

2019-20

Annual Investment Report

Fiscal Year Ended June 30, 2020



Summary of Investments

as of June 30, 2020

Introduction

Chief Investment Officer's Letter

Cash Equivalents	1	31,920,099,248.97
Debt Securities	5	106,222,306,463.36
Equity	124	189,874,802,910.85
Real Estate Programs	371	37,341,106,803.33
Private Debt	373	454,176,229.45
Private Equity	374	23,390,849,252.03
Infrastructure	381	3,441,267,014.72
Forestland	382	1,269,805,623.26

Cash Equivalents

Cash Equivalents	1	31,717,248,833.08
International Currency	4	202,850,415.89

Debt Securities

U. S. Treasuries & Agencies	5	21,506,803,220.55
Foreign Issued Bonds	6	3,037,691,850.88
Mortgage-Backed Securities	8	29,812,155,884.30
Mortgage Loans	61	28,281,937.11
Asset-Backed Securities	62	10,895,249,847.69
Corporate Bonds	66	40,942,123,722.83

Equity

Domestic Equity	124	97,051,244,126.42
International Equity	194	84,681,435,886.52
Domestic REITS	358	6,440,712,823.79
International REITS	364	1,165,862,553.13

Derivatives

	368	535,547,520.99
--	-----	-----------------------

Real Estate

	371	37,341,106,803.33
--	-----	--------------------------

Private Debt

	373	454,176,229.45
--	-----	-----------------------

Private Equity

	374	23,390,849,252.03
--	-----	--------------------------

Infrastructure

	381	3,441,267,014.72
--	-----	-------------------------

Forestland

	382	1,269,805,623.26
--	-----	-------------------------

Investment Section

CHIEF INVESTMENT OFFICER'S LETTER

November 21, 2020

On behalf of the CalPERS Investment Office, I am pleased to report on CalPERS' investment performance, operations, and initiatives for the one-year period ending on June 30, 2020. The CalPERS Public Employees' Retirement Fund (PERF) earned a time-weighted rate of return of 4.7 percent this fiscal year, with the ending fair value of investments at \$395.8 billion. CalPERS claims compliance with the Global Investment Performance Standards (GIPS).¹

Drivers of the returns included the Fixed Income program, which generated a 12.5 percent net return, followed by Real Assets and Public Equity net returns of 4.6 percent and 0.6 percent, respectively.

The third and fourth quarter of this fiscal year brought increased market volatility and slowed economic growth due to the coronavirus pandemic. The CalPERS investment team was prepared for this unanticipated situation through taking crucial steps and making decisions leading up to the downturn, which reduced the impact on the PERF. During this challenging time, our enhanced balance-sheet liquidity management framework allowed us to generate liquidity on demand, while the centralized governance structure allowed us to allocate liquidity in the most efficient way, maximizing the benefits to the Fund.

Also, during this fiscal year, we conducted several Investment Strategy Reviews, focusing on our comparative advantages, and eliminating costly fees. This resulted in reducing external manager relationships by over 20, reallocating approximately \$28 billion of assets to internal management and saving CalPERS over \$100 million a year in fees.

This fiscal year, we observed how the Fund benefited from diversification of the segments built into the strategic asset allocation, which helped offset our losses during the drawdown in spring of 2020. This speaks to the importance of not just focusing on strong returns, but also working to minimize risk, especially downside risk, within the portfolio.

While we did not reach the targeted 7 percent return in this fiscal year, our returns were positive and we beat our benchmark of 4.3 percent, despite the market volatility. We are a long-term investor and continue to stay focused on the sustainability and long-term performance of the Fund, while managing through the highs and lows of the short-term volatility.

In this current low-yield and low-growth environment, we continue to execute on our strategy to achieve our 7 percent return target, as these challenging times require innovation and an understanding of our structural advantages. We must also be prudent with the risks we take. Our 7 percent solution includes building our private equity and private debt assets as they have the potential of higher returns and lower expected volatility compared to publicly traded assets. We will also look to prudently and diligently apply leverage within our portfolio at the Total Fund level to take advantage of the current low interest rate environment.

We understand that increasing leverage and private asset investments comes with risk. However, with the proper controls, careful planning, a comprehensive balance-sheet liquidity management framework, and a long-term commitment, we can work to mitigate the corresponding risks. Prudent use of leverage can actually reduce risk over time by allowing us to keep more exposure in diversifying assets like Treasury bonds, while pursuing higher returns in other parts of the portfolio.

CalPERS is committed to the success and sustainability of our system. While the 2019-20 fiscal year brought unique challenges and opportunities, we remain focused on our Strategic Plan Goal to strengthen the long-term sustainability of the pension Fund. The Investment Office continues to stay focused on our Mission to manage the CalPERS investment portfolio in an efficient and risk aware manner to generate returns to sustainably pay benefits. And as we move forward, we will continue to implement our Vision to work as one team, with a culture of trust, respect, and accountability to effectively manage one Total Fund. We continue to identify ways to reduce the cost, risk, and complexity in the Fund's portfolio and operations, while also maximizing investment returns.

Our Investment Office staff, the Board's pension consultant Wilshire Associates, and State Street Bank & Trust, our master custodian, compiled the investment data presented on the following pages.

Dan Bienvenue
Interim Chief Investment Officer

¹GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. Asset Owner reports are made available to the Board and public at the first Investment Committee meeting following fiscal year end. <https://www.calpers.ca.gov/page/about/board/board-meetings>

**CalPERS 2019-2020 Annual Investment Report
Cash Equivalents**

Security Name	Rate	Maturity Date	Shares/Par Value	Base Total Cost	Base Market Value
AUSTRALIA AND NEW ZEALAND BANK	0.08	7/1/2020	250,000,000	250,000,000	250,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.12	7/9/2020	250,000,000	250,000,000	250,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.13	7/16/2020	100,000,000	100,000,000	100,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.14	7/10/2020	100,000,000	100,000,000	100,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.15	7/13/2020	100,000,000	100,000,000	100,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.15	7/29/2020	50,000,000	50,000,000	50,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.15	7/30/2020	100,000,000	100,000,000	100,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.16	7/24/2020	50,000,000	50,000,000	50,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.16	7/27/2020	100,000,000	100,000,000	100,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.18	7/20/2020	50,000,000	50,000,000	50,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.18	7/23/2020	50,000,000	50,000,000	50,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.19	7/16/2020	50,000,000	50,000,000	50,000,000
AUSTRALIA AND NEW ZEALAND BANK	0.19	7/17/2020	50,000,000	50,000,000	50,000,000
BANK OF AMERICA	0.46	10/6/2020	50,000,000	50,000,000	50,016,963
BANK OF MONTREAL-	0.42	7/30/2020	25,000,000	25,000,000	25,003,025
BANK OF MONTREAL-	0.42	8/28/2020	25,000,000	25,000,000	25,008,700
BANK OF MONTREAL-	0.49	9/21/2020	25,000,000	25,000,000	25,014,202
BANK OF MONTREAL-	0.49	10/21/2020	25,000,000	25,000,000	25,017,444
BANK OF NOVA SCOTIA	0.42	8/28/2020	25,000,000	25,000,000	25,008,618
BANK OF NOVA SCOTIA	0.42	8/18/2020	25,000,000	25,000,000	25,007,240
BANK OF NOVA SCOTIA	0.45	11/16/2020	25,000,000	25,000,000	25,008,923
BANK OF NOVA SCOTIA	0.45	7/1/2020	25,000,000	25,000,000	25,000,214
BANK OF NOVA SCOTIA	0.45	9/14/2020	25,000,000	25,000,000	25,008,778
BANK OF NOVA SCOTIA	0.51	10/2/2020	25,000,000	25,000,000	25,010,418
BANK OF NOVA SCOTIA/THE	0.46	7/24/2020	25,000,000	25,000,000	25,004,962
BANQUE NATIONALE DU CANADA	0.14	7/21/2020	75,000,000	75,000,000	75,000,000
BANQUE NATIONALE DU CANADA	0.16	7/2/2020	75,000,000	75,000,000	75,000,000
BANQUE NATIONALE DU CANADA	0.16	7/6/2020	150,000,000	150,000,000	150,000,000
BANQUE NATIONALE DU CANADA	0.16	7/7/2020	100,000,000	100,000,000	100,000,000
BANQUE NATIONALE DU CANADA	0.16	7/8/2020	100,000,000	100,000,000	100,000,000
BANQUE NATIONALE DU CANADA	0.16	7/9/2020	100,000,000	100,000,000	100,000,000
BANQUE NATIONALE DU CANADA	0.17	7/13/2020	100,000,000	100,000,000	100,000,000
BANQUE NATIONALE DU CANADA	0.17	7/30/2020	75,000,000	75,000,000	75,000,000
BANQUE NATIONALE DU CANADA	0.18	7/22/2020	50,000,000	50,000,000	50,000,000
BANQUE NATIONALE DU CANADA	0.18	7/23/2020	50,000,000	50,000,000	50,000,000
BANQUE NATIONALE DU CANADA	0.18	7/24/2020	50,000,000	50,000,000	50,000,000
BANQUE NATIONALE DU CANADA	0.18	7/27/2020	100,000,000	100,000,000	100,000,000
BANQUE NATIONALE DU CANADA	0.18	7/29/2020	200,000,000	200,000,000	200,000,000
CANADA T BILL	0.00	7/30/2020	200,000,000	146,466,351	146,822,320
CANADA T BILL	0.00	8/6/2020	200,000,000	146,459,443	146,816,446
CANADA T BILL	0.01	7/9/2020	600,000,000	428,857,444	440,511,013
CANADA T BILL	0.01	7/16/2020	250,000,000	178,012,281	183,540,749
CANADA T BILL	0.01	7/23/2020	450,000,000	324,722,680	330,360,132
CANADIAN IMPERIAL BK	0.00	7/1/2020	250,000,000	250,000,000	249,999,403
CANADIAN IMPERIAL BK	0.00	7/9/2020	250,000,000	249,992,777	249,992,313
CANADIAN IMPERIAL BK	0.44	11/13/2020	25,000,000	25,000,000	25,019,956
CMMNWLTH BNK OF AUS	0.41	9/9/2020	50,000,000	50,000,000	50,016,119
CMMNWLTH BNK OF AUS	0.47	9/18/2020	25,000,000	25,000,000	25,012,233
CREDIT AGRICOLE	0.00	7/1/2020	250,000,000	250,000,000	249,999,368
DUTCH TREASURY CERT	0.01	7/30/2020	350,000,000	390,111,841	393,273,381
FRENCH DISCOUNT T BILL	0.00	7/22/2020	80,000,000	89,493,127	89,879,965
FRENCH DISCOUNT T BILL	0.01	7/8/2020	455,000,000	512,486,034	511,080,964
FRENCH DISCOUNT T BILL	0.01	7/15/2020	379,000,000	424,580,501	425,759,959

**CalPERS 2019-2020 Annual Investment Report
Cash Equivalents**

Security Name	Rate	Maturity Date	Shares/Par Value	Base Total Cost	Base Market Value
FRENCH DISCOUNT T BILL	0.01	7/29/2020	194,000,000	218,694,501	217,982,660
FRENCH DISCOUNT T BILL	0.01	8/5/2020	295,000,000	326,794,102	331,504,589
GERMAN TREASURY BILL	0.01	7/8/2020	629,500,000	710,054,132	707,090,706
GERMAN TREASURY BILL	0.01	8/5/2020	200,000,000	226,681,362	224,752,059
GSTIF ERISA 4BPS	0.14	12/31/2030	2,700,000,000	2,700,000,000	2,700,000,000
J.P. MORGAN SECURITIES	0.42	9/2/2020	50,000,000	50,000,000	50,017,620
J.P. MORGAN SECURITIES	0.51	10/20/2020	50,000,000	50,000,000	50,037,658
JAPAN TREASURY DISC BILL	0.00	7/6/2020	1,100,000,000	10,289,772	10,196,206
JAPAN TREASURY DISC BILL	0.00	7/20/2020	12,490,000,000	116,844,847	115,779,354
JAPAN TREASURY DISC BILL	0.00	8/3/2020	18,000,000,000	166,944,314	166,867,019
JAPAN TREASURY DISC BILL	0.01	7/13/2020	42,000,000,000	390,366,621	389,318,818
JAPAN TREASURY DISC BILL	0.01	7/20/2020	27,230,000,000	253,922,797	252,415,677
JAPAN TREASURY DISC BILL	0.01	7/27/2020	10,410,000,000	96,720,706	96,501,485
JAPAN TREASURY DISC BILL	0.01	8/11/2020	24,500,000,000	226,189,082	227,132,868
NATIONAL BK OF CANAD	0.43	8/7/2020	25,000,000	25,000,000	25,006,191
NATIONAL BK OF CANAD	0.46	7/2/2020	25,000,000	25,000,000	25,000,441
NATIONAL BK OF CANAD	0.50	10/2/2020	25,000,000	25,000,000	25,016,292
NATL AUSTRALIA BK LT	0.38	8/7/2020	25,000,000	25,000,000	25,004,872
NATL AUSTRALIA BK LT	0.43	10/30/2020	25,000,000	25,000,000	25,013,903
ROYAL BANK OF CANADA	0.09	7/1/2020	450,000,000	450,000,000	450,000,000
ROYAL BANK OF CANADA	0.12	7/2/2020	250,000,000	250,000,000	250,000,000
ROYAL BANK OF CANADA	0.12	7/7/2020	250,000,000	250,000,000	250,000,000
ROYAL BANK OF CANADA	0.13	7/14/2020	250,000,000	250,000,000	250,000,000
ROYAL BANK OF CANADA	0.42	8/28/2020	25,000,000	25,000,000	25,008,700
ROYAL BANK OF CANADA	0.48	10/1/2020	25,000,000	25,000,000	25,015,712
ROYAL BK OF CANADA	0.38	7/10/2020	25,000,000	25,000,000	25,000,726
ROYAL BK OF CANADA	0.43	9/3/2020	25,000,000	25,000,000	25,009,353
STATE STREET INSTITUTIONAL TRE	0.39	12/31/2030	568,857	568,857	568,857
STIF CALPERS	0.35	12/31/2020	3,108,384,200	3,108,384,200	3,108,384,200
SUMITOMO MITSUI BKG CORP	0.14	7/30/2020	100,000,000	100,000,000	100,000,000
SUMITOMO MITSUI BKG CORP	0.15	7/2/2020	50,000,000	50,000,000	50,000,167
SUMITOMO MITSUI BKG CORP	0.15	7/7/2020	50,000,000	50,000,000	50,000,583
SUMITOMO MITSUI BKG CORP	0.15	7/8/2020	150,000,000	150,000,000	150,001,934
SUMITOMO MITSUI BKG CORP	0.15	7/15/2020	100,000,000	100,000,000	100,001,916
SUMITOMO MITSUI BKG CORP	0.15	7/24/2020	150,000,000	150,000,000	150,003,000
SUMITOMO MITSUI BKG CORP	0.15	7/29/2020	150,000,000	150,000,000	150,002,658
SWEDISH T BILL	0.00	7/15/2020	520,000,000	56,795,946	55,816,126
SWEDISH T BILL	0.00	8/19/2020	750,000,000	81,844,079	80,510,576
TORONTO DOMINION BANK	0.00	7/6/2020	150,000,000	149,996,875	149,997,750
TORONTO DOMINION BANK	0.00	7/7/2020	255,000,000	254,993,625	254,995,538
TORONTO DOMINION BANK	0.00	7/23/2020	50,000,000	49,994,806	49,995,336
TORONTO DOMINION BANK	0.00	7/24/2020	50,000,000	49,994,569	49,995,034
TORONTO DOMINION BANK	0.00	7/29/2020	150,000,000	149,980,167	149,979,821
TORONTO DOMINION BANK	0.00	7/30/2020	100,000,000	99,986,306	99,985,833
TORONTO DOMINION BANK	0.12	7/2/2020	250,000,000	250,000,000	250,000,000
TORONTO DOMINION BANK	0.17	7/17/2020	50,000,000	50,000,000	50,000,000
TORONTO DOMINION BANK	0.17	7/22/2020	50,000,000	50,000,000	50,000,000
TORONTO DOMINION BANK	0.47	7/23/2020	25,000,000	25,000,000	25,004,154
TORONTO-DOMINION	0.37	7/10/2020	25,000,000	25,000,000	25,001,483
TORONTO-DOMINION	0.42	7/24/2020	25,000,000	25,000,000	25,003,160
TORONTO-DOMINION	0.43	8/20/2020	25,000,000	25,000,000	25,002,128
TORONTO-DOMINION	0.49	9/18/2020	25,000,000	25,000,000	25,011,958
TOYOTA MOTOR CREDIT	0.46	7/31/2020	25,000,000	25,000,000	25,005,820

**CalPERS 2019-2020 Annual Investment Report
Cash Equivalents**

Security Name	Rate	Maturity Date	Shares/Par Value	Base Total Cost	Base Market Value
TOYOTA MOTOR CREDIT	0.48	7/10/2020	25,000,000	25,000,000	25,002,304
TREASURY BILL	0.00	7/7/2020	250,000,000	249,994,375	249,995,430
TREASURY BILL	0.00	8/4/2020	500,000,000	499,928,457	499,943,945
TREASURY BILL	0.01	7/7/2020	1,250,000,000	1,249,973,083	1,249,977,150
TREASURY BILL	0.01	7/9/2020	500,000,000	499,987,222	499,986,535
TREASURY BILL	0.01	7/16/2020	1,000,000,000	999,943,750	999,947,330
TREASURY BILL	0.01	7/21/2020	500,000,000	499,970,833	499,964,835
TREASURY BILL	0.01	7/23/2020	500,000,000	499,951,111	499,963,060
TREASURY BILL	0.01	7/28/2020	1,500,000,000	1,499,862,938	1,499,857,800
TREASURY CERTIFICATES	0.01	7/9/2020	425,000,000	459,947,896	477,385,175
TRI-PARTY BARCLAYS CAPITAL/XIS	0.06	7/1/2020	200,000,000	200,000,000	200,000,000
TRI-PARTY CANADIAN IMPERIAL BA	0.07	7/1/2020	850,000,000	850,000,000	850,000,000
TRI-PARTY DEUTSCHE BANK SECURI	0.07	7/1/2020	2,000,000,000	2,000,000,000	2,000,000,000
TRI-PARTY GOLDMAN SACHS CO/X	0.04	7/1/2020	250,000,000	250,000,000	250,000,000
TRI-PARTY STATE STREET BANK	0.07	7/1/2020	3,000,000,000	3,000,000,000	3,000,000,000
UK TREASURY BILL GBP	0.00	7/20/2020	5,200,000	6,351,587	6,424,842
UK TREASURY BILL GBP	0.00	7/31/2020	3,800,000	4,713,897	4,695,096
UK TREASURY BILL GBP	0.00	8/24/2020	1,800,000	2,232,899	2,223,920
UK TREASURY BILL GBP	0.01	7/6/2020	156,767,000	192,590,830	193,699,088
WELLS FARGO BANK NA	0.43	8/21/2020	25,000,000	25,000,000	25,007,923
WELLS FARGO BANK NA	0.44	9/10/2020	25,000,000	25,000,000	25,010,559
WELLS FARGO BANK NA	0.54	11/16/2020	25,000,000	25,000,000	25,013,505
WESTPAC BANKING CORP.	0.34	7/2/2020	25,000,000	25,000,000	25,000,274
WESTPAC BANKING CORP.	0.45	8/6/2020	25,000,000	25,000,000	25,015,320
Total				31,677,673,023	31,717,248,833

**CalPERS 2019-2020 Annual Investment Report
International Currency**

Security Name	Par Value	Book Value	Market Value
AUSTRALIAN DOLLAR	14,753,573	9,920,522	10,157,834
BRAZILIAN REAL	1,712,107	319,179	311,814
CANADIAN DOLLAR	21,558,614	15,833,686	15,828,644
CHILEAN PESO	61,170,204	74,375	74,543
COLOMBIAN PESO	405,474,568	111,015	108,437
CZECH KORUNA	3,561,046	151,546	150,121
DANISH KRONE	1,425,126	215,890	214,758
EGYPTIAN POUND	1,099,444	67,259	68,119
EURO CURRENCY	43,667,877	48,475,534	49,045,577
HONG KONG DOLLAR	15,297,229	1,973,755	1,973,721
HUNGARIAN FORINT	29,359,547	93,314	93,035
INDIAN RUPEE	8,301,178	109,673	109,944
INDONESIAN RUPIAH	1,202,600,091	84,623	84,186
JAPANESE YEN	1,375,614,105	12,780,894	12,750,745
KUWAITI DINAR	43,212	140,037	140,457
MALAYSIAN RINGGIT	457,544	106,842	106,778
MEXICAN PESO (NEW)	2,304,042	102,776	99,712
MOROCCAN DIRHAM	98	12	10
NEW ISRAELI SHEQEL	694,706	200,347	200,727
NEW TAIWAN DOLLAR	471,453	15,828	15,979
NEW ZEALAND DOLLAR	272,485	176,389	175,412
NORWEGIAN KRONE	870,469	94,328	90,232
PAKISTAN RUPEE	16,653,093	115,959	99,185
PERU SOL	86,637	26,094	24,505
PHILIPPINE PESO	8,641,538	173,017	173,438
POLISH ZLOTY	1,089,476	274,221	275,423
POUND STERLING	31,406,290	39,741,930	38,805,632
QATARI RIAL	579,554	159,174	159,174
SAUDI RIYAL	1,575,798	419,824	420,101
SINGAPORE DOLLAR	1,670,434	1,197,934	1,197,401
SOUTH AFRICAN RAND	2,539,738	149,996	146,172
SOUTH KOREAN WON	1,516,880,485	1,254,960	1,261,072
SWEDISH KRONA	3,348,576	360,149	359,418
SWISS FRANC	326,983	345,486	345,083
THAILAND BAHT	22,852,762	739,451	739,392
TURKISH LIRA	585,465	87,529	85,410
UAE DIRHAM	39,317,456	10,704,023	10,704,016
US DOLLAR	54,378,106	54,378,106	54,378,106
YUAN RENMINBI	13,273,471	1,876,157	1,876,104
Total		203,051,836	202,850,416

Currency balances are in absolute values

**CalPERS 2019-2020 Annual Investment Report
U.S. Treasuries and Agencies**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
US TREASURY N/B	0.63	5/15/2030	2,008,500,000	1,987,440,523	2,003,164,922
US TREASURY N/B	1.13	5/15/2040	871,200,000	862,567,818	863,168,625
US TREASURY N/B	1.25	5/15/2050	2,151,600,000	2,005,917,340	2,067,553,125
US TREASURY N/B	1.63	8/15/2029	100,050,000	99,957,084	109,163,930
US TREASURY N/B	2.00	2/15/2050	37,500,000	42,840,269	42,949,219
US TREASURY N/B	2.25	8/15/2027	200,100,000	195,825,005	224,706,047
US TREASURY N/B	2.25	11/15/2027	264,700,000	273,700,159	298,077,016
US TREASURY N/B	2.25	8/15/2049	667,500,000	685,135,278	802,668,750
US TREASURY N/B	2.38	5/15/2029	176,130,000	183,615,995	203,265,028
US TREASURY N/B	2.38	11/15/2049	156,100,000	160,682,474	192,783,500
US TREASURY N/B	2.50	2/15/2045	335,745,000	350,872,825	414,068,013
US TREASURY N/B	2.50	2/15/2046	617,400,000	620,875,155	764,611,313
US TREASURY N/B	2.50	5/15/2046	145,000,000	170,078,272	179,845,313
US TREASURY N/B	2.75	2/15/2028	607,500,000	603,278,446	708,686,719
US TREASURY N/B	2.75	8/15/2047	346,000,000	341,867,587	452,070,625
US TREASURY N/B	2.75	11/15/2047	642,900,000	609,492,279	840,993,563
US TREASURY N/B	2.88	5/15/2028	747,600,000	745,447,106	882,284,813
US TREASURY N/B	2.88	8/15/2028	744,240,000	744,024,637	881,459,250
US TREASURY N/B	2.88	8/15/2045	485,400,000	482,632,520	639,514,500
US TREASURY N/B	2.88	11/15/2046	277,000,000	270,333,110	368,323,438
US TREASURY N/B	2.88	5/15/2049	228,520,000	238,810,578	309,144,713
US TREASURY N/B	3.00	11/15/2045	396,400,000	400,877,683	534,272,875
US TREASURY N/B	3.00	2/15/2047	565,060,000	562,934,132	769,629,378
US TREASURY N/B	3.00	2/15/2048	659,950,000	652,115,719	903,409,680
US TREASURY N/B	3.00	2/15/2049	621,955,000	687,784,422	858,686,622
US TREASURY N/B	3.13	8/15/2044	329,900,000	332,559,805	449,901,125
US TREASURY N/B	3.13	5/15/2048	512,978,000	518,347,516	718,890,575
US TREASURY N/B	4.38	11/15/2039	557,700,000	746,097,243	876,896,109
US TREASURY N/B	4.38	5/15/2040	750,800,000	1,028,562,370	1,186,146,688
US TREASURY N/B	4.50	8/15/2039	655,800,000	832,490,890	1,043,951,625
US TREASURY N/B	4.63	2/15/2040	562,400,000	747,837,066	912,054,625
US TREASURY N/B	5.25	2/15/2029	3,200,000	3,777,605	4,461,500
Total				18,188,778,912	21,506,803,221

**CalPERS 2019-2020 Annual Investment Report
Foreign Issued Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
1011778 BC / NEW RED FIN	3.88	01/15/28	15,848,000	15,892,768	15,373,828
1011778 BC / NEW RED FIN	4.25	05/15/24	26,925,000	26,094,451	26,944,655
1011778 BC / NEW RED FIN	4.38	01/15/28	14,150,000	14,082,841	13,868,415
1011778 BC / NEW RED FIN	5.00	10/15/25	57,575,000	55,898,429	57,245,095
1011778 BC / NEW RED FIN	5.75	04/15/25	4,188,000	4,326,693	4,401,253
ABU DHABI GOVT INT L	3.13	04/16/30	5,000,000	4,980,416	5,509,050
ABU DHABI GOVT INT L	3.88	04/16/50	20,000,000	20,487,686	23,701,000
HUNGARY	7.63	03/29/41	18,000,000	25,939,197	30,175,560
HYDRO QUEBEC	9.38	04/15/30	1,000	1,411	1,736
ITALY GOV T INT BOND	2.88	10/17/29	30,000,000	29,608,544	29,982,000
ITALY GOV T INT BOND	4.00	10/17/49	35,000,000	34,687,182	35,422,450
ITALY GOV T INT BOND	5.38	06/15/33	20,000,000	21,705,567	24,764,000
JAPAN INT L COOP AGENCY	3.38	06/12/28	6,000,000	6,010,400	7,049,220
JPN BANK FOR INT L COOP	2.00	10/17/29	30,000,000	30,757,799	32,489,700
JPN BANK FOR INT L COOP	3.50	10/31/28	40,000,000	42,324,170	47,930,400
NOTA DO TESOURO NACIONAL	10.00	1/1/2031	190,000,000	50,669,891	41,796,834
OMAN GOV INTERNTL BOND	6.75	01/17/48	50,000,000	44,372,987	43,314,500
ONTARIO (PROVINCE OF)	2.00	10/02/29	60,000,000	61,208,215	64,303,200
PROV OF NEW BRUNSWICK	3.63	02/24/28	5,000,000	4,995,058	5,893,550
PROVINCE OF ALBERTA	3.30	03/15/28	5,000,000	5,435,664	5,793,900
PROVINCE OF QUEBEC	1.35	05/28/30	13,000,000	13,003,685	13,224,380
PROVINCE OF QUEBEC	7.50	09/15/29	13,000,000	18,907,554	20,057,310
REPUBLIC OF CHILE	2.45	01/31/31	7,000,000	6,997,098	7,271,040
REPUBLIC OF CHILE	2.55	01/27/32	42,000,000	43,141,287	43,748,040
REPUBLIC OF CHILE	3.50	01/25/50	40,000,000	40,992,839	45,144,400
REPUBLIC OF COLOMBIA	3.00	01/30/30	35,000,000	34,340,964	34,658,400
REPUBLIC OF COLOMBIA	3.13	04/15/31	15,000,000	14,973,914	14,897,100
REPUBLIC OF COLOMBIA	4.13	05/15/51	15,000,000	14,801,874	15,081,150
REPUBLIC OF COLOMBIA	4.50	03/15/29	35,000,000	36,812,057	38,452,750
REPUBLIC OF COLOMBIA	5.00	06/15/45	75,000,000	74,265,633	84,603,750
REPUBLIC OF COLOMBIA	5.20	05/15/49	75,000,000	83,626,335	87,916,500
REPUBLIC OF INDONESIA	2.85	02/14/30	15,000,000	14,962,360	15,324,300
REPUBLIC OF INDONESIA	3.70	10/30/49	10,000,000	9,861,675	10,369,700
REPUBLIC OF INDONESIA	3.85	10/15/30	25,000,000	25,355,996	27,802,500
REPUBLIC OF INDONESIA	4.20	10/15/50	32,000,000	32,246,752	35,711,040
REPUBLIC OF INDONESIA	4.45	04/15/70	25,000,000	25,413,246	28,749,000
REPUBLIC OF INDONESIA	4.75	02/11/29	55,000,000	57,042,451	63,775,250
REPUBLIC OF INDONESIA	5.35	02/11/49	45,000,000	50,726,759	58,304,250
REPUBLIC OF KOREA	2.50	06/19/29	30,000,000	30,004,699	32,802,900
REPUBLIC OF KOREA	3.88	09/20/48	12,925,000	15,364,205	17,757,787
REPUBLIC OF PANAMA	3.16	01/23/30	60,000,000	61,174,510	64,654,200
REPUBLIC OF PANAMA	3.87	07/23/60	20,000,000	21,011,636	22,697,800
REPUBLIC OF PANAMA	4.30	04/29/53	15,000,000	16,931,137	17,920,050
REPUBLIC OF PANAMA	4.50	04/16/50	35,000,000	35,901,425	42,809,200

**CalPERS 2019-2020 Annual Investment Report
Foreign Issued Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
REPUBLIC OF PANAMA	4.50	04/01/56	40,000,000	42,227,246	49,044,800
REPUBLIC OF PANAMA	6.70	01/26/36	35,000,000	41,043,917	50,330,000
REPUBLIC OF PERU	2.78	01/23/31	40,000,000	40,934,369	42,656,400
REPUBLIC OF PERU	2.84	06/20/30	62,000,000	63,952,344	66,397,040
REPUBLIC OF PERU	5.63	11/18/50	50,000,000	64,491,788	78,965,500
REPUBLIC OF PERU	8.75	11/21/33	5,000,000	6,513,246	8,338,600
REPUBLIC OF PHILIPPINES	2.46	05/05/30	20,000,000	20,149,211	20,992,600
REPUBLIC OF PHILIPPINES	2.95	05/05/45	25,000,000	25,289,965	25,986,000
REPUBLIC OF PHILIPPINES	3.00	02/01/28	14,000,000	13,708,510	15,113,700
REPUBLIC OF PHILIPPINES	3.70	02/02/42	90,000,000	96,117,176	103,211,100
REPUBLIC OF PHILIPPINES	3.75	01/14/29	48,000,000	52,376,264	54,851,520
REPUBLIC OF PHILIPPINES	5.00	01/13/37	42,000,000	47,073,283	54,073,740
REPUBLIC OF PHILIPPINES	6.38	10/23/34	39,000,000	47,460,397	56,213,430
REPUBLIC OF SOUTH AFRICA	5.75	09/30/49	23,000,000	22,565,705	19,975,960
REPUBLICA ORIENT URUGUAY	4.38	01/23/31	50,018,980	54,321,073	58,552,218
REPUBLICA ORIENT URUGUAY	4.98	04/20/55	35,000,000	36,865,087	44,855,300
REPUBLICA ORIENT URUGUAY	5.10	06/18/50	50,000,000	54,125,634	64,580,000
REPUBLICA ORIENT URUGUAY	7.63	03/21/36	12,000,000	14,565,278	18,186,720
SAUDI INTERNATIONAL BOND	4.50	04/22/60	26,000,000	25,958,478	30,052,880
STATE OF ISRAEL	2.50	01/15/30	20,000,000	20,140,854	21,625,800
STATE OF ISRAEL	2.75	07/03/30	37,000,000	38,477,085	40,760,310
STATE OF ISRAEL	3.38	01/15/50	36,000,000	36,890,906	39,618,360
STATE OF ISRAEL	3.88	07/03/50	45,000,000	48,044,516	53,567,550
STATE OF ISRAEL	4.13	01/17/48	25,000,000	25,481,719	31,043,000
STATE OF ISRAEL	4.50	12/31/99	15,000,000	15,000,000	19,455,150
STATE OF QATAR	3.75	04/16/30	10,000,000	9,981,395	11,408,300
STATE OF QATAR	4.82	03/14/49	23,000,000	28,773,162	30,411,750
TRINIDAD + TOBAGO	4.50	06/26/30	10,000,000	9,930,067	9,852,100
UNITED MEXICAN STATES	3.25	04/16/30	60,000,000	59,622,028	59,502,600
UNITED MEXICAN STATES	4.50	04/22/29	95,000,000	99,821,500	103,186,150
UNITED MEXICAN STATES	4.50	01/31/50	84,000,000	86,481,054	86,625,840
UNITED MEXICAN STATES	4.60	02/10/48	94,000,000	90,698,476	97,306,920
UNITED MEXICAN STATES	4.75	04/27/32	55,000,000	54,453,484	60,645,200
UNITED MEXICAN STATES	4.75	03/08/44	30,000,000	29,678,143	31,462,500
UNITED MEXICAN STATES	5.00	04/27/51	60,000,000	56,264,375	64,777,800
UNITED MEXICAN STATES	5.75	10/12/99	49,000,000	50,586,155	54,371,870
Total				2,807,403,354	3,037,691,851

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
AMERICAN HOME MORTGAGE ASSETS	3.96	11/25/2035	87,128	87,156	82,880
AMERICAN HOME MORTGAGE INVESTM	2.55	11/25/2045	1,363,367	1,362,249	879,734
AMERICAN HOME MORTGAGE INVESTM	2.97	6/25/2045	97,278	95,349	97,278
BANC OF AMERICA COMMERCIAL MOR	1.95	7/15/2049	87,251,713	10,776,164	5,976,214
BANC OF AMERICA FUNDING CORPOR	3.67	12/20/2034	73,361	55,065	73,361
BANK 2017-BNK4 XA Mtge	1.42	5/15/2050	44,298,626	3,708,280	3,017,394
BANK 2017-BNK7 XA Mtge	0.79	9/15/2060	115,022,141	6,910,415	4,675,477
BANK 2017-BNK9 XA Mtge	0.81	11/15/2054	61,681,637	3,936,399	2,803,085
BANK 2019-BN16 XA Mtge	0.96	2/15/2052	49,319,813	3,640,394	3,169,462
BANK 2019-BN17 XA Mtge	1.03	4/15/2052	86,740,274	7,296,340	6,454,387
BANK 2019-BN18 XA Mtge	0.90	5/15/2062	112,380,215	8,216,005	7,256,426
BANK 2019-BN20 XA Mtge	0.84	9/15/2062	76,362,548	5,250,376	4,688,059
BANK 2019-BN21 XA Mtge	1.00	10/17/2052	140,201,369	9,972,944	8,616,594
BANK 2019-BN22 XA Mtge	0.60	11/15/2062	48,881,699	2,494,335	2,292,258
BANK 2019-BN23 XA Mtge	0.70	12/15/2052	71,404,147	4,223,063	3,923,915
BANK 2019-BN24 A2 Mtge	2.71	11/15/2062	10,000,000	10,098,005	10,718,997
BANK 2019-BN24 A3 Mtge	2.96	11/15/2062	40,000,000	41,183,133	44,267,820
BANK 2019-BN24 XA Mtge	0.77	11/15/2062	81,459,138	4,474,062	3,981,332
BARCLAYS COMMERCIAL MORTGAGE S	0.89	11/15/2052	80,393,710	5,321,179	4,928,890
BARCLAYS COMMERCIAL MORTGAGE S	1.35	5/15/2052	133,188,976	13,980,714	12,608,550
BARCLAYS COMMERCIAL MORTGAGE S	1.60	8/15/2052	56,746,832	7,013,514	6,024,794
BAYVIEW COMMERCIAL ASSET TRUST	0.58	11/25/2035	333,333	283,527	310,279
BAYVIEW COMMERCIAL ASSET TRUST	0.83	8/25/2034	107,624	95,992	102,501
BEAR STEARNS ADJUSTABLE RATE M	4.29	1/25/2035	36,902	34,008	36,384
BEAR STEARNS COMMERCIAL MORTGA	2.05	5/11/2039	2,329,519	58,352	33,140
BEAR STEARNS MORTGAGE FUNDING	0.44	8/25/2036	802,394	298,233	732,415
BEAR STEARNS MORTGAGE FUNDING	0.48	12/25/2036	144,853	143,195	139,068
BENCHMARK MORTGAGE TRUST	0.49	7/15/2051	91,097,138	3,471,621	2,791,413
BENCHMARK MORTGAGE TRUST	0.52	1/15/2051	59,521,423	2,487,504	1,820,328
BENCHMARK MORTGAGE TRUST	0.59	10/10/2051	94,011,970	2,982,624	2,353,756
BENCHMARK MORTGAGE TRUST	0.83	12/15/2072	139,696,725	8,930,965	8,402,800
BENCHMARK MORTGAGE TRUST	1.05	3/15/2052	98,838,372	8,217,669	7,251,334
BENCHMARK MORTGAGE TRUST	1.05	5/15/2052	130,169,164	10,530,894	9,409,061
BENCHMARK MORTGAGE TRUST	1.23	3/15/2062	159,560,403	14,964,029	13,223,564
BENCHMARK MORTGAGE TRUST	1.27	8/15/2057	115,737,714	9,967,025	8,581,836
CANTOR COMMERCIAL REAL ESTATE	1.38	11/15/2052	161,418,025	14,970,214	13,213,760
CANTOR COMMERCIAL REAL ESTATE	3.01	1/15/2053	10,000,000	10,295,159	10,914,298
CD COMMERCIAL MORTGAGE TRUST	0.00	7/15/2044	19,255,093	204	752
CD COMMERCIAL MORTGAGE TRUST	0.90	8/15/2050	178,582,690	11,924,520	8,125,839
CD COMMERCIAL MORTGAGE TRUST	1.10	11/13/2050	73,604,394	4,971,897	3,496,067
CD COMMERCIAL MORTGAGE TRUST	1.17	2/10/2050	58,854,184	4,621,560	2,793,508
CD COMMERCIAL MORTGAGE TRUST	1.41	8/15/2057	105,814,642	12,254,127	10,949,368
CD COMMERCIAL MORTGAGE TRUST	1.51	12/11/2049	167,738	295	5,880
CITIGROUP COMMERCIAL MORTGAGE	0.83	8/15/2050	61,515,114	3,922,770	2,723,297
CITIGROUP COMMERCIAL MORTGAGE	0.88	12/15/2072	123,187,066	8,659,459	7,721,624
CITIGROUP COMMERCIAL MORTGAGE	0.93	12/10/2049	110,016,616	4,900,513	3,275,385
CITIGROUP COMMERCIAL MORTGAGE	0.95	11/10/2051	69,525,256	4,299,032	3,767,004
CITIGROUP COMMERCIAL MORTGAGE	0.99	2/15/2053	115,926,230	9,264,384	8,163,780
CITIGROUP COMMERCIAL MORTGAGE	0.99	11/10/2048	59,479,300	3,615,610	1,759,568
CITIGROUP COMMERCIAL MORTGAGE	1.04	9/10/2058	98,500,680	7,068,665	3,836,298

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CITIGROUP COMMERCIAL MORTGAGE	1.08	9/10/2046	65,393,792	4,756,289	1,659,553
CITIGROUP COMMERCIAL MORTGAGE	1.19	8/10/2056	103,837,567	8,477,538	7,581,330
CITIGROUP COMMERCIAL MORTGAGE	1.42	2/10/2049	125,214,135	11,882,646	6,944,156
CITIGROUP COMMERCIAL MORTGAGE	1.91	4/10/2049	62,424,709	8,118,471	4,928,482
CITIGROUP COMMERCIAL MORTGAGE	2.04	5/10/2049	137,019,193	18,920,857	12,033,678
CITIGROUP COMMERCIAL MORTGAGE	2.86	12/15/2072	10,000,000	10,098,647	10,915,013
CITIGROUP COMMERCIAL MORTGAGE	3.10	12/15/2072	40,000,000	41,186,433	44,575,368
CITIGROUP MORTGAGE LOAN TRUST	3.27	3/25/2037	491,116	322,098	401,318
CITIGROUP MORTGAGE LOAN TRUST	4.00	4/25/2037	605,015	599,068	558,487
COMM MORTGAGE TRUST	0.66	8/15/2057	184,744,770	8,977,986	7,902,938
COMM MORTGAGE TRUST	1.01	12/10/2047	91,207,985	6,423,792	3,005,942
COMM MORTGAGE TRUST	1.09	8/10/2050	80,331,115	6,571,887	2,129,602
COMM MORTGAGE TRUST	1.15	2/10/2049	124,184,982	9,162,271	5,479,979
COMM MORTGAGE TRUST	1.16	3/10/2046	130,981,971	11,362,791	2,536,754
COMM MORTGAGE TRUST	1.27	2/10/2048	167,165,136	14,944,439	7,291,292
COMM MORTGAGE TRUST	1.32	9/10/2050	84,264,907	7,705,092	5,727,422
COMM MORTGAGE TRUST	1.49	1/10/2046	51,785,563	4,689,168	1,394,874
COMM MORTGAGE TRUST	1.57	10/10/2049	63,232,685	6,489,286	3,967,981
COMM MORTGAGE TRUST	1.63	8/15/2045	17,789,010	2,267,277	467,780
COMM MORTGAGE TRUST	1.85	5/15/2045	60,977,361	8,452,054	1,625,315
COMM MORTGAGE TRUST	1.98	3/10/2039	322,585	5,083	20,676
COMM MORTGAGE TRUST	3.71	7/10/2048	30,000,000	30,761,655	32,833,959
COMM MORTGAGE TRUST	3.76	8/10/2048	25,000,000	25,639,149	27,418,754
COUNTRYWIDE ALTERNATIVE LOAN T	0.39	6/25/2046	285,862	163,323	208,858
COUNTRYWIDE ALTERNATIVE LOAN T	3.25	8/25/2035	555,694	420,532	458,489
COUNTRYWIDE ALTERNATIVE LOAN T	3.89	12/25/2034	12,472	10,628	12,445
COUNTRYWIDE ALTERNATIVE LOAN T	4.12	12/25/2034	5,009	5,014	5,008
COUNTRYWIDE HOME LOANS	0.58	9/25/2035	301,902	272,429	260,951
COUNTRYWIDE HOME LOANS	0.76	4/25/2035	330,838	250,935	302,042
COUNTRYWIDE HOME LOANS	0.84	2/25/2035	152,473	115,142	143,404
COUNTRYWIDE HOME LOANS	0.96	2/25/2035	1,151,205	1,151,205	965,073
COUNTRYWIDE HOME LOANS	2.48	11/25/2034	242,582	183,386	237,106
COUNTRYWIDE HOME LOANS	3.18	3/25/2037	1,630,959	1,533,125	1,503,884
COUNTRYWIDE HOME LOANS	3.47	2/25/2047	248,624	245,723	232,590
COUNTRYWIDE HOME LOANS	3.99	2/25/2034	50,813	44,624	49,798
CREDIT SUISSE FIRST BOSTON MOR	0.30	10/15/2039	499,550	5,754	685
CREDIT SUISSE MORTGAGE TRUST	0.88	12/15/2039	3,949,139	140	154
CSAIL COMMERCIAL MORTGAGE TRUS	0.72	11/15/2050	70,638,504	3,982,881	2,786,223
CSAIL COMMERCIAL MORTGAGE TRUS	0.75	6/15/2057	139,981,410	8,931,794	3,942,814
CSAIL COMMERCIAL MORTGAGE TRUS	0.76	8/15/2048	108,640,668	6,251,225	2,968,639
CSAIL COMMERCIAL MORTGAGE TRUS	0.83	4/15/2051	218,178,150	13,634,171	10,788,392
CSAIL COMMERCIAL MORTGAGE TRUS	0.88	9/15/2050	82,704,078	4,447,495	2,491,455
CSAIL COMMERCIAL MORTGAGE TRUS	0.94	11/15/2048	178,399,916	12,287,116	5,738,447
CSAIL COMMERCIAL MORTGAGE TRUS	1.05	3/15/2052	109,716,836	8,583,038	7,372,264
CSAIL COMMERCIAL MORTGAGE TRUS	1.37	9/15/2052	76,772,103	8,058,844	7,313,347
DBUBS MORTGAGE TRUST	0.34	8/10/2044	24,625,017	2,235,141	38,687
DBUBS MORTGAGE TRUST	0.87	11/10/2046	24,999,341	1,656,536	3,145
DEUTSCHE BANK COMMERCIAL MORTG	1.17	6/10/2050	98,717,095	7,503,143	4,896,965
DSLA MORTGAGE LOAN TRUST	0.99	11/19/2044	100,895	51,806	89,994
FANNIE MAE	0.00	9/25/2023	66,291	56,389	65,564

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FANNIE MAE	3.00	8/25/2031	13,150,000	13,334,728	13,365,878
FANNIE MAE	5.50	2/25/2033	952,314	961,291	1,080,063
FANNIE MAE	6.50	9/25/2023	45,887	46,218	48,894
FANNIE MAE	6.50	8/18/2028	82,173	81,527	92,569
FANNIE MAE	6.50	11/25/2031	1,211,252	1,234,249	1,420,073
FANNIE MAE	7.00	11/25/2029	701,376	745,864	816,198
FANNIEMAE STRIP	5.00	3/25/2036	46,002	18,311	8,089
FANNIEMAE STRIP	5.00	4/25/2036	49,961	24,216	8,781
FANNIEMAE WHOLE LOAN	3.92	4/25/2045	377,247	388,608	411,128
FED HM LN PC POOL 2B0649	2.74	7/1/2042	14,413,087	14,600,186	14,899,135
FED HM LN PC POOL 2B0893	3.77	11/1/2042	706,990	719,893	731,921
FED HM LN PC POOL 2B1771	3.85	10/1/2043	554,446	562,301	562,585
FED HM LN PC POOL 2B1985	3.09	12/1/2043	2,424,184	2,497,444	2,512,350
FED HM LN PC POOL 2B2161	3.63	1/1/2044	1,615,717	1,646,236	1,680,172
FED HM LN PC POOL 2B2622	3.16	5/1/2044	4,501,576	4,606,096	4,687,252
FED HM LN PC POOL 2B2821	3.29	7/1/2044	2,498,678	2,578,050	2,599,989
FED HM LN PC POOL 2B3169	3.14	9/1/2044	3,168,501	3,256,824	3,308,162
FED HM LN PC POOL 2B3249	3.14	9/1/2044	7,876,369	8,092,679	8,208,353
FED HM LN PC POOL 2B3271	3.06	8/1/2044	980,246	1,008,515	984,746
FED HM LN PC POOL 2B3309	3.11	10/1/2044	10,575,072	10,869,709	11,050,931
FED HM LN PC POOL 2B3317	3.13	10/1/2044	5,772,096	5,914,232	6,028,066
FED HM LN PC POOL 2B3403	3.20	11/1/2044	2,077,064	2,132,136	2,163,414
FED HM LN PC POOL 2B3878	2.70	3/1/2045	2,813,006	2,883,632	2,922,511
FED HM LN PC POOL 849316	3.29	7/1/2043	3,389,862	3,517,474	3,539,324
FED HM LN PC POOL 849345	3.22	5/1/2044	8,892,313	9,172,721	9,235,593
FED HM LN PC POOL 849433	3.21	8/1/2044	4,182,930	4,301,310	4,350,374
FED HM LN PC POOL 849473	3.17	5/1/2044	4,508,010	4,649,166	4,673,161
FED HM LN PC POOL 849628	2.81	10/1/2044	1,845,272	1,904,085	1,914,387
FED HM LN PC POOL A11314	6.00	7/1/2033	1,240	1,329	1,407
FED HM LN PC POOL A11732	5.00	8/1/2033	1,709	1,778	1,947
FED HM LN PC POOL A12739	5.00	8/1/2033	135,563	142,008	148,047
FED HM LN PC POOL A12885	5.00	8/1/2033	551	573	632
FED HM LN PC POOL A13679	6.00	9/1/2033	284	298	323
FED HM LN PC POOL A13715	5.00	9/1/2033	1,149,596	1,207,461	1,305,903
FED HM LN PC POOL A13890	5.00	9/1/2033	718	747	823
FED HM LN PC POOL A13973	5.50	10/1/2033	958	1,014	1,090
FED HM LN PC POOL A18698	6.00	2/1/2034	296,048	300,360	331,647
FED HM LN PC POOL A19680	5.00	3/1/2034	2,868	2,986	3,294
FED HM LN PC POOL A23348	6.50	6/1/2034	40,442	43,907	46,132
FED HM LN PC POOL A24457	6.00	7/1/2034	802,394	814,263	932,784
FED HM LN PC POOL A25467	6.50	8/1/2034	3,013	3,079	3,353
FED HM LN PC POOL A25557	6.00	8/1/2034	489,006	524,983	568,833
FED HM LN PC POOL A25914	6.00	8/1/2034	258,118	261,930	288,632
FED HM LN PC POOL A27926	6.00	10/1/2034	544	571	622
FED HM LN PC POOL A30638	7.00	3/1/2032	987	1,061	1,120
FED HM LN PC POOL A32056	4.50	4/1/2035	8,741	8,510	9,395
FED HM LN PC POOL A36085	6.00	7/1/2035	539	580	600
FED HM LN PC POOL A44350	6.00	4/1/2036	190	204	212
FED HM LN PC POOL A44755	7.00	4/1/2036	20,341	21,958	21,069
FED HM LN PC POOL A46250	4.50	7/1/2035	121,163	119,571	132,310

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL A51249	6.00	8/1/2036	570,233	607,705	651,342
FED HM LN PC POOL A53990	7.00	11/1/2036	43,874	47,406	45,176
FED HM LN PC POOL A55597	7.00	12/1/2036	2,125	2,297	2,525
FED HM LN PC POOL A56815	6.00	1/1/2037	85,280	91,709	94,769
FED HM LN PC POOL A58000	5.00	3/1/2037	955	997	1,090
FED HM LN PC POOL A58297	6.00	3/1/2037	47,103	46,794	53,276
FED HM LN PC POOL A61946	6.00	6/1/2037	10,417	11,209	11,694
FED HM LN PC POOL A61969	6.00	6/1/2037	1,489	1,787	1,733
FED HM LN PC POOL A62176	6.00	6/1/2037	8,571	9,223	9,532
FED HM LN PC POOL A62582	6.00	6/1/2037	1,293	1,361	1,476
FED HM LN PC POOL A62725	6.00	7/1/2037	85,634	92,156	99,682
FED HM LN PC POOL A62853	6.00	7/1/2037	7,619	7,569	8,865
FED HM LN PC POOL A62906	6.00	6/1/2037	64,934	69,871	72,307
FED HM LN PC POOL A63098	6.00	7/1/2037	1,602	1,724	1,864
FED HM LN PC POOL A63205	6.00	7/1/2037	14,760	15,884	17,164
FED HM LN PC POOL A63312	7.00	7/1/2037	75,136	81,255	80,593
FED HM LN PC POOL A63860	6.00	7/1/2037	3,639	3,916	4,044
FED HM LN PC POOL A64107	6.50	8/1/2037	122,134	123,652	141,770
FED HM LN PC POOL A64161	6.00	8/1/2037	15,170	15,070	16,872
FED HM LN PC POOL A64249	6.00	8/1/2037	7,599	8,121	8,450
FED HM LN PC POOL A64281	6.00	8/1/2037	29,280	31,513	34,042
FED HM LN PC POOL A64381	7.00	8/1/2037	105,902	114,540	113,113
FED HM LN PC POOL A64472	7.00	8/1/2037	13,053	14,117	15,452
FED HM LN PC POOL A64843	7.00	8/1/2037	37,854	38,421	43,113
FED HM LN PC POOL A65572	6.50	9/1/2037	4,263	4,317	4,745
FED HM LN PC POOL A66302	6.00	10/1/2037	198,068	198,713	228,070
FED HM LN PC POOL A66825	6.00	10/1/2037	2,814	3,029	3,272
FED HM LN PC POOL A67052	6.00	10/1/2037	130,088	130,521	151,332
FED HM LN PC POOL A67245	6.00	10/1/2037	4,795	5,050	5,373
FED HM LN PC POOL A67492	6.50	11/1/2037	14,957	15,145	17,313
FED HM LN PC POOL A67530	6.00	11/1/2037	381	410	443
FED HM LN PC POOL A68726	6.50	11/1/2037	576	629	649
FED HM LN PC POOL A68739	6.50	10/1/2037	12,196	12,349	14,577
FED HM LN PC POOL A68762	6.00	11/1/2037	661	712	769
FED HM LN PC POOL A69521	6.50	12/1/2037	119,916	121,419	133,446
FED HM LN PC POOL A69659	7.00	12/1/2037	10,783	11,669	11,328
FED HM LN PC POOL A69748	6.50	12/1/2037	31,012	31,401	34,513
FED HM LN PC POOL A69764	6.50	12/1/2037	41,251	41,768	45,906
FED HM LN PC POOL A69830	6.00	12/1/2037	20,878	21,989	24,293
FED HM LN PC POOL A70570	6.50	1/1/2038	16,825	17,037	19,893
FED HM LN PC POOL A71410	6.00	1/1/2038	15,547	16,376	18,088
FED HM LN PC POOL A72251	7.00	2/1/2038	31,309	33,888	35,877
FED HM LN PC POOL A73988	7.00	2/1/2038	8,484	8,734	8,876
FED HM LN PC POOL A74528	4.50	3/1/2038	37,111	37,394	41,126
FED HM LN PC POOL A74611	6.00	3/1/2038	758	816	843
FED HM LN PC POOL A77428	6.00	5/1/2038	67,846	73,090	75,791
FED HM LN PC POOL A77989	7.00	6/1/2038	114,287	123,759	137,062
FED HM LN PC POOL A77997	7.00	5/1/2038	71,501	77,418	73,781
FED HM LN PC POOL A78238	7.00	6/1/2038	20,533	22,235	20,569
FED HM LN PC POOL A78312	5.00	1/1/2034	11,575	12,079	12,651

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL A79564	5.50	6/1/2038	5,766	6,118	6,341
FED HM LN PC POOL A81046	6.00	8/1/2038	2,211	2,366	2,561
FED HM LN PC POOL A81420	6.00	9/1/2038	34,023	36,669	39,379
FED HM LN PC POOL A82358	6.00	10/1/2038	21,443	23,113	24,902
FED HM LN PC POOL A82557	6.00	10/1/2038	16,556	17,452	18,834
FED HM LN PC POOL A83617	6.00	12/1/2038	2,604	2,702	3,028
FED HM LN PC POOL A84001	6.00	1/1/2039	828	873	923
FED HM LN PC POOL A84051	5.00	1/1/2039	154,428	168,661	176,246
FED HM LN PC POOL A85053	5.00	3/1/2039	31,331	33,059	35,865
FED HM LN PC POOL A85767	5.00	4/1/2039	1,069	1,128	1,167
FED HM LN PC POOL A86958	6.00	6/1/2039	782	825	869
FED HM LN PC POOL A87100	4.50	6/1/2039	617,827	646,774	683,967
FED HM LN PC POOL A87388	5.00	7/1/2039	18,004	19,002	20,268
FED HM LN PC POOL A87530	6.00	7/1/2039	25,635	27,689	28,545
FED HM LN PC POOL A87700	5.00	8/1/2039	899,174	982,611	1,032,457
FED HM LN PC POOL A87842	4.50	8/1/2039	4,838,029	5,190,800	5,380,717
FED HM LN PC POOL A87957	5.00	8/1/2039	12,086	12,757	13,867
FED HM LN PC POOL A88406	4.50	9/1/2039	771,238	823,006	856,655
FED HM LN PC POOL A88559	6.00	9/1/2039	2,614	2,824	2,918
FED HM LN PC POOL A88622	5.00	9/1/2039	129,805	137,021	149,074
FED HM LN PC POOL A88904	6.00	9/1/2039	9,290	10,037	10,798
FED HM LN PC POOL A89165	4.50	10/1/2039	135,710	144,828	148,736
FED HM LN PC POOL A89214	4.50	10/1/2039	61,372	65,496	68,209
FED HM LN PC POOL A89243	5.00	10/1/2039	296,779	324,370	340,684
FED HM LN PC POOL A89279	6.00	10/1/2039	76,102	82,226	84,725
FED HM LN PC POOL A89300	5.00	10/1/2039	70,327	77,012	80,805
FED HM LN PC POOL A89303	5.00	10/1/2039	33,598	35,147	38,540
FED HM LN PC POOL A89503	4.50	10/1/2039	143,786	153,446	160,012
FED HM LN PC POOL A89658	5.00	11/1/2039	65,540	71,639	73,801
FED HM LN PC POOL A89989	4.50	11/1/2039	117,917	125,847	126,735
FED HM LN PC POOL A90032	4.50	12/1/2039	73,827	78,797	80,961
FED HM LN PC POOL A90112	4.50	12/1/2039	284,516	303,668	316,259
FED HM LN PC POOL A90175	4.50	12/1/2039	404,569	431,802	449,547
FED HM LN PC POOL A90316	4.50	12/1/2039	64,123	68,440	71,303
FED HM LN PC POOL A90365	4.50	12/1/2039	2,683,779	2,864,435	2,982,061
FED HM LN PC POOL A90388	4.50	12/1/2039	616,405	657,897	685,966
FED HM LN PC POOL A90421	4.50	12/1/2039	1,991,907	2,125,990	2,214,664
FED HM LN PC POOL A90563	5.00	1/1/2040	150,148	157,100	172,586
FED HM LN PC POOL A90660	4.50	1/1/2040	108,589	115,906	120,681
FED HM LN PC POOL A90768	5.00	1/1/2040	17,347	18,395	19,925
FED HM LN PC POOL A90893	5.00	1/1/2040	142,811	156,424	164,195
FED HM LN PC POOL A91025	5.00	2/1/2040	103,455	109,586	118,892
FED HM LN PC POOL A91109	4.50	2/1/2040	841,960	898,744	937,660
FED HM LN PC POOL A91182	4.50	2/1/2040	504,796	537,333	561,882
FED HM LN PC POOL A91373	4.50	3/1/2040	69,203	73,875	76,923
FED HM LN PC POOL A91435	4.50	2/1/2040	1,690,757	1,804,786	1,881,446
FED HM LN PC POOL A91531	6.00	3/1/2040	71,380	77,038	79,918
FED HM LN PC POOL A91548	5.50	3/1/2040	748,120	803,614	850,955
FED HM LN PC POOL A91699	5.00	4/1/2040	61,000	64,624	70,104
FED HM LN PC POOL A91796	5.00	4/1/2040	58,011	61,457	66,614

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL A91942	4.50	4/1/2040	439,231	467,605	489,582
FED HM LN PC POOL A91947	5.00	4/1/2040	4,818	5,105	5,535
FED HM LN PC POOL A92350	5.00	6/1/2040	72,507	79,449	83,366
FED HM LN PC POOL A92465	4.50	6/1/2040	7,504	7,508	8,267
FED HM LN PC POOL A92543	5.00	6/1/2040	2,867,300	3,141,828	3,307,281
FED HM LN PC POOL A92789	5.00	7/1/2040	4,805	5,091	5,486
FED HM LN PC POOL A92955	5.00	7/1/2040	44,366	46,436	50,967
FED HM LN PC POOL A93093	4.50	7/1/2040	22,103	23,536	24,642
FED HM LN PC POOL A93101	5.00	7/1/2040	179,606	190,314	206,336
FED HM LN PC POOL A93108	6.00	7/1/2040	32,418	35,001	36,546
FED HM LN PC POOL A93486	5.00	8/1/2040	108,212	114,672	118,653
FED HM LN PC POOL A93497	4.50	8/1/2040	394,210	419,787	440,768
FED HM LN PC POOL A93505	4.50	8/1/2040	2,259,047	2,412,232	2,510,476
FED HM LN PC POOL A93588	5.00	8/1/2040	294,101	322,309	325,709
FED HM LN PC POOL A93658	4.50	9/1/2040	93,740	100,102	101,886
FED HM LN PC POOL A93692	4.50	9/1/2040	1,432,834	1,513,281	1,587,069
FED HM LN PC POOL A93784	4.50	9/1/2040	62,083	65,569	69,044
FED HM LN PC POOL A93792	3.50	9/1/2040	122,564	129,130	130,843
FED HM LN PC POOL A93795	5.00	9/1/2040	10,592	11,226	11,836
FED HM LN PC POOL A93948	4.50	9/1/2040	214,978	229,568	239,052
FED HM LN PC POOL A94055	4.00	9/1/2040	7,438,538	7,582,283	8,154,053
FED HM LN PC POOL A94177	4.00	10/1/2040	1,407,006	1,463,815	1,543,720
FED HM LN PC POOL A94585	4.00	10/1/2040	2,416,708	2,463,427	2,651,864
FED HM LN PC POOL A94616	5.00	10/1/2040	7,414	7,867	8,105
FED HM LN PC POOL A94819	5.00	11/1/2040	374,311	397,230	430,354
FED HM LN PC POOL A94862	4.50	11/1/2040	2,166,822	2,288,743	2,410,326
FED HM LN PC POOL A94944	4.50	11/1/2040	406,318	430,507	444,920
FED HM LN PC POOL A95062	4.50	11/1/2040	440,682	458,907	480,051
FED HM LN PC POOL A95085	4.00	11/1/2040	30,426,461	31,322,781	33,353,505
FED HM LN PC POOL A95313	4.50	12/1/2040	458,315	484,130	509,872
FED HM LN PC POOL A95493	4.50	12/1/2040	668,957	708,819	745,642
FED HM LN PC POOL A95763	5.00	12/1/2040	108,567	118,787	118,764
FED HM LN PC POOL A95834	5.00	12/1/2040	2,721,801	2,978,012	3,129,419
FED HM LN PC POOL A95836	5.00	12/1/2040	206,026	218,655	236,793
FED HM LN PC POOL A96174	4.00	1/1/2041	1,091,068	1,135,180	1,196,094
FED HM LN PC POOL A96236	4.50	1/1/2041	414,872	441,595	461,707
FED HM LN PC POOL A96421	5.00	1/1/2041	622,732	681,402	703,972
FED HM LN PC POOL A96587	4.50	2/1/2041	65,239	69,499	70,135
FED HM LN PC POOL A96672	5.00	6/1/2040	34,701	37,950	37,915
FED HM LN PC POOL A96731	4.50	2/1/2041	3,284,703	3,496,508	3,655,351
FED HM LN PC POOL A96766	4.50	2/1/2041	651,700	693,723	713,923
FED HM LN PC POOL A96783	4.50	2/1/2041	360,405	383,645	400,975
FED HM LN PC POOL A96876	4.50	2/1/2041	585,123	622,853	645,624
FED HM LN PC POOL A97014	5.00	2/1/2041	14,144	15,004	15,560
FED HM LN PC POOL A97043	4.50	2/1/2041	141,530	150,772	158,674
FED HM LN PC POOL A97151	4.50	2/1/2041	271,765	289,289	302,318
FED HM LN PC POOL A97152	4.50	2/1/2041	540,378	575,222	591,741
FED HM LN PC POOL A97169	5.00	2/1/2041	28,102	29,425	31,662
FED HM LN PC POOL A97220	4.00	3/1/2041	798,424	836,653	875,289
FED HM LN PC POOL A97248	4.50	3/1/2041	609,036	648,345	677,255

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL A97255	4.50	2/1/2041	3,245,225	3,493,138	3,609,500
FED HM LN PC POOL A97260	4.50	2/1/2041	23,124,042	24,695,180	25,710,464
FED HM LN PC POOL A97323	5.00	3/1/2041	441,038	482,656	488,947
FED HM LN PC POOL A97328	4.00	3/1/2041	433,657	454,421	467,392
FED HM LN PC POOL A97528	4.50	3/1/2041	388,991	414,098	432,538
FED HM LN PC POOL A97661	4.50	3/1/2041	2,159,726	2,299,122	2,394,230
FED HM LN PC POOL A97942	4.50	4/1/2041	255,423	270,510	283,999
FED HM LN PC POOL C00909	7.00	1/1/2030	2,986	3,025	3,394
FED HM LN PC POOL C01367	7.00	5/1/2032	1,295	1,391	1,523
FED HM LN PC POOL C03424	6.00	10/1/2039	53,404	57,701	62,045
FED HM LN PC POOL C03427	5.50	10/1/2039	9,877,741	10,586,225	11,313,839
FED HM LN PC POOL C03479	5.00	6/1/2040	69,719	73,362	80,068
FED HM LN PC POOL C03533	5.00	10/1/2040	72,067	76,379	82,809
FED HM LN PC POOL C03552	4.50	8/1/2040	1,468,754	1,555,938	1,645,591
FED HM LN PC POOL C03993	4.00	6/1/2042	20,418,324	21,606,398	22,432,486
FED HM LN PC POOL C09005	4.00	7/1/2042	82,611	87,231	90,776
FED HM LN PC POOL C09021	4.50	11/1/2042	311,478	329,425	336,754
FED HM LN PC POOL C33003	7.50	11/1/2029	1,364	1,383	1,369
FED HM LN PC POOL C35511	7.00	1/1/2030	5,842	6,244	6,657
FED HM LN PC POOL C35716	7.50	1/1/2030	15,958	16,190	16,023
FED HM LN PC POOL C37060	7.00	3/1/2030	4,080	4,363	4,096
FED HM LN PC POOL C43084	7.50	7/1/2030	716	727	826
FED HM LN PC POOL C46835	7.50	1/1/2031	9,674	9,822	10,021
FED HM LN PC POOL C46897	6.00	1/1/2025	145	150	161
FED HM LN PC POOL C48025	7.50	2/1/2031	4,000	4,062	4,083
FED HM LN PC POOL C48961	7.50	3/1/2031	29,543	30,001	29,974
FED HM LN PC POOL C50565	7.50	4/1/2031	2,599	2,640	2,621
FED HM LN PC POOL C51850	7.50	5/1/2031	10,705	10,873	10,955
FED HM LN PC POOL C67539	6.00	1/1/2029	321	340	357
FED HM LN PC POOL C76133	5.00	2/1/2033	1,167	1,214	1,304
FED HM LN PC POOL C77128	5.00	3/1/2033	748	778	816
FED HM LN PC POOL C90613	5.00	1/1/2023	38,473	39,577	41,953
FED HM LN PC POOL C90703	4.00	7/1/2023	48,426	49,673	51,268
FED HM LN PC POOL C90706	5.00	9/1/2023	50,141	51,700	54,676
FED HM LN PC POOL C91028	5.00	2/1/2027	46,885	48,629	51,317
FED HM LN PC POOL C91137	5.00	11/1/2027	1,379	1,422	1,504
FED HM LN PC POOL C91154	5.00	1/1/2028	2,048	2,111	2,241
FED HM LN PC POOL C91164	5.00	3/1/2028	54,712	56,801	59,705
FED HM LN PC POOL C91167	5.00	4/1/2028	1,029	1,062	1,123
FED HM LN PC POOL C91222	5.00	12/1/2028	6,039	6,248	6,586
FED HM LN PC POOL C91227	5.00	10/1/2028	11,561	11,958	12,607
FED HM LN PC POOL D97372	5.00	7/1/2027	19,547	20,038	21,315
FED HM LN PC POOL D97638	5.00	3/1/2028	1,575	1,617	1,719
FED HM LN PC POOL D97830	5.00	6/1/2028	29,663	30,802	32,378
FED HM LN PC POOL D98316	5.00	1/1/2030	14,880	15,399	16,242
FED HM LN PC POOL G00029	8.00	6/1/2021	4,682	4,703	4,699
FED HM LN PC POOL G00616	7.00	6/1/2026	117	124	127
FED HM LN PC POOL G01324	7.00	10/1/2031	8,098	8,197	9,305
FED HM LN PC POOL G01649	5.00	2/1/2034	209,972	219,143	240,802
FED HM LN PC POOL G01740	5.50	12/1/2034	2,235,112	2,369,820	2,564,660

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL G01770	5.50	1/1/2035	5,562,886	5,904,571	6,380,418
FED HM LN PC POOL G01981	5.00	12/1/2035	11,761	12,368	13,523
FED HM LN PC POOL G01992	6.50	12/1/2035	2,719	2,751	3,026
FED HM LN PC POOL G02319	6.50	8/1/2036	85,253	86,286	99,209
FED HM LN PC POOL G02366	6.50	10/1/2036	3,973	4,329	4,629
FED HM LN PC POOL G02496	6.00	12/1/2036	110,416	117,702	128,337
FED HM LN PC POOL G02611	6.00	2/1/2037	47,101	49,564	55,000
FED HM LN PC POOL G02735	7.00	3/1/2037	141,429	143,547	168,237
FED HM LN PC POOL G02789	6.00	4/1/2037	729,457	777,930	851,867
FED HM LN PC POOL G02985	6.00	6/1/2037	14,688	15,462	17,080
FED HM LN PC POOL G02996	6.00	5/1/2037	163,502	162,428	190,821
FED HM LN PC POOL G03120	6.00	8/1/2037	29,916	32,198	34,918
FED HM LN PC POOL G03158	6.00	8/1/2037	52,780	52,904	61,638
FED HM LN PC POOL G03202	5.50	9/1/2037	258,142	269,355	296,459
FED HM LN PC POOL G03218	6.00	9/1/2037	17,298	18,620	20,202
FED HM LN PC POOL G03362	6.00	9/1/2037	265,778	286,089	310,382
FED HM LN PC POOL G03521	6.50	7/1/2037	137,631	150,184	162,416
FED HM LN PC POOL G03550	6.00	11/1/2037	17,927	18,880	20,914
FED HM LN PC POOL G03617	6.50	12/1/2037	77,930	78,907	87,863
FED HM LN PC POOL G03618	6.50	12/1/2037	257,018	279,246	290,882
FED HM LN PC POOL G03698	6.00	12/1/2037	19,047	20,510	22,242
FED HM LN PC POOL G03781	6.00	1/1/2038	292,055	307,628	339,758
FED HM LN PC POOL G03973	6.00	1/1/2038	956,078	965,333	1,116,484
FED HM LN PC POOL G04015	6.00	2/1/2038	208,331	222,407	243,191
FED HM LN PC POOL G04214	5.50	5/1/2038	282,168	294,588	323,380
FED HM LN PC POOL G04445	5.50	6/1/2038	24,477	25,556	28,007
FED HM LN PC POOL G04477	6.00	8/1/2038	38,066	41,022	43,992
FED HM LN PC POOL G04570	6.00	11/1/2037	13,771	14,503	16,082
FED HM LN PC POOL G04610	6.00	7/1/2038	16,377	17,259	19,036
FED HM LN PC POOL G04765	6.00	9/1/2038	8,761	9,089	10,229
FED HM LN PC POOL G04953	4.50	9/1/2038	10,554	10,611	11,702
FED HM LN PC POOL G05227	6.00	2/1/2039	8,155	8,464	9,437
FED HM LN PC POOL G05228	6.00	1/1/2039	21,512	23,195	25,039
FED HM LN PC POOL G05354	5.00	3/1/2039	40,517	44,258	46,526
FED HM LN PC POOL G05380	6.00	4/1/2039	1,510	1,567	1,697
FED HM LN PC POOL G05535	4.50	7/1/2039	4,188,758	4,490,668	4,657,636
FED HM LN PC POOL G05661	5.00	9/1/2039	76,106	83,175	87,380
FED HM LN PC POOL G05749	6.00	3/1/2038	1,626	1,752	1,892
FED HM LN PC POOL G05774	5.00	1/1/2040	258,166	282,235	296,513
FED HM LN PC POOL G05830	6.00	12/1/2039	411,428	440,135	469,355
FED HM LN PC POOL G05832	5.00	3/1/2040	12,330	12,902	14,162
FED HM LN PC POOL G05929	5.00	7/1/2040	643,663	703,992	740,057
FED HM LN PC POOL G05958	5.00	8/1/2040	220,680	233,529	253,473
FED HM LN PC POOL G05978	6.00	5/1/2040	5,587	6,034	6,487
FED HM LN PC POOL G06024	4.50	8/1/2040	38,438	40,901	42,740
FED HM LN PC POOL G06025	4.50	9/1/2040	7,901,221	8,473,160	8,782,897
FED HM LN PC POOL G06231	4.00	12/1/2040	1,124,006	1,145,751	1,232,277
FED HM LN PC POOL G06395	5.00	4/1/2040	82,332	86,785	91,965
FED HM LN PC POOL G06492	4.50	5/1/2041	226,373	241,198	253,581
FED HM LN PC POOL G06503	4.50	9/1/2040	85,667	91,231	95,688

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL G06506	4.00	12/1/2040	737,286	772,432	808,388
FED HM LN PC POOL G06719	4.50	9/1/2041	2,893,809	3,081,723	3,221,713
FED HM LN PC POOL G06782	4.00	10/1/2041	8,533	8,773	9,356
FED HM LN PC POOL G06875	5.50	12/1/2038	159,055	170,369	182,670
FED HM LN PC POOL G07044	4.00	6/1/2042	8,484,653	9,039,320	9,323,141
FED HM LN PC POOL G07249	4.00	12/1/2042	729,678	764,879	801,788
FED HM LN PC POOL G07319	3.50	3/1/2043	38,791,649	38,725,827	41,991,247
FED HM LN PC POOL G07348	3.50	3/1/2043	14,902,688	14,877,401	16,138,046
FED HM LN PC POOL G07396	4.50	7/1/2041	3,774,053	4,000,384	4,222,979
FED HM LN PC POOL G07399	5.00	7/1/2041	6,617,886	7,111,995	7,594,972
FED HM LN PC POOL G07459	3.50	8/1/2043	1,666,223	1,724,732	1,803,484
FED HM LN PC POOL G07477	4.00	1/1/2041	73,046,798	76,950,158	80,094,143
FED HM LN PC POOL G07642	5.00	10/1/2041	388,215	416,176	445,524
FED HM LN PC POOL G07805	4.50	5/1/2042	1,995,161	2,086,576	2,221,219
FED HM LN PC POOL G07810	4.50	5/1/2042	9,054,263	9,682,924	10,067,987
FED HM LN PC POOL G07996	4.00	1/1/2040	15,128,726	15,420,158	16,247,630
FED HM LN PC POOL G08003	6.00	7/1/2034	769,016	825,462	897,111
FED HM LN PC POOL G08068	5.50	7/1/2035	287,194	304,164	329,604
FED HM LN PC POOL G08148	7.00	8/1/2036	82,844	84,052	96,006
FED HM LN PC POOL G08163	7.00	11/1/2036	112,948	122,040	132,607
FED HM LN PC POOL G08193	6.00	4/1/2037	43,054	45,313	50,267
FED HM LN PC POOL G08210	6.00	7/1/2037	17,407	18,732	20,317
FED HM LN PC POOL G08227	6.00	10/1/2037	1,836	1,977	2,143
FED HM LN PC POOL G08232	6.00	11/1/2037	655	690	762
FED HM LN PC POOL G08309	5.50	12/1/2038	132,159	138,283	151,330
FED HM LN PC POOL G08364	4.50	9/1/2039	1,176,232	1,241,374	1,308,044
FED HM LN PC POOL G08368	4.50	10/1/2039	3,128,026	3,338,186	3,478,831
FED HM LN PC POOL G08372	4.50	11/1/2039	3,380,897	3,608,268	3,758,289
FED HM LN PC POOL G08417	5.00	8/1/2040	4,415	4,621	4,974
FED HM LN PC POOL G08435	4.50	2/1/2041	3,005,862	3,133,199	3,342,431
FED HM LN PC POOL G08457	4.50	8/1/2041	1,391,084	1,471,374	1,547,967
FED HM LN PC POOL G08501	4.00	7/1/2042	254,393	268,560	279,533
FED HM LN PC POOL G08504	4.00	8/1/2042	603,954	639,866	663,634
FED HM LN PC POOL G08619	3.00	12/1/2044	55,091	56,722	58,637
FED HM LN PC POOL G08624	4.00	1/1/2045	321,722	335,678	349,543
FED HM LN PC POOL G08658	3.00	8/1/2045	110,881	111,190	117,688
FED HM LN PC POOL G08669	4.00	9/1/2045	1,190,253	1,236,039	1,288,561
FED HM LN PC POOL G08672	4.00	10/1/2045	46,058	48,019	49,637
FED HM LN PC POOL G08677	4.00	11/1/2045	703,465	733,447	759,746
FED HM LN PC POOL G08680	3.00	12/1/2045	237,108	235,224	251,385
FED HM LN PC POOL G08682	4.00	12/1/2045	154,550	161,156	167,215
FED HM LN PC POOL G08697	3.00	3/1/2046	64,640	64,814	68,489
FED HM LN PC POOL G08699	4.00	3/1/2046	105,820	109,961	114,188
FED HM LN PC POOL G08707	4.00	5/1/2046	2,852,648	2,973,833	3,079,541
FED HM LN PC POOL G08710	3.00	6/1/2046	1,700,368	1,704,964	1,802,273
FED HM LN PC POOL G08715	3.00	8/1/2046	9,272,135	9,297,211	9,813,907
FED HM LN PC POOL G08717	4.00	8/1/2046	556,641	580,503	598,738
FED HM LN PC POOL G08721	3.00	9/1/2046	1,418,953	1,412,184	1,503,462
FED HM LN PC POOL G08726	3.00	10/1/2046	1,514,304	1,511,765	1,603,611
FED HM LN PC POOL G08732	3.00	11/1/2046	117,569	117,008	124,467

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL G08737	3.00	12/1/2046	25,731,310	25,734,327	27,197,863
FED HM LN PC POOL G08741	3.00	1/1/2047	22,153,128	22,213,125	23,415,725
FED HM LN PC POOL G08747	3.00	2/1/2047	21,349,195	20,418,570	22,582,821
FED HM LN PC POOL G08750	3.00	3/1/2047	15,410,486	15,437,869	16,288,969
FED HM LN PC POOL G08752	4.00	3/1/2047	98,830	103,100	105,871
FED HM LN PC POOL G08761	3.50	5/1/2047	2,620,721	2,542,134	2,769,153
FED HM LN PC POOL G08767	4.00	6/1/2047	285,185	292,678	304,168
FED HM LN PC POOL G08785	4.00	10/1/2047	79,999	79,948	85,128
FED HM LN PC POOL G08789	4.00	11/1/2047	303,602	311,458	323,705
FED HM LN PC POOL G08792	3.50	12/1/2047	2,040,715	1,979,750	2,155,694
FED HM LN PC POOL G08797	4.00	1/1/2048	121,029	124,214	129,147
FED HM LN PC POOL G08800	3.50	2/1/2048	6,043,408	5,862,808	6,364,028
FED HM LN PC POOL G08813	3.50	5/1/2048	2,064,872	2,002,831	2,173,705
FED HM LN PC POOL G08835	3.50	9/1/2048	220,153	213,534	232,074
FED HM LN PC POOL G11753	5.00	8/1/2020	102	102	107
FED HM LN PC POOL G12319	5.00	6/1/2021	200	201	210
FED HM LN PC POOL G12769	5.00	8/1/2022	3,241	3,277	3,406
FED HM LN PC POOL G12832	5.00	10/1/2022	4,768	4,846	5,011
FED HM LN PC POOL G12869	5.00	9/1/2022	782	791	822
FED HM LN PC POOL G13004	5.00	3/1/2023	29,906	30,305	31,451
FED HM LN PC POOL G13006	5.00	2/1/2023	185	187	194
FED HM LN PC POOL G13081	5.00	4/1/2023	2,810	2,848	2,953
FED HM LN PC POOL G13174	5.00	6/1/2023	50,499	51,486	53,092
FED HM LN PC POOL G13178	5.00	6/1/2023	22,754	23,064	23,930
FED HM LN PC POOL G13202	5.00	7/1/2023	20,422	20,729	21,475
FED HM LN PC POOL G13232	5.00	6/1/2023	121,886	123,604	128,122
FED HM LN PC POOL G13240	5.00	8/1/2023	6,572	6,670	6,911
FED HM LN PC POOL G13255	5.00	7/1/2023	19,354	19,634	20,347
FED HM LN PC POOL G13369	5.00	11/1/2023	96,013	97,559	100,907
FED HM LN PC POOL G13379	5.00	12/1/2023	69,264	70,379	72,852
FED HM LN PC POOL G13408	5.00	1/1/2024	45,854	46,588	48,216
FED HM LN PC POOL G13488	5.00	1/1/2024	91,751	93,268	96,491
FED HM LN PC POOL G13512	5.00	12/1/2022	295	301	310
FED HM LN PC POOL G13586	5.00	4/1/2024	20,587	20,948	21,650
FED HM LN PC POOL G13601	5.00	6/1/2024	12,268	12,565	12,899
FED HM LN PC POOL G13644	5.00	7/1/2024	112,618	114,640	118,390
FED HM LN PC POOL G13656	5.00	2/1/2024	18,170	18,461	19,096
FED HM LN PC POOL G13689	5.00	10/1/2024	19,742	20,121	20,759
FED HM LN PC POOL G13729	5.00	10/1/2024	814	830	856
FED HM LN PC POOL G13748	5.00	12/1/2024	2,876	2,952	3,025
FED HM LN PC POOL G13756	5.00	1/1/2025	8,507	8,741	8,945
FED HM LN PC POOL G13827	5.00	3/1/2025	15,728	16,052	16,531
FED HM LN PC POOL G13888	5.00	6/1/2025	849,952	890,812	893,636
FED HM LN PC POOL G13911	5.00	6/1/2025	110,158	112,499	115,828
FED HM LN PC POOL G14181	3.50	6/1/2021	2,795	2,811	2,936
FED HM LN PC POOL G18156	5.00	12/1/2021	609	616	640
FED HM LN PC POOL G18247	5.00	4/1/2023	21,891	22,300	23,024
FED HM LN PC POOL G18304	5.00	3/1/2024	128,980	131,146	135,601
FED HM LN PC POOL G30302	5.00	7/1/2025	15,664	16,215	17,081
FED HM LN PC POOL G30359	5.00	8/1/2027	1,501	1,546	1,640

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL G30419	5.00	11/1/2028	6,335	6,510	6,934
FED HM LN PC POOL G30795	5.00	7/1/2032	69,963	72,798	78,335
FED HM LN PC POOL G31077	5.00	9/1/2031	300,013	312,075	327,152
FED HM LN PC POOL G31106	5.00	9/1/2031	43,013	44,742	46,963
FED HM LN PC POOL G60440	3.50	3/1/2046	122,951	125,276	134,452
FED HM LN PC POOL G60661	4.00	7/1/2046	625,208	651,633	669,455
FED HM LN PC POOL G60713	3.50	9/1/2046	39,867	40,623	43,493
FED HM LN PC POOL G60856	4.50	7/1/2042	6,447,025	6,775,310	7,166,798
FED HM LN PC POOL G60959	4.50	7/1/2045	8,377,586	8,992,083	9,319,376
FED HM LN PC POOL G61075	4.00	7/1/2044	27,281,239	27,816,312	29,947,590
FED HM LN PC POOL G61195	3.50	8/1/2044	64,538,958	68,009,864	69,830,611
FED HM LN PC POOL G61311	3.50	2/1/2048	708,595	687,315	750,239
FED HM LN PC POOL G61319	4.00	1/1/2046	9,482,712	9,715,791	10,404,567
FED HM LN PC POOL G61321	4.50	7/1/2045	5,105,204	5,344,776	5,669,605
FED HM LN PC POOL G61372	3.50	5/1/2048	733,823	711,775	776,113
FED HM LN PC POOL G61417	3.50	5/1/2048	233,789,227	233,719,619	254,046,434
FED HM LN PC POOL G61553	4.50	8/1/2048	413,508,343	426,022,813	451,613,795
FED HM LN PC POOL G61554	4.50	8/1/2048	69,287,560	71,507,841	76,267,151
FED HM LN PC POOL G61581	4.00	8/1/2048	866,730,935	881,364,120	935,361,317
FED HM LN PC POOL G61646	4.00	10/1/2048	494,276,220	496,649,162	532,105,977
FED HM LN PC POOL G61693	3.50	6/1/2048	88,421,610	88,658,583	96,083,071
FED HM LN PC POOL G61748	3.50	11/1/2048	202,297,218	203,755,292	221,047,860
FED HM LN PC POOL G61932	3.50	6/1/2048	211,185,739	218,708,693	223,441,428
FED HM LN PC POOL G61942	3.50	3/1/2048	15,771,108	16,125,431	16,951,124
FED HM LN PC POOL G61949	4.00	2/1/2049	27,117,454	28,420,126	30,366,759
FED HM LN PC POOL G67710	3.50	3/1/2048	273,696,512	268,588,883	293,941,833
FED HM LN PC POOL G67719	4.50	1/1/2049	56,230,052	59,246,301	62,166,365
FED HM LN PC POOL J03958	5.00	12/1/2021	1,415	1,426	1,487
FED HM LN PC POOL J04178	5.00	1/1/2022	1,996	2,014	2,098
FED HM LN PC POOL J04229	5.00	2/1/2022	196	197	206
FED HM LN PC POOL J04324	5.00	2/1/2022	1,241	1,252	1,305
FED HM LN PC POOL J04508	5.00	3/1/2022	1,119	1,133	1,176
FED HM LN PC POOL J05659	5.00	9/1/2022	18,170	18,462	19,098
FED HM LN PC POOL J06770	5.00	12/1/2022	1,292	1,315	1,358
FED HM LN PC POOL J06787	5.00	1/1/2023	17,943	18,173	18,857
FED HM LN PC POOL J06806	5.00	2/1/2023	3,246	3,287	3,411
FED HM LN PC POOL J06832	5.00	1/1/2023	210	213	221
FED HM LN PC POOL J06857	5.00	1/1/2023	992	1,005	1,042
FED HM LN PC POOL J07005	5.00	2/1/2023	8,710	8,819	9,157
FED HM LN PC POOL J07046	5.00	2/1/2023	2,293	2,324	2,410
FED HM LN PC POOL J07161	5.00	3/1/2023	39,730	40,456	41,758
FED HM LN PC POOL J07567	5.00	4/1/2023	18,365	18,709	19,534
FED HM LN PC POOL J07575	5.00	4/1/2023	11,898	12,064	12,585
FED HM LN PC POOL J07704	5.00	4/1/2023	6,594	6,717	6,930
FED HM LN PC POOL J07844	5.00	5/1/2023	578	589	607
FED HM LN PC POOL J07891	5.00	5/1/2023	33,316	33,781	35,014
FED HM LN PC POOL J07926	5.00	5/1/2023	10,090	10,235	10,605
FED HM LN PC POOL J08023	5.00	7/1/2023	218,206	221,361	229,326
FED HM LN PC POOL J08112	5.00	6/1/2023	2,218	2,250	2,332
FED HM LN PC POOL J08160	5.00	12/1/2022	7,372	7,501	7,748

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL J08248	5.00	12/1/2022	2,894	2,931	3,041
FED HM LN PC POOL J08266	5.00	7/1/2023	37,720	38,266	39,643
FED HM LN PC POOL J08657	5.00	9/1/2023	27,338	27,752	28,733
FED HM LN PC POOL J09312	5.00	2/1/2024	45,554	46,326	47,876
FED HM LN PC POOL J11138	5.00	11/1/2024	6,732	6,908	7,081
FED HM LN PC POOL J11372	5.00	12/1/2024	2,157	2,198	2,269
FED HM LN PC POOL J12421	5.00	6/1/2025	68,912	70,846	72,508
FED HM LN PC POOL J16296	4.00	8/1/2026	91,837	94,039	97,184
FED HM LN PC POOL J16528	4.00	8/1/2026	324,128	331,900	342,784
FED HM LN PC POOL K39023	6.50	1/1/2048	736,098	750,542	794,077
FED HM LN PC POOL Q00054	5.00	4/1/2041	2,179	2,282	2,469
FED HM LN PC POOL Q00265	4.50	4/1/2041	7,882,064	8,353,473	8,892,227
FED HM LN PC POOL Q00284	4.50	4/1/2041	981,378	1,044,785	1,091,418
FED HM LN PC POOL Q00627	5.00	5/1/2041	8,208	8,595	9,036
FED HM LN PC POOL Q00704	4.50	5/1/2041	253,754	268,352	282,205
FED HM LN PC POOL Q01226	5.00	6/1/2041	8,628	9,155	9,699
FED HM LN PC POOL Q01300	4.50	6/1/2036	1,901,984	2,008,365	2,115,389
FED HM LN PC POOL Q01559	4.50	6/1/2041	29,089	30,738	32,358
FED HM LN PC POOL Q01561	4.50	6/1/2041	1,454,556	1,548,727	1,618,191
FED HM LN PC POOL Q01676	4.50	6/1/2041	170,273	178,831	182,908
FED HM LN PC POOL Q01722	5.00	7/1/2041	3,400,652	3,643,278	3,803,664
FED HM LN PC POOL Q01919	4.50	7/1/2041	783,047	828,193	870,932
FED HM LN PC POOL Q01982	4.50	7/1/2041	32,885	35,043	36,854
FED HM LN PC POOL Q02239	5.00	7/1/2041	71,020	75,362	77,651
FED HM LN PC POOL Q02376	4.50	8/1/2041	400,257	426,550	448,911
FED HM LN PC POOL Q02459	4.50	8/1/2041	820,254	867,596	904,109
FED HM LN PC POOL Q02481	4.50	7/1/2041	507,900	537,182	558,806
FED HM LN PC POOL Q02546	4.50	8/1/2041	652,239	689,884	714,686
FED HM LN PC POOL Q02570	4.50	8/1/2041	434,914	460,016	478,303
FED HM LN PC POOL Q02592	4.50	8/1/2041	446,372	475,694	500,420
FED HM LN PC POOL Q02645	5.00	8/1/2041	649,109	711,990	741,209
FED HM LN PC POOL Q02662	4.50	8/1/2041	203,696	217,077	228,368
FED HM LN PC POOL Q02663	4.50	8/1/2041	45,647	48,608	50,837
FED HM LN PC POOL Q02674	4.50	8/1/2041	881,934	932,837	981,605
FED HM LN PC POOL Q02716	4.50	8/1/2036	1,090,496	1,141,075	1,213,810
FED HM LN PC POOL Q02718	4.50	8/1/2036	2,788,263	2,917,585	3,104,020
FED HM LN PC POOL Q02775	4.50	8/1/2041	57,806	61,604	64,840
FED HM LN PC POOL Q02776	4.50	8/1/2041	10,237	10,901	11,395
FED HM LN PC POOL Q02791	4.50	8/1/2041	194,612	205,845	209,046
FED HM LN PC POOL Q02833	4.50	8/1/2041	36,283	38,111	39,747
FED HM LN PC POOL Q02930	4.50	8/1/2041	2,077,272	2,181,908	2,311,219
FED HM LN PC POOL Q02982	5.00	8/1/2041	273,966	300,505	301,093
FED HM LN PC POOL Q03009	4.50	9/1/2041	841,481	896,814	943,767
FED HM LN PC POOL Q03039	4.50	9/1/2041	704,207	746,515	781,683
FED HM LN PC POOL Q03089	4.50	9/1/2041	1,974,684	2,091,913	2,197,986
FED HM LN PC POOL Q03090	4.50	9/1/2041	658,400	701,694	738,498
FED HM LN PC POOL Q03147	5.00	9/1/2041	284,227	311,783	311,565
FED HM LN PC POOL Q03232	4.50	9/1/2041	840,331	888,886	922,725
FED HM LN PC POOL Q03240	4.50	9/1/2041	531,179	565,672	584,459
FED HM LN PC POOL Q03339	4.00	9/1/2041	1,241,729	1,292,100	1,362,023

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL Q03447	4.50	9/1/2041	53,117	55,340	57,063
FED HM LN PC POOL Q03457	4.50	9/1/2041	1,054,132	1,122,584	1,173,645
FED HM LN PC POOL Q03516	4.50	9/1/2041	3,667,411	3,834,973	4,083,582
FED HM LN PC POOL Q03526	4.50	9/1/2041	197,806	209,236	212,581
FED HM LN PC POOL Q03550	4.50	9/1/2041	335,734	355,133	361,757
FED HM LN PC POOL Q03580	4.50	9/1/2041	144,779	153,010	161,107
FED HM LN PC POOL Q03643	4.50	10/1/2041	2,909,478	3,100,982	3,263,515
FED HM LN PC POOL Q03645	4.50	9/1/2036	2,586,354	2,728,795	2,878,751
FED HM LN PC POOL Q03779	4.50	7/1/2041	720,654	756,915	789,109
FED HM LN PC POOL Q03805	4.50	10/1/2041	17,640,156	18,530,661	19,645,525
FED HM LN PC POOL Q04141	4.50	10/1/2041	2,396,830	2,535,462	2,669,373
FED HM LN PC POOL Q04220	4.50	10/1/2041	37,100	39,211	40,195
FED HM LN PC POOL Q04296	4.50	11/1/2041	108,751	115,827	121,115
FED HM LN PC POOL Q04368	4.00	11/1/2041	88,572	92,503	97,189
FED HM LN PC POOL Q04441	4.00	11/1/2041	3,782,236	4,010,354	4,153,557
FED HM LN PC POOL Q04442	4.50	11/1/2041	12,189,433	12,805,450	13,573,844
FED HM LN PC POOL Q04448	5.00	11/1/2041	350,232	383,495	385,409
FED HM LN PC POOL Q04643	5.00	11/1/2041	819,494	897,326	942,247
FED HM LN PC POOL Q04660	4.50	11/1/2041	751,376	800,264	827,217
FED HM LN PC POOL Q04663	5.00	11/1/2041	296,783	324,970	325,999
FED HM LN PC POOL Q04674	4.00	12/1/2041	343,039	356,971	376,260
FED HM LN PC POOL Q04741	4.50	11/1/2041	2,378,575	2,521,730	2,648,543
FED HM LN PC POOL Q04789	4.50	11/1/2041	1,313,651	1,388,485	1,462,266
FED HM LN PC POOL Q05168	4.00	12/1/2041	9,385,070	9,623,003	10,305,543
FED HM LN PC POOL Q05316	4.50	12/1/2041	631,806	659,531	700,075
FED HM LN PC POOL Q05451	4.00	1/1/2042	8,294,209	8,670,644	9,105,427
FED HM LN PC POOL Q05535	3.50	1/1/2042	1,253,451	1,238,979	1,392,551
FED HM LN PC POOL Q05599	4.00	1/1/2042	6,526,351	6,882,393	7,165,391
FED HM LN PC POOL Q05601	4.00	1/1/2042	6,114,940	6,270,024	6,661,543
FED HM LN PC POOL Q05692	4.00	1/1/2042	5,154,303	5,254,480	5,663,646
FED HM LN PC POOL Q05711	4.50	1/1/2042	669,589	713,239	738,544
FED HM LN PC POOL Q05717	3.50	1/1/2042	663,540	655,879	728,665
FED HM LN PC POOL Q05942	4.00	2/1/2042	2,403,437	2,532,284	2,640,958
FED HM LN PC POOL Q05962	4.00	1/1/2042	2,261,444	2,371,207	2,482,427
FED HM LN PC POOL Q07480	4.00	4/1/2042	16,156,267	17,094,487	17,735,263
FED HM LN PC POOL Q08126	4.50	5/1/2042	571,307	616,518	628,590
FED HM LN PC POOL Q08550	3.50	5/1/2042	469,237	455,408	503,128
FED HM LN PC POOL Q08862	3.50	6/1/2042	18,026	18,885	19,507
FED HM LN PC POOL Q09850	4.00	8/1/2042	1,469,089	1,497,707	1,614,278
FED HM LN PC POOL Q10056	4.50	8/1/2042	874,693	944,109	973,800
FED HM LN PC POOL Q10392	3.50	8/1/2042	31,774,289	33,163,380	34,395,758
FED HM LN PC POOL Q10670	4.00	8/1/2042	506,853	539,934	550,291
FED HM LN PC POOL Q10971	3.50	9/1/2042	1,739,656	1,736,719	1,883,829
FED HM LN PC POOL Q11004	4.00	9/1/2042	3,297,208	3,474,549	3,623,096
FED HM LN PC POOL Q11005	3.50	9/1/2042	8,081,361	8,067,717	8,751,084
FED HM LN PC POOL Q11207	3.50	9/1/2042	968,656	1,013,699	1,040,791
FED HM LN PC POOL Q11218	3.50	9/1/2042	830,536	805,924	899,139
FED HM LN PC POOL Q12191	3.50	10/1/2042	310,002	327,631	333,320
FED HM LN PC POOL Q12276	3.50	10/1/2042	2,942,423	3,107,793	3,184,359
FED HM LN PC POOL Q12858	3.50	11/1/2042	743,245	741,988	801,438

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL Q13268	4.50	10/1/2042	1,247,672	1,346,869	1,389,133
FED HM LN PC POOL Q13756	4.50	10/1/2042	341,680	361,348	369,068
FED HM LN PC POOL Q14010	3.50	12/1/2042	1,665,254	1,750,894	1,803,263
FED HM LN PC POOL Q14672	3.50	1/1/2043	873,845	872,364	934,240
FED HM LN PC POOL Q14864	3.50	1/1/2043	12,537	12,391	13,576
FED HM LN PC POOL Q15105	3.50	2/1/2043	1,561,574	1,558,926	1,690,244
FED HM LN PC POOL Q15287	3.50	1/1/2043	294,899	294,400	310,768
FED HM LN PC POOL Q15499	3.50	2/1/2043	2,647,816	2,763,279	2,867,280
FED HM LN PC POOL Q16336	3.50	3/1/2043	2,314,093	2,415,087	2,505,897
FED HM LN PC POOL Q16644	3.50	3/1/2043	20,513	20,274	22,214
FED HM LN PC POOL Q16849	4.00	4/1/2043	1,422,182	1,470,306	1,537,764
FED HM LN PC POOL Q17192	3.50	4/1/2043	3,799,163	3,953,047	4,114,065
FED HM LN PC POOL Q17550	3.50	4/1/2043	1,215,659	1,272,919	1,313,966
FED HM LN PC POOL Q17648	3.50	4/1/2043	12,976	12,820	14,052
FED HM LN PC POOL Q18134	3.50	5/1/2043	7,481,844	7,852,371	8,102,131
FED HM LN PC POOL Q18479	4.00	5/1/2043	1,811,085	1,872,415	1,989,644
FED HM LN PC POOL Q18499	4.00	5/1/2043	2,963,148	3,063,492	3,255,239
FED HM LN PC POOL Q19289	4.00	6/1/2043	1,729,719	1,788,341	1,870,273
FED HM LN PC POOL Q20131	3.50	7/1/2043	5,317	5,254	5,750
FED HM LN PC POOL Q21243	3.50	8/1/2043	400,785	422,321	433,242
FED HM LN PC POOL Q22089	4.00	10/1/2043	2,350,740	2,435,621	2,564,419
FED HM LN PC POOL Q22593	4.00	10/1/2043	5,263,989	5,473,900	5,782,963
FED HM LN PC POOL Q22663	4.00	10/1/2043	336,195	347,624	357,378
FED HM LN PC POOL Q23277	4.00	12/1/2043	267,489	276,596	283,783
FED HM LN PC POOL Q23332	4.00	12/1/2043	1,694,958	1,752,663	1,862,076
FED HM LN PC POOL Q23341	4.00	11/1/2043	1,081,750	1,118,551	1,185,884
FED HM LN PC POOL Q24189	4.00	1/1/2039	1,834,271	1,933,069	2,014,510
FED HM LN PC POOL Q24519	4.00	1/1/2044	1,109,443	1,147,242	1,215,957
FED HM LN PC POOL Q24521	4.00	1/1/2044	1,057,621	1,093,654	1,157,930
FED HM LN PC POOL Q24754	4.00	2/1/2039	781,756	823,907	856,775
FED HM LN PC POOL Q25223	4.00	3/1/2039	961,179	1,013,052	1,055,633
FED HM LN PC POOL Q26024	4.00	5/1/2039	1,167,088	1,230,198	1,263,859
FED HM LN PC POOL Q29009	4.00	10/1/2039	608,399	641,458	649,009
FED HM LN PC POOL Q29056	4.00	10/1/2044	119,645	124,753	130,155
FED HM LN PC POOL Q29974	4.00	11/1/2039	832,085	877,342	913,537
FED HM LN PC POOL Q30023	3.50	11/1/2044	308,443	319,171	325,248
FED HM LN PC POOL Q30380	4.00	12/1/2039	867,559	914,789	934,108
FED HM LN PC POOL Q31111	3.50	1/1/2045	233,657	241,793	245,930
FED HM LN PC POOL Q32954	3.00	4/1/2045	162,849	163,288	172,554
FED HM LN PC POOL Q33094	3.50	5/1/2045	368	380	394
FED HM LN PC POOL Q33538	4.00	5/1/2045	2,428,372	2,560,906	2,598,516
FED HM LN PC POOL Q33712	3.50	5/1/2045	231,055	239,117	243,078
FED HM LN PC POOL Q33839	3.50	6/1/2045	21,078,917	21,997,799	22,582,531
FED HM LN PC POOL Q33925	4.00	6/1/2045	231,736	241,624	250,918
FED HM LN PC POOL Q34077	3.50	6/1/2041	2,116,523	2,182,970	2,286,583
FED HM LN PC POOL Q34167	4.00	6/1/2045	441,764	459,950	478,831
FED HM LN PC POOL Q34469	4.00	6/1/2045	2,441,032	2,563,389	2,620,394
FED HM LN PC POOL Q34781	4.00	7/1/2045	4,564,837	4,810,194	4,944,927
FED HM LN PC POOL Q34871	3.50	7/1/2045	2,406,564	2,491,106	2,588,187
FED HM LN PC POOL Q34896	3.50	7/1/2040	2,781,328	2,867,905	2,999,331

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL Q34954	3.50	7/1/2045	1,253,899	1,298,689	1,346,615
FED HM LN PC POOL Q34967	4.00	7/1/2045	453,008	472,394	490,439
FED HM LN PC POOL Q35069	4.00	8/1/2045	6,100	6,425	6,612
FED HM LN PC POOL Q35511	3.50	8/1/2040	14,730,197	15,189,096	15,921,899
FED HM LN PC POOL Q36624	3.50	10/1/2045	5,711,386	5,911,196	6,116,177
FED HM LN PC POOL Q36970	4.00	10/1/2045	620,240	646,736	669,930
FED HM LN PC POOL Q37418	3.50	11/1/2045	29,368,842	30,649,548	31,233,397
FED HM LN PC POOL Q37485	3.00	11/1/2045	105,741	106,026	112,062
FED HM LN PC POOL Q37993	4.00	12/1/2045	1,381,635	1,440,673	1,494,367
FED HM LN PC POOL Q38945	4.00	2/1/2046	201,372	210,143	217,277
FED HM LN PC POOL Q39499	4.00	3/1/2046	93,879	93,820	101,503
FED HM LN PC POOL Q40366	3.50	5/1/2046	575,877	558,645	610,238
FED HM LN PC POOL Q40927	4.00	6/1/2046	2,395,683	2,498,419	2,578,228
FED HM LN PC POOL Q41537	3.00	7/1/2046	8,269,972	8,292,332	8,758,976
FED HM LN PC POOL Q41898	3.50	7/1/2046	633,270	614,407	669,873
FED HM LN PC POOL Q42089	4.00	7/1/2046	260,200	271,381	275,916
FED HM LN PC POOL Q42278	3.50	8/1/2046	192,466	186,704	203,520
FED HM LN PC POOL Q43428	3.00	8/1/2046	5,979,548	5,995,720	6,331,729
FED HM LN PC POOL Q43618	3.00	10/1/2046	729,520	731,494	772,212
FED HM LN PC POOL Q43734	3.00	10/1/2046	1,031,916	1,028,728	1,092,305
FED HM LN PC POOL Q44033	3.00	11/1/2046	9,607,107	9,633,112	10,138,598
FED HM LN PC POOL Q44452	3.00	11/1/2046	1,242,995	1,234,930	1,310,812
FED HM LN PC POOL Q44569	3.00	11/1/2046	180,602	181,091	190,674
FED HM LN PC POOL Q44652	3.00	12/1/2046	5,027,951	4,994,433	5,322,184
FED HM LN PC POOL Q44655	3.00	12/1/2046	720,209	716,771	762,134
FED HM LN PC POOL Q44663	3.00	11/1/2046	13,720,616	13,757,754	14,523,633
FED HM LN PC POOL Q44665	3.00	11/1/2046	2,237,400	2,243,456	2,364,474
FED HM LN PC POOL Q44813	3.00	12/1/2046	75,429	75,633	79,843
FED HM LN PC POOL Q45094	3.00	12/1/2046	231,554	230,449	245,071
FED HM LN PC POOL Q45176	3.00	1/1/2047	147,198	146,495	155,856
FED HM LN PC POOL Q45199	4.00	1/1/2047	111,916	116,717	120,510
FED HM LN PC POOL Q45252	3.00	1/1/2047	2,640,163	2,647,314	2,794,656
FED HM LN PC POOL Q45511	3.00	1/1/2047	100,618	100,891	106,471
FED HM LN PC POOL Q45638	3.00	1/1/2047	669,200	664,738	707,969
FED HM LN PC POOL Q45644	3.00	1/1/2047	12,817,832	12,756,625	13,564,965
FED HM LN PC POOL Q45735	3.00	1/1/2047	44,466,445	44,479,122	47,006,065
FED HM LN PC POOL Q45872	3.00	1/1/2047	1,167,509	1,170,671	1,235,386
FED HM LN PC POOL Q45878	3.00	12/1/2046	7,218,544	7,238,089	7,629,983
FED HM LN PC POOL Q45930	3.00	2/1/2047	54,394	54,541	57,557
FED HM LN PC POOL Q46241	3.00	1/1/2047	219,148	219,742	232,356
FED HM LN PC POOL Q46272	3.00	2/1/2047	21,868,830	21,764,375	23,132,140
FED HM LN PC POOL Q46441	3.00	2/1/2047	4,971,813	4,985,282	5,260,825
FED HM LN PC POOL Q47342	3.50	4/1/2047	4,452,535	4,579,033	4,784,395
FED HM LN PC POOL Q48181	4.00	5/1/2047	26,949	28,107	28,688
FED HM LN PC POOL Q49356	3.50	7/1/2047	29,915,849	30,623,365	32,147,900
FED HM LN PC POOL Q49485	3.50	7/1/2047	12,295,120	12,587,632	13,210,931
FED HM LN PC POOL Q49504	3.50	7/1/2047	36,143,910	37,960,677	39,503,434
FED HM LN PC POOL Q49848	3.50	8/1/2047	439,871	426,674	464,627
FED HM LN PC POOL Q49901	3.50	8/1/2047	25,603,964	26,408,537	27,517,915
FED HM LN PC POOL Q50827	3.50	9/1/2047	31,406,069	32,494,541	33,755,867

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL Q50920	3.50	9/1/2047	11,024,930	11,367,871	11,850,604
FED HM LN PC POOL Q51044	3.50	9/1/2047	2,126,563	2,195,336	2,284,163
FED HM LN PC POOL Q51109	3.50	10/1/2047	2,151,554	2,086,981	2,277,878
FED HM LN PC POOL Q51131	3.50	10/1/2047	3,575,149	3,467,851	3,784,887
FED HM LN PC POOL Q51334	4.00	10/1/2047	185,832	188,692	197,618
FED HM LN PC POOL Q51789	4.00	11/1/2047	11,334,325	11,455,945	12,268,465
FED HM LN PC POOL Q51914	3.50	11/1/2047	718,561	696,991	758,713
FED HM LN PC POOL Q52081	3.50	11/1/2047	687,847	667,302	728,258
FED HM LN PC POOL Q52189	3.50	11/1/2047	763,560	740,640	809,018
FED HM LN PC POOL Q52315	4.00	11/1/2047	16,092,211	16,821,258	18,030,544
FED HM LN PC POOL Q52554	4.00	11/1/2047	3,686,184	3,683,868	3,925,926
FED HM LN PC POOL Q52562	3.50	12/1/2047	2,225,679	2,158,860	2,357,099
FED HM LN PC POOL Q52890	3.50	12/1/2047	16,787,608	17,364,969	17,805,420
FED HM LN PC POOL Q53286	3.50	1/1/2048	3,987,930	4,085,846	4,285,730
FED HM LN PC POOL Q53313	3.50	1/1/2048	52,981,910	54,282,776	56,949,625
FED HM LN PC POOL Q53499	4.00	1/1/2048	10,150,070	10,262,007	11,024,454
FED HM LN PC POOL Q53500	3.50	1/1/2048	41,899,367	41,851,039	45,038,470
FED HM LN PC POOL Q53571	3.50	1/1/2048	783,125	759,611	830,717
FED HM LN PC POOL Q53987	3.50	2/1/2048	37,730,981	38,369,181	40,555,921
FED HM LN PC POOL Q53996	3.50	2/1/2048	3,839,508	3,904,451	4,126,124
FED HM LN PC POOL Q54231	3.50	2/1/2048	19,751,771	19,852,633	21,207,623
FED HM LN PC POOL Q54233	3.50	2/1/2048	5,959,098	5,989,528	6,403,417
FED HM LN PC POOL Q54552	3.50	3/1/2048	14,472,686	14,040,120	15,284,047
FED HM LN PC POOL Q54554	3.50	2/1/2048	14,065,416	14,056,807	15,118,531
FED HM LN PC POOL Q54556	3.50	3/1/2048	8,171,861	8,166,858	8,782,918
FED HM LN PC POOL Q54646	3.50	3/1/2048	331,288	321,484	350,311
FED HM LN PC POOL Q54667	4.00	3/1/2048	1,765,780	1,764,670	1,876,575
FED HM LN PC POOL Q54740	3.50	3/1/2048	928,729	900,833	982,733
FED HM LN PC POOL Q54743	3.50	3/1/2048	10,741,770	10,420,716	11,362,144
FED HM LN PC POOL Q54748	3.50	3/1/2048	16,581,031	16,548,742	17,820,141
FED HM LN PC POOL Q54754	3.50	3/1/2048	9,544,240	9,525,654	10,258,349
FED HM LN PC POOL Q54783	3.50	3/1/2048	8,467,655	8,449,639	9,098,561
FED HM LN PC POOL Q54812	3.50	3/1/2048	63,328,923	63,251,276	68,067,575
FED HM LN PC POOL Q54832	3.50	3/1/2048	13,432,676	13,031,195	14,196,436
FED HM LN PC POOL Q54867	3.50	3/1/2048	725,970	704,165	766,589
FED HM LN PC POOL Q54900	3.50	3/1/2048	14,004,079	13,585,519	14,822,247
FED HM LN PC POOL Q54925	4.00	3/1/2048	9,189,625	9,289,653	9,978,150
FED HM LN PC POOL Q54931	3.50	3/1/2048	11,369,043	11,029,241	12,016,063
FED HM LN PC POOL Q55052	3.50	4/1/2048	3,737,534	3,625,254	3,953,250
FED HM LN PC POOL Q55220	3.50	4/1/2048	807,398	783,142	856,236
FED HM LN PC POOL Q55303	4.00	4/1/2048	74,201,523	75,009,348	80,566,666
FED HM LN PC POOL Q55650	3.50	4/1/2048	809,112	784,806	856,357
FED HM LN PC POOL Q56064	4.00	5/1/2048	229,062	228,918	243,259
FED HM LN PC POOL Q56083	3.50	5/1/2048	2,546,040	2,469,542	2,685,334
FED HM LN PC POOL Q56195	4.00	5/1/2048	2,294,030	2,329,389	2,434,829
FED HM LN PC POOL Q56225	3.50	5/1/2048	2,539,253	2,462,959	2,680,097
FED HM LN PC POOL Q56369	3.50	5/1/2048	24,232,143	23,507,652	25,583,771
FED HM LN PC POOL Q57797	4.00	8/1/2048	2,467,409	2,505,460	2,615,904
FED HM LN PC POOL Q57834	4.00	8/1/2048	128,185,367	130,034,802	138,317,196
FED HM LN PC POOL Q58277	3.50	9/1/2048	3,640,848	3,531,386	3,860,657

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL Q58413	4.00	9/1/2048	35,698,797	36,320,109	38,428,090
FED HM LN PC POOL Q58478	4.00	9/1/2048	69,402,251	70,755,401	74,690,673
FED HM LN PC POOL Q58648	4.00	9/1/2048	7,812,237	7,947,056	8,410,144
FED HM LN PC POOL Q58741	4.00	9/1/2048	4,840,726	4,895,180	5,204,125
FED HM LN PC POOL Q58746	4.50	9/1/2048	905,377	937,562	978,961
FED HM LN PC POOL Q58806	4.00	8/1/2048	1,101,889	1,114,282	1,178,682
FED HM LN PC POOL Q58974	4.00	10/1/2048	5,136,126	5,158,951	5,494,031
FED HM LN PC POOL Q59044	4.50	9/1/2048	42,073,013	43,421,442	46,443,664
FED HM LN PC POOL Q59065	4.00	10/1/2048	72,996,432	73,320,828	78,953,976
FED HM LN PC POOL Q59077	4.00	10/1/2048	10,217,877	10,263,286	11,077,711
FED HM LN PC POOL Q59367	4.00	10/1/2048	17,968,056	18,042,374	19,438,553
FED HM LN PC POOL Q59742	4.00	11/1/2048	79,730,586	79,648,128	85,812,933
FED HM LN PC POOL Q59852	3.50	11/1/2048	976,577	947,207	1,030,507
FED HM LN PC POOL Q59962	3.50	7/1/2048	91,615,346	94,876,313	97,568,918
FED HM LN PC POOL Q63540	3.50	5/1/2049	5,698,992	5,901,721	6,058,722
FED HM LN PC POOL QA0958	3.00	7/1/2049	6,156,077	6,221,243	6,537,999
FED HM LN PC POOL QA1204	3.00	7/1/2049	19,832,599	20,008,051	21,020,825
FED HM LN PC POOL QA1207	3.00	7/1/2049	13,352,172	13,486,448	14,180,590
FED HM LN PC POOL QA4907	3.00	6/1/2049	7,825,632	8,134,191	8,254,876
FED HM LN PC POOL QA5410	3.00	12/1/2049	989,329	1,003,098	1,042,677
FED HM LN PC POOL QN0410	2.50	8/1/2034	16,349,126	16,565,944	17,200,965
FED HM LN PC POOL QN0421	2.50	8/1/2034	12,234,595	12,380,231	12,844,517
FED HM LN PC POOL RA1508	3.50	10/1/2049	174,797,024	180,970,583	183,757,229
FED HM LN PC POOL SD0007	3.00	3/1/2049	726,979,503	738,221,397	766,664,660
FED HM LN PC POOL SD0018	3.00	6/1/2049	168,413,493	170,094,243	177,708,857
FED HM LN PC POOL SD0120	3.00	10/1/2049	21,122,365	21,694,168	23,024,352
FED HM LN PC POOL SD0121	3.00	10/1/2049	17,356,498	17,775,918	18,866,592
FED HM LN PC POOL SD0145	3.00	8/1/2047	143,293,970	147,703,896	151,579,694
FED HM LN PC POOL SD7502	3.50	7/1/2049	212,936,912	221,895,936	227,955,596
FED HM LN PC POOL SD7503	3.50	8/1/2049	309,616,976	321,616,305	333,519,654
FED HM LN PC POOL SD7504	3.50	8/1/2049	790,241,118	817,552,745	842,201,266
FED HM LN PC POOL SD8005	3.50	8/1/2049	1,136,676	1,162,821	1,194,622
FED HM LN PC POOL SD8016	3.00	10/1/2049	84,741	85,924	89,311
FED HM LN PC POOL SD8030	3.00	12/1/2049	1,109,503	1,121,176	1,169,332
FED HM LN PC POOL V61367	2.50	1/1/2023	360,478	365,290	377,755
FED HM LN PC POOL V61368	2.50	8/1/2023	325,403	330,284	340,998
FED HM LN PC POOL V81760	4.00	5/1/2045	15,416	15,828	16,700
FED HM LN PC POOL V81932	3.50	10/1/2045	100,799,499	103,001,740	109,556,517
FED HM LN PC POOL V81990	4.00	10/1/2045	494,517	515,646	535,493
FED HM LN PC POOL V83155	4.50	4/1/2047	16,756,266	17,202,908	18,346,816
FED HM LN PC POOL V84064	3.50	12/1/2047	971,546	942,378	1,024,347
FED HM LN PC POOL V84296	3.50	5/1/2048	674,979	654,698	711,463
FED HM LN PC POOL V84352	3.50	6/1/2048	8,622,360	8,364,528	9,083,467
FED HM LN PC POOL V84479	4.50	7/1/2048	339,087,767	351,884,040	373,245,329
FED HM LN PC POOL V84692	4.50	9/1/2048	93,661,367	96,435,961	102,292,733
FED HM LN PC POOL V84772	4.50	10/1/2048	168,212,816	173,207,616	183,104,193
FED HM LN PC POOL V84887	4.50	11/1/2048	141,177,709	145,376,445	154,290,118
FED HM LN PC POOL V84888	4.50	11/1/2048	145,107,891	150,036,192	158,585,344
FED HM LN PC POOL V84889	4.50	11/1/2048	142,057,907	146,882,621	155,251,992
FED HM LN PC POOL V85327	4.00	3/1/2049	108,255,376	111,381,941	114,728,536

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL Z60007	5.00	4/1/2023	16,941	17,444	18,474
FED HM LN PC POOL Z60008	5.00	5/1/2023	51,233	52,769	55,867
FED HM LN PC POOL Z60026	5.00	11/1/2024	62,522	64,648	68,177
FED HM LN PC POOL Z60045	5.00	1/1/2025	119,591	123,697	130,410
FED HM LN PC POOL ZA5285	3.50	3/1/2048	59,458,358	59,346,965	65,541,495
FED HM LN PC POOL ZA5430	3.50	5/1/2048	28,255,146	28,202,195	31,146,111
FED HM LN PC POOL ZA5931	4.50	11/1/2048	70,057,457	75,212,693	75,675,591
FED HM LN PC POOL ZI1003	4.50	1/1/2041	1,865,627	2,006,845	2,075,682
FED HM LN PC POOL ZI1049	4.50	1/1/2041	1,283,557	1,380,233	1,428,074
FED HM LN PC POOL ZK9110	3.00	12/1/2032	5,476,030	5,584,289	5,762,512
FED HM LN PC POOL ZK9223	3.00	1/1/2033	7,048,974	7,188,369	7,417,713
FED HM LN PC POOL ZL1861	4.50	8/1/2041	2,613,916	2,812,534	2,908,555
FED HM LN PC POOL ZL2183	4.50	10/1/2041	611,054	646,162	676,990
FED HM LN PC POOL ZL3023	4.00	4/1/2042	1,350,958	1,438,335	1,484,048
FED HM LN PC POOL ZL3122	4.00	5/1/2042	3,060,264	3,253,429	3,361,736
FED HM LN PC POOL ZL3305	4.00	7/1/2042	677,604	718,296	740,696
FED HM LN PC POOL ZL3368	4.00	7/1/2042	639,642	681,135	695,142
FED HM LN PC POOL ZL3541	4.50	8/1/2042	265,397	281,389	285,678
FED HM LN PC POOL ZL4493	3.00	12/1/2042	17,119	17,046	18,438
FED HM LN PC POOL ZL5134	3.00	3/1/2043	213,831	206,692	232,561
FED HM LN PC POOL ZM0434	3.00	11/1/2045	55,896	56,029	59,741
FED HM LN PC POOL ZM0496	3.00	11/1/2045	1,265,369	1,268,441	1,340,663
FED HM LN PC POOL ZM0578	3.00	12/1/2045	1,045,524	1,038,284	1,107,555
FED HM LN PC POOL ZM0811	3.50	2/1/2046	6,972,931	7,079,272	7,463,814
FED HM LN PC POOL ZM1274	3.50	5/1/2046	3,317,302	3,386,380	3,552,777
FED HM LN PC POOL ZM1348	3.00	7/1/2046	199,467	191,389	211,327
FED HM LN PC POOL ZM1779	3.00	9/1/2046	92,369,511	95,204,900	97,888,472
FED HM LN PC POOL ZM1825	3.00	8/1/2046	2,360,706	2,348,812	2,499,088
FED HM LN PC POOL ZM1991	3.00	10/1/2046	18,398	18,443	19,472
FED HM LN PC POOL ZM2089	3.00	11/1/2046	611,751	613,242	644,957
FED HM LN PC POOL ZM2161	3.00	12/1/2046	35,540,099	35,360,845	37,599,034
FED HM LN PC POOL ZM2168	3.00	11/1/2046	24,849,621	24,724,319	26,293,013
FED HM LN PC POOL ZM2195	3.00	12/1/2046	3,699,620	3,673,958	3,915,077
FED HM LN PC POOL ZM2285	3.00	12/1/2046	30,908,623	30,752,728	32,704,252
FED HM LN PC POOL ZM2296	3.50	12/1/2046	51,372	49,817	54,295
FED HM LN PC POOL ZM2428	3.00	1/1/2047	26,633	26,698	28,230
FED HM LN PC POOL ZM2429	3.00	1/1/2047	11,149,104	10,654,797	12,011,653
FED HM LN PC POOL ZM2443	3.00	1/1/2047	13,678,464	13,711,817	14,471,945
FED HM LN PC POOL ZM2542	3.00	2/1/2047	687,572	659,387	727,362
FED HM LN PC POOL ZM2558	3.00	1/1/2047	61,688	61,838	65,416
FED HM LN PC POOL ZM2778	3.00	3/1/2047	20,449	19,610	21,603
FED HM LN PC POOL ZM3309	3.50	5/1/2047	13,929,761	14,562,293	15,128,052
FED HM LN PC POOL ZM3806	3.50	8/1/2047	53,228,110	54,930,012	57,171,328
FED HM LN PC POOL ZM4703	3.00	11/1/2047	5,164,210	4,952,170	5,469,311
FED HM LN PC POOL ZM5169	3.50	9/1/2047	16,740,235	16,733,433	18,457,695
FED HM LN PC POOL ZM5587	3.50	2/1/2048	9,155,022	9,210,999	9,945,136
FED HM LN PC POOL ZM6545	3.50	5/1/2048	4,966,863	4,967,031	5,475,016
FED HM LN PC POOL ZM7659	4.00	8/1/2048	37,410,136	37,459,769	40,653,035
FED HM LN PC POOL ZM8299	4.00	9/1/2048	38,621	38,856	40,940
FED HM LN PC POOL ZN4430	3.50	1/1/2049	6,351,673	6,442,290	6,779,763

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FED HM LN PC POOL ZN4636	3.00	10/1/2048	25,905,967	26,419,154	27,307,915
FED HM LN PC POOL ZN4664	3.00	4/1/2047	123,227,253	130,245,865	130,311,239
FED HM LN PC POOL ZN5108	3.00	4/1/2049	666,225	672,174	702,150
FED HM LN PC POOL ZS2543	5.00	2/1/2033	6,078,737	6,333,712	6,861,111
FED HM LN PC POOL ZS2728	4.50	7/1/2039	17,203,828	18,437,104	19,122,625
FED HM LN PC POOL ZS2793	5.00	4/1/2035	19,629,864	20,589,470	22,520,650
FED HM LN PC POOL ZS3635	4.50	6/1/2041	6,327,942	6,765,967	7,153,377
FED HM LN PC POOL ZS3659	3.00	12/1/2042	15,952	16,414	17,248
FED HM LN PC POOL ZS3686	3.00	11/1/2042	38,371	38,208	41,849
FED HM LN PC POOL ZS4609	3.00	4/1/2045	85,589	85,796	90,955
FED HM LN PC POOL ZS4625	3.00	8/1/2045	20,562	20,611	21,819
FED HM LN PC POOL ZS4650	3.00	2/1/2046	117,221	117,506	124,215
FED HM LN PC POOL ZS4655	3.50	3/1/2046	20,943,092	21,379,087	22,393,376
FED HM LN PC POOL ZS4658	3.00	4/1/2046	16,515	17,003	17,493
FED HM LN PC POOL ZS4667	3.00	6/1/2046	9,504,988	9,439,271	10,071,983
FED HM LN PC POOL ZS4671	3.00	8/1/2046	100,226	96,167	106,055
FED HM LN PC POOL ZS4672	3.50	8/1/2046	16,030,120	16,274,788	17,107,651
FED HM LN PC POOL ZS4677	3.00	9/1/2046	15,243,950	15,096,649	16,147,596
FED HM LN PC POOL ZS4682	3.00	10/1/2046	43,548	41,784	46,104
FED HM LN PC POOL ZS4688	3.00	11/1/2046	549,579	548,913	581,670
FED HM LN PC POOL ZS4693	3.00	12/1/2046	47,806	47,564	50,517
FED HM LN PC POOL ZS4697	3.00	1/1/2047	4,433,522	4,452,352	4,684,968
FED HM LN PC POOL ZS4706	3.00	3/1/2047	1,138,426	1,138,362	1,203,005
FED HM LN PC POOL ZS4712	3.00	4/1/2047	84,217,124	82,918,717	88,876,834
FED HM LN PC POOL ZS4721	3.00	6/1/2047	1,535,574	1,524,949	1,622,916
FED HM LN PC POOL ZS4734	3.00	9/1/2047	29,632,763	29,937,769	31,230,662
FED HM LN PC POOL ZS4750	3.00	1/1/2048	61,594,062	62,499,666	64,915,423
FED HM LN PC POOL ZS4758	3.00	3/1/2048	15,523,728	16,152,644	16,360,820
FED HM LN PC POOL ZS4779	3.00	6/1/2048	12,497,257	13,007,217	13,175,576
FED HM LN PC POOL ZT0049	4.00	4/1/2044	21,305,953	21,717,024	23,379,963
FED HM LN PC POOL ZT0230	3.00	11/1/2046	24,656	23,657	26,019
FED HM LN PC POOL ZT0326	3.50	3/1/2048	52,125,286	52,104,105	57,457,983
FED HM LN PC POOL ZT0504	3.00	4/1/2047	182,882,495	175,483,769	193,432,095
FED HM LN PC POOL ZT0520	3.00	4/1/2047	106,001,775	101,316,458	112,125,650
FED HM LN PC POOL ZT0540	4.00	6/1/2048	38,387,340	39,320,868	42,503,382
FED HM LN PC POOL ZT1548	3.00	11/1/2048	789,390	800,369	831,957
FED HM LN PC POOL ZT1682	3.00	1/1/2047	199,120,833	204,487,920	210,537,965
FED HM LN PC POOL ZT2101	3.00	4/1/2048	114,960,639	117,334,919	121,159,706
FHLMC GNMA	7.00	3/25/2024	41,557	41,787	45,013
FHLMC MULTIFAMILY STRUCTURED P	1.10	1/25/2021	77,908,874	4,891,988	136,894
FHLMC MULTIFAMILY STRUCTURED P	3.20	2/25/2042	44,134,628	8,918,019	767,794
FHLMC MULTIFAMILY STRUCTURED P	3.28	8/25/2027	19,479,000	22,120,647	22,340,084
FHLMC MULTIFAMILY STRUCTURED P	3.85	5/25/2028	9,536,000	11,399,990	11,356,669
FHLMC MULTIFAMILY STRUCTURED P	3.85	6/25/2028	6,000,000	7,178,672	7,151,656
FHLMC MULTIFAMILY STRUCTURED P	3.93	7/25/2028	1,546,000	1,864,138	1,855,305
FHLMC MULTIFAMILY STRUCTURED P	4.59	11/25/2044	9,050,000	2,515,131	27,570
FIRST HORIZON ALTERNATIVE MORT	3.57	11/25/2036	937,756	931,325	763,441
FIRST HORIZON MORTGAGE PASS TH	3.48	11/25/2036	197,844	197,927	157,631
FNMA POOL 050639	7.50	9/1/2022	674	680	706
FNMA POOL 050656	7.50	11/1/2022	99	100	105

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 050775	7.50	8/1/2023	809	819	860
FNMA POOL 050996	7.50	2/1/2024	197	199	210
FNMA POOL 124422	7.50	8/1/2022	114	115	115
FNMA POOL 136053	8.50	10/1/2021	15,572	15,734	15,781
FNMA POOL 141082	8.50	11/1/2021	4,938	4,958	4,962
FNMA POOL 152777	7.50	3/1/2022	858	864	861
FNMA POOL 190396	4.50	6/1/2039	5,800	6,144	6,444
FNMA POOL 190400	4.50	11/1/2039	22,012,276	23,565,076	24,473,447
FNMA POOL 190404	4.50	5/1/2040	12,829	13,593	14,277
FNMA POOL 190405	4.00	10/1/2040	97,589	101,529	107,086
FNMA POOL 235014	7.50	9/1/2023	3,424	3,467	3,436
FNMA POOL 250549	6.00	4/1/2026	76,047	79,713	84,739
FNMA POOL 250685	6.00	6/1/2026	76,728	80,492	85,271
FNMA POOL 254198	6.00	2/1/2032	5,526	5,901	6,422
FNMA POOL 254229	6.50	2/1/2022	49	49	54
FNMA POOL 254305	6.50	5/1/2022	45	45	50
FNMA POOL 254740	6.00	3/1/2033	40,680	43,548	45,285
FNMA POOL 254763	6.00	5/1/2023	4,690	4,821	5,209
FNMA POOL 254981	6.00	11/1/2033	1,495	1,511	1,744
FNMA POOL 254984	6.00	12/1/2033	33,828	36,270	39,475
FNMA POOL 254998	4.50	11/1/2023	2,261	2,303	2,425
FNMA POOL 255070	6.00	1/1/2034	7,180	7,256	8,375
FNMA POOL 255217	4.50	4/1/2024	10,042	10,242	10,769
FNMA POOL 255267	6.00	6/1/2034	28,626	30,726	33,367
FNMA POOL 255311	6.00	7/1/2034	110,861	119,011	129,297
FNMA POOL 255364	6.00	9/1/2034	7,434	7,517	8,677
FNMA POOL 255898	5.00	10/1/2035	2,964	3,120	3,406
FNMA POOL 256167	4.50	3/1/2021	465	464	489
FNMA POOL 256209	4.50	4/1/2021	472	471	497
FNMA POOL 256245	4.50	4/1/2021	11,374	11,439	11,975
FNMA POOL 256393	6.00	9/1/2036	1,954	2,088	2,271
FNMA POOL 256672	5.00	4/1/2037	1,181	1,243	1,352
FNMA POOL 256749	6.00	6/1/2037	2,519	2,695	2,940
FNMA POOL 256887	5.50	9/1/2022	472	480	487
FNMA POOL 256956	5.00	10/1/2037	9,329	9,820	10,195
FNMA POOL 257009	6.00	12/1/2022	2,986	3,047	3,108
FNMA POOL 257043	6.00	1/1/2038	488	523	570
FNMA POOL 257047	5.50	1/1/2028	90,813	95,148	100,050
FNMA POOL 257062	5.00	1/1/2038	2,226	2,343	2,549
FNMA POOL 257079	5.50	1/1/2023	2,420	2,421	2,520
FNMA POOL 257081	4.50	1/1/2023	16,168	16,420	17,023
FNMA POOL 257126	6.00	3/1/2028	37,871	39,770	42,137
FNMA POOL 257230	5.00	6/1/2038	1,370	1,446	1,568
FNMA POOL 257252	6.00	6/1/2028	44,865	47,153	49,837
FNMA POOL 257325	5.50	8/1/2028	60,082	63,057	66,156
FNMA POOL 257372	6.00	9/1/2028	25,355	26,669	28,212
FNMA POOL 257452	6.00	11/1/2028	6,975	7,340	7,748
FNMA POOL 257500	6.00	11/1/2028	50,087	52,707	55,640
FNMA POOL 276644	7.50	6/1/2024	988	1,002	1,021
FNMA POOL 310098	4.50	6/1/2036	141,786	148,510	157,529

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 323541	6.00	2/1/2029	72,159	76,403	81,575
FNMA POOL 323881	6.00	7/1/2029	61,553	65,259	69,585
FNMA POOL 333499	6.00	11/1/2025	15,716	15,868	15,816
FNMA POOL 333641	6.00	2/1/2026	20,962	21,946	23,285
FNMA POOL 335973	6.00	2/1/2026	1,095	1,146	1,216
FNMA POOL 339013	6.00	3/1/2026	582	610	647
FNMA POOL 339175	6.00	3/1/2026	37,980	39,795	42,524
FNMA POOL 339832	6.00	3/1/2026	38,323	40,155	42,572
FNMA POOL 345830	6.00	5/1/2026	2,186	2,291	2,430
FNMA POOL 346285	6.00	5/1/2026	330	346	366
FNMA POOL 353235	6.00	12/1/2023	7,088	7,297	7,874
FNMA POOL 357263	6.00	9/1/2032	36,145	38,647	41,526
FNMA POOL 357604	6.00	8/1/2034	22,300	22,542	25,980
FNMA POOL 357641	5.00	11/1/2034	1,190,025	1,253,586	1,363,637
FNMA POOL 357746	6.00	4/1/2035	4,731	5,086	5,513
FNMA POOL 357778	6.00	5/1/2035	1,091	1,173	1,242
FNMA POOL 368933	6.00	3/1/2025	6,038	6,259	6,711
FNMA POOL 373903	6.00	6/1/2024	10,224	10,588	11,358
FNMA POOL 428297	6.00	5/1/2028	14,170	14,965	15,764
FNMA POOL 449218	6.00	1/1/2029	59,195	62,658	65,808
FNMA POOL 450835	6.00	12/1/2028	6,658	6,737	7,406
FNMA POOL 452481	6.00	11/1/2028	975	1,031	1,084
FNMA POOL 453107	6.00	1/1/2029	205	206	229
FNMA POOL 453862	6.00	12/1/2028	14,369	15,205	15,992
FNMA POOL 456078	6.00	12/1/2028	2,988	3,162	3,378
FNMA POOL 481451	6.00	2/1/2029	35,767	37,875	41,353
FNMA POOL 481570	6.00	2/1/2029	16,109	17,058	18,215
FNMA POOL 481623	6.00	1/1/2029	83,920	88,830	94,058
FNMA POOL 481892	6.00	2/1/2029	13,311	14,096	14,803
FNMA POOL 486203	6.00	2/1/2029	16,489	16,582	18,457
FNMA POOL 535899	6.00	4/1/2031	1,365	1,454	1,519
FNMA POOL 545993	6.00	11/1/2032	19,453	20,808	22,588
FNMA POOL 555178	6.00	1/1/2033	2,747	2,939	3,188
FNMA POOL 555417	6.00	5/1/2033	730	781	848
FNMA POOL 589083	6.00	10/1/2031	129,964	138,633	144,860
FNMA POOL 589085	6.50	9/1/2031	35,407	38,413	39,387
FNMA POOL 625146	6.00	2/1/2032	6,573	7,018	7,637
FNMA POOL 626935	6.00	1/1/2032	68,049	72,630	75,750
FNMA POOL 627002	6.50	7/1/2032	51,282	55,766	57,046
FNMA POOL 630176	6.00	2/1/2032	23,471	25,062	26,145
FNMA POOL 635141	6.00	7/1/2032	19,453	19,647	22,576
FNMA POOL 657009	6.00	9/1/2032	39,652	42,383	44,124
FNMA POOL 657023	6.00	9/1/2032	67,196	71,824	74,744
FNMA POOL 660677	6.00	10/1/2032	5,446	5,824	6,067
FNMA POOL 663224	6.00	10/1/2032	7,558	7,655	8,449
FNMA POOL 664020	6.00	3/1/2033	18,069	19,343	20,088
FNMA POOL 666501	6.00	11/1/2032	64,117	68,582	71,351
FNMA POOL 666780	6.00	11/1/2032	13,151	14,067	14,628
FNMA POOL 670401	6.00	6/1/2032	5,078	5,426	5,891
FNMA POOL 671872	6.00	12/1/2032	60,893	65,145	67,753

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 678122	6.00	1/1/2033	14,503	15,519	16,243
FNMA POOL 678914	6.00	1/1/2033	10,537	10,647	11,732
FNMA POOL 679539	6.00	3/1/2033	20,516	21,963	22,847
FNMA POOL 682302	4.50	7/1/2033	159,594	166,729	171,373
FNMA POOL 682321	4.50	8/1/2033	1,008,413	1,053,610	1,101,615
FNMA POOL 682322	4.50	8/1/2033	49,374	51,587	53,918
FNMA POOL 682337	4.50	9/1/2033	904,239	944,866	980,954
FNMA POOL 682360	4.50	9/1/2033	110,893	115,876	119,064
FNMA POOL 684025	6.00	2/1/2033	2,767	2,796	3,075
FNMA POOL 686225	6.00	2/1/2033	85,529	91,545	98,842
FNMA POOL 686360	6.00	3/1/2033	8,687	9,299	9,664
FNMA POOL 693856	6.00	3/1/2033	592	599	664
FNMA POOL 701202	6.00	4/1/2033	43,217	46,273	48,343
FNMA POOL 702039	6.00	5/1/2033	10,181	10,903	11,380
FNMA POOL 707281	6.00	5/1/2033	80,239	85,928	92,900
FNMA POOL 720001	6.00	6/1/2033	57,005	61,057	63,862
FNMA POOL 721130	6.00	8/1/2034	1,286	1,381	1,430
FNMA POOL 725027	5.00	11/1/2033	5,668,933	6,096,930	6,502,531
FNMA POOL 725237	6.00	3/1/2034	6,825	7,320	7,945
FNMA POOL 725690	6.00	8/1/2034	916,721	984,278	1,069,339
FNMA POOL 725703	6.00	8/1/2034	18,645	18,853	21,750
FNMA POOL 725938	6.00	11/1/2034	23,515	23,778	27,447
FNMA POOL 730570	6.00	8/1/2033	14,751	15,805	16,412
FNMA POOL 733462	6.00	8/1/2033	30,299	32,464	34,419
FNMA POOL 733868	6.00	12/1/2032	5,908	5,968	6,831
FNMA POOL 735036	5.50	12/1/2034	10,737,095	11,410,801	12,310,196
FNMA POOL 735061	6.00	11/1/2034	5,459	5,520	6,369
FNMA POOL 735271	6.00	1/1/2035	36,735	39,473	42,782
FNMA POOL 735288	5.00	3/1/2035	191,723	202,058	220,002
FNMA POOL 735502	6.00	4/1/2035	872,153	937,566	1,017,551
FNMA POOL 735503	6.00	4/1/2035	3,060,000	3,289,506	3,569,846
FNMA POOL 735580	5.00	6/1/2035	243,560	256,733	279,419
FNMA POOL 735669	5.00	4/1/2035	20,233,392	21,311,795	23,207,637
FNMA POOL 735676	5.00	7/1/2035	5,743,143	6,056,964	6,588,899
FNMA POOL 735894	5.50	9/1/2035	17,286	18,391	19,757
FNMA POOL 738347	6.00	8/1/2033	5,487	5,879	6,096
FNMA POOL 738492	6.00	10/1/2033	24,109	24,363	27,917
FNMA POOL 741388	6.00	9/1/2033	12,717	13,628	14,180
FNMA POOL 741858	6.00	9/1/2033	7,526	7,605	8,377
FNMA POOL 742265	6.00	11/1/2033	24,600	26,371	27,395
FNMA POOL 743045	6.00	10/1/2033	1,189	1,274	1,327
FNMA POOL 743466	6.00	10/1/2033	84,703	90,786	95,570
FNMA POOL 745230	6.00	5/1/2035	7,270	7,764	8,481
FNMA POOL 745736	5.50	12/1/2035	20,822	22,161	23,907
FNMA POOL 745755	5.00	12/1/2035	178,396	188,164	204,580
FNMA POOL 747330	6.00	10/1/2033	27,501	29,477	32,038
FNMA POOL 747417	6.00	10/1/2033	75,198	80,599	85,719
FNMA POOL 748422	6.00	8/1/2033	11,399	12,213	12,947
FNMA POOL 748807	6.00	12/1/2033	255,295	273,723	296,100
FNMA POOL 749047	6.00	10/1/2033	5,765	6,179	6,425

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 750502	6.00	12/1/2033	60,809	65,199	69,240
FNMA POOL 753098	6.00	12/1/2033	39,548	42,403	46,036
FNMA POOL 754140	6.00	12/1/2033	22,549	24,177	25,354
FNMA POOL 756798	6.00	11/1/2033	100,553	107,794	111,778
FNMA POOL 757257	5.50	10/1/2034	54,353	57,749	59,804
FNMA POOL 757266	5.50	10/1/2034	840,035	892,522	962,877
FNMA POOL 757748	6.00	9/1/2034	1,938	2,081	2,166
FNMA POOL 759001	6.00	1/1/2034	22,575	24,209	25,464
FNMA POOL 759090	6.00	1/1/2034	7,561	7,642	8,812
FNMA POOL 759282	6.00	1/1/2034	2,512	2,694	2,815
FNMA POOL 762875	6.00	9/1/2033	64,782	69,423	72,108
FNMA POOL 763857	6.00	2/1/2034	5,261	5,643	5,978
FNMA POOL 767402	6.00	1/1/2034	23,694	23,952	26,960
FNMA POOL 769017	6.00	12/1/2031	3,294	3,516	3,664
FNMA POOL 772540	6.00	4/1/2034	25,185	27,024	28,017
FNMA POOL 773133	6.00	6/1/2034	16,289	17,483	18,145
FNMA POOL 776798	6.00	8/1/2034	4,968	5,023	5,748
FNMA POOL 776837	6.00	9/1/2034	16,195	17,391	18,846
FNMA POOL 777504	6.00	8/1/2034	15,036	16,144	16,792
FNMA POOL 779451	6.00	6/1/2034	15,833	16,995	18,450
FNMA POOL 781662	6.00	2/1/2035	918	986	1,028
FNMA POOL 781752	6.00	9/1/2034	299	321	345
FNMA POOL 781753	6.00	9/1/2034	4,488	4,819	5,206
FNMA POOL 781776	6.00	10/1/2034	9,314	9,416	10,847
FNMA POOL 784326	6.00	11/1/2034	1,957	2,103	2,180
FNMA POOL 787591	6.00	8/1/2034	7,887	8,469	8,776
FNMA POOL 788049	6.00	10/1/2034	78,369	84,171	88,815
FNMA POOL 789249	6.00	10/1/2034	67,034	71,997	75,615
FNMA POOL 789712	6.00	9/1/2034	866	875	964
FNMA POOL 789716	6.00	9/1/2034	11,031	11,845	12,435
FNMA POOL 789722	6.00	9/1/2034	19,347	20,776	21,532
FNMA POOL 789800	6.00	9/1/2034	48,405	51,980	53,995
FNMA POOL 790212	6.00	8/1/2034	4,469	4,799	5,030
FNMA POOL 790218	6.00	8/1/2034	4,044	4,342	4,591
FNMA POOL 790431	6.00	9/1/2034	6,649	7,140	7,746
FNMA POOL 790912	6.00	9/1/2034	8,613	9,190	9,627
FNMA POOL 790915	6.00	9/1/2034	33,863	36,364	38,069
FNMA POOL 791239	6.00	8/1/2034	15,108	15,272	17,188
FNMA POOL 791324	6.00	9/1/2034	14,538	14,696	16,333
FNMA POOL 791552	6.00	9/1/2034	5,600	6,014	6,227
FNMA POOL 791655	6.00	9/1/2034	75,919	81,526	86,185
FNMA POOL 791665	6.00	9/1/2034	1,217	1,305	1,355
FNMA POOL 792196	6.00	9/1/2034	16,612	16,793	18,485
FNMA POOL 792218	6.00	10/1/2034	7,959	8,048	8,849
FNMA POOL 792232	6.00	10/1/2034	12,959	13,919	14,436
FNMA POOL 793111	6.00	8/1/2034	6,364	6,833	7,085
FNMA POOL 793187	6.00	7/1/2034	25,576	27,456	29,816
FNMA POOL 793671	6.00	9/1/2034	33,579	36,059	37,382
FNMA POOL 793675	6.00	9/1/2034	16,569	17,793	19,229
FNMA POOL 793964	6.00	10/1/2034	739	794	823

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 794000	6.00	9/1/2034	26,535	28,495	29,931
FNMA POOL 794050	6.00	9/1/2034	13,021	13,982	14,494
FNMA POOL 794051	6.00	9/1/2034	82,699	88,807	92,019
FNMA POOL 794338	6.00	9/1/2034	18,365	19,722	21,391
FNMA POOL 794564	6.00	10/1/2034	51,671	55,497	57,443
FNMA POOL 794749	6.00	9/1/2034	138,024	148,220	160,761
FNMA POOL 795871	6.00	9/1/2034	1,955	2,100	2,174
FNMA POOL 795875	6.00	9/1/2034	6,288	6,356	7,158
FNMA POOL 795892	6.00	9/1/2034	27,723	29,771	30,823
FNMA POOL 796147	6.00	10/1/2034	7,180	7,260	8,366
FNMA POOL 796243	6.00	11/1/2034	4,668	4,720	5,194
FNMA POOL 796430	6.00	9/1/2034	2,476	2,659	2,753
FNMA POOL 796460	6.00	9/1/2034	9,570	10,277	10,755
FNMA POOL 796565	6.00	9/1/2034	15,499	15,668	17,479
FNMA POOL 796893	6.00	9/1/2034	24,175	24,439	28,155
FNMA POOL 796940	6.00	10/1/2034	27,622	29,667	30,861
FNMA POOL 797163	6.00	1/1/2035	16,899	18,150	19,199
FNMA POOL 797590	6.00	6/1/2035	718	772	799
FNMA POOL 797959	6.00	11/1/2034	889	948	990
FNMA POOL 799133	6.00	4/1/2035	2,012	2,162	2,269
FNMA POOL 799694	6.00	11/1/2034	30,949	33,246	34,430
FNMA POOL 799695	6.00	11/1/2034	12,220	12,358	13,784
FNMA POOL 800078	6.00	10/1/2034	92,299	99,132	107,553
FNMA POOL 800153	6.00	12/1/2034	570	612	633
FNMA POOL 800330	6.00	11/1/2034	14,300	15,361	15,910
FNMA POOL 800903	6.00	10/1/2034	28,198	30,286	31,533
FNMA POOL 801000	6.00	12/1/2034	476	481	530
FNMA POOL 801059	6.00	11/1/2034	758	814	843
FNMA POOL 801213	6.00	11/1/2034	29,469	31,655	32,776
FNMA POOL 801455	6.00	11/1/2034	34,619	37,187	40,079
FNMA POOL 801538	6.00	9/1/2034	15,498	16,643	18,063
FNMA POOL 801763	6.00	12/1/2034	1,440	1,547	1,602
FNMA POOL 802069	6.00	10/1/2034	14,659	14,819	16,319
FNMA POOL 802182	6.00	11/1/2034	14,905	16,011	16,731
FNMA POOL 802191	6.00	12/1/2034	39,341	39,773	43,940
FNMA POOL 802398	6.00	10/1/2034	5,367	5,765	5,976
FNMA POOL 802672	6.00	12/1/2034	13,614	14,626	15,131
FNMA POOL 802791	6.00	11/1/2034	10,811	11,614	12,028
FNMA POOL 804029	6.00	9/1/2034	55,911	60,041	63,271
FNMA POOL 804259	6.00	12/1/2034	31,610	33,961	35,202
FNMA POOL 804389	6.00	12/1/2034	6,427	6,905	7,173
FNMA POOL 804865	6.00	1/1/2035	535	574	595
FNMA POOL 804993	6.00	1/1/2035	3,448	3,705	3,837
FNMA POOL 806544	6.00	12/1/2034	8,886	8,984	9,926
FNMA POOL 807835	6.00	12/1/2034	39,954	42,925	45,498
FNMA POOL 809953	6.00	3/1/2035	2,543	2,559	2,828
FNMA POOL 819244	6.00	4/1/2035	661	669	738
FNMA POOL 819972	6.00	4/1/2035	3,696	3,972	4,207
FNMA POOL 820030	6.00	4/1/2035	3,814	4,099	4,243
FNMA POOL 821037	6.00	5/1/2035	437	467	487

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 828175	6.00	7/1/2035	6,957	7,479	7,924
FNMA POOL 828285	5.00	3/1/2035	316,902	333,880	350,058
FNMA POOL 828303	5.00	5/1/2035	118,530	124,905	129,217
FNMA POOL 828315	5.50	9/1/2035	133,500	141,919	146,986
FNMA POOL 829377	6.00	6/1/2035	2,634	2,831	2,928
FNMA POOL 831063	5.50	10/1/2025	132,497	137,702	145,635
FNMA POOL 831287	6.00	1/1/2036	10,078	10,772	11,744
FNMA POOL 831426	6.00	3/1/2021	2,562	2,578	2,585
FNMA POOL 832198	5.00	7/1/2035	1,597	1,677	1,829
FNMA POOL 832270	6.00	8/1/2035	5,639	6,017	6,341
FNMA POOL 833309	6.00	7/1/2035	940	1,011	1,046
FNMA POOL 833565	6.00	10/1/2035	1,018	1,087	1,146
FNMA POOL 835753	5.00	8/1/2035	10,040	10,393	11,502
FNMA POOL 837564	6.00	6/1/2035	803	856	893
FNMA POOL 840852	6.00	1/1/2036	512	547	593
FNMA POOL 845193	6.00	11/1/2035	3,817	4,080	4,447
FNMA POOL 850512	5.50	11/1/2035	70,112	74,550	77,064
FNMA POOL 850534	6.00	2/1/2036	213,934	229,886	238,218
FNMA POOL 850632	6.00	1/1/2036	950	1,014	1,103
FNMA POOL 851895	5.00	11/1/2035	1,707	1,798	1,957
FNMA POOL 852522	5.00	2/1/2036	649	682	742
FNMA POOL 867659	6.00	5/1/2036	27,781	29,712	31,028
FNMA POOL 867829	4.50	2/1/2021	1,711	1,719	1,802
FNMA POOL 868588	4.50	4/1/2021	5,152	5,181	5,424
FNMA POOL 868595	4.50	4/1/2021	8,019	8,065	8,444
FNMA POOL 868620	4.50	4/1/2021	43	43	45
FNMA POOL 868702	4.50	4/1/2021	8,110	8,156	8,539
FNMA POOL 869472	4.50	3/1/2021	5,345	5,372	5,627
FNMA POOL 869493	4.50	3/1/2021	9,158	9,205	9,642
FNMA POOL 869858	4.50	4/1/2021	499	502	525
FNMA POOL 870782	6.00	7/1/2036	6,245	6,672	7,224
FNMA POOL 871137	6.00	1/1/2037	3,420	3,660	3,804
FNMA POOL 879630	5.50	6/1/2021	266	267	267
FNMA POOL 879721	4.50	2/1/2021	1,917	1,914	2,018
FNMA POOL 880305	6.00	4/1/2036	4,114	4,394	4,794
FNMA POOL 880500	6.00	7/1/2036	1,321	1,413	1,489
FNMA POOL 880772	4.50	3/1/2021	499	502	526
FNMA POOL 880926	6.00	5/1/2036	5,250	5,608	6,112
FNMA POOL 883278	6.00	7/1/2036	160	172	178
FNMA POOL 883560	6.00	5/1/2036	6,420	6,858	7,132
FNMA POOL 886959	6.00	6/1/2036	14,283	15,278	16,361
FNMA POOL 888209	5.50	5/1/2036	1,483	1,579	1,704
FNMA POOL 888334	6.00	4/1/2037	8,338	8,928	9,723
FNMA POOL 888677	5.50	8/1/2022	121	122	124
FNMA POOL 889040	5.00	6/1/2037	2,623	2,766	3,003
FNMA POOL 889117	5.00	10/1/2035	7,767,272	8,380,067	8,909,226
FNMA POOL 889164	6.00	2/1/2038	6,773	7,250	7,880
FNMA POOL 889338	6.00	12/1/2037	20,245	21,695	23,627
FNMA POOL 889527	5.50	5/1/2023	8,028	8,170	8,384
FNMA POOL 889574	6.00	8/1/2037	1,717	1,839	2,004

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 889624	5.50	5/1/2038	21,215	22,643	24,301
FNMA POOL 889697	6.00	7/1/2038	1,090	1,169	1,267
FNMA POOL 889762	5.00	9/1/2037	5,129	5,410	5,874
FNMA POOL 890289	4.50	2/1/2041	8,634	9,150	9,605
FNMA POOL 890310	4.50	12/1/2040	107,278	113,693	119,388
FNMA POOL 891281	6.00	9/1/2036	26,853	28,733	31,030
FNMA POOL 892369	6.00	7/1/2036	2,814	3,006	3,126
FNMA POOL 892780	6.00	11/1/2036	85,158	91,137	95,457
FNMA POOL 893299	6.00	8/1/2036	2,235	2,391	2,503
FNMA POOL 893511	6.00	9/1/2036	8,484	9,077	9,869
FNMA POOL 894976	7.00	9/1/2036	24,966	27,240	26,759
FNMA POOL 896873	5.50	5/1/2022	3,908	3,969	4,009
FNMA POOL 897205	6.00	8/1/2036	7,705	8,233	8,908
FNMA POOL 898415	6.00	10/1/2036	235	252	273
FNMA POOL 899396	5.00	4/1/2037	9,008	9,476	9,980
FNMA POOL 899514	5.00	5/1/2037	11,432	12,055	12,975
FNMA POOL 899743	6.00	7/1/2037	8,376	8,961	9,748
FNMA POOL 899794	5.50	8/1/2022	11,626	11,827	11,722
FNMA POOL 899887	5.50	10/1/2021	1,647	1,662	1,656
FNMA POOL 899948	6.50	12/1/2037	254,687	277,350	286,907
FNMA POOL 900291	6.00	9/1/2036	6,248	6,677	6,949
FNMA POOL 900301	6.00	9/1/2036	554	593	616
FNMA POOL 900562	6.00	9/1/2036	3,040	3,248	3,376
FNMA POOL 900999	5.50	9/1/2021	263	266	267
FNMA POOL 902172	5.00	11/1/2036	4,576	4,830	5,059
FNMA POOL 902792	6.00	12/1/2036	524	561	610
FNMA POOL 904453	6.00	11/1/2036	469	502	521
FNMA POOL 906092	5.50	1/1/2022	1,934	1,960	1,976
FNMA POOL 906561	5.00	1/1/2037	7,577	7,987	8,683
FNMA POOL 906667	5.50	12/1/2021	1,355	1,372	1,381
FNMA POOL 907399	5.50	1/1/2022	1,035	1,048	1,048
FNMA POOL 907706	5.50	2/1/2022	765	776	771
FNMA POOL 908596	6.00	2/1/2037	1,861	1,989	2,176
FNMA POOL 908724	6.00	1/1/2037	11,671	12,493	13,294
FNMA POOL 908745	6.00	1/1/2037	2,503	2,680	2,785
FNMA POOL 909481	5.00	2/1/2037	3,747	3,951	4,291
FNMA POOL 910390	5.00	3/1/2037	3,065	3,232	3,510
FNMA POOL 912531	6.00	2/1/2037	39,095	41,802	45,485
FNMA POOL 914024	5.00	3/1/2037	323	340	368
FNMA POOL 914072	5.00	3/1/2037	592	623	677
FNMA POOL 914386	5.00	3/1/2037	29,920	31,581	34,262
FNMA POOL 914725	6.00	4/1/2037	816	874	951
FNMA POOL 915344	5.50	10/1/2022	14,867	15,161	15,221
FNMA POOL 915352	4.50	4/1/2023	77,659	79,101	81,768
FNMA POOL 915445	5.50	4/1/2027	159,362	166,350	175,164
FNMA POOL 915447	6.00	8/1/2036	11,223	12,007	12,487
FNMA POOL 915462	5.50	7/1/2027	110,549	115,492	121,511
FNMA POOL 915811	6.00	12/1/2036	26,549	28,381	30,202
FNMA POOL 915939	5.50	3/1/2022	2,374	2,408	2,429
FNMA POOL 916916	6.00	5/1/2037	942	1,008	1,097

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 917142	6.00	6/1/2037	7,117	7,612	8,279
FNMA POOL 917809	5.00	5/1/2037	5,670	5,728	6,493
FNMA POOL 917988	6.00	5/1/2037	1,070	1,145	1,197
FNMA POOL 918332	6.00	5/1/2037	11,577	12,397	13,374
FNMA POOL 918363	5.00	5/1/2037	499	527	570
FNMA POOL 918561	6.00	5/1/2037	2,059	2,205	2,314
FNMA POOL 920202	5.50	1/1/2022	33,648	34,093	34,377
FNMA POOL 920424	6.00	11/1/2036	300	321	347
FNMA POOL 923878	6.00	4/1/2037	6,562	7,018	7,362
FNMA POOL 924952	6.00	8/1/2037	186,410	199,681	217,032
FNMA POOL 928345	5.50	5/1/2022	5,381	5,465	5,541
FNMA POOL 929200	6.00	3/1/2038	2,930	3,140	3,271
FNMA POOL 929400	5.00	5/1/2023	47,553	48,480	49,967
FNMA POOL 930030	5.00	10/1/2038	6,161	6,506	7,059
FNMA POOL 930260	6.00	12/1/2038	317,969	342,666	353,511
FNMA POOL 930334	5.50	1/1/2024	462	472	489
FNMA POOL 930594	5.00	2/1/2039	2,122	2,241	2,411
FNMA POOL 930610	4.50	2/1/2039	17,024	18,029	18,910
FNMA POOL 930862	5.50	3/1/2024	2,351	2,402	2,370
FNMA POOL 931148	5.00	5/1/2039	365,481	400,055	419,176
FNMA POOL 931331	5.00	6/1/2039	385,128	421,596	441,521
FNMA POOL 931487	4.50	7/1/2039	3,432	3,636	3,816
FNMA POOL 931639	4.50	7/1/2039	13,647	14,455	15,171
FNMA POOL 931693	5.50	4/1/2023	2,553	2,597	2,639
FNMA POOL 931790	4.50	8/1/2039	1,105,213	1,156,027	1,229,316
FNMA POOL 932044	4.50	9/1/2039	3,804	4,030	4,228
FNMA POOL 932122	4.00	5/1/2035	63,268	65,727	67,927
FNMA POOL 932385	4.50	1/1/2040	47,185	50,587	53,166
FNMA POOL 932391	4.50	1/1/2040	4,269	4,523	4,751
FNMA POOL 932474	4.50	2/1/2040	66,128	70,059	73,581
FNMA POOL 933342	5.00	1/1/2038	335	353	383
FNMA POOL 933433	5.00	3/1/2038	2,151	2,264	2,458
FNMA POOL 933521	5.00	1/1/2038	262	275	299
FNMA POOL 933800	5.00	5/1/2038	4,430	4,666	5,067
FNMA POOL 934076	5.00	6/1/2038	4,351	4,582	4,834
FNMA POOL 934412	6.00	9/1/2038	1,672	1,792	1,939
FNMA POOL 934505	5.50	10/1/2023	4,158	4,260	4,337
FNMA POOL 934650	6.00	11/1/2038	20,879	22,398	24,275
FNMA POOL 935051	6.00	3/1/2039	2,568	2,753	2,884
FNMA POOL 937282	5.00	5/1/2037	6,763	7,116	7,725
FNMA POOL 938077	5.50	7/1/2022	241	245	248
FNMA POOL 938134	6.00	7/1/2037	606	649	704
FNMA POOL 939458	5.50	6/1/2022	1,371	1,372	1,410
FNMA POOL 940624	6.00	8/1/2037	2,482	2,659	2,886
FNMA POOL 940664	6.00	9/1/2037	11,629	12,458	13,266
FNMA POOL 940698	6.00	10/1/2037	2,675	2,863	3,107
FNMA POOL 940730	6.00	10/1/2037	602	645	701
FNMA POOL 941274	6.00	7/1/2037	3,128	3,346	3,636
FNMA POOL 941280	6.00	6/1/2037	14,103	15,085	16,325
FNMA POOL 941404	5.50	7/1/2022	338	344	348

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 941524	5.50	6/1/2022	3,531	3,588	3,555
FNMA POOL 941846	6.00	9/1/2037	16,750	17,922	18,606
FNMA POOL 942347	6.00	8/1/2037	16,335	16,652	18,990
FNMA POOL 942700	6.00	8/1/2037	3,148	3,372	3,659
FNMA POOL 942987	6.00	9/1/2037	28,523	29,078	33,112
FNMA POOL 943597	6.00	7/1/2037	3,992	4,271	4,647
FNMA POOL 943983	5.50	7/1/2022	5,589	5,665	5,634
FNMA POOL 944037	6.00	8/1/2037	1,090	1,167	1,211
FNMA POOL 944215	6.00	7/1/2037	104,989	107,024	119,865
FNMA POOL 944340	6.00	6/1/2037	1,672	1,791	1,948
FNMA POOL 944358	5.50	6/1/2022	2,965	3,013	3,063
FNMA POOL 944901	5.50	7/1/2022	7,858	7,990	7,923
FNMA POOL 945896	6.00	8/1/2022	535	545	553
FNMA POOL 946391	6.00	9/1/2037	20,592	22,060	23,959
FNMA POOL 947052	6.00	10/1/2037	5,470	5,861	6,294
FNMA POOL 947217	4.50	10/1/2022	1,590	1,613	1,674
FNMA POOL 947821	6.00	10/1/2037	509	545	565
FNMA POOL 948226	6.00	8/1/2037	3,924	4,199	4,359
FNMA POOL 950873	5.50	9/1/2022	48,561	49,260	50,180
FNMA POOL 950903	5.50	10/1/2022	1,720	1,751	1,734
FNMA POOL 952007	5.00	11/1/2037	4,085	4,309	4,510
FNMA POOL 952459	6.00	9/1/2037	26,014	27,840	30,208
FNMA POOL 952513	6.00	9/1/2037	2,403	2,571	2,674
FNMA POOL 952727	5.50	9/1/2022	73,155	74,465	75,404
FNMA POOL 952730	6.00	9/1/2037	1,213	1,297	1,405
FNMA POOL 953419	6.00	11/1/2022	3,095	3,156	3,206
FNMA POOL 953513	5.50	10/1/2022	113	115	114
FNMA POOL 953927	6.00	12/1/2037	3,736	3,999	4,342
FNMA POOL 955944	5.50	10/1/2022	5,797	5,883	6,009
FNMA POOL 956230	6.00	11/1/2037	12,030	12,875	13,627
FNMA POOL 959891	6.00	11/1/2037	33,742	36,154	39,200
FNMA POOL 959983	6.00	11/1/2037	173	185	201
FNMA POOL 960128	6.00	11/1/2037	5,207	5,572	6,018
FNMA POOL 961427	6.00	2/1/2038	7,468	7,995	8,685
FNMA POOL 961578	5.00	2/1/2038	507	536	581
FNMA POOL 962343	5.00	3/1/2038	3,531	3,726	3,961
FNMA POOL 963706	5.00	6/1/2023	111,480	113,702	117,218
FNMA POOL 964530	6.00	7/1/2038	4,837	5,180	5,420
FNMA POOL 964794	6.00	8/1/2038	15,668	16,783	17,406
FNMA POOL 964844	6.00	8/1/2038	175	188	195
FNMA POOL 965521	5.50	12/1/2022	8,042	8,044	8,336
FNMA POOL 965547	5.50	1/1/2023	16,491	16,821	16,815
FNMA POOL 966326	6.00	12/1/2037	2,200	2,355	2,459
FNMA POOL 966482	7.00	1/1/2038	8,188	8,953	8,375
FNMA POOL 966510	5.50	4/1/2037	315,781	335,206	347,094
FNMA POOL 966525	5.50	10/1/2037	131,930	140,122	145,186
FNMA POOL 966526	6.00	9/1/2037	94,695	101,249	105,203
FNMA POOL 966594	6.00	1/1/2038	3,214	3,440	3,609
FNMA POOL 966727	5.50	1/1/2023	18,696	19,071	19,394
FNMA POOL 966762	5.00	1/1/2038	569	600	623

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 966853	7.00	12/1/2037	767	838	834
FNMA POOL 967986	6.00	1/1/2038	4,396	4,706	5,114
FNMA POOL 968927	6.00	1/1/2038	437	467	503
FNMA POOL 969437	5.50	1/1/2023	12,248	12,445	12,355
FNMA POOL 969446	5.50	1/1/2023	34,714	35,274	35,499
FNMA POOL 969756	5.00	2/1/2038	7,066	7,439	7,930
FNMA POOL 969816	5.50	2/1/2023	6,563	6,699	6,798
FNMA POOL 970012	5.50	7/1/2023	3,059	3,130	3,182
FNMA POOL 970673	6.00	10/1/2038	1,834	1,965	2,050
FNMA POOL 970754	6.00	10/1/2038	5,467	5,864	6,073
FNMA POOL 970769	5.00	11/1/2038	750	791	859
FNMA POOL 970785	6.00	11/1/2038	1,585	1,700	1,835
FNMA POOL 972448	6.00	3/1/2038	2,907	3,112	3,381
FNMA POOL 972451	5.00	3/1/2038	588	619	673
FNMA POOL 972504	6.00	3/1/2038	21,023	22,508	24,468
FNMA POOL 973023	5.00	3/1/2038	641	677	733
FNMA POOL 973126	5.50	12/1/2037	357,728	380,011	395,358
FNMA POOL 973127	6.00	11/1/2037	117,823	126,003	131,025
FNMA POOL 973243	6.00	3/1/2038	29,765	31,868	34,588
FNMA POOL 973717	6.00	4/1/2038	415	445	462
FNMA POOL 973770	5.00	3/1/2038	1,881	1,981	2,151
FNMA POOL 973994	5.50	2/1/2023	14,605	14,905	14,894
FNMA POOL 974152	6.00	2/1/2038	17,934	19,199	20,594
FNMA POOL 974335	5.50	3/1/2038	19,215	20,505	21,121
FNMA POOL 974385	5.00	4/1/2038	3,919	4,129	4,481
FNMA POOL 974435	6.00	3/1/2038	2,202	2,361	2,563
FNMA POOL 974532	5.00	4/1/2038	1,168	1,233	1,335
FNMA POOL 974640	5.00	3/1/2038	337	355	376
FNMA POOL 974700	5.00	4/1/2038	2,044	2,153	2,340
FNMA POOL 974789	4.50	5/1/2023	10,049	10,068	10,581
FNMA POOL 976435	6.00	3/1/2038	32,685	34,993	36,377
FNMA POOL 976896	6.00	1/1/2038	91,274	97,702	105,997
FNMA POOL 976913	5.00	4/1/2038	834	878	952
FNMA POOL 977143	5.50	8/1/2023	745	759	780
FNMA POOL 979505	5.00	4/1/2038	2,130	2,248	2,432
FNMA POOL 981445	6.00	9/1/2038	3,437	3,682	3,833
FNMA POOL 981689	5.00	6/1/2038	11,297	11,925	12,931
FNMA POOL 981785	5.00	4/1/2038	186	196	203
FNMA POOL 982033	5.00	4/1/2038	2,072	2,186	2,365
FNMA POOL 982665	6.00	7/1/2038	15,450	16,547	17,260
FNMA POOL 982894	5.50	5/1/2023	10,212	10,393	10,632
FNMA POOL 983288	6.00	5/1/2038	10,981	11,759	12,211
FNMA POOL 983475	6.00	5/1/2038	4,412	4,727	5,125
FNMA POOL 984834	5.00	7/1/2038	5,627	5,926	6,441
FNMA POOL 984937	6.00	6/1/2038	1,153	1,234	1,335
FNMA POOL 984977	6.00	8/1/2038	1,384	1,484	1,537
FNMA POOL 985560	6.00	6/1/2038	3,143	3,366	3,646
FNMA POOL 985771	5.50	11/1/2022	61,038	62,198	62,408
FNMA POOL 986092	5.50	9/1/2023	17,108	17,518	17,244
FNMA POOL 986199	5.50	7/1/2023	181,890	185,265	188,979

