENUES		
Student tuition and fees, net	\$4,132,352	
Grants and contracts, net:		
Federal	3,244,529	
State	443,194	
Private	1,284,753	
Local	300,119	
Medical centers, net	10,235,900	
Educational activities, net	2,972,830	
Auxiliary enterprises, net	1,429,985	
Department of Energy laboratories	1,259,768	
Campus foundation private gifts		\$780,983
Other operating revenues, net	962,394	11,492
Total operating revenues	26,265,824	792,475
OPERATING EXPENSES		
Salaries and wages	14,021,131	
Pension benefits	2,686,688	
Retiree health benefits	1,448,105	
Other employee benefits	2,823,986	
Supplies and materials	3,108,907	
Depreciation and amortization	1,804,046	
Department of Energy laboratories	1,252,842	
Scholarships and fellowships	651,565	
Utilities	282,692	
Campus foundation grants	202,032	889,278
Other operating expenses	4,410,718	25,890
Total operating expenses	32,490,680	915,168
Operating loss	(6,224,856)	(122,693)
NONOPERATING REVENUES (EXPENSES)	(0)== 1,000)	(:==,==,
State educational appropriations	3,048,384	
State hospital fee grants	15,137	
Build America Bonds federal interest subsidies	58,550	
Federal Pell Grants	376,264	
Private gifts, net	1,091,519	
Investment income:	1,091,519	
Short Term Investment Pool and other, net	222 222	
	233,232	
Endowment, net	71,761	415
Securities lending, net	6,282	415
Campus foundations	(472.200)	52,826
Net appreciation (depreciation) in fair value of investments	(473,308)	(225,237)
Interest expense	(693,027)	(35)
Loss on disposal of capital assets	(47,070)	2.160
Other nonoperating revenues (expenses)	(7,406)	3,168
Net nonoperating revenues (expense)	3,680,318	(168,863)
Loss before other changes in net position OTHER CHANGES IN NET POSITION	(2,544,538)	(291,556)
Capital gifts and grants, net	248,705	
State capital appropriations	4,156	
Permanent endowments	30,008	278,077
Decrease in net position	(2,261,669)	(13,479)
NET POSITION	,,,,	,,
Beginning of year, as previously reported	11,201,530	8,081,866
Cumulative effect of reporting entity changes	531,537	(531,537)
		7,550,329
Beginning of year, restated	11,733,067	7,330,329

 ${\it See \ accompanying \ Notes \ to \ Financial \ Statements.}$ 

## STATEMENTS OF CASH FLOWS

Year ended June 30, 2016 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA	CAMPUS FOUNDATIONS
CASH FLOWS FROM OPERATING ACTIVITIES		
Student tuition and fees	\$4,131,891	
Grants and contracts	5,822,944	
Medical centers	10,227,768	
Educational activities	3,018,794	
Auxiliary enterprises	1,432,083	
Collection of loans from students and employees	73,285	
Campus foundation private gifts		\$679,092
Payments to employees	(14,048,211)	
Payments to suppliers and utilities	(7,552,418)	
Payments for pension benefits	(2,609,177)	
Payments for retiree health benefits	(325,493)	
Payments for other employee benefits	(2,837,415)	
Payments for scholarships and fellowships	(651,600)	
Loans issued to students and employees	(69,701)	
Payments to campuses and beneficiaries	(3.7, 3.7)	(918,027)
Other receipts	696,852	17,955
Net cash used by operating activities	(2,690,398)	(220,980)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,
State educational appropriations	3,051,306	
Federal Pell Grants	375,675	
State hospital fee grants	15,137	
Gifts received for other than capital purposes:	15,157	
Private gifts for endowment purposes	31,395	234,005
Other private gifts	1,065,909	234,003
Receipt of retiree health contributions from UCRP	60,769	
Payment of retiree health contributions to UCRHBT	(60,123)	
Receipts from UCRHBT	336,708	
Payments for retiree health benefits made on behalf of UCRHBT	(345,613)	
Student direct lending receipts	762,127	
Student direct lending receipts  Student direct lending payments		
Commercial paper financing:	(762,103)	
• •	12 200	
Proceeds from issuance	12,300	
Payments of principal	(20,670)	(6,000)
Other receipts (payments)	528,614	(6,909)
Net cash provided by noncapital financing activities  CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	5,051,431	227,096
Commercial paper financing:	676 700	
Proceeds from issuance	676,700	(070)
Payments of principal	(715,395)	(970)
Interest paid	(3,457)	
State capital appropriations	5,319	
State financing appropriations	445	
Build America Bonds federal interest subsidies	58,438	
Capital gifts and grants	131,012	
Proceeds from debt issuance	2,045,061	
Proceeds from the sale of capital assets	46,037	
Purchase of capital assets	(2,669,898)	
Refinancing or prepayment of outstanding debt	(527,882)	
Scheduled principal paid on debt and capital leases	(518,713)	
Interest paid on debt and capital leases	(811,520)	
Net cash used by capital and related financing activities	\$(2,283,853)	\$(970)

 ${\it See \ accompanying \ Notes \ to \ Financial \ Statements}.$ 

## UNIVERSITY OF CALIFORNIA

## **STATEMENTS OF CASH FLOWS** continued

Year ended June 30, 2016 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA	CAMPUS FOUNDATIONS
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from sales and maturities of investments	\$104,492,954	\$1,706,275
Purchase of investments	(104,786,465)	(1,763,467)
Investment income, net of investment expenses	323,973	48,682
Net cash provided (used) by investing activities	30,462	(8,510)
Net increase (decrease) in cash and cash equivalents	107,642	(3,364)
Cash and cash equivalents, beginning of year	158,923	198,276
Cash and cash equivalents, end of year	\$266,565	\$194,912
RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY OPERATIN	NG ACTIVITIES	
Operating loss	\$(6,224,856)	\$(122,693)
Adjustments to reconcile operating loss to net cash used by operating activities:		
Depreciation and amortization expense	1,804,046	
Noncash gifts	.,,	(83,350)
Allowance for uncollectible accounts	268,673	6,591
Loss on impairment of capital assets	10,127	7,22
Change in assets and liabilities:	,	
Investments held by trustees	(10,247)	
Accounts receivable	(319,228)	754
Pledges receivable	(* - ', - ',	(32,875)
Inventories	(7,223)	
Other assets	(100,322)	(681)
Accounts payable	132,482	5,681
Accrued salaries	(78,293)	
Employee benefits	(25,244)	
Unearned revenue	107,436	1,219
Department of Energy	66,348	
Self-insurance	76,621	
Obligations to under life income agreements		(8,533)
Net pension liability	506,299	
Obligations for retiree health benefits	1,066,760	
Other liabilities	36,223	12,907
Net cash used by operating activities	\$(2,690,398)	\$(220,980)
SUPPLEMENTAL NONCASH ACTIVITIES INFORMATION		
Capital assets acquired through capital leases	\$67,030	
Capital assets acquired with a liability at year-end	66,386	
Change in fair value of interest rate swaps classified as hedging derivatives	(61,030)	
Gifts of capital assets	111,836	
Other noncash gifts	31,132	\$131,084

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, 2016 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM (UCRS)	UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST (UCRHBT)	TOTAL UCRS AND UCRHBT
ASSETS			
Investments	\$73,196,935	\$53,604	\$73,250,539
Participants' interests in mutual funds	2,767,673		2,767,673
Investment of cash collateral	6,751,492		6,751,492
Participant 403(b) loans	178,664		178,664
Accounts receivable:			
Contributions from University and affiliates	118,246	19,297	137,543
Investment income	95,610		95,610
Securities sales and other	178,454	24	178,478
Prepaid insurance premiums		15,277	15,277
Total assets	83,287,074	88,202	83,375,276
LIABILITIES			
Payable to University		15,661	15,661
Payable for securities purchased	1,658,231		1,658,231
Member withdrawals, refunds and other payables	297,089		297,089
Collateral held for securities lending	6,749,519		6,749,519
Total liabilities	8,704,839	15,661	8,720,500
NET POSITION HELD IN TRUST			
Members' defined benefit plan benefits	54,225,589		54,225,589
Participants' defined contribution plan benefits	20,356,646		20,356,646
Retiree health benefits		72,541	72,541
Total net position held in trust	\$74,582,235	\$72,541	\$74,654,776

See accompanying Notes to Financial Statements.

## UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM AND RETIREE HEALTH BENEFIT TRUST

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

Year ended June 30, 2016 (in thousands of dollars)	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM (UCRS)	UNIVERSITY OF CALIFORNIA RETIREE HEALTH BENEFIT TRUST (UCRHBT)	TOTAL UCRS AND UCRHBT
ADDITIONS (REDUCTIONS)			
Contributions:			
Members and employees	\$2,020,972		\$2,020,972
Retirees		\$65,705	65,705
State	96,000		96,000
University	2,434,180	310,320	2,744,500
Total contributions	4,551,152	376,025	4,927,177
Investment income (expense), net:			
Net (depreciation) in fair value of investments	(2,300,033)		(2,300,033)
Interest, dividends and other investment income	1,272,141	155	1,272,296
Securities lending income	60,415		60,415
Securities lending fees and rebates	(16,440)		(16,440)
Total investment income, net	(983,917)	155	(983,762)
Interest income from contributions receivable	1,771		1,771
Total additions	3,569,006	376,180	3,945,186
DEDUCTIONS			
Benefit payments:			
Retirement payments	2,170,775		2,170,775
Member withdrawals	136,249		136,249
Cost-of-living adjustments	430,795		430,795
Lump sum cash outs	285,780		285,780
Preretirement survivor payments	46,835		46,835
Disability payments	30,769		30,769
Death payments	9,377		9,377
Participant withdrawals	1,231,279		1,231,279
Total benefit payments	4,341,859		4,341,859
Insurance premiums:	· · · · · ·		
Insured plans		209,180	209,180
Self-insured plans		131,637	131,637
Medicare Part B reimbursements		9,724	9,724
Total insurance premiums, net		350,541	350,541
Other deductions:			
Plan administration	48,381	3,743	52,124
Other	10,434	3,7 13	10,434
Total other deductions	58,815	3,743	62,558
Total deductions	4,400,674	354,284	4,754,958
Increase (decrease) in net position held in trust	(831,668)	21,896	(809,772)
NET POSITION HELD IN TRUST			
Beginning of year	75,413,903	50,645	75,464,548
End of year	\$74,582,235	\$72,541	\$74,654,776

See accompanying Notes to Financial Statements.

UNIVERSITY OF CALIFORNIA

# Notes to Financial Statements

Year ended June 30, 2016

#### **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 fiduciary responsibility 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.

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 GASB requirements as discretely presented component units of the University. The Regents 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.

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) that includes two defined benefit plans, the University of California Retirement Plan (UCRP) and the University of California Public Employees' Retirement System (PERS) Voluntary Early Retirement Incentive Plan (PERS-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). The UCRHBT statements of trust's fiduciary net position and changes in trust's fiduciary net position are shown separately 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).

In February 2015, the GASB issued Statement No. 72, *Fair Value Measurement and Application*, effective for the University's fiscal year beginning July 1, 2015. This Statement establishes standards for accounting and financial reporting for fair value measurements. The Statement requires investments to be measured at fair value and permits the use of net asset value as the fair value when an investment does not have a readily determinable fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Implementation of Statement No. 72 resulted in additional disclosures of investments and other assets reported at fair value within the fair value hierarchy.

In June 2015, the GASB issued Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68, effective for the University's fiscal year beginning July 1, 2015. This Statement establishes requirements for those pensions and pension plans that were not covered by Statements 67 and 68, specifically those not administered through a trust meeting specified criteria. Implementation of Statement No. 73 had no impact on the financial statements for the year ended June 30, 2016.

In June 2015, the GASB issued Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments, effective for the University's fiscal year beginning July 1, 2015. This Statement reduces the GAAP hierarchy to two categories of authoritative GAAP from the four categories under GASB Statement No. 55, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments. The first category of authoritative GAAP consists of GASB Statements of Governmental Accounting Standards. The second category comprises GASB Technical Bulletins and Implementation Guides, as well as guidance from the American Institute of Certified Public Accountants that is cleared by the GASB. Implementation of Statement No. 76 had no impact on the financial statements for the year ended June 30, 2016.

In August 2015, the GASB issued Statement No. 77, *Tax Abatement Disclosures*, effective for the University's fiscal year beginning July 1, 2016. This Statement requires governments to disclose information about their own tax abatements separately from information about tax abatements that are entered into by other governments that reduce the reporting government's tax revenues. The purpose of this Statement is to increase transparency in regards to tax abatements governments enter into and make the impact of these agreements more apparent to users of the financial statements. Implementation of Statement No. 77 had no impact on the financial statements for the year ended June 30, 2016.

In December 2015, the GASB issued Statement No. 79, *Certain External Investment Pools and Pool Participants*, effective for the University's fiscal year beginning July 1, 2015. This Statement establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. Implementation of Statement No. 79 had no impact on the financial statements for the year ended June 30, 2016.

GASB Statement No. 80, Blending Requirements for Certain Component Units — An Amendment of GASB Statement No. 14, was adopted by the University during the year ended June 30, 2016. Statement No. 80 amends the blending requirements established in paragraph 53 of amended Statement No. 14, The Financial Reporting Entity, for the financial statement presentation of component units of all state and local governments. The additional criterion requires blending of a component unit incorporated as a not-for-profit corporation in which the primary government is the sole corporate member. The additional criterion does not apply to component units included in the financial reporting entity pursuant to the provisions of Statement No. 39, Determining Whether Certain Organizations are Component Units — An Amendment of GASB Statement No. 14. CHRCO, combined with its foundation, was previously reported as a discretely presented component unit of the University and with the accounting change became a blended component used unit of the University. The cumulative effect of this accounting change increased the net position at the beginning of the year for the University by \$531.5 million and decreased the net position at the beginning of the year for the University's discretely presented component units by the same amount. The adoption of Statement No. 80 did not result in any adjustments to the financial statements of UCRS or UCRHBT.