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL 986496	5.50	8/1/2023	19,305	19,671	19,468
FNMA POOL 987905	6.00	10/1/2038	1,737	1,864	1,931
FNMA POOL 987914	5.00	11/1/2038	11,030	11,621	12,593
FNMA POOL 988301	5.50	9/1/2023	38,611	39,535	39,096
FNMA POOL 988714	6.00	10/1/2038	1,885	2,022	2,175
FNMA POOL 988841	6.00	8/1/2038	1,419	1,521	1,576
FNMA POOL 988842	6.00	8/1/2038	882	945	1,022
FNMA POOL 990040	6.00	9/1/2038	10,989	11,772	12,269
FNMA POOL 990274	6.00	10/1/2038	2,471	2,647	2,766
FNMA POOL 990406	6.00	11/1/2038	1,111	1,191	1,235
FNMA POOL 990523	6.00	9/1/2038	2,029	2,173	2,275
FNMA POOL 990895	5.50	10/1/2023	221,666	226,035	233,868
FNMA POOL 991092	5.50	11/1/2023	26,344	26,873	27,015
FNMA POOL 991160	6.00	9/1/2038	10,271	11,002	11,908
FNMA POOL 991397	5.50	10/1/2023	86,059	88,159	90,398
FNMA POOL 991435	5.00	12/1/2038	2,296	2,424	2,608
FNMA POOL 991472	6.00	10/1/2038	435	466	483
FNMA POOL 991860	6.00	10/1/2038	3,051	3,269	3,509
FNMA POOL 992144	6.00	10/1/2038	8,158	8,747	9,485
FNMA POOL 992490	5.50	11/1/2023	11,872	12,111	12,355
FNMA POOL 992630	6.00	11/1/2038	9,948	10,659	11,094
FNMA POOL 992695	6.00	10/1/2038	53,567	57,715	60,751
FNMA POOL 992910	5.50	11/1/2023	79,480	81,076	81,436
FNMA POOL 992959	5.50	12/1/2023	100,746	103,295	106,093
FNMA POOL 993075	6.00	12/1/2038	3,953	4,029	4,419
FNMA POOL 995002	5.00	7/1/2037	1,110,349	1,200,266	1,273,437
FNMA POOL 995039	5.00	4/1/2038	3,597	3,797	4,119
FNMA POOL 995050	6.00	9/1/2037	637	682	741
FNMA POOL 995069	6.00	10/1/2038	3,633	3,897	4,240
FNMA POOL 995196	6.00	7/1/2038	94,331	100,697	110,115
FNMA POOL 995238	5.00	1/1/2024	77,330	79,150	81,326
FNMA POOL 995245	5.00	1/1/2039	6,962	7,352	7,962
FNMA POOL 995253	5.50	12/1/2023	519	529	535
FNMA POOL 995442	6.00	12/1/2038	46,204	49,566	53,935
FNMA POOL 995461	5.50	12/1/2023	313	320	329
FNMA POOL 995477	5.50	1/1/2029	26,556	27,904	29,247
FNMA POOL 995672	4.50	4/1/2039	80,529	85,287	89,403
FNMA POOL 995789	5.00	4/1/2036	716,339	755,738	821,710
FNMA POOL 995872	5.00	6/1/2039	7,335	7,732	8,386
FNMA POOL 995876	6.00	11/1/2038	11,369	12,193	13,272
FNMA POOL 995883	6.00	6/1/2039	32,960	35,378	38,392
FNMA POOL 995917	5.00	7/1/2039	972	1,027	1,111
FNMA POOL 995951	5.00	4/1/2039	2,025	2,139	2,316
FNMA POOL AA0587	4.50	2/1/2039	72,818	76,466	80,897
FNMA POOL AA0601	4.50	2/1/2039	177,284	186,164	197,262
FNMA POOL AA0708	5.50	1/1/2024	2,457	2,508	2,592
FNMA POOL AA0890	6.00	12/1/2038	623	667	722
FNMA POOL AA2040	4.50	2/1/2039	156,890	164,043	171,362
FNMA POOL AA2180	4.50	2/1/2039	2,467	2,487	2,740
FNMA POOL AA2441	4.50	2/1/2039	95,903	100,707	102,984

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AA2778	5.00	10/1/2039	13,763	14,544	15,536
FNMA POOL AA4433	4.50	3/1/2039	898	951	998
FNMA POOL AA4434	5.00	3/1/2039	514	543	589
FNMA POOL AA4463	4.50	4/1/2039	9,642	10,211	10,708
FNMA POOL AA5781	5.00	4/1/2039	289	305	331
FNMA POOL AA7999	5.00	5/1/2024	1,386	1,420	1,457
FNMA POOL AA8741	4.50	7/1/2039	13,369	14,160	14,863
FNMA POOL AA9055	4.50	7/1/2039	59,617	63,056	65,873
FNMA POOL AA9372	4.50	7/1/2039	1,574,230	1,660,646	1,750,466
FNMA POOL ABO293	6.00	11/1/2038	11,761	12,601	13,694
FNMA POOL AB1080	4.50	5/1/2040	2,216,945	2,371,403	2,466,805
FNMA POOL AB1248	4.50	7/1/2040	3,690	3,910	4,103
FNMA POOL AB1335	4.50	8/1/2040	2,592	2,747	2,885
FNMA POOL AB1387	4.50	8/1/2040	32,007	33,916	35,624
FNMA POOL AB1565	5.00	10/1/2040	570,998	625,859	645,298
FNMA POOL AB1969	4.50	12/1/2040	5,464,332	5,781,668	6,083,274
FNMA POOL AB2086	4.00	1/1/2041	1,200,859	1,249,409	1,318,316
FNMA POOL AB2189	4.50	2/1/2041	1,074,907	1,138,304	1,199,072
FNMA POOL AB3032	4.50	5/1/2041	86,583	92,655	96,325
FNMA POOL AB3315	4.50	3/1/2041	3,340	3,540	3,660
FNMA POOL AB3354	5.00	6/1/2037	4,431	4,662	4,970
FNMA POOL AB3754	5.00	6/1/2041	442,383	466,991	494,221
FNMA POOL AB3844	5.00	11/1/2041	385,009	422,395	424,045
FNMA POOL AB4003	4.50	12/1/2041	1,293,930	1,363,502	1,440,554
FNMA POOL AB4115	4.00	12/1/2041	4,341	4,517	4,766
FNMA POOL AB4312	4.00	1/1/2042	23,512,726	24,704,452	25,824,560
FNMA POOL AB4316	4.00	1/1/2042	115,437	120,127	126,651
FNMA POOL AB4751	3.50	3/1/2042	14,723	15,069	15,908
FNMA POOL AB5297	4.50	6/1/2042	1,351,193	1,432,998	1,495,439
FNMA POOL AB5666	3.50	7/1/2042	1,695,823	1,786,857	1,825,763
FNMA POOL AB8251	4.00	4/1/2042	576,092	586,971	620,158
FNMA POOL AB8457	3.50	2/1/2028	770,482	799,409	815,551
FNMA POOL AB9715	3.50	6/1/2033	310,956	317,087	332,758
FNMA POOL AB9716	3.50	6/1/2033	108,741	110,885	116,365
FNMA POOL AC0380	4.50	7/1/2039	101,571	108,605	112,909
FNMA POOL AC1092	4.50	7/1/2039	197,677	206,753	219,948
FNMA POOL AC1258	4.00	8/1/2039	780,870	812,192	870,482
FNMA POOL AC1541	4.50	9/1/2039	6,053	6,403	6,656
FNMA POOL AC1877	4.50	9/1/2039	13,443	14,240	14,942
FNMA POOL AC1892	4.50	9/1/2039	55,734	58,957	61,994
FNMA POOL AC2749	4.50	8/1/2039	46,156	48,822	49,579
FNMA POOL AC3414	4.50	11/1/2039	1,558,480	1,648,835	1,733,022
FNMA POOL AC3657	4.50	10/1/2039	28,252,795	30,205,790	31,407,396
FNMA POOL AC3668	4.50	10/1/2039	152,314	161,346	169,354
FNMA POOL AC4563	4.50	2/1/2039	369,529	388,039	399,959
FNMA POOL AC5047	4.50	10/1/2039	1,815	1,923	2,018
FNMA POOL AC5400	4.50	10/1/2039	3,123	3,308	3,472
FNMA POOL AC5518	5.00	12/1/2039	8,834	9,315	10,150
FNMA POOL AC5566	4.50	2/1/2040	9,821	10,404	10,929
FNMA POOL AC5585	5.00	2/1/2040	173,835	190,420	199,776

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AC6048	5.00	5/1/2040	2,652	2,797	2,898
FNMA POOL AC6118	4.50	11/1/2039	48,455	51,330	53,863
FNMA POOL AC6213	5.00	11/1/2039	217,429	238,116	249,723
FNMA POOL AC6263	4.50	12/1/2039	5,036	5,335	5,600
FNMA POOL AC6608	4.50	11/1/2039	10,149	10,752	11,283
FNMA POOL AC6648	5.00	12/1/2039	2,513,360	2,752,701	2,886,684
FNMA POOL AC6753	5.00	12/1/2039	56,100	61,443	64,479
FNMA POOL AC7311	4.50	11/1/2039	534,324	573,616	586,940
FNMA POOL AC7330	4.50	12/1/2039	5,945	6,298	6,607
FNMA POOL AC7870	4.50	2/1/2040	23,500	24,897	26,151
FNMA POOL AC8634	4.50	1/1/2040	3,659,443	3,923,247	4,073,256
FNMA POOL AC9288	4.50	3/1/2041	5,360	5,681	5,965
FNMA POOL AC9294	4.50	5/1/2041	3,803	4,031	4,233
FNMA POOL AC9302	4.50	7/1/2041	1,775,273	1,903,002	1,976,388
FNMA POOL AC9313	4.50	11/1/2041	466,034	491,065	512,711
FNMA POOL AC9518	4.50	1/1/2040	4,616	4,891	5,138
FNMA POOL AD0127	6.00	7/1/2039	1,998	2,142	2,281
FNMA POOL AD0213	6.00	9/1/2039	3,564	3,822	4,160
FNMA POOL AD0245	5.00	8/1/2038	2,477	2,615	2,845
FNMA POOL AD0308	5.00	3/1/2035	7,883,794	8,313,302	8,991,825
FNMA POOL AD0496	6.00	10/1/2039	4,424	4,745	5,162
FNMA POOL AD0526	6.00	12/1/2038	21,117	22,655	24,629
FNMA POOL AD0569	5.00	1/1/2040	151,087	165,488	173,648
FNMA POOL AD0640	6.00	3/1/2039	4,225	4,533	4,932
FNMA POOL AD0890	6.00	5/1/2024	378	388	390
FNMA POOL AD1075	4.50	3/1/2040	1,450	1,536	1,608
FNMA POOL AD2004	4.50	3/1/2040	3,414	3,617	3,799
FNMA POOL AD2341	4.50	3/1/2040	61,240	64,882	68,152
FNMA POOL AD3072	4.50	4/1/2040	3,382	3,584	3,764
FNMA POOL AD3101	5.00	4/1/2040	746,802	818,177	858,273
FNMA POOL AD3125	4.50	5/1/2040	6,431	6,814	7,155
FNMA POOL AD3651	5.00	3/1/2040	195,291	213,939	213,568
FNMA POOL AD3795	4.50	4/1/2040	7,616	8,069	8,474
FNMA POOL AD3907	3.50	10/1/2025	156,358	160,306	164,248
FNMA POOL AD4437	4.50	4/1/2040	223,983	240,172	240,651
FNMA POOL AD4452	4.50	4/1/2040	515,741	552,850	567,378
FNMA POOL AD6041	4.50	7/1/2040	80,885	86,526	88,743
FNMA POOL AD6049	5.00	7/1/2040	187,099	205,029	214,394
FNMA POOL AD6495	5.00	5/1/2040	100,070	109,642	109,402
FNMA POOL AD6960	4.50	7/1/2040	20,885	22,130	23,244
FNMA POOL AD7887	4.50	6/1/2040	13,488,720	14,463,564	15,010,432
FNMA POOL AD7916	4.50	7/1/2040	5,835,767	6,251,405	6,495,480
FNMA POOL AD7952	5.50	9/1/2024	42,519	43,521	44,572
FNMA POOL AD8035	4.50	8/1/2040	6,849	7,258	7,612
FNMA POOL AD8037	4.50	8/1/2040	877,479	938,720	976,717
FNMA POOL AD8918	5.00	6/1/2040	126,595	133,540	138,842
FNMA POOL AD9029	4.50	10/1/2040	197,717	211,909	212,429
FNMA POOL AD9687	4.00	8/1/2040	2,132	2,218	2,308
FNMA POOL AD9808	4.50	7/1/2040	4,523	4,793	4,955
FNMA POOL AD9966	4.50	8/1/2040	340,692	365,105	369,147

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AE0217	4.50	8/1/2040	354,100	375,224	394,051
FNMA POOL AE0218	4.50	8/1/2040	73,865	78,272	82,209
FNMA POOL AE0374	6.00	11/1/2039	1,264	1,357	1,476
FNMA POOL AE0550	5.00	9/1/2040	252,101	276,302	289,737
FNMA POOL AE0674	4.50	11/1/2040	30,849,774	32,639,656	34,332,170
FNMA POOL AE0698	4.50	12/1/2040	7,703	8,163	8,571
FNMA POOL AE0803	4.50	10/1/2040	7,162,882	7,663,346	7,971,406
FNMA POOL AE0822	4.50	2/1/2041	944,155	1,011,551	1,050,918
FNMA POOL AE0826	4.50	1/1/2041	48,944	51,872	54,480
FNMA POOL AE0949	4.00	2/1/2041	16,925	17,243	18,575
FNMA POOL AE0954	4.50	2/1/2041	5,627	5,964	6,261
FNMA POOL AE0984	4.50	2/1/2041	16,354	17,333	18,204
FNMA POOL AE1308	4.50	8/1/2040	11,150	11,815	12,235
FNMA POOL AE1837	4.50	8/1/2040	11,994,889	12,828,787	13,353,594
FNMA POOL AE1971	4.00	9/1/2040	2,547,497	2,609,428	2,797,084
FNMA POOL AE2100	4.50	8/1/2040	544	577	601
FNMA POOL AE2546	4.50	9/1/2040	392,372	419,772	433,725
FNMA POOL AE2851	4.50	10/1/2040	174,076	183,096	193,692
FNMA POOL AE3026	4.50	9/1/2040	12,563,695	13,407,414	13,983,676
FNMA POOL AE3382	4.00	11/1/2040	14,549	15,179	15,962
FNMA POOL AE3389	4.50	11/1/2040	1,046,780	1,108,343	1,181,384
FNMA POOL AE3470	4.50	10/1/2040	20,857	22,188	23,217
FNMA POOL AE3695	4.50	11/1/2040	2,509,716	2,685,165	2,793,567
FNMA POOL AE3824	4.50	9/1/2040	1,059,395	1,136,290	1,179,121
FNMA POOL AE4414	4.00	11/1/2040	2,504,617	2,633,935	2,751,053
FNMA POOL AE4486	4.00	9/1/2030	120,621	124,467	128,617
FNMA POOL AE4588	4.50	9/1/2040	49,709	52,676	55,313
FNMA POOL AE4935	4.50	9/1/2040	136,860	144,891	152,329
FNMA POOL AE5637	4.50	6/1/2041	99,723	105,635	107,171
FNMA POOL AE6062	4.50	10/1/2040	767,160	820,761	853,936
FNMA POOL AE6120	4.00	10/1/2040	4,502	4,684	4,943
FNMA POOL AE6393	4.50	3/1/2041	2,910,084	3,081,863	3,284,304
FNMA POOL AE7323	4.00	11/1/2040	748,737	784,409	821,955
FNMA POOL AE7536	4.50	10/1/2040	2,058	2,180	2,290
FNMA POOL AE7620	4.50	11/1/2040	87,074	92,634	96,900
FNMA POOL AE7731	4.50	11/1/2040	5,500,911	5,885,469	6,120,844
FNMA POOL AE8184	4.50	10/1/2040	85,739	90,182	95,426
FNMA POOL AE9274	4.50	2/1/2041	143,260	150,879	159,452
FNMA POOL AE9292	4.50	11/1/2040	432,482	454,919	481,465
FNMA POOL AE9761	4.50	12/1/2040	12,101,434	12,975,324	13,469,856
FNMA POOL AH0055	4.50	2/1/2041	1,326,996	1,405,261	1,497,664
FNMA POOL AH0353	4.50	2/1/2041	344,786	369,914	381,033
FNMA POOL AH0426	4.50	4/1/2041	83,537	87,989	91,904
FNMA POOL AH1338	4.00	12/1/2040	65,338	65,882	70,373
FNMA POOL AH1504	4.50	12/1/2040	982,439	1,034,842	1,093,621
FNMA POOL AH1620	4.50	1/1/2041	430,959	453,852	468,495
FNMA POOL AH2159	4.50	3/1/2041	33,889	35,442	37,709
FNMA POOL AH2182	4.00	11/1/2040	895,911	917,709	983,923
FNMA POOL AH2367	4.00	1/1/2041	11,384	11,598	12,499
FNMA POOL AH2714	4.50	1/1/2041	11,365,460	12,181,286	12,650,380

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AH2727	4.50	1/1/2041	19,250,397	20,681,958	21,426,163
FNMA POOL AH2755	4.50	4/1/2041	56,164	60,101	61,639
FNMA POOL AH2899	4.50	1/1/2041	138,389	146,548	154,497
FNMA POOL AH3519	4.00	2/1/2041	3,201,134	3,386,307	3,514,050
FNMA POOL AH3526	4.50	2/1/2041	96,478	102,658	107,388
FNMA POOL AH3645	4.00	2/1/2041	120,003	124,856	131,767
FNMA POOL AH3853	4.50	7/1/2041	100,118	107,147	111,461
FNMA POOL AH3865	4.50	9/1/2041	220,777	232,610	245,792
FNMA POOL AH4493	4.50	2/1/2041	109,622	115,745	122,004
FNMA POOL AH4546	4.50	2/1/2041	1,023,323	1,083,725	1,138,656
FNMA POOL AH4987	4.00	1/1/2041	8,487	8,831	9,324
FNMA POOL AH5448	4.50	6/1/2041	20,986	22,107	22,563
FNMA POOL AH5457	4.50	6/1/2041	876,876	923,717	976,229
FNMA POOL AH5850	4.50	2/1/2041	13,678,363	14,481,802	15,283,382
FNMA POOL AH5980	4.50	3/1/2041	104,853	111,049	116,678
FNMA POOL AH6151	4.50	3/1/2041	1,253,077	1,348,559	1,375,555
FNMA POOL AH6169	4.50	2/1/2041	483,136	508,830	537,677
FNMA POOL AH6220	4.50	3/1/2041	117,396	125,620	130,622
FNMA POOL AH6690	4.00	3/1/2041	11,190	11,676	12,088
FNMA POOL AH6910	4.50	4/1/2041	92,996	99,514	99,890
FNMA POOL AH6912	4.50	4/1/2041	104,431	111,751	114,597
FNMA POOL AH6932	4.50	4/1/2041	88,669	94,884	95,785
FNMA POOL AH7284	4.00	3/1/2041	6,247,489	6,665,264	6,858,884
FNMA POOL AH7373	5.00	5/1/2041	167,442	183,623	184,873
FNMA POOL AH7549	4.50	3/1/2041	620,064	654,724	686,618
FNMA POOL AH7614	4.50	3/1/2041	231,588	243,917	257,690
FNMA POOL AH7620	4.50	5/1/2041	128,187	135,027	142,701
FNMA POOL AH7621	4.50	6/1/2041	1,049,952	1,106,038	1,168,752
FNMA POOL AH7628	4.50	7/1/2041	639,957	674,179	712,453
FNMA POOL AH7633	4.50	8/1/2041	681,464	717,946	747,975
FNMA POOL AH7642	4.50	10/1/2041	1,258,550	1,326,074	1,401,155
FNMA POOL AH7780	4.50	4/1/2041	57,489	60,553	62,293
FNMA POOL AH8040	5.00	4/1/2041	58,773	62,035	64,231
FNMA POOL AH8319	4.50	4/1/2041	128,067	137,043	142,438
FNMA POOL AH8382	4.50	3/1/2041	48,038	51,404	53,463
FNMA POOL AH8924	4.50	4/1/2041	2,388,242	2,560,305	2,658,065
FNMA POOL AH9388	4.50	3/1/2041	2,740,444	2,904,564	3,038,572
FNMA POOL AH9708	4.50	4/1/2041	37,594	39,838	41,853
FNMA POOL AH9719	4.50	4/1/2041	7,530	7,982	8,384
FNMA POOL AI0309	4.50	8/1/2041	538,611	567,446	588,556
FNMA POOL AI0788	4.50	6/1/2041	199,964	211,275	222,555
FNMA POOL AI0814	4.50	8/1/2041	819,321	863,184	908,958
FNMA POOL AI0818	4.00	9/1/2041	2,347,807	2,406,359	2,568,142
FNMA POOL AI0915	4.50	4/1/2041	23,414	24,817	25,959
FNMA POOL AI0964	4.50	4/1/2041	259,552	277,746	288,730
FNMA POOL AI0987	4.50	7/1/2041	571,601	604,153	628,828
FNMA POOL AI1019	4.50	5/1/2041	242,511	258,091	269,944
FNMA POOL AI1116	4.50	4/1/2041	187,085	200,582	208,168
FNMA POOL AI1616	4.50	4/1/2041	78,089	82,251	83,918
FNMA POOL AI1859	4.50	5/1/2041	1,697,098	1,816,117	1,888,313

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AI2090	4.50	4/1/2041	59,361	63,522	64,494
FNMA POOL AI2123	4.50	5/1/2041	31,210	33,058	34,743
FNMA POOL AI2404	4.50	5/1/2041	723,495	769,977	794,294
FNMA POOL AI2463	4.50	5/1/2041	24,984	26,482	27,814
FNMA POOL AI2468	4.50	5/1/2041	34,101	36,247	37,957
FNMA POOL AI2472	4.50	5/1/2041	362,624	388,055	403,521
FNMA POOL AI2504	4.50	5/1/2041	96,842	103,634	104,075
FNMA POOL AI2572	4.50	5/1/2041	46,408	49,157	50,584
FNMA POOL AI2574	5.00	5/1/2041	6,491	6,852	7,172
FNMA POOL AI2828	4.50	6/1/2041	65,175	68,656	72,558
FNMA POOL AI2898	4.50	5/1/2041	1,032,497	1,090,317	1,149,266
FNMA POOL AI3051	4.50	7/1/2041	2,548,925	2,687,142	2,837,718
FNMA POOL AI3097	5.00	6/1/2041	209,069	229,289	229,085
FNMA POOL AI3653	4.50	5/1/2041	3,778,246	4,001,991	4,204,683
FNMA POOL AI4162	5.00	6/1/2041	833,333	913,930	952,682
FNMA POOL AI4291	4.50	6/1/2041	13,372	14,174	14,835
FNMA POOL AI4835	4.50	6/1/2041	2,265,989	2,432,131	2,522,745
FNMA POOL AI4890	4.50	6/1/2041	4,573,696	4,782,406	5,091,807
FNMA POOL AI4895	4.50	2/1/2040	386,541	409,036	423,247
FNMA POOL AI4918	4.50	8/1/2041	2,166,425	2,282,406	2,411,520
FNMA POOL AI4931	4.50	9/1/2041	1,629,621	1,716,961	1,785,865
FNMA POOL AI4937	4.50	10/1/2041	528,920	557,298	575,168
FNMA POOL AI4951	4.50	11/1/2041	462,894	487,756	503,367
FNMA POOL AI5011	4.50	6/1/2041	91,202	97,602	101,518
FNMA POOL AI5048	4.50	7/1/2041	38,401	40,454	42,735
FNMA POOL AI5074	4.50	7/1/2041	208,969	220,144	232,643
FNMA POOL AI5595	5.00	7/1/2041	601,705	646,883	688,125
FNMA POOL AI5710	5.00	6/1/2041	139,880	147,661	153,661
FNMA POOL AI5868	4.50	7/1/2041	561,240	592,726	624,652
FNMA POOL AI6092	4.00	6/1/2031	7,811	8,068	8,394
FNMA POOL AI6515	4.50	7/1/2041	14,438	15,210	16,073
FNMA POOL AI6581	4.50	7/1/2041	550,568	586,012	612,943
FNMA POOL AI7004	4.50	7/1/2041	449,040	473,053	498,170
FNMA POOL AI7190	4.50	7/1/2041	416,819	446,964	457,604
FNMA POOL AI7294	4.50	8/1/2041	261,387	275,380	290,995
FNMA POOL AI7417	4.50	9/1/2041	1,650,120	1,771,402	1,830,736
FNMA POOL AI7560	4.50	6/1/2041	303,427	320,691	327,468
FNMA POOL AI7569	4.50	9/1/2041	775,345	831,511	863,190
FNMA POOL AI7578	4.50	9/1/2041	322,098	339,361	353,616
FNMA POOL AI7662	4.50	7/1/2041	314,776	337,424	350,439
FNMA POOL AI7951	4.50	8/1/2036	469,612	492,761	519,771
FNMA POOL AI8483	4.50	7/1/2041	6,933,103	7,438,190	7,718,624
FNMA POOL AI8501	5.00	7/1/2036	828,719	898,595	952,348
FNMA POOL AI8772	4.50	8/1/2041	38,216	40,262	42,545
FNMA POOL AI8842	4.50	8/1/2041	137,797	146,677	153,409
FNMA POOL AI9522	4.50	9/1/2041	1,312,997	1,405,271	1,461,763
FNMA POOL AI9736	4.50	9/1/2041	140,433	149,492	154,155
FNMA POOL AI9834	4.00	9/1/2041	5,966	6,078	6,551
FNMA POOL AJ0087	4.50	8/1/2041	11,333	11,940	12,184
FNMA POOL AJ0222	4.50	9/1/2041	2,616,891	2,771,576	2,873,273

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AJ0276	4.50	9/1/2041	3,829,700	4,111,179	4,233,543
FNMA POOL AJ0277	4.50	9/1/2041	2,328,764	2,499,926	2,566,457
FNMA POOL AJ0761	4.50	9/1/2041	97,872	104,186	108,962
FNMA POOL AJ0767	4.50	9/1/2041	1,200,117	1,291,428	1,336,092
FNMA POOL AJ1413	4.50	9/1/2041	395,357	417,621	440,137
FNMA POOL AJ1589	4.00	10/1/2041	1,780,054	1,863,593	1,953,020
FNMA POOL AJ1672	4.50	9/1/2041	10,889,905	11,672,667	12,123,660
FNMA POOL AJ1693	4.50	9/1/2041	2,439,413	2,583,016	2,735,212
FNMA POOL AJ1921	4.50	9/1/2041	595,350	633,755	661,882
FNMA POOL AJ1949	4.00	10/1/2041	111,773	116,309	122,654
FNMA POOL AJ1968	5.00	10/1/2041	122,726	129,583	134,225
FNMA POOL AJ2084	5.00	11/1/2041	541,269	593,828	609,538
FNMA POOL AJ2227	4.50	9/1/2041	246,149	262,028	272,136
FNMA POOL AJ2665	4.00	10/1/2041	6,494	6,757	6,900
FNMA POOL AJ3051	4.00	10/1/2041	8,249,820	8,702,866	9,063,180
FNMA POOL AJ3130	4.50	10/1/2041	4,861,391	5,130,728	5,412,164
FNMA POOL AJ3145	4.50	10/1/2041	100,042	106,502	111,377
FNMA POOL AJ3146	4.50	10/1/2041	36,735	39,108	40,898
FNMA POOL AJ4563	4.50	11/1/2041	1,836,403	1,969,644	2,044,461
FNMA POOL AJ4748	3.50	12/1/2041	1,009,652	1,063,821	1,092,182
FNMA POOL AJ4994	4.50	11/1/2041	5,236,748	5,551,701	5,829,955
FNMA POOL AJ5303	4.00	11/1/2041	35,357	36,024	38,804
FNMA POOL AJ5572	4.00	1/1/2042	1,477,431	1,557,047	1,615,620
FNMA POOL AJ5822	4.50	11/1/2041	2,645,183	2,838,590	2,944,894
FNMA POOL AJ6087	3.50	12/1/2026	8,035	8,218	8,450
FNMA POOL AJ6180	4.50	11/1/2041	389,083	409,981	421,900
FNMA POOL AJ6522	4.50	11/1/2041	688,830	725,828	754,009
FNMA POOL AJ8365	3.50	1/1/2042	18,205,554	18,921,511	19,678,713
FNMA POOL AJ8463	4.00	12/1/2041	6,467,868	6,841,400	7,104,985
FNMA POOL AJ8636	4.00	1/1/2042	15,331	15,954	16,757
FNMA POOL AJ9199	4.00	1/1/2042	27,526	28,046	30,194
FNMA POOL AJ9279	4.00	12/1/2041	121,729,151	129,203,845	133,654,244
FNMA POOL AJ9300	4.00	1/1/2042	24,846,090	25,314,811	27,282,734
FNMA POOL AK0001	4.50	1/1/2042	491,483	517,937	546,993
FNMA POOL AK0188	3.50	2/1/2042	801,502	844,510	867,631
FNMA POOL AK0372	5.00	2/1/2042	287,293	315,255	315,199
FNMA POOL AK0843	4.50	1/1/2042	2,069,396	2,186,362	2,271,327
FNMA POOL AK1120	5.00	2/1/2042	236,128	259,109	258,982
FNMA POOL AK1378	4.00	3/1/2042	810,077	856,968	874,189
FNMA POOL AK2415	4.00	2/1/2042	44,317,313	46,565,093	48,664,721
FNMA POOL AK2427	4.50	2/1/2042	3,639,546	3,903,850	4,007,791
FNMA POOL AK3420	5.00	1/1/2042	283,618	311,200	310,117
FNMA POOL AK3658	4.00	2/1/2042	470,842	497,304	508,124
FNMA POOL AK3971	4.50	2/1/2042	19,731	20,803	21,364
FNMA POOL AK4726	4.50	3/1/2042	2,090,590	2,236,664	2,314,670
FNMA POOL AK5920	4.50	2/1/2037	490,207	516,539	534,146
FNMA POOL AK6766	4.00	3/1/2042	17,166,939	17,574,356	18,856,119
FNMA POOL AK7438	4.00	3/1/2042	4,755,722	5,031,003	5,224,149
FNMA POOL AK9116	4.50	6/1/2040	1,506	1,596	1,676
FNMA POOL AK9445	4.00	3/1/2042	39,937,874	41,866,276	43,829,519

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AK9490	4.00	4/1/2042	17,753,466	18,903,104	19,502,244
FNMA POOL AK9733	4.50	4/1/2042	744,663	798,900	824,501
FNMA POOL AL0004	5.00	2/1/2041	12,134,969	13,120,025	13,947,093
FNMA POOL AL0054	4.50	2/1/2041	13,485	14,292	15,010
FNMA POOL AL0065	4.50	4/1/2041	51,898	55,008	57,748
FNMA POOL AL0071	5.00	5/1/2040	3,205	3,388	3,663
FNMA POOL AL0078	6.00	12/1/2020	2	2	2
FNMA POOL AL0095	6.00	7/1/2038	12,508	13,397	14,582
FNMA POOL AL0145	4.50	8/1/2040	23,595	25,003	26,235
FNMA POOL AL0160	4.50	5/1/2041	18,726	19,849	20,833
FNMA POOL AL0763	6.00	7/1/2040	25,104	26,974	29,305
FNMA POOL AL0846	3.50	10/1/2026	248	255	261
FNMA POOL AL0920	5.00	7/1/2037	2,119,792	2,289,555	2,431,609
FNMA POOL AL0933	5.00	10/1/2041	5,271,701	5,741,865	6,058,453
FNMA POOL AL1054	5.50	1/1/2038	40,423	43,128	46,363
FNMA POOL AL1338	5.00	7/1/2041	2,257	2,389	2,466
FNMA POOL AL1465	3.50	2/1/2027	51,545	53,045	54,224
FNMA POOL AL1503	3.37	1/1/2042	3,355,372	3,488,938	3,519,841
FNMA POOL AL1505	4.00	3/1/2042	94,714	98,565	103,954
FNMA POOL AL1779	5.50	12/1/2038	14,875	15,886	17,055
FNMA POOL AL1947	4.00	4/1/2042	7,840,036	8,298,498	8,566,556
FNMA POOL AL2070	4.00	7/1/2042	13,810,138	14,392,362	15,170,524
FNMA POOL AL2071	5.50	3/1/2040	4,758,364	5,104,425	5,464,329
FNMA POOL AL2117	4.00	3/1/2042	1,269,720	1,321,348	1,394,277
FNMA POOL AL2243	4.00	3/1/2042	2,688,214	2,797,520	2,950,403
FNMA POOL AL2278	6.00	5/1/2041	669,550	716,671	781,555
FNMA POOL AL2463	4.00	7/1/2042	23,630,469	24,077,134	25,958,280
FNMA POOL AL2482	4.50	9/1/2042	1,910	2,026	2,124
FNMA POOL AL2694	3.50	11/1/2042	29,502,302	30,704,556	31,934,535
FNMA POOL AL2845	4.50	7/1/2042	10,805,069	11,568,142	12,024,170
FNMA POOL AL2846	4.50	6/1/2042	4,613,000	4,928,215	5,183,649
FNMA POOL AL2869	4.50	1/1/2042	7,046,607	7,510,947	7,860,150
FNMA POOL AL2901	4.00	9/1/2042	8,999,650	9,505,908	9,881,266
FNMA POOL AL3519	4.50	11/1/2041	3,535	3,748	3,935
FNMA POOL AL3811	4.00	9/1/2042	17,454,424	18,299,176	19,164,241
FNMA POOL AL3967	4.50	8/1/2042	20,122	21,338	22,385
FNMA POOL AL4163	4.00	5/1/2023	2,216	2,262	2,342
FNMA POOL AL4242	5.00	10/1/2041	2,006,781	2,170,791	2,287,615
FNMA POOL AL4301	4.50	4/1/2042	1,125,068	1,176,957	1,251,666
FNMA POOL AL4338	4.00	10/1/2043	348,503	362,772	382,355
FNMA POOL AL4626	3.20	8/1/2043	1,612,237	1,630,215	1,667,136
FNMA POOL AL4809	5.00	5/1/2042	1,995,289	2,146,420	2,288,953
FNMA POOL AL5097	4.50	9/1/2043	3,643	3,865	4,053
FNMA POOL AL5231	4.50	9/1/2042	19,431	20,605	21,618
FNMA POOL AL5400	4.50	1/1/2043	2,934,767	3,142,607	3,276,110
FNMA POOL AL5537	4.50	4/1/2044	6,066	6,435	6,746
FNMA POOL AL5707	4.50	11/1/2043	25,064,196	26,950,592	27,873,374
FNMA POOL AL5749	4.50	7/1/2042	59,887	63,503	66,648
FNMA POOL AL5876	4.50	1/1/2042	13,646	14,467	15,160
FNMA POOL AL5889	4.50	6/1/2044	3,602	3,822	3,995

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AL5930	4.50	1/1/2043	49,437	52,430	55,014
FNMA POOL AL5955	5.00	1/1/2042	27,544,004	29,958,653	31,598,594
FNMA POOL AL6001	4.00	10/1/2044	12,260,627	12,911,214	13,462,537
FNMA POOL AL6127	2.86	12/1/2044	2,366,285	2,430,910	2,456,884
FNMA POOL AL6214	4.50	9/1/2042	21,884,578	23,431,587	24,357,148
FNMA POOL AL6274	5.00	9/1/2044	38,980,930	42,771,652	44,201,988
FNMA POOL AL6818	4.50	8/1/2044	58,421	61,988	64,984
FNMA POOL AL6949	4.50	6/1/2044	11,445,537	12,262,026	12,731,893
FNMA POOL AL7318	4.50	1/1/2043	15,899,583	17,025,590	17,695,487
FNMA POOL AL7363	4.50	10/1/2041	3,236,531	3,464,101	3,602,017
FNMA POOL AL7364	4.50	9/1/2043	2,746,939	2,942,164	3,055,655
FNMA POOL AL7767	4.50	6/1/2044	319,542	339,036	355,392
FNMA POOL AL8206	4.50	1/1/2043	59,439	63,038	66,114
FNMA POOL AL8383	4.50	10/1/2045	56,493	59,961	62,845
FNMA POOL AL8516	4.00	6/1/2042	27,498,862	28,152,059	30,175,318
FNMA POOL AL9128	4.50	2/1/2046	61,743	65,539	68,665
FNMA POOL AL9246	4.50	8/1/2044	8,754,397	9,165,572	9,731,783
FNMA POOL AL9565	3.50	9/1/2046	65,577	65,596	72,808
FNMA POOL AL9635	3.50	12/1/2045	34,142	34,152	37,906
FNMA POOL AL9725	3.50	1/1/2047	129,110	129,148	143,254
FNMA POOL AL9774	3.50	1/1/2047	33,516	33,525	37,187
FNMA POOL AL9949	3.50	2/1/2047	5,106,876	5,250,440	5,488,544
FNMA POOL AO1748	4.00	5/1/2042	8,381,025	8,788,594	9,205,164
FNMA POOL AO2102	4.50	5/1/2042	555,708	599,685	618,486
FNMA POOL AO2106	4.50	5/1/2042	746,911	800,794	819,795
FNMA POOL AO4143	4.00	6/1/2042	19,702	20,075	21,608
FNMA POOL AO5257	4.50	6/1/2042	361,074	381,832	391,442
FNMA POOL AO6731	4.00	6/1/2042	1,453,771	1,512,952	1,585,787
FNMA POOL AO8629	3.50	7/1/2042	18,890,727	19,700,080	20,426,714
FNMA POOL AO8647	4.00	7/1/2042	580,897	612,322	624,584
FNMA POOL AO8954	4.00	7/1/2042	244,735	259,079	266,481
FNMA POOL AO9369	4.00	7/1/2042	3,171,250	3,350,206	3,483,661
FNMA POOL AP0005	2.63	7/1/2042	13,020,908	13,200,520	13,453,983
FNMA POOL AP3683	4.00	10/1/2042	4,517,862	4,782,065	4,962,815
FNMA POOL AP9889	3.50	10/1/2042	11,562	11,836	12,515
FNMA POOL AQ4601	4.00	12/1/2042	4,086,056	4,244,461	4,488,566
FNMA POOL AQ6654	3.50	1/1/2043	15,461	15,828	16,323
FNMA POOL AQ8254	3.50	12/1/2042	923,143	978,662	988,029
FNMA POOL AQ8429	3.50	12/1/2042	8,470,719	8,980,157	9,169,744
FNMA POOL AR4878	3.50	1/1/2043	757,880	793,201	826,895
FNMA POOL AR7032	3.50	2/1/2043	1,175,111	1,224,504	1,275,772
FNMA POOL AR8948	3.50	3/1/2028	717,646	744,725	759,158
FNMA POOL AR9900	3.50	4/1/2043	5,336,518	5,593,005	5,835,775
FNMA POOL AR9927	3.50	4/1/2033	1,328,100	1,354,174	1,421,228
FNMA POOL AS0026	3.50	7/1/2043	48,461	49,617	52,393
FNMA POOL AS0317	4.00	8/1/2043	8,119	8,273	8,882
FNMA POOL AS4774	3.00	4/1/2045	30,864	30,753	32,788
FNMA POOL AS4805	3.50	4/1/2045	1,423	1,467	1,527
FNMA POOL AS5319	3.50	7/1/2045	1,490	1,499	1,596
FNMA POOL AS5459	3.50	7/1/2045	29,310	29,319	32,538

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AS5474	4.00	7/1/2045	12,011,617	12,304,431	12,978,135
FNMA POOL AS5696	3.50	8/1/2045	9,623	10,040	10,276
FNMA POOL AS5812	3.50	9/1/2045	24,193,603	25,001,674	26,001,051
FNMA POOL AS5943	4.00	10/1/2045	38,298	40,085	41,438
FNMA POOL AS6101	3.50	11/1/2045	5,928,238	6,057,794	6,444,010
FNMA POOL AS7245	3.50	5/1/2046	4,219,260	4,284,934	4,487,405
FNMA POOL AS8269	3.00	11/1/2046	221,807,141	221,364,685	234,758,443
FNMA POOL AS8371	3.50	11/1/2046	573,016	573,183	636,200
FNMA POOL AS8483	3.00	12/1/2046	12,596	12,464	13,330
FNMA POOL AS8493	3.50	12/1/2046	4,305,639	4,331,284	4,725,325
FNMA POOL AS8600	2.50	1/1/2032	11,097	11,102	11,648
FNMA POOL AS8963	4.00	10/1/2043	679,442	712,365	725,655
FNMA POOL AS9587	4.00	5/1/2047	156,641,389	165,506,927	169,892,779
FNMA POOL AS9938	3.50	7/1/2047	17,200,713	17,346,853	18,965,482
FNMA POOL AT2476	3.50	5/1/2033	718,127	732,255	767,693
FNMA POOL AT2478	3.50	5/1/2033	582,231	593,686	618,196
FNMA POOL AT2482	3.50	5/1/2033	873,210	890,389	930,856
FNMA POOL AT2858	3.50	5/1/2033	96,598	98,498	101,599
FNMA POOL AT2934	3.50	5/1/2033	1,116,152	1,138,111	1,193,602
FNMA POOL AT2958	3.50	5/1/2033	1,279,960	1,305,142	1,369,695
FNMA POOL AT2960	3.50	5/1/2033	1,570,951	1,601,857	1,681,106
FNMA POOL AT4187	3.50	5/1/2033	1,224,885	1,248,983	1,310,788
FNMA POOL AT4943	3.50	5/1/2043	4,378,350	4,623,849	4,787,996
FNMA POOL AT5419	3.50	5/1/2033	570,821	582,051	607,510
FNMA POOL AT5421	3.50	5/1/2033	1,306,068	1,331,764	1,397,664
FNMA POOL AT7585	3.50	6/1/2043	7,959,977	8,325,695	8,600,910
FNMA POOL AT7589	3.50	6/1/2043	6,105,187	6,397,346	6,606,083
FNMA POOL AT7590	4.00	5/1/2043	802,157	858,586	876,235
FNMA POOL AT7602	3.50	5/1/2043	778,200	811,324	830,928
FNMA POOL AT7893	2.29	8/1/2043	11,631,243	11,472,354	12,015,464
FNMA POOL AT8446	3.50	6/1/2033	607,176	619,147	648,201
FNMA POOL AT8620	4.50	6/1/2043	518,133	548,208	563,975
FNMA POOL AT8624	3.50	6/1/2043	430,231	440,921	464,872
FNMA POOL AT8750	3.50	5/1/2033	577,908	589,278	615,051
FNMA POOL AU1636	3.50	7/1/2043	18,504,116	19,237,344	20,019,295
FNMA POOL AU1650	3.50	7/1/2043	56,386,714	58,609,498	60,976,847
FNMA POOL AU1724	4.00	7/1/2043	1,012,235	1,049,312	1,134,556
FNMA POOL AU2553	3.50	7/1/2033	1,204,775	1,228,578	1,289,256
FNMA POOL AU2554	3.50	7/1/2033	1,415,746	1,443,717	1,515,025
FNMA POOL AU2594	4.00	7/1/2043	1,602,530	1,632,934	1,760,017
FNMA POOL AU6240	4.00	10/1/2043	280,831	291,773	306,810
FNMA POOL AU6973	3.57	11/1/2043	1,904,038	1,959,909	1,975,788
FNMA POOL AU7007	4.00	11/1/2043	1,084,900	1,109,062	1,191,331
FNMA POOL AU7276	4.00	10/1/2038	3,025,333	3,194,167	3,322,405
FNMA POOL AU9432	5.00	10/1/2043	317,685	341,843	351,505
FNMA POOL AU9782	3.78	9/1/2043	400,270	406,459	401,929
FNMA POOL AV0022	4.00	11/1/2043	10,391,117	10,588,494	11,399,524
FNMA POOL AV0662	4.00	12/1/2043	926,907	964,883	1,018,007
FNMA POOL AV1095	4.50	9/1/2043	1,645,158	1,762,714	1,831,088
FNMA POOL AV2334	2.91	1/1/2044	5,047,780	5,154,532	5,232,665

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL AV2348	4.00	1/1/2044	1,735,116	1,773,782	1,905,189
FNMA POOL AV3538	4.00	12/1/2038	1,822,840	1,924,778	2,001,842
FNMA POOL AV5373	5.00	12/1/2043	484,789	521,709	531,796
FNMA POOL AV6610	4.00	4/1/2039	3,638,210	3,842,483	3,994,592
FNMA POOL AV6685	4.50	1/1/2044	323,896	342,797	349,551
FNMA POOL AV6735	4.50	3/1/2044	201,544	213,322	216,552
FNMA POOL AV9206	4.00	3/1/2039	5,440,754	5,745,923	5,973,670
FNMA POOL AV9631	3.07	3/1/2044	1,207,240	1,244,471	1,249,135
FNMA POOL AW0966	2.79	6/1/2044	7,001,898	7,174,390	7,267,250
FNMA POOL AW2234	3.33	5/1/2044	1,479,721	1,529,706	1,540,492
FNMA POOL AW6278	3.10	7/1/2044	3,873,165	3,971,788	4,044,620
FNMA POOL AX1040	3.02	10/1/2044	992,271	1,010,440	1,005,062
FNMA POOL AX2377	2.91	9/1/2044	1,189,906	1,214,320	1,245,889
FNMA POOL AX2763	4.00	9/1/2044	54,087	57,250	58,611
FNMA POOL AX5302	4.00	1/1/2042	119,948,080	127,870,134	131,619,580
FNMA POOL AX6039	3.02	10/1/2044	746,046	760,227	769,211
FNMA POOL AX7770	4.00	2/1/2045	3,338,484	3,535,156	3,615,541
FNMA POOL AX9530	3.50	2/1/2045	1,946,598	1,924,427	2,081,188
FNMA POOL AY0089	2.80	12/1/2044	3,732,351	3,849,041	3,878,755
FNMA POOL AY1306	3.50	3/1/2045	941	977	1,009
FNMA POOL AY1814	4.00	1/1/2045	1,831,644	1,938,774	2,002,597
FNMA POOL AY4200	3.00	5/1/2045	17,525,111	17,882,504	18,632,268
FNMA POOL AY5654	2.64	6/1/2045	8,584,714	8,751,320	8,872,477
FNMA POOL AY5790	4.00	3/1/2045	8,990,266	9,519,015	9,755,898
FNMA POOL AZ0439	2.80	5/1/2045	3,613,469	3,708,275	3,760,626
FNMA POOL AZ0489	3.50	5/1/2045	2,599,170	2,695,422	2,830,313
FNMA POOL AZ2111	3.50	10/1/2045	2,947,324	2,993,156	3,157,104
FNMA POOL AZ2626	3.00	8/1/2045	2,966,926	2,973,950	3,145,596
FNMA POOL AZ2899	3.50	9/1/2045	77,840,436	80,532,264	83,671,906
FNMA POOL AZ3732	3.00	10/1/2045	3,050,484	3,057,714	3,237,737
FNMA POOL AZ3737	3.00	11/1/2045	292,908	292,473	316,599
FNMA POOL AZ4775	3.50	10/1/2045	4,031,410	4,094,099	4,308,766
FNMA POOL AZ4815	3.50	7/1/2045	4,702,381	4,834,323	5,055,659
FNMA POOL AZ5321	4.00	8/1/2045	3,974,642	4,192,042	4,305,292
FNMA POOL AZ5640	4.00	7/1/2045	2,955,452	3,096,501	3,227,817
FNMA POOL AZ6650	3.50	1/1/2046	4,208,686	4,274,160	4,508,594
FNMA POOL AZ7353	3.50	11/1/2045	14,809,486	15,039,811	15,827,405
FNMA POOL BA0898	3.50	2/1/2046	4,942,185	5,156,761	5,289,212
FNMA POOL BA1136	3.50	3/1/2046	8,227,527	8,397,951	8,776,387
FNMA POOL BA1141	3.50	3/1/2046	968,855	969,138	1,068,903
FNMA POOL BA1147	3.50	3/1/2046	2,915,252	2,975,638	3,108,794
FNMA POOL BA1565	3.00	10/1/2045	4,934,062	4,945,756	5,226,381
FNMA POOL BA2696	3.50	10/1/2045	43,558	45,422	46,310
FNMA POOL BA4384	3.50	11/1/2045	3,376,226	3,428,735	3,614,900
FNMA POOL BA4388	3.50	11/1/2045	11,077,983	11,349,120	11,863,219
FNMA POOL BA4390	3.50	11/1/2045	12,592,986	12,901,203	13,489,322
FNMA POOL BA5343	3.50	12/1/2045	3,972,040	4,095,183	4,257,931
FNMA POOL BA6587	3.50	1/1/2046	2,054,676	2,086,640	2,190,692
FNMA POOL BC0089	4.00	12/1/2045	43,354,956	45,809,593	46,708,366
FNMA POOL BC0448	3.50	12/1/2045	5,165,087	5,305,638	5,530,680

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL BC0767	3.50	12/1/2045	4,633,242	4,705,310	4,947,856
FNMA POOL BC0823	3.50	4/1/2046	898,214	912,193	955,737
FNMA POOL BC0843	3.50	4/1/2046	375,670	375,780	417,094
FNMA POOL BC1154	3.50	6/1/2046	9,983,833	9,987,480	11,084,686
FNMA POOL BC1809	3.50	5/1/2046	4,923,684	5,025,699	5,265,597
FNMA POOL BC2891	3.50	2/1/2046	1,483,806	1,506,893	1,585,855
FNMA POOL BC6408	3.50	4/1/2046	10,702,648	10,924,371	11,437,571
FNMA POOL BD2170	3.50	8/1/2047	203,122	203,182	223,965
FNMA POOL BD4485	3.50	7/1/2045	32,586	34,339	35,243
FNMA POOL BD5425	3.00	12/1/2046	330,272	329,849	349,656
FNMA POOL BD6965	3.00	10/1/2046	19,800	19,728	20,968
FNMA POOL BD7107	2.50	3/1/2032	547,532	547,533	574,541
FNMA POOL BD9522	3.00	10/1/2046	35,764,989	37,811,619	37,827,401
FNMA POOL BE0518	3.00	11/1/2046	55,267,391	56,688,409	58,502,732
FNMA POOL BE1566	3.50	4/1/2047	2,790,017	2,872,422	2,998,091
FNMA POOL BE2378	3.00	4/1/2047	260,844	258,035	276,253
FNMA POOL BE2848	3.00	12/1/2046	59,962	59,885	63,499
FNMA POOL BE3188	3.50	2/1/2047	286,732	286,815	316,148
FNMA POOL BE3319	3.00	1/1/2047	714,854	713,937	756,646
FNMA POOL BE3321	3.50	1/1/2047	662,509	662,703	729,693
FNMA POOL BE3695	3.50	6/1/2047	113,758,452	117,890,619	119,493,353
FNMA POOL BE4057	3.00	1/1/2047	319,158	318,749	337,583
FNMA POOL BE4247	3.00	12/1/2046	384,882	384,388	407,588
FNMA POOL BE4479	3.50	12/1/2046	1,138,744	1,156,485	1,217,126
FNMA POOL BE4595	3.00	4/1/2047	631,353	624,555	667,625
FNMA POOL BE5008	4.00	2/1/2045	11,930,579	12,544,367	13,020,142
FNMA POOL BE6826	3.50	3/1/2047	767,939	768,164	849,396
FNMA POOL BE7083	3.50	1/1/2047	562,500	556,063	596,593
FNMA POOL BE7961	3.50	2/1/2047	535,627	519,652	568,260
FNMA POOL BE8340	4.50	9/1/2047	1,157,438	1,193,153	1,257,823
FNMA POOL BE8348	4.50	12/1/2047	2,780,979	2,859,238	3,022,181
FNMA POOL BE8781	4.00	6/1/2047	17,545,331	18,471,279	19,048,515
FNMA POOL BE8824	3.50	7/1/2047	7,020,100	7,184,397	7,540,575
FNMA POOL BE9210	3.00	3/1/2047	824,004	822,946	870,316
FNMA POOL BE9407	4.00	7/1/2047	2,332,560	2,456,025	2,529,877
FNMA POOL BE9447	3.50	11/1/2047	1,511,229	1,511,672	1,666,274
FNMA POOL BH0975	3.00	4/1/2047	559,567	553,542	590,234
FNMA POOL BH1224	3.50	4/1/2047	798,664	821,579	857,218
FNMA POOL BH1374	3.00	7/1/2047	512,510	511,851	540,346
FNMA POOL BH1421	3.00	4/1/2047	97,758	96,706	103,533
FNMA POOL BH1731	3.50	6/1/2047	847,811	848,059	940,698
FNMA POOL BH2557	3.00	5/1/2047	913,434	906,953	964,039
FNMA POOL BH2558	3.00	5/1/2047	447,410	442,591	472,363
FNMA POOL BH2606	3.50	8/1/2047	151,968,022	157,081,185	163,246,254
FNMA POOL BH2759	3.00	6/1/2047	862,047	860,939	912,840
FNMA POOL BH2829	3.00	9/1/2047	1,334,713	1,332,997	1,409,155
FNMA POOL BH3889	3.50	7/1/2047	738,606	755,840	785,960
FNMA POOL BH3897	3.50	8/1/2047	3,845,056	3,972,127	4,131,822
FNMA POOL BH4152	3.50	11/1/2047	142,196	142,237	156,786
FNMA POOL BH4158	3.50	12/1/2047	640,855	641,043	693,509

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL BH4226	3.00	6/1/2047	374,400	373,919	395,082
FNMA POOL BH4271	4.00	6/1/2047	29,650,171	31,227,466	32,057,763
FNMA POOL BH4333	3.50	6/1/2047	1,522,605	1,557,479	1,636,409
FNMA POOL BH4410	4.00	6/1/2047	24,708,476	25,883,082	26,310,172
FNMA POOL BH4466	3.00	11/1/2047	186,280	186,041	196,629
FNMA POOL BH5113	3.50	8/1/2047	6,086,056	6,276,873	6,540,911
FNMA POOL BH5642	3.00	7/1/2047	521,608	520,938	550,170
FNMA POOL BH5750	3.50	11/1/2047	2,893,548	2,913,831	3,161,512
FNMA POOL BH5801	3.50	7/1/2047	627,867	628,051	691,545
FNMA POOL BH5810	3.50	7/1/2047	4,070,304	4,167,857	4,369,696
FNMA POOL BH5955	3.50	8/1/2047	877,508	877,765	973,650
FNMA POOL BH6452	3.50	7/1/2047	8,923,287	9,131,498	9,587,243
FNMA POOL BH7032	3.50	12/1/2047	112,470	111,372	119,122
FNMA POOL BH7342	3.50	7/1/2047	5,205,963	5,362,998	5,592,121
FNMA POOL BH7348	3.50	8/1/2047	10,865,265	11,193,110	11,675,546
FNMA POOL BH7494	3.50	9/1/2047	1,042,256	1,042,562	1,156,453
FNMA POOL BH7671	3.50	11/1/2047	960,191	960,472	1,058,703
FNMA POOL BH8113	3.00	10/1/2047	123,905	123,745	130,924
FNMA POOL BH8657	3.50	9/1/2047	585,964	586,136	638,577
FNMA POOL BH8794	3.00	10/1/2047	410,932	410,404	433,091
FNMA POOL BH9215	3.50	1/1/2048	176,157	170,894	185,889
FNMA POOL BH9285	3.50	2/1/2048	23,914,378	24,098,134	26,360,952
FNMA POOL BH9843	3.00	10/1/2047	889,297	888,153	938,587
FNMA POOL BH9854	3.50	11/1/2047	1,085,096	1,085,415	1,196,429
FNMA POOL BJ0056	3.50	10/1/2047	6,520,456	6,734,161	7,007,793
FNMA POOL BJ0175	3.50	1/1/2048	951,100	951,379	1,048,395
FNMA POOL BJ0186	3.50	2/1/2048	220,182	220,246	242,707
FNMA POOL BJ0641	3.50	3/1/2048	19,731,689	19,738,927	21,750,324
FNMA POOL BJ0650	3.50	3/1/2048	3,792,466	3,679,115	4,022,823
FNMA POOL BJ0812	3.00	10/1/2047	2,469,186	2,466,011	2,606,516
FNMA POOL BJ0813	3.00	10/1/2047	1,737,132	1,734,898	1,833,321
FNMA POOL BJ0957	3.50	11/1/2047	87,794	86,937	92,726
FNMA POOL BJ1003	3.50	12/1/2047	7,430,553	7,358,025	7,848,850
FNMA POOL BJ1007	3.50	12/1/2047	675,303	668,711	712,346
FNMA POOL BJ1163	3.50	1/1/2048	1,212,213	1,212,569	1,336,226
FNMA POOL BJ1662	3.50	12/1/2047	1,157,166	1,122,596	1,224,330
FNMA POOL BJ2015	3.50	12/1/2047	851,301	851,550	944,569
FNMA POOL BJ2070	3.50	12/1/2047	196,689	196,747	218,240
FNMA POOL BJ2193	3.50	1/1/2048	130,478	130,516	143,864
FNMA POOL BJ2508	3.50	10/1/2047	8,611,916	8,639,458	9,126,871
FNMA POOL BJ2554	3.00	11/1/2047	387,997	387,498	409,353
FNMA POOL BJ2965	3.00	11/1/2047	146,153	145,965	154,304
FNMA POOL BJ3139	3.50	11/1/2047	871,028	871,283	966,455
FNMA POOL BJ3420	3.50	2/1/2048	828,947	829,190	919,505
FNMA POOL BJ3611	3.50	1/1/2048	24,534,915	25,092,586	26,368,725
FNMA POOL BJ3619	3.50	1/1/2048	608,905	602,961	644,531
FNMA POOL BJ3653	3.50	2/1/2048	15,444,322	15,682,282	16,595,281
FNMA POOL BJ3655	3.50	2/1/2048	17,670,271	17,919,681	18,831,234
FNMA POOL BJ3667	3.50	2/1/2048	6,434,309	6,436,669	7,092,570
FNMA POOL BJ3671	3.50	2/1/2048	4,042,634	4,044,116	4,484,304

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL BJ3728	3.50	12/1/2047	1,054,251	1,043,961	1,118,465
FNMA POOL BJ3793	3.50	12/1/2047	1,244,150	1,274,957	1,336,639
FNMA POOL BJ3828	3.50	1/1/2048	20,295,068	20,797,731	21,811,899
FNMA POOL BJ3844	3.50	1/1/2048	3,547,139	3,548,440	3,935,805
FNMA POOL BJ3937	3.50	1/1/2048	10,677,377	10,573,141	11,272,718
FNMA POOL BJ3960	3.50	1/1/2048	536,080	530,846	565,758
FNMA POOL BJ3995	3.50	2/1/2048	11,926,359	11,809,910	12,612,226
FNMA POOL BJ3996	3.50	2/1/2048	1,256,250	1,235,626	1,325,870
FNMA POOL BJ3997	3.50	2/1/2048	470,102	465,511	498,056
FNMA POOL BJ4014	3.50	2/1/2048	80,799	80,010	85,233
FNMA POOL BJ4289	3.50	1/1/2048	1,089,413	1,089,732	1,208,438
FNMA POOL BJ4290	3.50	1/1/2048	141,729	141,770	153,684
FNMA POOL BJ4343	3.50	1/1/2048	1,041,980	1,042,286	1,155,817
FNMA POOL BJ4746	3.50	2/1/2048	4,494,218	4,495,866	4,953,999
FNMA POOL BJ4768	3.50	2/1/2048	2,360,349	2,361,041	2,618,216
FNMA POOL BJ4769	3.50	1/1/2048	1,450,702	1,451,127	1,599,113
FNMA POOL BJ4816	3.50	2/1/2048	1,830,856	1,837,242	1,967,299
FNMA POOL BJ4830	3.50	2/1/2048	11,075,122	11,113,755	11,900,506
FNMA POOL BJ4882	3.50	3/1/2048	517,088	512,038	546,490
FNMA POOL BJ4916	3.50	3/1/2048	23,056	22,367	24,387
FNMA POOL BJ5001	3.00	12/1/2047	2,504,149	2,500,927	2,642,088
FNMA POOL BJ5244	3.50	12/1/2047	1,282,314	1,282,690	1,422,818
FNMA POOL BJ5251	3.50	12/1/2047	1,095,861	1,085,164	1,161,778
FNMA POOL BJ5460	3.50	3/1/2048	12,826,426	12,869,438	13,588,703
FNMA POOL BJ5879	3.50	1/1/2048	89,003	89,029	98,108
FNMA POOL BJ5917	3.50	3/1/2048	1,041,030	1,041,335	1,147,541
FNMA POOL BJ5950	3.50	4/1/2048	850,416	850,665	937,430
FNMA POOL BJ5955	3.50	4/1/2048	693,180	672,459	732,914
FNMA POOL BJ6416	3.50	3/1/2048	1,141,324	1,141,659	1,258,096
FNMA POOL BJ6691	3.50	3/1/2048	2,156,343	2,153,935	2,309,498
FNMA POOL BJ7038	3.50	8/1/2048	1,197,046	1,197,397	1,319,519
FNMA POOL BJ7216	4.00	10/1/2048	28,437,090	28,562,787	30,748,003
FNMA POOL BJ7398	3.50	11/1/2048	3,782,554	3,681,763	3,998,431
FNMA POOL BJ8120	3.50	1/1/2048	48,004	48,018	53,248
FNMA POOL BJ8543	3.50	2/1/2048	2,560,729	2,484,204	2,701,113
FNMA POOL BJ8547	3.50	3/1/2048	600,610	582,659	636,223
FNMA POOL BJ8558	3.50	3/1/2048	313,177	310,118	330,192
FNMA POOL BJ8650	3.50	1/1/2048	17,204	17,209	18,964
FNMA POOL BJ8878	3.50	3/1/2048	74,454	72,229	78,755
FNMA POOL BJ8879	3.50	3/1/2048	1,888,560	1,889,114	2,081,781
FNMA POOL BJ9279	3.50	2/1/2048	283,056	280,293	299,537
FNMA POOL BJ9379	3.50	1/1/2048	5,933,373	6,030,086	6,375,550
FNMA POOL BJ9380	3.50	1/1/2048	1,486,490	1,486,926	1,638,559
FNMA POOL BJ9906	3.50	3/1/2048	1,314,212	1,314,598	1,457,792
FNMA POOL BK0161	3.50	2/1/2048	127,319	126,075	134,378
FNMA POOL BK0766	3.50	3/1/2048	432,637	419,706	457,293
FNMA POOL BK1193	3.50	2/1/2048	387,807	384,020	409,250
FNMA POOL BK1791	3.50	3/1/2048	160,444	155,648	169,706
FNMA POOL BK1793	3.50	3/1/2048	474,004	469,375	501,866
FNMA POOL BK4740	4.00	8/1/2048	26,970,331	27,766,559	28,586,854

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL BK4810	4.00	9/1/2048	176,360,646	179,779,758	190,685,863
FNMA POOL BK7146	3.50	6/1/2048	1,583,665	1,594,777	1,729,082
FNMA POOL BK7274	4.00	12/1/2048	6,915,254	7,098,787	7,344,664
FNMA POOL BK7466	3.00	9/1/2048	1,095,158	1,088,003	1,154,523
FNMA POOL BK7943	4.00	11/1/2048	164,328,198	169,118,975	174,146,545
FNMA POOL BM1096	4.00	4/1/2044	44,921,219	47,121,963	49,279,065
FNMA POOL BM1456	3.50	6/1/2047	10,162,012	10,411,568	10,903,074
FNMA POOL BM1617	3.50	7/1/2047	7,181,693	7,395,386	7,733,369
FNMA POOL BM1630	4.00	4/1/2046	48,416,915	49,343,605	53,121,288
FNMA POOL BM1822	3.50	9/1/2047	1,129,844	1,130,176	1,245,768
FNMA POOL BM1937	3.50	5/1/2047	18,454	18,460	20,476
FNMA POOL BM1938	3.50	11/1/2046	1,247,021	1,247,385	1,374,945
FNMA POOL BM1952	3.50	10/1/2047	1,820,782	1,821,316	2,007,584
FNMA POOL BM1957	3.50	11/1/2047	199,696	197,747	210,887
FNMA POOL BM3122	3.50	10/1/2047	39,692,028	41,619,371	43,367,780
FNMA POOL BM3282	3.50	12/1/2047	288,131	288,216	319,699
FNMA POOL BM3326	3.50	12/1/2047	261,696	261,773	290,369
FNMA POOL BM3327	3.50	12/1/2047	15,766	15,771	17,384
FNMA POOL BM3548	4.00	4/1/2046	18,061,521	18,495,446	19,811,488
FNMA POOL BM3663	3.00	4/1/2047	77,886,712	82,343,904	82,256,023
FNMA POOL BM3788	3.50	3/1/2048	26,319,053	26,385,642	28,749,358
FNMA POOL BM4029	3.50	5/1/2048	28,754,319	28,812,108	31,234,466
FNMA POOL BM4596	3.50	3/1/2048	18,681,567	18,733,003	20,415,050
FNMA POOL BM4623	3.50	10/1/2047	12,998,057	13,039,626	13,752,566
FNMA POOL BM4737	3.50	6/1/2048	35,693,077	35,783,421	38,989,031
FNMA POOL BM4858	4.00	8/1/2048	36,605,078	37,807,578	41,346,352
FNMA POOL BM5024	3.00	11/1/2048	194,175,104	198,072,501	204,645,683
FNMA POOL BM5119	4.50	12/1/2048	63,184,516	68,161,376	68,812,060
FNMA POOL BM5126	3.50	1/1/2048	46,977,854	49,498,717	51,504,427
FNMA POOL BM5221	3.50	9/1/2046	3,962,992	4,024,711	4,235,742
FNMA POOL BM5340	3.50	2/1/2034	27,986,805	29,277,979	29,971,051
FNMA POOL BM5673	3.50	11/1/2048	368,754,875	382,012,512	389,780,725
FNMA POOL BM5830	3.50	4/1/2034	24,169,036	25,304,066	25,890,697
FNMA POOL BM5843	3.50	1/1/2048	5,616,632	5,738,353	6,051,104
FNMA POOL BM5915	3.00	11/1/2046	153,541,709	156,494,885	162,879,798
FNMA POOL BN2530	3.50	2/1/2049	306,287	313,330	325,051
FNMA POOL BN2844	3.50	11/1/2048	786,134	762,608	829,968
FNMA POOL BN7575	2.50	6/1/2034	2,846,035	2,893,170	3,012,469
FNMA POOL BN7748	3.50	9/1/2049	73,351,275	76,306,648	78,174,326
FNMA POOL BO0556	3.00	7/1/2049	11,843,856	11,948,634	12,540,694
FNMA POOL BO1838	2.50	7/1/2034	5,428,349	5,518,280	5,760,630
FNMA POOL BO5253	3.50	9/1/2049	8,531,764	8,875,514	9,092,761
FNMA POOL CA0105	3.50	8/1/2047	110,915,839	114,409,064	119,201,044
FNMA POOL CA0532	3.50	10/1/2047	40,170,126	40,298,593	42,444,994
FNMA POOL CA0681	3.50	11/1/2047	33,250	33,260	36,662
FNMA POOL CA0689	3.50	11/1/2047	184,732	184,786	204,971
FNMA POOL CA0833	3.50	12/1/2047	432,546	428,324	458,364
FNMA POOL CA0862	3.50	9/1/2047	33,293,788	34,372,263	35,108,301
FNMA POOL CA0905	3.50	12/1/2047	4,569,936	4,608,790	5,038,803
FNMA POOL CA0907	3.50	12/1/2047	8,315,929	8,681,248	9,035,682

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL CA0917	3.50	12/1/2047	14,080,527	14,325,795	15,132,911
FNMA POOL CA0996	3.50	1/1/2048	121,334,070	121,252,833	131,963,906
FNMA POOL CA0998	3.50	1/1/2048	145,067,098	145,447,829	155,909,663
FNMA POOL CA1051	3.50	1/1/2048	45,348	44,905	47,995
FNMA POOL CA1058	3.50	1/1/2048	520,698	520,851	577,584
FNMA POOL CA1176	3.50	2/1/2048	69,241,486	69,266,877	76,325,338
FNMA POOL CA1178	3.50	2/1/2048	19,547,174	19,550,083	21,352,207
FNMA POOL CA1184	3.50	2/1/2048	183,656,249	184,138,375	197,343,662
FNMA POOL CA1187	3.50	2/1/2048	4,884,098	4,836,410	5,170,818
FNMA POOL CA1524	3.50	4/1/2048	10,406,545	10,408,094	11,367,526
FNMA POOL CA1535	3.50	2/1/2048	159,807,130	162,265,447	169,096,335
FNMA POOL CA1630	3.50	5/1/2033	14,704,704	15,293,880	15,533,674
FNMA POOL CA1694	4.00	5/1/2048	86,744,752	88,489,343	93,819,458
FNMA POOL CA1867	3.50	6/1/2048	4,766,431	4,802,008	5,254,086
FNMA POOL CA2189	4.00	8/1/2048	43,736,106	44,911,410	49,401,365
FNMA POOL CA2430	4.00	10/1/2048	95,310,307	96,798,189	103,262,049
FNMA POOL CA2622	3.50	11/1/2048	19,817,911	20,023,450	20,867,479
FNMA POOL CA2623	4.00	11/1/2048	9,872,674	10,336,749	11,050,400
FNMA POOL CA2781	3.00	9/1/2048	12,231,327	12,159,025	12,890,882
FNMA POOL CA2785	4.00	12/1/2048	33,382,328	34,871,921	37,364,571
FNMA POOL CA2922	3.00	12/1/2048	12,293,693	12,227,553	12,956,611
FNMA POOL CA3063	3.00	11/1/2048	574,482	572,659	605,460
FNMA POOL CA3064	3.00	2/1/2049	21,071,232	20,878,149	22,207,464
FNMA POOL CA3198	4.00	3/1/2049	59,433,633	62,306,899	66,537,513
FNMA POOL CA3317	3.00	1/1/2049	5,679,621	5,636,774	5,985,886
FNMA POOL CA3332	4.00	4/1/2049	22,276,505	23,327,895	25,167,782
FNMA POOL CA3427	3.50	4/1/2034	14,205,987	14,907,243	15,307,451
FNMA POOL CA3440	3.50	4/1/2034	29,240,170	30,598,421	31,395,518
FNMA POOL CA3613	3.50	6/1/2034	18,609,508	19,377,512	19,625,097
FNMA POOL CA3614	3.50	5/1/2034	24,619,183	25,878,611	26,572,436
FNMA POOL CA3635	3.50	6/1/2049	20,966,788	21,699,796	22,345,393
FNMA POOL CA3865	3.50	7/1/2049	272,320,129	280,309,331	290,225,984
FNMA POOL CA3955	3.50	8/1/2049	81,726,792	84,575,230	85,944,225
FNMA POOL CA3971	3.50	8/1/2049	404,017,163	421,016,751	434,119,346
FNMA POOL CA4027	4.00	8/1/2049	83,307,633	87,596,595	89,432,180
FNMA POOL CA4089	3.50	8/1/2034	78,443,691	82,114,676	84,460,088
FNMA POOL CA4091	3.50	8/1/2034	73,873,151	76,942,603	78,434,986
FNMA POOL CA4225	2.50	9/1/2034	17,809,682	17,974,393	18,903,284
FNMA POOL CA4226	2.50	9/1/2034	27,512,630	27,730,799	29,167,236
FNMA POOL CA4227	2.50	9/1/2034	40,289,545	40,581,007	42,391,284
FNMA POOL CA4228	3.00	9/1/2034	13,907,506	14,317,577	14,912,000
FNMA POOL CA4229	3.00	9/1/2034	13,699,225	14,094,128	14,654,964
FNMA POOL CA4230	3.00	9/1/2034	32,166,052	33,057,979	34,295,505
FNMA POOL CA4231	3.00	9/1/2034	32,233,003	33,072,524	34,245,328
FNMA POOL CA4232	3.00	9/1/2034	36,178,476	37,038,666	38,342,196
FNMA POOL CA4233	3.00	9/1/2034	9,210,680	9,495,747	9,898,967
FNMA POOL CA4234	3.50	9/1/2034	13,508,200	14,154,509	14,563,800
FNMA POOL CA4235	3.50	9/1/2034	17,781,360	18,580,088	19,148,948
FNMA POOL CA4236	3.50	9/1/2034	16,808,450	17,514,974	17,897,452
FNMA POOL CA4237	3.50	9/1/2034	17,046,735	17,735,188	18,021,923

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL CA4238	3.50	9/1/2034	9,082,409	9,538,204	9,808,027
FNMA POOL CA4253	2.50	9/1/2034	26,667,749	27,064,439	28,355,823
FNMA POOL CA4254	2.50	10/1/2034	24,439,220	24,668,888	25,956,971
FNMA POOL CA4255	2.50	10/1/2034	46,051,320	46,477,340	48,884,070
FNMA POOL CA4256	2.50	9/1/2034	54,451,054	54,882,847	57,729,761
FNMA POOL CA4257	2.50	9/1/2034	79,842,182	80,419,812	84,003,621
FNMA POOL CA4258	2.50	10/1/2034	15,882,975	16,138,123	16,928,148
FNMA POOL CA4261	3.00	10/1/2034	40,113,336	41,296,491	43,013,834
FNMA POOL CA4262	3.00	10/1/2034	35,968,714	37,005,928	38,484,919
FNMA POOL CA4263	3.00	10/1/2034	66,691,475	68,541,432	71,111,584
FNMA POOL CA4264	3.00	9/1/2034	67,845,751	69,612,971	72,080,259
FNMA POOL CA4265	3.00	10/1/2034	90,487,708	92,640,001	95,909,093
FNMA POOL CA4266	3.00	10/1/2034	28,788,185	29,679,427	30,939,816
FNMA POOL CA4314	3.00	10/1/2049	59,452,923	60,824,080	64,507,766
FNMA POOL CA4321	2.50	10/1/2034	24,500,654	24,773,996	26,007,606
FNMA POOL CA4322	2.50	10/1/2034	25,728,901	25,993,132	27,277,967
FNMA POOL CA4323	2.50	10/1/2034	37,298,301	37,637,261	39,245,999
FNMA POOL CA4325	3.00	10/1/2034	18,111,150	18,614,127	19,421,963
FNMA POOL CA4326	3.00	10/1/2034	27,888,755	28,622,123	29,737,735
FNMA POOL FM1000	3.00	4/1/2047	320,624,152	326,272,068	339,258,482
FNMA POOL FM1074	3.50	6/1/2034	106,760,382	111,740,983	115,055,075
FNMA POOL FM1076	3.50	6/1/2034	97,188,308	101,698,321	104,620,110
FNMA POOL FM1199	3.00	11/1/2048	51,561,188	52,091,007	54,397,373
FNMA POOL FM1325	3.00	8/1/2034	9,564,890	9,815,861	10,178,476
FNMA POOL FM1354	3.50	7/1/2033	44,868,089	46,899,349	48,299,656
FNMA POOL FM1382	3.50	8/1/2049	71,444,515	74,241,475	76,133,495
FNMA POOL FM1425	3.50	8/1/2034	166,901,971	174,884,330	179,899,587
FNMA POOL FM1445	3.00	8/1/2049	5,148,538	5,278,449	5,596,486
FNMA POOL FM1477	4.00	6/1/2045	26,825,154	28,633,128	29,419,671
FNMA POOL FM1510	3.00	11/1/2048	20,806,712	21,264,675	22,000,562
FNMA POOL FM1552	3.00	12/1/2047	43,916,103	44,838,962	46,409,422
FNMA POOL FM1602	3.00	10/1/2049	14,035,728	14,389,928	15,256,922
FNMA POOL FM1755	3.50	7/1/2048	17,813,615	18,388,879	18,833,785
FNMA POOL FM2213	3.00	11/1/2048	52,319,944	53,868,594	55,182,326
FNMA POOL FM2457	4.50	2/1/2050	102,599,860	110,264,222	111,156,361
FNMA POOL FM3127	3.00	10/1/2047	72,576,441	76,571,457	76,576,000
FNMA POOL MA0052	6.00	3/1/2029	4,514	4,761	5,014
FNMA POOL MA0115	4.50	7/1/2029	19,916	20,677	21,440
FNMA POOL MA0171	4.50	9/1/2029	3,992	4,127	4,308
FNMA POOL MA0562	4.50	11/1/2040	37,098	39,315	41,298
FNMA POOL MA0583	4.00	12/1/2040	448,745	466,880	492,659
FNMA POOL MA0614	4.00	1/1/2041	137,248	142,797	150,708
FNMA POOL MA0640	4.50	2/1/2041	998,942	1,071,531	1,112,105
FNMA POOL MA0706	4.50	4/1/2031	4,714,423	4,907,863	5,145,671
FNMA POOL MA0790	4.50	7/1/2041	3,502,419	3,712,622	3,898,372
FNMA POOL MA0816	4.50	8/1/2031	15,110,544	15,714,122	16,493,144
FNMA POOL MA1260	4.00	10/1/2042	2,613,514	2,770,400	2,870,994
FNMA POOL MA1472	3.50	6/1/2033	772,666	785,424	826,840
FNMA POOL MA1512	3.50	7/1/2033	1,197,541	1,217,358	1,281,505
FNMA POOL MA1614	4.50	10/1/2043	2,904,593	3,117,784	3,232,844

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FNMA POOL MA2190	4.00	2/1/2045	16,122,707	16,999,617	17,533,425
FNMA POOL MA2487	3.00	12/1/2045	55,539	55,339	58,908
FNMA POOL MA2806	3.00	11/1/2046	58,318,271	57,885,871	61,611,415
FNMA POOL MA2833	3.00	12/1/2046	206,357,936	208,699,142	218,387,550
FNMA POOL MA2896	3.50	2/1/2047	3,943,504	3,931,029	4,179,000
FNMA POOL MA3071	4.00	7/1/2037	56,087,269	57,781,418	60,321,804
FNMA POOL MA3147	3.00	10/1/2047	168,569	167,722	177,925
FNMA POOL MA3209	3.00	12/1/2047	112,418	112,278	118,623
FNMA POOL MA3210	3.50	12/1/2047	105,777,190	109,345,041	111,697,104
FNMA POOL MA3237	3.00	1/1/2048	7,117,014	7,398,583	7,500,787
FNMA POOL MA3238	3.50	1/1/2048	233,939,923	241,374,603	246,754,101
FNMA POOL MA3281	4.00	2/1/2038	169,413,845	174,548,248	182,135,417
FNMA POOL MA3331	3.00	4/1/2048	17,565,267	18,281,985	18,515,096
FNMA POOL MA3332	3.50	4/1/2048	56,206,706	58,037,903	59,294,563
FNMA POOL MA3530	3.00	10/1/2048	3,359,308	3,331,566	3,540,453
FNMA POOL MA3568	3.00	11/1/2048	4,483,953	4,450,687	4,725,743
FNMA POOL MA3577	3.00	1/1/2049	8,857,798	8,802,465	9,335,440
FNMA POOL MC0444	4.50	3/1/2041	17,541	18,592	19,521
FNMA POOL MC0473	4.50	5/1/2041	189,185	202,453	210,512
FNMA TBA 30 YR 2	2.00	8/13/2050	99,000,000	100,438,594	101,121,147
FNMA TBA 30 YR 2.5	2.50	7/14/2050	2,884,975,000	2,979,629,787	3,007,586,438
FNMA TBA 30 YR 3	3.00	7/14/2050	1,067,100,000	1,119,006,422	1,123,873,049
FREDDIE MAC	0.01	10/17/2027	315,288	282,285	305,936
FREDDIE MAC	3.00	7/15/2040	5,435,382	5,545,241	5,471,857
FREDDIE MAC	6.25	6/15/2028	1,816,403	1,840,041	2,053,756
FREDDIE MAC	6.50	4/15/2028	1,236,148	1,259,935	1,424,948
FREDDIEMAC STRIP	4.50	8/15/2035	20,325	8,521	3,091
FREDDIEMAC STRIP	5.00	9/15/2035	53,073	20,846	9,313
GCCFC COMMERCIAL MORTGAGE TRUS	0.84	3/10/2039	2,174,855	9,366	85
GE COMMERCIAL MORTGAGE CORPORA	0.73	3/10/2040	5,509,611	157,669	215
GNMA II POOL 003248	5.50	6/20/2032	1,698	1,811	1,894
GNMA II POOL 003284	5.50	9/20/2032	895	955	1,031
GNMA II POOL 003320	5.50	12/20/2032	1,032	1,102	1,190
GNMA II POOL 003652	5.50	12/20/2034	2,260	2,422	2,604
GNMA II POOL 003702	5.50	4/20/2035	2,014	2,159	2,319
GNMA II POOL 003807	5.50	1/20/2036	1,730	1,857	1,992
GNMA II POOL 003965	5.50	3/20/2037	1,997	2,148	2,301
GNMA II POOL 003997	5.50	6/20/2037	19,314	20,778	22,234
GNMA II POOL 004048	5.50	11/20/2037	2,369	2,550	2,725
GNMA II POOL 004072	5.50	1/20/2038	1,931	2,079	2,223
GNMA II POOL 004098	5.50	3/20/2038	916	986	1,056
GNMA II POOL 004194	5.50	7/20/2038	83,460	89,917	96,151
GNMA II POOL 004221	5.50	8/20/2038	973	1,048	1,121
GNMA II POOL 004244	5.50	9/20/2038	93,811	101,091	108,080
GNMA II POOL 004315	5.50	12/20/2038	67,738	73,018	78,047
GNMA II POOL 004462	5.00	6/20/2039	46,734	48,925	50,888
GNMA II POOL 004521	5.50	8/20/2039	217,077	234,187	248,515
GNMA II POOL 004559	5.00	10/20/2039	777,201	837,773	877,051
GNMA II POOL 004600	5.50	12/20/2039	31,557	34,057	36,062
GNMA II POOL 004635	4.00	2/20/2040	135,833	144,901	149,738

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
GNMA II POOL 004715	5.00	6/20/2040	6,791,341	7,294,481	7,663,840
GNMA II POOL 004748	5.50	7/20/2040	18,912	20,424	21,585
GNMA II POOL 004770	4.00	8/20/2040	1,019,682	1,055,935	1,123,962
GNMA II POOL 004772	5.00	8/20/2040	2,288,827	2,479,843	2,581,865
GNMA II POOL 004800	4.00	9/20/2040	367,476	380,555	405,070
GNMA II POOL 004803	5.50	9/20/2040	2,074,595	2,240,907	2,391,485
GNMA II POOL 004833	4.00	10/20/2040	1,622,763	1,683,582	1,788,880
GNMA II POOL 004834	4.50	10/20/2040	21,824,220	23,231,308	23,967,830
GNMA II POOL 004836	5.50	10/20/2040	229,253	248,004	264,034
GNMA II POOL 004853	4.00	11/20/2040	13,198,331	13,931,216	14,548,649
GNMA II POOL 004882	4.00	12/20/2040	4,147,806	4,427,733	4,572,451
GNMA II POOL 004885	5.50	12/20/2040	62,850	67,907	72,426
GNMA II POOL 004925	5.50	1/20/2041	104,400	112,971	120,233
GNMA II POOL 004945	4.00	2/20/2041	2,774,745	2,878,885	3,058,360
GNMA II POOL 004949	4.00	2/20/2041	191,037	201,031	203,502
GNMA II POOL 004950	5.50	2/20/2041	215,959	233,378	248,655
GNMA II POOL 004952	3.50	2/20/2041	56,262	59,533	58,643
GNMA II POOL 005081	4.00	6/20/2041	1,159,313	1,238,035	1,278,147
GNMA II POOL 005117	5.50	7/20/2041	1,066,048	1,152,535	1,227,249
GNMA II POOL 005140	4.50	8/20/2041	5,006,632	5,348,326	5,499,020
GNMA II POOL 005177	5.50	9/20/2041	54,436	58,947	62,669
GNMA II POOL 005206	5.50	10/20/2041	1,870,635	2,025,827	2,155,792
GNMA II POOL 080152	3.00	1/20/2028	1,627	1,657	1,692
GNMA II POOL 080169	3.00	2/20/2028	1,327	1,352	1,381
GNMA II POOL 080174	3.00	3/20/2028	2,273	2,315	2,305
GNMA II POOL 080178	3.00	3/20/2028	5,151	5,247	5,361
GNMA II POOL 080180	3.00	3/20/2028	1,265	1,288	1,287
GNMA II POOL 080186	3.88	4/20/2028	2,254	2,299	2,345
GNMA II POOL 080197	3.88	5/20/2028	2,126	2,169	2,212
GNMA II POOL 080198	3.88	5/20/2028	6,256	6,381	6,508
GNMA II POOL 080204	3.88	6/20/2028	3,728	3,804	3,741
GNMA II POOL 080205	3.88	6/20/2028	3,316	3,383	3,332
GNMA II POOL 080207	3.88	6/20/2028	5,485	5,596	5,488
GNMA II POOL 080221	3.25	8/20/2028	6,940	7,069	6,990
GNMA II POOL 080311	3.25	8/20/2029	2,191	2,234	2,284
GNMA II POOL 080317	3.25	9/20/2029	3,173	3,236	3,197
GNMA II POOL 080562	3.13	12/20/2031	30,621	30,624	32,053
GNMA II POOL 080932	3.88	6/20/2034	41,224	41,141	43,136
GNMA II POOL 081401	3.25	7/20/2035	31,698	31,569	33,229
GNMA II POOL 081560	3.63	12/20/2035	12,474	12,467	12,622
GNMA II POOL 081635	3.00	3/20/2036	38,899	38,768	40,815
GNMA II POOL 081734	3.75	8/20/2036	21,615	21,592	21,717
GNMA II POOL 783038	5.50	7/20/2040	61,396	66,305	70,742
GNMA II POOL 783377	4.50	5/20/2041	7,083,521	7,552,878	7,781,093
GNMA II POOL MA0393	4.00	9/20/2042	157,300	169,629	173,358
GNMA II POOL MA2892	3.50	6/20/2045	5,817	5,964	6,228
GNMA II POOL MA3105	3.50	9/20/2045	7,814	8,080	8,379
GNMA II POOL MA3106	4.00	9/20/2045	288	305	312
GNMA II POOL MA3172	3.00	10/20/2045	45,098	45,495	48,087
GNMA II POOL MA3662	3.00	5/20/2046	50,513,252	48,284,532	53,664,290

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
GNMA II POOL MA3735	3.00	6/20/2046	584,345,456	561,652,022	621,481,107
GNMA II POOL MA4003	3.00	10/20/2046	42,310,475	40,615,275	45,016,655
GNMA II POOL MA4963	4.00	1/20/2048	31,745,569	32,719,732	34,026,424
GNMA II POOL MA5530	5.00	10/20/2048	14,822,755	15,442,468	16,209,965
GNMA II POOL MA5652	4.50	12/20/2048	132,907,257	138,632,210	142,771,382
GNMA II POOL MA5653	5.00	12/20/2048	28,476,951	29,632,136	30,931,556
GNMA II POOL MA5712	5.00	1/20/2049	11,103,741	11,584,039	12,067,985
GNMA II POOL MA5819	5.00	3/20/2049	48,407,651	50,633,661	52,568,411
GNMA POOL 353933	6.50	10/15/2023	3,791	3,829	4,173
GNMA POOL 375958	6.50	12/15/2023	1,481	1,497	1,630
GNMA POOL 393403	6.50	4/15/2026	365	370	401
GNMA POOL 412570	6.50	3/15/2026	433	439	476
GNMA POOL 415053	6.50	2/15/2026	91	92	100
GNMA POOL 417374	6.50	4/15/2026	310	314	341
GNMA POOL 426034	6.50	4/15/2026	16	17	18
GNMA POOL 444136	5.00	8/15/2040	227,143	242,736	248,483
GNMA POOL 562291	5.50	12/15/2033	2,788	3,003	3,224
GNMA POOL 603567	5.50	4/15/2033	40,583	40,992	46,720
GNMA POOL 603829	5.50	12/15/2032	13,237	14,221	14,813
GNMA POOL 604183	5.50	4/15/2033	1,523	1,538	1,777
GNMA POOL 604370	5.50	6/15/2033	45,849	49,320	52,476
GNMA POOL 604382	5.50	6/15/2033	13,343	14,353	15,568
GNMA POOL 604872	5.50	12/15/2033	31,820	34,266	37,143
GNMA POOL 604949	5.50	1/15/2034	4,837	5,209	5,643
GNMA POOL 606739	5.00	7/15/2040	816,971	872,984	932,654
GNMA POOL 609460	5.50	8/15/2033	2,677	2,705	2,940
GNMA POOL 611879	5.50	5/15/2033	1,800	1,935	2,067
GNMA POOL 619120	5.50	10/15/2034	445	449	489
GNMA POOL 622145	5.50	10/15/2033	3,312	3,565	3,746
GNMA POOL 622611	5.50	10/15/2033	14,670	15,792	16,151
GNMA POOL 636834	5.50	11/15/2034	3,070	3,310	3,393
GNMA POOL 696976	5.00	6/15/2040	165,578	176,916	186,550
GNMA POOL 696990	5.00	8/15/2040	433,249	462,991	482,842
GNMA POOL 706805	5.00	6/15/2040	546,608	584,037	615,001
GNMA POOL 711520	5.00	6/15/2040	897,726	959,199	1,024,979
GNMA POOL 716861	4.50	4/15/2039	776	826	861
GNMA POOL 718536	5.00	6/15/2040	482,727	515,782	547,627
GNMA POOL 719226	5.00	7/15/2040	2,176,677	2,325,913	2,463,387
GNMA POOL 723807	5.00	6/15/2040	217,535	232,431	239,480
GNMA POOL 726872	5.00	6/15/2040	43,911	46,918	48,037
GNMA POOL 730927	5.00	7/15/2040	464,625	496,480	514,832
GNMA POOL 732153	5.00	6/15/2040	198,154	211,722	216,930
GNMA POOL 732516	5.00	7/15/2040	372,307	397,833	411,594
GNMA POOL 733352	5.00	7/15/2040	422,896	451,890	476,325
GNMA POOL 736055	5.00	6/15/2040	605,680	647,154	691,123
GNMA POOL 736107	5.00	7/15/2040	431,029	460,580	487,024
GNMA POOL 739192	5.00	7/15/2040	450,907	481,821	513,575
GNMA POOL 739669	5.00	8/15/2040	409,246	437,340	459,386
GNMA POOL 740478	5.00	7/15/2040	905,128	967,185	1,033,100
GNMA POOL 740494	5.00	7/15/2040	544,756	582,106	610,849

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
GNMA POOL 741230	5.00	8/15/2040	45,497	48,621	49,817
GNMA POOL 741313	5.00	6/15/2040	5,230	5,588	5,721
GNMA POOL 742413	5.00	7/15/2040	62,397	66,675	68,259
GNMA POOL 743691	5.00	6/15/2040	271,949	290,571	305,990
GNMA POOL 743742	5.00	6/15/2040	1,228,114	1,312,209	1,401,645
GNMA POOL 743744	5.00	7/15/2040	565,399	604,163	641,147
GNMA POOL 743802	5.00	6/15/2040	485,819	519,085	543,883
GNMA POOL 743817	5.00	7/15/2040	238,944	255,327	261,495
GNMA POOL 744484	5.00	7/15/2040	1,011,106	1,080,429	1,153,886
GNMA POOL 745790	5.00	7/15/2040	36,393	38,888	39,812
GNMA POOL 781806	9.50	5/15/2022	203	209	203
GS MORTGAGE SECURITIES TRUST	0.81	9/1/2052	113,791,199	7,520,916	6,804,498
GS MORTGAGE SECURITIES TRUST	0.89	5/10/2050	76,870,795	4,756,058	2,400,342
GS MORTGAGE SECURITIES TRUST	0.96	3/10/2050	102,403,682	6,820,270	4,595,771
GS MORTGAGE SECURITIES TRUST	0.96	11/10/2052	127,951,006	8,762,469	7,725,886
GS MORTGAGE SECURITIES TRUST	1.12	11/10/2050	124,498,388	9,442,020	6,805,281
GS MORTGAGE SECURITIES TRUST	1.21	11/10/2046	71,322,676	6,342,954	2,094,047
GS MORTGAGE SECURITIES TRUST	1.27	11/10/2039	12,562,998	503,287	20,017
GS MORTGAGE SECURITIES TRUST	1.30	5/10/2052	96,608,318	8,109,109	6,689,392
GS MORTGAGE SECURITIES TRUST	2.10	11/10/2045	46,891,765	7,233,022	1,719,250
GSR MORTGAGE LOAN TRUST	1.93	5/25/2034	44,827	44,848	43,269
GSR MORTGAGE LOAN TRUST	2.38	8/25/2046	1,287,415	846,065	487,676
GSR MORTGAGE LOAN TRUST	3.40	6/25/2034	216,452	131,578	208,833
HARBORVIEW MORTGAGE LOAN TRUST	0.37	11/19/2036	553,804	429,527	506,663
HARBORVIEW MORTGAGE LOAN TRUST	0.39	2/19/2037	144,485	68,245	132,047
HARBORVIEW MORTGAGE LOAN TRUST	0.73	3/19/2035	222,738	174,055	212,431
HARBORVIEW MORTGAGE LOAN TRUST	0.95	1/19/2035	666,304	660,087	606,104
HARBORVIEW MORTGAGE LOAN TRUST	0.99	11/19/2034	162,242	120,410	154,274
HARBORVIEW MORTGAGE LOAN TRUST	0.99	12/19/2034	669,572	664,479	583,469
HARBORVIEW MORTGAGE LOAN TRUST	1.18	10/25/2037	744,846	578,517	700,165
HARBORVIEW MORTGAGE LOAN TRUST	3.75	4/19/2034	98,396	94,695	96,496
HOMEBANC MORTGAGE TRUST	0.92	12/25/2034	247,764	210,347	230,699
IMPAC CMB TRUST	0.83	4/25/2035	228,895	144,676	209,120
IMPAC CMB TRUST	1.08	3/25/2035	17,337	17,385	16,675
IMPAC SECURED ASSETS CORP.	0.29	5/25/2037	417,315	417,315	335,347
INDYMAC INDA MORTGAGE LOAN TRU	3.63	11/25/2037	438,353	369,697	388,302
INDYMAC INDX MORTGAGE LOAN TRU	0.96	12/25/2034	121,775	90,181	97,413
INDYMAC INDX MORTGAGE LOAN TRU	3.56	6/25/2036	1,484,989	1,444,295	1,312,231
INDYMAC INDX MORTGAGE LOAN TRU	3.73	8/25/2035	404,256	288,329	293,725
JP MORGAN CHASE COMMERCIAL MOR	0.64	1/15/2042	1,293,075	37,942	51
JP MORGAN CHASE COMMERCIAL MOR	0.93	12/15/2046	69,285,661	5,300,007	1,774,073
JP MORGAN CHASE COMMERCIAL MOR	0.94	7/15/2047	64,484,817	4,327,536	1,349,878
JP MORGAN CHASE COMMERCIAL MOR	1.02	3/15/2050	182,781,999	12,331,911	8,805,753
JP MORGAN CHASE COMMERCIAL MOR	1.07	1/15/2049	76,148,817	5,289,449	2,472,816
JP MORGAN CHASE COMMERCIAL MOR	1.14	7/15/2050	57,860,103	4,801,868	3,086,037
JP MORGAN CHASE COMMERCIAL MOR	1.29	3/10/2052	131,490,111	11,463,794	10,219,500
JP MORGAN CHASE COMMERCIAL MOR	1.43	8/15/2049	97,625,546	7,890,676	6,533,713
JP MORGAN CHASE COMMERCIAL MOR	1.66	10/12/2037	335,179	10,004	5,305
JP MORGAN MORTGAGE ACQUISITION	0.46	1/25/2037	7,150,000	7,142,228	6,755,869
JP MORGAN MORTGAGE TRUST	3.65	4/25/2036	80,018	77,631	72,140

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
JP MORGAN MORTGAGE TRUST	4.11	6/25/2036	157,040	143,606	138,537
JP MORGAN MORTGAGE TRUST	4.11	11/25/2033	5,860	5,664	5,659
JPMBB COMMERCIAL MORTGAGE SECU	0.75	4/15/2047	49,421,421	3,133,921	881,999
JPMBB COMMERCIAL MORTGAGE SECU	0.83	2/15/2047	72,035,765	5,217,839	1,782,115
JPMBB COMMERCIAL MORTGAGE SECU	0.88	8/15/2048	154,727,779	10,501,220	5,456,576
JPMBB COMMERCIAL MORTGAGE SECU	0.91	12/15/2048	73,974,076	5,466,758	3,188,337
JPMBB COMMERCIAL MORTGAGE SECU	0.92	11/15/2047	104,787,903	7,418,984	2,845,295
JPMBB COMMERCIAL MORTGAGE SECU	0.97	10/15/2048	60,197,003	4,624,406	1,977,351
JPMBB COMMERCIAL MORTGAGE SECU	1.00	8/15/2047	56,496,693	4,648,604	1,786,246
JPMBB COMMERCIAL MORTGAGE SECU	1.06	11/15/2045	45,749,603	3,865,887	1,358,271
JPMBB COMMERCIAL MORTGAGE SECU	1.32	11/15/2048	99,887,152	8,332,486	3,171,486
JPMBB COMMERCIAL MORTGAGE SECU	1.32	3/15/2049	205,953,049	19,046,538	10,275,424
JPMBB COMMERCIAL MORTGAGE SECU	3.80	8/15/2048	45,000,000	46,150,251	49,624,794
LB UBS COMMERCIAL MORTGAGE TRU	0.03	8/15/2036	753,735	2,447	76
LB UBS COMMERCIAL MORTGAGE TRU	0.21	2/15/2040	2,269,741	25,707	89
LB UBS COMMERCIAL MORTGAGE TRU	0.68	9/15/2039	13,110,439	137,102	512
LB UBS COMMERCIAL MORTGAGE TRU	0.71	11/15/2038	9,220,243	148,047	36,123
LUMINENT MORTGAGE TRUST	0.37	7/25/2036	963,575	664,425	671,312
MASTR ADJUSTABLE RATE MORTGAGE	3.52	3/25/2035	196,686	196,686	191,173
MASTR ADJUSTABLE RATE MORTGAGE	3.67	11/25/2034	50,062	43,646	50,062
MASTR ALTERNATIVE LOANS TRUST	6.50	5/25/2033	98,826	104,634	98,826
MASTR REPERFORMING LOAN TRUST	0.53	5/25/2035	917,003	802,066	662,561
MASTR SPECIALIZED LOAN TRUST	0.55	1/25/2037	1,456,630	854,704	824,300
MERRILL LYNCH MORTGAGE INVESTO	3.71	2/25/2034	116,472	111,266	115,226
MERRILL LYNCH MORTGAGE INVESTO	3.73	2/25/2035	1,057,912	913,295	1,068,915
MERRILL LYNCH MORTGAGE INVESTO	4.00	7/25/2035	258,743	258,637	169,455
ML CFC COMMERCIAL MORTGAGE TRU	0.50	8/12/2048	3,900,401	152	152
ML CFC COMMERCIAL MORTGAGE TRU	0.75	12/12/2049	4,106,854	8,124	14,230
ML CFC COMMERCIAL MORTGAGE TRU	0.99	7/12/2046	1,737,411	47,476	31,844
MORGAN STANLEY BAML TRUST	0.72	10/15/2047	74,482,500	4,295,018	1,505,956
MORGAN STANLEY BAML TRUST	0.91	12/15/2047	76,207,729	5,455,254	2,914,764
MORGAN STANLEY BAML TRUST	0.98	12/15/2048	120,586,071	9,685,176	2,426,580
MORGAN STANLEY BAML TRUST	0.99	2/15/2047	136,856,017	10,202,508	3,099,737
MORGAN STANLEY BAML TRUST	1.00	6/15/2047	94,972,594	7,735,575	2,864,529
MORGAN STANLEY BAML TRUST	1.02	10/15/2048	114,882,593	9,148,595	4,782,136
MORGAN STANLEY BAML TRUST	1.05	5/15/2046	157,796,041	11,724,004	3,856,516
MORGAN STANLEY BAML TRUST	1.09	10/15/2048	81,144,338	6,613,523	3,425,963
MORGAN STANLEY BAML TRUST	1.11	8/15/2047	63,754,974	5,223,630	2,096,494
MORGAN STANLEY BAML TRUST	1.31	2/15/2048	114,107,250	11,385,233	5,004,676
MORGAN STANLEY BAML TRUST	1.41	5/15/2050	85,068,223	8,234,647	5,164,768
MORGAN STANLEY BAML TRUST	1.42	8/15/2045	77,798,202	8,299,197	1,668,418
MORGAN STANLEY BAML TRUST	1.58	5/15/2049	61,691,194	7,110,120	4,179,156
MORGAN STANLEY BAML TRUST	1.61	11/15/2045	37,761,176	4,905,912	1,055,828
MORGAN STANLEY BAML TRUST	3.33	5/15/2049	10,000,000	10,261,780	10,864,978
MORGAN STANLEY CAPITAL I TRUST	0.62	7/15/2049	89,774,117	4,314,006	300,737
MORGAN STANLEY CAPITAL I TRUST	0.79	12/15/2050	72,411,377	4,636,327	3,390,558
MORGAN STANLEY CAPITAL I TRUST	0.82	6/15/2044	45,856,420	4,768,695	155,163
MORGAN STANLEY CAPITAL I TRUST	0.83	7/15/2051	94,063,648	5,921,843	4,740,648
MORGAN STANLEY CAPITAL I TRUST	1.08	2/15/2053	111,115,257	10,221,226	9,022,226
MORGAN STANLEY CAPITAL I TRUST	1.17	3/15/2049	74,663,370	6,321,195	3,846,725

**CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
MORGAN STANLEY MORTGAGE LOAN T	2.26	10/25/2034	53,497	47,015	49,662
MORGAN STANLEY MORTGAGE LOAN T	2.46	6/25/2037	407,962	403,468	296,018
MORGAN STANLEY MORTGAGE LOAN T	3.24	11/25/2037	1,160,733	1,164,811	942,083
MORGAN STANLEY MORTGAGE LOAN T	3.62	7/25/2035	428,953	341,441	396,189
MORGAN STANLEY MORTGAGE LOAN T	3.91	9/25/2034	273,361	143,486	221,388
MORGAN STANLEY MORTGAGE LOAN T	4.09	8/25/2034	371,671	194,810	320,911
MORGAN STANLEY MORTGAGE LOAN T	6.00	8/25/2037	3,584	3,584	2,424
NEW YORK MORTGAGE TRUST	0.84	8/25/2035	290,562	261,490	260,496
NOMURA ASSET ACCEPTANCE CORPOR	6.00	3/25/2047	545,542	523,888	546,788
NOMURA HOME EQUITY LOAN INC	6.06	2/25/2037	941,737	595,963	363,856
RESI FINANCE LIMITED PARTNERSH	1.58	9/10/2035	606,408	497,875	166,614
RESIDENTIAL ACCREDIT LOANS, IN	3.19	8/25/2035	529,907	411,720	477,341
RESIDENTIAL ACCREDIT LOANS, IN	5.50	08/25/35	49,130	45,337	47,449
RESIDENTIAL ACCREDIT LOANS, IN	6.00	06/25/36	747,617	580,556	660,720
RESIDENTIAL ASSET MORTGAGE PRO	7.50	05/25/32	176,034	174,260	35,971
SALOMON BROTHERS MORTGAGE SECU	4.11	09/25/32	146,134	148,410	143,107
SEQUOIA MORTGAGE TRUST	0.73	01/20/35	137,706	117,488	126,919
SEQUOIA MORTGAGE TRUST	0.83	01/20/34	51,652	46,038	48,317
SEQUOIA MORTGAGE TRUST	0.89	11/22/24	937	906	933
SG COMMERCIAL MORTGAGE SECURIT	2.13	10/10/48	46,407,238	6,148,394	3,444,132
STRUCTURED ADJUSTABLE RATE MOR	0.48	10/25/35	110,837	93,774	108,842
STRUCTURED ADJUSTABLE RATE MOR	0.52	08/25/35	20,130	17,442	20,077
STRUCTURED ADJUSTABLE RATE MOR	0.68	10/25/34	2,286,966	2,284,572	1,975,790
STRUCTURED ADJUSTABLE RATE MOR	3.69	04/25/35	309,235	256,826	301,470
STRUCTURED ADJUSTABLE RATE MOR	3.71	01/25/35	174,155	142,426	169,877
STRUCTURED ADJUSTABLE RATE MOR	3.76	07/25/35	455,965	370,069	370,303
STRUCTURED ADJUSTABLE RATE MOR	3.84	04/25/34	148,819	133,306	145,712
STRUCTURED ADJUSTABLE RATE MOR	3.88	03/25/35	256,163	231,039	250,135
STRUCTURED ADJUSTABLE RATE MOR	3.93	10/25/47	987,720	988,140	799,787
STRUCTURED ASSET MORTGAGE INVE	0.39	08/25/36	1,273,438	943,483	1,143,620
STRUCTURED ASSET MORTGAGE INVE	0.41	02/25/36	795,292	547,363	718,400
STRUCTURED ASSET MORTGAGE INVE	0.49	12/25/35	106,939	77,069	114,401
STRUCTURED ASSET SECURITIES CO	0.33	05/25/36	13,348	12,828	13,311
STRUCTURED ASSET SECURITIES CO	3.83	11/25/32	158,286	159,837	158,286
STRUCTURED ASSET SECURITIES CO	4.08	06/25/33	101,700	96,704	99,323
THORNBURG MORTGAGE SECURITIES	3.69	09/25/37	197,266	176,335	193,666
UBS BARCLAYS COMMERCIAL MORTGA	1.26	04/10/46	109,370,608	9,734,559	2,733,566
UBS BARCLAYS COMMERCIAL MORTGA	1.76	12/10/45	60,038,944	7,835,944	1,729,121
UBS COMMERCIAL MORTGAGE TRUST	0.95	12/15/51	61,042,022	4,228,875	3,776,248
UBS COMMERCIAL MORTGAGE TRUST	1.01	11/15/50	79,247,978	5,746,398	4,047,546
UBS COMMERCIAL MORTGAGE TRUST	1.07	10/15/50	64,764,507	5,354,205	3,959,462
UBS COMMERCIAL MORTGAGE TRUST	1.64	10/15/52	103,156,414	11,928,801	10,381,981
UBS COMMERCIAL MORTGAGE TRUST	3.04	12/15/52	68,185,000	70,329,803	74,854,746
VENDEE MORTGAGE TRUST	6.50	10/15/29	3,523,606	3,549,294	4,180,553
WACHOVIA BANK COMMERCIAL MORTG	0.05	12/15/43	532,483	260	269
WAMU COMMERCIAL MORTGAGE SECUR	0.08	12/27/49	6,146,852	274,817	2,365
WAMU COMMERCIAL MORTGAGE SECUR	0.62	11/23/43	3,325,175	201,088	39,939
WAMU MORTGAGE PASS THROUGH CER	0.50	08/25/45	306,974	258,433	289,952
WAMU MORTGAGE PASS THROUGH CER	0.54	10/25/45	312,152	231,070	297,506
WAMU MORTGAGE PASS THROUGH CER	0.58	08/25/45	286,162	225,877	271,761

CalPERS 2019-2020 Annual Investment Report
Mortgage-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
WAMU MORTGAGE PASS THROUGH CER	0.62	07/25/44	228,773	190,443	213,888
WAMU MORTGAGE PASS THROUGH CER	0.72	07/25/45	31,434	26,222	27,941
WAMU MORTGAGE PASS THROUGH CER	0.82	07/25/45	106,327	90,556	99,761
WAMU MORTGAGE PASS THROUGH CER	0.90	01/25/45	597,943	597,943	562,804
WAMU MORTGAGE PASS THROUGH CER	0.96	10/25/44	76,482	64,251	71,919
WAMU MORTGAGE PASS THROUGH CER	1.06	11/25/34	318,888	318,888	300,629
WAMU MORTGAGE PASS THROUGH CER	2.38	09/25/46	1,065,182	850,898	1,035,216
WAMU MORTGAGE PASS THROUGH CER	3.16	04/25/37	1,729,928	1,730,774	1,566,970
WAMU MORTGAGE PASS THROUGH CER	3.23	03/25/37	914,850	688,853	812,945
WAMU MORTGAGE PASS THROUGH CER	3.27	11/25/36	270,612	236,993	246,817
WAMU MORTGAGE PASS THROUGH CER	3.45	07/25/37	330,306	244,733	266,598
WAMU MORTGAGE PASS THROUGH CER	3.53	06/25/37	1,643,043	1,645,313	1,446,623
WAMU MORTGAGE PASS THROUGH CER	3.59	02/25/37	956,361	770,299	883,056
WAMU MORTGAGE PASS THROUGH CER	3.62	12/25/36	785,241	637,637	736,831
WAMU MORTGAGE PASS THROUGH CER	3.67	10/25/36	7,791	7,590	7,069
WAMU MORTGAGE PASS THROUGH CER	3.84	01/25/35	348,995	331,715	346,154
WAMU MORTGAGE PASS THROUGH CER	3.86	08/25/36	144,541	138,386	130,772
WAMU MORTGAGE PASS THROUGH CER	3.91	08/25/46	211,335	177,500	200,438
WAMU MORTGAGE PASS THROUGH CER	4.10	01/25/33	82,522	78,973	81,519
WAMU MORTGAGE PASS THROUGH CER	4.40	08/25/33	152,629	147,466	149,835
WASHINGTON MUTUAL MORTGAGE PAS	0.44	12/25/35	997,486	750,198	872,792
WASHINGTON MUTUAL MORTGAGE PAS	2.65	08/25/46	1,203,066	780,800	783,798
WASHINGTON MUTUAL MORTGAGE PAS	2.68	06/25/46	447,092	266,224	349,747
WASHINGTON MUTUAL MORTGAGE PAS	3.75	04/25/37	831,331	825,757	562,201
WELLS FARGO COMMERCIAL MORTGAG	0.62	09/15/61	194,121,727	9,423,346	7,992,611
WELLS FARGO COMMERCIAL MORTGAG	0.77	09/15/58	68,150,439	4,381,392	2,299,591
WELLS FARGO COMMERCIAL MORTGAG	0.89	12/15/50	54,663,932	3,954,444	2,942,342
WELLS FARGO COMMERCIAL MORTGAG	0.94	08/15/51	51,796,366	3,368,525	2,447,270
WELLS FARGO COMMERCIAL MORTGAG	0.95	01/15/52	68,496,599	4,954,701	4,382,054
WELLS FARGO COMMERCIAL MORTGAG	1.00	11/15/48	69,021,133	5,549,989	2,963,560
WELLS FARGO COMMERCIAL MORTGAG	1.02	10/15/52	112,731,327	8,976,796	7,659,767
WELLS FARGO COMMERCIAL MORTGAG	1.04	12/15/47	100,021,208	8,292,018	3,757,961
WELLS FARGO COMMERCIAL MORTGAG	1.28	03/15/52	123,598,567	11,923,307	10,305,760
WELLS FARGO COMMERCIAL MORTGAG	1.30	11/15/59	82,739,567	7,882,764	4,795,370
WELLS FARGO COMMERCIAL MORTGAG	1.31	02/15/53	79,225,589	8,320,588	7,259,243
WELLS FARGO COMMERCIAL MORTGAG	1.49	01/15/59	62,376,346	6,286,974	3,610,050
WELLS FARGO COMMERCIAL MORTGAG	1.50	01/15/60	59,788,493	6,558,559	4,032,130
WELLS FARGO COMMERCIAL MORTGAG	1.62	08/15/52	48,944,557	5,963,258	5,382,849
WELLS FARGO COMMERCIAL MORTGAG	1.75	10/15/45	50,886,230	6,904,019	1,584,882
WELLS FARGO COMMERCIAL MORTGAG	2.12	06/15/49	102,479,758	14,739,356	8,710,911
WELLS FARGO COMMERCIAL MORTGAG	3.50	07/15/58	20,000,000	20,176,177	21,633,311
WELLS FARGO COMMERCIAL MORTGAG	3.81	12/15/48	18,500,000	18,978,376	20,550,659
WELLS FARGO MORTGAGE BACKED SE	4.48	10/25/36	83,594	70,262	80,063
WF RBS COMMERCIAL MORTGAGE TRU	0.70	09/15/46	106,123,937	6,735,262	2,004,753
WF RBS COMMERCIAL MORTGAGE TRU	0.72	06/15/46	129,803,239	8,544,428	2,083,329
WF RBS COMMERCIAL MORTGAGE TRU	0.81	09/15/57	78,928,726	5,167,227	2,206,488
WF RBS COMMERCIAL MORTGAGE TRU	0.84	11/15/47	80,420,265	5,661,587	2,091,610
WF RBS COMMERCIAL MORTGAGE TRU	1.18	03/15/45	112,863,006	8,889,655	2,817,238
WF RBS COMMERCIAL MORTGAGE TRU	2.06	04/15/45	63,457,726	10,199,901	1,290,756
Total				29,006,540,964	29,812,155,884

**CalPERS 2019-2020 Annual Investment Report
Mortgage Loans**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
DEFAULT MHLP	8.00	01/01/20	2,257,225	2,257,225	2,257,225
JUMBO MHLP 30 YEAR 906	6.63	03/13/39	132,190	131,936	138,800
JUMBO MHLP 885	1.00	12/14/36	968,301	966,285	945,232
JUMBO MHLP 15 YEAR 903	5.83	12/12/23	32,700	32,700	33,034
JUMBO MHLP 30 YEAR 890	6.09	06/15/37	1,234,230	1,230,281	1,183,569
JUMBO MHLP 30 YEAR 892	6.23	09/20/37	1,025,497	1,022,597	1,052,125
JUMBO MHLP 30 YEAR 895	6.15	12/20/37	1,800,479	1,793,739	1,756,098
JUMBO MHLP 30 YEAR 897	6.02	03/20/38	2,075,399	2,073,014	2,050,666
JUMBO MHLP 30 YEAR 898	6.21	06/20/38	1,374,469	1,370,199	1,327,020
JUMBO MHLP 30 YEAR 901	5.90	08/19/38	1,943,153	1,943,153	1,983,995
JUMBO MHLP 30 YEAR 904	6.28	12/12/38	3,670,864	3,667,603	3,621,988
JUMBO MHLP 30 YEAR 908	5.58	06/18/39	433,679	433,630	411,357
JUMBO MHLP 30 YEAR 913	1.00	12/10/39	1,276,455	1,275,206	1,250,943
JUMBO MHLP 30 YEAR 915	4.27	03/12/40	217,070	216,656	210,233
JUMBO MHLP 30 YR 888	1.00	03/15/37	1,301,558	1,298,305	1,308,472
JUMBO MHLP 854	6.21	02/01/33	449,461	449,167	462,938
JUMBO MHLP 856	5.93	06/01/33	931,440	931,376	945,020
JUMBO MHLP 858	5.64	09/01/33	1,986,674	1,984,446	1,996,141
JUMBO MHLP 860	1.00	12/15/33	459,282	458,518	448,925
JUMBO MHLP 866	5.30	09/24/34	81,390	81,373	80,807
JUMBO MHLP 868	5.55	12/30/30	663,117	662,671	611,800
JUMBO MHLP 870	3.50	03/25/35	263,724	263,512	266,867
JUMBO MHLP 872	1.00	07/25/34	986,776	985,612	1,004,160
JUMBO MHLP 874	5.81	07/25/34	273,094	272,994	276,354
JUMBO MHLP 876	1.00	12/19/35	760,017	758,375	741,661
JUMBO MHLP 879	5.72	03/24/36	196,322	195,492	199,256
JUMBO MHLP 882	1.00	09/19/36	132,274	131,912	134,743
JUMBO MHLP 884	1.00	12/14/21	7,876	7,873	7,906
JUMBO MHLP ARM 893	6.22	09/20/37	179,189	179,043	156,520
PERSONAL LOAN MHLP	6.75	03/01/21	1,399,207	1,446,718	1,418,083
Total				28,521,613	28,281,937

**CalPERS 2019-2020 Annual Investment Report
Asset-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
AAMES MORTGAGE INVESTMENT TRUS	0.00	10/25/2035	580,000	0	23
ACCREDITED MORTGAGE LOAN TRUST	0.94	1/25/2034	14,087	11,539	13,585
ACCREDITED MORTGAGE LOAN TRUST	5.21	1/25/2034	668,428	587,514	668,428
ACE SECURITIES CORP.	1.23	12/25/2033	158,206	158,699	148,548
AEGIS ASSET BACKED SECURITIES	1.23	1/25/2034	67,806	67,958	62,130
AFC HOME EQUITY LOAN TRUST	0.85	4/25/2028	3,986	3,520	3,959
AFC HOME EQUITY LOAN TRUST	0.97	6/25/2030	115,586	91,749	105,195
AIG CLO LTD	2.46	1/20/2032	296,500,000	296,500,000	291,785,650
AIG CLO LTD	2.64	4/15/2032	305,000,000	305,000,000	301,004,500
AIMCO	2.45	1/15/2032	248,225,000	248,225,000	242,590,293
ALM LOAN FUNDING	2.63	10/15/2028	174,000,000	173,792,474	171,825,000
ALM LOAN FUNDING	2.82	1/15/2028	25,000,000	25,000,000	24,277,500
ALM LOAN FUNDING	2.87	10/15/2027	35,000,000	35,000,000	33,782,000
AMERICAN HOME MORTGAGE INVESTM	0.58	1/25/2047	1,128,403	478,220	131,512
AMERICAN HOME MORTGAGE INVESTM	1.08	7/25/2046	993,816	473,776	455,351
AMERIQUEST MORTGAGE SECURITIES	1.53	3/25/2033	180,029	180,547	174,790
ANTARES CLO	2.39	4/20/2031	399,000,000	399,000,000	392,177,100
ANTARES CLO	2.82	7/20/2031	290,000,000	290,000,000	288,115,000
APIDOS CLO	2.27	1/20/2031	435,000,000	435,000,000	423,994,500
ARES CLO LTD	2.89	1/15/2029	50,000,000	50,000,000	48,300,000
ASSET BACKED FUNDING CORPORATI	1.31	5/25/2032	102,214	92,591	99,452
ASSET BACKED FUNDING CORPORATI	6.00	7/26/2035	314,228	0	3
ASSET BACKED SECURITIES CORP H	1.31	9/15/2033	310,986	311,801	292,717
AUBURN CLO, LTD.	2.39	10/20/2030	240,000,000	240,000,000	233,760,000
BAIN CAPITAL CREDIT CLO, LIMIT	2.56	4/18/2032	192,000,000	192,000,000	188,544,000
BAYVIEW FINANCIAL ACQUISITION	0.46	12/28/2036	162,732	130,076	161,097
BAYVIEW FINANCIAL ACQUISITION	0.53	5/28/2037	916,835	653,891	814,699
BAYVIEW FINANCIAL ACQUISITION	1.18	5/28/2039	1,043,022	736,891	881,246
BAYVIEW FINANCIAL ASSET TRUST	2.81	3/25/2037	227,506	153,167	215,495
BAYVIEW FINANCIAL ASSET TRUST	2.93	3/25/2037	780,019	647,484	709,027
BAYVIEW FINANCIAL ASSET TRUST	3.16	3/25/2037	178,754	112,168	169,619
BEAR STEARNS ASSET BACKED SECU	0.33	8/25/2036	1,004,799	981,520	1,393,628
BEAR STEARNS ASSET BACKED SECU	0.58	9/25/2046	478,644	308,301	438,305
BEAR STEARNS ASSET BACKED SECU	5.50	12/25/2035	87,300	0	1
BLUEMOUNTAIN CLO LTD	2.34	10/20/2030	200,000,000	200,000,000	195,100,000
BLUEMOUNTAIN CLO LTD	3.19	7/18/2027	5,000,000	5,000,000	4,657,000
BURNHAM PARK CLO LTD.	2.64	10/20/2029	16,000,000	16,000,000	15,328,000
CALIFORNIA STREET CLO XII, LTD	2.72	10/15/2025	31,000,000	31,000,000	29,995,600
CARLYLE GLOBAL MARKET STRATEGI	2.32	10/15/2030	51,650,000	51,650,000	50,637,660
CARLYLE GLOBAL MARKET STRATEGI	2.44	1/18/2029	43,537,500	43,537,500	41,042,801
CARLYLE GLOBAL MARKET STRATEGI	2.44	4/20/2031	41,572,858	41,490,103	40,645,783
CATAMARAN CLO LTD	2.40	4/22/2027	28,000,000	28,000,000	26,947,200
CATAMARAN CLO LTD	2.67	1/18/2029	56,000,000	56,000,000	55,322,400
CATAMARAN CLO LTD	3.19	10/18/2026	36,000,000	36,000,000	35,301,600
CBAM CLO MANAGEMENT	2.36	10/17/2029	325,000,000	325,000,000	319,085,000
CBAM CLO MANAGEMENT	2.37	10/17/2029	213,480,000	213,480,000	209,402,532
CBAM CLO MANAGEMENT	2.42	1/15/2031	181,000,000	181,000,000	176,529,300
CBAM CLO MANAGEMENT	2.67	1/15/2031	51,750,000	51,750,000	49,002,075
CBAM CLO MANAGEMENT	2.83	10/17/2029	85,000,000	85,000,000	81,846,500
CBAM CLO MANAGEMENT	2.88	10/17/2029	6,430,000	6,430,000	6,205,593
CIFC FUNDING LTD	2.99	10/20/2027	20,000,000	20,000,000	19,458,000

CalPERS 2019-2020 Annual Investment Report
Asset-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CITIBANK CREDIT CARD ISSUANCE	6.15	6/15/2039	187,179,000	225,428,520	279,655,268
CITIGROUP MORTGAGE LOAN TRUST	0.58	11/25/2046	1,036,419	637,803	970,451
COACHELLA HOUSING	8.40	8/1/2020	736,964	736,964	742,147
COLE PARK CLO LIMITED	2.74	10/20/2028	33,300,000	33,300,000	31,951,350
COUNTRYWIDE ASSET BACKED CERTI	0.27	3/25/2034	80,000,000	0	1
COUNTRYWIDE ASSET BACKED CERTI	0.64	9/25/2034	5,456	5,459	5,449
COUNTRYWIDE ASSET BACKED CERTI	0.83	2/25/2037	138,224	57,049	8,243
COUNTRYWIDE ASSET BACKED CERTI	1.08	10/25/2047	1,063,456	793,217	995,733
COUNTRYWIDE ASSET BACKED CERTI	1.18	8/25/2047	234,034	163,938	232,091
COUNTRYWIDE HOME EQUITY LOAN T	0.46	2/15/2034	146,832	110,278	136,697
COUNTRYWIDE HOME EQUITY LOAN T	0.47	12/15/2033	22,790	19,306	21,932
COVENANT CREDIT PARTNERS CLO L	2.50	10/15/2029	256,500,000	256,500,000	251,985,600
COVENANT CREDIT PARTNERS CLO L	3.07	10/15/2029	10,000,000	10,000,000	9,710,000
CREDIT SUISSE FIRST BOSTON MOR	0.65	5/25/2044	17,500	17,113	17,473
CUMBERLAND PARK CLO LTD	2.54	7/20/2028	25,000,000	25,000,000	23,965,000
CUMBERLAND PARK CLO LTD	2.94	7/20/2028	5,000,000	5,000,000	4,700,000
DORCHESTER PARK CLO LTD	2.59	4/20/2028	45,500,000	45,500,000	43,557,150
DRYDEN SENIOR LOAN FUND	1.64	11/15/2028	12,600,000	12,600,000	11,909,520
ELEVATION CLO LTD	2.44	7/15/2030	60,000,000	60,000,000	58,524,000
ELEVATION CLO LTD	2.82	7/15/2030	25,000,000	25,000,000	23,800,000
EQUITY ONE ABS INC	5.91	2/25/2033	48,930	48,940	10,751
FBR SECURITIZATION TRUST	3.53	9/25/2035	300,000	0	12
FBR SECURITIZATION TRUST	3.53	11/25/2035	570,753	0	22
FIRST FRANKLIN MORTGAGE LOAN N	6.50	9/25/2035	198,940	0	0
FIRST FRANKLIN MTG LOAN ASSET	0.44	12/25/2026	85,334	85,334	85,217
FORD CREDIT AUTO LEASE TRUST	0.44	2/15/2022	19,931,129	19,931,129	19,917,346
FORD CREDIT AUTO LEASE TRUST	1.73	2/15/2021	10,571,188	10,571,188	10,588,308
FORD CREDIT AUTO OWNER TRUST	0.42	2/15/2022	6,317,412	6,317,412	6,316,453
GALAXY CLO LTD	2.34	1/15/2031	213,500,000	213,500,000	208,333,300
GALAXY CLO LTD	2.86	7/16/2028	34,650,000	34,650,000	33,516,945
GE WMCMSN	5.50	1/25/2036	103,549	0	1
GILBERT PARK CLO LTD	2.41	10/15/2030	435,000,000	435,000,000	427,344,000
GM FINANCIAL SECURITIZED TERM	0.43	8/16/2022	19,015,461	19,015,461	19,012,240
GOLUB CAPITAL PARTNERS CLO LTD	2.62	1/20/2031	218,000,000	218,000,000	205,676,024
GOLUB CAPITAL PARTNERS CLO LTD	2.86	10/20/2031	236,000,000	236,000,000	227,197,200
GOLUB CAPITAL PARTNERS CLO LTD	3.19	7/20/2029	32,700,000	32,700,000	31,964,250
GREENPOINT MORTGAGE FUNDING TR	1.20	9/25/2034	398,851	153,159	426,961
GSAMP NIM TRUST	5.50	11/25/2035	539,975	0	5
GSAMP TRUST	0.48	12/25/2036	806,637	586,977	771,418
GSAMP TRUST	0.68	5/25/2036	719,364	418,661	713,978
HEAT EQUITY ASSET TRUST NIM	6.00	1/27/2036	419,282	117,322	4
HEAT EQUITY ASSET TRUST NIM	6.50	5/27/2036	131,313	0	0
HIGHBRIDGE LOAN MANAGEMENT LTD	2.19	7/18/2031	287,500,000	287,500,000	279,162,500
HOME EQUITY ASSET TRUST	0.33	10/25/2036	766,257	507,620	743,862
HOME EQUITY MORTGAGE TRUST	6.00	1/25/2037	3,309,090	3,307,965	341,708
HYUNDAI AUTO LEASE SECURITIZAT	1.77	1/15/2021	3,275,754	3,275,754	3,278,192
INDYMAC HOME EQUITY LOAN ASSET	1.39	6/25/2031	256,002	214,653	242,103
IXIS REAL ESTATE CAPITAL TRUST	0.34	8/25/2036	3,823,570	2,145,511	1,359,148
JACKSON MILL CLO LTD	2.67	4/15/2027	61,000,000	61,000,000	58,224,500
JAMESTOWN CLO LTD	2.40	4/22/2030	22,500,000	22,500,000	21,359,250
JAMESTOWN CLO LTD	2.88	1/17/2027	28,000,000	28,000,000	27,151,600

CalPERS 2019-2020 Annual Investment Report
Asset-Backed Securities

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
JP MORGAN MORTGAGE ACQUISITION	0.26	8/25/2036	13,674	13,674	6,922
L.A. ARENA FUNDING, LLC	7.66	12/15/2026	5,636,373	5,435,203	5,538,464
LCM LTD PARTNERSHIP	2.97	7/15/2027	51,000,000	51,000,000	49,745,400
LONG BEACH MORTGAGE LOAN TRUST	1.01	9/25/2031	40,809	34,250	40,718
MAGNETITE CLO LTD	2.07	4/20/2031	334,400,000	334,400,000	323,665,760
MAGNETITE CLO LTD	2.49	4/20/2031	57,475,000	57,475,000	54,549,523
MAGNETITE CLO LTD	2.72	4/15/2031	8,500,000	8,500,000	8,126,850
MARATHON CLO LTD	2.21	10/28/2025	47,139,207	47,139,207	46,757,379
MERCER FIELD CLO LP	2.55	4/15/2029	373,394,003	373,394,003	365,963,463
MERRILL LYNCH MORTGAGE INVESTO	0.30	2/25/2037	579,131	579,131	232,829
MERRILL LYNCH MORTGAGE INVESTO	0.46	1/25/2047	217,512	162,479	213,934
MERRILL LYNCH MORTGAGE INVESTO	0.78	2/25/2037	3,361,740	3,361,740	232,503
MORGAN STANLEY CAPITAL INC	0.48	12/25/2035	5,155	4,061	5,148
MORGAN STANLEY CAPITAL INC	1.24	9/25/2034	95,008	81,039	80,007
MORGAN STANLEY DEAN WITTER CAP	3.26	11/25/2032	85,786	86,083	86,928
NATIONAL COLLEGIATE STUDENT LO	0.65	2/25/2032	2,500,000	2,500,000	250
NEW CENTURY HOME EQUITY LOAN T	1.16	10/25/2033	357,750	358,964	334,393
NISSAN AUTO LEASE TRUST	0.45	10/15/2021	21,240,442	21,240,442	21,227,827
NOVASTAR HOME EQUITY LOAN	0.28	3/25/2037	89,866	89,866	41,263
NZCG FUNDING LTD	1.48	2/26/2031	249,000,000	249,000,000	242,127,600
OCP CLO LTD	1.53	11/20/2030	210,600,000	210,600,000	206,219,520
OCTAGON INVESTMENT PARTNERS 30	2.46	3/17/2030	70,500,000	70,500,000	69,421,350
OCTAGON INVESTMENT PARTNERS XV	1.99	1/25/2031	74,050,000	74,050,000	72,087,675
OPTION ONE MORTGAGE SECURITIES	5.44	8/26/2035	213,614	0	2
OWNIT MORTGAGE LOAN NIM	5.00	8/25/2036	939,567	0	0
OZLM LTD	2.29	1/20/2031	254,000,000	254,000,000	246,710,200
PALMER SQUARE CLO LTD	2.17	4/18/2031	225,000,000	225,000,000	219,037,500
PALMER SQUARE CLO LTD	2.33	10/17/2031	90,000,000	90,000,000	87,687,000
PARALLEL LTD	2.27	4/20/2031	260,000,000	260,000,000	251,394,000
PARALLEL LTD	2.39	10/20/2031	20,000,000	20,000,000	19,390,000
PARALLEL LTD	2.44	7/20/2027	47,000,000	47,000,000	44,650,000
PARALLEL LTD	2.50	7/20/2032	124,000,000	124,000,000	119,858,648
PIKES PEAK CLO	3.09	4/25/2030	30,000,000	30,000,000	29,721,000
PROVIDENT BANK HOME EQUITY LOA	0.72	8/25/2031	242,462	178,049	206,002
RAAC SERIES	0.47	5/25/2046	362,502	260,728	357,777
RAAC SERIES	0.56	10/25/2046	848,418	591,926	817,364
RAAC SERIES	1.38	9/25/2047	202,331	170,663	200,860
REGATTA II FUNDING LP	3.07	1/15/2029	32,200,000	32,200,000	31,240,440
REGATTA X FUNDING LTD.	2.25	1/17/2031	224,000,000	224,000,000	218,825,600
RESMAE MORTGAGE LOAN TRUST	0.48	2/25/2036	1,011,191	1,011,191	504,246
RRAM	2.31	1/15/2030	490,000,000	490,000,000	477,309,000
SAIL NET INTEREST MARGIN NOTES	7.35	11/27/2033	89,124	1	1
SAXON ASSET SECURITIES TRUST	2.77	12/25/2032	164,271	135,494	145,707
SB FINANCE NIM TRUST	7.50	6/25/2036	111,419	0	1
SHARPS SP I LLC NET INTEREST M	5.00	5/25/2035	428,624	0	4
SLM STUDENT LOAN TRUST	0.70	12/15/2039	1,550,224	1,550,224	1,194,343
SOUND POINT CLO LTD	2.29	4/18/2031	40,000,000	40,000,000	38,440,000
SOUND POINT CLO LTD	2.39	10/20/2031	260,000,000	260,000,000	252,668,000
SOUND POINT CLO LTD	2.53	7/20/2032	227,500,000	227,373,421	221,971,750
SOUND POINT CLO LTD	2.79	7/20/2028	37,500,000	37,500,000	36,153,750
STRUCTURED ASSET INVESTMENT LO	1.08	11/25/2034	794,897	795,493	790,880

**CalPERS 2019-2020 Annual Investment Report
Asset-Backed Securities**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
STRUCTURED ASSET SECURITIES CO	0.31	2/25/2037	1,257,421	1,193,591	1,221,528
SYMPHONY CLO LTD	3.16	7/16/2032	261,000,000	261,000,000	253,979,100
TCI FLATIRON CLO LTD	2.98	7/17/2028	30,000,000	30,000,000	29,259,000
TCI FLATIRON CLO LTD	3.83	7/17/2028	5,000,000	5,000,000	4,882,500
TEACHERS INSURANCE AND ANNUITY	2.33	1/16/2031	87,000,000	87,000,000	84,355,200
TERWIN MORTGAGE TRUST	0.50	3/25/2037	857,975	855,451	494,859
TERWIN MORTGAGE TRUST	0.60	7/25/2037	2,226,426	2,161,734	1,144,517
TERWIN MORTGAGE TRUST	4.50	5/25/2037	1,546,262	1,505,020	1,007,672
TIAA CHURCHILL MIDDLE MARKET C	2.67	10/20/2030	109,000,000	109,000,000	106,351,300
TIAA CLO LTD	2.37	1/20/2032	175,000,000	175,000,000	170,450,000
TICP CLO LTD	2.87	1/15/2031	26,800,000	26,800,000	25,950,440
TICP CLO LTD	3.19	4/26/2028	5,000,000	5,000,000	4,740,500
TOYOTA AUTO RECEIVABLES OWNER	0.30	8/16/2021	2,628,698	2,628,698	2,628,150
TOYOTA AUTO RECEIVABLES OWNER	0.31	2/15/2022	15,894,764	15,894,764	15,887,500
VOYA CLO 2017 4, LTD.	2.35	10/15/2030	55,000,000	55,000,000	53,746,000
VOYA CLO LTD	2.09	4/19/2031	32,000,000	31,440,195	30,892,800
WELLS FARGO HOME EQUITY TRUST	0.55	4/25/2034	204,878	204,427	193,448
WELLS FARGO HOME EQUITY TRUST	4.68	10/25/2034	97,170	97,321	111,202
ZAIS CLO 5 LTD	2.75	10/15/2028	11,899,870	11,827,343	11,747,552
Total				<u>11,120,834,093</u>	<u>10,895,249,848</u>

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
1011778 BC UNLIMITED LBLTY CO	0.00	11/19/2026	1,647,550	1,647,550	1,558,582
3M COMPANY	3.63	10/15/2047	16,200,000	16,061,349	18,779,850
8TH AVE FOOD PROVISIONS INC	0.00	10/1/2025	868,175	867,005	840,142
ABBOTT LABORATORIES	4.90	11/30/2046	67,400,000	69,849,443	96,450,748
ABBVIE INC	3.20	11/21/2029	36,000,000	36,016,737	39,516,840
ABBVIE INC	4.05	11/21/2039	60,000,000	60,315,058	70,150,200
ABBVIE INC	4.25	11/14/2028	47,000,000	46,336,215	55,445,430
ABBVIE INC	4.25	11/21/2049	48,300,000	48,248,655	58,463,769
ABBVIE INC	4.30	5/14/2036	26,400,000	26,139,181	31,141,968
ABBVIE INC	4.40	11/6/2042	8,200,000	8,136,699	9,876,244
ABBVIE INC	4.45	5/14/2046	46,000,000	45,023,796	56,199,580
ABBVIE INC	4.50	5/14/2035	37,109,000	38,347,058	44,828,043
ABBVIE INC	4.55	3/15/2035	39,500,000	45,918,589	47,878,740
ABBVIE INC	4.70	5/14/2045	10,000,000	10,030,446	12,454,500
ABBVIE INC	4.75	3/15/2045	29,500,000	33,572,683	36,644,015
ABBVIE INC	4.88	11/14/2048	10,000,000	9,873,629	13,045,000
ABC SUPPLY CO INC	4.00	1/15/2028	16,232,000	16,152,211	15,760,136
ABC SUPPLY CO INC	5.88	5/15/2026	16,230,000	16,084,496	16,261,973
ABERCROMBIE + FITCH MANA	8.75	7/15/2025	650,000	650,000	640,218
ACADIA HEALTHCARE CO INC	5.50	7/1/2028	2,622,000	2,634,190	2,641,927
ACADIA HEALTHCARE CO INC	5.63	2/15/2023	14,145,000	14,145,510	14,145,990
ACADIA HEALTHCARE CO INC	6.50	3/1/2024	2,037,000	2,075,306	2,070,936
ACE CAPITAL TRUST II	9.70	4/1/2030	27,195,000	31,201,431	39,771,600
ACRISURE LLC / FIN INC	7.00	11/15/2025	3,025,000	2,878,488	2,889,722
ACRISURE LLC / FIN INC	8.13	2/15/2024	17,625,000	17,917,379	18,318,720
ACRISURE LLC / FIN INC	10.13	8/1/2026	575,000	575,000	618,545
ADAMS HOMES INC	7.50	2/15/2025	1,000,000	1,007,479	980,760
ADIENT GLOBAL HOLDINGS	4.88	8/15/2026	18,564,000	16,388,430	15,246,428
ADIENT US LLC	7.00	5/15/2026	15,947,000	16,214,783	16,488,082
ADIENT US LLC	9.00	4/15/2025	9,800,000	10,148,484	10,554,110
ADT SEC CORP	3.50	7/15/2022	18,030,000	17,463,165	17,946,341
ADT SEC CORP	4.13	6/15/2023	16,331,000	15,820,869	16,472,100
ADT SEC CORP	4.88	7/15/2032	14,180,000	11,784,451	12,970,588
ADT SEC CORP	6.25	10/15/2021	15,350,000	15,615,000	15,827,385
ADVANCED DRAINAGE SYSTEM	5.00	9/30/2027	500,000	500,000	503,945
ADVISOR GROUP HOLDINGS I	10.75	8/1/2027	663,000	709,943	659,506
ADVOCATE HEALTH CORP	3.01	6/15/2050	20,000,000	20,000,000	20,747,600
AECOM	5.13	3/15/2027	20,240,000	19,401,882	21,745,249
AECOM	5.88	10/15/2024	12,500,000	12,811,710	13,520,250
AEP TRANSMISSION CO LLC	3.15	9/15/2049	20,500,000	20,353,255	21,744,555
AEP TRANSMISSION CO LLC	3.65	4/1/2050	20,000,000	19,992,860	23,181,200
AERCAP IRELAND CAP/GLOBA	3.88	1/23/2028	18,621,000	18,783,112	16,848,839
AERCAP IRELAND CAP/GLOBA	6.50	7/15/2025	1,175,000	1,170,695	1,228,768
AETNA INC	3.88	8/15/2047	36,205,000	32,396,991	40,734,608
AETNA INC	4.50	5/15/2042	12,425,000	12,723,562	14,674,546
AETNA INC	6.63	6/15/2036	26,378,000	31,617,638	37,160,008
AETNA INC	6.75	12/15/2037	14,046,000	17,112,684	19,968,917

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
AFFILIATED MANAGERS GROU	3.30	6/15/2030	30,000,000	29,987,192	30,625,500
AFLAC INC	3.60	4/1/2030	29,000,000	28,927,044	33,745,560
AG ISSUER LLC	6.25	3/1/2028	9,595,000	9,788,015	9,090,687
AGFC CAPITAL TRUST I	2.97	1/15/2067	250,000	165,230	112,923
AGILENT TECHNOLOGIES INC	2.75	9/15/2029	33,000,000	32,792,142	35,845,590
AHERN RENTALS INC	7.38	5/15/2023	3,025,000	2,118,565	1,370,870
AIR CANADA	7.75	4/15/2021	1,775,000	1,824,828	1,784,443
AIR LEASE CORP	3.00	2/1/2030	39,000,000	38,264,245	36,145,590
AIR LEASE CORP	3.25	10/1/2029	2,750,000	2,724,059	2,603,700
AIR LEASE CORP	3.63	4/1/2027	13,200,000	12,576,200	12,914,616
AIR LEASE CORP	3.63	12/1/2027	19,190,000	18,612,302	18,733,662
AIR LEASE CORP	4.63	10/1/2028	21,700,000	21,830,426	22,222,102
AIR METHODS CORP	0.00	4/22/2024	758,661	708,466	621,943
AIR METHODS CORP	8.00	5/15/2025	2,025,000	1,643,872	1,430,561
AIRCASTLE LTD	4.25	6/15/2026	10,900,000	10,887,054	9,952,790
AKER BP ASA	3.75	1/15/2030	24,500,000	24,547,977	23,232,125
ALASKA AIRLINES 2020 TR	4.80	2/15/2029	15,000,000	15,000,000	15,187,500
ALBERTSONS COS/SAFEWAY	3.50	2/15/2023	1,800,000	1,780,202	1,822,662
ALBERTSONS COS/SAFEWAY	4.63	1/15/2027	23,363,000	23,184,611	23,361,598
ALBERTSONS COS/SAFEWAY	4.88	2/15/2030	13,005,000	13,075,551	13,353,794
ALBERTSONS COS/SAFEWAY	5.75	3/15/2025	25,862,000	24,290,036	26,415,447
ALBERTSONS COS/SAFEWAY	5.88	2/15/2028	19,793,000	20,108,431	20,417,667
ALBERTSONS COS/SAFEWAY	6.63	6/15/2024	21,625,000	21,178,454	22,308,999
ALBERTSONS COS/SAFEWAY	7.50	3/15/2026	3,946,000	4,038,999	4,274,781
ALCOA NEDERLAND HOLDING	6.13	5/15/2028	12,879,000	13,013,175	13,281,855
ALCOA NEDERLAND HOLDING	6.75	9/30/2024	15,526,000	16,159,261	15,926,105
ALCOA NEDERLAND HOLDING	7.00	9/30/2026	10,250,000	10,632,895	10,612,543
ALEXANDRIA REAL ESTATE E	2.75	12/15/2029	10,200,000	10,074,327	10,826,280
ALEXANDRIA REAL ESTATE E	4.00	2/1/2050	28,990,000	29,549,640	35,274,162
ALEXANDRIA REAL ESTATE E	4.85	4/15/2049	8,500,000	8,871,545	11,144,945
ALEXANDRIA REAL ESTATE E	4.90	12/15/2030	20,000,000	19,986,932	25,049,200
ALGECO GLOBAL FINANCE	8.00	2/15/2023	400,000	395,792	383,812
ALGECO SCOTSMAN FIN 2	10.00	8/15/2023	800,000	772,772	671,232
ALLEGHENY TECHNOLOGIES	5.88	12/1/2027	1,025,000	1,028,466	950,606
ALLEGHENY TECHNOLOGIES	7.88	8/15/2023	9,000,000	9,421,165	9,213,480
ALLEGION PLC	3.50	10/1/2029	15,200,000	15,201,042	15,979,608
ALLEGION US HOLDING CO	3.55	10/1/2027	3,700,000	3,719,006	3,882,151
ALLEN MEDIA LLC	0.00	2/10/2027	1,520,947	1,513,342	1,439,835
ALLEN MEDIA LLC/CO ISSR	10.50	2/15/2028	1,275,000	1,263,606	1,169,698
ALLIANCE DATA SYSTEMS CO	4.75	12/15/2024	700,000	700,000	629,160
ALLIANT HOLD / CO ISSUER	6.75	10/15/2027	3,565,000	3,565,000	3,539,582
ALLIED UNIVERSAL	6.63	7/15/2026	29,722,000	30,975,991	31,191,158
ALLIED UNIVERSAL	9.75	7/15/2027	3,475,000	3,414,113	3,661,017
ALLISON TRANSMISSION INC	5.00	10/1/2024	20,470,000	20,229,206	20,556,179
ALLISON TRANSMISSION INC	5.88	6/1/2029	13,118,000	13,289,071	13,649,541
ALLSTATE CORP	3.85	8/10/2049	13,700,000	14,084,736	16,526,447
ALLY FINANCIAL INC	5.75	11/20/2025	21,445,000	22,072,490	22,941,432

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
ALLY FINANCIAL INC	8.00	11/1/2031	19,269,000	25,889,833	24,891,067
ALPINE FIN MERGER SUB LLC	0.00	7/12/2024	432,614	426,733	410,715
ALTERA INFRA/TEEKAY OFC	8.50	7/15/2023	11,400,000	11,365,247	10,106,898
ALTICE FINANCING SA	5.00	1/15/2028	1,575,000	1,586,160	1,566,621
ALTICE FINANCING SA	7.50	5/15/2026	700,000	717,561	733,985
ALTICE FRANCE HOLDING SA	6.00	2/15/2028	4,370,000	4,315,242	4,131,092
ALTICE FRANCE HOLDING SA	10.50	5/15/2027	4,667,000	5,100,163	5,158,388
ALTICE FRANCE SA	0.00	8/14/2026	966,926	942,752	927,726
ALTICE FRANCE SA	5.50	1/15/2028	1,350,000	1,351,642	1,364,283
ALTICE FRANCE SA	7.38	5/1/2026	1,300,000	1,301,660	1,353,508
ALTICE FRANCE SA	8.13	2/1/2027	3,500,000	3,470,327	3,835,545
ALTRA INDL MOTION CORP	0.00	10/1/2025	0	0	0
AMAZON.COM INC	3.88	8/22/2037	44,100,000	44,955,024	54,136,719
AMAZON.COM INC	4.05	8/22/2047	33,300,000	34,205,198	43,305,984
AMAZON.COM INC	4.25	8/22/2057	42,200,000	44,702,447	56,150,898
AMAZON.COM INC	4.95	12/5/2044	6,500,000	7,590,707	9,193,080
AMBAC ASSURANCE CORP	5.10	12/31/2099	1,077	0	1,443
AMBAC LSNI LLC	6.45	2/12/2023	147,322	71,790	145,630
AMC ENTERTAINMENT HLDGS	6.13	5/15/2027	2,975,000	2,819,331	896,011
AMC ENTERTAINMENT HLDGS	10.50	4/15/2025	3,500,000	3,162,925	2,838,535
AMC ENTERTAINMENT HOLDIN	5.88	11/15/2026	775,000	775,373	247,450
AMC NETWORKS INC	4.75	8/1/2025	13,500,000	13,037,398	13,296,960
AMC NETWORKS INC	5.00	4/1/2024	20,900,000	20,603,300	20,738,025
AMEREN ILLINOIS CO	3.70	12/1/2047	24,900,000	25,010,919	29,007,753
AMEREN ILLINOIS CO	4.15	3/15/2046	6,190,000	6,300,297	7,610,481
AMEREN ILLINOIS CO	4.50	3/15/2049	3,000,000	3,686,435	3,938,610
AMERICA MOVIL SAB DE CV	4.38	7/16/2042	32,000,000	32,724,319	38,989,120
AMERICA MOVIL SAB DE CV	6.13	3/30/2040	23,200,000	28,473,163	33,188,064
AMERICAN AIRLINES GROUP	3.75	3/1/2025	9,300,000	8,655,633	4,209,924
AMERICAN AIRLINES GROUP	5.00	6/1/2022	13,075,000	12,792,169	7,575,132
AMERICAN AIRLINES INC	11.75	7/15/2025	14,200,000	13,762,812	13,447,826
AMERICAN AXLE + MFG INC	6.25	4/1/2025	15,889,000	15,648,117	15,610,466
AMERICAN AXLE + MFG INC	6.50	4/1/2027	482,000	500,234	467,530
AMERICAN CAMPUS CMNTYS	2.85	2/1/2030	17,872,000	17,650,275	17,239,331
AMERICAN CAMPUS CMNTYS	3.63	11/15/2027	6,050,000	6,084,449	6,196,168
AMERICAN CAMPUS CMNTYS	3.88	1/30/2031	10,000,000	9,914,642	10,474,400
AMERICAN FINANCIAL GROUP	5.25	4/2/2030	10,000,000	9,865,889	11,838,400
AMERICAN HOMES 4 RENT	4.25	2/15/2028	2,900,000	3,114,616	3,115,006
AMERICAN HOMES 4 RENT	4.90	2/15/2029	12,400,000	12,690,191	13,858,240
AMERICAN INTL GROUP	3.40	6/30/2030	25,000,000	24,996,795	27,052,250
AMERICAN INTL GROUP	4.25	3/15/2029	26,300,000	26,488,598	30,268,407
AMERICAN INTL GROUP	4.50	7/16/2044	8,229,000	8,080,745	9,472,566
AMERICAN TOWER CORP	2.90	1/15/2030	50,000,000	49,790,405	53,314,000
AMERICAN TOWER CORP	3.10	6/15/2050	27,000,000	26,711,400	26,727,840
AMERICAN TOWER CORP	3.60	1/15/2028	40,200,000	39,844,215	44,660,994
AMERICAN TOWER CORP	3.70	10/15/2049	11,150,000	11,124,406	12,162,197
AMERICAN TOWER CORP	3.80	8/15/2029	24,700,000	24,921,400	27,989,299

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
AMERICAN TOWER CORP	3.95	3/15/2029	39,100,000	39,032,812	44,522,388
AMERICAN WATER CAP CORP	6.59	10/15/2037	52,300,000	56,293,242	77,707,863
AMERICAN WATER CAPITAL C	3.45	5/1/2050	15,000,000	14,969,320	16,946,100
AMERICAN WATER CAPITAL C	3.75	9/1/2047	6,000,000	6,139,179	6,952,200
AMERICAN WATER CAPITAL C	4.15	6/1/2049	30,540,000	31,239,942	37,898,918
AMERICAN WATER CAPITAL C	4.20	9/1/2048	9,125,000	10,388,526	11,384,259
AMERIGAS PART/FIN CORP	5.50	5/20/2025	10,725,000	10,479,661	11,067,557
AMERIGAS PART/FIN CORP	5.63	5/20/2024	10,725,000	10,581,764	11,130,512
AMERIGAS PART/FIN CORP	5.75	5/20/2027	10,500,000	10,037,352	11,126,220
AMERIGAS PART/FIN CORP	5.88	8/20/2026	12,325,000	12,046,384	13,102,215
AMGEN INC	3.38	2/21/2050	60,000,000	61,556,116	66,333,000
AMGEN INC	4.40	5/1/2045	77,750,000	81,795,731	96,376,568
AMGEN INC	4.56	6/15/2048	2,750,000	3,134,458	3,563,890
AMGEN INC	4.66	6/15/2051	28,450,000	29,965,327	37,882,882
AMGEN INC	4.95	10/1/2041	6,250,000	7,476,145	8,130,063
AMGEN INC	5.75	3/15/2040	2,125,000	2,687,125	2,913,885
AMGEN INC	6.38	6/1/2037	1,000,000	1,316,998	1,452,080
AMGEN INC	6.40	2/1/2039	1,000,000	1,323,905	1,471,560
AMKOR TECHNOLOGY INC	6.63	9/15/2027	9,705,000	9,796,955	10,409,777
AMPHENOL CORP	2.80	2/15/2030	6,600,000	6,382,444	7,050,516
AMSTED INDUSTRIES	5.63	7/1/2027	500,000	500,000	515,980
AMWINS GROUP INC	7.75	7/1/2026	9,300,000	10,188,076	9,765,000
ANALOG DEVICES INC	5.30	12/15/2045	5,500,000	6,941,492	7,470,595
ANHEUSER BUSCH CO/INBEV	4.70	2/1/2036	86,300,000	86,564,349	101,298,077
ANHEUSER BUSCH CO/INBEV	4.90	2/1/2046	63,764,000	63,283,932	77,321,502
ANHEUSER BUSCH INBEV FIN	4.00	1/17/2043	14,191,000	14,387,225	15,272,780
ANHEUSER BUSCH INBEV WOR	3.50	6/1/2030	15,000,000	14,969,255	16,865,100
ANHEUSER BUSCH INBEV WOR	4.35	6/1/2040	15,000,000	14,990,664	17,138,100
ANHEUSER BUSCH INBEV WOR	4.38	4/15/2038	23,250,000	22,487,082	26,347,133
ANHEUSER BUSCH INBEV WOR	4.50	6/1/2050	15,000,000	14,988,692	17,821,950
ANHEUSER BUSCH INBEV WOR	4.60	6/1/2060	15,000,000	14,987,476	17,902,050
ANHEUSER BUSCH INBEV WOR	5.45	1/23/2039	44,400,000	46,814,176	56,050,560
ANHEUSER BUSCH INBEV WOR	5.55	1/23/2049	11,750,000	15,353,752	15,603,178
ANHEUSER BUSCH INBEV WOR	5.80	1/23/2059	18,100,000	20,365,144	25,553,580
ANTERO MIDSTREAM PART/FI	5.38	9/15/2024	12,200,000	11,572,674	10,403,672
ANTERO MIDSTREAM PART/FI	5.75	3/1/2027	12,250,000	10,944,908	9,950,798
ANTERO MIDSTREAM PART/FI	5.75	1/15/2028	9,725,000	8,655,623	7,753,159
ANTERO RESOURCES CORP	5.00	3/1/2025	9,075,000	7,910,376	5,386,376
ANTERO RESOURCES CORP	5.13	12/1/2022	14,000,000	12,906,245	10,112,620
ANTERO RESOURCES CORP	5.38	11/1/2021	11,600,000	11,328,318	10,726,984
ANTERO RESOURCES CORP	5.63	6/1/2023	12,450,000	11,310,116	8,044,568
ANTHEM INC	2.88	9/15/2029	29,200,000	28,859,835	31,722,588
ANTHEM INC	3.13	5/15/2050	12,000,000	11,969,917	12,477,120
ANTHEM INC	3.70	9/15/2049	34,625,000	33,434,296	39,291,758
ANTHEM INC	4.38	12/1/2047	17,400,000	17,327,215	21,625,416
ANTHEM INC	4.55	3/1/2048	6,815,000	6,861,100	8,662,615
ANTHEM INC	4.63	5/15/2042	12,220,000	13,375,806	15,264,980

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
AON CORP	3.75	5/2/2029	17,700,000	17,879,659	20,223,843
AON CORP	4.50	12/15/2028	10,200,000	10,240,713	12,096,486
AON PLC	4.60	6/14/2044	29,625,000	33,823,246	36,255,371
AON PLC	4.75	5/15/2045	29,210,000	31,290,916	37,040,617
APACHE CORP	3.25	4/15/2022	275,000	260,875	266,082
APACHE CORP	4.25	1/15/2030	8,825,000	7,857,476	7,633,184
APACHE CORP	4.25	1/15/2044	8,000,000	6,008,919	6,018,640
APACHE CORP	4.38	10/15/2028	13,525,000	12,297,832	11,973,277
APACHE CORP	4.75	4/15/2043	20,525,000	16,379,757	16,475,418
APACHE CORP	5.10	9/1/2040	22,100,000	18,025,565	18,265,871
APACHE CORP	5.25	2/1/2042	225,000	182,353	183,490
APACHE CORP	5.35	7/1/2049	1,050,000	827,297	836,441
APERGY CORPORATION	0.00	5/28/2027	2,100,000	1,984,500	2,063,250
APPLE INC	3.75	9/12/2047	7,500,000	8,491,775	9,179,925
APPLE INC	3.75	11/13/2047	14,700,000	15,777,006	18,006,324
APPLE INC	3.85	5/4/2043	104,000,000	102,220,113	128,341,200
APPLE INC	4.25	2/9/2047	35,000,000	35,933,338	45,591,350
APPLE INC	4.38	5/13/2045	23,280,000	24,851,709	30,754,975
APPLE INC	4.45	5/6/2044	5,580,000	5,938,636	7,442,325
APPLE INC	4.65	2/23/2046	46,250,000	52,660,963	63,588,200
APX GROUP INC	6.75	2/15/2027	8,800,000	8,811,679	8,240,144
APX GROUP INC	7.63	9/1/2023	1,611,000	1,472,315	1,484,311
APX GROUP INC	7.88	12/1/2022	15,618,000	15,481,800	15,532,882
APX GROUP INC	8.50	11/1/2024	1,821,000	1,856,677	1,783,506
ARAMARK SERVICES INC	4.75	6/1/2026	11,430,000	11,228,936	11,100,816
ARAMARK SERVICES INC	5.00	4/1/2025	12,650,000	12,693,064	12,454,052
ARAMARK SERVICES INC	5.00	2/1/2028	22,758,000	22,250,100	21,616,231
ARAMARK SERVICES INC	6.38	5/1/2025	22,397,000	23,112,715	23,125,798
ARCELORMITTAL	4.55	3/11/2026	375,000	369,943	379,793
ARCELORMITTAL	7.25	10/15/2039	600,000	655,086	716,514
ARCHER DANIELS	4.54	3/26/2042	3,000,000	3,581,711	3,836,430
ARCHER DANIELS MIDLAND C	4.02	4/16/2043	3,000,000	3,395,230	3,550,440
ARCHER DANIELS MIDLAND C	4.50	3/15/2049	1,400,000	1,750,609	1,933,596
ARCHER DANIELS MIDLAND C	5.77	3/1/2041	2,000,000	2,700,498	2,957,400
ARCHROCK PARTNERS LP/FIN	6.25	4/1/2028	12,199,000	12,234,401	11,232,961
ARCHROCK PARTNERS LP/FIN	6.88	4/1/2027	9,125,000	9,280,161	8,607,795
ARCONIC CORP	6.00	5/15/2025	1,375,000	1,375,000	1,421,668
ARCONIC CORP	6.13	2/15/2028	12,896,000	13,314,406	12,945,779
ARD FINANCE SA	6.50	6/30/2027	3,200,000	3,206,945	3,168,352
ARDAGH PKG FIN/HLDGS USA	4.13	8/15/2026	10,456,000	10,367,415	10,283,162
ARDAGH PKG FIN/HLDGS USA	5.25	4/30/2025	9,124,000	9,276,399	9,374,545
ARDAGH PKG FIN/HLDGS USA	5.25	8/15/2027	27,970,000	27,549,252	27,455,605
ARDAGH PKG FIN/HLDGS USA	6.00	2/15/2025	20,952,000	21,217,145	21,454,010
ARDONAGH MIDCO THREE PLC	8.63	7/15/2023	1,400,000	1,347,781	1,458,894
ARROW BIDCO LLC	9.50	3/15/2024	350,000	347,483	271,751
ARUBA INVESTMENTS INC	8.75	2/15/2023	2,374,000	2,418,528	2,397,241
ASBURY AUTOMOTIVE GROUP	4.50	3/1/2028	463,000	463,000	449,203

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
ASCEND LEARNING LLC	6.88	8/1/2025	4,789,000	4,833,817	4,831,960
ASCENT RESOURCES/ARU FIN	7.00	11/1/2026	150,000	92,293	97,325
ASCENT RESOURCES/ARU FIN	10.00	4/1/2022	2,825,000	2,160,928	2,428,624
ASGN INCORPORATED	4.63	5/15/2028	13,276,000	13,316,585	12,957,774
ASHTREAD CAPITAL INC	4.00	5/1/2028	6,000,000	6,000,000	5,972,160
ASHTREAD CAPITAL INC	4.25	11/1/2029	5,000,000	5,000,000	5,002,100
ASHTREAD CAPITAL INC	4.38	8/15/2027	5,500,000	5,522,234	5,644,870
ASHTON WOODS USA/FINANCE	6.63	1/15/2028	700,000	700,000	688,681
ASHTON WOODS USA/FINANCE	6.75	8/1/2025	525,000	521,946	522,638
ASP UNIFRAX HLDGS INC	0.00	12/12/2025	320,125	318,524	263,588
ASSURANT INC	3.70	2/22/2030	33,500,000	33,472,001	33,277,895
ASSUREDPARTNERS INC	7.00	8/15/2025	525,000	525,000	524,307
ASTRAZENECA PLC	6.45	9/15/2037	5,000,000	6,888,130	7,515,500
ASURION LLC	0.00	8/4/2022	1,391,366	1,391,366	1,351,949
ASURION LLC	0.00	11/3/2023	660,566	660,566	637,995
AT+T INC	3.50	6/1/2041	30,000,000	29,907,412	31,437,300
AT+T INC	4.35	6/15/2045	37,883,000	37,422,963	42,399,790
AT+T INC	4.75	5/15/2046	1,627,000	1,547,474	1,916,931
AT+T INC	4.80	6/15/2044	36,300,000	34,992,611	42,050,646
AT+T INC	4.90	8/15/2037	47,800,000	48,303,986	57,486,670
AT+T INC	5.65	2/15/2047	23,800,000	24,194,457	31,442,894
AT+T INC	6.00	8/15/2040	40,200,000	43,001,732	53,851,920
ATHENE HOLDING LTD	6.15	4/3/2030	10,000,000	9,981,268	11,487,800
ATOTECH ALPHA 2 BV	8.75	6/1/2023	2,199,000	2,188,510	2,196,141
ATOTECH ALPHA 3 BV	6.25	2/1/2025	3,318,000	3,331,134	3,284,455
AUTONATION INC	4.75	6/1/2030	5,000,000	4,974,235	5,428,200
AUTOZONE INC	4.00	4/15/2030	30,000,000	29,980,410	34,859,100
AVALONBAY COMMUNITIES	4.35	4/15/2048	12,800,000	13,475,555	16,661,632
AVANGRID INC	3.80	6/1/2029	9,700,000	9,752,808	11,235,025
AVANTOR INC	6.00	10/1/2024	30,934,000	30,993,559	32,245,602
AVANTOR INC	9.00	10/1/2025	41,014,000	42,099,225	44,063,801
AVIS BUDGET CAR/FINANCE	5.25	3/15/2025	475,000	321,819	369,227
AVIS BUDGET CAR/FINANCE	5.75	7/15/2027	2,134,000	2,199,189	1,630,397
AVIS BUDGET CAR/FINANCE	6.38	4/1/2024	1,169,000	1,101,202	961,292
AVIS BUDGET CAR/FINANCE	10.50	5/15/2025	8,200,000	8,461,850	9,161,286
AVON INTERNATIONAL CAPIT	6.50	8/15/2022	500,000	500,000	494,635
AXA SA	8.60	12/15/2030	5,500,000	6,313,547	7,957,400
AXALTA COAT/DUTCH HLD BV	4.75	6/15/2027	8,948,000	9,088,294	8,995,514
AXALTA COATING SYSTEMS	4.88	8/15/2024	12,420,000	12,354,832	12,571,772
B+G FOODS INC	5.25	4/1/2025	15,950,000	15,435,410	16,042,829
B+G FOODS INC	5.25	9/15/2027	10,355,000	10,483,316	10,364,216
BAC CAPITAL TRUST XIII	4.00	12/29/2049	810,000	536,229	701,071
BAE SYSTEMS PLC	3.40	4/15/2030	20,000,000	19,862,206	21,793,200
BAE SYSTEMS PLC	5.80	10/11/2041	46,800,000	49,910,505	63,076,572
BAFFINLAND IRON CORP/LP	8.75	7/15/2026	10,275,000	10,223,350	10,215,919
BALL CORP	4.00	11/15/2023	7,600,000	7,494,590	7,910,156
BALL CORP	4.88	3/15/2026	12,600,000	12,586,445	13,659,030

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
BALL CORP	5.25	7/1/2025	16,100,000	16,429,863	17,641,736
BALTIMORE GAS + ELECTRIC	2.90	6/15/2050	20,000,000	19,806,061	20,423,200
BANCO SANTANDER SA	4.25	4/11/2027	29,800,000	30,816,454	32,951,350
BANFF MERGER SUB INC	9.75	9/1/2026	2,573,000	2,483,053	2,591,963
BANK OF AMERICA CORP	2.68	6/19/2041	32,500,000	32,500,000	33,338,175
BANK OF AMERICA CORP	2.88	10/22/2030	31,800,000	31,831,856	34,346,544
BANK OF AMERICA CORP	3.42	12/20/2028	22,811,000	21,900,033	25,400,505
BANK OF AMERICA CORP	3.97	2/7/2030	15,500,000	15,549,194	17,981,240
BANK OF AMERICA CORP	4.08	4/23/2040	18,600,000	18,927,672	22,591,188
BANK OF AMERICA CORP	4.18	11/25/2027	20,700,000	20,259,468	23,665,689
BANK OF AMERICA CORP	4.24	4/24/2038	14,800,000	16,615,764	18,052,448
BANK OF AMERICA CORP	4.27	7/23/2029	6,800,000	6,859,301	7,994,488
BANK OF AMERICA CORP	4.75	4/21/2045	1,750,000	2,140,754	2,300,008
BANK OF AMERICA CORP	5.00	1/21/2044	32,000,000	34,963,475	43,777,280
BANK OF AMERICA CORP	5.88	2/7/2042	28,600,000	30,643,518	42,321,994
BANK OF AMERICA CORP	6.11	1/29/2037	3,700,000	4,757,187	5,251,780
BANK OF AMERICA CORP	7.75	5/14/2038	35,000,000	37,211,870	57,632,400
BANK OF AMERICA NA	1.31	7/26/2021	50,000,000	50,000,000	50,022,000
BANK OF MONTREAL	1.65	7/13/2020	100,000,000	100,000,000	100,044,000
BARCLAYS PLC	4.34	1/10/2028	32,100,000	32,317,465	35,645,445
BARCLAYS PLC	4.84	5/9/2028	23,800,000	23,474,354	26,082,420
BARCLAYS PLC	4.95	1/10/2047	5,750,000	6,614,475	7,522,553
BARCLAYS PLC	5.20	5/12/2026	5,000,000	5,250,593	5,595,950
BARCLAYS PLC	7.75	12/31/2099	1,300,000	1,287,853	1,323,621
BARCLAYS PLC	8.00	12/31/2099	1,925,000	1,675,739	2,002,905
BAUSCH HEALTH AMERICAS	8.50	1/31/2027	18,345,000	18,887,802	19,561,457
BAUSCH HEALTH COS INC	5.00	1/30/2028	10,915,000	10,965,050	10,285,095
BAUSCH HEALTH COS INC	5.25	1/30/2030	10,040,000	10,141,571	9,514,105
BAUSCH HEALTH COS INC	5.50	3/1/2023	875,000	877,947	875,000
BAUSCH HEALTH COS INC	5.50	11/1/2025	50,136,000	49,617,757	51,374,861
BAUSCH HEALTH COS INC	5.75	8/15/2027	1,865,000	1,979,996	1,975,949
BAUSCH HEALTH COS INC	5.88	5/15/2023	1,899,000	1,876,368	1,899,000
BAUSCH HEALTH COS INC	6.13	4/15/2025	88,058,000	84,166,234	89,219,485
BAUSCH HEALTH COS INC	6.25	2/15/2029	6,873,000	6,871,797	6,911,283
BAUSCH HEALTH COS INC	7.00	3/15/2024	11,256,000	11,380,040	11,672,585
BAUSCH HEALTH COS INC	7.00	1/15/2028	13,630,000	13,621,283	14,056,074
BAUSCH HEALTH COS INC	7.25	5/30/2029	1,575,000	1,503,670	1,653,577
BAUSCH HEALTH COS INC	9.00	12/15/2025	6,550,000	6,779,720	7,063,651
BAYCARE HEALTH SYSTEM	3.83	11/15/2050	10,000,000	10,000,000	12,224,900
BAYTEX ENERGY CORP	8.75	4/1/2027	8,050,000	7,641,488	4,004,956
BCD ACQUISITION INC	9.63	9/15/2023	12,075,000	12,550,816	11,662,518
BEACON ROOFING SUPPLY IN	4.50	11/15/2026	2,553,000	2,499,976	2,494,051
BEACON ROOFING SUPPLY IN	4.88	11/1/2025	29,208,000	27,729,751	26,124,804
BEAZER HOMES USA	6.75	3/15/2025	1,475,000	1,472,489	1,465,560
BEAZER HOMES USA	7.25	10/15/2029	1,025,000	1,025,000	994,373
BECTON DICKINSON AND CO	4.67	6/6/2047	2,750,000	3,299,272	3,394,105
BECTON DICKINSON AND CO	4.69	12/15/2044	2,750,000	3,236,882	3,382,445