In April 2016, the GASB issued Statement No. 82, *Pension Issues — An Amendment of GASB Statements No. 67, No. 68, and No. 73*, effective for the University's fiscal year beginning July 1, 2016. The University has elected to early implement this Statement, effective July 1, 2015. This Statement clarifies or amends Statements No. 67, 68 and 73 and specifically addresses the issues of presentation of payroll related measures in required supplementary information, the selection of assumptions and the treatment of deviations from guidance in Actuarial Standards of Practice for financial reporting purposes, and classification of payments made by employers to satisfy plan member contribution requirements. Implementation of Statement No. 82 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 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 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, 2016.

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

For other investments, the 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. Estimates of the fair value of interests in externally held irrevocable trusts where the University is the beneficiary of either the income or the remainder that will not become a permanent endowment upon distribution to the University are based upon the present value of the expected future income or, if available, the University's proportional interest in the fair value of the trust assets.

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. Securities in these investment pools are included in the University's security lending program. Accordingly, the campus foundation's 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.

Funds held by trustees. The University and campus foundations have been named the irrevocable beneficiary for charitable remainder trusts for which the University and campus foundations are not the trustee. Upon maturity of each trust, the remainder of the trust corpus will be transferred to the University or the respective campus foundation. These funds cannot be sold, disbursed or consumed until a specified number of years have passed or a specific event has occurred. The University and campus foundations are also an income beneficiary of certain trusts where the assets are invested and administered by outside trustees.

Consistent with the University's and campus foundations' recognition policy for pledges of endowments, receivables and contribution revenue associated with these trusts are not reflected in the accompanying financial statements. The University and campus foundations recognize contribution revenue when all eligibility requirements have been met.

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 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 for services.

*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. Receivables and contribution revenue associated with externally held investment trusts are not reflected in the accompanying financial statements. The University recognizes contribution revenue when all eligibility requirements have been met.

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 fair value at the date of donation in the case of gifts. Estimates of fair 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 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 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 any income beneficiary interest is reported as a liability in the statement of net position. Gifts subject to such agreements are recorded as revenue, net of the income beneficiary share, at the date of the gift. Actuarial gains and losses are included in other nonoperating income (expense) in the statement of revenues, expenses and changes in net position. Resources that are expendable upon maturity are classified as restricted, expendable net position; all others are classified as restricted, nonexpendable 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 revalued 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, 2016 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 applies 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 remaining life of the old debt, or the new debt, whichever is shorter.

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 not included in pension expense are reported as deferred outflows of resources or deferred inflows of resources. Employer contributions subsequent to the measurement date of the net pension liability 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, are 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 are 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 are classified as expendable net position.

*Unrestricted.* The net position that is not subject to externally imposed restrictions governing their use are 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.

Expenses are charged to either restricted or unrestricted net position based upon a variety of factors, including 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 reserves.

*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 year ended June 30, 2016 are as follows:

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, 2016, the facilities and administrative cost recovery totaled \$1.0 billion, which consisted of \$745.6 million from federally sponsored programs and \$279.4 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 plan's fiduciary net position. 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 and is reimbursed by the DOE based upon rates authorized by The Regents. 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 expense and revenue, respectively, in the statement of revenues, expenses and changes in net position.

Retiree health benefits and obligations for retiree health benefits. The University's cost for campus and medical center retiree health benefits expense is based upon the annual required contribution to the retiree health plan, as actuarially determined. Campus and medical center contributions toward retiree health benefits, at rates determined by the University, are made to UCRHBT and reduce the obligation for retiree health benefits in the statement of net position.

LBNL participates in the University's retiree health plans. The annual required contribution for LBNL is actuarially determined independently from the University's campuses and medical centers, and is included with the DOE laboratory expense in the statement of revenues, expenses and changes in net position. 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. These contributions, in the form of direct payments, also reduce the University's obligation for retiree health benefits in the statement of net position. The reimbursement from the DOE is 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 obligation for retiree health benefits attributable to LBNL. The University does not have any obligation 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 who previously worked at a campus or medical center. 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). Because the University is a state institution, related income received by the University is also exempt from federal tax under IRC Section 115(a). 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 exempt under Section 501(c)(3). CHRCO and its component unit, the Children's Hospital and Research Center Foundation, are exempt under Section 501(c)(3). Income received by UCRHBT is tax-exempt under 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 June 2015, the GASB issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, effective for the University's fiscal year beginning July 1, 2016. This Statement addresses the financial reports of defined benefit other postemployment benefits (OPEB) plans that are administered through trusts that meet specified criteria. The Statement follows the framework for financial reporting of defined benefit OPEB plans in Statement No. 45 by requiring a statement of fiduciary net position and a statement of changes in fiduciary net position. The Statement requires note disclosures and required supplementary information (RSI) related to the measurement of the OPEB liabilities for which assets have been accumulated, including information about the annual money-weighted rates of return on plan investments. Additionally, Statement No. 74 sets forth note disclosure requirements for defined contribution OPEB plans. Statement No. 74 will affect the information presented in the footnotes to the financial statements and required supplementary information for UCRHBT. The University is evaluating the effect that Statement No. 74 will have on its financial statements.

In June 2015, the GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, effective for the University's fiscal year beginning July 1, 2017. This Statement revises existing standards for measuring and reporting retiree health benefits provided by the University to its employees. This Statement requires recognition of a liability equal to the net retiree health benefit liability, which is measured as the total retiree health benefit liability, less the amount of the UCRHBT's fiduciary net position. The total retiree health benefit liability is determined based upon discounting projected benefit payments based on claims costs, the benefit terms and legal agreements existing at the UCRHBT's fiscal year end. Projected benefit payments are required to be 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. The Statement requires that most changes in the net retiree health benefit liability be included in retiree health benefit expense in the period of change. As of June 30, 2016, the University reported a retiree health benefit obligation of \$10.5 billion. Under Statement No. 75, the University's OPEB obligation is expected to increase. The University is evaluating the effect that Statement No. 75 will have on its financial statements.

In December 2015, the GASB issued Statement No. 78, Pensions Provided Through Certain Multiple-Employer Defined Benefit Pension Plans, effective for the University's fiscal year beginning July 1, 2016. This Statement amends the scope and applicability of Statement No. 68, Accounting and Financial Reporting for Pensions, to exclude pensions provided to employees of state or local governmental employers through a cost-sharing multiple-employer defined benefit pension plan that (1) is not a state or local governmental pension plan, (2) is used to provide defined benefit pensions both to employees of state or local governmental employers and to employees of employers that are not state or local governmental employers, and (3) has no predominant state or local governmental employer (either individually or collectively with other state or local governmental employers that provide pensions through the pension plan). This Statement establishes requirements for recognition and measurement of pension expense, expenditures and liabilities; note disclosures; and required supplementary information for pensions that have the characteristics described above. The University is evaluating the effect that Statement No. 78 will have on its financial statements.

In March 2016, the GASB issued Statement No. 81, *Irrevocable Split-Interest Agreements*, effective for the University's fiscal year beginning July 1, 2017. This statement addresses when Irrevocable Split-Interest Agreements constitute an asset for accounting and financial reporting purposes when the resources are administered by a third party. The Statement also provides expanded guidance for circumstances in which the government holds the assets. The University is evaluating the effect that Statement No. 81 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. In 2012, ratings for one of the University's banks were lowered below these thresholds. The University approved an exception for this institution and continues to monitor the institution's financial condition. At June 30, 2016, the carrying amount of the University's demand deposits, generally held in five nationally recognized banking institutions, was \$266.6 million, compared to bank balances of \$230.5 million. 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 \$5.1 million at June 30, 2016.

The carrying amount of the campus foundations' cash and cash equivalents at June 30, 2016 was \$194.9 million, compared to bank balances of \$162.9 million. 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 \$29.9 million at June 30, 2016, with the remaining uncollateralized bank balances insured by the Federal Deposit Insurance Corporation (FDIC). Uncollateralized bank balances include \$6.7 million in excess of the FDIC limits at June 30, 2016. 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 allocation guidelines are provided to the campus foundations by the Committee on Investments 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 long-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 is not managed by the Chief Investment Officer and totaled \$2.8 billion at June 30, 2016.

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 28 days at June 30, 2016. The fair value of UCRHBT's investment in this portfolio was \$53.6 million at June 30, 2016. These are measured at net asset value as of June 30, 2016.

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEN
Equity securities:			
Domestic	\$1,979,452	\$294,314	\$15,490,564
Foreign	1,306,340	24,487	7,855,227
Equity securities	3,285,792	318,801	23,345,791
Fixed- or variable-income securities:			
U.S. government-guaranteed:			
U.S. Treasury bills, notes and bonds	443,380	299,286	1,886,713
U.S. Treasury strips	292,098	235	568,605
U.S. TIPS	315,226		2,655,968
U.S. government-backed securities		42	
U.S. government-backed - asset-backed securities	20,749	1,240	8,253
U.S. government-guaranteed	1,071,453	300,803	5,119,539
Other U.S. dollar-denominated:			
Corporate bonds	4,659,480	27,170	4,155,499
Commercial paper	2,812,619		143,139
U.S. agencies	1,946,581	300	4,256,013
U.S. agencies - asset-backed securities	532,609	55,592	2,814,309
Corporate - asset-backed securities	386,261	52,182	1,636,572
Supranational/foreign	1,301,968	7,755	1,961,695
Other	66,731	814	28,382
Other U.S. dollar-denominated	11,706,249	143,813	14,995,609
Foreign currency-denominated:		-	
Corporate			3,890
Foreign currency-denominated			3,890
Commingled funds:			
Absolute return funds	3,168,124	1,878,461	4,626,070
Non-U.S. equity funds	2,883,950	838,113	7,502,378
Private equity	1,180,827	621,712	2,822,693
Money market funds	505,489	754,942	4,589,358
U.S. equity funds	507,587	574,231	3,281,925
Real estate investment trusts	9,439	95,519	515,960
Real assets	182,861		960,923
U.S. bond funds	32,747	109,386	1,677,872
Non-U.S. bond funds	44,720	29,452	
Balanced funds	182,516	1,051,146	
Commingled funds	8,698,260	5,952,962	25,977,179
Investment derivatives	8,227	2,776	25,921
Publicly traded real estate investment trusts	100,606		750,056
Mortgage loans	319,038		
Real estate	937,421	116,536	2,978,950
Other investments	13,786	279,587	
Campus foundations' investments with the University	(1,604,216)		
UCRS investment in the STIP	(2,327,849)		
Total investments	22,208,767	7,115,278	\$73,196,935
Less: Current portion	(4,944,611)	(479,410)	<u> </u>
Less. Current portion	(1/2 1 1/0 1 1/	(., , , )	

#### **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 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. Effective September 2008, Fannie Mae and Freddie Mac were placed under the conservatorship of the Federal Housing Finance Agency. At the same time, the U.S. Treasury put in place a set of financing agreements to ensure Fannie Mae and Freddie Mac have the ability to fulfill their obligations to holders of bonds that they have issued or guaranteed.

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 the two-year Treasury). 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 US Aggregate Bond Index, comprised of 34.9% corporate bonds and 22.2% mortgage/asset-backed bonds, all of which carry some degree of credit risk. The remaining 42.9% 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 May 2016 mandate that no more than 10 percent of the market value of fixed-income securities may be invested in issues with credit ratings below investment grade, and thereafter, new guidelines were approved that limit the amount below investment grade to 15 percent. Further, the weighted average credit rating must be A or higher.

In addition, the investment policy for both UCRP and GEP allows 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, 2016 is as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Fixed- or variable-income securities:			
U.S. government-guaranteed	\$1,071,453	\$300,803	\$5,119,539
Other U.S. dollar-denominated:			
AAA	293,301	14,341	1,176,010
AA	930,816	39,837	3,419,468
A	1,894,608	5,289	1,040,084
BBB	2,737,919	20,048	2,606,436
BB	562,163	3,259	1,192,376
В	254,948	4,945	872,055
CCC or below	55,117	24,023	358,512
A-1 / P-1/ F-1	12,536		1,949
Not rated	4,964,841	32,071	4,328,719
Foreign currency-denominated:			
Not rated			3,890
Commingled funds:			
U.S. bond funds: Not rated	32,747	109,386	1,677,872
Non-U.S. bond funds: Not rated	44,720	29,452	
Money market funds: Not rated	505,489	754,942	4,589,358
Mortgage loans: Not rated	319,038		

#### **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 are 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 U.S. 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 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, 2016 are as follows:

(in thousands of dollars)	
	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS
Bayside Partners, LP	\$91,295

#### 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 limit weighted average effective duration to the effective duration of the benchmarks (Barclays Capital US Aggregate Index), plus or minus 10 percent. Similarly, portfolio guidelines for the fixed-income portion of UCRS and GEP limit weighted average effective duration to the effective duration of their benchmarks (Barclay's Capital US Aggregate Index), plus or minus 20 percent. These portfolio guidelines constrain the potential price movement due to interest rate changes of the portfolio to be 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, 2016 are as follows:

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Fixed- or variable-income securities:			
U.S. government-guaranteed:			
U.S. Treasury bills, notes and bonds	1.2	3.0	1.7
U.S. Treasury strips	7.5	19.3	7.8
U.S. TIPS	4.7		4.7
U.S. government-backed securities		0.7	
U.S. government-backed - asset-backed securities	1.5	4.2	1.9
Other U.S. dollar-denominated:			
Corporate bonds	2.9	2.8	6.1
U.S. agencies	2.1	7.3	1.7
U.S. agencies - asset-backed securities	2.9	3.8	2.5
Corporate - asset-backed securities	4.5	0.4	2.5
Supranational/foreign	2.9	2.7	5.8
Other	17.4	2.8	16.2
Foreign currency-denominated:			
Corporate	7.8		4.3
Commingled funds:			
U.S. bond funds*	4.1	4.8	3.7
Non-U.S. bond funds	7.2	6.0	
Money market funds**		1.3	

 $<sup>{\</sup>it *The \ University \ considers \ the \ modified \ durations \ for \ commingled \ funds.}$ 

<sup>\*\*</sup>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, although the effective durations of these securities may be low.

At June 30, 2016 the fair values of such investments are as follows:

(in thousands o	f dollars)
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	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Mortgage-backed securities	\$635,961	\$50,366	\$3,076,953
Collateralized mortgage obligations	173,385	32,583	507,526
Other asset-backed securities	92,843	21,758	718,940
Variable-rate securities	59,738		69,273
Callable bonds	1,892,892		5,882,116
Total	\$2,854,819	\$104,707	\$10,254,808

*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, 2016 the effective durations for these securities are as follows:

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Mortgage-backed securities	4.0	3.8	2.8
Collateralized mortgage obligations	2.4	1.1	2.2
Other asset-backed securities	2.2	(0.4)	1.4
Variable-rate securities	1.8		3.0
Callable bonds	3.7		3.8

#### 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 an essential 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 (10 percent and 20 percent, respectively).