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
BED BATH + BEYOND INC	3.75	8/1/2024	10,000,000	9,343,291	8,271,700
BED BATH + BEYOND INC	5.17	8/1/2044	13,550,000	9,529,417	7,661,170
BELLRING BRANDS LLC	0.00	10/21/2024	1,616,550	1,584,219	1,605,444
BERKLEY (WR) CORPORATION	4.00	5/12/2050	15,000,000	14,927,582	16,394,700
BERKSHIRE HATHAWAY FIN	4.20	8/15/2048	123,200,000	126,987,944	155,931,776
BERKSHIRE HATHAWAY FIN	4.25	1/15/2049	19,700,000	21,204,375	25,240,822
BERKSHIRE HATHAWAY FIN	4.40	5/15/2042	7,000,000	8,251,858	9,158,450
BERKSHIRE HATHAWAY INC	4.50	2/11/2043	5,800,000	6,373,035	7,683,666
BERRY GLOBAL INC	4.50	2/15/2026	13,002,000	12,584,647	12,815,551
BERRY GLOBAL INC	5.13	7/15/2023	10,640,000	10,634,067	10,703,414
BERRY GLOBAL INC	5.50	5/15/2022	1,581,000	1,533,119	1,582,960
BERRY GLOBAL INC	5.63	7/15/2027	7,900,000	8,004,693	8,130,206
BIG RIVER STEEL LLC	0.00	8/23/2023	2,154,756	2,146,626	2,020,084
BIG RIVER STEEL/BRS FIN	7.25	9/1/2025	12,579,000	12,941,686	11,747,528
BIOGEN INC	3.15	5/1/2050	40,000,000	39,671,469	38,586,000
BIOGEN INC	5.20	9/15/2045	42,725,000	48,369,054	55,482,258
BLOCK FINANCIAL LLC	5.25	10/1/2025	15,200,000	15,193,398	16,440,472
BLUE CUBE SPINCO LLC	9.75	10/15/2023	8,700,000	9,406,533	8,970,744
BLUE CUBE SPINCO LLC	10.00	10/15/2025	5,600,000	6,151,038	5,835,536
BLUE RACER MID LLC/FINAN	6.13	11/15/2022	16,365,000	16,494,298	16,275,156
BMC EAST LLC	5.50	10/1/2024	2,615,000	2,569,102	2,635,005
BOEING CO	3.20	3/1/2029	22,000,000	19,390,504	21,729,400
BOEING CO	3.25	2/1/2035	18,000,000	17,973,416	16,214,400
BOEING CO	3.55	3/1/2038	11,400,000	11,133,002	9,982,866
BOEING CO	3.90	5/1/2049	10,000,000	7,918,902	9,026,100
BOEING CO	4.88	5/1/2025	20,000,000	20,000,000	21,803,000
BOEING CO	5.15	5/1/2030	45,000,000	48,500,174	50,142,600
BOEING CO	5.71	5/1/2040	19,000,000	20,522,178	21,490,330
BOEING CO	5.81	5/1/2050	20,888,000	22,833,698	24,725,126
BOEING CO	5.88	2/15/2040	7,010,000	8,474,328	8,119,613
BOEING CO	5.93	5/1/2060	5,000,000	5,638,801	5,896,300
BOEING CO	8.75	9/15/2031	25,300,000	28,844,710	36,301,958
BOMBARDIER INC	6.00	10/15/2022	6,220,000	6,192,573	4,393,248
BOMBARDIER INC	6.13	1/15/2023	975,000	953,947	667,690
BOMBARDIER INC	7.50	12/1/2024	600,000	600,000	389,814
BOMBARDIER INC	7.50	3/15/2025	3,005,000	3,046,711	1,958,058
BOMBARDIER INC	7.88	4/15/2027	3,489,000	3,204,339	2,274,200
BOMBARDIER INC	8.75	12/1/2021	1,788,000	1,625,722	1,455,378
BOOKING HOLDINGS INC	4.63	4/13/2030	20,000,000	19,967,518	23,552,800
BORGWARNER INC	2.65	7/1/2027	15,000,000	14,958,047	15,382,350
BOSTON GENERATING LLC	0.00	6/20/2021	444,326	444,326	4,443
BOSTON SCIENTIFIC CORP	4.00	3/1/2029	6,000,000	5,982,798	6,868,260
BOSTON SCIENTIFIC CORP	4.55	3/1/2039	30,000,000	30,650,865	36,705,900
BOSTON SCIENTIFIC CORP	4.70	3/1/2049	5,750,000	7,000,838	7,326,075
BOSTON SCIENTIFIC CORP	7.00	11/15/2035	3,000,000	4,171,326	4,270,920
BOSTON SCIENTIFIC CORP	7.38	1/15/2040	11,750,000	12,939,024	18,043,300
BOXER PARENT CO INC	7.13	10/2/2025	10,828,000	11,305,994	11,352,508

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
BOXER PARENT CO INC	9.13	3/1/2026	1,139,000	1,139,000	1,175,915
BOYD GAMING CORP	0.00	9/15/2023	705,753	701,331	661,862
BOYD GAMING CORP	4.75	12/1/2027	16,771,000	16,594,503	14,424,066
BOYD GAMING CORP	6.00	8/15/2026	19,003,000	18,808,018	17,854,459
BOYD GAMING CORP	6.38	4/1/2026	19,319,000	19,585,347	18,359,812
BOYD GAMING CORP	8.63	6/1/2025	8,392,000	8,719,866	8,773,416
BOYNE USA INC	7.25	5/1/2025	10,121,000	10,683,972	10,601,849
BP CAP MARKETS AMERICA	3.00	2/24/2050	10,000,000	9,836,334	9,799,200
BP CAP MARKETS AMERICA	3.63	4/6/2030	15,000,000	15,000,000	17,014,500
BP CAP MARKETS AMERICA	3.94	9/21/2028	15,500,000	15,545,968	17,745,795
BP CAP MARKETS AMERICA	4.23	11/6/2028	40,500,000	41,321,283	47,202,345
BRAND INDUSTRIAL SERVICE	8.50	7/15/2025	1,950,000	1,872,192	1,760,304
BRIGHOUSE FINANCIAL IN	3.70	6/22/2027	4,500,000	4,243,280	4,585,905
BRINK S CO/THE	4.63	10/15/2027	11,500,000	10,986,424	11,025,625
BRINK S CO/THE	5.50	7/15/2025	500,000	500,000	509,000
BRISTOL MYERS SQUIBB CO	4.13	6/15/2039	20,000,000	21,421,582	25,422,600
BRISTOL MYERS SQUIBB CO	4.25	10/26/2049	13,300,000	14,307,201	17,533,789
BRISTOL MYERS SQUIBB CO	4.35	11/15/2047	1,650,000	1,948,067	2,171,433
BRISTOL MYERS SQUIBB CO	5.00	8/15/2045	25,950,000	32,949,077	36,516,840
BRITISH TELECOMMUNICATIO	5.13	12/4/2028	1,977,000	1,984,335	2,442,841
BRITISH TELECOMMUNICATIO	9.63	12/15/2030	17,200,000	20,433,339	28,043,912
BRIXMOR OPERATING PART	4.05	7/1/2030	10,000,000	9,977,728	10,226,000
BROADCOM CRP / CAYMN FI	3.50	1/15/2028	9,200,000	9,065,484	9,731,576
BROADCOM CRP / CAYMN FI	3.88	1/15/2027	18,500,000	18,516,844	19,981,110
BROADCOM INC	4.30	11/15/2032	15,000,000	14,981,323	16,557,750
BROADCOM INC	4.75	4/15/2029	20,100,000	20,086,895	22,811,892
BROADRIDGE FINANCIAL SOL	2.90	12/1/2029	25,000,000	24,933,229	26,722,250
BROOKFIELD FINANCE INC	3.90	1/25/2028	3,700,000	3,830,165	4,047,837
BROOKFIELD FINANCE INC	4.35	4/15/2030	10,000,000	9,990,520	11,343,800
BROOKFIELD FINANCE INC	4.85	3/29/2029	38,745,000	39,319,151	45,549,009
BROOKFIELD PPTY REIT INC	5.75	5/15/2026	17,923,000	17,908,556	15,142,426
BROOKFIELD RESID PROPERT	4.88	2/15/2030	8,775,000	8,780,961	7,319,228
BROOKFIELD RESID PROPERT	6.25	9/15/2027	9,800,000	9,804,512	9,366,056
BROWN FORMAN CORP	4.50	7/15/2045	7,748,000	8,471,046	9,631,926
BRUIN E+P PARTNERS LLC	8.88	8/1/2023	11,300,000	11,007,187	226,226
BUCKEYE PARTNERS LP	3.95	12/1/2026	10,550,000	9,871,035	9,954,031
BUCKEYE PARTNERS LP	4.13	3/1/2025	9,083,000	8,984,398	8,705,783
BUCKEYE PARTNERS LP	4.15	7/1/2023	8,570,000	8,572,037	8,348,123
BUCKEYE PARTNERS LP	4.35	10/15/2024	644,000	556,534	613,230
BUCKEYE PARTNERS LP	4.50	3/1/2028	7,750,000	7,787,917	7,235,633
BUFFALO THUNDER DEV AUTH	11.00	12/9/2022	986,754	920,273	494,610
BUILDERS FIRSTSOURCE INC	5.00	3/1/2030	10,935,000	11,216,309	10,302,957
BUILDERS FIRSTSOURCE INC	6.75	6/1/2027	15,200,000	15,565,053	15,559,936
BUNGE LTD FINANCE CORP	3.75	9/25/2027	9,200,000	9,378,419	9,630,560
BURLINGTN NORTH SANTA FE	4.15	4/1/2045	39,538,000	39,528,202	48,841,687
BURLINGTN NORTH SANTA FE	4.55	9/1/2044	10,000,000	10,935,662	12,931,200
BURLINGTN NORTH SANTA FE	4.70	9/1/2045	33,000,000	33,584,849	43,709,490

CalPERS 2019-2020 Annual Investment Report
Corporate Bonds

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
BURLINGTN NORTH SANTA FE	4.90	4/1/2044	17,900,000	19,630,253	24,365,480
BURLINGTN NORTH SANTA FE	6.15	5/1/2037	2,500,000	3,474,900	3,682,825
BURLINGTON COAT FACTORY	6.25	4/15/2025	878,000	879,587	915,245
BURLINGTON RESOURCES LLC	7.20	8/15/2031	30,500,000	32,159,221	43,701,010
BWAY HLDG CO	0.00	4/3/2024	554,085	551,315	496,139
BWX TECHNOLOGIES INC	4.13	6/30/2028	2,097,000	2,097,000	2,091,527
BWX TECHNOLOGIES INC	5.38	7/15/2026	1,514,000	1,552,070	1,566,854
CADILLAC FAIRVIEW PRP TR	4.13	2/1/2029	8,700,000	8,739,380	9,543,900
CAESARS RESORT / FINCO	5.25	10/15/2025	22,171,000	21,282,442	19,293,426
CALATLANTIC GROUP INC	6.25	12/15/2021	351,000	363,135	354,935
CALIFORNIA RESOURCES CORP	0.00	12/31/2022	1,950,000	1,921,339	665,438
CALLON PETROLEUM CO	6.13	10/1/2024	3,475,000	2,784,247	1,301,422
CALLON PETROLEUM CO	6.25	4/15/2023	2,225,000	1,099,811	846,435
CALLON PETROLEUM CO	6.38	7/1/2026	5,226,000	4,808,403	1,733,673
CALLON PETROLEUM CO	8.25	7/15/2025	175,000	171,141	63,793
CALPERS MARINER FIXED FUND LLC	0.00	12/31/2030	2,282	2,282	0
CALPINE CORP	4.50	2/15/2028	23,308,000	23,425,749	22,888,689
CALPINE CORP	5.13	3/15/2028	28,838,000	28,959,984	28,228,653
CALPINE CORP	5.25	6/1/2026	27,605,000	26,688,086	27,878,013
CALPINE CORP	5.50	2/1/2024	12,346,000	11,710,420	12,372,544
CALPINE CORP	5.75	1/15/2025	17,941,000	16,806,605	18,106,775
CALUMET SPECIALTY PROD	11.00	4/15/2025	8,200,000	8,210,666	7,908,736
CAMELOT FINANCE SA	4.50	11/1/2026	14,373,000	14,571,933	14,373,000
CAMPBELL SOUP CO	4.80	3/15/2048	9,450,000	9,437,733	12,390,368
CANADIAN IMP BK COMM NY	0.43	8/21/2020	25,000,000	25,000,000	24,998,750
CANADIAN NATL RAILWAY	2.45	5/1/2050	10,000,000	9,788,285	9,687,100
CANADIAN NATL RAILWAY	4.45	1/20/2049	22,300,000	23,012,744	29,619,083
CANADIAN NATL RESOURCES	2.95	7/15/2030	20,000,000	19,991,017	19,923,400
CANADIAN NATL RESOURCES	6.25	3/15/2038	9,000,000	9,308,728	10,673,550
CANADIAN NATL RESOURCES	6.75	2/1/2039	16,300,000	17,081,453	19,824,712
CARDTRONICS INC / USA	5.50	5/1/2025	425,000	425,000	411,239
CARGO AIRCRAFT MANAGEMEN	4.75	2/1/2028	9,150,000	9,268,554	9,086,774
CARLISLE COS INC	2.75	3/1/2030	10,000,000	9,879,822	10,289,900
CARLSON TRAVEL INC	6.75	12/15/2023	300,000	298,423	195,570
CARLSON TRAVEL INC	9.50	12/15/2024	600,000	600,000	270,018
CARNIVAL CORP	3.95	10/15/2020	400,000	393,018	394,568
CARNIVAL CORP	11.50	4/1/2023	1,125,000	1,154,974	1,220,546
CARRIER GLOBAL CORP	2.49	2/15/2027	10,000,000	10,000,000	10,178,300
CARRIER GLOBAL CORP	2.72	2/15/2030	30,000,000	29,997,682	30,062,700
CARRIER GLOBAL CORP	3.38	4/5/2040	25,000,000	24,999,017	24,338,500
CARRIER GLOBAL CORP	3.58	4/5/2050	40,000,000	39,998,418	39,053,600
CASCADES INC	5.75	7/15/2023	825,000	825,000	831,278
CASCADES INC/USA INC	5.38	1/15/2028	425,000	426,913	433,317
CASTLE US HOLDING CORP	9.50	2/15/2028	2,400,000	2,400,000	2,223,888
CATALENT PHARMA SOLUTION	4.88	1/15/2026	1,026,000	1,027,300	1,046,233
CATALENT PHARMA SOLUTION	5.00	7/15/2027	11,389,000	11,610,173	11,829,754
CB144A APPCION ESC	9.00	6/1/2025	1,975,000	1,719,891	79,000

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CCL INDUSTRIES INC	3.05	6/1/2030	25,000,000	24,938,509	25,500,750
CCO HLDGS LLC/CAP CORP	4.50	8/15/2030	8,376,000	8,462,296	8,542,599
CCO HLDGS LLC/CAP CORP	4.50	5/1/2032	2,375,000	2,367,058	2,406,754
CCO HLDGS LLC/CAP CORP	4.75	3/1/2030	48,437,000	49,212,267	49,589,801
CCO HLDGS LLC/CAP CORP	5.00	2/1/2028	45,388,000	43,503,695	46,873,549
CCO HLDGS LLC/CAP CORP	5.13	5/1/2027	66,293,000	64,327,856	68,581,434
CCO HLDGS LLC/CAP CORP	5.38	5/1/2025	1,362,000	1,394,137	1,398,638
CCO HLDGS LLC/CAP CORP	5.38	6/1/2029	11,367,000	11,865,293	11,991,389
CCO HLDGS LLC/CAP CORP	5.50	5/1/2026	4,031,000	4,063,972	4,174,544
CCO HLDGS LLC/CAP CORP	5.75	2/15/2026	46,270,000	46,301,142	47,967,184
CD+R SMOKEY BUYER INC	6.75	7/15/2025	3,805,000	3,910,211	3,961,766
CDK GLOBAL INC	4.88	6/1/2027	12,748,000	12,387,187	13,074,859
CDK GLOBAL INC	5.00	10/15/2024	7,600,000	7,654,013	8,104,260
CDK GLOBAL INC	5.25	5/15/2029	11,350,000	11,525,618	11,745,321
CDK GLOBAL INC	5.88	6/15/2026	8,600,000	8,720,234	8,950,450
CDW LLC/CDW FINANCE	4.13	5/1/2025	1,075,000	1,075,000	1,081,805
CDW LLC/CDW FINANCE	4.25	4/1/2028	9,500,000	9,641,349	9,653,330
CDW LLC/CDW FINANCE	5.00	9/1/2025	12,165,000	12,119,620	12,510,364
CDW LLC/CDW FINANCE	5.50	12/1/2024	10,315,000	10,523,486	11,249,333
CEDAR FAIR LP	5.25	7/15/2029	9,000,000	9,083,911	8,140,230
CEDAR FAIR LP/CANADA S W	5.38	6/1/2024	1,877,000	1,891,971	1,776,825
CEDAR FAIR/CAN/MAGNUM/MI	5.38	4/15/2027	11,050,000	10,859,121	9,889,750
CEDAR FAIR/CAN/MAGNUM/MI	5.50	5/1/2025	16,027,000	16,023,677	16,092,711
CEMEX SAB DE CV	5.45	11/19/2029	2,400,000	2,400,000	2,219,664
CEMEX SAB DE CV	7.38	6/5/2027	600,000	600,000	609,054
CENGAGE LEARNING ACQUISITIONS	0.00	6/7/2023	1,583,505	1,530,031	1,269,971
CENGAGE LEARNING INC	9.50	6/15/2024	350,000	353,236	240,513
CENOVUS ENERGY INC	3.00	8/15/2022	1,050,000	863,216	1,019,529
CENOVUS ENERGY INC	5.25	6/15/2037	16,255,000	16,324,915	14,109,828
CENOVUS ENERGY INC	5.40	6/15/2047	525,000	356,479	451,668
CENOVUS ENERGY INC	6.75	11/15/2039	1,075,000	770,963	1,054,941
CENTENE CORP	3.38	2/15/2030	2,972,000	2,993,618	2,998,629
CENTENE CORP	4.25	12/15/2027	11,073,000	11,043,364	11,421,800
CENTENE CORP	4.63	12/15/2029	17,096,000	17,264,169	18,037,990
CENTENE CORP	5.25	4/1/2025	18,600,000	19,427,896	19,141,446
CENTENE CORP	5.38	6/1/2026	34,476,000	36,474,090	35,880,207
CENTENE CORP	5.38	8/15/2026	14,172,000	15,010,095	14,745,399
CENTENNIAL RESOURCE PROD	5.38	1/15/2026	2,282,000	2,222,226	1,162,040
CENTENNIAL RESOURCE PROD	6.88	4/1/2027	3,311,000	3,314,197	1,686,325
CENTERPOINT ENER HOUSTON	3.95	3/1/2048	12,300,000	12,388,453	14,959,629
CENTERPOINT ENER HOUSTON	4.25	2/1/2049	16,600,000	16,881,630	21,123,998
CENTERPOINT ENER HOUSTON	4.50	4/1/2044	20,300,000	21,460,466	25,964,512
CENTERPOINT ENERGY RES	4.00	4/1/2028	15,500,000	15,930,174	17,500,740
CENTERPOINT ENERGY RES	4.10	9/1/2047	5,359,000	5,497,470	5,965,156
CENTERPOINT ENERGY RESOU	6.63	11/1/2037	38,500,000	42,003,688	50,938,195
CENTRAL GARDEN + PET CO	6.13	11/15/2023	1,200,000	1,204,523	1,226,820
CENTURY COMMUNITIES	5.88	7/15/2025	1,125,000	1,132,549	1,121,254

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CENTURY COMMUNITIES	6.75	6/1/2027	9,675,000	9,705,735	9,977,634
CENTURYLINK INC	4.00	2/15/2027	1,089,000	1,089,000	1,057,375
CENTURYLINK INC	5.13	12/15/2026	27,397,000	27,705,476	27,358,918
CENTURYLINK INC	5.63	4/1/2025	3,015,000	3,056,528	3,118,384
CENTURYLINK INC	5.80	3/15/2022	30,835,000	30,935,137	31,683,271
CENTURYLINK INC	6.75	12/1/2023	3,757,000	3,837,881	4,042,044
CENTURYLINK INC	6.88	1/15/2028	708,000	714,320	752,328
CENTURYLINK INC	7.50	4/1/2024	21,293,000	21,971,118	23,419,958
CF INDUSTRIES INC	3.45	6/1/2023	12,600,000	12,216,319	12,832,848
CF INDUSTRIES INC	4.95	6/1/2043	11,600,000	9,917,815	12,515,588
CF INDUSTRIES INC	5.15	3/15/2034	18,615,000	17,605,121	19,925,868
CF INDUSTRIES INC	5.38	3/15/2044	11,968,000	11,003,478	12,955,001
CH ROBINSON WORLDWIDE	4.20	4/15/2028	3,000,000	3,012,523	3,406,470
CHAMPIONX CORP	6.38	5/1/2026	3,162,000	3,046,012	2,936,012
CHANGE HEALTH / FIN INC	5.75	3/1/2025	27,281,000	26,848,036	26,934,531
CHAPARRAL ENERGY INC	8.75	7/15/2023	1,600,000	1,471,605	148,640
CHARLES RIVER LABORATORI	4.25	5/1/2028	9,430,000	9,516,153	9,424,436
CHARLES RIVER LABORATORI	5.50	4/1/2026	9,255,000	9,383,478	9,683,414
CHARLES SCHWAB CORP	4.63	3/22/2030	20,000,000	19,972,370	24,991,000
CHARLES SCHWAB CORP	5.38	12/31/2099	22,000,000	22,017,463	23,346,620
CHARTER COMM OPT LLC/CAP	3.70	4/1/2051	20,000,000	19,864,270	19,671,200
CHARTER COMM OPT LLC/CAP	3.75	2/15/2028	5,000,000	4,948,259	5,450,900
CHARTER COMM OPT LLC/CAP	4.20	3/15/2028	36,800,000	35,860,322	41,148,288
CHARTER COMM OPT LLC/CAP	4.80	3/1/2050	17,361,000	18,937,396	19,605,256
CHARTER COMM OPT LLC/CAP	5.05	3/30/2029	5,000,000	5,561,000	5,903,900
CHARTER COMM OPT LLC/CAP	5.13	7/1/2049	4,000,000	4,284,245	4,637,760
CHARTER COMM OPT LLC/CAP	5.75	4/1/2048	21,000,000	24,257,508	26,055,960
CHARTER COMM OPT LLC/CAP	6.38	10/23/2035	61,550,000	65,326,524	81,070,583
CHARTER COMM OPT LLC/CAP	6.48	10/23/2045	95,025,000	100,922,019	126,033,558
CHARTER COMM OPT LLC/CAP	6.83	10/23/2055	7,100,000	8,448,109	9,714,788
CHEMOURS CO	5.38	5/15/2027	10,356,000	9,919,577	9,383,986
CHEMOURS CO	6.63	5/15/2023	14,485,000	14,709,941	13,864,607
CHEMOURS CO	7.00	5/15/2025	18,216,000	18,464,481	17,407,392
CHENIERE CORP CHRISTI HD	3.70	11/15/2029	20,400,000	20,398,210	20,853,288
CHENIERE CORP CHRISTI HD	5.13	6/30/2027	21,919,000	24,008,916	24,086,132
CHENIERE ENERGY INC	4.88	5/28/2021	29,173,000	29,314,276	29,626,932
CHENIERE ENERGY PARTNERS	5.25	10/1/2025	28,045,000	27,785,563	27,945,721
CHENIERE ENERGY PARTNERS	5.63	10/1/2026	19,163,000	19,152,801	19,019,086
CHESAPEAKE ENERGY CORP	5.75	3/15/2023	475,000	439,121	13,998
CHESAPEAKE ENERGY CORP	6.63	8/15/2020	50,000	31,374	1,517
CHESAPEAKE ENERGY CORP	6.88	11/15/2020	1,563,000	1,437,968	39,731
CHESAPEAKE ENERGY CORP	8.00	1/15/2025	1,685,000	1,421,164	37,255
CHESAPEAKE ENERGY CORP	11.50	1/1/2025	31,668,000	38,126,335	3,315,323
CHOBANI LLC/FINANCE CORP	7.50	4/15/2025	1,562,000	1,485,635	1,519,842
CHS/COMMUNITY HEALTH SYS	6.25	3/31/2023	52,388,000	50,495,720	49,307,586
CHS/COMMUNITY HEALTH SYS	6.63	2/15/2025	27,700,000	28,116,931	26,414,997
CHS/COMMUNITY HEALTH SYS	6.88	2/1/2022	1,353,000	1,130,664	1,091,695

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CHS/COMMUNITY HEALTH SYS	6.88	4/1/2028	1,027,000	636,086	405,644
CHS/COMMUNITY HEALTH SYS	8.00	3/15/2026	41,796,000	41,230,279	39,513,102
CHS/COMMUNITY HEALTH SYS	8.00	12/15/2027	4,651,000	4,639,314	4,439,519
CHS/COMMUNITY HEALTH SYS	8.13	6/30/2024	2,074,000	1,779,357	1,402,231
CHS/COMMUNITY HEALTH SYS	8.63	1/15/2024	24,331,000	24,757,201	23,808,127
CHS/COMMUNITY HEALTH SYS	9.88	6/30/2023	400,000	386,867	320,960
CHUBB INA HOLDINGS INC	4.15	3/13/2043	11,700,000	11,782,188	14,528,358
CHURCH + DWIGHT CO INC	3.95	8/1/2047	500,000	523,301	578,725
CHURCHILL DOWNS INC	4.75	1/15/2028	10,300,000	9,742,577	9,878,627
CHURCHILL DOWNS INC	5.50	4/1/2027	11,850,000	11,907,657	11,596,410
CIGNA CORP	4.38	10/15/2028	105,300,000	105,879,748	124,700,472
CIGNA CORP	4.80	8/15/2038	60,325,000	63,814,987	76,431,172
CIGNA CORP	4.80	7/15/2046	12,850,000	14,068,494	16,207,705
CIGNA CORP	4.90	12/15/2048	15,350,000	15,875,275	20,235,138
CIMAREX ENERGY CO	3.90	5/15/2027	10,500,000	10,384,992	10,651,830
CIMAREX ENERGY CO	4.38	6/1/2024	575,000	540,703	607,120
CIMAREX ENERGY CO	4.38	3/15/2029	2,400,000	2,388,965	2,462,544
CIMPRESS PLC	7.00	6/15/2026	300,000	314,804	276,981
CINCINNATI BELL INC	7.00	7/15/2024	11,400,000	10,593,541	11,644,758
CINEMARK USA INC	4.88	6/1/2023	11,625,000	10,044,540	10,067,483
CINEMARK USA INC	5.13	12/15/2022	3,086,000	2,899,888	2,728,363
CIRSA FINANCE INTER	7.88	12/20/2023	1,170,000	1,143,146	1,086,626
CITIGROUP INC	3.67	7/24/2028	19,500,000	19,561,562	21,770,775
CITIGROUP INC	3.98	3/20/2030	11,600,000	12,500,310	13,258,684
CITIGROUP INC	4.08	4/23/2029	35,000,000	34,484,262	39,950,750
CITIGROUP INC	4.40	6/10/2025	18,700,000	18,891,537	20,943,065
CITIGROUP INC	4.45	9/29/2027	49,800,000	51,283,696	56,645,508
CITIGROUP INC	6.13	8/25/2036	2,000,000	2,601,860	2,662,460
CITIGROUP INC	8.13	7/15/2039	26,600,000	29,502,790	46,066,146
CITRIX SYSTEMS INC	3.30	3/1/2030	23,000,000	23,053,176	24,575,270
CITRIX SYSTEMS INC	4.50	12/1/2027	23,467,000	24,764,868	26,944,340
CLARIOS GLOBAL LP	6.75	5/15/2025	7,075,000	7,302,055	7,363,731
CLARIOS GLOBAL LP/US FIN	6.25	5/15/2026	23,138,000	23,396,840	23,855,741
CLARIOS GLOBAL LP/US FIN	8.50	5/15/2027	14,155,000	13,990,571	14,244,460
CLARK EQUIPMENT CO	5.88	6/1/2025	425,000	425,000	434,694
CLEAN HARBORS INC	4.88	7/15/2027	12,075,000	12,342,442	12,405,251
CLEAN HARBORS INC	5.13	7/15/2029	150,000	150,000	155,460
CLEAR CHANNEL OUTDOOR HLDNGS I	0.00	8/21/2026	769,188	765,342	695,346
CLEAR CHANNEL WORLDWIDE	5.13	8/15/2027	32,051,000	32,445,668	30,781,460
CLEAR CHANNEL WORLDWIDE	9.25	2/15/2024	34,763,000	37,121,753	32,248,592
CLEARWATER SEAFOODS INC	6.88	5/1/2025	250,000	250,601	246,500
CLEARWAY ENERGY OP LLC	4.75	3/15/2028	14,698,000	14,721,534	14,972,412
CLEARWAY ENERGY OP LLC	5.00	9/15/2026	3,999,000	3,936,154	4,090,577
CLEARWAY ENERGY OP LLC	5.75	10/15/2025	15,057,000	15,080,559	15,617,422
CLEAVER BROOKS INC	7.88	3/1/2023	125,000	125,000	106,210
CLEVELAND CLIFFS INC	5.75	3/1/2025	1,028,000	975,131	875,558
CLEVELAND CLIFFS INC	5.88	6/1/2027	14,300,000	13,778,563	11,797,357

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CLEVELAND CLIFFS INC	6.75	3/15/2026	10,125,000	9,080,516	9,811,328
CLEVELAND CLIFFS INC	9.88	10/17/2025	14,100,000	13,840,400	14,761,290
CMS ENERGY CORP	4.75	6/1/2050	5,000,000	5,000,000	5,093,250
CNA FINANCIAL CORP	3.45	8/15/2027	4,000,000	4,009,603	4,288,080
CNA FINANCIAL CORP	3.90	5/1/2029	12,400,000	12,472,629	13,596,972
CNO FINANCIAL GROUP INC	5.25	5/30/2029	9,200,000	9,428,382	9,881,260
CNX MIDSTREAM PTR/CNX	6.50	3/15/2026	450,000	413,892	413,924
CNX RESOURCES CORP	5.88	4/15/2022	9,799,000	9,722,424	9,674,749
CNX RESOURCES CORP	7.25	3/14/2027	8,825,000	8,224,474	8,121,559
COCA COLA CO/THE	4.20	3/25/2050	5,000,000	4,968,187	6,609,300
COCA COLA FEMSA SAB CV	2.75	1/22/2030	10,000,000	9,901,731	10,505,200
COEUR MINING INC	5.88	6/1/2024	775,000	763,477	746,465
COLFAX CORP	6.00	2/15/2024	13,333,000	13,634,213	13,752,456
COLFAX CORP	6.38	2/15/2026	560,000	560,000	585,200
COLONIAL ENTERPRISES INC	3.25	5/15/2030	25,000,000	24,987,421	27,188,000
COLT MERGER SUB INC	5.75	7/1/2025	2,834,000	2,836,100	2,849,049
COLT MERGER SUB INC	6.25	7/1/2025	8,165,000	8,160,960	8,136,994
COLT MERGER SUB INC	8.13	7/1/2027	4,395,000	4,390,344	4,248,163
COLUMBIA PIPELINE GROUP	5.80	6/1/2045	53,550,000	55,726,966	65,431,139
COMCAST CORP	2.80	1/15/2051	20,000,000	19,850,057	20,454,200
COMCAST CORP	3.25	11/1/2039	111,600,000	111,431,401	122,922,936
COMCAST CORP	3.45	2/1/2050	30,700,000	30,647,762	34,794,152
COMCAST CORP	3.97	11/1/2047	2,000,000	2,218,153	2,383,380
COMCAST CORP	4.20	8/15/2034	7,953,000	8,128,419	9,821,080
COMCAST CORP	4.25	10/15/2030	10,500,000	10,525,794	12,830,160
COMCAST CORP	4.25	1/15/2033	6,065,000	6,427,366	7,464,377
COMCAST CORP	4.40	8/15/2035	27,500,000	29,550,200	34,182,225
COMCAST CORP	4.60	10/15/2038	22,865,000	23,565,560	29,011,112
COMCAST CORP	4.70	10/15/2048	24,400,000	26,148,541	32,640,612
COMCAST CORP	4.95	10/15/2058	77,500,000	81,858,004	110,579,325
COMMERCIAL METALS CO	5.75	4/15/2026	375,000	375,000	384,416
COMMONWEALTH BANK AUST	3.61	9/12/2034	25,500,000	25,507,794	27,082,275
COMMONWEALTH EDISON CO	3.65	6/15/2046	17,500,000	15,677,564	20,391,350
COMMONWEALTH EDISON CO	3.70	3/1/2045	16,800,000	15,846,394	19,552,008
COMMONWEALTH EDISON CO	3.75	8/15/2047	45,850,000	43,502,252	54,354,258
COMMONWEALTH EDISON CO	4.70	1/15/2044	8,200,000	8,809,644	10,793,086
COMMONWEALTH EDISON CO	5.90	3/15/2036	3,625,000	3,871,896	5,152,648
COMMONWEALTH EDISON CO	6.45	1/15/2038	47,300,000	51,136,936	71,411,175
COMMSCOPE INC	5.50	3/1/2024	21,025,000	21,237,643	21,287,813
COMMSCOPE INC	5.50	6/15/2024	2,292,000	2,132,452	2,334,012
COMMSCOPE INC	6.00	3/1/2026	28,458,000	28,774,514	29,159,490
COMMSCOPE INC	7.13	7/1/2028	2,000,000	2,000,000	1,999,000
COMMSCOPE INC	8.25	3/1/2027	19,203,000	19,678,560	19,724,746
COMMSCOPE TECH LLC	5.00	3/15/2027	15,029,000	13,749,766	13,545,938
COMMSCOPE TECH LLC	6.00	6/15/2025	30,366,000	29,978,324	29,294,991
COMPASS GROUP DIVERSIFIE	8.00	5/1/2026	8,000,000	8,364,814	8,160,160
COMPASS MINERALS INTERNA	4.88	7/15/2024	1,510,000	1,487,439	1,540,215

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
COMPASS MINERALS INTERNA	6.75	12/1/2027	8,325,000	8,551,219	8,885,356
COMSTOCK RESOURCES INC	7.50	5/15/2025	12,575,000	12,181,835	11,392,950
COMSTOCK RESOURCES INC	9.75	8/15/2026	16,175,000	15,355,564	15,118,128
CON EDISON CO OF NY INC	3.95	4/1/2050	25,000,000	24,835,889	30,217,500
CON EDISON CO OF NY INC	4.13	5/15/2049	30,100,000	31,644,513	36,515,213
CON EDISON CO OF NY INC	4.65	12/1/2048	29,100,000	29,944,752	37,281,465
CONAGRA BRANDS INC	4.85	11/1/2028	29,300,000	29,784,519	35,324,080
CONAGRA BRANDS INC	5.30	11/1/2038	38,325,000	42,343,416	50,092,308
CONAGRA BRANDS INC	5.40	11/1/2048	11,050,000	12,054,821	15,255,188
CONNECT FINCO SARL/CONNE	6.75	10/1/2026	2,000,000	2,034,045	1,889,640
CONNECTICUT LIGHT + PWR	4.00	4/1/2048	70,600,000	71,844,069	86,581,722
CONNECTICUT LIGHT + PWR	4.15	6/1/2045	27,500,000	27,382,532	33,763,950
CONNECTICUT LIGHT + PWR	4.30	4/15/2044	15,800,000	15,820,969	19,793,134
CONOCOPHILLIPS COMPANY	5.95	3/15/2046	3,900,000	5,509,698	5,723,952
CONSOLIDATED ENERGY FIN	6.50	5/15/2026	750,000	750,000	636,818
CONSOLIDATED ENERGY FIN S A	0.00	5/7/2025	710,443	708,667	642,951
CONSTELLATION BRANDS INC	2.88	5/1/2030	10,000,000	9,980,454	10,607,800
CONSTELLATION BRANDS INC	3.15	8/1/2029	7,100,000	7,109,193	7,652,167
CONSTELLATION BRANDS INC	3.60	2/15/2028	9,800,000	9,651,756	10,799,894
CONSTELLATION BRANDS INC	3.75	5/1/2050	10,000,000	9,929,023	10,880,400
CONSTELLATION BRANDS INC	4.50	5/9/2047	13,606,000	14,162,914	16,139,573
CONSTELLATION BRANDS INC	4.65	11/15/2028	27,500,000	27,783,899	32,475,300
CONSTELLATION BRANDS INC	5.25	11/15/2048	12,975,000	13,835,870	16,948,853
CONSTELLIUM SE	5.63	6/15/2028	1,907,000	1,908,874	1,871,473
CONSTELLIUM SE	5.75	5/15/2024	1,000,000	1,005,526	995,630
CONSTELLIUM SE	5.88	2/15/2026	13,280,000	13,009,941	13,308,154
CONSTELLIUM SE	6.63	3/1/2025	17,904,000	17,802,097	18,171,307
CONTINENTAL RESOURCES	4.38	1/15/2028	22,900,000	23,046,205	20,218,639
CONTINENTAL RESOURCES	4.50	4/15/2023	1,100,000	907,715	1,052,887
CONTINENTAL RESOURCES	4.90	6/1/2044	2,250,000	2,185,538	1,796,378
CONTINENTAL RESOURCES	5.00	9/15/2022	2,700,000	2,353,162	2,654,694
COOKE OMEGA/ALPHA VESSEL	8.50	12/15/2022	1,425,000	1,415,810	1,417,832
COOPER STANDARD AUTOMOTI	5.63	11/15/2026	675,000	675,000	428,429
COOPERATIEVE RABOBANK UA	3.75	7/21/2026	20,400,000	20,472,622	22,485,288
COOPERATIEVE RABOBANK UA	5.25	8/4/2045	1,000,000	1,270,837	1,371,260
CORE + MAIN LP	6.13	8/15/2025	4,767,000	4,739,021	4,745,787
CORNERSTONE BUILDING	8.00	4/15/2026	12,600,000	12,147,590	12,720,708
CORNERSTONE CHEMICAL CO	6.75	8/15/2024	850,000	831,006	763,343
CORNING INC	3.90	11/15/2049	8,200,000	8,182,861	8,882,486
CORNING INC	5.45	11/15/2079	7,000,000	6,980,601	8,361,780
COSTAR GROUP INC	2.80	7/15/2030	30,000,000	29,976,300	30,274,800
COTT HOLDINGS INC	5.50	4/1/2025	15,773,000	15,522,162	15,882,622
COTY INC	6.50	4/15/2026	13,100,000	12,503,369	11,511,625
CRANE CO	4.20	3/15/2048	7,800,000	7,576,317	7,612,878
CREDIT ACCEPTANC	5.13	12/31/2024	400,000	400,000	387,588
CREDIT ACCEPTANC	6.63	3/15/2026	500,000	500,000	505,370
CREDIT SUISSE GROUP AG	3.87	1/12/2029	11,100,000	11,270,841	12,232,755

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CREDIT SUISSE GROUP AG	4.28	1/9/2028	26,500,000	26,846,387	29,701,465
CREDIT SUISSE GROUP AG	5.10	12/31/2099	200,000	200,000	189,820
CREDIT SUISSE GROUP AG	6.25	12/29/2049	1,815,000	1,691,766	1,893,517
CRESTWOOD MID PARTNER LP	5.63	5/1/2027	10,950,000	10,927,517	9,104,378
CRESTWOOD MID PARTNER LP	5.75	4/1/2025	9,516,000	9,527,479	8,268,833
CRESTWOOD MIDSTREAM PART	6.25	4/1/2023	14,110,000	14,235,726	12,553,949
CROWN AMER/CAP CORP IV	4.50	1/15/2023	16,155,000	16,043,630	16,591,185
CROWN AMER/CAP CORP VI	4.75	2/1/2026	16,990,000	16,454,923	17,365,649
CROWN CASTLE INTL CORP	3.30	7/1/2030	16,000,000	15,871,765	17,598,880
CROWN CASTLE INTL CORP	3.65	9/1/2027	56,700,000	56,919,864	63,064,008
CROWN CASTLE INTL CORP	3.80	2/15/2028	93,900,000	92,465,667	105,571,770
CROWN CASTLE INTL CORP	4.00	3/1/2027	23,000,000	23,345,323	26,151,920
CROWN CASTLE INTL CORP	4.30	2/15/2029	16,100,000	16,469,291	18,664,730
CROWNROCK LP/CROWNROCK F	5.63	10/15/2025	26,331,000	25,741,458	23,612,061
CSC HOLDINGS LLC	4.13	12/1/2030	800,000	800,000	792,920
CSC HOLDINGS LLC	4.63	12/1/2030	600,000	600,000	583,086
CSC HOLDINGS LLC	5.38	7/15/2023	16,850,000	16,836,224	17,087,248
CSC HOLDINGS LLC	5.38	2/1/2028	18,500,000	17,758,328	19,214,840
CSC HOLDINGS LLC	5.50	5/15/2026	39,800,000	39,163,274	40,960,568
CSC HOLDINGS LLC	5.50	4/15/2027	25,090,000	24,456,789	26,073,026
CSC HOLDINGS LLC	5.75	1/15/2030	27,956,000	28,683,638	29,091,293
CSC HOLDINGS LLC	5.88	9/15/2022	25,000	24,191	26,215
CSC HOLDINGS LLC	6.50	2/1/2029	29,198,000	31,174,656	31,966,554
CSC HOLDINGS LLC	6.75	11/15/2021	250,000	255,467	262,340
CSC HOLDINGS LLC	7.50	4/1/2028	9,400,000	9,638,581	10,255,682
CSC HOLDINGS LLC	7.75	7/15/2025	2,900,000	3,011,244	3,016,348
CSC HOLDINGS LLC	10.88	10/15/2025	12,726,000	13,707,807	13,682,868
CSX CORP	3.35	9/15/2049	27,000,000	26,080,728	29,962,440
CSX CORP	3.80	11/1/2046	4,500,000	4,459,450	5,228,100
CSX CORP	3.80	4/15/2050	5,000,000	4,976,997	5,945,650
CSX CORP	4.10	3/15/2044	12,300,000	11,651,525	14,855,940
CSX CORP	4.25	11/1/2066	2,500,000	2,335,970	3,022,500
CSX CORP	4.30	3/1/2048	8,000,000	7,970,371	9,988,640
CSX CORP	4.50	3/15/2049	17,500,000	17,913,869	22,649,025
CSX CORP	4.75	11/15/2048	27,500,000	28,134,000	36,483,150
CSX CORP	6.15	5/1/2037	8,000,000	9,900,095	11,185,680
CSX CORP	6.22	4/30/2040	35,283,000	39,634,009	51,413,329
CSX CORP	6.80	12/1/2028	20,500,000	20,970,804	26,889,440
CUBESMART LP	3.00	2/15/2030	20,400,000	20,329,497	21,641,136
CUBESMART LP	4.38	2/15/2029	6,900,000	7,064,651	8,030,220
CUMULUS MEDIA NEW HLDGS	6.75	7/1/2026	9,000,000	9,105,143	8,306,370
CURO GROUP HOLDINGS CORP	8.25	9/1/2025	11,200,000	10,510,111	8,958,768
CUSHMAN + WAKEFIELD US	6.75	5/15/2028	11,200,000	11,838,020	11,742,192
CVR ENERGY INC	5.25	2/15/2025	9,000,000	8,958,842	8,252,640
CVR PARTNERS/CVR NITROGE	9.25	6/15/2023	11,000,000	11,263,758	10,754,590
CVS HEALTH CORP	3.25	8/15/2029	23,200,000	23,062,564	25,597,024
CVS HEALTH CORP	3.75	4/1/2030	35,000,000	34,923,916	40,155,500

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
CVS HEALTH CORP	4.13	4/1/2040	20,000,000	19,667,046	23,605,200
CVS HEALTH CORP	4.25	4/1/2050	10,000,000	9,998,314	12,039,200
CVS HEALTH CORP	4.30	3/25/2028	75,000,000	74,870,490	87,528,000
CVS HEALTH CORP	4.78	3/25/2038	84,225,000	87,472,500	104,210,750
CVS HEALTH CORP	5.05	3/25/2048	53,150,000	54,655,050	69,477,680
CVS HEALTH CORP	5.13	7/20/2045	22,350,000	24,945,549	28,864,578
CVS HEALTH CORP	6.25	6/1/2027	1,500,000	1,772,315	1,900,185
CYRUSONE LP/CYRUSONE FIN	3.45	11/15/2029	17,200,000	17,264,116	17,894,708
DAE FUNDING LLC	5.00	8/1/2024	1,875,000	1,860,625	1,757,419
DANA FINANCING LUX SARL	6.50	6/1/2026	1,573,000	1,530,379	1,629,722
DANA INC	5.63	6/15/2028	400,000	400,000	396,792
DARLING INGREDIENTS INC	5.25	4/15/2027	9,525,000	9,652,384	9,798,939
DAVITA INC	4.63	6/1/2030	26,925,000	27,008,794	26,792,798
DAVITA INC	5.00	5/1/2025	33,478,000	32,280,002	34,227,907
DAVITA INC	5.13	7/15/2024	29,450,000	28,884,498	29,964,786
DAYTON POWER + LIGHT CO/ DCP MIDSTREAM OPERATING	3.95	6/15/2049	1,000,000	1,032,634	1,035,560
DCP MIDSTREAM OPERATING	3.88	3/15/2023	9,670,000	9,527,466	9,378,450
DCP MIDSTREAM OPERATING	4.75	9/30/2021	6,775,000	6,799,302	6,881,097
DCP MIDSTREAM OPERATING	5.13	5/15/2029	15,435,000	15,127,694	14,774,845
DCP MIDSTREAM OPERATING	5.38	7/15/2025	13,650,000	13,825,300	13,492,889
DCP MIDSTREAM OPERATING	5.63	7/15/2027	100,000	100,000	100,625
DCP MIDSTREAM OPERATING	5.85	5/21/2043	9,200,000	8,361,305	6,440,276
DCP MIDSTREAM OPERATING	6.75	9/15/2037	3,457,000	3,671,284	3,105,596
DEALER TIRE LLC/DT ISSR	8.00	2/1/2028	700,000	701,632	650,727
DELEK LOG PART/FINANCE	6.75	5/15/2025	1,587,000	1,593,085	1,451,264
DELL INC	6.50	4/15/2038	835,000	800,239	901,650
DELL INT LLC / EMC CORP	5.88	6/15/2021	3,907,000	3,943,895	3,907,781
DELL INT LLC / EMC CORP	6.02	6/15/2026	23,900,000	23,936,989	27,342,795
DELL INT LLC / EMC CORP	7.13	6/15/2024	14,281,000	14,883,290	14,815,109
DELMARVA PWR + LIGHT CO	4.15	5/15/2045	39,200,000	38,298,449	47,219,144
DELPHI TECHNOLOGIES PLC	5.00	10/1/2025	19,133,000	17,750,251	20,544,824
DELTA AIR LINES INC	3.40	4/19/2021	575,000	558,894	560,740
DELTA AIR LINES INC	3.63	3/15/2022	525,000	472,257	496,939
DELTA AIR LINES INC	3.75	10/28/2029	85,000	66,064	68,054
DELTA AIR LINES INC	3.80	4/19/2023	800,000	678,805	711,456
DELTA AIR LINES INC	7.00	5/1/2025	1,400,000	1,405,362	1,445,108
DELTA AIR LINES INC	7.38	1/15/2026	2,952,000	2,955,164	2,855,086
DENBURY RESOURCES INC	7.75	2/15/2024	7,800,000	5,995,057	2,945,592
DENBURY RESOURCES INC	9.00	5/15/2021	3,933,000	3,949,201	1,498,709
DENTSPLY SIRONA INC	3.25	6/1/2030	10,000,000	9,979,009	10,505,800
DEUTSCHE BANK AG	6.00	12/31/2099	400,000	400,111	330,788
DEUTSCHE BANK NY	3.70	5/30/2024	4,000,000	3,843,261	4,158,200
DEUTSCHE TELEKOM INT FIN	9.25	6/1/2032	48,814,000	60,142,890	80,632,918
DH EUROPE FINANCE II	3.25	11/15/2039	20,300,000	20,269,796	22,390,900
DIAMOND OFFSHORE DRILL	3.45	11/1/2023	475,000	406,714	56,786
DIAMOND OFFSHORE DRILL	5.70	10/15/2039	350,000	200,293	41,419
DIAMOND OFFSHORE DRILL	7.88	8/15/2025	1,900,000	1,670,666	190,000

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
DIAMOND RESORTS INTL INC	7.75	9/1/2023	9,900,000	10,049,085	9,595,278
DIAMOND SPORTS GR/DIAMON	5.38	8/15/2026	65,149,000	65,631,202	47,089,697
DIAMOND SPORTS GR/DIAMON	6.63	8/15/2027	36,529,000	36,337,136	19,551,417
DIAMOND SPORTS GROUP LLC	0.00	8/24/2026	595,500	592,523	483,099
DIEBOLD NIXDORF INC	8.50	4/15/2024	1,000,000	929,459	809,660
DIGICEL GROUP ONE LTD	8.25	12/30/2022	850,000	607,170	552,500
DIGITAL REALTY TRUST LP	3.60	7/1/2029	16,100,000	16,131,845	18,377,184
DIGITAL REALTY TRUST LP	4.45	7/15/2028	19,500,000	19,527,244	23,296,650
DISCOVER BANK	4.65	9/13/2028	30,800,000	32,793,141	35,370,412
DISCOVERY COMMUNICATIONS	3.63	5/15/2030	10,000,000	10,000,000	10,929,000
DISCOVERY COMMUNICATIONS	3.95	3/20/2028	108,000,000	107,644,002	120,336,840
DISCOVERY COMMUNICATIONS	4.13	5/15/2029	8,600,000	8,826,966	9,759,022
DISCOVERY COMMUNICATIONS	5.00	9/20/2037	22,225,000	22,647,582	26,159,714
DISH DBS CORP	5.00	3/15/2023	27,420,000	25,464,607	27,389,290
DISH DBS CORP	5.88	7/15/2022	32,420,000	31,705,739	33,011,665
DISH DBS CORP	5.88	11/15/2024	33,400,000	30,088,417	33,234,670
DISH DBS CORP	6.75	6/1/2021	1,300,000	1,307,371	1,324,323
DISH DBS CORP	7.38	7/1/2028	4,676,000	4,678,040	4,681,751
DISH DBS CORP	7.75	7/1/2026	42,940,000	39,718,484	45,506,524
DIVERSIFIED HEALTHCARE T	4.75	2/15/2028	6,300,000	5,605,100	5,222,637
DIVERSIFIED HEALTHCARE T	9.75	6/15/2025	10,975,000	11,583,694	11,795,272
DOLLAR TREE INC	4.20	5/15/2028	28,400,000	28,822,976	32,960,188
DOLYA HOLDCO 18 DAC	5.00	7/15/2028	400,000	400,000	395,216
DOMINION ENERGY GAS HLDG	3.00	11/15/2029	5,000,000	4,981,129	5,352,800
DOMINION ENERGY GAS HLDG	3.90	11/15/2049	10,000,000	9,994,906	10,771,700
DOMINION ENERGY INC	3.38	4/1/2030	60,000,000	59,411,703	66,479,400
DOMINION ENERGY INC	4.70	12/1/2044	11,763,000	13,423,956	14,585,061
DONNELLEY FINANCIAL SOL	8.25	10/15/2024	525,000	526,739	517,199
DOW CHEMICAL CO/THE	4.80	11/30/2028	10,200,000	10,375,672	12,179,514
DOWNSTREAM DEVELOPMENT	10.50	2/15/2023	1,025,000	1,020,525	859,534
DPL INC	4.13	7/1/2025	50,000	50,000	50,021
DPL INC	4.35	4/15/2029	10,000,000	9,804,068	10,136,500
DRAX FINCO PLC	6.63	11/1/2025	1,000,000	1,017,956	1,038,030
DTE ELECTRIC CO	3.70	3/15/2045	28,500,000	26,994,515	33,027,510
DTE ELECTRIC CO	3.95	3/1/2049	9,700,000	9,506,316	11,875,904
DUKE ENERGY CAROLINAS	3.70	12/1/2047	12,100,000	11,518,304	14,341,525
DUKE ENERGY CAROLINAS	3.75	6/1/2045	7,800,000	7,476,420	9,108,918
DUKE ENERGY CAROLINAS	3.88	3/15/2046	8,400,000	8,094,833	10,247,748
DUKE ENERGY FLORIDA LLC	3.40	10/1/2046	19,700,000	17,568,230	22,077,396
DUKE ENERGY FLORIDA LLC	6.35	9/15/2037	8,000,000	8,423,933	11,865,360
DUKE ENERGY OHIO INC	3.70	6/15/2046	3,700,000	3,911,296	4,195,615
DUKE ENERGY OHIO INC	4.30	2/1/2049	300,000	354,436	383,310
DUKE ENERGY OHIO INC	6.90	6/1/2025	32,500,000	33,352,847	40,873,300
DUKE ENERGY PROGRESS LLC	3.60	9/15/2047	43,000,000	37,873,704	49,609,960
DUKE ENERGY PROGRESS LLC	3.70	10/15/2046	27,500,000	25,033,556	32,082,325
DUKE ENERGY PROGRESS LLC	4.20	8/15/2045	23,500,000	23,162,369	29,068,325
DUKE REALTY LP	2.88	11/15/2029	12,300,000	12,300,687	13,384,122

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
DUKE REALTY LP	3.05	3/1/2050	7,000,000	6,816,370	7,321,090
DUKE REALTY LP	4.00	9/15/2028	5,000,000	5,026,828	5,839,850
DUN + BRADSTREET CORP	6.88	8/15/2026	14,725,000	14,909,615	15,549,747
DUN + BRADSTREET CORP	10.25	2/15/2027	13,000,000	13,323,232	14,428,700
E TRADE FINANCIAL CORP	3.80	8/24/2027	9,189,000	9,055,131	10,073,901
EAGLE INT GLO/RUYI US FI	7.50	5/1/2025	800,000	764,014	554,600
EAST OHIO GAS CO/THE	3.00	6/15/2050	25,000,000	24,644,487	24,847,500
EASTMAN CHEMICAL CO	4.65	10/15/2044	12,900,000	12,773,891	14,862,219
EATON CORP	4.15	11/2/2042	5,000,000	5,528,516	5,901,100
EBAY INC	2.70	3/11/2030	25,000,000	24,961,954	26,451,500
EBAY INC	3.60	6/5/2027	24,800,000	24,810,673	27,964,728
ECOPETROL SA	5.88	5/28/2045	14,250,000	15,269,435	14,973,188
EDGEWELL PERSONAL CARE	4.70	5/24/2022	9,000,000	8,937,971	9,312,570
EDGEWELL PERSONAL CARE	5.50	6/1/2028	12,585,000	13,025,825	12,893,962
EDISON INTERNATIONAL	4.13	3/15/2028	1,836,000	1,809,125	1,927,525
EG GLOBAL FINANCE PLC	6.75	2/7/2025	1,200,000	1,200,000	1,169,496
EG GLOBAL FINANCE PLC	8.50	10/30/2025	1,020,000	1,045,312	1,048,438
ELANCO ANIMAL HEALTH INC	5.65	8/28/2028	13,950,000	15,956,703	15,467,481
ELDORADO RESORTS INC	6.00	4/1/2025	18,325,000	18,333,015	19,156,955
ELDORADO RESORTS INC	6.00	9/15/2026	11,050,000	10,960,835	12,213,344
ELDORADO RESORTS INC	7.00	8/1/2023	1,500,000	1,557,123	1,522,500
ELECTRICITE DE FRANCE SA	6.95	1/26/2039	34,500,000	36,035,953	51,366,360
ELEMENT FLEET MANAGEMENT	3.85	6/15/2025	10,000,000	9,998,524	10,247,200
ELEMENT SOLUTIONS INC	5.88	12/1/2025	21,330,000	21,193,140	21,564,203
ELI LILLY + CO	3.95	3/15/2049	9,000,000	9,047,250	11,481,750
ELLIE MAE INC	0.00	4/17/2026	1,942,323	1,930,336	1,877,255
EMBARQ CORP	8.00	6/1/2036	27,550,000	26,536,362	30,955,180
EMC CORP	3.38	6/1/2023	15,460,000	14,830,306	15,649,694
ENABLE MIDSTREAM PARTNER	4.40	3/15/2027	9,900,000	9,989,213	9,164,727
ENABLE MIDSTREAM PARTNER	4.95	5/15/2028	900,000	937,568	834,408
ENBRIDGE INC	3.70	7/15/2027	13,000,000	13,023,875	14,325,350
ENCOMPASS HEALTH CORP	4.50	2/1/2028	13,704,000	13,761,478	13,148,029
ENCOMPASS HEALTH CORP	4.75	2/1/2030	12,550,000	12,599,040	12,036,329
ENCOMPASS HEALTH CORP	5.75	11/1/2024	12,276,000	12,379,253	12,270,108
ENDEAVOR ENERGY RESOURCE	5.50	1/30/2026	10,517,000	10,426,980	10,094,427
ENDEAVOR ENERGY RESOURCE	5.75	1/30/2028	22,419,000	22,762,044	21,601,827
ENDEAVOR ENERGY RESOURCE	6.63	7/15/2025	7,869,000	8,005,608	7,929,985
ENDO DAC/FIN LLC/FINCO	5.88	10/15/2024	579,000	540,988	562,852
ENDO DAC/FIN LLC/FINCO	6.00	6/30/2028	6,458,000	3,952,198	4,165,410
ENDO DAC/FIN LLC/FINCO	9.50	7/31/2027	4,573,000	4,709,399	4,836,862
ENERGIZER HOLDINGS INC	4.75	6/15/2028	3,655,000	3,642,000	3,582,412
ENERGIZER HOLDINGS INC	5.50	6/15/2025	14,104,000	13,856,466	14,535,582
ENERGIZER HOLDINGS INC	6.38	7/15/2026	15,073,000	15,297,673	15,600,555
ENERGIZER HOLDINGS INC	7.75	1/15/2027	14,198,000	14,693,474	15,167,865
ENERGY TRANSFER OPERATNG	3.75	5/15/2030	48,500,000	48,774,407	48,183,295
ENERGY TRANSFER OPERATNG	4.20	4/15/2027	15,180,000	15,331,586	15,867,958
ENERGY TRANSFER OPERATNG	4.90	3/15/2035	7,700,000	7,799,075	7,781,774

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
ENERGY TRANSFER OPERATNG	4.95	6/15/2028	9,830,000	10,248,369	10,588,385
ENERGY TRANSFER OPERATNG	5.25	4/15/2029	47,400,000	48,522,244	51,750,846
ENERGY TRANSFER OPERATNG	5.30	4/15/2047	12,450,000	12,597,407	12,298,982
ENERGY TRANSFER OPERATNG	5.50	6/1/2027	17,940,000	19,288,758	20,040,056
ENERGY TRANSFER OPERATNG	6.13	12/15/2045	14,600,000	14,896,638	15,181,664
ENERGY TRANSFER OPERATNG	6.25	4/15/2049	9,600,000	10,994,368	10,229,376
ENERGY TRANSFER OPERATNG	6.25	12/31/2099	600,000	599,183	463,386
ENERGY TRANSFER OPERATNG	6.63	10/15/2036	18,750,000	19,788,235	20,653,500
ENERGY TRANSFER OPERATNG	6.63	12/31/2099	900,000	753,307	711,000
ENERGY TRANSFER OPERATNG	7.50	7/1/2038	31,747,000	34,836,736	37,324,313
ENLINK MIDSTREAM LLC	5.38	6/1/2029	7,975,000	5,432,188	5,982,606
ENLINK MIDSTREAM PARTNER	4.15	6/1/2025	11,000,000	6,428,670	8,451,520
ENLINK MIDSTREAM PARTNER	4.40	4/1/2024	9,375,000	5,357,177	7,797,750
ENLINK MIDSTREAM PARTNER	4.85	7/15/2026	1,375,000	1,136,605	1,019,508
ENLINK MIDSTREAM PARTNER	5.05	4/1/2045	275,000	232,240	171,614
ENLINK MIDSTREAM PARTNER	5.45	6/1/2047	8,850,000	3,717,713	5,497,355
ENLINK MIDSTREAM PARTNER	5.60	4/1/2044	1,200,000	1,015,681	733,764
ENPRO INDUSTRIES INC	5.75	10/15/2026	725,000	725,000	724,964
ENSIGN DRILLING INC	9.25	4/15/2024	1,875,000	1,859,795	820,969
ENTEGRIS INC	4.63	2/10/2026	12,845,000	12,465,191	13,087,257
ENTERCOM MEDIA CORP	7.25	11/1/2024	1,374,000	1,228,395	1,194,240
ENERGY LOUISIANA LLC	4.00	3/15/2033	18,000,000	18,003,852	22,133,700
ENERGY LOUISIANA LLC	4.95	1/15/2045	12,600,000	12,767,135	13,635,090
ENERGY MISSISSIPPI LLC	3.85	6/1/2049	1,000,000	1,102,935	1,199,730
ENTERPRISE DEVELOP AUTH	12.00	7/15/2024	2,350,000	2,407,921	2,366,098
ENTERPRISE PRODUCTS OPER	3.13	7/31/2029	31,400,000	31,457,187	33,675,558
ENTERPRISE PRODUCTS OPER	3.95	1/31/2060	15,000,000	14,905,103	15,613,650
ENTERPRISE PRODUCTS OPER	4.15	10/16/2028	31,400,000	31,647,532	35,813,898
ENTERPRISE PRODUCTS OPER	4.20	1/31/2050	15,900,000	18,262,284	17,736,450
ENTERPRISE PRODUCTS OPER	4.25	2/15/2048	16,000,000	15,999,450	17,600,000
ENTERPRISE PRODUCTS OPER	4.45	2/15/2043	10,650,000	10,804,672	11,869,851
ENTERPRISE PRODUCTS OPER	4.80	2/1/2049	23,550,000	24,093,525	28,159,442
ENTERPRISE PRODUCTS OPER	4.85	3/15/2044	12,850,000	13,559,652	14,920,007
ENTERPRISE PRODUCTS OPER	4.90	5/15/2046	29,550,000	30,893,691	34,582,956
ENTERPRISE PRODUCTS OPER	6.13	10/15/2039	9,400,000	10,008,249	11,869,004
ENTERPRISE PRODUCTS OPER	6.45	9/1/2040	51,700,000	54,936,204	68,611,070
ENTERPRISE PRODUCTS OPER	6.65	10/15/2034	15,000,000	16,009,148	20,256,000
ENTERPRISE PRODUCTS OPER	6.88	3/1/2033	9,400,000	9,835,104	12,289,466
ENVISION HEALTHCARE CORP	8.75	10/15/2026	2,050,000	1,924,645	1,009,523
EOG RESOURCES INC	4.38	4/15/2030	10,000,000	9,996,085	11,920,900
EOG RESOURCES INC	4.95	4/15/2050	10,000,000	9,941,619	12,762,500
EP ENER/EVEREST ACQ FIN	9.38	5/1/2020	2,193,000	2,193,000	22
EP ENER/EVEREST ACQ FIN	9.38	5/1/2024	2,496,000	2,187,409	424
EQM MIDSTREAM PARTNERS L	4.00	8/1/2024	8,000,000	7,316,372	7,583,600
EQM MIDSTREAM PARTNERS L	4.13	12/1/2026	7,200,000	6,144,917	6,597,720
EQM MIDSTREAM PARTNERS L	4.75	7/15/2023	19,450,000	18,126,439	19,598,209
EQM MIDSTREAM PARTNERS L	5.50	7/15/2028	26,430,000	23,943,913	25,170,346

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
EQM MIDSTREAM PARTNERS L	6.00	7/1/2025	5,912,000	5,934,986	5,987,614
EQM MIDSTREAM PARTNERS L	6.50	7/1/2027	5,316,000	5,358,116	5,444,488
EQM MIDSTREAM PARTNERS L	6.50	7/15/2048	9,050,000	7,209,605	8,270,252
EQT CORP	3.00	10/1/2022	11,697,000	10,520,935	10,981,611
EQT CORP	3.90	10/1/2027	19,987,000	14,418,127	16,251,430
EQT CORP	4.88	11/15/2021	400,000	396,395	391,900
EQT CORP	6.13	2/1/2025	32,475,000	28,519,946	32,357,441
EQT CORP	7.00	2/1/2030	13,993,000	11,883,814	14,407,193
EQUIFAX INC	3.10	5/15/2030	15,000,000	14,972,005	15,957,600
EQUINIX INC	3.20	11/18/2029	30,700,000	30,691,730	33,312,877
EQUINIX INC	5.38	5/15/2027	13,000,000	13,460,431	14,164,150
EQUINOR ASA	3.13	4/6/2030	100,000,000	99,228,604	110,383,000
EQUINOR ASA	3.25	11/18/2049	9,200,000	9,064,200	9,806,004
EQUINOR ASA	3.70	4/6/2050	40,000,000	39,708,308	45,611,200
ESC LEHMAN BRTH HLDH PROD	1.00	4/4/2016	575,000	0	3,623
ESC LEHMAN BRTH HLDH PROD	1.00	9/27/2027	80,000,000	0	504,000
ESC SEVENTYSEVENENERG	6.50	7/15/2022	1,525,000	1,002,865	0
ESCROW GCB DENVER PARENT	12.25	8/15/2018	823,442	823,442	0
ESCROW GENON ENERGY	9.50	10/15/2049	1,150,000	384,700	0
ESH HOSPITALITY INC	4.63	10/1/2027	15,505,000	15,485,838	14,592,376
ESH HOSPITALITY INC	5.25	5/1/2025	26,665,000	26,167,325	25,670,662
ESSENTIAL UTILITIES INC	2.70	4/15/2030	10,000,000	10,000,000	10,465,300
ESSENTIAL UTILITIES INC	3.35	4/15/2050	20,000,000	20,000,000	20,989,800
ESSENTIAL UTILITIES INC	3.57	5/1/2029	10,200,000	10,212,022	11,353,620
ESSENTIAL UTILITIES INC	4.28	5/1/2049	26,425,000	27,735,014	31,666,399
ESSEX PORTFOLIO LP	3.00	1/15/2030	16,500,000	16,313,180	17,988,135
ESSEX PORTFOLIO LP	4.00	3/1/2029	11,500,000	11,585,285	13,373,120
EVERI PAYMENTS INC	7.50	12/15/2025	810,000	795,327	785,724
EVERSOURCE ENERGY	3.45	1/15/2050	25,000,000	24,954,234	27,019,500
EVERSOURCE ENERGY	4.25	4/1/2029	11,000,000	11,085,660	12,946,670
EW SCRIPPS CO	5.13	5/15/2025	1,125,000	1,101,958	1,075,489
EXELA INTERMED/EXELA FIN	10.00	7/15/2023	2,250,000	1,643,350	571,860
EXELON CORP	4.05	4/15/2030	25,000,000	24,949,778	28,882,750
EXELON CORP	5.63	6/15/2035	16,272,000	16,768,633	21,412,488
EXIDE TECHNOLOGIES	11.00	4/30/2020	1,223,864	1,223,864	991,330
EXPEDIA GROUP INC	3.80	2/15/2028	16,900,000	16,993,998	16,191,721
EXPEDIA GROUP INC	6.25	5/1/2025	10,000,000	10,000,000	10,624,000
EXPEDIA GROUP INC	7.00	5/1/2025	5,000,000	5,000,000	5,236,650
EXTERRAN NRG SOLUTIONS/F	8.13	5/1/2025	600,000	600,000	497,424
EXTRACTION OIL + GAS INC	5.63	2/1/2026	10,300,000	9,223,017	1,994,492
EXXON MOBIL CORPORATION	3.10	8/16/2049	27,700,000	27,710,461	28,532,939
EXXON MOBIL CORPORATION	3.45	4/15/2051	20,000,000	20,000,000	22,135,600
EXXON MOBIL CORPORATION	3.48	3/19/2030	32,000,000	32,015,187	36,519,040
EXXON MOBIL CORPORATION	4.23	3/19/2040	15,000,000	16,842,845	18,133,200
EXXON MOBIL CORPORATION	4.33	3/19/2050	103,900,000	113,444,723	130,012,148
F BRASILE SPA/F BRASILE	7.38	8/15/2026	1,600,000	1,610,033	1,217,552
FAGE INTL / FAGE USA	5.63	8/15/2026	3,008,000	2,813,910	2,884,913

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FAIRSTONE FINANCIAL INC	7.88	7/15/2024	1,275,000	1,269,726	1,268,281
FEDEX CORP	3.90	2/1/2035	6,800,000	6,897,346	7,345,904
FEDEX CORP	4.40	1/15/2047	9,500,000	9,969,869	10,060,310
FEDEX CORP	4.75	11/15/2045	12,000,000	11,969,831	13,356,840
FEDEX CORP	4.90	1/15/2034	6,000,000	6,522,834	7,193,880
FELCOR LODGING LP	6.00	6/1/2025	1,750,000	1,771,878	1,699,950
FERL PRT LP/FERL PRT FIN	8.63	6/15/2020	649,000	649,000	162,250
FERRELLGAS LP/FERRELLGAS	6.75	1/15/2022	225,000	225,866	187,182
FERRELLGAS LP/FERRELLGAS	6.75	6/15/2023	675,000	675,000	560,493
FERRELLGAS LP/FERRELLGAS	10.00	4/15/2025	10,400,000	10,932,638	11,185,824
FIDELITY + GUARANTY LIFE	5.50	5/1/2025	8,700,000	8,624,368	9,372,945
FIDELITY NATL FINANCIAL	4.50	8/15/2028	1,500,000	1,602,105	1,685,400
FINANCIAL RISK US HLDGS INC	0.00	10/1/2025	252,747	253,170	246,618
FIRST AMERICAN FINANCIAL	4.00	5/15/2030	25,000,000	24,899,313	27,254,500
FIRST QUANTUM MINERALS L	6.50	3/1/2024	4,596,000	4,519,079	4,336,418
FIRST QUANTUM MINERALS L	6.88	3/1/2026	700,000	679,254	662,648
FIRST QUANTUM MINERALS L	7.25	5/15/2022	200,000	167,998	195,622
FIRST QUANTUM MINERALS L	7.25	4/1/2023	580,000	560,778	554,207
FIRST QUANTUM MINERALS L	7.50	4/1/2025	1,800,000	1,745,373	1,710,252
FIRSTENERGY CORP	2.25	9/1/2030	7,000,000	6,989,565	7,031,150
FIRSTENERGY CORP	2.65	3/1/2030	20,000,000	19,986,312	20,918,600
FIRSTENERGY TRANSMISSION	4.55	4/1/2049	10,450,000	10,723,528	12,711,694
FIRSTENERGY TRANSMISSION	5.45	7/15/2044	51,305,000	55,338,881	65,664,756
FISERV INC	3.50	7/1/2029	12,400,000	12,501,143	13,932,640
FISERV INC	4.20	10/1/2028	9,000,000	9,060,464	10,564,200
FISERV INC	4.40	7/1/2049	30,500,000	32,239,359	36,951,360
FIVE CORNERS FND TR II	2.85	5/15/2030	25,000,000	25,000,000	25,858,750
FIVE POINT OP CO LP/FIVE	7.88	11/15/2025	10,700,000	10,614,731	10,237,118
FLEX ACQUISITION CO INC	0.00	12/29/2023	615,862	612,782	587,156
FLEX ACQUISITION CO INC	6.88	1/15/2025	1,247,000	1,230,375	1,199,040
FLEX ACQUISITION CO INC	7.88	7/15/2026	2,287,000	2,244,247	2,216,080
FLEX LTD	3.75	2/1/2026	5,000,000	4,982,644	5,329,450
FLORIDA GAS TRANSMISSION	2.55	7/1/2030	25,000,000	24,940,863	25,504,500
FLORIDA POWER + LIGHT CO	3.95	3/1/2048	33,500,000	32,959,832	42,126,250
FLORIDA POWER + LIGHT CO	4.05	10/1/2044	26,000,000	24,913,079	32,602,700
FLORIDA POWER + LIGHT CO	4.13	6/1/2048	62,100,000	60,787,211	80,585,928
FLORIDA POWER + LIGHT CO	5.65	2/1/2037	37,149,000	38,532,998	52,186,544
FLY LEASING LTD	5.25	10/15/2024	1,400,000	1,299,905	1,162,644
FMC CORP	3.45	10/1/2029	36,900,000	37,378,422	39,937,239
FMC CORP	4.50	10/1/2049	15,200,000	15,444,834	17,861,064
FOMENTO ECONOMICO MEX	3.50	1/16/2050	75,000,000	74,564,750	77,303,250
FORD HOLDINGS LLC	9.30	3/1/2030	5,770,000	6,121,407	6,477,575
FORD MOTOR COMPANY	4.75	1/15/2043	29,000,000	21,945,157	22,872,300
FORD MOTOR COMPANY	7.45	7/16/2031	26,078,000	26,428,176	27,382,161
FORD MOTOR COMPANY	8.50	4/21/2023	57,000,000	58,873,883	60,266,670
FORD MOTOR COMPANY	9.00	4/22/2025	58,738,000	61,687,214	63,499,302
FORD MOTOR CREDIT CO LLC	3.22	1/9/2022	2,691,000	2,601,326	2,616,998

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
FORD MOTOR CREDIT CO LLC	4.06	11/1/2024	400,000	351,771	381,180
FORD MOTOR CREDIT CO LLC	4.13	8/4/2025	1,000,000	828,484	948,760
FORD MOTOR CREDIT CO LLC	4.14	2/15/2023	600,000	557,733	586,980
FORD MOTOR CREDIT CO LLC	4.27	1/9/2027	10,200,000	9,317,604	9,515,784
FORD MOTOR CREDIT CO LLC	4.54	8/1/2026	725,000	641,216	689,874
FORD MOTOR CREDIT CO LLC	4.69	6/9/2025	200,000	169,537	195,468
FORD MOTOR CREDIT CO LLC	5.11	5/3/2029	22,000,000	20,045,214	21,472,660
FORD MOTOR CREDIT CO LLC	5.13	6/16/2025	4,633,000	4,633,683	4,634,205
FORD MOTOR CREDIT CO LLC	5.75	2/1/2021	600,000	596,605	602,550
FORD MOTOR CREDIT CO LLC	5.88	8/2/2021	20,600,000	20,587,179	20,804,146
FORESTAR GROUP INC	5.00	3/1/2028	600,000	600,000	579,474
FORESTAR GROUP INC	8.00	4/15/2024	1,750,000	1,750,000	1,810,813
FORTRESS TRANS + INFRAST	6.50	10/1/2025	950,000	939,365	859,000
FORTRESS TRANS + INFRAST	6.75	3/15/2022	13,300,000	13,413,149	12,793,004
FOUR FINANCE SA	10.75	5/1/2022	300,000	300,000	219,861
FOX CORP	4.71	1/25/2029	26,900,000	27,727,465	32,307,976
FREEDOM MORTGAGE CORP	8.25	4/15/2025	12,100,000	11,571,570	11,964,359
FREEPORT MCMORAN INC	3.55	3/1/2022	2,724,000	2,644,150	2,726,370
FREEPORT MCMORAN INC	3.88	3/15/2023	42,154,000	40,971,659	42,144,726
FREEPORT MCMORAN INC	4.13	3/1/2028	1,500,000	1,500,000	1,447,470
FREEPORT MCMORAN INC	4.25	3/1/2030	2,075,000	2,075,000	2,012,729
FREEPORT MCMORAN INC	4.55	11/14/2024	18,958,000	18,453,307	19,279,528
FREEPORT MCMORAN INC	5.00	9/1/2027	1,875,000	1,852,975	1,885,950
FREEPORT MCMORAN INC	5.25	9/1/2029	2,837,000	2,867,344	2,902,308
FREEPORT MCMORAN INC	5.40	11/14/2034	12,200,000	11,284,408	12,307,116
FREEPORT MCMORAN INC	5.45	3/15/2043	39,776,000	35,531,076	39,099,012
FRONTDOOR INC	6.75	8/15/2026	2,434,000	2,406,260	2,589,338
FRONTIER COMMUNICATIONS	7.88	1/15/2027	110,000	105,331	33,529
FRONTIER COMMUNICATIONS	8.00	4/1/2027	9,925,000	10,065,183	10,083,304
FRONTIER COMMUNICATIONS	8.50	4/1/2026	895,000	877,741	847,305
FRONTIER COMMUNICATIONS	10.50	9/15/2022	11,642,000	8,567,053	4,014,977
FS ENERGY + POWER FUND	7.50	8/15/2023	8,100,000	8,091,780	6,931,332
FTS INTERNATIONAL INC	6.25	5/1/2022	1,750,000	1,709,336	589,838
FXI HOLDINGS INC	7.88	11/1/2024	9,973,000	9,579,730	8,681,497
FXI HOLDINGS INC	12.25	11/15/2026	16,065,000	16,063,334	15,590,440
GAP INC/THE	8.38	5/15/2023	8,600,000	8,878,361	9,341,922
GAP INC/THE	8.63	5/15/2025	12,300,000	12,635,621	13,067,397
GAP INC/THE	8.88	5/15/2027	17,000,000	17,496,758	18,213,800
GARDA WORLD SECURITY	4.63	2/15/2027	775,000	775,000	763,360
GARDA WORLD SECURITY COR	9.50	11/1/2027	9,300,000	9,605,473	9,844,422
GARTNER INC	4.50	7/1/2028	3,462,000	3,462,000	3,497,035
GARTNER INC	5.13	4/1/2025	19,684,000	19,727,321	20,152,086
GATES GLOBAL/GATES CORP	6.25	1/15/2026	14,173,000	14,096,236	13,993,428
GATEWAY CASINOS ENTMT LTD	0.00	3/13/2025	637,000	636,204	513,581
GATEWAY CASINOS + ENTERT	8.25	3/1/2024	1,425,000	1,475,569	1,133,018
GCB144A CLAIRE'S STORES	8.88	3/15/2019	250,000	13,245	33,125
GCI LLC	6.63	6/15/2024	1,025,000	1,028,935	1,075,143

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
GE CAPITAL FUNDING LLC	4.40	5/15/2030	20,000,000	21,010,316	20,788,800
GE CAPITAL INTL FUNDING	4.42	11/15/2035	182,505,000	176,502,871	184,822,814
GEMS MENASA KY LTD/GEMS	7.13	7/31/2026	775,000	777,870	739,831
GENERAL DYNAMICS CORP	4.25	4/1/2050	10,000,000	9,854,314	12,928,400
GENERAL ELECTRIC CO	3.45	5/1/2027	20,000,000	19,969,846	20,459,000
GENERAL ELECTRIC CO	3.63	5/1/2030	12,000,000	11,981,285	12,003,720
GENERAL ELECTRIC CO	6.15	8/7/2037	17,079,000	17,235,557	19,723,683
GENERAL MILLS INC	4.55	4/17/2038	14,225,000	15,426,713	17,807,993
GENERAL MILLS INC	4.70	4/17/2048	1,000,000	1,203,482	1,325,180
GENERAL MOTORS CO	5.00	10/1/2028	10,000,000	10,019,115	10,728,300
GENERAL MOTORS CO	5.15	4/1/2038	9,000,000	9,012,103	8,754,030
GENERAL MOTORS CO	5.20	4/1/2045	8,300,000	8,218,347	8,033,902
GENERAL MOTORS FINL CO	3.60	6/21/2030	25,000,000	24,927,429	24,319,250
GENERAL MOTORS FINL CO	4.35	1/17/2027	32,019,000	31,757,758	33,281,829
GENERAL MOTORS FINL CO	5.25	3/1/2026	1,656,000	1,684,647	1,804,725
GENERAL MOTORS FINL CO	5.65	1/17/2029	23,800,000	25,594,681	26,798,324
GENESIS ENERGY LP/FIN	6.50	10/1/2025	9,977,000	9,614,619	8,569,345
GENESIS ENERGY LP/FIN	7.75	2/1/2028	15,619,000	15,603,386	13,744,720
GENESIS ENERGY LP/GENESI	6.00	5/15/2023	150,000	134,270	136,362
GENESYS/GREENEDEN LUX/US	10.00	11/30/2024	3,916,000	4,101,844	4,062,889
GENWORTH HOLDINGS INC	4.80	2/15/2024	675,000	654,474	569,363
GENWORTH HOLDINGS INC	4.90	8/15/2023	800,000	792,751	681,960
GENWORTH HOLDINGS INC	7.63	9/24/2021	12,450,000	12,473,357	11,623,943
GFL ENVIRONMENTAL INC	4.25	6/1/2025	2,532,000	2,532,000	2,551,572
GFL ENVIRONMENTAL INC	5.13	12/15/2026	9,919,000	10,250,590	10,239,681
GFL ENVIRONMENTAL INC	7.00	6/1/2026	769,000	776,157	801,613
GFL ENVIRONMENTAL INC	8.50	5/1/2027	2,928,000	3,104,419	3,184,405
GILEAD SCIENCES INC	4.00	9/1/2036	5,200,000	5,331,444	6,423,768
GILEAD SCIENCES INC	4.15	3/1/2047	27,350,000	28,798,207	34,899,147
GILEAD SCIENCES INC	4.50	2/1/2045	7,050,000	7,384,280	9,167,045
GILEAD SCIENCES INC	4.75	3/1/2046	24,750,000	25,998,357	33,384,038
GILEAD SCIENCES INC	5.65	12/1/2041	13,351,000	15,741,528	19,358,950
GLOBAL AIR LEASE CO LTD	6.50	9/15/2024	6,450,000	6,451,955	4,554,087
GLOBAL MARINE INC	7.00	6/1/2028	325,000	276,829	144,797
GLOBAL PAYMENTS INC	3.20	8/15/2029	21,500,000	21,460,279	23,025,855
GLOBAL PAYMENTS INC	4.15	8/15/2049	11,200,000	11,206,868	12,855,248
GLOBE LIFE INC	4.55	9/15/2028	11,400,000	11,616,762	13,159,020
GLP CAPITAL LP / FIN II	4.00	1/15/2030	24,960,000	24,965,729	24,743,098
GO DADDY OPCO/FINCO	5.25	12/1/2027	11,750,000	11,976,818	12,012,025
GOEASY LTD	5.38	12/1/2024	9,800,000	9,832,007	9,748,942
GOGO INTERMEDIATE/FINANC	9.88	5/1/2024	14,600,000	14,784,771	12,401,824
GOLDEN ENTERTAINMENT INC	7.63	4/15/2026	1,625,000	1,584,376	1,514,370
GOLDEN NUGGET INC	6.75	10/15/2024	9,112,000	8,674,274	6,524,192
GOLDEN NUGGET INC	8.75	10/1/2025	4,575,000	4,328,778	2,690,924
GOLDEN NUGGET LLC	0.00	10/4/2023	250,000	240,000	262,500
GOLDEN NUGGET, INC.	0.00	10/4/2023	1,331,246	1,317,739	1,051,685
GOLDMAN SACHS GROUP INC	3.81	4/23/2029	15,900,000	16,000,536	17,964,774

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
GOLDMAN SACHS GROUP INC	3.85	1/26/2027	50,600,000	50,629,436	56,866,810
GOLDMAN SACHS GROUP INC	4.22	5/1/2029	34,700,000	34,769,754	40,236,038
GOLDMAN SACHS GROUP INC	4.80	7/8/2044	2,000,000	2,427,534	2,605,860
GOLDMAN SACHS GROUP INC	5.15	5/22/2045	3,125,000	3,781,553	4,071,781
GOLDMAN SACHS GROUP INC	5.95	1/15/2027	8,018,000	8,286,979	10,000,851
GOLDMAN SACHS GROUP INC	6.25	2/1/2041	16,500,000	18,272,683	24,748,680
GOLDMAN SACHS GROUP INC	6.45	5/1/2036	4,250,000	5,578,367	5,883,403
GOLDMAN SACHS GROUP INC	6.75	10/1/2037	30,136,000	41,037,568	43,409,401
GOODYEAR TIRE + RUBBER	4.88	3/15/2027	11,200,000	10,401,657	10,254,944
GOODYEAR TIRE + RUBBER	5.00	5/31/2026	15,820,000	15,023,087	14,735,539
GOODYEAR TIRE + RUBBER	5.13	11/15/2023	17,000,000	16,840,819	16,323,400
GOODYEAR TIRE + RUBBER	9.50	5/31/2025	14,550,000	15,389,608	15,568,937
GRAHAM HOLDINGS CO	5.75	6/1/2026	800,000	800,663	830,640
GRANITE US HOLDINGS CORP	11.00	10/1/2027	575,000	554,361	562,114
GRAY TELEVISION INC	5.13	10/15/2024	12,482,000	12,172,507	12,460,656
GRAY TELEVISION INC	5.88	7/15/2026	12,660,000	12,439,005	12,611,512
GRAY TELEVISION INC	7.00	5/15/2027	20,459,000	20,919,887	21,106,323
GREENEDEN US HLDGS II LLC	0.00	12/1/2023	0	0	0
GREIF INC	6.50	3/1/2027	11,175,000	11,361,535	11,396,936
GREYSTAR REAL ESTATE PAR	5.75	12/1/2025	13,125,000	13,014,184	13,136,025
GRIFFON CORPORATION	5.75	3/1/2028	17,105,000	17,211,046	16,907,601
GRINDING MED/MOLY COP	7.38	12/15/2023	14,700,000	14,836,846	14,630,322
GROUP 1 AUTOMOTIVE INC	5.00	6/1/2022	9,475,000	9,431,025	9,451,597
GRUBHUB HOLDINGS INC	5.50	7/1/2027	8,000,000	8,153,507	8,192,160
GRUPO TELEVISIA SAB	6.13	1/31/2046	13,500,000	14,479,734	17,206,830
GUARDIAN LIFE INSURANCE	3.70	1/22/2070	26,050,000	26,347,423	27,443,154
GUARDIAN LIFE INSURANCE	4.85	1/24/2077	2,500,000	3,182,232	3,179,650
GULFPORT ENERGY CORP	6.00	10/15/2024	250,000	151,632	129,590
GULFPORT ENERGY CORP	6.38	5/15/2025	1,185,000	1,004,634	591,398
GULFPORT ENERGY CORP	6.38	1/15/2026	1,075,000	904,100	516,946
H+E EQUIPMENT SERVICES	5.63	9/1/2025	21,749,000	21,511,650	22,024,560
HALLIBURTON CO	4.85	11/15/2035	14,300,000	15,025,370	14,915,329
HANESBRANDS INC	4.63	5/15/2024	16,300,000	16,036,723	16,347,270
HANESBRANDS INC	4.88	5/15/2026	16,850,000	16,345,311	16,979,577
HANESBRANDS INC	5.38	5/15/2025	7,500,000	7,656,518	7,589,550
HARBORWALK FUNDING	5.08	2/15/2069	43,125,000	43,807,248	52,298,981
HARSCO CORP	5.75	7/31/2027	9,050,000	9,332,293	9,087,196
HARTFORD FINL SVCS GRP	3.60	8/19/2049	45,125,000	44,856,147	48,024,733
HASBRO INC	3.55	11/19/2026	10,000,000	9,973,096	10,553,800
HASBRO INC	3.90	11/19/2029	40,600,000	40,489,007	42,273,126
HAT HOLDINGS I LLC/HAT	5.25	7/15/2024	1,000,000	1,017,233	1,022,580
HCA INC	3.50	9/1/2030	28,013,000	27,334,851	26,852,982
HCA INC	4.13	6/15/2029	21,800,000	22,085,670	24,053,248
HCA INC	4.50	2/15/2027	28,900,000	28,858,714	32,182,173
HCA INC	5.13	6/15/2039	26,125,000	26,992,888	30,413,680
HCA INC	5.25	6/15/2049	7,100,000	8,228,376	8,507,504
HCA INC	5.38	2/1/2025	53,505,000	53,754,316	57,263,726

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
HCA INC	5.38	9/1/2026	15,100,000	15,047,561	16,404,942
HCA INC	5.50	6/15/2047	29,025,000	31,013,541	35,434,301
HCA INC	5.63	9/1/2028	18,365,000	18,778,578	20,481,383
HCA INC	5.88	5/1/2023	19,600,000	20,159,711	21,241,108
HCA INC	5.88	2/15/2026	29,970,000	30,579,315	32,849,518
HCA INC	5.88	2/1/2029	1,464,000	1,544,854	1,655,154
HCA INC	7.69	6/15/2025	1,580,000	1,670,919	1,786,601
HD SUPPLY INC	5.38	10/15/2026	15,818,000	15,569,612	16,177,069
HEALTH CARE SERVICE CORP	3.20	6/1/2050	25,000,000	24,776,364	25,443,500
HEALTHCARE REALTY TRUST	2.40	3/15/2030	10,000,000	9,967,464	9,569,000
HEALTHCARE REALTY TRUST	3.63	1/15/2028	6,930,000	7,035,352	7,332,425
HEALTHCARE TRUST OF AMER	3.10	2/15/2030	25,300,000	25,221,177	25,494,557
HERBALIFE/HLF FINANCING	7.88	9/1/2025	10,425,000	10,865,644	10,755,473
HERC HOLDINGS INC	5.50	7/15/2027	24,723,000	24,827,832	24,844,143
HERTZ CORP	5.50	10/15/2024	1,892,000	1,260,983	588,771
HERTZ CORP	6.00	1/15/2028	7,864,000	7,570,190	2,455,377
HERTZ CORP	6.25	10/15/2022	275,000	115,364	85,605
HERTZ CORP	7.13	8/1/2026	4,919,000	4,750,709	1,535,367
HERTZ CORP	7.63	6/1/2022	1,193,000	1,179,462	899,606
HESS CORP	4.30	4/1/2027	43,000,000	43,327,655	44,527,360
HESS CORP	5.80	4/1/2047	20,725,000	22,853,133	22,460,926
HESS MIDSTREAM OPERATION	5.13	6/15/2028	10,500,000	10,481,270	10,099,320
HESS MIDSTREAM OPERATION	5.63	2/15/2026	16,300,000	16,995,821	16,147,269
HIGHWOODS REALTY LP	3.05	2/15/2030	12,300,000	11,956,077	12,244,773
HILCORP ENERGY I/HILCORP	5.00	12/1/2024	7,300,000	7,036,736	6,138,497
HILCORP ENERGY I/HILCORP	5.75	10/1/2025	9,568,000	9,268,643	7,954,548
HILCORP ENERGY I/HILCORP	6.25	11/1/2028	13,012,000	12,566,171	10,338,424
HILL ROM HOLDINGS INC	5.00	2/15/2025	984,000	1,016,832	1,017,466
HILLENBRAND INC	5.75	6/15/2025	1,069,000	1,069,000	1,106,362
HILLMAN GROUP INC	6.38	7/15/2022	825,000	825,000	765,856
HILTON DOMESTIC OPERATIN	4.25	9/1/2024	23,087,000	22,364,745	22,331,362
HILTON DOMESTIC OPERATIN	4.88	1/15/2030	16,300,000	16,701,726	16,051,099
HILTON DOMESTIC OPERATIN	5.13	5/1/2026	28,984,000	28,688,463	28,854,152
HILTON DOMESTIC OPERATIN	5.38	5/1/2025	1,939,000	1,939,000	1,930,895
HILTON DOMESTIC OPERATIN	5.75	5/1/2028	2,057,000	2,057,000	2,084,543
HILTON GRAND VACA LLC/IN	6.13	12/1/2024	661,000	700,788	667,617
HILTON WORLDWIDE FIN LLC	4.63	4/1/2025	17,765,000	17,461,653	17,364,222
HILTON WORLDWIDE FIN LLC	4.88	4/1/2027	9,300,000	9,127,495	9,078,846
HLF FIN SARL LLC/HERBALI	7.25	8/15/2026	575,000	580,226	578,007
HOLLY NRG PRTNR/FIN CORP	5.00	2/1/2028	11,653,000	11,752,195	11,100,764
HOLOGIC INC	4.38	10/15/2025	19,530,000	18,997,656	19,753,423
HOME DEPOT INC	3.30	4/15/2040	35,000,000	34,693,839	39,603,900
HOME DEPOT INC	3.35	4/15/2050	20,000,000	19,773,536	23,034,400
HOME DEPOT INC	4.25	4/1/2046	10,300,000	11,098,246	13,010,857
HOME DEPOT INC	4.50	12/6/2048	21,500,000	22,867,137	28,748,080
HOME DEPOT INC	4.88	2/15/2044	12,100,000	13,155,240	16,467,858
HOME DEPOT INC	5.88	12/16/2036	36,400,000	39,109,831	53,866,540

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
HOME DEPOT INC	5.95	4/1/2041	22,000,000	28,062,655	32,965,680
HOMER CITY GENERATION LP	8.73	10/1/2026	736,747	412,472	285,489
HORIZON THERAPEUTICS USA	5.50	8/1/2027	10,000,000	10,210,728	10,403,800
HOST HOTELS + RESORTS LP	3.38	12/15/2029	5,000,000	4,963,822	4,769,350
HOWARD HUGHES CORP	5.38	3/15/2025	21,167,000	20,871,771	19,683,405
HOWMET AEROSPACE INC	5.90	2/1/2027	500,000	443,504	533,535
HOWMET AEROSPACE INC	5.95	2/1/2037	1,650,000	1,740,971	1,702,899
HOWMET AEROSPACE INC	6.88	5/1/2025	15,000,000	15,000,000	16,275,900
HP ENTERPRISE CO	4.65	10/1/2024	25,000,000	24,956,571	28,067,750
HP ENTERPRISE CO	4.90	10/15/2025	2,400,000	2,424,129	2,766,240
HP ENTERPRISE CO	6.20	10/15/2035	7,200,000	7,908,057	8,857,944
HP ENTERPRISE CO	6.35	10/15/2045	65,717,000	69,455,069	80,392,263
HP INC	3.40	6/17/2030	15,000,000	14,968,621	15,431,850
HP INC	6.00	9/15/2041	3,185,000	3,435,915	3,752,631
HSBC HOLDINGS PLC	3.97	5/22/2030	23,000,000	23,327,041	25,548,400
HSBC HOLDINGS PLC	4.04	3/13/2028	67,100,000	67,739,291	74,058,270
HSBC HOLDINGS PLC	4.25	8/18/2025	11,927,000	11,947,091	12,967,034
HSBC HOLDINGS PLC	4.58	6/19/2029	12,200,000	12,452,417	14,067,820
HSBC HOLDINGS PLC	4.95	3/31/2030	20,000,000	19,975,630	24,030,800
HUB INTERNATIONAL LTD	7.00	5/1/2026	6,563,000	6,577,333	6,544,427
HUB INTL LTD	0.00	4/25/2025	933,832	914,010	886,365
HUDBAY MINERALS INC	7.25	1/15/2023	654,000	658,015	644,785
HUDBAY MINERALS INC	7.63	1/15/2025	5,528,000	5,674,520	5,283,220
HUDSON PACIFIC PROPRTIE	3.25	1/15/2030	37,200,000	36,951,841	35,858,940
HUGHES SATELLITE SYSTEMS	5.25	8/1/2026	550,000	568,563	568,337
HUGHES SATELLITE SYSTEMS	6.63	8/1/2026	15,340,000	15,088,291	16,001,614
HUGHES SATELLITE SYSTEMS	7.63	6/15/2021	940,000	961,682	968,708
HUMANA INC	3.13	8/15/2029	11,300,000	11,300,221	12,243,437
HUMANA INC	3.95	3/15/2027	28,900,000	28,811,953	32,835,024
HUNT COS INC	6.25	2/15/2026	11,985,000	11,406,029	10,921,331
HUNTINGTON INGALLS INDUS	4.20	5/1/2030	40,000,000	39,998,440	44,656,000
HUSKY III HOLDING LTD	13.00	2/15/2025	875,000	863,119	841,899
HYUNDAI CAPITAL AMERICA	3.00	2/10/2027	20,000,000	19,943,143	19,752,200
IAA INC	5.50	6/15/2027	12,259,000	12,353,895	12,673,354
IAMGOLD CORP	7.00	4/15/2025	325,000	325,638	328,708
IBM CORP	2.85	5/15/2040	10,000,000	9,936,978	10,414,400
IBM CORP	4.00	6/20/2042	16,100,000	16,496,010	19,308,408
IBM CORP	4.15	5/15/2039	7,100,000	7,737,218	8,592,917
ICAHN ENTERPRISES/FIN	4.75	9/15/2024	20,425,000	20,621,793	19,199,500
ICAHN ENTERPRISES/FIN	5.25	5/15/2027	18,525,000	18,741,010	17,875,328
ICAHN ENTERPRISES/FIN	6.25	2/1/2022	20,847,000	21,051,635	20,982,922
ICAHN ENTERPRISES/FIN	6.25	5/15/2026	23,150,000	23,417,481	23,150,926
ICAHN ENTERPRISES/FIN	6.38	12/15/2025	17,892,000	18,071,203	17,714,154
ICAHN ENTERPRISES/FIN	6.75	2/1/2024	75,000	75,905	75,897
IDEX CORP	3.00	5/1/2030	10,000,000	9,982,310	10,449,300
IHEARTCOMMUNICATIONS INC	4.75	1/15/2028	12,101,000	12,104,699	11,180,356
IHEARTCOMMUNICATIONS INC	5.25	8/15/2027	16,778,000	16,789,818	16,073,324

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
IHEARTCOMMUNICATIONS INC	6.38	5/1/2026	18,465,376	19,047,945	18,397,423
IHEARTCOMMUNICATIONS INC	8.38	5/1/2027	4,389,032	4,645,883	4,018,378
IHO VERWALTUNGS GMBH	4.75	9/15/2026	1,516,000	1,473,953	1,492,820
IHS MARKIT LTD	4.75	8/1/2028	6,200,000	6,252,703	7,272,042
ILFC E CAPITAL TRUST I	3.02	12/21/2065	500,000	384,645	244,930
ILLUMINATE BUYER/HLDG	9.00	7/1/2028	760,000	760,000	792,323
INDIANAPOLIS PWR + LIGHT	4.05	5/1/2046	19,000,000	18,444,656	23,023,250
INDIGO NATURAL RES LLC	6.88	2/15/2026	12,200,000	11,519,467	11,330,750
INEOS GROUP HOLDINGS SA	5.63	8/1/2024	2,640,000	2,581,289	2,556,893
INFORMATICA LLC	0.00	2/25/2025	964,000	959,180	962,795
ING GROEP NV	4.55	10/2/2028	1,700,000	1,899,368	2,052,716
INGEVITY CORP	4.50	2/1/2026	746,000	732,970	736,317
INGLES MARKETS INC	5.75	6/15/2023	5,622,000	5,634,895	5,656,856
INN OF THE MOUNTAIN GODS	9.25	11/30/2020	614,886	615,811	522,942
INNOPHOS HOLDINGS INC	9.38	2/15/2028	3,216,000	3,256,783	3,161,971
INSTALLED BUILDING PRODU	5.75	2/1/2028	925,000	933,063	933,381
INTEL CORP	3.10	2/15/2060	20,000,000	19,869,454	22,134,200
INTEL CORP	3.73	12/8/2047	20,300,000	19,940,847	24,301,333
INTEL CORP	4.60	3/25/2040	10,000,000	9,991,022	13,270,300
INTEL CORP	4.75	3/25/2050	21,805,000	21,781,013	30,704,929
INTELSAT JACKSON HLDG	8.00	2/15/2024	125,000	129,367	126,751
INTELSAT JACKSON HLDG	8.50	10/15/2024	2,850,000	2,794,235	1,715,387
INTELSAT JACKSON HLDG	9.75	7/15/2025	4,375,000	4,344,101	2,682,838
INTELSAT LUXEMBOURG SA	8.13	6/1/2023	1,170,000	1,032,556	64,350
INTERCONTINENTALEXCHANGE	3.00	6/15/2050	50,000,000	49,250,466	52,198,500
INTERCONTINENTALEXCHANGE	4.25	9/21/2048	18,400,000	18,925,960	23,292,560
INTERNATIONAL GAME TECH	5.25	1/15/2029	6,841,000	6,812,789	6,679,484
INTERNATIONAL GAME TECH	6.25	2/15/2022	12,137,000	12,166,974	12,257,885
INTERNATIONAL GAME TECH	6.25	1/15/2027	14,700,000	14,884,695	14,963,130
INTERNATIONAL GAME TECH	6.50	2/15/2025	25,574,000	26,402,358	26,126,398
INTERNATIONAL PAPER CO	4.40	8/15/2047	10,500,000	10,617,248	12,340,755
INTERNATIONAL PAPER CO	4.80	6/15/2044	45,500,000	43,571,595	53,747,785
INTERPUBLIC GROUP COS	4.65	10/1/2028	9,200,000	9,205,541	10,674,668
IQVIA INC	5.00	10/15/2026	23,440,000	23,127,949	24,112,494
IQVIA INC	5.00	5/15/2027	19,019,000	19,223,606	19,397,098
IRB HOLDING CORP	6.75	2/15/2026	7,132,000	6,960,494	6,815,553
IRB HOLDING CORP	7.00	6/15/2025	14,140,000	14,711,844	14,561,938
IRB HOLDING CORP.	0.00	2/5/2025	465,053	465,053	428,346
IRON MOUNTAIN INC	4.88	9/15/2027	18,500,000	17,348,284	18,036,205
IRON MOUNTAIN INC	4.88	9/15/2029	20,391,000	20,468,316	19,816,586
IRON MOUNTAIN INC	5.00	7/15/2028	2,101,000	2,101,000	2,058,560
IRON MOUNTAIN INC	5.25	3/15/2028	20,100,000	19,044,236	19,998,294
IRON MOUNTAIN INC	5.25	7/15/2030	7,400,000	7,396,406	7,289,000
IRON MOUNTAIN INC	5.63	7/15/2032	650,000	650,000	648,499
IRON MOUNTAIN INC	5.75	8/15/2024	17,325,000	17,173,812	17,490,974
ISTAR INC	4.25	8/1/2025	9,800,000	9,842,299	8,931,132
ISTAR INC	4.75	10/1/2024	12,200,000	12,363,903	11,445,674

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
ITC HOLDINGS CORP	2.95	5/14/2030	20,000,000	19,959,342	21,324,800
J2 CLOUD LLC/CLOUD INC	6.00	7/15/2025	12,775,000	12,961,793	13,005,206
JACOBS ENTERTAINMENT INC	7.88	2/1/2024	1,125,000	1,135,581	971,516
JAGGED PEAK ENERGY LLC	5.88	5/1/2026	875,000	876,957	852,399
JAGUAR HL / PPD	4.63	6/15/2025	3,035,000	3,053,371	3,085,958
JAGUAR HL / PPD	5.00	6/15/2028	7,815,000	7,996,880	7,998,965
JBS INVESTMENTS II GMBH	5.75	1/15/2028	3,154,000	3,143,600	3,186,518
JBS INVESTMENTS II GMBH	7.00	1/15/2026	5,163,000	5,366,269	5,384,131
JBS USA LLC/JBS USA FINA	5.75	6/15/2025	27,271,000	26,930,564	27,571,799
JBS USA LLC/JBS USA FINA	5.88	7/15/2024	16,884,000	16,715,650	17,111,765
JBS USA LUX/JBS USA FIN	6.75	2/15/2028	21,250,000	20,907,333	22,442,975
JBS USA/FOOD/FINANCE	5.50	1/15/2030	12,743,000	12,836,894	13,050,489
JBS USA/FOOD/FINANCE	6.50	4/15/2029	25,925,000	27,074,927	27,496,055
JC PENNEY CORP INC	6.38	10/15/2036	525,000	378,235	4,132
JC PENNEY CORP INC	8.63	3/15/2025	1,275,000	1,152,501	25,232
JEFFERIES FIN LLC / JFIN	6.25	6/3/2026	1,000,000	1,004,380	948,680
JEFFERIES FIN LLC / JFIN	7.25	8/15/2024	400,000	400,000	355,984
JEFFERIES GRP LLC / CAP	4.15	1/23/2030	23,700,000	22,892,898	25,393,602
JEFFERIES GRP LLC / CAP	4.85	1/15/2027	2,100,000	2,175,586	2,301,117
JELD WEN INC	4.63	12/15/2025	995,000	986,738	955,091
JELD WEN INC	6.25	5/15/2025	850,000	851,273	888,480
JETBLUE 2019 1 CLASS AA	2.75	11/15/2033	15,804,914	15,804,914	14,136,073
JM SMUCKER CO	2.38	3/15/2030	10,000,000	9,987,986	10,236,800
JM SMUCKER CO	3.55	3/15/2050	7,000,000	6,973,330	7,281,960
JM SMUCKER CO	4.25	3/15/2035	3,750,000	4,043,973	4,420,275
JOHNSON + JOHNSON	3.63	3/3/2037	38,000,000	38,269,554	45,795,700
JOHNSON + JOHNSON	3.75	3/3/2047	23,200,000	23,261,170	29,248,240
JOHNSON CONTROLS INTL PL	4.63	7/2/2044	13,100,000	12,710,398	14,935,179
JOHNSON CONTROLS INTL PL	6.00	1/15/2036	20,125,000	22,725,534	25,282,434
JONAH NRG LLC/FINANCE	7.25	10/15/2025	8,700,000	6,905,862	994,410
JOSEPH T RYERSON + SON I	11.00	5/15/2022	7,300,000	7,602,663	7,451,548
JPMORGAN CHASE + CO	3.51	1/23/2029	44,000,000	43,783,358	49,580,960
JPMORGAN CHASE + CO	3.54	5/1/2028	20,000,000	20,057,085	22,340,600
JPMORGAN CHASE + CO	3.70	5/6/2030	17,000,000	17,162,838	19,482,000
JPMORGAN CHASE + CO	3.78	2/1/2028	6,055,000	6,074,742	6,850,748
JPMORGAN CHASE + CO	3.88	7/24/2038	31,800,000	33,562,541	37,580,604
JPMORGAN CHASE + CO	3.90	1/23/2049	16,900,000	17,250,364	20,387,315
JPMORGAN CHASE + CO	4.01	4/23/2029	31,100,000	30,560,572	35,866,697
JPMORGAN CHASE + CO	4.20	7/23/2029	11,500,000	11,728,648	13,459,025
JPMORGAN CHASE + CO	4.26	2/22/2048	23,350,000	24,068,454	29,361,224
JPMORGAN CHASE + CO	4.85	2/1/2044	32,600,000	34,987,105	44,340,890
JPMORGAN CHASE + CO	4.95	6/1/2045	7,650,000	8,199,086	10,392,525
JPMORGAN CHASE + CO	5.63	8/16/2043	7,750,000	10,170,255	11,257,108
JPW INDUSTRIES HOLD CORP	9.00	10/1/2024	300,000	300,000	235,194
JUNIPER NETWORKS INC	3.75	8/15/2029	49,100,000	49,105,691	55,027,843
JUNIPER NETWORKS INC	5.95	3/15/2041	9,738,000	10,929,096	11,932,166
K HOVNANIAN ENTERPRISES	5.00	2/1/2040	330,000	228,759	35,914

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
K HOVNANIAN ENTERPRISES	13.50	2/1/2026	332,000	384,546	153,603
KAISER ALUMINUM CORP	4.63	3/1/2028	9,300,000	9,420,183	8,900,007
KAISER ALUMINUM CORP	6.50	5/1/2025	2,100,000	2,123,267	2,178,687
KANSAS CITY SOUTHERN	4.30	5/15/2043	12,100,000	11,802,573	14,445,464
KANSAS CITY SOUTHERN	4.70	5/1/2048	16,900,000	17,342,530	21,310,731
KAR AUCTION SERVICES INC	0.00	9/19/2026	247,003	246,385	233,726
KAR AUCTION SERVICES INC	5.13	6/1/2025	22,389,000	21,868,152	22,031,224
KB HOME	6.88	6/15/2027	750,000	748,432	819,240
KB HOME	7.00	12/15/2021	300,000	311,075	315,162
KB HOME	7.63	5/15/2023	2,273,000	2,327,603	2,477,206
KENNEDY WILSON INC	5.88	4/1/2024	20,555,000	20,294,174	20,452,019
KENTUCKY UTILITIES CO	4.38	10/1/2045	1,000,000	1,163,375	1,217,500
KEURIG DR PEPPER INC	3.20	5/1/2030	6,000,000	5,984,912	6,672,660
KEURIG DR PEPPER INC	3.80	5/1/2050	10,000,000	9,945,197	11,315,000
KEURIG DR PEPPER INC	4.60	5/25/2028	37,700,000	38,208,494	45,217,380
KEURIG DR PEPPER INC	4.99	5/25/2038	2,625,000	3,061,304	3,353,858
KFC HLD/PIZZA HUT/TACO	4.75	6/1/2027	15,317,000	14,907,119	15,733,316
KFC HLD/PIZZA HUT/TACO	5.00	6/1/2024	19,910,000	19,825,834	20,284,308
KFC HLD/PIZZA HUT/TACO	5.25	6/1/2026	18,250,000	18,059,569	18,696,943
KFW	0.00	4/18/2036	11,765,000	6,632,226	9,561,651
KFW	1.75	9/14/2029	75,000,000	77,036,680	81,051,000
KFW	2.88	4/3/2028	65,000,000	67,412,791	75,645,050
KILROY REALTY LP	3.05	2/15/2030	16,400,000	15,972,830	16,310,948
KIMBERLY CLARK CORP	2.88	2/7/2050	15,000,000	14,952,635	16,292,100
KINDER MORGAN ENER PART	6.50	2/1/2037	600,000	752,353	757,818
KINDER MORGAN ENER PART	7.50	11/15/2040	45,000,000	47,084,068	61,290,000
KINDER MORGAN INC	4.30	3/1/2028	11,100,000	11,261,074	12,573,858
KINDER MORGAN INC	5.20	3/1/2048	10,550,000	11,469,227	12,684,793
KINDER MORGAN INC	5.30	12/1/2034	13,050,000	14,647,098	14,991,579
KINDER MORGAN INC	5.55	6/1/2045	74,150,000	77,103,052	90,514,164
KLA CORP	5.00	3/15/2049	22,000,000	24,543,824	28,958,820
KONINKIJE AHOLD DLHAIZE	5.70	10/1/2040	5,309,000	5,710,001	7,143,260
KOPPERS INC	6.00	2/15/2025	8,700,000	8,391,060	8,462,316
KRAFT HEINZ FOODS CO	3.75	4/1/2030	10,500,000	10,480,404	10,843,350
KRAFT HEINZ FOODS CO	3.88	5/15/2027	5,000,000	5,000,000	5,224,550
KRAFT HEINZ FOODS CO	4.25	3/1/2031	10,000,000	10,000,000	10,594,800
KRAFT HEINZ FOODS CO	4.38	6/1/2046	54,967,000	52,943,098	53,930,322
KRAFT HEINZ FOODS CO	4.63	1/30/2029	9,600,000	10,040,841	10,399,680
KRAFT HEINZ FOODS CO	4.63	10/1/2039	8,125,000	8,085,214	8,143,444
KRAFT HEINZ FOODS CO	4.88	10/1/2049	600,000	592,669	621,492
KRAFT HEINZ FOODS CO	5.00	7/15/2035	9,575,000	9,879,491	10,532,117
KRAFT HEINZ FOODS CO	5.00	6/4/2042	36,459,000	37,088,469	38,030,383
KRAFT HEINZ FOODS CO	5.20	7/15/2045	2,175,000	2,293,849	2,356,721
KRAFT HEINZ FOODS CO	5.50	6/1/2050	525,000	525,000	564,785
KRAFT HEINZ FOODS CO	6.88	1/26/2039	1,100,000	1,308,879	1,368,213
KRAFT HEINZ FOODS CO	7.13	8/1/2039	475,000	521,855	607,159
KRATON POLYMERS LLC/CAP	7.00	4/15/2025	650,000	657,256	653,283

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
KROGER CO	3.95	1/15/2050	20,000,000	19,934,630	22,965,600
KROGER CO	6.90	4/15/2038	15,500,000	16,813,983	22,574,820
KROGER CO	7.50	4/1/2031	45,400,000	50,644,735	67,014,032
KRONOS ACQUISITION HOLDI	9.00	8/15/2023	725,000	695,898	691,759
L BRANDS INC	5.25	2/1/2028	17,484,000	15,547,593	13,820,577
L BRANDS INC	5.63	2/15/2022	9,883,000	9,991,572	9,731,494
L BRANDS INC	5.63	10/15/2023	456,000	459,277	431,280
L BRANDS INC	6.75	7/1/2036	16,895,000	14,737,613	14,071,339
L BRANDS INC	6.88	7/1/2025	8,464,000	8,698,754	8,744,751
L BRANDS INC	6.88	11/1/2035	18,848,000	16,727,232	15,715,462
L BRANDS INC	7.50	6/15/2029	11,302,000	11,130,712	9,933,328
L BRANDS INC	9.38	7/1/2025	1,432,000	1,432,000	1,433,905
L3HARRIS TECH INC	2.90	12/15/2029	10,000,000	9,974,690	10,758,800
L3HARRIS TECH INC	4.40	6/15/2028	20,300,000	22,036,758	24,118,024
L3HARRIS TECH INC	4.85	4/27/2035	10,000,000	11,498,467	12,713,500
L3HARRIS TECH INC	5.05	4/27/2045	3,750,000	4,610,500	4,917,525
L3HARRIS TECH INC	6.15	12/15/2040	3,000,000	4,005,339	4,233,000
LABL ESCROW ISSUER LLC	6.75	7/15/2026	14,860,000	15,042,518	15,489,321
LABL ESCROW ISSUER LLC	10.50	7/15/2027	12,145,000	12,197,735	12,921,673
LADDER CAP FIN LLLP/CORP	4.25	2/1/2027	12,025,000	11,949,849	9,614,108
LADDER CAP FIN LLLP/CORP	5.25	3/15/2022	8,247,000	8,267,005	7,908,378
LADDER CAP FIN LLLP/CORP	5.25	10/1/2025	3,514,000	3,069,283	3,026,257
LADDER CAP FIN LLLP/CORP	5.88	8/1/2021	1,550,000	1,563,163	1,534,640
LAM RESEARCH CORP	4.88	3/15/2049	3,200,000	3,262,290	4,432,800
LAMAR MEDIA CORP	3.75	2/15/2028	10,532,000	10,568,658	9,979,175
LAMAR MEDIA CORP	4.00	2/15/2030	1,118,000	1,118,000	1,073,269
LAMAR MEDIA CORP	5.00	5/1/2023	1,575,000	1,576,333	1,583,615
LAMAR MEDIA CORP	5.75	2/1/2026	10,514,000	10,904,609	10,864,221
LAMB WESTON HLD	4.63	11/1/2024	16,015,000	15,877,352	16,612,680
LAMB WESTON HLD	4.88	11/1/2026	15,450,000	15,331,837	16,011,917
LAMB WESTON HLD	4.88	5/15/2028	1,929,000	1,933,888	2,042,560
LANDSBANKI ISLANDS ESC	0.00	8/25/2016	3,330,000	3,330,000	241,425
LAREDO PETROLEUM INC	9.50	1/15/2025	10,275,000	9,830,150	7,096,121
LAS VEGAS SANDS CORP	3.90	8/8/2029	10,500,000	10,594,802	10,356,885
LAUREATE EDUCATION INC	8.25	5/1/2025	12,700,000	13,420,244	13,205,460
LAZARD GROUP LLC	4.38	3/11/2029	8,500,000	8,613,147	9,505,720
LCPR SR SECURED FIN DAC	6.75	10/15/2027	20,000,000	21,033,048	20,424,600
LEAR CORP	3.80	9/15/2027	5,500,000	5,480,610	5,569,520
LEHMAN BRTH HLD	6.50	7/19/2017	1,140,000	0	11
LEHMAN BRTH HLD	7.50	5/11/2038	339,000,000	0	3,390
LEHMAN BRTH HLD ESCROW	1.00	11/30/2056	4,950,000	0	0
LEIDOS INC	3.63	5/15/2025	7,000,000	6,975,625	7,624,120
LEIDOS INC	4.38	5/15/2030	10,000,000	9,873,357	11,274,100
LENNAR CORP	5.25	6/1/2026	2,705,000	2,822,641	2,932,139
LEVEL 3 FINANCING INC	4.25	7/1/2028	1,575,000	1,575,000	1,573,425
LEVEL 3 FINANCING INC	4.63	9/15/2027	18,775,000	18,817,393	18,885,022
LEVEL 3 FINANCING INC	5.13	5/1/2023	7,955,000	7,922,254	7,955,716

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
LEVEL 3 FINANCING INC	5.25	3/15/2026	16,375,000	16,054,526	16,818,599
LEVEL 3 FINANCING INC	5.38	8/15/2022	1,254,000	1,255,413	1,254,828
LEVEL 3 FINANCING INC	5.38	1/15/2024	18,895,000	18,743,373	19,047,483
LEVEL 3 FINANCING INC	5.38	5/1/2025	12,725,000	12,606,350	13,038,290
LEVEL 3 FINANCING INC	5.63	2/1/2023	950,000	954,342	949,060
LEVI STRAUSS + CO	5.00	5/1/2025	8,500,000	8,556,433	8,548,365
LIBERTY INTERACTIVE LLC	8.25	2/1/2030	9,500,000	9,837,337	9,292,710
LIBERTY MUTUAL GROUP INC	3.95	5/15/2060	10,000,000	9,989,938	10,509,700
LIBERTY MUTUAL GROUP INC	3.95	10/15/2050	32,650,000	32,835,198	34,472,523
LIFE STORAGE LP	4.00	6/15/2029	23,900,000	24,039,854	26,126,763
LIFEPOINT HEALTH INC	4.38	2/15/2027	12,725,000	12,688,696	11,990,640
LIFEPOINT HEALTH INC	6.75	4/15/2025	7,575,000	7,754,490	7,778,540
LINCOLN NATIONAL CORP	6.30	10/9/2037	2,900,000	2,963,543	3,852,244
LINCOLN NATIONAL CORP	7.00	6/15/2040	22,000,000	24,292,568	31,016,920
LIONS GATE CAPITAL HOLD	5.88	11/1/2024	10,100,000	10,161,492	9,695,596
LIONS GATE CAPITAL HOLD	6.38	2/1/2024	10,875,000	10,970,407	10,596,709
LITHIA MOTORS INC	4.63	12/15/2027	800,000	784,595	791,912
LITHIA MOTORS INC	5.25	8/1/2025	250,000	250,000	251,648
LIVE NATION ENTERTAINMEN	4.75	10/15/2027	17,392,000	17,831,727	15,008,774
LIVE NATION ENTERTAINMEN	4.88	11/1/2024	12,280,000	12,129,182	11,059,245
LIVE NATION ENTERTAINMEN	5.63	3/15/2026	2,253,000	2,292,097	2,135,281
LIVE NATION ENTERTAINMEN	6.50	5/15/2027	16,298,000	17,130,300	16,789,711
LLOYDS BANKING GROUP PLC	4.58	12/10/2025	54,932,000	55,409,730	60,947,603
LLOYDS BANKING GROUP PLC	5.30	12/1/2045	10,750,000	12,857,741	14,019,505
LOCKHEED MARTIN CORP	2.80	6/15/2050	10,000,000	9,913,632	10,499,800
LOCKHEED MARTIN CORP	4.07	12/15/2042	11,000,000	11,833,150	13,982,980
LOCKHEED MARTIN CORP	4.09	9/15/2052	77,714,000	80,257,333	101,388,016
LONGHORN A	1.00	11/1/2027	2,710,601	2,706,425	9,476,770
LONGHORN B MULTI STRATEGY CRDT	1.00	11/1/2027	41,039,489	40,939,331	54,694,382
LOWE S COS INC	3.70	4/15/2046	19,625,000	19,040,703	21,954,488
LOWE S COS INC	4.05	5/3/2047	38,975,000	38,482,926	45,798,353
LOWE S COS INC	4.55	4/5/2049	42,325,000	45,882,448	53,550,860
LPL HOLDINGS INC	4.63	11/15/2027	500,000	500,000	495,830
LPL HOLDINGS INC	5.75	9/15/2025	15,200,000	14,991,781	15,392,736
LTF MERGER SUB INC	0.00	6/10/2022	3,363,379	3,329,884	2,970,301
LTF MERGER SUB INC	8.50	6/15/2023	6,599,000	6,749,267	5,460,409
LYB INTERNATIONAL FINANC	3.50	3/2/2027	3,000,000	2,985,616	3,270,210
LYB INTL FINANCE BV	5.25	7/15/2043	7,300,000	7,252,129	8,788,543
MACY S INC	8.38	6/15/2025	12,703,000	13,057,666	12,645,201
MACYS RETAIL HLDGS INC	2.88	2/15/2023	8,000,000	5,828,982	6,283,280
MACYS RETAIL HLDGS INC	3.63	6/1/2024	6,000,000	4,139,552	4,337,040
MACYS RETAIL HLDGS INC	4.50	12/15/2034	2,000,000	1,154,943	1,188,040
MAGELLAN MIDSTREAM PARTN	3.25	6/1/2030	30,000,000	29,964,413	31,760,400
MAGNOLIA OIL GAS/MAG FIN	6.00	8/1/2026	675,000	676,656	644,807
MALLINCKRODT FIN/SB	5.63	10/15/2023	2,045,000	1,881,205	398,039
MANITOWOC COMPANY INC	9.00	4/1/2026	500,000	500,000	496,080
MANULIFE FINANCIAL CORP	4.06	2/24/2032	7,100,000	6,974,040	7,522,592

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
MARATHON OIL CORP	4.40	7/15/2027	8,100,000	8,397,315	7,989,192
MARATHON OIL CORP	5.20	6/1/2045	1,750,000	1,962,380	1,619,643
MARATHON OIL CORP	6.60	10/1/2037	700,000	541,270	710,906
MARATHON OIL CORP	6.80	3/15/2032	10,970,000	11,494,511	11,695,336
MARATHON PETROLEUM CORP	3.80	4/1/2028	11,600,000	11,672,077	12,320,476
MARATHON PETROLEUM CORP	4.50	5/1/2023	35,000,000	34,980,571	37,725,450
MARATHON PETROLEUM CORP	4.70	5/1/2025	50,000,000	49,905,963	55,974,000
MARATHON PETROLEUM CORP	6.50	3/1/2041	13,150,000	14,469,259	16,289,168
MARKEL CORP	3.35	9/17/2029	20,300,000	20,388,619	21,652,995
MARRIOTT INTERNATIONAL	5.75	5/1/2025	8,000,000	7,999,693	8,693,680
MARRIOTT OWNERSHIP RESOR	4.75	1/15/2028	375,000	375,000	341,944
MARRIOTT OWNERSHIP RESOR	6.13	9/15/2025	7,605,000	7,712,827	7,766,834
MARRIOTT OWNERSHIP/ILG	6.50	9/15/2026	14,575,000	14,788,924	14,729,787
MARSH + MCLENNAN COS INC	4.35	1/30/2047	10,200,000	10,372,209	12,791,616
MASONITE INTERNATIONAL C	5.38	2/1/2028	10,740,000	10,935,002	10,994,323
MASONITE INTERNATIONAL C	5.75	9/15/2026	600,000	596,102	612,966
MASS MUTUAL LIFE INS CO	3.73	10/15/2070	23,424,000	22,613,504	24,063,944
MASS MUTUAL LIFE INS CO	4.90	4/1/2077	9,000,000	9,427,140	11,341,260
MASTERCARD INC	3.65	6/1/2049	3,948,000	3,963,560	4,738,587
MASTERCARD INC	3.85	3/26/2050	25,000,000	24,894,938	31,106,500
MASTERCARD INC	3.95	2/26/2048	5,000,000	5,051,710	6,257,550
MATADOR RESOURCES CO	5.88	9/15/2026	22,370,000	22,232,145	16,594,066
MATCH GROUP INC	4.13	8/1/2030	8,300,000	8,306,159	8,134,083
MATCH GROUP INC	4.63	6/1/2028	1,716,000	1,716,000	1,738,188
MATCH GROUP INC	5.00	12/15/2027	700,000	702,717	728,546
MATCH GROUP INC	5.63	2/15/2029	1,128,000	1,202,199	1,191,687
MATTAMY GROUP CORP	4.63	3/1/2030	10,425,000	10,222,968	10,051,160
MATTAMY GROUP CORP	5.25	12/15/2027	7,300,000	7,431,531	7,276,786
MATTEL INC	5.45	11/1/2041	1,209,000	966,596	1,001,862
MATTEL INC	5.88	12/15/2027	13,163,000	13,205,546	13,565,525
MATTEL INC	6.75	12/31/2025	33,290,000	32,765,547	34,528,388
MATTHEWS INTERNATIONAL C	5.25	12/1/2025	700,000	688,876	638,211
MAUSER PACKAGING SOLUT	5.50	4/15/2024	33,037,000	32,688,987	32,480,327
MAUSER PACKAGING SOLUT	7.25	4/15/2025	4,584,000	4,580,168	4,150,491
MAXIM CRANE WORKS LLC	10.13	8/1/2024	10,225,000	10,731,266	10,060,071
MBIA INC	7.15	7/15/2027	200,000	208,694	167,472
MBIA INSURANCE CO	11.49	1/15/2033	825,000	723,213	547,000
MCDONALD S CORP	3.63	9/1/2049	7,950,000	7,829,935	8,809,395
MCDONALD S CORP	4.45	3/1/2047	25,720,000	26,187,870	31,558,954
MCDONALD S CORP	4.45	9/1/2048	6,950,000	7,392,545	8,557,952
MCDONALD S CORP	4.60	5/26/2045	6,750,000	7,409,514	8,386,403
MCDONALD S CORP	4.70	12/9/2035	6,722,000	7,554,431	8,525,580
MCDONALD S CORP	4.88	12/9/2045	59,999,000	64,861,121	77,083,715
MCDONALD S CORP	6.30	10/15/2037	1,500,000	2,046,354	2,178,810
MCDONALD S CORP	6.30	3/1/2038	1,500,000	2,042,768	2,182,860
MCLAREN FINANCE PLC	5.75	8/1/2022	200,000	200,000	137,810
MDC PARTNERS INC	6.50	5/1/2024	15,350,000	14,075,486	14,256,466

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
MEDNAX INC	5.25	12/1/2023	12,100,000	12,318,555	12,032,966
MEDNAX INC	6.25	1/15/2027	16,100,000	16,346,022	16,101,932
MEG ENERGY CORP	7.00	3/31/2024	12,068,000	11,499,426	10,340,224
MEG ENERGY CORP	7.13	2/1/2027	20,980,000	21,041,019	17,429,764
MELCO RESORTS FINANCE	5.25	4/26/2026	1,400,000	1,400,000	1,415,918
MELCO RESORTS FINANCE	5.38	12/4/2029	1,500,000	1,402,713	1,491,885
MELCO RESORTS FINANCE	5.63	7/17/2027	1,600,000	1,484,318	1,614,592
MERCER INTL INC	6.50	2/1/2024	1,150,000	1,164,923	1,134,855
MERCER INTL INC	7.38	1/15/2025	775,000	775,000	774,814
MERCK + CO INC	3.70	2/10/2045	6,700,000	6,739,399	8,103,315
MERCK + CO INC	4.00	3/7/2049	18,400,000	18,534,388	23,771,696
MERCK + CO INC	6.55	9/15/2037	2,800,000	3,992,733	4,324,936
MEREDITH CORP	6.88	2/1/2026	21,880,000	22,072,942	18,286,429
MERITAGE HOMES CORP	5.13	6/6/2027	1,010,000	950,325	1,042,280
MERITAGE HOMES CORP	6.00	6/1/2025	2,205,000	2,223,458	2,353,793
MERITAGE HOMES CORP	7.00	4/1/2022	1,513,000	1,501,504	1,601,874
MERLIN ENTERTAINMENTS	5.75	6/15/2026	2,000,000	2,068,020	1,927,840
MET LIFE GLOB FUNDING I	0.65	9/7/2020	25,000,000	25,000,000	25,014,750
METHANEX CORP	5.25	12/15/2029	9,400,000	9,412,789	8,289,014
METLIFE INC	9.25	4/8/2068	45,000,000	49,364,307	62,603,550
METLIFE INC	10.75	8/1/2069	47,500,000	57,057,332	73,435,950
MGIC INVESTMENT CORP	5.75	8/15/2023	1,750,000	1,764,579	1,808,170
MGM CHINA HOLDINGS LTD	5.38	5/15/2024	1,200,000	1,203,678	1,215,972
MGM GROWTH/MGM FINANCE	4.50	9/1/2026	10,525,000	10,041,929	10,365,967
MGM GROWTH/MGM FINANCE	4.50	1/15/2028	740,000	689,174	717,911
MGM GROWTH/MGM FINANCE	4.63	6/15/2025	5,801,000	5,834,451	5,691,071
MGM GROWTH/MGM FINANCE	5.63	5/1/2024	20,435,000	20,782,161	21,155,334
MGM GROWTH/MGM FINANCE	5.75	2/1/2027	15,113,000	15,435,132	15,634,399
MGM RESORTS INTL	4.63	9/1/2026	4,124,000	4,358,858	3,798,328
MGM RESORTS INTL	5.50	4/15/2027	13,406,000	13,658,825	12,956,899
MGM RESORTS INTL	5.75	6/15/2025	15,343,000	15,359,555	15,222,097
MGM RESORTS INTL	6.00	3/15/2023	27,715,000	28,076,862	27,955,289
MGM RESORTS INTL	6.75	5/1/2025	6,025,000	5,910,212	5,972,342
MGM RESORTS INTL	7.75	3/15/2022	15,800,000	16,518,212	16,119,318
MICHAELS STORES INC	8.00	7/15/2027	8,200,000	8,018,619	7,131,294
MICROCHIP TECHNOLOGY INC	4.25	9/1/2025	3,639,000	3,639,000	3,655,921
MICROSOFT CORP	2.53	6/1/2050	51,000,000	51,499,439	53,187,390
MICROSOFT CORP	2.68	6/1/2060	118,770,000	114,765,154	123,881,861
MICROSOFT CORP	3.70	8/8/2046	10,500,000	10,750,023	13,128,570
MICROSOFT CORP	3.95	8/8/2056	8,336,000	10,074,616	10,736,184
MID AMERICA APARTMENTS	3.95	3/15/2029	11,000,000	11,898,364	12,647,690
MID AMERICA APARTMENTS	4.20	6/15/2028	7,000,000	7,005,985	8,073,590
MIDAMERICAN ENERGY CO	3.15	4/15/2050	5,000,000	4,972,458	5,665,850
MIDAMERICAN ENERGY CO	3.65	8/1/2048	49,600,000	47,843,274	58,864,784
MIDAMERICAN ENERGY CO	3.95	8/1/2047	19,100,000	18,003,242	23,469,698
MIDAMERICAN ENERGY CO	4.25	5/1/2046	17,200,000	16,776,226	21,652,392
MIDAMERICAN ENERGY CO	4.40	10/15/2044	52,500,000	53,102,599	66,565,800

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
MIDAS INT HOLDCO II/FIN	7.88	10/1/2022	2,175,000	2,130,859	1,877,177
MIDCONTINENT COMM + FIN	5.38	8/15/2027	675,000	675,000	687,818
MINERAL RESOURCES LTD	8.13	5/1/2027	1,400,000	1,404,048	1,488,466
MINERALS TECHNOLOGIES IN	5.00	7/1/2028	2,636,000	2,638,229	2,675,487
MITSUBISHI UFJ FIN GRP	3.20	7/18/2029	25,100,000	25,144,415	27,437,563
MITSUBISHI UFJ FIN GRP	3.74	3/7/2029	19,082,000	19,182,374	21,642,232
MITSUBISHI UFJ FIN GRP	3.75	7/18/2039	38,900,000	41,282,839	44,183,787
MIZUHO FINANCIAL GROUP	3.15	7/16/2030	4,400,000	4,468,776	4,758,468
MIZUHO FINANCIAL GROUP	4.25	9/11/2029	40,000,000	40,000,000	46,308,400
MOHEGAN GAMING + ENT	7.88	10/15/2024	3,875,000	3,938,068	3,200,246
MOLINA HEALTHCARE INC	4.38	6/15/2028	1,000,000	1,000,000	1,000,460
MOLINA HEALTHCARE INC	4.88	6/15/2025	718,000	731,799	721,813
MOLINA HEALTHCARE INC	5.38	11/15/2022	11,000,000	11,064,070	11,320,760
MOLSON COORS BEVERAGE	3.00	7/15/2026	9,200,000	9,192,871	9,532,212
MOLSON COORS BEVERAGE	4.20	7/15/2046	7,350,000	6,615,195	7,138,247
MOLSON COORS BEVERAGE	5.00	5/1/2042	16,250,000	17,209,483	17,232,475
MONDELEZ INTERNATIONAL	4.63	5/7/2048	5,750,000	6,297,270	7,443,145
MONTAGE RESOURCES CORP	8.88	7/15/2023	7,500,000	7,207,667	5,929,275
MOODY S CORPORATION	4.88	12/17/2048	16,725,000	18,516,873	22,063,286
MOODY S CORPORATION	5.25	7/15/2044	16,900,000	18,876,853	23,351,575
MOOG INC	4.25	12/15/2027	11,463,000	11,627,119	11,180,437
MORGAN STANLEY	3.59	7/22/2028	87,100,000	87,273,038	97,814,171
MORGAN STANLEY	3.62	4/1/2031	75,000,000	75,000,000	85,728,000
MORGAN STANLEY	3.77	1/24/2029	8,400,000	8,437,219	9,562,896
MORGAN STANLEY	3.95	4/23/2027	37,000,000	37,430,395	41,496,610
MORGAN STANLEY	4.35	9/8/2026	7,700,000	7,899,786	8,863,470
MORGAN STANLEY	4.43	1/23/2030	7,600,000	7,926,777	9,055,324
MORGAN STANLEY	4.46	4/22/2039	2,500,000	2,916,217	3,146,525
MORGAN STANLEY	6.38	7/24/2042	17,500,000	21,755,879	27,335,350
MOSS CREEK RESOURCES HLD	7.50	1/15/2026	11,625,000	10,961,188	5,808,431
MOSS CREEK RESOURCES HLD	10.50	5/15/2027	8,000,000	7,914,896	4,237,040
MOTION BONDCO DAC	6.63	11/15/2027	400,000	404,773	354,260
MOUNTAIN PROVINCE DIAMON	8.00	12/15/2022	450,000	448,129	248,184
MPH ACQUISITION HLDGS LLC	0.00	6/7/2023	348,404	349,133	330,548
MPH ACQUISITION HOLDINGS	7.13	6/1/2024	35,752,000	35,623,897	33,245,785
MPLX LP	4.00	3/15/2028	16,000,000	15,633,905	16,912,960
MPLX LP	4.13	3/1/2027	6,500,000	6,598,476	6,936,670
MPLX LP	4.25	12/1/2027	7,000,000	7,141,367	7,615,440
MPLX LP	4.70	4/15/2048	5,000,000	4,859,954	5,092,800
MPLX LP	4.80	2/15/2029	17,300,000	17,989,043	19,242,963
MPLX LP	5.20	3/1/2047	3,635,000	3,436,822	3,876,873
MPLX LP	5.20	12/1/2047	6,300,000	6,465,737	6,507,396
MPLX LP	5.25	1/15/2025	1,519,000	1,449,942	1,579,426
MPLX LP	5.50	2/15/2049	27,650,000	28,746,652	30,630,117
MPT OPER PARTNERSP/FINL	4.63	8/1/2029	7,900,000	7,963,448	7,955,537
MRO HOLDINGS INC	0.00	6/4/2026	965,250	960,424	712,779
MSCI INC	3.88	2/15/2031	500,000	500,000	509,680

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
MSCI INC	4.00	11/15/2029	15,000,000	15,063,889	15,300,000
MSCI INC	4.75	8/1/2026	9,900,000	9,746,840	10,266,696
MSCI INC	5.38	5/15/2027	9,600,000	9,698,564	10,187,904
MTS SYSTEMS CORP	5.75	8/15/2027	2,479,000	2,538,914	2,286,704
MURPHY OIL CORP	5.75	8/15/2025	10,230,000	10,383,835	9,201,783
MURPHY OIL CORP	5.88	12/1/2027	8,350,000	8,351,856	7,416,888
MURPHY OIL CORP	6.38	12/1/2042	975,000	799,970	757,409
MURPHY OIL CORP	6.88	8/15/2024	8,725,000	9,064,989	8,168,520
MURPHY OIL USA INC	4.75	9/15/2029	9,725,000	9,896,551	9,939,436
MURPHY OIL USA INC	5.63	5/1/2027	150,000	152,182	155,492
MYLAN INC	4.55	4/15/2028	2,400,000	2,431,355	2,775,336
MYLAN NV	3.95	6/15/2026	42,700,000	42,268,794	47,704,867
MYLAN NV	5.25	6/15/2046	9,900,000	10,825,919	12,194,523
NABORS INDUSTRIES INC	5.75	2/1/2025	18,275,000	16,883,832	7,394,431
NABORS INDUSTRIES LTD	7.25	1/15/2026	14,021,000	13,102,956	8,754,011
NABORS INDUSTRIES LTD	7.50	1/15/2028	2,298,000	1,964,200	1,419,222
NARRAGANSETT ELECTRIC	3.40	4/9/2030	17,000,000	17,000,000	19,127,040
NASCAR HOLDINGS INC	0.00	10/19/2026	515,837	513,258	492,532
NASDAQ INC	3.25	4/28/2050	10,000,000	9,810,911	10,467,400
NATHAN S FAMOUS INC	6.63	11/1/2025	1,125,000	1,130,400	1,141,256
NATIONAL INTERGOVERNMENTAL PUR	0.00	5/23/2025	1,452,939	1,441,472	1,397,248
NATIONSTAR MTG HLD INC	6.00	1/15/2027	11,260,000	11,408,413	10,817,482
NATIONSTAR MTG HLD INC	8.13	7/15/2023	16,250,000	16,494,046	16,663,563
NATIONSTAR MTG HLD INC	9.13	7/15/2026	12,550,000	12,871,239	13,268,488
NATIONWIDE MUTUAL INSURA	9.38	8/15/2039	60,000,000	66,582,761	97,015,800
NAVIENT CORP	5.00	10/26/2020	660,000	660,440	657,749
NAVIENT CORP	5.00	3/15/2027	2,550,000	2,247,411	2,171,580
NAVIENT CORP	5.50	1/25/2023	27,108,000	26,947,212	26,033,439
NAVIENT CORP	5.88	3/25/2021	1,400,000	1,413,397	1,375,780
NAVIENT CORP	5.88	10/25/2024	5,929,000	5,735,848	5,570,829
NAVIENT CORP	6.13	3/25/2024	23,822,000	23,634,638	22,676,638
NAVIENT CORP	6.50	6/15/2022	19,755,000	20,019,441	19,404,546
NAVIENT CORP	6.63	7/26/2021	9,625,000	9,739,556	9,432,500
NAVIENT CORP	6.75	6/25/2025	2,300,000	2,358,237	2,201,514
NAVIENT CORP	6.75	6/15/2026	1,883,000	1,950,827	1,785,442
NAVIENT CORP	7.25	1/25/2022	500,000	517,750	502,005
NAVIENT CORP	7.25	9/25/2023	1,634,000	1,706,907	1,596,532
NAVIOS MARITIME ACQ CORP	8.13	11/15/2021	10,600,000	9,659,602	6,101,678
NAVISTAR INC	0.00	11/6/2024	391,557	318,032	369,857
NAVISTAR INTL CORP	6.63	11/1/2025	20,400,000	20,712,789	19,342,056
NAVISTAR INTL CORP	9.50	5/1/2025	8,775,000	9,192,906	9,431,019
NBCUNIVERSAL MEDIA LLC	4.45	1/15/2043	27,200,000	26,338,584	34,211,344
NCL CORPORATION LTD	3.63	12/15/2024	9,475,000	9,500,268	5,793,015
NCL CORPORATION LTD	12.25	5/15/2024	8,525,000	8,833,694	8,908,625
NCR CORP	5.00	7/15/2022	9,092,000	8,992,480	9,073,634
NCR CORP	5.75	9/1/2027	12,687,000	12,780,370	12,670,507
NCR CORP	6.13	9/1/2029	14,627,000	14,784,122	14,602,280

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
NCR CORP	6.38	12/15/2023	13,554,000	13,517,891	13,789,704
NCR CORP	8.13	4/15/2025	2,116,000	2,116,000	2,243,637
NEENAH FOUNDRY CO	0.00	12/13/2022	286,472	283,608	243,502
NESTLE HOLDINGS INC	4.00	9/24/2048	14,400,000	14,656,949	18,499,536
NETAPP INC	2.70	6/22/2030	20,000,000	19,946,133	20,015,400
NETFLIX INC	4.38	11/15/2026	18,400,000	17,555,502	19,146,304
NETFLIX INC	4.88	4/15/2028	25,800,000	24,645,673	27,529,374
NETFLIX INC	4.88	6/15/2030	5,066,000	5,080,400	5,431,056
NETFLIX INC	5.38	11/15/2029	5,799,000	5,854,261	6,352,283
NETFLIX INC	5.75	3/1/2024	945,000	959,161	1,030,050
NETFLIX INC	5.88	2/15/2025	9,142,000	9,373,498	10,147,620
NETFLIX INC	5.88	11/15/2028	39,591,000	39,890,917	45,050,995
NETFLIX INC	6.38	5/15/2029	13,470,000	14,077,862	15,694,436
NEVADA POWER CO	5.38	9/15/2040	5,000,000	5,167,497	6,524,200
NEVADA POWER CO	6.75	7/1/2037	28,000,000	31,439,296	41,891,080
NEW ENTERPRISE STONE + L	6.25	3/15/2026	1,325,000	1,331,996	1,344,385
NEW ENTERPRISE STONE + L	10.13	4/1/2022	1,025,000	1,049,709	1,025,226
NEW GOLD INC	7.50	7/15/2027	425,000	425,000	437,971
NEW YORK LIFE INSURANCE	3.75	5/15/2050	20,000,000	19,878,667	22,569,400
NEW YORK LIFE INSURANCE	6.75	11/15/2039	51,500,000	57,623,353	78,021,470
NEWELL BRANDS INC	4.35	4/1/2023	500,000	472,618	515,225
NEWELL BRANDS INC	4.70	4/1/2026	19,325,000	19,053,339	20,268,060
NEWELL BRANDS INC	4.88	6/1/2025	1,431,000	1,423,986	1,497,198
NEWELL BRANDS INC	5.88	4/1/2036	12,828,000	13,044,779	13,600,117
NEWELL BRANDS INC	6.00	4/1/2046	7,100,000	7,202,476	7,521,882
NEWFIELD EXPLORATION CO	5.38	1/1/2026	10,875,000	11,256,036	10,183,894
NEXSTAR BROADCASTING INC	5.63	8/1/2024	18,645,000	18,467,005	18,887,385
NEXSTAR BROADCASTING INC	5.63	7/15/2027	35,170,000	36,361,078	34,918,535
NEXTERA ENERGY OPERATING	3.88	10/15/2026	10,625,000	10,644,346	10,627,550
NEXTERA ENERGY OPERATING	4.25	7/15/2024	2,673,000	2,574,045	2,690,214
NEXTERA ENERGY OPERATING	4.25	9/15/2024	10,725,000	10,461,163	10,790,530
NEXTERA ENERGY OPERATING	4.50	9/15/2027	11,539,000	11,020,529	12,070,140
NFP CORP	6.88	7/15/2025	6,461,000	6,404,316	6,371,838
NFP CORP	7.00	5/15/2025	1,506,000	1,531,196	1,581,300
NFP CORP	8.00	7/15/2025	900,000	900,000	890,352
NGL ENRGY PART LP/FIN CO	7.50	11/1/2023	9,550,000	9,574,570	7,951,044
NIAGARA MOHAWK POWER	4.28	12/15/2028	7,200,000	7,222,671	8,474,544
NIELSEN CO LUX SARL/THE	5.00	2/1/2025	12,300,000	12,085,286	12,141,945
NIELSEN CO LUX SARL/THE	5.50	10/1/2021	663,000	665,742	662,669
NIELSEN FINANCE LLC/CO	5.00	4/15/2022	48,843,000	48,241,317	48,666,677
NIKE INC	3.25	3/27/2040	20,000,000	19,876,445	22,379,800
NIKE INC	3.38	3/27/2050	15,000,000	14,949,893	17,272,050
NINE ENERGY SERVICE INC	8.75	11/1/2023	525,000	525,540	255,938
NISOURCE INC	3.60	5/1/2030	30,000,000	29,891,683	34,372,500
NISOURCE INC	4.38	5/15/2047	5,300,000	5,610,219	6,459,269
NISOURCE INC	4.80	2/15/2044	40,885,000	40,810,841	50,134,005
NISOURCE INC	5.65	2/1/2045	28,300,000	28,354,212	38,643,650

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
NMI HOLDINGS	7.38	6/1/2025	700,000	709,809	732,249
NOBLE ENERGY INC	3.85	1/15/2028	900,000	931,364	867,834
NOBLE ENERGY INC	4.95	8/15/2047	7,500,000	7,954,968	6,743,100
NOBLE ENERGY INC	6.00	3/1/2041	22,830,000	24,644,264	22,233,680
NOBLE HOLDING INTL LTD	6.20	8/1/2040	125,000	95,752	1,760
NOBLE HOLDING INTL LTD	7.75	1/15/2024	354,000	336,774	7,282
NOBLE HOLDING INTL LTD	7.88	2/1/2026	2,519,000	2,468,283	600,983
NOBLE HOLDING INTL LTD	8.95	4/1/2045	375,000	249,294	9,611
NOKIA OF AMERICA CORP	6.45	3/15/2029	925,000	954,944	958,753
NOMURA TBA COC	0.00	(blank)	0	0	0
NORDEA BANK ABP	6.63	12/31/2099	6,000,000	6,043,409	6,411,180
NORDSTROM INC	4.38	4/1/2030	4,200,000	4,197,587	3,292,968
NORDSTROM INC	8.75	5/15/2025	500,000	500,000	537,665
NORFOLK SOUTHERN CORP	3.05	5/15/2050	10,000,000	9,976,609	10,426,900
NORFOLK SOUTHERN CORP	3.40	11/1/2049	12,000,000	11,893,075	13,228,920
NORFOLK SOUTHERN CORP	3.95	10/1/2042	700,000	758,615	812,861
NORFOLK SOUTHERN CORP	4.10	5/15/2049	17,500,000	17,720,668	21,347,900
NORTHERN STATES PWR MINN	2.60	6/1/2051	15,000,000	14,718,099	15,253,950
NORTHERN STATES PWR MINN	3.60	9/15/2047	74,000,000	68,727,612	86,655,480
NORTHERN STATES PWR MINN	4.00	8/15/2045	16,700,000	15,636,358	20,454,160
NORTHERN STATES PWR MINN	4.13	5/15/2044	22,000,000	21,404,476	27,307,060
NORTHROP GRUMMAN CORP	4.03	10/15/2047	40,052,000	37,833,417	48,172,944
NORTHROP GRUMMAN CORP	4.40	5/1/2030	22,000,000	21,914,170	26,690,620
NORTHROP GRUMMAN CORP	4.75	6/1/2043	10,600,000	12,354,345	13,732,724
NORTHROP GRUMMAN CORP	5.15	5/1/2040	40,000,000	39,806,274	53,490,000
NORTHROP GRUMMAN CORP	5.25	5/1/2050	40,000,000	39,764,957	57,648,400
NORTHWEST ACQ/DOMINION	7.13	11/1/2022	8,525,000	8,395,466	113,979
NORTHWEST PIPELINE LLC	4.00	4/1/2027	28,690,000	28,339,081	31,388,868
NORTHWESTERN MUTUAL LIFE	3.63	9/30/2059	8,400,000	8,364,429	9,464,700
NORTONLIFELOCK INC	5.00	4/15/2025	18,300,000	18,503,953	18,543,573
NOURYON HOLDING BV	8.00	10/1/2026	4,992,000	4,873,899	5,129,729
NOVA CHEMICALS CORP	5.25	6/1/2027	686,000	658,797	603,557
NOVELIS CORP	4.75	1/30/2030	33,081,000	33,135,510	31,603,272
NOVELIS CORP	5.88	9/30/2026	34,945,000	34,409,860	34,896,077
NRG ENERGY INC	5.25	6/15/2029	14,164,000	14,298,187	14,912,851
NRG ENERGY INC	5.75	1/15/2028	17,643,000	17,923,962	18,652,532
NRG ENERGY INC	6.63	1/15/2027	24,303,000	24,956,021	25,455,934
NRG ENERGY INC	7.25	5/15/2026	17,450,000	18,470,551	18,411,146
NSTAR ELECTRIC CO	4.40	3/1/2044	14,050,000	16,332,433	17,479,324
NUANCE COMMUNICATIONS	5.63	12/15/2026	8,900,000	8,915,404	9,259,649
NUFARM AUSTRALIA/AMERICA	5.75	4/30/2026	350,000	354,318	338,496
NUSTAR LOGISTICS LP	5.63	4/28/2027	10,448,000	10,061,484	10,097,156
NUSTAR LOGISTICS LP	6.00	6/1/2026	11,090,000	11,281,005	10,662,591
NUTRIEN LTD	3.95	5/13/2050	42,000,000	41,890,452	46,743,480
NUTRIEN LTD	4.13	3/15/2035	9,850,000	10,279,005	10,976,348
NUTRIEN LTD	4.90	6/1/2043	3,130,000	3,724,130	3,668,329
NUTRIEN LTD	5.00	4/1/2049	7,125,000	8,452,815	9,098,768

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
NUTRIEN LTD	7.13	5/23/2036	16,298,000	21,064,621	21,948,843
NVENT FINANCE SARL	4.55	4/15/2028	30,781,000	30,920,323	32,295,733
NVR INC	3.00	5/15/2030	15,000,000	14,971,951	15,645,450
NWH ESCROW CORP	7.50	8/1/2021	550,000	544,449	292,875
NXP BV/NXP FDG/NXP USA	3.88	6/18/2026	15,500,000	15,506,474	17,299,395
NXP BV/NXP FDG/NXP USA	4.30	6/18/2029	60,700,000	61,151,952	69,062,032
NXP BV/NXP FUNDING LLC	5.35	3/1/2026	6,500,000	6,520,683	7,714,785
NXP BV/NXP FUNDING LLC	5.55	12/1/2028	32,600,000	33,797,226	39,796,450
O REILLY AUTOMOTIVE INC	3.90	6/1/2029	8,200,000	8,298,627	9,425,736
O REILLY AUTOMOTIVE INC	4.20	4/1/2030	20,000,000	19,992,015	23,598,800
O REILLY AUTOMOTIVE INC	4.35	6/1/2028	5,000,000	5,096,469	5,848,950
OASIS PETROLEUM INC	6.25	5/1/2026	350,000	326,128	60,470
OASIS PETROLEUM INC	6.88	3/15/2022	100,000	99,317	18,176
OCCIDENTAL PETROLEUM COR	1.40	2/8/2021	1,050,000	972,558	1,037,453
OCCIDENTAL PETROLEUM COR	2.60	8/13/2021	17,275,000	15,563,610	16,904,106
OCCIDENTAL PETROLEUM COR	2.60	4/15/2022	800,000	677,245	763,200
OCCIDENTAL PETROLEUM COR	2.70	8/15/2022	30,040,000	25,440,723	27,968,141
OCCIDENTAL PETROLEUM COR	2.90	8/15/2024	42,000,000	32,127,814	35,893,200
OCCIDENTAL PETROLEUM COR	3.20	8/15/2026	715,000	359,151	581,788
OCCIDENTAL PETROLEUM COR	3.50	6/15/2025	525,000	373,662	444,313
OCCIDENTAL PETROLEUM COR	3.50	8/15/2029	19,511,000	10,355,083	14,279,516
OCCIDENTAL PETROLEUM COR	4.10	2/1/2021	1,675,000	1,621,324	1,678,802
OCCIDENTAL PETROLEUM COR	4.10	2/15/2047	300,000	164,406	202,110
OCCIDENTAL PETROLEUM COR	4.30	8/15/2039	675,000	370,961	466,857
OCCIDENTAL PETROLEUM COR	4.40	4/15/2046	800,000	525,424	558,272
OCCIDENTAL PETROLEUM COR	4.40	8/15/2049	715,000	381,427	493,557
OCCIDENTAL PETROLEUM COR	4.50	7/15/2044	8,500,000	3,626,714	5,928,240
OCCIDENTAL PETROLEUM COR	4.85	3/15/2021	1,125,000	1,061,944	1,123,684
OCCIDENTAL PETROLEUM COR	5.55	3/15/2026	2,450,000	1,917,186	2,230,015
OCCIDENTAL PETROLEUM COR	6.20	3/15/2040	300,000	190,782	250,854
OCCIDENTAL PETROLEUM COR	6.45	9/15/2036	34,175,000	17,227,574	29,329,327
OCCIDENTAL PETROLEUM COR	6.60	3/15/2046	25,984,000	13,609,301	22,633,883
OCCIDENTAL PETROLEUM COR	6.95	7/1/2024	750,000	624,844	735,413
OCCIDENTAL PETROLEUM COR	7.13	10/15/2027	400,000	249,396	331,180
OCCIDENTAL PETROLEUM COR	7.50	5/1/2031	3,725,000	2,513,763	3,463,952
OCCIDENTAL PETROLEUM COR	7.88	9/15/2031	2,266,000	1,527,772	2,143,500
OCCIDENTAL PETROLEUM COR	8.00	7/15/2025	5,550,000	5,500,000	5,571,257
OCEAN GATE LIFE SETTLEMENT	0.00	(blank)	246,586,324	246,586,324	46,871,888
OCEANEERING INTL INC	4.65	11/15/2024	7,300,000	6,811,934	5,507,996
OCI NV	5.25	11/1/2024	1,000,000	1,000,000	962,430
OCI NV	6.63	4/15/2023	600,000	600,000	607,236
OGLETHORPE POWER CORP	4.55	6/1/2044	12,900,000	12,297,156	13,641,492
OI EUROPEAN GROUP BV	4.00	3/15/2023	150,000	147,764	147,662
OLIN CORP	5.00	2/1/2030	11,200,000	10,605,002	9,914,240
OLIN CORP	5.13	9/15/2027	11,850,000	11,675,429	11,147,888
OLIN CORP	5.63	8/1/2029	11,600,000	11,759,108	10,675,016
OLIN CORP	9.50	6/1/2025	4,450,000	4,724,890	4,961,839

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
OMEGA HLTHCARE INVESTORS	3.63	10/1/2029	19,400,000	19,139,149	19,076,408
ONCOR ELECTRIC DELIVERY	3.70	5/15/2050	20,000,000	19,941,552	24,096,000
ONCOR ELECTRIC DELIVERY	3.75	4/1/2045	43,700,000	41,543,388	51,791,929
ONCOR ELECTRIC DELIVERY	3.80	9/30/2047	3,400,000	3,475,779	4,101,080
ONCOR ELECTRIC DELIVERY	3.80	6/1/2049	22,500,000	22,709,135	27,308,700
ONCOR ELECTRIC DELIVERY	7.00	5/1/2032	25,080,000	26,697,176	36,850,295
ONCOR ELECTRIC DELIVERY	7.50	9/1/2038	18,200,000	19,034,156	29,650,166
ONE GAS INC	4.50	11/1/2048	12,550,000	13,019,662	15,931,096
ONEOK INC	3.40	9/1/2029	4,900,000	4,881,844	4,769,317
ONEOK INC	4.00	7/13/2027	1,400,000	1,461,888	1,420,482
ONEOK INC	4.35	3/15/2029	22,700,000	22,735,397	23,780,293
ONEOK INC	5.85	1/15/2026	15,000,000	14,991,676	17,144,850
ONEOK INC	6.00	6/15/2035	6,500,000	7,589,709	7,087,535
ONEOK PARTNERS LP	5.00	9/15/2023	5,983,000	5,943,566	6,452,127
ONEOK PARTNERS LP	6.85	10/15/2037	19,400,000	20,285,098	21,733,432
OPEN TEXT CORP	3.88	2/15/2028	15,500,000	15,457,498	14,916,115
OPEN TEXT CORP	5.88	6/1/2026	17,130,000	17,500,267	17,756,787
OPEN TEXT HOLDINGS INC	4.13	2/15/2030	17,050,000	17,072,740	16,729,460
ORACLE CORP	3.60	4/1/2040	120,000,000	119,681,221	135,636,000
ORACLE CORP	3.60	4/1/2050	60,000,000	59,794,124	67,278,600
ORACLE CORP	3.85	4/1/2060	18,122,000	18,052,665	21,204,552
ORACLE CORP	4.00	7/15/2046	7,800,000	8,094,621	9,178,260
ORACLE CORP	4.00	11/15/2047	20,600,000	20,779,246	24,282,456
ORACLE CORP	4.13	5/15/2045	56,500,000	56,910,150	67,263,815
ORACLE CORP	4.50	7/8/2044	23,100,000	23,891,904	29,078,280
ORANGE SA	5.50	2/6/2044	25,300,000	31,042,918	36,927,374
ORANGE SA	9.00	3/1/2031	13,100,000	18,080,545	21,302,303
ORTHO CLINICAL INC/SA	7.25	2/1/2028	667,000	669,051	677,258
ORTHO CLINICAL INC/SA	7.38	6/1/2025	1,114,000	1,131,372	1,133,729
OSHKOSH CORP	3.10	3/1/2030	7,000,000	6,974,587	7,030,520
OSHKOSH CORP	4.60	5/15/2028	3,000,000	3,226,667	3,359,580
OTIS WORLDWIDE CORP	2.57	2/15/2030	20,000,000	19,998,455	21,004,200
OUTFRONT MEDIA CAP LLC/C	4.63	3/15/2030	12,090,000	12,115,320	11,046,512
OUTFRONT MEDIA CAP LLC/C	5.00	8/15/2027	15,326,000	15,447,966	13,833,401
OUTFRONT MEDIA CAP LLC/C	5.63	2/15/2024	5,549,000	5,588,216	5,565,481
OWENS BROCKWAY	5.88	8/15/2023	12,720,000	12,947,374	13,101,600
OWENS BROCKWAY	6.38	8/15/2025	100,000	101,636	105,067
OWENS BROCKWAY	6.63	5/13/2027	9,200,000	9,431,173	9,620,440
OWENS CORNING	3.88	6/1/2030	11,973,000	12,374,957	12,630,557
OWENS CORNING	3.95	8/15/2029	21,200,000	21,230,041	23,101,428
OXFORD FIN LLC/CO ISS II	6.38	12/15/2022	275,000	275,000	254,603
PACIFIC GAS + ELECTRIC	2.50	2/1/2031	30,000,000	29,968,897	29,350,800
PACIFIC GAS + ELECTRIC	3.30	8/1/2040	25,000,000	24,875,454	24,368,250
PACIFIC GAS + ELECTRIC	3.50	8/1/2050	60,150,000	59,770,868	58,145,201
PACIFIC GAS + ELECTRIC	5.13	11/15/2043	1,900,000	1,708,566	2,255,718
PACIFIC GAS + ELECTRIC	5.40	1/15/2040	200,000	168,014	238,796
PACIFIC GAS + ELECTRIC	5.80	3/1/2037	1,500,000	1,344,427	1,787,745

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
PACIFIC GAS + ELECTRIC	6.05	3/1/2034	550,000	562,517	656,678
PACIFIC GAS + ELECTRIC COMPANY	0.00	6/23/2025	1,650,000	1,625,250	1,619,063
PACIFICORP	3.30	3/15/2051	15,000,000	14,877,319	16,498,800
PACKAGING CORP OF AMERIC	3.00	12/15/2029	5,000,000	4,993,847	5,416,050
PACKAGING CORP OF AMERIC	4.05	12/15/2049	8,050,000	8,035,666	9,492,963
PANTHER BF AGGREGATOR 2 LP	0.00	4/30/2026	1,661,318	1,644,705	1,578,252
PAR PHARMACEUTICAL INC	7.50	4/1/2027	37,610,000	37,513,892	38,578,458
PARK INTERMED HOLDINGS	7.50	6/1/2025	11,300,000	11,669,281	11,554,024
PARK OHIO INDUSTRIES INC	6.63	4/15/2027	1,025,000	1,024,798	843,052
PARKER DRILLING CO	0.00	3/26/2024	35,037	34,780	33,986
PARKLAND CORP	5.88	7/15/2027	10,100,000	10,240,050	10,450,975
PARKLAND CORP	6.00	4/1/2026	7,750,000	7,712,082	7,969,713
PARSLEY ENERGY LLC/FINAN	4.13	2/15/2028	2,258,000	2,258,000	2,045,409
PARSLEY ENERGY LLC/FINAN	5.25	8/15/2025	1,450,000	1,303,219	1,392,450
PARSLEY ENERGY LLC/FINAN	5.63	10/15/2027	2,725,000	2,782,911	2,684,725
PATRICK INDUSTRIES INC	7.50	10/15/2027	1,700,000	1,704,616	1,756,083
PATTERN ENERGY GROUP INC	5.88	2/1/2024	250,000	250,000	251,395
PBF HOLDING CO LLC	6.00	2/15/2028	16,475,000	16,767,104	13,754,319
PBF HOLDING CO LLC	7.25	6/15/2025	11,250,000	11,363,853	10,249,088
PBF HOLDING CO LLC	9.25	5/15/2025	750,000	764,780	800,235
PBF LOGISTICS LP/FINANCE	6.88	5/15/2023	10,450,000	10,373,841	10,067,844
PDC ENERGY INC	5.75	5/15/2026	10,775,000	10,507,645	9,798,246
PDC ENERGY INC	6.13	9/15/2024	1,683,000	1,665,347	1,584,208
PECO ENERGY CO	3.00	9/15/2049	6,800,000	6,465,632	7,263,828
PECO ENERGY CO	3.70	9/15/2047	21,520,000	19,895,371	25,420,500
PECO ENERGY CO	3.90	3/1/2048	40,000,000	38,909,774	48,896,800
PECO ENERGY CO	4.15	10/1/2044	27,700,000	26,387,495	34,266,008
PENSKE AUTO GROUP INC	5.75	10/1/2022	1,642,000	1,649,314	1,648,141
PENSKE AUTOMOTIVE GROUP	3.75	8/15/2020	1,475,000	1,474,482	1,473,997
PENSKE AUTOMOTIVE GROUP	5.38	12/1/2024	925,000	941,797	926,434
PENSKE AUTOMOTIVE GROUP	5.50	5/15/2026	11,300,000	11,058,294	11,323,843
PENTAIR FINANCE SARL	4.50	7/1/2029	9,300,000	9,269,330	10,213,632
PEPSICO INC	3.38	7/29/2049	39,900,000	43,587,829	45,772,881
PEPSICO INC	3.63	3/19/2050	5,000,000	4,973,950	6,087,250
PEPSICO INC	3.88	3/19/2060	25,000,000	24,607,564	31,609,000
PEPSICO INC	4.60	7/17/2045	29,900,000	33,005,199	40,277,393
PERFORMANCE FOOD GROUP I	5.50	6/1/2024	1,850,000	1,886,983	1,818,587
PERFORMANCE FOOD GROUP I	5.50	10/15/2027	23,824,000	24,350,474	22,990,636
PERFORMANCE FOOD GROUP I	6.88	5/1/2025	639,000	639,000	666,624
PERKINELMER INC	3.30	9/15/2029	39,200,000	39,093,960	41,991,824
PERRIGO FINANCE UNLIMITD	4.90	12/15/2044	5,000,000	4,939,863	5,279,400
PERRIGO FINANCE UNLIMITE	3.15	6/15/2030	15,000,000	14,875,910	15,161,550
PERRIGO FINANCE UNLIMITE	4.38	3/15/2026	11,200,000	11,457,600	12,234,320
PETRA DIAMONDS US TREAS	7.25	5/1/2022	200,000	199,995	79,666
PETRONAS CAPITAL LTD	3.50	4/21/2030	5,000,000	4,938,029	5,538,950
PETRONAS CAPITAL LTD	4.55	4/21/2050	23,000,000	23,000,000	29,040,720
PETSMART INC	5.88	6/1/2025	26,220,000	22,691,228	26,312,294

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
PETSMART INC	7.13	3/15/2023	10,645,000	10,234,194	10,494,160
PFIZER INC	4.20	9/15/2048	14,400,000	14,636,326	18,712,080
PFIZER INC	7.20	3/15/2039	28,500,000	30,638,101	48,122,250
PG+E CORP	5.00	7/1/2028	4,930,000	4,928,520	4,928,176
PG+E CORP	5.25	7/1/2030	4,167,000	4,174,100	4,190,169
PGT INNOVATIONS INC	6.75	8/1/2026	1,375,000	1,396,209	1,406,075
PHILLIPS 66	3.90	3/15/2028	21,800,000	21,339,384	24,522,166
PHILLIPS 66	4.65	11/15/2034	1,500,000	1,715,950	1,788,390
PHILLIPS 66	4.88	11/15/2044	31,450,000	36,426,051	38,911,513
PHILLIPS 66 PARTNERS LP	3.15	12/15/2029	52,400,000	51,463,131	53,924,840
PHILLIPS 66 PARTNERS LP	3.75	3/1/2028	11,100,000	10,810,100	11,855,577
PHILLIPS 66 PARTNERS LP	4.68	2/15/2045	8,125,000	8,222,886	8,622,575
PHOTO HOLDINGS MERGER SU	8.50	10/1/2026	14,000,000	13,138,659	13,228,320
PHYSICIANS REALTY LP	3.95	1/15/2028	3,000,000	3,132,814	3,063,300
PHYSICIANS REALTY LP	4.30	3/15/2027	7,400,000	7,373,411	7,735,220
PICASSO FINANCE SUB INC	6.13	6/15/2025	8,250,000	8,426,312	8,431,253
PILGRIM S PRIDE CORP	5.75	3/15/2025	21,656,000	21,218,967	21,590,382
PILGRIM S PRIDE CORP	5.88	9/30/2027	19,551,000	19,041,865	19,562,731
PINE STREET TRUST II	5.57	2/15/2049	14,300,000	14,846,210	16,306,290
PLAINS ALL AMER PIPELINE	3.55	12/15/2029	50,900,000	50,775,113	49,388,779
PLAINS ALL AMER PIPELINE	3.80	9/15/2030	15,000,000	14,969,265	14,711,700
PLAINS ALL AMER PIPELINE	4.50	12/15/2026	21,400,000	21,701,785	22,681,004
PLAINS ALL AMER PIPELINE	4.65	10/15/2025	46,200,000	46,434,393	49,355,460
PLAINS ALL AMER PIPELINE	4.70	6/15/2044	39,600,000	37,986,190	35,601,984
PLAINS ALL AMER PIPELINE	4.90	2/15/2045	14,200,000	14,041,100	13,230,282
PLAINS ALL AMERICAN PIPE	6.13	12/31/2099	4,025,000	3,553,099	2,950,365
PLANTRONICS INC	5.50	5/31/2023	14,489,000	14,096,468	12,687,583
PLASTIPAK HOLDINGS INC	6.25	10/15/2025	9,200,000	8,626,157	8,936,788
POLARIS INTERMEDIATE	8.50	12/1/2022	23,926,404	24,056,743	21,051,407
POLYONE CORP	5.25	3/15/2023	9,600,000	9,693,462	10,407,840
POLYONE CORP	5.75	5/15/2025	11,025,000	11,338,897	11,347,702
POST HOLDINGS INC	4.63	4/15/2030	25,346,000	25,173,855	24,851,246
POST HOLDINGS INC	5.00	8/15/2026	32,992,000	31,532,182	33,148,382
POST HOLDINGS INC	5.50	12/15/2029	10,600,000	10,697,301	10,997,500
POST HOLDINGS INC	5.63	1/15/2028	18,624,000	18,064,455	19,232,632
POST HOLDINGS INC	5.75	3/1/2027	31,917,000	31,467,469	32,918,555
POWDERHOUND	1.00	3/31/2028	253,534,842	253,534,842	327,792,226
POWERTEAM SERVICES LLC	9.03	12/4/2025	8,000,000	8,038,770	8,150,080
PPL CAPITAL FUNDING INC	4.13	4/15/2030	25,000,000	24,991,706	28,494,250
PPL CAPITAL FUNDING INC	4.70	6/1/2043	1,250,000	1,405,809	1,424,575
PPL ELECTRIC UTILITIES	3.00	10/1/2049	9,500,000	8,980,465	10,075,510
PPL ELECTRIC UTILITIES	3.95	6/1/2047	41,700,000	40,856,711	50,076,696
PPL ELECTRIC UTILITIES	4.13	6/15/2044	33,500,000	32,359,948	40,692,450
PPL ELECTRIC UTILITIES	4.15	10/1/2045	19,850,000	19,314,971	24,437,732
PQ CORP	5.75	12/15/2025	2,164,000	2,163,098	2,186,506
PQ CORP	6.75	11/15/2022	500,000	513,455	509,275
PRAIRIE ECI ACQUIROR LP	0.00	3/11/2026	569,052	564,784	514,873

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
PRECISION DRILLING CORP	5.25	11/15/2024	980,000	938,369	652,004
PRECISION DRILLING CORP	7.13	1/15/2026	425,000	425,000	264,686
PRESIDIO HOLDING INC	4.88	2/1/2027	950,000	950,000	928,226
PRESIDIO HOLDING INC	8.25	2/1/2028	1,750,000	1,773,856	1,746,203
PRESTIGE BRANDS INC	5.13	1/15/2028	1,846,000	1,839,135	1,853,070
PRESTIGE BRANDS INC	6.38	3/1/2024	15,807,000	15,869,095	16,258,290
PRIME SECSRVC BRW/FINANC	5.25	4/15/2024	16,356,000	16,405,902	16,749,852
PRIME SECSRVC BRW/FINANC	5.75	4/15/2026	24,400,000	24,668,896	25,297,432
PRIME SECSRVC BRW/FINANC	6.25	1/15/2028	21,475,000	21,438,910	20,245,556
PRINCIPAL FINANCIAL GRP	3.70	5/15/2029	2,000,000	2,021,604	2,284,480
PRISO ACQUISITION CORP	9.00	5/15/2023	1,350,000	1,394,885	1,198,814
PROGRESSIVE CORP	4.20	3/15/2048	22,800,000	23,422,801	29,487,696
PROJECT ALPHA INTERMEDIATE HL	0.00	4/26/2024	772,541	764,816	743,571
PROLOGIS LP	3.00	4/15/2050	15,000,000	14,842,342	15,834,450
PROLOGIS LP	4.38	9/15/2048	12,800,000	14,042,667	16,842,880
PROTECTIVE LIFE CORP	3.40	1/15/2030	15,300,000	15,265,524	15,660,774
PROVIDENT FDG/PFG FIN	6.38	6/15/2025	4,050,000	3,771,740	3,827,453
PRUDENTIAL FINANCIAL INC	3.91	12/7/2047	2,500,000	2,723,232	2,852,900
PTC INC	3.63	2/15/2025	2,732,000	2,732,000	2,708,969
PTC INC	4.00	2/15/2028	8,231,000	8,337,786	8,172,560
PUB SVC NEW HAMP	3.60	7/1/2049	4,800,000	4,789,007	5,527,872
PUBLIC SERVICE ELECTRIC	3.15	1/1/2050	10,000,000	9,984,845	11,083,900
PUBLIC SERVICE ELECTRIC	4.05	5/1/2045	48,750,000	47,470,950	56,038,613
PUBLIC SERVICE ELECTRIC	4.05	5/1/2048	47,900,000	48,367,843	60,402,379
PUBLIC SERVICE ELECTRIC	4.15	11/1/2045	30,500,000	30,039,999	38,858,830
PUBLIC SERVICE ELECTRIC	5.80	5/1/2037	6,800,000	8,961,309	9,670,008
PUGET SOUND ENERGY INC	4.30	5/20/2045	4,000,000	3,988,761	4,871,040
PUGET SOUND ENERGY INC	6.27	3/15/2037	15,300,000	16,082,280	21,825,756
QEP RESOURCES INC	5.25	5/1/2023	11,400,000	10,840,291	7,748,922
QEP RESOURCES INC	5.38	10/1/2022	492,000	491,571	376,124
QEP RESOURCES INC	5.63	3/1/2026	9,505,000	8,889,647	6,010,202
QORVO INC	4.38	10/15/2029	10,025,000	10,463,070	10,280,938
QORVO INC	5.50	7/15/2026	16,042,000	16,062,711	16,683,520
QTS LP/FINANCE	4.75	11/15/2025	1,721,000	1,675,207	1,764,128
QUALCOMM INC	4.65	5/20/2035	15,500,000	16,428,676	20,528,355
QUEBECOR F	9.13	8/15/2019	350,000	350,000	10,472
QUEBECOR MEDIA INC	5.75	1/15/2023	12,575,000	12,771,283	13,184,385
QUEST DIAGNOSTICS INC	2.95	6/30/2030	12,000,000	11,970,177	12,731,520
QUICKEN LOANS INC	5.25	1/15/2028	20,700,000	19,720,345	21,336,525
QUICKEN LOANS INC	5.75	5/1/2025	26,696,000	26,372,108	27,306,538
RACKSPACE HOSTIN	8.63	11/15/2024	20,400,000	19,538,293	20,436,720
RADIAN GROUP INC	4.88	3/15/2027	525,000	531,719	498,094
RADIATE HOLDCO / FINANCE	6.63	2/15/2025	2,862,000	2,797,672	2,864,919
RADIATE HOLDCO / FINANCE	6.88	2/15/2023	780,000	775,520	791,817
RAIN CII CARBON LLC/CII	7.25	4/1/2025	11,490,000	11,145,497	11,207,691
RALPH LAUREN CORP	2.95	6/15/2030	10,000,000	9,900,268	10,268,300
RANGE RESOURCES CORP	4.88	5/15/2025	14,482,000	13,411,145	10,929,855

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
RANGE RESOURCES CORP	5.00	8/15/2022	1,000,000	974,405	910,770
RANGE RESOURCES CORP	5.00	3/15/2023	11,850,000	11,432,842	10,282,719
RANGE RESOURCES CORP	5.88	7/1/2022	715,000	718,704	661,118
RANGE RESOURCES CORP	9.25	2/1/2026	9,200,000	8,715,928	8,282,392
RAYMOND JAMES FINANCIAL	4.65	4/1/2030	20,000,000	20,232,894	23,822,800
RAYTHEON TECH CORP	3.13	7/1/2050	40,000,000	39,867,333	42,394,400
RAYTHEON TECH CORP	3.75	11/1/2046	1,500,000	1,475,903	1,703,550
RAYTHEON TECH CORP	4.05	5/4/2047	8,200,000	8,433,538	9,786,864
RAYTHEON TECH CORP	4.35	4/15/2047	12,950,000	15,511,290	15,759,114
RAYTHEON TECH CORP	4.45	11/16/2038	16,816,000	18,133,028	20,536,372
RAYTHEON TECH CORP	4.50	6/1/2042	37,500,000	39,755,822	46,623,375
RAYTHEON TECH CORP	5.40	5/1/2035	2,000,000	2,484,234	2,721,020
RBS GLOBAL + REXNORD LLC	4.88	12/15/2025	11,900,000	11,559,749	11,954,740
REALOGY GROUP/CO ISSUER	4.88	6/1/2023	300,000	297,645	284,958
REALOGY GROUP/CO ISSUER	5.25	12/1/2021	425,000	397,784	430,691
REALOGY GROUP/CO ISSUER	7.63	6/15/2025	5,225,000	5,259,202	5,226,097
REALOGY GROUP/CO ISSUER	9.38	4/1/2027	425,000	391,836	396,614
REALTY INCOME CORP	4.65	3/15/2047	12,500,000	13,729,071	15,505,750
REFINITIV US HOLDINGS	6.25	5/15/2026	25,019,000	25,055,399	26,515,637
REFINITIV US HOLDINGS	8.25	11/15/2026	34,812,000	34,771,663	37,681,553
REGIONALCARE/LIFEPOINT	9.75	12/1/2026	2,196,000	2,323,425	2,265,262
REINSURANCE GRP OF AMER	3.90	5/15/2029	18,400,000	18,575,508	19,965,840
RELX CAPITAL INC	4.00	3/18/2029	33,400,000	33,584,048	38,553,286
REPUBLIC SERVICES INC	5.70	5/15/2041	1,500,000	1,993,715	2,084,295
RESIDEO FUNDING INC	6.13	11/1/2026	2,238,000	2,264,888	2,185,967
REYNOLDS GRP ISS/REYNOLD	5.13	7/15/2023	35,310,000	35,098,201	35,484,431
REYNOLDS GRP ISS/REYNOLD	7.00	7/15/2024	18,469,000	18,704,845	18,549,894
RGS AEGCO FUNDING CORP	9.81	12/7/2022	305,157	312,111	319,545
RGS I+M FUNDING CORP	9.81	12/7/2022	459,331	469,808	481,011
RHP HOTEL PPTY/RHP FINAN	5.00	4/15/2023	190,000	189,627	179,371
RHP HOTEL PPTYS LP	0.00	5/11/2024	0	0	0
RITCHIE BROS AUCTIONEERS	5.38	1/15/2025	10,827,000	10,823,114	11,130,156
RITE AID CORP	6.13	4/1/2023	21,094,000	19,958,122	20,499,149
RITE AID CORP	7.50	7/1/2025	12,282,000	11,613,710	12,317,863
ROCKIES EXPRESS PIPELINE	3.60	5/15/2025	450,000	414,619	415,796
ROCKIES EXPRESS PIPELINE	4.80	5/15/2030	200,000	180,291	184,572
ROCKIES EXPRESS PIPELINE	4.95	7/15/2029	575,000	519,873	535,756
ROCKIES EXPRESS PIPELINE	6.88	4/15/2040	775,000	722,963	744,589
ROCKIES EXPRESS PIPELINE	7.50	7/15/2038	225,000	192,127	219,449
ROCKPOINT GAS STORAGE CA	7.00	3/31/2023	3,467,000	3,457,784	3,186,866
ROGERS COMMUNICATIONS IN	3.70	11/15/2049	11,350,000	11,281,451	12,588,058
ROGERS COMMUNICATIONS IN	4.35	5/1/2049	14,735,000	15,521,729	18,011,769
ROGERS COMMUNICATIONS IN	5.00	3/15/2044	27,250,000	30,028,131	35,087,373
ROPER TECHNOLOGIES INC	2.95	9/15/2029	21,700,000	21,655,195	23,640,414
ROPER TECHNOLOGIES INC	4.20	9/15/2028	11,200,000	11,325,971	13,107,024
ROYAL BK SCOTLND GRP PLC	3.75	11/1/2029	15,300,000	15,326,508	15,813,774
ROYAL BK SCOTLND GRP PLC	3.77	12/31/2049	325,000	280,219	298,360

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
ROYAL BK SCOTLND GRP PLC	4.89	5/18/2029	12,500,000	12,585,754	14,706,750
ROYAL BK SCOTLND GRP PLC	5.08	1/27/2030	38,700,000	38,907,402	46,521,270
ROYAL BK SCOTLND GRP PLC	7.50	12/29/2049	600,000	600,000	602,274
ROYAL BK SCOTLND GRP PLC	8.63	12/29/2049	1,150,000	1,192,567	1,190,561
ROYAL CARIBBEAN CRUISES	3.70	3/15/2028	6,650,000	3,996,497	4,176,267
ROYAL CARIBBEAN CRUISES	5.25	11/15/2022	10,675,000	8,629,615	8,388,415
ROYAL CARIBBEAN CRUISES	9.13	6/15/2023	9,400,000	9,497,270	9,301,394
ROYAL CARIBBEAN CRUISES	11.50	6/1/2025	1,400,000	1,506,706	1,452,346
RP CROWN PARENT LLC	7.38	10/15/2024	1,200,000	1,207,986	1,200,876
RPM INTERNATIONAL INC	4.55	3/1/2029	12,300,000	12,442,699	13,794,450
RUBY PIPELINE LLC	7.00	4/1/2022	7,500,000	6,957,844	6,972,975
RYDER SYSTEM INC	2.90	12/1/2026	12,000,000	11,994,318	12,321,480
RYDER SYSTEM INC	3.35	9/1/2025	10,000,000	9,993,295	10,613,600
RYMAN HOSPITALITY PROP	4.75	10/15/2027	14,500,000	14,666,859	12,896,445
S+P GLOBAL INC	4.50	5/15/2048	7,715,000	8,502,552	9,996,094
SABINE PASS LIQUEFACTION	5.00	3/15/2027	15,450,000	15,633,541	17,253,788
SABINE PASS LIQUEFACTION	5.88	6/30/2026	12,800,000	14,126,710	15,044,224
SABRE GLBL INC	5.25	11/15/2023	9,900,000	9,918,250	9,104,634
SABRE GLBL INC	5.38	4/15/2023	10,428,000	10,461,471	9,836,732
SABRE GLBL INC	9.25	4/15/2025	14,103,000	14,733,761	14,848,626
SALEM MEDIA GROUP INC.	6.75	6/1/2024	675,000	615,212	556,072
SALLY HOLDINGS/SALLY CAP	5.63	12/1/2025	11,830,000	11,452,220	11,492,727
SAN DIEGO G + E	3.75	6/1/2047	18,900,000	17,336,776	21,727,440
SAN FRANCISCO CITY CNTY CA P	3.30	11/1/2039	10,000,000	10,000,000	10,837,900
SANCHEZ ENERGY CORP	6.13	1/15/2023	2,400,000	1,964,501	10,104
SANCHEZ ENERGY CORP	7.75	6/15/2021	3,400,000	3,348,450	15,946
SANDRIDGE ENERGY, INC	7.50	3/15/2021	2,350,000	1,977,651	0
SANDS CHINA LTD	5.40	8/8/2028	3,900,000	4,090,060	4,313,244
SANJEL CORP	0.01	12/31/2099	1,000,000	1,000,000	0
SBA COMMUNICATIONS CORP	3.88	2/15/2027	14,750,000	14,788,908	14,702,948
SBA COMMUNICATIONS CORP	4.00	10/1/2022	14,655,000	14,408,227	14,803,016
SBA COMMUNICATIONS CORP	4.88	9/1/2024	25,990,000	25,516,384	26,606,743
SCHLUMBERGER HLDGS CORP	3.90	5/17/2028	1,900,000	2,010,194	2,044,324
SCHLUMBERGER HLDGS CORP	4.30	5/1/2029	38,900,000	39,886,357	43,180,167
SCIENCE APPLICATIONS INT	4.88	4/1/2028	1,475,000	1,496,029	1,465,398
SCIENTIFIC GAMES INTERNA	5.00	10/15/2025	26,816,000	26,122,687	24,865,940
SCIENTIFIC GAMES INTERNA	7.00	5/15/2028	15,275,000	15,441,660	12,195,560
SCIENTIFIC GAMES INTERNA	7.25	11/15/2029	10,050,000	9,971,087	8,063,819
SCIENTIFIC GAMES INTERNA	8.25	3/15/2026	21,438,000	21,767,187	19,221,525
SCIENTIFIC GAMES INTERNA	8.63	7/1/2025	1,967,000	1,966,825	1,839,322
SCRIPPS ESCROW INC	5.88	7/15/2027	12,462,000	12,649,743	11,808,243
SEAGATE HDD CAYMAN	4.13	1/15/2031	10,000,000	9,985,976	10,539,600
SEALED AIR CORP	4.00	12/1/2027	1,175,000	1,175,000	1,174,824
SELECT MEDICAL CORP	6.25	8/15/2026	26,548,000	27,682,590	26,837,108
SEMPRA ENERGY	3.40	2/1/2028	25,900,000	25,324,406	28,449,855
SENSATA TECH UK FIN CO	6.25	2/15/2026	6,300,000	6,415,293	6,577,893
SENSATA TECHNOLOGIES BV	5.00	10/1/2025	2,000,000	2,149,989	2,129,840

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
SERTA SIMMONS BEDDING LLC	0.00	11/8/2024	759,467	748,075	100,250
SERVICE CORP INTL	4.63	12/15/2027	11,420,000	11,146,138	11,899,983
SERVICE CORP INTL	5.13	6/1/2029	12,700,000	12,893,073	13,653,643
SERVICE CORP INTL	5.38	5/15/2024	2,420,000	2,464,094	2,467,287
SERVICE CORP INTL	7.50	4/1/2027	140,000	135,917	159,587
SERVICE PROPERTIES TRUST	4.35	10/1/2024	11,400,000	10,266,999	10,273,110
SERVICE PROPERTIES TRUST	4.38	2/15/2030	100,000	79,036	82,345
SERVICE PROPERTIES TRUST	4.50	6/15/2023	7,000,000	6,538,883	6,698,510
SERVICE PROPERTIES TRUST	4.95	2/15/2027	450,000	402,758	395,033
SERVICE PROPERTIES TRUST	5.00	8/15/2022	7,000,000	6,750,628	6,862,380
SERVICE PROPERTIES TRUST	5.25	2/15/2026	250,000	225,312	226,900
SERVICE PROPERTIES TRUST	7.50	9/15/2025	1,625,000	1,627,832	1,711,856
SERVICEMASTER COMPANY LL	5.13	11/15/2024	14,200,000	13,999,205	14,388,860
SESI LLC	7.13	12/15/2021	1,100,000	1,083,166	493,152
SESI LLC	7.75	9/15/2024	8,180,000	7,740,438	2,915,679
SEVEN GENERATIONS ENERGY	5.38	9/30/2025	12,150,000	11,769,923	10,587,024
SHEA HOMES LP/FNDG CP	4.75	2/15/2028	3,825,000	3,558,701	3,618,794
SHELF DRILL HOLD LTD	8.25	2/15/2025	2,141,000	2,113,482	993,445
SHELL INTERNATIONAL FIN	2.75	4/6/2030	87,000,000	86,948,180	94,389,780
SHELL INTERNATIONAL FIN	3.25	4/6/2050	85,000,000	83,520,801	90,968,700
SHELL INTERNATIONAL FIN	3.75	9/12/2046	11,300,000	11,439,022	12,996,356
SHELL INTERNATIONAL FIN	4.38	5/11/2045	6,500,000	6,865,355	7,966,010
SIGNATURE AVIATION US	4.00	3/1/2028	10,300,000	10,259,171	9,306,359
SIGNATURE AVIATION US	5.38	5/1/2026	9,300,000	9,313,854	9,307,440
SILGAN HOLDINGS INC	4.13	2/1/2028	10,750,000	10,813,778	10,677,868
SIMMONS FOODS INC	5.75	11/1/2024	10,000,000	8,765,409	9,604,800
SINCLAIR TELEVISION GROU	5.13	2/15/2027	475,000	475,000	432,293
SINCLAIR TELEVISION GROU	5.50	3/1/2030	10,775,000	10,768,995	9,948,881
SINCLAIR TELEVISION GROU	5.63	8/1/2024	10,695,000	10,613,226	10,285,702
SINCLAIR TELEVISION GROU	5.88	3/15/2026	475,000	480,648	467,248
SINCLAIR TELEVISION GROUP INC	0.00	9/30/2026	471,438	469,080	447,866
SIRIUS XM RADIO INC	3.88	8/1/2022	17,675,000	17,410,792	17,777,162
SIRIUS XM RADIO INC	4.13	7/1/2030	6,209,000	6,210,472	6,139,335
SIRIUS XM RADIO INC	4.63	5/15/2023	1,100,000	1,081,589	1,108,514
SIRIUS XM RADIO INC	4.63	7/15/2024	11,783,000	11,881,488	12,076,279
SIRIUS XM RADIO INC	5.00	8/1/2027	27,635,000	26,863,840	28,206,215
SIRIUS XM RADIO INC	5.38	4/15/2025	17,800,000	17,777,251	18,289,500
SIRIUS XM RADIO INC	5.38	7/15/2026	19,318,000	19,116,550	20,002,050
SIRIUS XM RADIO INC	5.50	7/1/2029	27,525,000	28,455,755	28,977,770
SIX FLAGS ENTERTAINMENT	4.88	7/31/2024	20,967,000	20,479,770	18,760,223
SIX FLAGS ENTERTAINMENT	5.50	4/15/2027	9,600,000	9,276,968	8,578,464
SIX FLAGS THEME PARKS	7.00	7/1/2025	10,657,000	11,033,808	11,062,605
SM ENERGY CO	5.00	1/15/2024	150,000	68,275	82,041
SM ENERGY CO	5.63	6/1/2025	1,672,000	1,597,682	886,244
SM ENERGY CO	6.13	11/15/2022	875,000	676,310	638,199
SM ENERGY CO	6.63	1/15/2027	3,350,000	3,051,136	1,654,565
SM ENERGY CO	6.75	9/15/2026	4,750,000	4,309,206	2,408,155

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
SOLERA LLC / SOLERA FINA	10.50	3/1/2024	1,842,000	1,929,131	1,874,032
SONIC AUTOMOTIVE INC	6.13	3/15/2027	700,000	658,469	701,904
SOPHIA LP/FIN INC	9.00	9/30/2023	309,000	312,280	312,170
SOTHEBY S	7.38	10/15/2027	10,100,000	10,223,061	9,440,773
SOUTHERN CAL EDISON	4.00	4/1/2047	86,000,000	79,925,514	98,463,980
SOUTHERN CAL EDISON	4.13	3/1/2048	5,000,000	5,692,513	5,810,150
SOUTHERN CALIF GAS CO	3.95	2/15/2050	16,200,000	16,336,746	19,858,284
SOUTHERN NATURAL GAS	4.80	3/15/2047	38,460,000	41,890,004	42,819,441
SOUTHERN POWER CO	5.25	7/15/2043	8,700,000	8,771,227	9,965,415
SOUTHWEST AIRLINES CO	2.63	2/10/2030	20,000,000	19,897,736	18,017,000
SOUTHWEST AIRLINES CO	4.75	5/4/2023	15,000,000	15,399,881	15,408,600
SOUTHWEST AIRLINES CO	5.13	6/15/2027	20,000,000	20,000,000	20,667,600
SOUTHWEST GAS CORP	4.15	6/1/2049	21,600,000	21,791,935	24,717,528
SOUTHWESTERN ELEC POWER	3.90	4/1/2045	8,500,000	8,228,788	9,042,300
SOUTHWESTERN ELEC POWER	6.20	3/15/2040	10,100,000	10,554,174	13,778,824
SOUTHWESTERN ENERGY CO	6.20	1/23/2025	15,380,000	14,902,293	13,257,252
SOUTHWESTERN ENERGY CO	7.50	4/1/2026	13,330,000	13,477,229	11,676,414
SOUTHWESTERN ENERGY CO	7.75	10/1/2027	175,000	160,104	153,013
SOUTHWESTERN PUBLIC SERV	3.40	8/15/2046	27,000,000	23,738,305	29,542,590
SPANSION INC/OLD	2.25	6/15/2016	3,500,000	0	0
SPCM SA	4.88	9/15/2025	1,000,000	987,700	1,011,500
SPECTACLE GARY HOLDINGS LLC	0.00	12/23/2025	1,725,000	1,673,250	1,587,000
SPECTRA ENERGY PARTNERS	3.38	10/15/2026	8,000,000	7,765,182	8,693,280
SPECTRA ENERGY PARTNERS	4.50	3/15/2045	30,445,000	31,208,211	34,569,689
SPECTRUM BRANDS INC	5.50	7/15/2030	400,000	400,000	400,244
SPECTRUM BRANDS INC	5.75	7/15/2025	23,986,000	23,722,859	24,612,754
SPECTRUM BRANDS INC	6.13	12/15/2024	825,000	825,000	848,504
SPEEDWAY MOT/SPEEDWAY FD	4.88	11/1/2027	525,000	525,000	482,575
SPIRIT AEROSYSTEMS INC	3.95	6/15/2023	10,001,000	8,098,131	8,458,546
SPIRIT AEROSYSTEMS INC	4.60	6/15/2028	10,600,000	10,757,197	8,573,386
SPIRIT AEROSYSTEMS INC	7.50	4/15/2025	22,452,000	21,950,570	22,277,323
SPIRIT REALTY LP	3.40	1/15/2030	5,200,000	5,190,219	4,902,976
SPRINGLEAF FINANCE CORP	5.38	11/15/2029	1,392,000	1,435,687	1,303,176
SPRINGLEAF FINANCE CORP	5.63	3/15/2023	16,384,000	16,220,716	16,565,699
SPRINGLEAF FINANCE CORP	6.13	5/15/2022	18,795,000	19,083,668	19,152,481
SPRINGLEAF FINANCE CORP	6.13	3/15/2024	22,268,000	22,593,282	22,602,465
SPRINGLEAF FINANCE CORP	6.63	1/15/2028	1,350,000	1,371,936	1,343,709
SPRINGLEAF FINANCE CORP	6.88	3/15/2025	24,756,000	24,688,098	25,435,305
SPRINGLEAF FINANCE CORP	7.13	3/15/2026	34,637,000	34,407,308	35,835,440
SPRINGLEAF FINANCE CORP	7.75	10/1/2021	300,000	313,338	312,459
SPRINGLEAF FINANCE CORP	8.25	12/15/2020	200,000	203,615	205,786
SPRINGLEAF FINANCE CORP	8.25	10/1/2023	675,000	714,232	710,924
SPRINGLEAF FINANCE CORP	8.88	6/1/2025	1,508,000	1,508,000	1,611,600
SPRINT CAPITAL CORP	6.88	11/15/2028	44,047,000	43,858,342	53,721,043
SPRINT CAPITAL CORP	8.75	3/15/2032	9,203,000	11,013,106	13,163,143
SPRINT COMMUNICATIONS	6.00	11/15/2022	30,550,000	30,717,390	32,209,782
SPRINT COMMUNICATIONS	9.25	4/15/2022	475,000	518,901	523,640

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
SPRINT CORP	7.13	6/15/2024	40,195,000	40,859,943	45,331,117
SPRINT CORP	7.25	9/15/2021	32,160,000	32,807,037	33,697,570
SPRINT CORP	7.63	3/1/2026	1,600,000	1,778,944	1,889,744
SPRINT CORP	7.88	9/15/2023	70,955,000	73,931,794	79,995,377
SPX FLOW INC	5.63	8/15/2024	2,048,000	2,096,401	2,092,524
SPX FLOW INC	5.88	8/15/2026	505,000	504,496	518,822
SS C TECHNOLOGIES INC	0.00	4/16/2025	416,661	416,661	398,041
SS+C TECHNOLOGIES INC	5.50	9/30/2027	39,775,000	40,344,207	40,598,343
SSL ROBOTICS LLC	9.75	12/31/2023	15,400,000	16,227,382	16,495,402
STANDARD INDUSTRIES INC	4.38	7/15/2030	175,000	175,000	174,505
STAPLES INC	0.00	4/16/2026	1,237,500	1,225,125	1,061,156
STAPLES INC	7.50	4/15/2026	42,600,000	42,047,839	33,552,186
STAPLES INC	10.75	4/15/2027	22,668,000	22,804,788	13,450,058
STARBUCKS CORP	4.45	8/15/2049	33,250,000	33,898,454	40,172,650
STARBUCKS CORP	4.50	11/15/2048	3,750,000	4,298,879	4,457,925
STARS GRP HLDS/STARS GRP	7.00	7/15/2026	17,700,000	18,038,409	18,669,783
STARWOOD PROPERTY TRUST	3.63	2/1/2021	620,000	617,761	610,502
STARWOOD PROPERTY TRUST	5.00	12/15/2021	12,538,000	12,591,229	12,207,248
STATION CASINOS LLC	4.50	2/15/2028	13,150,000	12,760,408	11,208,008
STATION CASINOS LLC	5.00	10/1/2025	12,350,000	11,899,157	10,880,350
STEEL DYNAMICS INC	3.25	1/15/2031	26,790,000	26,925,932	27,315,352
STEEL DYNAMICS INC	5.50	10/1/2024	1,405,000	1,426,762	1,443,638
STENA INTERNATIONAL SA	6.13	2/1/2025	400,000	400,000	373,324
STERICYCLE INC	5.38	7/15/2024	7,205,000	7,431,217	7,401,192
STEVENS HOLDING CO INC	6.13	10/1/2026	2,125,000	2,147,266	2,225,045
STORE CAPITAL CORP	4.50	3/15/2028	2,000,000	2,129,746	2,018,740
STORE CAPITAL CORP	4.63	3/15/2029	12,100,000	12,205,521	12,512,005
STRYKER CORP	4.63	3/15/2046	7,775,000	8,839,967	10,030,839
SUBURBAN PROPANE PARTNRS	5.50	6/1/2024	8,671,000	8,516,182	8,607,788
SUMITOMO MITSUI FINL GRP	3.04	7/16/2029	49,600,000	49,633,728	53,648,848
SUMITOMO MITSUI FINL GRP	3.20	9/17/2029	50,600,000	50,613,418	54,051,426
SUMITOMO MITSUI FINL GRP	3.45	1/11/2027	4,000,000	3,983,089	4,402,240
SUMITOMO MITSUI FINL GRP	4.31	10/16/2028	4,000,000	4,000,000	4,687,800
SUMMIT MATERIALS LLC/FIN	5.13	6/1/2025	400,000	397,950	398,044
SUMMIT MATERIALS LLC/FIN	6.13	7/15/2023	2,500,000	2,512,671	2,493,150
SUMMIT MATERIALS LLC/FIN	6.50	3/15/2027	500,000	500,000	512,065
SUMMIT MID HLDS LLC / FI	5.50	8/15/2022	725,000	328,700	482,082
SUMMIT MID HLDS LLC / FI	5.75	4/15/2025	6,275,000	5,804,264	3,541,610
SUMMIT MIDSTREAM PARTNER	9.50	12/31/2099	800,000	800,000	103,960
SUNCOKE ENRGY PART LP/FI	7.50	6/15/2025	10,300,000	10,225,277	8,780,338
SUNCOR ENERGY INC	5.95	12/1/2034	17,900,000	18,724,826	21,422,720
SUNCOR ENERGY INC	5.95	5/15/2035	3,000,000	3,811,679	3,559,350
SUNCOR ENERGY INC	6.80	5/15/2038	2,000,000	2,789,679	2,593,540
SUNOCO LOGISTICS PARTNER	3.90	7/15/2026	10,400,000	10,420,090	10,952,448
SUNOCO LOGISTICS PARTNER	5.35	5/15/2045	9,600,000	8,671,921	9,358,272
SUNOCO LOGISTICS PARTNER	5.40	10/1/2047	52,600,000	53,626,192	51,636,894
SUNOCO LP/FINANCE CORP	4.88	1/15/2023	18,970,000	18,674,891	18,895,638

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
SUNOCO LP/FINANCE CORP	5.50	2/15/2026	15,879,000	15,377,594	15,422,955
SUNOCO LP/FINANCE CORP	5.88	3/15/2028	337,000	349,065	335,655
SUNOCO LP/FINANCE CORP	6.00	4/15/2027	11,823,000	11,552,256	11,833,404
SUPERIOR PLUS/GEN PRTNR	7.00	7/15/2026	300,000	300,000	310,530
SURGERY CENTER HOLDINGS	6.75	7/1/2025	1,046,000	975,820	948,021
SVB FINANCIAL GROUP	3.13	6/5/2030	15,000,000	14,988,532	16,082,250
SYNCHRONY FINANCIAL	3.95	12/1/2027	14,600,000	14,643,067	15,155,092
SYNCHRONY FINANCIAL	5.15	3/19/2029	5,000,000	5,418,778	5,606,600
SYSCO CORPORATION	3.30	2/15/2050	20,000,000	19,962,679	18,882,200
SYSCO CORPORATION	4.45	3/15/2048	19,350,000	19,576,659	21,334,536
SYSCO CORPORATION	4.50	4/1/2046	13,350,000	14,049,716	14,459,252
SYSCO CORPORATION	4.85	10/1/2045	7,800,000	8,569,001	8,991,060
SYSCO CORPORATION	5.38	9/21/2035	2,150,000	2,636,819	2,605,091
T MOBILE USA INC	2.55	2/15/2031	15,000,000	14,969,006	15,104,400
T MOBILE USA INC	3.75	4/15/2027	20,000,000	19,991,679	22,172,400
T MOBILE USA INC	3.88	4/15/2030	20,000,000	19,858,876	22,261,000
T MOBILE USA INC	4.38	4/15/2040	28,315,000	30,142,371	32,780,842
T MOBILE USA INC	4.50	2/1/2026	22,431,000	21,555,414	22,696,134
T MOBILE USA INC	4.50	4/15/2050	5,000,000	5,674,542	5,890,750
T MOBILE USA INC	4.75	2/1/2028	31,576,000	30,221,723	33,354,360
T MOBILE USA INC	5.38	4/15/2027	120,000	118,527	126,935
T MOBILE USA INC	6.00	3/1/2023	2,068,000	2,105,397	2,080,449
T MOBILE USA INC	6.00	4/15/2024	6,105,000	6,243,128	6,229,176
T MOBILE USA INC	6.38	3/1/2025	7,050,000	7,172,997	7,231,044
T MOBILE USA INC	6.50	1/15/2026	15,271,000	15,628,521	15,976,826
TAKEDA PHARMACEUTICAL	3.03	7/9/2040	40,000,000	40,000,000	40,319,200
TAKEDA PHARMACEUTICAL	3.18	7/9/2050	10,000,000	10,000,000	10,010,000
TAKEDA PHARMACEUTICAL	3.38	7/9/2060	10,000,000	10,000,000	9,978,800
TALEN ENERGY SUPPLY LLC	6.50	6/1/2025	9,200,000	7,670,765	6,165,840
TALEN ENERGY SUPPLY LLC	6.63	1/15/2028	550,000	550,000	537,999
TALEN ENERGY SUPPLY LLC	7.25	5/15/2027	14,900,000	15,042,799	14,952,448
TALEN ENERGY SUPPLY LLC	10.50	1/15/2026	11,725,000	11,029,831	9,319,851
TALLGRASS NRG PRTNR/FIN	4.75	10/1/2023	7,700,000	7,607,764	7,126,812
TALLGRASS NRG PRTNR/FIN	5.50	9/15/2024	11,450,000	11,225,422	10,392,593
TALLGRASS NRG PRTNR/FIN	5.50	1/15/2028	11,619,000	11,356,667	9,934,710
TALLGRASS NRG PRTNR/FIN	6.00	3/1/2027	724,000	714,324	644,367
TARGA RESOURCES PARTNERS	4.25	11/15/2023	7,230,000	7,077,747	6,907,036
TARGA RESOURCES PARTNERS	5.00	1/15/2028	16,168,000	15,629,332	15,197,435
TARGA RESOURCES PARTNERS	5.25	5/1/2023	2,785,000	2,797,329	2,732,113
TARGA RESOURCES PARTNERS	5.50	3/1/2030	15,145,000	15,130,016	14,579,183
TARGA RESOURCES PARTNERS	5.88	4/15/2026	22,241,000	21,987,187	22,103,773
TARGA RESOURCES PARTNERS	6.50	7/15/2027	9,429,000	9,800,013	9,535,831
TARGA RESOURCES PARTNERS	6.75	3/15/2024	3,800,000	3,816,459	3,823,066
TARGA RESOURCES PARTNERS	6.88	1/15/2029	13,198,000	13,764,331	13,827,545
TASEKO MINES LTD	8.75	6/15/2022	1,725,000	1,657,157	1,449,966
TAYLOR MORR COMM/HLDGS	5.63	3/1/2024	905,000	892,294	935,164
TAYLOR MORR COMM/HLDGS	5.88	4/15/2023	2,118,000	2,183,405	2,180,248

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
TAYLOR MORRISON COMM	5.75	1/15/2028	1,585,000	1,585,000	1,642,314
TAYLOR MORRISON COMM	5.88	1/31/2025	575,000	572,413	582,901
TAYLOR MORRISON COMM	5.88	6/15/2027	10,480,000	10,663,992	10,883,270
TAYLOR MORRISON COMM	6.00	9/1/2023	725,000	710,676	745,119
TAYLOR MORRISON COMM	6.63	7/15/2027	625,000	625,000	655,063
TC PIPELINES LP	3.90	5/25/2027	5,500,000	5,584,318	5,783,195
TEACHERS INSUR + ANNUITY	4.27	5/15/2047	39,300,000	39,901,574	46,919,091
TEACHERS INSUR + ANNUITY	4.90	9/15/2044	28,600,000	29,349,605	36,619,154
TEACHERS INSUR + ANNUITY	6.85	12/16/2039	4,202,000	5,000,839	6,392,671
TECK RESOURCES LIMITED	6.13	10/1/2035	5,500,000	5,801,122	6,250,915
TECK RESOURCES LIMITED	6.25	7/15/2041	7,770,000	8,105,507	8,504,265
TEGNA INC	4.63	3/15/2028	20,350,000	20,518,821	18,686,998
TEGNA INC	4.88	9/15/2021	1,063,000	1,064,522	1,063,361
TEGNA INC	5.00	9/15/2029	20,300,000	20,405,306	19,009,935
TELECOM ITALIA CAPITAL	6.00	9/30/2034	2,525,000	2,621,853	2,746,746
TELECOM ITALIA CAPITAL	7.20	7/18/2036	325,000	365,355	387,182
TELECOM ITALIA SPA	5.30	5/30/2024	275,000	292,450	287,887
TELEFLEX INC	4.25	6/1/2028	4,150,000	4,272,605	4,260,473
TELEFLEX INC	4.63	11/15/2027	9,500,000	9,209,690	9,988,680
TELEFONICA EMISIONES SAU	4.10	3/8/2027	30,403,000	30,933,714	34,753,365
TELEFONICA EUROPE BV	8.25	9/15/2030	5,700,000	6,014,520	8,729,265
TELESAT CANADA/TELESAT L	4.88	6/1/2027	775,000	775,000	762,538
TELESAT CANADA/TELESAT L	6.50	10/15/2027	10,450,000	10,576,299	10,254,481
TELUS CORP	4.30	6/15/2049	11,200,000	11,243,380	13,228,320
TEMPO ACQUISITION LLC/FI	5.75	6/1/2025	1,299,000	1,299,000	1,335,177
TEMPO ACQUISITION LLC/FI	6.75	6/1/2025	2,567,000	2,596,845	2,603,605
TEMPUR SEALY INTL INC	5.50	6/15/2026	12,195,000	11,883,569	12,446,217
TENET HEALTHCARE CORP	4.63	7/15/2024	36,892,000	36,030,655	36,135,345
TENET HEALTHCARE CORP	4.63	9/1/2024	775,000	775,000	765,212
TENET HEALTHCARE CORP	4.63	6/15/2028	1,582,000	1,582,000	1,541,801
TENET HEALTHCARE CORP	4.88	1/1/2026	19,979,000	20,039,198	19,577,222
TENET HEALTHCARE CORP	5.13	5/1/2025	19,273,000	18,863,830	18,623,500
TENET HEALTHCARE CORP	5.13	11/1/2027	22,153,000	22,214,182	21,915,077
TENET HEALTHCARE CORP	6.25	2/1/2027	16,026,000	16,400,415	15,894,907
TENET HEALTHCARE CORP	6.75	6/15/2023	39,358,000	39,217,427	39,054,550
TENET HEALTHCARE CORP	6.88	11/15/2031	650,000	536,778	585,754
TENET HEALTHCARE CORP	7.00	8/1/2025	1,246,000	1,171,647	1,214,202
TENET HEALTHCARE CORP	7.50	4/1/2025	2,200,000	2,240,260	2,339,172
TENET HEALTHCARE CORP	8.13	4/1/2022	43,963,000	45,078,129	46,063,552
TENNANT CO	5.63	5/1/2025	575,000	561,137	580,813
TENNECO INC	5.00	7/15/2026	12,540,000	11,251,006	8,535,351
TENNESSEE GAS PIPELINE	2.90	3/1/2030	25,000,000	24,951,991	25,670,250
TEREX CORP	5.63	2/1/2025	15,145,000	14,722,774	13,901,141
TERRAFORM POWER OPERATIN	4.25	1/31/2023	11,630,000	11,427,654	11,785,493
TERRAFORM POWER OPERATIN	4.75	1/15/2030	15,188,000	15,292,372	15,478,395
TERRAFORM POWER OPERATIN	5.00	1/31/2028	14,752,000	13,994,697	15,502,729
TERVITA CORP	7.63	12/1/2021	10,000,000	10,029,579	8,024,500

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
TESLA INC	5.30	8/15/2025	34,545,000	31,461,230	34,542,927
TEVA PHARMACEUTICALS NE	4.10	10/1/2046	1,950,000	1,588,509	1,610,154
TEVA PHARMACEUTICALS NE	6.00	4/15/2024	500,000	499,967	512,705
TEVA PHARMACEUTICALS NE	7.13	1/31/2025	1,200,000	1,235,666	1,273,140
TEXAS COHLD TCEH	11.50	10/1/2020	4,825,000	4,488,446	5,259
TEXAS INSTRUMENTS INC	3.88	3/15/2039	4,000,000	3,999,620	4,958,520
TEXAS INSTRUMENTS INC	4.15	5/15/2048	10,900,000	11,029,985	14,141,551
THOMSON REUTERS CORP	3.35	5/15/2026	7,200,000	7,202,538	7,821,432
TIME WARNER CABLE LLC	4.50	9/15/2042	44,950,000	38,382,171	47,952,211
TIME WARNER CABLE LLC	5.50	9/1/2041	85,500,000	86,459,786	103,421,655
TIME WARNER CABLE LLC	6.75	6/15/2039	10,650,000	11,543,494	14,174,085
TITAN ACQ/CO BORROWER	7.75	4/15/2026	1,225,000	1,194,971	1,160,014
TITAN INTERNATIONAL INC	6.50	11/30/2023	750,000	750,000	490,643
TMS INTL HOLDING CORP	7.25	8/15/2025	275,000	275,000	224,458
TOLL BROS FINANCE CORP	4.35	2/15/2028	3,200,000	3,191,561	3,322,752
TOPBUILD CORP	5.63	5/1/2026	1,275,000	1,267,157	1,310,828
TORONTO DOMINION BANK	0.56	9/17/2020	70,000,000	70,000,000	70,027,300
TOTAL CAPITAL INTL SA	3.13	5/29/2050	75,000,000	75,000,000	76,848,000
TOWNSQUARE MEDIA INC	6.50	4/1/2023	1,725,000	1,745,230	1,505,873
TOYOTA MOTOR CREDIT CORP	1.47	10/9/2020	75,000,000	75,000,000	75,002,250
TPC GROUP INC	10.50	8/1/2024	16,275,000	16,741,157	14,634,806
TRANSCANADA PIPELINES	4.25	5/15/2028	1,700,000	1,853,444	1,943,627
TRANSCANADA PIPELINES	4.63	3/1/2034	3,250,000	3,631,489	3,749,038
TRANSCANADA PIPELINES	7.70	6/15/2029	20,400,000	21,534,714	28,251,552
TRANSCONT GAS PIPE CORP	4.45	8/1/2042	9,900,000	10,129,480	10,687,248
TRANSCONT GAS PIPE LINE	3.25	5/15/2030	25,000,000	24,947,536	26,714,500
TRANSCONT GAS PIPE LINE	3.95	5/15/2050	28,000,000	27,888,074	30,187,080
TRANSCONT GAS PIPE LINE	4.00	3/15/2028	30,900,000	30,597,630	34,293,747
TRANSCONT GAS PIPE LINE	4.60	3/15/2048	1,650,000	1,787,352	1,880,225
TRANSCONT GAS PIPE LINE	5.40	8/15/2041	18,800,000	19,792,480	22,397,004
TRANSCONT GAS PIPE LINE	7.85	2/1/2026	50,800,000	52,649,115	66,234,056
TRANSDIGM INC	5.50	11/15/2027	57,117,000	56,741,537	49,840,865
TRANSDIGM INC	6.25	3/15/2026	83,190,000	84,921,298	82,945,421
TRANSDIGM INC	6.38	6/15/2026	19,766,000	19,613,169	18,033,708
TRANSDIGM INC	6.50	7/15/2024	23,675,000	23,839,119	22,627,381
TRANSDIGM INC	6.50	5/15/2025	15,230,000	15,343,211	14,258,935
TRANSDIGM INC	7.50	3/15/2027	4,566,000	4,626,613	4,387,150
TRANSDIGM INC	8.00	12/15/2025	10,359,000	10,598,461	10,880,990
TRANSDIGM UK HOLDINGS	6.88	5/15/2026	704,000	702,532	655,776
TRANSMONTAIGE PARTNERS	6.13	2/15/2026	2,476,000	2,450,091	2,391,321
TRANSOCEAN GUARDIAN LTD	5.88	1/15/2024	13,077,770	13,011,755	11,361,051
TRANSOCEAN INC	5.80	10/15/2022	1,000,000	991,019	507,640
TRANSOCEAN INC	6.80	3/15/2038	925,000	453,935	254,384
TRANSOCEAN INC	7.25	11/1/2025	625,000	601,215	348,600
TRANSOCEAN INC	7.50	1/15/2026	2,207,000	2,109,896	1,202,881
TRANSOCEAN INC	7.50	4/15/2031	925,000	773,510	259,194
TRANSOCEAN INC	8.00	2/1/2027	2,893,000	2,876,161	1,597,891

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
TRANSOCEAN INC	9.35	12/15/2041	1,275,000	1,002,626	373,001
TRANSOCEAN PONTUS LTD	6.13	8/1/2025	7,661,125	6,714,221	7,027,703
TRANSOCEAN POSEIDON LTD	6.88	2/1/2027	9,709,000	9,290,030	8,571,591
TRANSOCEAN SENTRY LTD	5.38	5/15/2023	8,797,000	7,219,072	7,486,687
TRAVELERS COS INC	3.75	5/15/2046	14,100,000	13,732,935	16,611,351
TRAVELERS COS INC	4.05	3/7/2048	17,500,000	17,898,033	21,601,650
TRAVELERS COS INC	4.10	3/4/2049	12,700,000	13,138,745	15,964,662
TREEHOUSE FOODS INC	6.00	2/15/2024	12,965,000	13,042,335	13,259,954
TRI POINTE GROUP / HOMES	5.88	6/15/2024	1,639,000	1,632,767	1,692,038
TRI POINTE GROUP INC	5.25	6/1/2027	1,075,000	988,949	1,071,850
TRI POINTE GROUP INC	5.70	6/15/2028	1,232,000	1,232,000	1,259,276
TRIDENT TPI HOLDINGS INC	6.63	11/1/2025	200,000	200,000	193,428
TRIDENT TPI HOLDINGS INC	9.25	8/1/2024	1,000,000	992,032	1,029,780
TRIMBLE INC	4.90	6/15/2028	36,700,000	38,671,232	42,107,378
TRINITY INDUSTRIES INC	4.55	10/1/2024	10,000,000	9,675,823	10,080,100
TRINSEO OP / TRINSEO FIN	5.38	9/1/2025	14,235,000	13,607,482	13,546,311
TRIUMPH GROUP INC	5.25	6/1/2022	675,000	675,000	585,205
TRIUMPH GROUP INC	6.25	9/15/2024	875,000	875,000	743,750
TRIUMPH GROUP INC	7.75	8/15/2025	660,000	664,626	502,669
TRIVIUM PACKAGING FIN	5.50	8/15/2026	2,723,000	2,737,298	2,766,405
TRIVIUM PACKAGING FIN	8.50	8/15/2027	1,951,000	2,027,094	2,084,956
TRONOX FINANCE PLC	5.75	10/1/2025	1,150,000	1,151,302	1,061,634
TRONOX INC	6.50	5/1/2025	7,500,000	7,529,656	7,582,425
TRONOX INC	6.50	4/15/2026	12,525,000	12,028,981	11,719,643
TTM TECHNOLOGIES INC	5.63	10/1/2025	375,000	375,000	372,034
TULLOW OIL PLC	6.25	4/15/2022	700,000	683,516	511,938
TULLOW OIL PLC	7.00	3/1/2025	200,000	200,000	126,688
TUPPERWARE BRANDS CORP	4.75	6/1/2021	10,000,000	9,957,606	6,108,100
TUTOR PERINI CORP	6.88	5/1/2025	8,700,000	8,596,492	8,395,500
TWIN RIVER WORLDWIDE HLD	6.75	6/1/2027	400,000	400,000	380,044
TWITTER INC	3.88	12/15/2027	12,373,000	12,405,680	12,375,722
TYCO ELECTRONICS GROUP S	7.13	10/1/2037	16,050,000	18,160,294	24,517,499
TYSON FOODS INC	3.55	6/2/2027	16,000,000	15,689,085	17,712,000
TYSON FOODS INC	4.35	3/1/2029	25,500,000	25,648,450	30,053,790
TYSON FOODS INC	4.55	6/2/2047	14,250,000	15,088,455	17,101,853
TYSON FOODS INC	4.88	8/15/2034	5,200,000	6,026,769	6,529,744
TYSON FOODS INC	5.10	9/28/2048	56,150,000	57,402,908	72,411,040
TYSON FOODS INC	5.15	8/15/2044	1,500,000	1,791,059	1,892,805
UBER TECHNOLOGIES INC	7.50	11/1/2023	16,757,000	17,277,570	16,855,699
UBER TECHNOLOGIES INC	7.50	5/15/2025	16,693,000	16,969,125	16,825,542
UBER TECHNOLOGIES INC	7.50	9/15/2027	22,975,000	22,844,443	23,019,342
UBER TECHNOLOGIES INC	8.00	11/1/2026	26,075,000	27,341,956	26,529,487
UBS GROUP AG	4.25	3/23/2028	20,300,000	20,442,176	23,099,167
UDR INC	3.00	8/15/2031	7,700,000	7,676,007	8,212,127
UDR INC	3.10	11/1/2034	12,700,000	12,653,238	13,493,877
UDR INC	3.20	1/15/2030	31,300,000	32,289,524	33,731,071
UDR INC	4.40	1/26/2029	20,700,000	20,837,651	24,125,643

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
UFC HOLDINGS, LLC	0.00	4/29/2026	1,175,695	1,175,016	1,120,826
ULTIMATE SOFTWARE GROUP INC	0.00	5/4/2026	573,665	572,231	554,826
UNDER ARMOUR INC	3.25	6/15/2026	9,000,000	8,646,875	7,938,180
UNICREDIT SPA	5.46	6/30/2035	600,000	600,000	603,198
UNION PACIFIC CORP	3.38	2/1/2035	14,200,000	13,279,591	16,137,590
UNION PACIFIC CORP	3.55	8/15/2039	12,500,000	12,490,462	13,994,125
UNION PACIFIC CORP	3.75	2/5/2070	10,000,000	9,995,537	11,371,600
UNION PACIFIC CORP	3.84	3/20/2060	5,125,000	5,236,403	5,982,054
UNION PACIFIC CORP	3.95	8/15/2059	15,500,000	15,412,617	18,224,900
UNION PACIFIC CORP	4.00	4/15/2047	5,500,000	5,437,310	6,495,610
UNION PACIFIC CORP	4.05	3/1/2046	12,800,000	12,949,537	15,105,792
UNION PACIFIC CORP	4.10	9/15/2067	13,000,000	12,395,538	15,553,720
UNION PACIFIC CORP	4.30	6/15/2042	8,000,000	8,322,378	9,621,840
UNION PACIFIC CORP	4.30	3/1/2049	28,000,000	27,918,477	35,744,240
UNITED AIR 2014 1 A PTT	4.00	10/11/2027	4,342,735	4,342,735	3,961,529
UNITED AIR 2019 2 AA PTT	2.70	11/1/2033	17,000,000	16,871,221	15,311,730
UNITED AIRLINES HOLDINGS	4.25	10/1/2022	1,080,000	1,051,141	917,935
UNITED AIRLINES HOLDINGS	5.00	2/1/2024	125,000	87,867	101,781
UNITED AIRLINES HOLDINGS	6.00	12/1/2020	450,000	439,148	447,372
UNITED PARCEL SERVICE	3.40	11/15/2046	28,739,000	27,090,014	31,107,956
UNITED RENTALS NORTH AM	3.88	11/15/2027	1,680,000	1,692,142	1,680,101
UNITED RENTALS NORTH AM	4.00	7/15/2030	3,381,000	3,373,698	3,273,586
UNITED RENTALS NORTH AM	4.63	10/15/2025	1,841,000	1,869,470	1,849,634
UNITED RENTALS NORTH AM	4.88	1/15/2028	27,749,000	26,270,193	28,433,568
UNITED RENTALS NORTH AM	5.25	1/15/2030	1,391,000	1,435,882	1,437,793
UNITED RENTALS NORTH AM	5.50	7/15/2025	5,700,000	5,767,857	5,846,604
UNITED RENTALS NORTH AM	5.50	5/15/2027	20,717,000	20,415,919	21,446,031
UNITED RENTALS NORTH AM	5.88	9/15/2026	19,200,000	19,230,923	20,117,184
UNITED RENTALS NORTH AM	6.50	12/15/2026	24,140,000	24,996,770	25,351,828
UNITED STATES STEEL CORP	6.25	3/15/2026	10,505,000	10,112,166	6,643,782
UNITED STATES STEEL CORP	6.88	8/15/2025	12,700,000	12,511,253	8,638,794
UNITED STATES STEEL CORP	12.00	6/1/2025	12,533,000	13,001,232	12,842,565
UNITEDHEALTH GROUP INC	3.70	8/15/2049	3,300,000	3,333,314	3,921,390
UNITEDHEALTH GROUP INC	3.75	10/15/2047	28,800,000	28,595,326	34,327,584
UNITEDHEALTH GROUP INC	4.20	1/15/2047	5,300,000	5,668,825	6,672,912
UNITEDHEALTH GROUP INC	4.25	6/15/2048	10,200,000	10,221,164	13,080,786
UNITEDHEALTH GROUP INC	4.45	12/15/2048	10,200,000	10,264,091	13,460,226
UNITEDHEALTH GROUP INC	4.63	7/15/2035	6,200,000	6,853,215	8,074,384
UNITEDHEALTH GROUP INC	4.75	7/15/2045	17,160,000	18,785,840	22,970,891
UNITEDHEALTH GROUP INC	5.80	3/15/2036	1,080,000	1,409,917	1,535,447
UNITI GROUP/CSL CAPITAL	6.00	4/15/2023	12,965,000	12,667,054	12,688,716
UNITI GROUP/CSL CAPITAL	7.13	12/15/2024	300,000	297,130	274,944
UNITI GRP/UNITI HLD/CSL	7.88	2/15/2025	38,529,000	39,690,459	39,127,741
UNITYPOINT HEALTH	3.67	2/15/2050	10,000,000	10,000,000	10,969,700
UNIVAR SOLUTIONS USA INC	5.13	12/1/2027	10,650,000	10,805,240	10,759,163
UNIVISION COMMUNICATIONS	5.13	5/15/2023	20,200,000	19,436,229	20,385,436
UNIVISION COMMUNICATIONS	5.13	2/15/2025	27,935,000	26,256,406	26,320,636

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
UNIVISION COMMUNICATIONS	6.63	6/1/2027	15,875,000	15,808,106	15,156,815
UNIVISION COMMUNICATIONS	9.50	5/1/2025	775,000	767,716	829,335
UPC HOLDING BV	5.50	1/15/2028	600,000	600,000	577,362
UPJOHN INC	2.70	6/22/2030	10,000,000	9,968,777	10,277,100
UPJOHN INC	3.85	6/22/2040	20,000,000	19,958,451	21,488,600
UPJOHN INC	4.00	6/22/2050	20,000,000	19,948,043	21,405,400
US CELLULAR CORP	6.70	12/15/2033	11,800,000	12,250,286	13,604,456
US CONCRETE INC	6.38	6/1/2024	13,675,000	13,541,287	13,578,181
US FOODS INC	5.88	6/15/2024	12,450,000	12,515,155	11,835,842
US FOODS INC	6.25	4/15/2025	14,000,000	14,357,220	14,243,880
USA COM PART/USA COM FIN	6.88	4/1/2026	14,549,000	14,634,505	14,126,497
USA COM PART/USA COM FIN	6.88	9/1/2027	14,073,000	13,881,717	13,418,887
USI INC/NY	6.88	5/1/2025	3,074,000	3,087,239	3,098,592
USS ULTIMATE HLDGS INC	0.00	8/25/2024	950,147	957,208	890,354
VAIL RESORTS INC	6.25	5/15/2025	9,614,000	9,945,251	10,055,763
VALERO ENERGY CORP	4.00	4/1/2029	11,700,000	12,358,475	13,047,606
VALERO ENERGY CORP	4.35	6/1/2028	20,400,000	20,999,889	23,070,360
VALERO ENERGY CORP	6.63	6/15/2037	5,662,000	6,758,600	7,407,538
VALERO ENERGY CORP	10.50	3/15/2039	17,500,000	19,003,297	28,125,475
VALERO ENERGY PARTNERS	4.38	12/15/2026	2,800,000	2,815,590	3,174,556
VALVOLINE INC	4.25	2/15/2030	10,618,000	10,691,958	10,410,418
VALVOLINE INC	4.38	8/15/2025	1,990,000	1,985,937	2,001,821
VENTAS REALTY LP	3.00	1/15/2030	23,500,000	23,367,950	23,303,305
VENTAS REALTY LP	4.88	4/15/2049	6,400,000	6,715,149	6,938,240
VERICAST CORP	8.38	8/15/2022	1,785,000	1,736,139	1,494,420
VERICAST CORP	9.25	3/1/2021	800,000	798,671	802,032
VERISIGN INC	4.75	7/15/2027	2,500,000	2,549,939	2,627,800
VERISK ANALYTICS INC	3.63	5/15/2050	5,000,000	4,948,730	5,614,300
VERISK ANALYTICS INC	4.13	3/15/2029	25,600,000	27,647,735	30,021,632
VERITAS US INC/BERMUDA L	10.50	2/1/2024	1,800,000	1,765,363	1,562,562
VERIZON COMMUNICATIONS	4.00	3/22/2050	25,000,000	25,000,000	31,855,250
VERIZON COMMUNICATIONS	5.25	3/16/2037	34,000,000	38,463,154	46,194,440
VERSCEND ESCROW CORP	9.75	8/15/2026	6,298,000	6,426,034	6,785,465
VERTIV GROUP CORPORATION	0.00	3/2/2027	250,000	248,750	235,625
VF CORP	2.95	4/23/2030	10,000,000	9,978,906	10,662,100
VIACOMCBS INC	2.90	1/15/2027	11,000,000	10,678,737	11,506,880
VIACOMCBS INC	3.38	2/15/2028	20,100,000	19,792,127	21,385,194
VIACOMCBS INC	4.20	6/1/2029	16,100,000	16,130,275	18,144,861
VIACOMCBS INC	4.38	3/15/2043	5,300,000	5,570,480	5,470,236
VIACOMCBS INC	4.85	7/1/2042	8,525,000	8,669,191	9,047,327
VIACOMCBS INC	5.50	5/15/2033	3,500,000	4,160,183	4,105,570
VIACOMCBS INC	5.85	9/1/2043	62,625,000	63,646,457	73,752,210
VIACOMCBS INC	7.88	7/30/2030	21,600,000	24,423,675	30,711,744
VIASAT INC	5.63	9/15/2025	13,300,000	12,842,509	12,908,714
VIASAT INC	5.63	4/15/2027	13,554,000	13,699,628	13,903,151
VICI PROPERTIES / NOTE	3.50	2/15/2025	9,000,000	8,681,373	8,464,770
VICI PROPERTIES / NOTE	3.75	2/15/2027	16,238,000	16,288,717	15,242,448

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
VICI PROPERTIES / NOTE	4.13	8/15/2030	18,424,000	18,551,258	17,565,257
VICI PROPERTIES / NOTE	4.25	12/1/2026	23,220,000	23,582,108	22,309,079
VICI PROPERTIES / NOTE	4.63	12/1/2029	17,203,000	17,666,986	16,865,305
VIDEOTRON LTD	5.00	7/15/2022	10,800,000	10,861,697	11,087,388
VIDEOTRON LTD	5.38	6/15/2024	13,290,000	13,499,964	14,150,129
VIDEOTRON LTD / LTEE	5.13	4/15/2027	13,535,000	13,378,126	14,107,531
VIKING CRUISES LTD	5.88	9/15/2027	21,009,000	20,132,507	12,533,549
VIKING CRUISES LTD	6.25	5/15/2025	650,000	619,157	379,496
VIKING CRUISES LTD	13.00	5/15/2025	10,790,000	11,464,645	11,331,119
VINE OIL + GAS LP / FIN	8.75	4/15/2023	1,450,000	1,141,732	873,509
VINE OIL + GAS LP / FIN	9.75	4/15/2023	1,625,000	1,609,777	983,580
VIRGIN AUSTRALIA HOLDING	8.13	11/15/2024	325,000	325,000	50,957
VIRGIN MEDIA FINANCE PLC	5.00	7/15/2030	2,996,000	2,999,990	2,919,302
VIRGIN MEDIA SECURED FIN	5.50	5/15/2029	1,000,000	1,008,697	1,047,540
VIRGINIA ELEC + POWER CO	6.00	1/15/2036	44,600,000	47,250,619	61,871,796
VISA INC	2.70	4/15/2040	20,000,000	19,854,610	21,461,200
VISA INC	4.30	12/14/2045	6,200,000	6,506,560	8,185,984
VISTAJET MALTA/XO MGMT	10.50	6/1/2024	1,075,000	1,059,138	975,326
VISTRA CORP	5.00	7/31/2027	26,567,000	27,192,791	26,843,297
VISTRA CORP	5.50	9/1/2026	18,976,000	19,127,685	19,422,505
VISTRA CORP	5.63	2/15/2027	26,256,000	26,753,409	26,941,019
VISTRA CORP	8.13	1/30/2026	1,578,000	1,638,423	1,650,241
VOC ESCROW LTD	5.00	2/15/2028	11,650,000	11,230,529	8,772,217
VODAFONE GROUP PLC	4.88	6/19/2049	15,000,000	14,746,700	19,044,900
VODAFONE GROUP PLC	5.00	5/30/2038	1,000,000	1,164,061	1,254,430
VODAFONE GROUP PLC	5.25	5/30/2048	25,000,000	25,106,537	32,425,750
VODAFONE GROUP PLC	6.15	2/27/2037	19,100,000	21,391,776	26,616,423
VODAFONE GROUP PLC	7.00	4/4/2079	1,650,000	1,825,547	1,940,466
VODAFONE GROUP PLC	7.88	2/15/2030	11,515,000	13,093,795	16,708,956
VOYA FINANCIAL INC	5.70	7/15/2043	17,015,000	18,693,829	21,972,661
VOYAGER AVIATION HLDS	8.50	8/15/2021	7,661,000	7,688,301	5,694,421
W + T OFFSHORE INC	9.75	11/1/2023	6,400,000	6,208,370	4,001,600
WABASH NATIONAL CORP	5.50	10/1/2025	375,000	368,817	345,019
WALGREENS BOOTS ALLIANCE	3.20	4/15/2030	17,000,000	17,399,369	17,569,670
WALGREENS BOOTS ALLIANCE	3.45	6/1/2026	37,337,000	37,147,770	40,421,783
WALGREENS BOOTS ALLIANCE	4.65	6/1/2046	5,000,000	4,945,245	5,335,950
WALMART INC	3.63	12/15/2047	6,000,000	5,832,737	7,356,780
WALMART INC	4.05	6/29/2048	17,400,000	17,681,312	22,834,890
WALMART INC	4.30	4/22/2044	6,000,000	6,258,799	7,931,580
WALT DISNEY COMPANY/THE	8.45	8/1/2034	38,380,000	55,161,799	65,882,340
WASHINGTON MUTUAL INC COMMON	0.00	9/21/2017	2,460,000	0	4,895
WASHINGTON PG LP	6.45	8/15/2024	22,385,000	21,455,281	12,898,909
WASTE CONNECTIONS INC	3.05	4/1/2050	10,000,000	9,853,978	10,119,300
WASTE CONNECTIONS INC	4.25	12/1/2028	8,500,000	8,538,648	10,030,935
WASTE MANAGEMENT INC	4.00	7/15/2039	39,000,000	43,316,440	40,458,990
WASTE PRO USA INC	5.50	2/15/2026	13,895,000	13,527,676	13,256,942
WATCO COS LLC/FINANCE CO	6.50	6/15/2027	2,500,000	2,540,517	2,561,150

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
WEATHERFORD INTL LTD	11.00	12/1/2024	34,250,000	36,957,896	23,722,920
WEEKLEY HOMES LLC/ FINAN	6.00	2/1/2023	1,075,000	1,031,315	1,072,463
WEEKLEY HOMES LLC/ FINAN	6.63	8/15/2025	675,000	655,657	679,138
WELBILT INC	9.50	2/15/2024	379,000	403,666	361,744
WELLS FARGO + COMPANY	2.57	2/11/2031	40,000,000	40,000,000	41,821,200
WELLS FARGO + COMPANY	2.88	10/30/2030	39,900,000	39,924,627	42,593,250
WELLS FARGO + COMPANY	3.58	5/22/2028	61,400,000	61,339,797	68,134,352
WELLS FARGO + COMPANY	4.10	6/3/2026	6,200,000	6,171,695	6,990,624
WELLS FARGO + COMPANY	4.30	7/22/2027	4,187,000	4,246,636	4,789,551
WELLS FARGO + COMPANY	4.40	6/14/2046	4,750,000	5,307,665	5,719,618
WELLS FARGO + COMPANY	4.65	11/4/2044	46,350,000	48,197,515	57,183,386
WELLS FARGO + COMPANY	4.75	12/7/2046	21,550,000	24,067,452	27,614,601
WELLS FARGO + COMPANY	5.38	2/7/2035	2,000,000	2,580,725	2,708,760
WELLS FARGO + COMPANY	5.38	11/2/2043	2,500,000	3,216,764	3,367,525
WELLS FARGO + COMPANY	5.50	8/1/2035	3,500,000	4,347,210	4,538,730
WELLS FARGO BANK NA	0.48	10/9/2020	25,000,000	25,000,000	25,003,500
WELLTOWER INC	3.10	1/15/2030	11,400,000	11,381,733	11,802,078
WELLTOWER INC	4.25	4/15/2028	6,500,000	6,524,022	7,218,900
WELLTOWER INC	4.95	9/1/2048	7,400,000	7,760,181	8,455,536
WERNER FINCO LP/INC	8.75	7/15/2025	1,050,000	1,056,679	887,009
WESCO DISTRIBUTION INC	5.38	6/15/2024	2,500,000	2,383,188	2,500,750
WESCO DISTRIBUTION INC	7.13	6/15/2025	13,849,000	14,329,933	14,600,447
WESCO DISTRIBUTION INC	7.25	6/15/2028	13,479,000	13,966,922	14,285,988
WEST STREET MERGER SUB	6.38	9/1/2025	575,000	575,000	557,681
WESTERN MIDSTREAM OPERAT	3.10	2/1/2025	25,256,000	19,400,448	24,021,992
WESTERN MIDSTREAM OPERAT	3.95	6/1/2025	200,000	166,277	187,616
WESTERN MIDSTREAM OPERAT	4.00	7/1/2022	8,975,000	7,643,068	8,951,216
WESTERN MIDSTREAM OPERAT	4.05	2/1/2030	15,386,000	12,218,898	14,799,793
WESTERN MIDSTREAM OPERAT	4.50	3/1/2028	925,000	768,929	875,846
WESTERN MIDSTREAM OPERAT	4.65	7/1/2026	200,000	167,023	191,762
WESTERN MIDSTREAM OPERAT	4.75	8/15/2028	575,000	476,424	551,270
WESTERN MIDSTREAM OPERAT	5.25	2/1/2050	6,675,000	3,709,313	5,780,216
WESTERN MIDSTREAM OPERAT	5.30	3/1/2048	17,550,000	9,630,591	14,246,037
WESTERN MIDSTREAM OPERAT	5.45	4/1/2044	9,850,000	4,034,680	8,211,354
WESTERN MIDSTREAM OPERAT	5.50	8/15/2048	500,000	347,172	407,710
WESTINGHOUSE AIR BRAKE	3.20	6/15/2025	10,000,000	9,989,212	10,193,300
WESTINGHOUSE AIR BRAKE	4.95	9/15/2028	52,200,000	52,493,438	58,164,894
WESTLAKE CHEMICAL CORP	3.38	6/15/2030	10,000,000	9,959,014	10,200,800
WESTPAC BANKING CORP	4.11	7/24/2034	22,500,000	22,716,856	24,795,675
WEYERHAEUSER CO	7.38	3/15/2032	66,450,000	73,649,986	91,140,827
WHIRLPOOL CORP	4.50	6/1/2046	7,500,000	7,003,825	8,223,000
WHIRLPOOL CORP	4.60	5/15/2050	15,000,000	14,784,636	17,073,150
WHIRLPOOL CORP	4.75	2/26/2029	13,900,000	14,643,773	16,398,525
WHITING PETROLEUM CORP	5.75	3/15/2021	1,000,000	232,338	194,270
WHITING PETROLEUM CORP	6.25	4/1/2023	825,000	710,562	143,195
WHITING PETROLEUM CORP	6.63	1/15/2026	1,210,000	878,352	215,598
WILLIAM CARTER	5.50	5/15/2025	7,000,000	7,167,501	7,211,960

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
WILLIAM CARTER	5.63	3/15/2027	11,250,000	11,508,119	11,585,138
WILLIAMS COMPANIES INC	3.75	6/15/2027	9,900,000	9,777,369	10,588,446
WILLIAMS COMPANIES INC	4.85	3/1/2048	900,000	967,814	982,548
WILLIAMS COMPANIES INC	5.10	9/15/2045	61,700,000	63,251,920	67,438,717
WILLIAMS COMPANIES INC	5.75	6/24/2044	4,600,000	4,947,617	5,313,460
WILLIAMS SCOTSMAN INTL	6.88	8/15/2023	1,350,000	1,351,100	1,391,891
WILLIAMS SCOTSMAN INTL	7.88	12/15/2022	499,000	500,187	518,651
WILLIS NORTH AMERICA INC	2.95	9/15/2029	8,400,000	8,208,926	8,910,300
WILLIS NORTH AMERICA INC	3.88	9/15/2049	16,425,000	15,814,413	18,145,519
WILLIS NORTH AMERICA INC	4.50	9/15/2028	28,000,000	27,961,479	32,670,120
WINDSTREAM HLDGS MIDWEST	6.75	4/1/2028	525,000	513,440	454,078
WINDSTREAM SRVC / FIN	10.50	6/30/2024	850,000	644,157	40,282
WMG ACQUISITION CORP	3.88	7/15/2030	500,000	500,000	505,235
WMG ACQUISITION CORP	5.00	8/1/2023	400,000	402,418	405,748
WOLVERINE ESCROW LLC	8.50	11/15/2024	12,050,000	12,127,531	8,824,818
WOLVERINE ESCROW LLC	9.00	11/15/2026	15,935,000	16,160,163	11,667,607
WP CAREY INC	3.85	7/15/2029	9,200,000	9,221,204	9,551,440
WPX ENERGY INC	4.50	1/15/2030	8,697,000	8,764,874	7,652,490
WPX ENERGY INC	5.25	9/15/2024	1,031,000	1,024,957	1,018,999
WPX ENERGY INC	5.88	6/15/2028	2,961,000	2,964,234	2,844,958
WPX ENERGY INC	8.25	8/1/2023	758,000	589,399	845,314
WR GRACE + CO CONN	4.88	6/15/2027	6,895,000	6,931,925	6,984,152
WR GRACE + CO CONN	5.13	10/1/2021	12,075,000	12,199,702	12,731,639
WRKCO INC	3.90	6/1/2028	15,500,000	15,523,966	17,138,195
WRKCO INC	4.00	3/15/2028	12,960,000	12,948,851	14,394,542
WRKCO INC	4.20	6/1/2032	17,585,000	17,839,080	20,572,867
WRKCO INC	4.90	3/15/2029	18,500,000	18,933,708	22,021,290
WW GRAINGER INC	4.60	6/15/2045	13,150,000	14,165,485	16,516,532
WYNDHAM DESTINATIONS INC	4.25	3/1/2022	11,450,000	11,317,192	11,255,121
WYNDHAM DESTINATIONS INC	4.63	3/1/2030	475,000	475,000	441,712
WYNDHAM DESTINATIONS INC	5.75	4/1/2027	10,000,000	9,558,594	9,661,100
WYNDHAM DESTINATIONS INC	6.35	10/1/2025	896,000	920,848	904,261
WYNDHAM HOTELS + RESORTS	5.38	4/15/2026	8,800,000	8,759,078	8,549,728
WYNN LAS VEGAS LLC/CORP	4.25	5/30/2023	11,842,000	11,534,089	11,114,664
WYNN LAS VEGAS LLC/CORP	5.25	5/15/2027	17,580,000	16,398,970	15,198,789
WYNN LAS VEGAS LLC/CORP	5.50	3/1/2025	35,340,000	34,762,267	32,471,806
WYNN MACAU LTD	4.88	10/1/2024	321,000	313,361	314,994
WYNN MACAU LTD	5.13	12/15/2029	300,000	300,000	293,040
WYNN MACAU LTD	5.50	1/15/2026	1,400,000	1,400,000	1,380,400
WYNN RESORTS FINANCE LLC	5.13	10/1/2029	15,725,000	15,880,749	14,052,961
WYNN RESORTS FINANCE LLC	7.75	4/15/2025	7,967,000	8,111,030	8,025,637
XEROX CORPORATION	3.80	5/15/2024	1,848,000	1,761,708	1,804,683
XEROX CORPORATION	4.13	3/15/2023	15,677,000	15,340,813	15,678,254
XLIT LTD	5.50	3/31/2045	5,500,000	7,025,425	7,328,420
XPO LOGISTICS INC	6.13	9/1/2023	6,200,000	6,265,754	6,277,748
XPO LOGISTICS INC	6.25	5/1/2025	19,275,000	19,729,053	20,184,009
XPO LOGISTICS INC	6.50	6/15/2022	6,508,000	6,600,583	6,516,135

**CalPERS 2019-2020 Annual Investment Report
Corporate Bonds**

Security Name	Rate	Maturity Date	Par Value	Book Value	Market Value
XPO LOGISTICS INC	6.75	8/15/2024	18,026,000	18,199,720	18,882,596
YARA INTERNATIONAL ASA	3.15	6/4/2030	15,000,000	15,076,083	15,506,100
YUM BRANDS INC	3.88	11/1/2023	900,000	905,059	921,510
YUM BRANDS INC	4.75	1/15/2030	14,850,000	15,161,528	15,175,067
YUM BRANDS INC	7.75	4/1/2025	8,148,000	8,754,746	8,787,374
ZAYO GROUP HOLDINGS INC	4.00	3/1/2027	30,012,000	29,416,915	28,540,512
ZAYO GROUP HOLDINGS INC	6.13	3/1/2028	7,444,000	7,095,160	7,235,940
ZIGGO BOND CO BV	5.13	2/28/2030	828,000	828,000	820,921
ZIGGO BOND CO BV	6.00	1/15/2027	3,540,000	3,516,245	3,583,011
ZIGGO BV	4.88	1/15/2030	922,000	922,000	922,028
ZIGGO BV	5.50	1/15/2027	685,000	656,143	692,905
ZIMMER BIOMET HOLDINGS	3.55	3/20/2030	15,000,000	14,964,724	16,193,850
ZIMMER BIOMET HOLDINGS	4.25	8/15/2035	2,000,000	2,012,507	2,061,900
ZOETIS INC	3.00	5/15/2050	20,000,000	19,781,999	21,099,400
ZOETIS INC	4.45	8/20/2048	14,850,000	15,666,827	19,147,590
ZOETIS INC	4.70	2/1/2043	58,350,000	60,390,359	76,818,359
Total				37,948,469,535	40,942,123,723

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
1 800 FLOWERS.COM INC CL A	54,879	583,700	1,098,678
10X GENOMICS INC CLASS A	121,121	10,272,151	10,817,317
180 DEGREE CAPITAL CORP	52,700	100,130	91,698
1LIFE HEALTHCARE INC	47,230	1,029,254	1,715,394
1ST CONSTITUTION BANCORP	11,003	237,472	136,437
1ST SOURCE CORP	36,847	1,437,479	1,311,016
21VIANET GROUP INC ADR	174,626	1,298,155	4,166,576
2U INC	126,310	4,067,306	4,794,728
3D SYSTEMS CORP	256,136	3,662,251	1,790,391
3M CO	1,261,484	153,597,460	196,778,889
4LICENSING CORP	40,600	0	0
51JOB INC ADR	65,215	4,868,748	4,681,785
58.COM INC ADR	821,975	44,919,143	44,337,332
89BIO INC	10,886	251,049	216,958
8X8 INC	205,600	2,670,989	3,289,600
A H BELO CORP A	66,879	374,522	115,701
A MARK PRECIOUS METALS INC	19,365	270,916	368,903
A10 NETWORKS INC	136,536	705,152	929,810
AAON INC	92,180	2,186,502	5,004,452
AAR CORP	75,559	2,436,908	1,561,805
AARON S INC	179,306	8,659,111	8,140,492
ABBOTT LABORATORIES	3,898,112	201,286,090	356,404,380
ABBVIE INC	4,098,348	238,794,107	402,375,807
ABEONA THERAPEUTICS INC	131,969	857,794	384,690
ABERCROMBIE + FITCH CO CL A	258,674	4,826,729	2,752,291
ABIOMED INC	90,250	12,142,429	21,800,790
ABM INDUSTRIES INC	186,702	6,220,850	6,777,283
ABRAXAS PETROLEUM CORP	1,037,500	2,808,206	242,153
ACACIA COMMUNICATIONS INC	86,082	4,626,028	5,783,850
ACACIA RESEARCH CORP	96,300	1,924,937	393,867
ACADIA HEALTHCARE CO INC	195,424	7,545,586	4,909,051
ACADIA PHARMACEUTICALS INC	243,994	6,453,968	11,826,389
ACAMAR PARTNERS ACQUISITI A	62,400	623,602	639,600
ACCELERATE DIAGNOSTICS INC	61,700	951,371	935,372
ACCELERON PHARMA INC	102,892	4,270,369	9,802,521
ACCO BRANDS CORP	210,557	1,752,205	1,494,955
ACCURAY INC	197,231	737,630	400,379
ACELRX PHARMACEUTICALS INC	56,000	110,480	67,760
ACER THERAPEUTICS INC	6,421	123,283	22,024
ACHILLION PHARMACE	326,299	150,098	150,098
ACI WORLDWIDE INC	258,152	5,319,650	6,967,522
ACM RESEARCH INC CLASS A	23,219	548,647	1,447,937
ACME UNITED CORP	7,092	151,769	162,974
ACNB CORP	18,771	543,559	491,425
ACORDA THERAPEUTICS INC	50,400	1,245,572	37,024
ACORN INTERNATIONAL INC ADR	1,354	35,908	21,366
ACTINIUM PHARMACEUTICALS INC	40,000	13,880	14,060
ACTIVISION BLIZZARD INC	1,813,570	79,737,967	137,649,963
ACTUA CORP	72,523	0	0
ACUITY BRANDS INC	89,239	8,637,063	8,543,742

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
ACUSHNET HOLDINGS CORP	75,814	2,019,526	2,637,569
ADAMAS PHARMACEUTICALS INC	16,100	104,146	41,216
ADAMS RESOURCES + ENERGY INC	7,305	327,995	195,555
ADAPTHEALTH CORP	1,491	27,009	24,005
ADAPTIMMUNE THERAPEUTICS ADR	235,707	2,551,967	2,359,427
ADAPTIVE BIOTECHNOLOGIES	144,800	4,137,091	7,005,424
ADDUS HOMECARE CORP	31,285	2,304,876	2,895,740
ADEPTUS HEALTH INC	10,800	0	0
ADIENT PLC	358,243	9,627,370	5,882,350
ADMA BIOLOGICS INC	170,333	600,518	499,076
ADOBE INC	1,913,182	515,996,790	832,827,256
ADT INC	262,662	2,280,159	2,096,043
ADTALEM GLOBAL EDUCATION INC	154,096	6,540,900	4,800,090
ADTRAN INC	105,609	1,880,952	1,154,306
ADURO BIOTECH INC	146,989	358,305	339,545
ADVANCE AUTO PARTS INC	191,639	20,468,318	27,298,976
ADVANCED DISPOSAL SERVICES I	164,400	5,202,841	4,959,948
ADVANCED DRAINAGE SYSTEMS IN	110,523	2,573,558	5,459,836
ADVANCED EMISSIONS SOLUTIONS	33,500	360,573	162,475
ADVANCED ENERGY INDUSTRIES	85,082	2,548,408	5,767,709
ADVANCED MICRO DEVICES	3,186,437	94,397,953	167,638,451
ADVANSIX INC	60,674	907,916	712,313
ADVAXIS INC	3,193	885,192	1,711
ADVENT INTERNATIONAL GPE IX LP	134,750,001	134,750,001	122,068,005
ADVERUM BIOTECHNOLOGIES INC	165,713	1,985,525	3,460,087
AECOM	359,039	11,834,247	13,492,686
AEGION CORP	67,015	1,362,600	1,063,528
AEGLEA BIOTHERAPEUTICS INC	93,012	788,156	860,361
AEHR TEST SYSTEMS	2,300	5,520	4,485
AERIE PHARMACEUTICALS INC	74,200	2,302,023	1,095,192
AEROJET ROCKETDYNE HOLDINGS	163,281	5,279,562	6,472,459
AEROVIRONMENT INC	47,821	2,246,061	3,807,986
AES CORP	1,547,168	21,079,728	22,418,464
AEVI GENOMIC MEDICINE INC	51,000	15,741	1,719
AFFILIATED MANAGERS GROUP	120,496	10,813,899	8,984,182
AFLAC INC	5,878,364	250,223,005	211,797,455
AGCO CORP	165,929	8,562,863	9,202,422
AGENUS INC	306,251	1,726,331	1,203,566
AGEX THERAPEUTICS INC	4,839	5,469	4,581
AGILE THERAPEUTICS INC	137,400	396,829	381,972
AGILENT TECHNOLOGIES INC	696,658	33,820,452	61,563,667
AGILYSYS INC	41,163	624,227	738,464
AGIOS PHARMACEUTICALS INC	125,000	7,383,964	6,685,000
AIMMUNE THERAPEUTICS INC	102,963	2,654,275	1,720,512
AIR LEASE CORP	311,533	10,436,807	9,124,802
AIR PRODUCTS + CHEMICALS INC	495,304	66,739,968	119,596,104
AIR T FUNDING	5,006	80,643	110,132
AIR T INC	95,278	1,624,081	1,048,058
AIR T INC WTS	262,838	61,068	19,713
AIR TRANSPORT SERVICES GROUP	130,290	1,774,811	2,901,558

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
AKAMAI TECHNOLOGIES INC	913,903	66,325,816	97,869,872
AKCEA THERAPEUTICS INC	33,300	597,108	456,210
AKEBIA THERAPEUTICS INC	290,049	2,618,857	3,938,865
AKERO THERAPEUTICS INC	24,717	546,605	615,948
AKORN INC	177,900	1,051,277	49,812
AKOUSTIS TECHNOLOGIES INC	62,800	358,587	520,612
ALACER GOLD CORP	707,519	3,189,566	4,846,661
ALAMO GROUP INC	21,813	1,517,481	2,238,886
ALARM.COM HOLDINGS INC	100,799	4,882,000	6,532,783
ALASKA AIR GROUP INC	279,446	9,581,799	10,132,712
ALASKA COMM SYSTEMS GROUP	148,898	218,880	415,425
ALBANY INTL CORP CL A	68,838	4,393,197	4,041,479
ALBEMARLE CORP	215,927	13,319,134	16,671,724
ALBERTSONS COS INC CLASS A	5,500	88,000	86,735
ALBIREO PHARMA INC	26,900	516,765	712,581
ALCOA CORP	642,830	13,970,742	7,225,409
ALDER BIOPHARMACEUTICALS INC	135,910	119,601	119,601
ALECTOR INC	103,272	2,180,516	2,523,968
ALERUS FINANCIAL CORP	2,845	59,221	56,217
ALEXION PHARMACEUTICALS INC	488,701	40,188,558	54,851,800
ALEXZA PHARMACEUTICALS	26,307	0	0
ALIBABA GROUP HOLDING SP ADR	4,470,391	806,456,942	964,263,339
ALICO INC	11,937	353,647	371,957
ALIGN TECHNOLOGY INC	174,544	21,987,499	47,901,855
ALLAKOS INC	53,895	4,504,549	3,872,895
ALLEGHANY CORP	122,259	71,061,111	59,801,767
ALLEGHENY TECHNOLOGIES INC	283,384	7,798,470	2,887,683
ALLEGIANCE BANCSHARES INC	41,898	1,436,916	1,063,790
ALLEGIANCE TELECOM B	30,700	0	0
ALLEGIANTE TRAVEL CO	29,401	3,632,777	3,210,883
ALLETE INC	116,803	8,248,627	6,378,612
ALLIANCE DATA SYSTEMS CORP	153,099	11,525,884	6,907,827
ALLIANCEBERNSTEIN HOLDING LP	215,869	5,716,836	5,880,272
ALLIANT ENERGY CORP	2,058,027	89,025,510	98,456,012
ALLIED MOTION TECHNOLOGIES	16,083	624,839	567,730
ALLISON TRANSMISSION HOLDING	256,479	9,614,081	9,433,298
ALLOGENE THERAPEUTICS INC	98,788	2,811,715	4,230,102
ALLSCRIPTS HEALTHCARE SOLUTI	368,767	4,689,093	2,496,553
ALLSTATE CORP	2,662,531	231,032,048	258,238,882
ALLY FINANCIAL INC	1,176,751	31,620,667	23,334,972
ALNYLAM PHARMACEUTICALS INC	255,768	23,360,650	37,881,798
ALPHA + OMEGA SEMICONDUCTOR	46,675	774,550	507,824
ALPHABET INC CL A	745,888	755,167,828	1,057,706,478
ALPHABET INC CL C	622,917	736,924,271	880,561,700
ALPHATEC HOLDINGS INC	97,698	589,987	459,181
ALTA MESA RESOURCES INC A	3,100	31,084	13
ALTAIR ENGINEERING INC A	85,000	3,294,999	3,378,750
ALTERYX INC CLASS A	107,761	12,073,409	17,702,977
ALTICE USA INC A	802,652	17,062,197	18,091,776
ALTIMMUNE INC	724	17,595	7,754

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
ALTISOURCE ASSET MANAGEMENT	2,100	136,500	34,430
ALTRA INDUSTRIAL MOTION CORP	165,202	4,435,579	5,263,336
AMAG PHARMACEUTICALS INC	68,372	1,486,227	523,046
AMALGAMATED BK OF NEW YORK A	29,360	396,017	371,110
AMARIN CORP PLC ADR	772,426	8,860,195	5,345,188
AMAZON.COM INC	977,291	1,085,960,738	2,696,169,957
AMBAC FINANCIAL GROUP INC	100,375	2,269,252	1,437,370
AMBARELLA INC	73,721	3,818,297	3,376,422
AMBIT BIOSCIENCES CORP	34,600	0	0
AMC ENTERTAINMENT HLDS CL A	118,679	1,349,428	509,133
AMC NETWORKS INC A	111,105	3,817,167	2,598,746
AMCI ACQUISITION CORP CL A	45,100	458,076	460,922
AMCON DISTRIBUTING CO	1,350	127,575	76,059
AMDOCS LTD	351,399	17,331,839	21,393,171
AMEDISYS INC	70,883	6,319,115	14,073,111
AMER NATL BNKSHS/DANVILLE VA	23,579	872,076	590,418
AMERANT BANCORP INC	50,303	922,329	756,557
AMERANT BANCORP INC B	8,417	152,225	88,379
AMERCO	88,488	29,869,006	26,740,189
AMEREN CORPORATION	2,070,548	135,236,075	145,683,757
AMERESCO INC CL A	54,005	758,652	1,500,259
AMERICA FIRST MULTIFAMILY IN	134,137	879,120	552,644
AMERICA S CAR MART INC	13,979	496,363	1,228,335
AMERICAN AIRLINES GROUP INC	1,567,326	40,832,263	20,484,951
AMERICAN AXLE + MFG HOLDINGS	438,987	4,643,233	3,336,301
AMERICAN EAGLE ENERGY CORP	96,300	0	0
AMERICAN EAGLE OUTFITTERS	339,570	5,570,480	3,701,313
AMERICAN ELECTRIC POWER	4,155,412	309,942,561	330,937,012
AMERICAN EQUITY INVT LIFE HL	210,140	4,524,561	5,192,559
AMERICAN EXPRESS CO	1,523,229	118,624,476	145,011,401
AMERICAN FINANCIAL GROUP INC	166,864	11,593,414	10,589,189
AMERICAN INTERNATIONAL GROUP	2,246,391	105,417,966	70,042,471
AMERICAN NATIONAL INSURANCE	17,185	1,213,528	1,238,523
AMERICAN PUBLIC EDUCATION	31,945	1,093,261	945,572
AMERICAN RENAL ASSOCIATES HO	41,161	630,308	268,370
AMERICAN RIVER BANKSHRS (CA)	16,599	259,774	177,609
AMERICAN SOFTWARE INC CL A	68,253	789,524	1,075,667
AMERICAN STATES WATER CO	83,570	5,584,481	6,571,109
AMERICAN SUPERCONDUCTOR CORP	44,500	274,251	361,785
AMERICAN VANGUARD CORP	63,666	1,093,712	876,044
AMERICAN WATER WORKS CO INC	1,519,209	142,639,487	195,461,430
AMERICAN WOODMARK CORP	48,279	3,311,173	3,652,306
AMERIPRISE FINANCIAL INC	296,484	25,694,300	44,484,459
AMERIS BANCORP	151,172	5,100,596	3,566,147
AMERISAFE INC	42,346	1,717,772	2,589,881
AMERISERV FINANCIAL INC	35,833	146,019	109,649
AMERISOURCEBERGEN CORP	337,400	19,089,646	33,999,798
AMES NATIONAL CORP	19,439	585,500	383,726
AMETEK INC	512,948	28,717,143	45,842,163
AMGEN INC	1,369,964	170,953,758	323,119,709

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
AMICUS THERAPEUTICS INC	516,331	5,847,862	7,786,271
AMKOR TECHNOLOGY INC	227,542	1,667,771	2,801,042
AMN HEALTHCARE SERVICES INC	104,970	5,912,407	4,748,843
AMNEAL PHARMACEUTICALS INC	255,598	2,557,183	1,216,646
AMPCO PITTSBURGH CORP	42,000	436,800	128,940
AMPHASTAR PHARMACEUTICALS IN	78,436	1,570,068	1,761,673
AMPHENOL CORP CL A	2,490,640	204,286,380	238,628,218
AMPIO PHARMACEUTICALS INC	20,500	59,245	13,056
AMREP CORP	22,809	163,769	102,869
AMTECH SYSTEMS INC	83,002	563,409	404,220
AMYRIS INC	136,010	374,718	580,763
ANALOG DEVICES INC	824,693	63,338,835	101,140,350
ANAPLAN INC	265,991	13,597,496	12,052,052
ANAPTYSBIO INC	47,286	2,884,773	1,056,369
ANAVEX LIFE SCIENCES CORP	113,245	339,722	557,165
ANDERSONS INC/THE	69,015	1,623,424	949,646
ANGI HOMESERVICES INC A	338,400	3,084,389	4,111,560
ANGIODYNAMICS INC	80,944	1,330,879	823,200
ANI PHARMACEUTICALS INC	20,800	904,357	672,672
ANIKA THERAPEUTICS INC	30,939	1,215,951	1,167,328
ANSYS INC	191,763	23,502,787	55,943,020
ANTARES PHARMA INC	362,471	1,247,298	996,795
ANTERIX INC	27,000	1,277,817	1,224,180
ANTERO MIDSTREAM CORP	638,239	5,998,980	3,255,019
ANTERO RESOURCES CORP	553,391	8,934,554	1,405,613
ANTHEM INC	569,637	92,232,892	149,803,138
ANTHERA PHARMACEUTICALS INC	12,765	3,989	337
APACHE CORP	1,356,268	40,170,025	18,309,618
APELLIS PHARMACEUTICALS INC	132,834	3,725,786	4,338,358
APEX GLOBAL BRANDS INC	5,166	11,470	5,786
APEX TECHNOLOGY ACQUI CL A	63,500	625,162	650,875
API GROUP CORP	414,481	4,990,447	5,035,944
APOGEE ENTERPRISES INC	57,928	2,098,712	1,334,661
APOLLO ENDOSURGERY INC	848	5,003	1,374
APOLLO GLOBAL MANAGEMENT INC	382,547	15,957,199	19,096,746
APOLLO INVESTMENT CORP	537,019	9,825,557	5,139,272
APOLLO MEDICAL HOLDINGS INC	22,314	325,988	368,181
APPFOLIO INC A	36,086	3,580,372	5,871,553
APPIAN CORP	73,109	3,170,102	3,746,836
APPLE INC	9,255,014	1,148,917,914	3,376,229,107
APPLIED DNA SCIENCES INC	906	53,214	7,311
APPLIED GENETIC TECHNOLOGIES	18,000	85,050	99,720
APPLIED INDUSTRIAL TECH INC	87,568	3,665,275	5,463,368
APPLIED MATERIALS INC	2,288,347	71,834,047	138,330,576
APPLIED OPTOELECTRONICS INC	39,100	1,590,837	425,017
APPLIED THERAPEUTICS INC	30,559	1,082,436	1,104,708
APPROACH RESOURCES INC	1,158,300	5,344,477	59,652
APREA THERAPEUTICS INC	15,961	531,434	618,968
APTARGROUP INC	143,492	9,567,887	16,068,234
APTEVO THERAPEUTICS INC	1,542	95,472	12,876

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
APYX MEDICAL CORP	73,916	402,779	410,234
AQR MULTI ASSET CLASS FUND	33,905,772	319,704,221	395,402,938
AQUESTIVE THERAPEUTICS INC	19,400	142,281	94,284
ARAMARK	580,292	20,772,572	13,097,190
ARAVIVE INC	24,600	353,865	286,344
ARC DOCUMENT SOLUTIONS INC	34,400	77,056	34,400
ARC GROUP WORLDWIDE INC	19,200	46,080	5,748
ARCA BIOPHARMA INC	457	4,285	3,025
ARCBEST CORP	57,447	1,607,970	1,522,920
ARCHER DANIELS MIDLAND CO	1,270,114	39,688,643	50,677,549
ARCHROCK INC	295,791	3,512,880	1,919,684
ARCONIC CORP	300,476	5,292,496	4,185,631
ARCOSA INC	110,722	2,178,611	4,672,468
ARCTURUS THERAPEUTICS HOLDIN	29,432	570,088	1,375,652
ARCUS BIOSCIENCES INC	74,065	788,558	1,832,368
ARCUTIS BIOTHERAPEUTICS INC	20,996	571,233	634,919
ARDELYX INC	165,218	1,100,115	1,143,309
ARENA PHARMACEUTICALS INC	125,048	6,311,347	7,871,772
ARES CAPITAL CORP	942,000	16,311,743	13,611,900
ARES MANAGEMENT CORP A	219,550	6,905,711	8,716,135
ARGAN INC	32,571	1,106,779	1,543,214
ARISTA NETWORKS INC	131,796	27,110,393	27,681,114
ARK RESTAURANTS CORP	8,799	213,816	109,108
ARLINGTON ASSET INVESTMENT A	42,200	602,869	125,334
ARLO TECHNOLOGIES INC	171,611	1,659,825	442,756
ARMSTRONG FLOORING INC	35,550	464,827	106,295
ARMSTRONG WORLD INDUSTRIES	106,353	7,602,271	8,291,280
ARROW ELECTRONICS INC	188,493	9,888,421	12,947,584
ARROW FINANCIAL CORP	28,359	643,940	843,113
ARROWHEAD PHARMACEUTICALS IN	225,262	3,842,213	9,729,066
ARTESIAN RESOURCES CORP CL A	17,761	676,489	644,547
ARTHUR J GALLAGHER + CO	1,582,376	117,439,253	154,265,836
ARTISAN PARTNERS ASSET MA A	190,091	6,002,660	6,177,958
ARVINAS INC	65,794	2,319,257	2,206,731
ARYA SCIENCES ACQUISITION A	12,200	132,782	192,028
ASBURY AUTOMOTIVE GROUP	47,766	2,538,132	3,693,745
ASCENA RETAIL GROUP INC	14,960	2,762,130	21,842
ASCENDIS PHARMA A/S ADR	104,678	12,609,873	15,481,876
ASF VIII B L.P.	54,789,559	54,789,559	54,210,433
ASGN INC	113,849	5,089,583	7,591,451
ASHFORD INC	3,812	287,668	38,692
ASHLAND GLOBAL HOLDINGS INC	124,031	6,162,330	8,570,542
ASPEN AEROGELS INC	41,382	189,005	272,294
ASPEN GROUP INC	37,500	259,027	339,375
ASPEN TECHNOLOGY INC	150,920	10,180,480	15,636,821
ASPIRA WOMEN S HEALTH INC	104,484	285,378	401,219
ASSEMBLY BIOSCIENCES INC	67,895	1,167,888	1,583,311
ASSERTIO HOLDINGS INC	113,800	368,560	97,527
ASSETMARK FINANCIAL HOLDINGS	36,191	889,786	987,652
ASSOCIATED BANC CORP	396,802	7,449,615	5,428,251

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
ASSURANT INC	467,069	43,846,864	48,243,557
ASTEC INDUSTRIES INC	50,062	1,645,155	2,318,371
ASTRAZENECA PLC SPONS ADR	58,235	2,062,786	3,080,049
ASTRONICS CORP	50,840	1,422,154	536,870
ASTRONICS CORP CL B	2,429	28,953	24,897
ASTRONOVA INC	13,982	249,586	111,297
ASURE SOFTWARE INC	25,555	385,114	164,319
AT HOME GROUP INC	106,368	1,382,160	690,328
AT+T INC	27,351,579	806,226,940	826,838,233
ATARA BIOTHERAPEUTICS INC	116,200	2,556,298	1,693,034
ATHENEX INC	149,000	2,121,650	2,050,240
ATHERSYS INC	383,763	899,336	1,059,186
ATKORE INTERNATIONAL GROUP I	146,049	4,518,885	3,994,440
ATLANTIC AMERICAN CORP	53,025	172,331	86,961
ATLANTIC CAPITAL BANCSHARES	46,202	767,485	561,816
ATLANTIC POWER CORP	240,963	514,482	481,926
ATLANTIC UNION BANKSHARES CO	172,409	5,449,946	3,992,992
ATLANTICUS HOLDINGS CORP	13,587	39,936	140,490
ATLAS AIR WORLDWIDE HOLDINGS	80,185	3,005,114	3,450,361
ATLAS FINANCIAL HOLDINGS INC	21,200	226,840	14,147
ATMOS ENERGY CORP	1,026,488	96,405,514	102,217,675
ATN INTERNATIONAL INC	24,642	1,055,637	1,492,566
ATRECA INC A	39,185	549,299	833,857
ATRICURE INC	87,264	2,310,046	3,922,517
ATRION CORPORATION	3,165	1,142,321	2,016,137
AUBURN NATL BANCORPORATION	1,001	42,032	57,147
AUTODESK INC	498,333	47,619,335	119,196,270
AUTOHOME INC ADR	135,337	10,875,693	10,217,944
AUTOMATIC DATA PROCESSING	2,409,130	277,788,015	358,695,366
AUTONATION INC	165,414	6,142,197	6,216,258
AUTOWEB INC	30,000	109,500	38,700
AUTOZONE INC	198,081	164,585,415	223,459,138
AVADEL PHARMACEUTICALS ADR	131,017	1,515,307	1,058,617
AVALARA INC	171,613	16,463,523	22,839,974
AVANGRID INC	127,409	6,233,111	5,348,630
AVANOS MEDICAL INC	96,400	2,728,247	2,833,196
AVANTOR INC	944,751	16,720,039	16,060,767
AVAYA HOLDINGS CORP	296,800	4,052,865	3,668,448
AVEO PHARMACEUTICALS INC	3,340	84,168	17,201
AVERY DENNISON CORP	187,813	13,592,544	21,427,585
AVIAT NETWORKS INC	13,842	231,161	252,617
AVID BIOSERVICES INC	124,861	605,931	819,712
AVID TECHNOLOGY INC	69,771	349,799	507,235
AVIS BUDGET GROUP INC	247,657	4,923,382	5,668,869
AVISTA CORP	150,687	5,578,264	5,483,500
AVITA THERAPEUTICS INC CDI	245,507	1,885,392	1,521,286
AVNET INC	312,204	11,467,983	8,705,809
AVROBIO INC	68,334	1,160,806	1,192,428
AWARE INC/MASS	29,700	117,315	97,416

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
AXALTA COATING SYSTEMS LTD	545,878	15,051,177	12,309,549
AXCELIS TECHNOLOGIES INC	74,161	1,036,706	2,065,384
AXION INTERNATIONAL HOLDINGS	35,000	0	0
AXOGEN INC	73,600	1,156,262	680,064
AXON ENTERPRISE INC	131,740	4,304,743	12,927,646
AXONICS MODULATION TECHNOLOG	67,348	2,072,111	2,364,588
AXOS FINANCIAL INC	129,601	2,071,851	2,861,590
AXSOME THERAPEUTICS INC	62,359	2,640,151	5,130,899
AXT INC	86,407	483,744	411,297
AZZ INC	58,090	1,894,736	1,993,649
B. RILEY FINANCIAL INC	42,850	896,937	932,416
B+G FOODS INC	142,748	2,959,449	3,480,196
BABCOCK + WILCOX ENTERPR	74,541	2,271,826	169,953
BADGER METER INC	89,850	4,078,262	5,653,362
BAIDU INC SPON ADR	682,203	90,273,835	81,789,318
BAIN CAPITAL SPECIALTY FINAN	98,929	1,656,854	1,096,133
BAKER HUGHES CO	1,461,013	39,470,535	22,484,990
BALCHEM CORP	71,757	4,152,671	6,806,869
BALL CORP	2,769,301	136,913,706	192,438,726
BALLANTYNE STRONG INC	76,963	377,119	126,219
BANC OF CALIFORNIA INC	98,736	1,501,030	1,069,311
BANCFIRST CORP	41,447	2,414,565	1,681,505
BANCORP INC/THE	113,584	1,141,145	1,113,123
BANCORPSOUTH BANK	220,693	5,450,390	5,018,559
BANDWIDTH INC CLASS A	39,128	3,269,876	4,969,256
BANK FIRST CORP	13,938	884,381	893,426
BANK OF AMERICA CORP	18,063,118	401,087,029	428,999,053
BANK OF COMMERCE HOLDINGS	35,400	341,091	268,332
BANK OF HAWAII CORP	87,991	4,291,912	5,403,527
BANK OF MARIN BANCORP/CA	29,244	760,369	974,703
BANK OF NEW YORK MELLON CORP	1,850,420	59,781,190	71,518,733
BANK OF SOUTH CAROLINA CORP	4,114	90,097	69,074
BANK OZK	280,812	7,294,884	6,590,658
BANKFINANCIAL CORP	44,381	659,155	372,800
BANKUNITED INC	207,503	6,904,196	4,201,936
BANKWELL FINANCIAL GROUP INC	13,500	370,460	214,650
BANNER CORPORATION	78,386	3,580,710	2,978,668
BAOZUN INC SPN ADR	98,904	4,033,332	3,802,859
BAR HARBOR BANKSHARES	33,922	941,891	759,514
BARINGS BDC INC	77,100	718,461	612,174
BARNES + NOBLE EDUCATION INC	55,300	386,002	88,480
BARNES GROUP INC	106,537	4,724,545	4,214,604
BARRETT BUSINESS SVCS INC	16,522	1,053,109	877,814
BASIC ENERGY SERVICES INC	584	3,150,723	111
BASSETT FURNITURE INDS	19,500	719,322	143,325
BATTALION OIL CORP	17	3,426,769	162
BAUDAX BIO INC	27,200	136,408	112,880
BAUSCH HEALTH COS INC	722,800	25,177,345	13,182,344
BAXANO SURGICAL INC	66,000	0	0
BAXTER INTERNATIONAL INC	4,064,260	282,932,879	349,932,786

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
BAYCOM CORP	25,679	429,457	331,516
BBQ HOLDINGS INC	30,589	247,771	100,179
BBX CAPITAL CORP	126,200	306,203	320,548
BCB BANCORP INC	30,400	443,489	282,112
BEACON ROOFING SUPPLY INC	121,945	3,983,597	3,215,690
BEAM THERAPEUTICS INC	27,149	495,233	760,172
BEASLEY BROADCAST GRP INC A	67,569	797,314	164,193
BEAZER HOMES USA INC	65,080	1,056,445	655,356
BECTON DICKINSON AND CO	606,572	104,173,258	145,134,482
BED BATH + BEYOND INC	690,823	12,939,680	7,322,724
BEIGENE LTD ADR	131,963	23,616,035	24,861,829
BEL FUSE INC CL B	20,500	458,104	219,965
BELDEN INC	98,375	4,420,689	3,202,106
BELLRING BRANDS INC CLASS A	88,243	1,867,620	1,759,565
BENCHMARK ELECTRONICS INC	84,007	1,895,555	1,814,551
BENEFITFOCUS INC	58,700	1,458,799	631,612
BENEFYTT TECHNOLOGIES INC	23,096	600,945	472,544
BERKSHIRE HATHAWAY INC CL A	917	176,420,429	245,114,100
BERKSHIRE HATHAWAY INC CL B	3,048,866	490,107,066	544,253,070
BERKSHIRE HILLS BANCORP INC	104,191	2,911,695	1,148,185
BERRY CORP	154,442	1,374,767	745,955
BERRY GLOBAL GROUP INC	323,685	12,774,593	14,345,719
BEST BUY CO INC	531,808	23,688,365	46,410,884
BEST INC ADR	1,592,324	8,702,474	6,815,147
BEYOND MEAT INC	111,900	11,166,106	14,992,362
BEYONDSRING INC	27,400	473,472	413,192
BG STAFFING INC	7,100	147,879	80,372
BGC PARTNERS INC CL A	689,029	3,432,913	1,887,939
BHP GROUP PLC ADR	20,661	739,435	850,200
BIG 5 SPORTING GOODS CORP	29,800	342,700	57,812
BIG LOTS INC	150,440	4,624,317	6,318,480
BIGLARI HOLDINGS INC A	397	431,271	132,995
BIGLARI HOLDINGS INC B	2,073	448,508	142,996
BILL.COM HOLDINGS INC	26,350	1,072,348	2,377,034
BIO PATH HOLDINGS INC	579	20,514	2,912
BIO RAD LABORATORIES A	47,502	10,270,233	21,446,678
BIO TECHNE CORP	85,158	11,527,649	22,487,673
BIOCRYST PHARMACEUTICALS INC	346,467	1,534,444	1,650,915
BIODELIVERY SCIENCES INTL	203,601	601,445	887,700
BIOGEN INC	456,062	83,999,438	122,019,388
BIOHAVEN PHARMACEUTICAL HOLD	95,868	4,346,718	7,008,909
BIOLASE INC	33,423	60,162	15,475
BIOMARIN PHARMACEUTICAL INC	811,610	76,385,693	100,103,977
BIOMERICA INC	14,700	106,752	106,575
BIOSIG TECHNOLOGIES INC	46,935	501,067	337,932
BIOSPECIFICS TECHNOLOGIES	13,852	711,818	848,851
BIOTELEMETRY INC	74,227	2,915,288	3,354,318
BIOXCEL THERAPEUTICS INC	24,182	704,304	1,281,888
BITAUTO HOLDINGS LTD ADR	74,123	1,802,800	1,174,850
BIZLINK HOLDING INC	285,444	1,897,502	2,031,664

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
BJ S RESTAURANTS INC	41,158	1,468,336	861,849
BJ S WHOLESALE CLUB HOLDINGS	302,923	7,926,526	11,289,940
BK TECHNOLOGIES CORP	87,177	326,914	295,530
BLACK DIAMOND THERAPEUTICS I	27,224	731,210	1,147,764
BLACK HILLS CORP	140,308	9,265,955	7,949,851
BLACK KNIGHT INC	1,316,314	78,469,670	95,511,744
BLACK STONE MINERALS LP	350,415	3,963,993	2,277,698
BLACKBAUD INC	110,602	7,435,569	6,313,162
BLACKLINE INC	123,577	6,386,969	10,245,769
BLACKROCK CAPITAL INVESTMENT	150,000	613,979	400,500
BLACKROCK INC	329,379	123,077,585	179,211,820
BLACKROCK TCP CAPITAL CORP	128,200	1,931,684	1,171,748
BLACKSTONE GROUP INC/THE A	1,531,145	56,921,566	86,754,676
BLOOM ENERGY CORP A	188,258	1,768,824	2,048,247
BLOOMIN BRANDS INC	233,867	4,579,990	2,493,022
BLUCORA INC	106,812	2,576,967	1,219,793
BLUE BIRD CORP	33,896	645,933	508,101
BLUEBIRD BIO INC	131,600	13,525,675	8,032,864
BLUEGREEN VACATIONS CORP	1,304	12,646	7,068
BLUEKNIGHT ENERGY PARTNERS L	89,764	538,584	125,670
BLUELINX HOLDINGS INC	12,040	479,960	103,183
BLUEPRINT MEDICINES CORP	109,800	8,804,423	8,564,400
BLUESTEM GROUP INC	6,097	139,520	4,024
BMC STOCK HOLDINGS INC	153,115	2,972,337	3,849,311
BODY CENTRAL CORP	5,850	0	0
BOEING CO/THE	1,090,122	205,192,569	199,819,363
BOINGO WIRELESS INC	96,731	1,460,891	1,288,457
BOISE CASCADE CO	117,820	3,907,816	4,431,210
BOK FINANCIAL CORPORATION	94,132	5,627,109	5,312,810
BONANZA CREEK ENERGY INC	42,945	887,399	636,445
BOOKING HOLDINGS INC	92,002	109,134,290	146,498,465
BOOT BARN HOLDINGS INC	64,786	2,040,109	1,396,786
BOOZ ALLEN HAMILTON HOLDINGS	1,175,670	76,474,726	91,455,369
BORGWARNER INC	468,393	16,174,061	16,534,273
BOSTON BEER COMPANY INC A	17,851	5,223,707	9,579,739
BOSTON OMAHA CORP CL A	25,216	455,135	403,456
BOSTON PRIVATE FINL HOLDING	245,685	2,722,411	1,690,313
BOSTON SCIENTIFIC CORP	2,860,868	74,932,017	100,445,075
BOTTOMLINE TECHNOLOGIES (DE)	95,803	3,071,439	4,863,918
BOWL AMERICA INC CLASS A	5,912	87,794	55,618
BOX INC CLASS A	485,629	9,449,803	10,081,658
BOX SHIPS INC WTS	80,000	0	0
BOYD GAMING CORP	376,318	8,142,316	7,865,046
BP MIDSTREAM PARTNERS LP	106,552	1,803,804	1,222,151
BRADY CORPORATION CL A	108,131	4,099,710	5,062,693
BRAINSTORM CELL THERAPEUTICS	54,000	332,051	605,340
BRICKELL BIOTECH INC	4,395	46,155	4,395
BRIDGE BANCORP INC	36,814	1,124,772	840,832
BRIDGEBIO PHARMA INC	161,137	4,544,283	5,254,678
BRIDGEWATER BANCSHARES INC	48,916	544,918	501,389

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
BRIDGFORD FOODS CORP	19,468	315,048	322,390
BRIGGS + STRATTON	83,900	860,561	109,909
BRIGHAM MINERALS INC CL A	61,200	914,981	755,820
BRIGHT HORIZONS FAMILY SOLUT	130,426	15,309,612	15,285,927
BRIGHTCOVE	86,012	726,016	677,775
BRIGHTHOUSE FINANCIAL INC	231,796	9,592,313	6,448,565
BRIGHTSPHERE INVESTMENT GROU	141,484	1,582,830	1,762,891
BRIGHTVIEW HOLDINGS INC	68,866	1,435,697	771,299
BRINK S CO/THE	163,397	8,179,930	7,436,197
BRINKER INTERNATIONAL INC	98,029	2,703,885	2,352,696
BRISTOL MYERS SQUIBB CO	8,361,000	362,376,436	450,055,840
BRISTOW GROUP INC	13,233	418,504	184,336
BROADCOM INC	891,908	170,357,524	281,495,084
BROADRIDGE FINANCIAL SOLUTIO	962,378	99,948,327	121,442,480
BROADWIND INC	107,672	292,868	403,770
BROOKDALE SENIOR LIVING INC	688,396	5,597,131	2,030,768
BROOKFIELD INFRASTRUCTURE PA	660,181	21,696,598	27,140,041
BROOKLINE BANCORP INC	175,423	2,253,353	1,768,264
BROOKS AUTOMATION INC	160,784	4,561,680	7,113,084
BROOKSIDE CAP PARTNERS	5,138	4,932	119,508
BROWN + BROWN INC	2,009,528	69,383,034	81,908,361
BROWN FORMAN CORP CLASS A	102,781	3,636,543	5,917,102
BROWN FORMAN CORP CLASS B	1,029,965	48,594,272	65,567,572
BRP GROUP INC A	43,970	705,328	759,362
BRUKER CORP	232,125	6,433,094	9,442,845
BRUNSWICK CORP	337,222	15,754,471	21,585,580
BRYN MAWR BANK CORP	43,636	1,397,390	1,206,972
BSQUARE CORP	42,450	186,780	66,647
BUCKLE INC/THE	66,121	1,707,643	1,036,777
BUILD A BEAR WORKSHOP INC	26,200	244,970	57,116
BUILDERS FIRSTSOURCE INC	610,672	12,721,100	12,640,910
BUNGE LTD	959,202	54,102,471	39,451,978
BURLINGTON STORES INC	204,293	31,841,823	40,231,420
BUSINESS FIRST BANCSHARES	26,904	501,856	412,976
BWX TECHNOLOGIES INC	213,926	7,831,532	12,116,769
BYLINE BANCORP INC	55,316	904,705	724,640
C + F FINANCIAL CORP	6,900	403,764	229,425
C.H. ROBINSON WORLDWIDE INC	1,131,843	91,591,175	89,483,508
CABALETTA BIO INC	2,572	24,064	28,652
CABLE ONE INC	11,381	9,852,348	20,199,568
CABOT CORP	130,831	4,793,266	4,847,289
CABOT MICROELECTRONICS CORP	64,790	6,311,602	9,040,797
CABOT OIL + GAS CORP	882,573	16,645,194	15,162,604
CACI INTERNATIONAL INC CL A	55,566	7,010,930	12,051,154
CACTUS INC A	105,065	3,189,008	2,167,491
CADENCE BANCORP	327,819	5,885,578	2,904,476
CADENCE DESIGN SYS INC	819,676	36,274,784	78,656,109
CADIZ INC	40,400	485,329	410,464
CAESARS ENTERTAINMENT CORP	1,267,056	14,613,115	15,369,389
CAGLES INC ESCROW CONTRA	14,000	0	0

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
CAI INTERNATIONAL INC	37,436	692,705	623,684
CAL MAINE FOODS INC	70,075	2,264,076	3,116,936
CALADRIUS BIOSCIENCES INC	4,242	17,901	7,551
CALAMOS ASSET MANAGEMENT, INC.	158,000	0	0
CALAMP CORP	73,854	1,094,238	591,571
CALAVO GROWERS INC	36,397	2,091,569	2,289,735
CALERES INC	129,491	2,999,304	1,079,955
CALIFORNIA RESOURCES CORP	98,500	2,057,903	120,170
CALIFORNIA WATER SERVICE GRP	107,799	4,585,147	5,142,012
CALITHERA BIOSCIENCES INC	150,249	895,095	793,315
CALIX INC	110,141	1,037,025	1,641,101
CALLAWAY GOLF COMPANY	206,377	3,882,673	3,613,661
CALLON PETROLEUM CO	1,572,089	8,609,764	1,807,902
CALUMET SPECIALTY PRODUCTS	135,789	2,440,198	309,599
CALYXT INC	81,003	969,179	399,345
CAMBRIDGE BANCORP	14,115	844,617	836,173
CAMDEN NATIONAL CORP	32,736	956,261	1,130,701
CAMPBELL SOUP CO	1,492,229	57,225,568	74,059,325
CAMPING WORLD HOLDINGS INC A	73,593	1,162,314	1,998,786
CANCER GENETICS INC	310	9,114	939
CANNAE HOLDINGS INC	168,915	3,093,469	6,942,407
CANO PETROLEUM INC	121,150	0	0
CANTEL MEDICAL CORP	78,115	4,011,274	3,455,026
CANTERBURY PARK HOLDING CORP	2,999	45,435	32,239
CAPITAL CITY BANK GROUP INC	29,503	653,429	618,088
CAPITAL ONE FINANCIAL CORP	1,049,204	71,829,370	65,669,678
CAPITAL PRODUCT PARTNERS LP	33,300	2,157,106	269,064
CAPITAL SENIOR LIVING CORP	59,600	585,079	42,316
CAPITAL SOUTHWEST CORP	38,500	620,304	518,980
CAPITALA FINANCE CORP	30,500	243,390	80,215
CAPITOL FEDERAL FINANCIAL IN	293,149	3,982,153	3,227,570
CAPSTAR FINANCIAL HOLDINGS I	34,996	477,974	419,952
CAPSTONE TURBINE CORP	7,191	100,674	21,717
CARA THERAPEUTICS INC	83,300	1,388,680	1,424,430
CARBO CERAMICS INC	64,700	522,776	988
CARDINAL HEALTH INC	730,040	30,731,819	38,100,788
CARDIOVASCULAR SYSTEMS INC	76,441	2,944,541	2,411,714
CARDLYTICS INC	57,988	3,345,796	4,058,000
CAREDX INC	86,600	1,218,958	3,068,238
CARGURUS INC	315,548	9,120,719	7,999,142
CARLISLE COS INC	121,823	8,855,112	14,578,558
CARLYLE	21,587,487	21,587,487	284,070
CARLYLE GROUP INC/THE	264,214	6,827,758	7,371,571
CARMAX INC	387,666	21,440,397	34,715,490
CARNIVAL CORP	1,059,470	34,755,742	17,396,497
CARNIVAL PLC	326,631	13,630,897	3,978,546
CARPENTER TECHNOLOGY	105,025	4,730,784	2,550,007
CARRIAGE SERVICES INC	36,388	700,445	659,351
CARRIER GLOBAL CORP	1,936,052	29,394,918	43,019,075
CARROLS RESTAURANT GROUP INC	100,100	583,549	484,484

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
CARS.COM INC	153,868	2,240,988	886,280
CARTER BANK + TRUST	50,090	780,595	404,226
CARTER S INC	139,582	11,077,894	11,264,267
CARVANA CO	122,496	10,336,632	14,724,019
CASA SYSTEMS INC	69,932	880,635	290,917
CASELLA WASTE SYSTEMS INC A	104,522	3,161,678	5,447,687
CASEY S GENERAL STORES INC	82,630	8,047,838	12,354,838
CASI PHARMACEUTICALS INC	102,800	675,796	257,000
CASPER SLEEP INC	1,700	11,426	15,249
CASS INFORMATION SYSTEMS INC	32,999	1,357,958	1,287,951
CASSAVA SCIENCES INC	14,285	114,851	43,998
CASTLE BIOSCIENCES INC	22,638	661,749	853,226
CASTLIGHT HEALTH INC B	106,400	260,884	88,312
CATALENT INC	343,995	14,939,892	25,214,834
CATALYST BIOSCIENCES INC	895	25,848	5,254
CATALYST PHARMACEUTICALS INC	228,872	1,024,194	1,057,389
CATERPILLAR INC	1,219,976	107,936,858	154,326,964
CATHAY GENERAL BANCORP	170,064	4,684,613	4,472,683
CATO CORP CLASS A	48,090	817,629	393,376
CAVCO INDUSTRIES INC	19,139	2,303,014	3,690,956
CB FINANCIAL SERVICES INC	4,193	128,064	91,491
CBIZ INC	114,115	1,753,837	2,735,337
CBOE GLOBAL MARKETS INC	954,002	100,816,916	88,989,307
CBRE GROUP INC A	778,846	28,707,229	35,219,416
CBTX INC	39,140	955,135	821,940
CCA INDUSTRIES INC	24,958	74,874	54,658
CCUR HOLDINGS INC	44,468	233,457	142,298
CDK GLOBAL INC	1,027,419	49,531,338	42,555,695
CDTI ADVANCED MATERIALS INC	1,322	3,649	238
CDW CORP/DE	320,524	26,015,985	37,238,478
CECO ENVIRONMENTAL CORP	68,369	469,713	450,552
CEDAR FAIR LP	168,817	7,551,382	4,642,468
CEL SCI CORP	75,330	683,473	1,123,924
CELADON GROUP INC	53,600	144,184	538
CELANESE CORP	290,979	20,555,721	25,123,127
CELCUITY INC	10,000	192,184	69,300
CELLEX THERAPEUTICS INC	12,026	1,427,588	156,338
CELLULAR BIOMEDICINE GROUP I	24,900	462,329	372,753
CELSION CORP	4,794	10,978	17,834
CELSIUS HOLDINGS INC	78,810	380,298	927,594
CENTENE CORP	1,355,470	57,900,729	86,140,119
CENTENNIAL RESOURCE DEVELO A	448,108	3,955,639	398,816
CENTERPOINT ENERGY INC	1,138,747	26,937,114	21,260,406
CENTRAL FEDERAL CORP	265	3,577	2,677
CENTRAL GARDEN + PET CO	22,587	637,314	812,906
CENTRAL GARDEN AND PET CO A	91,603	1,915,511	3,095,265
CENTRAL PACIFIC FINANCIAL CO	61,639	1,380,827	988,073
CENTRAL VALLEY COMM BANCORP	23,551	471,396	362,450
CENTRIC BRANDS INC	5,290	5,660	365

**CalPERS 2019-2020 Annual Investment Report
Domestic Equity**

Security Name	Shares	Book Value	Market Value
CENTRUS ENERGY CORP CLASS A	9,983	37,836	100,229
CENTURY ALUMINUM COMPANY	111,736	742,050	796,678
CENTURY BANCORP INC CL A	6,218	495,429	483,263
CENTURY CASINOS INC	59,825	486,477	248,274
CENTURY COMMUNITIES INC	64,716	1,823,872	1,984,193
CENTURLINK INC	2,843,276	59,257,231	28,518,058
CENVEO ENTERPRISES, INC.	1,157	121,749	15,041
CERBERUS CAL III PARTNERS LP	88,517,239	88,517,239	78,915,332
CERECOR INC	1,703	61,764	4,428
CERENCE INC	81,414	1,423,074	3,324,948
CERIDIAN HCM HOLDING INC	237,595	13,435,614	18,834,156
CERNER CORP	1,736,749	99,325,854	119,054,144
CERUS CORP	327,900	1,796,626	2,164,140
CEVA INC	48,626	824,965	1,819,585
CF FINANCE ACQUISITION CL A	4,960	51,495	53,816
CF INDUSTRIES HOLDINGS INC	499,255	15,454,037	14,049,036
CHAMPIONX CORP	410,967	4,876,190	4,011,040
CHANGE HEALTHCARE INC	555,800	5,412,724	6,224,960
CHANNELADVISOR CORP	60,132	702,894	952,491
CHAPARRAL ENERGY INC CLASS A	153,397	1,065,615	99,432
CHARAH SOLUTIONS INC	102,735	1,232,820	326,697
CHARLES + COLVARD LTD	36,473	51,792	26,625
CHARLES RIVER LABORATORIES	111,246	11,314,816	19,395,740
CHART INDUSTRIES INC	79,825	4,573,021	3,870,714
CHARTER COMMUNICATIONS INC A	343,787	98,511,790	175,345,121
CHASE CORP	16,257	1,091,809	1,666,343
CHATHAM EUREKA FUND L P	140,400,987	135,857,604	221,909,096
CHEESECAKE FACTORY INC/THE	329,359	8,090,972	7,548,908
CHEETAH MOBILE INC ADR	129,400	2,088,496	222,568
CHEFS WAREHOUSE INC/THE	54,715	1,923,841	743,030
CHEGG INC	246,928	9,795,948	16,608,377
CHEMBIO DIAGNOSTICS INC	39,400	145,707	128,050
CHEMED CORP	35,068	7,775,256	15,818,123
CHEMOCENTRYX INC	99,218	2,108,485	5,709,004
CHEMOURS CO/THE	376,557	6,794,166	5,780,150
CHEMUNG FINANCIAL CORP	6,200	286,980	169,260
CHENIERE ENERGY INC	472,539	21,642,212	22,833,084
CHENIERE ENERGY PARTNERS LP	91,715	3,266,111	3,208,191
CHESAPEAKE ENERGY CORP	19,800	18,533,315	97,020
CHESAPEAKE UTILITIES CORP	35,788	2,839,686	3,006,192
CHEVRON CORP	4,214,705	387,641,958	376,078,127
CHEWY INC CLASS A	130,375	4,482,862	5,826,459
CHIASMA INC	81,069	361,884	436,151
CHICAGO RIVET + MACHINE CO	2,900	84,390	60,320
CHICO S FAS INC	268,190	2,744,210	370,102
CHILDREN S PLACE INC/THE	32,218	2,280,087	1,205,598
CHIMERIX INC	107,153	3,163,182	332,174
CHIPOTLE MEXICAN GRILL INC	62,353	30,102,213	65,617,803
CHOICE HOTELS INTL INC	170,584	13,176,224	13,459,078
CHOICEONE FINANCIAL SVCS INC	1,297	37,334	38,339

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
CHRISTOPHER + BANKS CORP	100,600	110,660	19,114
CHROMADEX CORP	82,500	284,310	378,675
CHURCH + DWIGHT CO INC	2,064,452	120,225,197	159,582,140
CHURCHILL CAPITAL CORP II A	115,800	1,156,325	1,308,540
CHURCHILL CAPITAL CORP III A	31,200	321,778	336,648
CHURCHILL DOWNS INC	96,743	11,153,881	12,881,330
CHUY S HOLDINGS INC	36,608	818,260	544,727
CIA DE MINAS BUENAVENTUR ADR	1,815,480	26,476,004	16,593,487
CIENA CORP	414,785	14,216,218	22,464,756
CIGNA CORP	840,834	100,361,572	157,782,500
CIMAREX ENERGY CO	340,230	14,906,744	9,352,923
CINCINNATI BELL INC	117,010	2,167,385	1,737,599
CINCINNATI FINANCIAL CORP	1,286,191	100,426,207	82,354,810
CINEDIGM CORP A	10,970	17,662	20,953
CINEMARK HOLDINGS INC	403,166	9,372,761	4,656,567
CINER RESOURCES LP	43,978	1,130,194	560,720
CINTAS CORP	229,921	33,181,964	61,241,758
CIRCOR INTERNATIONAL INC	44,010	1,709,539	1,121,375
CIRRUS LOGIC INC	131,942	4,102,350	8,151,377
CISCO SYSTEMS INC	15,095,030	557,198,583	704,032,199
CIT GROUP INC	347,035	14,483,076	7,194,036
CITI TRENDS INC	22,100	532,901	446,862
CITIGROUP INC	4,831,274	293,061,832	246,878,101
CITIZENS + NORTHERN CORP	29,728	698,766	613,883
CITIZENS COMMUNITY BANCORP I	11,652	154,613	79,933
CITIZENS FINANCIAL GROUP	1,312,403	42,771,313	33,125,052
CITIZENS FINANCIAL SERVICES	11,722	709,769	583,170
CITIZENS HOLDING COMPANY	1,600	35,680	40,000
CITIZENS INC	109,518	839,454	656,013
CITRIX SYSTEMS INC	995,072	95,375,625	147,181,100
CITY HOLDING CO	34,882	1,860,213	2,273,260
CIVEO CORP	215,400	758,208	132,794
CIVISTA BANCSHARES INC	34,824	798,286	536,290
CKX LANDS INC	5,395	55,299	43,918
CLAIRE S STORES	261,340	0	0
CLARUS CORP	51,452	552,002	595,814
CLEAN ENERGY FUELS CORP	290,718	1,836,093	645,394
CLEAN HARBORS INC	116,473	6,252,004	6,986,051
CLEAR CHANNEL OUTDOOR HOLDIN	804,732	1,230,273	836,921
CLEARFIELD INC	22,600	287,331	315,496
CLEARONE INC	50,600	194,810	101,200
CLEARWATER PAPER CORP	37,479	943,986	1,354,116
CLEARWAY ENERGY INC A	81,148	1,704,231	1,701,674
CLEARWAY ENERGY INC C	180,829	3,708,899	4,169,917
CLEVELAND CLIFFS INC	879,553	10,203,313	4,855,133
CLOROX COMPANY	1,054,180	147,407,153	231,255,467
CLOUDERA INC	455,682	5,373,756	5,796,275
CLOUDFLARE INC CLASS A	232,110	4,447,740	8,344,355
CLOVIS ONCOLOGY INC	146,300	4,029,490	987,525

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
CME GROUP INC	2,721,828	439,998,909	442,405,923
CMS ENERGY CORP	2,391,524	120,653,053	139,712,832
CNA FINANCIAL CORP	63,432	2,574,796	2,039,339
CNB FINANCIAL CORP/PA	32,572	852,399	584,016
CNO FINANCIAL GROUP INC	326,677	3,763,962	5,086,361
CNX MIDSTREAM PARTNERS LP	92,819	1,081,111	617,246
CNX RESOURCES CORP	422,969	5,885,936	3,658,682
CO DIAGNOSTICS INC	59,432	993,277	1,150,009
COASTAL FINANCIAL CORP/WA	5,500	93,058	79,860
COBALT INTERNATIONAL ENERGY	51,680	1,654	0
COCA COLA CO/THE	25,288,764	1,090,523,449	1,129,901,976
COCA COLA CONSOLIDATED INC	10,369	2,200,731	2,376,471
CODEXIS INC	117,100	1,943,630	1,334,940
CODORUS VALLEY BANCORP INC	19,200	473,205	265,536
COEUR MINING INC	540,485	3,913,734	2,745,664
COFFEE HOLDING CO INC	12,200	50,386	36,356
COGENT COMMUNICATIONS HOLDIN	94,429	3,989,425	7,305,027
COGNEX CORP	368,907	10,866,092	22,031,126
COGNIZANT TECH SOLUTIONS A	3,939,419	244,351,117	223,837,788
COHEN + STEERS INC	55,728	2,468,347	3,792,290
COHERENT INC	73,902	8,859,594	9,679,684
COHERUS BIOSCIENCES INC	128,130	2,291,646	2,288,402
COHU INC	91,255	1,786,353	1,582,362
COLDWATER CREEK INC	54,625	0	0
COLFAX CORP	379,155	12,888,459	10,578,425
COLGATE PALMOLIVE CO	5,019,341	299,924,036	367,716,922
COLLECTORS UNIVERSE	18,400	266,123	630,752
COLLEGIUM PHARMACEUTICAL INC	77,286	1,532,688	1,352,505
COLLIER CREEK HOLDINGS A	89,900	921,467	1,231,630
COLONY BANKCORP	5,149	85,988	60,604
COLT CLASS B UNITS	19,105	655,548	0
COLUMBIA BANKING SYSTEM INC	160,070	5,463,152	4,537,184
COLUMBIA FINANCIAL INC	108,564	1,711,586	1,515,011
COLUMBIA SPORTSWEAR CO	59,090	2,961,851	4,761,472
COLUMBUS MCKINNON CORP/NY	51,411	1,490,235	1,719,698
COMCAST CORP CLASS A	12,866,708	407,888,464	501,544,278
COMERICA INC	411,681	17,722,489	15,685,046
COMFORT SYSTEMS USA INC	80,517	3,934,781	3,281,068
COMMERCE BANCSHARES INC	226,165	8,880,734	13,450,033
COMMERCIAL METALS CO	277,901	4,779,101	5,669,180
COMMERCIAL VEHICLE GROUP INC	61,700	427,926	178,313
COMMONWEALTH BANKSHARES INC	13,692	0	0
COMMSCOPE HOLDING CO INC	591,814	11,459,154	4,929,811
COMMUNICATIONS SYSTEMS INC	26,400	96,096	133,848
COMMUNITY BANK SYSTEM INC	115,552	6,637,666	6,588,775
COMMUNITY BANKERS TRUST CORP	44,500	389,466	244,750
COMMUNITY FINANCIAL CORP/THE	3,500	124,328	85,400
COMMUNITY HEALTH SYSTEMS INC	192,566	2,933,264	579,624
COMMUNITY TRUST BANCORP INC	34,259	1,350,777	1,122,325
COMMUNITY WEST BANCSHARES	24,489	280,399	215,258

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
COMMVault SYSTEMS INC	93,008	4,105,769	3,599,410
COMPASS DIVERSIFIED HOLDINGS	132,447	2,446,795	2,283,386
COMPASS MINERALS INTERNATION	75,989	4,387,653	3,704,464
COMPUTER PROGRAMS + SYSTEMS	28,345	837,995	645,983
COMPUTER TASK GROUP INC	17,772	139,332	71,621
COMPX INTERNATIONAL INC	3,482	47,529	48,121
COMSCORE INC	129,131	945,778	400,306
COMSTOCK MINING INC	12,660	21,262	12,026
COMSTOCK RESOURCES INC	34,349	225,317	150,449
COMTECH TELECOMMUNICATIONS	53,544	1,417,167	904,358
CONAGRA BRANDS INC	1,095,716	28,726,120	38,536,332
CONCERT PHARMACEUTICALS INC	63,373	827,612	630,561
CONCHO RESOURCES INC	465,625	41,004,832	23,979,688
CONCRETE PUMPING HOLDINGS IN	5,442	27,315	18,938
CONDUENT INC	365,055	3,981,878	872,481
CONFORMIS INC	8,200	33,872	6,724
CONMED CORP	75,228	4,573,165	5,415,664
CONN S INC	38,931	775,221	392,814
CONNECTONE BANCORP INC	83,890	1,671,522	1,352,307
CONOCOPHILLIPS	2,427,858	108,680,758	102,018,593
CONSOL ENERGY INC	59,857	1,564,077	303,475
CONSOLIDATED COMMUNICATIONS	165,984	1,680,456	1,123,712
CONSOLIDATED EDISON INC	2,843,865	223,694,257	204,559,209
CONSTELLATION BRANDS INC A	409,493	50,386,523	71,640,800
CONSTELLATION PHARMACEUTICAL	60,661	2,131,692	1,822,863
CONSTRUCTION PARTNERS INC A	41,473	738,009	736,560
CONSUMER PORTFOLIO SERVICES	113,440	380,663	321,035
CONTAINER STORE GROUP INC/TH	570,896	2,981,738	1,849,703
CONTANGO OIL + GAS	198,608	703,736	454,812
CONTINENTAL RESOURCES INC/OK	345,097	7,669,207	6,049,550
CONTRA INNOCOLL HLDGS PLC	18,300	10,980	0
CONTURA ENERGY INC	35,300	1,259,746	107,312
CONYERS PARK II ACQUISITIO A	22,500	243,499	248,625
COOPER COS INC/THE	411,161	104,904,632	116,621,706
COOPER STANDARD HOLDING	38,178	2,905,605	505,859
COOPER STD HLDGS INC	73,200	0	0
COOPER TIRE + RUBBER	269,825	7,461,166	7,449,868
COPART INC	510,669	21,654,518	42,523,408
CORBUS PHARMACEUTICALS HOLDI	134,100	707,423	1,125,099
CORCEPT THERAPEUTICS INC	214,944	2,492,844	3,615,358
CORE MARK HOLDING CO INC	98,714	3,405,128	2,463,408
CORE MOLDING TECHNOLOGIES IN	5,945	95,893	24,493
CORELOGIC INC	182,551	5,474,810	12,271,078
CORINTHIAN COLLEGES INC	214,600	0	0
CORMEDIX INC	52,200	323,281	328,860
CORNERSTONE BUILDING BRANDS	99,108	825,121	600,594
CORNERSTONE ONDEMAND INC	134,136	6,848,913	5,172,284
CORNING INC	1,688,303	36,124,232	43,727,048
CORTEVA INC	1,670,321	40,489,310	44,747,900
CORTEXIME INC	34,770	1,836,225	1,609,851

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
CORVEL CORP	20,022	837,768	1,419,360
COSTAR GROUP INC	86,696	32,652,712	61,612,246
COSTCO WHOLESALE CORP	1,058,116	185,219,263	320,831,352
COTY INC CL A	1,201,207	10,528,830	5,369,395
COUNTY BANCORP INC	3,900	104,795	81,627
COUPA SOFTWARE INC	151,128	16,944,590	41,868,501
COVANTA HOLDING CORP	263,827	4,483,464	2,530,101
COVENANT LOGISTICS GROUP INC	28,123	520,871	405,815
COVETRUS INC	198,600	2,824,555	3,552,954
COVIA HOLDINGS CORP	78,419	2,458,200	37,641
COWEN INC A	59,176	883,222	959,243
CPI AEROSTRUCTURES INC	13,900	137,610	45,731
CPI CARD GROUP INC	7,739	20,354	22,443
CRA INTERNATIONAL INC	17,245	936,558	681,178
CRACKER BARREL OLD COUNTRY	103,906	11,780,441	11,524,214
CRAFT BREW ALLIANCE INC	25,407	437,150	391,014
CRANE CO	128,567	6,738,220	7,644,594
CRAWFORD + CO CL B	21,920	139,267	154,098
CRAWFORD + COMPANY CL A	19,290	178,312	152,198
CREDIT ACCEPTANCE CORP	36,308	13,171,853	15,213,415
CREE INC	220,300	9,069,782	13,039,557
CRESCENT ACQUISITION CORP A	41,400	412,383	433,044
CRESCENT CAPITAL BDC INC	53,064	677,717	670,729
CRESTWOOD EQUITY PARTNERS LP	112,911	7,474,208	1,480,263
CREXENDO INC	19,001	47,503	108,306
CRINETICS PHARMACEUTICALS IN	54,800	986,163	960,096
CRITEO SA SPON ADR	136,178	3,739,395	1,551,067
CROCS INC	150,749	2,411,113	5,550,578
CROSS COUNTRY HEALTHCARE INC	79,005	907,878	486,671
CROSS TIMBERS ROYALTY TRUST	20,900	280,060	154,242
CROSSAMERICA PARTNERS LP	41,739	587,950	561,807
CROSSFIRST BANKSHARES INC	106,052	907,609	1,037,189
CROWDSTRIKE HOLDINGS INC A	234,800	21,059,168	23,548,092
CROWN CRAFTS INC	37,146	224,733	181,272
CROWN HOLDINGS INC	320,505	14,647,437	20,874,491
CRYOLIFE INC	81,298	1,900,990	1,558,483
CRYOPOINT INC	67,900	1,218,850	2,053,975
CSG SYSTEMS INTL INC	73,486	3,156,620	3,041,586
CSP INC	146,616	1,612,776	1,190,522
CSW INDUSTRIALS INC	31,150	2,107,130	2,152,777
CSX CORP	1,714,502	70,660,890	119,569,369
CTI BIOPHARMA CORP	28,400	110,192	32,944
CTO REALTY GROWTH INC	10,697	501,344	422,532
CTS CORP	70,412	2,002,184	1,411,056
CUBIC CORP	63,600	3,608,044	3,054,708
CUE BIOPHARMA INC	63,388	1,072,335	1,553,640
CUI GLOBAL INC	65,700	173,448	40,734
CULLEN/FROST BANKERS INC	124,614	7,826,876	9,309,912
CULP INC	7,900	120,817	68,019
CUMBERLAND PHARMACEUTICALS	53,441	346,832	177,959

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
CUMMINS INC	332,943	37,543,592	57,685,704
CUMULUS MEDIA INC CL A	10,300	180,334	40,685
CURO GROUP HOLDINGS CORP	40,418	409,427	330,215
CURTISS WRIGHT CORP	94,106	8,531,481	8,401,784
CUSHMAN + WAKEFIELD PLC	251,974	4,477,301	3,139,596
CUSTOMERS BANCORP INC	65,391	1,372,853	786,000
CUTERA INC	37,286	1,496,055	453,771
CVB FINANCIAL CORP	288,018	5,689,507	5,397,457
CVD EQUIPMENT CORP	15,700	127,327	46,943
CVR ENERGY INC	67,483	2,553,898	1,357,083
CVR PARTNERS LP	155,600	2,330,127	132,260
CVS HEALTH CORP	3,105,485	154,975,800	201,763,360
CYANOTECH CORP	19,300	82,025	44,583
CYBEROPTICS CORP	15,535	265,466	500,382
CYCLACEL PHARMACEUTICALS INC	377	10,808	1,753
CYCLERION THERAPEUTICS INC	28,398	644,894	167,832
CYMABAY THERAPEUTICS INC	153,365	742,473	535,244
CYTOKINETICS INC	125,841	1,551,620	2,966,072
CYTOMX THERAPEUTICS INC	100,012	1,381,297	833,100
CYTOSORBENTS CORP	76,390	600,337	756,261
CYTRX CORP	22,217	38,213	15,219
DAILY JOURNAL CORP	2,526	657,888	682,020
DAKTRONICS INC	81,119	1,844,709	352,868
DANA INC	425,074	6,212,659	5,181,652
DANAHER CORP W/D	2,538,360	279,377,047	448,858,199
DARDEN RESTAURANTS INC	317,500	24,661,375	24,056,975
DARLING INGREDIENTS INC	361,336	6,716,205	8,896,092
DASAN ZHONG SOLUTIONS INC	23,904	267,725	213,463
DASEKE INC	45,031	178,057	176,972
DATA I/O CORP	27,600	169,464	93,012
DATADOG INC CLASS A	339,319	26,367,065	29,503,787
DAVE + BUSTER S ENTERTAINMEN	132,655	4,042,420	1,768,291
DAVITA INC	194,940	7,285,939	15,427,552
DAWSON GEOPHYSICAL CO	48,222	333,423	69,440
DCP MIDSTREAM LP	202,321	6,602,857	2,286,227
DEAN FOODS CO	119,000	1,888,172	9,505
DECIPHERA PHARMACEUTICALS IN	83,209	4,458,595	4,969,241
DECKERS OUTDOOR CORP	68,199	7,242,052	13,393,602
DEERE + CO	700,485	79,553,271	110,081,218
DEL TACO RESTAURANTS INC	65,835	492,423	390,402
DELEK LOGISTICS PARTNERS LP	19,420	521,147	445,301
DELEK US HOLDINGS INC	142,631	4,832,645	2,483,206
DELL TECHNOLOGIES C	561,021	26,585,645	30,822,494
DELTA AIR LINES INC	1,665,535	57,113,777	46,718,257
DELTA APPAREL INC	17,167	322,008	208,064
DELUXE CORP	96,305	3,828,729	2,267,020
DENALI THERAPEUTICS INC	139,172	2,823,592	3,365,179
DENBURY RESOURCES INC	1,020,300	6,256,363	281,705
DENNY S CORP	120,013	1,009,332	1,212,131
DENTSPLY SIRONA INC	580,742	22,691,572	25,587,493

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
DESIGNER BRANDS INC CLASS A	140,670	2,848,568	952,336
DESTINATION MATERNITY CORP	61,500	177,735	923
DEVON ENERGY CORP	875,394	29,374,757	9,926,968
DEXCOM INC	205,557	26,598,620	83,332,808
DHI GROUP INC	102,100	165,260	214,410
DIAMOND HILL INVESTMENT GRP	7,098	679,024	806,830
DIAMOND OFFSHORE DRILLING	132,300	2,531,706	33,829
DIAMOND S SHIPPING INC	68,515	769,829	547,435
DIAMONDBACK ENERGY INC	410,387	34,336,912	17,162,384
DIAMONDPEAK HOLDINGS CORP A	55,200	561,273	568,560
DICERNA PHARMACEUTICALS INC	144,990	2,299,435	3,682,746
DICK S SPORTING GOODS INC	142,998	4,995,507	5,900,097
DIEBOLD NIXDORF INC	160,581	2,260,657	973,121
DIGI INTERNATIONAL INC	63,175	680,998	735,989
DIGIMARC CORP	24,200	810,793	386,958
DIGIRAD CORP	7,730	108,220	21,644
DIGITAL TURBINE INC	240,574	1,656,739	3,024,015
DILLARDS INC CL A	17,138	685,842	441,989
DIME COMMUNITY BANCSHARES	63,163	1,103,043	867,228
DINE BRANDS GLOBAL INC	44,377	2,545,306	1,868,272
DIODES INC	95,585	3,417,898	4,846,160
DIRECTBUY HLDGS INC.	5,621	69,965	0
DISCOVER FINANCIAL SERVICES	691,681	31,897,561	34,646,301
DISCOVERY INC A	364,312	11,026,757	7,686,983
DISCOVERY INC C	756,674	19,581,571	14,573,541
DISCUS NON US SIDE HOLDINGS	89,934	89,934	12,640
DISH NETWORK CORP A	550,062	19,159,240	18,982,640
DIVERSICARE HEALTHCARE SERVI	19,989	138,724	32,982
DIXIE GROUP INC	52,157	151,255	49,028
DLH HOLDINGS CORP	210,554	1,250,351	1,545,466
DMC GLOBAL INC	32,070	1,287,032	885,132
DOCUSIGN INC	432,975	31,594,185	74,562,625
DOLBY LABORATORIES INC CL A	142,950	6,695,704	9,416,117
DOLLAR GENERAL CORP	2,137,185	241,797,750	407,155,114
DOLLAR TREE INC	1,069,896	87,486,659	99,157,961
DOMINION ENERGY INC	5,434,192	380,636,021	441,147,707
DOMINO S PIZZA INC	87,173	11,403,484	32,205,193
DOMO INC CLASS B	51,600	1,319,260	1,659,972
DOMTAR CORP	125,256	5,098,575	2,644,154
DONALDSON CO INC	318,308	12,265,945	14,807,688
DONEGAL GROUP INC CL A	24,111	351,076	342,858
DONNELLEY FINANCIAL SOLUTION	68,565	1,560,191	575,946
DORAL FINL CORP ESCROW	19,605	1,457	0
DORCHESTER MINERALS LP	71,041	1,411,526	907,904
DORIAN LPG LTD	78,938	840,195	610,980
DORMAN PRODUCTS INC	59,602	2,536,769	3,997,506
DOUGLAS DYNAMICS INC	49,745	2,301,981	1,747,044
DOVER CORP	324,332	16,996,828	31,317,498
DOVER MOTORSPORTS INC	113,937	239,268	176,602
DOW INC	1,996,079	77,442,423	81,360,180

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
DR HORTON INC	742,204	24,731,074	41,155,212
DRAFTKINGS INC CL A	501,244	18,526,208	16,671,375
DRIL QUIP INC	77,430	3,526,117	2,306,640
DRIVE SHACK INC	118,000	3,709,210	218,300
DROPBOX INC CLASS A	720,926	16,590,813	15,694,559
DSP GROUP INC	48,329	589,797	767,465
DTE ENERGY COMPANY	1,602,411	175,051,876	172,259,183
DUCOMMUN INC	23,817	806,461	830,499
DUKE ENERGY CORP	6,017,090	490,761,210	480,705,320
DUNKIN BRANDS GROUP INC	182,445	10,711,568	11,900,887
DUPONT DE NEMOURS INC	1,654,396	99,686,430	87,898,059
DURECT CORPORATION	447,870	947,121	1,039,058
DXC TECHNOLOGY CO	750,831	22,268,344	12,388,712
DXP ENTERPRISES INC	36,205	1,011,848	720,842
DYCOM INDUSTRIES INC	67,996	2,623,719	2,780,356
DYNAGAS LNG PARTNERS LP	226,910	3,693,058	726,112
DYNATRACE INC	378,081	10,462,709	15,350,089
DYNAVAX TECHNOLOGIES CORP	185,118	1,525,454	1,641,997
DYNEX CAPITAL INC	4,027	73,798	57,586
E TRADE FINANCIAL CORP	550,949	18,327,086	27,398,694
EAGLE BANCORP INC	72,987	2,783,334	2,390,324
EAGLE BANCORP MONTANA INC	600	11,850	10,428
EAGLE BULK SHIPPING INC	145,020	802,966	317,594
EAGLE MATERIALS INC	92,122	5,700,787	6,468,807
EAGLE PHARMACEUTICALS INC	24,892	1,384,576	1,194,318
EAST WEST BANCORP INC	315,231	10,990,915	11,423,971
EASTERN CO/THE	16,004	455,308	285,991
EASTMAN CHEMICAL CO	315,702	18,822,086	21,985,487
EASTMAN KODAK CO	43,200	781,682	96,336
EATON CORP PLC	905,007	62,715,707	79,170,012
EATON VANCE CORP	271,939	10,424,077	10,496,845
EBAY INC	1,569,895	41,186,820	82,340,993
EBIX INC	58,373	1,514,066	1,305,220
ECA MARCELLUS TRUST I	49,300	81,345	22,678
ECHO GLOBAL LOGISTICS INC	78,986	1,572,051	1,707,677
ECHOSTAR CORP A	123,333	4,225,545	3,448,391
ECOLAB INC	2,130,645	323,490,202	423,891,823
EDAP TMS SA ADR	49,400	129,590	123,500
EDGEWELL PERSONAL CARE CO	124,256	4,336,560	3,871,817
EDISON INTERNATIONAL	780,331	40,723,175	42,379,777
EDITAS MEDICINE INC	123,602	3,391,812	3,656,147
EDUCATION MGMT CORP NEW	98,577	0	0
EDUCATIONAL DEVELOPMENT CORP	15,400	187,880	148,148
EDWARDS LIFESCIENCES CORP	1,408,887	52,702,790	97,368,181
EGAIN CORP	46,199	388,873	513,271
EHEALTH INC	57,134	3,050,131	5,612,844
EIDOS THERAPEUTICS INC	25,038	1,062,325	1,193,561
EIGER BIOPHARMACEUTICALS INC	52,023	622,844	499,421
EL PASO ELECTRIC CO	90,876	4,373,889	6,088,692
EL POLLO LOCO HOLDINGS INC	39,584	436,797	584,260

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
ELANCO ANIMAL HEALTH INC	1,587,655	29,808,037	31,467,579
ELASTIC NV	122,000	9,894,080	11,249,620
ELDORADO RESORTS INC	368,030	9,123,533	14,743,282
ELECTRONIC ARTS INC	743,106	50,163,750	98,127,147
ELEMENT SOLUTIONS INC	680,794	7,811,384	7,386,615
ELEVATE CREDIT INC	164,113	771,494	242,887
ELF BEAUTY INC	60,285	658,066	1,149,635
ELI LILLY + CO	4,190,141	413,561,152	687,937,349
ELLINGTON FINANCIAL INC	91,279	1,208,808	1,075,267
ELMIRA SAVINGS BANK	2,802	54,715	29,561
EMAGIN CORPORATION	62,890	97,480	49,627
EMCOR GROUP INC	121,199	7,443,760	8,016,102
EMCORE CORP	75,395	344,932	239,756
EMERALD HOLDING INC	55,751	907,563	171,713
EMERGENT BIOSOLUTIONS INC	100,347	4,667,638	7,935,441
EMERSON ELECTRIC CO	1,496,590	71,138,964	92,833,478
EMMIS COMMUNICATIONS CLASS A	32,600	148,982	53,790
EMPLOYERS HOLDINGS INC	65,939	2,211,266	1,988,061
ENABLE MIDSTREAM PARTNERS LP	333,005	3,091,463	1,558,463
ENANTA PHARMACEUTICALS INC	42,095	3,230,918	2,113,590
ENCOMPASS HEALTH CORP	221,610	12,385,469	13,724,307
ENCORE CAPITAL GROUP INC	71,829	2,171,094	2,455,115
ENCORE WIRE CORP	45,442	1,962,549	2,218,478
ENDEAVOUR INTERNATIONAL CORP	72,400	0	0
ENDOLOGIX INC	8,360	840,790	6,721
ENDURANCE INTERNATIONAL GROU	150,711	1,458,653	607,365
ENERGIZER HOLDINGS INC	138,594	3,990,445	6,581,829
ENERGY RECOVERY INC	76,700	659,066	582,537
ENERGY TRANSFER LP	5,600,647	80,367,284	39,876,607
ENERPAC TOOL GROUP CORP	120,025	2,277,385	2,112,440
ENERSYS	95,238	4,178,064	6,131,422
ENGLOBAL CORP	90,000	76,500	92,700
ENLINK MIDSTREAM LLC	600,362	4,668,967	1,464,883
ENNIS INC	56,610	1,135,402	1,026,905
ENOVA INTERNATIONAL INC	66,970	1,413,648	995,844
ENPHASE ENERGY INC	239,001	5,279,445	11,369,278
ENPRO INDUSTRIES INC	46,203	1,857,664	2,277,346
ENSIGN GROUP INC/THE	115,242	4,913,379	4,822,878
ENTEGRIS INC	299,605	9,187,574	17,691,675
ENTERCOM COMMUNICATIONS CL A	260,168	1,048,365	359,032
ENERGY CORP	1,682,878	151,163,901	157,870,785
ENTERPRISE BANCORP INC	19,859	655,276	473,041
ENTERPRISE FINANCIAL SERVICE	53,257	1,617,151	1,657,358
ENTERPRISE PRODUCTS PARTNERS	3,320,863	92,165,844	60,340,081
ENTRAVISION COMMUNICATIONS A	266,414	1,405,530	380,972
ENVESTNET INC	108,601	6,949,365	7,986,518
ENVISTA HOLDINGS CORP	382,271	7,566,338	8,062,095
ENVIVA PARTNERS LP	23,304	671,533	839,876
ENZO BIOCHEM INC	89,900	746,440	201,376

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
EOG RESOURCES INC	1,353,548	85,458,787	68,570,742
EPAM SYSTEMS INC	119,633	15,030,564	30,148,712
EPIZYME INC	197,339	2,398,138	3,169,264
EPLUS INC	29,372	1,100,578	2,076,013
EQT CORP	584,566	11,729,757	6,956,335
EQUIFAX INC	247,676	20,996,994	42,570,551
EQUITABLE HOLDINGS INC	1,003,961	22,179,516	19,366,408
EQUITRANS MIDSTREAM CORP	1,307,680	17,354,212	10,866,821
EQUITY BANCSHARES INC CL A	33,130	819,384	577,787
ERIE INDEMNITY COMPANY CL A	213,545	33,359,621	40,979,286
ERIN ENERGY CORP	53,382	166,554	37
ESC ACETO CHEM INC COM	71,900	0	0
ESC NII HLDGS INC BE	21,400	0	0
ESC RENTECH NITROGEN PARTN	46,300	0	0
ESC SEVENTY SEVEN	106,500	0	0
ESCALADE INC	13,800	180,780	192,648
ESCO TECHNOLOGIES INC	56,646	3,915,144	4,788,286
ESCROW AMBASSADORS GROUP INC	34,400	0	0
ESCROW CHROMCRAFT REVINGTON	13,900	0	0
ESCROW DESIGN WITHIN REACH	16,361	0	0
ESPERION THERAPEUTICS INC	87,897	4,632,306	4,509,995
ESPEY MFG + ELECTRONICS CORP	17,235	447,789	298,507
ESQUIRE FINANCIAL HOLDINGS I	4,600	114,375	77,740
ESSA BANCORP INC	19,000	278,950	264,480
ESSENT GROUP LTD	250,729	10,007,301	9,093,941
ESSENTIAL UTILITIES INC	548,001	18,610,456	23,147,562
ESTEE LAUDER COMPANIES CL A	500,743	57,070,555	94,480,189
ETHAN ALLEN INTERIORS INC	51,787	1,168,410	612,640
ETSY INC	241,254	5,927,458	25,628,412
EURONET WORLDWIDE INC	178,468	16,223,099	17,100,804
EVANS BANCORP INC	9,600	405,362	223,296
EVELO BIOSCIENCES INC	5,000	68,712	24,500
EVENTBRITE INC CLASS A	128,600	1,960,212	1,102,102
EVERBRIDGE INC	70,846	6,010,807	9,802,253
EVERCORE INC A	89,848	5,771,558	5,293,844
EVERGY INC	1,913,063	106,164,407	113,425,505
EVERI HOLDINGS INC	180,170	1,214,922	929,677
EVERQUOTE INC CLASS A	34,580	1,413,590	2,011,173
EVERSOURCE ENERGY	2,730,783	177,733,200	227,392,300
EVO PAYMENTS INC CLASS A	90,195	2,243,972	2,059,152
EVOFEM BIOSCIENCES INC	103,862	376,352	293,929
EVOKE PHARMA INC	36,700	89,181	129,918
EVOLANT HEALTH INC A	152,800	1,348,207	1,087,936
EVOLUS INC	25,600	340,837	135,680
EVOLUTION PETROLEUM CORP	56,836	445,822	159,141
EVOLVING SYSTEMS INC	27,237	102,139	29,688
EVOQUA WATER TECHNOLOGIES CO	190,975	2,979,565	3,552,135
EW SCRIPPS CO/THE A	113,400	1,282,480	992,250
EXACT SCIENCES CORP	302,700	20,157,326	26,316,738
EXELIXIS INC	681,180	12,180,878	16,171,213

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
EXELON CORP	7,601,142	324,658,779	275,845,443
EXICURE INC	131,305	383,557	320,384
EXLSERVICE HOLDINGS INC	75,721	3,913,320	4,800,711
EXONE CO/THE	22,520	157,640	192,546
EXP WORLD HOLDINGS INC	52,637	511,064	897,461
EXPEDIA GROUP INC	380,255	33,136,207	31,256,961
EXPEDITORS INTL WASH INC	633,344	37,425,957	48,159,478
EXPERIENCE INVESTMENT CORP A	56,200	554,602	560,314
EXPONENT INC	115,068	3,246,525	9,312,453
EXPRESS INC	128,700	2,720,515	198,198
EXTENDED STAY AMERICA INC	737,015	11,606,071	8,247,198
EXTERRAN CORP	60,123	1,250,411	324,063
EXTRACTION OIL + GAS INC	191,000	889,512	23,111
EXTREME NETWORKS INC	257,654	2,468,349	1,118,218
EXXON MOBIL CORP	9,515,561	553,336,475	425,535,888
EYEPOINT PHARMACEUTICALS INC	64,900	148,621	49,129
EZCORP INC CL A	107,301	1,805,231	675,996
F5 NETWORKS INC	511,887	73,641,337	71,397,999
FACEBOOK INC CLASS A	5,505,269	686,729,871	1,250,081,432
FACTSET RESEARCH SYSTEMS INC	83,219	14,473,130	27,334,945
FAIR ISAAC CORP	63,102	7,637,067	26,379,160
FALCON MINERALS CORP	30,900	204,284	98,880
FAR POINT ACQUISITION CORP A	129,100	1,323,318	1,321,984
FARMER BROS CO	32,500	390,188	238,550
FARMERS + MERCHANTS BANCO/OH	22,452	572,645	476,880
FARMERS NATL BANC CORP	57,235	811,844	678,807
FARO TECHNOLOGIES INC	39,316	1,772,765	2,107,338
FASTENAL CO	1,376,683	34,790,465	58,977,100
FASTLY INC CLASS A	162,675	8,821,875	13,848,523
FATE THERAPEUTICS INC	138,520	3,030,874	4,752,621
FAUQUIER BANKSHARES INC	2,600	55,848	38,740
FB FINANCIAL CORP	39,468	1,502,264	977,622
FBL FINANCIAL GROUP INC CL A	22,094	1,163,979	792,954
FEDERAL AGRIC MTG CORP CL C	21,098	808,897	1,350,483
FEDERAL SIGNAL CORP	132,299	2,325,358	3,933,249
FEDERATED HERMES INC	229,815	6,541,740	5,446,616
FEDEX CORP	543,182	62,692,943	76,164,980
FEDNAT HOLDING CO	25,000	581,748	276,750
FERRELLGAS PARTNERS LP	214,000	4,958,372	79,822
FERRO CORP	180,818	2,491,301	2,158,967
FERROGLOBE REP + WRNTY INS TRU	440,900	0	0
FIBROGEN INC	183,768	7,220,821	7,448,117
FIDELITY D+D BANCORP INC	2,000	125,420	96,180
FIDELITY NATIONAL FINANCIAL	2,331,386	80,110,093	71,480,295
FIDELITY NATIONAL INFO SERV	4,053,700	415,538,629	543,560,633
FIDUS INVESTMENT CORP	53,800	635,309	487,966
FIESTA RESTAURANT GROUP	39,304	473,026	250,760
FIFTH THIRD BANCORP	1,666,344	35,125,445	32,127,112
FINANCIAL INSTITUTIONS INC	36,192	821,767	673,533
FINSERV ACQUISITION CORP A	5,240	51,693	52,138

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
FINTECH ACQUISITION CORP A	33,160	337,902	370,066
FIREEYE INC	487,785	8,349,028	5,938,782
FIRST ACCEPTANCE CORP	25,900	22,015	18,130
FIRST AMERICAN FINANCIAL	246,546	9,397,678	11,839,139
FIRST BANCORP INC/ME	22,395	604,168	485,972
FIRST BANCORP/NC	63,524	1,851,856	1,593,182
FIRST BANCSHARES INC/MS	45,705	1,258,455	1,028,363
FIRST BANK/HAMILTON NJ	11,900	136,005	77,588
FIRST BUSEY CORP	114,700	3,036,778	2,139,155
FIRST BUSINESS FINANCIAL SER	16,500	424,459	271,425
FIRST CAPITAL INC	6,600	427,663	458,502
FIRST CHOICE BANCORP	23,351	450,652	382,489
FIRST CITIZENS BCSHS CL A	18,308	6,981,219	7,415,106
FIRST COMMONWEALTH FINL CORP	220,468	2,757,705	1,825,475
FIRST COMMUNITY BANKSHARES	38,420	933,905	862,529
FIRST COMMUNITY CORP	14,400	284,235	218,160
FIRST FINANCIAL BANCORP	224,880	4,812,518	3,123,583
FIRST FINANCIAL CORP/INDIANA	29,621	1,164,415	1,091,238
FIRST FINL BANKSHARES INC	286,500	6,072,268	8,276,985
FIRST FOUNDATION INC	89,890	1,380,437	1,468,803
FIRST HAWAIIAN INC	290,675	7,809,909	5,011,237
FIRST HORIZON NATIONAL CORP	880,072	10,809,294	8,765,517
FIRST INTERNET BANCORP	19,100	462,062	317,442
FIRST INTERSTATE BANCSYS A	95,072	3,726,643	2,943,429
FIRST MARINER BANCORP INC	143,653	0	0
FIRST MERCHANTS CORP	119,469	3,406,619	3,293,760
FIRST MID BANCSHARES INC	32,189	1,095,769	844,317
FIRST MIDWEST BANCORP INC/IL	254,892	4,442,780	3,402,808
FIRST NORTHWEST BANCORP	6,400	114,677	79,488
FIRST OF LONG ISLAND CORP	50,526	775,290	825,595
FIRST REGIONAL BANCORP/CAL	12,009	0	1
FIRST REPUBLIC BANK/CA	411,419	30,710,650	43,606,300
FIRST SAVINGS FINANCIAL GRP	200	14,400	8,666
FIRST SOLAR INC	170,692	11,015,129	8,449,254
FIRST UNITED CORP	13,586	264,136	181,237
FIRST US BANCSHARES INC	10,600	119,674	73,140
FIRSTCASH INC	91,699	4,652,801	6,187,849
FIRSTENERGY CORP	2,649,313	106,440,129	102,740,358
FIS CALBEAR FUND	10,825	105,891	25,811
FISERV INC	3,839,639	290,405,170	374,825,559
FITBIT INC A	528,267	4,702,909	3,412,605
FIVE BELOW	111,100	9,475,712	11,877,701
FIVE POINT HOLDINGS LLC CL A	129,977	908,140	597,894
FIVE PRIME THERAPEUTICS INC	36,100	494,318	220,210
FIVE STAR SENIOR LIVING INC	44,107	274,817	172,017
FIVE9 INC	126,801	5,730,090	14,033,067
FLAGSTAR BANCORP INC	131,011	4,502,872	3,855,654
FLANIGAN S ENTERPRISES INC	3,800	94,810	55,860
FLEETCOR TECHNOLOGIES INC	416,159	87,179,920	104,676,473
FLEX LTD	1,690,836	15,069,724	17,331,069