At June 30, 2016 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
Equity securities:			
Euro	\$361,718		\$2,175,068
British pound	244,974	\$1,388	1,473,068
Japanese yen	215,890		1,298,182
Canadian dollar	77,602	7,556	466,630
Swiss franc	96,146		578,144
Australian dollar	57,003	46	342,768
Hong Kong dollar	27,517		165,462
Swedish krona	33,033		198,633
Singapore dollar	10,836		65,158
Danish kone	14,184		85,287
Norwegian krone	8,340		50,152
South Korean won	48,976	14,140	294,499
Indian rupee	25,057		150,671
New Taiwan dollar	20,720		124,590
Other	64,344	1,357	386,915
Subtotal	1,306,340	24,487	7,855,227
Fixed-income securities:		•	
Euro			1,779
Other			2,111
Subtotal			3,890
Commingled funds (various currency denominations):			
Non-U.S. equity funds	2,883,950	547,487	7,502,378
Balanced funds		238,192	
U.S. bond funds		2,709	
Non-U.S. bond funds	44,720	3,229	
Real estate investment trusts	,	17,103	
Real assets	9,145	,	51,820
Subtotal	2,937,815	808,720	7,554,198
nvestment derivatives:			
Australian dollar	1,439		64
Canadian dollar	33		266
British pound	2,263		17,058
Japanese yen	(893)		64
Hong Kong dollar	(2,142)		203
Other	259		1,219
Subtotal	959		18,874
Private equity:			
Euro		44,844	93,095
Other		8,698	22,382
Publicly traded real estate investment trusts:		-,	,
Australian dollar	6,562		44,160
Euro	5,851		39,377
British pound	4,106		27,632
Japanese yen	4,388		29,527
South African rand	1,097		7,381
Singapore dollar	810		5,454
Canadian dollar	881		5,927
Mexican peso	446		3,004
Other	559		3,764
Subtotal	24,700	53,542	281,703
	27,700	JJ,J72	201,703

## Liquidity Risks

Alternative investments are subject to liquidity risk. Alternative investments include hedge funds, limited partnerships, private equity, venture capital funds, real estate and real assets funds. Additionally, certain asset-backed securities are thinly traded and subject to liquidity risk.

Alternative investments include ownership interests in a wide variety of vehicles including partnerships and corporations that may be domiciled in the United States or offshore. Generally, there is little or no regulation of these investment vehicles by the Securities and Exchange Commission or the applicable state agencies. Managers of these investments employ a wide variety of strategies and have areas of concentration including absolute return, venture capital or early stage investing, private equity or later stage investing and the underlying investments may be leveraged to enhance the total investment return. Each asset class has guidelines and policies regarding the use of leverage. Such underlying investments may include financial assets such as marketable securities, non-marketable securities, derivatives and other synthetic and structured investments as well as tangible and intangible assets.

Alternative investments do not have a ready market and ownership interests in these investment vehicles may not be traded without the approval of the general partner or fund management. These investments are subject to the risks generally associated with equities and fixed-income instruments with additional risks due to leverage and the lack of a ready market for acquisition or disposition of ownership interests.

The University's portfolio includes the following investments subject to liquidity risk as of June 30, 2016:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Absolute return funds	\$3,168,124	\$1,878,461	\$4,626,070
Private equity funds	1,180,827	621,712	2,822,693
Real estate funds	937,421	116,536	2,978,950
Real assets funds	182,861		960,923
Total	\$5,469,233	\$2,616,709	\$11,388,636

## The University's Investment Pools

The composition of the University's investments at June 30, 2016, by investment pool, are as follows:

in	thousands	of dollars)

	UNIVERSITY OF CALIFORNIA				
	STIP	TRIP	GEP	OTHER	TOTAL
Equity securities:					
Domestic		\$1,146,426	\$727,457	\$105,569	\$1,979,452
Foreign		545,738	725,650	34,952	1,306,340
Fixed- or variable-income securities:					
U.S. government-guaranteed	\$186,557	478,848	397,424	8,624	1,071,453
Other U.S. dollar-denominated	7,701,979	3,472,313	508,083	23,874	11,706,249
Commingled funds	94,408	2,484,288	4,529,132	226,744	7,334,572
Investment derivatives		28	8,176	23	8,227
Publicly traded real estate investment trusts		50,082	45,861	4,663	100,606
Private equity		106,170	1,063,638	11,019	1,180,827
Mortgage loans	319,038				319,038
Real assets			182,861		182,861
Real estate		373,354	528,850	35,217	937,421
Other investments				13,786	13,786
Subtotal	8,301,982	8,657,247	8,717,132	464,471	26,140,832
Campus foundations' investments with the University	(693,159)	(19,398)	(785,515)	(106,144)	(1,604,216)
UCRS investment in the STIP	(2,327,849)				(2,327,849)
Total investments	\$5,280,974	\$8,637,849	\$7,931,617	\$358,327	\$22,208,767

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, 2016, were 0.3 percent for TRIP, (3.4) percent for GEP and (2.0) percent for UCRS. The investment return for STIP distributed to participants, representing combined income and realized gains or losses, during the same periods, was 1.3 percent. Other investments consist of numerous, small portfolios of investments 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, 2016 are as follows:

(in thousands of dollars)	
STIP	\$693,159
TRIP	19,398
GEP	785,515
Other investment pools	106,144
Campus foundations' investments with the University	1,604,216
Classified as cash and cash equivalents by campus foundations	(28,183)
Classified as investments by campus foundations	\$1,576,033

Endowment 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 \$18.3 million for the year ended June 30, 2016.

#### **UCRS**

UCRS had \$2.3 billion invested in STIP at June 30, 2016. 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 \$30.1 million for the year ended June 30, 2016.

## 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, 2016 are as follows:

(in thousands of dollars)	
Short-term investments:	
STIP	\$86,176
GEP	224,821
Other investment pools	16,432
Total agency assets	\$327,429
Funds held for others	\$327,429

The composition of the net position at June 30, 2016 for STIP and GEP are as follows:

(in thousands of dollars)	STIP	GEP
Investments	\$8,301,982	\$8,717,132
Investment of cash collateral	38,760	356,794
Securities lending collateral	(38,748)	(356,764)
Other assets, net	2,428,681	211,974
Net position	\$10,730,675	\$8,929,136

Other assets include amounts receivable for pension benefits from the campuses and medical centers of \$2.3 billion at June 30, 2016.

The changes in net position for STIP and GEP for the year ending June 30, 2016 are as follows:

(in thousands of dollars)	STIP	GEP
Net position, beginning of year	\$12,258,256	\$8,921,362
Investment income	141,298	77,911
Net appreciation (depreciation) in fair value of investments	3,724	(382,996)
Transfer to TRIP	(1,768,504)	
Participant contributions (withdrawals), net	95,901	312,859
Net position, end of year	\$10,730,675	\$8,929,136

#### 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, 2016, the securities in these pools had a weighted average maturity of

34 days. 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, 2016, 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, 2016 are as follows:

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
SECURITIES LENT			
For cash collateral:			
Equity securities:			
Domestic	\$428,032		\$3,910,177
Foreign	35,420		124,796
Fixed-income securities:			
U.S. government-guaranteed	120,898		990,162
Other U.S. dollar-denominated	270,848		1,639,228
Foundations' share	(41,973)	\$41,973	
Lent for cash collateral	813,225	41,973	6,664,363
For securities collateral:			
Equity securities:			
Domestic	215,992		1,823,980
Foreign	148,851		667,413
Fixed-income securities:			
U.S. government-guaranteed	111,328		2,526,750
Other U.S. dollar-denominated	134,092		510,090
Lent for securities collateral	610,263		5,528,233
Total securities lent	\$1,423,488	\$41,973	\$12,192,596
COLLATERAL RECEIVED			
Cash	\$866,650		\$6,749,519
Foundations' share	(41,973)	\$41,973	
Total cash collateral received	824,677	41,973	6,749,519
Securities	655,859		5,941,27
Total collateral received	\$1,480,536	\$41,973	\$12,690,790
INVESTMENT OF CASH COLLATERAL			
Fixed-income securities:			
Other U.S. dollar-denominated:			
Corporate bonds	\$105,385		\$820,737
Repurchase agreements Corporate - asset-backed securities	194,582 71,220		1,515,418
•			554,664 2 592 214
Certificates of deposit/time deposits	459,963 35,716		3,582,21
Supranational/foreign	35,716		278,16
Other assets (liabilities), net*	38 (41,973)	¢41.073	29
Loundations' share		\$41,973	
Foundations' share			¢6 751 40°
Foundations' share  Investment of cash collateral  Less: Current portion	<b>824,931</b> (680,838)	<b>41,973</b> (34,641)	\$6,751,492

 $<sup>{\</sup>it *Other assets (liabilities)}, net is comprised of pending settlements of cash collateral investments.\\$ 

Noncurrent portion

\$144,093

\$7,332

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, 2016 are as follows:

(in thousands of dollars) UNIVERSITY OF UNIVERSITY OF UNIVERSITY OF CALIFORNIA **CALIFORNIA** RETIREMENT CALIFORNIA CAMPUS FOUNDATIONS SYSTEM Securities lending income \$8,840 \$581 \$60,415 Securities lending fees and rebates (2,558)(166)(16,440)Securities lending investment income, net \$6,282 \$415 \$43,975

#### **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 policies 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 policies 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, 2016 are as follows:

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Fixed- or variable-income securities:			
Other U.S. dollar-denominated:			
AAA	\$89,504		\$697,065
AA+	19,936		155,262
AA-	104,931		817,206
A+	145,590		1,133,866
A	61,267		477,147
A-	37,911		295,251
A-1 / A-2 / P-1/ F-1	213,144		1,659,981
Commingled funds:			
Other assets (liabilities) net*: Not rated	38		297
Campus foundations' share	(41,973)	\$41,973	

 $<sup>{\</sup>it *Other assets (liabilities)}, net {\it is comprised of pending settlements of cash collateral investments}.\\$ 

#### **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 policy 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 held by individual component units at June 30, 2016 are as follows:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Svenska Handelsbanken AB	\$56,331	\$438,705

#### 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 policy 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, 2016 are as follows:

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM
Fixed- or variable-income securities:		
Other U.S. dollar-denominated:		
Corporate bonds	44	44
Repurchase agreements	8	8
Corporate-asset-backed securities	18	18
Certificates of deposit/time deposits	46	46
Supranational/foreign	26	26

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, 2016 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
\$89,504		\$697,064
536,906		4,181,454
(31,125)	\$31,125	
\$595,285	\$31,125	\$4,878,518
	\$89,504 536,906 (31,125)	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS  \$89,504 536,906 (31,125) \$31,125

At June 30, 2016, the weighted average maturity expressed in days for asset-backed securities was 18 days and for variable-rate investments was 23 days.

## 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 has 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 \$40.0 million at June 30, 2016.

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2016, categorized by type, and the changes in fair value of such derivatives are as follows:

## **University of California**

(in thousands of dollars)

CATEGORY	NOTIONAL AMOUNT	CLASSIFICATION	FAIR VALUE-POSITIVE (NEGATIVE)	CLASSIFICATION	CHANGES II FAIR VALUE
INVESTMENT DERIVATIVES					
Futures contracts:					
Domestic equity futures:					
Long positions	267	Investments	\$7,256	Net appreciation (depreciation)	\$24,093
Short positions		Investments		Net appreciation (depreciation)	(2)
Foreign futures:					
Long positions	82	Investments	714	Net appreciation (depreciation)	(7,560)
Short positions	(13,377)	Investments	7,982	Net appreciation (depreciation)	12,942
Futures contracts, net			15,952		29,473
Foreign currency exchange contracts,	, net*:				
Long positions	242,859	Investments	742	Net appreciation (depreciation)	2,430
Short positions	(18,428,479)	Investments	(8,576)	Net appreciation (depreciation)	(10,835)
Futures currency exchange contracts, net			(7,834)		(8,405)
Swaps:					
Credit default swaps		Investments		Net appreciation (depreciation)	(2)
Fixed interest rate swaps		Investments		Net appreciation (depreciation)	10
Swaps, net					8
Stock rights/warrants	710	Investments	109	Net appreciation (depreciation)	248
Total investment derivatives			\$8,227		\$21,324
CASH FLOW HEDGES					
Effective interest rate swaps:					
Pay fixed, receive variable	845,655	Other assets	\$(152,123)	Deferred inflows	\$(61,030

 $<sup>*</sup>Notional\ amount\ reported\ in\ local\ currency.$ 

## **University of California Campus Foundations**

(in thousands of dollars)

CATEGORY	NOTIONAL AMOUNT	CLASSIFICATION	FAIR VALUE-POSITIVE (NEGATIVE)	CLASSIFICATION	CHANGES IN FAIR VALUE
INVESTMENT DERIVATIVES					
Options/swaptions	6,902	Investments	\$247	Net appreciation (depreciation)	\$247
Swaps	179,812		2,529		2,529
Total investment derivatives			\$2,776		\$2,776

# University of California Retirement System

(in thousands of dollars)

CATEGORY	NOTIONAL AMOUNT	CLASSIFICATION	FAIR VALUE-POSITIVE (NEGATIVE)	CLASSIFICATION	CHANGES IN FAIR VALUE
INVESTMENT DERIVATIVES					
Futures contracts:  Domestic equity futures:					
Long positions	195	Investments	\$6,886	Net appreciation (depreciation)	\$50,218
Short positions	(8,312)	Investments	133	Net appreciation (depreciation)	229
Foreign equity futures:					
Long positions	25,039	Investments	(15,237)	Net appreciation (depreciation)	(43,302)
Short positions		Investments		Net appreciation (depreciation)	(328)
Futures contracts, net			(8,218)		6,817
Foreign currency exchange contracts, net	*:				
Long positions	34,426,314	Investments	16,277	Net appreciation (depreciation)	(19,710)
Short positions	(4,500,715)	Investments	17,189	Net appreciation (depreciation)	127,570
Foreign currency exchange contracts, net			33,466		107,860
Swaps:					
Credit default swaps		Investments		Net appreciation (depreciation)	(37)
Swaps, net					(37)
Stock rights/warrants	4,704	Investments	673	Net appreciation (depreciation)	284
Options/swaptions		Investments		Net appreciation (depreciation)	1
Total investment derivatives			\$25,921		\$114,925