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
FLEXION THERAPEUTICS INC	75,542	1,604,880	993,377
FLEXSTEEL INDS	33,288	1,094,287	420,427
FLIR SYSTEMS INC	1,121,814	52,490,128	45,511,994
FLOOR + DECOR HOLDINGS INC A	180,948	7,285,765	10,431,652
FLOTEK INDUSTRIES INC	138,500	1,564,549	166,200
FLOWERS FOODS INC	439,916	7,190,609	9,836,522
FLOWSERVE CORP	311,967	12,192,501	8,897,299
FLUENT INC	170,562	933,055	303,600
FLUIDIGM CORP	156,207	1,029,701	626,390
FLUOR CORP	311,710	9,716,036	3,765,457
FLUSHING FINANCIAL CORP	59,595	1,195,029	686,534
FLY LEASING LTD ADR	51,079	820,570	419,359
FLYING EAGLE ACQUISITION A	28,700	293,198	315,126
FMC CORP	290,533	14,787,000	28,942,897
FNB CORP	741,766	9,300,286	5,563,245
FNCB BANCORP INC	15,600	135,592	89,700
FOCUS FINANCIAL PARTNERS A	69,797	1,868,105	2,306,791
FONAR CORP	12,779	356,632	273,087
FOOT LOCKER INC	239,403	7,836,378	6,980,991
FORD MOTOR CO	11,207,270	100,472,374	68,140,202
FORESCOUT TECHNOLOGIES INC	97,300	2,856,859	2,062,760
FORESTAR GROUP INC	8,174	131,219	123,264
FORMFACTOR INC	170,561	2,766,111	5,002,554
FORRESTER RESEARCH INC	24,067	859,187	771,107
FORTERRA INC	43,204	698,799	482,157
FORTINET INC	315,663	18,959,486	43,331,060
FORTIVE CORP	778,674	49,547,906	52,685,083
FORTRESS BIOTECH INC	117,500	464,252	314,900
FORTRESS TRANSPORTATION + IN	186,537	2,966,641	2,423,116
FORTUNE BRANDS HOME + SECURI	312,339	11,222,261	19,967,832
FORUM ENERGY TECHNOLOGIES IN	31,500	583,313	16,635
FORUM MERGER II CORP CL A	41,100	423,136	676,095
FORWARD AIR CORP	62,379	2,976,023	3,107,722
FOSSIL GROUP INC	102,467	3,201,795	476,472
FOSTER (LB) CO A	20,400	445,248	260,508
FOUNDATION BUILDING MATERIAL	46,677	764,924	728,628
FOX CORP CLASS A	754,813	28,417,101	20,244,085
FOX CORP CLASS B	355,869	13,945,485	9,551,524
FOX FACTORY HOLDING CORP	85,269	5,325,020	7,044,072
FRANCESCAS HOLDINGS CORP	5,066	1,801,602	19,504
FRANCHISE GROUP INC	42,422	965,169	928,193
FRANKLIN COVEY CO	27,812	659,330	595,177
FRANKLIN ELECTRIC CO INC	103,289	3,690,989	5,424,738
FRANKLIN FINANCIAL NETWORK	30,426	977,807	783,470
FRANKLIN FINANCIAL SERVICES	3,000	114,265	77,700
FRANKLIN RESOURCES INC	632,716	16,456,518	13,268,055
FRD ACQUISITION CO SHS	182,200	0	0
FRED S INC CLASS A	106,700	2,353,003	758
FREEDOM HOLDING CORP/NV	34,739	633,986	649,272
FREEPORT MCMORAN INC	3,048,117	48,542,191	35,266,714

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
FREIGHTCAR AMERICA INC	137,405	2,075,808	170,382
FREQUENCY ELECTRONICS INC	13,737	120,473	120,336
FREQUENCY THERAPEUTICS INC	55,544	1,067,490	1,291,398
FRESH DEL MONTE PRODUCE INC	68,644	2,092,442	1,690,015
FRESHPET INC	87,469	4,499,701	7,317,657
FRIEDMAN INDUSTRIES	61,891	374,441	312,550
FRONTAGE HOLDINGS CORP	1,486,000	710,201	920,308
FRONTDOOR INC	190,480	7,655,383	8,443,978
FRONTIER COMMUNICATIONS CORP	97,160	8,331,816	9,473
FRP HOLDINGS INC	15,351	432,185	622,944
FS BANCORP INC	8,693	388,884	335,289
FS KKR CAP CORP	288,434	8,298,099	4,038,076
FTI CONSULTING INC	83,063	5,398,405	9,514,867
FUEL TECH INC	666,139	869,453	559,557
FUELCELL ENERGY INC	485,341	1,097,459	1,096,871
FULCRUM THERAPEUTICS INC	31,744	384,397	580,598
FULGENT GENETICS INC	21,473	360,016	343,568
FULL HOUSE RESORTS INC	59,245	191,361	78,796
FULTON FINANCIAL CORP	362,876	4,961,347	3,821,084
FUNKO INC CLASS A	52,902	620,143	306,832
FUTUREFUEL CORP	58,765	699,130	702,242
FVCBANKCORP INC	8,700	148,387	93,612
G III APPAREL GROUP LTD	166,172	5,010,689	2,208,426
G1 THERAPEUTICS INC	69,000	2,272,605	1,673,940
GAIA INC	110,482	1,366,690	925,839
GAIN CAPITAL HOLDINGS INC	43,161	241,789	259,829
GALECTIN THERAPEUTICS INC	23,450	79,730	71,757
GALERA THERAPEUTICS INC	2,149	23,575	15,344
GAMESTOP CORP CLASS A	126,643	2,312,347	549,631
GANNETT CO INC	293,150	2,438,021	404,547
GAP INC/THE	732,773	10,155,914	9,247,595
GARRISON CAPITAL INC	43,000	355,180	145,340
GARTNER INC	194,416	14,489,848	23,588,493
GASLOG PARTNERS LP	72,012	1,511,859	295,249
GATES INDUSTRIAL CORP PLC	102,289	1,174,287	1,051,531
GATEWAY CASINOS + ENTERTAINMEN	23,241	850,000	104,585
GATX CORP	77,676	4,233,954	4,736,682
GAZPROM PJSC SPON ADR	14,517,298	95,696,883	78,335,340
GCI LIBERTY INC CLASS A	221,499	8,143,754	15,753,009
GCP APPLIED TECHNOLOGIES	108,133	1,834,819	2,009,111
GENASYS INC	66,500	156,275	323,190
GENCO SHIPPING + TRADING LTD	27,142	78,328	170,452
GENCOR INDUSTRIES INC	9,900	152,955	125,136
GENERAC HOLDINGS INC	136,939	7,112,036	16,696,972
GENERAL ATLANTIC GP L.P.	24,600,000	24,600,000	24,600,000
GENERAL DYNAMICS CORP	570,037	64,108,856	85,197,730
GENERAL ELECTRIC CO	22,285,745	288,680,966	152,211,638
GENERAL FINANCE CORP	21,367	442,563	427,928
GENERAL MILLS INC	4,488,164	207,675,462	276,695,311
GENERAL MOLY INC	142,200	53,837	28,568

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
GENERAL MOTORS CO	3,888,609	125,404,344	98,381,808
GENESCO INC	32,355	1,225,707	700,809
GENESIS ENERGY L.P.	475,463	11,526,718	3,432,843
GENESIS HEALTHCARE INC	173,000	247,390	119,387
GENIE ENERGY LTD B	31,418	220,640	231,236
GENIUS BRANDS INTERNATIONAL	86,200	244,299	193,950
GENMARK DIAGNOSTICS INC	149,890	1,432,754	2,204,882
GENOCEA BIOSCIENCES INC	7,500	55,800	17,250
GENPACT LTD	528,337	15,443,757	19,294,867
GENTEX CORP	596,014	11,111,021	15,359,281
GENTHERM INC	82,103	2,286,265	3,193,807
GENUINE PARTS CO	1,125,872	100,534,132	97,905,829
GENWORTH FINANCIAL INC CL A	1,150,073	10,376,317	2,656,669
GEOSPACE TECHNOLOGIES CORP	60,238	1,302,294	452,990
GERMAN AMERICAN BANCORP	54,383	1,306,186	1,691,311
GERON CORP	375,200	717,534	817,936
GIBRALTAR INDUSTRIES INC	72,156	2,464,862	3,464,210
GIGCAPITAL2 INC	36,300	361,546	368,082
GILEAD SCIENCES INC	10,625,917	708,852,223	817,558,054
GLACIER BANCORP INC	211,964	6,611,219	7,480,210
GLADSTONE CAPITAL CORP	65,100	562,326	475,881
GLADSTONE INVESTMENT CORP	74,300	846,594	760,832
GLATFELTER	99,907	1,650,821	1,603,507
GLAUKOS CORP	85,600	5,416,264	3,288,752
GLEN BURNIE BANCORP	1,300	15,405	10,712
GLOBAL BLOOD THERAPEUTICS IN	130,706	6,868,694	8,251,470
GLOBAL INFRA PRTRNS IV A/B LP	10,198,442	10,198,442	1,584,440
GLOBAL PARTNERS LP	51,878	1,354,678	507,886
GLOBAL PAYMENTS INC	1,509,350	158,596,069	256,015,947
GLOBAL WATER RESOURCES INC	10,726	136,918	113,052
GLOBALSCAPE INC	28,800	202,017	280,800
GLOBALSTAR INC	1,224,393	548,124	399,887
GLOBE LIFE INC	848,172	63,337,662	62,959,808
GLOBUS MEDICAL INC A	166,418	7,053,292	7,939,803
GLU MOBILE INC	342,561	1,778,479	3,175,540
GLYCOMIMETICS INC	54,100	350,328	203,416
GMS INC	94,927	2,409,817	2,334,255
GNC HOLDINGS INC CL A	155,800	4,625,551	85,690
GODADDY INC CLASS A	373,373	24,277,169	27,379,442
GOGO INC	130,059	585,636	410,986
GOLAR LNG PARTNERS LP	107,239	2,176,016	276,677
GOLD RESOURCE CORP	143,773	623,434	590,907
GOLDEN ENTERTAINMENT INC	38,324	699,285	341,850
GOLDEN MINERALS CO	22,200	9,080	9,546
GOLDFIELD CORP	116,046	522,207	430,531
GOLDMAN SACHS BDC INC	75,400	1,424,335	1,223,742
GOLDMAN SACHS GROUP INC	766,370	133,106,327	151,450,039
GOLUB CAPITAL BDC INC	284,456	4,131,985	3,313,912
GOOD TIMES RESTAURANTS INC	15,000	49,500	18,450
GOODYEAR TIRE + RUBBER CO	1,137,296	19,947,066	10,173,113

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
GOOSEHEAD INSURANCE INC A	28,925	1,345,150	2,174,003
GOPRO INC CLASS A	285,930	3,077,172	1,361,027
GORES METROPOULOS INC CL A	81,700	830,134	873,373
GORMAN RUPP CO	38,860	1,039,258	1,207,769
GOSSAMER BIO INC	100,300	2,050,579	1,303,900
GP STRATEGIES CORP	26,100	227,315	223,938
GRACO INC	393,339	11,220,663	18,876,339
GRAF INDUSTRIAL CORP	49,700	507,652	690,830
GRAFTECH INTERNATIONAL LTD	155,705	1,929,662	1,242,526
GRAHAM CORP	19,600	426,749	249,704
GRAHAM HOLDINGS CO CLASS B	9,386	4,928,927	3,216,301
GRANA Y MONTERO SA SPON ADR	188,300	3,137,136	412,377
GRAND CANYON EDUCATION INC	95,272	4,567,348	8,624,974
GRANITE CONSTRUCTION INC	94,800	3,555,627	1,814,472
GRAPHIC PACKAGING HOLDING CO	653,343	8,638,092	9,140,269
GRAVITY CO LTD SPONSORED ADR	6,516	265,108	359,683
GRAY TELEVISION INC	203,609	2,510,097	2,840,346
GREAT ELM CAPITAL GROUP INC	47,867	184,288	111,530
GREAT LAKES DREDGE + DOCK CO	147,983	1,112,628	1,370,323
GREAT SOUTHERN BANCORP INC	24,349	982,225	982,726
GREAT WESTERN BANCORP INC	125,101	4,958,522	1,721,390
GREEN BRICK PARTNERS INC	52,660	598,042	624,021
GREEN DOT CORP CLASS A	113,350	4,545,640	5,563,218
GREEN PLAINS INC	69,200	1,180,989	706,878
GREEN PLAINS PARTNERS LP	10,321	144,352	68,944
GREENBRIER COMPANIES INC	71,282	2,021,441	1,621,666
GREENE COUNTY BANCORP INC	688	19,267	15,342
GREENHILL + CO INC	31,384	1,411,828	313,526
GREENSKY INC CLASS A	136,570	1,190,273	669,193
GREIF INC CL A	140,693	6,561,981	4,841,246
GREIF INC CL B	6,339	333,417	265,160
GRID DYNAMICS HOLDINGS INC	47,700	422,668	329,130
GRIFFIN INDUSTRIAL REALTY IN	4,404	164,710	238,565
GRIFFON CORP	81,522	1,460,606	1,509,787
GRITSTONE ONCOLOGY INC	60,100	507,402	399,064
GROCERY OUTLET HOLDING CORP	268,845	9,773,191	10,968,876
GROUP 1 AUTOMOTIVE INC	38,941	2,435,347	2,568,938
GROUPON INC	59,919	5,371,577	1,085,732
GROWGENERATION CORP	63,527	469,010	434,525
GRUBHUB INC	187,200	10,062,769	13,160,160
GSE SYSTEMS INC	114,767	367,254	115,915
GSI TECHNOLOGY INC	32,610	240,010	234,140
GTT COMMUNICATIONS INC	70,724	2,180,848	577,108
GTY TECHNOLOGY HOLDINGS INC	89,700	444,812	373,601
GUARANTY BANCSHARES INC	15,221	445,396	393,767
GUARANTY FEDERAL BNCSHS INC	18,316	430,847	279,319
GUARDANT HEALTH INC	151,952	12,778,100	12,327,866
GUESS? INC	178,860	2,748,552	1,729,576
GUIDEWIRE SOFTWARE INC	170,772	14,728,224	18,930,076
GULF ISLAND FABRICATION INC	28,000	289,800	85,960

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
GULFPORT ENERGY CORP	366,982	4,012,011	400,010
GW PHARMACEUTICALS ADR	61,500	8,345,234	7,547,280
GWG HOLDINGS INC	100	1,071	767
GX ACQUISITION CORP CL A	51,900	512,655	529,380
GYRODYNE LLC	2,070	42,849	34,569
H.B. FULLER CO.	138,163	4,594,902	6,162,070
H+E EQUIPMENT SERVICES INC	72,996	1,865,343	1,348,966
H+R BLOCK INC	659,531	15,554,035	9,418,103
HACKETT GROUP INC/THE	55,124	815,623	746,379
HAEMONETICS CORP/MASS	111,818	9,756,108	10,014,420
HAIN CELESTIAL GROUP INC	181,779	3,581,223	5,727,856
HALLIBURTON CO	2,043,976	48,284,063	26,530,808
HALLMARK FINL SERVICES INC	51,191	544,049	178,657
HALOZYME THERAPEUTICS INC	303,383	4,970,291	8,133,698
HAMILTON LANE INC CLASS A	50,175	2,916,886	3,380,290
HANCOCK WHITNEY CORP	190,789	7,471,170	4,044,727
HANESBRANDS INC	1,177,794	12,155,306	13,297,294
HANGER INC	81,595	1,920,882	1,351,213
HANMI FINANCIAL CORPORATION	67,397	1,142,763	654,425
HANOVER INSURANCE GROUP INC/	85,871	6,745,634	8,701,308
HARBERT INFRASTRUCTURE FUND VI	9,673,752	9,673,752	9,673,752
HARBORONE BANCORP INC	117,096	1,024,337	1,000,000
HARLEY DAVIDSON INC	573,123	15,889,890	13,623,134
HARLEYSVILLE FINANCIAL CORP	14,163	339,912	319,092
HARMONIC INC	210,008	1,379,872	997,538
HARPOON THERAPEUTICS INC	23,441	425,572	389,121
HARROW HEALTH INC	15,700	102,117	81,797
HARSCO CORP	172,949	5,561,110	2,336,541
HARTE HANKS INC	12,030	110,796	36,571
HARTFORD FINANCIAL SVCS GRP	3,007,989	143,964,283	115,957,976
HARVARD BIOSCIENCE INC	123,240	727,116	382,044
HARVEST NATURAL RESOURCES IN	13,475	0	0
HARVEST OIL + GAS CORP	2,167	17,567	2,769
HASBRO INC	283,948	22,144,855	21,281,903
HAVERTY FURNITURE	38,610	470,488	617,760
HAWAIIAN ELECTRIC INDS	242,185	8,325,257	8,733,191
HAWAIIAN HOLDINGS INC	221,638	4,618,109	3,111,798
HAWKINS INC	21,386	561,449	910,616
HAWTHORN BANCSHARES INC	11,960	232,858	235,492
HAYMAKER ACQ CORP II CL A	72,200	724,463	747,270
HAYNES INTERNATIONAL INC	27,601	1,116,265	644,759
HBT FINANCIAL INC/DE	19,536	208,696	260,415
HC LTH LLC (HINES)	771,652,207	771,652,207	639,227,744
HC2 HOLDINGS INC	88,600	449,202	295,924
HCA HEALTHCARE INC	667,333	57,374,112	64,771,341
HCI GROUP INC	13,430	487,081	620,197
HD SUPPLY HOLDINGS INC	366,153	12,417,142	12,687,201
HEALTH CATALYST INC	65,300	1,928,475	1,904,801
HEALTHCARE MERGER CORP A	1,260	12,538	12,625
HEALTHCARE SERVICES GROUP	165,058	3,122,588	4,037,319

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
HEALTH EQUITY INC	141,300	8,675,982	8,290,071
HEALTHSTREAM INC	57,018	1,294,187	1,261,808
HEARTLAND EXPRESS INC	100,319	1,524,004	2,088,642
HEARTLAND FINANCIAL USA INC	79,130	3,690,122	2,646,107
HECLA MINING CO	1,167,615	3,503,624	3,818,101
HEICO CORP	99,702	11,221,972	9,935,304
HEICO CORP CLASS A	186,269	11,597,787	15,132,494
HEIDRICK + STRUGGLES INTL	43,738	1,323,510	945,616
HELEN OF TROY LTD	56,308	5,760,637	10,617,436
HELIOS TECHNOLOGIES INC	64,921	2,443,978	2,418,307
HELIX ENERGY SOLUTIONS GROUP	325,189	4,784,439	1,128,406
HELMERICH + PAYNE	239,579	10,630,044	4,674,186
HEMISPHERE MEDIA GROUP INC	36,319	418,839	357,016
HENNESSY CAPITAL ACQUISITI A	61,300	620,246	658,975
HENRY SCHEIN INC	1,207,653	68,451,566	70,514,859
HEPION PHARMACEUTICALS INC	1	221	3
HERBALIFE NUTRITION LTD	311,568	9,842,684	14,014,329
HERC HOLDINGS INC	53,657	2,528,707	1,648,880
HERCULES CAPITAL INC	247,400	3,043,348	2,590,278
HERCULES OFFSHORE INC ESCROW	64,803	2,607,168	0
HERITAGE COMMERCE CORP	128,378	1,660,290	963,477
HERITAGE CRYSTAL CLEAN INC	33,516	669,149	585,189
HERITAGE FINANCIAL CORP	79,679	1,771,295	1,593,580
HERITAGE INSURANCE HOLDINGS	57,297	770,704	750,018
HERMAN MILLER INC	133,431	4,762,967	3,150,306
HERON THERAPEUTICS INC	193,842	4,252,923	2,851,416
HERSHEY CO/THE	1,245,566	136,671,349	161,450,265
HERTZ GLOBAL HOLDINGS INC	222,489	3,594,080	313,709
HESKA CORP	18,475	1,663,520	1,721,316
HESS CORP	559,200	29,877,989	28,972,152
HESS MIDSTREAM LP CLASS A	37,522	774,992	687,403
HEWLETT PACKARD ENTERPRISE	3,070,373	29,821,430	29,874,729
HEXCEL CORP	188,565	9,532,600	8,526,909
HEXION HOLDINGS CORP B	63,138	3,153,221	426,182
HF FOODS GROUP INC	71,900	622,782	650,695
HG HOLDINGS INC	54,346	33,559	35,053
HI CRUSH INC	95,800	2,308,335	14,542
HIBBETT SPORTS INC	37,772	988,419	790,946
HIGHLAND RESTORATION CAP PTNRS	11,883,683	11,883,683	46,093,953
HIGHPOINT RESOURCES CORP	631,700	3,410,770	186,352
HILL INTERNATIONAL INC	87,900	470,265	133,608
HILL ROM HOLDINGS INC	149,859	9,448,096	16,451,521
HILLENBRAND INC	165,711	4,120,527	4,485,797
HILLTOP HOLDINGS INC	166,050	3,755,277	3,063,623
HILTON GRAND VACATIONS INC	215,294	6,838,958	4,208,998
HILTON WORLDWIDE HOLDINGS IN	612,160	47,659,311	44,963,152
HIMAX TECHNOLOGIES INC ADR	198,416	720,922	821,442
HINGHAM INSTITUTION FOR SVGS	3,157	583,093	529,681
HIPCRICKET INC	120,300	0	0
HISTOGEN INC	2,489	85,656	9,483

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
HKN INC	3,699	33,661	25,893
HMN FINANCIAL INC	25,267	483,891	371,172
HMS HOLDINGS CORP	194,861	4,665,644	6,311,548
HNI CORP	99,953	3,616,409	3,055,563
HOLLY ENERGY PARTNERS LP	101,825	2,937,535	1,485,627
HOLLYFRONTIER CORP	344,709	13,610,036	10,065,503
HOLOGIC INC	578,536	18,978,798	32,976,552
HOME BANCORP INC	17,093	729,581	457,238
HOME BANCSHARES INC	343,544	5,959,576	5,283,707
HOME DEPOT INC	3,202,339	446,794,372	802,217,943
HOMESTREET INC	52,265	1,363,914	1,286,242
HOMETRUST BANCSHARES INC	34,580	750,698	553,280
HOMOLOGY MEDICINES INC	68,800	1,101,975	1,045,072
HONEYWELL INTERNATIONAL INC	1,655,861	175,110,860	239,420,942
HOOKER FURNITURE CORP	25,734	1,053,682	500,526
HOOKIPA PHARMA INC	30,531	349,590	354,770
HOPE BANCORP INC	275,524	3,091,392	2,540,331
HORACE MANN EDUCATORS	92,436	2,983,363	3,395,174
HORIZON BANCORP INC/IN	94,573	1,590,549	1,010,985
HORIZON GLOBAL CORP	112,684	1,768,502	247,905
HORIZON TECHNOLOGY FINANCE C	33,900	330,958	369,510
HORIZON THERAPEUTICS PLC	410,395	9,805,209	22,809,754
HORMEL FOODS CORP	2,440,630	91,701,446	117,809,210
HORNBECK OFFSHORE SERVICES	83,500	298,930	1,060
HOSTESS BRANDS INC	276,961	3,581,863	3,384,463
HOUGHTON MIFFLIN HARCOURT CO	240,758	1,467,295	435,772
HOULIHAN LOKEY INC	99,331	4,707,283	5,526,777
HOUSTON WIRE + CABLE CO	55,900	405,275	131,924
HOVNANIAN ENTERPRISES A	8,171	500,535	191,120
HOWARD BANCORP INC	28,978	379,712	307,746
HOWARD HUGHES CORP/THE	86,795	7,950,594	4,509,000
HOWMET AEROSPACE INC	884,972	18,843,073	14,026,806
HP INC	3,844,326	53,051,823	67,006,602
HQ SUSTAINABLE MARITIME INDU	98,306	0	0
HUAZHU GROUP LTD ADR	354,861	12,138,905	12,437,878
HUB GROUP INC CL A	84,966	3,505,130	4,066,473
HUBBELL INC	122,157	9,529,292	15,313,602
HUBSPOT INC	84,300	7,243,036	18,912,705
HUDSON GLOBAL INC	12,379	232,735	108,316
HUDSON LTD CLASS A	90,467	1,098,735	440,574
HUDSON TECHNOLOGIES INC	104,500	960,355	105,545
HUMANA INC	306,977	54,777,301	119,030,332
HUNT (JB) TRANSPRT SVCS INC	187,826	12,175,778	22,602,981
HUNTINGTON BANCSHARES INC	2,277,566	24,871,662	20,577,809
HUNTINGTON INGALLS INDUSTRIE	89,279	11,241,654	15,578,293
HUNTSMAN CORP	466,729	9,603,513	8,387,120
HURCO COMPANIES INC	14,115	533,977	394,797
HURON CONSULTING GROUP INC	50,074	2,695,640	2,215,775
HUYA INC ADR	148,998	3,636,543	2,781,793
HYATT HOTELS CORP CL A	79,534	3,978,065	3,999,765

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
HYCROFT MINING HOLDING CORP	15,000	155,388	141,750
HYSTER YALE MATERIALS	21,870	1,256,336	845,494
I3 VERTICALS INC CLASS A	33,576	902,661	1,015,674
IAA INC	299,385	9,837,456	11,547,279
IAC/INTERACTIVECORP	167,255	22,679,058	54,090,267
IBERIABANK CORP	120,031	8,605,306	5,466,212
ICAD INC	44,525	244,852	444,805
ICAHN ENTERPRISES LP	34,800	2,102,831	1,687,452
ICF INTERNATIONAL INC	40,274	3,071,702	2,610,963
ICHOR HOLDINGS LTD	48,824	1,524,408	1,297,742
ICU MEDICAL INC	40,299	6,371,036	7,427,509
IDACORP INC	112,414	9,040,762	9,821,611
IDENTIV INC	8,411	27,840	42,896
IDERA PHARMACEUTICALS INC	20,074	586,190	35,932
IDEX CORP	212,399	21,830,021	33,567,538
IDEXX LABORATORIES INC	188,148	26,876,235	62,118,944
IEC ELECTRONICS CORP	35,447	153,840	341,355
IES HOLDINGS INC	18,664	348,220	432,445
IF BANCORP INC	6,400	130,880	105,344
IGM BIOSCIENCES INC	15,745	422,366	1,149,385
IGNITE RESTAURANT GROUP INC	12,000	0	0
IHEARTMEDIA INC CLASS A	142,032	1,706,242	1,191,928
II VI INC	182,300	5,418,197	8,608,206
ILLINOIS TOOL WORKS	708,418	67,159,511	123,866,887
ILLUMINA INC	348,651	65,133,876	129,122,898
IMAGE SENSING SYSTEMS INC	31,600	150,100	106,808
IMARA INC	38,595	1,753,045	1,066,380
IMEDIA BRANDS INC	13,340	146,740	46,290
IMMERSION CORPORATION	63,600	407,420	396,228
IMMUNOGEN INC	385,632	2,447,388	1,773,907
IMMUNOMEDICS INC	420,932	6,480,635	14,917,830
IMMUNOVANT INC	42,321	848,810	1,030,516
IMPINJ INC	37,181	1,091,992	1,021,362
INARI MEDICAL INC	1,357	65,373	65,733
INCYTE CORP	1,543,099	141,387,349	160,436,003
INDEPENDENCE HOLDING CO	10,289	240,936	314,741
INDEPENDENT BANK CORP MICH	46,881	1,005,397	696,183
INDEPENDENT BANK CORP/MA	73,752	5,311,807	4,948,022
INDEPENDENT BANK GROUP INC	84,377	4,187,957	3,418,956
INFINERA CORP	344,363	2,407,656	2,038,629
INFINITY PHARMACEUTICALS INC	88,100	194,701	79,695
INFORMATION SERVICES GROUP	72,000	306,720	149,040
INFUSYSTEM HOLDINGS INC	32,060	166,023	369,972
INGERSOLL RAND INC	772,201	17,483,510	21,714,292
INGEVITY CORP	92,582	4,941,406	4,867,036
INGLES MARKETS INC CLASS A	33,430	1,212,180	1,439,830
INGREDION INC	366,736	30,147,607	30,439,088
INNERWORKINGS INC	48,200	332,295	63,624
INNODATA INC	96,992	111,541	130,939
INNOSPEC INC	54,910	4,294,094	4,241,798

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
INNOVATIVE SOLUTIONS + SUPP	106,351	388,854	531,755
INNOVIVA INC	190,535	3,333,531	2,663,679
INOGEN INC	40,806	2,647,883	1,449,429
INOVALON HOLDINGS INC A	164,197	2,557,082	3,162,434
INOVIO PHARMACEUTICALS INC	322,441	2,658,809	8,689,785
INPHI CORP	132,817	8,840,482	15,605,998
INSEGO CORP	154,555	1,007,157	1,792,838
INSIGHT ENTERPRISES INC	77,421	2,481,902	3,809,113
INSIGHT PARTNERS XI, L.P.	60,000,000	60,000,000	56,423,940
INSMED INC	204,900	4,264,971	5,642,946
INSPERITY INC	80,802	4,053,489	5,230,313
INSPIRE MEDICAL SYSTEMS INC	58,357	4,466,272	5,078,226
INSTALLED BUILDING PRODUCTS	69,806	3,269,316	4,801,257
INSTEEL INDUSTRIES INC	42,252	761,047	805,746
INSULET CORP	141,003	15,229,366	27,391,243
INSURANCE ACQUISITION CORP A	100	1,041	1,296
INTEGER HOLDINGS CORP	74,731	3,257,642	5,459,100
INTEGRA LIFESCIENCES HOLDING	160,367	7,083,545	7,535,645
INTEL CORP	11,921,949	434,873,641	713,290,209
INTELLIA THERAPEUTICS INC	88,700	1,358,610	1,864,474
INTELLICHECK INC	44,330	91,763	334,692
INTELLIGENT SYSTEMS CORP	15,762	580,257	537,169
INTER PARFUMS INC	39,334	1,550,570	1,893,932
INTERACTIVE BROKERS GRO CL A	164,975	7,801,086	6,891,006
INTERCEPT PHARMACEUTICALS IN	57,393	6,912,434	2,749,699
INTERCONTINENTAL EXCHANGE IN	2,858,686	210,640,295	261,855,638
INTERDIGITAL INC	68,932	3,197,448	3,903,619
INTERFACE INC	132,944	1,960,188	1,082,164
INTERGROUP CORP	3,400	81,940	90,372
INTERNATIONAL BANCSHARES CRP	129,791	4,677,570	4,155,908
INTERNATIONAL GAME TECHNOLOG	226,624	3,820,102	2,016,954
INTERNATIONAL MONEY EXPRESS	29,295	284,870	365,016
INTERNATIONAL PAPER CO	913,709	35,909,917	32,171,694
INTERNATIONAL SEAWAYS INC	56,434	1,415,776	922,132
INTERPACE BIOSCIENCES INC	534	4,541	2,483
INTERPUBLIC GROUP OF COS INC	1,071,887	18,280,391	18,393,581
INTERSECT ENT INC	65,800	1,726,914	890,932
INTEST CORP	31,576	227,347	106,411
INTEVAC INC	26,900	172,573	146,874
INTL BUSINESS MACHINES CORP	2,857,179	340,669,632	345,061,508
INTL FLAVORS + FRAGRANCES	219,071	23,082,603	26,827,435
INTRA CELLULAR THERAPIES INC	121,680	2,452,508	3,123,526
INTREPID POTASH INC	211,947	662,129	209,828
INTRICON CORP	16,700	382,083	225,784
INTUIT INC	608,060	91,769,814	180,101,291
INTUITIVE SURGICAL INC	245,919	74,932,652	140,132,024
INUVO INC	76,399	72,533	40,805
INVACARE CORP	74,583	1,540,657	475,094
INVESCO LTD	1,178,631	22,082,164	12,682,070
INVESTAR HOLDING CORP	20,600	437,627	298,700

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
INVESTCORP CREDIT MANAGEMENT	36,600	291,885	125,904
INVESTORS BANCORP INC	516,627	5,692,000	4,391,330
INVESTORS TITLE CO	2,857	531,091	346,611
INVITAE CORP	233,600	4,585,516	7,075,744
ION GEOPHYSICAL CORP	13,866	400,034	32,446
IONIS PHARMACEUTICALS INC	290,676	13,576,855	17,138,257
IOVANCE BIOTHERAPEUTICS INC	302,145	5,318,913	8,293,880
IPG PHOTONICS CORP	72,100	7,208,709	11,564,119
IQVIA HOLDINGS INC	428,901	51,111,051	60,852,474
IRADIMED CORP	1,246	27,394	28,920
IRHYTHM TECHNOLOGIES INC	60,421	4,757,181	7,002,190
IRIDEX CORP	32,100	182,649	68,052
IRIDIUM COMMUNICATIONS INC	262,939	3,652,408	6,689,168
IROBOT CORP	61,008	3,628,918	5,118,571
IRONWOOD PHARMACEUTICALS INC	353,005	4,201,566	3,643,012
ISORAY INC	117,100	54,791	65,049
ITAU UNIBANCO H SPON PRF ADR	986,530	7,625,406	4,626,826
ITERIS INC	81,600	410,109	388,008
ITRON INC	125,774	8,752,349	8,332,528
ITT INC	204,036	7,997,197	11,985,075
IVERIC BIO INC	99,903	343,432	509,505
J + J SNACK FOODS CORP	33,157	4,481,797	4,215,249
J ALEXANDER S HOLDINGS	41,782	498,106	205,567
J. JILL INC	50,000	650,000	34,600
J.C. PENNEY CO INC	655,900	7,975,969	219,628
J2 GLOBAL INC	104,311	6,018,319	6,593,498
JABIL INC	433,593	11,466,947	13,909,663
JACK HENRY + ASSOCIATES INC	643,706	81,216,381	118,461,215
JACK IN THE BOX INC	50,072	2,489,379	3,709,834
JACOBS ENGINEERING GROUP INC	281,175	19,473,908	23,843,640
JADE EQUITY INVESTORS LP	12,396,488	12,396,488	12,396,488
JAKKS PACIFIC INC	56,700	136,080	46,494
JD.COM INC ADR	2,391,289	86,979,443	143,907,772
JEFFERIES FINANCIAL GROUP IN	878,562	15,597,072	13,661,639
JELD WEN HOLDING INC	228,626	5,124,123	3,683,165
JETBLUE AIRWAYS CORP	623,647	9,840,039	6,797,752
JINKOSOLAR HOLDING CO ADR	77,682	1,516,286	1,375,748
JM SMUCKER CO/THE	954,952	98,144,381	101,043,471
JMP GROUP LLC	57,085	288,850	158,696
JOHN B. SANFILIPPO + SON INC	19,458	1,340,938	1,660,351
JOHN BEAN TECHNOLOGIES CORP	70,226	5,382,684	6,040,841
JOHNSON + JOHNSON	10,272,785	1,136,541,225	1,444,661,755
JOHNSON CONTROLS INTERNATION	1,848,696	71,046,068	63,114,481
JOHNSON OUTDOORS INC A	11,530	670,608	1,049,461
JOINT CORP/THE	26,800	433,029	409,236
JONES LANG LASALLE INC	119,949	13,776,276	12,409,924
JPMORGAN CHASE + CO	6,787,055	499,981,852	638,390,393
JUMIA TECHNOLOGIES AG ADR	65,100	422,271	357,399
JUNIPER INDUSTRIAL HLDGS A	7,050	69,167	70,289
JUNIPER NETWORKS INC	2,785,952	79,078,507	63,686,863

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
K12 INC	88,481	1,891,675	2,410,222
KADANT INC	25,493	1,689,114	2,540,632
KADMON HOLDINGS INC	365,044	1,479,145	1,869,025
KAGY HOLDINGS COMPANY INC	343	13,720	13,720
KAISER ALUMINUM CORP	36,354	3,054,368	2,676,381
KALA PHARMACEUTICALS INC	81,945	886,622	861,242
KALVISTA PHARMACEUTICALS INC	27,600	399,987	333,960
KAMAN CORP	62,306	3,037,016	2,591,930
KANSAS CITY SOUTHERN	238,806	19,707,300	35,651,348
KAR AUCTION SERVICES INC	285,590	5,647,830	3,929,718
KARUNA THERAPEUTICS INC	34,328	2,984,046	3,826,199
KARYOPHARM THERAPEUTICS INC	156,782	2,106,950	2,969,451
KB HOME	203,509	4,450,886	6,243,656
KBR INC	515,271	12,325,261	11,619,361
KEARNY FINANCIAL CORP/MD	167,709	2,192,674	1,371,860
KELLOGG CO	2,201,072	133,476,025	145,402,816
KELLY SERVICES INC A	74,227	1,802,402	1,173,900
KEMPER CORP	139,411	8,426,923	10,110,086
KENNAMETAL INC	186,092	5,781,812	5,342,701
KENNEDY WILSON HOLDINGS INC	272,206	5,928,147	4,142,975
KENTUCKY FIRST FEDERAL BANCO	5,612	49,666	38,386
KEROS THERAPEUTICS INC	15,419	551,703	578,367
KEURIG DR PEPPER INC	866,597	18,703,216	24,611,355
KEWAUNEE SCIENTIFIC CP	8,100	276,615	75,249
KEY ENERGY SERVICES INC	7,167	2,001,032	827
KEY TRONIC CORP	27,400	194,266	143,850
KEYCORP	2,253,646	32,060,972	27,449,408
KEYSIGHT TECHNOLOGIES IN	1,577,232	144,788,973	158,953,441
KEZAR LIFE SCIENCES INC	57,249	223,538	296,550
KFORCE INC	43,626	831,178	1,276,061
KIMBALL ELECTRONICS INC	53,235	349,461	720,802
KIMBALL INTERNATIONAL B	82,193	852,922	950,151
KIMBELL ROYALTY PARTNERS LP	71,023	720,320	610,798
KIMBERLY CLARK CORP	2,242,370	243,296,498	316,959,000
KINDER MORGAN INC	4,380,743	114,461,922	66,455,871
KINDRED BIOSCIENCES INC	75,400	562,039	338,546
KINIKSA PHARMACEUTICALS A	42,094	726,790	1,072,555
KINSALE CAPITAL GROUP INC	46,622	2,888,305	7,236,201
KIRBY CORP	134,806	8,720,425	7,220,209
KIRKLAND S INC	54,400	576,096	147,424
KKR + CO INC	1,190,906	30,171,973	36,775,177
KKR EUROPEAN FUND V (USD) SCSP	68,091,527	68,091,527	55,477,776
KLA CORP	368,879	33,708,791	71,739,588
KLDISCOVERY INC	13,300	134,581	107,065
KLX ENERGY SERVICES HOLDING	33,300	906,961	71,595
KNIGHT SWIFT TRANSPORTATION	282,627	8,460,671	11,788,372
KNOLL INC	168,290	3,968,771	2,051,455
KNOT OFFSHORE PARTNERS LP	53,679	970,318	738,086
KNOWLES CORP	288,013	4,121,014	4,395,078
KODIAK SCIENCES INC	64,606	2,428,084	3,496,477

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
KOHL'S CORP	696,155	22,938,180	14,459,139
KONA GRILL INC	32,600	57,050	579
KONTOOR BRANDS INC	114,031	2,505,576	2,030,892
KOPIN CORP	569,072	1,824,091	756,866
KOPPERS HOLDINGS INC	47,017	1,546,562	885,800
KORN FERRY	123,593	4,744,503	3,798,013
KOSMOS ENERGY LTD	918,909	5,921,881	1,525,389
KRAFT HEINZ CO/THE	1,502,184	55,855,995	47,904,648
KRATON CORP	71,098	1,761,907	1,228,573
KRATOS DEFENSE + SECURITY	214,200	2,280,283	3,347,946
KROGER CO	4,338,413	111,341,802	146,855,280
KRONOS WORLDWIDE INC	51,059	706,339	531,524
KRYSTAL BIOTECH INC	27,168	1,006,533	1,125,299
KURA ONCOLOGY INC	117,314	1,949,765	1,912,218
KVH INDUSTRIES INC	32,800	349,320	292,904
L BRANDS INC	756,592	16,726,462	11,326,182
L3HARRIS TECHNOLOGIES INC	1,735,572	264,331,737	294,474,501
LA JOLLA PHARMACEUTICAL CO	42,200	1,101,916	179,772
LA Z BOY INC	100,842	2,132,098	2,728,785
LABORATORY CRP OF AMER HLDGS	832,470	123,987,080	138,281,592
LAKE SHORE BANCORP INC	8,076	137,292	100,142
LAKELAND BANCORP INC	111,041	1,400,221	1,269,199
LAKELAND FINANCIAL CORP	53,658	1,742,718	2,499,926
LAKELAND INDUSTRIES INC	15,400	208,826	345,422
LAM RESEARCH CORP	328,360	39,580,234	106,211,326
LAMB WESTON HOLDINGS INC	1,249,841	77,795,303	79,902,335
LANCASTER COLONY CORP	41,969	4,190,540	6,504,775
LANDCADIA HOLDINGS II INC A	64,600	640,304	1,056,210
LANDEC CORP	52,400	405,382	417,104
LANDMARK BANCORP INC	10,372	270,945	256,292
LANDMARK INFRASTRUCTURE PART	49,281	700,072	487,882
LANDS END INC	18,749	594,883	150,742
LANDSTAR SYSTEM INC	85,135	6,851,867	9,561,512
LANNETT CO INC	72,778	880,444	528,368
LANTHEUS HOLDINGS INC	141,335	2,607,440	2,021,091
LANTRONIX INC	58,633	147,169	217,528
LAREDO PETROLEUM INC	20,952	3,317,776	290,395
LAS VEGAS SANDS CORP	810,265	39,212,883	36,899,468
LATTICE SEMICONDUCTOR CORP	304,324	3,987,443	8,639,758
LAUREATE EDUCATION INC A	240,466	3,838,324	2,396,244
LAWSON PRODUCTS INC	9,671	227,200	311,986
LAZARD LTD CL A	402,072	12,776,840	11,511,321
LAZARE KAPLAN INTERNATIONAL	45,000	0	0
LAZYDAYS HOLDINGS INC	40,056	256,839	348,888
LCI INDUSTRIES	55,361	4,012,334	6,365,408
LCNB CORPORATION	24,600	442,762	392,616
LEAF GROUP LTD	206,292	1,415,727	757,092
LEAR CORP	139,796	11,963,569	15,240,560
LEE ENTERPRISES	109,645	252,184	107,452
LEGACY ACQUISITION CORP CL A	59,900	620,511	575,040

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
LEGACY HOUSING CORP	1,266	19,915	18,003
LEGG MASON INC	193,870	6,718,240	9,645,033
LEGGETT + PLATT INC	336,718	9,793,744	11,835,638
LEIDOS HOLDINGS INC	1,130,757	71,625,584	105,918,008
LEISURE ACQUISITION CORP	13,700	142,183	167,140
LEMAITRE VASCULAR INC	36,587	1,110,555	965,897
LENDINGCLUB CORP	152,419	2,173,605	693,506
LENDINGTREE INC	16,100	2,622,263	4,661,433
LENNAR CORP B SHS	37,013	1,358,349	1,705,929
LENNAR CORP A	626,305	26,850,552	38,592,914
LENNOX INTERNATIONAL INC	106,352	17,624,241	24,778,952
LEVI STRAUSS + CO CLASS A	94,127	1,813,715	1,261,302
LEXICON PHARMACEUTICALS INC	92,749	1,461,084	185,034
LF CAPITAL ACQUISITION COR A	24,400	254,785	261,080
LGI HOMES INC	49,568	3,607,450	4,363,471
LHC GROUP INC	67,530	4,859,742	11,771,830
LIBBEY INC	36,200	213,218	3,692
LIBERTY BROADBAND A	56,019	4,725,965	6,844,962
LIBERTY BROADBAND C	895,050	80,470,699	110,950,398
LIBERTY LATIN AMERIC CL A	105,159	2,262,964	1,022,145
LIBERTY LATIN AMERIC CL C	401,806	8,197,068	3,793,049
LIBERTY MEDIA COR SIRIUSXM A	597,592	22,254,406	20,628,876
LIBERTY MEDIA COR SIRIUSXM C	1,632,596	57,812,671	56,242,932
LIBERTY MEDIA CORP BRAVES A	22,156	383,251	444,892
LIBERTY MEDIA CORP BRAVES C	80,166	1,643,204	1,582,477
LIBERTY MEDIA CORP LIBERTY A	56,542	1,712,855	1,649,896
LIBERTY MEDIA CORP LIBERTY C	445,363	17,755,235	14,122,461
LIBERTY OILFIELD SERVICES A	139,277	1,407,279	763,238
LIBERTY TRIPADVISOR HDG A	211,364	1,891,366	450,205
LIFETIME BRANDS INC	25,600	303,360	172,032
LIFEVANTAGE CORP	30,291	158,619	409,534
LIFEWAY FOODS INC	49,100	278,888	112,930
LIGAND PHARMACEUTICALS	31,923	2,846,872	3,570,588
LIGHTPATH TECHNOLOGIES INC A	6,123	12,613	20,451
LIMELIGHT NETWORKS INC	262,915	1,043,655	1,935,054
LIMESTONE BANCORP INC	4,684	63,937	61,595
LIMONEIRA CO	32,900	648,581	476,721
LINCOLN EDUCATIONAL SERVICES	67,200	126,336	262,080
LINCOLN ELECTRIC HOLDINGS	129,827	9,186,385	10,936,626
LINCOLN NATIONAL CORP	731,562	35,810,691	26,914,166
LINDBLAD EXPEDITIONS HOLDING	57,485	690,868	443,784
LINDSAY CORP	23,949	1,909,030	2,208,337
LINDSAY GOLDBERG V LP	11,984,438	11,984,438	11,984,438
LINEAGE CELL THERAPEUTICS IN	48,400	167,827	42,108
LINNCO LLC ESCROW CUSIP	2,161,400	0	2
LIONS GATE ENTERTAINMENT A	199,364	2,207,325	1,477,287
LIONS GATE ENTERTAINMENT B	450,039	5,985,886	3,073,766
LIPOCINE INC	46,000	73,600	57,960
LIQUIDIA TECHNOLOGIES INC	41,200	392,332	346,904
LIQUIDITY SERVICES INC	56,300	274,769	335,548

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
LITHIA MOTORS INC CL A	75,577	7,901,117	11,437,067
LITTELFUSE INC	53,166	5,779,191	9,071,715
LIVE NATION ENTERTAINMENT IN	291,081	10,028,212	12,903,621
LIVE OAK BANCSHARES INC	62,191	1,001,023	902,391
LIVENT CORP	296,900	1,627,676	1,828,904
LIVEPERSON INC	124,406	3,023,727	5,154,141
LIVERAMP HOLDINGS INC	173,554	5,655,912	7,370,838
LIVONGO HEALTH INC	109,700	3,163,706	8,248,343
LKQ CORP	683,354	15,932,958	17,903,875
LLGC LEGATO CAPITAL MGMT	42,622,938	411,141,464	449,796,366
LOCKHEED MARTIN CORP	1,267,141	348,374,144	462,405,094
LOEWS CORP	567,924	22,758,461	19,474,114
LOGMEIN INC	108,863	6,467,071	9,228,317
LOOP INDUSTRIES INC	42,700	440,406	384,300
LORAL SPACE + COMMUNICATIONS	28,376	1,125,941	553,900
LOUISIANA PACIFIC CORP	447,052	8,961,147	11,466,884
LOVESAC CO/THE	18,000	384,143	472,140
LOWE S COS INC	1,708,585	102,781,163	230,864,005
LPL FINANCIAL HOLDINGS INC	178,444	11,361,017	13,990,010
LSB INDUSTRIES INC	25,400	955,437	29,464
LSC COMMUNICATIONS INC	50,937	1,969,503	2,875
LSI INDUSTRIES INC	51,900	468,657	335,793
LUBY S INC	45,600	119,928	66,120
LUCKIN COFFEE INC ADR	69,609	2,407,570	162,189
LUKOIL PJSC SPON ADR	1,118,702	84,007,903	83,074,811
LUMBER LIQUIDATORS HOLDINGS	57,800	1,494,858	801,108
LUMENTUM HOLDINGS INC	217,716	14,359,623	17,728,614
LUMINEX CORP	94,997	2,015,945	3,090,252
LUMOS PHARMA INC	2,032	616,000	33,508
LUNA INNOVATIONS INC	58,600	226,847	342,224
LUTHER BURBANK CORP	40,679	402,589	406,790
LYDALL INC	38,790	658,660	525,992
LYFT INC A	485,300	22,915,355	16,019,753
LYONDELLBASELL INDU CL A	715,262	51,392,712	47,007,019
M + T BANK CORP	344,446	44,133,857	35,812,051
M/I HOMES INC	62,516	1,721,499	2,153,051
MACATAWA BANK CORP	57,914	548,180	452,887
MACKINAC FINANCIAL CORP	6,600	107,252	68,442
MACOM TECHNOLOGY SOLUTIONS H	105,457	5,354,204	3,622,448
MACQUARIE INFRASTRUCTURE COR	173,494	7,126,591	5,324,531
MACROGENICS INC	97,000	1,293,635	2,708,240
MACY S INC	1,159,328	17,061,802	7,976,177
MADISON SQUARE GARDEN ENTERT	55,127	2,923,655	4,134,525
MADISON SQUARE GARDEN SPORTS	38,549	3,751,188	5,662,463
MADRIGAL PHARMACEUTICALS INC	17,700	2,263,688	2,004,525
MAGELLAN HEALTH INC	51,716	3,018,818	3,774,234
MAGELLAN MIDSTREAM PARTNERS	504,951	25,711,280	21,798,735
MAGENTA THERAPEUTICS INC	34,300	404,008	257,593
MAGNIT PJSC SPON GDR REGS	1,288,488	25,551,240	16,737,459

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
MAGNITOGORS SPON GDR REGS	262,103	2,135,765	1,766,574
MAGNOLIA OIL + GAS CORP A	277,243	2,757,351	1,680,093
MAIN STREET CAPITAL CORP	136,538	5,445,919	4,250,428
MAINSTREET BANCSHARES INC	5,100	117,771	67,320
MAJESCO	10,008	59,602	78,663
MALIBU BOATS INC A	46,857	1,445,835	2,434,221
MALLINCKRODT PLC	193,805	5,746,784	519,397
MALVERN BANCORP INC	6,734	160,407	85,724
MANHATTAN ASSOCIATES INC	183,912	8,753,165	17,324,510
MANITEX INTERNATIONAL INC	54,074	557,503	268,748
MANITOWOC COMPANY INC	75,163	1,153,679	817,773
MANNATECH INC	6,610	134,183	97,762
MANNING + NAPIER INC	56,500	172,325	161,590
MANNKIND CORP	471,389	655,858	824,931
MANPOWERGROUP INC	135,872	8,643,977	9,341,200
MANTECH INTERNATIONAL CORP A	61,295	3,691,622	4,198,095
MARATHON OIL CORP	3,150,201	33,697,986	19,279,230
MARATHON PETROLEUM CORP	1,492,082	59,703,857	55,774,025
MARCHEX INC CLASS B	190,762	535,922	301,404
MARCUS + MILLICHAP INC	51,535	1,739,116	1,487,300
MARCUS CORPORATION	49,537	1,681,920	657,356
MARIN SOFTWARE INC	4,600	34,500	6,256
MARINE PRODUCTS CORP	1,350	29,521	18,698
MARINEMAX INC	47,011	594,982	1,052,576
MARINUS PHARMACEUTICALS INC	187,632	343,287	476,585
MARKEL CORP	123,662	125,253,749	114,161,049
MARKETAXESS HOLDINGS INC	161,931	42,238,291	81,114,477
MARLIN BUSINESS SERVICES INC	45,762	1,226,536	387,147
MARRIOTT INTERNATIONAL CL A	604,535	50,003,551	51,826,786
MARRIOTT VACATIONS WORLD	93,048	6,732,197	7,649,476
MARSH + MCLENNAN COS	4,244,338	349,295,933	455,714,571
MARTEN TRANSPORT LTD	87,156	1,065,193	2,192,845
MARTIN MARIETTA MATERIALS	139,144	22,617,883	28,742,976
MARTIN MIDSTREAM PARTNERS LP	43,700	1,133,275	52,003
MARVELL TECHNOLOGY GROUP LTD	1,675,198	41,291,496	58,732,442
MASCO CORP	594,123	16,196,517	29,830,916
MASIMO CORP	108,133	11,269,868	24,653,243
MASONITE INTERNATIONAL CORP	56,809	3,275,095	4,418,604
MASTEC INC	131,371	5,092,542	5,894,617
MASTERCARD INC A	2,076,761	304,380,711	614,098,228
MASTERCRAFT BOAT HOLDINGS IN	42,009	495,140	800,271
MATADOR RESOURCES CO	545,532	8,798,509	4,637,022
MATCH GROUP INC	123,733	7,826,949	13,245,618
MATERIALISE NV ADR	42,634	565,019	961,823
MATERION CORP	45,368	2,563,126	2,789,678
MATINAS BIOPHARMA HOLDINGS I	352,700	306,816	272,637
MATRIX SERVICE CO	59,321	786,823	576,600
MATSON INC	96,171	2,736,215	2,798,576
MATTEL INC	1,131,416	15,798,554	10,940,793

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
MATTHEWS INTL CORP CLASS A	67,429	2,640,301	1,287,894
MAUI LAND + PINEAPPLE CO	5,445	97,724	60,440
MAXAR TECHNOLOGIES INC	135,850	2,131,518	2,439,866
MAXIM INTEGRATED PRODUCTS	594,293	23,845,659	36,020,099
MAXIMUS INC	138,596	7,876,145	9,764,088
MAXLINEAR INC	147,895	2,676,588	3,173,827
MBIA INC	154,256	1,423,189	1,118,356
MCCLATCHY CO CLASS A	18,980	175,945	2,467
MCCORMICK + CO INC VTG COM	9,691	1,400,326	1,721,606
MCCORMICK + CO NON VTG SHRS	1,040,128	133,215,114	186,609,364
MCDERMOTT INTL INC	400,800	8,518,790	28,858
MCDONALD S CORP	4,513,162	710,604,193	832,542,994
MCGRATH RENTCORP	53,342	2,611,469	2,881,001
MCKESSON CORP W/D	394,185	40,837,626	60,475,863
MDC HOLDINGS INC	114,540	4,194,604	4,089,078
MDC PARTNERS INC A	40,400	103,270	84,032
MDU RESOURCES GROUP INC	454,710	10,175,080	10,085,468
MECHEL PJSC SPONSORED ADR	418,585	981,149	719,966
MECHEL PREF SPON ADR	390,736	312,335	203,847
MEDALLIA INC	147,600	3,107,607	3,725,424
MEDALLION FINANCIAL CORP	35,200	157,681	93,280
MEDCATH CORPORATION	32,200	0	0
MEDIA GEN INC CVR	132,200	0	0
MEDIACO HOLDING INC CL A WI	4,123	16,657	21,481
MEDICINOVA INC	85,300	796,239	462,326
MEDIFAST INC	25,001	1,516,015	3,469,389
MEDLEY CAPITAL CORP	102,900	1,273,449	78,719
MEDNAX INC	191,620	6,536,668	3,276,702
MEDPACE HOLDINGS INC	106,287	7,363,677	9,886,817
MEET GROUP INC/THE	156,885	744,277	978,962
MEGALITH FINANCIAL ACQUISI A	34,600	356,471	378,718
MEI PHARMA INC	228,806	403,952	944,969
MEIRAGTX HOLDINGS PLC	45,651	826,446	571,551
MELCO RESORTS + ENTERT ADR	465,672	8,166,144	7,227,229
MENLO THERAPEUTICS INC	192,400	422,196	332,852
MERCANTILE BANK CORP	34,930	886,935	789,418
MERCHANTS BANCORP/IN	20,142	362,114	372,426
MERCK + CO. INC.	10,446,009	655,151,844	807,789,876
MERCURY GENERAL CORP	60,698	3,244,208	2,473,444
MERCURY SYSTEMS INC	112,234	6,828,906	8,828,326
MEREDITH CORP	242,206	5,251,137	3,524,097
MERIDIAN BANCORP INC	103,577	1,745,040	1,201,493
MERIDIAN BIOSCIENCE INC	93,542	1,384,667	2,178,593
MERIT MEDICAL SYSTEMS INC	109,600	2,543,332	5,003,240
MERITAGE HOMES CORP	148,862	8,601,172	11,331,375
MERITOR INC	160,300	2,658,246	3,173,940
MERSANA THERAPEUTICS INC	102,703	966,416	2,403,250
MESA AIR GROUP INC	14,900	132,573	51,256
MESA LABORATORIES INC	9,110	1,642,516	1,975,048
MESA ROYALTY TRUST	2,700	42,390	13,905

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
MESABI TRUST	29,121	682,914	509,909
META FINANCIAL GROUP INC	77,251	2,336,746	1,403,651
METHODE ELECTRONICS INC	151,708	4,960,393	4,742,392
METLIFE INC	1,917,277	79,770,737	70,018,956
METROCITY BANKSHARES INC	38,318	544,751	549,097
METROPOLITAN BANK HOLDING CO	15,410	619,906	494,353
METTLER TOLEDO INTERNATIONAL	52,784	18,508,722	42,520,151
MGE ENERGY INC	77,300	4,916,018	4,986,623
MGIC INVESTMENT CORP	908,894	9,434,602	7,443,842
MGM RESORTS INTERNATIONAL	1,598,764	34,939,901	26,859,235
MGP INGREDIENTS INC	26,100	1,406,933	958,001
MICHAELS COS INC/THE	169,353	2,639,103	1,197,326
MICROBOT MEDICAL INC	49	618	339
MICROCHIP TECHNOLOGY INC	572,842	40,334,624	60,325,991
MICRON TECHNOLOGY INC	3,388,207	112,527,767	174,560,425
MICROSOFT CORP	17,769,746	1,467,601,895	3,616,321,008
MICROSTRATEGY INC CL A	17,444	1,889,974	2,063,451
MICROVISION INC	27,600	35,880	37,536
MID PENN BANCORP INC	5,500	161,703	101,365
MIDDLEBY CORP	158,896	11,146,247	12,543,250
MIDDLEFIELD BANC CORP	4,400	121,248	91,300
MIDDLESEX WATER CO	37,717	1,061,811	2,533,828
MIDLAND STATES BANCORP INC	50,056	1,284,158	748,337
MIDWESTONE FINANCIAL GROUP I	32,504	1,005,880	650,080
MILESTONE SCIENTIFIC INC	5,200	3,796	10,140
MILLENDO THERAPEUTICS INC	1,786	24,136	3,143
MILLER INDUSTRIES INC/TENN	24,545	646,907	730,705
MIMECAST LTD	124,845	5,347,822	5,201,043
MINERALS TECHNOLOGIES INC	78,587	4,362,083	3,688,088
MINERVA NEUROSCIENCES INC	65,748	427,974	237,350
MIRATI THERAPEUTICS INC	81,333	6,354,014	9,285,789
MIRUM PHARMACEUTICALS INC	1,026	20,166	19,966
MISONIX INC	29,300	417,131	397,601
MISTRAS GROUP INC	20,800	330,291	82,160
MITCHAM INDUSTRIES INC	33,200	109,560	53,120
MITEK SYSTEMS INC	88,881	748,079	854,146
MKS INSTRUMENTS INC	123,383	9,569,702	13,971,891
MMA CAPITAL HOLDINGS INC	3,500	110,494	80,920
MNC MEDIA INVESTMENT LTD ADR	109,600	0	0
MOBILE MINI INC	97,410	3,018,882	2,873,595
MOBILE TELESYSTEMS SP ADR	1,200,361	10,533,881	11,031,318
MOBILEIRON INC	212,954	1,111,784	1,049,863
MODEL N INC	76,921	1,891,321	2,673,774
MODERNA INC	599,997	17,701,888	38,525,807
MODINE MANUFACTURING CO	109,398	1,181,838	603,877
MOELIS + CO CLASS A	117,739	4,763,198	3,668,747
MOHAWK INDUSTRIES INC	138,479	14,475,170	14,091,623
MOLECULAR TEMPLATES INC	53,684	603,299	740,302
MOLINA HEALTHCARE INC	131,431	13,985,482	23,392,089

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
MOLSON COORS BEVERAGE CO B	405,943	23,276,534	13,948,201
MOMENTA PHARMACEUTICALS INC	262,751	4,257,616	8,741,726
MOMO INC SPON ADR	364,183	10,555,084	6,365,919
MONARCH CASINO + RESORT INC	27,919	633,806	951,480
MONDELEZ INTERNATIONAL INC A	3,430,766	133,288,528	175,415,066
MONEYGRAM INTERNATIONAL INC	125,500	759,930	402,855
MONGODB INC	85,100	11,586,739	19,261,534
MONITRONICS INTERNATIONAL IN	970	32,641	3,298
MONOCLE ACQUISITION CORP	35,200	360,098	362,208
MONOLITHIC POWER SYSTEMS INC	97,607	7,589,697	23,132,859
MONRO INC	72,871	3,409,304	4,003,533
MONROE CAPITAL CORP	44,300	374,057	307,885
MONSTER BEVERAGE CORP	827,348	29,888,664	57,351,763
MONTAGE RESOURCES CORP	17,982	1,634,984	71,029
MOODY S CORP	375,921	43,399,246	103,276,776
MOOG INC CLASS A	70,045	3,829,047	3,710,984
MORGAN STANLEY	2,554,891	85,652,144	123,401,235
MORNINGSTAR INC	48,340	5,162,611	6,814,490
MORPHIC HOLDING INC	30,291	501,819	819,372
MOSAIC CO/THE	837,014	26,537,131	10,471,045
MOTORCAR PARTS OF AMERICA IN	38,000	824,451	671,460
MOTOROLA SOLUTIONS INC	1,475,818	195,992,330	206,806,376
MOVADO GROUP INC	34,763	773,044	376,831
MPLX LP	876,938	27,627,120	15,153,489
MR COOPER GROUP INC	176,644	2,170,490	2,197,451
MRC GLOBAL INC	179,098	4,121,158	1,058,469
MSA SAFETY INC	82,164	7,057,043	9,402,848
MSC INDUSTRIAL DIRECT CO A	101,789	6,044,707	7,411,257
MSCI INC	187,165	22,519,725	62,479,420
MSG NETWORKS INC A	91,130	1,049,526	906,744
MTS SYSTEMS CORP	42,961	2,091,363	755,684
MUELLER INDUSTRIES INC	126,401	3,397,053	3,359,739
MUELLER WATER PRODUCTS INC A	346,450	3,009,770	3,267,024
MURPHY OIL CORP	333,307	9,639,970	4,599,637
MURPHY USA INC	68,043	3,485,520	7,660,961
MUSTANG BIO INC	10,000	73,606	31,800
MV OIL TRUST	46,031	401,851	192,870
MVB FINANCIAL CORP	21,555	342,773	286,682
MVC CAPITAL INC	34,043	335,948	222,301
MYERS INDUSTRIES INC	79,267	1,190,105	1,153,335
MYLAN NV	1,742,305	52,691,491	28,016,264
MYOKARDIA INC	110,364	6,560,852	10,663,370
MYR GROUP INC/DELAWARE	35,980	993,208	1,148,122
MYRIAD GENETICS INC	314,784	6,318,195	3,569,651
N B T BANCORP INC	94,989	3,108,438	2,921,862
NABORS INDUSTRIES LTD	16,137	8,373,154	597,392
NACCO INDUSTRIES CL A	8,280	295,642	192,924
NANOSTRING TECHNOLOGIES INC	85,002	2,060,532	2,494,809
NANOVIRICIDES INC	255	3,938	1,907
NANTHEALTH INC	5,308	18,605	24,311

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
NANTKWEST INC	63,650	548,976	781,622
NAPCO SECURITY TECHNOLOGIES	25,671	354,400	600,445
NASDAQ INC	968,219	81,380,076	115,673,124
NATERA INC	155,336	4,915,721	7,745,053
NATHAN S FAMOUS INC	6,514	529,833	366,347
NATIONAL AMERICAN UNIVERSITY	3,100	3,224	902
NATIONAL BANK HOLD CL A	65,059	2,355,613	1,756,593
NATIONAL BANKSHARES INC/VA	14,061	636,751	402,145
NATIONAL BEVERAGE CORP	26,068	1,466,143	1,590,669
NATIONAL CINEMEDIA INC	142,442	1,559,587	423,053
NATIONAL ENERGY	726,459	0	1
NATIONAL ENERGY SERVICES REU	52,685	341,523	362,473
NATIONAL FUEL GAS CO	187,017	8,101,177	7,841,623
NATIONAL GENERAL HLDGS	157,985	3,219,327	3,414,056
NATIONAL HEALTHCARE CORP	28,116	2,143,007	1,783,679
NATIONAL INSTRUMENTS CORP	289,499	9,910,708	11,206,506
NATIONAL OILWELL VARCO INC	876,660	22,499,599	10,739,085
NATIONAL PRESTO INDS INC	11,247	925,453	982,875
NATIONAL RESEARCH CORP	30,532	798,482	1,777,268
NATIONAL SECURITY GROUP INC	1,400	22,316	18,774
NATIONAL VISION HOLDINGS INC	177,938	5,177,078	5,430,668
NATIONAL WESTERN LIFE GROU A	6,037	1,416,918	1,226,658
NATURAL ALTERNATIVES INTL	16,700	168,670	114,896
NATURAL GAS SERVICES GROUP	26,700	285,417	167,409
NATURAL GROCERS BY VITAMIN C	1,657	15,588	24,656
NATURAL HEALTH TRENDS CORP	26,100	1,119,690	148,770
NATURAL RESOURCE PARTNERS LP	18,139	2,392,166	221,114
NATURES SUNSHINE PRODS INC	58,080	723,445	523,301
NATUS MEDICAL INC	74,341	1,787,212	1,622,121
NATUZZI SPA SP ADR	13,800	117,300	15,180
NAUTILUS INC	60,000	689,847	556,200
NAVIDEA BIOPHARMACEUTICALS I	18,385	107,736	72,437
NAVIENT CORP	1,020,731	11,591,097	7,175,739
NAVIGATOR HOLDINGS LTD	69,991	758,581	450,042
NAVIOS MARITIME PARTNERS LP	15,833	400,408	153,738
NAVISTAR INTERNATIONAL CORP	110,442	3,697,607	3,114,464
NCR CORPORATION	295,715	6,016,998	5,121,784
NEENAH ENTERPRISES INC	96,783	75,439	290,349
NEENAH INC	37,065	1,683,513	1,833,235
NEKTAR THERAPEUTICS	352,700	10,646,719	8,168,532
NELNET INC CL A	40,103	1,179,464	1,914,517
NEOGEN CORP	116,773	5,716,206	9,061,585
NEOGENOMICS INC	232,976	4,572,300	7,217,596
NEOLEUKIN THERAPEUTICS INC	68,048	1,020,026	1,129,597
NEONODE INC	8,190	35,954	69,533
NEOPHOTONICS CORP	112,667	955,202	1,000,483
NEOS THERAPEUTICS INC	39,100	250,341	26,784
NESCO HOLDINGS INC	35,300	154,967	141,906
NETAPP INC	515,486	21,301,484	22,872,114
NETEASE INC ADR	180,421	49,099,930	77,469,169

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
NETFIN ACQUISITION CORP CL A	51,700	512,574	555,775
NETFLIX INC	891,884	154,976,026	405,842,895
NETGEAR INC	64,252	1,797,025	1,663,484
NETLIST INC	47,100	7,310	26,842
NETSCOUT SYSTEMS INC	156,847	2,588,593	4,009,009
NETSOL TECHNOLOGIES INC	66,412	438,067	176,656
NEUBASE THERAPEUTICS INC	3,940	17,336	34,593
NEUROCRINE BIOSCIENCES INC	206,006	12,742,467	25,132,732
NEVRO CORP	74,232	5,154,883	8,868,497
NEW AGE BEVERAGES CORP	178,200	351,319	272,646
NEW ENGLAND REALTY ASSOC LP	3,741	260,000	198,273
NEW FORTRESS ENERGY LLC	35,700	447,202	462,672
NEW HOME CO INC/THE	174,166	1,720,530	585,198
NEW JERSEY RESOURCES CORP	212,862	8,224,891	6,949,944
NEW MOUNTAIN FINANCE CORP	311,000	3,317,698	2,889,190
NEW ORIENTAL EDUCATIO SP ADR	322,001	32,870,394	41,934,190
NEW PROVIDENCE ACQUISIT CL A	47,000	463,467	473,760
NEW RELIC INC	102,500	8,550,080	7,062,250
NEW YORK COMMUNITY BANCORP	1,010,996	12,923,299	10,312,159
NEW YORK TIMES CO A	363,527	8,902,317	15,279,040
NEWELL BRANDS INC	854,353	18,301,695	13,567,126
NEWMARK GROUP INC CLASS A	430,512	3,961,413	2,092,288
NEWMARKET CORP	15,477	3,476,906	6,198,229
NEWMONT CORP	6,890,010	246,827,180	425,389,217
NEWPARK RESOURCES INC	202,733	1,490,146	452,095
NEWS CORP CLASS A	880,051	10,246,160	10,437,405
NEWS CORP CLASS B	274,940	3,247,442	3,285,533
NEWSSTAR FINANCIAL INCCVR	149,036	0	0
NEWTEK BUSINESS SERVICES COR	43,760	802,864	797,307
NEXSTAR MEDIA GROUP INC CL A	98,962	7,620,700	8,282,130
NEXTCURE INC	36,426	1,824,674	780,973
NEXTDECADE CORP	167,051	779,783	360,830
NEXTEER AUTOMOTIVE GROUP LTD	1,889,000	2,536,027	1,296,632
NEXTERA ENERGY INC	4,031,042	703,431,719	968,135,357
NEXTERA ENERGY PARTNERS LP	144,453	5,957,220	7,407,550
NEXTGEN HEALTHCARE INC	121,349	2,232,406	1,332,412
NEXTIER OILFIELD SOLUTIONS I	358,056	3,897,061	877,237
NGL ENERGY PARTNERS LP	264,457	2,864,336	1,031,382
NGM BIOPHARMACEUTICALS INC	52,988	876,522	1,045,983
NI HOLDINGS INC	21,309	299,855	314,734
NIC INC	145,558	2,047,948	3,342,012
NICHOLAS FINANCIAL INC	30,713	268,432	236,797
NICOLET BANKSHARES INC	20,660	1,346,066	1,132,168
NIELSEN HOLDINGS PLC	833,545	24,215,326	12,386,479
NIKE INC CL B	2,805,288	155,033,908	275,058,488
NIKOLA CORP	55,754	1,057,036	3,765,068
NINE ENERGY SERVICE INC	6,600	140,631	12,870
NINE POINT ENERGY HLDGS (COM)	9,747	451,024	9,747
NISOURCE INC	3,135,731	79,310,446	71,306,523
NL INDUSTRIES	15,300	148,174	52,173

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
NLIGHT INC	69,800	1,229,925	1,553,748
NMI HOLDINGS INC CLASS A	147,617	3,515,020	2,373,681
NN INC	93,165	1,527,915	441,602
NOAH HOLDINGS LTD SPON ADS	76,288	2,069,774	1,943,055
NOBLE ENERGY INC	1,060,033	27,892,328	9,497,896
NOBLE MIDSTREAM PARTNERS LP	75,325	2,008,180	637,250
NOODLES + CO	69,098	317,622	418,043
NORDSON CORP	129,375	14,206,944	24,543,731
NORDSTROM INC	554,520	13,014,559	8,589,515
NORFOLK SOUTHERN CORP	574,493	62,827,535	100,863,736
NORTH EUROPEAN OIL RTY TRUST	29,100	250,260	91,665
NORTHEAST BANK	16,858	333,904	295,858
NORTHERN OIL AND GAS INC	661,203	1,148,947	554,683
NORTHERN TECHNOLOGIES INTL	20,137	302,055	160,693
NORTHERN TRUST CORP	431,394	30,464,846	34,226,800
NORTHFIELD BANCORP INC	97,763	1,428,193	1,126,230
NORTHRIM BANCORP INC	14,364	505,428	361,111
NORTHROP GRUMMAN CORP	405,756	85,200,743	124,745,625
NORTHWEST BANCSHARES INC	259,148	3,767,108	2,649,788
NORTHWEST NATURAL HOLDING CO	67,938	4,292,996	3,790,261
NORTHWEST PIPE CO	21,333	456,089	534,818
NORTHWESTERN CORP	114,180	6,281,774	6,225,094
NORTONLIFELOCK INC	1,287,241	34,440,531	25,525,989
NORWEGIAN CRUISE LINE HOLDIN	569,635	25,719,367	9,359,103
NORWOOD FINANCIAL CORP	11,822	344,002	293,067
NOVABAY PHARMACEUTICALS INC	4,124	13,609	4,743
NOVANTA INC	76,094	5,860,728	8,124,556
NOVARTIS AG SPONSORED ADR	257,877	23,316,517	22,522,977
NOVATEK PJSC SPONS GDR REG S	251,317	46,907,517	35,737,277
NOVAVAX INC	129,975	6,824,681	10,833,416
NOVO NORDISK A/S SPONS ADR	298,658	15,348,119	19,556,126
NOVOLIPETSK STEEL PJSC GDR	240,370	5,332,060	4,778,556
NOW INC	249,716	4,835,179	2,155,049
NRG ENERGY INC	571,481	22,355,224	18,607,421
NU SKIN ENTERPRISES INC A	235,436	8,576,443	9,000,718
NUANCE COMMUNICATIONS INC	635,194	8,889,635	16,073,584
NUCOR CORP	680,752	31,094,323	28,189,940
NUSTAR ENERGY LP	466,453	15,066,166	6,660,949
NUTANIX INC A	538,900	15,675,795	12,774,625
NUVASIVE INC	116,260	6,024,989	6,471,032
NUVECTRA CORP	28,233	370,135	424
NV5 GLOBAL INC	23,596	1,174,688	1,199,385
NVE CORP	10,481	435,526	648,040
NVIDIA CORP	1,323,913	155,316,001	502,967,788
NVR INC	31,530	100,353,430	102,748,388
O I GLASS INC	568,975	7,132,159	5,109,396
O REILLY AUTOMOTIVE INC	267,167	69,325,674	112,656,309
O.C.FUNDING B.V.F	39,891	0	0
OAKTREE LATIGO INVEST FUND	50,000,000	50,000,000	50,000,000

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
OAKTREE SPECIALTY LENDING CO	267,952	1,336,579	1,197,745
OAKTREE STRATEGIC INCOME COR	46,000	371,451	291,640
OASIS MIDSTREAM PARTNERS LP	11,330	186,352	98,798
OASIS PETROLEUM INC	731,887	8,620,291	548,915
OCCIDENTAL PETROLEUM CORP	1,868,864	86,081,195	34,200,211
OCEANEERING INTL INC	219,246	4,987,221	1,400,982
OCEANFIRST FINANCIAL CORP	128,568	3,102,358	2,266,654
OCERA THERAPEUTICS INC	30,711	8,292	0
OCULAR THERAPEUTIX INC	113,473	636,411	945,230
OCWEN FINANCIAL CORP	224,900	3,892,284	149,334
ODONATE THERAPEUTICS INC	28,965	527,614	1,226,378
ODYSSEY MARINE EXPLORATION	5,024	41,548	23,437
OFFICE DEPOT INC	1,190,713	4,108,726	2,798,176
OFS CAPITAL CORP	11,600	124,004	52,432
OGE ENERGY CORP	809,908	30,514,928	24,588,807
OHA BLACK BEAR FUND, L.P.	150,000,000	150,000,000	150,000,000
OHIO VALLEY BANC CORP	5,582	248,384	125,874
OIL DRI CORP OF AMERICA	10,471	399,093	363,344
OIL STATES INTERNATIONAL INC	137,320	2,893,117	652,270
OKTA INC	284,100	30,949,975	56,885,343
OLD DOMINION FREIGHT LINE	218,883	11,909,354	37,120,368
OLD NATIONAL BANCORP	368,583	6,112,381	5,071,702
OLD POINT FINANCIAL CORP	1,000	26,220	15,250
OLD REPUBLIC INTL CORP	640,374	12,134,071	10,444,500
OLD SECOND BANCORP INC	63,564	762,147	494,528
OLIN CORP	330,422	5,603,160	3,796,549
OLLIE S BARGAIN OUTLET HOLDI	108,100	8,090,322	10,555,965
OLYMPIC STEEL INC	18,900	446,040	222,075
OMEGA FLEX INC	6,435	444,927	680,823
OMEROS CORP	106,100	1,445,482	1,561,792
OMNICELL INC	105,119	5,419,190	7,423,504
OMNICOM GROUP	1,831,292	126,297,696	99,988,543
ON DECK CAPITAL INC	53,400	227,363	38,368
ON SEMICONDUCTOR CORP	909,577	12,080,389	18,027,816
ONCOCYTE CORP	10,175	29,572	19,434
ONCTERNAL THERAPEUTICS INC	850	111,920	2,414
ONE GAS INC	115,994	6,400,107	8,937,338
ONEMAIN HOLDINGS INC	199,526	6,949,802	4,896,368
ONEOK INC	928,296	47,912,370	30,837,993
ONESPAN INC	74,006	933,265	2,066,988
ONTO INNOVATION INC	105,038	2,516,801	3,575,494
ONTRAK INC	15,900	355,809	393,366
OOMA INC	45,964	555,593	757,487
OPEN LENDING CORP CL A	56,500	575,483	853,150
OPKO HEALTH INC	879,272	4,328,858	2,998,318
OPORTUN FINANCIAL CORP	44,313	613,595	595,567
OPPENHEIMER HOLDINGS CL A	21,577	582,899	470,163
OPTICAL CABLE CORP	26,409	72,625	66,023
OPTIMIZERX CORP	29,100	261,285	379,173
OPTINOSE INC	62,400	517,558	464,256

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
OPTION CARE HEALTH INC	77,626	912,291	1,077,449
ORACLE CORP	10,573,889	457,160,888	584,418,845
ORASURE TECHNOLOGIES INC	137,469	1,293,883	1,598,764
ORBCOMM INC	163,518	651,559	629,544
ORBIT INTERNATIONAL CORP	111,761	680,432	474,984
ORCHIDS PAPER PRODUCTS CO	25,100	165,660	108
ORIC PHARMACEUTICALS INC	19,249	614,941	649,269
ORIGIN BANCORP INC	48,905	1,650,975	1,075,910
ORION ENERGY SYSTEMS INC	55,400	43,766	191,684
ORION GROUP HOLDINGS INC	192,944	997,129	605,844
ORMAT TECHNOLOGIES INC	88,490	5,305,887	5,618,230
ORRSTOWN FINL SERVICES INC	22,000	456,923	324,500
ORTHOFIX MEDICAL INC	41,433	2,353,373	1,325,856
ORTHOPEDIATRICS CORP	26,458	1,098,834	1,157,802
OSHKOSH CORP	153,233	8,007,721	10,974,547
OSI SYSTEMS INC	37,480	2,473,783	2,797,507
OSMOTICA PHARMACEUTICALS PLC	1,980	14,900	13,325
OTIS WORLDWIDE CORP	988,424	47,304,423	56,201,789
OTTER TAIL CORP	90,160	3,615,206	3,497,306
OVERSEAS SHIPHOLDING GROUP A	133,600	797,329	248,496
OVERSTOCK.COM INC	226,114	3,090,848	6,360,997
OVID THERAPEUTICS INC	94,824	709,211	698,853
OVINTIV INC	886,688	9,672,580	8,447,201
OWENS + MINOR INC	145,112	1,838,903	1,105,753
OWENS CORNING	250,003	12,491,590	13,940,167
OWL ROCK CAPITAL CORP	744,872	12,935,634	9,184,272
OXFORD INDUSTRIES INC	36,922	1,636,495	1,624,937
OXFORD SQUARE CAPITAL CORP	92,800	332,294	259,840
OYSTER POINT PHARMA INC	11,779	360,971	340,178
OZ DOMESTIC PARTNERS LP	1,819,788	1,815,351	111,344
OZ EUREKA FUND LP	4,645,904	2,154,288	11,824,628
P G + E CORP	1,502,739	37,074,647	13,329,295
P.A.M. TRANSPORTATION SVCS	426	24,677	13,100
PACCAR INC	834,454	42,934,895	62,458,882
PACIFIC BIOSCIENCES OF CALIF	320,724	1,595,867	1,106,498
PACIFIC DRILLING SA	3,800	50,992	1,878
PACIFIC ETHANOL INC	92,394	582,082	65,591
PACIFIC MERCANTILE BANCORP	39,600	368,280	144,936
PACIFIC PREMIER BANCORP INC	194,215	5,924,567	4,210,581
PACIRA BIOSCIENCES INC	91,449	4,357,082	4,798,329
PACKAGING CORP OF AMERICA	210,908	14,834,950	21,048,618
PACWEST BANCORP	371,539	12,486,740	7,323,034
PAE INC	148,469	1,452,602	1,419,364
PAG ASIA III LP	78,504,130	78,504,130	65,350,842
PAGERDUTY INC	187,800	4,981,994	5,374,836
PALATIN TECHNOLOGIES INC	465,300	545,800	238,234
PALO ALTO NETWORKS INC	266,200	46,388,887	61,138,154
PALOMAR HOLDINGS INC	46,217	2,543,325	3,963,570
PANHANDLE OIL AND GAS INC A	103,996	1,738,205	278,709
PAPA JOHN S INTL INC	80,874	3,927,289	6,422,204

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
PAR PACIFIC HOLDINGS INC	88,600	1,569,580	796,514
PAR TECHNOLOGY CORP/DEL	32,500	655,681	972,725
PARAGON OFFSHORE PLC	193,566	0	0
PARAMOUNT GOLD NEVADA CORP	18,374	30,133	22,784
PARATEK PHARMACEUTICALS INC	82,500	1,112,198	430,650
PARETEUM CORP	51,621	138,760	32,010
PARK AEROSPACE CORP	41,238	915,025	459,391
PARK NATIONAL CORP	31,705	2,894,534	2,231,398
PARK OHIO HOLDINGS CORP	19,178	541,732	318,163
PARKE BANCORP INC	23,297	420,343	315,674
PARKER DRILLING CO POST BANK	6,700	130,040	38,525
PARKER HANNIFIN CORP	288,465	33,089,412	52,866,981
PARKERVISION INC	30,670	23,003	15,007
PARSLEY ENERGY INC CLASS A	690,105	16,162,331	7,370,321
PARSONS CORP	49,855	1,834,214	1,806,745
PARTY CITY HOLDCO INC	183,000	400,723	272,670
PASSAGE BIO INC	30,035	513,871	820,857
PATRICK INDUSTRIES INC	50,901	1,643,487	3,117,686
PATRIOT TRANSPORTATION HOLDI	18,404	337,529	153,305
PATTERSON COS INC	314,797	6,159,251	6,925,534
PATTERSON UTI ENERGY INC	417,446	6,184,040	1,448,538
PAYCHEX INC	2,710,846	184,206,882	205,346,585
PAYCOM SOFTWARE INC	118,970	18,178,194	36,848,578
PAYLOCITY HOLDING CORP	77,303	6,376,024	11,277,735
PAYPAL HOLDINGS INC	2,685,261	173,304,054	467,853,024
PAYSIGN INC	67,981	558,557	660,096
PBF ENERGY INC CLASS A	353,699	10,490,839	3,621,878
PBF LOGISTICS LP	71,200	1,278,862	694,200
PC CONNECTION INC	24,355	842,124	1,129,098
PC TEL INC	36,750	246,593	245,490
PCB BANCORP	12,176	196,004	125,413
PCSB FINANCIAL CORP	33,058	565,022	419,175
PDC ENERGY INC	227,429	8,292,968	2,829,217
PDF SOLUTIONS INC	65,306	598,476	1,277,385
PDL BIOPHARMA INC	250,971	3,436,873	730,326
PDL COMMUNITY BANCORP	1,614	23,005	16,431
PEAPACK GLADSTONE FINL CORP	40,492	1,245,100	758,415
PEGASYSTEMS INC	88,147	3,407,666	8,917,832
PELTON INTERACTIVE INC A	235,356	10,211,426	13,596,516
PENDRELL CORP	2	340,000	170,000
PENN NATIONAL GAMING INC	572,427	13,073,204	17,481,921
PENN VIRGINIA CORP	27,600	767,464	263,028
PENNANT GROUP INC/THE	57,256	551,666	1,293,986
PENNANTPARK FLOATING RATE CA	88,293	841,012	741,661
PENNANTPARK INVESTMENT CORP	146,200	742,508	513,162
PENNS WOODS BANCORP INC	13,800	400,294	313,398
PENNYMAC FINANCIAL SERVICES	88,396	3,117,476	3,694,069
PENSKE AUTOMOTIVE GROUP INC	112,221	4,429,672	4,344,075
PENUMBRA INC	65,200	9,219,158	11,659,064
PEOPLE S UNITED FINANCIAL	948,466	14,198,486	10,973,752

**CalPERS 2019-2020 Annual Investment Report
Domestic Equity**

Security Name	Shares	Book Value	Market Value
PEOPLE S UTAH BANCORP	35,139	886,248	789,573
PEOPLES BANCORP INC	40,914	1,124,142	870,650
PEOPLES BANCORP OF NC	9,300	282,784	164,331
PEOPLES FINANCIAL CORP/MISS	18,007	251,558	171,067
PEOPLES FINANCIAL SERVICES	15,428	661,242	589,195
PEPSICO INC	9,654,971	1,042,330,480	1,276,966,464
PERCEPTRON INC	28,600	253,253	94,666
PERDOCEO EDUCATION CORP	153,162	2,720,956	2,439,871
PERFICIENT INC	74,724	1,771,944	2,673,625
PERFORMANCE FOOD GROUP CO	292,120	10,610,524	8,512,377
PERFORMANT FINANCIAL CORP	217,565	663,573	145,312
PERKINELMER INC	249,967	11,760,756	24,519,263
PERMA PIPE INTERNATIONAL HOL	18,955	172,491	106,527
PERSONALIS INC	39,600	313,570	513,612
PERSPECTA INC	317,399	5,053,594	7,373,179
PETIQ INC	45,486	1,494,715	1,584,732
PETMED EXPRESS INC	103,329	2,141,120	3,682,646
PFENEX INC	76,480	516,382	638,608
PFIZER INC	18,617,922	614,725,529	608,806,049
PFSWEB INC	43,367	405,915	289,692
PGT INNOVATIONS INC	128,589	1,895,734	2,016,276
PHATHOM PHARMACEUTICALS INC	31,924	1,080,112	1,050,619
PHIBRO ANIMAL HEALTH CORP A	45,079	1,517,544	1,184,225
PHILLIPS 66	984,858	65,219,738	70,811,290
PHILLIPS 66 PARTNERS LP	131,598	6,779,435	4,742,792
PHOSAGRO PJSC GDR REG S	236,015	3,021,347	2,912,425
PHOTRONICS INC	146,180	1,122,161	1,626,983
PHREESIA INC	63,190	1,390,257	1,787,013
PICO HOLDINGS INC	38,172	738,377	321,790
PIER 1 IMPORTS INC	8,234	1,812,738	1,070
PIERIS PHARMACEUTICALS INC	100,400	330,571	311,240
PILGRIM S PRIDE CORP	117,530	1,774,609	1,985,082
PING IDENTITY HOLDING CORP	35,315	914,240	1,133,258
PINNACLE FINANCIAL PARTNERS	171,621	6,188,734	7,206,366
PINNACLE WEST CAPITAL	947,123	78,551,880	69,414,645
PINTEREST INC CLASS A	818,100	19,634,242	18,137,277
PIONEER BANCORP INC/NY	10,665	148,551	97,585
PIONEER NATURAL RESOURCES CO	368,510	43,325,399	36,003,427
PIONEER POWER SOLUTIONS INC	17,600	102,960	30,976
PIPER SANDLER COS	39,479	2,095,098	2,335,578
PITNEY BOWES INC	395,010	3,291,314	1,027,026
PIVOTAL INVESTMENT CORP II A	3,520	35,215	35,728
PIXELWORKS INC	75,200	273,898	242,896
PJT PARTNERS INC A	52,544	1,779,200	2,697,609
PLAINS ALL AMER PIPELINE LP	946,188	20,368,370	8,364,302
PLAINS GP HOLDINGS LP CL A	711,585	18,150,842	6,333,107
PLANET FITNESS INC CL A	285,768	17,175,795	17,308,968
PLANTRONICS INC	74,341	2,043,245	1,091,326
PLAYA HOTELS + RESORTS NV	117,598	644,599	425,705
PLAYAGS INC	58,711	518,833	198,443

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
PLEXUS CORP	63,944	2,589,641	4,511,889
PLUG POWER INC	728,465	2,753,662	5,980,698
PLUMAS BANCORP	3,415	96,303	75,540
PLURALSIGHT INC A	191,200	4,477,291	3,451,160
PLUS THERAPEUTICS INC	26	3,836	55
PMI DT	36,289,830	36,289,830	35,349,887
PNC FINANCIAL SERVICES GROUP	986,103	96,615,174	103,747,897
PNM RESOURCES INC	178,526	6,606,904	6,862,539
POLARIS INC	198,215	16,184,051	18,344,798
POLARITYTE INC	1,723	30,566	2,137
POLYONE CORPORATION	217,813	5,150,921	5,713,235
POLYUS PJSC REG S GDR	484,053	22,524,099	40,733,060
POOL CORP	87,723	9,330,376	23,849,252
PORTLAND GENERAL ELECTRIC CO	200,838	9,280,276	8,397,037
PORTMAN RIDGE FINANCE CORP	91,002	291,206	100,102
PORTOLA PHARMACEUTICALS INC	158,900	5,164,150	2,858,611
POST HOLDINGS INC	144,384	11,892,547	12,650,926
POTBELLY CORP	3,400	47,600	7,752
POWELL INDUSTRIES INC	20,418	666,354	559,249
POWER INTEGRATIONS INC	66,164	4,138,324	7,815,953
POWERFLEET INC	90,713	563,842	419,094
PPD INC	256,237	5,278,700	6,867,152
PPG INDUSTRIES INC	531,174	38,123,292	56,336,314
PPL CORP	1,728,147	48,891,853	44,655,318
PQ GROUP HOLDINGS INC	84,718	1,429,996	1,121,666
PRA GROUP INC	100,519	2,674,836	3,886,065
PRA HEALTH SCIENCES INC	142,090	12,455,748	13,823,936
PRECIGEN INC	146,533	1,369,858	731,200
PRECISION BIOSCIENCES INC	92,400	1,160,943	769,692
PREFERRED BANK/LOS ANGELES	30,495	1,027,922	1,306,711
PREFORMED LINE PRODUCTS CO	6,767	342,663	338,418
PREMIER FINANCIAL BANCORP	28,890	465,410	370,370
PREMIER FINANCIAL CORP	81,774	1,830,476	1,444,947
PREMIER INC CLASS A	137,071	4,918,506	4,698,794
PRESTIGE CONSUMER HEALTHCARE	167,774	5,744,476	6,301,591
PREVAIL THERAPEUTICS INC	31,605	389,261	470,915
PRGX GLOBAL INC	70,388	684,476	330,824
PRICESMART INC	50,354	2,741,865	3,037,857
PRIMEENERGY RESOURCES CORP	4,946	349,562	351,611
PRIMERICA INC	89,358	7,581,014	10,419,143
PRIMO WATER CORP	356,204	4,094,688	4,872,306
PRIMORIS SERVICES CORP	107,259	2,245,377	1,904,920
PRINCIPAL FINANCIAL GROUP	631,225	27,079,356	26,221,087
PRINCIPIA BIOPHARMA INC	65,476	3,216,881	3,914,810
PROASSURANCE CORP	120,039	4,562,954	1,736,964
PROCTER + GAMBLE CO/THE	9,629,325	822,439,275	1,151,378,390
PROFIRE ENERGY INC	25,000	87,500	20,828
PROGENIC PHARMACEUTICALS INC.	176,700	0	66,510
PROGRESS SOFTWARE CORP	99,983	3,463,351	3,874,341
PROGRESSIVE CORP	3,543,165	216,392,437	283,842,948

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
PROGYNY INC	58,287	1,516,020	1,504,387
PROOFPOINT INC	126,038	11,354,401	14,005,343
PROPETRO HOLDING CORP	182,700	2,781,631	939,078
PROPHASE LABS INC	2,841	8,353	4,176
PROPTECH ACQUISITION CORP A	35,200	347,241	355,520
PROS HOLDINGS INC	86,908	3,278,476	3,861,322
PROSIGHT GLOBAL INC	8,517	144,136	75,801
PROSPECT CAPITAL CORP	624,300	4,885,835	3,190,173
PROSPERITY BANCSHARES INC	199,306	12,423,418	11,834,790
PROTAGONIST THERAPEUTICS INC	50,000	471,828	883,000
PROTECTIVE INSURANCE CORP B	20,465	378,300	308,408
PROTEOSTASIS THERAPEUTICS IN	41,200	219,184	56,444
PROTO LABS INC	59,778	6,583,576	6,723,232
PROVENTION BIO INC	93,802	1,220,016	1,323,546
PROVIDENCE SERVICE CORP	26,786	1,106,513	2,113,683
PROVIDENT FINANCIAL HLDGS	55,157	1,013,472	739,655
PROVIDENT FINANCIAL SERVICES	138,267	2,703,292	1,997,958
PRUDENTIAL BANCORP INC	17,800	314,936	214,312
PRUDENTIAL FINANCIAL INC	1,111,970	84,675,366	67,718,973
PSYCHEMEDICS CORP	47,487	993,903	261,179
PTC INC	212,400	9,699,611	16,522,596
PTC THERAPEUTICS INC	137,249	5,984,816	6,964,014
PUBLIC SERVICE ENTERPRISE GP	4,253,543	220,210,890	209,104,174
PULSE BIOSCIENCES INC	10,372	131,745	106,325
PULTEGROUP INC	757,916	17,331,821	25,791,881
PUMA BIOTECHNOLOGY INC	67,186	3,802,197	700,750
PURE ACQUISITION CORP	51,600	535,748	556,248
PURE CYCLE CORP	42,579	401,912	391,301
PURE STORAGE INC CLASS A	741,827	12,114,197	12,855,862
PURPLE INNOVATION INC	1,436	26,200	25,848
PVH CORP	196,143	18,254,480	9,424,671
PZENA INVESTMENT MANAGM CL A	28,710	259,139	156,182
Q2 HOLDINGS INC	100,588	6,770,810	8,629,445
QAD INC A	25,701	587,643	1,060,937
QAD INC B	7,797	103,526	233,910
QCR HOLDINGS INC	33,790	1,318,392	1,053,572
QEP RESOURCES INC	551,848	7,642,879	711,884
QIWI PLC SPONSORED ADR	67,344	1,330,662	1,166,398
QORVO INC	261,811	12,978,882	28,937,970
QUAD GRAPHICS INC	67,300	1,768,094	218,725
QUAKER CHEMICAL CORP	26,900	1,810,439	4,993,985
QUALCOMM INC	2,531,280	154,292,979	230,878,049
QUALYS INC	82,091	6,832,292	8,539,106
QUANEX BUILDING PRODUCTS	74,906	1,347,921	1,039,695
QUANTA SERVICES INC	309,492	8,477,781	12,141,371
QUANTERIX CORP	38,300	1,005,822	1,049,037
QUANTUM CORP	87,962	354,958	339,533
QUDIAN INC SPON ADR	411,724	1,568,442	699,931
QUEST DIAGNOSTICS INC	1,122,087	99,824,640	127,873,035
QUICKLOGIC CORP	8,505	166,737	26,025

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
QUICKSILVER RESOURCES INC	232,000	0	0
QUIDEL CORP	83,596	4,217,865	18,703,769
QUINSTREET INC	104,722	1,168,516	1,095,392
QUMU CORP	37,200	66,216	133,548
QUORUM HEALTH CORP	49,575	356,444	5,716
QUOTIENT TECHNOLOGY INC	190,033	2,243,781	1,391,042
QURATE RETAIL INC SERIES A	990,671	15,382,114	9,411,375
R1 RCM INC	236,529	2,617,845	2,637,298
RADIAN GROUP INC	704,232	12,030,399	10,922,638
RADIANT LOGISTICS INC	86,406	349,158	339,576
RADIUS HEALTH INC	100,808	3,515,702	1,374,013
RADNET INC	96,311	1,116,151	1,528,456
RAFAEL HOLDINGS INC CLASS B	20,344	285,978	292,343
RALPH LAUREN CORP	153,588	13,163,345	11,138,202
RAMBUS INC	254,454	3,530,680	3,867,701
RANGE RESOURCES CORP	488,193	7,210,429	2,748,527
RANPAK HOLDINGS CORP	58,600	450,679	435,984
RAPID7 INC	101,900	5,898,611	5,198,938
RAPT THERAPEUTICS INC	24,277	713,163	704,519
RATTLER MIDSTREAM LP	97,173	1,773,313	942,578
RAVE RESTAURANT GROUP INC	64,220	86,697	48,313
RAVEN INDUSTRIES INC	78,725	2,007,251	1,693,375
RAYMOND JAMES FINANCIAL INC	333,274	21,210,972	22,939,249
RAYONIER ADVANCED MATERIALS	125,400	1,772,657	352,374
RAYTHEON TECHNOLOGIES CORP	3,241,147	176,460,433	199,719,478
RBB BANCORP	37,869	641,135	516,912
RBC BEARINGS INC	54,541	5,321,037	7,310,676
RCI HOSPITALITY HOLDINGS INC	17,400	465,553	241,164
RCM TECHNOLOGIES INC	50,700	272,766	67,938
RE/MAX HOLDINGS INC CL A	40,552	1,974,198	1,274,549
READING INTERNATIONAL INC A	33,305	522,513	141,546
REALOGY HOLDINGS CORP	261,313	8,284,142	1,936,329
REALPAGE INC	195,457	8,671,052	12,706,660
REALREAL INC/THE	126,200	1,222,933	1,614,098
REATA PHARMACEUTICALS INC A	53,081	5,664,521	8,281,698
RECRO PHARMA INC	40,000	483,770	182,000
RED LION HOTELS CORP	60,800	604,960	141,664
RED RIVER BANCSHARES INC	10,978	454,881	481,824
RED ROBIN GOURMET BURGERS	28,284	983,888	288,497
RED ROCK RESORTS INC CLASS A	204,517	3,904,634	2,231,280
RED VIOLET INC	14,034	230,701	247,560
REDFIN CORP	213,009	3,940,722	8,927,207
REED S INC	13,200	30,360	12,646
REGAL BELOIT CORP	94,912	6,092,000	8,287,716
REGENERON PHARMACEUTICALS	841,830	452,253,096	525,007,280
REGENXBIO INC	68,900	3,210,235	2,537,587
REGIONAL MANAGEMENT CORP	19,380	619,712	343,220
REGIONS FINANCIAL CORP	2,465,705	31,684,093	27,418,640
REGIS CORP	47,600	937,309	389,368
REGULUS THERAPEUTICS INC	14,799	119,702	10,086

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
REINSURANCE GROUP OF AMERICA	157,881	16,643,759	12,384,186
RELIANCE STEEL + ALUMINUM	178,116	12,173,139	16,908,552
RELIANCE WORLDWIDE CORP LTD	1,881,355	5,178,264	3,808,220
RELIANT BANCORP INC	23,655	537,068	385,340
RELMADA THERAPEUTICS INC	31,904	1,076,445	1,427,704
RENASANT CORP	121,971	4,395,612	3,037,078
RENEWABLE ENERGY GROUP INC	84,610	1,236,206	2,096,636
RENT A CENTER INC	138,693	2,710,369	3,858,439
REPAY HOLDINGS CORP	81,007	1,193,179	1,995,202
REPLAY ACQUISITION CORP	53,600	542,484	546,720
REPLIGEN CORP	116,693	4,635,028	14,424,422
REPLIMUNE GROUP INC	39,145	550,327	972,753
REPRO MEDSYSTEMS INC	53,975	399,616	484,696
REPUBLIC BANCORP INC CLASS A	21,492	728,089	703,003
REPUBLIC FIRST BANCORP INC	89,000	643,021	217,160
REPUBLIC SERVICES INC	1,852,053	131,231,036	151,960,949
RESEARCH FRONTIERS INC	53,241	50,579	216,158
RESIDEO TECHNOLOGIES INC	273,677	3,641,336	3,207,494
RESMED INC	322,643	25,838,301	61,947,456
RESOURCES CONNECTION INC	67,426	1,063,496	807,089
RETROPHIN INC	91,549	2,167,212	1,868,515
REV GROUP INC	60,226	562,940	367,379
REVANCE THERAPEUTICS INC	127,282	2,289,709	3,108,226
REVLON INC CLASS A	17,120	270,109	169,488
REVOLUTION MEDICINES INC	32,445	729,543	1,024,289
REVOLVE GROUP INC	27,600	231,320	410,136
REX AMERICAN RESOURCES CORP	12,435	486,297	862,616
REXNORD CORP	238,633	6,529,050	6,956,152
REYNOLDS CONSUMER PRODUCTS I	108,998	3,257,972	3,786,591
RF INDUSTRIES LTD	118,018	930,074	549,964
RGC RESOURCES INC	16,847	430,506	407,192
RH	59,260	7,655,855	14,749,814
RHYTHM PHARMACEUTICALS INC	68,000	1,499,715	1,516,400
RIBBON COMMUNICATIONS INC	151,509	1,222,482	595,430
RICHARDSON ELEC LTD	21,900	202,356	88,476
RICHMOND MUTUAL BANCORPORATI	24,900	279,437	279,876
RIGEL PHARMACEUTICALS INC	375,658	889,394	687,454
RIMINI STREET INC	3,841	18,034	19,781
RING ENERGY INC	117,600	1,545,371	136,416
RINGCENTRAL INC CLASS A	171,401	12,249,140	48,850,999
RIO TINTO PLC SPON ADR	23,300	1,061,471	1,308,994
RIOT BLOCKCHAIN INC	16,907	126,633	37,534
RISE EDUCATION CAYMAN ADR	21,875	184,677	84,875
RITE AID CORP	207,103	5,859,231	3,533,177
RIVERVIEW BANCORP INC	43,400	398,819	245,210
RLI CORP	87,623	3,858,382	7,193,848
RMG ACQUISITION CORP CL A	41,400	412,859	423,522
RMR GROUP INC/THE A	34,687	1,398,801	1,022,226
ROADRUNNER TRANSPORTATION SY	1,400	686,703	3,234
ROBERT HALF INTL INC	255,218	8,075,370	13,483,167

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
ROCKET PHARMACEUTICALS INC	75,334	1,339,820	1,576,741
ROCKWELL AUTOMATION INC	260,939	25,951,960	55,580,007
ROCKWELL MEDICAL INC	138,500	658,586	270,075
ROCKY BRANDS INC	13,946	348,106	286,730
ROCKY MOUNTAIN CHOC FACT INC	19,271	225,278	81,902
ROGERS CORP	41,565	4,617,476	5,178,999
ROKU INC	227,442	25,070,336	26,503,816
ROLLINS INC	1,216,283	40,209,863	51,558,236
ROPER TECHNOLOGIES INC	232,897	49,790,532	90,424,589
ROSETTA STONE INC	51,847	730,690	874,140
ROSNEFT OIL CO PJSC REGS GDR	2,747,769	17,467,050	13,815,783
ROSS STORES INC	2,603,157	212,898,067	221,893,103
ROSTELECOM SPONSORED ADR	334,930	3,208,131	2,465,085
ROYAL CARIBBEAN CRUISES LTD	382,799	29,408,274	19,254,790
ROYAL GOLD INC	147,322	12,658,980	18,315,071
RPC INC	127,073	1,295,895	391,385
RPM INTERNATIONAL INC	289,380	13,596,131	21,720,863
RR DONNELLEY + SONS CO	130,433	2,871,063	155,215
RTI SURGICAL HDS INC	114,900	357,884	365,382
RTW RETAILWINDS INC	176,000	702,240	35,288
RUBICON PROJECT INC/THE	228,014	1,667,825	1,520,853
RUBICON TECHNOLOGY INC	6,130	42,052	49,163
RUBIUS THERAPEUTICS INC	72,500	933,668	433,550
RUSH ENTERPRISES INC CL B	10,191	398,135	363,411
RUSH ENTERPRISES INC CL A	61,855	2,269,424	2,564,508
RUTH S HOSPITALITY GROUP INC	58,972	568,909	481,212
RYANAIR HOLDINGS PLC SP ADR	316,537	15,751,090	20,999,065
RYDER SYSTEM INC	171,908	8,335,394	6,448,269
RYERSON HOLDING CORP	14,912	173,329	83,955
S + T BANCORP INC	86,706	3,465,951	2,033,256
S+P GLOBAL INC	557,182	76,992,041	183,580,325
SABINE OIL + GAS HOLDINGS IN	140	6,141	6,300
SABRE CORP	884,677	16,290,573	7,130,497
SAFEGUARD SCIENTIFICS INC	39,700	424,422	277,900
SAFEHOLD INC	3,258	133,482	187,302
SAFETY INSURANCE GROUP INC	32,439	2,962,436	2,473,798
SAGA COMMUNICATIONS INC CL A	11,587	519,098	296,627
SAGE THERAPEUTICS INC	104,200	11,386,602	4,332,636
SAIA INC	58,557	2,953,739	6,510,367
SAILPOINT TECHNOLOGIES HOLDI	194,808	4,010,724	5,156,568
SALEM MEDIA GROUP INC	39,300	125,760	44,409
SALESFORCE.COM INC	1,980,818	200,854,078	371,066,636
SALISBURY BANCORP INC	2,300	91,425	94,277
SALLY BEAUTY HOLDINGS INC	253,620	4,144,494	3,177,859
SAMSONITE INTERNATIONAL SA	4,399,904	8,369,457	4,428,033
SAMSUNG ELECTRO REGS GDR PFD	1,090	864,319	1,054,030
SANCHEZ ENERGY CORP	294,800	4,562,755	2,463
SANCHEZ MIDSTREAM PARTNERS L	30,030	359,765	11,417
SANDERSON FARMS INC	44,626	4,115,190	5,171,707
SANDRIDGE ENERGY INC	6,525	0	24

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
SANDRIDGE MISSISSIPPIAN TRUS	188,500	190,792	29,901
SANDRIDGE PERMIAN TRUST	173,300	381,260	78,332
SANDY SPRING BANCORP INC	103,820	2,934,804	2,572,660
SANGAMO THERAPEUTICS INC	233,000	2,230,884	2,087,680
SANMINA CORP	211,016	5,485,166	5,283,841
SANTANDER CONSUMER USA HOLDI	174,195	3,938,511	3,206,930
SARATOGA INVESTMENT CORP	18,600	283,713	293,880
SAREPTA THERAPEUTICS INC	151,669	10,513,556	24,318,607
SATSUMA PHARMACEUTICALS INC	20,340	563,587	584,978
SB FINANCIAL GROUP INC	3,200	60,512	53,184
SB ONE BANCORP	16,400	315,753	323,080
SBERBANK PJSC SPONSORED ADR	6,273,958	86,261,907	71,393,525
SCANSOURCE INC	57,668	1,874,102	1,389,222
SCHLUMBERGER LTD	3,143,990	132,926,607	57,817,976
SCHNEIDER NATIONAL INC CL B	131,197	2,670,348	3,236,630
SCHNITZER STEEL INDS INC A	56,936	1,881,190	1,004,351
SCHOLAR ROCK HOLDING CORP	50,293	676,031	915,836
SCHOLASTIC CORP	64,336	2,248,725	1,926,220
SCHRODINGER INC	30,462	1,341,385	2,789,405
SCHWAB (CHARLES) CORP	2,736,826	82,010,927	92,340,509
SCIENCE APPLICATIONS INTE	129,103	7,425,139	10,028,721
SCIENTIFIC GAMES CORP	130,199	2,825,781	2,012,877
SCIPLAY CORP CLASS A	50,507	536,645	749,019
SCORPIO BULKERS INC	11,120	2,204,666	170,136
SCOTTS MIRACLE GRO CO	91,346	6,561,211	12,283,297
SCULPTOR CAPITAL MANAGEMENT	39,946	1,422,066	516,502
SCVX CORP CLASS A	4,700	45,944	46,812
SCYNEXIS INC	200,000	246,000	150,180
SEABOARD CORP	561	2,163,328	1,645,873
SEACHANGE INTERNATIONAL INC	60,000	193,200	90,600
SEACOAST BANKING CORP/FL	114,356	2,631,405	2,332,862
SEACOR HOLDINGS INC	43,632	1,847,838	1,235,658
SEACOR MARINE HOLDINGS INC	40,108	842,899	102,275
SEAGATE TECHNOLOGY	577,427	20,452,564	27,953,241
SEALED AIR CORP	350,935	9,334,354	11,528,215
SEASPINE HOLDINGS CORP	53,000	568,349	554,910
SEATTLE GENETICS INC	271,962	18,476,716	46,211,783
SEAWORLD ENTERTAINMENT INC	142,074	3,830,927	2,104,116
SECUREWORKS CORP A	16,200	175,925	185,166
SECURITY NATL FINL CORP CL A	63,304	307,190	426,985
SEELOS THERAPEUTICS INC	860	6,840	869
SEI INVESTMENTS COMPANY	282,577	10,718,403	15,536,083
SELECT BANCORP INC	32,000	351,326	260,480
SELECT ENERGY SERVICES INC A	130,190	1,590,401	637,931
SELECT INTERIOR CONCEPTS A	14,800	145,810	51,800
SELECT MEDICAL HOLDINGS CORP	323,110	5,221,869	4,759,410
SELECTA BIOSCIENCES INC	137,200	388,365	389,648
SELECTIVE INSURANCE GROUP	130,916	6,424,096	6,904,510
SELECTQUOTE INC	4,515	115,968	114,365
SELLAS LIFE SCIENCES GROUP I	15	4,559	44

**CalPERS 2019-2020 Annual Investment Report
Domestic Equity**

Security Name	Shares	Book Value	Market Value
SEMPRA ENERGY	1,661,144	189,748,074	194,735,911
SEMTECH CORP	166,987	6,952,960	8,720,061
SENECA BIOPHARMA INC	599	19,882	431
SENECA FOODS CORP CL A	14,866	464,805	502,619
SENECA FOODS CORP CL B	231	6,870	7,623
SENSATA TECHNOLOGIES HOLDING	349,719	14,813,397	13,020,038
SENSEONICS HOLDINGS INC	113,200	511,653	44,148
SENSIENT TECHNOLOGIES CORP	95,121	4,231,718	4,961,511
SERES THERAPEUTICS INC	97,368	379,717	463,472
SERVICE CORP INTERNATIONAL	392,388	12,496,259	15,259,969
SERVICEMASTER GLOBAL HOLDING	293,197	11,804,276	10,464,201
SERVICENOW INC	438,884	75,514,268	177,774,353
SERVICESOURCE INTERNATIONAL	189,902	1,206,047	300,045
SERVISFIRST BANCSHARES INC	109,407	4,158,535	3,912,394
SEVERN BANCORP INC/MD	52,116	392,282	337,712
SFX ENTERTAINMENT INC	115,200	0	0
SHAKE SHACK INC CLASS A	71,000	5,016,129	3,761,580
SHARPS COMPLIANCE CORP	27,800	112,590	195,434
SHELL MIDSTREAM PARTNERS LP	277,967	6,671,474	3,410,655
SHENANDOAH TELECOMMUNICATION	106,618	2,646,493	5,255,201
SHERWIN WILLIAMS CO/THE	194,775	63,536,867	112,550,734
SHILOH INDUSTRIES INC	30,400	261,440	49,248
SHOCKWAVE MEDICAL INC	53,900	2,355,872	2,553,243
SHOE CARNIVAL INC	21,222	359,059	621,168
SHORE BANCSHARES INC	25,200	462,855	279,468
SHOTSPOTTER INC	17,831	783,360	449,341
SHUTTERSTOCK INC	109,272	5,087,958	3,821,242
SHYFT GROUP INC/THE	77,496	925,871	1,305,033
SI BONE INC	51,300	893,838	817,722
SIENTRA INC	93,900	620,026	363,393
SIERRA BANCORP	30,917	753,795	583,713
SIFCO INDUSTRIES	21,725	124,702	86,900
SIFY TECHNOLOGIES SPON ADR	169,600	315,922	131,779
SIGA TECHNOLOGIES INC	109,400	542,671	646,554
SIGMA DESIGNS INC	298,300	59,660	68,609
SIGMATRON INTERNATIONAL INC	8,700	58,638	29,058
SIGNATURE BANK	116,581	10,209,638	12,464,841
SIGNET JEWELERS LTD	118,962	3,580,007	1,221,740
SILGAN HOLDINGS INC	175,018	5,251,245	5,668,833
SILICON LABORATORIES INC	97,337	7,956,219	9,759,981
SILICON MOTION TECHNOL ADR	76,421	2,407,899	3,727,052
SILK ROAD MEDICAL INC	64,300	2,524,604	2,693,527
SILVER SPIKE ACQUISITION A	51,100	505,005	516,110
SILVERBOW RESOURCES INC	7,109	181,066	22,820
SILVERGATE CAPITAL CORP CL A	33,897	523,342	474,558
SIMMONS FIRST NATL CORP CL A	250,421	6,079,293	4,284,703
SIMPLY GOOD FOODS CO/THE	188,607	4,679,501	3,504,318
SIMPSON MANUFACTURING CO INC	98,936	5,260,077	8,346,241
SIMS LTD	385,983	5,571,681	2,107,392
SIMULATIONS PLUS INC	28,596	646,443	1,710,613

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
SINCLAIR BROADCAST GROUP A	119,048	3,222,403	2,197,626
SIRIUS XM HOLDINGS INC	9,637,996	54,833,032	56,575,037
SISTEMA PJSC REG S SPONS GDR	452,974	2,345,518	2,147,097
SITE CENTERS CORP	39,183	467,822	317,382
SITEONE LANDSCAPE SUPPLY INC	93,250	6,397,456	10,627,703
SITIME CORP	11,151	521,805	528,669
SIX FLAGS ENTERTAINMENT CORP	255,553	9,519,588	4,909,173
SIXTH STREET SPECIALTY LENDI	145,069	2,914,344	2,392,188
SJW GROUP	58,425	3,714,621	3,628,777
SKECHERS USA INC CL A	300,080	8,483,098	9,416,510
SKYLINE CHAMPION CORP	120,480	3,305,000	2,932,483
SKYWEST INC	158,690	5,752,195	5,176,468
SKYWORKS SOLUTIONS INC	377,480	20,589,192	48,264,593
SLACK TECHNOLOGIES INC CL A	763,500	22,335,646	23,737,215
SLEEP NUMBER CORP	61,731	1,755,144	2,570,479
SLM CORP	1,047,300	8,265,442	7,362,519
SM ENERGY CO	256,817	5,825,152	963,064
SMART GLOBAL HOLDINGS INC	32,217	1,015,626	875,658
SMARTFINANCIAL INC	30,651	574,056	495,933
SMARTSHEET INC CLASS A	253,700	12,054,378	12,918,404
SMILEDIRECTCLUB INC	117,300	1,180,349	926,670
SMITH (A.O.) CORP	319,748	10,073,995	15,066,526
SMITH MICRO SOFTWARE INC	67,700	237,148	301,942
SNAP INC A	1,906,285	28,777,004	44,778,635
SNAP ON INC	121,866	12,297,536	16,879,660
SOFTBRANDS INC	36,200	0	0
SOGOU INC ADR	114,834	948,435	480,006
SOHU.COM LTD ADR	67,960	1,418,000	625,912
SOLAR CAPITAL LTD	90,424	1,868,028	1,447,688
SOLAR SENIOR CAPITAL LTD	33,600	502,523	431,088
SOLARIS OILFIELD INFRAST A	66,257	749,943	491,627
SOLARWINDS CORP	103,703	1,884,708	1,832,432
SOLID BIOSCIENCES INC	4,787	15,294	14,026
SOLITARIO ZINC CORP	14,104	6,905	4,441
SONIC AUTOMOTIVE INC CLASS A	54,408	1,076,658	1,736,159
SONIC FOUNDRY INC	13,487	32,234	63,928
SONOCO PRODUCTS CO	227,261	9,372,728	11,883,478
SONOMA PHARMACEUTICALS INC	200	6,949	1,424
SONOS INC	175,696	2,200,366	2,570,432
SORRENTO THERAPEUTICS INC	388,008	1,626,710	2,436,690
SOUTH JERSEY INDUSTRIES	204,879	6,299,879	5,119,926
SOUTH PLAINS FINANCIAL INC	24,145	401,634	343,825
SOUTH STATE CORP	161,765	12,296,089	7,709,720
SOUTHCROSS ENERGY PARTNERS L	18,400	32,016	129
SOUTHERN CO/THE	8,623,443	416,137,592	447,125,520
SOUTHERN FIRST BANCSHARES	15,986	600,140	442,972
SOUTHERN MISSOURI BANCORP	17,579	607,878	427,170
SOUTHERN NATL BANCORP OF VA	45,198	719,123	437,969
SOUTHSIDE BANCSHARES INC	69,940	1,788,312	1,938,737
SOUTHWEST AIRLINES CO	1,345,716	41,865,414	45,996,573

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
SOUTHWEST GAS HOLDINGS INC	122,221	8,031,825	8,439,360
SOUTHWESTERN ENERGY CO	1,755,045	13,545,317	4,492,915
SP PLUS CORP	50,816	1,814,326	1,052,399
SPARK NETWORKS SE ADR	4,150	58,640	13,695
SPARTAN ENERGY ACQUISITION A	112,800	1,150,402	1,209,216
SPARTANNASH CO	82,165	1,302,168	1,746,006
SPECTRUM BRANDS HOLDINGS INC	125,717	6,014,817	5,770,410
SPECTRUM PHARMACEUTICALS INC	253,920	1,939,151	858,250
SPERO THERAPEUTICS INC	29,100	390,358	393,723
SPIRE INC	112,046	7,083,514	7,362,543
SPIRIT AEROSYSTEMS HOLD CL A	242,620	12,585,713	5,808,323
SPIRIT AIRLINES INC	198,917	6,545,061	3,540,723
SPIRIT OF TEXAS BANCSHARES I	30,032	477,448	369,694
SPLUNK INC	387,893	41,706,240	77,074,339
SPOK HOLDINGS INC	38,704	467,859	361,882
SPORT HALEY HOLDINGS INC	6,900	0	0
SPORTSMAN S WAREHOUSE HOLDIN	100,908	722,169	1,437,939
SPRAGUE RESOURCES LP	22,581	593,548	355,651
SPRINGWORKS THERAPEUTICS INC	46,905	1,829,149	1,970,010
SPROUT SOCIAL INC CLASS A	17,776	251,844	479,952
SPROUTS FARMERS MARKET INC	273,343	6,676,584	6,994,847
SPS COMMERCE INC	78,642	3,144,222	5,907,587
SPX CORP	95,579	2,559,915	3,933,076
SPX FLOW INC	95,262	3,954,495	3,566,609
SQUARE INC A	774,476	44,607,736	81,273,511
SS+C TECHNOLOGIES HOLDINGS	523,927	20,322,862	29,591,397
ST JOE CO/THE	72,756	1,313,216	1,412,922
STAAR SURGICAL CO	99,814	2,507,771	6,142,554
STAGE STORES INC	38,200	135,217	2,678
STAMPS.COM INC	81,399	6,070,692	14,952,182
STANDARD MOTOR PRODS	47,091	1,659,061	1,940,149
STANDEX INTERNATIONAL CORP	27,748	1,737,261	1,596,897
STANLEY BLACK + DECKER INC	346,100	34,480,269	48,239,418
STAR GROUP LP	94,552	832,002	829,221
STARBUCKS CORP	3,275,949	173,481,849	241,077,087
STARRETT (L.S.) CO CL A	8,500	51,425	28,815
STARTEK INC	36,776	323,935	186,822
STATE AUTO FINANCIAL CORP	38,703	1,105,602	690,849
STATE STREET CORP	815,493	39,977,670	51,824,580
STEEL CONNECT INC	143,982	285,084	86,404
STEEL DYNAMICS INC	473,780	12,581,631	12,360,920
STEEL PARTNETRS HLDGS L P	8,400	101,441	44,268
STEELCASE INC CL A	201,786	3,109,370	2,433,539
STEIN MART INC	48,500	99,425	20,370
STELLUS CAPITAL INVESTMENT C	40,500	465,593	294,840
STEMLINE THERAPEUTICS INC	93,700	30,921	30,921
STEPAN CO	47,686	3,515,512	4,630,311
STEREOTAXIS INC	97,886	497,873	436,572
STERICYCLE INC	207,662	11,092,735	11,624,919
STERIS PLC	188,953	19,305,984	28,992,948

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
STERLING BANCORP INC/MI	11,800	110,851	42,244
STERLING BANCORP/DE	447,626	8,169,351	5,246,177
STERLING CONSTRUCTION CO	61,631	736,247	645,277
STEVEN MADDEN LTD	186,246	4,782,270	4,598,414
STEWART INFORMATION SERVICES	51,539	1,822,547	1,675,533
STIFEL FINANCIAL CORP	154,360	7,255,985	7,321,295
STITCH FIX INC CLASS A	345,135	8,525,377	8,607,667
STOCK YARDS BANCORP INC	45,150	1,714,307	1,815,030
STOKE THERAPEUTICS INC	24,700	557,324	588,601
STONEMOR INC	14,700	408,016	11,425
STONERIDGE INC	57,435	1,033,503	1,186,607
STONEX GROUP INC	37,649	1,311,362	2,070,695
STRATASYS LTD	115,838	5,593,953	1,837,191
STRATEGIC EDUCATION INC	48,770	5,884,074	7,493,511
STRATTEC SECURITY CORP	14,386	474,019	229,313
STRATUS PROPERTIES INC	17,197	531,895	340,673
STREAMLINE HEALTH SOLUTIONS	28,600	41,756	38,038
STRYKER CORP	1,386,071	209,881,527	249,756,133
STUDIO CITY INTERNATIONA ADR	7,800	157,177	124,019
SUBURBAN PROPANE PARTNERS LP	142,973	4,477,109	2,044,514
SUMMER INFANT INC	14,981	117,302	122,545
SUMMIT FINANCIAL GROUP INC	24,829	630,334	409,182
SUMMIT MATERIALS INC CL A	268,502	5,849,274	4,317,512
SUMMIT MIDSTREAM PARTNERS LP	135,300	1,520,615	134,001
SUMMIT PART GROWTH EQ FD X A L	19,450,000	19,450,000	22,065,792
SUMMIT STATE BANK	2,875	42,694	27,916
SUNCOKE ENERGY INC	189,316	1,461,832	560,375
SUNESIS PHARMACEUTICALS INC	19,416	54,559	5,114
SUNNOVA ENERGY INTERNATIONAL	71,609	724,233	1,222,366
SUNOCO LP	122,602	3,834,309	2,799,004
SUNPOWER CORP	169,238	1,563,141	1,296,363
SUNRUN INC	235,200	4,155,973	4,638,144
SUPER MICRO COMPUTER INC	102,247	2,503,419	2,902,792
SUPERIOR BANCORP	46,325	0	0
SUPERIOR ENERGY SERVICES INC	18,280	4,740,889	20,839
SUPERIOR GROUP OF COS INC	9,456	151,860	126,710
SUPERIOR INDUSTRIES INTL	9,300	196,310	15,810
SUPERNUS PHARMACEUTICALS INC	111,181	3,633,488	2,640,549
SUPPORT.COM INC	105,166	283,948	148,284
SURFACE ONCOLOGY INC	1,000	15,000	6,560
SURGERY PARTNERS INC	50,157	747,430	580,316
SURGUTNEFTEGAS SP ADR	1,679,533	8,906,311	8,968,706
SURGUTNEFTEGAZ SP ADR PREF	1,816,113	10,212,104	8,880,793
SURMODICS INC	29,222	1,258,226	1,263,559
SURO CAPITAL CORP	41,000	277,570	347,270
SUTRO BIOPHARMA INC	37,201	352,255	288,680
SUTTONBROOK EUREKA FUND	5,248,488	5,248,488	1,255,785
SVB FINANCIAL GROUP	114,939	15,476,753	24,772,803
SVMK INC	263,782	5,028,672	6,209,428

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
SWISHER HYGIENE INC	5,550	0	0
SWITCH INC A	215,402	3,374,422	3,838,464
SWITCHBACK ENERGY ACQUISIT A	22,761	226,464	228,680
SWK HOLDINGS CORP	982	0	11,764
SYKES ENTERPRISES INC	148,328	4,155,481	4,102,752
SYNACOR INC	13,700	23,975	15,481
SYNALLOY CORP	37,687	644,728	281,899
SYNAPTICS INC	79,022	2,759,612	4,750,803
SYNCHRONOSS TECHNOLOGIES INC	80,800	912,614	285,224
SYNCHRONY FINANCIAL	1,446,390	38,387,423	32,052,002
SYNCREON	17,704	243,428	57,538
SYNDAX PHARMACEUTICALS INC	59,591	636,819	883,139
SYNEOS HEALTH INC	221,268	12,092,979	12,888,861
SYNERGY PHARMACEUTICALS INC	5,895	0	0
SYNNEX CORP	124,474	11,644,690	14,908,251
SYNOPSIS INC	1,261,765	122,724,491	246,044,175
SYNOVUS FINANCIAL CORP	398,446	12,010,461	8,180,096
SYNTHESIS ENERGY SYSTEMS INC	2,343	59,813	820
SYNTHETIC BIOLOGICS INC	2,869	23,582	1,466
SYPRIS SOLUTIONS INC	49,748	72,632	37,042
SYROS PHARMACEUTICALS INC	94,694	634,044	1,009,438
SYSCO CORP	1,148,964	51,506,730	62,802,372
SYSTEMAX INC	27,423	552,280	563,268
T MOBILE US INC	5,276,566	265,757,843	292,694,165
T ROWE PRICE GROUP INC	509,015	39,189,471	62,863,353
TABULA RASA HEALTHCARE INC	45,261	2,407,343	2,477,135
TACTILE SYSTEMS TECHNOLOGY I	37,200	1,938,685	1,541,196
TAILORED BRANDS INC	78,700	1,537,911	73,821
TAIWAN SEMICONDUCTOR SP ADR	497,889	26,209,202	28,265,159
TAKE TWO INTERACTIVE SOFTWARE	958,287	126,066,782	133,748,117
TAL EDUCATION GROUP ADR	861,011	31,955,275	58,875,932
TALON THERAPEUTICS CVRNEW	9,125	0	0
TALOS ENERGY INC	25,129	3,875,374	231,187
TANDEM DIABETES CARE INC	119,843	6,074,891	11,854,870
TANDY LEATHER FACTORY INC	30,500	225,700	101,870
TAPESTRY INC	858,811	21,799,172	11,405,010
TARGA RESOURCES CORP	680,727	24,350,463	13,662,191
TARGANTA THERAPEUTICS	9,000	0	0
TARGET CORP	1,163,373	69,245,967	139,523,324
TARGET HOSPITALITY CORP	32,496	199,647	54,918
TAYLOR DEVICES INC	83,915	850,656	839,150
TAYLOR MORRISON HOME CORP	290,032	6,623,890	5,594,717
TC PIPELINES LP	123,772	4,840,665	3,844,358
TCEH CORP TRA	79,445	76,448	79,445
TCF FINANCIAL CORP	335,716	12,687,726	9,876,765
TCG BDC INC	125,484	1,167,906	1,075,398
TCR2 THERAPEUTICS INC	33,000	509,781	506,880
TD AMERITRADE HOLDING CORP	670,016	25,759,305	24,375,182
TEAM INC	66,203	1,411,857	368,751
TECH DATA CORP	82,586	6,173,203	11,966,711

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
TECHTARGET	51,734	1,240,799	1,553,572
TECOGEN INC/WALTHAM MA	2,392	7,846	1,674
TEEKAY LNG PARTNERS LP	116,451	2,582,158	1,357,819
TEGNA INC	491,815	5,780,823	5,478,819
TEJON RANCH CO	46,178	720,425	664,963
TELADOC HEALTH INC	198,634	17,260,508	37,907,313
TELEDYNE TECHNOLOGIES INC	81,575	12,694,431	25,365,746
TELEFLEX INC	104,021	22,707,780	37,861,564
TELENAV INC	74,952	421,641	411,486
TELEPHONE AND DATA SYSTEMS	232,519	6,325,623	4,622,478
TELLURIAN INC	295,300	1,618,503	339,595
TEMPUR SEALY INTERNATIONAL I	144,751	8,616,320	10,414,834
TENABLE HOLDINGS INC	123,200	3,565,257	3,672,592
TENET HEALTHCARE CORP	298,435	8,143,818	5,404,658
TENNANT CO	40,451	2,230,511	2,629,720
TENNECO INC CLASS A	116,321	3,283,968	879,387
TERADATA CORP	316,934	7,438,770	6,592,227
TERADYNE INC	386,049	12,085,775	32,625,001
TEREX CORP	153,145	4,404,916	2,874,532
TERNIUM SA SPONSORED ADR	112,649	2,847,279	1,708,885
TERRAFORM POWER INC A	195,997	4,095,415	3,614,185
TERRITORIAL BANCORP INC	17,338	467,314	412,471
TESLA INC	334,390	99,762,074	361,077,666
TESSCO TECHNOLOGIES INC	49,433	872,163	271,882
TETRA TECH INC	120,705	6,027,335	9,550,180
TETRA TECHNOLOGIES INC	145,300	1,394,339	77,663
TETRAPHASE PHARMACEUTICALS I	8,190	525,798	20,639
TEXAS CAPITAL BANCSHARES INC	117,597	6,047,205	3,630,219
TEXAS INSTRUMENTS INC	3,369,357	285,265,306	427,807,258
TEXAS ROADHOUSE INC	214,234	7,941,359	11,262,281
TEXTAINER GROUP HOLDINGS LTD	117,067	1,324,279	957,608
TEXTRON INC	513,701	17,070,063	16,905,900
TFS FINANCIAL CORP	108,541	1,509,802	1,553,222
TG THERAPEUTICS INC	215,780	2,610,852	4,203,394
THE BANK OF PRINCETON	4,000	123,450	80,320
THERAPEUTICSMD INC	521,310	1,619,324	651,638
THERMO FISHER SCIENTIFIC INC	888,187	147,312,531	321,825,678
THERMON GROUP HOLDINGS INC	72,314	1,665,798	1,053,615
THL CREDIT INC	20,800	136,260	67,392
THOR INDUSTRIES INC	123,587	6,750,535	13,165,723
THUNDER BRIDGE ACQUISITION A	70,300	688,902	710,030
TIDEWATER INC	81,800	1,686,572	457,262
TIERONE CORP	77,845	0	0
TIFFANY + CO	271,650	19,830,543	33,125,001
TILLY S INC CLASS A SHRS	44,900	581,684	254,583
TIMBERLAND BANCORP INC	15,068	481,064	274,388
TIMKEN CO	238,617	10,221,608	10,854,687
TIMKENSTEEL CORP	91,000	1,431,732	353,990
TIPTREE INC	54,845	345,373	353,750
TITAN INTERNATIONAL INC	103,200	1,531,516	150,672

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
TITAN MACHINERY INC	41,923	536,531	455,284
TITAN PHARMACEUTICALS INC	4,679	26,389	1,433
TIVITY HEALTH INC	95,779	2,101,229	1,085,176
TJX COMPANIES INC	8,731,386	392,127,911	441,458,876
TMK PAO GDR REG S	205,859	627,523	682,423
TOBAM VENTURES	38,598	38,598	2,601,964
TOLL BROTHERS INC	286,965	8,453,514	9,352,189
TOMPKINS FINANCIAL CORP	31,728	2,057,184	2,055,023
TOOTSIE ROLL INDS	35,636	1,130,458	1,221,246
TOPBUILD CORP	115,057	8,104,266	13,090,035
TORO CO	239,390	10,421,445	15,881,133
TORTOISE ACQUISITION CORP A	18,940	189,024	519,714
TOWN SPORTS INTERNATIONAL	53,000	495,550	28,620
TOWNE BANK	150,780	3,780,890	2,840,695
TOWNSQUARE MEDIA INC CL A	16,400	120,048	73,308
TPG HEALTHCARE PARTNERS, L.P.	12,055,392	12,055,392	9,219,301
TPG PACE HOLDINGS CORP CL A	85,400	827,127	822,402
TPG PARTNERS VIII, L.P.	48,128,313	48,128,313	33,891,092
TPI COMPOSITES INC	61,400	1,370,207	1,434,918
TRACTOR SUPPLY COMPANY	259,985	15,041,606	34,263,423
TRADE DESK INC/THE CLASS A	90,330	16,566,376	36,719,145
TRADEWEB MARKETS INC CLASS A	182,668	10,147,149	10,620,318
TRANS WORLD ENTERTAINMENT CP	1,098	27,468	7,532
TRANSACT TECHNOLOGIES INC	32,262	400,049	147,760
TRANSATLANTIC PETROLEUM LTD	196,860	318,913	53,152
TRANSCAT INC	14,100	243,310	364,626
TRANSDIGM GROUP INC	137,228	44,013,649	60,661,637
TRANSENERIX INC	11,101	237,803	6,006
TRANSLATE BIO INC	104,086	1,266,511	1,865,221
TRANSMEDICS GROUP INC	40,000	534,248	716,800
TRANSOCEAN LTD	1,293,004	10,161,557	2,366,197
TRANSUNION	448,837	28,161,818	39,066,772
TRAVELCENTERS OF AMERICA INC	62,978	1,071,759	969,861
TRAVELERS COS INC/THE	2,141,526	256,208,038	244,241,040
TRAVELZOO	123,409	1,276,457	696,027
TRECORA RESOURCES	55,130	543,085	345,665
TREDEGAR CORP	59,608	1,275,271	917,963
TREEHOUSE FOODS INC	125,156	7,323,775	5,481,833
TREVENA INC	125,000	232,500	187,500
TREX COMPANY INC	140,240	6,228,592	18,241,017
TRI POINTE GROUP INC	440,777	6,695,596	6,475,014
TRIBUNE CO	2,575,000	23,926	167,375
TRIBUNE PUBLISHING CO	35,559	357,646	355,234
TRICIDA INC	37,288	1,218,442	1,024,674
TRICO BANCSHARES	58,452	2,059,935	1,779,863
TRICO MARINE SERVICES INC	35,323	0	0
TRIDENT ACQUISITIONS CORP	14,500	153,385	162,400
TRIDENT VIII	28,685,510	28,685,510	28,685,510
TRIMAS CORP	96,614	2,596,080	2,313,905
TRIMBLE INC	710,324	20,736,699	30,678,894

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
TRINE ACQUISITION CORP A	61,300	612,657	640,585
TRINET GROUP INC	91,168	5,558,388	5,555,778
TRINITY BIOTECH PLC SPON ADR	28,100	125,888	61,258
TRINITY INDUSTRIES INC	204,294	2,530,532	4,349,419
TRINITY PLACE HOLDINGS INC	20,687	135,914	28,548
TRINSEO SA	88,545	2,826,311	1,962,157
TRIPADVISOR INC	225,211	8,093,264	4,281,261
TRIPLEPOINT VENTURE GROWTH B	67,933	865,457	698,351
TRISTATE CAPITAL HLDGS INC	62,859	1,227,124	987,515
TRIUMPH BANCORP INC	48,732	1,581,098	1,182,726
TRIUMPH GROUP INC	113,448	3,098,990	1,022,166
TRIVAGO NV ADR	15,000	165,000	29,550
TROVAGENE INC	1,073	23,152	5,376
TRUEBLUE INC	79,154	1,555,826	1,208,682
TRUECAR INC	232,700	1,537,423	600,366
TRUIST FINANCIAL CORP	3,099,349	121,715,379	116,380,555
TRUPANION INC	65,814	1,872,894	2,809,600
TRUSTCO BANK CORP NY	209,291	1,707,241	1,324,812
TRUSTMARK CORP	140,788	4,358,342	3,452,122
TTEC HOLDINGS INC	40,204	1,054,364	1,871,898
TTM TECHNOLOGIES	227,764	2,542,575	2,701,281
TUESDAY MORNING CORP	53,800	182,920	8,613
TUPPERWARE BRANDS CORP	111,939	3,222,217	531,710
TURNING POINT THERAPEUTICS I	61,941	3,596,127	4,000,769
TURTLE BEACH CORP	27,300	386,753	401,856
TUSA CONVERTIBLE PREFERRED STO	168	168,000	16,800
TUSCAN HOLDINGS CORP	57,200	570,134	585,156
TUSCAN HOLDINGS CORP II	35,420	348,555	355,971
TUTOR PERINI CORP	92,885	1,655,447	1,131,339
TWILIO INC A	263,608	30,653,341	57,840,867
TWIN DISC INC	88,885	1,649,475	492,423
TWIN RIVER WORLDWIDE HOLDING	40,509	874,508	902,946
TWIST BIOSCIENCE CORP	61,169	1,888,422	2,770,956
TWITTER INC	1,569,576	53,761,045	46,757,669
TYLER TECHNOLOGIES INC	330,793	84,216,826	114,745,476
TYSON FOODS INC CL A	1,556,067	92,471,114	92,912,761
U.S. GLOBAL INVESTORS INC A	32,800	95,448	61,992
U.S. PHYSICAL THERAPY INC	28,945	1,728,962	2,345,124
UBER TECHNOLOGIES INC	2,937,559	95,472,637	91,299,334
UBIQUITI INC	29,978	3,139,398	5,232,960
UBIQUNITY INC	379,900	0	0
UC HLDGS INC	42,076	0	315,570
UFP INDUSTRIES INC	162,136	5,710,509	8,027,353
UFP TECHNOLOGIES INC	15,203	515,415	669,844
UGI CORP	598,542	24,717,189	19,033,636
ULTA BEAUTY INC	120,472	20,346,439	24,506,414
ULTRA CLEAN HOLDINGS INC	91,376	1,365,043	2,067,839
ULTRA PETROLEUM CORP	143,900	7,761,242	2,754
ULTRAGENYX PHARMACEUTICAL IN	114,800	5,897,883	8,979,656
ULTRALIFE CORP	20,200	178,770	141,602

**CalPERS 2019-2020 Annual Investment Report
Domestic Equity**

Security Name	Shares	Book Value	Market Value
UMB FINANCIAL CORP	97,554	6,123,246	5,028,909
UMPQUA HOLDINGS CORP	500,463	8,629,325	5,324,926
UNDER ARMOUR INC CLASS A	884,700	12,934,722	8,616,978
UNDER ARMOUR INC CLASS C	434,648	7,526,197	3,842,288
UNICO AMERICAN CORP	13,300	102,410	68,628
UNIFI INC	31,343	356,962	403,698
UNIFIRST CORP/MA	34,314	5,466,071	6,140,490
UNILEVER PLC SPONSORED ADR	32,342	1,787,626	1,774,929
UNION ACQUISITION CORP II	100	990	1,000
UNION BANKSHARES INC /VT	3,855	161,995	72,166
UNION PACIFIC CORP	1,523,874	146,377,417	257,641,377
UNISYS CORP	136,867	2,826,352	1,493,219
UNIT CORP	73,300	3,303,953	5,241
UNITED AIRLINES HOLDINGS INC	621,459	34,627,130	21,508,696
UNITED BANCORP INC/OHIO	13,229	167,347	152,266
UNITED BANCSHARES INC/OHIO	2,000	44,800	35,800
UNITED BANKSHARES INC	273,949	8,484,576	7,577,429
UNITED COMMUNITY BANKS/GA	175,260	4,393,641	3,526,231
UNITED FIRE GROUP INC	46,332	1,767,407	1,283,860
UNITED GUARDIAN INC	15,551	270,587	229,883
UNITED INSURANCE HOLDINGS CO	45,057	628,973	352,346
UNITED NATURAL FOODS INC	119,500	3,729,513	2,176,095
UNITED PARCEL SERVICE CL B	1,601,768	149,786,888	178,084,566
UNITED RENTALS INC	213,312	20,412,854	31,792,020
UNITED SECURITY BANCSHARE/CA	57,253	639,207	383,023
UNITED STATES ANTIMONY CORP	131,400	32,824	64,386
UNITED STATES LIME + MINERAL	4,471	213,650	377,531
UNITED STATES STEEL CORP	384,103	7,838,740	2,773,224
UNITED THERAPEUTICS CORP	100,869	7,035,399	12,205,149
UNITEDHEALTH GROUP INC	2,149,520	299,961,127	634,000,924
UNITEK GLOBAL SERVICES INC	35,550	0	0
UNITIL CORP	33,423	1,850,772	1,498,019
UNITY BANCORP INC	39,550	871,538	565,565
UNITY BIOTECHNOLOGY INC	66,600	490,538	578,088
UNIVAR SOLUTIONS INC	371,160	8,633,429	6,257,758
UNIVERSAL DISPLAY CORP	95,690	10,868,923	14,317,138
UNIVERSAL ELECTRONICS INC	29,787	880,283	1,394,627
UNIVERSAL HEALTH SERVICES B	663,991	76,542,810	61,678,124
UNIVERSAL INSURANCE HOLDINGS	64,114	1,154,300	1,138,024
UNIVERSAL LOGISTICS HOLDINGS	17,684	326,866	307,348
UNIVERSAL STAINLESS + ALLOY	126,877	2,360,990	1,091,142
UNIVERSAL TECHNICAL INSTITUT	58,400	259,016	405,880
UNIVEST FINANCIAL CORP	64,563	1,705,329	1,042,047
UNUM GROUP	928,376	27,028,694	15,401,758
UPLAND SOFTWARE INC	46,200	2,031,380	1,605,912
UPWORK INC	187,700	2,673,562	2,710,388
URBAN ONE INC	19,350	36,765	36,959
URBAN OUTFITTERS INC	389,419	8,232,942	5,926,957
UROGEN PHARMA LTD	39,200	1,466,964	1,023,904
US AUTO PARTS NETWORK INC	46,725	241,487	404,639

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
US BANCORP	4,354,247	178,298,214	160,323,375
US CELLULAR CORP	31,922	1,345,393	985,432
US CONCRETE INC	36,426	1,535,031	903,365
US ECOLOGY INC	68,874	2,693,776	2,333,451
US FOODS HOLDING CORP	492,609	16,888,352	9,714,249
US SILICA HOLDINGS INC	168,555	3,441,115	608,484
USA COMPRESSION PARTNERS LP	110,743	1,670,838	1,202,669
USA TECHNOLOGIES INC	139,000	1,147,279	974,390
USA TRUCK INC	36,143	903,214	280,108
USANA HEALTH SCIENCES INC	25,582	1,726,258	1,878,486
USD PARTNERS LP	85,791	942,633	273,673
UTAH MEDICAL PRODUCTS INC	7,543	580,231	668,461
UXIN LTD ADR	100,000	900,000	143,000
VAALCO ENERGY INC	150,315	147,294	186,391
VAIL RESORTS INC	89,489	15,304,945	16,300,421
VALERO ENERGY CORP	941,716	52,428,407	55,391,735
VALHI INC	81,206	2,634,320	851,039
VALLEY NATIONAL BANCORP	895,642	10,142,035	7,003,920
VALMONT INDUSTRIES	46,930	5,700,833	5,332,187
VALUE LINE INC	354	9,779	9,554
VALVOLINE INC	414,237	6,346,733	8,007,201
VANDA PHARMACEUTICALS INC	119,214	1,744,280	1,363,808
VANTAGE DRILLING INTERNATION	805	58,153	4,790
VAPOTHERM INC	38,800	794,306	1,590,412
VAREX IMAGING CORP	82,966	1,766,022	1,256,935
VARIAN MEDICAL SYSTEMS INC	185,232	12,435,379	22,694,625
VARONIS SYSTEMS INC	63,400	3,489,930	5,609,632
VAXART INC	9,003	47,716	79,677
VBI VACCINES INC	393,463	518,981	1,219,735
VECTRUS INC	25,801	550,713	1,267,603
VEECO INSTRUMENTS INC	107,427	1,695,728	1,449,190
VEEVA SYSTEMS INC CLASS A	298,706	33,083,704	70,022,661
VERA BRADLEY INC	62,378	948,588	276,958
VERACYTE INC	101,200	1,137,553	2,621,080
VERASTEM INC	331,000	839,983	569,320
VERICEL CORP	91,000	1,445,637	1,257,620
VERINT SYSTEMS INC	144,491	6,401,721	6,528,103
VERISIGN INC	874,725	140,421,216	180,919,372
VERISK ANALYTICS INC	655,684	73,886,557	111,597,417
VERITEX HOLDINGS INC	106,780	2,745,587	1,890,006
VERITIV CORP	29,414	583,518	498,861
VERITONE INC	46,500	790,539	690,990
VERIZON COMMUNICATIONS INC	25,116,944	1,318,441,622	1,384,697,123
VERRA MOBILITY CORP	299,052	4,114,369	3,074,255
VERRICA PHARMACEUTICALS INC	27,670	328,167	304,647
VERSO CORP A	80,133	1,216,051	958,391
VERTEX ENERGY INC	77,600	83,808	55,329
VERTEX PHARMACEUTICALS INC	2,179,324	525,318,912	632,679,550
VERTIV HOLDINGS CO	445,302	4,784,873	6,038,295
VERU INC	109,788	234,908	366,692

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
VF CORP	804,802	42,725,853	49,044,634
VIACOMCBS INC CLASS A	23,988	1,048,008	614,093
VIACOMCBS INC CLASS B	1,207,815	49,031,880	28,166,246
VIAD CORP	44,639	2,246,095	849,034
VIASAT INC	153,056	9,212,637	5,872,759
VIAMI SOLUTIONS INC	609,138	11,682,330	7,760,418
VICOR CORP	39,893	1,077,850	2,870,301
VICTORY CAPITAL HOLDING A	28,540	498,556	490,603
VIDEO DISPLAY CORP	30,280	31,794	34,822
VIELA BIO INC	44,279	1,887,781	1,918,166
VIEWRAY INC	225,500	677,962	505,120
VIKING THERAPEUTICS INC	132,700	947,031	956,767
VILLAGE SUPER MARKET CLASS A	18,746	458,495	519,639
VINCE HOLDING CORP	4,567	332,886	25,347
VIPER ENERGY PARTNERS LP	149,108	4,209,598	1,544,759
VIPSHOP HOLDINGS LTD ADR	985,777	9,178,023	19,626,820
VIR BIOTECHNOLOGY INC	93,700	3,539,198	3,838,889
VIRCO MFG CORPORATION	51,480	213,642	134,878
VIRGIN GALACTIC HOLDINGS INC	136,265	1,683,916	2,226,570
VIRNETX HOLDING CORP	128,100	397,731	832,650
VIRTU FINANCIAL INC CLASS A	139,061	2,991,961	3,281,840
VIRTUS INVESTMENT PARTNERS	16,784	1,843,391	1,951,811
VIRTUSA CORP	64,571	2,091,255	2,096,620
VISA INC CLASS A SHARES	6,639,256	800,145,796	1,282,505,082
VISHAY INTERTECHNOLOGY INC	362,126	5,384,959	5,529,664
VISHAY PRECISION GROUP	27,600	763,907	678,408
VISIONCHINA MEDIA INC ADR	14,650	0	0
VISTEON CORP	69,312	4,977,399	4,747,872
VISTRA CORP	1,158,064	25,314,179	21,305,897
VIVINT SMART HOME INC	154,378	2,235,612	2,675,371
VIVINT SOLAR INC	108,797	802,962	1,077,090
VIVUS INC	11,200	42,762	9,205
VMWARE INC CLASS A	197,104	22,122,590	30,523,525
VOCERA COMMUNICATIONS INC	70,293	1,843,147	1,490,212
VOLT INFO SCIENCES INC	20,700	55,890	26,703
VONAGE HOLDINGS CORP	516,060	4,328,787	5,191,564
VOXELJET AG ADR	25,000	81,750	39,000
VOXX INTERNATIONAL CORP	62,771	306,009	362,816
VOYA FINANCIAL INC	293,286	13,300,735	13,681,792
VOYAGER THERAPEUTICS INC	57,324	909,361	723,429
VSE CORP	19,512	547,075	612,482
VTB BANK JSC GDR REG S	6,005,865	9,596,904	5,636,504
VULCAN MATERIALS CO	294,825	28,714,813	34,155,476
VUZIX CORP	5,900	35,695	14,101
W+T OFFSHORE INC	208,719	946,930	475,879
WABASH NATIONAL CORP	120,530	1,637,640	1,280,029
WABTEC CORP	434,504	27,654,800	25,014,395
WADDELL + REED FINANCIAL A	148,341	3,452,483	2,300,769
WAITR HOLDINGS INC	153,700	248,809	404,231
WALGREENS BOOTS ALLIANCE INC	1,699,645	72,054,237	72,047,952

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
WALKER + DUNLOP INC	66,457	3,831,152	3,376,680
WALMART INC	6,481,617	562,368,717	776,368,084
WALT DISNEY CO/THE	4,044,059	331,024,703	450,953,019
WARREN RES INC	16,898	2,029,132	16,898
WARRIOR MET COAL INC	117,255	2,833,344	1,804,554
WASHINGTON FEDERAL INC	169,322	3,838,600	4,544,602
WASHINGTON TRUST BANCORP	38,320	1,482,334	1,254,980
WASTE CONNECTIONS INC	2,243,541	177,808,719	210,170,827
WASTE MANAGEMENT INC	3,567,563	318,014,958	377,840,597
WATERS CORP	137,103	14,691,473	24,733,381
WATERSTONE FINANCIAL INC	50,500	641,847	748,915
WATSCO INC	73,592	9,548,103	13,077,298
WATSCO INC CL B	104	18,554	18,554
WATTS WATER TECHNOLOGIES A	61,442	4,187,988	4,976,802
WAVE LIFE SCIENCES LTD	41,600	1,036,569	433,056
WAYFAIR INC CLASS A	134,147	12,453,418	26,508,789
WAYSIDE TECHNOLOGY GROUP INC	12,782	176,392	328,497
WD 40 CO	30,431	2,358,097	6,034,467
WEBSTER FINANCIAL CORP	221,486	7,925,039	6,336,714
WEC ENERGY GROUP INC	2,653,993	186,713,292	232,622,486
WEIBO CORP SPON ADR	133,484	7,203,353	4,485,062
WEIS MARKETS INC	22,487	931,928	1,127,048
WELBILT INC	377,107	4,185,783	2,296,582
WELLS FARGO + CO	9,692,063	357,626,661	248,116,813
WENDY S CO/THE	402,859	6,660,135	8,774,269
WERNER ENTERPRISES INC	136,614	4,057,252	5,946,807
WESBANCO INC	146,814	5,814,813	2,981,792
WESCO INTERNATIONAL INC	215,465	9,482,946	7,193,682
WEST BANCORPORATION	35,358	821,761	618,411
WEST PHARMACEUTICAL SERVICES	165,046	14,823,064	37,493,500
WESTAMERICA BANCORPORATION	57,768	3,196,886	3,317,039
WESTELL TECHNOLOGIES INC A	35,205	106,671	27,643
WESTERN ALLIANCE BANCORP	225,434	7,300,158	8,537,186
WESTERN DIGITAL CORP	902,837	44,134,143	39,860,254
WESTERN MIDSTREAM PARTNERS L	595,094	14,335,948	5,974,744
WESTERN NEW ENGLAND BANCORP	46,200	494,203	267,498
WESTERN UNION CO	3,506,360	64,131,155	75,807,503
WESTLAKE CHEMICAL CORP	144,241	7,603,488	7,738,530
WESTLAKE CHEMICAL PARTNERS L	43,331	981,817	820,689
WESTROCK CO	736,081	26,372,131	20,801,649
WESTWATER RESOURCES INC	210	5,468	557
WESTWOOD HOLDINGS GROUP INC	17,306	511,488	272,570
WET SEAL INC/THE CLASS A	268,800	0	0
WEX INC	99,518	14,759,300	16,421,465
WEYCO GROUP INC	13,536	335,211	292,242
WHIRLPOOL CORP	187,280	21,546,054	24,258,378
WHITE MOUNTAINS INSURANCE GP	9,583	9,594,475	8,509,417
WHITEHORSE FINANCE INC	34,500	382,045	355,350
WHITING PETROLEUM CORP	182,100	9,629,004	205,773
WHOLE EARTH BRANDS INC	50,500	552,975	407,535

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
WIDEPENWEST INC	119,464	825,908	629,575
WIDEPOINT CORP	72,255	40,636	50,253
WILEY (JOHN) + SONS CL B	1,876	76,126	72,264
WILEY (JOHN) + SONS CLASS A	98,700	4,472,581	3,849,300
WILLAMETTE VALLEY VINEYARDS	9,410	78,103	56,931
WILLDAN GROUP INC	20,900	652,767	522,709
WILLIAMS COS INC	2,727,797	68,364,948	51,882,699
WILLIAMS SONOMA INC	177,572	8,144,385	14,562,680
WILLIS LEASE FINANCE CORP	18,565	684,681	450,758
WILLSCOT CORP	120,197	1,918,371	1,477,221
WINDSTREAM HOLDINGS INC	75,074	3,058,884	9,309
WINGSTOP INC	60,549	5,066,516	8,414,495
WINMARK CORP	6,556	531,380	1,122,649
WINNEBAGO INDUSTRIES	72,812	1,840,855	4,850,735
WINTRUST FINANCIAL CORP	159,240	8,575,466	6,946,049
WIRELESS TELECOM GROUP INC	67,592	152,082	67,112
WISDOMTREE INVESTMENTS INC	321,575	2,040,706	1,115,865
WNS HOLDINGS LTD ADR	111,905	4,638,281	6,152,537
WOLVERINE WORLD WIDE INC	183,302	3,807,510	4,364,421
WONDER AUTO TECHNOLOGY INCORPO	65,400	0	0
WOODWARD INC	124,657	8,393,940	9,667,150
WORKDAY INC CLASS A	349,850	50,459,624	65,547,896
WORKHORSE GROUP INC	128,200	257,467	2,229,398
WORKIVA INC	77,700	4,260,398	4,156,173
WORLD ACCEPTANCE CORP	10,902	726,472	714,299
WORLD FUEL SERVICES CORP	143,521	4,270,841	3,697,101
WORLD WRESTLING ENTERTAIN A	94,897	4,588,859	4,123,275
WORTHINGTON INDUSTRIES	85,874	2,447,681	3,203,100
WPX ENERGY INC	921,913	10,098,140	5,881,805
WR BERKLEY CORP	1,216,032	62,174,080	69,666,473
WR GRACE + CO	170,964	8,221,500	8,686,681
WSFS FINANCIAL CORP	112,740	4,934,870	3,235,638
WVS FINANCIAL CORP	3,294	53,297	43,415
WW GRAINGER INC	100,188	18,874,478	31,475,062
WW INTERNATIONAL INC	205,170	5,835,206	5,207,215
WYNDHAM DESTINATIONS INC	230,339	6,895,714	6,490,953
WYNDHAM HOTELS + RESORTS INC	204,086	6,977,544	8,698,145
WYNN RESORTS LTD	199,300	22,951,832	14,845,857
X4 PHARMACEUTICALS INC	32,500	288,215	302,900
XBIOTECH INC	31,616	493,503	433,455
XCEL ENERGY INC	4,394,915	221,645,956	274,682,188
XENCOR INC	122,668	4,710,721	3,973,217
XERIS PHARMACEUTICALS INC	75,500	529,543	200,830
XEROX HOLDINGS CORP	633,110	15,563,047	9,680,252
XILINX INC	568,069	35,617,707	55,892,309
XOMA CORP	11,500	265,722	227,240
XPEL INC	37,106	365,081	580,338
XPERI HOLDING CORP	244,751	7,511,055	3,612,525
XPO LOGISTICS INC	209,384	13,342,150	16,174,914
XPRESSPA GROUP INC	1,382	55,397	5,791

CalPERS 2019-2020 Annual Investment Report
Domestic Equity

Security Name	Shares	Book Value	Market Value
XYLEM INC	417,647	20,799,271	27,130,349
Y MABS THERAPEUTICS INC	67,124	2,186,592	2,899,757
YELP INC	202,946	8,974,583	4,694,141
YETI HOLDINGS INC	164,091	4,682,072	7,011,608
YEXT INC	204,600	4,355,421	3,398,406
YORK WATER CO	29,252	1,151,759	1,402,926
YRC WORLDWIDE INC	48,500	789,446	89,725
YUM BRANDS INC	2,530,085	213,038,379	219,889,687
ZAGG INC	58,000	646,099	182,120
ZEBRA TECHNOLOGIES CORP CL A	117,775	14,022,553	30,144,511
ZENDESK INC	240,100	14,030,808	21,256,053
ZENTALIS PHARMACEUTICALS INC	22,859	1,201,833	1,097,689
ZILLOW GROUP INC A	129,482	5,072,775	7,442,625
ZILLOW GROUP INC C	303,081	14,216,344	17,460,496
ZIMMER BIOMET HOLDINGS INC	466,792	42,698,127	55,716,293
ZION OIL + GAS INC	102,780	421,398	30,608
ZIONS BANCORP NA	365,209	11,804,417	12,417,106
ZIOPHARM ONCOLOGY INC	431,400	3,233,118	1,414,992
ZIX CORP	120,493	726,501	831,402
ZOETIS INC	2,400,783	202,254,030	329,003,302
ZOGENIX INC	112,500	3,734,467	3,038,625
ZOOM VIDEO COMMUNICATIONS A	341,358	73,744,076	86,547,907
ZOVIO INC	95,956	1,095,949	293,625
ZSCALER INC	190,168	13,939,177	20,823,396
ZTO EXPRESS CAYMAN INC ADR	3,199,598	103,459,773	117,457,243
ZUMIEZ INC	47,655	1,397,988	1,304,794
ZUOAN FASHION LTD SPON ADR	47,700	0	0
ZUORA INC CLASS A	197,700	2,982,505	2,520,675
ZYNERBA PHARMACEUTICALS INC	18,100	128,983	60,997
ZYNEX INC	37,613	417,945	935,435
ZYNGA INC CL A	1,982,067	9,491,887	18,908,919
Total		75,028,692,633	97,051,244,126

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
1+1 DRILLISCH AG	108,714	6,008,852	2,824,222
360 FINANCE INC ADR	238,857	2,402,076	2,558,158
360 SECURITY TECHNOLOGY IN A	692,418	2,163,045	1,792,196
361 DEGREES INTERNATIONAL	1,422,000	349,076	183,473
3I GROUP PLC	2,241,954	20,884,726	23,064,350
3M INDIA LTD	4,181	1,300,555	1,040,782
3SBIO INC	2,870,000	4,495,594	3,636,357
5I5J HOLDING GROUP LTD A	388,500	221,278	175,740
77 BANK LTD/THE	167,600	3,580,955	2,490,270
888 HOLDINGS PLC	634,717	1,528,078	1,369,312
A DATA TECHNOLOGY CO LTD	475,885	764,765	922,592
A LIVING SERVICES CO LTD H	787,250	3,459,365	3,966,494
A.G. BARR PLC	195,038	1,761,807	1,088,066
A.G.V. PRODUCTS	867,945	219,547	224,160
A2 MILK CO LTD	1,734,550	15,126,593	22,544,489
A2A SPA	6,720,205	11,890,003	9,514,000
AA PLC	1,450,724	5,815,841	409,590
AAC TECHNOLOGIES HOLDINGS IN	1,579,825	6,922,954	9,692,428
AAK AB	391,941	3,491,306	6,735,227
AALBERTS NV	228,085	10,808,365	7,477,710
AAREAL BANK AG	145,294	4,130,232	2,832,926
AARTI INDUSTRIES LIMITED	99,829	1,077,360	1,231,472
AAVAS FINANCIERS LTD	44,394	977,174	787,440
ABB INDIA LTD	119,344	2,197,701	1,487,616
ABB LTD REG	4,176,470	75,902,446	94,015,202
ABC MART INC	260,400	14,278,071	15,230,329
ABDUL MOHSEN AL HOKAIR TOURI	63,030	249,558	234,913
ABDULLAH AL OTHAIM MARKETS	104,310	2,435,928	3,109,000
ABILITY ENTERPRISE CO LTD	499,950	383,088	206,727
ABLBIO LNC	55,992	1,337,670	1,443,033
ABLE C+C	43,560	1,050,844	336,066
ABN AMRO BANK NV CVA	980,018	21,118,198	8,438,022
ABOITIZ POWER CORP	3,647,140	2,702,132	1,976,373
ABSA GROUP LTD	1,688,784	18,614,697	8,290,836
ABU DHABI COMMERCIAL BANK	10,534,326	23,059,502	14,196,239
ABU DHABI ISLAMIC BANK	2,169,339	2,911,048	2,179,291
AC IMMUNE SA	53,052	424,500	357,040
ACBEL POLYTECH INC	926,000	719,432	616,716
ACC LTD	105,690	2,362,344	1,864,881
ACCELINK TECHNOLOGIES CO A	111,800	478,653	519,324
ACCELL GROUP	50,759	1,166,691	1,254,219
ACCENT GROUP LTD	772,307	891,093	744,427
ACCENTURE PLC CL A	3,723,043	562,226,197	799,411,793
ACCIONA SA	48,116	6,512,121	4,709,716

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ACCOR SA	443,398	19,656,522	12,056,640
ACCORDIA GOLF TRUST	1,921,500	999,822	943,498
ACCTON TECHNOLOGY CORP	4,317,000	23,374,819	33,360,199
ACE HARDWARE INDONESIA	16,388,100	1,661,785	1,732,309
ACEA SPA	106,358	1,551,563	2,041,503
ACER INC	6,860,788	4,383,580	4,162,352
ACERINOX SA	403,305	3,655,782	3,252,339
ACHILLES CORP	32,200	518,176	579,322
ACKERMANS + VAN HAAREN	51,930	7,498,667	6,789,051
ACOM CO LTD	902,500	3,002,201	3,438,175
ACS ACTIVIDADES CONS Y SERV	557,234	22,031,888	14,044,240
ACS ACTIVIDADES DE CONSTRUCCIO	557,234	864,991	869,003
ADAMA LTD A	79,599	105,013	101,495
ADANI ENTERPRISES LTD	620,337	1,208,948	1,283,746
ADANI PORTS AND SPECIAL ECON	4,950,289	26,377,683	22,547,283
ADANI POWER LTD	2,188,474	1,851,626	1,043,459
ADAPTEO OYJ	103,647	999,493	883,319
ADARO ENERGY TBK PT	29,745,800	3,234,866	2,071,899
ADASTRIA CO LTD	65,100	1,513,191	1,036,073
ADBRI LTD	1,064,517	2,634,952	2,330,685
ADC THERAPEUTICS SA	2,330	96,707	109,067
ADCOCK INGRAM HOLDINGS LTD	135,963	515,016	375,610
ADDSINO CO LTD A	265,111	459,137	512,301
ADDTECH AB B SHARES	112,652	3,105,799	4,527,047
ADECCO GROUP AG REG	359,159	20,738,308	16,852,102
ADECOAGRO SA	215,521	1,382,248	935,361
ADEKA CORP	263,314	3,146,327	3,482,867
ADEVINTA ASA	527,617	5,519,583	5,299,688
ADHI KARYA PERSERO TBK PT	4,163,100	520,530	177,773
ADIDAS AG	474,730	87,731,769	124,553,888
ADITYA BIRLA CAPITAL LTD	1,354,360	1,727,842	1,135,453
ADITYA BIRLA FASHION AND RET	435,966	1,151,428	723,494
ADITYA BIRLA FASHION AND RETAI	50,957	0	10,326
ADLINK TECHNOLOGY INC	353,069	647,709	989,639
ADMIRAL GROUP PLC	1,660,449	43,091,009	47,167,475
ADO PROPERTIES SA	103,704	3,541,787	2,821,028
ADP	250,534	44,830,710	25,718,796
ADVAN CO LTD	54,100	374,219	671,956
ADVANCED CERAMIC X CORP	119,000	976,871	1,657,679
ADVANCED INFO SERVICE FOR RG	3,676,000	23,745,517	22,003,074
ADVANCED INFO SERVICE NVDR	6,325,100	38,784,753	37,859,532
ADVANCED INTERNATIONAL MULTI	245,000	309,446	258,249
ADVANCED PETROCHEMICALS CO	249,663	3,330,063	3,540,942
ADVANCED PROCESS SYSTEMS COR	26,377	605,974	510,940

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
ADVANCED TECH + MATERIAL A	169,400	164,755	158,047
ADVANCED WIRELESS SEMICONDUCT	344,431	919,071	1,056,483
ADVANTECH CO LTD	3,077,082	23,961,205	30,818,273
ADVANTEST CORP	530,900	16,262,044	30,116,402
ADVTECH LTD	1,270,802	1,161,684	526,606
ADYEN NV	66,984	53,507,547	97,464,457
AECC AERO ENGINE CONTROL A	57,525	107,521	110,999
AECC AVIATION POWER CO A	200,897	643,835	666,807
AECI LTD	261,592	1,730,643	1,163,802
AECON GROUP INC	145,900	1,790,787	1,581,119
AED OIL LTD	431,977	0	0
AEDAS HOMES SA	50,501	1,654,636	915,464
AEGEAN AIRLINES	67,757	594,150	302,883
AEGON NV	4,129,719	31,360,474	12,305,394
AEKYUNG INDUSTRIAL CO LTD	15,129	759,802	295,574
AENA SME SA	583,402	101,491,322	77,777,935
AEON CO LTD	1,650,090	26,229,178	38,313,718
AEON CREDIT SERVICE M BHD	224,600	867,032	498,470
AEON DELIGHT CO LTD	55,900	1,420,514	1,550,288
AEON FANTASY CO LTD	15,300	223,971	217,832
AEON FINANCIAL SERVICE CO LT	274,200	4,537,362	2,986,374
AEON MALL CO LTD	277,000	5,187,240	3,671,595
AEON THANA SINSAP THA FOREIG	217,600	1,393,672	760,359
AERCAP HOLDINGS NV	583,149	26,913,824	17,960,989
AEROSPACE CH UAV CO LTD	156,100	258,199	296,793
AEROSPACE HI TECH HOLDINGS A	122,013	185,198	175,756
AES TIETE ENERGIA SA UNIT	370,178	1,020,223	1,057,786
AF POYRY AB	230,830	3,493,113	4,955,215
AFFIMED NV	162,460	364,810	749,753
AFI PROPERTIES LTD	33,409	699,280	779,973
AFREECATV CO LTD	16,587	905,029	871,512
AFRICAN RAINBOW MINERALS LTD	251,116	2,641,869	2,444,677
AFTERPAY LTD	483,094	10,096,935	20,285,895
AFYA LTD CLASS A	133,273	3,003,031	3,123,919
AG ANADOLU GRUBU HOLDING AS	296,412	959,408	870,891
AGABANG+COMPANY	55,426	511,058	137,315
AGC INC	469,971	18,810,706	13,351,820
AGEAS	423,707	36,081,140	15,009,461
AGFA GEVAERT NV	787,231	3,317,429	3,280,302
AGGREKO PLC	594,916	6,237,727	3,254,928
AGILE GROUP HOLDINGS LTD	3,280,890	3,946,800	3,860,643
AGILITY	2,165,398	5,348,436	5,166,267
AGL ENERGY LTD	1,498,191	19,571,170	17,587,150
AGNICO EAGLE MINES LTD	2,124,427	96,871,009	135,592,099

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
AGRANA BETEILIGUNGS AG	27,605	741,162	568,003
AGRICULTURAL BANK OF CHINA A	39,818,665	19,650,721	19,025,330
AGRICULTURAL BANK OF CHINA H	129,242,599	51,573,058	52,027,548
AGRITRADE RESOURCES LTD	5,555,000	1,104,652	59,489
AGUAS ANDINAS SA A	6,447,419	3,616,116	2,185,805
AGUNG PODOMORO LAND TBK PT	7,485,800	145,973	59,740
AHLI UNITED BANK B.S.C	11,950,635	9,591,255	6,836,703
AHLSTROM MUNKSJO OYJ	89,829	1,458,017	1,341,856
AHNLAB INC	14,043	830,166	582,571
AI HOLDINGS CORP	104,000	1,123,270	1,498,040
AIA ENGINEERING LTD	94,250	2,136,539	2,005,927
AIA GROUP LTD	31,679,990	208,591,680	295,526,489
AIB GROUP PLC	1,849,451	8,607,517	2,326,476
AICA KOGYO CO LTD	123,100	3,958,580	4,033,540
AICHI BANK LTD/THE	23,600	1,184,542	608,129
AICHI CORP	59,500	334,744	409,774
AICHI STEEL CORP	27,300	1,032,869	774,325
AIDA ENGINEERING LTD	131,700	849,348	889,923
AIER EYE HOSPITAL GROUP CO A	361,863	1,965,231	2,222,607
AIFUL CORP	694,600	1,559,729	1,525,886
AIN HOLDINGS INC	64,500	3,921,960	4,220,883
AIPHONE CO LTD	28,000	465,323	408,769
AIR ARABIA PJSC	5,398,824	1,761,331	1,807,863
AIR CANADA	293,800	5,991,089	3,656,322
AIR CHINA LTD A	508,488	511,772	475,128
AIR CHINA LTD H	4,039,076	3,563,924	2,407,671
AIR FRANCE KLM	445,813	5,062,975	2,019,383
AIR LIQUIDE SA	1,093,120	107,863,572	157,641,529
AIR NEW ZEALAND LTD	1,142,040	1,767,371	970,449
AIR WATER INC	416,700	6,048,104	5,874,781
AIRASIA GROUP BHD	3,528,400	1,826,864	720,502
AIRASIA X BHD	4,301,400	305,980	100,383
AIRBUS SE	1,398,683	117,524,769	99,785,528
AIRPORT CITY LTD	169,386	2,403,002	1,817,215
AIRPORT FACILITIES CO LTD	41,300	211,291	161,548
AIRPORTS OF THAILAND PC NVDR	25,220,740	52,499,325	49,368,431
AIRPORTS OF THAILAND PCL FOR	11,374,040	23,567,797	22,264,157
AIRTAC INTERNATIONAL GROUP	352,690	3,640,063	6,168,145
AIRTEL AFRICA PLC	2,219,970	2,219,717	1,714,373
AIRTRIP CORP	25,500	461,702	292,144
AISAN INDUSTRY CO LTD	75,900	622,350	372,166
AISIN SEIKI CO LTD	408,383	13,399,733	11,886,014
AISINO CORP A	166,336	434,748	381,857
AIXTRON SE	252,372	3,291,128	3,041,436

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
AJ BELL PLC	648,615	3,305,083	3,097,523
AJANTA PHARMA LTD	49,943	854,016	937,393
AJINOMOTO CO INC	3,951,556	64,902,026	65,636,449
AJISEN CHINA HOLDINGS LTD	1,253,000	559,840	172,985
AK HOLDINGS INC	17,672	989,825	274,002
AK MEDICAL HOLDINGS LTD	884,000	2,268,619	2,811,527
AKATSUKI INC	12,200	680,047	432,544
AKBANK T.A.S.	6,221,638	9,752,425	5,518,445
AKCANSА CIMENTO	95,289	173,711	179,603
AKEBONO BRAKE INDUSTRY CO	175,900	789,651	278,805
AKER ASA A SHARES	54,309	3,831,475	1,972,621
AKER BP ASA	253,803	5,476,966	4,611,969
AKER SOLUTIONS ASA	347,736	1,550,073	301,705
AKITA BANK LTD/THE	38,800	1,157,516	521,481
AKKA TECHNOLOGIES	29,213	1,901,786	935,102
AKR CORPORINDO TBK PT	3,844,707	1,343,403	683,623
AKSA AKRILIK KIMYA SANAYII	267,846	329,540	284,853
AKSA ENERJI URETIM AS	541,851	365,508	431,599
AKSIGORTA	292,618	250,782	290,708
AKWEL	19,216	636,831	311,219
AKZO NOBEL N.V.	447,940	35,851,151	40,117,499
AL HAMMADI CO FOR DEVELOPMEN	138,771	804,495	813,906
AL JOUF CEMENT	165,111	365,816	386,477
AL MEERA CONSUMER GOODS CO	233,144	978,203	1,165,400
AL RAJHI BANK	10,455,491	168,772,991	157,766,140
ALAM SUTERA REALTY TBK PT	27,105,400	734,179	244,774
ALAMOS GOLD INC CLASS A	978,786	9,213,936	9,102,212
ALARKO HOLDING	316,319	245,410	257,494
ALBARAKA TURK KATILIM BANKAS	998,227	297,523	238,826
ALBIOMA SA	64,212	1,907,647	2,639,581
ALCHIP TECHNOLOGIES LTD	102,000	737,105	1,728,550
ALCON INC	1,967,498	95,876,004	112,873,401
ALCONIX CORP	47,900	910,043	516,362
ALD SA	188,761	2,941,325	1,865,661
ALDAR PROPERTIES PJSC	9,193,321	5,459,742	4,455,062
ALDREES PETROLEUM AND TRANSP	70,446	903,439	1,181,299
ALEMBIC PHARMACEUTICALS LTD	107,778	843,165	1,302,978
ALEXANDER FORBES GROUP HOLDI	1,425,284	589,089	391,287
ALEXANDRIA MINERAL OILS CO	1,477,848	385,700	207,851
ALFA FINANCIAL SOFTWARE HOLD	222,001	1,249,620	198,597
ALFA LAVAL AB	738,297	12,815,145	16,197,658
ALFA S.A.B. A	7,018,192	6,865,219	3,933,249
ALFRESA HOLDINGS CORP	1,570,206	37,025,173	32,762,049
ALGONQUIN POWER + UTILITIES	1,252,076	12,884,419	16,133,578

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
ALI CORP	355,145	312,571	264,814
ALIANSCOE SONAE SHOPPING CENT	298,600	1,499,258	1,552,603
ALIBABA GROUP HOLDING LTD	1,216,224	18,648,143	32,891,064
ALIBABA HEALTH INFORMATION T	9,680,000	9,838,780	28,226,490
ALIBABA PICTURES GROUP LTD	74,260,000	11,780,888	9,868,821
ALIMENTATION COUCHE TARD B	1,960,170	36,372,273	61,266,106
ALIMTIAZ INVESTMENT GROUP	1,724,612	731,571	513,488
ALINMA BANK	8,355,187	36,542,324	32,387,208
ALIOR BANK SA	220,138	3,420,854	898,772
ALITHYA GROUP INC CLASS A	61,431	295,353	106,276
ALK ABELLO A/S	15,584	2,011,992	4,159,052
ALKEM LABORATORIES LTD	58,938	1,570,742	1,848,688
ALKERMES PLC	458,556	11,212,242	8,898,279
ALL WINNER TECHNOLOGY CO L A	232,568	991,729	1,209,836
ALLEGION PLC	206,053	13,745,082	21,062,738
ALLIANCE BANK MALAYSIA BHD	2,581,700	2,011,984	1,313,444
ALLIANCE GLOBAL GROUP INC	9,188,900	2,344,148	1,254,080
ALLIANZ SE REG	973,492	185,412,987	198,732,307
ALLIED ELECTRONICS COR A SHR	584,734	897,418	683,171
ALLOT LTD	73,664	912,724	777,304
ALLREAL HOLDING AG REG	32,150	4,984,601	6,365,194
ALM. BRAND A/S	151,415	864,181	1,412,396
ALMARAI CO	2,140,019	28,468,936	29,552,915
ALMIRALL SA	167,172	2,308,403	2,202,416
ALPARGATAS SA PREF	407,400	2,342,802	2,172,483
ALPEK SA DE CV	875,247	1,116,952	662,486
ALPEN CO LTD	36,800	637,250	569,985
ALPHA BANK AE	3,223,933	6,176,846	2,397,076
ALPHA GROUP A	119,173	126,279	141,847
ALPHA NETWORKS INC	789,300	589,368	733,001
ALPHA PRO TECH LTD	20,300	72,514	359,310
ALPHA SYSTEMS INC	10,400	237,525	358,122
ALPIQ HOLDING AG REG	8,291	774,320	612,495
ALPS ALPINE CO LTD	460,672	6,670,123	5,892,639
ALS LTD	1,126,215	8,551,133	5,086,617
ALSEA SAB DE CV	1,235,400	3,106,303	1,208,828
ALSO HOLDING AG REG	5,788	819,929	1,423,254
ALSTOM	1,470,885	68,868,077	68,410,336
ALTAGAS LTD	645,626	13,508,761	7,418,537
ALTEK CORP	508,100	392,120	430,528
ALTEN SA	68,507	4,309,851	5,890,036
ALTEOGEN INC	21,139	1,600,105	4,683,496
ALTICE EUROPE NV	1,282,479	3,781,105	4,947,830
ALTICE EUROPE NV B	66,500	194,053	254,691

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ALTISOURCE PORTFOLIO SOL	12,442	320,977	183,395
ALTIUM LTD	255,111	5,948,309	5,704,914
ALTRI SGPS SA	171,412	575,543	821,681
ALTUS PROPERTY VENTURES INC	300,854	0	251,190
ALUMINA LTD	5,868,708	9,864,744	6,565,983
ALUMINUM CORP OF CHINA LTD A	1,165,311	499,338	454,653
ALUMINUM CORP OF CHINA LTD H	9,413,000	3,556,146	1,761,040
ALUPAR INVESTIMENTO SA UNIT	249,623	1,541,668	1,089,725
AMA GROUP LTD	1,089,545	768,194	446,340
AMADA CO LTD	768,216	7,216,039	6,273,331
AMADEUS IT GROUP SA	2,758,651	183,625,422	143,702,816
AMANO CORP	158,000	4,728,967	3,276,137
AMARA RAJA BATTERIES LTD	76,584	795,082	659,705
AMATA CORP PUBLIC CO LTD FOR	1,851,800	1,238,476	922,680
AMBEV SA	10,355,575	50,633,781	26,667,850
AMBU A/S B	390,506	9,159,861	12,263,723
AMBUJA CEMENTS LTD	5,607,573	16,808,257	14,378,440
AMCOR PLC	1,121,943	11,436,734	11,455,038
AMCOR PLC CDI	3,745,851	32,084,344	37,344,182
AMERICA MOVIL SAB DE C SER L	70,941,755	54,286,307	45,284,584
AMG ADVANCED METALLURGICAL	61,828	2,574,276	1,103,435
AMICOGEN INC	41,796	1,288,658	1,018,101
AMIGO HOLDINGS PLC	326,872	964,069	23,466
AMMB HOLDINGS BHD	4,554,837	4,705,137	3,305,844
AMOREPACIFIC CORP	72,830	8,185,179	10,141,767
AMOREPACIFIC CORP PEF	24,589	2,874,016	1,451,402
AMOREPACIFIC GROUP	67,269	2,819,118	2,885,713
AMOT INVESTMENTS LTD	316,123	1,758,976	1,433,124
AMOY DIAGNOSTICS CO LTD A	36,998	279,300	402,506
AMP LTD	8,047,777	25,843,411	10,278,358
AMPLIFON SPA	285,063	7,002,202	7,591,196
AMPOL LTD	588,821	11,256,838	11,886,422
AMREST HOLDINGS SE	171,743	1,983,445	989,911
AMS AG	600,654	9,990,706	8,909,495
AMTD INTERNATIONAL INC ADR	19,065	162,695	137,268
AMTRAN TECHNOLOGY CO LTD	1,716,000	880,427	467,030
AMUNDI SA	132,906	7,836,608	10,404,354
AMUSE INC	23,500	491,959	480,521
AN HUI WENERGY CO LTD A	200,902	116,880	114,167
ANA HOLDINGS INC	960,823	32,345,719	21,828,588
ANADOLU CAM SANAYII AS	385,967	219,180	261,825
ANADOLU EFES BIRACILIK VE	468,118	2,172,353	1,455,965
ANANTI INC	89,988	680,475	721,939
ANDRITZ AG	166,158	7,340,469	6,046,500

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ANEKA TAMBANG TBK	19,843,030	1,114,648	840,394
ANEST IWATA CORP	76,200	706,325	593,298
ANGANG STEEL CO LTD A	528,472	205,542	183,028
ANGANG STEEL CO LTD H	3,309,876	1,451,391	807,136
ANGEL YEAST CO LTD A	75,343	417,676	526,989
ANGLO AMERICAN PLATINUM LTD	172,680	10,048,436	12,463,570
ANGLO AMERICAN PLC	3,123,686	94,417,775	72,151,893
ANGLOGOLD ASHANTI LTD	3,629,572	56,898,793	105,615,845
ANGLOGOLD ASHANTI SPON ADR	368,543	8,964,886	10,868,333
ANHEUSER BUSCH INBEV SA/NV	1,938,755	128,125,522	95,516,596
ANHUI ANKE BIOTECHNOLOGY G A	121,613	245,246	307,724
ANHUI CONCH CEMENT CO LTD A	2,329,067	18,049,296	17,420,016
ANHUI CONCH CEMENT CO LTD H	2,862,830	15,339,320	19,281,426
ANHUI CONSTRUCTION ENG A	284,600	168,150	155,293
ANHUI EXPRESSWAY CO LTD A	79,536	59,424	58,353
ANHUI EXPRESSWAY CO LTD H	1,160,000	699,638	535,814
ANHUI GUJING DISTILLERY CO A	34,493	649,132	732,564
ANHUI GUJING DISTILLERY CO B	288,409	2,167,980	3,099,007
ANHUI HENGYUAN COAL INDUST A	198,100	151,630	127,976
ANHUI JINHE INDUSTRIAL CO A	82,700	243,300	268,532
ANHUI KORRUN CO LTD A	35,900	140,161	136,869
ANHUI KOUZI DISTILLERY CO A	20,881	141,677	150,244
ANHUI SUN CREATE ELECTRONI A	26,200	169,493	147,035
ANHUI XINHUA MEDIA CO LTD A	105,974	84,358	83,292
ANHUI ZHONGDING SEALING PA A	108,981	133,077	120,934
ANICOM HOLDINGS INC	42,000	1,243,261	1,777,170
ANIMA HOLDING SA	202,700	1,060,970	907,033
ANIMA HOLDING SPA	1,586,342	8,933,286	6,820,348
ANRITSU CORP	322,100	6,373,003	7,631,159
ANSELL LTD	301,528	4,462,323	7,618,994
ANTA SPORTS PRODUCTS LTD	2,856,000	20,000,595	25,205,040
ANTEROGEN CO LTD	11,617	806,985	680,882
ANTOFAGASTA PLC	820,894	9,117,602	9,510,050
ANTON OILFIELD SERVICES GP	4,736,000	1,154,917	281,088
ANXIN CHINA HOLDING	3,936,000	0	1
AO WORLD PLC	678,432	1,420,062	1,207,110
AOKI HOLDINGS INC	89,200	813,276	515,927
AOMORI BANK LTD/THE	45,400	1,466,054	941,792
AON PLC CLASS A	1,943,620	293,701,471	374,341,212
AOYAMA TRADING CO LTD	106,900	1,950,758	725,317
AOZORA BANK LTD	979,922	27,949,647	17,039,752
AP EAGERS LIMITED	462,483	3,790,492	2,149,332
AP MOELLER MAERSK A/S A	10,225	14,844,409	11,094,116
AP MOLLER MAERSK A/S B	14,561	19,699,525	16,957,242

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
AP THAILAND PCL FOREIGN	5,395,250	1,198,155	1,029,911
APA GROUP	2,771,593	18,225,976	21,238,728
APELOA PHARMACEUTICAL CO A	1,397,427	2,560,200	4,600,737
APERAM	107,590	2,372,599	2,999,242
APG SGA SA	2,599	958,257	485,487
APHRIA INC	621,000	5,310,336	2,653,612
APLUS FINANCIAL CO LTD	216,500	148,898	132,447
APOLLO FUTURE MOBILITY GRP L	9,875,589	1,430,014	617,985
APOLLO HOSPITALS ENTERPRISE	230,554	4,284,606	4,121,826
APOLLO TYRES LTD	607,442	1,506,447	868,881
APPEN LTD	257,758	2,661,115	6,019,659
APPLUS SERVICES SA	340,883	4,302,296	2,614,953
APROGEN PHARMACEUTICALS INC	552,612	904,261	849,925
APTIV PLC	571,393	34,980,372	44,522,943
ARAB NATIONAL BANK	1,545,427	8,368,244	7,828,076
ARABIAN CEMENT	115,654	907,788	812,445
ARABIAN CENTRES CO LTD	383,761	2,655,706	2,269,213
ARABTEC HOLDING CO PJSC	1,725,207	804,919	272,884
ARAKAWA CHEMICAL INDUSTRIES	38,900	472,770	446,385
ARATA CORP	30,200	909,139	1,354,850
ARB CORP LTD	157,823	1,534,916	1,950,467
ARBONIA AG	103,529	1,430,303	1,067,467
ARC RESOURCES LTD	837,900	7,595,431	2,805,304
ARCA CONTINENTAL SAB DE CV	1,042,800	5,856,766	4,546,765
ARCADIS NV	177,446	3,734,835	3,208,706
ARCADYAN TECHNOLOGY CORP	383,679	1,120,071	1,087,141
ARCELIK AS	1,712,023	4,895,260	4,970,168
ARCELORMITTAL	1,507,682	63,038,666	15,866,718
ARCH CAPITAL GROUP LTD	3,407,068	99,272,890	97,612,498
ARCLAND SAKAMOTO CO LTD	60,600	489,624	1,057,137
ARCLAND SERVICE HOLDINGS CO	32,600	522,141	577,454
ARCO PLATFORM LTD CLASS A	60,021	2,707,397	2,609,713
ARCOS DORADOS HOLDINGS INC A	388,222	3,914,862	1,626,650
ARCS CO LTD	82,100	1,578,950	1,649,077
ARDAGH GROUP SA	42,369	642,505	546,984
ARDENTEC CORP	1,122,513	947,002	1,209,846
ARDMORE SHIPPING CORP	74,338	462,750	322,627
AREZZO INDUSTRIA E COMERCIO	103,550	1,464,343	903,337
ARGENX SE	100,366	12,827,093	22,353,581
ARGO GRAPHICS INC	35,400	745,852	1,102,507
ARGO GROUP INTERNATIONAL	73,421	2,948,442	2,557,253
ARIAKE JAPAN CO LTD	41,600	2,597,624	2,637,475
ARISTOCRAT LEISURE LTD	1,541,920	19,922,009	27,071,101
ARJO AB B SHARES	535,074	1,968,876	2,974,978

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ARKEMA	158,675	13,648,187	15,173,296
ARNOLDO MONDADORI EDITORE	288,561	713,934	311,133
AROUNDTOWN SA	9,916,817	74,435,596	56,781,898
ARRIYADH DEVELOPMENT COMPANY	205,550	810,766	808,829
ARTERIA NETWORKS CORP	40,600	502,292	720,289
ARTNATURE INC	50,400	516,382	287,306
ARUHI CORP	79,500	1,636,666	1,124,503
ARVIND LTD	302,250	269,421	129,701
ARYZTA AG	2,223,891	3,495,429	997,002
AS ONE CORP	29,578	1,255,320	3,229,632
ASAHI CO LTD	28,700	445,935	396,376
ASAHI DIAMOND INDUSTRIAL CO	121,100	1,016,950	550,021
ASAHI GROUP HOLDINGS LTD	3,208,116	130,772,288	112,284,803
ASAHI HOLDINGS INC	129,500	2,537,440	3,425,805
ASAHI INTECC CO LTD	444,200	7,220,043	12,619,669
ASAHI KASEI CORP	2,919,135	24,142,411	23,691,844
ASAHI YUKIZAI CORP	28,000	361,126	370,617
ASALEO CARE LTD	849,265	949,805	593,490
ASCENDAS INDIA TRUST	2,048,500	1,824,673	1,967,664
ASCENTAGE PHARMA GROUP INTER	275,700	1,611,185	1,679,004
ASCENTIAL PLC	941,839	5,233,918	3,370,182
ASCLETIS PHARMA INC	1,060,000	458,482	441,755
ASCOM HOLDING AG REG	85,277	1,040,454	779,377
ASE TECHNOLOGY HOLDING CO LT	28,145,712	62,649,788	64,486,778
ASEER TRADING TOURISM + MANU	139,286	342,086	383,956
ASELSAN ELEKTRONIK SANAYI	1,632,969	6,812,827	7,737,530
ASHMORE GROUP PLC	1,064,687	6,210,831	5,488,382
ASHOK LEYLAND LTD	2,754,248	3,009,695	1,712,656
ASHTAD GROUP PLC	1,051,893	21,915,251	35,339,377
ASIA CEMENT CHINA HOLDINGS	1,023,000	997,075	1,003,142
ASIA CEMENT CORP	5,507,925	7,168,157	8,139,285
ASIA OPTICAL CO INC	499,000	1,044,599	1,185,578
ASIA PACIFIC TELECOM CO LTD	3,358,887	1,383,446	898,223
ASIA POLYMER	882,313	478,762	572,668
ASIA VITAL COMPONENTS	619,000	682,182	875,909
ASIAN PAINTS LTD	2,461,801	50,252,733	55,019,335
ASIAN PAY TELEVISION TRUST	3,500,400	1,617,020	318,663
ASIANA AIRLINES	222,936	1,013,987	711,705
ASICS CORP	398,000	5,532,293	4,522,853
ASKA PHARMACEUTICAL CO LTD	49,400	456,422	554,969
ASKUL CORP	49,400	1,630,132	1,579,738
ASM INTERNATIONAL NV	113,047	9,074,352	17,464,550
ASM PACIFIC TECHNOLOGY	1,596,010	17,308,630	16,751,984
ASMEDIA TECHNOLOGY INC	81,000	1,232,667	3,939,569

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ASML HOLDING NV	1,013,776	159,867,329	372,215,710
ASPEED TECHNOLOGY INC	80,000	1,834,230	3,362,199
ASPEN PHARMACARE HOLDINGS LT	897,905	8,061,163	7,416,308
ASR NEDERLAND NV	327,016	12,638,363	10,041,655
ASSA ABLOY AB B	2,263,675	33,584,228	46,030,840
ASSECO POLAND SA	132,631	1,715,606	2,212,948
ASSET WORLD CORP PCL FOREIGN	16,740,700	3,538,643	2,090,726
ASSICURAZIONI GENERALI	9,714,537	193,664,726	146,969,588
ASSOCIATED BRITISH FOODS PLC	813,213	19,245,193	19,242,044
ASSURED GUARANTY LTD	233,053	7,141,505	5,688,824
ASTELLAS PHARMA INC	11,912,348	166,217,137	198,695,558
ASTM SPA	170,397	3,519,053	3,892,698
ASTON MARTIN LAGONDA GLOBAL	1,385,108	2,079,154	845,452
ASTRA AGRO LESTARI TBK PT	921,705	824,857	530,698
ASTRA INDUSTRIAL GROUP	84,683	364,969	425,334
ASTRA INTERNATIONAL TBK PT	47,665,800	23,574,062	16,016,510
ASTRAL FOODS LTD	92,102	1,002,119	773,922
ASTRAL POLY TECHNIK LTD	85,261	1,275,389	1,077,905
ASTRAZENECA PLC	3,598,801	252,488,401	374,454,985
ASTRO MALAYSIA HOLDINGS BHD	3,627,800	1,552,009	702,701
ASUSTEK COMPUTER INC	6,053,549	45,336,379	44,317,531
ASX LTD	456,667	19,723,811	26,844,769
ASYMCHEM LABORATORIES TIAN A	15,100	434,546	518,695
ATACADAO SA	916,305	3,350,828	3,295,881
ATCO LTD CLASS I	178,800	5,100,980	5,286,546
ATEA ASA	200,694	1,865,977	1,926,429
ATEAM INC	9,500	138,071	75,641
ATEN INTERNATION CO LTD	282,000	717,131	850,650
ATENTO SA	172,141	920,530	203,126
ATHENE HOLDING LTD CLASS A	415,319	16,772,940	12,953,800
ATLANTIA SPA	1,148,967	27,434,745	18,453,611
ATLANTICA SUSTAINABLE INFRAS	157,156	3,584,792	4,573,240
ATLAS ARTERIA	2,219,322	9,077,715	10,115,380
ATLAS COPCO AB A SHS	1,482,259	33,061,808	62,780,012
ATLAS COPCO AB B SHS	1,450,166	22,793,057	53,638,078
ATLAS CORP	184,464	2,333,878	1,401,926
ATLASSIAN CORP PLC CLASS A	279,602	28,047,241	50,403,853
ATOM CORP	169,000	1,052,766	1,284,516
ATOS SE	219,400	16,149,811	18,703,211
ATRAE INC	17,400	503,097	506,428
ATRESMEDIA CORP DE MEDIOS DE	189,629	1,577,124	495,396
ATRIUM LJUNGBERG AB B SHS	109,950	1,798,016	1,548,351
ATS AUTOMATION TOOLING SYS	177,900	1,469,072	2,497,392
ATTENDO AB	258,036	2,103,736	1,011,466

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
AU OPTRONICS CORP	72,658,609	26,175,742	22,803,936
AU SMALL FINANCE BANK LTD	350,115	3,252,914	2,520,239
AUB GROUP LTD	153,190	1,234,889	1,550,428
AUCKLAND INTL AIRPORT LTD	9,243,115	44,805,575	39,093,179
AUDICODES LTD	48,330	422,045	1,550,046
AURAS TECHNOLOGY CO LTD	164,000	1,107,020	953,278
AURELIA METALS LTD	1,855,600	989,937	638,790
AURIZON HOLDINGS LTD	16,373,412	65,689,658	55,463,617
AUROBINDO PHARMA LTD	626,034	5,275,689	6,398,496
AURORA CANNABIS INC	248,599	14,298,458	3,064,594
AURUBIS AG	86,238	4,300,013	5,315,579
AUSNET SERVICES	4,292,176	4,707,520	4,935,122
AUSNUTRIA DAIRY CORP LTD	1,405,000	1,837,606	3,143,392
AUST AND NZ BANKING GROUP	10,246,492	197,572,983	131,499,774
AUSTAL LTD	747,565	1,458,929	1,662,476
AUSTEVOLL SEAFOOD ASA	194,387	1,394,235	1,600,917
AUSTRALIAN AGRICULTURAL CO	915,351	984,897	649,126
AUSTRALIAN PHARMA INDUS LTD	935,429	732,545	737,429
AUTO TRADER GROUP PLC	2,216,259	13,094,265	14,414,995
AUTOBACS SEVEN CO LTD	139,100	1,849,158	1,750,918
AUTOBIO DIAGNOSTICS CO LTD A	58,724	903,005	1,348,458
AUTOGRILL SPA	305,980	2,647,585	1,607,648
AUTOLIV INC	195,325	12,237,563	12,600,416
AUTOLUS THERAPEUTICS PLC	40,200	542,980	644,406
AUTONEUM HOLDING AG	6,716	746,751	655,617
AVANTI FEEDS LTD	77,156	601,730	515,540
AVANZA BANK HOLDING AB	295,596	1,671,854	4,197,576
AVARY HOLDING SHENZHEN CO A	74,572	470,432	527,710
AVAST PLC	1,296,885	4,812,479	8,468,853
AVENUE SUPERMARTS LTD	1,147,208	29,560,167	35,206,901
AVEVA GROUP PLC	150,557	6,429,531	7,612,279
AVEX INC	56,200	684,167	444,349
AVI LTD	737,415	4,262,444	2,993,799
AVIC AIRCRAFT CO LTD A	247,315	577,290	620,202
AVIC CAPITAL CO LTD A	800,755	472,608	448,253
AVIC ELECTROMECHANICAL SY A	322,049	342,845	359,648
AVIC HEAVY MACHINERY CO LT A	83,324	114,182	120,379
AVIC JONHON OPTRONIC TECH A	98,254	518,236	569,598
AVIC SHENYANG AIRCRAFT CO A	125,123	555,384	580,503
AVICOPTER PLC A	52,563	313,138	305,164
AVIVA PLC	9,275,101	66,412,540	31,355,437
AWA BANK LTD/THE	87,200	1,969,640	1,955,200
AXA SA	4,812,520	128,328,050	100,601,247
AXFOOD AB	249,652	3,028,520	5,450,373

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
AXIAL RETAILING INC	33,200	1,042,551	1,324,800
AXIATA GROUP BERHAD	10,587,008	11,635,931	8,771,033
AXIS BANK LTD	4,934,304	45,533,515	26,575,299
AXIS CAPITAL HOLDINGS LTD	186,586	8,806,911	7,567,928
AYALA CORPORATION	2,504,444	41,854,994	39,055,755
AYALA LAND INC	32,328,728	16,352,259	12,657,124
AYGAZ AS	167,432	319,553	293,108
AZ. BGP HOLDINGS	43,616,220	0	49
AZBIL CORP	308,900	5,657,463	9,405,724
AZIMUT HOLDING SPA	288,625	4,344,349	4,930,613
AZRIELI GROUP LTD	228,121	12,345,653	10,328,540
AZUL SA	649,700	2,528,285	2,379,520
AZURE POWER GLOBAL LTD	2,062	22,757	32,910
B GRIMM POWER PCL FOREIGN	1,675,700	2,402,436	2,900,589
B GRIMM POWER PCL NVDR	25,600	35,881	44,313
B SOFT CO LTD A	183,148	340,589	478,705
B+M EUROPEAN VALUE RETAIL SA	1,990,791	10,409,889	9,777,795
B+S GROUP SARL	59,639	1,138,472	422,666
B2GOLD CORP	2,460,192	7,477,106	13,944,701
B2W CIA DIGITAL	608,820	8,572,570	11,869,706
B3 SA BRASIL BOLSA BALCAO	6,613,211	59,526,585	66,351,314
BABCOCK INTL GROUP PLC	591,566	6,630,711	2,267,374
BACHEM HOLDING AG REG B	13,473	1,445,211	3,540,475
BAE SYSTEMS PLC	8,087,534	56,765,018	48,305,978
BAIC BLUEPARK NEW ENERGY A	576,700	494,167	524,191
BAIC MOTOR CORP LTD H	5,274,733	3,523,925	2,279,914
BAJAJ AUTO LTD	727,473	28,746,497	27,228,781
BAJAJ CONSUMER CARE LTD	117,501	564,963	227,443
BAJAJ FINANCE LTD	1,532,215	65,678,345	57,450,135
BAJAJ FINSERV LTD	328,697	31,143,153	25,446,197
BAJAJ HOLDINGS AND INVESTMEN	62,643	2,851,263	2,109,844
BAKKAFROST P/F	118,931	4,845,996	7,464,779
BAKKAHOR GROUP PLC	346,314	785,460	302,529
BALFOUR BEATTY PLC	1,655,695	6,766,190	5,335,388
BALKRISHNA INDUSTRIES LTD	192,791	2,509,543	3,220,088
BALOISE HOLDING AG REG	391,447	58,802,634	58,703,624
BALRAMPUR CHINI MILLS LTD	305,776	576,072	542,877
BANCA FARMAFACTORING SPA	308,386	2,021,436	1,752,601
BANCA GENERALI SPA	135,055	2,486,948	4,043,976
BANCA IFIS SPA	61,593	1,327,363	591,473
BANCA MEDIOLANUM SPA	607,168	4,207,072	4,357,601
BANCA MONTE DEI PASCHI SIENA	527,512	1,241,463	934,333
BANCA POPOLARE DI SONDRIO	1,074,400	5,685,686	2,028,484
BANCO BILBAO VIZCAYA ARGENTA	15,741,545	150,778,027	54,171,878

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
BANCO BPM SPA	3,394,860	10,434,946	5,063,580
BANCO BRADESCO S.A.	3,182,016	20,320,406	10,987,656
BANCO BRADESCO SA PREF	9,092,589	66,873,780	34,278,537
BANCO BTG PACTUAL SA UNIT	560,212	7,340,761	7,805,095
BANCO COMERCIAL PORTUGUES R	18,791,149	3,780,469	2,258,265
BANCO DAVIVIENDA SA	240,867	2,951,118	1,803,630
BANCO DE CHILE	381,833,550	53,901,933	33,734,989
BANCO DE CREDITO E INVERSION	105,601	6,231,243	3,590,511
BANCO DE SABADELL SA	13,078,848	26,882,000	4,540,527
BANCO DEL BAJIO SA	1,660,900	2,940,141	1,404,509
BANCO DO BRASIL S.A.	2,011,900	21,600,658	11,780,175
BANCO ESPIRITO SANTO REG	9,968,526	0	11
BANCO ESTADO RIO GRAN PREF B	475,000	2,691,802	1,172,188
BANCO INTER SA ORD	240,100	400,711	553,155
BANCO INTER SA PR	568,900	2,247,725	1,491,979
BANCO LATINOAMERICANO COME E	70,574	1,992,396	811,601
BANCO PAN SA	711,000	740,631	1,139,506
BANCO SANTANDER BRASIL UNIT	861,039	9,579,136	4,393,952
BANCO SANTANDER CHILE	517,696,088	37,473,878	21,197,403
BANCO SANTANDER MEXICO SA IN	1,324,700	2,024,047	963,700
BANCO SANTANDER SA	38,621,870	269,402,414	94,325,797
BANCOLOMBIA SA	644,146	7,506,159	4,134,353
BANCOLOMBIA SA PREF	1,052,359	12,798,361	6,951,410
BANDAI NAMCO HOLDINGS INC	1,690,079	70,140,322	88,776,732
BANDHAN BANK LTD	1,473,981	7,715,887	6,233,361
BANDO CHEMICAL INDUSTRIES	100,300	744,578	608,020
BANGCHAK CORP PCL FOREIGN	2,469,500	2,261,449	1,677,894
BANGKOK AIRWAYS FOREIGN	1,671,900	842,022	338,085
BANGKOK BANK PCL FOREIGN REG	1,119,600	6,286,472	3,875,991
BANGKOK BANK PUBLIC CO NVDR	7,200	45,050	24,926
BANGKOK CHAIN HOSPITAL FOREG	2,538,475	969,809	1,231,970
BANGKOK COMMERCIAL FOREIGN	4,133,500	3,399,768	3,249,828
BANGKOK DUSIT MED SERVI NVDR	50,408,700	39,301,906	36,696,457
BANGKOK DUSIT MED SERVICE F	29,113,780	21,609,444	21,194,210
BANGKOK EXPRESSWAY AND METRO	28,184,820	8,776,486	8,663,133
BANGKOK EXPRESSWAY NVDR	39,204,900	11,606,834	12,050,362
BANGKOK LAND PUB CO LTD FRGN	27,863,100	1,376,769	919,530
BANGKOK LIFE ASSURANCE NVDR	1,213,820	1,039,082	608,726
BANK AL JAZIRA	3,381,395	12,061,782	10,186,554
BANK ALBILAD	865,016	5,900,360	5,101,081
BANK BTPN SYARIAH TBK PT	5,445,000	1,337,107	1,212,118
BANK CENTRAL ASIA TBK PT	83,513,200	153,492,319	166,471,009
BANK DANAMON INDONESIA TBK	1,335,698	480,641	251,525
BANK HANDLOWY W WARSZAWIE SA	77,957	1,411,644	754,807

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
BANK HAPOALIM BM	9,566,343	61,558,491	56,884,768
BANK LEUMI LE ISRAEL	12,440,190	77,173,175	62,219,821
BANK MANDIRI PERSERO TBK PT	43,684,322	21,353,799	15,137,374
BANK MILLENNIUM SA	1,447,937	3,328,725	1,106,181
BANK NEGARA INDONESIA PERSER	17,325,100	9,161,192	5,554,705
BANK OF BARODA FOREIGN	2,158,515	2,980,112	1,389,386
BANK OF BEIJING CO LTD A	1,955,239	1,392,057	1,354,331
BANK OF CHANGSHA CO LTD A	304,988	349,361	342,320
BANK OF CHENGDU CO LTD A	114,900	129,094	129,289
BANK OF CHINA LTD A	19,180,653	9,864,231	9,435,642
BANK OF CHINA LTD H	367,002,324	144,492,805	135,901,357
BANK OF CHONGQING CO LTD H	1,686,500	1,095,673	844,289
BANK OF COMMUNICATIONS CO A	18,000,720	14,119,126	13,053,773
BANK OF COMMUNICATIONS CO H	71,453,346	56,038,753	44,068,021
BANK OF EAST ASIA LTD	2,937,804	9,441,821	6,709,176
BANK OF GEORGIA GROUP PLC	90,191	2,104,169	1,192,409
BANK OF HANGZHOU CO LTD A	529,347	672,258	667,474
BANK OF INDIA	831,613	1,001,797	537,493
BANK OF IRELAND GROUP PLC	2,806,085	17,053,223	5,751,769
BANK OF IWATE LTD/THE	28,800	1,191,661	694,072
BANK OF JIANGSU CO LTD A	368,364	321,534	295,249
BANK OF KAOHSIUNG	1,231,306	362,082	408,982
BANK OF KYOTO LTD/THE	170,928	7,562,065	6,052,231
BANK OF MONTREAL	1,497,341	94,472,692	79,440,426
BANK OF N.T. BUTTERFIELD+SON	115,015	4,169,109	2,805,216
BANK OF NAGOYA LTD/THE	41,000	1,363,549	879,399
BANK OF NANJING CO LTD A	785,509	855,660	813,924
BANK OF NINGBO CO LTD A	506,680	1,815,304	1,881,580
BANK OF NOVA SCOTIA	2,973,523	152,223,638	122,651,771
BANK OF OKINAWA LTD/THE	39,300	1,283,109	1,129,258
BANK OF QINGDAO CO LTD A	143,581	106,495	103,310
BANK OF QUEENSLAND LTD	1,068,405	8,196,829	4,538,632
BANK OF SAGA LTD/THE	28,000	734,443	304,435
BANK OF SHANGHAI CO LTD A	6,235,084	8,158,739	7,315,587
BANK OF THE PHILIPPINE ISLAN	4,180,606	7,464,858	6,041,217
BANK OF THE RYUKYUS LTD	97,600	1,076,292	864,862
BANK OF XI AN CO LTD A	141,300	108,308	105,065
BANK OF ZHENGZHOU CO LTD A	210,222	111,012	102,227
BANK PAN INDONESIA TBK PT	9,001,900	824,631	513,584
BANK PEKAO SA	366,508	10,439,418	4,988,508
BANK RAKYAT INDONESIA PERSER	468,886,110	119,220,340	99,455,717
BANK TABUNGAN NEGARA PERSERO	8,316,705	1,202,733	724,837
BANKIA SA	2,842,169	14,893,717	3,027,466
BANKINTER SA	3,151,378	21,783,565	15,025,051

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
BANPU POWER PCL FOREIGN	1,466,600	1,010,270	792,436
BANPU PUBLIC CO LTD FOR REG	10,213,700	4,507,760	2,015,807
BANPU PUBLIC CO LTD NVDR	93,900	19,989	18,532
BANQUE CANTONALE VAUDOIS REG	66,490	4,313,745	6,462,697
BANQUE SAUDI FRANSI	1,395,402	11,180,831	10,620,828
BAOSHAN IRON + STEEL CO A	1,731,674	1,238,533	1,116,246
BAOSHENG SCIENCE AND TECH A	226,100	125,365	125,609
BAPCOR LTD	761,099	2,643,574	3,091,698
BARCLAYS PLC	40,472,353	156,680,287	57,218,770
BARCO N.V.	23,150	2,222,399	4,082,145
BARITO PACIFIC TBK PT	44,795,600	2,780,473	3,637,585
BARLOWORLD LTD	456,897	3,593,897	1,814,440
BARRATT DEVELOPMENTS PLC	2,382,693	17,420,790	14,599,578
BARRICK GOLD CORP	15,832,515	262,391,620	424,641,537
BARRY CALLEBAUT AG REG	21,529	38,202,589	41,056,306
BARWA REAL ESTATE CO	4,475,255	4,229,145	3,748,840
BASF SE	2,148,273	141,430,884	120,352,104
BASIC FIT NV	86,834	2,090,082	2,277,270
BASILEA PHARMACEUTICA REG	23,290	1,611,861	1,196,514
BASSO INDUSTRY CORP	220,500	365,359	302,674
BATA INDIA LTD	73,899	1,217,090	1,278,438
BAVARIAN NORDIC A/S	139,742	3,047,916	3,817,875
BAWAG GROUP AG	133,754	5,859,398	4,617,941
BAWAN CO	60,221	231,799	209,353
BAYCURRENT CONSULTING INC	31,900	1,367,730	2,649,340
BAYER AG REG	2,317,461	171,536,204	171,241,922
BAYER CROPSOURCE LTD	25,449	1,411,078	2,001,102
BAYERISCHE MOTOREN WERKE AG	755,342	51,491,149	48,203,951
BAYERISCHE MOTOREN WERKE PRF	135,267	9,351,642	6,560,127
BAYSIDE LAND CORPORATION LTD	1,566	720,539	813,056
BAYTEX ENERGY CORP	1,269,448	18,343,958	643,112
BAYWA BAYERISCHE WARENVERMIT	33,942	1,199,637	1,097,912
BB SEGURIDADE PARTICIPACOES	5,867,300	44,899,459	29,139,883
BBMG CORP H	5,661,750	1,922,417	1,103,064
BBMG CORPORATION A	741,683	338,591	320,825
BCE INC	1,655,947	69,171,548	68,839,735
BCPG PCL FOREIGN	1,395,600	897,094	704,404
BDO UNIBANK INC	16,829,809	34,918,971	33,102,284
BE SEMICONDUCTOR INDUSTRIES	169,377	3,993,724	7,542,849
BEACH ENERGY LTD	4,191,201	7,207,110	4,386,175
BEAUTY COMMUNITY PCL FOREIGN	2,781,800	492,451	138,606
BEAZLEY PLC	1,436,571	5,674,124	7,277,615
BEC WORLD PCL FOREIGN	2,304,900	541,102	371,379
BECHTLE AG	64,143	6,572,792	11,310,627

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
BECLE SAB DE CV	1,310,700	2,051,195	2,510,563
BEFAR GROUP CO LTD A	255,100	190,240	152,899
BEFESA SA	81,366	3,486,794	3,171,102
BEGA CHEESE LTD	504,576	2,138,921	1,545,932
BEIBUWAN PORT CO LTD A	200,508	270,298	304,414
BEIERSDORF AG	854,851	89,361,998	97,068,731
BEIJER REF AB	151,971	2,879,012	4,590,131
BEIJING AOSAIKANG PHARM A	1,079,421	2,511,078	2,883,908
BEIJING BDSTAR NAVIGATION A	80,900	303,355	366,298
BEIJING CAPITAL CO LTD A	506,200	221,951	215,386
BEIJING CAPITAL DEVELOPMEN A	229,682	215,941	190,263
BEIJING CAPITAL INTL AIRPO H	4,289,154	4,053,673	2,684,024
BEIJING CAPITAL LAND LTD H	3,056,000	965,757	575,678
BEIJING CENTERGATE TECH HD A	124,400	167,383	178,315
BEIJING CHANGJIU LOGISTICS A	36,200	45,851	45,134
BEIJING CISRI GAONA MATERI A	77,500	173,439	205,524
BEIJING DABEINONG TECHNOLO A	387,859	434,675	499,483
BEIJING E HUALU INFO TECH A	90,980	479,948	720,216
BEIJING EASPRING MATERIAL A	72,100	281,718	337,053
BEIJING ENLIGHT MEDIA CO L A	268,126	392,307	413,516
BEIJING ENTERPRISES CLEAN EN	44,000,000	918,760	238,438
BEIJING ENTERPRISES HLDGS	1,231,539	6,061,673	4,115,485
BEIJING ENTERPRISES WATER GR	12,756,000	7,192,938	4,970,437
BEIJING FOREVER TECHNOLOGY A	100,100	190,895	144,332
BEIJING GAS BLUE SKY HOLDING	14,687,699	645,087	214,144
BEIJING GEOENVIRON ENGINEE A	100,200	152,632	165,156
BEIJING GLOBAL SAFETY TECH A	38,373	220,204	254,081
BEIJING JETSEN TECHNOLOGY A	229,828	138,289	129,630
BEIJING JINGNENG CLEAN ENE H	3,806,000	809,360	756,245
BEIJING JINGXI CULTURE +TO A	118,200	144,021	102,425
BEIJING KUNLUN TECH CO LTD A	105,352	283,606	371,720
BEIJING LANXUM TECHNOLOGY A	85,633	188,629	236,898
BEIJING NEW BUILDING MATER A	150,562	463,566	453,978
BEIJING NORTH STAR CO LTD A	235,164	97,703	93,413
BEIJING NORTH STAR CO LTD H	1,610,000	536,097	353,141
BEIJING ORIENT NATIONAL A	97,863	196,306	171,680
BEIJING ORIENTAL YUHONG A	142,405	714,165	817,901
BEIJING ORIGINWATER TECHNO A	282,464	334,895	324,226
BEIJING SANJU ENVIRONMENTA A	208,173	142,229	125,950
BEIJING SHIJI INFORMATION A	96,602	505,355	532,983
BEIJING SHOUGANG CO LTD A	334,515	184,949	203,335
BEIJING SHUNXIN AGRICULT A	67,734	529,467	545,579
BEIJING SL PHARMACEUTICAL A	91,175	160,663	165,103
BEIJING SPORTS AND ENTERTAIN	900,000	234,961	15,560

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
BEIJING STRONG BIOTECHNOLO A	82,900	217,753	269,533
BEIJING SUPERMAP SOFTWARE A	74,200	212,727	264,112
BEIJING THUNISOFT CORP LTD A	133,583	442,326	532,700
BEIJING TIANTAN BIOLOGICAL A	94,838	515,486	607,711
BEIJING TONG REN TANG CHINES	565,000	1,046,098	761,065
BEIJING TONGRENTANG CO A	122,226	455,087	468,578
BEIJING TONGTECH CO LTD A	45,700	274,422	277,982
BEIJING ULTRAPOWERSOFTWAR A	182,921	155,177	160,060
BEIJING UNISTRONG SCIENCE A	123,097	184,242	168,616
BEIJING UNITED INFORMATION T	30,050	269,791	399,302
BEIJING URBAN CONSTRUCTION H	703,000	280,793	163,268
BEIJING VRV SOFTWARE CORP A	239,500	231,967	238,684
BEIJING WATERTEK INFORMATI A	289,500	294,461	272,553
BEIJING YANJING BREWERY CO A	250,318	221,734	242,388
BEIJING ZHONGKE SANHUAN HI A	95,057	132,089	131,417
BEKAERT NV	85,014	2,586,994	1,666,187
BEKASI FAJAR INDUSTRIAL ESTA	11,172,900	246,564	89,164
BELC CO LTD	21,400	656,513	1,461,909
BELIMO HOLDING AG REG	1,096	3,226,136	8,061,970
BELL FOOD GROUP AG REG	4,746	1,352,502	1,202,090
BELLSYSTEM24 HOLDINGS INC	78,300	782,330	1,011,002
BELLUNA CO LTD	113,000	480,238	634,731
BELLWAY PLC	289,385	10,813,716	9,103,587
BENDIGO AND ADELAIDE BANK	1,230,283	10,100,400	5,937,819
BENEFIT ONE INC	139,400	2,345,649	2,797,432
BENESSE HOLDINGS INC	616,380	18,457,725	16,511,454
BENETEAU	87,454	1,157,463	621,758
BENEXT GROUP INC	63,100	864,237	549,789
BENGANG STEEL PLATES CO B	933,200	268,265	183,017
BERA HOLDING AS	726,310	377,822	461,973
BERGER PAINTS INDIA LTD	1,913,922	12,724,567	12,519,724
BERJAYA CORP BHD	7,722,272	670,074	342,411
BERJAYA SPORTS TOTO BHD	1,922,500	1,132,220	987,048
BERKELEY GROUP HOLDINGS/THE	275,258	12,786,174	14,165,538
BERLI JUCKER PUB CO FORGN	3,849,770	6,102,099	4,920,033
BERLI JUCKER PUBLIC CO NVDR	6,256,100	10,121,421	7,995,339
BERMAZ AUTO BHD	1,525,240	871,383	526,804
BERNER KANTONALBANK AG REG	10,720	2,499,135	2,596,422
BERRY GENOMICS CO LTD A	52,500	311,825	443,357
BERTRANDT AG	11,088	1,115,134	437,117
BES ENGINEERING CORP	3,172,000	792,737	763,314
BESALCO SA	563,577	528,585	288,849
BEST WORLD INTERNATIONAL LTD	1,663,300	0	1
BESTSUN ENERGY CO LTD A	238,300	216,929	172,474

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
BETHEL AUTOMOTIVE SAFETY S A	67,426	269,733	335,505
BETSSON AB	289,278	1,934,789	2,012,012
BETSSON AB REDEMPTION	289,278	88,628	89,112
BETTA PHARMACEUTICALS CO L A	13,647	183,328	270,042
BETTER LIFE COMMERCIAL CHA A	76,740	115,643	151,655
BEZEQ THE ISRAELI TELECOM CO	4,821,224	5,745,957	4,374,129
BGF CO LTD	62,949	149,350	221,893
BGF RETAIL CO LTD	61,705	7,336,126	7,130,561
BGI GENOMICS CO LTD A	12,913	197,940	284,597
BH CO LTD	53,334	1,001,887	877,926
BHARAT ELECTRONICS LTD	1,373,208	2,146,846	1,612,303
BHARAT FORGE LTD	1,770,631	12,399,753	7,489,045
BHARAT PETROLEUM CORP LTD	6,393,743	34,658,211	31,670,743
BHARTI AIRTEL LTD FOREIGN	9,174,963	49,113,483	68,031,098
BHARTI INFRATEL LTD	4,155,830	16,448,280	12,191,664
BHP GROUP LTD	6,932,891	184,699,676	170,979,423
BHP GROUP LTD SPON ADR	216,109	8,046,812	10,747,101
BHP GROUP PLC	6,536,777	152,250,711	133,623,335
BIC CAMERA INC	346,400	3,661,385	3,666,764
BICYCLE THERAPEUTICS LTD ADR	18,745	306,877	290,548
BID CORP LTD	785,163	16,479,054	12,811,149
BIDVEST GROUP LTD	803,084	9,926,238	6,565,183
BIEM.L.FDLKK GARMENT CO LT A	86,592	187,169	209,561
BIESSE SPA	25,649	979,152	323,510
BIG SHOPPING CENTERS 2004 LT	10,336	759,624	713,765
BILFINGER SE	66,562	3,383,369	1,270,905
BILIA AB A SHS	186,796	1,957,068	1,508,740
BILIBILI INC SPONSORED ADR	354,623	12,220,332	16,426,137
BILLERUDKORSNAS AB	419,764	3,999,388	6,012,623
BIM BIRLESIK MAGAZALAR AS	1,069,438	9,010,803	10,608,962
BINEX CO LTD	55,144	751,765	584,517
BINGGRAE CO LTD	11,976	547,883	598,377
BINGO INDUSTRIES LTD	1,136,888	2,185,871	1,682,907
BIOCERES CROP SOLUTIONS CORP	1,791	11,313	10,853
BIOCON LTD	673,295	2,441,518	3,478,667
BIOMERIEUX	99,760	6,033,427	13,703,158
BIONDVAX PHARMACEUTICALS ADR	939	22,447	21,362
BIRLASOFT LTD	373,525	460,288	442,519
BK BRASIL OPERACAO E ASSESSO	435,800	842,903	907,983
BKW AG	42,959	2,340,064	3,853,638
BLACKBERRY LTD	1,180,800	10,277,550	5,739,278
BLACKMORES LTD	31,546	3,424,436	1,693,029
BLOOMBERRY RESORTS CORP	8,064,300	1,742,186	1,202,564
BLUE CAPITAL REINSURANCE HOL	18,700	216,920	23,562

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
BLUE LABEL TELECOMS LTD	1,449,524	640,815	217,741
BLUE SAIL MEDICAL CO LTD A	122,909	320,731	523,146
BLUEDON INFORMATION SECURI A	124,069	81,032	70,329
BLUEFOCUS INTELLIGENT COMM A	222,424	228,966	245,248
BLUESCOPE STEEL LTD	1,178,207	10,885,401	9,482,874
BLUESTAR ADISSEO CO A	93,738	153,800	161,926
BML INC	59,800	1,175,534	1,553,686
BMO COMMERCIAL PROPERTY TRUS	1,291,054	2,030,347	1,004,993
BNK FINANCIAL GROUP INC	686,365	5,732,786	2,853,078
BNP PARIBAS	2,527,823	163,098,926	100,419,833
BOBST GROUP SA REG	18,524	1,523,017	1,093,787
BOC AVIATION LTD	484,600	3,327,052	3,095,007
BOC HONG KONG HOLDINGS LTD	23,241,945	86,880,558	73,920,088
BODYCOTE PLC	455,490	3,021,798	3,531,593
BOE TECHNOLOGY GROUP CO LT A	16,361,650	9,678,988	10,801,219
BOE TECHNOLOGY GROUP CO LT B	2,196,000	800,383	821,681
BOE VARITRONIX LTD	746,103	291,703	236,814
BOIRON SA	6,788	277,314	279,799
BOLIDEN AB	648,109	10,673,980	14,747,695
BOLLORE	2,357,733	9,280,154	7,404,054
BOLSA MEXICANA DE VALORES SA	1,152,600	2,235,060	2,145,880
BOMBARDIER INC B	5,029,500	6,564,060	1,550,947
BOMBAY BURMAH TRADING CORP	39,515	649,220	550,383
BONAVA AB B SHARES	202,413	1,620,931	1,088,470
BONDUELLE SCA	33,368	834,560	803,887
BOOHOO GROUP PLC	2,043,551	5,321,825	10,403,053
BORAL LTD	2,837,516	10,710,469	7,404,256
BORR DRILLING LTD	189,298	3,556,846	207,998
BORREGAARD ASA	241,455	2,719,664	2,557,966
BOSCH LTD	16,602	4,082,052	2,510,647
BOSHIWA INTERNATIONAL HOLDIN	1,935,000	0	0
BOSIDENG INTL HLDGS LTD	6,263,177	2,154,035	1,939,452
BOSKALIS WESTMINSTER	186,906	5,859,095	3,686,256
BOSSARD HOLDING AG REG A	6,118	1,255,709	934,923
BOUBYAN BANK K.S.C	2,116,636	3,736,930	3,660,167
BOUBYAN PETROCHEMICALS CO	882,004	2,419,625	1,760,281
BOUYGUES SA	504,500	23,067,984	17,231,194
BOYA BIO PHARMACEUTICAL GR A	38,587	193,457	204,496
BOYD GROUP SERVICES INC	47,600	5,253,972	7,062,065
BP PLC	46,568,604	369,428,055	176,763,482
BPD JAWA BARAT DAN BANTEN TB	5,739,200	680,446	305,341
BPER BANCA	780,256	5,870,586	1,938,474
BPOST SA	238,924	2,319,498	1,610,085
BR MALLS PARTICIPACOES SA	1,819,396	6,659,751	3,340,044

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
BR PROPERTIES SA	478,400	1,132,732	777,178
BRACK CAPITAL PROPERTIES NV	5,542	616,083	361,893
BRADESPAR SA PREF	521,000	4,156,662	3,464,288
BRAINPAD INC	11,300	677,491	480,238
BRAIT SE	1,855,916	1,236,159	356,763
BRAMBLES LTD	3,571,180	27,706,089	26,726,690
BRAVIDA HOLDING AB	479,916	3,509,819	4,587,112
BRAVURA SOLUTIONS LTD	550,000	1,516,833	1,704,037
BREMBO SPA	355,122	2,302,680	3,280,585
BRENNTAG AG	363,342	16,321,340	19,086,256
BREVILLE GROUP LTD	310,478	2,378,464	4,865,270
BREWIN DOLPHIN HOLDINGS PLC	691,790	2,242,200	2,226,692
BRF SA	1,719,128	12,424,075	6,656,345
BRICKWORKS LTD	139,703	1,539,692	1,522,617
BRIDGESTONE CORP	4,644,944	164,878,289	149,356,358
BRIGHT DAIRY + FOOD CO LTD A	116,392	219,774	244,495
BRIGHT REAL ESTATE GROUP A	324,609	163,786	128,942
BRIGHTOIL PETROLEUM HOLDINGS	5,263,000	0	1
BRIGHTON BEST INTERNATIONAL	1,317,000	1,442,335	1,198,510
BRILLIANCE CHINA AUTOMOTIVE	6,474,000	7,584,424	5,797,026
BRISA BRIDGESTONE SABANCI	92,548	134,434	170,251
BRITANNIA INDUSTRIES LTD	492,322	20,346,388	23,498,568
BRITVIC PLC	636,643	5,050,244	6,057,101
BROADLEAF CO LTD	189,800	908,307	927,141
BROGENT TECHNOLOGIES INC	79,100	542,804	289,542
BRONCO BILLY CO LTD	21,800	593,985	489,204
BROOGE ENERGY LTD	16,979	172,346	135,832
BROOKFIELD ASSET MANAGE CL A	3,254,917	80,239,163	106,776,572
BROOKFIELD BUSINESS PT UNIT	125,283	4,940,838	3,864,981
BROOKFIELD INFRASTRUCTURE A	71,946	2,394,783	3,276,421
BROOKFIELD RENEWABLE PARTNER	275,791	13,276,738	13,210,389
BROTHER INDUSTRIES LTD	604,400	9,334,530	10,879,592
BROWN (N) GROUP PLC	361,542	1,181,394	155,906
BRP INC/CA SUB VOTING	93,700	4,137,063	3,983,282
BRUNEL INTERNATIONAL	46,507	643,527	332,210
BRUNELLO CUCINELLI SPA	79,614	2,084,525	2,364,224
BT GROUP PLC MM	24,031,555	77,068,252	33,865,328
BTG HOTELS GROUP CO LTD A	88,151	195,367	191,527
BTS GROUP HOLDINGS PCL FORGN	27,105,600	10,088,577	9,909,999
BTS GROUP HOLDINGS PCL NVDR	36,944,400	12,420,635	13,507,133
BTS RAIL MASS TRANSIT FUND F	6,690,501	2,314,536	1,580,220
BUBS AUSTRALIA LTD	1,222,910	991,336	778,825
BUCHER INDUSTRIES AG REG	15,675	3,460,269	4,512,838
BUDWEISER BREWING CO APAC LT	2,747,621	11,046,308	7,994,227

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
BUKWANG PHARMACEUTICAL CO	78,024	641,724	2,198,955
BUMI ARMADA BERHAD	7,990,600	537,399	428,900
BUMI SERPONG DAMAI PT	17,751,600	1,908,278	919,579
BUMITAMA AGRI LTD	733,300	498,361	231,283
BUMRUNGRAD HOSPITAL FOREIGN	869,850	4,189,030	3,278,736
BUMRUNGRAD HOSPITAL PCL NVDR	2,409,100	12,632,316	9,080,649
BUNKA SHUTTER CO LTD	128,200	779,373	887,662
BUNZL PLC	1,986,519	51,735,261	53,165,425
BUPA ARABIA FOR COOPERATIVE	147,771	4,136,624	4,301,944
BURBERRY GROUP PLC	1,422,762	26,808,741	28,118,660
BURCKHARDT COMPRESSION HOLDI	7,486	1,700,713	1,832,887
BURE EQUITY AB	122,823	1,022,675	2,665,637
BUREAU VERITAS SA	647,666	12,996,880	13,661,062
BURGAN BANK	1,631,137	1,660,293	1,039,177
BURSA MALAYSIA BHD	1,236,850	1,814,027	2,101,346
BUZZI UNICEM SPA	167,599	4,039,395	3,608,538
BUZZI UNICEM SPA RSP	93,828	1,342,325	1,165,535
BW ENERGY LTD	142,195	304,936	253,053
BW LPG LTD	192,800	1,916,083	599,165
BW OFFSHORE LTD	215,211	1,567,182	704,952
BWX LTD	262,484	942,793	634,328
BYD CO LTD A	162,310	1,383,818	1,647,398
BYD CO LTD H	1,619,093	8,647,204	12,502,850
BYD ELECTRONIC INTL CO LTD	1,821,500	3,217,584	4,169,230
BYUCKSAN CORPORATION	103,396	479,388	143,552
C+C GROUP PLC	740,849	3,160,259	2,105,405
C+S PAPER CO LTD A	1,295,800	2,589,396	4,084,808
CA IMMOBILIEN ANLAGEN AG	165,705	3,256,115	5,518,208
CAC CORP	25,100	244,230	277,325
CADILA HEALTHCARE LTD	588,894	2,323,719	2,754,015
CAE INC	646,735	8,853,788	10,456,024
CAESARSTONE LTD	49,301	667,698	584,217
CAFE DE CORAL HOLDINGS LTD	778,000	1,883,666	1,610,116
CAFE24 CORP	13,943	1,763,824	612,038
CAHYA MATA SARAWAK BHD	1,277,000	978,151	464,905
CAIRN ENERGY PLC	1,383,911	3,546,925	2,014,334
CAIRN HOMES PLC	1,604,166	2,729,027	1,567,496
CAIRO COMMUNICATIONS SPA	157,480	866,403	259,297
CAITONG SECURITIES CO LTD A	1,210,393	1,727,270	1,753,796
CAIXABANK SA	8,383,080	29,878,943	17,894,075
CAJA DE AHORROS DEL MEDITERR	163,949	0	0
CALBEE INC	709,888	21,233,249	19,628,270
CALEDONIA MINING CORP PLC	22,600	394,094	391,432
CALISEN PLC	246,301	590,750	548,706

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CAMECO CORP	933,300	9,298,854	9,538,573
CAMEL GROUP CO LTD A	1,631,428	2,091,406	2,094,028
CAMIL ALIMENTOS SA	289,700	556,586	591,978
CAMSING INTERNATIONAL HOLDIN	734,000	0	0
CAN IMPERIAL BK OF COMMERCE	1,280,016	99,532,883	85,278,012
CANADA GOOSE HOLDINGS INC	118,200	6,382,259	2,735,436
CANADIAN NATL RAILWAY CO	1,881,142	119,489,390	165,891,311
CANADIAN NATURAL RESOURCES	2,877,304	83,582,899	49,772,275
CANADIAN PACIFIC RAILWAY LTD	319,705	47,156,947	81,057,658
CANADIAN SOLAR INC	105,937	1,933,229	2,041,406
CANADIAN TIRE CORP CLASS A	133,371	11,140,995	11,519,651
CANADIAN UTILITIES LTD A	289,892	7,476,883	7,194,089
CANADIAN WESTERN BANK	186,600	4,250,866	3,240,154
CANARA BANK	677,303	1,603,096	901,979
CANCOM SE	80,970	4,112,562	4,292,437
CANFOR CORP	142,000	1,259,718	1,227,122
CANNY ELEVATOR CO LTD A	131,600	159,803	162,405
CANON ELECTRONICS INC	42,900	794,464	639,812
CANON INC	8,531,101	261,520,690	168,787,460
CANON MARKETING JAPAN INC	126,600	2,458,727	2,575,771
CANOPY GROWTH CORP	526,100	12,192,795	8,494,082
CANSINO BIOLOGICS INC H	170,600	2,983,362	4,706,085
CANVEST ENVIRONMENTAL PROTEC	1,691,000	744,952	741,815
CAP SA	173,879	1,376,167	1,127,268
CAPCOM CO LTD	270,300	5,378,722	9,821,347
CAPGEMINI SE	409,073	36,291,927	46,840,963
CAPITA PLC	3,947,086	6,755,882	2,150,767
CAPITAL POWER CORP	251,800	5,623,844	5,172,808
CAPITAL PRODUCT PARTNERS LP	3,126	65,279	25,258
CAPITAL SECURITIES CORP	5,096,785	1,544,935	1,787,921
CAPITALAND LTD	5,902,582	15,755,853	12,354,783
CAPITEC BANK HOLDINGS LTD	125,357	9,715,299	6,195,341
CAPRI HOLDINGS LTD	462,253	18,047,061	7,225,014
CAR INC	1,468,000	1,288,324	441,321
CARABAO GROUP PCL F	596,900	1,279,212	2,008,496
CARD FACTORY PLC	758,881	2,825,981	468,837
CARDTRONICS PLC A	82,007	1,896,305	1,966,528
CARE RATINGS LTD	51,118	711,483	283,979
CAREER TECHNOLOGY CO LTD	900,220	1,005,162	933,645
CAREL INDUSTRIES SPA	95,899	1,082,692	1,759,964
CARGOTEC OYJ B SHARE	115,499	3,782,296	2,680,071
CARL ZEISS MEDITEC AG BR	87,271	7,418,540	8,507,999
CARLSBERG AS B	290,260	32,932,392	38,342,953
CARLSBERG BREWERY MALAYSIA B	343,300	2,164,190	1,985,291

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
CARNARVON PETROLEUM LTD	3,502,815	976,494	470,279
CARREFOUR SA	1,356,957	45,494,249	20,963,532
CARSALES.COM LTD	517,871	3,695,662	6,325,270
CASCADES INC	213,200	1,587,411	2,315,145
CASETEK HOLDINGS LTD	307,826	870,017	686,504
CASHBUILD LTD	53,428	924,322	438,432
CASINO GUICHARD PERRACHON	127,496	8,912,229	4,711,186
CASIO COMPUTER CO LTD	498,200	6,396,735	8,635,436
CASTELLUM AB	633,506	12,465,260	11,834,911
CASTROL INDIA LTD	1,139,127	2,290,070	1,896,439
CATCHER TECHNOLOGY CO LTD	1,753,260	13,827,946	13,192,012
CATENA AB	60,442	1,895,350	2,380,922
CATHAY FINANCIAL HOLDING CO	68,051,507	98,563,590	96,526,142
CATHAY PACIFIC AIRWAYS	1,438,160	2,217,046	1,391,687
CATHAY REAL ESTATE DEVELOPME	1,503,000	943,048	1,011,186
CATTOLICA ASSICURAZIONI SC	371,985	4,061,397	2,134,932
CAWACHI LTD	27,100	547,112	697,815
CCC SA	68,219	3,739,821	1,029,239
CCL INDUSTRIES INC CL B	353,500	7,475,465	11,388,825
CCOOP GROUP CO LTD A	991,600	427,003	629,378
CCR SA	3,724,000	16,013,980	9,834,268
CCS SUPPLY CHAIN MANAGEME A	82,410	76,735	74,324
CD PROJEKT SA	172,043	10,538,734	17,175,377
CEAT LTD	42,962	639,827	520,298
CEBU AIR INC	439,380	765,077	349,211
CECEP SOLAR ENERGY CO LT A	453,743	219,935	216,798
CECEP WIND POWER CORP A	368,280	117,686	110,368
CECONOMY AG	427,253	2,367,399	1,483,756
CEDAR WOODS PROPERTIES LTD	142,438	805,938	513,879
CELESTICA INC	260,800	2,082,368	1,784,623
CELL BIOTECH CO LTD	13,320	598,251	184,377
CELLCOM ISRAEL LTD	186,731	1,017,740	733,770
CELLNEX TELECOM SA	1,130,553	40,786,837	68,872,902
CELLTRION HEALTHCARE CO LTD	165,650	7,953,230	14,928,262
CELLTRION INC	240,394	23,817,138	61,155,226
CELLTRION PHARM INC	43,516	1,044,436	4,590,914
CEMBRA MONEY BANK AG	69,936	5,392,474	6,830,855
CEMENTIR HOLDING NV	110,602	570,877	786,329
CEMENTOS ARGOS SA	1,158,774	2,505,410	1,053,634
CEMEX HOLDINGS PHILIPPINES I	14,231,056	857,307	294,189
CEMEX LATAM HOLDINGS SA	354,943	480,214	144,283
CEMEX SAB CPO	35,776,607	17,677,809	10,032,995
CENCOSUD SA	3,195,082	6,743,574	4,477,631
CENCOSUD SHOPPING SA	1,135,541	2,408,845	2,020,477

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
CENOVUS ENERGY INC	2,380,682	36,570,732	11,099,362
CENTAMIN PLC	2,618,663	5,713,893	5,934,130
CENTER LABORATORIES INC	635,883	1,230,956	1,616,405
CENTERRA GOLD INC	514,400	4,225,518	5,721,850
CENTRAIS ELETRICAS BRAS PR B	649,700	5,785,794	3,814,804
CENTRAIS ELETRICAS BRASILIER	997,200	4,838,730	5,629,999
CENTRAL BANK OF INDIA	821,061	552,896	195,196
CENTRAL CHINA REAL ESTATE	1,698,000	879,400	790,893
CENTRAL CHINA SECURITIES C A	222,448	153,265	147,793
CENTRAL CHINA SECURITIES C H	2,651,000	687,036	430,976
CENTRAL EUROPEAN MEDIA ENT A	203,148	1,943,042	719,144
CENTRAL GLASS CO LTD	96,100	1,991,152	1,630,988
CENTRAL JAPAN RAILWAY CO	1,312,496	245,539,056	203,045,449
CENTRAL PATTANA PCL NVDR	25,700	57,467	40,536
CENTRAL PATTANA PUB CO FOREI	5,823,600	12,192,818	9,185,489
CENTRAL PLAZA HOTEL PCL FRGN	1,504,900	1,662,347	1,119,880
CENTRAL SECURITY PATROLS CO	16,000	683,007	632,525
CENTRAL SPORTS CO LTD	13,300	473,737	277,379
CENTRE TESTING INTL GROUP A	279,100	574,846	779,607
CENTRICA PLC	13,791,465	37,466,766	6,567,502
CENTRO DE IMAGEM DIAGNOSTICO	102,200	479,847	191,527
CENTURIA CAPITAL GROUP	917,845	972,271	1,128,006
CENTURY PACIFIC FOOD INC	2,373,100	706,427	695,379
CENTURY TEXTILES + INDS LTD	62,803	333,382	244,961
CERAGON NETWORKS LTD	48,887	163,323	105,107
CERVED GROUP SPA	618,850	4,882,876	4,444,918
CESC LTD	268,292	2,689,217	2,210,190
CEZ AS	374,261	8,871,381	7,983,393
CFE	17,196	1,305,808	1,172,341
CG POWER AND INDUSTRIAL SOLU	981,980	401,987	111,199
CGG SA	1,695,804	4,570,298	1,854,741
CGI INC	2,023,402	122,501,861	127,064,297
CGN NEW ENERGY HOLDINGS CO L	2,554,000	720,147	490,999
CGN NUCLEAR TECHNOLOGY DEV A	156,000	164,395	160,100
CGN POWER CO LTD H	26,482,412	7,388,604	5,467,019
CGN PWR CO LTD	664,900	281,986	278,213
CH. KARNCHANG PUB CO FORGN	2,444,500	1,927,448	1,581,817
CHABIOTECH CO LTD	98,139	1,184,972	1,627,695
CHACHA FOOD CO LTD A	450,200	1,901,852	3,448,684
CHAILEASE HOLDING CO LTD	3,043,823	11,685,196	12,895,588
CHALLENGER LTD	1,343,356	6,010,505	4,078,811
CHAMBAL FERTILISERS + CHEM	235,325	413,975	442,420
CHAMPION IRON LTD	979,002	1,642,591	1,927,762
CHANG HWA COMMERCIAL BANK	14,751,690	9,420,522	9,674,633

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHANGCHUN FAWAY AUTOMBILE A	108,810	136,076	126,436
CHANGCHUN HIGH + NEW TECH A	36,446	1,654,643	2,242,680
CHANGE INC	15,200	491,150	1,052,454
CHANGJIANG SECURITIES CO L A	493,245	474,103	469,950
CHANGSHA JINGJIA MICROELEC A	26,810	225,476	255,059
CHANGZHOU TRONLY NEW ELECT A	85,100	177,226	215,093
CHANGZHOU XINGYU AUTOMOTIV A	23,118	340,282	415,033
CHAOWEI POWER HOLDINGS LTD	1,363,000	648,538	601,444
CHAOZHOU THREE CIRCLE GROU A	155,608	466,982	609,313
CHAROEN POKPHAND ENTERPRISE	550,000	1,095,428	1,271,331
CHAROEN POKPHAND FOOD FORGN	9,674,200	8,324,374	9,937,907
CHAROEN POKPHAND FOODS NVDR	7,145,120	6,008,945	7,339,887
CHAROEN POKPHAND INDONESIA PT	17,283,700	6,195,585	6,745,301
CHARTWELL RETIREMENT RESIDEN	510,700	5,121,812	3,513,406
CHAUN CHOUNG TECHNOLOGY CORP	86,000	545,084	769,510
CHC HEALTHCARE GROUP	235,174	396,739	350,715
CHECK POINT SOFTWARE TECH	956,649	98,346,676	102,772,802
CHEIL WORLDWIDE INC	604,895	11,535,223	8,247,311
CHEMRING GROUP PLC	669,250	2,929,406	2,001,160
CHENG LOONG CORP	2,211,000	1,261,689	1,746,049
CHENG SHIN RUBBER IND CO LTD	4,325,998	6,451,518	4,948,480
CHENG UEI PRECISION INDUSTRY	940,000	1,021,318	1,271,196
CHENGDU FUSEN NOBLE HOUSE A	125,000	219,021	217,342
CHENGDU HONGQI CHAIN CO LT A	200,326	246,201	309,235
CHENGDU KANGHONG PHARMACEU A	30,654	175,231	214,930
CHENGDU XINGRONG ENVIRONME A	265,750	175,975	172,806
CHENGTUN MINING GROUP CO A	381,100	268,649	276,905
CHENGZHI CO LTD A	207,000	425,793	371,331
CHIA HSIN CEMENT	1,123,000	654,336	671,794
CHIBA BANK LTD/THE	1,442,900	8,765,517	6,794,209
CHIBA KOGYO BANK LTD/THE	110,800	676,061	240,323
CHICONY ELECTRONICS CO LTD	4,948,647	11,791,406	14,290,184
CHICONY POWER TECHNOLOGY CO	436,000	937,371	995,997
CHILISIN ELECTRONICS CORP	480,697	1,690,180	1,466,310
CHIMNEY CO LTD	16,300	347,628	219,680
CHIN POON INDUSTRIAL CO LTD	806,000	1,007,037	722,558
CHINA AEROSPACE TIMES ELEC A	243,026	222,801	221,242
CHINA AGRITECH INC	24,300	0	0
CHINA AIRLINES LTD	6,203,678	1,925,332	1,724,149
CHINA ALUMINUM INTERNATIONAL A	355,000	261,478	196,216
CHINA ANIMAL HEALTH	7,317,731	0	1
CHINA AOYUAN GROUP LTD	2,916,476	3,494,542	3,525,909
CHINA AVIONICS SYSTEMS CO A	128,660	246,557	242,257
CHINA BAOAN GROUP A	230,244	219,649	276,979

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHINA BESTER GROUP TELECOM A	55,800	195,374	138,039
CHINA BIOLOGIC PRODUCTS HOLD	52,458	6,019,404	5,360,158
CHINA CAMC ENGINEERING CO A	204,500	239,960	210,452
CHINA CHEMICAL + PHARM CO	582,000	367,041	500,049
CHINA CINDA ASSET MANAGEME H	21,008,603	5,538,867	4,120,158
CHINA CITIC BANK CORP LTD A	869,252	650,720	632,822
CHINA CITIC BANK CORP LTD H	86,391,557	45,465,981	37,675,679
CHINA COM RICH RENE ENE INVEST	40,094,000	0	5
CHINA COMMUNICATIONS CONST A	448,855	537,911	465,726
CHINA COMMUNICATIONS CONST H	10,583,404	9,339,498	5,967,328
CHINA COMMUNICATIONS SERVI H	20,556,643	15,422,747	12,784,163
CHINA CONCH VENTURE HOLDINGS	13,913,390	48,060,609	58,702,121
CHINA CONSTRUCTION BANK A	888,043	818,251	792,122
CHINA CONSTRUCTION BANK H	227,044,444	178,199,697	183,675,614
CHINA CSSC HOLDINGS LTD A	166,700	428,485	410,971
CHINA CYTS TOURS HLDG CO A	64,339	95,506	89,768
CHINA DEVELOPMENT FINANCIAL	110,717,568	35,432,422	35,499,269
CHINA DONGXIANG GROUP CO	7,975,000	849,907	709,991
CHINA EAST EDUCATION HOLDING	971,000	1,832,981	1,756,468
CHINA EASTERN AIRLINES CO A	929,029	598,262	554,205
CHINA EASTERN AIRLINES CO H	3,652,540	1,844,545	1,300,700
CHINA EDUCATION GROUP HOLDIN	846,000	1,412,702	1,360,071
CHINA ELECTRIC MANUFACTURING	788,500	342,579	301,990
CHINA ENTERPRISE CO LTD A	542,899	328,530	312,351
CHINA EVERBRIGHT BANK CO A	3,683,836	2,005,200	1,864,284
CHINA EVERBRIGHT BANK CO L H	7,487,000	3,382,704	2,811,085
CHINA EVERBRIGHT GREENTECH L	1,271,000	889,958	500,171
CHINA EVERBRIGHT INTL LTD	23,777,184	22,026,415	12,547,489
CHINA EVERBRIGHT LTD	2,006,525	3,026,334	2,904,762
CHINA EVERGRANDE GROUP	5,089,750	10,661,522	13,134,076
CHINA FANGDA GROUP CO LTD B	849,410	333,762	322,209
CHINA FEIHE LTD	2,787,000	5,753,267	5,580,868
CHINA FIBER OPTIC	2,239,200	0	0
CHINA FILM CO LTD A	148,457	281,206	275,546
CHINA FISHERY GROUP LTD	3,092,906	0	2
CHINA FOODS LTD	1,676,886	756,307	636,098
CHINA FORESTRY HOLDINGS CO	5,319,000	2,007,092	1
CHINA FORTUNE LAND DEVELOP A	252,415	849,987	815,681
CHINA GALAXY SECURITIES CO A	210,222	310,747	340,856
CHINA GALAXY SECURITIES CO H	8,859,500	5,693,283	4,789,568
CHINA GAS HOLDINGS LTD	7,140,500	25,620,206	22,019,102
CHINA GENERAL PLASTICS	926,794	559,801	595,257
CHINA GEZHOUBA GROUP CO LT A	409,525	351,605	344,450
CHINA GRAND PHARMACEUTICAL A	3,188,939	1,886,356	2,238,299

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHINA GREAT WALL SECURITIE A	215,735	395,416	375,716
CHINA GREATWALL TECHNOLOGY A	271,564	504,915	506,728
CHINA HARMONY NEW ENERGY AUT	1,709,000	765,074	848,938
CHINA HARZONE INDUSTRY COR A	140,238	220,390	179,805
CHINA HIGH PRECISION AUTOMAT	2,500,000	0	0
CHINA HIGH SPEED RAILWAY A	247,834	109,836	103,000
CHINA HIGH SPEED TRANSMISSIO	811,000	686,875	470,876
CHINA HONGQIAO GROUP LTD	6,001,000	3,945,744	2,663,515
CHINA HONGXING SPORTS LTD	6,008,000	0	4
CHINA HUARONG ASSET MANAGE H	45,903,023	8,971,040	4,619,649
CHINA HUIYUAN JUICE GROUP	911,000	0	0
CHINA INTERNATIONAL CAPTAL A	2,587,200	4,825,180	5,080,632
CHINA INTERNATIONAL MARINE H	1,070,346	1,033,591	870,037
CHINA INTL MARINE CONTAIN A	136,112	155,891	139,112
CHINA JINMAO HOLDINGS GROUP	13,744,320	7,663,936	9,664,799
CHINA JUSHI CO LTD A	312,129	392,245	403,723
CHINA LESSO GROUP HOLDINGS L	2,204,000	2,503,328	2,866,456
CHINA LIFE INSURANCE CO A	466,023	1,847,850	1,792,523
CHINA LIFE INSURANCE CO H	17,790,606	46,201,207	35,808,689
CHINA LIFE INSURANCE CO LTD	23,658,659	20,446,097	17,480,681
CHINA LILANG LTD	904,000	687,204	485,216
CHINA LITERATURE LTD	505,897	2,792,157	3,407,263
CHINA LNG GROUP LTD	5,135,000	1,102,580	188,825
CHINA LOGISTICS PROPERTY HOL	3,188,000	1,219,111	1,365,619
CHINA LONGYUAN POWER GROUP H	7,921,252	5,048,308	4,445,864
CHINA LUMENA NEW MATERIALS	131,850	0	0
CHINA MACHINERY ENGINEERIN H	1,951,000	940,467	513,524
CHINA MAN MADE FIBER CORP	3,082,646	838,782	695,840
CHINA MAPLE LEAF EDUCATIONAL	3,562,074	1,237,530	1,084,646
CHINA MEDICAL SYSTEM HOLDING	2,943,260	3,622,955	3,467,149
CHINA MEDICAL TECH SPON ADR	142,800	0	0
CHINA MEHECO CO LTD A	95,177	190,227	190,378
CHINA MEIDONG AUTO HOLDINGS	964,000	1,636,140	2,363,218
CHINA MENGNIU DAIRY CO	6,270,182	15,264,782	23,946,660
CHINA MERCHANTS BANK A	1,902,760	9,174,618	9,069,856
CHINA MERCHANTS BANK H	9,108,827	39,882,504	41,898,171
CHINA MERCHANTS ENERGY A	615,015	519,200	506,854
CHINA MERCHANTS EXPRESSWAY A	198,095	199,376	188,459
CHINA MERCHANTS LAND LTD	2,892,000	417,606	444,036
CHINA MERCHANTS PORT GROUP A	30,580	64,967	62,897
CHINA MERCHANTS PORT HOLDING	3,120,499	5,880,124	3,688,014
CHINA MERCHANTS PROPERTY O A	175,700	675,743	763,244
CHINA MERCHANTS SECURITIES A	510,274	1,268,412	1,583,313
CHINA MERCHANTS SECURITIES H	2,197,200	2,725,790	2,460,721

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHINA MERCHANTS SHEKOU IND A	657,859	1,612,420	1,528,845
CHINA METAL PRODUCTS CO LTD	635,962	636,886	598,144
CHINA METAL RECYCLING	1,401,600	0	0
CHINA MINMETALS RARE EARTH A	161,900	293,667	261,362
CHINA MINSHENG BANKING A	16,231,679	13,828,523	13,009,940
CHINA MINSHENG BANKING COR H	51,063,394	35,132,758	35,050,514
CHINA MOBILE LTD	50,291,165	467,789,542	339,364,544
CHINA MODERN DAIRY HOLDINGS	3,162,000	674,448	354,939
CHINA MOLYBDENUM CO LTD A	803,187	425,548	416,689
CHINA MOLYBDENUM CO LTD H	9,233,000	2,984,535	3,013,953
CHINA MOTOR CORP	597,267	890,488	742,927
CHINA NATIONAL ACCORD MEDI A	33,238	205,956	211,482
CHINA NATIONAL ACCORD MEDI B	127,382	505,922	358,292
CHINA NATIONAL BUILDING MA H	9,182,800	7,816,666	9,774,671
CHINA NATIONAL CHEMICAL A	438,818	355,773	339,933
CHINA NATIONAL MEDICINES A	67,354	324,615	387,228
CHINA NATIONAL NUCLEAR POW A	1,239,721	788,957	716,764
CHINA NATIONAL SOFTWARE A	45,901	486,273	513,897
CHINA NATURAL RESOURCES INC	600	1,218	708
CHINA NONFERROUS METAL IND A	173,920	108,900	102,767
CHINA NORTHERN RARE EARTH A	323,656	447,922	426,411
CHINA ONLINE EDUCATION ADR	8,900	252,497	228,552
CHINA ORIENTAL GROUP CO LTD	5,756,000	2,995,024	1,567,026
CHINA OVERSEAS GRAND OCEANS	2,755,000	1,481,750	1,553,374
CHINA OVERSEAS LAND + INVEST	9,113,645	29,282,899	27,574,525
CHINA OVERSEAS PROPERTY HOLD	3,070,000	1,189,021	3,248,069
CHINA PACIFIC INSURANCE GR A	576,943	2,451,875	2,222,431
CHINA PACIFIC INSURANCE GR H	6,194,374	24,202,922	16,544,013
CHINA PETROCHEMICAL DEV CORP	6,471,588	2,504,223	1,816,155
CHINA POWER INTERNATIONAL	10,368,962	2,628,042	1,899,751
CHINA PUBLISHING + MEDIA C A	215,300	163,129	159,784
CHINA RAILWAY CONSTRUCTION A	1,062,953	1,372,449	1,259,177
CHINA RAILWAY CONSTRUCTION H	4,519,037	5,215,305	3,550,882
CHINA RAILWAY GROUP LTD H	9,182,504	6,192,476	4,715,386
CHINA RAILWAY SIGNAL + COM H	3,680,000	2,404,949	1,581,121
CHINA RAILWAY TIELONG CONT A	116,326	89,485	91,757
CHINA REINSURANCE GROUP CO H	16,116,471	2,959,228	1,642,745
CHINA RESOURCES BEER HOLDING	11,447,186	49,734,129	63,805,126
CHINA RESOURCES CEMENT	5,199,493	4,882,573	6,366,493
CHINA RESOURCES DOUBLE CRA A	92,669	167,835	173,179
CHINA RESOURCES GAS GROUP LT	2,120,000	9,971,484	10,325,852
CHINA RESOURCES LAND LTD	6,539,563	25,640,688	24,764,520
CHINA RESOURCES MEDICAL HOLD	1,370,588	1,313,975	781,632
CHINA RESOURCES PHARMACEUTIC	3,980,000	4,121,220	2,295,428

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHINA RESOURCES POWER HOLDIN	4,456,322	6,540,054	5,238,030
CHINA RESOURCES SANJIU MED A	87,143	357,559	359,580
CHINA SATELLITE COMMUNICAT A	127,500	294,414	324,603
CHINA SCE GROUP HOLDINGS LTD	4,049,067	1,671,097	1,755,365
CHINA SHENHUA ENERGY CO A	629,730	1,432,734	1,278,314
CHINA SHENHUA ENERGY CO H	8,199,273	17,698,589	12,821,861
CHINA SHINEWAY PHARMACEUTICA	683,000	753,881	450,313
CHINA SHIPBUILDING INDUSTR A	2,035,302	1,277,641	1,150,847
CHINA SILVER GROUP LTD	1,210,000	197,870	88,988
CHINA SOUTH CITY HOLDINGS	5,750,225	945,457	586,118
CHINA SOUTH PUBLISHING A	160,005	263,699	239,303
CHINA SOUTHERN AIRLINES CO A	768,099	607,625	561,354
CHINA SOUTHERN AIRLINES CO H	3,620,000	2,247,843	1,602,049
CHINA SPACESAT CO LTD A	110,411	466,378	481,188
CHINA STATE CONSTRUCTION A	3,845,751	2,858,387	2,593,154
CHINA STATE CONSTRUCTION INT	4,159,660	4,291,543	2,425,880
CHINA STEEL CHEMICAL CORP	363,000	1,518,907	1,291,837
CHINA STEEL CORP	101,895,705	79,999,931	71,488,793
CHINA SUNTIEN GREEN ENERGY H	4,383,000	1,228,093	1,000,963
CHINA TAIPING INSURANCE HOLD	3,470,220	8,683,857	5,560,985
CHINA TELECOM CORP LTD H	113,952,427	54,678,645	31,904,827
CHINA TIAN LUN GAS HOLDINGS	1,039,500	1,109,048	793,998
CHINA TIANYING INC A	416,800	327,535	300,488
CHINA TOBACCO INTERNATIONAL	408,000	1,042,758	829,640
CHINA TOURISM GROUP DUTY F A	810,510	14,344,566	17,647,878
CHINA TOWER CORP LTD H	404,440,850	83,343,385	71,490,554
CHINA TRADITIONAL CHINESE ME	5,862,000	2,881,303	2,828,724
CHINA TRANSINFO TECHNOLOGY A	89,614	272,446	303,903
CHINA TRAVEL INTL INV HK	6,008,000	1,201,976	852,699
CHINA TUNGSTEN + HIGHTECH A	1,870,959	1,625,172	1,576,302
CHINA UNICOM HONG KONG LTD	51,115,737	57,807,820	27,633,871
CHINA UNITED NETWORK A	12,021,236	8,963,518	8,224,761
CHINA VALVES TECHNOLOGY INC	158,400	0	0
CHINA VANKE CO LTD A	892,544	3,323,055	3,298,102
CHINA VANKE CO LTD H	4,541,212	15,628,261	14,355,256
CHINA WATER AFFAIRS GROUP	2,194,000	1,487,287	1,579,588
CHINA WEST CONSTRUCTION GR A	65,340	95,059	88,671
CHINA WORLD TRADE CENTER A	64,044	129,676	120,681
CHINA YANGTZE POWER CO LTD A	9,511,608	24,103,424	25,466,117
CHINA YONGDA AUTOMOBILES SER	2,055,000	2,006,790	2,468,508
CHINA YUCHAI INTL LTD	38,676	770,722	556,161
CHINA YUHUA EDUCATION CORP L	2,276,000	1,210,214	1,867,680
CHINA ZHENGTONG AUTO SERVICE	2,576,500	1,106,488	369,000
CHINA ZHENHUA GROUP SCIENC A	84,900	220,749	269,914

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHINA ZHESHANG BANK CO LTD A	659,500	368,481	367,316
CHINA ZHONGHUA GEOTECHNICA A	129,530	66,776	62,256
CHINA ZHONGWANG HOLDINGS LTD	3,278,000	1,379,002	617,497
CHINASOFT INTERNATIONAL LTD	4,822,000	2,174,409	2,637,947
CHINESE ESTATES HOLDINGS LTD	1,136,000	1,564,064	753,381
CHINESE UNIVERSE PUBLISHIN A	120,599	208,065	200,825
CHIPBOND TECHNOLOGY CORP	1,472,000	2,708,769	3,207,972
CHIPMOS TECHNOLOGIES INC	1,390,788	1,418,022	1,593,270
CHIPMOS TECHNOLOGIES INC ADR	47,237	568,632	1,070,863
CHIYODA CO LTD	55,079	940,096	603,962
CHIYODA CORP	363,800	957,029	954,307
CHIYODA INTEGRE CO LTD	26,300	416,327	404,184
CHLITINA HOLDING LTD	122,050	898,471	897,655
CHOCOLAFABRIKEN LINDT PC	7,355	49,687,832	60,544,562
CHOCOLAFABRIKEN LINDT REG	1,016	75,569,305	87,280,249
CHOFU SEISAKUSHO CO LTD	45,700	1,000,847	959,876
CHOLAMANDALAM FINANCIAL HOLD	105,935	727,844	414,319
CHOLAMANDALAM INVESTMENT AND	453,325	1,866,852	1,137,159
CHONG HONG CONSTRUCTION CO	455,218	1,137,216	1,339,217
CHONG KUN DANG PHARMACEUTICA	16,567	662,697	1,494,384
CHONGKUNDANG HOLDINGS CORP	7,184	272,559	716,698
CHONGQING BREWERY CO A	44,758	336,041	461,873
CHONGQING CHANGAN AUTOMOB A	354,577	516,619	551,356
CHONGQING CHANGAN AUTOMOB B	1,985,798	1,162,086	1,040,242
CHONGQING DEPARTMENT STORE A	36,137	151,675	159,483
CHONGQING DIMA INDUSTRY CO A	155,051	65,021	61,152
CHONGQING FULING ZHACAI A	70,149	309,482	357,086
CHONGQING IRON + STEEL CO A	1,383,700	352,318	291,445
CHONGQING IRON + STEEL CO H	1,288,000	190,656	116,329
CHONGQING PHARSCIN PHARMAC A	59,300	143,980	146,781
CHONGQING RURAL COMMERCIAL A	433,000	292,122	288,907
CHONGQING RURAL COMMERCIAL H	5,626,000	3,150,338	2,213,975
CHONGQING WATER GROUP A	167,350	123,555	118,047
CHONGQING ZHIFEI BIOLOGICA A	708,689	9,321,865	10,033,107
CHONGQING ZONGSHEN POWER A	189,000	160,746	172,059
CHORI CO LTD	24,400	320,337	416,599
CHORUS LTD	1,063,915	2,477,033	5,123,017
CHOW SANG SANG HLDG	548,290	791,083	580,800
CHOW TAI FOOK JEWELLERY GROU	2,480,600	3,354,675	2,371,636
CHOW TAI SENG JEWELLERY CO A	69,400	205,581	217,497
CHR HANSEN HOLDING A/S	801,241	69,906,566	82,587,850
CHROMA ATE INC	925,921	3,715,932	4,754,428
CHUBB LTD	3,835,677	494,955,434	485,673,422
CHUBU ELECTRIC POWER CO INC	1,790,400	30,762,901	22,437,047

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CHUBU SHIRYO CO LTD	65,200	1,084,921	985,690
CHUDENKO CORP	59,800	1,084,055	1,283,190
CHUETSU PULP + PAPER CO LTD	21,000	388,178	301,710
CHUGAI PHARMACEUTICAL CO LTD	5,777,700	117,289,010	308,740,237
CHUGOKU BANK LTD/THE	399,500	4,629,702	3,695,611
CHUGOKU ELECTRIC POWER CO	2,429,825	33,295,614	32,454,723
CHUGOKU MARINE PAINTS LTD	121,200	926,934	898,735
CHUKYO BANK LTD/THE	27,900	638,181	555,492
CHULARAT HOSPITAL PCL F	13,353,900	986,620	1,062,868
CHUNG HSIN ELECTRIC + MACHIN	818,625	532,799	767,170
CHUNG HWA PULP	952,747	309,421	289,656
CHUNGHWA PRECISION TEST TECH	42,000	1,312,650	1,157,315
CHUNGHWA TELECOM CO LTD	32,380,290	114,026,607	128,403,936
CHUO SPRING CO LTD	9,300	275,945	242,575
CI TAKIRON CORP	91,500	390,187	594,536
CI FINANCIAL CORP	482,900	6,746,619	6,123,115
CIA BRASILEIRA DE DISTRIBUIC	396,583	8,208,008	5,126,659
CIA CERVECERIAS UNIDAS SA	354,588	4,101,354	2,555,920
CIA DE DISTRIBUCION INTEGRAL	149,506	3,268,952	2,787,433
CIA DE SANEAMENTO DO PA UNIT	1,581,820	7,932,348	9,077,575
CIA DE TRANSMISSAO DE ENE PF	910,719	4,542,387	3,468,189
CIA ENERGETICA DE MINAS GER	432,863	1,275,955	937,339
CIA ENERGETICA DE SP PREF B	436,000	2,970,214	2,301,967
CIA ENERGETICA DE SPON ADR	236,500	860,621	484,825
CIA ENERGETICA MINAS GER PRF	2,529,284	8,259,956	5,076,257
CIA HERING	298,400	2,158,528	778,227
CIA PARANAENSE DE ENERGI PFB	632,952	5,875,018	7,011,026
CIA PARANAENSE DE ENERGIA	52,500	603,093	577,894
CIA SANEAMENTO BASICO DE SP	804,240	9,482,471	8,451,346
CIA SANEAMENTO MINAS GERAIS	263,088	4,120,445	2,790,051
CIA SIDERURGICA NACIONAL SA	1,505,467	2,931,600	2,928,241
CIA SUD AMERICANA DE VAPORES	28,690,170	1,120,788	657,993
CIE AUTOMOTIVE SA	129,672	2,231,252	2,274,914
CIE FINANCIERE RICHEMONT REG	1,361,044	77,663,180	86,814,943
CIECH SA	62,545	759,767	505,179
CIELO SA	886,702	960,400	746,078
CIFI HOLDINGS GROUP CO LTD	7,944,000	5,514,359	6,190,835
CIMB GROUP HOLDINGS BHD	49,503,974	58,694,673	41,128,156
CIMC ENRIC HOLDINGS LTD	1,397,805	946,847	553,679
CIMIC GROUP LTD	220,183	5,384,926	3,656,495
CIMPRESS PLC	41,210	3,289,454	3,145,971
CIMSA CIMENTO SANAYI VE TIC	117,827	316,714	170,344
CINDA REAL ESTATE CO LTD A	253,209	144,077	147,471
CINEPLEX INC	140,500	3,526,324	829,383

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
CINEWORLD GROUP PLC	2,396,811	8,514,786	1,792,893
CIPLA LTD	2,856,963	22,415,337	24,226,221
CIPUTRA DEVELOPMENT TBK PT	32,642,552	2,700,022	1,393,907
CIR SPA COMPAGNIE INDUSTRIAL	1,200,896	876,413	561,095
CITI PACIFIC SPECIAL STEE A	450,010	1,067,841	1,087,159
CITIC GUOAN INFORMATION A	369,399	152,453	124,280
CITIC LTD	47,692,596	67,831,533	44,797,670
CITIC RESOURCES HOLDINGS LTD	5,902,000	446,424	190,376
CITIC SECURITIES CO A	4,537,763	15,179,880	15,465,637
CITIC SECURITIES CO LTD H	5,446,910	10,912,913	10,302,847
CITIC TELECOM INTERNATIONAL	3,520,625	1,158,045	1,117,450
CITIZEN WATCH CO LTD	633,779	3,498,891	2,056,103
CITY CEMENT CO	218,812	818,658	941,516
CITY DEVELOPMENTS LTD	1,104,354	7,963,803	6,665,468
CITY LODGE HOTELS LTD	88,354	710,569	120,772
CITY UNION BANK LTD	713,657	1,998,471	1,146,520
CITYCON OYJ	183,226	2,245,824	1,273,842
CJ CGV CO LTD	46,839	937,922	564,531
CJ CHEILJEDANG CORP	18,633	3,918,806	5,049,971
CJ CHEILJEDANG CORP PREF	3,228	411,680	367,657
CJ CORP	30,626	2,076,284	2,197,301
CJ ENM CO LTD	22,610	4,306,213	2,073,312
CJ FRESHWAY CORP	10,905	508,037	138,256
CJ LOGISTICS	69,082	8,535,705	9,045,529
CK ASSET HOLDINGS LTD	6,724,253	39,344,473	40,082,897
CK HUTCHISON HOLDINGS LTD	22,954,736	228,952,116	147,494,127
CK INFRASTRUCTURE HOLDINGS L	5,054,646	36,560,067	26,021,763
CK POWER LTD FOREIGN	8,546,930	1,350,328	1,139,314
CKD CORP	131,000	1,116,703	2,314,372
CLAL INSURANCE ENTERPR HLDGS	108,764	1,411,079	906,956
CLARIANT AG REG	465,903	6,753,380	9,150,393
CLARIVATE PLC	411,078	7,899,363	9,179,372
CLARKSON PLC	50,556	1,526,504	1,402,385
CLAS OHLSON AB B SHS	94,284	1,388,069	1,055,510
CLEAN TEQ HOLDINGS LTD	1,425,664	1,025,424	137,420
CLEANAWAY CO LTD	187,000	992,195	1,058,449
CLEANAWAY WASTE MANAGEMENT L	3,174,061	4,306,945	4,807,750
CLEANUP CORP	34,745	222,104	183,894
CLEVO COMPANY	1,457,708	1,621,322	1,464,897
CLICKS GROUP LTD	568,087	7,592,209	6,877,858
CLINUVEL PHARMACEUTICALS LTD	91,869	1,908,293	1,622,409
CLOETTA AB B SHS	503,188	1,738,748	1,281,106
CLOSE BROTHERS GROUP PLC	359,371	5,224,445	4,906,631
CLP HOLDINGS LTD	13,968,254	148,238,379	136,971,054

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CMBC CAPITAL HOLDINGS LTD	37,730,000	1,081,999	798,369
CMC MAGNETICS CORP	2,476,612	790,758	617,799
CMC MARKETS PLC	282,108	723,897	930,689
CMG PHARMACEUTICAL CO LTD	242,309	737,422	800,747
CMIC HOLDINGS CO LTD	20,500	333,716	270,014
CMK CORP	111,000	643,929	426,982
CMST DEVELOPMENT CO LTD A	196,329	129,613	121,837
CNFINANCE HOLDINGS LTD	20,000	79,878	77,200
CNH INDUSTRIAL NV	2,332,155	22,971,413	16,313,374
CNHTC JINAN TRUCK CO LTD A	110,715	319,879	489,243
CNNC HUA YUAN TITANIUM A	262,800	157,709	167,916
CNOOC ENERGY TECHNOLOGY + A	581,800	213,097	191,628
CNP ASSURANCES	347,795	7,529,481	4,003,916
CO FOR COOPERATIVE INSURANCE	144,766	2,687,825	2,744,032
COATS GROUP PLC	3,408,887	3,661,980	2,358,733
COCA COLA AMATIL LTD	1,188,454	8,986,720	7,086,049
COCA COLA BOTTLERS JAPAN HOL	324,175	8,697,632	5,871,418
COCA COLA EUROPEAN PARTNERS	1,715,130	77,311,462	64,763,309
COCA COLA FEMSA SAB DE CV	1,259,596	8,361,466	5,484,942
COCA COLA HBC AG DI	453,228	12,887,253	11,356,978
COCA COLA ICECEK AS	265,572	1,764,490	1,681,436
COCHLEAR LTD	231,818	20,356,190	30,154,489
COCOKARA FINE INC	49,400	1,711,230	2,655,791
CODAN LTD	285,165	1,221,547	1,392,023
COFACE SA	210,239	2,509,517	1,378,999
COFCO CAPITAL HOLDINGS CO A	282,200	349,787	347,060
COFCO MEAT HOLDINGS LTD	4,070,425	938,462	1,344,475
COGECO COMMUNICATIONS INC	25,200	1,248,700	1,809,700
COGNA EDUCACAO	4,372,474	11,192,351	5,263,724
COLBUN SA	17,331,564	3,324,487	2,766,799
COLES GROUP LTD	2,966,471	24,586,715	35,068,266
COLGATE PALMOLIVE (INDIA)	568,921	11,423,331	10,599,489
COLLECTOR AB	190,836	1,165,199	275,706
COLLIERS INTERNATIONAL GROUP	75,500	2,836,463	4,318,245
COLLINS FOODS LTD	240,094	1,049,366	1,557,170
COLOPL INC	101,300	768,888	923,000
COLOPLAST B	1,056,727	103,613,939	163,701,558
COLOUR LIFE SERVICES GROUP	920,000	589,072	439,200
COLOWIDE CO LTD	134,293	1,483,520	1,827,336
COLRUYT SA	467,757	28,421,904	25,726,942
COM2US CORP	23,231	1,573,343	2,271,244
COM7 PCL F	1,437,600	774,415	1,313,992
COM7 PCL NVDR	100	93	91
COMBA TELECOM SYSTEMS HOLDIN	3,194,716	698,631	1,302,544

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
COMET HOLDING AG REG	16,107	2,110,941	2,305,007
COMFORTDELGRO CORP LTD	4,808,656	7,237,470	4,998,065
COMMERCIAL BANK PSQC	4,662,856	5,408,307	4,866,480
COMMERCIAL INTERNATIONAL BAN	8,384,519	38,349,837	33,527,686
COMMERZBANK AG	2,427,470	45,204,623	10,815,680
COMMONWEALTH BANK OF AUSTRAL	4,158,972	203,509,533	198,780,829
COMPAGNIE DE SAINT GOBAIN	1,143,743	53,719,703	41,171,269
COMPAL ELECTRONICS	36,104,901	22,134,866	23,556,384
COMPANHIA DE LOCACAO DAS AME	798,300	1,968,258	2,461,430
COMPASS GROUP PLC	14,782,987	290,082,124	203,116,451
COMPEQ MANUFACTURING CO LTD	2,649,000	2,495,279	4,282,645
COMPUGROUP MEDICAL SE + CO K	52,763	1,983,471	4,151,217
COMPUTACENTER PLC	175,985	1,564,507	3,568,308
COMPUTER ENGINEER + CONSULT	56,900	995,384	896,603
COMPUTERSHARE LTD	1,822,872	20,274,546	16,629,376
COMSYS HOLDINGS CORP	263,072	5,420,789	7,766,458
COMTURE CORP	52,400	1,009,401	1,354,624
CONCENTRIC AB	73,034	527,641	1,031,623
CONCORD NEW ENERGY GROUP LTD	11,550,000	588,427	484,327
CONCORDIA FINANCIAL GROUP LT	2,632,200	12,921,666	8,417,380
CONCRAFT HOLDING CO LTD	130,810	866,384	496,559
CONEXIO CORP	38,700	440,115	509,734
CONSOLIDATED WATER CO ORD SH	32,281	459,649	465,815
CONSORCIO ARA S.A.B. SER	1,522,500	379,527	165,382
CONSTELLATION SOFTWARE INC	186,730	153,653,653	210,158,994
CONSTELLIUM SE	275,967	3,192,193	2,119,427
CONSTRUCC Y AUX DE FERROCARR	34,093	1,478,687	1,236,817
CONSTRUTORA TENDA SA	179,658	794,584	1,014,642
CONSUN PHARMACEUTICAL GROUP	1,300,000	874,519	536,743
CONTACT ENERGY LTD	1,678,601	7,833,703	6,764,552
CONTAINER CORP OF INDIA LTD	1,821,949	13,557,091	10,084,168
CONTEMPORARY AMPEREX TECHN A	71,181	1,360,355	1,754,445
CONTINENTAL AG	254,629	31,228,846	24,926,589
CONTRA CLEMENTIA PHARM F	9,646	13,022	0
CONTROLADORA VUELA CIA DE A	1,816,000	1,915,433	943,877
CONVATEC GROUP PLC	3,718,928	11,864,174	8,988,035
CONVOY GLOBAL HOLDINGS LTD	26,358,000	0	3
CONZZETA AG REG	3,142	2,615,671	2,815,216
COOKPAD INC	114,400	595,340	334,022
COOPER ENERGY LTD	3,271,041	1,197,163	844,542
COPA HOLDINGS SA CLASS A	231,052	14,498,613	11,681,989
CORBION NV	141,007	3,387,266	5,075,823
CORE LABORATORIES N.V.	98,172	6,531,288	1,994,855
COREANA COSMETICS CO LTD	56,522	535,299	239,179

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
CORESTATE CAPITAL HOLDING S.	28,432	1,185,994	573,524
CORETRONIC CORP	972,000	1,230,199	1,047,623
COROMANDEL INTERNATIONAL LTD	167,030	898,444	1,671,876
CORONA CORP	30,500	358,293	292,321
CORONADO GLOBAL RESOURCE CDI	692,592	1,526,293	441,086
CORONATION FUND MANAGERS LTD	604,989	1,958,946	1,392,780
CORP AMERICA AIRPORTS SA	5,313	43,221	11,582
CORP FINANCIERA COLOMBIANA	258,686	2,150,990	1,921,840
CORP INMOBILIARIA VESTA SAB	1,340,183	2,195,723	1,977,766
CORPORATE TRAVEL MANAGEMENT	200,058	2,971,540	1,334,700
CORTICEIRA AMORIM SA	79,769	1,046,541	903,093
CORUS ENTERTAINMENT INC B SH	467,900	4,309,676	982,521
COSAN LOGISTICA SA	290,900	816,594	1,008,730
COSAN LTD CLASS A SHARES	585,056	6,720,181	8,810,943
COSAN SA	363,400	4,677,887	4,693,729
COSCO SHIPPING DEVELOPME A	709,055	210,257	184,428
COSCO SHIPPING DEVELOPMENT H	8,576,009	1,213,253	818,823
COSCO SHIPPING ENERGY TRAN A	309,420	307,429	282,559
COSCO SHIPPING ENERGY TRAN H	3,043,086	1,755,297	1,358,512
COSCO SHIPPING HOLDINGS CO A	799,586	452,615	392,214
COSCO SHIPPING HOLDINGS CO H	5,867,358	2,327,207	1,688,187
COSCO SHIPPING INTERNATIONAL	2,286,400	479,676	335,982
COSCO SHIPPING PORTS LTD	4,249,670	3,892,829	2,280,981
COSEL CO LTD	50,300	555,265	436,864
COSMAX INC	15,923	1,032,204	1,294,650
COSMO ENERGY HOLDINGS CO LTD	151,000	3,627,907	2,197,432
COSMO PHARMACEUTICALS NV	16,984	2,535,929	1,554,021
COSMOS PHARMACEUTICAL CORP	41,100	3,371,883	6,301,098
COSON CO LTD	37,911	683,779	164,207
COSTA GROUP HOLDINGS LTD	904,796	2,158,392	1,806,561
COSTAMARE INC	113,843	1,030,699	632,967
COUNTRY GARDEN HOLDINGS CO	17,621,842	20,907,138	21,645,187
COUNTRY GARDEN SERVICES HOLD	2,955,028	6,978,078	13,725,785
COUNTRYSIDE PROPERTIES PLC	1,056,806	4,274,236	4,322,165
COVESTRO AG	460,970	29,541,061	17,525,447
COWAY CO LTD	427,084	28,784,390	25,635,337
CP ALL PCL FOREIGN	13,965,019	33,183,955	30,611,665
CP ALL PCL NVDR	8,755,481	21,484,677	19,192,230
CPFL ENERGIA SA	442,000	3,485,986	2,468,078
CPMC HOLDINGS LTD	909,000	463,819	343,641
CQ PHARMACEUTICAL HOLDING A	285,400	239,273	203,336
CRANSWICK PLC	123,470	4,052,921	5,519,607
CREATE RESTAURANTS HOLDINGS	214,200	839,061	1,411,653
CREATE SD HOLDINGS CO	44,800	702,393	1,391,111

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
CREDICORP LTD	514,646	105,449,105	68,792,731
CREDIT AGRICOLE SA	2,693,443	45,168,287	25,495,885
CREDIT CORP GROUP LTD	128,408	1,727,408	1,377,411
CREDIT SAISON CO LTD	367,678	5,953,942	4,198,724
CREDIT SUISSE GROUP AG REG	5,656,830	116,085,036	58,493,610
CREDITO EMILIANO SPA	179,660	1,090,013	887,855
CREDITO REAL SAB DE CV SOFOM	640,700	908,906	331,344
CRESCENT POINT ENERGY CORP	1,186,800	6,643,977	1,917,004
CREST NICHOLSON HOLDINGS	590,398	3,376,067	1,442,214
CRH PLC	2,313,924	64,880,094	78,624,863
CRISPR THERAPEUTICS AG	103,803	6,480,418	7,628,482
CRODA INTERNATIONAL PLC	605,399	35,455,183	39,316,529
CROMPTON GREAVES CONSUMER EL	1,000,251	3,323,278	3,161,564
CRONOS GROUP INC	418,700	7,004,919	2,514,659
CROPENERGIES AG	48,158	297,439	484,094
CROWN RESORTS LTD	820,938	7,008,859	5,465,636
CRRC CORP LTD H	9,630,626	7,497,864	4,063,267
CRRC CORP LTD A	11,819,445	10,495,707	9,306,386
CRYSTAL INTERNATIONAL GROUP	1,268,500	996,171	276,599
CRYSTALGENOMICS INC	85,674	1,340,021	1,136,052
CSBC CORP TAIWAN	525,112	520,065	412,906
CSC FINANCIAL CO LTD A	60,741	233,597	338,132
CSC FINANCIAL CO LTD H	2,128,000	1,619,654	2,407,932
CSG HOLDING CO LTD B	2,605,024	890,963	719,281
CSG HOLDING CO LTD A	176,784	115,409	125,451
CSG SMART SCIENCE+ TECHNOL A	64,600	80,111	74,060
CSL LTD	1,155,693	112,151,667	228,364,331
CSPC PHARMACEUTICAL GROUP LT	12,394,400	18,865,203	23,412,062
CSR LTD	1,158,067	4,040,457	2,934,171
CSSC OFFSHORE + MARINE ENG H	578,000	604,791	387,797
CSSC OFFSHORE AND MARINE E A	65,928	152,535	157,595
CSSC SCIENCE + TECHNOLOGY A	121,436	236,794	188,486
CSTONE PHARMACEUTICALS	809,000	1,240,128	1,154,454
CT ENVIRONMENTAL GROUP LTD	2,456,000	0	0
CTBC FINANCIAL HOLDING CO LT	151,391,939	101,128,387	104,418,850
CTCI CORP	1,666,417	2,551,029	2,202,724
CTS CO LTD	67,700	464,517	561,003
CTS EVENTIM AG + CO KGAA	136,645	4,641,783	5,678,495
CTS INTERNATIONAL LOGISTII A	166,800	163,541	136,994
CTT CORREIOS DE PORTUGAL	360,797	2,912,173	855,034
CUB ELECPARTS INC	179,406	1,413,326	924,256
CUCKOO HOLDINGS CO LTD	3,063	333,493	200,660
CUCKOO HOMESYS CO LTD	13,210	523,446	369,004
CUMMINS INDIA LTD	156,391	1,491,901	812,675

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
CUROCOM CO LTD	210,528	489,992	362,300
CURRO HOLDINGS LTD	410,832	596,320	212,805
CURVES HOLDINGS CO LTD	139,600	810,844	759,561
CVC BRASIL OPERADORA E AGENC	305,900	900,731	1,010,604
CYBERAGENT INC	224,400	7,518,408	11,003,161
CYBERARK SOFTWARE LTD/ISRAEL	83,687	7,805,036	8,307,608
CYBERLINK CORP	108,240	313,671	387,037
CYBERTAN TECHNOLOGY INC	785,000	505,569	433,680
CYBOZU INC	58,700	288,610	1,825,448
CYFROWY POLSAT SA	624,037	4,087,191	4,149,046
CYPRUS POPULAR BANK PUBLIC C	10,584,222	0	12
CYRELA BRAZIL REALTY SA EMP	663,100	1,966,722	2,759,495
D IETEREN SA/NV	54,451	2,126,430	3,015,022
D LINK CORP	1,393,617	594,964	902,170
D.G. KHAN CEMENT	535,200	411,464	271,999
D/S NORDEN	63,991	1,298,380	859,198
D+L INDUSTRIES INC	5,041,300	1,004,349	505,901
DA AN GENE CO LTD SUN YAT A	145,299	431,644	560,320
DABUR INDIA LTD	4,477,624	26,331,213	27,632,388
DACIAN GOLD LTD	1,033,076	1,081,050	316,516
DAEA TI CO LTD	139,210	746,269	708,289
DAEDUCK CO LTD	42,138	243,096	201,083
DAEDUCK ELECTRONICS CO LTD /	72,836	522,046	469,890
DAEHAN FLOUR MILLS CO LTD	2,382	317,506	326,749
DAEHWA PHARM CO LTD	25,843	593,065	279,302
DAEKYO CO LTD	63,185	337,238	224,826
DAELIM INDUSTRIAL CO LTD	63,761	4,004,826	4,362,581
DAESANG CORPORATION	46,129	632,989	991,341
DAETWYLER HOLDING AG BR	17,606	2,097,993	3,441,118
DAEWOO ENGINEERING + CONSTR	412,167	2,811,361	1,175,319
DAEWOO SHIPBUILDING + MARINE	109,795	2,778,382	2,469,098
DAEWOONG CO LTD	51,324	595,213	1,160,588
DAEWOONG PHARMACEUTICAL CO	10,458	714,938	1,152,002
DAH SING BANKING GROUP LTD	855,288	1,249,534	781,302
DAH SING FINANCIAL HOLDINGS	330,947	1,748,057	926,598
DAI DAN CO LTD	34,200	697,579	894,269
DAI ICHI LIFE HOLDINGS INC	2,545,379	40,304,046	30,270,392
DAI ICHI SEIKO CO LTD	18,000	427,618	361,385
DAI NIPPON PRINTING CO LTD	1,103,107	26,415,640	25,245,133
DAI NIPPON TORYO CO LTD	56,400	464,063	490,367
DAIBIRU CORP	84,400	805,761	770,580
DAICEL CORP	633,363	4,930,363	4,890,313
DAIDO METAL CO LTD	105,000	657,894	531,399
DAIDO STEEL CO LTD	82,900	3,664,959	2,539,598

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
DAIFUKU CO LTD	226,700	7,700,538	19,794,355
DAIHEN CORP	46,800	1,085,745	1,667,943
DAIHO CORP	37,100	950,627	831,857
DAIICHI JITSUGYO CO LTD	21,700	539,958	735,167
DAIICHI SANKYO CO LTD	1,729,613	73,229,066	141,177,848
DAIICHIKOSHO CO LTD	95,000	4,056,743	2,839,829
DAIKEN CORP	35,900	524,543	601,633
DAIKIN INDUSTRIES LTD	623,606	52,578,656	100,201,233
DAIKOKU DENKI CO LTD	16,000	237,994	190,128
DAIKOKUTENBUSSAN CO LTD	11,600	419,739	517,718
DAIKYONISHIKAWA CORP	131,100	1,187,201	584,503
DAILY MAIL+GENERAL TST A NV	345,344	3,239,176	2,940,013
DAIMLER AG REGISTERED SHARES	1,892,977	106,107,040	76,847,782
DAINICHISEIKA COLOR + CHEM	34,300	805,591	742,051
DAIO PAPER CORP	167,900	1,675,969	2,241,053
DAIRY FARM INTL HLDGS LTD	2,756,300	13,442,564	12,816,795
DAISEKI CO LTD	91,900	2,141,065	2,444,761
DAISHI HOKUETSU FINANCIAL GR	99,650	3,516,613	2,013,598
DAISHIN SECURITIES CO LTD	76,369	661,979	613,314
DAISHIN SECURITIES CO LTD PF	84,821	588,746	605,033
DAISYO CORP	21,300	280,846	251,332
DAITO PHARMACEUTICAL CO LTD	25,800	616,226	954,183
DAITO TRUST CONSTRUCT CO LTD	552,586	69,350,531	50,753,809
DAIWA HOUSE INDUSTRY CO LTD	1,528,524	36,191,596	36,015,276
DAIWA INDUSTRIES LTD	70,100	513,452	586,739
DAIWA SECURITIES GROUP INC	3,534,900	22,090,552	14,734,620
DAIWABO HOLDINGS CO LTD	43,400	1,334,558	2,832,053
DALATA HOTEL GROUP PLC	436,643	3,249,998	1,397,684
DALI FOODS GROUP CO LTD	4,819,289	3,036,548	2,922,496
DALIAN HUARUI HEAVY INDUS A	107,913	56,298	65,595
DALIAN PORT PDA CO LTD A	690,417	175,324	167,868
DALLAH HEALTHCARE CO	71,342	910,380	892,013
DALMIA BHARAT LTD	108,668	1,563,949	969,040
DAMAC PROPERTIES DUBAI CO	3,955,841	1,550,242	737,719
DANA GAS	8,049,966	1,929,798	1,404,796
DANAOS CORP	692	11,155	2,581
DANIELI + CO	27,620	597,337	353,024
DANIELI + CO RSP	96,048	1,303,539	783,182
DANONE	1,582,233	117,367,661	109,397,355
DANSKE BANK A/S	1,551,059	32,747,628	20,634,195
DAOU TECHNOLOGY INC	57,423	829,900	950,008
DAQIN RAILWAY CO LTD A	1,332,209	1,359,167	1,325,787
DAQO NEW ENERGY CORP ADR	17,853	844,677	1,325,407
DAR AL ARKAN REAL ESTATE DEV	1,241,130	3,534,480	2,349,246

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
DARE POWER DEKOR HOME CO L A	91,400	161,329	200,783
DARFON ELECTRONICS CORP	495,000	536,957	635,013
DARWIN PRECISIONS CORP	1,054,000	586,757	378,668
DASHANG CO LTD A	48,400	179,627	164,136
DASHENLIN PHARMACEUTICAL G A	20,371	184,648	233,886
DASSAULT AVIATION SA	11,159	15,587,246	10,283,516
DASSAULT SYSTEMES SA	872,636	106,591,674	150,543,537
DATA 3 LTD	323,844	905,750	1,012,268
DATALOGIC SPA	47,875	891,407	593,092
DATANG INTL POWER GEN CO A	598,395	192,055	178,484
DATANG INTL POWER GEN CO H	6,674,000	1,631,341	869,722
DATATEC LTD	420,468	1,122,057	641,289
DATONG COAL INDUSTRY CO A	147,193	83,495	81,565
DAVIDE CAMPARI MILANO SPA	1,308,292	8,253,501	11,020,562
DAWNING INFORMATION INDUST A	105,157	522,068	570,819
DAWRAYS PHARMACEUTICAL HOLD	1,679,989	434,096	197,252
DAWONSYS CO LTD	50,921	734,185	690,038
DAZHONG TRANSPORTATION GRP A	138,872	76,295	73,813
DAZHONG TRANSPORTATION GRP B	1,833,955	913,337	572,194
DB FINANCIAL INVESTMENT CO L	57,155	274,828	150,864
DB HITEK CO LTD	84,735	1,027,157	2,032,344
DB INSURANCE CO LTD	426,913	22,710,775	15,208,232
DBG TECHNOLOGY CO LTD A	127,847	349,773	333,438
DBS GROUP HOLDINGS LTD	5,477,339	80,494,366	81,666,357
DBV TECHNOLOGIES SA	101,242	3,268,107	895,466
DCB BANK LTD	355,820	971,662	356,745
DCC PLC	229,395	17,152,055	19,075,553
DCM HOLDINGS CO LTD	211,000	1,673,702	2,417,352
DCM SHRIRAM LTD	87,128	491,068	366,208
DE LONGHI SPA	148,051	2,354,101	3,877,731
DEA CAPITAL SPA	192,026	323,616	274,337
DECHRA PHARMACEUTICALS PLC	236,671	4,388,817	8,322,582
DECMIL GROUP LTD	458,073	766,116	17,661
DELEK AUTOMOTIVE SYSTEMS LTD	136,861	862,445	620,451
DELEK GROUP LTD	12,419	1,975,329	290,645
DELIVERY HERO SE	331,190	17,393,333	33,834,942
DELPHI TECHNOLOGIES PLC	191,197	4,095,369	2,716,909
DELTA ELECTRONICS INC	17,132,757	75,987,606	97,264,377
DELTA ELECTRONICS THAI FORGN	1,061,577	1,820,281	1,846,146
DELTA GALIL INDUSTRIES	21,477	665,567	246,049
DEMANT A/S	439,845	11,196,924	11,592,747
DENA CO LTD	214,100	3,835,641	2,667,196
DENKA CO LTD	206,100	4,620,534	5,037,639
DENKI KOGYO CO LTD	27,099	734,290	651,823

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
DENSO CORP	1,374,811	56,462,109	53,585,580
DENTIUM CO LTD	15,848	1,130,377	495,394
DENTSU GROUP INC	509,500	16,829,370	12,066,297
DENYO CO LTD	35,300	413,458	624,298
DEPO AUTO PARTS IND CO LTD	315,000	544,400	544,493
DEPPON LOGISTICS CO LTD A	30,780	57,073	58,870
DERICHEBOURG	216,253	1,104,804	618,870
DERMAPHARM HOLDING SE	24,341	872,875	1,210,690
DESCARTES SYSTEMS GRP/THE	198,600	5,100,386	10,450,559
DESCENTE LTD	91,100	785,648	1,254,805
DESPEGAR.COM CORP	132,034	1,431,031	948,004
DESWELL INDUSTRIES INC	11,408	34,566	27,265
DEUTSCHE BANK AG REGISTERED	4,765,874	115,361,481	45,306,028
DEUTSCHE BETEILIGUNGS AG	27,139	777,075	922,055
DEUTSCHE BOERSE AG	1,615,710	213,115,373	292,254,977
DEUTSCHE EUROSHOP AG	125,989	4,213,679	1,775,882
DEUTSCHE LUFTHANSA REG	560,889	10,434,487	5,633,125
DEUTSCHE PFANDBRIEFBANK AG	294,274	3,714,398	2,148,340
DEUTSCHE POST AG REG	2,315,687	68,432,405	84,658,121
DEUTSCHE TELEKOM AG REG	28,151,984	473,761,789	472,544,486
DEUTSCHE WOHNEN SE	2,947,016	124,450,922	132,232,147
DEUTZ AG	288,227	1,875,209	1,354,454
DEVRO PLC	391,946	1,428,510	732,245
DEXERIALS CORP	113,800	1,138,608	890,274
DEYAAR DEVELOPMENT PJSC	3,447,093	325,389	260,891
DFDS A/S	70,978	1,966,187	2,188,398
DFZQ H	1,918,800	1,325,711	1,059,611
DGB FINANCIAL GROUP INC	362,584	3,618,793	1,540,345
DHC SOFTWARE CO LTD A	289,314	442,899	512,038
DHT HOLDINGS INC	254,130	1,561,095	1,303,687
DIAGEO PLC	5,752,150	168,543,580	190,583,861
DIALOG GROUP BHD	35,068,700	27,975,800	29,544,459
DIALOG SEMICONDUCTOR PLC	162,705	4,881,514	7,421,158
DIAN DIAGNOSTICS GROUP CO A	55,347	233,572	276,183
DIANA SHIPPING INC	81,925	270,258	122,888
DIASORIN SPA	53,036	5,607,723	10,150,282
DIC ASSET AG	117,583	1,316,304	1,576,836
DIC CORP	193,500	5,433,061	4,844,450
DIGI.COM BHD	8,670,800	9,796,175	8,721,388
DIGITAL ARTS INC	22,800	842,498	1,838,624
DIGITAL CHINA GROUP CO LTD A	749,071	2,585,627	2,577,344
DIGITAL CHINA HOLDINGS LTD	3,048,750	2,106,102	1,970,755
DIGITAL CHINA INFORMATION A	891,408	1,824,478	1,938,035
DIGITAL DOMAIN HOLDINGS LTD	47,140,000	1,438,906	285,865

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
DIGITAL GARAGE INC	75,700	1,821,923	2,406,739
DIGITAL HOLDINGS INC	37,700	867,638	501,805
DIGITAL TELECOMMUNICATIONS F	12,325,763	6,722,801	6,021,808
DIGNITY PLC	118,675	1,661,571	365,854
DILIP BUILDCON LTD	78,403	707,677	283,275
DINO POLSKA SA	113,279	3,522,465	5,744,636
DIO CORP	26,593	981,972	551,603
DIOS FASTIGHETER AB	172,019	1,030,116	1,150,283
DIP CORP	110,700	2,301,919	2,237,908
DIPLOMA PLC	268,719	3,445,707	5,959,927
DIRECIONAL ENGENHARIA SA	189,800	711,434	543,392
DIRECT LINE INSURANCE GROUP	12,271,033	51,913,954	41,089,280
DIS CHEM PHARMACIES PTY LTD	919,580	1,600,644	927,783
DISCO CORP	65,100	7,672,909	15,743,236
DISCOVERY LTD	2,421,102	26,068,034	14,568,415
DISH TV INDIA LTD	1,052,106	697,237	107,992
DISTELL GROUP HOLDINGS LTD	187,616	1,708,618	823,891
DISTRIBUIDORA INTERNACIONAL	4,455,002	667,923	556,905
DIVI S LABORATORIES LTD	685,831	16,511,754	20,700,167
DIXONS CARPHONE PLC	2,394,114	4,470,683	2,657,915
DKSH HOLDING AG	84,175	5,501,244	5,401,129
DLF LTD	1,399,418	3,723,032	2,744,020
DMCI HOLDINGS INC	9,584,000	1,870,804	788,648
DMG MORI CO LTD	232,500	3,135,397	2,816,680
DNB ASA	2,629,513	36,805,779	34,644,045
DNO ASA	1,492,780	2,089,051	895,328
DO + CO AG	15,733	1,595,171	804,009
DO FLUORIDE CHEMICALS CO A	60,307	97,624	90,706
DOGAN SIRKETLER GRUBU HLDGS	2,225,909	650,517	681,923
DOGUS OTOMOTIV SERVIS VE TIC	75,471	142,006	172,307
DOHA BANK QPSC	3,662,544	2,673,221	2,052,071
DOLLARAMA INC	882,106	31,056,564	29,248,096
DOMAIN HOLDINGS AUSTRALIA LT	533,218	1,401,829	1,229,854
DOMETIC GROUP AB	712,648	5,395,222	6,390,131
DOMINO S PIZZA ENTERPRISES L	141,682	5,360,442	6,700,575
DOMINO S PIZZA GROUP PLC	1,124,696	3,301,749	4,310,772
DONG A SOCIO HOLDINGS CO LTD	7,415	619,805	586,863
DONG A ST CO LTD	10,672	977,686	770,112
DONG E E JIAOCO LTD A	58,232	272,550	294,778
DONGFANG ELECTRIC CORP LTD A	248,018	318,702	310,281
DONGFANG ELECTRIC CORP LTD H	789,617	582,100	412,615
DONGJIANG ENVIRONMENTAL CO A	112,050	158,722	142,714
DONGJIANG ENVIRONMENTAL H	478,500	557,013	325,361
DONGJIN SEMICHEM CO LTD	69,994	1,152,434	1,638,052

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
DONGKOOK PHARMACEUTICAL CO L	10,945	646,155	1,099,186
DONGKUK STEEL MILL CO LTD	135,264	899,265	596,001
DONGSUH COMPANIES INC	72,077	1,732,783	949,761
DONGSUNG PHARMACEUTICAL CO	42,241	619,776	438,968
DONGWON F+B CO LTD	2,665	791,274	396,587
DONGWON INDUSTRIES CO.	3,505	915,114	584,240
DONGXING SECURITIES CO LT A	245,812	382,428	378,755
DONGYUE GROUP	2,494,000	1,804,162	1,013,631
DOOSAN BOBCAT INC	91,157	2,354,071	1,993,124
DOOSAN HEAVY INDUSTRIES	308,028	4,439,324	1,238,156
DOOSAN INFRACORE CO LTD	308,063	2,886,357	1,856,804
DORMAKABA HOLDING AG	7,310	3,087,322	3,984,608
DOSHISHA CO LTD	54,300	749,223	820,905
DOUBLE MEDICAL TECHNOLOGY A	113,603	1,016,675	1,915,679
DOUBLEGAMES CO LTD	21,731	898,925	1,441,687
DOUTOR NICHIRE HOLDINGS CO	61,400	1,006,591	991,415
DOUYU INTERNATIONAL HOLD ADR	213,142	1,844,888	2,459,659
DOUZONE BIZON CO LTD	43,417	977,766	3,681,701
DOVALUE SPA	148,099	1,897,781	1,335,689
DOWA HOLDINGS CO LTD	105,600	3,091,105	3,200,742
DOWNER EDI LTD	1,395,570	6,880,973	4,208,522
DR LAL PATHLABS LTD	82,327	1,439,353	1,705,938
DR. REDDY S LABORATORIES	903,722	35,634,847	47,218,027
DRAEGERWERK AG PEF	16,603	1,132,902	1,351,955
DRAKE + SCULL INTERNATIONAL	583,531	0	0
DRAX GROUP PLC	953,772	4,011,693	3,031,054
DRB HICOM BHD	2,010,700	1,165,903	802,403
DRDGOLD LTD	1,019,891	865,421	1,581,932
DRILLING CO OF 1972/THE	51,822	3,217,124	1,091,738
DS SMITH PLC	2,992,482	14,831,663	12,135,236
DSV PANALPINA A/S	590,333	32,095,806	72,039,672
DTS CORP	100,094	1,316,581	2,063,392
DUBAI FINANCIAL MARKET PJSC	3,862,748	1,024,551	868,636
DUBAI INVESTMENTS PJSC	4,889,483	2,015,448	1,544,124
DUBAI ISLAMIC BANK	14,878,407	20,337,144	15,473,235
DUERR AG	117,027	3,806,657	3,049,382
DUFREY AG REG	75,219	8,338,631	2,227,476
DUK SAN NEOLUX CO LTD	28,805	495,193	808,221
DUNELM GROUP PLC	236,882	1,980,444	3,483,029
DUR HOSPITALITY CO	105,284	587,198	696,093
DURATEX SA	696,200	1,303,065	1,630,570
DUSKIN CO LTD	85,600	1,721,937	2,179,573
DWS GROUP GMBH + CO KGAA	81,106	2,423,418	2,943,254
DXB ENTERTAINMENTS PJSC	5,935,367	353,087	201,985

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
DYDO GROUP HOLDINGS INC	20,800	786,310	939,890
DYNAM JAPAN HOLDINGS CO LTD	639,200	1,400,393	575,659
DYNAMIC ELECTRONICS CO LTD	718,893	278,725	423,960
DYNAPACK INTERNATIONAL TECH	310,000	665,671	800,624
E HOUSE CHINA ENTERPRISE HOL	1,311,000	1,612,917	1,529,129
E INK HOLDINGS INC	2,099,000	1,947,486	2,888,353
E MART INC	46,124	7,337,418	4,045,460
E.ON SE	5,224,179	117,556,416	58,763,381
E.SUN FINANCIAL HOLDING CO	90,606,642	64,769,810	85,372,219
E1 CORP	6,199	334,248	178,314
EAGLE HIGH PLANTATIONS TBK P	28,494,900	438,669	177,532
EAGLE INDUSTRY CO LTD	63,000	669,490	420,448
EARTH CORP	31,300	1,101,740	2,381,916
EAST JAPAN RAILWAY CO	2,708,757	240,800,244	187,655,836
EAST MONEY INFORMATION CO A	3,651,137	9,177,011	10,425,774
EASTERN COMMUNICATIONS CO B	682,002	368,557	291,215
EASTERN PROVINCE CEMENT CO	100,533	826,732	781,268
EASYJET PLC	456,888	7,234,798	3,838,811
EASYSIGHT SUPPLY CHAIN MA A	78,146	130,103	129,468
EBARA CORP	222,300	5,130,706	5,202,832
EBOS GROUP LTD	219,429	2,305,421	3,052,573
EBRO FOODS SA	183,327	3,561,223	3,796,865
ECHO POLSKA PROPERTIES NV	1,102,712	1,424,138	595,940
ECLAT TEXTILE COMPANY LTD	469,882	6,194,460	5,446,615
ECLERX SERVICES LTD FOREIGN	39,536	471,154	233,670
ECLIPX GROUP LTD	715,955	1,528,187	616,169
ECN CAPITAL CORP	532,800	1,562,267	1,509,991
ECONOCOM GROUP	296,825	1,563,067	598,749
ECOPETROL SA	11,178,216	9,189,463	6,203,012
ECOPRO BM CO LTD	19,625	882,878	1,966,008
ECOPRO CO LTD	43,675	1,483,671	1,069,318
ECORODOVIAS INFRA E LOG SA	403,800	1,235,748	953,829
ECOVACS ROBOTICS CO LTD A	93,284	339,736	398,370
EDELWEISS FINANCIAL SERVICES	840,623	1,209,774	699,185
EDENRED	2,433,795	88,817,157	106,415,814
EDF	1,214,447	30,609,765	11,198,491
EDION CORP	206,600	1,735,244	2,093,097
EDP ENERGIAS DO BRASIL SA	703,037	3,306,909	2,230,441
EDP ENERGIAS DE PORTUGAL SA	6,103,538	25,162,228	29,134,553
EDP RENOVAVEIS SA	360,904	3,781,668	4,985,797
EFG HERMES HOLDING SAE	1,620,145	1,743,350	1,404,326
EFG INTERNATIONAL AG	179,301	1,618,467	1,275,383
EGE ENDUSTRI VE TICARET AS	2,792	244,054	254,039
EGIS TECHNOLOGY INC	151,000	1,214,039	985,189

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
EGUARANTEE INC	70,800	738,140	1,674,761
EGYPT KUWAIT HOLDING CO SAE	1,822,003	2,578,559	2,011,491
EHIME BANK LTD/THE	81,799	1,051,665	883,309
EICHER MOTORS LTD	112,452	34,749,241	27,306,309
EIFFAGE	176,892	15,904,598	16,172,247
EIH LTD	321,732	828,635	270,795
EIKEN CHEMICAL CO LTD	73,700	750,701	1,177,724
EIS ECZACIBASI ILAC VE SINAI	372,444	246,553	331,979
EISAI CO LTD	618,050	29,716,658	48,958,199
EIZO CORP	45,800	1,265,343	1,723,576
EL PUERTO DE LIVERPOOL C1	463,246	2,975,721	1,129,898
ELAN CORP	31,200	511,319	548,028
ELAN MICROELECTRONICS CORP	681,500	1,748,947	2,783,330
ELBIT SYSTEMS LTD	167,211	20,270,307	22,900,653
ELDERS LTD	365,013	1,391,872	2,367,354
ELDORADO GOLD CORP	631,161	7,210,392	6,066,004
ELECOM CO LTD	52,500	1,064,167	2,559,670
ELECTRA LTD	4,083	702,420	1,737,748
ELECTRIC CONNECTOR TECHNOL A	41,400	209,065	187,158
ELECTRIC POWER DEVELOPMENT C	462,438	12,686,493	8,765,683
ELECTRICITY GEN PUB CO FOREI	627,000	6,325,819	5,010,726
ELECTRICITY GENERA PCL NVDR	1,700	15,904	13,586
ELECTRO OPTIC SYSTEMS HOLDIN	284,088	865,477	915,383
ELECTROCOMPONENTS PLC	1,078,755	5,137,827	8,943,828
ELECTROLUX AB SER B	536,355	9,182,120	8,969,330
ELECTROLUX PROFESSIONAL AB B	529,857	1,924,741	1,922,844
ELEKTA AB B SHS	828,599	11,369,831	7,707,319
ELEMATEC CORP	36,400	300,104	295,559
ELEMENT FLEET MANAGEMENT COR	1,028,500	9,754,580	7,649,563
ELEMENTIS PLC	1,367,529	2,708,677	1,088,179
ELIA GROUP SA/NV	82,506	7,713,674	8,951,595
ELION CLEAN ENERGY CO LTD A	452,300	263,490	208,436
ELIOR GROUP	224,067	2,998,381	1,275,921
ELIS SA	511,462	11,209,086	5,968,521
ELISA OYJ	1,212,751	53,677,411	73,744,166
ELITE ADVANCED LASER CORP	308,968	633,922	783,298
ELITE MATERIAL CO LTD	676,000	2,241,548	3,654,426
ELITE SEMICONDUCTOR MICROELE	573,000	584,621	750,613
ELITEGROUP COMPUTER SYSTEMS	599,395	311,367	240,737
ELKEM ASA	579,289	2,517,142	1,177,553
ELLAKTOR SA	313,749	587,655	377,054
ELRINGKLINGER AG	67,225	1,201,038	400,170
EM SYSTEMS CO LTD	83,000	760,757	753,182
EMAAR DEVELOPMENT PJSC	1,877,361	2,296,032	1,068,207

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
EMAAR ECONOMIC CITY	976,540	2,397,210	1,770,320
EMAAR MALLS PJSC	4,700,972	2,723,978	1,753,354
EMAAR PROPERTIES PJSC	8,344,953	11,552,775	6,202,230
EMAMI LTD	256,329	1,375,016	749,598
EMBOTELLADORA ANDINA PREF B	439,800	1,502,020	1,077,258
EMBRAER SA	2,299,016	3,880,724	3,387,310
EMECO HOLDINGS LTD	850,784	1,715,469	582,836
EMEMORY TECHNOLOGY INC	165,000	1,891,527	2,720,687
EMERA INC	578,976	22,778,373	22,708,442
EMIRATES TELECOM GROUP CO	12,230,343	50,882,339	54,939,401
EML PAYMENTS LTD	676,037	1,732,680	1,554,608
EMMI AG REG	4,606	1,699,537	4,020,012
EMPEROR CAPITAL GROUP LTD	9,436,000	695,274	161,925
EMPEROR WATCH + JEWELLERY	9,200,000	519,501	144,817
EMPIRE CO LTD A	1,466,501	31,725,969	35,004,367
EMPRESA NACIONAL DE TELECOM	319,853	3,022,132	2,065,831
EMPRESAS CMPC SA	2,879,607	7,247,039	5,726,930
EMPRESAS COPEC SA	1,158,565	11,753,403	7,779,299
EMS CHEMIE HOLDING AG REG	67,245	36,850,200	52,089,948
EN JAPAN INC	74,100	2,425,749	1,824,254
ENAGAS SA	580,161	14,110,217	14,172,471
ENAUTA PARTICIPACOES SA	179,500	459,409	338,025
ENAV SPA	600,516	2,448,552	2,705,972
ENBRIDGE INC	4,851,338	166,523,143	147,036,147
ENCAVIS AG	238,753	2,235,920	3,480,658
ENCE ENERGIA Y CELULOSA SA	265,452	936,200	868,787
ENDAVA PLC SPON ADR	42,706	1,808,902	2,062,700
ENDEAVOUR MINING CORP	179,000	3,201,254	4,317,291
ENDESA SA	750,236	18,223,625	18,478,823
ENDO INTERNATIONAL PLC	516,374	18,055,518	1,771,163
ENDURANCE TECHNOLOGIES LTD	76,754	1,131,528	885,169
ENEA SA	508,112	1,067,437	919,718
ENEL AMERICAS SA	69,395,724	12,596,798	10,486,315
ENEL CHILE SA	62,145,881	5,944,130	4,649,960
ENEL SPA	19,456,780	132,564,912	167,786,436
ENEOS HOLDINGS INC	9,358,730	42,744,049	33,137,460
ENERFLEX LTD	212,300	2,177,350	801,191
ENERGA SA	158,856	317,505	326,896
ENERGEAN PLC	203,264	1,508,824	1,544,592
ENERGISA SA UNITS	603,500	6,605,448	5,385,645
ENERGIX RENEWABLE ENERGIES	403,365	1,364,353	1,508,124
ENERGY ABSOLUTE PCL FOREIGN	3,890,700	5,880,660	4,940,871
ENERGY ABSOLUTE PCL NVDR	31,100	40,877	39,494
ENERJISA ENERJI AS	555,720	591,471	697,209

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
ENERPLUS CORP	543,200	8,219,324	1,523,512
ENEVA SA	403,700	2,807,128	3,307,064
ENGHOUSE SYSTEMS LTD	97,100	2,330,220	5,168,686
ENGIE	5,526,886	131,085,897	68,282,744
ENGIE BRASIL ENERGIA SA	406,373	4,454,702	3,115,072
ENGIE ENERGIA CHILE SA	1,165,917	2,101,059	1,561,471
ENGINEERS INDIA LTD	358,002	618,346	357,510
ENGRO CORPORATION LTD	747,060	1,361,533	1,303,328
ENGRO FERTILIZERS LTD	1,391,810	712,635	499,692
ENI SPA	5,739,445	126,680,116	54,728,729
ENKA INSAAT VE SANAYI AS	1,658,022	1,548,698	1,489,976
ENLIGHT RENEWABLE ENERGY LTD	1,229,179	1,530,231	1,864,572
ENN ECOLOGICAL HOLDINGS CO A	69,600	101,493	101,732
ENN ENERGY HOLDINGS LTD	1,795,600	17,017,290	20,202,223
ENNOCONN CORP	112,504	982,062	1,071,485
ENPLAS CORP	23,750	560,718	522,176
ENSTAR GROUP LTD	27,379	3,651,141	4,182,690
ENTRA ASA	388,986	5,098,842	4,951,537
ENZYCHEM LIFESCIENCES CORP	14,796	1,348,395	1,139,053
EO TECHNICS CO LTD	19,771	1,151,317	1,553,277
EOH HOLDINGS LTD	324,985	421,269	93,521
EOPTOLINK TECHNOLOGY INC L A	50,220	351,433	448,097
EPIROC AB A	1,471,957	10,490,993	18,342,882
EPIROC AB B	1,999,735	12,813,262	24,458,341
EPISTAR CORP	2,329,000	2,367,706	2,908,833
EPS HOLDINGS INC	74,400	935,562	711,002
EQT AB	471,687	5,411,844	8,462,536
EQUATORIAL ENERGIA SA ORD	2,135,900	9,435,504	9,032,490
EQUINITI GROUP PLC	795,357	3,087,080	1,428,909
EQUINOR ASA	2,324,971	54,552,018	32,921,223
EQUITAL LTD	1	17	10
EQUITAS HOLDINGS LTD/INDIA	251,732	483,487	165,201
ERAMET	18,968	1,694,942	680,021
EREGLI DEMIR VE CELIK FABRIK	5,068,906	6,997,660	6,344,683
EREX CO LTD	63,300	701,765	828,471
ERG SPA	130,897	2,263,263	2,821,256
ERICSSON LM A SHS	84,761	669,775	843,366
ERICSSON LM B SHS	22,387,846	204,325,188	207,041,889
EROS INTERNATIONAL PLC	161,499	315,680	510,337
ERSTE GROUP BANK AG	667,526	26,443,637	15,706,882
ES CON JAPAN LTD	57,900	402,757	437,933
ESCORTS LTD	138,935	1,273,682	1,913,712
ESHRAQ INVESTMENTS PJSC	2,720,058	637,815	160,694
ESMO CORP	206,689	1,442,188	84,542

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ESPEC CORP	45,200	515,650	746,595
ESPRIT HOLDINGS LTD	4,271,800	971,547	462,981
ESR CAYMAN LTD	2,826,200	6,849,147	6,680,384
ESSENTRA PLC	623,817	3,663,771	2,242,995
ESSILORLUXOTTICA	1,367,884	160,104,777	175,526,726
ESSITY AKTIEBOLAG B	1,418,849	29,622,621	45,855,048
ESSO STE ANONYME FRANCAISE	5,141	474,512	84,879
ESSO THAILAND PCL FOREIGN	2,824,400	791,906	639,676
ESTABLISHMENT LABS HOLDINGS	43,200	761,084	806,976
ESTIA HEALTH LTD	557,920	1,829,172	589,636
ESTUN AUTOMATION CO LTD A	123,800	174,978	209,305
ETERNAL ASIA SUPPLY CHAIN A	189,500	126,852	143,583
ETERNAL MATERIALS CO LTD	2,381,287	1,978,360	2,522,165
ETIHAD ETISALAT CO	3,265,461	20,993,201	23,156,828
ETRON TECHNOLOGY INC	926,000	313,833	245,745
EUGENE INVESTMENT + SECURITI	140,795	588,759	333,011
EUGLENA CO LTD	163,300	1,921,255	1,180,646
EURAZEO SE	352,307	24,154,118	18,051,543
EUROBANK ERGASIAS SERVICES A	5,968,345	5,543,973	2,734,966
EUROCASH SA	186,451	989,646	816,384
EUROFINS SCIENTIFIC	28,023	12,117,576	17,581,395
EURONAV NV	381,861	4,685,345	3,072,977
EURONEXT NV	144,819	11,258,856	14,516,822
EUROPCAR MOBILITY GROUP	249,295	2,717,803	592,471
EUSKALTEL SA	231,503	2,598,011	2,054,100
EUSU HOLDINGS CO LTD	44,664	191,774	225,761
EUTELSAT COMMUNICATIONS	439,103	10,811,493	4,048,996
EUTILEX CO LTD	11,033	776,724	637,481
EVA AIRWAYS CORP	5,536,488	2,500,114	2,101,668
EVA PRECISION INDUSTRIAL HLD	2,422,000	589,716	128,124
EVE ENERGY CO LTD A	168,249	831,744	1,138,055
EVEN CONSTRUTORA E INCORPORA	239,832	549,910	483,088
EVER SUNSHINE LIFESTYLE SERV	1,296,000	1,759,266	2,003,249
EVERBRIGHT JIABAO CO LTD A	247,515	152,375	137,506
EVERBRIGHT SECURITIE CO A	348,718	582,458	791,678
EVERBRIGHT SECURITIES CO L H	606,000	558,297	437,858
EVEREST RE GROUP LTD	341,104	71,293,070	70,335,645
EVERGREEN INTERNATIONAL STOR	1,160,000	591,221	536,664
EVERGREEN MARINE CORP LTD	5,652,091	2,414,223	2,059,346
EVERLIGHT CHEMICAL	945,911	531,069	472,883
EVERLIGHT ELECTRONICS CO LTD	961,000	1,101,615	1,008,082
EVERTEC INC	135,546	3,613,504	3,808,843
EVN AG	88,906	1,374,479	1,499,819
EVOLUTION GAMING GROUP	293,322	4,776,447	17,492,307

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
EVOLUTION MINING LTD	2,480,071	6,226,576	9,681,688
EVONIK INDUSTRIES AG	451,831	13,706,804	11,473,987
EVOTEC SE	317,904	4,327,355	8,640,704
EVRAZ PLC	1,350,276	8,022,737	4,811,671
EVS BROADCAST EQUIPMENT S.A.	33,816	1,455,295	622,120
EXEDY CORP	147,200	3,019,878	2,184,430
EXIDE INDUSTRIES LTD	479,440	1,320,675	941,053
EXOR NV	243,534	10,608,967	13,906,022
EXPERIAN PLC	2,795,107	50,930,258	97,357,997
EXXARO RESOURCES LTD	586,652	5,742,448	4,404,195
EZ TEC EMPREENDIMENTOS E PAR	226,347	1,684,167	1,644,796
EZAKI GLICO CO LTD	119,050	3,975,735	5,671,938
EZDAN HOLDING GROUP	3,621,321	825,985	1,127,871
EZION HOLDINGS LTD WARRANT	2,627,801	0	2
EZRA HOLDINGS LTD	3,815,700	0	3
EZZ STEEL	451,160	407,682	169,674
F SECURE OYJ	219,112	794,177	706,295
F+F CO LTD	15,118	1,188,679	1,157,557
FABEGE AB	602,338	4,130,999	7,040,579
FABRINET	81,681	2,400,489	5,098,528
FAES FARMA SA	672,878	2,822,653	2,735,789
FAGRON	146,262	2,936,052	3,071,927
FAIRFAX FINANCIAL HLDGS LTD	228,408	106,568,722	70,338,596
FALABELLA SA	6,420,239	44,360,371	20,341,971
FALCK RENEWABLES SPA	277,837	1,212,332	1,697,566
FAMILYMART CO LTD	2,106,180	51,018,791	36,097,018
FAMOUS BRANDS LTD	177,944	1,019,240	404,330
FAN COMMUNICATIONS INC	98,200	967,676	407,782
FANCL CORP	161,900	3,977,003	4,794,647
FANGDA CARBON NEW MATERIAL A	338,544	336,519	300,541
FANGDA SPECIAL STEEL TECH A	355,936	284,171	261,137
FANHUA INC SPONSORED ADR	79,029	2,145,444	1,581,370
FANTASIA HOLDINGS GROUP CO	5,765,000	927,609	1,078,550
FANUC CORP	523,429	79,154,888	93,444,339
FAR EAST CONSORTIUM INTERNAT	2,438,767	885,679	796,093
FAR EAST HORIZON LTD	4,946,309	4,473,804	4,199,332
FAR EASTERN DEPARTMENT STORE	2,620,466	2,073,331	2,211,514
FAR EASTERN INTL BANK	4,825,668	1,779,148	1,815,483
FAR EASTERN NEW CENTURY CORP	27,707,569	26,987,364	26,200,789
FAR EASTONE TELECOMM CO LTD	13,597,928	32,001,687	31,339,596
FARADAY TECHNOLOGY CORP	504,000	931,081	792,611
FARFETCH LTD CLASS A	460,200	7,685,882	7,947,654
FARGLORY LAND DEVELOPMENT CO	701,299	954,639	1,124,284
FAST RETAILING CO LTD	156,700	64,305,456	89,617,556

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
FASTIGHETS AB BALDER B SHRS	229,321	7,113,627	8,740,469
FATTAL HOLDINGS 1998 LTD	11,618	1,718,350	500,175
FAUJI CEMENT CO LTD	1,715,000	359,090	172,419
FAUJI FERTILIZER COMPANY LTD	1,559,563	1,036,101	1,021,658
FAURECIA	170,054	7,085,453	6,640,936
FAW CAR COMPANY LIMITED A	202,365	298,851	307,233
FAWAZ ABDULAZIZ ALHOKAIR + C	153,717	942,186	774,527
FCC CO LTD	82,100	1,484,379	1,404,798
FDK CORP	32,399	353,861	258,868
FEDERAL BANK LTD FOREIGN	3,464,380	4,471,765	2,340,061
FEDERAL CORPORATION	1,042,188	487,993	664,073
FEED ONE CO LTD	342,100	692,358	637,365
FEELUX CO LTD	134,232	1,499,891	494,924
FEISHANG ANTHRACITE RESOURCE	10,000	1,450	1,100
FENG TAY ENTERPRISE CO LTD	869,332	5,522,299	4,905,820
FERGUSON PLC	529,695	28,707,588	43,274,976
FERRARI NV	314,330	29,003,638	53,609,086
FERREXPO PLC	696,400	1,553,214	1,492,059
FERROCHINA 12C (DLST)	672,000	0	0
FERROGLOBE PLC	219,000	3,605,254	108,602
FERROVIAL SA	2,565,359	64,426,553	68,286,408
FF GROUP	39,499	0	0
FFP	12,272	958,931	923,481
FGV HOLDINGS BHD	4,493,900	1,628,882	1,043,508
FIAT CHRYSLER AUTOMOBILES NV	2,585,309	23,918,753	25,970,602
FIBERHOME TELECOM TECH CO A	106,246	452,731	434,200
FIBI HOLDINGS	36,458	1,127,227	890,132
FIDEA HOLDINGS CO LTD	424,500	727,502	397,409
FIELDS CORP	29,900	388,643	92,290
FIELMANN AG	57,460	3,627,140	3,865,718
FIH MOBILE LTD	7,039,000	3,127,368	753,810
FILA HOLDINGS CORP	120,081	6,592,166	3,504,047
FILINVEST LAND INC	22,899,000	742,252	454,993
FINABLR PLC	417,996	917,656	56,812
FINANCIAL PRODUCTS GROUP CO	142,000	1,389,795	779,200
FINANCIAL STREET HOLDINGS A	266,217	261,292	249,881
FINCANTIERI SPA	1,106,561	1,114,390	760,614
FINCERA INC	10,065	156,978	6,744
FINECOBANK SPA	1,427,931	13,654,202	19,269,426
FINNAIR OYJ	255,054	766,557	362,377
FINNING INTERNATIONAL INC	382,200	6,149,156	5,194,216
FINOLEX CABLES LTD	86,454	627,551	326,791
FINVOLUTION GROUP	38,234	120,961	69,204
FIRICH ENTERPRISES CO LTD	485,487	694,365	489,527

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
FIRST ABU DHABI BANK PJSC	27,139,269	106,894,812	83,047,353
FIRST BANCORP PUERTO RICO	485,085	3,956,786	2,711,625
FIRST CAPITAL REAL ESTATE IN	511,080	6,898,167	5,208,363
FIRST CAPITAL SECURITIES C A	111,352	109,247	108,926
FIRST FINANCIAL HOLDING CO	84,725,090	56,989,900	65,041,715
FIRST GEN CORPORATION	2,832,700	1,379,928	1,392,898
FIRST INTL BANK ISRAEL	125,021	2,645,162	2,640,615
FIRST MAJESTIC SILVER CORP	442,000	5,109,436	4,381,057
FIRST NATIONAL FINANCIAL COR	38,800	915,355	804,488
FIRST PACIFIC CO	5,426,749	2,759,737	1,036,274
FIRST QUANTUM MINERALS LTD	1,292,100	9,483,945	10,264,700
FIRST RESOURCES LTD	1,225,600	1,359,018	1,221,163
FIRST TRACTOR CO H	938,000	367,556	223,897
FIRST TRACTOR CO LTD A	90,900	105,304	118,731
FIRSTGROUP PLC	3,464,405	8,472,712	2,155,293
FIRSTRAND LTD	10,877,359	38,231,512	23,826,894
FIRSTSERVICE CORP	83,835	4,337,031	8,417,354
FISCHER (GEORG) REG	9,643	11,295,069	8,278,804
FISHER + PAYKEL HEALTHCARE C	4,875,484	46,279,922	111,733,909
FIT HON TENG LTD	2,414,000	1,400,189	934,397
FIVERR INTERNATIONAL LTD	36,200	1,336,893	2,672,284
FIXSTARS CORP	50,800	741,677	604,128
FLETCHER BUILDING LTD	1,937,324	8,516,714	4,614,464
FLEURY SA	573,600	3,773,047	2,568,810
FLEXIGROUP LTD	695,145	1,271,499	538,433
FLEXIUM INTERCONNECT INC	714,653	2,152,381	2,942,952
FLIGHT CENTRE TRAVEL GROUP L	332,656	5,156,102	2,546,854
FLOW TRADERS	66,615	2,619,025	2,382,225
FLSMIDTH + CO A/S	119,095	5,708,765	3,434,147
FLUGHAFEN WIEN AG	23,770	628,610	675,441
FLUGHAFEN ZURICH AG REG	44,053	8,537,292	5,723,101
FLUIDRA SA	147,569	2,221,525	1,949,127
FLUTTER ENTERTAINMENT PLC	700,976	70,284,591	91,975,030
FLYTECH TECHNOLOGY CO LTD	289,523	796,722	695,731
FNAC DARTY SA	40,719	2,250,553	1,681,165
FOCALTECH SYSTEMS CO LTD	619,061	690,539	675,618
FOCUS MEDIA INFORMATION TE A	1,319,592	945,254	1,039,019
FOCUSED PHOTONICS HANGZHOU A	74,700	192,224	176,663
FOMENTO ECONOMICO MEXICA UBD	4,324,711	38,176,903	26,668,458
FOOSUNG CO LTD	119,981	778,965	803,963
FORAN ENERGY GROUP CO LTD A	91,800	203,855	197,249
FORBO HOLDING AG REG	2,272	1,679,488	3,289,730
FORD OTOMOTIV SANAYI AS	227,198	2,350,016	2,349,953
FORFARMERS NV	85,295	958,892	521,147

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
FORMOSA CHEMICALS + FIBRE	29,735,938	99,906,351	76,293,803
FORMOSA INTERNATIONAL HOTELS	149,972	902,316	764,995
FORMOSA PETROCHEMICAL CORP	10,158,780	36,342,309	30,471,692
FORMOSA PLASTICS CORP	34,966,040	115,812,803	103,815,523
FORMOSA TAFFETA CO.	2,428,475	2,626,342	2,996,034
FORMOSAN RUBBER GROUP INC	730,091	499,174	447,886
FORMULA SYSTEMS (1985) LTD	18,424	839,708	1,426,670
FORTESCUE METALS GROUP LTD	3,734,176	19,257,065	35,608,071
FORTIS HEALTHCARE LTD	1,151,167	2,349,906	1,859,309
FORTIS INC	1,085,393	39,689,532	41,144,523
FORTUM OYJ	1,025,436	27,442,156	19,469,801
FORUS SA	194,788	552,197	236,200
FOSHAN HAITIAN FLAVOURING A	103,885	1,623,446	1,826,846
FOSHAN NATIONSTAR OPTOELEC A	102,000	168,998	167,258
FOSTER ELECTRIC CO LTD	45,700	758,328	444,779
FOSUN INTERNATIONAL LTD	5,338,527	7,209,359	6,791,590
FOUNDER SECURITIES CO LTD A	734,677	737,967	735,290
FOURLIS SA	97,366	503,365	464,766
FOXCONN INDUSTRIAL INTERNE A	362,237	742,970	775,772
FOXCONN TECHNOLOGY CO LTD	8,121,591	17,740,053	15,552,539
FOXSEMICON INTEGRATED TECH	177,200	914,441	1,081,055
FP CORP	54,236	2,728,676	4,328,423
FRANCE BED HOLDINGS CO LTD	49,900	408,549	390,375
FRANCO NEVADA CORP	1,653,038	128,601,129	230,175,225
FRANK S INTERNATIONAL NV	342,839	1,409,746	764,531
FRAPORT AG FRANKFURT AIRPORT	339,803	26,854,558	14,815,643
FRASER + NEAVE HOLDINGS BHD	241,000	2,017,910	1,826,763
FRASERS GROUP PLC	447,071	1,680,903	1,688,138
FRASERS PROPERTY LTD	831,300	1,179,008	750,825
FREEDOM FOODS GROUP LTD	299,247	1,070,242	620,155
FREENET AG	312,700	5,991,721	5,029,313
FREIGHTWAYS LTD	354,885	1,185,654	1,642,607
FRESENIUS MEDICAL CARE AG +	489,041	30,737,661	41,909,027
FRESENIUS SE + CO KGAA	951,435	42,423,192	47,146,820
FRESNILLO PLC	434,200	5,333,239	4,514,092
FRONTKEN CORP BHD	2,248,700	960,453	1,327,704
FRONTLINE LTD	205,113	1,498,960	1,422,417
FSP TECHNOLOGY INC	269,400	211,195	217,770
FU SHOU YUAN INTERNATIONAL	2,241,025	1,773,893	2,050,057
FUAN PHARMACEUTICAL GROUP A	196,600	184,079	147,573
FUBON FINANCIAL HOLDING CO	58,266,165	87,312,995	86,694,729
FUCHS PETROLUB SE	79,853	3,014,752	2,690,607
FUCHS PETROLUB SE PREF	162,886	6,603,077	6,538,469
FUDO TETRA CORP	28,510	389,764	375,253

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
FUFENG GROUP LTD	3,643,999	1,756,566	1,161,310
FUGRO NV CVA	192,899	3,506,421	750,925
FUJI CO LTD	46,104	855,575	801,270
FUJI CORP/AICHI	193,900	2,074,045	3,389,678
FUJI ELECTRIC CO LTD	295,900	6,822,921	8,074,613
FUJI KYUKO CO LTD	54,599	1,216,294	1,700,446
FUJI MEDIA HOLDINGS INC	108,800	1,485,395	1,046,804
FUJI OIL CO LTD	104,200	659,605	165,159
FUJI OIL HOLDINGS INC	104,600	2,860,651	2,687,595
FUJI PHARMA CO LTD	42,700	537,088	461,097
FUJI SEAL INTERNATIONAL INC	97,700	3,003,269	1,899,030
FUJI SOFT INC	50,300	1,312,984	1,988,502
FUJIAN AONONG BIOLOGICAL T A	71,600	212,302	236,538
FUJIAN FUNENG CO LTD A	67,435	75,105	69,207
FUJIAN LONGKING CO LTD A	95,463	124,403	118,754
FUJIAN LONGMA ENVIRONMENTA A	63,680	140,612	219,375
FUJIAN STAR NET COMMUNICAT A	97,400	438,333	486,442
FUJIAN SUNNER DEVELOPMENT A	114,112	415,946	467,798
FUJIBO HOLDINGS INC	25,800	743,842	778,412
FUJICCO CO LTD	50,400	782,750	936,664
FUJIFILM HOLDINGS CORP	3,050,759	128,875,161	130,361,023
FUJIKURA KASEI CO LTD	56,200	331,832	271,923
FUJIKURA LTD	618,600	2,713,910	1,777,504
FUJIMI INC	46,500	854,075	1,428,813
FUJIMORI KOGYO CO LTD	35,800	750,649	1,246,040
FUJIO FOOD GROUP INC	56,900	782,278	755,256
FUJITA KANKO INC	17,499	608,185	275,416
FUJITEC CO LTD	184,400	1,718,729	3,382,561
FUJITSU FRONTECH LTD	24,500	254,055	245,942
FUJITSU GENERAL LTD	132,200	2,461,958	2,704,411
FUJITSU LTD	1,680,769	133,098,894	196,610,324
FUJIYA CO LTD	24,600	435,824	508,486
FUKUDA CORP	12,300	451,373	558,080
FUKUI BANK LTD/THE	53,300	1,289,949	827,031
FUKUI COMPUTER HOLDINGS INC	15,700	382,881	398,594
FUKUOKA FINANCIAL GROUP INC	385,738	8,247,268	6,081,850
FUKUSHIMA GALILEI CO LTD	26,300	531,624	832,502
FUKUYAMA TRANSPORTING CO LTD	75,500	2,279,107	2,641,818
FULGENT SUN INTERNATIONAL	243,000	719,920	860,665
FULLCAST HOLDINGS CO LTD	46,800	852,616	619,460
FULLSHARE HOLDINGS LTD	17,945,000	264,217	326,464
FUNAI ELECTRIC CO LTD	34,100	323,177	158,355
FUNAI SOKEN HOLDINGS INC	73,700	1,014,820	1,656,602
FUNDING CIRCLE HOLDINGS	358,606	1,558,787	303,076

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
FURUKAWA CO LTD	76,300	1,141,203	774,422
FURUKAWA ELECTRIC CO LTD	143,142	4,536,480	3,461,626
FURUNO ELECTRIC CO LTD	56,065	477,676	505,643
FUSHENG PRECISION CO LTD	278,000	1,420,377	1,535,834
FUSO CHEMICAL CO LTD	36,900	811,730	1,344,181
FUSO PHARMACEUTICAL INDUST	16,600	446,864	384,669
FUTABA CORP	83,900	1,344,866	763,682
FUTABA INDUSTRIAL CO LTD	106,900	773,408	444,901
FUTU HOLDINGS LTD ADR	77,312	1,395,517	1,829,975
FUTURE CONSUMER LTD	1,091,985	532,931	240,080
FUTURE CORP	42,700	372,989	680,762
FUTURE PLC	232,812	3,758,152	3,670,575
FUTURE RETAIL LTD	502,859	3,016,250	858,148
FUYAO GLASS INDUSTRY GROUP A	178,705	533,100	527,215
FUYAO GLASS INDUSTRY GROUP H	1,216,800	3,453,642	2,898,171
FUYO GENERAL LEASE CO LTD	44,800	2,734,359	2,487,389
G 7 HOLDINGS INC	21,200	483,829	460,019
G BITS NETWORK TECHNOLOGY A	5,955	338,808	462,158
G RESOURCES GROUP LTD	53,889,600	2,072,943	264,218
G TEKT CORP	48,000	589,024	463,605
G TREEBNT CO LTD	48,276	1,752,365	985,306
G. WILLI FOOD INTERNATIONAL	21,689	155,994	338,132
G.U.D. HOLDINGS LTD	191,315	1,319,568	1,516,101
G4S PLC	3,626,163	11,806,706	5,105,518
G8 EDUCATION LTD	1,953,708	4,115,484	1,190,438
GAIL INDIA LTD	2,534,345	5,167,788	3,428,748
GAKKEN HOLDINGS CO LTD	46,400	335,542	622,767
GALAPAGOS NV	111,251	14,469,055	21,872,771
GALAXY ENTERTAINMENT GROUP L	5,032,000	22,030,572	34,248,076
GALAXY RESOURCES LTD	964,763	1,282,722	514,785
GALENICA AG	112,031	5,761,697	8,016,149
GALLIFORD TRY HOLDINGS PLC	264,987	2,309,165	387,467
GALP ENERGIA SGPS SA	1,422,021	21,806,340	16,442,587
GAM HOLDING AG	372,846	3,116,035	855,435
GAMES WORKSHOP GROUP PLC	79,115	4,273,954	7,835,027
GAMEVIL INC	11,832	665,017	279,361
GAMUDA BHD	5,222,633	4,838,080	4,436,496
GAN LTD	1,387	36,055	35,299
GANFENG LITHIUM CO LTD A	99,896	631,578	756,482
GANFENG LITHIUM CO LTD H	339,400	1,163,339	1,569,908
GANSU QILIANSHAN CEMENT GR A	523,850	930,804	1,203,342
GANSU SHANGFENG CEMENT A	671,203	1,863,503	2,240,158
GARMIN LTD	1,056,515	74,001,020	103,010,213
GARRETT MOTION INC	172,515	1,395,243	955,733