<sup>\*</sup>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, 2016 along with the credit rating of the associated counterparty, are as follows:

ТҮРЕ	OBJECTIVE	NOTIONAL AMOUNT	EFFECTIVE DATE	MATURITY DATE	CASH PAID OR RECEIVED	TERMS	COUNTERPARTY CREDIT RATING	FAIR VALUE
UNIVERSITY OF C	ALIFORNIA							
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	70,880	2007	2032	None	Pay fixed 3.5897%; receive 58% of 1-Month LIBOR* plus 0.48%	A1/A	\$(14,188)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	124,775	2008	2030 through 2043	None	Pay fixed 4.6359%; receive 67% of 3-Month LIBOR* plus 0.69%**	Baa2/BBB+	(57,603)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate General Revenue Bonds	400,000	2013	2023	None	Pay fixed 1.8982%; receive 70% of 1-Month LIBOR*	Aa2/AA-	(32,588)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate General Revenue Bonds	100,000	2013	2023	None	Pay fixed 1.9057%; receive 70% of 1-Month LIBOR*	Aa2/AA-	(8,199)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate General Revenue Bonds	100,000	2013	2023	None	Pay fixed 1.8980%; receive 70% of 1-Month LIBOR*	Aa2/AA-	(8,146)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	24,250	2013	2045	None	Pay fixed 4.741%; receive 67% of 3-Month LIBOR* +0.79%**	Baa2/BBB+	(14,901)
Pay fixed, receive variable interest rate swap	Hedge of changes in cash flows on variable-rate Medical Center Pooled Revenue Bonds	25,750	2013	2047	None	Pay fixed 4.741%; receive 67% of 3-Month LIBOR* +0.79%**	Baa2/BBB+	(16,498)
Interest rate swaps,	, net	845,655						\$(152,123)

<sup>\*</sup> London Interbank Offered Rate (LIBOR)

## **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 \$70.9 million notional amount. Depending on the fair value related to the swaps with the combined \$174.8 million notional amount, the University may be entitled to receive collateral from the counterparty to the extent the positive fair value exceeds \$15.0 million, or be obligated to provide collateral to the counterparty if the negative fair value of the swap exceeds \$125.0 million or the cash and investments held by the medical centers fall below \$250.0 million.

<sup>\*\*</sup>Weighted average spread

Depending on the fair value related to the swaps with the counterparty that is currently rated Aa2/AA- with a combined notional amount of \$500.0 million and the swap with the counterparty that is currently rated Aa2/AA- with a notional amount of \$100.0 million, the University may be entitled to receive collateral from each counterparty to the extent the positive fair value of the swap or swaps with each counterparty exceeds \$30.0 million. As of June 30, 2016, 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 \$70.9 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/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-. 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.

#### Subsequent Event

In August 2016, the University replaced the counterparty for certain of its interest rate swap agreements and discontinued hedge accounting on interest rate swaps with a notional value of \$174.8 million. The University recognized a decrease in net position upon hedge termination of \$43.5 million on the statement of revenues, expenses and changes in net position. The University determined that the interest rate swap agreements with the new counterparty are derivative instruments that meet the criteria for an effective hedge. These 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, the swaps consist of an at-the-market swap derivative instrument and a borrowing, represented by the up-front payment. The new counterparty's credit rating is Aa2/AA- upon the date of the transaction. There are no collateral requirements related to these new interest rate swaps. The new counterparty's credit rating is Aa2/AA- upon the date of the transaction.

#### 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 classified as Level 3 have significant unobservable inputs, as they trade infrequently or not at all. The inputs into the determination of fair value of these investments are based upon the best information in the circumstance and may require significant management judgment. Level 3 investments include private equity investments, real estate and 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, 2016:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA					
	Total	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs	Net Asset Value	Not Leveled
		(Level 1)	(Level 2)	(Level 3)	(NAV)	
Equity securities	\$3,285,792	\$3,274,412		\$11,380		
Fixed- or variable-income securities:						
U.S. government-guaranteed	1,071,453		\$1,071,453			
Other U.S. dollar-denominated	11,706,249		11,637,569	68,680		
Commingled funds	8,698,260	562,933	21,572	93,043	\$8,020,610	\$102
Investment derivatives	8,227	16,060	(7,833)			
Publicly traded real estate investment trusts	100,606	100,606				
Mortgage loans	319,038			319,038		
Real Estate	937,421			406,144	531,277	
Other investments	13,786			13,786		
Campus foundations' investments with the University	(1,604,216)					(1,604,216)
UCRS investment in STIP	(2,327,849)					(2,327,849)
Total investments	\$22,208,767	\$3,954,011	\$12,722,761	\$912,071	\$8,551,887	\$(3,931,963)
Securities lending investments of cash collateral	\$824,931		\$739,724	\$85,171		\$36
Investments held by trustees	\$850,884	\$54,769		\$5,642	\$752,618	\$37,855

(in thousands of dollars)	CAMPUS FOUNDATIONS						
	Total	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs	Net Asset Value	Not Leveled	
		(Level 1)	(Level 2)	(Level 3)	(NAV)		
Equity securities	\$318,801	\$305,930	\$4,389	\$7,848	\$36	\$598	
Fixed- or variable-income securities:							
U.S. government-guaranteed	300,803	18	300,785				
Other U.S. dollar-denominated	143,813	571	143,218	24			
Commingled funds	5,952,962	575,831	386	995	5,312,341	63,409	
Investment derivatives	2,776		2,776				
Real estate	116,536		3,750	48,707	64,079		
Other investments	279,587	4,854		162,396	110,109	2,228	
Total investments	\$7,115,278	\$887,204	\$455,304	\$219,970	\$5,486,565	\$66,235	
Securities lending investments of cash collateral	\$41,973		\$37,638	\$4,333		\$2	

(in thousands of dollars)		UNIVE	UNIVERSITY OF CALIFORNIA RETIREMENT SYSTEM						
	Total	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs	Net Asset Value	Not Leveled			
		(Level 1)	(Level 2)	(Level 3)	(NAV)				
Equity securities	\$23,345,791	\$23,344,616		\$1,175					
Fixed- or variable-income securities:									
U.S. government-guaranteed	5,119,539		\$5,119,539						
Other U.S. dollar-denominated	14,995,609		14,945,410	50,199					
Foreign currency-denominated	3,890		3,890						
Commingled funds	25,977,179	3,320,189	106,834	638,169	\$21,874,071	\$37,916			
Investment derivatives	25,921	(7,545)	33,466						
Insurance contracts	750,056	750,056							
Real estate	2,978,950			1,600,803	1,378,147				
Total investments	\$73,196,935	\$27,407,316	\$20,209,139	\$2,290,346	\$23,252,218	\$37,916			
Securities lending investments of cash collateral	\$6,751,492		\$6,054,131	\$697,064		\$297			

The following table presents significant terms of certain investments at June 30, 2016:

(in thousands of dollars)	UNIVERSITY OF CALIFORNIA					
Investment Type	Fair Value	Unfunded Commitments	Remaining life (years)	Redemption Terms and Restrictions		
Absolute return	\$3,168,124	\$1,953	0 to 5	Generally, lock up provisions ranging from 0 to 3 years. After initial lock-up expires, redemptions are available on a rolling basis and require 5 to 95 days prior notification.		
Private equities	1,180,827	431,059	0 to 15	Not eligible for redemption.		
Real assets	182,861	79,207	0 to 15	Not eligible for redemption.		
Real estate	937,421	124,673	0 to 6	Not eligible for redemption.		
Fixed Income - Other	66,731	49,739	1 to 7	Not eligible for redemption.		

(in thousands of dollars)	of dollars) CAMPUS FOUNDATIONS						
Investment Type	Fair Value	Unfunded Commitments	Remaining life (years)	Redemption Terms and Restrictions			
Absolute return	\$1,779,453		0 to 5	Generally, lock-up provisions range from 0 to 5 years. After initial lock-up expires, redemptions are available and require 30 to 180 days prior notification. Certain securities can only be sold to a Goldman Sachs approved bidder.			
Private equities	621,280	\$337,583	0 to 15	Generally, lock-up provisions range from 0 to 14 years. After initial lock-up expires, redemptions are available and require 30 days prior notification. Certain securities can only be sold to a Goldman Sachs approved bidder.			
Real assets	109,389	12,900	9	Not eligible for redemption.			
Real estate	121,510	76,332	0 to 11	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	\$4,626,070	\$3,051	0 to 5	Generally, lock up provisions ranging from 0 to 3 years. After initial lock-up expires, redemptions are available on a rolling basis and require 5 to 95 days' prior notification.		
Private equities	2,822,693	821,064	0 to 15	Not eligible for redemption.		
Real assets	960,923	296,041	0 to 15	Not eligible for redemption.		
Real estate	2,978,950	189,259	0 to 6	Not eligible for redemption.		

#### **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 separate trusts for the workers' compensation and professional medical and hospital liability programs. Securities are held by the trustees in the name of the University. The trust agreements permit the trustees to invest in equity securities, long-term and short-term debt securities, commercial paper and other securities including any common or commingled trust funds.

The composition of cash and investments and the modified duration associated with fixed-income securities for self-insurance programs at June 30, 2016 are as follows:

(in thousands of dollars)		
	INVESTMENTS AT FAIR VALUE	MODIFIED DURATION
Cash	\$37,855	
Commingled funds:		
U.S. bond funds	532,759	6.0
Money market funds	80,790	
U.S. equity funds	106,919	
Total	\$758,323	

Self-insurance investments are held in externally managed commingled funds with underlying credit ratings ranging from B to AAA, where applicable.

#### Subsequent Events

In July 2016, the University liquidated investments held by trustees for self-insurance programs and transferred to STIP \$696.6 million to its captive and the funds were invested in STIP by the captive.

# 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 \$22.8 million at June 30, 2016. 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 \$8.5 million at June 30, 2016.

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 \$58.1 million at June 30, 2016. 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	
	STATE AND FEDERAL GOVERNMENT	MEDICAL CENTERS	INVESTMENT INCOME	PRIVATE GRANTS AND CONTRACTS	MEDICAL PROFESSIONAL FEES	OTHER	TOTAL	CALIFORNIA CAMPUS FOUNDATIONS
At June 30, 2016								
Accounts receivable	\$589,875	\$1,859,862	\$53,426	\$372,664	\$268,573	\$488,019	\$3,632,419	\$32,562
Allowance for uncollectible accounts	(1,355)	(225,524)		(15,648)	(44,347)	(26,027)	(312,901)	
Accounts receivable, net	\$588,520	\$1,634,338	\$53,426	\$357,016	\$224,226	\$461,992	\$3,319,518	\$32,562

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.

The expense for uncollectible accounts have either increased (decreased) the following revenues for the year ended June 30, 2016:

(in thousands of dollars)	
Student tuition and fees	\$(1,748)
Grants and contracts:	
Federal	928
State	329
Private	(11,519)
Local	144
Medical centers	(235,526)
Educational activities	(21,516)
Auxiliary enterprises	(796)
Other operating revenues	1,031
Expense for uncollectible accounts	\$(268,673)

### **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 the year ended June 30, 2016, under the terms of these agreements, the state of California contributed \$5.3 million, including interest at 8.5 percent. At June 30, 2016, the remaining amount owed to UCRP by the state was \$17.4 million. 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, 2016 are summarized as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS
Total pledges receivable outstanding	\$64,846	\$1,060,609
Less: Unamortized discount to present value	(1,384)	(145,318)
Allowance for uncollectible pledges	(16,356)	(72,868)
Total pledges receivable, net	47,106	842,423
Less: Current portion of pledges receivable	(17,056)	(217,971)
Noncurrent portion of pledges receivable	\$30,050	\$624,452

Future receipts under pledge agreements for each of the five fiscal years subsequent to June 30, 2016 and thereafter are as follows:

(in	thousands	of dol	lars)
(111	tiiousuiius	UI UUI	iuis)

	UNIVERSITY OF CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS
Year Ending June 30		
2017	\$32,203	\$249,008
2018	12,381	131,287
2019	6,724	105,246
2020	8,625	74,049
2021	1,603	44,294
2022-2026	2,560	194,444
Beyond 2026	750	262,281
Total payments on pledges receivable	\$64,846	\$1,060,609

Adjustments to the allowance for uncollectible pledges for the University have increased the following revenues for the year ended June 30, 2016:

(in thousands of dollars)	
Private gifts	\$1,359

#### 9. NOTES AND MORTGAGES RECEIVABLE

Notes and mortgages receivable at June 30, 2016 along with the allowance for uncollectible amounts, are as follows:

(in	thousands	of doll	lars)

		UNIVERSITY O	CALIFORNIA		UNI	VERSITY OF CALIFO	RNIA	
		NONCURRENT		NONCURRENT CAMPUS FOL		AMPUS FOUNDATIO	FOUNDATIONS	
	CURRENT	NOTES	MORTGAGES	TOTAL	CURRENT	NONCURRENT	TOTAL	
At June 30, 2016								
Notes and mortgages receivable	\$60,931	\$320,523	\$24,411	\$344,934	\$6	\$1,014	\$1,020	
Allowance for uncollectible amounts	(8,259)	(17,636)	(129)	(17,765)				
Notes and mortgages receivable, net	\$52,672	\$302,887	\$24,282	\$327,169	\$6	\$1,014	\$1,020	

### 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 year ended June 30, 2016, the University recorded \$11.8 million, as its equity in the current earnings of LANS and received \$10.5 million in cash distributions.

### 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, 2016. For the year ended June 30, 2016, the University recorded \$ 12.2 million, as its equity in the current earnings of LLNS and received \$11.6 million in cash distributions.