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
GASLOG LTD	92,389	1,217,995	259,613
GATEWAY DISTRI PARKS LTD	151,035	317,630	167,531
GAZIT GLOBE LTD	205,838	2,048,794	970,028
GAZTRANSPORT ET TECHNIGA SA	52,513	3,729,984	4,004,740
GCA CORP	57,100	470,966	326,558
GCI SCIENCE + TECHNOLOGY A	94,400	179,091	175,480
GCL NEW ENERGY HOLDINGS LTD	2,212,000	135,354	31,394
GCL POLY ENERGY HOLDINGS LTD	31,599,000	1,038,201	892,875
GCL SYSTEM INTEGRATION TEC A	441,414	227,514	162,860
GD POWER DEVELOPMENT CO A	1,751,478	502,986	458,042
GDS HOLDINGS LTD ADR	199,556	10,511,423	15,896,631
GE POWER INDIA LTD	38,506	375,284	229,010
GEA GROUP AG	388,584	11,285,681	12,285,733
GEBERIT AG REG	311,732	122,336,906	156,005,820
GECOSS CORP	25,332	195,293	217,430
GEELY AUTOMOBILE HOLDINGS LT	12,517,000	19,890,845	19,703,037
GEK TERNA HOLDING REAL ESTAT	124,941	663,380	848,981
GEM CO LTD A	370,792	246,663	260,505
GEMDALE CORP A	402,769	752,424	780,019
GEMDALE PROPERTIES AND INVES	12,794,000	921,723	2,360,562
GEMTEK TECHNOLOGY CORP	686,000	606,505	560,342
GEMVAX + Kael CO LTD	86,264	2,130,537	1,384,125
GENER S.A.	6,565,946	1,764,981	944,165
GENERAL INTERFACE SOLUTION	472,000	2,073,738	1,799,725
GENERTEC UNIVERSAL MEDICAL G	1,620,500	1,166,080	978,516
GENESIS ENERGY LTD	1,235,796	2,176,864	2,410,497
GENEXINE CO LTD	39,566	2,088,355	3,088,704
GENFIT	86,787	2,971,715	490,786
GENIMOUS TECHNOLOGY CO LT A	118,399	136,537	142,934
GENIUS ELECTRONIC OPTICAL CO	196,357	2,303,061	4,658,608
GENKY DRUGSTORES CO LTD	20,700	734,868	682,101
GENMAB A/S	138,159	21,271,891	46,219,905
GENOMMA LAB INTERNACIONAL B	1,776,300	1,741,289	1,804,205
GENSCRIPT BIOTECH CORP	2,028,000	4,802,653	4,170,896
ENTERA SAB DE CV	2,410,200	1,942,278	1,148,410
GENTING BHD	18,822,800	26,891,086	18,010,147
GENTING MALAYSIA BHD	25,839,500	20,432,255	15,256,461
GENTING PLANTATIONS BHD	944,100	2,354,916	2,165,812
GENTING SINGAPORE LTD	13,848,733	10,986,468	7,544,559
GENUS PLC	156,599	3,364,266	6,834,202
GENWORTH MI CANADA INC	88,600	2,546,150	2,160,357
GENWORTH MORTGAGE INSURANCE	473,647	1,395,938	675,039
GEO HOLDINGS CORP	61,200	650,769	767,517
GEOPARK LTD	81,860	823,763	801,409

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
GEORGIA CAPITAL PLC	88,912	1,076,566	510,848
GEOX SPA	172,149	799,855	139,405
GERDAU SA PREF	2,483,342	8,950,092	7,240,895
GEROVA FINANCIAL GROUP LTD	43,540	0	0
GERRESHEIMER AG	73,651	4,883,295	6,791,404
GESTAMP AUTOMOCION SA	372,176	2,431,375	936,341
GETAC TECHNOLOGY CORP	818,000	1,055,898	1,204,633
GETBACK SA	63,066	0	0
GETINGE AB B SHS	522,437	5,907,998	9,695,476
GETLINK SE	3,780,297	54,701,380	54,516,595
GF SECURITIES CO LTD A	544,490	1,070,674	1,086,809
GF SECURITIES CO LTD H	3,704,400	4,937,183	3,967,063
GFH FINANCIAL GROUP BSC	6,694,085	1,603,260	1,020,565
GFPT PUBLIC CO LTD FOR	1,275,600	630,911	536,530
GIANT MANUFACTURING	2,492,111	14,121,993	22,298,880
GIBSON ENERGY INC	349,600	6,525,989	5,423,677
GIGABYTE TECHNOLOGY CO LTD	1,160,000	1,640,147	2,575,200
GIGADEVICE SEMICONDUCTOR B A	40,812	1,088,631	1,361,015
GIGAMEDIA LTD	13,433	35,463	42,314
GIGASOLAR MATERIALS CORP	57,000	450,747	173,872
GIGASTORAGE CORP	605,798	378,968	180,274
GIKEN LTD	33,800	777,085	1,591,547
GILAT SATELLITE NETWORKS LTD	62,622	397,991	407,112
GILDAN ACTIVEWEAR INC	455,600	8,407,754	7,034,705
GILLETTE INDIA LTD	18,370	1,833,632	1,212,262
GIMV NV	44,321	2,484,861	2,548,692
GINKO INTERNATIONAL CO LTD	109,000	973,960	541,223
GIORDANO INTERNATIONAL LTD	2,746,000	1,248,491	414,533
GIVAUDAN REG	78,626	184,394,857	292,747,114
GJENSIDIGE FORSIKRING ASA	767,948	13,138,996	14,098,019
GL EVENTS	34,227	761,037	472,837
GLANBIA PLC	466,764	7,712,794	5,284,400
GLAXOSMITHKLINE PLC	21,728,240	458,383,608	439,384,987
GLENCORE PLC	26,840,601	107,718,173	56,783,851
GLENMARK PHARMACEUTICALS LTD	324,671	2,035,936	1,936,319
GLOBAL BRANDS MANUFACTURE	573,000	273,674	272,862
GLOBAL DOMINION ACCESS SA	287,359	1,582,037	919,830
GLOBAL INDEMNITY LTD	17,966	480,113	430,106
GLOBAL MEDIACOM TBK PT	17,239,600	512,566	223,264
GLOBAL MIXED MODE TECHNOLOGY	158,000	548,808	846,108
GLOBAL POWER SYNERGY NVDR	17,700	45,653	42,092
GLOBAL POWER SYNERGY PCL F	1,612,680	3,627,921	3,835,056
GLOBAL SHIP LEASE INC CL A	12,000	114,240	50,880
GLOBAL TOP E COMMERCE CO A	1,012,500	773,190	928,899

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
GLOBAL UNICHIP CORP	206,000	1,408,323	1,762,951
GLOBALWAFERS CO LTD	500,000	5,838,767	6,829,467
GLOBANT SA	122,117	12,229,047	18,299,232
GLOBE TELECOM INC	68,355	2,609,329	2,839,836
GLOBE UNION INDUSTRIAL CORP	544,050	291,506	243,402
GLOBERIDE INC	17,900	471,680	335,485
GLODON CO LTD A	103,284	783,904	1,017,641
GLORIA MATERIAL TECHNOLOGY	912,356	617,782	488,577
GLORY LTD	121,200	3,213,295	2,752,375
GLORY SUN LAND GROUP LTD	3,319,781	798,508	194,892
GMO INTERNET INC	142,200	2,367,239	3,923,895
GMO PAYMENT GATEWAY INC	92,800	4,433,389	9,668,369
GMR INFRASTRUCTURE LTD	3,485,000	870,488	925,441
GN STORE NORD A/S	303,775	14,399,995	16,177,651
GNCO CO LTD	160,400	307,888	154,686
GO AHEAD GROUP PLC	104,695	2,653,527	1,076,285
GOCO GROUP PLC	694,474	734,935	827,201
GODO STEEL LTD	21,190	518,951	359,239
GODREJ AGROVET LTD	108,761	765,709	620,555
GODREJ CONSUMER PRODUCTS LTD	3,135,083	29,556,027	28,683,547
GODREJ INDUSTRIES LTD	165,561	1,031,681	915,474
GODREJ PROPERTIES LTD	141,834	1,990,364	1,628,850
GOERTEK INC A	295,269	951,589	1,225,470
GOL LINHAS AEREAS INT SA PRE	165,710	555,893	559,831
GOLAR LNG LTD	184,200	3,783,716	1,333,608
GOLD CIRCUIT ELECTRONICS LTD	819,000	324,363	932,685
GOLD FIELDS LTD	7,424,352	34,093,536	69,316,741
GOLD FIELDS LTD SPONS ADR	493,891	4,079,257	4,642,575
GOLD ROAD RESOURCES LTD	2,018,192	1,115,907	2,320,507
GOLDCARD SMART GROUP CO LTD	70,760	155,120	150,540
GOLDCREST CO LTD	37,870	796,878	517,757
GOLDEN AGRI RESOURCES LTD	14,945,363	4,136,201	1,585,544
GOLDEN OCEAN GROUP LTD	204,940	3,534,425	795,167
GOLDENMAX INTERNATIONAL TE A	120,200	156,684	154,793
GOLDSUN BUILDING MATERIALS C	3,093,000	970,450	1,582,955
GOLDWIN INC	83,000	5,727,098	5,416,138
GOLFZON CO LTD	6,873	364,337	400,546
GOME RETAIL HOLDINGS LTD	25,838,874	2,587,602	4,300,673
GOODBABY INTERNATIONAL HOLDI	1,955,000	885,331	219,452
GOSUNCN TECHNOLOGY GROUP C A	165,091	145,440	141,425
GOTION HIGH TECH CO LTD A	103,823	341,280	393,917
GOURMET MASTER CO LTD	172,407	975,029	596,028
GRAFTON GROUP PLC UTS	533,708	3,588,118	4,352,370
GRAINCORP LTD A	557,969	1,686,058	1,582,746

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
GRAINGER PLC	1,494,770	3,696,240	5,282,245
GRAN TIERRA ENERGY INC	423,200	2,025,151	146,512
GRAND BAOXIN AUTO GROUP LTD	1,592,668	496,985	240,428
GRAND CITY PROPERTIES	262,823	6,187,103	6,063,196
GRAND KOREA LEISURE CO LTD	44,297	791,478	473,223
GRAND PACIFIC PETROCHEMICAL	2,041,000	1,214,779	1,003,050
GRANDBLUE ENVIRONMENT CO A	126,500	346,461	391,261
GRANDJOY HOLDINGS GROUP A	331,932	262,614	238,834
GRANDVISION NV	116,464	3,143,619	3,315,946
GRAPE KING BIO LTD	253,000	1,498,079	1,629,243
GRAPHITE INDIA LTD	160,453	1,065,158	388,787
GRASIM INDUSTRIES LTD	758,787	9,415,085	6,227,774
GREAT BASIN GOLD LTD	1,664,600	0	1
GREAT CANADIAN GAMING CORP	126,600	2,097,085	2,512,480
GREAT EASTERN SHIPPING CO F	112,905	461,610	317,389
GREAT WALL ENTERPRISES	1,538,712	1,581,917	2,224,273
GREAT WALL MOTOR CO LTD A	290,925	335,666	317,488
GREAT WALL MOTOR COMPANY H	7,427,080	5,336,413	4,638,062
GREAT WEST LIFECO INC	2,350,074	55,152,756	41,065,904
GREATEK ELECTRONICS INC	689,000	860,286	1,080,047
GREATTOWN HOLDINGS LTD A	202,466	192,745	170,293
GREATVIEW ASEPTIC PACKAGING	2,019,000	699,260	713,773
GREE ELECTRIC APPLIANCES I A	537,887	4,356,077	4,301,362
GREE INC	219,900	933,302	941,686
GREE REAL ESTATE CO LTD A	340,240	329,863	558,401
GREEN CROSS CELL CORP	13,946	430,334	469,562
GREEN CROSS CORP	11,743	1,416,890	1,444,872
GREEN CROSS HOLDINGS CORP	59,678	1,015,193	1,190,732
GREENCORE GROUP PLC	1,061,412	2,289,640	1,649,844
GREENLAND HOLDINGS CORP LT A	578,986	491,287	505,808
GREENLAND HONG KONG HOLDINGS	1,903,000	718,286	672,764
GREENLIGHT CAPITAL RE LTD A	63,940	841,780	416,889
GREENTOWN CHINA HOLDINGS	1,796,500	1,632,902	1,794,078
GREENTOWN CHINA HOLDINGS RHTS	33,896	0	20,730
GREENTOWN SERVICE GROUP CO L	1,984,000	1,715,849	2,337,144
GREGGS PLC	238,157	2,959,676	4,767,124
GRENDENE SA	634,500	1,427,309	847,032
GRENKE AG	60,973	6,663,932	4,697,853
GRG BANKING EQUIPMENT CO A	221,954	338,851	406,000
GRIEG SEAFOOD ASA	130,398	1,246,194	1,330,744
GRIFOLS SA	1,030,793	24,256,801	31,293,582
GRIFOLS SA B	173,740	4,277,575	3,192,426
GRIFOLS SA ADR	170,889	4,104,810	3,117,015
GRINDROD LTD	1,005,981	376,502	177,747

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
GRINM ADVANCED MATERIAL CO A	3,425,733	6,340,231	6,765,170
GROUP LEASE PUBLIC CO L NVDR	1,245,800	231,466	152,362
GROUP LEASE PUBLIC CO LTD FO	591,200	344,910	72,304
GROUPE BRUXELLES LAMBERT SA	670,826	65,273,734	56,266,768
GROUPE CRIT	2,270	207,448	133,851
GRUMA S.A.B. B	512,940	5,349,556	5,506,330
GRUPA AZOTY SA	111,154	979,790	861,267
GRUPA LOTOS SA	230,096	4,861,583	3,490,137
GRUPO AEROPORT DEL PACIFIC B	1,002,005	9,332,438	7,166,719
GRUPO AEROPORT DEL SURESTE B	386,920	6,125,687	4,297,530
GRUPO AEROPORTUARIO DEL CENT	792,200	4,774,763	3,663,244
GRUPO ARGOS SA	715,488	3,683,086	1,894,304
GRUPO AVAL ACCIONES SA PF	9,820,279	3,932,540	2,179,786
GRUPO BIMBO SAB SERIES A	5,371,199	10,534,316	8,942,313
GRUPO CARSO SAB DE CV SER A1	1,069,400	3,333,902	2,074,285
GRUPO CEMENTOS CHIHUAHUA	385,010	2,072,812	1,611,220
GRUPO COMERCIAL CHEDRAUI SA	1,087,900	1,071,233	1,269,774
GRUPO DE INV SURAMERICANA	593,197	6,173,506	2,957,038
GRUPO DE INV SURAMERICANA PF	183,479	1,887,341	779,200
GRUPO ELEKTRA SAB DE CV	151,049	9,618,905	8,238,763
GRUPO ENERGIA BOGOTA SA ESP	6,301,310	4,178,650	3,934,864
GRUPO FINANCIERO BANORTE O	6,830,200	36,553,377	23,564,441
GRUPO FINANCIERO INBURSA O	5,139,653	7,073,795	3,547,733
GRUPO HERDEZ SAB SERIES	499,665	1,126,527	734,566
GRUPO LALA SAB DE CV	1,376,394	1,791,618	723,728
GRUPO MEXICO SAB DE CV SER B	702,052	1,620,614	1,623,345
GRUPO ROTOPLAS SAB DE CV	400,319	424,064	253,112
GRUPO SBF SA	140,300	1,134,914	835,800
GRUPO TELEVISA SAB SER CPO	5,093,115	12,834,329	5,318,599
GS ENGINEERING + CONSTRUCT	135,549	5,890,024	2,766,536
GS HOLDINGS	120,837	4,831,926	3,641,635
GS HOME SHOPPING INC	7,050	780,546	640,030
GS RETAIL CO LTD	62,577	2,450,112	1,896,273
GS YUASA CORP	243,100	6,670,487	4,294,838
GSX TECHEDU INC ADR	104,264	2,399,486	6,254,797
GT CAPITAL HOLDINGS INC	235,301	4,118,712	2,144,982
GUANGDONG BAOLIHUA NEW A	193,041	141,263	128,801
GUANGDONG DONGFANG PRECISI A	254,800	167,986	166,046
GUANGDONG ELECTRIC POWER B	1,853,940	656,784	478,408
GUANGDONG ELLINGTON ELECTR A	60,474	89,038	89,162
GUANGDONG GOLDEN DRAGON DE A	79,762	143,341	140,940
GUANGDONG HAID GROUP CO A	143,135	860,415	962,920
GUANGDONG HEC TECHNOLOGY H A	268,178	270,320	261,957
GUANGDONG HONGDA BLASTING A	118,700	364,423	585,605

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
GUANGDONG HUATIE TONGDA HI A	263,600	201,271	207,926
GUANGDONG INVESTMENT LTD	10,991,361	20,590,624	18,861,499
GUANGDONG MARUBI BIOTECHNO A	12,900	142,702	156,880
GUANGDONG PROVINCIAL EXPR B	815,800	534,838	475,768
GUANGDONG SHENGLU TELECOMM A	133,100	167,177	134,528
GUANGDONG SHIRONGZHAOYE A	133,500	145,381	123,421
GUANGDONG SOUTH NEW MEDIA A	18,900	473,876	597,556
GUANGDONG TAPAI GROUP CO A	197,000	305,069	335,012
GUANGDONG XINBAO ELECTRICA A	134,593	391,126	694,075
GUANGDONG ZHONGSHENG PHA A	134,600	220,816	326,506
GUANGHUI ENERGY CO LTD A	595,168	240,966	227,160
GUANGSHEN RAILWAY CO LTD A	503,868	177,681	160,261
GUANGSHEN RAILWAY CO LTD H	3,354,711	1,188,209	627,619
GUANGXI GUIDONG ELECTRIC A	136,700	82,432	74,204
GUANGXI GUIGUAN ELECTRIC A	300,911	190,228	180,357
GUANGXI LIUGONG MACHINERY A	131,736	119,905	117,507
GUANGXI LIUZHOU PHARMACEUT A	59,816	210,559	194,057
GUANGXI WUZHOU COMMUNICATI A	185,200	99,085	91,630
GUANGXI WUZHOU ZHONGHENG G A	308,289	139,424	139,892
GUANGZHOU AUTOMOBILE GROUP A	280,022	404,181	356,257
GUANGZHOU AUTOMOBILE GROUP H	9,640,904	9,880,009	6,953,487
GUANGZHOU BAIYUN INTERNATI A	184,745	433,786	398,003
GUANGZHOU BAIYUNSHAN PHAR A	125,391	582,812	573,061
GUANGZHOU BAIYUNSHAN PHARM H	516,000	1,766,637	1,302,242
GUANGZHOU HAIGE COMMUNICAT A	215,230	369,630	393,700
GUANGZHOU KINGMED DIAGNOST A	76,800	666,861	971,657
GUANGZHOU R+F PROPERTIES H	2,655,395	4,263,951	3,090,358
GUANGZHOU RESTAURANT GROUP A	66,700	301,617	306,623
GUANGZHOU SHANGPIN HOME CO A	29,300	306,264	248,844
GUANGZHOU SHIYUAN ELECTRON A	20,791	266,754	292,492
GUANGZHOU TINCI MATERIALS A	52,077	196,485	248,750
GUANGZHOU WONDFO BIOTECH C A	145,600	1,621,251	2,140,541
GUANGZHOU YUEXIU FINANCIAL A	105,176	155,640	173,358
GUANGZHOU ZHUJIANG BREWERY A	147,634	170,173	209,114
GUARARAPES CONFECOES SA	204,400	543,058	657,409
GUBRE FABRIKALARI TAS	194,071	254,758	783,673
GUERBET	12,490	600,411	472,047
GUIZHOU BAILING GROUP PHAR A	112,523	138,616	132,023
GUIZHOU BROADCASTING + TV A	125,200	156,924	126,189
GUIZHOU GAS GROUP CORP LTD A	110,600	196,439	153,843
GUIZHOU PANJIANG REFINED A	146,146	111,502	110,527
GUIZHOU SPACE APPLIANCE CO A	70,800	283,944	366,105
GUIZHOU XINBANG PHARMACEUT A	147,251	101,238	94,919
GUJARAT GAS LTD	392,517	835,323	1,654,468

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
GUJARAT PIAVAV PORT FOREIGN	513,420	907,519	515,774
GUJARAT STATE PETRONET LTD	319,739	801,298	934,820
GULF BANK	4,139,158	3,983,652	2,852,272
GULF ENERGY DEVELOPM FOREIGN	9,050,500	7,829,867	11,054,158
GULF ENERGY DEVELOPMENT NVDR	51,500	46,477	62,901
GULF INTERNATIONAL SERVICES	2,149,524	591,797	877,284
GUN EI CHEMICAL INDUSTRY CO	11,700	280,247	284,244
GUNGHO ONLINE ENTERTAINMENT	79,570	1,975,983	1,417,561
GUNKUL ENGINEERING FORGN	9,244,543	965,497	777,669
GUNMA BANK LTD/THE	973,400	4,675,832	3,085,719
GUNOSY INC	33,200	666,102	281,885
GUNZE LTD	38,700	1,367,055	1,434,861
GUOCHENG MINING CO LTD A	147,600	288,127	386,626
GUOCOLAND LTD	387,600	599,102	405,646
GUOMAI TECHNOLOGIES INC A	166,400	220,152	208,173
GUORUI PROPERTIES LTD	1,805,000	505,690	270,152
GUOSEN SECURITIES CO LTD A	392,123	635,319	626,368
GUOSHENG FINANCIAL HOLDING A	172,552	246,786	223,188
GUOTAI JUNAN INTERNATIONAL	5,336,000	1,280,931	695,361
GUOTAI JUNAN SECURITIES CO A	3,420,731	8,073,247	8,346,195
GUOTAI JUNAN SECURITIES CO H	1,789,231	3,109,522	2,474,767
GUOYUAN SECURITIES CO LTD A	299,899	352,692	356,109
GURUNAVI INC	58,500	639,635	400,718
GVC HOLDINGS PLC	1,564,378	17,363,322	14,315,401
GWA GROUP LTD	611,284	1,235,329	1,165,807
H I S CO LTD	72,500	1,894,224	1,072,531
H LUNDBECK A/S	557,688	24,622,070	20,959,680
H.S. INDUSTRIES CO LTD	108,135	933,596	620,303
H.U. GROUP HOLDINGS INC	122,900	3,874,734	2,894,646
H2O RETAILING CORP	204,600	2,765,225	1,365,454
HABIB BANK LTD	1,584,800	1,867,159	914,351
HACHIJUNI BANK LTD/THE	1,061,176	5,391,822	4,022,997
HACI OMER SABANCI HOLDING	4,569,297	7,154,500	6,159,277
HAICHANG OCEAN PARK HOLDINGS	3,744,000	649,689	222,212
HAIDILAO INTERNATIONAL HOLDI	842,000	3,272,768	3,552,491
HAIER ELECTRONICS GROUP CO	3,832,690	9,790,193	11,596,305
HAIER SMART HOME CO LTD A	579,612	1,352,544	1,450,239
HAIL CEMENT	113,028	289,569	367,620
HAINAN POLY PHARM CO LTD A	46,879	401,470	490,056
HAINAN RUIZE NEW BUILDING A	190,200	181,766	179,066
HAINAN STRAIT SHIPPING CO A	225,850	255,775	351,190
HAISCO PHARMACEUTICAL GROU A	56,129	182,703	211,135
HAITIAN INTERNATIONAL HLDGS	1,356,056	2,884,738	2,753,946
HAITONG INTERNATIONAL SECURI	5,795,756	2,385,329	1,383,423

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
HAITONG SECURITIES CO LTD A	721,973	1,331,125	1,283,898
HAITONG SECURITIES CO LTD H	8,117,200	9,788,970	6,556,222
HAKIM UNIQUE INTERNET CO L A	112,000	141,287	95,786
HAKUHODO DY HOLDINGS INC	549,800	5,727,983	6,528,190
HAKUTO CO LTD	27,100	275,489	246,923
HALFORDS GROUP PLC	475,999	2,154,686	893,980
HALLA HOLDINGS CORP	17,728	946,725	393,513
HALMA PLC	897,481	15,963,881	25,538,614
HALOWS CO LTD	19,800	409,054	618,492
HAMAKYOREX CO LTD	36,300	719,787	1,044,737
HAMAMATSU PHOTONICS KK	1,165,303	40,951,302	50,442,277
HAMBURGER HAFEN UND LOGISTIK	57,047	1,374,928	966,211
HAN S LASER TECHNOLOGY IN A	85,085	414,168	432,395
HANA FINANCIAL GROUP	1,036,812	37,634,874	23,272,997
HANA MICROELECTRONICS FOREIG	1,394,800	1,475,210	1,252,308
HANA TOUR SERVICE INC	20,427	869,136	651,266
HANALL BIOPHARMA CO LTD	87,977	1,631,320	2,055,247
HANCOM INC	34,613	532,079	446,025
HAND ENTERPRISE SOLUTIONS A	146,000	237,464	198,544
HANDSOME CO LTD	28,209	620,731	820,813
HANG LUNG GROUP LTD	2,053,000	5,605,086	4,773,279
HANG LUNG PROPERTIES LTD	4,779,500	13,020,457	11,322,132
HANG SENG BANK LTD	6,406,722	145,823,594	107,544,018
HANG ZHOU GREAT STAR INDUS A	92,753	149,653	155,766
HANGJIN TECHNOLOGY CO LTD A	117,100	250,606	369,636
HANGXIAO STEEL STRUCTURE A	355,372	164,873	182,355
HANGZHOU BINJIANG REAL EST A	256,604	151,839	154,889
HANGZHOU CENTURY CO LTD A	78,099	138,142	149,373
HANGZHOU FIRST APPLIED MAT A	36,276	196,956	255,939
HANGZHOU HIKVISION DIGITAL A	4,293,766	18,443,008	18,421,537
HANGZHOU LIANLUO INTERACT A	4,882,176	1,447,779	993,813
HANGZHOU OXYGEN PLANT GROU A	54,498	101,751	109,395
HANGZHOU ROBAM APPLIANCES A	84,261	359,824	370,557
HANGZHOU SHUNWANG TECH A	64,156	210,830	230,356
HANGZHOU SILAN MICROELECTR A	216,600	477,671	449,483
HANGZHOU STEAM TURBINE CO B	647,244	679,171	667,249
HANGZHOU TIGERMED CONSULTI A	126,847	1,456,538	1,826,829
HANGZHOU ZHONGHENG ELECTRI A	93,000	165,946	178,136
HANIL CEMENT CO LTD/NEW	5,582	491,174	378,677
HANIL HOLDINGS CO LTD	5,008	241,709	191,102
HANJIN KAL CORP	70,831	1,543,737	4,722,656
HANJIN TRANSPORTATION CO	27,963	835,381	1,024,043
HANKOOK SHELL OIL CO LTD	1,423	569,808	273,870
HANKOOK TECHNOLOGY GROUP CO	57,121	1,012,754	614,970

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
HANKOOK TIRE + TECHNOLOGY CO	176,114	4,966,521	3,609,103
HANKYU HANSHIN HOLDINGS INC	1,923,966	66,944,585	65,003,069
HANMI PHARM CO LTD	16,727	4,689,581	3,386,145
HANMI SCIENCE CO LTD	32,393	2,303,985	896,776
HANNOVER RUECK SE	513,410	67,894,395	88,456,033
HANNSTAR BOARD CORP	700,970	869,778	921,813
HANNSTAR DISPLAY CORP	5,607,545	1,106,461	1,231,571
HANNSTOUCH SOLUTION INCORPOR	1,228,687	521,831	418,523
HANON SYSTEMS	374,410	2,339,932	2,820,098
HANSA BIOPHARMA AB	80,713	1,747,829	1,503,084
HANSAE CO LTD	39,153	625,137	343,405
HANSOH PHARMACEUTICAL GROUP	5,468,000	23,511,181	25,751,021
HANSOL CHEMICAL CO LTD	19,780	1,418,223	2,088,423
HANSOL HOLDINGS CO LTD	83,103	432,779	207,265
HANSOL PAPER CO LTD	40,197	609,219	466,183
HANSOL TECHNICS CO LTD	58,492	738,120	339,909
HANSSEM CO LTD	23,604	3,665,051	1,691,537
HANWA CO LTD	89,700	2,167,948	1,638,770
HANWHA AEROSPACE CO LTD	82,422	4,311,668	1,685,648
HANWHA CORPORATION	100,529	3,004,485	1,851,201
HANWHA CORPORATION 3P	53,615	777,272	517,050
HANWHA GENERAL INSURANCE CO	183,178	1,013,276	393,661
HANWHA INVESTMENT + SECURITI	279,192	701,376	382,979
HANWHA LIFE INSURANCE CO LTD	1,047,191	3,705,653	1,184,004
HANWHA SOLUTIONS CORP	229,514	3,452,600	3,673,064
HAOHUA CHEMICAL SCIENCE A	127,700	339,266	369,881
HAP SENG CONSOLIDATED	1,523,800	3,488,656	3,129,391
HAPPINET CORP	33,700	515,313	351,416
HAPVIDA PARTICIPACOES E INVE	1,902,900	27,090,226	21,545,730
HARBIN BOSHI AUTOMATION CO A	94,983	146,799	171,193
HAREL INSURANCE INVESTMENTS	261,328	1,717,388	1,411,992
HARGREAVES LANSDOWN PLC	1,609,056	26,330,037	32,377,032
HARIM HOLDINGS CO LTD	66,864	704,950	375,219
HARTALEGA HOLDINGS BHD	13,582,400	24,135,907	41,206,814
HARVEY NORMAN HOLDINGS LTD	1,380,166	3,756,486	3,363,864
HASEKO CORP	638,500	5,355,462	8,037,104
HASTINGS GROUP HOLDINGS PLC	737,131	2,002,554	1,756,021
HAVELLS INDIA LTD	2,061,399	19,381,602	15,821,475
HAYS PLC	3,442,859	5,947,179	5,062,258
HAZAMA ANDO CORP	775,601	4,468,569	4,478,838
HC GROUP INC	1,427,000	822,221	235,671
HCL TECHNOLOGIES LTD	9,291,208	66,917,022	68,523,870
HDC HOLDINGS CO LTD	86,275	508,273	607,515
HDC HYUNDAI DEVELOPMENT CO E	107,572	3,196,693	1,886,993

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
HDFC ASSET MANAGEMENT CO LTD	381,627	15,734,344	12,551,872
HDFC LIFE INSURANCE CO LTD	4,876,733	38,930,823	35,459,516
HEADHUNTER GROUP PLC ADR	69,755	1,397,242	1,630,872
HEALIUS LTD	1,367,509	4,339,437	2,871,666
HEALTH AND HAPPINESS H+H INT	354,147	1,631,336	1,601,565
HEARTLAND GROUP HOLDINGS LTD	993,570	1,066,395	786,721
HEBEI CHENGDE LOLO CO A	177,560	175,929	175,700
HEBEI HENGSHUI LAOBAIGAN A	148,000	241,230	270,932
HEFEI MEIYA OPTOELECTRONIC A	55,996	358,577	416,362
HEG LTD	35,489	1,000,490	388,668
HEIDELBERGCEMENT AG	351,775	25,041,976	18,782,869
HEIDELBERGER DRUCKMASCHINEN	650,554	1,914,476	416,482
HEILONGJIANG AGRICULTURE A	158,276	319,747	360,222
HEINEKEN HOLDING NV	408,519	24,410,149	33,425,629
HEINEKEN NV	658,167	54,405,017	60,660,417
HEIWA CORP	122,200	2,142,798	2,041,103
HEIWA REAL ESTATE CO LTD	80,500	1,383,909	2,298,188
HEIWADO CO LTD	70,300	1,184,241	1,227,652
HELICAL PLC	254,007	1,248,143	969,800
HELIOPOLIS HOUSING	897,144	410,620	322,950
HELIXMITH CO LTD	52,682	6,656,938	2,676,036
HELLA GMBH + CO KGAA	103,032	4,818,042	4,212,222
HELLENIC EXCHANGES ATHENS	131,579	670,302	468,472
HELLENIC PETROLEUM SA	136,038	1,203,087	909,107
HELLENIC TELECOMMUN ORGANIZA	760,456	10,251,798	10,257,815
HELLMAN FRIEDMAN CAPITAL PAR	143,784,642	143,784,642	143,784,642
HELLOFRESH SE	359,056	5,517,004	19,115,176
HELVETIA HOLDING AG REG	75,460	9,161,728	7,035,925
HENAN PINGGAO ELECTRIC CO A	121,079	133,723	126,999
HENAN REBECCA HAIR PRODUCT A	186,900	87,451	79,261
HENAN SENYUAN ELECTRIC CO A	75,766	64,630	53,445
HENAN SHENHUO COAL + POWER A	313,800	194,931	184,090
HENAN SHUANGHUI INVESTMENT A	274,622	1,475,432	1,789,249
HENAN YUGUANG GOLD+LEAD CO A	179,800	116,528	99,633
HENAN ZHONGYUAN EXPRESSWAY A	200,275	108,188	100,221
HENDERSON INVESTMENT LTD	2,738,000	211,390	141,308
HENDERSON LAND DEVELOPMENT	3,073,825	12,724,322	11,660,027
HENGAN INTL GROUP CO LTD	1,672,645	12,192,206	13,099,827
HENGDIAN ENTERTAINMENT CO A	93,500	203,821	208,832
HENGDIAN GROUP DMEGC A	156,524	228,342	248,921
HENGLI PETROCHEMICAL CO L A	288,958	570,290	571,862
HENGTEN NETWORKS GROUP LTD	44,108,000	940,330	819,508
HENGTONG OPTIC ELECTRIC CO A	177,314	414,117	411,321
HENKEL AG + CO KGAA	239,571	16,973,092	19,951,850

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
HENKEL AG + CO KGAA VORZUG	412,210	32,532,469	38,371,258
HENNES + MAURITZ AB B SHS	2,042,869	51,366,585	29,601,554
HERA SPA	1,808,352	6,560,040	6,795,895
HERFY FOOD SERVICES CO	46,868	641,092	561,017
HERMES INTERNATIONAL	267,752	162,901,508	223,679,751
HERMITAGE OFFSHORE SERVICES	6,029	69,948	3,125
HERO MOTOCORP LTD	839,481	32,685,185	28,318,012
HESTEEL CO LTD A	944,331	297,806	272,322
HEXAGON AB B SHS	597,774	19,845,924	34,904,076
HEXAWARE TECHNOLOGIES LTD	202,047	844,577	891,906
HEXING ELECTRICAL CO LTD A	338,040	868,496	690,024
HEXPOL AB	590,161	4,219,891	4,370,789
HI SUN TECHNOLOGY CHINA LTD	4,251,000	804,083	477,181
HIAG IMMOBILIEN AG	6,611	834,325	643,274
HIBIYA ENGINEERING LTD	41,300	509,674	715,864
HIDAY HIDAKA CORP	63,195	910,400	984,081
HIGHWEALTH CONSTRUCTION CORP	2,071,786	2,913,603	3,058,051
HIKARI TSUSHIN INC	181,490	30,203,214	41,299,342
HIKMA PHARMACEUTICALS PLC	332,927	8,551,106	9,132,299
HILAN LTD	31,959	961,239	1,286,320
HILL + SMITH HOLDINGS PLC	188,586	3,103,963	2,898,731
HINDALCO INDUSTRIES LTD	2,103,058	5,765,040	4,072,209
HINDUSTAN CONSTRUCTION CO	1,690,382	349,425	133,209
HINDUSTAN PETROLEUM CORP	5,141,109	20,613,743	14,758,676
HINDUSTAN UNILEVER LTD	5,760,186	143,992,692	166,312,342
HINDUSTAN ZINC LTD	543,258	1,659,677	1,409,882
HINO MOTORS LTD	632,100	4,961,375	4,265,364
HIOKI E E CORP	20,700	432,650	552,205
HIRATA CORP	20,200	1,751,001	1,054,141
HIROSE ELECTRIC CO LTD	279,486	30,693,490	30,620,795
HIROSHIMA BANK LTD/THE	688,800	4,907,443	3,243,365
HISAKA WORKS LTD	46,800	559,483	322,744
HISAMITSU PHARMACEUTICAL CO	163,980	7,163,120	8,830,920
HISCOX LTD	781,450	14,345,023	7,614,407
HISENSE HOME APPLIANCES G A	149,228	240,762	256,515
HISENSE HOME APPLIANCES GR H	965,000	832,174	1,120,580
HITACHI CAPITAL CORP	99,500	1,889,126	2,189,489
HITACHI CONSTRUCTION MACHINE	247,400	5,919,966	6,833,684
HITACHI LTD	2,174,761	68,731,602	68,598,153
HITACHI METALS LTD	457,600	5,085,560	5,441,913
HITACHI TRANSPORT SYSTEM LTD	100,100	2,219,233	2,672,179
HITACHI ZOSEN CORP	403,288	2,127,996	1,469,085
HITE JINRO CO LTD	72,910	2,142,473	2,654,910
HITHINK ROYALFLUSH INFORMA A	686,961	11,833,423	12,923,308

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
HITO COMMUNICATIONS HOLDINGS	25,600	403,331	247,256
HIWIN TECHNOLOGIES CORP	594,097	4,490,882	5,909,860
HK ELECTRIC INVESTMENTS SS	10,819,000	11,328,415	11,223,188
HKBN LTD	1,856,500	2,605,218	3,248,088
HKT TRUST AND HKT LTD SS	23,403,430	33,993,875	34,242,514
HLB INC	95,787	6,358,757	7,374,050
HLB LIFE SCIENCE CO LTD	93,790	1,803,901	1,450,301
HMM CO LTD	643,258	3,597,671	2,505,436
HO TUNG CHEMICAL CORP	2,108,433	597,853	521,668
HOCHIKI CORP	34,000	583,134	385,744
HOCHSCHILD MINING PLC	596,524	2,074,017	1,431,381
HOCHTIEF AG	46,133	4,887,303	4,090,737
HODOGAYA CHEMICAL CO LTD	13,399	364,495	541,499
HOEGH LNG PARTNERS LP	38,989	554,906	379,363
HOGY MEDICAL CO LTD	51,300	1,376,047	1,578,681
HOKKAIDO ELECTRIC POWER CO	429,500	1,522,806	1,648,172
HOKKAIDO GAS CO LTD	26,500	358,480	389,327
HOKKAN HOLDINGS LTD	23,000	324,105	387,793
HOKKOKU BANK LTD/THE	54,300	1,555,763	1,437,967
HOKUJETSU CORP	330,400	1,661,829	1,169,883
HOKUHOKU FINANCIAL GROUP INC	299,000	5,193,087	2,469,379
HOKURIKU ELECTRIC POWER CO	396,355	5,526,544	2,527,620
HOKUTO CORP	47,500	955,628	893,776
HOLDING CO ADMIE IPTO SA	265,845	568,402	679,278
HOLITECH TECHNOLOGY CO LTD A	257,392	201,535	191,022
HOLLYSYS AUTOMATION TECHNOLO	132,811	2,194,788	1,766,386
HOLMEN AB B SHARES	226,116	4,136,246	7,213,073
HOLTEK SEMICONDUCTOR INC	339,000	641,383	766,368
HOLY STONE ENTERPRISE CO LTD	313,000	1,118,851	1,283,635
HOME CAPITAL GROUP INC	122,300	2,186,897	1,812,051
HOME PRODUCT CENTER PCL FOR	17,269,606	8,345,842	8,604,770
HOME PRODUCT CENTER PCL NVDR	31,630,200	16,170,204	15,760,093
HOMECAST CO LTD	70,209	622,798	202,540
HOMESERVE PLC	643,805	6,535,930	10,381,090
HON HAI PRECISION INDUSTRY	61,451,322	168,757,514	179,743,737
HONDA MOTOR CO LTD	4,038,674	120,596,679	103,152,118
HONEYS HOLDINGS CO LTD	64,630	746,851	686,527
HONG KONG + CHINA GAS	90,030,644	154,581,420	139,394,194
HONG KONG EXCHANGES + CLEAR	3,478,941	76,154,242	148,126,951
HONG KONG TELEVISION NETWORK	1,318,910	576,194	757,266
HONG LEONG BANK BERHAD	1,468,693	5,738,193	4,825,950
HONG LEONG FINANCIAL GROUP	539,363	2,192,182	1,648,928
HONG PU REAL ESTATE DEVELOP	510,000	392,971	408,802
HONGFA TECHNOLOGY CO LTD A	66,431	317,953	376,756

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
HONGHUA GROUP	5,229,000	1,332,046	163,270
HONGKONG LAND HOLDINGS LTD	9,940,410	62,278,139	41,053,893
HONGLI CLEAN ENERGY TECHNOLO	5,780	0	636
HONGTA SECURITIES CO LTD A	116,100	332,207	318,392
HOOSIERS HOLDINGS	103,800	647,262	509,932
HOPE EDUCATION GROUP CO LTD	6,000,000	1,437,591	2,051,494
HOPSON DEVELOPMENT HOLDINGS	1,497,600	1,516,210	1,557,414
HORIBA LTD	90,900	4,741,231	4,785,763
HORNBACH HOLDING AG + CO KGA	20,386	1,581,712	1,687,475
HOSHINE SILICON INDUSTRY C A	31,028	120,374	119,917
HOSHIZAKI CORP	435,686	32,438,320	37,315,091
HOSIDEN CORP	137,600	1,520,253	1,204,008
HOSKEN CONS INVESTMENTS LTD	105,349	879,108	187,961
HOSOKAWA MICRON CORP	14,900	445,338	788,608
HOTA INDUSTRIAL MFG CO LTD	493,384	1,646,000	1,688,955
HOTAI MOTOR COMPANY LTD	2,441,030	29,898,567	58,162,114
HOTEL SHILLA CO LTD	71,863	6,516,200	4,241,820
HOTELES CITY EXPRESS SAB DE	836,077	860,218	269,924
HOUSE FOODS GROUP INC	169,400	4,425,922	5,464,263
HOUSING DEVELOPMENT FINANCE	9,285,839	263,550,287	215,795,870
HOWDEN JOINERY GROUP PLC	1,345,765	9,612,628	9,192,114
HOYA CORP	2,456,298	149,663,819	233,597,048
HSBC HOLDINGS PLC	47,603,443	458,986,951	222,688,142
HSIN KUANG STEEL CO LTD	591,000	499,989	500,771
HT+E LTD	572,846	1,372,053	469,341
HTC CORP	1,693,781	3,903,964	1,903,060
HU LANE ASSOCIATE INC	183,000	615,885	512,322
HUA HAN HEALTH INDUSTRY HOLD	6,649,605	0	1
HUA HONG SEMICONDUCTOR LTD	915,000	1,632,047	3,175,751
HUA NAN FINANCIAL HOLDINGS C	70,343,710	41,608,359	47,683,377
HUAAN SECURITIES CO LTD A	254,581	245,312	245,796
HUABAO FLAVOURS + FRAGRANC A	19,563	90,046	101,989
HUADIAN FUXIN ENERGY CORP H	5,892,000	1,247,544	1,885,331
HUADIAN POWER INTL CORP A	576,386	285,962	278,656
HUADIAN POWER INTL CORP H	3,798,000	1,573,178	1,092,780
HUADONG MEDICINE CO LTD A	155,947	506,105	557,733
HUAFA INDUSTRIAL CO LTD ZH A	188,516	184,537	188,140
HUAFON MICROFIBRE SHANGHAI T	281,475	374,658	340,598
HUAFU FASHION CO LTD A	251,000	239,234	221,050
HUAGONG TECH CO LTD A	95,005	297,732	328,094
HUAIBEI MINING HOLDINGS CO A	540,896	690,500	595,635
HUAKU DEVELOPMENT CO LTD	558,000	1,377,117	1,592,422
HUALAN BIOLOGICAL ENGINEER A	165,578	949,198	1,172,886
HUANENG POWER INTL INC A	630,871	420,090	376,341

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
HUANENG POWER INTL INC H	10,147,602	5,764,325	3,810,040
HUANG HSIANG CONSTRUCTION CO	397,000	548,210	467,581
HUANGSHAN TOURISM DEVELOP B	516,534	526,119	325,416
HUAPONT LIFE SCIENCES CO L A	175,564	126,389	133,520
HUATAI SECURITIES CO LTD A	3,345,776	8,876,631	8,891,674
HUATAI SECURITIES CO LTD H	3,787,202	6,443,566	6,029,853
HUAXI SECURITIES CO LTD A	167,110	250,090	251,110
HUAXIA BANK CO LTD A	1,422,850	1,321,776	1,230,947
HUAXIN CEMENT CO LTD A	2,357,350	8,341,048	7,901,043
HUAXIN CEMENT CO LTD B	737,941	1,365,881	1,343,053
HUAYU AUTOMOTIVE SYSTEMS A	281,210	858,250	826,445
HUB POWER COMPANY	2,445,869	1,818,836	1,056,138
HUB24 LTD	105,084	1,017,095	672,858
HUBEI BIOCAUSE PHARMACEUTI A	325,732	266,108	239,898
HUBEI DINGLONG CO LTD A	162,100	255,743	380,382
HUBEI ENERGY GROUP CO LTD A	538,565	281,184	267,984
HUBEI JUMPCAN PHARMACEUT A	33,921	119,674	122,083
HUBEI KAILE SCIENCE + TECH A	165,260	320,413	315,844
HUBEI XINGFA CHEMICALS GRP A	169,800	240,864	214,827
HUBER + SUHNER AG REG	41,494	2,353,932	2,916,469
HUCHEMS FINE CHEMICAL CORP	51,393	919,458	679,344
HUDACO INDUSTRIES LTD	70,967	585,695	298,164
HUDBAY MINERALS INC	492,100	3,797,630	1,484,971
HUFVUDSTADEN AB A SHS	254,477	2,857,825	3,162,986
HUGEL INC	4,452	1,356,565	1,748,822
HUGO BOSS AG ORD	145,354	12,451,030	4,391,542
HUHTAMAKI OYJ	216,608	9,274,884	8,524,646
HUISHAN DAIRY	7,591,000	0	1
HUIZHOU DESAY SV AUTOMOTIV A	82,305	394,073	713,556
HUIZHOU SPEED WIRELESS TEC A	67,200	163,881	162,820
HULIC CO LTD	864,700	6,864,297	8,111,196
HUMANSOFT HOLDING CO KSC	229,426	2,403,159	2,079,115
HUMAX CO LTD	36,277	358,808	92,136
HUMEDIX CO LTD	13,219	812,111	302,767
HUNAN AIHUA GROUP CO LTD A	57,400	182,773	235,471
HUNAN DAKANG INTL FOOD +AG A	905,000	259,438	287,846
HUNAN GOLD CORP LTD A	106,437	121,098	118,563
HUNAN VALIN STEEL CO LTD A	507,170	285,407	270,286
HUNDSUN TECHNOLOGIES INC A	95,148	1,083,303	1,448,586
HUNG SHENG CONSTRUCTION LTD	1,096,680	825,528	665,342
HUNTING PLC	336,569	2,929,889	884,129
HUOLINHE OPENCUT COAL IND A	108,666	125,887	119,049
HUONS CO LTD	14,126	599,037	638,861
HUONS GLOBAL CO LTD	12,139	390,774	317,389

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
HUSKY ENERGY INC	701,810	14,112,097	2,298,144
HUSQVARNA AB B SHS	961,768	7,044,027	7,876,533
HUTCHISON PORT HOLDINGS TR U	11,937,500	5,285,524	1,146,000
HUTCHISON TELECOMM HONG KONG	2,865,000	617,984	454,677
HY ENERGY GROUP CO LTD A	78,400	90,431	86,999
HYAKUGO BANK LTD/THE	490,000	1,770,343	1,494,276
HYAKUJUSHI BANK LTD/THE	62,000	1,679,340	1,116,040
HYDRO ONE LTD	736,700	13,454,419	13,809,068
HYFLUX LTD	1,393,400	0	1
HYOSUNG ADVANCED MATERIALS C	7,538	710,615	714,413
HYOSUNG CHEMICAL CORP	5,387	678,815	470,246
HYOSUNG CORPORATION	15,454	870,303	806,843
HYOSUNG HEAVY INDUSTRIES COR	11,951	341,636	287,138
HYOSUNG TNC CO LTD	7,206	965,581	670,966
HYPERA SA	3,236,000	24,489,980	19,625,337
HYPOPORT AG	9,621	2,384,734	4,257,496
HYSAN DEVELOPMENT CO	1,466,112	5,286,551	4,700,744
HYTERA COMMUNICATIONS CORP A	170,926	187,992	183,391
HYUNDAI BIOSCIENCE CO LTD	76,182	842,899	839,183
HYUNDAI CONSTRUCTION EQUIPME	28,425	281,379	517,527
HYUNDAI CORPORATION	17,303	401,357	189,163
HYUNDAI DEPT STORE CO	34,849	2,942,307	1,631,125
HYUNDAI ELECTRIC + ENERGY SY	53,913	916,002	354,983
HYUNDAI ELEVATOR CO.	38,278	2,905,398	2,202,135
HYUNDAI ENGINEERING + CONST	167,896	7,890,301	4,613,179
HYUNDAI GLOVIS CO LTD	102,318	13,094,154	8,633,892
HYUNDAI GREENFOOD CO LTD	105,138	1,012,880	675,659
HYUNDAI HEAVY INDUSTRIES HOL	24,114	7,779,869	4,931,657
HYUNDAI HOME SHOPPING NETWOR	13,659	1,467,641	726,754
HYUNDAI LIVART CO LTD	20,954	611,630	295,274
HYUNDAI MARINE + FIRE INS CO	542,957	16,530,232	10,336,879
HYUNDAI MIPO DOCKYARD	46,741	2,226,158	1,216,272
HYUNDAI MOBIS CO LTD	154,439	27,939,588	24,651,692
HYUNDAI MOTOR CO	335,217	36,677,104	27,227,585
HYUNDAI MOTOR CO LTD 2ND PRF	89,223	7,145,959	4,220,633
HYUNDAI MOTOR CO LTD PRF	55,903	4,240,523	2,560,798
HYUNDAI ROTEM COMPANY	114,833	2,376,189	1,465,425
HYUNDAI STEEL CO	174,299	8,377,133	2,970,553
HYUNDAI WIA CORP	56,530	3,916,540	1,623,737
HYUNION HOLDING CO LTD A	102,899	93,775	84,512
I SENS INC	20,514	596,577	428,921
IA FINANCIAL CORP INC	260,800	9,031,305	8,704,822
IAMGOLD CORP	1,103,900	4,164,019	4,368,591
IBERDROLA SA	14,091,352	130,080,746	163,331,569

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
IBF FINANCIAL HOLDINGS CO LT	6,475,925	2,244,044	2,579,000
IBIDEN CO LTD	255,600	6,270,373	7,451,101
IBSTOCK PLC	923,911	2,661,240	2,052,570
ICA GRUPPEN AB	181,192	7,016,355	8,592,211
ICD CO LTD	28,835	593,565	315,235
ICHIA TECHNOLOGIES INC	632,000	462,259	290,247
ICHIBANYA CO LTD	38,900	1,151,653	1,710,901
ICHIGO INC	457,300	1,770,766	1,144,469
ICHIKOH INDUSTRIES LTD	130,300	550,234	591,806
ICHIYOSHI SECURITIES CO LTD	78,900	652,395	332,026
ICICI BANK LTD	1,530,331	10,621,206	7,123,286
ICICI LOMBARD GENERAL INSURA	1,629,668	30,113,977	27,338,212
ICICI PRUDENTIAL LIFE INSURA	2,909,345	19,463,931	16,407,120
ICICI SECURITIES LTD	159,973	836,610	995,491
ICLICK INTERACTIVE ASIA ADR	122,684	666,346	653,906
ICOM INC	22,800	528,485	655,142
ICON PLC	116,741	10,621,905	19,666,189
IDEC CORP	64,300	850,572	1,023,937
IDEMITSU KOSAN CO LTD	549,564	13,923,443	11,649,932
IDFC FIRST BANK LTD	5,531,651	3,530,586	1,882,866
IDFC LTD	619,355	385,821	150,935
IDI INSURANCE CO LTD	17,716	807,740	412,014
IDOM INC	125,400	565,071	577,687
IDORSIA LTD	212,348	4,803,660	6,790,295
IDP EDUCATION LTD	323,831	3,364,762	3,453,613
IEI INTEGRATION CORP	263,169	563,697	390,679
IFCI LTD	1,780,474	469,516	176,859
IFLYTEK CO LTD A	197,601	973,522	1,045,533
IG GROUP HOLDINGS PLC	847,760	5,798,953	8,568,491
IGG INC	2,058,000	1,261,924	1,683,479
IGM FINANCIAL INC	189,374	6,379,796	4,586,966
IGO LTD	1,165,909	4,560,011	3,909,287
IGUATEMI EMP DE SHOPPING	205,300	2,143,076	1,246,950
IHH HEALTHCARE BHD	20,655,910	27,781,409	26,512,837
IHI CORP	293,665	6,933,324	4,240,905
IHS MARKIT LTD	893,850	44,833,389	67,485,675
IIDA GROUP HOLDINGS CO LTD	1,256,140	22,162,943	19,223,128
IINO KAIUN KAISHA LTD	195,600	1,038,008	616,434
IJM CORP BHD	7,613,340	4,467,495	3,215,903
IKD CO LTD A	141,440	220,180	278,317
ILIAD SA	36,146	4,537,896	7,049,735
ILJIN MATERIALS CO LTD	38,513	1,370,300	1,588,099
ILL INC	40,300	656,348	584,226
ILUKA RESOURCES LTD	975,277	5,249,768	5,734,423

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ILYANG PHARMACEUTICAL CO LTD	31,100	809,417	1,654,737
IMARKETKOREA INC	53,891	895,232	390,232
IMAX CHINA HOLDING INC	258,400	1,089,084	374,075
IMAX CORP	109,769	3,142,426	1,230,510
IMCD NV	252,251	15,958,160	23,707,859
IMERYS SA	85,244	4,566,572	2,904,806
IMI PLC	634,358	7,745,929	7,230,676
IMMOFINANZ AG	190,978	4,716,040	3,260,354
IMPALA PLATINUM HOLDINGS LTD	1,741,505	11,320,121	11,626,738
IMPERIAL LOGISTICS LTD	425,871	1,525,231	964,000
IMPERIAL OIL LTD	529,407	18,591,228	8,489,170
IMPLENIA AG REG	35,120	1,857,625	1,295,758
IMPRO PRECISION INDUSTRIES L	395,000	131,271	136,076
INA INVEST HOLDING AG	6,951	265,647	154,051
INABA DENKI SANGYO CO LTD	136,200	2,281,807	3,032,418
INABA SEISAKUSHO CO LTD	18,800	222,239	242,221
INABATA + CO LTD	101,000	830,548	1,217,973
INAGEYA CO LTD	56,300	734,682	880,886
INARI AMERTRON BHD	5,207,100	2,015,537	2,053,675
INBODY CO LTD	25,146	819,219	334,486
INCHCAPE PLC	915,212	9,231,138	5,541,099
INCITEC PIVOT LTD	4,558,851	12,415,889	5,885,191
IND + COMM BK OF CHINA A	27,134,585	21,978,353	19,102,110
IND + COMM BK OF CHINA H	189,124,870	129,056,775	114,688,423
INDAH KIAT PULP + PAPER TBK	6,164,800	4,151,640	2,578,557
INDIA CEMENTS LTD	290,180	425,430	492,897
INDIABULLS HOUSING FINANCE L	758,876	5,710,950	2,082,031
INDIABULLS REAL ESTATE LTD	258,037	251,693	166,776
INDIABULLS VENTURES LTD	262,176	814,856	409,912
INDIAN BANK	281,735	1,013,001	231,347
INDIAN HOTELS CO LTD	1,122,635	2,111,264	1,188,001
INDIAN RAILWAY CATERING + TO	47,133	882,399	848,133
INDIVIOR PLC	2,173,779	5,938,620	2,229,316
INDOCEMENT TUNGGAL PRAKARSA	3,106,850	4,341,160	2,566,386
INDOFOOD CBP SUKSES MAKMUR T	5,358,500	4,065,442	3,507,314
INDOFOOD SUKSES MAKMUR TBK P	10,375,200	5,516,793	4,739,110
INDORAMA VENTURES FOREIGN	4,180,400	4,802,863	3,753,332
INDORAMA VENTURES PCL NVDR	38,200	32,282	34,298
INDRA SISTEMAS SA	293,442	3,556,858	2,305,408
INDRAPRASTHA GAS LTD	322,955	1,206,847	1,891,866
INDUS HOLDING AG	44,391	1,524,212	1,500,718
INDUSTRIA DE DISENO TEXTIL	2,893,619	61,560,809	76,601,752
INDUSTRIA MACCHINE AUTOMATIC	49,517	3,120,415	2,975,404
INDUSTRIAL BANK CO LTD A	4,312,464	10,884,821	9,619,695

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
INDUSTRIAL BANK OF KOREA	2,374,315	28,080,129	15,949,175
INDUSTRIAL SECURITIES CO A	597,329	517,285	578,406
INDUSTRIAS BACHOCO SER B	388,863	1,738,006	1,128,876
INDUSTRIAS PENOLES SAB DE CV	290,886	4,104,938	2,953,927
INDUSTRIES QATAR	4,711,092	14,089,720	9,957,859
INDUSTRIVARDEN AB A SHS	487,744	9,214,686	11,067,184
INDUSTRIVARDEN AB C SHS	391,499	7,482,696	8,870,725
INDUTRADE AB	227,483	4,647,842	8,985,391
INES CORP	51,900	428,449	656,658
INESA INTELLIGENT TECH INC B	679,866	392,706	324,296
INFICON HOLDING AG REG	4,609	2,887,092	3,575,131
INFIGEN ENERGY	1,543,614	1,092,653	999,011
INFINEON TECHNOLOGIES AG	3,042,159	39,297,964	71,325,720
INFLARX NV	3,280	17,335	15,055
INFO EDGE INDIA LTD	533,173	18,448,296	19,502,923
INFO SERVICES INTL DENTSU	27,700	457,035	1,286,342
INFOCOM CORP	48,200	1,102,319	1,317,977
INFOMART CORP	501,400	1,947,038	3,457,771
INFORE ENVIRONMENT TECHNOL A	522,000	489,379	608,770
INFORMA PLC	3,482,140	30,735,731	20,239,122
INFORTREND TECHNOLOGY INC	647,000	283,563	283,979
INFOSYS LTD	29,548,866	295,340,138	288,018,647
INFRAESTRUCTURA ENERGETICA N	1,200,900	5,110,107	3,447,254
INFRASTRUTTURE WIRELESS ITAL	664,845	6,733,717	6,660,748
INFRATIL LTD	1,079,356	2,270,859	3,265,727
ING GROEP NV	9,474,185	134,971,952	65,952,491
INGENIC SEMICONDUCTOR CO A	73,313	998,016	1,046,100
INGENICO GROUP	145,983	15,288,279	23,282,435
INGHAMS GROUP LTD	441,013	1,106,868	971,640
INMODE LTD	25,697	954,073	727,739
INNER MONGOLIA BAOTOU STE A	3,513,793	601,227	536,449
INNER MONGOLIA FIRST MACHI A	151,007	216,205	221,790
INNER MONGOLIA MENGDIAN HU A	516,992	193,752	179,783
INNER MONGOLIA YILI INDUS A	540,986	2,269,433	2,380,641
INNER MONGOLIA YUAN XING A	648,200	203,269	170,432
INNERGEX RENEWABLE ENERGY	302,200	3,249,806	4,237,900
INNOCEAN WORLDWIDE INC	26,691	1,608,973	991,884
INNODISK CORP	132,000	736,357	789,642
INNOLUX CORP	19,672,963	5,729,632	5,267,549
INNOVENT BIOLOGICS INC	8,561,500	31,170,485	63,517,118
INNOX ADVANCED MATERIALS CO	15,028	911,221	559,091
INNUOVO TECHNOLOGY CO LTD A	187,206	141,925	151,107
INPEX CORP	2,691,478	31,099,532	16,637,593
INSCOBEE INC	196,181	1,437,935	333,533

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
INSOURCE CO LTD	24,000	567,130	586,625
INSPUR ELECTRONIC INFORMAT A	129,960	677,381	719,785
INSPUR INTERNATIONAL LTD	1,271,000	596,700	428,015
INSPUR SOFTWARE CO LTD A	954,246	2,842,266	2,495,519
INSTITUTO HERMES PARDINI SA	106,100	774,199	425,498
INSUN ENT CO LTD	68,230	383,289	480,449
INSURANCE AUSTRALIA GROUP	5,437,400	25,500,288	21,600,857
INTACT FINANCIAL CORP	1,214,392	97,590,465	115,206,748
INTAGE HOLDINGS INC	76,500	854,852	623,998
INTEGRAFIN HOLDINGS PLC	583,301	2,961,236	3,300,930
INTEGRAL DIAGNOSTICS LTD	324,672	763,097	871,793
INTEGRATED HOLDING CO KCSC	350,975	701,806	484,851
INTELSAT SA	136,700	2,811,652	73,818
INTER FAR EAST ENERGY CORP F	2,619,700	0	0
INTER PIPELINE LTD	995,000	24,263,707	9,234,068
INTERCONEXION ELECTRICA SA	1,038,024	5,453,695	5,218,879
INTERCONTINENTAL HOTELS GROU	428,100	18,600,987	18,868,026
INTERFLEX CO LTD	19,442	377,823	204,465
INTERGLOBE AVIATION LTD	811,115	14,737,019	10,622,930
INTERMEDIATE CAPITAL GROUP	650,481	5,533,019	10,360,141
INTERNATIONAL CSRC INVEST	1,987,267	1,927,603	1,357,197
INTERNATIONAL GAMES SYSTEM C	218,000	2,275,795	5,415,920
INTERNATIONAL GENERAL INSURA	54,500	405,251	376,050
INTERNATIONAL PERSONAL FINAN	527,554	1,596,456	340,915
INTERNET INITIATIVE JAPAN	65,700	1,540,529	2,238,008
INTERPARFUMS SA	30,980	1,006,852	1,384,848
INTERPARK HOLDINGS CORP	85,360	450,862	162,864
INTERPUMP GROUP SPA	186,335	3,049,245	5,533,420
INTERROLL HOLDING AG REG	1,327	1,959,072	2,677,668
INTERSHOP HOLDING AG	2,702	1,414,120	1,616,837
INTERTEK GROUP PLC	379,316	19,084,328	25,496,360
INTERTRUST NV	209,433	3,782,944	3,566,006
INTESA SANPAOLO	32,529,230	105,766,708	62,241,376
INTL CONSOLIDATED AIRLINE DI	1,052,301	5,654,585	2,889,097
INTL CONTAINER TERM SVCS INC	2,515,330	5,928,434	5,174,537
INTOPS CO LTD	27,990	278,848	257,131
INTOUCH HOLDINGS PCL F	5,048,700	10,598,913	9,188,364
INTOUCH HOLDINGS PCL NVDR	13,894,400	29,645,829	25,287,066
INTRON BIOTECHNOLOGY INC	56,900	1,149,963	707,200
INTRUM AB	158,379	4,043,129	2,906,926
INVENTEC CORP	7,256,170	5,123,669	6,172,952
INVERSIONES AGUAS METROPOL	1,177,089	1,627,644	1,011,040
INVERSIONES LA CONSTRUCCION	77,841	1,198,886	521,723
INVESTEC LTD	731,063	4,297,951	1,452,869

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
INVESTEC PLC	1,565,993	9,519,567	3,124,931
INVESTMENT AB LATOUR B SHS	283,430	3,244,437	5,141,298
INVESTMENT AB ORESUND	70,474	821,398	783,662
INVESTOR AB A SHS	318,132	15,317,585	16,636,228
INVESTOR AB B SHS	1,077,540	37,500,088	56,868,769
INVOCARE LTD	320,169	2,552,828	2,310,173
IOCHPE MAXION S.A.	305,127	1,757,639	751,314
IOI CORP BHD	7,420,866	7,848,975	7,516,116
IOI PROPERTIES GROUP BHD	4,374,257	1,508,109	1,000,414
ION BEAM APPLICATIONS	47,968	744,943	411,607
IOOF HOLDINGS LTD	786,808	4,226,516	2,665,249
IPCA LABORATORIES LTD	108,356	1,257,456	2,402,944
IPEK DOGAL ENERJİ KAYNAKLARI	580,198	1,011,023	1,159,592
IPH LTD	379,967	1,842,234	1,951,590
IPSEN	79,844	5,897,119	6,784,049
IPSOS	93,666	2,844,940	2,345,982
IQIYI INC ADR	531,341	10,759,743	12,321,798
IR JAPAN HOLDINGS LTD	20,800	809,186	2,172,832
IRB BRASIL RESSEGUROS SA	500,010	839,662	1,001,696
IRB INFRASTRUCTURE DEVELOPER	311,228	557,871	365,005
IREADER TECHNOLOGY CO LTD A	542,104	2,439,782	2,921,987
IREN SPA	1,508,540	3,354,604	3,737,663
IRESS LTD	409,614	3,149,957	3,088,110
IRISH CONTINENTAL GROUP PLC	386,200	2,233,820	1,533,344
IRISO ELECTRONICS CO LTD	47,300	1,727,893	1,543,273
IRON FORCE INDUSTRIAL CO LTD	131,000	677,426	412,032
IRPC PCL FOREIGN	23,946,200	3,159,294	2,029,897
IRPC PCL NVDR	177,700	35,805	15,063
IS DONGSEO CO LTD	32,107	1,609,061	751,392
ISEKI + CO LTD	34,600	858,008	355,028
ISETAN MITSUKOSHI HOLDINGS L	817,686	8,224,681	4,683,969
ISHIHARA SANGYO KAISHA LTD	81,700	909,675	533,888
ISKENDERUN DEMİR VE ÇELİK AS	356,927	425,037	387,401
ISRACARD LTD	407,290	1,365,361	925,212
ISRAEL CHEMICALS LTD	1,653,391	11,587,212	4,901,484
ISRAEL CORP LIMITED/THE	8,567	2,541,918	701,262
ISRAEL DISCOUNT BANK A	4,764,292	13,301,296	14,454,142
ISS A/S	432,628	12,503,850	6,845,431
ISTYLE INC	116,500	879,817	289,401
ISUZU MOTORS LTD	1,492,516	14,476,263	13,464,947
IT S HANBUL CO LTD	9,663	544,619	125,321
ITALGAS SPA	1,638,387	9,607,806	9,513,598
ITALIAN THAI DEVELOP FOREIGN	8,948,300	839,421	330,051
ITALMOBILIARE SPA	35,987	783,587	1,172,145

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ITAU CORPBANCA	412,572,479	3,250,681	1,115,645
ITAU UNIBANCO HOLDING S PREF	11,725,565	96,157,343	54,348,297
ITAU UNIBANCO HOLDING SA	1,068,800	5,192,196	4,671,669
ITAUSA SA	10,777,701	32,888,133	18,823,879
ITE TECHNOLOGY INC	287,615	335,801	600,488
ITEQ CORP	790,697	2,676,703	3,952,882
ITM SEMICONDUCTOR CO LTD	14,400	814,300	699,140
ITO EN LTD	133,400	4,252,077	7,517,931
ITOCHU CORP	8,089,608	149,270,619	174,074,477
ITOCHU ENEX CO LTD	107,900	744,473	872,121
ITOCHU SHOKUHIN CO LTD	12,400	461,466	589,628
ITOCHU TECHNO SOLUTIONS CORP	826,100	20,351,811	30,935,200
ITOHAM YONEKYU HOLDINGS INC	310,600	2,581,801	1,868,466
ITOKI CORP	94,900	560,363	299,078
ITURAN LOCATION AND CONTROL	43,223	876,737	692,432
ITV PLC	8,790,374	12,509,649	8,111,287
IVANHOE MINES LTD CL A	1,283,200	3,942,468	3,627,254
IWATANI CORP	97,900	2,531,288	3,421,078
IWG PLC	1,673,367	4,270,673	5,479,175
IYO BANK LTD/THE	648,237	5,062,711	3,953,654
IZUMI CO LTD	92,100	2,566,816	2,911,072
J FRONT RETAILING CO LTD	582,736	7,268,054	3,878,245
J OIL MILLS INC	12,700	461,481	469,106
J TRUST CO LTD	186,100	1,832,466	527,845
JAC RECRUITMENT CO LTD	18,700	238,750	197,946
JACCS CO LTD	59,000	1,012,784	959,772
JACK SEWING MACHINE CO LTD A	57,300	164,471	177,389
JACQUET METAL SERVICE SA	29,950	565,208	394,241
JAFCO CO LTD	82,570	3,012,564	2,782,055
JAFRON BIOMEDICAL CO LTD A	65,768	527,975	646,142
JAMCO CORP	22,800	412,924	162,729
JAMES HARDIE INDUSTRIES CDI	1,040,218	10,834,074	19,709,549
JAMES RIVER GROUP HOLDINGS L	66,039	3,018,516	2,971,755
JAMMU + KASHMIR BANK LTD	507,136	488,032	121,572
JANUS HENDERSON GROUP PLC	418,799	11,105,958	8,861,787
JAPAN AIRLINES CO LTD	957,105	31,251,701	17,228,511
JAPAN AIRPORT TERMINAL CO	149,110	5,577,431	6,343,930
JAPAN AVIATION ELECTRONICS	103,200	1,793,518	1,384,163
JAPAN BEST RESCUE SYSTEM CO	37,500	378,854	289,544
JAPAN CASH MACHINE CO LTD	39,100	398,027	213,105
JAPAN DISPLAY INC	1,493,800	1,526,807	678,465
JAPAN ELEVATOR SERVICE HOLDI	69,800	1,452,789	2,245,039
JAPAN EXCHANGE GROUP INC	2,264,700	29,261,975	52,311,558
JAPAN LIFELINE CO LTD	159,000	1,946,147	2,097,205

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
JAPAN MATERIAL CO LTD	134,800	1,054,808	2,111,619
JAPAN MEDICAL DYNAMIC MKT	24,400	374,311	368,878
JAPAN PETROLEUM EXPLORATION	71,860	2,954,297	1,204,272
JAPAN POST BANK CO LTD	3,500,149	39,281,141	26,019,553
JAPAN POST HOLDINGS CO LTD	12,808,515	142,313,633	91,025,522
JAPAN POST INSURANCE CO LTD	434,700	8,811,050	5,693,387
JAPAN PULP + PAPER CO LTD	26,000	889,899	944,710
JAPAN SECURITIES FINANCE CO	203,400	1,263,137	963,409
JAPAN STEEL WORKS LTD	170,100	5,869,759	2,413,895
JAPAN TRASCITY CORP	114,200	413,618	534,560
JAPAN WOOL TEXTILE CO LTD	150,800	1,199,634	1,492,834
JAPARA HEALTHCARE LTD	598,989	846,675	202,078
JAPFA COMFEED INDONES TBK PT	16,339,700	1,819,827	1,355,446
JARDINE CYCLE + CARRIAGE LTD	567,768	12,117,176	8,204,869
JARDINE MATHESON HLDGS LTD	1,849,898	108,903,963	77,214,743
JARDINE STRATEGIC HLDGS LTD	1,801,000	61,461,913	38,811,550
JARIR MARKETING CO	139,034	5,818,507	5,411,614
JASA MARGA (PERSERO) TBK PT	5,109,543	2,098,847	1,573,818
JASMINE BROADBAND INTER F	9,274,458	3,015,323	2,805,668
JASMINE INTL PCL FOREIGN	8,161,200	1,735,551	945,308
JASMINE INTL PCL NVDR	38,800	7,910	4,494
JASON FURNITURE HANGZHOU C A	39,885	233,429	253,774
JASTRZEBSKA SPOLKA WEGLOWA S	122,584	1,964,224	579,505
JAZZ PHARMACEUTICALS PLC	125,061	12,329,716	13,799,231
JB FINANCIAL GROUP CO LTD	351,930	1,824,885	1,386,830
JB HI FI LTD	264,813	4,283,819	7,845,390
JBS SA	972,900	5,843,630	3,747,511
JC FINANCE + TAX INTERCONN A	128,600	189,231	222,511
JCDECAUX SA	172,376	4,611,327	3,204,148
JCR PHARMACEUTICALS CO LTD	32,900	2,395,136	3,442,935
JCU CORP	51,800	1,143,411	1,613,273
JD SPORTS FASHION PLC	1,018,734	7,003,588	7,831,932
JDC CORP	87,500	435,264	468,786
JDE PEET S BV	143,100	6,025,861	5,798,878
JEIL PHARMACEUTICAL CO LTD/N	16,489	743,636	634,693
JENAX INC	36,900	760,350	97,860
JENOPTIK AG	121,672	2,028,812	2,847,909
JENTECH PRECISION INDUSTRIAL	199,000	749,999	1,912,132
JEOL LTD	90,200	1,141,732	2,497,357
JEREISSATI PARTICIPACOES SA	82,700	380,107	345,813
JERONIMO MARTINS	571,763	8,315,690	10,008,307
JESS LINK PRODUCTS CO LTD	228,000	247,823	276,263
JFE HOLDINGS INC	1,214,127	29,762,822	8,688,011
JG SUMMIT HOLDINGS INC	6,779,900	9,067,941	8,824,416

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
JGC HOLDINGS CORP	545,510	9,104,736	5,733,961
JHSF PARTICIPACOES SA	577,400	443,822	746,620
JIAJIAYUE GROUP CO LTD A	102,142	451,775	711,259
JIANGBO PHARMACEUTICALS INC	82,900	0	0
JIANGLING MOTORS CORP LTD A	45,803	88,675	80,093
JIANGSU CHANGSHU RURAL COM A	161,600	161,061	171,558
JIANGSU EASTERN SHENGHONG A	239,003	184,578	187,848
JIANGSU ETERN CO LTD A	205,300	126,197	122,470
JIANGSU EXPRESS CO LTD H	10,482,306	11,925,615	12,280,492
JIANGSU EXPRESSWAY CO LTD A	158,418	224,861	219,686
JIANGSU GUOTAI INTL A	258,300	211,577	220,907
JIANGSU HENGLI HYDRAULIC C A	72,178	647,534	818,291
JIANGSU HENGRUI MEDICINE C A	2,442,693	31,262,844	31,871,272
JIANGSU HENGSHUN VINEGAR I A	165,456	323,889	433,866
JIANGSU HOPERUN SOFTWARE C A	131,600	245,916	192,914
JIANGSU HUAXICUN CO LTD A	146,400	188,827	258,690
JIANGSU JIANGYIN RURAL COM A	359,000	218,169	199,442
JIANGSU KANION PHARMACEUTI A	52,444	107,436	103,196
JIANGSU KING S LUCK BREWER A	109,651	530,284	616,759
JIANGSU LIHUA ANIMAL HUSBA A	24,258	168,063	132,159
JIANGSU NHWA PHARMACEUTICA A	149,400	273,196	356,071
JIANGSU PROVINCIAL AGRICULTU	199,100	300,214	266,814
JIANGSU SHAGANG CO LTD A	364,300	636,130	643,721
JIANGSU YANGHE BREWERY A	134,348	1,963,679	1,996,770
JIANGSU YANGNONG CHEMICAL A	51,200	452,532	597,108
JIANGSU YOKE TECHNOLOGY A	77,800	316,468	573,759
JIANGSU YUYUE MEDICAL EQU A	89,378	412,405	459,897
JIANGSU ZHANGJIAGANG RURA A	57,237	44,948	46,605
JIANGSU ZHONGNAN CONSTRUCT A	330,346	388,962	415,612
JIANGSU ZHONGTIAN TECHNOLO A	278,012	418,836	449,985
JIANGSU ZIJIN RURAL COMMER A	116,579	76,566	69,709
JIANGXI BANK CO LTD H	2,092,000	1,381,623	931,223
JIANGXI HUANGSHANGHUANG GR A	75,600	240,669	269,523
JIANGXI LIANCHUANG OPTOELE A	264,092	565,176	578,276
JIANGXI WANNIANQING CEM A	131,700	206,161	239,603
JIANGXI ZHENGBOANG TECH A	223,425	549,201	552,080
JIAYUAN INTERNATIONAL GROUP	2,852,000	2,222,539	1,177,532
JIH SUN FINANCIAL HOLDINGS	3,544,556	1,076,593	1,156,911
JILIN AODONG PHARMACEUTICA A	103,589	231,646	230,341
JILIN ELECTRIC POWER A	354,500	163,526	186,418
JILIN ZIXIN PHARMACEUTICAL A	211,600	185,855	132,809
JIMOTO HOLDINGS INC	435,600	723,677	383,575
JINCHUAN GROUP INTERNATIONAL	11,438,000	1,211,052	974,018
JINDAL SAW LTD	278,108	353,967	213,267

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
JINDAL STEEL + POWER LTD	925,789	2,084,907	1,980,232
JINDUICHENG MOLYBDENUM CO A	246,001	222,811	214,909
JINGWEI TEXTILE MACHINERY A	990,397	1,310,638	1,268,429
JINKE PROPERTIES GROUP CO A	476,450	515,064	549,587
JINNENG SCIENCE+TECHNOLOGY A	111,600	177,684	187,575
JINS HOLDINGS INC	34,500	1,413,888	2,094,591
JINXIN FERTILITY GROUP LTD	2,220,000	2,904,533	3,362,747
JINYU BIO TECHNOLOGY CO LT A	104,176	344,612	409,983
JINYUAN EP CO LTD A	105,400	147,060	150,037
JIUGUI LIQUOR CO LTD A	54,600	318,173	590,527
JIUMAOJIU INTERNATIONAL HOLD	803,000	1,454,335	1,386,260
JIUZHITANG CO LTD A	76,808	97,657	109,445
JIZHONG ENERGY RESOURCES A	275,554	124,976	117,637
JK CEMENT LTD	43,783	734,291	799,652
JL MAG RARE EARTH CO LTD A	13,295	66,013	62,734
JM AB	166,170	3,622,739	3,740,169
JM FINANCIAL LTD	477,077	731,671	442,301
JM HOLDINGS CO LTD	32,000	678,126	892,803
JNBY DESIGN LTD	475,500	760,019	476,699
JOHN LAING GROUP PLC	1,177,754	4,330,389	5,070,034
JOHN WOOD GROUP PLC	1,556,796	11,683,238	3,728,856
JOHNSON ELECTRIC HOLDINGS	824,575	1,719,126	1,461,807
JOHNSON HEALTH TECH CO LTD	246,965	533,096	593,463
JOHNSON MATTHEY PLC	449,373	15,796,918	11,649,052
JOINCARE PHARMACEUTICAL GR A	179,880	359,518	412,950
JOINTO ENERGY INVESTMENT C A	94,682	68,184	68,126
JOINTOWN PHARMACEUTICAL A	167,474	400,961	440,815
JOLLIBEE FOODS CORP	963,520	4,077,908	2,707,332
JONJEE HIGH TECH INDUSTRIA A	72,085	513,891	596,420
JOSHIN DENKI CO LTD	39,000	727,310	781,554
JOYFUL HONDA CO LTD	145,500	1,542,024	1,915,095
JOYOUNG CO LTD A	70,882	306,170	373,443
JOYY INC	125,450	8,650,791	11,108,598
JP HOLDINGS INC	132,600	460,820	339,228
JS GLOBAL LIFESTYLE CO LTD	699,448	720,018	670,529
JSE LTD	196,338	1,124,991	1,378,604
JSL SA	137,000	394,123	578,360
JSP CORP	26,100	403,308	352,726
JSR CORP	426,700	7,303,039	8,226,686
JSTI GROUP A	160,300	197,030	168,591
JSW ENERGY LTD	896,861	888,829	560,065
JSW STEEL LTD	2,358,791	7,535,442	5,915,429
JTEKT CORP	904,500	11,942,150	7,017,347
JU TENG INTERNATIONAL HLDGS	1,890,000	953,004	690,115

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
JUBILANT FOODWORKS LTD	171,098	3,346,410	3,914,097
JUBILANT LIFE SCIENCES LTD	169,159	1,233,429	1,468,474
JUEWEI FOOD CO LTD A	23,800	205,676	237,997
JUKI CORP	69,800	704,013	357,136
JULIUS BAER GROUP LTD	588,852	24,762,883	24,640,369
JUMBO INTERACTIVE LTD	122,277	1,990,451	806,518
JUMBO SA	247,689	4,479,580	4,451,071
JUNEYAO AIRLINES CO LTD A	75,295	114,359	96,858
JUNGHEINRICH PRFD	99,152	1,601,883	2,311,887
JUPITER FUND MANAGEMENT	1,080,531	4,915,999	3,420,538
JUPITER MINES LTD	3,136,158	862,532	604,588
JUROKU BANK LTD/THE	85,400	2,184,779	1,551,504
JUST DIAL LTD	584,355	5,938,995	3,108,924
JUST EAT TAKEAWAY	479,917	35,953,474	50,048,858
JUST GROUP PLC	2,453,424	3,913,516	1,591,512
JUSTSYSTEMS CORP	80,500	3,014,198	5,685,777
JUSUNG ENGINEERING CO LTD	80,590	770,255	375,196
JUVENTUS FOOTBALL CLUB SPA	1,148,228	887,635	1,191,878
JVCKENWOOD CORP	379,600	1,564,410	573,526
JW HOLDINGS CORP	89,891	635,516	399,067
JW PHARMACEUTICAL	30,448	895,640	917,604
JYP ENTERTAINMENT CORP	64,637	1,879,425	1,139,215
JYSKE BANK REG	135,483	3,317,697	3,971,013
K S AG REG	464,274	2,792,438	2,931,588
K S HOLDINGS CORP	397,300	4,204,903	5,406,094
K WAH INTL HOLDINGS	2,979,028	1,342,121	1,283,790
K+O ENERGY GROUP INC	32,300	417,090	455,676
KADOKAWA CORP	96,100	1,573,203	1,969,478
KAGA ELECTRONICS CO LTD	29,800	463,997	540,286
KAGOME CO LTD	183,000	4,164,754	5,470,408
KAINOS GROUP PLC	113,144	1,049,430	1,047,108
KAISA GROUP HOLDINGS LTD	4,816,000	2,370,713	1,814,439
KAJARIA CERAMICS LTD	150,107	1,122,003	780,120
KAJIMA CORP	1,069,200	10,908,267	12,725,150
KAKAKU.COM INC	1,162,780	22,252,300	29,413,047
KAKAO CORP	124,685	14,818,870	27,728,509
KAKEN PHARMACEUTICAL CO LTD	78,100	3,346,976	3,988,794
KALBE FARMA TBK PT	44,391,300	4,943,470	4,537,018
KALEYRA INC	10,400	88,058	42,016
KAMA CO LTD B	553,690	316,439	234,765
KAMADA LTD	66,345	524,192	507,419
KAMAKURA SHINSHO LTD	36,300	493,829	377,855
KAMEDA SEIKA CO LTD	31,700	1,115,206	1,522,047
KAMEI CORP	52,700	420,099	497,764

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
KAMIGUMI CO LTD	840,935	17,783,516	16,478,070
KANADEN CORP	40,221	295,257	480,930
KANAGAWA CHUO KOTSU CO LTD	16,800	588,623	642,351
KANAMOTO CO LTD	69,700	1,234,294	1,521,467
KANDENKO CO LTD	244,500	1,927,618	2,078,199
KANEKA CORP	135,400	4,520,118	3,514,112
KANEMATSU CORP	390,900	4,183,513	4,666,814
KANEMATSU ELECTRONICS LTD	28,400	489,177	1,008,222
KANGWON LAND INC	1,012,903	26,355,042	18,104,846
KANSAI ELECTRIC POWER CO INC	1,870,211	29,153,733	18,115,313
KANSAI MIRAI FINANCIAL GROUP	416,300	3,268,016	1,558,930
KANSAI NEROLAC PAINTS LTD	303,306	2,161,056	1,793,233
KANSAI PAINT CO LTD	448,900	6,990,772	9,457,753
KANSAI SUPER MARKET LTD	45,000	567,311	455,485
KANTO DENKA KOGYO CO LTD	108,300	667,294	857,285
KAO CORP	4,083,161	283,177,533	323,216,341
KAP INDUSTRIAL HOLDINGS LTD	5,993,891	568,012	858,981
KAPPA CREATE CO LTD	44,900	506,784	612,207
KAPSCH TRAFFICOM AG	12,059	451,475	232,958
KARDEMIR KARABUK DEMIR CL A	573,720	284,651	349,852
KARDEMIR KARABUK DEMIR CL D	1,834,102	769,135	869,591
KARDEX HOLDING AG REG	13,953	2,367,777	2,544,540
KARNATAKA BANK LTD	363,517	483,281	200,045
KAROON ENERGY LTD	1,166,451	2,249,107	485,876
KARUR VYSYA BANK LTD	746,876	810,978	333,852
KASAI KOGYO CO LTD	35,200	266,620	148,128
KASEN INTERNATIONAL HOLDINGS	1,687,000	1,216,000	211,135
KASIKORNBANK PCL FOREIGN	8,499,702	46,504,429	25,644,171
KASIKORNBANK PCL NVDR	3,519,800	21,320,368	10,619,473
KATAKURA INDUSTRIES CO LTD	50,300	567,862	532,909
KATHMANDU HOLDINGS LTD	1,378,907	1,656,641	1,003,069
KATITAS CO LTD	115,000	2,329,791	2,659,545
KATO SANGYO CO LTD	59,291	1,437,503	1,940,003
KATO WORKS CO LTD	14,000	256,305	158,187
KAUFMAN + BROAD SA	101,656	4,683,931	3,505,171
KAVERI SEED CO LTD	62,338	424,479	473,745
KAWADA TECHNOLOGIES INC	10,500	721,027	473,004
KAWAI MUSICAL INSTRUMENTS MF	7,600	206,489	195,697
KAWASAKI HEAVY INDUSTRIES	343,300	9,256,716	4,932,243
KAWASAKI KISEN KAISHA LTD	189,871	6,232,908	1,784,578
KAZ MINERALS PLC	513,745	5,021,313	3,173,918
KB FINANCIAL GROUP INC	911,722	39,152,730	25,733,019
KBC ANCORA	84,853	3,281,965	2,885,764
KBC GROUP NV	646,503	39,191,143	37,075,680

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
KC CO LTD	13,763	226,439	215,109
KC TECH CO LTD/NEW	22,645	553,609	419,823
KCC CORP	10,775	2,503,908	1,191,400
KCC GLASS CORP	13,715	352,039	372,278
KCE ELECTRONICS PCL FOREIGN	1,865,400	1,552,091	1,376,078
KDDI CORP	14,567,464	346,097,803	436,679,599
KEE TAI PROPERTIES CO LTD	1,020,000	458,150	350,896
KEIHAN HOLDINGS CO LTD	819,250	31,478,026	36,487,892
KEIHANSHIN BUILDING CO LTD	85,500	634,039	1,099,212
KEIHIN CORP	103,400	1,585,337	2,419,072
KEIKYU CORP	1,967,331	33,209,433	30,106,720
KEIO CORP	903,304	48,521,496	51,576,703
KEISEI ELECTRIC RAILWAY CO	1,118,302	35,292,041	34,984,189
KEIYO BANK LTD/THE	275,900	1,683,579	1,324,709
KEIYO CO LTD	78,700	381,791	539,086
KELLER GROUP PLC	178,385	1,813,321	1,397,416
KELT EXPLORATION LTD	362,650	2,019,460	372,768
KEMIRA OYJ	181,617	2,045,344	2,337,647
KENEDIX INC	519,800	2,234,262	2,558,408
KENKO MAYONNAISE CO LTD	24,900	654,756	446,370
KENON HOLDINGS LTD	38,579	677,280	761,336
KEPCO ENGINEERING + CONSTRUC	29,395	494,861	366,567
KEPCO PLANT SERVICE + ENGINE	49,617	3,013,501	1,198,299
KEPPEL CORP LTD	3,345,409	18,199,647	14,292,418
KEPPEL INFRASTRUCTURE TRUST	8,485,347	3,174,382	3,284,533
KERING	174,072	56,025,953	94,675,220
KERNEL HOLDING SA	122,447	1,549,214	1,290,822
KERRY GROUP PLC A	1,338,345	134,673,546	165,798,794
KERRY LOGISTICS NETWORK LTD	1,367,542	2,152,891	1,817,402
KERRY PROPERTIES LTD	1,421,585	5,437,650	3,668,393
KESKO OYJ B SHS	634,656	7,924,100	10,849,028
KEWPIE CORP	250,500	4,468,921	4,725,101
KEY COFFEE INC	38,100	659,219	808,722
KEYENCE CORP	532,924	116,879,997	222,436,555
KEYERA CORP	515,600	12,913,829	7,824,855
KFC HOLDINGS JAPAN LTD	34,400	645,057	954,342
KGHM POLSKA MIEDZ SA	319,998	7,489,018	7,353,486
KH NEOCHEM CO LTD	83,300	1,742,058	1,571,261
KH VATEC CO LTD	34,025	642,071	637,872
KIA MOTORS CORP	654,685	19,748,240	17,444,115
KIATNAKIN BANK PCL FOR	1,397,900	2,738,725	1,809,140
KIKKOMAN CORP	428,783	13,213,880	20,627,370
KIMBERLY CLARK DE MEXICO A	1,983,060	3,923,433	3,079,248
KINAXIS INC	63,000	4,045,849	8,976,344

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
KINDEN CORP	295,100	3,533,409	4,866,134
KINDOM DEVELOPMENT CO LTD	780,000	655,723	820,858
KINEPOLIS	26,089	1,201,693	1,179,400
KING S TOWN BANK	2,245,000	2,114,424	2,731,634
KING SLIDE WORKS CO LTD	151,000	1,636,575	1,717,043
KING YUAN ELECTRONICS CO LTD	2,676,000	2,598,273	3,115,477
KINGBOARD HOLDINGS LTD	1,739,500	4,830,362	4,511,215
KINGBOARD LAMINATES HLDG LTD	2,422,000	2,162,745	2,434,359
KINGCLEAN ELECTRIC CO LTD A	16,083	50,778	56,588
KINGDEE INTERNATIONAL SFTWR	15,069,000	25,762,384	35,035,821
KINGFISHER PLC	5,014,086	16,051,024	13,679,460
KINGSOFT CORP LTD	2,035,845	4,864,739	9,469,413
KINGSPAN GROUP PLC	1,556,269	70,497,947	100,243,417
KINIK COMPANY	275,000	550,520	576,946
KINNEVIK AB B	562,497	13,997,627	14,798,024
KINPO ELECTRONICS INC	3,089,000	1,027,275	1,135,950
KINROSS GOLD CORP	11,403,270	42,069,703	82,049,960
KINSUS INTERCONNECT TECH	635,030	1,220,254	1,513,078
KINTETSU DEPT STORE CO LTD	21,200	668,327	595,412
KINTETSU GROUP HOLDINGS CO L	1,479,017	64,402,357	66,421,072
KINTETSU WORLD EXPRESS INC	84,200	1,299,156	1,453,998
KION GROUP AG	165,182	9,588,154	10,166,724
KIRIN HOLDINGS CO LTD	2,212,448	41,739,446	46,644,232
KIRKLAND LAKE GOLD LTD	2,342,123	85,882,785	96,126,781
KISCO CORP	53,873	357,143	197,962
KISOJI CO LTD	50,409	1,068,191	1,141,018
KISSEI PHARMACEUTICAL CO LTD	71,765	1,787,721	1,804,685
KISWIRE LTD	19,462	637,613	246,744
KITA NIPPON BANK LTD/THE	18,200	460,934	327,949
KITAGAWA CORP	18,000	308,581	265,783
KITANO CONSTRUCTION CORP	11,200	294,157	278,222
KITANOTATSUJIN CORP	145,200	1,001,361	691,781
KITZ CORP	195,243	1,022,881	1,243,286
KIWOOM SECURITIES CO LTD	27,452	1,417,551	1,990,119
KIYO BANK LTD/THE	151,200	2,129,845	2,294,243
KLAB INC	73,300	985,470	493,944
KLABIN SA UNIT	907,200	3,801,805	3,358,960
KLOECKNER + CO SE	174,937	2,202,234	955,681
KLOVERN AB B SHS	1,230,429	1,324,785	1,945,358
KLOVERN AB PREF	37,727	1,492,437	1,241,146
KMW CO LTD	68,978	4,318,509	3,670,110
KNORR BREMSE AG	130,855	12,850,715	13,261,085
KNT CT HOLDINGS CO LTD	25,800	386,353	237,709
KOA CORP	66,400	696,849	617,317

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
KOATSU GAS KOGYO CO LTD	64,300	389,874	439,852
KOBAYASHI PHARMACEUTICAL CO	143,400	7,005,406	12,600,751
KOBE BUSSAN CO LTD	51,800	1,257,644	2,919,257
KOBE STEEL LTD	986,069	11,096,998	3,381,800
KOC HOLDING AS	2,596,045	8,957,608	6,816,997
KOEI TECMO HOLDINGS CO LTD	162,500	3,066,012	5,264,286
KOENIG + BAUER AG	32,326	2,201,516	720,693
KOH YOUNG TECHNOLOGY INC	26,377	1,379,646	2,192,875
KOHNAN SHOJI CO LTD	63,100	987,080	1,982,750
KOITO MANUFACTURING CO LTD	268,500	8,765,449	10,801,224
KOJAMO OYJ	426,307	7,693,544	9,001,566
KOJIMA CO LTD	53,900	217,711	275,283
KOKUYO CO LTD	196,100	3,312,517	2,366,614
KOLMAR KOREA CO LTD	35,498	1,536,123	1,257,193
KOLMAR KOREA HOLDINGS CO LTD	15,975	756,130	291,517
KOLON CORP	15,657	528,070	231,695
KOLON INDUSTRIES INC	44,426	2,092,344	1,185,580
KOMATSU LTD	2,138,909	47,912,634	43,686,203
KOMATSU MATERE CO LTD	79,400	465,548	544,617
KOMAX HOLDING AG REG	7,077	1,793,992	1,148,691
KOMEDA HOLDINGS CO LTD	75,000	1,225,849	1,271,493
KOMERCNI BANKA AS	643,772	22,301,631	14,953,612
KOMERI CO LTD	56,200	1,187,209	1,435,669
KOMIPHARM INTERNATIONAL CO	86,421	1,082,805	1,228,581
KOMORI CORP	103,900	1,235,739	677,033
KONA I CO LTD	27,442	672,708	297,725
KONAMI HOLDINGS CORP	793,878	33,000,592	26,417,222
KONE OYJ B	1,221,272	46,952,639	83,973,741
KONECRANES OYJ	172,396	5,699,757	3,895,767
KONFOONG MATERIALS INTERNA A	32,300	215,585	272,496
KONGSBERG GRUPPEN ASA	171,310	2,970,310	2,393,758
KONICA MINOLTA INC	1,064,100	10,298,463	3,669,140
KONINKLIJKE AHOLD DELHAIZE N	9,362,140	219,463,487	255,096,031
KONINKLIJKE BAM GROEP NV	588,931	3,002,125	1,064,947
KONINKLIJKE DSM NV	407,126	33,107,671	56,334,873
KONINKLIJKE KPN NV	32,910,276	102,555,144	87,233,099
KONINKLIJKE PHILIPS NV	2,182,835	80,850,732	101,792,558
KONINKLIJKE PHILIPS NVR NY	61,634	2,980,914	2,886,937
KONISHI CO LTD	60,500	513,216	845,099
KONKA GROUP CO LTD A	263,800	209,810	252,087
KONOIKE TRANSPORT CO LTD	68,000	705,034	733,040
KONYA CIMENTO SANAYII AS	2,106	134,468	84,950
KOOLEARN TECHNOLOGY HOLDING	598,000	2,427,232	2,399,577
KORDSA TEKNIK TEKSTIL AS	134,174	274,113	243,890

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
KOREA AEROSPACE INDUSTRIES	149,117	6,245,951	2,944,281
KOREA ELECTRIC POWER CORP	593,356	15,789,287	9,619,189
KOREA ELECTRIC TERMINAL CO	16,792	538,588	445,330
KOREA GAS CORPORATION	61,891	2,495,754	1,348,085
KOREA INVESTMENT HOLDINGS CO	88,107	4,363,729	3,259,560
KOREA LINE CORP	26,689	1,562,931	381,636
KOREA PETRO CHEMICAL IND	6,753	1,009,457	634,401
KOREA REAL ESTATE INVEST	369,935	1,100,739	522,833
KOREA SHIPBUILDING + OFFSHOR	100,372	11,318,554	7,293,106
KOREA ZINC CO LTD	30,243	8,899,491	8,422,833
KOREAN AIR LINES CO LTD	183,577	3,263,195	1,698,361
KOREAN REINSURANCE CO	224,039	1,964,741	1,370,850
KORIAN	124,563	3,980,065	4,558,038
KORNIT DIGITAL LTD	91,962	2,770,607	4,908,932
KOSE CORP	67,450	6,298,144	8,102,628
KOSHIDAKA HOLDINGS CO LTD	106,500	469,860	410,660
KOSSAN RUBBER INDUSTRIES	1,533,000	1,363,463	3,044,534
KOT ADDU POWER COMPANY LTD	1,117,000	510,588	134,053
KOTOBUKI SPIRITS CO LTD	43,800	1,537,206	1,792,436
KOURAKUEN HOLDINGS CORP	16,341	241,857	234,622
KOZA ALTIN ISLETMELERI AS	201,820	2,241,788	2,454,021
KOZA ANADOLU METAL MADENCILI	436,097	714,570	852,504
KPC PHARMACEUTICALS INC A	125,800	192,929	173,564
KPJ HEALTHCARE BERHAD	5,555,600	1,290,718	1,089,079
KRAKATAU STEEL PERSERO TBK	9,187,499	339,856	177,511
KRBL LTD	211,632	759,454	689,802
KRESNA GRAHA INVESTAMA TBK P	31,322,700	1,294,618	339,868
KRONES AG	35,779	2,352,946	2,294,574
KROSAKI HARIMA CORP	9,300	390,493	313,779
KRUK SA	36,166	1,703,469	986,516
KRUNG THAI BANK NVDR	16,170,000	9,618,128	5,388,692
KRUNG THAI BANK PUB CO FOREI	21,174,751	11,765,163	7,056,538
KRUNGTHAI CARD PCL FOREIGN	3,072,300	4,263,674	2,982,092
KRUNGTHAI CARD PCL NVDR	25,300	35,693	24,557
KT CORP	3,810	98,035	74,594
KT SKYLIFE CO LTD	34,296	717,787	226,102
KTB INVESTMENT + SECURITIES	111,355	388,105	207,370
KUALA LUMPUR KEPONG BHD	1,088,880	6,009,896	5,641,339
KUANG CHI TECHNOLOGIES CO A	191,826	216,159	196,596
KUANGCHI SCIENCE LTD	4,331,000	1,969,949	148,084
KUBOTA CORP	2,580,719	34,773,340	38,464,997
KUEHNE NAGEL INTL AG REG	524,296	73,119,896	87,092,175
KUK IL PAPER MFG CO LTD	186,744	909,869	895,800
KULICKE + SOFFA INDUSTRIES	138,956	2,154,669	2,894,453

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
KUMAGAI GUMI CO LTD	105,286	2,682,686	2,517,847
KUMBA IRON ORE LTD	358,598	9,957,963	9,557,798
KUMHO INDUSTRIAL CO LTD	46,035	651,731	254,889
KUMHO PETROCHEMICAL CO LTD	41,297	3,903,753	2,557,781
KUMHO TIRE CO INC	323,612	2,807,291	811,149
KUMIAI CHEMICAL INDUSTRY CO	231,041	1,364,246	2,143,690
KUNG LONG BATTERIES INDUSTRI	147,000	725,813	737,379
KUNGSLEDEN AB	451,999	2,987,868	3,366,954
KUNSHAN KERSEN SCIENCE + T A	78,000	110,012	133,968
KUNWU JIUDING INVESTMENT H A	38,440	137,301	162,148
KUO TOONG INTL CO LTD	514,498	421,678	297,317
KURA CORP	23,200	621,613	1,126,829
KURABO INDUSTRIES LTD	44,200	873,255	926,322
KURARAY CO LTD	814,400	9,995,863	8,492,376
KUREHA CORP	43,400	2,376,613	1,894,740
KURIMOTO LTD	27,500	455,603	441,998
KURITA WATER INDUSTRIES LTD	649,253	17,321,082	17,999,868
KUSURI NO AOKI HOLDINGS CO L	37,100	1,962,618	2,909,264
KUWAIT FINANCE HOUSE	9,346,154	19,160,412	18,592,057
KUWAIT INTERNATIONAL BANK	1,350,830	1,110,704	768,390
KUWAIT PROJECTS CO HOLDINGS	1,641,370	1,172,206	928,322
KWANG DONG PHARMACEUTICAL CO	71,654	323,556	418,778
KWEICHOW MOUTAI CO LTD A	113,687	21,107,867	23,509,766
KWG GROUP HOLDINGS LTD	2,947,644	2,612,114	4,951,754
KWS SAAT SE + CO KGAA	24,499	1,182,583	1,835,321
KYB CORP	46,300	1,410,940	864,330
KYOBO SECURITIES CO LTD	41,136	353,553	212,032
KYOCERA CORP	2,731,184	146,962,584	148,476,564
KYODO PRINTING CO LTD	17,600	521,405	465,103
KYOEI STEEL LTD	50,200	1,055,372	600,716
KYOKUTO KAIHATSU KOGYO CO	70,000	608,721	850,628
KYOKUTO SECURITIES	50,300	371,130	238,247
KYOKUYO CO LTD	22,599	544,980	569,767
KYORIN HOLDINGS INC	91,300	1,566,213	1,867,721
KYORITSU MAINTENANCE CO LTD	55,700	2,391,253	1,892,205
KYOSAN ELECTRIC MFG CO LTD	112,200	460,391	554,318
KYOWA EXEO CORP	262,680	6,516,281	6,269,648
KYOWA KIRIN CO LTD	2,156,680	39,128,604	56,553,253
KYUDENKO CORP	91,400	2,950,251	2,694,091
KYUSHU ELECTRIC POWER CO INC	1,077,600	14,816,860	9,039,514
KYUSHU FINANCIAL GROUP INC	872,800	4,658,121	3,680,994
KYUSHU RAILWAY COMPANY	1,289,112	39,894,259	33,445,099
L OCCITANE INTERNATIONAL SA	1,048,000	2,300,624	1,755,129
L OREAL	564,378	105,948,138	181,099,850

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
L+F CO LTD	35,698	1,181,919	914,078
L+K ENGINEERING CO LTD	386,000	381,890	355,197
L+T FINANCE HOLDINGS LTD	1,126,797	1,996,737	982,727
L+T TECHNOLOGY SERVICES LTD	59,184	1,328,937	1,005,725
LA COMER SAB DE CV	1,123,406	1,328,669	1,556,248
LA FRANCAISE DES JEUX SAEM	202,629	6,894,843	6,249,423
LAFARGEHOLCIM LTD REG	1,207,279	69,989,635	52,888,134
LAGARDERE SCA	271,628	2,804,966	3,865,351
LAKALA PAYMENT CO LTD A	25,500	133,986	125,335
LAMDA DEVELOPMENT SA	164,340	1,281,061	1,101,934
LANCASHIRE HOLDINGS LTD	570,146	5,369,352	5,699,185
LAND + HOUSES PUB CO FOR REG	15,422,300	4,959,068	3,792,267
LAND MARK OPTOELECTRONICS	165,100	1,590,660	1,617,174
LANDING INTERNATIONAL DEVELO	4,410,000	476,123	141,681
LANDIS GYR GROUP AG	67,556	5,502,103	4,370,411
LANXESS AG	196,872	9,869,582	10,383,645
LAO FENG XIANG CO LTD A	27,974	185,661	190,564
LAO FENG XIANG CO LTD B	498,034	1,728,495	1,521,494
LAOBAIXING PHARMACY CHAIN A	24,193	313,252	342,131
LAOX CO LTD	59,600	351,608	101,649
LARGAN PRECISION CO LTD	241,694	31,963,586	33,463,370
LARSEN + TOUBRO INFOTECH LTD	66,881	1,547,866	1,734,302
LARSEN + TOUBRO LTD	3,740,824	72,614,785	46,753,023
LASERTEC CORP	179,100	7,035,563	16,866,626
LATAM AIRLINES GROUP SA	536,313	5,713,201	767,935
LAURENTIAN BANK OF CANADA	103,700	3,914,917	2,177,548
LAURUS LABS LTD	95,694	622,609	658,355
LAWSON INC	427,916	23,980,177	21,458,271
LEALEA ENTERPRISE	2,111,458	659,825	535,298
LEC INC	58,600	738,076	876,135
LEE + MAN PAPER MANUFACTURIN	3,396,325	2,180,015	1,822,954
LEE S PHARMACEUTICAL HLDGS	635,000	701,647	336,735
LEEJAM SPORTS CO JSC	48,811	1,014,375	761,249
LEENO INDUSTRIAL INC	21,849	854,352	2,052,573
LEG IMMOBILIEN AG	161,961	16,618,640	20,555,435
LEGAL + GENERAL GROUP PLC	13,835,660	36,449,516	37,763,628
LEGEND HOLDINGS CORP H	1,219,560	2,938,943	1,424,049
LEGOCHEM BIOSCIENCES INC	34,064	824,351	1,614,206
LEGRAND SA	772,699	42,240,630	58,684,484
LEM HOLDING SA REG	1,126	1,352,447	1,663,659
LENDLEASE GROUP	1,560,551	15,076,800	13,290,813
LENOVO GROUP LTD	61,549,261	45,504,429	34,068,516
LENS TECHNOLOGY CO LTD A	143,775	409,204	569,889
LENZING AG	32,570	3,909,470	1,507,137

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
LEO GROUP CO LTD A	630,269	323,566	343,908
LEO HOLDINGS CORP A	39,500	407,513	410,800
LEONARDO SPA	1,791,374	24,697,819	11,870,692
LEONG HUP INTERNATIONAL BHD	3,063,100	656,911	543,280
LEONI AG	68,260	1,729,563	516,347
LEONTEQ AG	25,419	1,939,156	1,066,334
LEOPALACE21 CORP	545,300	1,282,905	1,066,490
LEPU MEDICAL TECHNOLOGY A	161,774	783,376	835,157
LEROY SEAFOOD GROUP ASA	601,386	4,201,425	3,600,711
LET S GOWEX S.A	86,288	0	0
LEWIS GROUP LTD	183,004	546,559	135,765
LEXINFITECH HOLDINGS L ADR	250,023	2,670,762	2,660,245
LEXTAR ELECTRONICS CORP	869,000	548,830	592,008
LEYARD OPTOELECTRONIC CO L A	227,306	204,661	195,042
LEYOU TECHNOLOGIES HOLDINGS	2,725,000	705,460	896,561
LF CORP	24,094	492,321	247,380
LG CHEM LTD	106,577	25,359,050	43,460,131
LG CHEM LTD PREFERENCE	18,138	2,768,073	3,769,797
LG CORP	212,624	13,203,560	12,585,799
LG DISPLAY CO LTD	517,044	11,007,526	4,878,787
LG ELECTRONICS INC	323,104	23,097,243	16,976,492
LG ELECTRONICS PREF	40,622	926,883	849,352
LG HAUSYS LTD	14,485	871,878	774,316
LG HELLOVISION CO LTD	63,101	810,679	209,314
LG HOUSEHOLD + HEALTH CARE	22,480	15,375,707	25,155,323
LG HOUSEHOLD + HEALTH PREF	4,967	2,516,079	2,993,786
LG INNOTEK CO LTD	33,466	3,520,830	4,854,984
LG INTERNATIONAL CORP	57,733	1,422,075	746,351
LG UPLUS CORP	1,787,148	17,276,957	18,126,288
LI CHENG ENTERPRISE CO LTD	286,820	637,396	340,243
LI NING CO LTD	4,268,340	10,238,824	13,547,751
LIANCHUANG ELECTRONIC TECH A	92,780	154,508	163,943
LIAONING CHENG DA CO LTD A	136,287	341,553	364,698
LIAONING WELLHOPE AGRI TEC A	155,400	293,141	327,315
LIBERBANK SA	3,194,033	2,251,235	528,780
LIBERTY GLOBAL PLC C	907,122	21,488,293	19,512,194
LIBERTY GLOBAL PLC A	414,461	10,135,777	9,060,117
LIBERTY GLOBAL PLC B	418	10,093	9,907
LIBERTY HOLDINGS LTD	277,781	2,196,277	1,056,447
LIC HOUSING FINANCE LTD	2,823,342	19,354,026	9,911,121
LIECHTENSTEIN LANDESBANK	26,399	1,755,903	1,621,468
LIEN HWA INDUSTRIAL HOLDINGS	1,906,361	1,817,342	2,746,033
LIER CHEMICAL CO LTD A	86,600	169,247	218,272
LIFCO AB B SHS	104,663	3,115,292	6,628,044

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
LIFE CORP	46,300	1,174,531	1,480,604
LIFE HEALTHCARE GROUP HOLDIN	3,294,739	5,799,076	3,198,978
LIFESTYLE CHINA GROUP LTD	1,120,000	271,757	265,894
LIFESTYLE INTL HLDGS LTD	1,087,000	1,464,067	893,392
LIFETECH SCIENTIFIC CORP	4,792,000	936,467	1,508,620
LIFULL CO LTD	150,900	745,607	591,655
LIG NEX1 CO LTD	25,595	1,827,961	638,359
LIGHT SA	555,100	2,588,765	1,676,178
LIGHTSPEED POS INC SUB VOTE	116,200	2,529,454	2,766,789
LINAMAR CORP	108,400	2,524,677	2,920,910
LINDAB INTERNATIONAL AB	163,035	1,736,052	1,910,925
LINDE PLC	1,196,919	209,848,697	253,878,489
LINE CORP	501,000	23,480,686	25,169,579
LINGNAN ECO+CULTURE TOUR A	253,900	175,971	154,333
LINGSEN PRECISION INDUSTRIES	838,000	305,963	292,545
LINGYI ITECH GUANGDONG CO A	619,209	883,931	930,463
LINICAL CO LTD	24,500	280,418	191,440
LINK ADMINISTRATION HOLDINGS	1,248,645	6,810,373	3,524,737
LINK AND MOTIVATION INC	101,500	633,229	364,096
LINTEC CORP	118,500	2,246,430	2,809,686
LINX SA	312,192	2,328,577	1,440,764
LION CORP	1,974,501	35,109,654	47,347,028
LIPPO KARAWACI TBK PT	137,352,710	3,496,966	1,644,194
LIQUEFIED NATURAL GAS LTD	1,323,316	2,731,694	39,177
LISI	39,407	1,643,883	818,810
LITE ON SEMICONDUCTOR CORP	517,615	547,228	721,919
LITE ON TECHNOLOGY CORP	18,166,275	28,217,970	28,507,466
LIUZHOU IRON + STEEL CO A	121,324	82,171	75,976
LIVANOVA PLC	116,317	8,055,560	5,598,337
LIVZON PHARMACEUTICAL GROU A	57,032	330,321	387,061
LIVZON PHARMACEUTICAL GROU H	377,089	1,020,280	1,902,364
LIXIL GROUP CORP	613,600	10,948,852	8,565,432
LIXIL VIVA CORP	51,100	845,988	1,229,128
LLOYDS BANKING GROUP PLC	164,269,513	160,331,980	63,276,369
LOBLAW COMPANIES LTD	1,500,748	79,019,390	72,844,677
LOCALIZA RENT A CAR	1,307,020	11,849,393	9,738,142
LOCAWEB SERVICOS DE INTERNET	189,897	1,216,799	1,494,054
LOCK+LOCK CO LTD	38,240	860,184	356,061
LOG COMMERCIAL PROPERTIES E	113,107	520,596	678,749
LOGAN GROUP CO LTD	2,414,000	3,352,875	4,273,311
LOGITECH INTERNATIONAL REG	346,551	13,397,130	22,624,289
LOGO YAZILIM SANAYI VE TICAR	33,473	338,391	378,447
LOJAS AMERICANAS SA	565,827	2,192,785	2,810,174
LOJAS AMERICANAS SA PREF	2,035,482	10,129,734	11,929,375

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
LOJAS RENNER S.A.	3,969,247	44,039,290	30,216,822
LOMON BILLIONS GROUP CO A	181,100	413,278	473,608
LONCIN MOTOR CO LTD A	181,577	95,685	99,335
LONDON STOCK EXCHANGE GROUP	762,130	40,060,926	78,706,308
LONG CHEN PAPER + PACKAGING	1,924,685	967,744	929,579
LONG YUAN CONSTRUCTION GRO A	252,700	282,170	308,637
LONG4LIFE LTD	1,852,221	566,168	330,468
LONGFOR GROUP HOLDINGS LTD	4,164,175	14,497,089	19,798,831
LONGI GREEN ENERGY TECHNOL A	1,828,431	6,583,509	10,527,416
LONGSHINE TECHNOLOGY GROUP A	168,600	387,937	405,645
LONKING HOLDINGS LTD	4,543,000	1,166,436	1,377,475
LONZA GROUP AG REG	186,573	43,497,767	98,489,594
LOOMIS AB	184,529	4,344,892	4,408,898
LOTES CO LTD	165,272	1,110,793	2,120,200
LOTTE CHEMICAL CORP	34,794	5,879,131	4,830,692
LOTTE CHEMICAL TITAN HOLDING	1,343,800	1,138,045	558,218
LOTTE CHILSUNG BEVERAGE CO	8,193	791,942	694,755
LOTTE CONFECTIONERY CO LTD	3,186	504,660	279,439
LOTTE CORP	61,013	2,668,578	1,602,869
LOTTE FINE CHEMICAL CO LTD	40,977	1,750,069	1,173,594
LOTTE FOOD CO LTD	858	390,296	249,657
LOTTE HIMART CO LTD	28,035	1,398,214	897,325
LOTTE SHOPPING CO	25,838	4,733,193	1,707,712
LOTTE TOUR DEVELOPMENT CO LT	73,372	756,065	814,329
LOTUS PHARMACEUTICAL CO LTD	193,000	602,492	547,513
LOVISA HOLDINGS LTD	106,645	736,972	436,879
LPN DEVELOPMENT PCL FOREIGN	2,221,900	623,076	322,061
LPP SA	1,950	4,361,028	2,962,724
LS CORP	55,553	3,054,610	1,607,220
LS ELECTRIC CO LTD	36,312	2,136,353	1,446,020
LSR GROUP PJSC GDR REGS	497,827	784,076	982,711
LT GROUP INC	6,523,800	1,898,963	1,047,474
LUCKY CEMENT	423,600	1,294,272	1,164,534
LUENMEI QUANTUM CO LTD A	127,864	242,847	259,195
LUK FOOK HOLDINGS INTL LTD	813,000	2,377,901	1,760,174
LULULEMON ATHLETICA INC	254,402	31,925,528	79,375,968
LUMENS CO LTD	100,228	829,949	138,737
LUNDBERGS AB B SHS	174,058	6,173,188	7,898,947
LUNDIN MINING CORP	1,475,500	6,875,663	7,886,667
LUNDIN PETROLEUM AB	442,296	9,837,201	10,662,597
LUNG YEN LIFE SERVICE CORP	505,000	1,134,321	996,153
LUONIUSHAN CO LTD A	190,000	268,045	275,031
LUPIN LTD	1,858,552	21,291,724	22,444,285
LUTHAI TEXTILE CO LTD B	424,545	432,573	251,426

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
LUTRONIC CORP	45,104	697,152	229,110
LUXFER HOLDINGS PLC	62,724	1,002,231	887,545
LUXI CHEMICAL GROUP CO LT A	129,860	150,260	136,944
LUXSHARE PRECISION INDUSTR A	631,346	3,312,891	4,582,861
LUYE PHARMA GROUP LTD	3,843,500	2,869,239	2,350,598
LUZHOU LAOJIAO CO LTD A	131,363	1,621,676	1,692,059
LVGEM CHINA REAL ESTATE INVE	2,502,000	884,658	758,627
LVMH MOET HENNESSY LOUIS VUI	584,961	146,689,044	256,558,096
LYNAS CORP LTD	1,595,195	2,584,736	2,125,194
M DIAS BRANCO SA	196,600	1,101,387	1,454,055
M+A CAPITAL PARTNERS CO LTD	29,500	757,296	1,091,023
M+G PLC	7,165,170	17,147,223	14,833,685
M3 INC	1,021,700	15,071,304	43,421,185
M6 METROPOLE TELEVISION	143,702	2,725,777	1,620,445
MAANSHAN IRON + STEEL A	530,713	199,808	193,557
MAANSHAN IRON + STEEL H	1,964,624	760,192	527,249
MABANEE CO SAKC	842,174	1,741,326	1,853,248
MABUCHI MOTOR CO LTD	117,900	3,771,657	3,748,408
MACA LTD	638,886	813,501	380,490
MACAU LEGEND DEVELOPMENT LTD	3,586,000	1,052,524	485,817
MACCURA BIOTECH CO LTD A	38,847	239,782	319,767
MACHVISION INC	72,984	803,323	770,544
MACMAHON HOLDINGS LTD	4,117,400	698,076	722,882
MACNICA FUJI ELECTRONICS HOL	112,500	1,402,637	1,619,433
MACQUARIE GROUP LTD	751,365	52,291,804	61,353,528
MACROLINK CULTURAL TAINMENT A	158,854	75,789	71,185
MACROMILL INC	87,100	1,516,011	595,818
MACRONIX INTERNATIONAL	4,194,830	5,153,734	4,407,454
MAEDA CORP	374,100	3,884,903	2,846,884
MAEDA KOSEN CO LTD	50,000	689,706	1,141,957
MAEDA ROAD CONSTRUCTION CO	79,100	1,400,955	1,489,838
MAEIL DAIRIES CO.	7,288	313,981	479,868
MAEZAWA KASEI INDUSTRIES CO	28,900	298,112	262,788
MAEZAWA KYUSO INDUSTRIES CO	20,300	316,386	378,020
MAGAZINE LUIZA SA	1,561,000	13,133,659	20,369,646
MAGELLAN FINANCIAL GROUP LTD	322,839	8,441,822	12,894,151
MAGNA INTERNATIONAL INC	761,014	27,996,587	33,782,287
MAGNACHIP SEMICONDUCT	79,687	930,399	820,776
MAGNUM BHD	1,838,700	939,711	944,023
MAGYAR TELEKOM TELECOMMUNICA	912,791	1,481,737	1,104,917
MAHANAGAR GAS LTD	93,241	1,289,398	1,299,258
MAHINDRA + MAHINDRA FIN SECS	692,306	3,323,308	1,538,585
MAHINDRA + MAHINDRA LTD	5,934,167	58,446,605	40,138,127
MAHINDRA CIE AUTOMOTIVE LTD	213,665	549,067	331,943

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
MAHLE METAL LEVE SA	90,800	709,217	296,173
MAINFREIGHT LTD	58,147	928,686	1,474,826
MAIRE TECNIMONT SPA	351,512	1,661,352	679,057
MAISONS DU MONDE SA	103,986	2,986,536	1,360,625
MAJOR CINEPLEX GROUP FOREIGN	1,372,200	1,094,279	665,955
MAKALOT INDUSTRIAL CO LTD	440,427	2,087,917	2,313,755
MAKEMYTRIP LTD	90,400	2,563,205	1,384,928
MAKINO MILLING MACHINE CO	49,100	1,672,566	1,501,877
MAKITA CORP	568,900	14,481,680	20,644,608
MALAYAN BANKING BHD	38,317,861	83,343,185	67,156,858
MALAYSIA AIRPORTS HLDGS BHD	2,110,374	4,226,270	2,684,140
MALAYSIA BUILDING SOCIETY	4,980,836	1,248,363	720,681
MALAYSIAN RESOURCES CORP BHD	5,103,500	1,137,690	559,777
MAN GROUP PLC/JERSEY	3,443,997	6,418,858	5,559,686
MAN WAH HOLDINGS LTD	3,548,800	1,571,628	3,392,914
MANAPPURAM FINANCE LTD	584,094	995,433	1,170,838
MANCHESTER UNITED PLC CL A	52,723	839,112	834,605
MANDO CORP	76,461	2,764,614	1,420,712
MANDOM CORP	84,800	1,525,949	1,560,254
MANGO EXCELLENT MEDIA CO L A	161,635	1,183,185	1,489,745
MANI INC	144,600	3,525,759	3,813,199
MANILA ELECTRIC COMPANY	615,670	4,214,258	3,311,582
MANILA WATER COMPANY	2,701,500	589,404	683,169
MANITOU BF	29,326	682,893	572,454
MANULIFE FINANCIAL CORP	4,584,582	95,728,469	62,171,241
MAOYAN ENTERTAINMENT	562,400	891,169	857,701
MAOYE COMMERCIAL CO LTD A	285,726	189,306	170,448
MAOYE INTERNATIONAL HLDGS	2,460,000	238,837	117,438
MAPELEY LTD	30,416	0	0
MAPFRE SA	9,147,934	26,926,459	16,274,812
MAPLE LEAF FOODS INC	172,700	2,575,393	3,615,035
MARCOPOLO SA PREF	1,351,611	1,204,960	721,246
MARFRIG GLOBAL FOODS SA	888,508	2,046,070	2,040,520
MARICO LTD	3,793,987	18,857,530	17,682,619
MARIELLA BURANI SPA	28,240	0	0
MARKOR INTL HOME FURNISHIN A	292,600	177,597	182,821
MARKS + SPENCER GROUP PLC	4,599,546	20,824,984	5,626,370
MARR SPA	78,647	1,155,419	1,178,354
MARS GROUP HOLDINGS CORP	21,061	454,901	317,813
MARSHALLS PLC	473,339	3,290,236	3,602,725
MARSTON S PLC	1,523,664	2,545,539	1,000,623
MARTINREA INTERNATIONAL INC	195,700	1,449,872	1,477,090
MARUBENI CORP	3,684,712	24,964,341	16,650,110
MARUDAI FOOD CO LTD	51,400	899,631	905,223

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
MARUHA NICHIRO CORP	84,100	2,698,477	1,720,431
MARUI GROUP CO LTD	1,702,523	32,986,431	30,709,642
MARUICHI STEEL TUBE LTD	505,106	14,634,975	12,542,791
MARUSAN SECURITIES CO LTD	137,300	895,539	521,787
MARUTI SUZUKI INDIA LTD	959,324	97,492,274	74,179,379
MARUWA CO LTD	22,000	1,173,388	1,659,916
MARUWA UNYU KIKAN CO LTD	43,200	786,813	1,211,290
MARUZEN SHOWA UNYU CO LTD	35,621	746,686	1,102,787
MARVELOUS INC	65,900	540,814	428,807
MAS REAL ESTATE INC	962,080	1,362,307	725,367
MASMOVIL IBERCOM SA	332,194	8,224,424	8,469,454
MASRAF AL RAYAN	31,385,532	33,053,452	32,928,518
MASSMART HOLDINGS LTD	240,104	390,616	317,145
MATAHARI DEPARTMENT STORE TB	5,226,600	2,174,337	590,897
MATRIX IT LTD	74,799	907,108	1,588,286
MATSUDA SANGYO CO LTD	28,600	425,678	355,230
MATSUI SECURITIES CO LTD	237,800	1,944,763	1,829,485
MATSUMOTOKIYOSHI HOLDINGS CO	178,500	4,124,749	6,477,522
MATSUYA CO LTD	78,300	762,679	495,703
MATSUYAFOODS HOLDINGS CO LTD	19,100	403,440	646,197
MAUREL ET PROM	130,024	1,129,301	256,148
MAVI GIYIM SANAYI VE TICA B	84,944	738,076	589,859
MAX CO LTD	92,400	1,179,067	1,302,687
MAX FINANCIAL SERVICES LTD	311,635	1,808,948	2,237,057
MAXELL HOLDINGS LTD	96,700	1,569,370	899,910
MAXIS BHD	6,443,500	8,757,537	8,075,051
MAXVALU TOKAI CO LTD	20,000	448,737	459,378
MAYINGLONG PHARMACEUTICAL A	54,800	135,690	187,854
MAYNE PHARMA GROUP LTD	3,641,072	2,847,650	965,148
MAZDA MOTOR CORP	1,354,100	14,509,097	8,108,158
MBANK SA	29,917	3,179,014	1,739,514
MBK PCL FOREIGN	992,800	748,559	446,491
MCB BANK LTD	1,223,900	1,747,492	1,181,402
MCCARTHY + STONE PLC	1,269,853	3,275,532	1,114,012
MCDONALD S HOLDINGS CO JAPAN	409,900	18,861,515	22,112,601
MCEWEN MINING INC	709,140	1,315,043	716,231
MCJ CO LTD	149,900	894,272	1,189,363
MCMILLAN SHAKESPEARE LTD	124,051	1,209,182	775,515
MCNEX CO LTD	25,715	645,484	663,799
MEBUKI FINANCIAL GROUP INC	2,377,900	8,042,859	5,510,266
MEDACTA GROUP SA	12,497	927,352	990,475
MEDCO ENERGI INTERNASIONAL T	16,039,566	749,020	507,517
MEDIA DO CO LTD	12,300	524,955	502,215
MEDIA NUSANTARA CITRA TBK PT	11,720,400	1,278,598	742,524

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
MEDIASET ESPANA COMUNICACION	294,020	2,076,047	1,087,112
MEDIASET SPA	727,166	3,891,433	1,292,862
MEDIATEK INC	3,803,250	42,688,982	74,635,454
MEDIBANK PRIVATE LTD	6,472,367	13,599,739	13,324,110
MEDICAL DATA VISION CO LTD	31,300	315,467	354,241
MEDICARE GROUP	325,284	750,089	610,723
MEDICLINIC INTERNATIONAL PLC	966,796	4,292,814	3,160,842
MEDIGEN BIOTECHNOLOGY CORP	258,625	818,116	749,460
MEDINET NASR HOUSING	1,643,661	484,892	278,017
MEDIOBANCA SPA	1,805,542	19,418,322	12,958,246
MEDIPAL HOLDINGS CORP	1,416,966	29,480,121	27,266,269
MEDIPOST CO LTD	34,694	1,451,315	783,092
MEDITERRANEAN + GULF INSURAN	78,665	348,756	456,765
MEDIWOUND LTD	209,604	1,095,826	622,524
MEDPACTO INC	28,905	1,522,223	1,285,628
MEDTRONIC PLC	5,213,468	468,786,343	478,075,016
MEDY TOX INC	9,224	3,730,695	1,116,527
MEG ENERGY CORP	681,500	3,036,118	1,886,384
MEGA FINANCIAL HOLDING CO LT	92,852,431	83,852,103	97,244,153
MEGA OR HOLDINGS LTD	47,550	1,170,649	1,057,491
MEGACABLE HOLDINGS CPO	722,430	2,973,387	2,103,166
MEGACHIPS CORP	42,300	744,713	817,888
MEGAPORT LTD	296,247	2,236,183	2,463,910
MEGAWORLD CORP	27,529,800	2,658,582	1,685,216
MEGGITT PLC	1,812,262	11,539,508	6,590,060
MEGMILK SNOW BRAND CO LTD	97,500	2,749,749	2,268,388
MEIDENSHA CORP	97,200	1,987,405	1,572,174
MEIJI HOLDINGS CO LTD	1,022,557	68,943,690	81,323,067
MEIKO NETWORK JAPAN CO LTD	31,900	338,234	251,628
MEINIAN ONEHEALTH HEALTHCA A	348,979	625,642	710,873
MEISEI INDUSTRIAL CO LTD	111,700	594,985	826,219
MEITEC CORP	58,700	1,891,197	2,823,868
MEITU INC	4,430,000	2,048,771	868,801
MEITUAN DIANPING CLASS B	9,017,747	93,971,658	200,007,833
MEKONOMEN AB	99,991	1,380,186	708,345
MELCO HOLDINGS INC	14,200	343,026	395,523
MELCO INTERNATIONAL DEVELOP.	1,822,000	3,003,658	3,526,247
MELEXIS NV	44,308	1,453,354	3,359,106
MELIA HOTELS INTERNATIONAL	259,323	2,493,042	1,101,540
MELISRON	39,085	1,756,790	1,462,462
MELROSE INDUSTRIES PLC	11,232,110	26,713,816	15,821,378
MENICON CO LTD	58,200	1,274,580	2,864,550
MENORA MIVTACHIM HOLDINGS LT	53,428	526,331	536,912
MERCADOLIBRE INC	93,653	35,763,486	92,320,318

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
MERCER INTERNATIONAL INC	92,366	826,959	753,707
MERCK KGAA	1,121,554	120,134,345	130,124,263
MERCURIES + ASSOCIATES HOLDI	1,150,897	738,480	1,033,699
MERCURIES LIFE INSURANCE CO	2,761,428	1,029,591	935,935
MERCURY NZ LTD	1,587,107	4,318,469	4,801,991
MEREO BIOPHARMA GROUP PL ADR	498	2,400	1,524
MERIDA INDUSTRY CO LTD	578,742	3,006,607	3,942,692
MERIDIAN ENERGY LTD	2,888,979	6,981,369	8,945,543
MERITZ FINANCIAL GROUP INC	70,319	304,803	549,527
MERITZ FIRE + MARINE INSURAN	138,936	1,752,117	1,461,147
MERITZ SECURITIES CO LTD	710,725	2,228,664	1,790,329
MERRY ELECTRONICS CO LTD	457,765	2,079,741	2,164,355
MERSEN	28,865	950,737	687,298
MERUS NV	56,095	947,423	902,569
MESAIEED PETROCHEMICAL HOLDI	10,168,871	7,217,811	5,641,615
MESOBLAST LTD	1,074,866	3,000,955	2,405,147
METAIR INVESTMENTS LTD	448,272	860,945	465,687
METALLURGICAL CORP OF CHIN A	1,348,376	503,239	478,425
METALLURGICAL CORP OF CHIN H	6,950,425	1,819,695	1,103,036
METALURGICA GERDAU SA PREF	1,683,600	2,308,116	2,241,407
METAWATER CO LTD	27,000	756,312	1,238,819
METCASH LTD	2,345,842	6,204,419	4,393,105
METHANEX CORP	141,900	4,128,737	2,552,533
METHANOL CHEMICALS CO	139,100	297,713	252,167
METLIFECARE LTD	415,660	1,461,730	1,375,367
METRO AG	391,200	7,433,008	3,697,791
METRO BANK PLC	378,534	7,792,171	490,869
METRO INC/CN	2,154,278	75,799,163	88,575,307
METRO PACIFIC INVESTMENTS CO	33,620,800	3,343,999	2,496,678
METROPOLITAN BANK + TRUST	4,220,263	5,218,657	3,133,963
METROVACESA SA	107,591	1,778,375	738,338
METSA BOARD OYJ	410,481	1,379,079	2,775,411
METSO OUTOTEC OYJ	346,222	2,863,141	1,910,077
METSO OYJ	250,564	7,843,236	8,209,050
MEZZION PHARMA CO LTD	11,400	1,291,231	2,162,763
MGM CHINA HOLDINGS LTD	1,732,000	3,007,349	2,234,709
MICHELIN (CGDE)	410,650	39,342,511	42,589,199
MICHINOKU BANK LTD/THE	37,700	735,460	393,476
MICRO FOCUS INTERNATIONAL	859,154	22,370,286	4,585,988
MICRO STAR INTERNATIONAL CO	5,807,000	15,554,776	21,157,874
MICROBIO CO LTD	888,580	561,987	2,258,757
MICRONICS JAPAN CO LTD	77,600	868,878	818,546
MICROPORT SCIENTIFIC CORP	1,086,761	986,497	4,374,835
MIDAS HOLDINGS LTD	2,510,900	0	2

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
MIDDLE EAST HEALTHCARE CO	83,006	589,963	670,510
MIDEA GROUP CO LTD A	182,200	1,379,126	1,539,947
MIDEA REAL ESTATE HOLDING LT	464,600	1,172,591	1,136,555
MIE KOTSU GROUP HOLDINGS INC	134,500	631,501	587,195
MIGDAL INSURANCE + FINANCIAL	746,874	745,778	386,714
MIGROS TICARET A.S	204,025	792,561	1,145,915
MILBON CO LTD	44,000	1,044,305	2,096,306
MILESTONE PHARMACEUTICALS IN	31,800	57,160	120,204
MILLAT TRACTORS LTD	70,323	455,808	295,767
MILLICOM INTL CELLULAR S.A.	233,315	6,281,991	6,101,187
MIMASU SEMICONDUCTOR INDUST	34,400	459,315	738,156
MIND CTI LTD	37,200	82,212	78,120
MINDA INDUSTRIES LTD	148,532	742,242	539,410
MINDTREE LTD	101,527	896,451	1,244,686
MINEBEA MITSUMI INC	964,774	11,347,729	17,464,927
MINERAL RESOURCES LTD	334,554	3,255,231	4,876,306
MINERVA SA	615,910	1,299,161	1,475,052
MING YANG SMART ENERGY GRO A	163,100	285,702	287,046
MINISTOP CO LTD	28,300	478,312	396,098
MINOR INTERNATIONAL PCL FOR	8,344,470	10,037,895	5,480,635
MINOR INTERNATIONAL PCL FOR RH	1,017,618	0	46,094
MINTH GROUP LTD	1,620,000	5,565,447	4,608,894
MIRAE ASSET DAEWOO CO LTD	884,372	7,775,795	4,903,987
MIRAE ASSET DAEWOO CO LTD 2P	330,435	1,198,253	979,341
MIRAE ASSET LIFE INSURANCE	181,525	761,612	399,918
MIRAIT HOLDINGS CORP	191,100	2,231,966	2,848,300
MIROKU JYOHU SERVICE CO LTD	44,300	871,081	928,007
MISHO ECOLOGY + LANDSCAPE A	111,200	192,251	149,648
MISUMI GROUP INC	651,800	10,270,000	16,276,120
MITAC HOLDINGS CORP	1,939,671	1,503,796	2,130,026
MITCHELLS + BUTLERS PLC	531,436	2,326,969	1,234,488
MITHRA PHARMACEUTICALS	33,199	1,151,911	678,632
MITIE GROUP PLC	865,134	2,890,715	890,444
MITRA ADIPERKASA TBK PT	17,227,700	1,135,948	940,679
MITSUBA CORP	82,000	683,335	351,152
MITSUBISHI CHEMICAL HOLDINGS	3,000,977	19,933,614	17,452,037
MITSUBISHI CORP	3,343,487	81,086,071	70,350,053
MITSUBISHI ELECTRIC CORP	4,693,895	52,230,970	60,889,892
MITSUBISHI ESTATE CO LTD	2,850,822	58,738,576	42,345,481
MITSUBISHI GAS CHEMICAL CO	451,400	6,261,528	6,820,058
MITSUBISHI HEAVY INDUSTRIES	2,076,947	83,324,354	48,956,539
MITSUBISHI LOGISNEXT CO LTD	153,900	1,561,536	1,355,193
MITSUBISHI LOGISTICS CORP	155,800	3,948,067	4,013,238
MITSUBISHI MATERIALS CORP	294,700	9,338,818	6,214,418

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
MITSUBISHI MOTORS CORP	1,480,600	13,785,626	3,650,550
MITSUBISHI PAPER MILLS LTD	58,100	641,375	183,102
MITSUBISHI PENCIL CO LTD	104,800	1,333,305	1,312,368
MITSUBISHI RESEARCH INSTITUT	14,700	407,570	586,583
MITSUBISHI SHOKUHIN CO LTD	33,000	849,755	839,950
MITSUBISHI STEEL MFG CO LTD	27,300	595,859	170,048
MITSUBISHI UFJ FINANCIAL GRO	30,043,230	201,640,539	117,404,883
MITSUBISHI UFJ LEASE + FINAN	1,029,937	4,816,068	4,868,776
MITSUBOSHI BELTING LTD	48,700	652,401	762,877
MITSUMI + CO LTD	3,892,422	62,954,655	57,528,543
MITSUMI CHEMICALS INC	401,607	8,879,226	8,364,563
MITSUMI E+S HOLDINGS CO LTD	175,100	2,776,479	673,555
MITSUMI FUDOSAN CO LTD	2,172,883	49,965,313	38,458,730
MITSUMI HIGH TEC INC	55,900	549,888	829,031
MITSUMI MATSUSHIMA HOLDINGS C	29,500	421,517	230,783
MITSUMI MINING + SMELTING CO	127,100	5,036,146	2,577,697
MITSUMI OSK LINES LTD	260,635	14,742,289	4,609,460
MITSUMI SOKO HOLDINGS CO LTD	51,580	954,184	712,850
MITSUMI SUGAR CO LTD	34,700	703,635	637,488
MITSUUROKO HOLDINGS CO LTD	105,900	878,510	1,132,767
MIURA CO LTD	229,500	5,368,194	9,540,784
MIVNE REAL ESTATE KD LTD	1,596,085	3,211,734	2,877,699
MIYAZAKI BANK LTD/THE	35,200	1,063,160	776,531
MIZRAHI TEFAHOT BANK LTD	1,187,654	22,175,338	22,174,895
MIZUHO FINANCIAL GROUP INC	207,926,067	351,079,398	254,788,210
MIZUHO LEASING CO LTD	102,000	2,395,851	2,240,719
MIZUNO CORP	43,900	1,092,361	843,127
MK RESTAURANTS GROUP FOREIGN	362,700	896,449	689,432
MLP SAGLIK HIZMETLERI AS	719,388	1,840,343	2,088,453
MLS CO LTD A	210,800	370,068	459,200
MMC NORILSK NICKEL PJSC ADR	295,720	0	7,744,907
MMG LTD	5,368,000	2,074,265	1,108,168
MOBILE TELECOMMUNICATIONS CO	5,674,965	11,047,571	11,073,995
MOBIMO HOLDING AG REG	15,547	3,066,991	4,495,676
MOCHIDA PHARMACEUTICAL CO	59,450	1,942,600	2,209,709
MODEC INC	46,500	1,070,501	657,728
MODERN TIMES GROUP B SHS	158,159	1,900,075	1,716,269
MODETOUR NETWORK INC	34,222	598,695	298,733
MOL HUNGARIAN OIL AND GAS PL	3,634,493	37,235,525	21,398,560
MOMENTUM METROPOLITAN HOLDIN	2,331,537	3,162,698	2,363,071
MOMO.COM INC	108,000	848,509	2,620,888
MONADELPHOUS GROUP LTD	209,809	2,623,799	1,562,987
MONCLER SPA	449,749	13,942,297	17,194,816
MONDI PLC	1,303,197	25,656,746	24,322,540

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
MONETA MONEY BANK AS	1,216,224	3,999,773	2,743,025
MONEX GROUP INC	419,400	1,022,710	847,469
MONEYSUPERMARKET.COM	1,237,429	3,952,730	4,947,741
MONOGATARI CORP	11,300	1,081,435	878,778
MONOTARO CO LTD	276,300	5,069,594	11,063,781
MONTNETS RONGXIN TECHNOLOG A	75,833	203,931	212,252
MORGAN ADVANCED MATERIALS PL	674,130	2,174,172	2,007,423
MORINAGA + CO LTD	91,600	4,370,660	3,553,284
MORINAGA MILK INDUSTRY CO	94,500	3,762,991	4,195,718
MORIROKU HOLDINGS CO LTD	26,400	607,131	415,509
MORITA HOLDINGS CORP	93,900	925,903	1,638,039
MORPHOSYS AG	77,804	5,000,938	9,826,507
MOS FOOD SERVICES INC	58,600	1,165,851	1,615,390
MOTA ENGIL SGPS SA	101,753	246,613	130,512
MOTECH INDUSTRIES INC	987,744	597,503	245,727
MOTHERSON SUMI SYSTEMS LTD	2,222,223	3,999,824	2,785,735
MOTILAL OSWAL FINANCIAL SERV	83,907	1,095,322	657,665
MOTOR OIL (HELLAS) SA	134,229	3,037,006	1,858,862
MOTUS HOLDINGS LTD	385,431	2,119,489	679,246
MOUNT GIBSON IRON LTD	1,638,831	1,402,968	688,284
MOUWASAT MEDICAL SERVICES CO	111,777	2,597,821	2,690,873
MOVIDA PARTICIPACOES SA	311,200	1,059,992	745,298
MOWI ASA	3,070,619	69,442,619	58,137,096
MPHASIS LTD	176,408	2,171,887	2,053,124
MR PRICE GROUP LTD	606,581	6,991,642	4,992,293
MRF LTD	2,388	2,091,837	2,127,729
MRV ENGENHARIA	695,800	2,281,410	2,280,979
MS+AD INSURANCE GROUP HOLDIN	3,889,907	119,597,463	106,761,965
MTI LTD	61,200	395,850	361,351
MTN GROUP LTD	4,253,466	33,094,304	12,932,985
MTR CORP	12,846,524	68,523,384	66,549,418
MTU AERO ENGINES AG	123,744	20,796,328	21,424,241
MUANGTHAI CAPITAL PCL FOREIGN	2,514,300	4,198,535	4,230,158
MUANGTHAI CAPITAL PCL NVDR	3,127,170	4,703,413	5,261,274
MUENCHENER RUECKVER AG REG	1,212,266	282,955,329	315,064,196
MUHAK CO LTD	32,168	736,397	141,471
MUHIBBAH ENGINEERING (M) BHD	838,800	541,119	183,029
MULLEN GROUP LTD	234,500	3,061,706	1,251,700
MULTI COMMODITY EXCH INDIA	17,672	261,931	300,503
MULTICHOICE GROUP LTD	1,036,455	7,701,246	6,339,227
MULTIPLAN EMPREENDIMENTOS	622,241	4,374,221	2,323,148
MUNTERS GROUP AB	251,805	1,301,946	1,405,426
MURATA MANUFACTURING CO LTD	1,335,076	45,856,389	78,160,449
MURRAY + ROBERTS HOLDINGS	483,592	447,998	139,163

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
MUSASHI SEIMITSU INDUSTRY CO	103,900	1,130,337	924,540
MUSASHINO BANK LTD/THE	76,400	1,901,752	1,090,569
MUTHOOT FINANCE LTD	230,005	2,126,552	3,308,404
MUYUAN FOODSTUFF CO LTD A	319,957	3,039,841	3,708,807
MY EG SERVICES BHD	4,994,650	1,600,536	1,655,170
MYCRONIC AB	163,811	1,921,541	3,089,264
MYER HOLDINGS LTD	1,987,022	3,329,203	253,092
MYHOME REAL ESTATE DEVELOP A	407,300	161,578	158,910
MYOVANT SCIENCES LTD	95,897	1,321,778	1,977,396
MYS GROUP CO LTD A	136,448	88,858	83,905
MYSTATE LTD	228,330	617,919	617,816
MYTILINEOS S.A.	252,164	2,821,641	2,061,827
NABTESCO CORP	272,900	6,307,853	8,398,091
NACHI FUJIKOSHI CORP	43,900	1,868,941	1,379,441
NAGACORP LTD	3,538,000	4,991,450	4,094,712
NAGAILEBEN CO LTD	59,300	930,902	1,448,902
NAGASE + CO LTD	258,188	3,449,206	3,214,038
NAGATANIEN HOLDINGS CO LTD	26,100	513,986	523,040
NAGOYA RAILROAD CO LTD	1,607,772	40,828,394	45,378,558
NAJIRAN CEMENT CO	196,702	500,330	566,351
NAKAYAMA STEEL WORKS LTD	35,700	239,366	119,789
NAM TAI PROPERTY INC	48,823	494,843	305,144
NAMCHOW HOLDINGS CO LTD	402,000	630,104	626,752
NAMHAE CHEMICAL CORP	45,590	504,687	277,440
NAMPAK LTD	1,554,087	1,115,258	115,383
NAMURA SHIPBUILDING CO LTD	123,700	944,021	180,015
NAMYANG DAIRY PRODUCTS CO	1,063	525,049	250,539
NAN KANG RUBBER TIRE CO LTD	1,641,000	2,275,752	2,466,686
NAN PAO RESINS CHEMICAL CO L	232,000	931,919	1,045,807
NAN YA PLASTICS CORP	45,025,513	108,864,103	98,583,204
NAN YA PRINTED CIRCUIT BOARD	499,000	655,721	1,341,175
NANFANG ZHONGJIN ENVIRONME A	317,124	157,068	139,866
NANJI E COMMERCE CO LTD A	222,181	526,726	664,900
NANJING HANRUI COBALT CO L A	21,417	180,192	187,767
NANJING IRON + STEEL CO A	237,928	115,144	108,637
NANJING KING FRIEND BIOCHE A	41,990	340,091	383,271
NANJING PANDA ELEC CO LTD A	646,980	791,002	749,038
NANJING SECURITIES CO LTD A	109,764	209,463	221,418
NANKAI ELECTRIC RAILWAY CO	253,800	6,235,482	5,801,277
NANOSONICS LTD	553,422	1,251,038	2,598,631
NANTEX INDUSTRY CO LTD	846,000	929,179	1,115,403
NANTO BANK LTD/THE	74,700	2,116,987	1,448,509
NANYA TECHNOLOGY CORP	1,919,478	4,396,488	3,968,485
NANYANG TOPSEC TECHNOLOGIE A	471,705	1,568,285	1,772,369

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
NAPHTHA ISRAEL PETROLEUM CRP	80,221	572,122	261,458
NARI TECHNOLOGY CO LTD A	412,553	1,185,770	1,180,956
NASPERS LTD N SHS	1,069,515	178,197,451	194,704,667
NATCO PHARMA LTD	209,499	1,923,876	1,751,241
NATIONAL AGRICULTURAL HOLDIN	2,048,000	0	0
NATIONAL AGRICULTURE DEVELOP	117,501	710,651	875,541
NATIONAL ALUMINIUM CO LTD	1,057,052	843,604	445,900
NATIONAL AUSTRALIA BANK LTD	7,469,432	154,480,667	93,700,054
NATIONAL BANK OF CANADA	790,020	29,911,232	35,684,310
NATIONAL BANK OF GREECE	1,278,559	3,751,201	1,792,145
NATIONAL BANK OF KUWAIT	15,216,367	45,164,867	40,606,655
NATIONAL BANK OF PAKISTAN	1,214,500	255,443	200,006
NATIONAL COMMERCIAL BANK	10,730,075	120,036,360	106,556,996
NATIONAL EXPRESS GROUP PLC	1,008,513	4,426,734	2,327,751
NATIONAL GAS + INDUSTRIALIZA	86,726	686,890	656,630
NATIONAL GRID PLC	8,747,476	101,132,957	106,916,562
NATIONAL INDUSTRIALIZATION C	784,074	2,749,898	2,182,280
NATIONAL INDUSTRIES GRP HOLD	2,384,276	1,549,620	1,263,244
NATIONAL MEDICAL CARE CO	51,885	693,664	582,340
NATIONAL PETROCHEMICAL CO	284,057	1,810,229	1,825,053
NATIXIS	1,950,412	9,014,536	5,093,157
NATURA +CO HOLDING S.A.	1,712,692	16,659,061	12,445,620
NATURA +CO HOLDING SA RCT	82,236	537,710	594,439
NATURECELL CO LTD	107,676	4,152,319	809,237
NATURGY ENERGY GROUP SA	895,456	22,581,425	16,659,941
NAURA TECHNOLOGY GROUP CO A	45,188	828,316	1,091,740
NAVER CORP	414,786	35,904,964	92,071,216
NAVIGATOR CO SA/THE	602,187	1,985,426	1,463,614
NAVIGATOR GLOBAL INVESTMENTS	275,434	978,786	224,719
NAVINFO CO LTD A	178,192	397,760	415,372
NAVIOS MARITIME ACQUISITION	4,592	302,471	18,689
NAVIOS MARITIME CONTAINERS L	1,052	4,208	852
NAVIOS MARITIME HOLDINGS INC	113,712	866,494	239,932
NAVTECH INC A	94,690	260,071	369,706
NBCC INDIA LTD	1,031,385	880,772	317,596
NCC AB A SHS	9,660	198,796	155,528
NCC AB B SHS	229,619	3,418,720	3,716,630
NCC GROUP PLC	625,507	2,383,288	1,371,084
NCC LTD	1,019,768	852,499	393,705
NCSOFT CORP	110,865	40,897,442	82,122,222
NEARMAP LTD	865,504	1,765,670	1,340,774
NEC CAPITAL SOLUTIONS LTD	17,300	268,829	317,505
NEC CORP	2,224,788	74,789,113	106,614,951
NEC NETWORKS + SYSTEM INTEGR	164,300	1,088,163	3,338,236

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
NEDBANK GROUP LTD	826,709	13,324,697	4,831,787
NEINOR HOMES SA	160,515	3,146,156	1,644,176
NEL ASA	2,998,341	3,497,442	5,858,684
NEMAK SAB DE CV	1,793,200	333,897	373,276
NEMETSCHKE SE	127,060	6,507,928	8,733,696
NEOEN SA	52,261	1,275,211	2,113,090
NEOENERGIA SA	564,200	3,106,960	1,964,651
NEOWIZ	27,476	749,778	632,735
NEPES CORP	38,597	695,837	920,924
NEPI ROCKCASTLE PLC	876,706	8,297,793	4,478,643
NESTE OYJ	3,375,998	92,159,327	131,990,896
NESTLE (MALAYSIA) BERHAD	144,300	5,004,181	4,711,218
NESTLE INDIA LTD	198,000	31,836,114	45,038,042
NESTLE SA REG	12,414,252	997,732,521	1,372,242,894
NET 1 UEPS TECHNOLOGIES INC	102,020	825,891	310,141
NET HOLDING AS	355,681	197,420	128,164
NET ONE SYSTEMS CO LTD	195,400	5,188,724	6,511,220
NET263 LTD A	223,600	222,309	222,206
NETCARE LTD	3,376,706	4,596,160	2,650,836
NETCOMPANY GROUP AS	78,603	2,814,101	5,152,586
NETDRAGON WEBSOFT HOLDINGS L	610,500	1,396,276	1,713,239
NETENT AB	439,254	2,161,787	3,356,881
NETLINK NBN TRUST	7,000,000	4,361,943	4,867,209
NETMARBLE CORP	39,562	4,333,085	3,305,467
NETUREN CO LTD	79,400	635,310	403,311
NETWEALTH GROUP LTD	194,234	1,232,645	1,199,559
NETWORK INTERNATIONAL HOLDIN	969,896	7,716,299	5,284,962
NEW CENTURY RESOURCES LTD	1,206,430	749,351	128,747
NEW CHINA LIFE INSURANCE C A	186,104	1,204,757	1,164,909
NEW CHINA LIFE INSURANCE C H	2,082,433	9,126,032	6,972,387
NEW FRONTIER HEALTH CORP	24,100	247,459	199,548
NEW HOPE CORP LTD	536,129	1,473,580	503,855
NEW HOPE LIUHE CO LTD A	380,213	1,456,598	1,601,666
NEW WORK SE	6,678	1,529,397	2,040,108
NEW WORLD DEPT STORE CHINA	1,098,679	604,316	199,877
NEW WORLD DEVELOPMENT PARR	3,374,297	17,757,889	16,021,538
NEW ZEALAND REFINING CO LTD	524,539	802,371	246,501
NEWCREST MINING LTD	6,885,652	128,316,966	149,476,504
NEWLAND DIGITAL TECHNOLOGY A	97,068	224,869	219,271
NEWMAX TECHNOLOGY CO LTD	228,000	765,671	397,200
NEWOCEAN ENERGY HLDGS LTD	2,078,000	989,483	195,723
NEXA RESOURCES SA	99,906	744,541	663,376
NEXANS SA	70,966	3,664,465	3,295,024
NEXEN TIRE CORP	82,402	897,424	365,135

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
NEXI SPA	828,305	11,259,166	14,326,786
NEXITY	233,053	10,734,728	7,538,500
NEXON CO LTD	1,060,841	10,656,010	23,963,197
NEXT PLC	298,863	16,120,060	18,072,334
NEXTAGE CO LTD	82,700	961,367	660,006
NEXTDC LTD	1,057,112	4,388,488	7,190,877
NFI GROUP INC	133,400	4,077,686	1,630,771
NGK INSULATORS LTD	613,700	10,064,666	8,464,435
NGK SPARK PLUG CO LTD	451,839	7,565,691	6,466,510
NH FOODS LTD	729,268	27,212,130	29,235,613
NH HOTEL GROUP SA	52,843	242,592	197,341
NH INVESTMENT + SECURITIES C	302,154	3,449,209	2,077,411
NHK SPRING CO LTD	382,700	3,123,068	2,476,012
NHN CORP	49,484	3,169,201	3,402,192
NHPC LTD	5,341,710	1,851,185	1,414,952
NIB HOLDINGS LTD	1,098,806	3,694,683	3,487,593
NIBC HOLDING NV	77,757	722,826	606,089
NIBE INDUSTRIER AB B SHS	706,813	9,047,804	15,620,722
NICE HOLDINGS CO LTD	47,480	829,801	836,826
NICE INFORMATION SERVICE CO	73,946	671,365	1,121,931
NICE LTD	529,137	60,168,469	98,597,336
NICHI IKO PHARMACEUTICAL CO	113,450	1,975,159	1,370,212
NICHIAS CORP	132,800	1,671,259	2,760,999
NICHIBAN CO LTD	18,800	475,364	254,419
NICHICON CORP	145,900	1,493,269	1,011,570
NICHIDEN CORP	30,600	477,421	669,663
NICHIDENBO CORP	385,000	624,093	700,724
NICHIHA CORP	67,300	1,054,765	1,434,145
NICHIIGAKKAN CO LTD	93,700	1,005,254	1,442,607
NICHIREI CORP	250,171	4,213,610	7,269,649
NICKEL ASIA CORP	7,122,660	667,650	258,746
NIDEC CORP	1,388,092	60,408,419	92,586,643
NIEN HSING TEXTILE CO LTD	269,000	215,340	152,714
NIEN MADE ENTERPRISE CO LTD	329,000	3,129,649	3,205,867
NIFCO INC	193,800	4,155,229	4,129,825
NIHON CHOUZAI CO LTD	30,000	579,941	442,694
NIHON KOHDEN CORP	175,718	4,806,382	5,904,229
NIHON M+A CENTER INC	302,616	6,084,414	13,660,286
NIHON NOHYAKU CO LTD	87,100	624,488	377,836
NIHON PARKERIZING CO LTD	227,500	2,226,031	2,279,534
NIHON TOKUSHU TORYO CO LTD	36,300	629,726	332,432
NIHON TRIM CO LTD	10,200	505,762	290,726
NIHON UNISYS LTD	150,800	4,291,882	4,703,545
NIIT TECHNOLOGIES LTD	44,409	867,246	828,848

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
NIKKISO CO LTD	143,000	1,337,224	1,359,948
NIKKON HOLDINGS CO LTD	123,500	2,122,316	2,454,317
NIKON CORP	756,800	13,668,537	6,327,419
NILFISK HOLDING A/S	58,694	1,435,660	803,997
NINE DRAGONS PAPER HOLDINGS	3,749,000	3,367,847	3,390,834
NINE ENTERTAINMENT CO HOLDIN	3,472,389	5,139,868	3,299,221
NINESTAR CORP A	59,076	266,460	274,832
NINETY ONE LTD	373,809	838,439	941,246
NINETY ONE PLC	741,293	1,228,616	1,886,841
NINGBO HUAXIANG ELECTRONIC A	103,300	220,281	225,464
NINGBO JOYSON ELECTRONIC A	110,195	328,791	370,894
NINGBO SANXING MEDICAL CO A	107,065	107,813	103,673
NINGBO TUOPU GROUP CO LTD A	81,990	250,049	323,366
NINGBO YUNSHENG (GROUP) CO A	163,100	152,883	131,419
NINGBO ZHOUSHAN PORT CO LT A	659,928	328,792	333,038
NINGXIA BAOFENG ENERGY GRO A	233,600	297,082	278,044
NINGXIA JIAZE RENEWABLES C A	318,700	166,838	131,551
NINTENDO CO LTD	612,930	247,508,925	272,760,526
NIO INC ADR	1,913,089	6,115,006	14,769,047
NIPPO CORP	120,800	1,987,480	3,047,853
NIPPON BEET SUGAR MFG CO LTD	25,000	526,765	435,417
NIPPON CARBON CO LTD	24,599	777,686	783,219
NIPPON CERAMIC CO LTD	45,800	859,998	965,372
NIPPON CHEMI CON CORP	37,300	1,184,902	623,367
NIPPON COKE + ENGINEERING CO	333,000	424,081	206,804
NIPPON DENKO CO LTD	264,000	1,179,757	413,551
NIPPON DENSETSU KOGYO CO LTD	82,800	1,145,175	1,828,914
NIPPON ELECTRIC GLASS CO LTD	186,843	7,218,092	2,918,204
NIPPON EXPRESS CO LTD	164,980	8,142,454	8,533,053
NIPPON FLOUR MILLS CO LTD	118,400	1,417,339	1,775,698
NIPPON GAS CO LTD	84,800	2,405,370	3,643,213
NIPPON KANZAI CO LTD	41,600	567,222	760,780
NIPPON KAYAKU CO LTD	382,458	4,005,605	3,988,184
NIPPON KOEI CO LTD	32,300	636,567	901,173
NIPPON LIFE INDIA ASSET MANA	348,657	1,186,933	1,451,588
NIPPON LIGHT METAL HOLDINGS	1,431,000	2,379,585	2,493,655
NIPPON PAINT HOLDINGS CO LTD	363,800	9,876,931	26,437,336
NIPPON PAPER INDUSTRIES CO L	223,800	4,610,065	3,128,242
NIPPON PARKING DEVELOPMENT C	343,000	266,251	441,924
NIPPON ROAD CO LTD	13,400	555,236	899,254
NIPPON SEIKI CO LTD	106,900	1,657,813	1,243,542
NIPPON SHARYO LTD	15,699	559,629	366,118
NIPPON SHEET GLASS CO LTD	160,510	1,257,823	554,945
NIPPON SHINYAKU CO LTD	120,500	6,603,840	9,795,477

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
NIPPON SHOKUBAI CO LTD	74,600	3,994,208	3,899,930
NIPPON SIGNAL COMPANY LTD	138,200	1,225,794	1,451,366
NIPPON SODA CO LTD	65,000	1,542,517	1,701,441
NIPPON STEEL CORP	2,192,898	56,111,001	20,600,659
NIPPON STEEL TRADING CORP	39,300	1,249,046	1,236,720
NIPPON SUISAN KAISHA LTD	639,700	2,642,294	2,774,988
NIPPON TELEGRAPH + TELEPHONE	11,492,997	252,823,448	267,976,400
NIPPON TELEVISION HOLDINGS	86,106	1,372,632	930,617
NIPPON THOMPSON CO LTD	154,600	790,054	484,356
NIPPON YAKIN KOGYO CO LTD	27,439	748,302	406,683
NIPPON YUSEN KK	380,300	12,334,564	5,343,976
NIPRO CORP	346,900	3,783,189	3,826,398
NISHAT MILLS LTD	541,100	519,544	251,407
NISHI NIPPON FINANCIAL HOLDI	339,660	3,751,061	2,288,852
NISHI NIPPON RAILROAD CO LTD	177,100	3,669,622	4,806,496
NISHIMATSU CONSTRUCTION CO	123,900	1,958,333	2,461,118
NISHIMATSUYA CHAIN CO LTD	91,200	765,644	938,332
NISHIO RENT ALL CO LTD	37,123	745,390	764,930
NISSAN CHEMICAL CORP	317,137	8,474,829	16,226,503
NISSAN MOTOR CO LTD	4,553,200	36,562,712	16,847,916
NISSAN SHATAI CO LTD	145,700	1,703,576	1,249,224
NISSAI ASB MACHINE CO LTD	18,900	451,219	562,349
NISSHA CO LTD	94,800	1,648,843	888,379
NISSHIN OILIO GROUP LTD/THE	51,000	1,378,193	1,593,085
NISSHIN SEIFUN GROUP INC	1,824,283	34,124,158	27,207,409
NISSHINBO HOLDINGS INC	391,900	3,708,939	2,833,406
NISSIN CORP	25,800	380,642	362,781
NISSIN ELECTRIC CO LTD	134,000	1,097,636	1,301,682
NISSIN FOODS HOLDINGS CO LTD	548,233	34,756,624	48,529,686
NISSIN KOGYO CO LTD	91,300	1,362,670	1,855,027
NISSIN SUGAR CO LTD	27,900	536,905	481,271
NISSO CORP	38,700	456,428	236,752
NITORI HOLDINGS CO LTD	668,583	82,811,344	130,915,474
NITTA CORP	45,300	997,060	983,386
NITTETSU MINING CO LTD	14,200	597,050	577,161
NITTO BOSEKI CO LTD	67,000	1,138,322	3,334,940
NITTO DENKO CORP	358,052	17,350,342	20,244,864
NITTO KOGYO CORP	62,800	925,635	1,122,873
NITTO KOHKI CO LTD	25,200	527,688	416,010
NKMAX CO LTD	60,144	856,279	620,015
NKT A/S	64,722	1,500,806	1,443,479
NMC HEALTH PLC	206,717	7,269,033	0
NMDC LTD	1,723,776	2,718,842	1,852,682
NN GROUP NV	775,265	26,601,177	26,035,093

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
NOBIA AB	205,715	1,375,603	973,744
NOBLE CORP PLC	507,000	5,995,536	162,798
NOBLE GROUP LTD	3,130,740	468,182	2
NOEVIR HOLDING CO	35,100	2,117,313	1,498,220
NOF CORP	157,500	4,859,838	5,445,382
NOHMI BOSAI LTD	51,200	560,548	992,346
NOJIMA CORP	69,800	1,034,082	1,760,447
NOK CORP	263,300	3,868,621	3,253,269
NOKIA OYJ	48,010,264	312,739,014	209,678,534
NOKIAN RENKAAT OYJ	319,869	9,366,945	7,019,958
NOLATO AB B SHS	41,246	2,908,600	2,780,236
NOMAD FOODS LTD	377,903	7,518,884	8,106,019
NOMURA CO LTD	183,400	1,095,323	1,524,863
NOMURA HOLDINGS INC	7,120,613	46,973,286	31,839,308
NOMURA REAL ESTATE HOLDINGS	264,700	5,557,044	4,907,077
NOMURA RESEARCH INSTITUTE LT	2,711,045	49,338,448	73,552,660
NONGSHIM CO LTD	7,692	1,680,772	2,337,304
NORBORD INC	105,440	2,810,421	2,399,108
NORDEA BANK ABP	7,522,277	56,933,607	51,942,273
NORDEX SE	164,091	2,008,021	1,622,751
NORDIC AMERICAN TANKERS LTD	324,055	2,231,711	1,315,663
NORDIC ENTERTAINMENT GROUP B	156,744	3,133,799	4,794,861
NORDIC SEMICONDUCTOR ASA	350,607	1,500,368	2,667,622
NORINCO INTL COOPERATION A	127,200	151,002	131,442
NORITAKE CO LTD	31,000	1,000,219	1,011,447
NORITSU KOKI CO LTD	48,200	533,570	668,818
NORITZ CORP	81,600	1,114,690	992,346
NORMA GROUP SE	77,379	2,985,455	2,059,725
NORSK HYDRO ASA	3,176,574	18,793,287	8,748,997
NORSTAR HOLDINGS INC	28,954	568,138	142,471
NORTH BANGKOK POWER PLANT F	2,445,200	992,982	957,273
NORTH HUAJIN CHEMICAL INDU A	141,095	103,013	90,153
NORTH PACIFIC BANK LTD	650,300	1,431,009	1,253,765
NORTH WEST CO INC/THE	115,000	2,339,793	2,506,021
NORTHAM PLATINUM LTD	813,484	4,104,608	5,440,394
NORTHEAST PHARMACEUTICAL A	223,353	165,598	164,813
NORTHEAST SECURITIES CO LT A	208,717	248,001	249,312
NORTHERN REGION CEMENT CO	208,278	552,971	550,263
NORTHERN STAR RESOURCES LTD	1,677,993	11,434,589	15,434,782
NORTHLAND POWER INC	414,257	7,814,406	10,335,134
NORWAY ROYAL SALMON ASA	31,844	626,118	827,871
NORWEGIAN AIR SHUTTLE AS	97,657	833,019	27,494
NORWEGIAN FINANCE HOLDING AS	372,848	4,153,800	2,546,977
NOS SGPS	546,252	2,861,964	2,382,923

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
NOTRE DAME INTERMED PAR SA	1,078,500	14,341,775	13,358,488
NOVA GROUP HOLDINGS LTD	2,910,000	1,332,200	55,193
NOVA MEASURING INSTRUMENTS	66,310	1,079,853	3,191,969
NOVAGOLD RESOURCES INC	559,308	3,582,732	5,112,617
NOVARTIS AG REG	9,942,642	738,704,702	864,833,047
NOVATEK MICROELECTRONICS COR	4,904,040	25,737,399	37,896,630
NOVO NORDISK A/S B	6,743,713	280,827,389	436,373,144
NOVOCURE LTD	223,180	13,505,822	13,234,574
NOVOZYMES A/S B SHARES	766,618	24,426,723	44,303,830
NRW HOLDINGS LTD	974,707	1,306,144	1,251,575
NS SHOPPING CO LTD	36,632	651,324	394,384
NS SOLUTIONS CORP	96,003	2,047,670	2,620,650
NS UNITED KAIUN KAISHA LTD	23,000	618,015	317,013
NSD CO LTD	171,000	1,279,213	2,914,854
NSFOCUS TECHNOLOGIES GROUP A	72,985	206,887	240,288
NSK LTD	1,040,000	8,952,734	7,702,276
NTN CORP	986,800	4,270,299	1,966,557
NTT DATA CORP	5,373,740	60,743,257	59,722,058
NTT DOCOMO INC	9,853,561	231,457,101	263,224,385
NUFARM LTD	755,973	4,208,074	2,128,793
NUTRIEN LTD	1,546,602	78,969,880	49,532,143
NVENT ELECTRIC PLC	411,172	7,431,163	7,701,252
NWS HOLDINGS LTD	3,316,227	5,718,907	2,862,487
NXP SEMICONDUCTORS NV	628,429	49,296,895	71,666,043
NYFOSA AB	410,299	1,881,149	2,796,497
NYMOX PHARMACEUTICAL CORP	87,416	356,774	310,327
O NET TECHNOLOGIES GROUP LTD	1,379,000	679,431	907,418
O2 CZECH REPUBLIC AS	112,906	1,100,320	1,042,374
OBARA GROUP INC	27,500	672,353	833,526
OBAYASHI CORP	1,589,772	12,178,039	14,853,688
OBEROI REALTY LTD	480,994	2,835,638	2,330,316
OBI PHARMA INC	308,523	1,766,083	1,212,990
OBIC BUSINESS CONSULTANTS	34,400	1,135,133	1,827,057
OBIC CO LTD	586,491	53,472,268	102,582,242
OBSEVA SA	68,100	396,010	401,109
OC OERLIKON CORP AG REG	449,184	6,550,844	3,662,019
OCADO GROUP PLC	1,068,299	14,619,769	26,769,416
OCEAN YIELD ASA	113,913	865,102	255,646
OCEANAGOLD CORP	1,438,200	3,678,056	3,336,793
OCEANIA HEALTHCARE LTD	951,273	434,406	551,144
OCEANWIDE HOLDINGS CO LTD A	330,452	186,542	176,108
OCI CO LTD	41,897	5,949,094	1,288,763
OCI NV	224,339	6,491,624	2,338,248
ODAKYU ELECTRIC RAILWAY CO	2,533,994	55,446,170	62,266,470