### 11. CAPITAL ASSETS

The University's capital asset activity for the year ended June 30, 2016 is as follows:

(in th	ousands	of dol	lars)
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(in thousands of dollars)				
	2015	ADDITIONS	DISPOSALS	2016
ORIGINAL COST				
Land	\$972,954	\$191,276	\$(1,135)	\$1,163,095
Infrastructure	647,114	16,759		663,873
Buildings and improvements	33,751,460	1,732,566	(55,433)	35,428,593
Equipment, software and intangibles	6,963,627	574,325	(366,460)	7,171,492
Libraries and collections	3,931,840	152,265	(23,996)	4,060,109
Special collections	384,221	50,687	(170)	434,738
Construction in progress	2,826,673	238,356		3,065,029
Capital assets, at original cost	\$49,477,889	\$2,956,234	\$(447,194)	\$51,986,929
	2015	DEPRECIATION AND AMORTIZATION	DISPOSALS	2016
ACCUMULATED DEPRECIATION AND AMORTIZATION				
Infrastructure	\$326,367	\$22,238		\$348,605
Buildings and improvements	13,101,858	1,083,003	\$(27,410)	14,157,451
Equipment, software and intangibles	4,527,627	567,743	(294,867)	4,800,503
Libraries and collections	2,879,258	131,062	(18,765)	2,991,555
Accumulated depreciation and amortization	\$20,835,110	\$1,804,046	\$(341,042)	\$22,298,114
Canital assets not	\$28 642 779			\$29 688 815

Service concession arrangements, reported as buildings and improvements, are \$91.1 million of original cost and \$20.2 million of accumulated depreciation at June 30, 2016.

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

The University's self-insurance and other liabilities at June 30, 2016 are as follows:

(in thousands of dollars)

	UNIVERSITY OF	CALIFORNIA	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS		
	CURRENT	NONCURRENT	CURRENT	NONCURRENT	
Self-insurance programs	\$228,751	\$558,158			
Obligations under life income agreements	1,346	\$32,021	\$16,718	\$130,314	
Other liabilities:					
Compensated absences	567,736	\$294,842			
UCRP*	3,833	13,558			
Accrued interest	95,860				
Fair value of interest rate swaps		152,123			
Other	541,001	276,832	35,157	\$220,234	
Total	\$1,438,527	\$737,355	\$51,875	\$220,234	

 $<sup>* \</sup>textit{UCRP has an equivalent amount recorded as a contribution receivable from the \textit{University in its statement of fiduciary net position}. \\$ 

# **Self-Insurance Programs**

Changes in liabilities for self-insurance or insured through a wholly owned captive or third party insurance company changed as follows for the years ended June 30:

(in thousands of dollars)

	MEDICAL MALPRACTICE	WORKERS' COMPENSATION	EMPLOYEE & STUDENT HEALTH CARE	GENERAL LIABILITY	TOTAL
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)	(27,153)	(824,504)
Liabilities at June 30, 2016	\$198,440	\$391,440	\$88,510	\$108,518	\$786,908
Discount rate	5.0%	5.0%	Undiscounted	2.0%	
Year Ended June 30, 2015					
Liabilities at June 30, 2014	\$181,324	\$321,055	\$70,513	\$87,777	\$660,669
Claims incurred and changes in estimates	48,075	111,485	542,995	49,146	751,701
Claim payments	(42,163)	(79,402)	(538,075)	(42,442)	(702,082)
Liabilities at June 30, 2015	\$187,236	\$353,138	\$75,433	\$94,481	\$710,288
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 year ended June 30, 2016 are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA			OF CALIFORNIA OUNDATIONS
	ANNUITIES	LIFE BENEFICIARIES	ANNUITIES	LIFE BENEFICIARIES
Year Ended June 30, 2016				
Balance at June 30, 2015	\$14,878	\$17,699	\$49,779	\$103,268
New obligations to beneficiaries and change in liability, net	1,926	1,128	5,241	5,082
Payments to beneficiaries	(1,216)	(1,048)	(6,122)	(10,216)
Obligations under life income agreements at June 30, 2016	15,588	17,779	48,898	98,134
Less: Current portion	(763)	(583)	(5,902)	(10,816)
Noncurrent portion at June 30, 2016	\$14,825	\$17,196	\$42,996	\$87,318

#### **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, 2016 is as follows:

(in thousands of dollars)

	WEIGHTED AVERAGE INTEREST RATE	INTEREST RATE RANGE	MATURITY YEARS	2016
INTERIM FINANCING:				
Commercial paper		0.4 - 0.6%	2016	\$1,037,857
LONG-TERM FINANCING:				
University of California General Revenue Bonds				
Fixed Rate	4.7%	0.8 - 7.6%	2017-2115	9,033,015
Variable Rate	0.6%	0.4 - 1.0%	2037-2048	1,250,000
University of California Limited Project Revenue Bonds	4.8%	0.7 - 6.3%	2017-2051	3,783,230
University of California Medical Center Pooled Revenue Bonds				
Fixed Rate	5.7%	3.0 - 6.6%	2017-2049	2,445,435
Variable Rate	0.9%	0.3 - 1.2%	2017-2047	251,205
University of California Medical Center Revenue Bonds	5.0%	5.0 - 5.5%	2017-2039	42,560
Unamortized bond premium				881,814
University of California revenue bonds	4.5%			17,687,259
Capital lease obligations		0.0 - 6.0%	2016-2042	176,753
Other University borrowings		Various	2016-2049	356,847
Blended component unit revenue bonds, net	5.7%	4.0 - 6.5%	2016-2049	692,571
Total outstanding debt				19,951,287
Less: Commercial paper				(1,037,857)
Current portion of outstanding debt				(1,413,265)
Noncurrent portion of outstanding debt				\$17,500,165

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 year ended June 30, 2016 was \$747.8 million. Interest expense, net of investment income, totaling \$54.8 million was capitalized during the year ended June 30, 2016. The remaining \$693.0 million 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 year ended June 30, 2016 is as follows:

(in thousands of dollars)

UNIVERSITY REVENUE BONDS	CAPITAL LEASE OBLIGATIONS	OTHER UNIVERSITY BORROWINGS	BLENDED COMPONENT UNIT REVENUE BONDS	TOTAL
\$16,777,164	\$131,278	\$337,169	\$690,222	\$17,935,833
1,345,155	67,031	200,000	282,555	1,894,741
155,026			40,353	195,379
(214,255)		(52)	(313,575)	(527,882)
(314,305)	(21,556)	(180,270)	(3,663)	(519,794)
(61,526)			(3,321)	(64,847)
17,687,259	176,753	356,847	692,571	18,913,430
(1,245,038)	(29,008)	(111,904)	(27,315)	(1,413,265)
\$16,442,221	\$147,745	\$244,943	\$665,256	\$17,500,165
	\$16,777,164 1,345,155 155,026 (214,255) (314,305) (61,526) <b>17,687,259</b> (1,245,038)	\$16,777,164 \$131,278 1,345,155 67,031 155,026 (214,255) (314,305) (21,556) (61,526) 17,687,259 176,753 (1,245,038) (29,008)	REVENUE BONDS         OBLIGATIONS         BORROWINGS           \$16,777,164         \$131,278         \$337,169           1,345,155         67,031         200,000           155,026         (214,255)         (52)           (314,305)         (21,556)         (180,270)           (61,526)         176,753         356,847           (1,245,038)         (29,008)         (111,904)	REVENUE BONDS         OBLIGATIONS         BORROWINGS         UNIT REVENUE BONDS           \$16,777,164         \$131,278         \$337,169         \$690,222           1,345,155         67,031         200,000         282,555           155,026         40,353         (214,255)         (52)         (313,575)           (314,305)         (21,556)         (180,270)         (3,663)           (61,526)         (3,321)         (3,321)           17,687,259         176,753         356,847         692,571           (1,245,038)         (29,008)         (111,904)         (27,315)

#### **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/permanent 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, 2016 is as follows:

(in thousands of dollars)		
	INTEREST RATES	OUTSTANDING
Taxable	0.39-0.60%	\$1,037,857
Total outstanding		\$1,037,857

The expectation is that the University will continue to utilize available investments for liquidity support for 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, 2016, the University has two revolving credit agreements totaling \$700.0 million. There were no borrowings against the revolving credit lines as of June 30, 2016.

# University of California Revenue Bonds

Revenue bonds have financed various auxiliary, administrative, academic, medical center and research facilities of the University. They 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.

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; 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 financial covenants. General Revenues, as defined in the Indenture, have been amended to include certain state appropriations as to secure payment of the General Revenue Bonds. General Revenues for the year ended June 30, 2016 were \$15.3 billion. The pledge of General Revenues for interest rate swap agreements is on a parity basis with the University's General Revenue Bonds.

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 financial covenants. Pledged revenues for the year ended June 30, 2016 were \$1.3 billion.

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 non-operating revenues to pay for the annual principal and interest on the bonds and certain other financial covenants. Pledged revenues of the medical centers for the year ended June 30, 2016 were \$10.4 billion.

Medical Center Revenue Bonds have also financed certain facilities of one medical center and are collateralized by a pledge of the specific gross revenues associated with the medical center. That Medical Center Revenue Bond Indenture requires that medical center to achieve debt service coverage of 1.1 times, set limitations on encumbrances, indebtedness, disposition of assets and transfer services, as well as maintain certain other financial 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.

Medical center gross revenues are pledged under the Indentures for the Medical Center Pooled Revenue Bonds and the Medical Center Revenue Bonds and certain interest rate swap agreements. The pledge of medical center revenues under Medical Center Pooled Revenue Bonds is subordinate to the specific Medical Center Revenue Bonds.

The pledge of medical center revenues for interest rate swap agreements may be at parity with or subordinate to specific Medical Center Revenue Bonds and Medical Center Pooled Revenue Bonds.

All Indentures permit the University to issue additional bonds as long as certain conditions are met.

# 2016 Activity

In April 2016, General Revenue Bonds totaling \$813.1 million, including \$410.3 million in tax-exempt bonds, \$182.3 million in taxable bonds, \$132.3 million in tax-exempt put bonds and \$88.2 million of taxable fixed rate notes, were issued to finance or refinance certain facilities and projects of the University. The bonds mature at various dates through 2046 and the taxable fixed rate notes mature at 2021. The put bonds will be subject to mandatory tender for purchase in 2021. Proceeds, including a bond premium of \$90.0 million, were used to pay for project construction and issuance costs and to refund \$73.4 million of outstanding General Revenue Bonds. The refunding of the outstanding General Revenue Bonds resulted in a loss of \$7.1 million, recorded as a deferred outflow of resources, that will be amortized as interest expense over the remaining life of the refunded bonds. The refinancing and refunding of previously outstanding General Revenue Bonds resulted in cash flow savings of \$17.7 million and an economic gain of \$11.3 million. The taxable bonds have a stated weighted average interest rate of 3.0 percent. The tax-exempt bonds have a stated weighted average interest rate of 1.9 percent. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds.

In June 2016, Limited Project Revenue Bonds totaling \$532.1 million, including \$434.2 million tax-exempt bonds and \$97.9 million taxable bonds, were issued to finance or refinance the acquisition, construction, improvement and renovation of certain athletic, parking, recreational, dining, student and faculty housing of the University. The bonds mature at various dates through 2051. Proceeds, including a bond premium of \$69.9 million, were used to pay for project construction and issuance costs and to refund \$140.9 million of outstanding General Revenue bonds. The refunding of the outstanding General Revenue Bonds resulted in a loss of \$13.9 million, recorded as a deferred outflow of resources, that will be amortized as interest expense over the remaining life of the refunded bonds. The refinancing and refunding of previously outstanding General Revenue Bonds resulted in cash flow savings of \$28.2 million and an economic gain of \$20.2 million. The taxable bonds have a stated weighted average interest rate of 3.1 percent. The tax-exempt 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.

### Subsequent Events

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.

Medical center gross revenues continue to be pledged under the Indentures for the Medical Center Pooled Revenue Bonds and certain interest rate swap agreements. The pledge of medical center revenues for interest rate swap agreements may be at parity with, or subordinate to, specific Medical Center Pooled Revenue Bonds.

#### **Capital Leases**

Capital leases entered into with other lessors, typically for equipment, totaled \$67.0 million for the year ended June 30, 2016.

# 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 December 5, 2017, totaled \$415.0 million at June 30, 2016. Outstanding borrowings under these bank lines totaled \$300.0 million at June 30, 2016.

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 \$40.0 million at June 30, 2016.

#### **Blended Component Unit Revenue Bonds**

# Student Housing

The University has entered into ground leases with a legally separate, non-profit 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 March 2016, the LLC, through its conduit issuer, issued additional Student Housing LLC Revenue Bonds totaling \$282.6 million. Proceeds, including a bond premium of \$40.5 million, were used to pay for issuance costs and to refund \$313.6 million of outstanding Student Housing LLC Revenue bonds. The refunding of the outstanding Student Housing LLC Revenue Bonds resulted in a loss of \$26.4 million, recorded as a deferred outflow of resources, that will be amortized as interest expense over the life of the refunded bonds. The refinancing and refunding of previously outstanding Student Housing LLC Revenue Bonds resulted in cash flow savings of \$71.5 million and and economic gain of \$35.4 million. The deferred premium will be amortized as a reduction to interest expense over the term of the bonds. The Student Housing LLC Revenue Bonds 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 project, and do not constitute general obligations of The Regents.

At June 30, 2016, the LLC, through its conduit issuer, has outstanding Student Housing LLC Revenue Bonds totaling \$370.9 million. The bonds mature at various dates through 2040 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 laboratory building with a legally separate, non-profit corporation. In connection with the research laboratory building, the University entered into a ground lease with the corporation. The corporation has entered into a sub-ground lease with a developer to construct, own and manage the building. 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 the 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 non-profit corporation are appointed by the University and the University has the authority to determine the budget for the corporation. Under accounting requirements, the financial position and operating results of this legally separate organization are blended into the University's financial reporting entity.

The corporation, through a conduit issuer, has outstanding tax-exempt revenue bonds totaling \$19.7 million and taxable revenue bonds totaling \$188.0 million. The tax-exempt revenue bonds mature at various dates from 2021 through 2025 and have a weighted average interest rate of 5.0 percent. They 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 non-profit corporation 35.0 percent of the semi-annual interest cost on the taxable bonds, making the net interest rate 4.2 percent post-subsidy. The 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, non-profit 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 \$56.2 million. The bonds mature at various dates through 2040 and have a weighted average interest rate of 5.0 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 and net receipts or payments on associated hedging derivative instruments for each of the five fiscal years subsequent to June 30, 2016, 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 hedging derivative interest rate swaps, these amounts assume that current interest rates on variable-rate bonds and the current reference rates of the hedging derivative interest rate swaps will remain the same. As these rates vary, variable-rate bond interest payments and net hedging derivative interest rate swap payments will vary.

	COMMERCIAL PAPER	UNIVERSITY REVENUE BONDS	CAPITAL LEASES	OTHER UNIVERSITY BORROWINGS	BLENDED COMPONENT UNIT REVENUE BONDS	TOTAL PAYMENTS	PRINCIPAL	INTEREST
Year Ending June 30								
2017	\$1,038,656	\$1,083,744	\$34,499	\$112,280	\$59,071	\$2,328,250	\$1,531,850	\$796,400
2018		1,076,327	29,862	204,280	44,532	1,355,001	572,934	782,067
2019		1,081,439	26,753	3,490	44,535	1,156,217	388,000	768,217
2020		1,370,659	25,062	2,102	44,526	1,442,349	692,099	750,250
2021		1,310,650	20,008	1,331	48,091	1,380,080	648,672	731,408
2022-2026		5,309,277	23,251	7,093	240,580	5,580,201	2,296,219	3,283,982
2027-2031		4,995,553	26,701	7,326	239,298	5,268,878	2,618,022	2,650,856
2032-2036		4,586,842	32,488	7,409	236,206	4,862,945	2,881,399	1,981,546
2037-2041		4,263,569	39,525	7,037	173,996	4,484,127	3,232,675	1,251,452
2042-2046		2,724,936	5,545	4,863	70,430	2,805,774	2,132,809	672,965
2047-2051		1,009,810		335	39,416	1,049,561	673,140	376,421
2052-2116		5,433,947				5,433,947	1,360,000	4,073,947
Total future debt service	1,038,656	34,246,753	263,694	357,546	1,240,681	37,147,330	\$19,027,819	\$18,119,511
Less: Interest component of future payments	(799)	(17,441,308)	(85,196)	(699)	(591,509)	(18,119,511)		
Principal portion of future payments	1,037,857	16,805,445	178,498	356,847	649,172	19,027,819		
Adjusted by:								
Unamortized bond premium		881,814			43,399	925,213		
Present value of net minimum leases included in long-term debt			(1,745)			(1,745)		
Total debt	\$1,037,857	\$17,687,259	\$176,753	\$356,847	\$692,571	\$19,951,287		

Long-term debt does not include \$3.1 billion of defeased liabilities at June 30, 2016. 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 \$750.0 million of these bonds as current liabilities as of June 30, 2016.

Medical Center Pooled Revenue Bonds of \$102.2 million are variable-rate demand bonds which give the debt holders the ability to tender the bonds back to the University upon demand. In connection with \$70.1 million of these outstanding variable-rate demand bonds, the University has entered into a bank standby bond purchase agreement to provide funds for the purchase of the bonds that have been tendered and not remarketed. The standby bond purchase agreement is scheduled to terminate on June 30, 2017. The University is required to repurchase any bonds held by the bank on the termination date of the agreement. The University has classified \$102.2 million of these bonds as current liabilities as of June 30, 2016.

As rates vary, variable-rate bond interest payments and net swap payments will vary. 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, 2016, combined debt service requirements of the variable-rate debt and net swap payments are as follows:

(in thousands of dollars)

	VARIABLE-RATE BONDS		INTEREST DATE SWAP NET	TOTAL DAVAGENTS	
	PRINCIPAL	INTEREST	INTEREST RATE SWAP, NET	TOTAL PAYMENTS	
Year Ending June 30					
2017	\$3,340	\$4,375	\$17,645	\$25,360	
2018	3,465	4,364	17,548	25,377	
2019	3,590	4,352	17,448	25,390	
2020	3,725	4,351	17,349	25,425	
2021	3,860	4,327	17,236	25,423	
2022-2026	35,890	21,206	58,530	115,626	
2027-2031	47,710	19,766	29,881	97,357	
2032-2036	33,275	18,075	22,741	74,091	
2037-2041	42,765	16,304	17,098	76,167	
2042-2046	403,160	12,006	7,423	422,589	
2047-2051	270,425	1,512	16	271,953	
Total	\$851,205	\$110,638	\$222,915	\$1,184,758	

#### 14. DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The composition of deferred outflows and inflows of resources at June 30, 2016 are summarized as follows:

(in thousands of dollars)

	SERVICE CONCESSION ARRANGEMENTS	NET PENSION LIABILITY	LOSS ON DEBT REFUNDING	INTEREST RATE SWAP AGREEMENTS	ROYALTY SALE	TOTAL
At June 30, 2016						
Deferred outflows of resources		\$5,034,519	\$387,222	\$152,123		\$5,573,864
Deferred inflows of resources	\$70,759	1,163,694			\$497,826	1,732,279

In March 2016, the University sold 95.4 percent of future royalty payments to a third-party for \$1.1 billion plus a residual interest in the payments contingent on exceeding certain milestones. The sales proceeds were shared with the group of inventors and a third-party involved with the discovery. The University's share of the net proceeds, after transactions fees, totaled \$520.2 million. The royalty payments from January 2016 through the expiration of the related patents and license agreement in August 2027 were sold. Proceeds from the sale have been reported as deferred inflows of resources and will be recognized on a straight-line basis through the expiration of the patents. The present value of the estimated royalty income stream sold was \$1.5 billion using a 12 percent discount rate.

# 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; PERS-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 and the President has redelegated that authority within UCRS to the Vice President — Human Resources. 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, PERS-VERIP and the CHRCO Pension Plan for the year ended June 30, 2016 is as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA					
	UNIVERSITY OF CALIFORNIA RETIREMENT PLAN	UNIVERSITY OF CALIFORNIA PERS-VERIP	SUBTOTAL	UNIVERSITY OF CALIFORNIA RETIREMENT SAVINGS PROGRAM	TOTAL	CHILDREN'S HOSPITAL & RESEARCH CENTER AT OAKLAND PENSION PLAN
CONDENSED STATEMENT OF PLAN FIDUCIARY NET I	POSITION					
Investments at fair value	\$55,283,722	\$62,601	\$55,346,323	\$17,850,612	\$73,196,935	\$353,446
Participants' interests in mutual funds				2,767,673	2,767,673	
Investment of cash collateral	3,735,547	4,222	3,739,769	3,011,723	6,751,492	
Other assets	305,772	160	305,932	265,042	570,974	
Total assets	59,325,041	66,983	59,392,024	23,895,050	83,287,074	353,446
Collateral held for securities lending	3,734,455	4,221	3,738,676	3,010,842	6,749,518	
Other liabilities	1,426,054	1,706	1,427,760	527,561	1,955,321	
Total liabilities	5,160,509	5,927	5,166,436	3,538,403	8,704,839	
Net position held in trust	\$54,164,532	\$61,056	\$54,225,588	\$20,356,647	\$74,582,235	\$353,446
CONDENSED STATEMENT OF CHANGES IN PLANS' FI	DUCIARY NET POSITION	ON				
Contributions	\$3,367,719		\$3,367,719	\$1,183,433	\$4,551,152	\$24,000
Net appreciation (depreciation) in fair value of investments	(1,937,245)	\$(2,519)	(1,939,764)	(360,269)	(2,300,033)	
Investment and other income, net	832,590	1,094	833,684	484,203	1,317,887	214
Total additions	2,263,064	(1,425)	2,261,639	1,307,367	3,569,006	24,214
Benefit payment and participant withdrawals	3,105,641	4,937	3,110,578	1,231,281	4,341,859	9,509
Other deductions	48,341	7	48,348	10,467	58,815	1,816
Total deductions	3,153,982	4,944	3,158,926	1,241,748	4,400,674	11,325
Increase in net position held in trust	(890,918)	(6,369)	(897,287)	65,619	(831,668)	12,889
Net position held in trust						
Beginning of year	55,055,450	67,425	55,122,875	20,291,028	75,413,903	340,557
End of year	\$54,164,532	\$61,056	\$54,225,588	\$20,356,647	\$74,582,235	\$353,446
CHANGES IN TOTAL PENSION LIABILITY						
Service cost	\$1,710,241		\$1,710,241			\$10,410
Interest	4,784,904	\$2,533	4,787,437			27,782
Difference between expected and actual experience	136,167	(650)	135,517			24
Changes of benefit terms						(3,690)
Changes of assumptions or other inputs						3,613
Benefits paid, including refunds of employee contributions	(3,105,641)	(4,937)	(3,110,578)			(9,509)
Net change in total pension liability	3,525,671	(3,054)	3,522,617			28,630
Total pension liability						
Beginning of year	65,705,091	38,062	65,743,153			391,232
End of year	\$69,230,762	\$35,008	\$69,265,770			\$419,862
Net pension liability (asset), end of year	\$15,066,230	\$(26,048)	\$15,040,182			\$66,416

Additional information on the retirement plans can be obtained from the 2015-2016 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. Annual cost-of-living adjustments (COLAs) 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	l of the following at June 30, 2016:
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	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	UNIVERSITY OF CALIFORNIA
Retirees and beneficiaries receiving benefits	56,950	13,127	70,077
Inactive members entitled to , but not receiving benefits	70,808	10,787	81,595
Active members:			
Vested	73,612	1,686	75,298
Nonvested	52,295	920	53,215
Total active members	125,907	2,606	128,513
Total membership	253,665	26,520	280,185

#### **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 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 and is reimbursed by the DOE based upon rates authorized by The Regents. 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, deferred inflows of resources and deferred outflows of resources that will be reimbursed under DOE contracts, a receivable from the DOE is recorded. As of June 30, 2016, the University reported \$974.7 million, as other non-current Department of Energy receivables for pension liabilities. Contributions of \$413.9 million, reported as DOE laboratory revenue and expense in the statement of revenues, expenses and changes in net position, were deposited into UCRP on behalf of the DOE for the year ended June 30, 2016.

#### **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, 2016			
UCRP net position	\$46,127,486	\$8,037,046	\$54,164,532
Total pension liability	59,779,748	9,451,014	69,230,762
Net pension liability	\$13,652,262	\$1,413,968	\$15,066,230

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:

Inflation	3.0%
Investment rate of return	7.25
Projected salary increases	3.8 - 6.2
Cost-of-living adjustments	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 in 2016 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 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
TIPS	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, 2016 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 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. The projections also include STIP transfers of \$480.0 million in 2016-17 and \$392.0 million in 2017-18. In addition, State funding contributions of \$171.0 million are included in both 2016-17 and 2017-18. UCRP was projected to have assets sufficient to make projected benefit payments for current members for all future years as of June 30, 2016.

# Sensitivity of the Net Pension Liability to the Discount Rate Assumption

The following presents the June 30, 2016 net pension liability of the University calculated using the June 30, 2016 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	\$23,767,277	\$15,066,230	\$7,764,507
PERS-VERIP	(24,137)	(26,048)	(27,794)

# 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	PERS-VERIP	TOTAL
At June 30, 2016					
DEFERRED OUTFLOWS OF RESOURCES					
Difference between expected and actual experience	\$133,315		\$133,315		\$133,315
Changes of assumptions or other inputs	1,790,043		1,790,043		1,790,043
Net difference between projected and actual earnings on pension plan investments	2,610,352	\$450,700	3,061,052	\$3,299	3,064,351
Total	\$4,533,710	\$450,700	\$4,984,410	\$3,299	\$4,987,709
DEFERRED INFLOWS OF RESOURCES					
Difference between expected and actual experience	\$270,482	\$11,422	\$281,904		\$281,904
Changes of assumptions or other inputs	877,254		877,254		877,254
Total	\$1,147,736	\$11,422	\$1,159,158		\$1,159,158

The net amount of deferred outflows of resources and deferred inflows of resources as of June 30, 2016 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	PERS-VERIP	TOTAL
2017	\$539,654	\$4,052	\$543,706	\$(93)	\$543,613
2018	301,821	69,111	370,932	442	371,374
2019	1,503,455	214,052	1,717,507	1,726	1,719,233
2020	1,020,799	152,063	1,172,862	1,224	1,174,086
2021	20,245		20,245		20,245
Total	\$3,385,974	\$439,278	\$3,825,252	\$3,299	\$3,828,551

#### **Defined Contribution Plan**

The University 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 \$4.9 million or the year ended June 30, 2016.

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 year ended June 30, 2016.

# 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 \$1.5 million for the year ended June 30, 2016.

#### 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 year ended June 30, 2016.

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 PERS-VERIP

The University of California PERS-VERIP 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, 2016, there are 553 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 year ended June 30, 2016.

# 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, 2016: 3.0 percent inflation, 7.0 percent investment rate of return, 5.0 percent projected salary increases through 2017, 4.0 percent afterward and no cost-of-living adjustments. CHRCO recognized pension expense of \$21.4 million and \$10.3 million for the years ended June 30, 2016 and 2015, respectively.

Mortality rates were based on the RP-2015 mortality with fully generational projected mortality improvements using modified scale MP-2015. The MP 2015 projection scale as modified for this valuation to utilize the social security administration 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, 2016:

Total membership	3,745
Active members	1,849
Inactive members entitled to, but not yet receiving benefits	1,102
Retirees and beneficiaries receiving benefits	794

#### **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, 2016, and the total pension liability was determined by an actuarial valuation as of January 1, 2016 rolled forward to June 30, 2016. The actuarial assumptions used in the June 30, 2016 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	PROJECTED REAL RATE OF RETURN
Asset class		
U.S. Equity	51.6%	5.9%
Developed International Equity	1.7	6.9
Emerging Market Equity	3.6	10.3
Core Fixed Income	43.1	1.6
Total	100.0%	

#### **Discount Rate**

The discount rate used to measure the total pension liability was 7.0 percent for June 30, 2016. 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, 2016 net pension liability calculated using the June 30, 2016 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	\$126,691	\$66,416	\$16,708

# Deferred Outflows of Resources and Deferred Inflows of Resources

As of June 30, 2016 deferred outflows of resources and deferred inflows of resources were as follows:

(in thousands of dollars)	
Deferred Outflows of Resources	
Difference between expected and actual experience	\$3,528
Changes of benefit terms	254
Changes of assumptions	27,877
Net difference between projected and actual earnings on pension plan investments	13,103
Total	\$44,762
Deferred Inflows of Resources	
Net difference between projected and actual earnings on pension plan investments	\$3,030
Total	\$3,030

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	
2017	\$5,571
2018	8,256
2019	13,569
2020	11,209
2021	3,127
Total	\$41,732

### **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.

Membership in the OCERS Plan consisted of the following at December 31, 2015: 15,810 retired members and beneficiaries, 5,091 inactive members, 21,525 active members.

#### **Contributions**

Contribution rates for OCERS are set by the Board of Trustees.

### **Net Pension Liability**

The University's proportionate share of the net pension liability was \$18.1 million, or 0.3 percent. The net pension liability for OCERS and the total pension liability was determined by an actuarial valuation as of December 31, 2015 and rolled forward to June 30, 2016. The actuarial assumptions used in the December 31, 2015 valuation were based on the results of an experience review conducted during 2013.

The net pension liability for the Plan was calculated based upon the following assumptions as of June 30, 2016: 3.0 percent inflation, 7.25 percent investment rate of return, 4.25-13.5 percent projected salary increases through 2017 and 3.0 percent cost-of-living adjustments. Additional information on OCERS can be obtained from the 2015-2016 annual reports of the Orange County Employees Retirement System at http://www.ocers.org/.

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		
Large Cap U.S. Equity	14.9%	5.9%
Small/Mid Cap U.S. Equity	2.7	6.5
Developed International Equity	10.9	6.9
Emerging International Equity	6.5	8.3
Core Bonds	10.0	0.7
Global Bonds	2.0	0.3
Emerging Market Debt	3.0	4.0
Real Estate	10.0	5.0
Diversified Credit (U.S. Credit)	8.0	5.0
Diversified Credit (Non-U.S. Credit)	2.0	6.8
Hedge Funds	7.0	4.1
GTAA	7.0	4.2
Real Return	10.0	5.9
Private Equity	6.0	9.6
Total	100.0%	

#### Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent for June 30, 2016. 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, 2016 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)	ORANGE C	ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM				
	1% DECREASE (6.25%)	CURRENT DISCOUNT RATE (7.25%)	1% INCREASE (8.25%)			
Net pension liability	\$26,352	\$18,092	\$11,296			

### Deferred Outflow of Resources and Deferred Inflows of Resources

As of June 30, 2016 deferred outflow of resources and deferred inflows of resources were as follows:

(in thousands of dollars)	
Deferred Outflows of Resources	
Difference between expected and actual experience	\$499
Net difference between projected and actual earnings on pension plan investments	1,549
Total	\$2,048
Deferred Inflows of Resources	
Difference between expected and actual experience	\$582
Changes in assumptions	925
Total	\$1,507

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:

Total	\$541
Thereafter	5
2020	34
2019	379
2018	41
2017	41
2016	\$41
Year Ending June 30	
(in thousands of dollars)	

#### 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 (retirees) of the University of California and its affiliates. The Regents has the authority to establish and amend the plans.

Membership in UCRP is required to become eligible for retiree health benefits. Participation in the retiree health benefit Plans consisted of the following at July 1, 2015, the date of the latest actuarial valuation:

	CAMPUSES AND MEDICAL CENTERS	LBNL	UNIVERSITY OF CALIFORNIA
Retirees who are currently receiving benefits	39,774	1,777	41,551
Employees who may receive benefits at retirement	121,298	3,019	124,317
Total membership	161,072	4,796	165,868

# **Contribution Policy**

The contribution requirements of the University and eligible retirees are established and may be amended by the University. The contribution requirements are 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.

Contributions toward medical and dental benefits are shared between the University and the retiree. Contributions toward wellness benefits are made by the University. 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.

Active employees do not make any contributions toward the retiree health benefit plans. Retirees pay the excess, if any, of the premium over the applicable portion of the University's contribution.

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.

# Retiree Health Benefit Expense and Obligation for Retiree Health Benefits

The University's retiree health benefit expense is independently calculated for the campuses and medical centers and LBNL based upon the actuarially determined annual required contribution. The annual required contribution represents the level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize unfunded actuarial liabilities over a period of up to 30 years.

The University's annual retiree health benefit expense and related information for the year ended June 30, 2016, segregated between the University and the DOE responsibility, is as follows:

(in thousands of dollars)			
	CAMPUSES AND MEDICAL CENTERS	LBNL	UNIVERSITY OF CALIFORNIA
Actuarial valuation date	July 1, 2015	July 1, 2015	July 1, 2015
Annual required contribution	\$2,074,273	\$61,270	\$2,135,543
Interest on obligations for retiree health benefits	410,457	12,099	422,556
Adjustment to annual required contribution	(1,036,625)	(30,478)	(1,067,103)
Annual retiree health benefit cost	1,448,105	42,891	1,490,996
University contributions:			
To UCRHBT	(309,592)		(309,592)
To health care insurers and administrators		(13,294)	(13,294)
Implicit subsidy	(97,002)	(4,347)	(101,349)
Total contributions	(406,594)	(17,641)	(424,235)
Increase in obligations for retiree health benefits	1,041,511	25,250	1,066,761
Obligations for retiree health benefits			
Beginning of year	9,121,249	268,830	9,390,079
End of year	\$10,162,760	\$294,080	\$10,456,840
Retiree health care reimbursement from the DOE during the year		\$13,294	\$13,294
DOE receivable for obligations for retiree health benefits:			
Noncurrent		294,080	294,080
Total		\$294,080	\$294,080

The annual retiree health benefit cost, percentage of the annual retiree health benefit cost contributed to the retiree health benefit plan and the net obligation for retiree health benefits for the University for the year ended June 30, 2016, and the preceding years are as follows:

(in thousands of dollars)			
	CAMPUSES AND MEDICAL CENTERS	DOE NATIONAL LABORATORIES	UNIVERSITY OF CALIFORNIA
Annual retiree health benefit cost:			
June 30, 2016	\$1,448,105	\$42,891	\$1,490,996
June 30, 2015	1,274,218	42,726	1,316,944
June 30, 2014	1,216,648	42,938	1,259,586
Percentage of annual cost contribut	red:		
June 30, 2016	28.1%	41.1%	28.5%
June 30, 2015	27.5%	39.7%	27.9%
June 30, 2014	31.2%	38.6%	31.6%
Net obligation to the health benefit	plan:		
June 30, 2016	\$10,162,760	\$294,080	\$10,456,840
June 30, 2015	9,121,249	268,830	9,390,079
June 30, 2014	8,197,230	243,073	8,440,303

#### **Funded Status**

Actuarial valuations represent a long-term perspective and involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, investment return and health care cost trends. The projection of benefits does not explicitly incorporate the potential effects of the results of collective bargaining discussions on the contribution rate. Actuarially determined amounts are subject to periodic revisions as actual rates are compared with past expectations and new estimates are made about the future.

The funded status of the plan as of July 1, 2015 was as follows:

(in thousands of dollars)			
	CAMPUSES AND MEDICAL CENTERS	LBNL	UNIVERSITY OF CALIFORNIA
Actuarial value of plan assets	\$50,645		\$50,645
Actuarial accrued liability	(17,320,301)	\$(569,383)	(17,889,684)
Unfunded actuarial accrued liability	\$(17,269,656)	\$(569,383)	\$(17,839,039)
Value of the implicit subsidy included in the actuarial accrued liability	\$3,824,303	\$125,827	\$3,950,130
Funded ratio	0.3%	0.0%	0.3%
Covered payroll	9,659,652	268,182	9,927,834
Unfunded actuarial accrued liability as a percentage of covered payroll	(178.8)%	(212.3)%	(179.7)%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, includes multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

#### **Actuarial Methods and Assumptions**

Projections of benefits for financial reporting purposes are based upon the plan as understood by the University and plan members, and include the types of benefits provided at the time of each valuation and the historical cost pattern of sharing of benefit costs between the University and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methods and assumptions used in the valuation were:

- assumed return on investment of 4.5 percent per year, representing the return on the University's assets expected to be used to finance benefits;
- market value of assets smoothed over a five-year period;
- health care cost trend rate ranging from 7.1 to 9.5 percent for non-Medicare and 6.4 to 8.0 percent for Medicare initially, depending on the type of plan, reduced by increments to an ultimate rate of 5.0 percent over 15 years;
- projected inflation at 3.0 percent;
- amortization of the initial unfunded actuarial accrued liability over 30 years as a flat dollar amount on a closed basis;
- amortization of future actuarial gains and losses over 15 years as a flat dollar amount on a closed basis;
- amortization of the effects of changes in the plan design, or changes in assumptions, over 30 years as a flat dollar amount on a closed basis;
- entry age normal level-dollar actuarial cost method;
- future life expectancy based upon recent group mortality experience; and
- assumed retirement ages, employee turnover and disability rates based on actual plan experience and future expectations.

#### 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, 2016 are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA					
	RESTRICTED NONEXPENDABLE	RESTRICTED EXPENDABLE	UNRESTRICTED	TOTAL		
At June 30, 2016						
Endowments	\$1,092,786	\$2,539,481	\$4,770	\$3,637,037		
Funds functioning as endowments		2,275,525	2,905,204	5,180,729		
Annuity and life income	18,297	8,376		26,673		
Gifts		1,261,615	16,954	1,278,569		
University endowments and gifts	\$1,111,083	\$6,084,997	\$2,926,928	\$10,123,008		

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 \$2.1 billion at June 30, 2016.

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 \$260.5 million for the year ended June 30, 2016. The portion of this annual income distribution from accumulated capital gains, in addition to the dividend and interest income earned during the year, was \$240.4 million for the year ended June 30, 2016. Accumulated endowment income available for spending in the future, including the annual income distribution, was \$595.6 million at June 30, 2016.

#### **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, 2016 are as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS						
	RESTRICTED NONEXPENDABLE	UNREST		TOTAL			
At June 30, 2016							
Endowments	\$3,631,455	\$884,701		\$4,516,156			
Funds functioning as endowments		1,358,719		1,358,719			
Annuity and life income	68,594	52,715		121,309			
Gifts		1,445,797	\$94,869	1,540,666			
Campus foundations' endowments and gifts	\$3,700,049	\$3,741,932	\$94,869	\$7,536,850			

### 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, 2016 is as follows:

(in thousands of dollars)

	UNIVERSITY OF CALIFORNIA MEDICAL CENTERS					
	DAVIS	IRVINE	LOS ANGELES	SAN DIEGO	SAN FRANCISCO	
Year Ended June 30, 2016						
Revenue bonds outstanding	\$282,054	\$265,185	\$700,315	\$658,667	\$832,979	
Related debt service payments	32,833	24,007	44,507	40,201	54,236	
Bonds due serially through	2047	2049	2049	2048	2049	
CONDENSED STATEMENT OF NET POSITION						
Current assets	\$825,786	\$477,962	\$1,319,490	\$757,892	\$1,120,331	
Capital assets, net	1,004,073	718,179	1,813,446	1,471,118	2,381,726	
Other assets	18,837		299,918	37,073	224,590	
Total assets	1,848,696	1,196,141	3,432,854	2,266,083	3,726,647	
Total deferred outflows of resources	329,360	157,583	445,456	216,217	542,005	
Current liabilities	374,616	240,452	421,741	234,871	510,171	
Long-term debt	268,671	267,344	837,071	684,672	829,519	
Other noncurrent liabilities	1,108,165	559,500	1,389,227	723,104	1,608,933	
Total liabilities	1,751,452	1,067,296	2,648,039	1,642,647	2,948,623	
Total deferred inflows of resources	84,896	50,051	87,526	57,712	118,254	
Net investment in capital assets	701,366	446,355	959,252	749,527	1,475,111	
Restricted			11,360		63,785	
Unrestricted	(359,658)	(209,978)	172,133	32,414	(337,121)	
Total net position	\$341,708	\$236,377	\$1,142,745	\$781,941	\$1,201,775	

	UNIVERSITY OF CALIFORNIA MEDICAL CENTERS					
	DAVIS	IRVINE	LOS ANGELES	SAN DIEGO	SAN FRANCISCO	
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CH	IANGES IN NET POSITIO	ON				
Operating revenues	\$1,935,274	\$1,009,651	\$2,364,038	\$1,544,658	\$3,567,317	
Operating expenses	(1,797,223)	(918,913)	(2,095,729)	(1,384,789)	(3,482,411)	
Depreciation expense	(79,291)	(68,706)	(134,100)	(58,391)	(205,146)	
Operating income (loss)	58,760	22,032	134,209	101,478	(120,240)	
Nonoperating revenues (expenses), net	(461)	(20,450)	(24,398)	16	(15,663)	
Income (loss) before other changes in net position	58,299	1,582	109,811	101,494	(135,903)	
Health systems support	(41,387)	(65,081)	(176,852)	(96,570)	(64,055)	
Transfers (to) from University, net	(8,563)	3,086	(8,950)	(2,735)	8,240	
Changes in allocation for pension payable to University	(1,184)	681	(452)	(1,613)	(12,414)	
Other, including donated assets	2,074	822	16,212	52,255	47,290	
Increase (decrease) in net position	9,239	(58,910)	(60,231)	52,831	(156,842)	
Net position - beginning of year	332,469	295,287	1,202,976	729,110	1,358,617	
Net position - June 30, 2016	\$341,708	\$236,377	\$1,142,745	\$781,941	\$1,201,775	
CONDENSED STATEMENT OF CASH FLOWS						
Net cash provided (used) by:						
Operating activities	\$207,723	\$128,263	\$430,799	\$303,984	\$214,823	
Noncapital financing activities	(46,176)	(64,180)	(175,258)	(101,887)	(47,456)	
Capital and related financing activities	(118,061)	(84,466)	(102,284)	(188,317)	(175,565)	
Investing activities	12,168	(9,042)	15,583	49,764	6,557	
Net increase (decrease) in cash and cash equivalents	55,654	(29,425)	168,840	63,544	(1,641)	
Cash and cash equivalents* – June 30, 2015	409,254	282,757	734,777	402,045	452,342	
Cash and cash equivalents* – June 30, 2016	\$464,908	\$253,332	\$903,617	\$465,589	\$450,701	

<sup>\*</sup>Cash and cash equivalents on the medical centers' financial statements are included in the University's Short Term Investment Pool, except for CHRCO as of June 30, 2015.

Summarized financial information for each medical center is from their separately issued 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/.

Multiple purpose and housing system projects (including student and faculty housing, parking facilities, student centers, recreation and events facilities, student health service facilities and certain academic and administrative facilities) are also financed by revenue bonds; however, assets and liabilities are not required to be accounted for separately.

#### 19. 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, 2016 is as follows:

(in thousands of dollars)

		UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS				
	BERKELEY	SAN FRANCISCO	LOS ANGELES	ALL OTHER	TOTAL	
CONDENSED STATEMENT OF NET POSITION						
Current assets	\$78,588	\$193,643	\$434,051	\$259,166	\$965,448	
Noncurrent assets	1,838,382	1,456,193	2,254,770	1,738,791	7,288,136	
Total assets	1,916,970	1,649,836	2,688,821	1,997,957	8,253,584	
Current liabilities	15,950	46,269	246,519	55,988	364,726	
Noncurrent liabilities	72,976	221,977	29,430	26,165	350,548	
Total liabilities	88,926	268,246	275,949	82,153	715,274	
Total deferred inflows of resources			1,460		1,460	
Net investment of capital assets						
Restricted	1,825,680	1,381,166	2,344,581	1,890,554	7,441,981	
Unrestricted	2,364	424	66,831	25,250	94,869	
Total net position	\$1,828,044	\$1,381,590	\$2,411,412	\$1,915,804	\$7,536,850	
CONDENSED STATEMENT OF REVENUES, EXPENSES ANI	D CHANGES IN NET POSITI	ION				
Operating revenues	\$127,301	\$180,801	\$258,641	\$225,732	\$792,475	
Operating expenses	(188,917)	(232,835)	(263,898)	(229,518)	(915,168	
Operating loss	(61,616)	(52,034)	(5,257)	(3,786)	(122,693	
Nonoperating revenues	(34,417)	(32,548)	(62,363)	(39,535)	(168,863	
Loss before other changes in net position	(96,033)	(84,582)	(67,620)	(43,321)	(291,556	
Permanent endowments	88,469	39,538	70,138	\$79,932	278,077	
Other						
Increase (decrease) in net position	(7,564)	(45,044)	2,518	36,611	(13,479	
Net position – June 30, 2015	1,835,608	1,426,634	2,408,894	1,879,193	7,550,329	
Net position – June 30, 2016	\$1,828,044	\$1,381,590	\$2,411,412	\$1,915,804	\$7,536,850	
CONDENSED STATEMENT OF CASH FLOWS						
Net cash provided (used) by:						
Operating activities	\$(93,199)	\$(10,622)	\$(57,870)	\$(59,289)	\$(220,980	
Noncapital financing activities	77,929	17,104	59,081	72,982	227,096	
Capital and related financing activities				(970)	(970	
Investing activities	16,259	(13,527)	267	(11,509)	(8,510	
Net increase (decrease) in cash and cash equivalents	989	(7,045)	1,478	1,214	(3,364	
Cash and cash equivalents – June 30, 2015	2,668	159,072	4,098	32,438	198,276	
Cash and cash equivalents – June 30, 2016	\$3,657	\$152,027	\$5,576	\$33,652	\$194,912	

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

#### 20. COMMITMENTS AND CONTINGENCIES

#### **Contractual Commitments**

Amounts committed but unexpended for construction projects totaled \$673.8 million at June 30, 2016. The University has made a commitment to contribute \$87.9 million for an investment in a joint venture to fund construction projects.

The University leases land, buildings and equipment under agreements recorded as operating leases. Operating lease expenses for the year ended June 30, 2016 were \$236.0 million. The terms of operating leases extend through December 2040.

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	
2017	\$219,001
2018	195,555
2019	161,739
2020	136,043
2021	110,305
2022-2026	207,029
2027-2031	61,501
2032-2036	5,023
2037-2041	3,692
Total	\$1,099,888

# 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.

As of June 30, 2016, CHRCO had no amounts outstanding under its revolving credit facility for \$25.0 million. The interest rate on the credit facility is 1.2 percent as of June 30, 2016 and the facility expires on August 31, 2018.

#### Subsequent Event

In August 2016, the University entered into an agreement with a developer, with minimum contractual payments of \$585.0 million to design, construct, finance, operate and maintain certain auxiliary, administrative, academic and research facilities of one of its campuses.

# REQUIRED SUPPLEMENTARY INFORMATION

# **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)	2016	2015	2014	2013	2012
TOTAL PENSION LIABILITY					
Service cost	\$1,710,241	\$1,589,267	\$1,519,183	\$1,456,761	\$1,531,094
Interest on the total pension liability	4,784,904	4,538,846	4,316,728	4,112,461	3,871,146
Difference between expected and actual experience	136,167	(112,155)	(320,624)	(183,253)	(212,758)
Changes of assumptions or other inputs		2,136,793		(3,312,815)	4,923,778
Benefits paid, including refunds of employee contributions	(3,105,641)	(2,976,992)	(2,687,540)	(2,487,369)	(2,273,071)
Net change in total pension liability	3,525,671	5,175,759	2,827,747	(414,215)	7,840,189
Total pension liability - beginning of year	65,705,091	60,529,332	57,701,585	58,115,800	50,275,611
Total pension liability - end of year	69,230,762	65,705,091	60,529,332	57,701,585	58,115,800
PLAN NET POSITION					
Contributions - employer	2,426,683	2,510,046	1,580,876	810,056	1,851,460
Contributions - member	845,036	793,012	577,466	415,641	272,420
Contributions - state	96,000				
Net investment income	(1,104,655)	1,993,801	8,009,980	4,833,339	115,863
Benefits paid, including refunds of employee contributions	(3,105,641)	(2,976,993)	(2,687,540)	(2,487,369)	(2,273,071)
Administrative expense	(48,341)	(48,283)	(37,641)	(37,426)	(32,839)
Net change in plan net position	(890,918)	2,271,583	7,443,141	3,534,241	(66,167)
Plan net position - beginning of year	55,055,450	52,783,867	45,340,726	41,806,485	41,872,652
Plan net position - end of year	54,164,532	55,055,450	52,783,867	45,340,726	41,806,485
Net pension liability - end of year	\$15,066,230	\$10,649,641	\$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)	2016	2015	2014	2013	2012
Total pension liability	\$69,230,762	\$65,705,091	\$60,529,332	\$57,701,585	\$58,115,800
Plan net position	54,164,532	55,055,450	52,783,867	45,340,726	41,806,485
Net pension liability	\$15,066,230	\$10,649,641	\$7,745,465	\$12,360,859	\$16,309,315
Ratio of plan net position to total pension liability	78.2%	83.8%	87.2%	78.6%	71.9%
Covered-employee payroll	\$10,689,424	\$10,047,570	\$9,372,583	\$8,921,077	\$8,594,147
Net pension liability as a percentage of covered-employee payroll	140.9%	106.0%	82.6%	138.6%	189.8%

(in thousands of dollars)

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to Actuarial Contributions	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
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	(42,254)	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	
2008	23,934	2,657	21,277	7,612,726	
2007		23,934	(23,934)	8,258,985	

#### **Notes to Schedule**

Valuation date:

Actuarially calculated contribution rates are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contributions rates:

Actuarial cost method Entry age actuarial cost method.

Amortization method Level dollar, closed.

22.67 years as of July 1, 2014.

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 will be 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 will be 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.

Remaining amortization period 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 returns on a market value basis and is recognized over a five-year period.

	June 30, 2014 valuation date	June 30, 2015 valuation date
Inflation	3.50%.	3.00%.
Investment rate of return	7.5%, net of investment expenses, includes inflation.	7.25%, net of investment expenses, includes inflation.
Projected salary increases	4.30 - 6.75%, includes inflation.	3.75 - 6.15%, includes inflation.
Cost-of-living adjustments	2.00%.	2.00%.
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table projected with scale AA to 2025, set back two years.	Healthy: RP-2014 White Collar Healthy Annuitant Mortality Table projected with the two-dimensional MP-2014 projection scale to 2029, set forward one year.
	Disabled: RP-2000 Disabled Retiree Mortality Table projected with scale AA to 2025, set back two years for males.	Disabled: RP-2014 Disabled Retiree Mortality Table projected with the two-dimensional MP-2014 projection scale to 2029, set back one year for males and set forward five years for females.

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

(in thousands of dollars)	2016	2015	2014	2013	2012
TOTAL PENSION LIABILITY					
Interest on the total pension liability	\$2,533	\$2,704	\$2,857	\$3,052	\$3,227
Changes of benefit terms					11,186
Difference between expected and actual experience	(650)	242	(436)	(241)	172
Changes of assumptions or other inputs		1,837			1,267
Benefits paid, including refunds of employee contributions	(4,937)	(5,081)	(5,169)	(5,278)	(5,368)
Net change in total pension liability	(3,054)	(298)	(2,748)	(2,467)	10,484
Total pension liability - beginning of year	38,062	38,360	41,108	43,575	33,091
Total pension liability - end of year	35,008	38,062	38,360	41,108	43,575
PLAN NET POSITION					
Net investment income	(1,425)	2,550	11,035	7,144	90
Benefits paid, including refunds of employee contributions	(4,937)	(5,081)	(5,169)	(5,278)	(5,368)
Administrative expense	(7)	(6)	(6)	(7)	(7)
Net change in plan net position	(6,369)	(2,537)	5,860	1,859	(5,285)
Plan net position - beginning of year	67,425	69,962	64,102	62,243	67,528
Plan net position - end of year	61,056	67,425	69,962	64,102	62,243
Net pension liability (asset) - end of year	\$(26,048)	\$(29,363)	\$(31,602)	\$(22,994)	\$(18,668)

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

(in thousands of dollars)	2016	2015	2014	2013	2012
Total pension liability	\$35,008	\$38,062	\$38,360	\$41,108	\$43,575
Plan net position	61,056	67,425	69,962	64,102	62,243
Net pension asset	\$(26,048)	\$(29,363)	\$(31,602)	\$(22,994)	\$(18,668)
Ratio of plan net position to total pension liability (asset)	174.4%	177.1%	182.4%	155.9%	142.8%

The University is not required to make contributions to the PERS-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)	2016	2015	2014
TOTAL PENSION LIABILITY			
Service cost	\$10,410	\$9,448	\$9,274
Interest on the total pension liability	27,782	24,683	22,453
Changes of benefit terms	24	40	142
Difference between expected and actual experience	(3,690)	762	2,487
Changes of assumptions or other inputs	3,613	33,105	
Benefits paid, including refunds of employee contributions	(9,509)	(8,082)	(6,994)
Net change in total pension liability	28,630	59,956	27,362
Total pension liability - beginning of year	391,232	331,276	303,914
Total pension liability - end of year	419,862	391,232	331,276
PLAN NET POSITION			
Contributions - employer	24,000	18,000	14,500
Net investment income	214	11,797	48,704
Benefits paid, including refunds of employee contributions	(9,509)	(8,082)	(6,994)
Administrative expense	(1,816)	(1,222)	(718)
Net change in plan net position	12,889	20,493	55,492
Total plan net position - beginning of year	340,557	320,064	264,572
Total plan net position - end of year	353,446	340,557	320,064
Net pension liability - end of year	\$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)	2016	2015	2014
Total pension liability	\$419,862	\$391,232	\$331,276
Plan net position	353,446	340,557	320,064
Net pension liability	\$66,416	\$50,675	\$11,212
Ratio of plan net position to total pension liability	84.2%	87.0%	96.6%
Covered-employee payroll	\$165,672	\$177,986	\$175,189
Net pension liability as a percentage of covered-employee payroll	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)	2016	2015	2014
Actuarially calculated employer contributions	\$7,823	\$12,200	\$21,300
Contributions in relation to the actuarially calculated employer contribution	24,000	18,000	14,500
Annual contribution deficiency (excess)	\$(16,177)	\$(5,800)	\$6,800
Covered-employee payroll	\$165,672	\$177,986	\$175,189
Actual contributions as a percentage of covered-employee payroll	14.5%	10.1%	8.3%

#### Notes to schedule

Methods and assumptions used to determine contribution rates:

• Note that a 10-year history is not available as the organization was not required to report under GASB prior to FY 2014.

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 to June 30, 2016 includes HATFA.
Contributions in relation to the actuarially determined contribution	The amount shown is equal to the overall dollar amount contributed to the Plan during the fiscal year shown. For 2016, this represents the period from July 1, 2015 through June 30,2016.
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 year's 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	3.00%.
Investment rate of return	7.0%, net of pension plan investment expenses, including inflation.
Projected salary increases	5.00%, including inflation through 2017, 4.00% afterward.
Cost-of-living adjustments	N/A.
Mortality	RP-2000 Healthy Annuitant Mortality Table for Males or Females, as appropriate, with generational adjustments for mortality improvements based on Scale AA.

# **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-EMPLOYEE PAYROLL	PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS A PERCENTAGE OF ITS COVERED-EMPLOYEE PAYROLL	PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY
2016	0.3%	\$18,092	\$285	6347.5%	34.8%

# Retiree Health Plan

(in thousands of dollars)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITY	(DEFICIT)	FUNDED RATIO	COVERED PAYROLL	(DEFICIT) PAYROLL	IMPLICIT SUBSIDY INCLUDED IN ACTUARIAL ACCRUED LIABILITY
University of California							
July 1, 2015	\$50,646	\$17,889,684	\$(17,839,038)	0.3%	\$9,927,834	(179.7)%	\$3,950,130
July 1, 2014	65,184	14,583,920	(14,518,736)	0.4	9,299,817	(156.1)	2,811,375
July 1, 2013	44,300	13,725,248	(13,680,948)	0.3	8,836,770	(154.8)	2,666,877
Campuses and Medical Cent	ers						
July 1, 2015	\$50,646	\$17,320,301	\$(17,269,655)	0.3%	\$9,659,652	(178.8)%	\$3,824,303
July 1, 2014	65,184	14,093,786	(14,028,602)	0.5	9,034,755	(155.3)	2,713,867
July 1, 2013	44,300	13,253,215	(13,208,915)	0.3	8,569,794	(154.1)	2,571,587
DOE National Laboratories							
July 1, 2015		\$569,383	\$(569,383)	0.0%	\$268,182	(212.3)%	\$125,827
July 1, 2014		490,134	(490,134)	0.0	265,062	(184.9)	97,508
July 1, 2013		472,033	(472,033)	0.0	266,976	(176.8)	95,290



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