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
ODONTOPREV S.A.	121,828	324,901	315,730
OESTERREICHISCHE POST AG	72,969	2,547,450	2,413,579
OFFSHORE OIL ENGINEERING A	388,031	274,873	249,578
OFG BANCORP	112,065	1,923,651	1,498,309
OFILM GROUP CO LTD A	247,082	545,356	642,320
OFX GROUP LTD	528,123	1,124,991	510,876
OGAKI KYORITSU BANK LTD/THE	92,200	2,339,357	1,939,973
OHARA INC	20,700	482,561	206,453
OHSHO FOOD SERVICE CORP	25,300	1,050,443	1,407,054
OIL + GAS DEVELOPMENT CO LTD	1,509,876	1,395,261	980,205
OIL REFINERIES LTD	3,432,087	1,637,922	633,671
OIL SEARCH LTD	4,853,614	19,268,595	10,593,230
OILES CORP	66,400	1,046,193	859,812
OITA BANK LTD/THE	36,500	1,412,925	803,518
OJI HOLDINGS CORP	2,079,943	9,910,151	9,658,909
OKABE CO LTD	95,900	567,509	722,683
OKAMOTO INDUSTRIES INC	34,168	909,403	1,254,162
OKAMURA CORP	194,600	1,585,992	1,349,222
OKASAN SECURITIES GROUP INC	286,000	1,293,921	861,566
OKI ELECTRIC INDUSTRY CO LTD	202,100	2,826,404	1,944,476
OKINAWA ELECTRIC POWER CO	108,057	1,588,954	1,796,860
OKUMA CORP	70,000	3,643,332	2,991,148
OKUMURA CORP	86,900	2,036,510	1,997,609
OKURA INDUSTRIAL CO LTD	20,000	313,705	300,876
OKUWA CO LTD	62,600	687,046	958,569
OLAM INTERNATIONAL LTD	1,466,700	2,105,663	1,461,391
OLD MUTUAL LTD	11,931,019	16,962,354	8,267,595
OLYMPUS CORP	4,160,656	46,547,337	80,043,023
OMEGA GERACAO SA	186,200	1,385,468	1,279,133
OMNI BRIDGEWAY LTD	557,160	1,156,350	1,829,794
OMNIA HOLDINGS LTD	387,515	831,882	621,362
OMRON CORP	437,842	16,578,683	29,301,749
OMV AG	337,181	17,492,725	11,270,256
ON TRACK INNOVATIONS LTD	37,200	39,432	18,600
ONECONNECT FINANCIAL TECHNO	74,397	1,499,472	1,358,489
ONESAVINGS BANK PLC	828,915	4,352,015	2,718,248
ONESP WORLD HOLDINGS LTD	91,400	1,454,735	435,978
ONEX CORPORATION	714,142	41,236,833	32,157,363
ONO PHARMACEUTICAL CO LTD	3,322,188	66,417,441	96,600,118
ONOKEN CO LTD	37,100	457,573	421,603
ONTEX GROUP NV	190,649	5,101,580	2,790,080
ONWARD HOLDINGS CO LTD	254,800	1,665,555	751,044
OOH MEDIA LTD	1,114,226	2,073,960	698,102
OOREDOO QPSC	1,938,767	4,097,695	3,474,445

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
OPAP SA	474,754	4,911,138	4,503,043
OPEN DOOR INC	31,200	665,499	374,799
OPEN HOUSE CO LTD	139,600	3,922,652	4,774,751
OPEN TEXT CORP	1,216,810	39,708,462	51,504,476
OPERA LTD ADR	53,138	442,587	478,242
OPPEIN HOME GROUP INC A	14,695	233,424	240,759
OPPLE LIGHTING CO LTD A	25,930	99,716	100,324
OPTEX GROUP CO LTD	77,500	900,375	878,551
OPTIM CORP	46,600	625,207	1,488,038
OPTOELECTRONICS SOLUTIONS CO	16,669	550,721	654,094
OPTORUN CO LTD	22,000	748,088	511,433
OPTOTECH CORP	796,088	597,111	553,129
OPUS GLOBAL NYILVANOSAN MU	580,483	848,783	478,253
ORACLE CORP JAPAN	313,689	22,759,577	36,984,975
ORACLE FINANCIAL SERVICES	53,854	2,395,560	2,042,606
ORANGE	16,779,494	281,798,207	200,614,491
ORANGE BELGIUM	67,383	1,571,940	1,097,378
ORANGE POLSKA SA	1,573,015	2,082,564	2,475,451
ORASCOM CONSTRUCTION PLC	134,492	940,317	555,384
ORBIA ADVANCE CORP SAB DE CV	2,400,000	3,573,959	3,529,320
ORCHARD THERAPEUTICS PLC	171,900	1,384,845	1,031,400
ORG TECHNOLOGY CO LTD A	210,259	125,305	124,537
ORGANO CORP	15,900	626,084	857,747
ORICA LTD	1,418,970	22,755,241	16,256,627
ORIENT CORP	1,353,600	2,445,472	1,480,510
ORIENT SECURITIES CO LTD A	532,542	729,152	714,412
ORIENT SEMICONDUCTOR ELECTR	1,167,800	680,092	471,007
ORIENTAL LAND CO LTD	1,671,700	171,166,145	220,651,694
ORIENTAL PEARL GROUP CO LT A	304,417	413,006	415,265
ORIENTAL UNION CHEMICAL	1,707,300	1,267,626	972,145
ORIENTAL WEAVERS	615,108	294,864	209,228
ORIGIN ENERGY LTD	4,097,226	28,485,595	16,474,288
ORIGIN PROPERTY PCL F	1,310,150	421,732	231,022
ORIOLA CORP B	298,462	967,526	670,435
ORION CORP/REPUBLIC OF KOREA	51,082	4,432,106	5,690,641
ORION ENGINEERED CARBONS SA	428,778	5,305,160	4,540,759
ORION HOLDINGS CORP	48,089	1,064,998	531,724
ORION OYJ CLASS B	476,871	17,947,069	23,062,836
ORIX CORP	2,950,667	42,503,960	36,334,626
ORKLA ASA	6,443,490	59,981,803	56,306,231
OROCOBRE LTD	526,161	1,493,654	836,825
ORORA LTD	2,273,304	3,774,469	3,975,531
ORPEA	114,644	11,712,415	13,249,652
ORSTED A/S	443,017	31,942,262	51,098,217

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
OSAKA GAS CO LTD	3,248,283	63,836,195	64,071,430
OSAKA SODA CO LTD	46,600	915,300	1,026,725
OSAKA STEEL CO LTD	26,300	437,940	294,484
OSAKA TITANIUM TECHNOLOGIES	43,600	665,576	375,441
OSAKI ELECTRIC CO LTD	96,400	715,312	449,453
OSCOTEC INC	51,272	1,174,088	1,059,242
OSG CORP	182,300	3,533,001	2,788,108
OSHIDORI INTERNATIONAL HOLDI	9,722,738	1,066,830	1,204,295
OSISKO GOLD ROYALTIES LTD	364,050	4,466,134	3,624,463
OSJB HOLDINGS CORP	238,400	662,263	510,455
OSOTSPA PCL FOREIGN	2,708,500	3,299,798	3,330,033
OSOTSPA PCL NVDR	18,000	24,307	22,131
OSRAM LICHT AG	173,845	7,336,972	8,278,770
OSSTEM IMPLANT CO LTD	23,266	624,450	582,206
OTOKAR OTOMOTIV VE SAVUNMA	18,012	510,317	393,362
OTP BANK PLC	1,558,029	60,472,056	54,406,668
OTSUKA CORP	454,042	14,189,762	23,904,700
OTSUKA HOLDINGS CO LTD	2,412,019	95,181,724	105,057,026
OTTOGI CORPORATION	2,915	1,960,654	1,349,840
OURPALM CO LTD A	254,799	214,633	264,016
OUTOKUMPU OYJ	727,004	4,117,313	2,073,998
OUTSOURCING INC	241,000	2,289,159	1,519,025
OVCTEK CHINA INC A	101,445	592,821	994,359
OVERSEA CHINESE BANKING CORP	23,836,542	185,545,480	153,778,630
OVS SPA	395,427	2,311,602	428,580
OW BUNKER A/S	67,016	0	0
OXFORD IMMUNOTEC GLOBAL PLC	57,314	896,273	745,082
OYAK CIMENTO FABRIKALARI	397,334	309,147	410,391
OYO CORP	47,800	546,486	623,835
OZ MINERALS LTD	748,614	6,960,571	5,649,011
PABRIK KERTAS TJIWI KIMIA PT	2,962,000	2,474,436	1,067,854
PACIFIC BASIN SHIPPING LTD	10,348,000	3,235,364	1,508,718
PACIFIC INDUSTRIAL CO LTD	108,000	925,270	947,008
PACIFIC METALS CO LTD	34,000	1,077,368	483,126
PACIFIC SECURITIES CO/THE A	607,421	282,063	272,194
PACIFIC TEXTILES HOLDINGS	1,172,000	907,728	565,552
PACK CORP/THE	26,700	565,219	773,393
PACT GROUP HOLDINGS LTD	474,934	1,467,221	716,113
PADINI HOLDINGS BERHAD	855,700	864,416	497,245
PAGE INDUSTRIES LTD	44,135	15,237,313	11,640,890
PAGEGROUP PLC	758,687	4,058,929	3,545,376
PAGSEGURO DIGITAL LTD CL A	451,961	16,271,074	15,972,302
PAKISTAN OILFIELDS LTD	321,230	957,655	670,833
PAKISTAN PETROLEUM LTD	1,601,465	1,281,319	827,726

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
PAKISTAN STATE OIL CO LTD	821,839	1,024,402	774,164
PAKUWON JATI TBK PT	54,986,300	2,276,767	1,601,281
PAL GROUP HOLDINGS CO LTD	64,800	803,306	780,831
PALFINGER AG	24,120	581,813	530,971
PALM HILLS DEVELOPMENTS SAE	3,463,143	656,764	248,685
PALTAC CORPORATION	133,900	5,982,605	6,149,831
PAN AMERICAN SILVER CORP	1,086,838	13,399,272	15,077,989
PAN INTERNATIONAL INDUSTRIAL	894,530	719,040	550,279
PAN JIT INTERNATIONAL INC	784,700	613,260	752,665
PAN OCEAN CO LTD	420,392	1,763,069	1,335,077
PAN PACIFIC INTERNATIONAL HO	3,734,728	49,149,739	82,009,275
PANASONIC CORP	5,022,727	63,674,016	43,744,304
PANDORA A/S	227,223	13,039,517	12,337,110
PANDOX AB	214,427	3,915,542	2,476,464
PANGANG GROUP VANADIUM TIT A	764,100	250,881	217,108
PANIN FINANCIAL TBK PT	37,667,400	792,554	485,180
PARADE TECHNOLOGIES LTD	164,801	2,465,772	5,485,081
PARADIGM BIOPHARMACEUTICALS	457,239	955,434	991,648
PARADISE CO LTD	107,206	2,547,131	1,189,841
PARAGON BANKING GROUP PLC	619,375	2,154,216	2,678,550
PARAMOUNT BED HOLDINGS CO LT	49,300	1,561,703	2,006,090
PARAMOUNT RESOURCES LTD A	166,100	2,868,827	193,905
PAREX RESOURCES INC	332,200	4,071,150	3,990,302
PARGESA HOLDING SA TEND	322,420	25,857,169	24,209,997
PARIS MIKI HOLDINGS INC	51,100	381,326	144,464
PARK24 CO LTD	255,792	4,661,745	4,374,438
PARKLAND CORP	351,174	8,372,298	8,691,685
PARKSON RETAIL GROUP LTD	2,129,000	238,644	130,480
PARQUE ARAUCO S.A.	1,412,745	3,813,346	2,565,184
PARTNER COMMUNICATIONS CO	231,763	1,061,444	1,028,585
PARTNERS GROUP HOLDING AG	147,358	98,743,510	133,649,375
PARTRON CO LTD	92,030	744,087	677,113
PASON SYSTEMS INC	176,900	2,301,437	963,728
PASONA GROUP INC	43,000	366,370	473,504
PATRIZIA AG	106,487	962,837	2,577,399
PAX GLOBAL TECHNOLOGY LTD	1,475,000	890,869	641,350
PAZ OIL CO LTD	24,098	3,794,056	1,914,778
PC DEPOT CORP	73,340	372,242	516,646
PCCW LTD	22,065,473	12,609,266	12,583,707
PCHOME ONLINE INC	207,400	1,035,834	829,473
PCI SUNTEK TECHNOLOGY CO L A	283,400	390,088	364,961
PEAB AB CLASS B	478,455	3,520,829	3,933,780
PEARL ABYSS CORP	49,719	8,843,213	9,010,884
PEARSON PLC	3,221,001	36,247,656	22,916,096

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
PEGASUS HAVA TASIMACILIGI AS	84,999	681,423	688,821
PEGATRON CORP	16,828,150	31,720,429	36,502,961
PEMBINA PIPELINE CORP	1,286,962	43,556,173	32,070,110
PENDAL GROUP LTD	669,397	4,301,743	2,751,452
PENNON GROUP PLC	993,160	11,378,695	13,731,799
PENTA OCEAN CONSTRUCTION CO	672,900	4,258,633	3,611,337
PENTAIR PLC	374,910	12,103,933	14,242,831
PENTAMASTER CORP BHD	987,000	904,276	1,186,243
PEOPLE S INSURANCE CO GROU H	19,629,336	8,243,143	5,723,835
PEPKOR HOLDINGS LTD	1,656,991	2,117,639	1,049,030
PEPPER FOOD SERVICE CO LTD	30,600	1,192,105	152,029
PEPTIDREAM INC	202,600	7,340,360	9,276,952
PEPTRON INC	33,128	704,387	526,038
PEREGRINE HOLDINGS LTD	404,164	589,765	457,083
PERENTI GLOBAL LTD	1,628,773	2,117,211	1,295,229
PERFECT WORLD CO LTD A	71,358	459,520	581,427
PERMANENT TSB GROUP HOLDINGS	289,611	963,743	162,638
PERMIRA VII L.P.1	99,000,000	108,724,413	101,409,861
PERNOD RICARD SA	557,717	75,480,252	87,727,301
PERPETUAL LTD	101,410	3,617,986	2,071,582
PERRIGO CO PLC	311,215	30,739,738	17,200,853
PERSEUS MINING LTD	2,803,984	2,808,837	2,529,011
PERSIMMON PLC	746,989	18,719,296	21,099,324
PERSISTENT SYSTEMS LTD FOR	85,496	801,434	719,150
PERSOL HOLDINGS CO LTD	503,000	8,109,453	6,900,311
PERUSAHAAN GAS NEGARA TBK PT	24,472,100	4,252,142	1,944,406
PETKIM PETROKIMYA HOLDING AS	5,721,824	3,514,391	3,564,271
PETRO RIO SA	177,500	1,014,052	1,144,045
PETROBRAS PETROLEO BRAS	10,297,100	65,713,348	41,895,027
PETROBRAS PETROLEO BRAS PR	13,532,000	85,657,166	53,109,674
PETROBRAS DISTRIBUIDORA SA	1,712,501	11,243,990	6,721,133
PETROFAC LTD	616,769	3,620,117	1,358,789
PETRONET LNG LTD FOR	3,705,254	11,868,437	12,663,488
PETS AT HOME GROUP PLC	1,139,066	3,505,785	3,363,759
PEUGEOT SA	1,291,863	30,592,228	21,009,842
PFEIFFER VACUUM TECHNOLOGY	15,836	1,749,063	2,924,052
PFIZER LIMITED	26,095	1,066,997	1,369,937
PGE SA	1,695,033	4,017,396	2,945,573
PGS ASA	771,526	4,596,687	307,747
PHARMA MAR SA	401,077	1,769,309	3,450,597
PHARMABLOCK SCIENCES NANJI A	23,835	280,816	418,640
PHARMAENGINE INC	193,584	726,816	524,893
PHARMAESSENTIA CORP	404,000	1,799,758	1,602,061
PHARMAGEST INTERACTIVE	9,016	635,197	789,853

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
PHARMALLY INTERENATIONAL HOL	106,081	740,301	589,648
PHARMARON BEIJING CO LTD A	21,900	233,838	304,627
PHARMARON BEIJING CO LTD H	198,900	1,812,930	2,053,042
PHARMICELL CO LTD	128,964	803,937	1,972,763
PHIHONG TECHNOLOGY CO LTD	646,771	253,463	189,179
PHISON ELECTRONICS CORP	1,290,020	10,947,911	12,854,510
PHOENIX GROUP HOLDINGS PLC	1,229,830	10,744,805	9,786,087
PHOENIX HOLDINGS LTD/THE	283,114	1,557,196	1,047,071
PHOENIX MEDIA INVESTMENT HOL	3,101,093	491,920	176,052
PHOENIX MILLS LTD	147,857	1,414,429	1,145,492
PI ADVANCED MATERIALS CO LTD	32,138	1,257,200	768,149
PI INDUSTRIES LTD	134,497	2,051,095	2,679,029
PIA CORP	14,200	663,264	446,855
PIAGGIO + C. S.P.A.	394,548	1,062,578	952,744
PICC PROPERTY + CASUALTY H	16,171,755	18,523,780	13,333,099
PICK N PAY STORES LTD	819,189	3,571,244	2,404,526
PICTON PROPERTY INCOME LTD	1,303,306	1,213,340	1,093,438
PIDILITE INDUSTRIES LTD	1,046,037	17,704,163	19,009,220
PIGEON CORP	252,400	6,911,460	9,755,833
PIHSIANG MACHINERY MFG CO	230,000	0	0
PILBARA MINERALS LTD	4,568,408	1,764,466	786,337
PILOT CORP	84,000	3,178,721	2,549,937
PINDUODUO INC ADR	647,565	41,341,245	55,586,980
PING AN BANK CO LTD A	1,769,837	3,403,219	3,202,374
PING AN HEALTHCARE AND TECHN	2,013,100	14,162,864	30,623,317
PING AN INSURANCE GROUP CO A	984,729	10,664,034	9,939,024
PING AN INSURANCE GROUP CO H	14,769,855	156,182,292	147,689,974
PINGDINGSHAN TIANAN COAL A	206,115	113,864	108,971
PIOLAX INC	56,500	788,725	842,119
PIONEERS HOLDING	1,116,365	879,359	251,078
PIRAEUS BANK S.A	690,270	1,717,478	1,217,185
PIRAMAL ENTERPRISES LTD	245,241	5,955,554	4,429,709
PIRELLI + C SPA	910,213	6,464,275	3,859,204
PIXART IMAGING INC	260,000	853,066	1,493,670
PKO BANK POLSKI SA	1,985,448	21,626,576	11,504,170
PLAN B MEDIA PCL F	3,114,500	893,575	604,611
PLASTIC OMNIUM	129,809	3,760,183	2,643,263
PLATINUM ASSET MANAGEMENT	703,913	2,579,729	1,807,722
PLAY COMMUNICATIONS SA	302,493	1,963,337	2,321,663
PLAYTECH PLC	730,495	6,626,999	2,540,819
PLAZA SA Y FILIALES	698,116	1,560,598	1,178,273
PLDT INC	217,533	5,649,270	5,457,426
PLENUS CO LTD	56,100	1,036,906	932,357
PLURISTEM THERAPEUTICS INC	18,170	225,308	160,623

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
PLUS500 LTD	249,727	2,599,036	4,059,144
PNB HOUSING FINANCE LTD	91,523	1,048,038	251,585
POINTSBET HOLDINGS LTD	248,084	1,066,349	905,271
POLA ORBIS HOLDINGS INC	174,000	2,953,462	3,025,666
POLARIS BAY GROUP CO LTD A	91,900	159,413	155,763
POLETOWIN PITCREW HOLDINGS	69,800	689,275	582,287
POLISAN HOLDING AS	445,100	242,721	207,137
POLSKI KONCERN NAFTOWY ORLEN	723,538	18,876,162	11,453,983
POLSKIE GORNICTWO NAFTOWE I	4,081,878	6,035,043	4,690,035
POLY DEVELOPMENTS AND HOLD A	1,090,609	2,264,376	2,278,622
POLY PROPERTY DEVELOPMENT H	312,800	3,339,722	3,147,998
POLY PROPERTY GROUP CO LTD	4,588,844	1,782,089	1,379,534
POLYCAB INDIA LTD	59,432	816,638	621,289
POLYMETAL INTERNATIONAL PLC	797,414	10,650,089	15,917,283
POLYNOVO LTD	1,414,221	2,171,718	2,473,175
POLYPIPE GROUP PLC	448,602	2,362,477	2,397,317
POONGSAN CORP	44,653	1,073,031	811,130
POPULAR INC	202,935	8,681,875	7,543,094
PORR AG	22,683	798,847	375,013
PORSCHE AUTOMOBIL HLDG PRF	490,393	36,257,446	28,178,156
PORTO SEGURO SA	219,571	3,305,277	2,016,240
POS MALAYSIA BERHAD	868,600	555,717	188,518
POSCO	160,331	48,312,346	23,192,912
POSCO CHEMICAL CO LTD	50,548	2,528,020	3,155,967
POSCO ICT CO LTD	128,394	686,471	453,651
POSCO INTERNATIONAL CORP	113,878	2,443,288	1,320,695
POSIFLEX TECHNOLOGY INC	132,509	560,948	375,909
POSTAL SAVINGS BANK OF CHI H	83,745,953	53,927,133	48,083,594
POSTE ITALIANE SPA	4,304,139	38,523,897	37,416,660
POSTNL NV	1,120,345	2,841,460	2,406,528
POU CHEN	22,164,000	25,681,501	21,634,774
POU SHENG INTL HOLDINGS LTD	4,984,000	1,221,631	1,144,646
POWER ASSETS HOLDINGS LTD	11,763,562	80,107,039	63,974,884
POWER CONSTRUCTION CORP OF A	957,693	525,080	468,415
POWER CORP OF CANADA	1,297,319	33,334,976	22,745,945
POWER FINANCE CORPORATION	1,486,124	2,381,451	1,653,354
POWER GRID CORP OF INDIA LTD	4,339,582	10,176,664	10,049,513
POWERLONG REAL ESTATE HOLDIN	3,376,000	1,713,002	1,890,450
POWERTECH TECHNOLOGY INC	6,414,090	16,451,728	23,261,117
POWSZECHNY ZAKLAD UBEZPIECZE	1,310,765	13,715,588	9,586,397
POYA INTERNATIONAL CO LTD	180,221	2,193,790	3,555,004
PP LONDON SUMATRA INDONES PT	6,517,800	720,413	378,703
PP PERSERO TBK PT	5,570,100	956,431	339,236
PPB GROUP BERHAD	1,569,700	6,520,866	6,513,248

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
PPC LTD	3,005,265	1,029,937	172,965
PRADA S.P.A.	1,198,969	5,613,582	4,161,341
PRAIRIESKY ROYALTY LTD	552,539	10,697,374	3,480,752
PRECIOUS SHIPPING PCL FORGN	1,471,736	406,441	259,515
PREMIER INVESTMENTS LTD	192,535	1,730,629	2,286,666
PREMIER OIL PLC	1,928,219	5,234,318	1,227,945
PREMIUM BRANDS HOLDINGS CORP	73,500	4,723,975	4,673,348
PRESIDENT CHAIN STORE CORP	4,874,073	48,403,803	48,981,093
PRESIDENT SECURITIES CORP	2,082,000	951,432	963,219
PRESS KOGYO CO LTD	210,200	786,278	568,924
PRESS METAL ALUMINIUM HOLDIN	4,448,000	5,189,072	4,702,320
PRESSANCE CORP	75,600	793,944	830,384
PRESTIGE ESTATE PROJ FOR	254,538	933,948	706,603
PRESTIGE INTERNATIONAL INC	203,700	1,022,344	1,529,379
PRETIUM RESOURCES INC	558,900	5,103,013	4,661,604
PRIMA MEAT PACKERS LTD	68,585	878,842	1,833,426
PRIMAX ELECTRONICS LTD	749,000	1,323,089	1,215,987
PRINCE HOUSING DEVELOPMENT	2,700,000	899,648	924,266
PRO MEDICUS LTD	98,870	1,337,116	1,801,185
PROMOTORA DE INFORMACIONES A	970,272	1,973,284	547,060
PROMOTORA Y OPERADORA DE INF	512,640	4,979,208	3,673,029
PRONEXUS INC	33,500	272,055	379,761
PROPERTY + BUILDING CORP LTD	2,693	141,704	160,913
PROQR THERAPEUTICS NV	83,100	570,703	505,248
PROSEGUR CASH SA	895,593	2,375,560	752,402
PROSEGUR COMP SEGURIDAD	1,122,574	6,740,697	2,612,417
PROSIEBENSAT.1 MEDIA SE	364,496	11,560,649	4,335,373
PROSUS NV	1,081,513	83,030,668	100,504,391
PROTALIX BIOTHERAPEUTICS INC	66,631	279,521	252,531
PROTHENA CORP PLC	68,184	1,941,242	713,205
PROTO CORP	44,700	441,794	416,402
PROVIDENT FINANCIAL PLC	605,278	5,233,436	1,317,768
PROXIMUS	1,269,408	35,629,213	25,862,844
PROYA COSMETICS CO LTD A	29,700	573,678	755,798
PRUDENTIAL PLC	6,899,785	94,128,433	103,881,738
PRUKSA HOLDING PCL FOREIGN	1,350,500	821,965	502,491
PRYSMIAN SPA	561,989	10,998,167	13,015,302
PSG GROUP LTD	388,532	6,068,624	3,541,623
PSP SWISS PROPERTY AG REG	101,021	10,412,656	11,375,590
PTC INDIA LTD	424,186	414,810	272,477
PTG ENERGY PCL FOREIGN	1,131,000	651,868	592,808
PTG ENERGY PCL NVDR	6,400	3,679	3,355
PTT EXPLOR + PROD PCL NVDR	13,800	52,282	40,966
PTT EXPLORATION + PROD FOR	3,233,083	12,736,451	9,597,521

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
PTT GLOBAL CHEMICAL PCL FOR	4,734,800	8,790,037	7,085,157
PTT GLOBAL CHEMICAL PCL NVDR	34,900	92,953	52,224
PTT PCL NVDR	9,522,900	14,968,921	11,631,141
PTT PCL/FOREIGN	38,201,300	53,812,485	46,658,548
PUBLIC BANK BERHAD	25,265,187	134,805,594	97,287,184
PUBLIC POWER CORP	269,914	678,750	1,045,881
PUBLICIS GROUPE	507,394	26,289,787	16,418,231
PUMA SE	192,603	12,042,313	14,887,285
PUNJAB NATIONAL BANK FOREIGN	2,233,516	2,214,247	1,027,958
PUREGOLD PRICE CLUB INC	2,358,330	2,007,825	2,193,850
PUSHPAY HOLDINGS LTD	434,824	1,011,983	2,460,479
PVR LTD	60,593	1,416,112	803,881
PZ CUSSONS PLC	449,439	1,757,083	1,026,244
Q TECHNOLOGY GROUP CO LTD	871,000	1,162,536	1,135,044
QANTAS AIRWAYS LTD	1,389,461	4,535,746	3,616,114
QASSIM CEMENT/THE	104,883	1,455,522	1,677,681
QATAR ALUMINUM MANUFACTURING	6,416,007	1,775,499	1,321,616
QATAR ELECTRICITY + WATER CO	1,181,901	5,380,079	5,128,821
QATAR FUEL QSC	1,142,885	6,839,347	5,056,819
QATAR GAS TRANSPORT(NAKILAT)	6,406,232	4,020,678	4,593,977
QATAR INSURANCE CO	3,756,481	3,451,905	1,965,421
QATAR INTERNATIONAL ISLAMIC	1,749,923	3,916,199	3,902,602
QATAR ISLAMIC BANK	2,731,199	11,137,257	11,814,442
QATAR NATIONAL BANK	38,372,204	199,503,423	183,271,801
QBE INSURANCE GROUP LTD	3,408,843	40,431,815	20,794,315
QIAGEN N.V.	516,311	14,652,070	22,233,163
QIANHE CONDIMENT AND FOOD A	96,106	265,446	429,034
QINETIQ GROUP PLC	1,550,864	4,823,473	5,698,923
QINGDAO EASTSOFT COMMUNICA A	77,400	164,229	171,669
QINGDAO HANHE CABLE CO LTD A	157,532	95,856	103,773
QINGDAO PORT INTERNATIONAL A	145,429	128,230	116,769
QINGDAO PORT INTERNATIONAL H	2,577,000	1,677,971	1,369,887
QINGDAO RURAL COMMERCIAL B A	176,600	111,556	110,592
QINGDAO TGOOD ELECTRIC A	89,097	257,984	263,735
QINGLING MOTORS CO LTD H	1,774,000	483,933	322,735
QINHUANGDAO PORT CO LTD A	178,150	70,513	63,210
QISDA CORP	3,291,000	1,889,711	1,968,722
QL RESOURCES BHD	1,706,400	2,926,861	3,822,973
QOL HOLDINGS CO LTD	53,000	819,431	555,128
QUADIENT SA	83,139	4,624,784	1,212,041
QUALICORP CONS E CORR SEG SA	1,007,500	6,147,410	5,321,174
QUALITAS CONTROLADORA SAB CV	415,200	1,311,683	1,623,102
QUALITY HOUSE PCL FOREIGN	15,316,900	1,254,808	1,110,082
QUANTA COMPUTER INC	24,210,345	44,262,377	58,260,079

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
QUANTA STORAGE INC	356,000	427,356	409,639
QUANTUM HI TECH CHINA BIOL A	82,600	184,211	219,400
QUBE HOLDINGS LTD	3,381,202	6,689,346	6,774,356
QUEBECOR INC CL B	1,518,700	31,879,642	32,526,049
QUECTEL WIRELESS SOLUTIONS A	15,780	323,404	463,980
QUESS CORP LTD	154,710	1,400,128	749,435
QUILTER PLC	4,270,768	7,605,107	7,342,895
QUOTIENT LTD	144,500	1,024,161	1,069,300
QUTOUTIAO INC ADR	253,539	909,699	755,546
RABIGH REFINING AND PETROCHE	512,526	2,543,256	1,839,136
RADA ELECTRONIC INDS LTD	79,736	402,850	521,473
RADIANT OPTO ELECTRONICS COR	1,076,890	3,898,972	4,325,153
RADICO KHAITAN LTD	126,009	439,801	623,338
RADIUM LIFE TECH CO LTD	1,805,425	797,053	630,273
RADWARE LTD	92,265	1,438,352	2,176,531
RAFFLES MEDICAL GROUP LTD	2,383,878	1,638,432	1,572,107
RAI WAY SPA	239,144	1,255,324	1,571,278
RAIA DROGASIL SA	556,273	13,224,982	11,206,913
RAIFFEISEN BANK INTERNATIONA	306,878	10,047,023	5,466,467
RAIN INDUSTRIES LTD	192,853	589,306	194,121
RAINBOW DIGITAL COMMERCIAL A	49,142	70,532	66,341
RAISIO OYJ V SHS	296,091	1,133,408	1,010,966
RAITO KOGYO CO LTD	106,500	807,539	1,409,668
RAIZNEXT CORP	106,300	1,052,914	1,199,120
RAJESH EXPORTS LTD	322,242	3,097,848	1,988,839
RAK PROPERTIES	2,339,782	317,381	224,223
RAKSUL INC	26,400	765,085	714,539
RAKUTEN INC	1,841,487	20,247,125	16,181,394
RALLYE SA	53,025	1,264,315	418,672
RAMAYANA LESTARI SENTOSA TBK	6,743,200	648,628	280,868
RAMCO CEMENTS LTD/THE	133,447	1,173,757	1,122,490
RAMELIUS RESOURCES LTD	1,754,812	1,612,760	2,404,294
RAMI LEVY CHAIN STORES HASHI	17,987	808,720	996,809
RAMSAY HEALTH CARE LTD	405,420	14,866,640	18,567,836
RAND MERCHANT INVESTMENT HOL	1,757,047	4,090,601	2,952,850
RANDON PARTICIPACOES SA PREF	416,113	962,557	728,281
RANDSTAD NV	260,972	11,822,321	11,624,771
RANK GROUP PLC	445,504	1,193,066	805,881
RASTAR GROUP A	205,500	118,827	116,199
RATCH GROUP PCL FOREIGN	1,820,000	3,865,796	3,665,615
RATCH GROUP PCL NVDR	11,200	25,445	22,558
RATCHTHANI LEASING PCL FOR	3,198,700	734,258	370,504
RATHBONE BROTHERS PLC	136,597	3,985,830	2,396,667
RATIONAL AG	8,090	4,839,381	4,528,604

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
RATOS AB B SHS	463,749	2,500,087	1,240,427
RAUBEX GROUP LTD	401,637	603,909	511,553
RAYMOND LTD	38,616	304,658	141,952
RAZER INC	8,686,000	2,193,862	1,636,235
RBL BANK LTD	884,204	4,879,592	2,031,812
RCS MEDIAGROUP SPA	362,849	351,949	251,448
REAL GOLD MINING	5,371,500	1	1
REA GROUP LTD	118,024	6,596,061	8,766,276
REALCAN PHARMACEUTICAL GRO A	133,293	116,126	100,995
REALTEK SEMICONDUCTOR CORP	1,842,402	9,677,344	18,670,989
REC LTD	1,575,296	3,148,181	2,255,378
RECHI PRECISION CO LTD	655,136	535,630	379,699
RECKITT BENCKISER GROUP PLC	1,536,750	99,947,259	141,119,504
RECORDATI SPA	875,129	34,245,078	43,689,957
RECRUIT HOLDINGS CO LTD	3,064,400	68,215,684	104,584,704
RED AVENUE NEW MATERIALS G A	96,800	277,616	318,420
RED ELECTRICA CORPORACION SA	1,008,089	17,280,492	18,800,765
RED STAR MACALLINE GROUP C A	100,206	152,616	150,009
RED STAR MACALLINE GROUP C H	1,398,877	1,129,278	783,326
REDCO PROPERTIES GROUP LTD	2,118,000	1,037,356	978,323
REDDE NORTHGATE PLC	582,224	3,349,080	1,194,198
REDES ENERGETICAS NACIONAIS	940,542	2,798,999	2,566,979
REDHILL BIOPHARMA LTD SP ADR	43,700	294,680	292,790
REDINGTON INDIA LTD	468,519	797,203	545,130
REDROW PLC	547,319	2,564,677	2,913,361
REGINA MIRACLE INTERNATIONAL	815,000	902,530	232,393
REGIONAL SAB DE CV	554,500	2,766,778	1,483,978
REGIS HEALTHCARE LTD	317,366	1,099,336	308,094
REGIS RESOURCES LTD	1,125,895	2,976,914	4,046,432
RELAXO FOOTWEARS LTD	142,079	996,823	1,191,805
RELIA INC	98,990	1,110,603	920,304
RELIANCE INDUSTRIES LTD	9,526,191	161,377,959	215,003,653
RELIANCE INFRASTRUCTURE LTD	1,367,032	1,034,486	700,682
RELO GROUP INC	244,100	4,782,598	4,588,542
RELX PLC	8,677,024	169,033,944	200,488,987
REMGRO LTD	1,183,111	15,094,153	6,802,463
REMY COINTREAU	56,897	7,108,840	7,745,149
RENAISSANCERE HOLDINGS LTD	391,735	56,508,156	66,998,437
RENAULT SA	437,703	31,403,624	11,100,467
RENESAS ELECTRONICS CORP	1,665,400	14,673,222	8,505,681
RENEWI PLC	1,451,136	1,567,002	469,772
RENGO CO LTD	495,800	3,434,627	4,034,967
RENHE PHARMACY CO LTD A	204,700	192,949	173,619
RENISHAW PLC	80,725	4,412,080	4,013,693

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
RENOVA INC	103,300	1,184,978	901,008
RENTOKIL INITIAL PLC	4,384,822	15,261,066	27,609,561
REPCO HOME FINANCE LTD	67,683	472,223	109,856
REPLY SPA	49,263	2,331,467	3,975,442
REPSOL SA	6,299,911	63,597,605	28,414,230
RESOLUTE FOREST PRODUCTS	133,240	1,392,597	281,136
RESOLUTE MINING LTD	2,670,823	2,828,837	2,087,108
RESONA HOLDINGS INC	5,596,142	31,520,493	19,078,287
RESORTTRUST INC	153,100	2,453,872	1,979,650
RESTAR HOLDINGS CORP	60,100	947,130	1,158,715
RESTAURANT BRANDS INTERN	680,915	37,365,585	36,940,389
RESTAURANT BRANDS NZ LTD	76,923	439,651	584,822
RESTAURANT GROUP PLC	1,375,067	2,743,318	957,405
RESURS HOLDING AB	338,101	2,055,349	1,388,454
REUNERT LTD	374,810	1,844,570	736,461
REWALK ROBOTICS LTD	8,200	225,500	14,432
REXEL SA	715,916	11,844,744	8,177,505
REXON INDUSTRIAL CORP LTD	317,000	909,792	849,860
RHB BANK BHD	13,436,590	18,131,694	15,020,132
RHEINMETALL AG	101,148	12,976,555	8,770,258
RHEON AUTOMATIC MACHINERY	47,300	908,390	541,461
RHI MAGNESITA NV	59,444	2,155,793	1,805,377
RHOEN KLINIKUM AG	25,787	634,544	525,962
RIB SOFTWARE SE TEND	97,649	3,476,228	3,180,560
RICH DEVELOPMENT CO LTD	1,507,000	530,120	515,877
RICHTER GEDEON NYRT	332,742	6,094,581	6,874,644
RICOH CO LTD	5,748,788	60,559,883	40,977,133
RICOH LEASING CO LTD	31,500	783,957	865,130
RIETER HOLDING AG REG	8,069	1,147,067	743,416
RIGHT ON CO LTD	25,500	232,778	142,763
RIGHTMOVE PLC	2,251,767	13,970,424	15,191,274
RIKEN CORP	20,600	804,548	570,732
RIKEN KEIKI CO LTD	41,300	805,750	913,014
RIKEN TECHNOS CORP	112,500	423,549	443,180
RIKEN VITAMIN CO LTD	37,800	679,775	798,150
RINGER HUT CO LTD	44,500	809,104	967,257
RINGKJOEBING LANDBOBANK A/S	62,476	4,001,665	4,410,824
RINNAI CORP	310,282	21,176,503	25,884,395
RIO TINTO LTD	911,892	56,382,297	61,502,968
RIO TINTO PLC	3,493,129	180,741,129	196,339,951
RIPLEY CORP SA	2,502,736	1,428,200	814,319
RISEN ENERGY CO LTD A	530,432	1,017,364	1,124,734
RISESUN REAL ESTATE DEVEL A	359,881	419,416	412,072
RISO KAGAKU CORP	56,800	636,864	784,465

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
RISO KYOIKU CO LTD	178,000	746,794	537,869
RITCHIE BROS AUCTIONEERS	459,495	11,641,783	18,646,321
RITEK CORPORATION	2,846,851	768,601	505,601
RIYAD BANK	11,453,399	70,395,337	51,480,754
RMB HOLDINGS LTD	2,607,616	11,606,478	246,129
ROAD KING INFRASTRUCTURE LTD	607,000	702,223	820,773
ROBERTET SA	1,617	1,672,310	1,690,820
ROBINSONS LAND CO	4,750,061	2,250,075	1,666,454
ROBINSONS RETAIL HOLDINGS IN	1,502,720	2,288,512	1,960,397
ROCHE HOLDING AG BR	65,333	18,005,973	22,408,554
ROCHE HOLDING AG GENUSSSCHEIN	3,242,263	806,138,395	1,123,525,994
ROCHE HOLDINGS LTD SPONS ADR	72,244	2,627,227	3,133,945
ROCK FIELD CO LTD	44,700	422,731	539,043
ROCKET INTERNET SE	120,527	3,577,352	2,584,211
ROCKWOOL INTL A/S B SHS	15,021	3,921,906	4,063,125
ROGERS COMMUNICATIONS INC B	3,005,874	147,141,160	120,389,447
ROHM CO LTD	194,576	14,128,140	12,877,348
ROHTO PHARMACEUTICAL CO LTD	230,600	4,832,206	7,310,117
ROKKO BUTTER CO LTD	30,700	739,585	437,088
ROLAND DG CORP	27,500	614,003	314,038
ROLLS ROYCE HOLDINGS PLC	4,019,360	38,057,421	14,173,888
RONGAN PROPERTY CO LTD A	143,139	52,541	49,574
RONGSHENG PETRO CHEMICAL A	165,503	270,129	287,766
RONSHINE CHINA HOLDINGS LTD	1,298,000	1,773,572	1,142,174
ROO HSING CO LTD	1,619,000	678,495	735,298
RORZE CORP	22,800	549,928	1,126,422
ROSNEFT OIL CO PJSC REGS GDR	1,327	6,008	6,672
ROSTELECOM SPONSORED ADR	67,384	498,768	491,566
ROTHSCHILD + CO	60,969	2,175,048	1,472,263
ROTORK PLC	1,997,908	5,491,966	6,912,126
ROUND ONE CORP	152,400	1,349,850	1,100,427
ROYAL BANK OF CANADA	3,412,063	215,598,508	230,752,660
ROYAL BANK OF SCOTLAND GROUP	10,655,452	99,303,787	16,009,714
ROYAL DUTCH SHELL PLC A SHS	9,682,202	297,160,203	153,968,119
ROYAL DUTCH SHELL PLC B SHS	8,750,280	262,259,342	132,337,061
ROYAL HOLDINGS CO LTD	60,700	1,029,471	1,054,380
ROYAL MAIL PLC	2,186,690	6,167,891	4,924,168
ROYAL UNIBREW	116,572	4,935,395	9,693,326
RPA HOLDINGS INC	63,200	946,410	462,789
RPS GROUP PLC	539,509	1,805,733	324,643
RS TECHNOLOGIES CO LTD	16,200	928,797	517,301
RSA INSURANCE GROUP PLC	3,566,154	28,028,269	18,057,190
RTL GROUP	91,169	6,629,228	2,918,299
RUBIS	213,651	12,771,673	10,265,580

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
RUENTEX DEVELOPMENT CO LTD	1,760,498	2,995,646	3,049,075
RUENTEX INDUSTRIES LTD	991,732	2,766,581	2,379,794
RUHNN HOLDING LTD ADR	52,719	330,397	157,103
RUMO SA	2,628,500	13,246,036	10,766,184
RUN LONG CONSTRUCTION CO LTD	659,000	1,268,592	1,375,871
RUSSEL METALS INC	149,100	2,820,669	1,775,626
RWE AG	1,341,654	60,097,615	46,878,997
RYMAN HEALTHCARE LTD	981,591	7,471,081	8,265,242
RYOBI LTD	63,000	1,087,505	703,082
RYODEN CORP	31,600	416,480	427,933
RYOHIN KEIKAKU CO LTD	551,200	7,291,273	7,791,445
RYOSAN CO LTD	56,100	1,344,856	1,153,876
RYOYO ELECTRO CORP	49,100	589,073	1,329,844
S 1 CORPORATION	44,182	2,838,862	3,151,528
S F HOLDING CO LTD A	1,318,332	10,284,570	10,193,913
S FOODS INC	43,300	1,109,285	1,056,362
S IMMO AG	127,239	1,814,659	2,280,819
S OIL CORP	95,644	6,695,159	5,049,170
S POOL INC	139,800	836,487	953,727
S.O.I.T.E.C.	49,364	3,420,904	5,499,963
S+T AG	118,525	2,927,546	3,035,167
S+T DYNAMICS CO LTD	33,817	356,397	142,538
S+T MOTIV CO LTD	16,737	485,690	527,358
SA SA INTERNATIONAL HLDGS	2,575,851	1,041,235	432,053
SAAB AB B	214,859	7,857,125	5,364,182
SAC S BAR HOLDINGS INC	42,400	579,943	236,593
SACYR SA	821,582	2,680,107	1,704,337
SADBHAV ENGINEERING LTD	189,672	614,573	113,672
SAFE BULKERS INC	436,670	1,288,252	532,737
SAFRAN SA	755,745	71,845,657	75,731,276
SAGA PLC	2,646,884	5,594,112	504,637
SAGAMI HOLDINGS CORP	50,172	555,834	589,684
SAGAX AB D	263,141	991,425	823,317
SAGAX AB PREF	30,262	139,783	113,361
SAGE GROUP PLC/THE	9,310,730	68,092,731	77,286,181
SAHARA INTERNATIONAL PETROCH	3,117,364	13,831,437	11,984,108
SAIBU GAS CO LTD	47,900	1,127,001	1,194,337
SAIC MOTOR CORP LTD A	3,985,189	10,793,563	9,571,304
SAILUN GROUP CO LTD A	445,599	242,195	222,355
SAINSBURY (J) PLC	3,852,511	15,901,253	9,934,464
SAINT MARC HOLDINGS CO LTD	32,700	720,099	503,450
SAIPEM SPA	1,304,265	14,422,746	3,250,580
SAIZERIYA CO LTD	52,000	923,612	1,003,995
SAKAI CHEMICAL INDUSTRY CO	20,900	420,188	393,068

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SAKAI MOVING SERVICE CO LTD	20,600	724,032	1,048,283
SAKATA INX CORP	99,700	845,058	948,160
SAKATA SEED CORP	75,600	1,487,619	2,410,567
SALFACORP SA	803,499	1,110,615	427,178
SALIM IVOMAS PRATAMA TBK PT	7,549,600	336,086	134,239
SALMAR ASA	121,878	5,845,861	5,800,165
SALVATORE FERRAGAMO SPA	157,691	3,586,771	2,134,183
SALZGITTER AG	78,322	2,555,037	1,101,791
SAM CHUN DANG PHARM CO LTD	30,780	1,236,713	939,125
SAM YOUNG ELECTRONICS CO LTD	24,559	246,377	145,780
SAMART CORPORATION PCL FOR	1,250,700	399,300	232,679
SAMBA FINANCIAL GROUP	2,326,827	17,861,805	16,655,640
SAMCHULLY CO LTD	5,369	539,524	300,844
SAMHALLSBYGGNADSBOLAGET I D	8,921	33,349	27,625
SAMHALLSBYGGNADSBOLAGET I NO	2,242,817	5,047,799	5,729,425
SAMPO CORP	805,600	467,080	588,408
SAMPO OYJ A SHS	4,017,104	171,024,195	138,151,637
SAMSUNG BIOLOGICS CO LTD	31,104	6,304,790	20,040,404
SAMSUNG C+T CORP	197,854	20,914,811	19,080,570
SAMSUNG CARD CO	70,839	2,593,477	1,610,713
SAMSUNG ELECTR GDR REG S	1,087	1,124,799	1,198,961
SAMSUNG ELECTRO MECHANICS CO	137,627	11,462,030	14,759,848
SAMSUNG ELECTRONICS CO LTD	13,119,648	371,599,788	575,896,757
SAMSUNG ELECTRONICS PREF	2,575,172	69,321,326	99,551,480
SAMSUNG ENGINEERING CO LTD	370,051	6,352,927	3,768,653
SAMSUNG FIRE + MARINE INS	265,812	60,837,651	38,893,388
SAMSUNG FIRE + MARINE INS PF	6,275	923,000	652,097
SAMSUNG HEAVY INDUSTRIES	1,006,762	9,693,792	4,980,034
SAMSUNG LIFE INSURANCE CO LT	149,322	11,987,705	5,549,065
SAMSUNG PHARMACEUTICAL CO LT	122,398	512,868	377,517
SAMSUNG SDI CO LTD PFD	122,990	19,726,734	37,167,448
SAMSUNG SDS CO LTD	288,383	53,238,817	40,397,835
SAMSUNG SECURITIES CO LTD	147,468	5,753,671	3,230,479
SAMTY CO LTD	70,400	1,052,666	890,726
SAMWHA CAPACITOR CO LTD	17,125	1,104,874	758,833
SAMYANG CORP	8,089	553,573	267,986
SAMYANG HOLDINGS CORP	13,955	841,179	661,292
SAN A CO LTD	42,800	1,239,132	1,638,448
SAN AI OIL CO LTD	130,000	905,767	1,171,247
SAN IN GODO BANK LTD/THE	367,800	2,293,884	1,844,369
SAN JU SAN FINANCIAL GROUP I	53,661	1,404,170	658,048
SAN MIGUEL CORP	877,050	2,907,515	1,760,261
SAN MIGUEL FOOD AND BEVERAGE	1,557,010	2,902,316	2,170,283
SANAN OPTOELECTRONICS CO L A	369,051	1,110,650	1,304,233

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SANDEN HOLDINGS CORP	54,800	882,717	174,226
SANDFIRE RESOURCES LTD	407,999	2,381,074	1,424,200
SANDS CHINA LTD	7,886,384	28,362,733	30,933,181
SANDVIK AB	2,531,251	37,259,380	47,301,423
SANEI ARCHITECTURE PLANNING	24,400	494,245	294,017
SANGETSU CORP	136,800	1,923,728	1,931,190
SANGFOR TECHNOLOGIES INC A	13,833	319,470	402,743
SANGSANGIN CO LTD	90,700	1,319,349	462,982
SANKEN ELECTRIC CO LTD	45,500	990,029	893,678
SANKI ENGINEERING CO LTD	122,900	1,145,704	1,405,743
SANKYO CO LTD	106,300	4,530,685	2,567,714
SANKYO SEIKO CO LTD	81,000	286,196	332,604
SANKYO TATEYAMA INC	64,100	825,881	570,385
SANKYU INC	116,611	5,473,507	4,377,574
SANLAM LTD	4,120,513	20,536,801	13,977,729
SANNE GROUP PLC	296,759	2,615,273	2,310,056
SANOFI	2,723,947	230,248,620	277,334,715
SANOFI INDIA LTD	13,138	1,005,222	1,370,678
SANOH INDUSTRIAL CO LTD	52,000	336,168	324,864
SANOMA OYJ	162,101	1,765,351	1,640,394
SANQUAN FOOD CO LTD A	135,046	403,228	456,256
SANRIO CO LTD	136,100	4,342,249	2,104,230
SANSHIN ELECTRONICS CO LTD	42,200	459,078	601,600
SANSIRI PUBLIC CO LTD FORGN	21,346,333	1,117,513	524,896
SANSTEEL MINGUANG CO LTD A	218,029	228,883	205,266
SANTAM LTD	97,325	1,881,544	1,501,186
SANTANDER BANK POLSKA SA	68,978	6,470,221	3,058,598
SANTEN PHARMACEUTICAL CO LTD	1,805,970	25,453,279	33,194,962
SANTOS BRASIL PARTICIPACOES	1,182,700	1,662,411	1,186,836
SANTOS LTD	4,149,815	25,481,068	15,142,881
SANWA HOLDINGS CORP	893,600	8,129,265	7,968,144
SANY HEAVY EQUIPMENT INTL	2,068,000	731,607	957,895
SANY HEAVY INDUSTRY CO LTD A	770,530	1,960,870	2,043,390
SANYANG MOTOR CO LTD	1,527,000	1,089,411	1,097,202
SANYO CHEMICAL INDUSTRIES	24,700	886,184	1,060,027
SANYO DENKI CO LTD	20,700	696,662	926,737
SANYO ELECTRIC RAILWAY CO	39,900	862,100	814,384
SANYO SHOKAI LTD	25,500	719,813	168,763
SANYO SPECIAL STEEL CO LTD	53,400	1,086,374	437,555
SAO MARTINHO SA	393,200	1,919,421	1,518,863
SAP SE	2,837,877	271,742,904	396,252,799
SAPIENS INTERNATIONAL CORP	59,810	1,109,536	1,602,157
SAPPI LIMITED	1,314,850	4,525,044	2,051,544
SAPPORO HOLDINGS LTD	145,700	3,961,907	2,729,385

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SAPURA ENERGY BHD	20,935,700	1,557,092	464,152
SAPUTO INC	2,038,539	58,723,420	48,448,978
SARACEN MINERAL HOLDINGS LTD	2,560,720	3,630,211	9,555,761
SARANTIS SA	76,152	674,627	701,347
SARAS SPA	1,367,771	2,404,311	1,075,348
SARTORIUS AG VORZUG	82,691	10,553,077	27,175,049
SARTORIUS STEDIM BIOTECH	57,165	5,883,901	14,446,096
SAS AB	445,113	1,388,319	371,220
SASA POLYESTER SANAYI	294,211	364,928	463,544
SASOL LTD	1,308,754	28,875,210	9,957,829
SATO HOLDINGS CORP	54,600	1,062,304	1,180,212
SATS LTD	1,469,100	4,770,644	3,011,810
SAUDI AIRLINES CATERING CO	89,783	2,043,814	1,852,627
SAUDI ARABIAN FERTILIZER CO	477,069	10,241,454	9,475,244
SAUDI ARABIAN MINING CO	3,601,972	42,191,348	33,417,389
SAUDI ARABIAN OIL CO	3,630,824	33,504,263	31,458,752
SAUDI BASIC INDUSTRIES CORP	6,235,234	152,979,071	146,447,378
SAUDI CEMENT	175,798	2,993,009	2,483,949
SAUDI CERAMIC CO	69,417	469,508	615,333
SAUDI CHEMICAL CO HOLDING	97,531	628,810	598,031
SAUDI ELECTRICITY CO	1,857,060	9,517,170	7,733,212
SAUDI GROUND SERVICES CO	211,283	1,697,812	1,585,608
SAUDI IND INVESTMENT GROUP	527,423	3,131,719	2,840,294
SAUDI KAYAN PETROCHEMICAL CO	1,758,225	4,837,718	3,843,627
SAUDI PHARMACEUTICAL INDUSTR	139,959	936,846	1,082,061
SAUDI PUBLIC TRANSPORT CO	144,607	586,588	543,577
SAUDI REAL ESTATE CO	200,676	660,764	677,302
SAUDI RESEARCH AND MARKETING	75,381	1,538,235	1,264,054
SAUDI TELECOM CO	5,116,067	140,164,812	135,028,161
SAUDIA DAIRY + FOODSTUFF CO	37,095	1,345,804	1,631,745
SAURER INTELLIGENT TECHNOL A	313,200	282,000	209,417
SAVIA A	228,906	0	0
SAVILLS PLC	325,306	2,631,552	3,316,073
SAVOLA	618,368	5,643,713	6,940,361
SAWAI PHARMACEUTICAL CO LTD	90,029	4,698,411	4,623,077
SB TECHNOLOGY CORP	16,500	330,306	565,116
SBANKEN ASA	194,786	1,907,271	1,261,960
SBI HOLDINGS INC	528,553	10,276,166	11,405,398
SBI LIFE INSURANCE CO LTD	3,067,582	40,676,919	32,764,618
SBM OFFSHORE NV	414,964	5,948,631	6,065,860
SBS HOLDINGS INC	40,500	658,968	832,637
SBS MEDIA HOLDINGS CO LTD	137,701	543,393	214,076
SC HEALTH CORP A	31,000	310,335	313,410
SCALES CORP LTD	259,370	847,047	818,150

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SCANDIC HOTELS GROUP AB	316,219	2,435,544	1,111,237
SCATEC SOLAR ASA	220,252	2,363,798	3,570,790
SCHAEFFLER AG PEF	179,156	2,491,867	1,342,131
SCHIBSTED ASA B SHS	228,130	5,638,185	5,358,584
SCHIBSTED ASA CL A	179,889	4,682,048	4,676,704
SCHINDLER HOLDING AG REG	169,468	33,271,564	39,919,010
SCHINDLER HOLDING PART CERT	95,745	16,449,810	22,532,990
SCHNEIDER ELECTRIC SE	1,237,139	89,416,455	137,393,039
SCHOELLER BLECKMANN OILFIELD	26,249	1,761,681	691,343
SCHOUW + CO	30,164	1,409,975	2,400,047
SCHRODERS PLC	265,982	10,122,555	9,691,815
SCHWEITER TECHNOLOGIES AG BR	2,234	1,341,286	2,749,031
SCIENTEX BHD	475,308	1,015,074	987,221
SCINOPHARM TAIWAN LTD	635,955	688,290	812,605
SCOR SE	364,839	12,658,093	9,998,362
SCORPIO TANKERS INC	113,157	4,878,788	1,449,541
SCOUT24 AG	691,247	35,112,073	53,608,631
SCREEN HOLDINGS CO LTD	91,200	3,513,577	4,252,083
SCSK CORP	97,100	3,231,540	4,716,170
SCULLY ROYALTY LTD	74,112	497,500	563,251
SDI CORPORATION	371,000	886,358	606,713
SDIC CAPITAL CO LTD A	269,645	471,290	485,232
SDIC POWER HOLDINGS CO LTD A	605,307	691,161	672,554
SEA LTD ADR	436,349	34,839,538	46,794,067
SEADRILL LTD	800	17,232	344
SEADRILL PARTNERS LLC	32,460	6,863,618	9,089
SEAH BESTEEL CORP	26,296	537,065	221,893
SEAH STEEL CORP/NEW	3,035	285,223	122,879
SEAH STEEL HOLDINGS CORP	3,625	208,078	101,561
SEALAND SECURITIES CO LTD A	485,242	304,043	297,699
SEALINK TRAVEL GROUP LTD	311,869	998,254	949,070
SEARLE COMPANY LTD/THE	228,211	491,185	270,795
SEAZEN GROUP LTD	4,660,000	4,162,020	4,046,449
SEAZEN HOLDINGS CO LTD A	201,345	900,842	889,162
SEB SA	63,652	7,975,543	10,516,289
SEBANG GLOBAL BATTERY CO LTD	19,256	662,386	487,463
SECOM CO LTD	1,754,511	138,047,342	153,244,262
SECTRA AB B SHS	62,582	2,142,479	3,560,127
SECURE ENERGY SERVICES INC	361,500	3,287,006	443,249
SECURITAS AB B SHS	728,193	9,581,620	9,813,037
SECURITY BANK CORP	1,069,766	4,105,770	2,211,458
SEEGENE INC	34,152	1,070,010	3,202,682
SEEK LTD	813,601	12,239,102	12,261,995
SEERA GROUP HOLDING	347,192	1,600,657	1,480,958

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SEGA SAMMY HOLDINGS INC	1,550,467	21,651,819	18,539,208
SEIBU HOLDINGS INC	1,800,400	30,248,359	19,541,812
SEIKA CORP	22,700	290,123	261,118
SEIKAGAKU CORP	91,000	1,081,109	954,832
SEIKO EPSON CORP	2,361,900	32,332,926	26,993,768
SEIKO HOLDINGS CORP	64,853	1,146,384	1,026,731
SEINO HOLDINGS CO LTD	353,254	3,460,186	4,616,843
SEIREN CO LTD	103,300	861,625	1,303,159
SEKERBANK	887,306	295,142	187,694
SEKISUI CHEMICAL CO LTD	2,919,692	43,067,737	41,731,150
SEKISUI HOUSE LTD	5,181,138	82,023,501	98,570,568
SEKISUI JUSHI CORP	65,833	837,874	1,316,233
SEKISUI KASEI CO LTD	58,700	405,947	314,489
SELECT HARVESTS LTD	228,917	1,205,216	994,515
SEMAFO INC	796,200	3,379,552	2,706,612
SEMAPA SOCIEDADE DE INVESTIM	56,491	821,160	513,293
SEMBICORP INDUSTRIES LTD	2,161,181	5,152,064	2,711,062
SEMBICORP MARINE LTD	1,887,928	3,152,047	575,155
SEMEN INDONESIA PERSERO TBK	6,816,765	5,622,033	4,593,025
SEMICONDUCTOR MANUFACTURING	7,329,915	7,706,982	25,534,995
SEMIRARA MINING AND POWER CO	2,753,590	1,431,368	700,763
SENEX ENERGY LTD	2,537,261	1,475,508	393,053
SENIOR PLC	999,287	2,206,797	862,452
SENKO GROUP HOLDINGS CO LTD	250,300	1,371,867	1,858,370
SENSHU IKEDA HOLDINGS INC	638,400	2,171,013	946,786
SEOBU T+D	59,915	548,229	323,273
SEOUL SEMICONDUCTOR CO LTD	87,791	2,246,620	981,659
SEQUANS COMMUNICATIONS ADR	16,750	111,220	102,845
SER EDUCACIONAL SA	128,244	362,458	350,342
SERBA DINAMIK HOLDINGS BHD	2,618,930	1,218,107	1,008,456
SERCO GROUP PLC	2,887,389	5,711,672	5,440,681
SERCOMM CORPORATION	548,000	1,351,613	1,450,586
SERVICE STREAM LTD	796,175	1,319,474	1,044,257
SES	836,558	16,412,151	5,712,647
SEVEN + I HOLDINGS CO LTD	6,057,456	233,695,925	197,638,644
SEVEN BANK LTD	5,294,100	15,908,094	14,476,151
SEVEN GENERATIONS ENERGY A	1,062,850	11,819,024	2,364,490
SEVEN GROUP HOLDINGS LTD	307,532	4,133,553	3,637,620
SEVEN WEST MEDIA LTD	2,080,603	878,773	130,357
SEVERN TRENT PLC	559,384	14,470,040	17,134,234
SFA ENGINEERING CORP	42,321	910,841	1,150,515
SFA SEMICON CO LTD	180,838	620,538	753,210
SFL CORP LTD	206,300	2,462,287	1,916,527
SFS GROUP AG	40,645	3,358,030	3,804,772

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SG FLEET GROUP LTD	259,334	651,897	285,682
SG HOLDINGS CO LTD	1,413,600	33,638,758	46,122,000
SG MICRO CORP A	14,600	491,334	629,583
SGIS SONGSHAN CO LTD A	399,500	220,349	214,600
SGL CARBON SE	116,919	2,305,834	424,156
SGS SA REG	47,220	112,310,931	115,365,205
SH JINJIANG INTL HOTELS B	367,400	711,780	477,620
SHAAN XI PROVINCIAL NATURA A	85,599	77,592	73,933
SHAANXI COAL INDUSTRY CO L A	668,839	728,250	681,688
SHAANXI INTL TRUST CO LTD A	341,027	179,239	178,851
SHANDONG AIRLINES CO LTD B	336,501	495,515	275,264
SHANDONG BUCHANG PHARMACEU A	39,699	135,532	161,903
SHANDONG CHENMING PAPER A	147,383	102,973	102,921
SHANDONG CHENMING PAPER B	1,661,661	778,904	578,868
SHANDONG CHENMING PAPER H	1,142,750	523,359	409,892
SHANDONG DENGHAI SEEDS CO A	77,700	129,080	138,944
SHANDONG GOLD MINING CO LT A	235,146	1,167,996	1,217,264
SHANDONG GOLD MINING CO LT H	1,150,450	1,964,864	2,443,265
SHANDONG HI SPEED CO LTD A	225,322	171,082	195,569
SHANDONG HIMILE MECHANICAL A	71,183	189,856	195,816
SHANDONG HUALU HENGSHENG A	145,135	360,474	362,730
SHANDONG HUMON SMELTING A	715,791	1,427,371	1,383,195
SHANDONG LINGLONG TYRE CO A	68,684	201,799	196,126
SHANDONG MINHE ANIMAL HUS A	49,765	189,940	156,032
SHANDONG NANSHAN ALUMINUM A	1,063,163	316,481	305,088
SHANDONG NEW BEIYANG INFOR A	110,000	186,470	158,451
SHANDONG PUBLISHING + MEDI A	84,774	78,885	74,898
SHANDONG SINOCERA FUNCTION A	161,700	552,599	765,973
SHANDONG SUN PAPER INDUSTR A	221,220	284,534	297,708
SHANDONG WEIGAO GP MEDICAL H	6,684,000	6,229,378	14,867,803
SHANDONG XIANTAN CO LTD A	76,410	162,853	143,118
SHANDONG XINCHAO ENERGY CO A	607,010	148,355	130,427
SHANDONG XINHUA PHARM CO A	70,460	80,786	102,790
SHANDONG YISHENG LIVESTOCK A	165,120	349,128	356,424
SHANG GONG GROUP CO LTD B	583,757	349,620	198,477
SHANGHAI 2345 NETWORK HOLD A	316,924	133,972	125,890
SHANGHAI AJ GROUP CO LTD A	144,350	166,517	162,223
SHANGHAI ATHUB CO LTD A	31,000	229,648	473,583
SHANGHAI BAILIAN GROUP CO B	418,300	435,310	311,215
SHANGHAI BAIRUN INVESTMENT A	44,948	229,059	287,958
SHANGHAI BAOSIGHT SOFTWARE A	48,600	325,717	405,887
SHANGHAI BAOSIGHT SOFTWARE B	727,633	1,246,217	1,682,288
SHANGHAI BELLING CO LTD A	116,200	267,573	285,486
SHANGHAI CHLOR ALKALI CHEM B	966,811	608,772	382,857

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
SHANGHAI CONSTRUCTION GROU A	604,894	273,362	262,510
SHANGHAI DAZHONG PUBLIC UT A	214,616	138,433	138,343
SHANGHAI ELECTRIC GRP CO L A	786,285	561,661	560,195
SHANGHAI ELECTRIC GRP CO L H	6,634,888	2,300,070	1,883,343
SHANGHAI ELECTRIC POWER CO A	233,004	247,624	243,738
SHANGHAI ENVIRONMENT GROUP A	81,483	135,524	138,222
SHANGHAI FLYCO ELECTRICAL A	15,000	92,573	104,600
SHANGHAI FOSUN PHARMACEUTI A	179,411	801,651	858,493
SHANGHAI FOSUN PHARMACEUTI H	1,289,500	3,930,256	4,309,176
SHANGHAI FUDAN MICROELECT H	582,000	546,372	686,345
SHANGHAI FUDAN ZHANGJIANG H	636,000	484,384	434,096
SHANGHAI GANGLIAN E COMMER A	31,460	292,502	349,551
SHANGHAI GREENCOURT INVEST B	626,100	234,434	164,664
SHANGHAI HAIXIN GROUP CO B	961,590	438,663	278,861
SHANGHAI HAOHAI BIOLOGICAL H	94,000	550,704	432,981
SHANGHAI HUAYI GROUP CORP	565,000	423,053	219,220
SHANGHAI INDUSTRIAL DEVEL A	134,340	104,371	97,041
SHANGHAI INDUSTRIAL URBAN DE	4,022,000	638,738	461,854
SHANGHAI INTERNATIONAL AIR A	172,360	1,746,366	1,755,981
SHANGHAI INTERNATIONAL POR A	961,965	637,249	571,133
SHANGHAI JAHWA UNITED CO A	59,707	354,603	404,287
SHANGHAI JIN JIANG CAPITAL H	3,284,000	623,032	580,493
SHANGHAI JINJIANG INTERNAT A	45,676	171,950	179,176
SHANGHAI JINJIANG INTL B	381,580	260,321	257,185
SHANGHAI JINQIAO EXPORT P A	68,957	140,378	155,770
SHANGHAI JINQIAO EXPORT PR B	641,943	721,177	607,278
SHANGHAI JUNSHI BIOSCIENCE H	343,400	1,263,214	2,474,552
SHANGHAI KINETIC MEDICAL C A	122,100	325,556	502,270
SHANGHAI LUJIAZUI FIN+TRAD A	156,953	261,833	248,716
SHANGHAI LUJIAZUI FIN+TRAD B	2,591,461	2,850,049	2,008,382
SHANGHAI M+G STATIONERY IN A	42,250	294,708	326,098
SHANGHAI MALING AQUARIUS A	154,700	199,427	207,532
SHANGHAI MECHANICAL AND EL A	72,033	162,071	172,392
SHANGHAI MECHANICAL AND EL B	507,779	859,704	515,396
SHANGHAI PHARMACEUTICALS A	171,345	451,355	445,190
SHANGHAI PHARMACEUTICALS H	6,737,740	15,077,389	11,318,746
SHANGHAI PHOENIX ENTERPRIS B	410,701	230,311	164,280
SHANGHAI PUDONG DEVEL BANK A	2,645,293	4,082,583	3,956,291
SHANGHAI PUDONG ROAD+BRIDG A	160,400	145,701	139,447
SHANGHAI PUTAILAI NEW ENER A	26,152	299,244	380,851
SHANGHAI RAAS BLOOD PRODUC A	524,900	629,606	627,734
SHANGHAI RONGTAI HEALTH TE A	23,100	88,745	87,579
SHANGHAI RUNDA MEDICAL TEC A	88,900	139,811	167,392
SHANGHAI SHENDA CO LTD A	140,800	122,883	99,717

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
SHANGHAI SHIBEI HI TECH C A	81,000	91,219	107,747
SHANGHAI SHIBEI HI TECH CO B	1,081,900	474,445	424,105
SHANGHAI SHIMAO CO LTD A	284,547	173,380	179,800
SHANGHAI SHYNDEC PHARMACEU A	169,651	216,023	230,947
SHANGHAI SINYANG SEMICONDU A	48,000	377,332	407,526
SHANGHAI TONGJI SCIENCE A	103,100	123,081	123,881
SHANGHAI TUNNEL ENGINEERIN A	279,506	232,232	223,238
SHANGHAI WAIGAOQIAO FREE B	466,010	651,647	417,079
SHANGHAI WAIGAOQIAO FTZ A	62,590	134,917	125,107
SHANGHAI WEAVER NETWORK CO A	34,160	262,210	373,079
SHANGHAI YUYUAN TOURIST MA A	346,340	419,488	433,776
SHANGHAI ZHANGJIANG HIGH A	138,026	334,362	397,448
SHANGHAI ZHENHUA HEAVY IND B	2,417,823	913,322	517,414
SHANGHAI ZI JIANG ENTERPRI A	250,100	139,931	151,670
SHANGRI LA ASIA LTD	2,615,442	3,942,402	2,247,462
SHANXI BLUE FLAME HOLDING A	149,700	207,787	161,887
SHANXI COKING CO LTD A	325,520	198,678	198,788
SHANXI LU AN ENVIRONMENTAL A	266,024	238,428	209,462
SHANXI SECURITIES CO LTD A	147,772	146,602	136,615
SHANXI TAIGANG STAINLESS A	940,200	447,936	441,252
SHANXI XINGHUACUN FEN WINE A	78,742	1,258,054	1,613,999
SHANXI XISHAN COAL + ELEC A	364,321	206,985	193,128
SHANYING INTL HLDG CO LTD A	408,512	174,834	170,355
SHAPIR ENGINEERING AND INDUS	263,711	1,377,745	1,600,881
SHARP CORP	361,094	18,142,897	3,835,693
SHAW COMMUNICATIONS INC B	3,966,733	77,567,467	64,481,255
SHAWCOR LTD	166,600	3,729,762	331,488
SHEDE SPIRITS CO LTD A	55,500	228,531	293,030
SHENERGY COMPANY LIMITED A	437,291	338,521	365,331
SHENG SIONG GROUP LTD	1,037,000	826,701	1,226,515
SHENG YU STEEL CO LTD	254,000	227,844	151,085
SHENGDA RESOURCES CO LTD A	113,800	191,007	189,021
SHENGHE RESOURCES HOLDINGS A	162,947	179,081	162,392
SHENGYI TECHNOLOGY CO LTD A	208,076	825,779	860,941
SHENNAN CIRCUITS CO LTD A	15,996	335,904	378,797
SHENWAN HONGYUAN GROUP CO H	4,097,600	1,155,929	1,131,401
SHENWAN HONGYUAN GROUP CO A	2,019,144	1,321,144	1,441,410
SHENWAN HONGYUAN HK LTD	910,000	565,499	103,323
SHENZHEN AGRICULTURAL PROD A	165,229	165,444	173,075
SHENZHEN AIRPORT CO A	183,149	216,482	198,318
SHENZHEN AISIDI CO LTD A	55,170	50,625	55,996
SHENZHEN ANCHE TECHNOLOGIE A	32,000	247,074	287,471
SHENZHEN BAUING CONSTRUCTIO A	216,900	160,402	155,145
SHENZHEN CAPCHEM TECHNOLOG A	62,500	299,196	486,458

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SHENZHEN CENTER POWER TECH A	53,600	161,657	161,010
SHENZHEN DANBOND TECHNOLOG A	90,288	155,544	123,165
SHENZHEN DAS INTELLITECH A	319,700	172,077	175,349
SHENZHEN DESAY BATTERY TEC A	34,200	212,317	236,941
SHENZHEN ENERGY GROUP CO L A	406,038	266,223	266,326
SHENZHEN EVERWIN PRECISION A	667,495	1,835,248	2,156,071
SHENZHEN EXPRESSWAY CO H	1,700,000	1,978,328	1,719,642
SHENZHEN EXPRESSWAY CO LTD A	69,523	91,622	89,826
SHENZHEN FASTPRINT CIRCUIT A	929,312	1,593,362	1,685,454
SHENZHEN FRD SCIENCE + TECHN	83,603	367,930	387,873
SHENZHEN GAS CORP LTD A	202,791	192,849	186,333
SHENZHEN GONGJIN ELECTRONI A	114,300	209,411	192,113
SHENZHEN GOODIX TECHNOLOGY A	82,748	2,542,608	2,607,332
SHENZHEN GRANDLAND GROUP C A	134,503	72,130	63,695
SHENZHEN H+T INTELLIGENT A	150,800	291,350	345,552
SHENZHEN HEPALINK PHARMACE A	46,926	148,566	166,103
SHENZHEN HEUNGKONG HOLDING A	560,700	178,201	156,144
SHENZHEN HUAQIANG INDUS CO A	86,837	169,732	178,483
SHENZHEN INFOGEM TECHNOLOG A	66,456	139,196	150,496
SHENZHEN INOVANCE TECHNOLO A	157,478	692,020	845,703
SHENZHEN INTL HOLDINGS	8,196,293	16,009,370	13,049,856
SHENZHEN INVESTMENT LTD	8,327,541	3,163,575	2,632,425
SHENZHEN JINJIA GROUP CO L A	130,760	173,424	164,695
SHENZHEN KAIFA TECHNOLOGY A	138,705	390,785	428,030
SHENZHEN KANGTAI BIOLOGICA A	58,532	1,044,074	1,341,732
SHENZHEN KINGDOM SCI TECH A	79,600	214,914	218,295
SHENZHEN KINWONG ELECTRONI A	31,960	149,978	158,985
SHENZHEN MEGMEET ELECTRICA A	77,500	242,330	283,965
SHENZHEN MINDRAY BIO MEDIC A	456,473	15,676,277	19,726,014
SHENZHEN MTC CO LTD A	417,770	260,263	292,329
SHENZHEN NEPTUNUS BIOENG A	244,997	144,843	145,112
SHENZHEN OVERSEAS CHINESE A	732,441	665,326	627,443
SHENZHEN SALUBRIS PHARM A	83,760	265,941	351,186
SHENZHEN SC NEW ENERGY TEC A	47,300	339,474	591,944
SHENZHEN SDG INFO CO LTD A	134,600	217,366	184,944
SHENZHEN SINOVATIO TECHNOL A	17,620	301,973	407,466
SHENZHEN SUNLINE TECH CO L A	119,400	237,841	320,691
SHENZHEN SUNLORD ELECTRONI A	507,966	1,571,911	1,791,571
SHENZHEN SUNTAK CIRCIOT TE A	134,928	361,776	385,857
SHENZHEN SUNWAY COMMUNICAT A	89,131	548,626	668,032
SHENZHEN TAGEN GROUP CO A	308,700	248,419	301,539
SHENZHEN TELLUS HOLDING CO A	22,274	60,824	57,715
SHENZHEN WOER HEAT SHRINK A	5,947,157	3,904,915	3,841,974
SHENZHEN WORLD UNION GROUP A	179,634	78,465	70,847

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
SHENZHEN YINGHE TECHNOLOGY A	83,050	272,066	374,272
SHENZHEN YSSTECH INFO TECH A	122,600	189,350	161,870
SHENZHEN YUTO PACKAGING TE A	55,698	204,516	216,600
SHENZHEN ZHONGJIN LINGNAN A	316,694	172,645	166,537
SHENZHOU INTERNATIONAL GROUP	4,547,612	56,085,719	54,802,877
SHIBAURA MACHINE CO LTD	54,300	1,203,246	1,085,648
SHIBUSAWA WAREHOUSE CO LTD	23,400	435,638	449,629
SHIBUYA CORPORATION	48,900	1,398,587	1,270,489
SHIGA BANK LTD/THE	113,200	3,051,543	2,507,744
SHIJIAZHUANG CHANGSHAN BEI A	152,499	191,457	225,059
SHIJIAZHUANG YILING PHARMA A	61,618	217,121	271,676
SHIKOKU BANK LTD/THE	82,600	1,160,392	601,020
SHIKOKU CHEMICALS CORP	79,600	625,521	799,800
SHIKOKU ELECTRIC POWER CO	359,500	6,061,624	2,649,140
SHIKUN + BINUI LTD	472,027	1,353,753	1,677,554
SHIMA SEIKI MFG LTD	68,500	1,619,632	975,261
SHIMACHU CO LTD	81,400	2,034,863	2,257,485
SHIMADZU CORP	918,090	17,697,236	24,406,378
SHIMAMURA CO LTD	184,897	15,359,906	12,510,989
SHIMANO INC	734,599	93,468,465	141,288,680
SHIMAO GROUP HOLDINGS LTD	3,321,552	9,646,593	14,056,849
SHIMIZU BANK LTD/THE	28,400	799,403	467,257
SHIMIZU CORP	1,295,000	8,875,541	10,623,117
SHIMOJIMA CO LTD	24,900	265,188	270,038
SHIN ETSU CHEMICAL CO LTD	942,573	75,677,200	110,040,385
SHIN ETSU POLYMER CO LTD	84,900	530,700	692,515
SHIN KONG FINANCIAL HOLDING	80,651,673	25,492,657	23,508,427
SHIN NIPPON AIR TECHNOLOGIES	31,500	541,594	692,863
SHIN NIPPON BIOMEDICAL LABOR	31,900	245,544	191,604
SHIN ZU SHING CO LTD	313,000	1,129,228	1,580,674
SHINDENGEN ELECTRIC MFG	18,100	744,412	360,205
SHINHAN FINANCIAL GROUP LTD	1,385,680	50,887,903	33,119,924
SHINING BUILDING BUSINESS CO	1,643,429	585,974	551,440
SHINKO ELECTRIC INDUSTRIES	160,600	1,157,367	2,174,877
SHINKO SHOJI CO LTD	74,600	417,266	578,075
SHINKONG SYNTHETIC FIBERS	3,437,000	1,230,663	1,310,520
SHINMAYWA INDUSTRIES LTD	130,300	966,681	1,219,845
SHINNIHON CORP	59,300	508,005	462,264
SHINSEGAE INC	16,031	4,248,334	2,938,717
SHINSEGAE INTERNATIONAL INC	5,456	1,113,423	712,135
SHINSEI BANK LTD	432,700	7,152,889	5,205,956
SHINVA MEDICAL INSTRUMENT A	67,100	150,864	147,591
SHINWA CO LTD	26,563	434,544	482,583
SHIONOGI + CO LTD	2,304,994	120,967,133	144,215,688

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
SHIP HEALTHCARE HOLDINGS INC	91,400	3,371,652	3,799,685
SHISEIDO CO LTD	918,174	41,919,903	58,170,453
SHIZUOKA BANK LTD/THE	1,174,075	10,533,115	7,541,678
SHIZUOKA GAS CO LTD	133,700	887,180	1,223,172
SHO BOND HOLDINGS CO LTD	108,000	3,815,155	4,780,090
SHOCHIKU CO LTD	23,600	2,802,481	3,248,459
SHOEI CO LTD/TAITO KU	49,000	1,007,185	1,221,764
SHOEI FOODS CORP	30,200	1,167,300	1,174,297
SHOPIFY INC CLASS A	279,260	90,795,519	264,450,198
SHOPRITE HOLDINGS LTD	1,170,932	11,685,413	7,187,332
SHOUCHENG HOLDINGS LTD	5,422,398	1,030,530	1,070,424
SHOUGANG FUSHAN RESOURCES GR	8,522,000	3,268,567	1,781,269
SHOWA CORP	117,100	1,083,633	2,416,134
SHOWA DENKO K K	334,200	8,413,676	7,484,147
SHOWA SANGYO CO LTD	57,700	1,159,624	1,767,609
SHREE CEMENT LTD	73,753	20,962,743	22,516,552
SHRIRAM TRANSPORT FINANCE	391,945	5,935,889	3,579,760
SHUFERSAL LTD	260,268	1,701,605	1,698,798
SHUI ON LAND LTD	8,144,599	2,570,546	1,366,111
SHUN TAK HOLDINGS LTD	4,301,750	1,767,152	1,598,493
SIA ENGINEERING CO LTD	543,600	1,294,594	767,637
SIAM CEMENT PUB CO FOR REG	6,792,050	91,980,112	80,869,511
SIAM CITY CEMENT PCL FOR	208,260	1,541,411	875,962
SIAM COMMERCIAL BANK FOREIGN	5,642,143	22,848,341	13,234,825
SIAM COMMERCIAL BANK P NVDR	5,187,700	21,474,104	12,168,834
SIAM GLOBAL HOUSE PCL FOREIG	3,387,288	1,565,395	1,819,267
SIAM MAKRO PUBLIC CO FOREIGN	778,800	890,575	1,039,408
SIASUN ROBOT + AUTOMATION A	139,244	275,515	269,075
SIBANYE STILLWATER LTD	5,114,484	7,244,974	11,097,326
SIBANYE STILLWATER LTD ADR	63,600	493,413	550,140
SICHUAN CHUANTOU ENERGY CO A	392,397	521,321	514,203
SICHUAN EXPRESSWAY CO A	172,051	87,489	82,449
SICHUAN EXPRESSWAY CO H	2,110,000	705,397	481,869
SICHUAN HAITE HIGH TECH CO A	124,900	234,929	271,372
SICHUAN HEBANG BIOTECHNOL A	783,340	159,157	146,168
SICHUAN JIUYUAN YINHAI SOF A	51,900	218,792	223,107
SICHUAN KELUN PHARMACEUTIC A	128,269	407,833	380,776
SICHUAN LANGUANG DEVELOPME A	192,878	156,262	146,960
SICHUAN ROAD+BRIDGE CO LT A	160,273	84,869	86,547
SICHUAN SHUANGMA CEMENT A	126,177	249,676	229,020
SICHUAN SWELLFUN CO LTD A	44,148	320,062	389,550
SICHUAN TIANYI COMHEART TE A	39,400	143,080	152,050
SICHUAN YAHUA INDUSTRIAL A	141,400	150,543	184,493
SIEGFRIED HOLDING AG REG	9,554	2,430,541	4,335,623

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SIEMENS AG REG	1,797,141	187,353,685	211,453,762
SIEMENS GAMESA RENEWABLE ENE	521,750	9,063,956	9,247,136
SIEMENS HEALTHINEERS AG	453,042	17,635,876	21,701,776
SIEMENS LTD	617,342	12,577,556	8,966,549
SIEYUAN ELECTRIC CO LTD A	861,665	2,270,776	2,492,143
SIG	352,948	0	2,181
SIG COMBIBLOC GROUP AG	593,900	7,727,839	9,608,450
SIG PLC	1,411,794	2,811,329	532,046
SIGMA HEALTHCARE LTD	2,531,656	1,245,957	1,089,403
SIGNATURE AVIATION PLC	1,956,307	6,943,197	5,605,520
SIGNIFY NV	319,051	10,663,678	8,238,286
SIGURD MICROELECTRONICS CORP	931,349	946,991	1,281,593
SIHUAN PHARMACEUTICAL HLDGS	9,565,000	1,998,748	913,250
SIIX CORP	80,000	849,640	733,374
SIKA AG REG	325,779	32,130,869	62,694,107
SILERGY CORP	145,000	2,887,989	9,435,849
SILICOM LTD	13,571	406,148	498,056
SILICON INTEGRATED SYSTEMS	1,063,890	314,959	441,717
SILICON WORKS CO LTD	20,720	633,177	664,914
SILLAJEN INC	124,585	8,381,759	1,253,256
SILOAM INTERNATIONAL HOSPITA	824,593	553,500	300,167
SILTRONIC AG	50,195	3,876,951	5,117,860
SILVER LAKE RESOURCES LTD	1,921,643	1,543,193	2,818,099
SILVERLAKE AXIS LTD	1,863,640	946,484	313,935
SIMCORP A/S	94,884	4,354,992	10,223,413
SIME DARBY BERHAD	8,453,892	4,646,264	4,241,743
SIME DARBY PLANTATION BHD	21,048,392	23,644,916	24,167,582
SIME DARBY PROPERTY BHD	8,263,792	1,932,173	1,311,407
SIMPLO TECHNOLOGY CO LTD	418,200	3,470,689	4,528,628
SINA CORP	131,183	7,382,942	4,710,782
SINANEN HOLDINGS CO LTD	21,900	448,989	554,985
SINBON ELECTRONICS CO LTD	488,105	1,581,663	2,464,968
SINCERE NAVIGATION	688,240	440,055	353,398
SINDOH CO LTD	3,676	127,053	74,415
SINFONIA TECHNOLOGY CO LTD	62,699	711,375	595,113
SINGAMAS CONTAINER HLDGS	3,400,000	588,312	223,729
SINGAPORE AIRLINES LTD	6,443,527	25,238,470	17,228,311
SINGAPORE EXCHANGE LTD	6,868,874	38,505,412	41,064,054
SINGAPORE POST LTD	3,534,900	2,638,555	1,951,094
SINGAPORE PRESS HOLDINGS LTD	3,790,876	8,411,654	3,451,068
SINGAPORE TECH ENGINEERING	13,146,836	34,284,898	31,098,928
SINGAPORE TELECOMMUNICATIONS	67,679,540	154,256,343	119,344,589
SINKO INDUSTRIES LTD	46,100	754,232	622,159
SINO AMERICAN SILICON PRODUC	1,259,000	2,817,682	4,049,521

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SINO BIOPHARMACEUTICAL	15,303,498	17,233,271	28,828,142
SINO GEOPHYSICAL CO LTD A	52,700	133,861	138,863
SINO LAND CO	7,830,215	12,588,127	9,850,344
SINO OCEAN GROUP HOLDING LTD	6,933,708	2,888,907	1,663,993
SINO PLATINUM METALS CO A	497,021	1,567,518	2,094,428
SINO THAI ENGR + CONST FOR	2,698,443	1,820,893	1,327,067
SINO WEALTH ELECTRONIC LTD A	46,100	194,859	211,142
SINOCARE INC A	95,900	259,789	435,706
SINOCHEM INTL CORP A	245,602	181,513	175,676
SINOFERT HOLDINGS LTD	4,142,000	434,084	368,750
SINOLINK SECURITIES CO LTD A	269,824	390,573	435,206
SINOMA INTERNATIONAL ENGIN A	155,295	125,908	115,910
SINOMA SCIENCE+TECHNOLOGY A	155,452	292,999	340,610
SINOPAC FINANCIAL HOLDINGS	87,257,398	31,914,351	32,088,080
SINOPEC ENGINEERING GROUP H	3,518,000	2,607,037	1,497,900
SINOPEC KANTONS HOLDINGS	2,370,000	1,271,523	908,192
SINOPEC OILFIELD SERVICE H	6,626,000	867,318	427,459
SINOPEC OILFIELD SERVICE C A	459,777	126,732	109,841
SINOPEC SHANGHAI PETROCHE A	516,372	283,082	254,022
SINOPEC SHANGHAI PETROCHEM H	8,411,999	2,867,122	2,018,763
SINOPHARM GROUP CO H	10,390,148	41,677,161	26,597,235
SINOTRANS LIMITED A	384,308	193,293	175,473
SINOTRANS LIMITED H	4,950,783	1,704,595	1,002,875
SINOTRUK HONG KONG LTD	1,559,000	2,144,236	4,033,050
SINOVAC BIOTECH LTD	68,732	0	0
SINTOKOGIO LTD	113,900	964,477	835,101
SINYI REALTY INC	703,843	694,678	646,483
SIRIUS INTERNATIONAL INSURAN	112,189	985,469	807,761
SIRIUS REAL ESTATE LTD	2,207,808	1,966,472	2,078,712
SITC INTERNATIONAL HOLDINGS	2,771,000	2,437,664	2,956,753
SITRONIX TECHNOLOGY CORP	236,000	999,304	1,231,812
SIX OF OCTOBER DEVELOPMENT	588,702	647,964	324,990
SIXT SE	31,340	1,457,659	2,393,568
SIXT SE PRFD	40,649	1,391,004	2,093,278
SJM HOLDINGS LTD	4,341,000	5,908,014	4,816,830
SK CHEMICALS CO LTD/NEW	20,230	1,357,608	2,161,163
SK DISCOVERY CO LTD	17,714	525,933	575,077
SK GAS LTD	7,149	435,614	440,405
SK HOLDINGS CO LTD	72,835	12,297,044	17,620,638
SK HYNIX INC	2,068,077	97,629,319	146,313,632
SK INNOVATION CO LTD	135,279	16,479,569	14,732,967
SK MATERIALS CO LTD	11,129	1,082,341	1,850,439
SK NETWORKS CO LTD	343,949	2,343,774	1,356,809
SK SECURITIES CO LTD	902,624	1,033,093	657,354

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SK TELECOM	186,939	38,865,983	32,792,226
SKANDINAVISKA ENSKILDA BAN A	3,359,184	27,716,686	29,096,955
SKANDINAVISKA ENSKILDA BAN C	47,975	500,872	434,093
SKANSKA AB B SHS	840,281	15,095,106	17,091,256
SKC CO LTD	45,774	1,330,454	2,321,332
SKF AB B SHARES	907,708	15,649,415	16,869,759
SKISTAR AB	98,500	836,713	1,005,442
SKSHU PAINT CO LTD A	39,317	407,750	512,548
SKY NETWORK TELEVISION LTD	3,781,056	1,432,078	365,108
SKY PERFECT JSAT HOLDINGS	291,119	1,268,407	1,079,368
SKYCITY ENTERTAINMENT GROUP	1,539,329	4,237,654	2,368,354
SKYFAME REALTY HOLDINGS LTD	6,804,000	1,244,239	877,885
SKYLARK HOLDINGS CO LTD	443,900	6,980,489	7,040,023
SKYWORTH DIGITAL CO LTD A	56,102	86,355	95,802
SKYWORTH GROUP LTD	4,694,053	1,952,890	1,314,259
SL CORP	36,961	672,292	424,044
SLC AGRICOLA SA	202,900	854,803	872,084
SLIGRO FOOD GROUP NV	81,222	3,203,127	1,251,600
SM ENTERTAINMENT CO LTD	40,644	1,505,212	819,401
SM INVESTMENTS CORP	2,634,958	46,888,676	49,658,315
SM PRIME HOLDINGS INC	50,796,850	36,167,970	32,471,243
SMA SOLAR TECHNOLOGY AG	20,859	655,221	647,075
SMARTFREN TELECOM TBK PT	100,953,700	1,150,657	685,510
SMARTGROUP CORP LTD	201,121	1,188,929	840,524
SMARTONE TELECOMMUNICATIONS	914,538	812,261	489,692
SMC CORP	177,032	42,392,444	90,546,654
SMCP SA	58,998	1,451,345	286,259
SMI HOLDINGS GROUP LTD	1,325,600	0	0
SMILES FIDELIDADE SA	139,100	1,492,727	372,653
SMITH + NEPHEW PLC	6,035,573	110,894,859	112,273,532
SMITHS GROUP PLC	922,599	18,267,753	16,096,290
SMK CORP	12,899	517,710	310,743
SMS CO LTD	116,800	1,930,693	2,616,727
SMTC CORPORATION	34,480	82,493	104,474
SMU SA	7,004,763	1,629,128	1,295,360
SMURFIT KAPPA GROUP PLC	561,899	15,952,685	18,606,778
SNAM SPA	5,391,308	24,479,324	26,243,444
SNC LAVALIN GROUP INC	406,600	6,348,271	6,839,358
SNS REAAL	2,618,193	0	3
SO YOUNG INTERNATIONAL ADR	92,239	1,131,057	1,251,683
SOBHA LTD	88,644	565,450	266,388
SOC QUIMICA Y MINERA CHILE B	283,558	8,264,275	7,384,395
SOCIETE BIC SA	57,244	2,632,714	2,906,071
SOCIETE GENERALE SA	1,803,323	93,618,441	29,975,954

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SODA SANAYII	925,817	926,791	826,580
SODEXO SA	668,892	70,468,295	45,226,217
SODICK CO LTD	96,100	564,113	709,048
SOFINA	36,648	6,444,392	9,672,883
SOFT WORLD INTL CORP	229,000	544,783	900,337
SOFTBANK CORP	16,433,300	218,898,735	209,443,273
SOFTBANK GROUP CORP	3,771,150	108,088,042	190,506,257
SOFTCAT PLC	304,207	3,213,177	4,097,074
SOFTWARE AG	122,265	3,871,626	4,929,858
SOFTWAREONE HOLDING AG	225,727	5,527,696	5,574,388
SOHGO SECURITY SERVICES CO	596,900	28,929,376	27,774,371
SOHO CHINA LTD	4,401,923	1,630,442	1,544,843
SOJITZ CORP	2,837,100	7,962,747	6,179,900
SOK MARKETLER TICARET AS	607,938	1,157,717	1,188,427
SOLAR A/S B SHS	1,256	69,066	48,643
SOLAREEDGE TECHNOLOGIES INC	119,166	10,231,375	16,537,857
SOLASTO CORP	106,100	986,695	1,052,296
SOLVAY SA	162,634	18,287,637	13,016,521
SOMPO HOLDINGS INC	800,191	29,091,288	27,495,092
SONAE	2,204,316	2,278,787	1,589,449
SONDA SA	1,257,245	1,623,405	827,536
SONGCHENG PERFORMANCE DEVE A	239,324	570,836	585,277
SONGWON INDUSTRIAL CO LTD	37,340	632,764	398,902
SONIC HEALTHCARE LTD	3,669,775	62,621,702	76,885,649
SONIX TECHNOLOGY CO LTD	326,000	379,994	626,487
SONOSCAPE MEDICAL CORP A	67,000	281,049	375,532
SONOVA HOLDING AG REG	469,852	85,526,545	93,791,890
SONY CORP	3,179,240	142,588,100	217,597,517
SONY CORP SPONSORED ADR	19,058	1,257,522	1,317,480
SONY FINANCIAL HOLDINGS INC	355,500	7,093,852	8,550,980
SOOCHOW SECURITIES CO LTD A	346,199	408,209	399,342
SOPRA STERIA GROUP	35,263	3,669,468	4,344,739
SOTETSU HOLDINGS INC	180,800	4,042,862	4,823,121
SOU YU TE GROUP CO LTD A	201,528	86,231	80,052
SOULBRAIN HOLDINGS CO LTD	20,055	862,014	1,598,931
SOURCENEXT CORP	197,000	862,165	505,807
SOUTH INDIAN BANK LTD	2,116,125	475,750	225,615
SOUTH32 LTD	11,485,967	20,791,233	16,132,498
SOUTHERN COPPER CORP	184,835	4,523,803	7,350,888
SOUTHERN CROSS MEDIA GROUP L	6,487,620	2,421,100	781,677
SOUTHERN PROVINCE CEMENT CO	161,576	2,339,022	2,338,997
SOUTHWEST SECURITIES CO LT A	503,141	326,828	326,461
SP SETIA BHD	3,039,676	1,609,675	599,423
SPACE VALUE HOLDINGS CO LTD	67,600	526,813	219,308

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SPAR GROUP LIMITED/THE	460,822	5,889,192	4,551,197
SPAR NORD BANK A/S	193,915	2,098,792	1,539,994
SPAREBANK 1 OESTLANDET	69,825	735,179	634,049
SPAREBANK 1 SMN	310,040	2,466,439	2,516,444
SPAREBANK 1 SR BANK ASA	422,583	3,908,509	3,061,942
SPARK NEW ZEALAND LTD	15,651,191	39,435,387	45,944,073
SPARX GROUP CO LTD	221,100	515,156	442,671
SPC SAMLIP	2,478	396,325	128,757
SPCG PCL	890,300	621,539	469,526
SPECTRIS PLC	267,410	5,973,548	8,342,902
SPEEDCAST INTERNATIONAL LTD	533,999	1,262,053	290,450
SPIC DONGFANG NEW ENERGY C A	888,700	553,465	522,610
SPIE SA	285,852	6,028,788	4,270,027
SPIRAX SARCO ENGINEERING PLC	173,369	15,029,934	21,370,073
SPIRE HEALTHCARE GROUP PLC	668,048	2,779,750	702,450
SPIRENT COMMUNICATIONS PLC	1,462,074	3,763,022	4,353,760
SPORTON INTERNATIONAL INC	151,068	897,587	1,228,840
SPOTIFY TECHNOLOGY SA	384,147	55,659,676	99,182,914
SPRING AIRLINES CO LTD A	63,621	341,161	316,931
SQUARE ENIX HOLDINGS CO LTD	181,800	5,522,973	9,167,095
SRA HOLDINGS INC	16,300	390,120	360,946
SRF LTD	32,819	1,081,764	1,567,279
SRI TRANG AGRO INDUSTRY FOR	2,110,920	826,891	1,861,120
SRISAWAD CORP PCL NVDR	7,200	12,934	11,997
SRISAWADCORP PCL FOREIGN	1,379,500	1,760,255	2,298,609
SSAB AB B SHARES	1,436,063	4,723,825	3,807,244
SSAB AB A SHARES	576,542	2,621,018	1,587,298
SSANGYONG CEMENT IND	240,105	1,221,353	1,018,028
SSANGYONG MOTOR CO	95,884	709,621	256,679
SSE PLC	2,466,730	47,003,594	41,588,502
SSP GROUP PLC	1,265,572	7,075,869	4,021,943
SSR MINING INC	294,600	4,642,114	6,257,546
SSY GROUP LTD	3,380,888	2,152,909	2,307,595
ST BARBARA LTD	1,629,467	3,242,765	3,533,947
ST CORP	25,800	327,372	411,088
ST GALLER KANTONALBANK A REG	6,681	2,781,342	2,982,495
ST JAMES S PLACE PLC	1,820,870	21,830,277	21,436,743
ST PHARM CO LTD	18,849	624,539	631,512
ST SHINE OPTICAL CO LTD	110,000	1,797,300	1,316,070
ST. MODWEN PROPERTIES PLC	434,141	1,856,244	1,853,348
STABILUS SA	59,332	3,660,662	3,108,031
STADLER RAIL AG	91,125	4,397,211	3,750,594
STAGECOACH GROUP PLC	964,950	2,590,902	709,414
STANDARD BANK GROUP LTD	3,013,388	35,988,009	18,123,686

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
STANDARD CHARTERED PLC	6,394,329	84,691,568	34,771,583
STANDARD FOODS CORP	1,073,900	2,142,140	2,293,064
STANDARD LIFE ABERDEEN PLC	5,307,397	27,096,677	17,548,734
STANLEY ELECTRIC CO LTD	336,400	7,605,327	8,091,560
STANTEC INC	266,000	5,051,666	8,185,066
STAR BULK CARRIERS CORP	93,900	2,871,767	619,740
STAR ENTERTAINMENT GRP LTD/T	1,903,438	6,887,524	3,721,868
STAR MICRONICS CO LTD	97,600	1,217,988	1,084,696
STAR PETROLEUM REFINING PCL	3,399,200	528,488	731,366
STARHUB LTD	1,385,640	2,124,504	1,291,231
STARPHARMA HOLDINGS LTD	978,942	1,155,320	758,252
STARTS CORP INC	71,700	1,318,318	1,467,429
STARZEN CO LTD	18,400	621,377	723,993
STATE BANK OF INDIA	8,485,352	36,060,084	20,054,780
STCUBE	51,067	989,756	447,900
STEADFAST GROUP LTD	1,999,789	3,851,761	4,626,231
STEALTHGAS INC	531,715	2,209,966	1,478,168
STEEL AUTHORITY OF INDIA	2,328,387	1,692,558	937,476
STEINHOFF INTERNATIONAL H NV	10,150,439	830,311	595,882
STELLA CHEMIFA CORP	21,200	596,700	474,168
STELLA INTERNATIONAL	1,023,000	1,582,088	1,049,339
STELLA JONES INC	153,600	4,010,063	3,850,150
STERLITE TECHNOLOGIES LTD	230,732	761,154	336,455
STMICROELECTRONICS NV	1,486,617	22,185,393	40,406,593
STO EXPRESS CO LTD A	136,138	356,234	315,803
STOBART GROUP LTD	944,284	2,647,487	403,698
STOLT NIELSEN LTD	59,314	845,037	537,374
STONECO LTD A	316,000	10,517,449	12,248,160
STORA ENSO OYJ R SHS	1,359,172	15,465,715	16,227,270
STOREBRAND ASA	1,131,839	6,355,653	5,820,518
STRABAG SE BR	39,572	1,119,458	1,020,019
STRAUMANN HOLDING AG REG	23,715	13,752,598	20,372,550
STRAUSS GROUP LTD	97,179	2,148,864	2,693,590
STRIDES PHARMA SCIENCE LTD	103,629	950,190	562,177
STRIKE CO LTD	33,700	1,085,021	1,502,498
STROEER SE + CO KGAA	56,394	2,455,157	3,794,001
STUDIO ALICE CO LTD	22,000	339,598	320,564
STUDIO CITY INTERNATIONA ADR	1,435	24,606	22,816
STUDIO DRAGON CORP	14,044	1,254,579	1,006,437
SUBARU CORP	4,336,472	99,699,848	90,097,808
SUBSEA 7 SA	551,829	7,029,348	3,466,449
SUEDZUCKER AG	182,863	3,659,112	2,881,518
SUEZ	868,312	15,884,627	10,176,678
SUGI HOLDINGS CO LTD	83,200	3,555,069	5,629,698

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
SUI NORTHERN GAS PIPELINES	907,600	709,528	295,146
SUI SOUTHERN GAS CO LTD	2,103,000	408,576	167,088
SUL AMERICA SA UNITS	657,142	6,550,520	5,394,003
SULZER AG REG	40,347	4,163,218	3,214,816
SUMAVISION TECHNOLOGIES CO A	236,200	176,185	158,600
SUMCO CORP	542,758	8,293,972	8,295,944
SUMIDA CORP	48,700	810,843	345,777
SUMITOMO BAKELITE CO LTD	74,100	3,094,137	2,070,830
SUMITOMO CHEMICAL CO LTD	3,562,698	17,453,971	10,633,441
SUMITOMO CHEMICAL INDIA LTD	231,994	914,612	841,282
SUMITOMO CORP	2,635,627	36,543,828	30,158,794
SUMITOMO DAINIPPON PHARMA CO	385,300	5,172,603	5,321,379
SUMITOMO DENSETSU CO LTD	33,800	524,994	746,899
SUMITOMO ELECTRIC INDUSTRIES	1,800,732	23,173,059	20,688,764
SUMITOMO FORESTRY CO LTD	321,082	3,403,080	4,026,732
SUMITOMO HEAVY INDUSTRIES	266,200	8,111,480	5,786,152
SUMITOMO METAL MINING CO LTD	553,807	16,690,286	15,446,126
SUMITOMO MITSUI CONSTRUCTION	361,400	1,694,821	1,567,736
SUMITOMO MITSUI FINANCIAL GR	3,078,337	137,071,459	86,513,582
SUMITOMO MITSUI TRUST HOLDIN	875,277	33,295,046	24,541,993
SUMITOMO OSAKA CEMENT CO LTD	82,740	2,903,743	2,902,822
SUMITOMO PRECISION PRODUCTS	6,600	247,497	135,016
SUMITOMO REALTY + DEVELOPMEN	930,715	28,296,119	25,561,557
SUMITOMO RIKO COMPANY LTD	85,323	767,926	493,503
SUMITOMO RUBBER INDUSTRIES	427,987	5,178,286	4,213,025
SUMITOMO SEIKA CHEMICALS CO	20,600	537,052	669,259
SUMITOMO WAREHOUSE CO LTD	129,100	1,346,417	1,548,458
SUMMARECON AGUNG TBK PT	25,400,805	2,007,856	1,040,215
SUMMERSET GROUP HOLDINGS LTD	525,335	1,670,512	2,184,671
SUMMIT THERAPEUTICS SPON ADR	3,973	14,124	11,800
SUN ART RETAIL GROUP LTD	5,168,500	6,077,344	8,829,286
SUN FRONTIER FUDOUSAN CO LTD	64,300	746,591	508,988
SUN HUNG KAI + CO LTD	1,320,000	890,716	517,751
SUN HUNG KAI PROPERTIES	3,358,706	47,243,529	42,880,602
SUN INTERNATIONAL LTD	240,851	837,254	232,880
SUN LIFE FINANCIAL INC	1,375,673	52,812,789	50,390,841
SUN PHARMA ADVANCED RESEARCH	168,433	424,609	362,280
SUN PHARMACEUTICAL INDUS	7,695,074	53,071,239	48,201,384
SUN TV NETWORK LTD	197,681	1,477,952	1,056,035
SUNAC CHINA HOLDINGS LTD	5,800,897	22,828,290	24,287,507
SUNCITY GROUP HOLDINGS LTD	5,140,000	1,208,120	848,880
SUNCOR ENERGY INC	3,604,478	126,022,151	60,577,461
SUNCORP GROUP LTD	2,959,089	29,834,169	18,804,579
SUNDARAM FINANCE LTD	62,411	1,269,080	1,200,257

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SUNDRAM FASTENERS LTD	119,019	900,180	590,021
SUNDRUG CO LTD	576,519	17,695,337	19,077,470
SUNEVISION HOLDINGS	1,430,000	1,133,881	1,119,948
SUNFLOWER PHARMACEUTICAL A	86,150	178,648	178,167
SUNG KWANG BEND CO LTD	39,499	664,745	225,596
SUNGROW POWER SUPPLY CO LT A	127,906	210,880	260,184
SUNGWOO HITECH CO LTD	103,136	722,096	236,222
SUNING UNIVERSAL CO LTD A	269,175	123,741	117,577
SUNING.COM CO LTD A	854,024	1,131,726	1,058,762
SUNNY FRIEND ENVIRONMENTAL T	153,000	1,074,198	1,335,305
SUNNY OPTICAL TECH	1,806,347	22,509,063	28,899,874
SUNONWEALTH ELECTRIC MACHINE	468,000	647,443	813,720
SUNPLUS TECHNOLOGY CO LTD	1,005,000	412,915	415,564
SUNRISE COMMUNICATIONS GROUP	81,057	6,861,406	7,189,954
SUNTORY BEVERAGE + FOOD LTD	1,158,376	47,781,744	45,149,660
SUNWARD INTELLIGENT EQUIPM A	179,400	152,396	151,400
SUNWAY BHD	3,722,454	1,426,758	1,190,143
SUNWAY CONSTRUCTION GROUP BH	1,123,760	490,595	493,038
SUNWODA ELECTRONIC CO LTD A	146,049	353,547	390,202
SUOFEIYA HOME COLLECTION C A	45,710	123,911	156,177
SUPALAI PUBLIC CO LTD FOR	3,050,600	1,829,554	1,658,176
SUPER ENERGY CORP PCL FOREIG	30,872,300	953,454	938,929
SUPER GROUP LTD	855,682	913,571	787,966
SUPER RETAIL GROUP LTD	377,489	1,934,449	1,832,842
SUPERB SUMMIT	15,630,000	0	2
SUPERDRY PLC	158,352	2,329,189	276,467
SUPERIOR PLUS CORP	399,700	4,243,192	3,263,336
SUPERLOOP LTD	620,771	770,167	423,127
SUPERMAX CORP BHD	1,916,422	653,935	3,577,917
SUPREME ELECTRONICS CO LTD	850,000	837,296	857,073
SUPREME INDUSTRIES LTD	89,915	1,371,145	1,342,942
SURGUTNEFTEGAS SP ADR	2,660	14,817	14,218
SURUGA BANK LTD	435,500	1,974,629	1,521,838
SURYA CITRA MEDIA PT TBK	13,520,800	1,616,053	1,102,676
SURYA SEMESTA INTERNUSA PT	8,837,100	586,713	241,265
SUSHIRO GLOBAL HOLDINGS LTD	237,100	3,530,708	5,215,167
SUZANO SA	1,352,950	10,586,554	9,065,169
SUZHOU ANJIE TECHNOLOGY CO A	61,779	185,040	217,455
SUZHOU CHUNXING PRECISION A	186,100	238,913	187,308
SUZHOU GOLD MANTIS CONSTR A	238,566	278,408	265,070
SUZHOU NEW DISTRICT HI TEC A	190,000	143,290	138,590
SUZHOU TFC OPTICAL COMMUNI A	32,800	217,102	276,111
SUZLON ENERGY LTD	6,151,171	793,520	411,416
SUZUKEN CO LTD	598,600	28,419,269	22,304,973

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
SUZUKI MOTOR CORP	1,576,456	58,735,992	53,437,453
SVENSKA CELLULOSA AB A SHS	51,549	534,504	600,884
SVENSKA CELLULOSA AB SCA B	1,402,845	8,733,055	16,683,596
SVENSKA HANDELSBANKEN A SHS	3,469,707	32,847,833	32,936,827
SVENSKA HANDELSBANKEN B SHS	82,716	914,767	825,682
SWANCOR HOLDING CO LTD	170,000	591,064	494,365
SWATCH GROUP AG/THE BR	68,204	18,493,217	13,611,288
SWATCH GROUP AG/THE REG	104,528	5,368,267	4,088,236
SWCC SHOWA HOLDINGS CO LTD	40,300	397,784	428,084
SWECO AB B SHS	158,902	3,307,885	7,136,105
SWEDBANK AB A SHARES	2,343,291	33,245,864	30,031,068
SWEDISH ORPHAN BIVITRUM AB	411,200	9,855,943	9,498,075
SWIRE PACIFIC LTD CL A	1,205,161	12,373,920	6,390,870
SWIRE PACIFIC LTD CL B	2,167,500	3,622,253	2,066,696
SWIRE PROPERTIES LTD	2,492,161	7,461,326	6,328,114
SWISS LIFE HOLDING AG REG	78,249	23,671,365	28,985,699
SWISS PRIME SITE REG	643,727	55,402,231	59,511,883
SWISS RE AG	1,729,182	147,701,790	133,327,040
SWISSCOM AG REG	219,023	101,735,369	114,625,619
SWISSQUOTE GROUP HOLDING REG	20,987	915,426	1,791,830
SYARIKAT TAKAFUL MALAYSIA KE	585,200	580,526	607,734
SYDBANK A/S	142,386	3,455,775	2,639,182
SYDNEY AIRPORT	9,428,686	46,267,050	36,807,653
SYMPHONY LTD	39,597	723,669	459,538
SYMRISE AG	296,566	21,489,071	34,474,620
SYNCMOLD ENTERPRISE CORP	255,500	646,515	700,569
SYNERGIE SA	642	37,516	16,332
SYNGENE INTERNATIONAL LTD	224,614	893,728	1,192,626
SYNLAIT MILK LTD	235,522	1,750,618	1,076,483
SYNNEX TECHNOLOGY INTL CORP	3,268,327	3,972,823	4,613,731
SYNTHOMER PLC	793,550	2,610,824	2,729,742
SYRAH RESOURCES LTD	1,010,796	1,737,892	191,382
SYSTEMEX CORP	468,688	24,627,193	35,753,833
SYSTEMA CORP	163,100	1,219,559	2,148,261
SYSTEX CORP	354,000	728,524	975,451
T GAIA CORP	49,000	574,334	922,909
T HASEGAWA CO LTD	56,300	935,728	1,257,663
T M G HOLDING	2,366,897	1,520,863	856,424
T+D HOLDINGS INC	1,340,029	20,127,926	11,439,651
TA CHEN STAINLESS PIPE CO	2,395,936	2,446,739	2,200,677
TA I TECHNOLOGY CO LTD	235,750	516,016	608,861
TA YA ELECTRIC WIRE + CABLE	1,216,680	355,839	447,423
TABCORP HOLDINGS LTD	4,456,213	14,473,746	10,370,186
TABUK CEMENT CO	103,898	361,631	339,033

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
TACHI S CO LTD	65,100	827,590	522,562
TACHIBANA ELETECH CO LTD	43,300	852,668	696,749
TADANO LTD	267,400	3,741,572	2,228,230
TAEKWANG INDUSTRIAL CO LTD	1,314	1,174,981	760,314
TAEWOONG CO LTD	22,265	741,363	120,131
TAEYOUNG ENGINEERING + CONST	81,172	590,837	1,052,736
TAG IMMOBILIEN AG	287,710	4,533,735	6,857,063
TAHOE GROUP CO LTD A	221,015	162,883	159,026
TAICHUNG COMMERCIAL BANK	6,117,640	2,219,094	2,415,581
TAIDOC TECHNOLOGY CORP	141,000	697,690	1,309,427
TAIFLEX SCIENTIFIC CO LTD	343,540	461,346	570,539
TAIGEN BIOPHARMACEUTICALS	687,060	548,819	581,001
TAIHAN ELECTRIC WIRE CO LTD	578,541	852,588	321,772
TAIHEI DENGYO KAISHA LTD	36,100	707,970	768,277
TAIHEIYO CEMENT CORP	279,658	6,778,685	6,459,728
TAIHO KOGYO CO	60,600	496,050	296,021
TAIJI COMPUTER CORP LTD A	38,158	205,325	235,666
TAIKISHA LTD	67,600	1,436,955	1,860,355
TAIKO PHARMACEUTICAL CO LTD	64,500	1,092,030	1,554,433
TAIMED BIOLOGICS INC	446,000	2,433,124	1,357,447
TAINAN SPINNING	2,678,265	1,089,679	1,030,294
TAISEI CORP	496,615	13,374,886	18,044,499
TAISEI LAMICK CO LTD	13,400	335,474	343,555
TAISHIN FINANCIAL HOLDING	82,959,764	36,138,191	37,537,082
TAISHO PHARMACEUTICAL HOLDIN	316,600	28,886,546	19,368,402
TAIWAN BUSINESS BANK	44,122,145	15,916,567	16,150,728
TAIWAN CEMENT	40,059,444	51,622,032	58,043,391
TAIWAN COGENERATION CORP	840,000	702,780	1,120,304
TAIWAN COOPERATIVE FINANCIAL	78,068,840	46,883,687	54,904,453
TAIWAN FAMILYMART CO LTD	116,000	830,719	939,653
TAIWAN FERTILIZER CO LTD	1,750,000	2,768,192	2,950,821
TAIWAN GLASS IND CORP	3,791,557	1,570,123	1,285,078
TAIWAN HIGH SPEED RAIL CORP	17,018,060	18,314,620	21,053,032
TAIWAN HON CHUAN ENTERPRISE	649,642	1,199,909	1,208,810
TAIWAN LAND DEVELOPMENT CORP	1,676,167	505,645	406,195
TAIWAN MOBILE CO LTD	14,047,312	49,989,370	52,609,872
TAIWAN PAIHO LTD	565,299	1,321,444	1,235,804
TAIWAN PCB TECHVEST CO LTD	576,736	689,017	682,204
TAIWAN SAKURA CORP	469,000	759,794	751,875
TAIWAN SECOM	678,680	1,876,713	2,005,826
TAIWAN SEMICONDUCTOR CO LTD	535,000	679,333	725,313
TAIWAN SEMICONDUCTOR MANUFAC	87,395,998	679,901,310	927,144,923
TAIWAN STYRENE MONOMER	1,183,181	821,351	657,668
TAIWAN SURFACE MOUNTING TECH	696,711	1,348,551	3,069,784

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
TAIWAN TEA CORP	1,491,000	801,458	800,974
TAIWAN UNION TECHNOLOGY CORP	580,000	2,198,095	2,820,926
TAIYEN BIOTECH CO LTD	281,733	280,533	298,400
TAIYO HOLDINGS CO LTD	40,500	1,195,144	1,865,737
TAIYO NIPPON SANSO CORP	454,735	7,362,749	7,591,210
TAIYO YUDEN CO LTD	289,500	4,549,786	8,976,016
TAKAMATSU CONSTRUCTION GROUP	35,000	658,603	782,500
TAKAMIYA CO LTD	45,500	313,410	227,743
TAKAOKA TOKO CO LTD	23,900	517,015	225,077
TAKARA BIO INC	109,100	2,595,722	3,089,405
TAKARA HOLDINGS INC	406,200	3,407,252	3,629,576
TAKARA LEBEN CO LTD	198,700	781,311	663,039
TAKARA STANDARD CO LTD	111,900	1,662,026	1,582,791
TAKASAGO INTERNATIONAL CORP	35,000	962,534	696,853
TAKASAGO THERMAL ENGINEERING	148,600	1,856,313	2,179,035
TAKASHIMAYA CO LTD	330,869	4,866,186	2,760,181
TAKEDA PHARMACEUTIC SP ADR	32,100	603,074	575,553
TAKEDA PHARMACEUTICAL CO LTD	6,444,326	257,593,077	229,853,700
TAKEUCHI MFG CO LTD	81,200	1,469,982	1,347,249
TAKI CHEMICAL CO LTD	10,900	540,372	777,958
TAKIHYO CO LTD	13,200	266,786	227,453
TAKKT AG	78,345	1,255,801	797,218
TAKUMA CO LTD	217,466	1,713,420	2,993,345
TALANX AG	88,281	3,395,058	3,279,975
TALEND SA ADR	59,500	2,230,613	2,062,270
TALKTALK TELECOM GROUP	1,616,655	3,125,693	1,710,893
TAMA HOME CO LTD	31,500	381,120	358,256
TAMBURI INVESTMENT PARTNERS	184,095	1,374,678	1,203,380
TAMRON CO LTD	17,800	332,917	306,717
TAMURA CORP	181,050	716,311	761,892
TANGRENSHEN GROUP CO LTD A	138,000	191,143	185,714
TANGSHAN JIDONG CEMENT INV A	119,787	290,734	271,608
TANGSHAN PORT GROUP CO LTD A	528,828	172,761	166,705
TANGSHAN SANYOU CHEMICAL I A	182,816	125,371	120,428
TANSEISHA CO LTD	76,400	675,060	531,121
TAOKAENOI FOOD + MARKETING F	1,333,600	707,460	448,740
TARKETT	78,234	2,565,977	910,318
TARO PHARMACEUTICAL INDUS	19,574	1,858,918	1,301,475
TASSAL GROUP LTD	496,666	1,641,663	1,179,743
TAT GIDA SANAYI AS	183,333	219,347	267,454
TATA CHEMICALS LTD	30,399	119,082	124,831
TATA COMMUNICATIONS LTD	164,105	835,508	1,329,619
TATA CONSULTANCY SVCS LTD	7,697,336	216,974,938	212,267,711
TATA CONSUMER PRODUCTS LTD	763,408	2,861,497	3,917,454

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
TATA MOTORS LTD	2,534,008	6,546,544	3,297,403
TATA MOTORS LTD A DVR	894,525	1,303,130	474,489
TATA POWER CO LTD	2,224,429	2,242,933	1,321,334
TATA STEEL LTD	634,222	3,882,280	2,744,239
TATE + LYLE PLC	1,096,027	9,247,155	9,040,984
TATERU INC	80,500	855,433	137,294
TATSUTA ELEC WIRE + CABLE	78,700	416,771	417,263
TATUNG CO LTD	5,126,000	2,413,203	3,648,460
TAURON POLSKA ENERGIA SA	2,252,303	1,029,950	1,346,035
TAV HAVALIMANLARI HOLDING AS	697,397	3,304,542	1,970,689
TAYCA CORP	40,400	995,291	517,147
TAYLOR WIMPEY PLC	8,495,001	17,018,955	14,967,907
TBC BANK GROUP PLC	83,857	1,967,436	926,307
TBEA CO LTD A	331,481	324,781	317,231
TC ENERGY CORP	2,284,653	100,637,355	97,290,656
TCI CO LTD	245,428	2,011,482	2,275,062
TCL ELECTRONICS HOLDINGS LTD	1,455,333	712,828	711,663
TCL TECHNOLOGY GROUP CORP A	1,214,965	894,901	1,064,840
TDK CORP	281,800	19,366,507	27,896,594
TE CONNECTIVITY LTD	787,556	48,715,261	64,225,192
TEAMLEASE SERVICES LTD	23,853	994,233	530,900
TEAMVIEWER AG	285,693	12,093,543	15,594,579
TECAN GROUP AG REG	28,462	3,482,176	10,080,573
TECH BANK FOOD CO LTD A	191,300	328,061	347,494
TECH MAHINDRA LTD	3,971,989	39,246,619	28,586,379
TECH PRO TECHNOLOGY	18,653,192	0	2
TECHMATRIX CORPORATION	49,600	713,273	859,730
TECHNIPFMC PLC	1,407,500	35,697,340	9,681,572
TECHNOGYM SPA	283,962	2,424,690	2,366,475
TECHNOLOGY ONE LTD	355,947	1,137,517	2,154,161
TECHNOPRO HOLDINGS INC	84,500	4,988,730	4,816,935
TECHTRONIC INDUSTRIES CO LTD	2,929,016	11,518,191	28,646,003
TECK RESOURCES LTD CLS B	1,107,000	22,005,839	11,557,060
TECNICAS REUNIDAS SA	72,769	3,064,043	1,103,362
TECNOGLASS INC	91,652	824,994	499,503
TECO ELECTRIC + MACHINERY	4,264,000	3,406,655	3,909,275
TECON BIOLOGY CO LTD A	179,100	291,703	407,615
TEEKAY CORP	157,768	2,634,117	378,643
TEEKAY TANKERS LTD CLASS A	55,551	1,664,163	712,164
TEIJIN LTD	428,800	7,333,293	6,812,469
TEIKOKU ELECTRIC MFG CO LTD	40,700	429,192	468,926
TEIKOKU SEN I CO LTD	50,000	1,052,468	1,059,461
TEKFEN HOLDING AS	419,133	1,573,094	1,040,686
TEKKEN CORP	29,600	642,206	566,292

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
TELCON RF PHARMACEUTICAL INC	165,686	1,794,968	717,649
TELE2 AB B SHS	4,338,604	61,749,372	57,535,114
TELECOM EGYPT	805,616	779,113	665,357
TELECOM ITALIA RSP	14,269,274	14,962,555	5,529,155
TELECOM ITALIA SPA	25,264,090	32,136,132	9,922,865
TELECOM PLUS PLC	136,607	2,179,819	2,403,594
TELEFONICA BRASIL S.A.	71,600	676,329	631,136
TELEFONICA BRASIL S.A. PREF	3,893,557	49,083,929	34,058,342
TELEFONICA DEUTSCHLAND HOLDI	7,474,223	25,659,792	22,052,808
TELEFONICA SA	15,691,811	182,757,745	74,850,224
TELEFONICA SA RTS	15,880,306	3,444,179	3,123,078
TELEKOM AUSTRIA AG	319,212	2,222,146	2,204,916
TELEKOM MALAYSIA BHD	2,720,471	2,722,398	2,634,762
TELEKOMUNIKASI INDONESIA PER	386,433,900	104,356,511	82,507,763
TELENET GROUP HOLDING NV	378,189	17,927,081	15,563,316
TELENOR ASA	5,958,500	115,852,269	86,533,207
TELEPERFORMANCE	136,584	20,106,040	34,654,037
TELESITES SAB DE CV	2,938,757	1,996,181	1,853,018
TELEVISION BROADCASTS LTD	684,971	2,304,294	795,404
TELEVISION FRANCAISE (T.F.1)	258,681	3,065,215	1,398,648
TELIA CO AB	21,617,302	103,151,058	80,745,988
TELKOM SA SOC LTD	678,760	3,349,012	1,157,506
TELSTRA CORP LTD	35,395,805	92,546,467	76,278,128
TELUS CORP	3,505,184	59,036,777	58,599,882
TEMENOS AG REG	212,653	26,706,829	33,023,998
TENAGA NASIONAL BHD	15,950,193	52,700,716	43,253,499
TENARIS SA	1,091,955	16,572,553	7,049,516
TENARIS SA ADR	74,290	2,294,344	960,570
TENCENT HOLDINGS LTD	13,992,605	556,053,224	900,168,745
TENCENT MUSIC ENTERTAINM ADR	2,002,558	27,860,442	26,954,431
TENMA CORP	33,626	498,242	517,395
TERNA ENERGY SA	105,431	815,733	1,137,967
TERNA SPA	3,858,643	20,308,019	26,514,403
TERUMO CORP	3,269,004	83,485,634	123,657,648
TES CO LTD	33,181	637,469	590,326
TESCO PLC	22,754,444	99,063,663	64,131,239
TESSENDERLO GROUP	61,787	2,070,477	1,838,996
TEST RESEARCH INC	448,700	703,582	824,265
TEST RITE INTERNATIONAL CO	926,000	656,147	651,240
TEVA PHARMACEUTICAL IND LTD	2,306,345	64,732,205	27,761,838
TEXHONG TEXTILE GROUP LTD	691,000	719,144	552,768
TEXWINCA HOLDINGS LTD	1,494,000	694,004	219,750
TFI INTERNATIONAL INC	197,700	3,565,449	6,994,980
TGS NOPEC GEOPHYSICAL CO ASA	278,239	5,687,959	4,019,136

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
THAI AIRWAYS INTL PCL FOR	2,567,400	246,872	315,655
THAI OIL PCL FOREIGN	2,393,800	5,213,435	3,427,183
THAI OIL PCL NVDR	9,800	19,194	14,031
THAI UNION GROUP PCL F	11,163,930	5,951,292	4,659,539
THAI UNION GROUP PCL NVDR	9,807,400	5,127,163	4,093,358
THAI VEGETABLE OIL PCL FOR	1,009,700	892,982	857,547
THAICOM PCL FOREIGN	1,537,800	553,527	233,848
THAIFOODS GROUP PCL F	4,362,200	670,856	694,395
THAILAND FUTURE FUND FOREIGN	5,307,753	2,173,659	1,837,514
THALES SA	890,919	98,555,743	71,925,694
THANACHART CAPITAL FOREIGN	2,000,111	3,179,501	2,297,305
THE FOSCHINI GROUP LTD	541,254	5,913,450	1,999,603
THE SHANGHAI COMMERCIAL + SA	28,512,635	45,885,393	44,018,727
THE UNITED LABORATORIES INTE	1,103,500	1,087,863	953,938
THERAVANCE BIOPHARMA INC	103,063	2,047,040	2,163,292
THERMAX LTD FOREIGN	63,783	907,210	637,756
THIRD POINT REINSURANCE LTD	177,815	1,859,757	1,335,391
THK CO LTD	278,852	6,119,108	6,885,681
THOMAS COOK (INDIA) LTD	212,405	256,515	74,830
THOMSON MEDICAL GROUP LTD	15,186,200	838,908	609,603
THOMSON REUTERS CORP	553,165	30,109,748	37,462,511
THONBURI HEALTHCARE FOREIGN	800,900	617,452	518,256
THORESEN THAI AGENCIES FOR	3,543,186	836,121	362,257
THULE GROUP AB/THE	250,338	3,867,709	6,319,814
THUNDER SOFTWARE TECHNOLOG A	33,768	273,467	370,899
THYSSENKRUPP AG	1,085,895	28,512,995	7,700,700
TI FLUID SYSTEMS PLC	458,519	1,019,186	1,050,377
TIAN DI SCIENCE + TECHNOLO A	298,394	128,785	123,591
TIAN GE INTERACTIVE HOLDINGS	1,177,000	529,253	154,899
TIANFENG SECURITIES CO LTD A	594,602	532,848	509,363
TIANGONG INTL CO LTD	2,718,000	710,822	876,723
TIANJIN CAPITAL ENVIRON A	96,022	94,231	90,130
TIANJIN CAPITAL ENVIRON H	792,000	311,447	241,163
TIANJIN CHASE SUN PHARM A	268,247	184,125	209,316
TIANJIN DEVELOPMENT HLDGS LT	898,000	335,169	201,604
TIANJIN GUANGYU DEVELOPMT A	307,500	301,879	317,320
TIANJIN PORT DVLP HLDS LTD	3,724,000	413,463	259,464
TIANJIN ZHONG XIN PHARM CO A	94,630	202,686	231,689
TIANJIN ZHONGHUAN SEMICOND A	255,928	605,635	812,562
TIANJIN712 COMMUNICATION + A	59,000	226,646	320,100
TIANLI EDUCATION INTERNATION	2,535,000	998,383	1,776,032
TIANMA MICROELECTRONICS A	182,909	372,097	397,150
TIANNENG POWER INTL LTD	1,580,000	1,280,429	2,690,941
TIANQI LITHIUM CORP A	131,629	442,857	427,035

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
TIANSHUI HUATIAN TECHNOLOG A	1,987,095	3,408,791	3,800,539
TIBET SUMMIT RESOURCES CO A	51,541	70,576	72,859
TIBET TIANLU CO LTD A	143,000	144,330	143,928
TIETOEVRV OYJ	228,131	5,188,503	6,225,778
TILRAY INC CLASS 2 COMMON	204,700	2,505,033	1,455,417
TIM PARTICIPACOES SA	1,927,861	6,057,094	4,985,726
TIMAH TBK PT	6,127,383	447,757	255,218
TIME DOTCOM BHD	735,800	1,423,356	1,868,262
TIMES CHINA HOLDINGS LTD	1,761,000	2,570,551	3,253,685
TIMES NEIGHBORHOOD HOLDINGS	1,004,653	632,778	1,363,656
TINGYI (CAYMAN ISLN) HLDG CO	4,389,839	6,312,197	6,808,103
TIPCO ASPHALT PCL FOREIGN	1,494,000	1,048,351	1,208,445
TIS INC	557,600	7,148,816	11,753,093
TISCO FINANCIAL FOREIGN	1,405,178	3,643,863	3,159,747
TISCO FINANCIAL GROUP NVDR	14,000	37,808	31,481
TITAN CEMENT INTERNATIONAL T	58,987	1,264,960	715,514
TITAN CO LTD	2,638,700	39,775,571	33,195,294
TITAN WIND ENERGY SUZHOU A	294,580	260,224	249,019
TK CORPORATION	32,513	521,727	197,589
TKC CORP	34,000	904,794	1,799,509
TKH GROUP NV DUTCH CERT	101,876	3,393,780	4,013,925
TLG IMMOBILIEN AG	31,500	1,014,789	616,660
TMB BANK PCL NVDR	11,211,774	582,270	380,890
TMB BANK PUBLIC CORP FOREIGN	100,836,880	4,601,550	3,425,664
TMX GROUP LTD	132,145	7,580,347	13,023,365
TOA CORP	94,000	1,099,421	954,248
TOA OIL CO LTD	12,999	207,787	246,642
TOA PAINT THAILAND PCL FOR	1,196,500	1,572,486	1,412,998
TOAGOSEI CO LTD	303,700	2,608,474	2,967,046
TOBU RAILWAY CO LTD	1,653,528	47,424,172	54,639,916
TOC CO LTD	116,400	650,871	734,749
TOCALO CO LTD	125,500	708,680	1,347,073
TOCHIGI BANK LTD/THE	230,900	873,325	348,859
TOD S SPA	20,197	1,514,395	598,411
TODA CORP	546,600	2,629,972	3,521,222
TOEI CO LTD	14,284	1,158,121	1,907,887
TOENEC CORP	16,548	477,393	571,361
TOFAS TURK OTOMOBIL FABRIKA	289,987	1,200,197	1,121,070
TOHO BANK LTD/THE	436,400	1,459,337	902,046
TOHO CO LTD	972,989	32,851,174	34,734,764
TOHO GAS CO LTD	669,046	25,074,548	33,487,958
TOHO HOLDINGS CO LTD	126,700	2,189,682	2,357,018
TOHO TITANIUM CO LTD	76,200	635,109	456,275
TOHO ZINC CO LTD	31,400	1,063,503	445,308

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
TOHOKU ELECTRIC POWER CO INC	1,096,700	15,012,631	10,429,756
TOKAI CARBON CO LTD	456,600	6,047,124	4,278,840
TOKAI CORP/GIFU	42,100	750,976	926,407
TOKAI HOLDINGS CORP	282,700	1,697,820	2,604,661
TOKAI RIKA CO LTD	137,075	2,536,514	1,980,812
TOKAI TOKYO FINANCIAL HOLDIN	516,300	1,548,654	1,138,985
TOKEN CORP	17,350	863,440	1,130,560
TOKIO MARINE HOLDINGS INC	4,183,182	198,418,759	182,162,386
TOKUSHU TOKAI PAPER CO LTD	20,200	583,215	865,032
TOKUYAMA CORP	186,800	5,071,954	4,384,090
TOKYO BASE CO LTD	23,000	170,651	75,469
TOKYO BROADCASTING SYSTEM	84,600	1,339,211	1,349,554
TOKYO CENTURY CORP	145,100	5,576,361	7,410,678
TOKYO DOME CORP	213,900	1,849,304	1,532,601
TOKYO ELECTRIC POWER COMPANY	7,036,959	55,559,906	21,589,966
TOKYO ELECTRON DEVICE LTD	14,300	229,346	476,512
TOKYO ELECTRON LTD	456,400	64,180,626	111,852,584
TOKYO ENERGY + SYSTEMS INC	45,566	354,158	332,817
TOKYO GAS CO LTD	1,677,179	41,117,147	40,108,651
TOKYO INDIVIDUALIZED EDU	48,400	448,029	231,940
TOKYO KIRABOSHI FINANCIAL GR	61,900	1,758,909	632,283
TOKYO OHKA KOGYO CO LTD	91,317	2,430,516	4,562,253
TOKYO RAKUTENCHI CO LTD	5,676	245,361	229,650
TOKYO ROPE MFG CO LTD	28,200	516,114	147,946
TOKYO SEIMITSU CO LTD	82,100	1,732,776	2,617,825
TOKYO STEEL MFG CO LTD	188,800	1,100,282	1,085,007
TOKYO TATEMONO CO LTD	463,400	5,557,121	5,309,009
TOKYOTOKEIBA CO LTD	35,500	872,887	1,182,949
TOKYU CONSTRUCTION CO LTD	183,140	954,479	947,232
TOKYU CORP	4,234,567	69,560,749	59,543,385
TOKYU FUDOSAN HOLDINGS CORP	1,406,500	8,924,542	6,570,663
TOLI CORP	104,800	224,219	263,251
TOLY BREAD CO LTD A	20,891	147,057	150,287
TOMOKU CO LTD	22,600	296,621	370,574
TOMONY HOLDINGS INC	354,100	1,393,292	1,132,359
TOMRA SYSTEMS ASA	278,978	4,624,140	10,211,167
TOMTOM NV	299,043	3,739,066	2,364,526
TOMY COMPANY LTD	216,100	1,847,664	1,702,600
TON YI INDUSTRIAL CORP	1,727,000	715,870	535,581
TONAMI HOLDINGS CO LTD	15,484	479,793	808,036
TONG HSING ELECTRONIC INDUST	466,000	2,055,689	2,211,188
TONG REN TANG TECHNOLOGIES H	1,483,000	1,709,328	1,127,015
TONG TAI MACHINE + TOOL CO	544,360	349,243	243,541
TONG YANG INDUSTRY	1,115,450	1,604,742	1,379,923

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
TONGCHENG ELONG HOLDINGS LTD	1,950,800	3,329,673	3,513,753
TONGDA GROUP HOLDINGS LTD	8,560,000	1,124,740	508,048
TONGDING INTERCONNECTION I A	112,393	95,298	81,346
TONGFU MICROELECTRONIC CO A	193,460	432,072	685,059
TONGHUA DONGBAO PHARMACEUT A	181,252	387,576	446,590
TONGKUN GROUP CO LTD A	164,397	294,632	296,533
TONGLING NONFERROUS METALS A	936,710	268,483	255,559
TONGWEI CO LTD A	390,361	793,271	959,058
TONGYANG INC	469,047	1,176,272	462,086
TONGYANG LIFE INSURANCE	77,094	698,433	186,190
TONGYU COMMUNICATION INC A	39,900	150,614	138,638
TOP GLOVE CORP BHD	13,438,000	19,930,179	50,490,502
TOPCHOICE MEDICAL CORPORAT A	29,021	534,852	684,162
TOPCO SCIENTIFIC CO LTD	369,296	987,598	1,364,309
TOPCON CORP	232,400	3,852,321	1,865,490
TOPDANMARK A/S	102,630	2,580,839	4,237,618
TOPIX EXCHANGE TRADED FUND	7,890	121,504	119,354
TOPKEY CORP	157,000	727,741	758,274
TOPPAN FORMS CO LTD	94,100	804,494	929,792
TOPPAN PRINTING CO LTD	716,026	12,615,332	11,926,577
TOPRE CORP	100,000	1,459,695	1,113,222
TOPSPORTS INTERNATIONAL HOLD	3,136,000	4,132,159	4,005,755
TOPTEC CO LTD	47,923	731,221	758,975
TOPY INDUSTRIES LTD	42,799	949,025	484,382
TORAY INDUSTRIES INC	3,568,264	24,549,165	16,785,410
TORC OIL + GAS LTD	344,100	2,569,003	429,493
TOREX GOLD RESOURCES INC	202,360	3,071,216	3,178,033
TORIDOLL HOLDINGS CORP	99,800	764,909	1,119,322
TORII PHARMACEUTICAL CO LTD	29,500	622,466	847,662
TORISHIMA PUMP MFG CO LTD	50,100	621,074	371,507
TOROMONT INDUSTRIES LTD	188,833	5,321,962	9,340,440
TORONTO DOMINION BANK	4,888,016	223,583,022	217,448,524
TORRENT PHARMACEUTICALS LTD	95,898	2,233,231	3,012,826
TORRENT POWER LTD	276,508	1,106,500	1,167,319
TOSEI CORP	64,800	484,624	682,927
TOSHIBA CORP	2,066,132	71,946,589	65,784,524
TOSHIBA TEC CORP	56,500	1,607,415	2,157,668
TOSHO CO LTD	34,900	560,735	412,777
TOSOH CORP	672,300	6,984,253	9,160,504
TOTAL ACCESS COMM FOREIGN	1,576,100	2,825,463	2,001,518
TOTAL ACCESS COMMUNICA NVDR	23,100	30,921	29,335
TOTAL SA	5,728,810	331,957,679	218,605,789
TOTETSU KOGYO CO LTD	65,000	1,107,895	1,638,180
TOTO LTD	337,300	9,414,821	12,865,454

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
TOTVS SA	1,666,500	5,481,279	7,026,203
TOUNG LOONG TEXTILE MANUF CO	204,000	395,308	190,486
TOURISM HOLDINGS LIMITED	337,544	1,224,771	430,242
TOURMALINE OIL CORP	572,900	8,187,175	4,992,895
TOWA BANK LTD/THE	77,890	632,583	503,937
TOWA CORP	56,600	722,824	611,197
TOWA PHARMACEUTICAL CO LTD	47,600	857,586	879,333
TOWER BERSAMA INFRASTRUCTURE	24,087,900	2,053,137	1,863,292
TOWER SEMICONDUCTOR LTD	252,258	4,543,644	4,814,910
TOWERBROOK INVESTORS V (ONSHOR	47,780,835	47,780,835	42,031,845
TOWERBROOK STRCT OP FUND II (O	21,019,168	21,019,168	19,407,544
TOWN HEALTH INTERNATIONAL ME	9,196,000	0	1
TOWNGAS CHINA CO LTD	2,552,689	2,230,370	1,152,760
TOYO CONSTRUCTION CO LTD	73,000	278,223	271,335
TOYO CORP	53,300	550,824	489,598
TOYO ENGINEERING CORP	53,300	826,160	170,445
TOYO INK SC HOLDINGS CO LTD	90,700	1,920,915	1,713,367
TOYO KANETSU K K	18,300	409,989	358,079
TOYO SEIKAN GROUP HOLDINGS L	344,800	5,931,039	3,886,331
TOYO SUISAN KAISHA LTD	759,970	27,865,689	42,476,888
TOYO TANSO CO LTD	33,400	1,210,629	524,753
TOYO TIRE CORP	236,900	3,656,879	3,164,230
TOYOBO CO LTD	207,793	2,984,594	2,889,090
TOYODA GOSEI CO LTD	173,700	3,915,070	3,609,727
TOYOTA BOSHOKU CORP	144,400	2,294,811	1,936,755
TOYOTA INDUSTRIES CORP	373,129	16,684,207	19,748,497
TOYOTA MOTOR CORP	5,767,671	328,304,856	361,505,226
TOYOTA TSUSHO CORP	916,102	24,261,741	23,173,216
TP ICAP PLC	1,370,827	7,010,336	5,941,832
TPG TELECOM LTD	850,547	4,269,455	5,211,854
TPI POLENE PCL	5,896,400	1,123,616	766,918
TPI POLENE PUB CO LTD FOR	19,632,600	1,073,664	755,894
TPK HOLDING CO LTD	758,000	2,313,918	1,193,347
TPR CO LTD	99,800	1,545,068	1,239,579
TQM CORP PCL FOREIGN	350,300	748,421	1,513,065
TQM CORP PUBLIC CO ADR	5,000	11,988	21,597
TRADA ALAM MINERA TBK PT	77,349,300	866,442	270,736
TRAINLINE PLC	1,069,166	6,871,319	5,738,694
TRAKYA CAM SANAYII AS	3,538,635	2,056,508	1,853,270
TRANCOM CO LTD	11,400	582,203	730,166
TRANE TECHNOLOGIES PLC	535,454	31,147,646	47,644,697
TRANSACTION CAPITAL	1,157,726	965,261	1,239,350
TRANSALTA CORP	630,100	5,142,738	3,724,159
TRANSALTA RENEWABLES INC	259,100	2,779,403	2,775,528

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
TRANSCEND INFORMATION INC	665,071	1,540,993	1,622,977
TRANSCONTINENTAL INC CL A	178,700	2,233,837	1,981,182
TRANSCOSMOS INC	64,600	987,064	1,492,174
TRANSFAR ZHILIAN CO LTD A	92,794	82,978	71,359
TRANSMISSORA ALIANCA DE UNIT	944,873	6,535,630	4,835,531
TRANSURBAN GROUP	18,131,226	159,775,917	176,389,702
TRATON SE	116,266	3,062,039	2,270,597
TRAVELSKY TECHNOLOGY LTD H	7,954,000	14,061,381	13,998,227
TRAVIS PERKINS PLC	589,862	14,135,976	8,203,025
TREASURY WINE ESTATES LTD	1,681,311	12,193,419	12,131,464
TRELLEBORG AB B SHS	753,572	12,097,388	10,971,974
TREND MICRO INC	1,094,812	54,246,996	61,090,682
TRI CHEMICAL LABORATORIES IN	13,900	1,323,048	1,485,536
TRIGANO SA	19,203	885,263	2,011,202
TRIP.COM GROUP LTD ADR	1,101,817	39,092,908	28,559,097
TRIPLE S MANAGEMENT CORP B	50,829	1,178,772	966,768
TRIPOD TECHNOLOGY CORP	1,200,000	3,732,406	5,328,001
TRITON FUND V, L.P.	51,116,776	56,177,668	49,293,320
TRITON INTERNATIONAL LTD/BER	221,091	7,382,189	6,685,792
TRONOX HOLDINGS PLC A	204,034	2,679,785	1,473,125
TRUE CORP PCL FOREIGN	24,893,006	4,654,256	2,738,372
TRULY INTERNATIONAL HOLDINGS	3,666,000	832,863	383,134
TRUSCO NAKAYAMA CORP	92,900	1,323,338	2,404,197
TRUWORTHS INTERNATIONAL LTD	993,995	4,323,576	1,945,656
TRYG A/S	1,035,624	26,302,373	29,964,030
TS TECH CO LTD	133,055	3,798,538	3,646,880
TSAKOS ENERGY NAVIGATION LTD	145,619	910,810	292,694
TSI HOLDINGS CO LTD	193,100	1,125,484	826,919
TSINGTAO BREWERY CO LTD A	63,516	536,647	686,868
TSINGTAO BREWERY CO LTD H	903,364	5,133,494	6,701,989
TSOGO SUN GAMING LTD	1,226,097	1,308,052	310,494
TSOGO SUN HOTELS LTD	1,247,894	362,916	165,189
TSRC CORP	1,676,550	1,841,412	974,524
TSUBAKI NAKASHIMA CO LTD	95,600	1,665,872	745,234
TSUBAKIMOTO CHAIN CO	79,200	2,459,937	1,918,977
TSUGAMI CORP	110,700	593,175	922,457
TSUKISHIMA KIKAI CO LTD	62,300	623,324	676,214
TSUKUBA BANK LTD	179,300	525,662	292,504
TSUKUI CORP	107,200	619,068	500,800
TSUMURA + CO	152,879	4,386,209	3,996,096
TSURUHA HOLDINGS INC	254,379	24,466,805	35,014,396
TSURUMI MANUFACTURING CO LTD	49,300	551,918	844,020
TSUTSUMI JEWELRY CO LTD	15,600	310,013	271,267
TT HELLENIC POSTBANK S.A.	345,831	0	0

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
TTK PRESTIGE LTD	7,856	740,270	563,356
TTW PCL FOREIGN SHARES	3,282,900	1,338,281	1,402,064
TTW PCL NVDR	18,700	8,497	7,986
TTY BIOPHARM CO LTD	492,827	1,414,537	1,271,133
TUAS LTD	425,273	146,400	197,640
TUBE INVESTMENTS OF INDIA LT	106,412	573,050	626,320
TUCOWS INC CLASS A	20,666	1,191,807	1,184,575
TUFIN SOFTWARE TECHNOLOGIES	44,500	437,231	424,975
TUI AG DI	1,017,804	12,801,192	4,790,196
TULLOW OIL PLC	3,318,105	8,848,572	1,299,653
TUNG HO STEEL ENTERPRISE COR	1,957,000	1,442,670	1,485,767
TUNG THIH ELECTRONIC CO LTD	146,000	640,391	268,203
TUNGHSU OPTOELECTRONIC TEC A	489,900	249,282	184,905
TUPRAS TURKIYE PETROL RAFINE	287,824	6,821,034	3,758,014
TUPY SA	156,100	807,347	543,001
TURK HAVA YOLLARI AO	6,154,626	11,820,470	11,241,244
TURK SISE VE CAM FABRIKALARI	1,421,240	1,264,164	1,150,718
TURK TELEKOMUNIKASYON AS	1,261,057	1,623,654	1,491,983
TURK TRAKTOR VE ZIRAAT MAKIN	31,861	224,509	366,031
TURKCELL ILETISIM HIZMET AS	3,119,025	7,958,203	7,480,473
TURKIYE GARANTI BANKASI	4,893,147	9,738,402	6,039,027
TURKIYE HALK BANKASI	1,443,188	1,549,054	1,349,551
TURKIYE IS BANKASI C	3,291,329	4,202,375	2,679,254
TURKIYE SINAI KALKINMA BANK	2,728,514	393,907	513,481
TURKIYE VAKIFLAR BANKASI T D	2,464,260	2,585,642	1,916,117
TURQUOISE HILL RESOURCES LTD	2,370,600	3,476,860	1,740,529
TUS ENVIRONMENTAL SCIENCE A	127,692	149,453	133,936
TV ASAHI HOLDINGS CORP	49,600	766,312	722,265
TV TOKYO HOLDINGS CORP	13,300	294,492	292,665
TV18 BROADCAST LTD	963,438	427,348	430,655
TVS MOTOR CO LTD	267,705	1,646,242	1,341,472
TXC CORP	656,000	896,690	1,414,076
TYC BROTHER INDUSTRIAL CO	409,000	356,463	335,467
TYNTEK CORPORATION	718,175	338,267	331,040
TYRO PAYMENTS LTD	736,562	1,940,900	1,774,930
U BLOX HOLDING AG	15,866	2,770,642	1,085,026
U CITY PCL F	8,325,492	642,197	387,890
U MING MARINE TRANSPORT CORP	990,000	1,110,937	1,050,247
UACJ CORP	66,800	1,700,387	1,193,775
UBE INDUSTRIES LTD	238,521	5,670,909	4,094,553
UBI BANCA SPA	2,204,950	18,576,491	7,206,585
UBISOFT ENTERTAINMENT	215,735	15,973,250	17,785,023
UBS GROUP AG REG	8,166,526	147,154,325	93,985,506
UCB SA	1,126,782	89,300,070	130,477,714

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
UCHIDA YOKO CO LTD	29,500	823,756	1,717,199
UDG HEALTHCARE PLC	594,250	3,896,559	5,271,956
UEM SUNRISE BHD	3,675,000	868,262	373,075
UK COMMERCIAL PROPERTY REIT	1,281,553	1,524,418	946,926
ULKER BISKUVI SANAYI	357,271	1,242,466	1,266,521
ULTRA ELECTRONICS HLDGS PLC	166,119	3,815,656	4,101,030
ULTRAPAR PARTICIPACOES SA	1,901,830	11,341,404	6,366,219
ULTRATECH CEMENT LTD	699,980	38,509,550	36,096,315
ULVAC INC	113,000	5,646,731	3,257,450
UMICORE	710,329	22,848,860	33,436,051
UNI PRESIDENT CHINA HOLDINGS	2,766,600	2,970,011	2,755,731
UNI PRESIDENT ENTERPRISES CO	25,837,010	61,667,751	62,437,215
UNICAJA BANCO SA	1,855,259	2,576,418	948,099
UNICHARM CORP	2,758,640	78,093,424	113,020,242
UNICREDIT SPA	4,986,956	76,411,515	45,861,805
UNIFIN FINANCIERA SAB DE CV	319,500	633,183	241,004
UNIGROUP GUOXIN MICROELECT A	55,378	479,563	569,507
UNILEVER INDONESIA TBK PT	60,276,200	37,786,056	33,334,405
UNILEVER NV	3,539,170	182,702,825	187,819,643
UNILEVER PLC	2,572,014	112,340,916	138,401,120
UNILUMIN GROUP CO LTD A	162,100	204,308	185,379
UNIMICRON TECHNOLOGY CORP	3,035,000	3,711,013	5,153,570
UNION BANK OF INDIA	1,127,965	895,615	475,066
UNION FINANCIERE DE FRANCE	10,129	289,540	179,178
UNION PROPERTIES PJSC	4,912,009	443,763	401,182
UNION TOOL CO	22,300	598,538	543,625
UNIPAR CARBOCLORO SA	105,393	816,632	459,516
UNIPER SE	262,105	5,462,319	8,448,799
UNIPOL GRUPPO SPA	1,170,681	4,767,334	4,552,012
UNIPOLSAI ASSICURAZIONI SPA	1,191,351	3,356,268	2,847,404
UNIPRES CORP	57,300	946,342	498,723
UNIQA INSURANCE GROUP AG	271,770	2,555,792	1,828,379
UNIQUE ENGINEERING + CO FORE	1,370,800	523,722	230,629
UNIQUE NV	83,195	4,584,317	3,748,767
UNISPLENDOR CORP LTD A	87,588	480,481	532,157
UNITECH PRINTED CIRCUIT	1,325,020	1,042,323	1,154,163
UNITED ARROWS LTD	62,200	1,449,543	1,050,456
UNITED BANK LTD	720,800	961,898	443,728
UNITED BREWERIES LTD	161,203	2,824,711	2,215,631
UNITED DEVELOPMENT CO	4,071,017	1,643,732	1,277,993
UNITED ELECTRONICS CO	69,366	1,078,240	1,017,097
UNITED ENERGY GROUP LTD	17,462,000	3,380,394	3,154,243
UNITED INTEGRATED SERVICES	367,600	1,381,585	2,504,282
UNITED INTERNATIONAL TRANSPOR	82,303	726,418	669,219

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
UNITED INTERNET AG REG SHARE	347,656	10,938,407	14,724,618
UNITED MALT GRP LTD	546,550	1,960,801	1,546,591
UNITED MICROELECTRONICS CORP	108,966,201	49,318,215	58,721,978
UNITED OVERSEAS BANK LTD	10,838,740	191,693,065	157,175,521
UNITED RENEWABLE ENERGY CO L	4,961,835	1,858,407	1,099,846
UNITED SPIRITS LTD	2,524,415	21,293,808	19,803,136
UNITED SUPER MARKETS HOLDING	132,100	1,013,425	1,389,753
UNITED TRACTORS TBK PT	3,588,108	5,803,498	4,157,031
UNITED UTILITIES GROUP PLC	1,602,178	19,395,387	18,018,794
UNITIKA LTD	129,099	836,764	424,806
UNITY OPTO TECHNOLOGY CO LTD	990,971	380,381	138,379
UNIVENTURES PCL FOREIGN	1,949,000	526,507	192,961
UNIVERSAL ROBINA CORP	2,068,200	6,429,204	5,396,207
UNIVERSAL SCIENTIFIC INDUS A	70,490	197,925	217,625
UNIZYX HOLDING CORP	773,000	467,133	487,309
UOL GROUP LTD	1,167,572	4,835,359	5,682,817
UP FINTECH HOLDING LTD ADR	168,774	668,112	702,100
UPC TECHNOLOGY CORP	2,113,034	780,328	716,173
UPL LTD	1,260,760	9,976,772	7,099,981
UPM KYMMENE OYJ	1,247,927	27,699,311	36,049,390
UPONOR OYJ	130,308	1,650,159	1,753,338
URANIUM ENERGY CORP	402,128	531,905	352,948
UROVANT SCIENCES LTD	1,341	12,523	13,195
USHIO INC	259,019	3,674,889	3,445,264
USI CORP	2,096,467	1,040,352	873,987
USINAS SIDER MINAS GER PF A	963,400	1,900,059	1,275,573
USS CO LTD	1,847,900	30,743,539	29,512,274
UTSTARCOM HOLDINGS CORP	61,719	306,743	107,391
V GUARD INDUSTRIES LTD	242,579	781,680	546,017
V TECHNOLOGY CO LTD	17,800	968,976	603,040
V.S. INDUSTRY BERHAD	2,988,274	886,512	676,459
VA TECH WABAG LTD	63,686	431,571	90,885
VAKRANGEE LTD	1,225,593	678,510	568,939
VALARIS PLC	418,900	14,732,713	273,081
VALE INDONESIA TBK	4,756,700	1,131,382	932,360
VALE SA	11,964,606	128,736,087	121,851,236
VALE SA SP ADR	81,904	764,648	844,430
VALEO SA	556,807	15,408,750	14,608,825
VALIANT CO LTD A	596,843	1,358,131	1,448,636
VALIANT HOLDING AG REG	37,713	5,438,096	3,522,348
VALID SOLUCOES SA	161,250	1,050,451	316,873
VALLOUREC SA	18,121	2,942,165	756,303
VALMET OYJ	317,274	4,493,149	8,277,925
VALOR HOLDINGS CO LTD	95,900	1,412,951	1,868,488

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
VALORA HOLDING AG REG	7,660	1,836,223	1,464,822
VALQUA LTD	35,300	557,908	634,441
VALUE PARTNERS GROUP LTD	2,214,000	1,738,313	1,122,647
VALUECOMMERCE CO LTD	36,900	726,365	988,469
VAN DE VELDE NV	13,925	546,055	326,873
VANGUARD INTERNATIONAL SEMI	5,350,200	11,111,252	14,107,867
VARTA AG	33,436	2,086,245	3,751,609
VARUN BEVERAGES LTD	164,462	1,235,242	1,483,243
VAT GROUP AG	60,714	6,493,382	11,084,926
VATTI CORPORATION LTD A	143,600	218,543	205,633
VECTOR INC	56,600	525,626	456,430
VECTOR LTD	594,176	1,375,954	1,377,003
VECTURA GROUP PLC	1,289,938	2,765,591	1,547,627
VEDANTA LTD	3,757,068	8,972,331	5,294,466
VEIDEKKE ASA	240,906	2,804,530	2,901,760
VELESTO ENERGY BHD	8,843,900	924,344	299,268
VENATOR MATERIALS PLC	109,261	258,893	195,577
VENTURE CORP LTD	609,400	5,426,574	7,067,913
VENUS MEDTECH HANGZHOU INC H	112,500	980,973	1,110,419
VENUSTECH GROUP INC A	391,732	2,008,245	2,329,648
VEOLIA ENVIRONNEMENT	1,181,541	37,410,053	26,567,497
VEONEER INC	205,400	3,703,220	2,195,726
VERALLIA	43,683	1,248,126	1,248,642
VERBUND AG	154,993	7,689,417	6,938,844
VERMILION ENERGY INC	369,600	11,962,366	1,639,048
VESTAS WIND SYSTEMS A/S	459,523	28,761,079	46,769,767
VESTEL ELEKTRONIK SANAYI	177,963	289,157	421,882
VESUVIUS PLC	507,495	2,343,795	2,430,489
VETROPACK HOLDING REGISTERED	27,371	1,122,410	1,513,630
VGI PCL FOREIGN	6,355,201	1,640,213	1,542,150
VGP	18,406	2,167,004	2,348,419
VIA TECHNOLOGIES INC	828,000	923,403	941,531
VIA VAREJO SA	2,723,800	7,139,270	7,594,773
VICAT	37,963	2,147,794	1,166,153
VICTORY GIANT TECHNOLOGY A	459,490	1,357,626	1,562,140
VICTREX PLC	196,912	4,001,197	4,756,605
VIDENTE CO LTD	60,561	719,541	308,633
VIENNA INSURANCE GROUP AG	89,573	3,569,923	2,002,018
VIEWWORKS CO LTD	17,310	752,489	475,617
VIFOR PHARMA AG	120,492	15,811,432	18,126,890
VILLAGE ROADSHOW LTD	253,944	1,159,053	375,907
VILMORIN + CIE	14,330	1,063,079	758,867
VINA CONCHA Y TORO S.A.	555,424	1,092,864	864,948
VINATI ORGANICS LTD	59,020	917,319	753,699

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
VINCI SA	1,175,615	95,392,527	108,272,146
VINDA INTERNATIONAL HOLDINGS	611,000	1,108,160	2,183,705
VIOHALCO SA	151,563	638,842	395,780
VIRBAC SA	10,587	1,473,508	2,318,704
VIRGIN AUSTRALIA INT HOLDINGS	7,398,961	0	5
VIRGIN MONEY UK PLC	2,908,319	8,090,096	3,310,351
VIRTUS HEALTH LTD	143,748	893,765	280,086
VISCOFAN SA	90,742	3,445,945	5,921,371
VISION INC/TOKYO JAPAN	59,700	899,353	375,183
VISIONOX TECHNOLOGY INC A	225,600	478,590	455,403
VISTA GROUP INTERNATIONAL LT	489,042	553,205	456,490
VISTA LAND + LIFESCAPES INC	9,289,900	1,238,541	688,003
VISTRY GROUP PLC	530,876	6,373,261	4,660,530
VISUAL CHINA GROUP CO LTD A	48,195	133,535	126,856
VISUAL PHOTONICS EPITAXY CO	436,250	1,220,617	1,352,908
VITA GROUP LTD	323,248	584,254	214,767
VITAL KSK HOLDINGS INC	79,100	607,118	756,650
VITASOY INTL HOLDINGS LTD	1,866,000	8,072,355	7,138,540
VITROLIFE AB	151,840	2,117,281	3,396,441
VIVA ENERGY GROUP LTD	2,531,989	3,230,590	3,172,759
VIVARA PARTICIPACOES SA	220,400	888,525	845,346
VIVENDI	6,911,392	184,856,308	177,296,188
VIVOTEK INC	78,998	269,166	197,063
VMART RETAIL LTD	20,572	646,912	474,304
VOCUS GROUP LTD	1,407,785	5,361,632	2,859,317
VODACOM GROUP LTD	1,420,323	12,629,828	10,050,573
VODAFONE GROUP PLC	62,889,852	182,922,726	100,132,905
VODAFONE IDEA LTD	18,813,756	3,619,944	2,641,270
VODAFONE QATAR	3,869,444	1,486,758	1,183,895
VOESTALPINE AG	271,298	10,026,302	5,833,642
VOLITIONRX LTD	20,400	93,720	79,356
VOLKSWAGEN AG	75,981	13,753,076	12,228,944
VOLKSWAGEN AG PREF	467,537	68,387,276	70,858,910
VOLTAS LTD	232,816	2,120,784	1,684,980
VOLTRONIC POWER TECHNOLOGY	115,789	1,952,672	3,320,087
VOLVO AB B SHS	3,549,793	48,499,076	55,590,239
VONOVIA SE	4,446,532	214,267,053	272,579,209
VONTOBEL HOLDING AG REG	60,807	3,104,136	4,264,287
VOPAK	587,010	31,324,309	31,039,858
VOSSLOH AG	20,921	1,737,066	915,225
VP BANK AG REG	5,612	885,249	728,485
VSTEC HOLDINGS LTD	1,522,000	883,798	820,850
VT HOLDINGS CO LTD	204,000	1,073,476	665,598
VTB BANK JSC GDR REG S	76,007	75,250	71,333

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
VTECH HOLDINGS LTD	377,000	3,812,083	2,264,301
VZ HOLDING AG	32,383	1,416,544	2,419,626
W SCOPE CORP	69,200	1,076,596	511,215
WABCO INDIA LTD	10,742	944,691	978,846
WACKER CHEMIE AG	34,972	3,892,053	2,397,578
WACKER NEUSON SE	60,649	1,105,107	915,505
WACOAL HOLDINGS CORP	125,900	3,182,927	2,325,798
WACOM CO LTD	341,800	1,789,111	1,739,335
WAFER WORKS CORP	1,147,665	1,052,841	1,299,192
WAH LEE INDUSTRIAL CORP	419,000	776,469	803,789
WAKITA + CO LTD	103,300	1,050,860	887,603
WALLENIUS WILHELMSEN ASA	245,285	1,104,740	315,791
WALLENSTAM AB B SHS	388,551	2,122,116	4,499,971
WALMART DE MEXICO SAB DE CV	12,223,200	35,111,306	29,173,388
WALSIN LIHWA CORP	7,321,173	3,326,275	3,610,401
WALSIN TECHNOLOGY CORP	1,150,389	6,954,249	6,979,262
WALVAX BIOTECHNOLOGY CO A	139,699	858,125	1,034,003
WAN HAI LINES LTD	1,706,876	1,019,947	951,655
WANDA FILM HOLDING CO LTD A	185,500	421,380	400,416
WANGFUJING GROUP CO LTD A	71,267	276,771	458,887
WANGSU SCIENCE + TECHNOLOG A	223,376	280,424	268,085
WANHUA CHEMICAL GROUP CO A	281,598	1,861,007	1,989,947
WANT WANT CHINA HOLDINGS LTD	12,817,000	9,215,612	9,674,206
WANXIANG QIANCHAO CO LTD A	245,104	175,891	167,697
WARABEYA NICHIO HOLDINGS CO	30,900	482,484	486,048
WARBA BANK KSCP	2,099,836	1,571,006	1,399,208
WARSAW STOCK EXCHANGE	63,769	708,645	673,857
WARTSILA OYJ ABP	1,138,408	13,003,890	9,407,961
WASHINGTON H. SOUL PATTINSON	212,125	3,838,004	2,852,318
WASHTEC AG	24,782	2,006,108	1,020,113
WASION GROUP HOLDINGS LTD	1,174,000	563,322	375,658
WASKITA KARYA PERSERO TBK PT	9,608,395	1,229,915	477,561
WATAMI CO LTD	31,900	482,522	280,901
WATCHES OF SWITZERLAND GROUP	231,383	806,203	801,941
WATFORD HOLDINGS LTD	37,729	862,041	629,697
WCT HOLDINGS BHD	1,916,468	670,011	214,680
WDB HOLDINGS CO LTD	12,200	396,395	300,915
WEATHERFORD INTERNATIONAL PL	29,602	15,326,093	42,285
WEATHERNEWS INC	13,100	342,055	427,418
WEBJET LTD	759,662	2,814,688	1,736,450
WEBUILD	532,317	1,643,664	834,031
WEBZEN INC	39,599	797,520	720,969
WEG SA	2,009,517	12,224,751	18,522,193
WEI CHUAN FOODS	963,000	864,451	750,699

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
WEICHAI POWER CO LTD A	558,802	1,033,918	1,083,779
WEICHAI POWER CO LTD H	4,698,960	6,364,083	8,754,715
WEIFU HIGH TECHNOLOGY GROU B	341,701	636,391	581,519
WEIFU HIGH TECHNOLOGY GRP A	74,504	212,157	217,801
WEIHAI GUANGWEI COMPOSITES A	77,581	503,377	687,954
WEIMOB INC	2,654,000	1,733,840	3,331,861
WEIQIAO TEXTILE CO LTD H	982,500	399,608	174,938
WEIR GROUP PLC/THE	605,523	14,234,902	7,956,943
WELCIA HOLDINGS CO LTD	118,300	4,426,094	9,528,915
WELSPUN CORP LTD	300,079	498,254	316,955
WELSPUN INDIA LTD	747,451	723,011	367,272
WELTREND SEMICONDUCTOR INC	358,077	297,038	341,031
WEMADE CO LTD	16,807	603,160	573,577
WENDEL	63,708	6,508,466	6,071,327
WENS FOODSTUFFS GROUP CO A	2,543,624	10,197,562	7,838,595
WESFARMERS LTD	9,640,528	245,965,295	297,559,247
WEST CHINA CEMENT LTD	4,924,000	775,311	895,798
WEST FRASER TIMBER CO LTD	116,700	3,692,909	4,088,784
WEST JAPAN RAILWAY CO	1,442,039	100,431,239	80,813,531
WESTERN AREAS LTD	616,067	2,100,135	1,119,788
WESTERN REGION GOLD CO LTD A	75,000	157,559	146,626
WESTERN SECURITIES CO LTD A	312,140	370,352	360,055
WESTGOLD RESOURCES LTD	726,686	1,007,968	1,045,676
WESTON (GEORGE) LTD	168,986	11,636,293	12,338,956
WESTONE INFORMATION INDUST A	77,261	253,943	233,068
WESTPAC BANKING CORP	8,468,366	168,705,093	104,656,924
WESTPORTS HOLDINGS BHD	2,496,500	2,457,795	2,213,932
WESTSHORE TERMINALS INVESTME	90,900	2,205,144	1,115,227
WETHERSPOON (J.D.) PLC	188,289	2,082,520	2,340,459
WH GROUP LTD	19,734,500	17,808,541	16,907,029
WH SMITH PLC	285,716	4,339,144	3,872,749
WHA CORP PCL FOREIGN	17,267,320	2,219,719	1,854,809
WHARF HOLDINGS LTD	2,134,203	4,475,632	4,339,753
WHARF REAL ESTATE INVESTMENT	2,371,222	10,486,968	11,320,015
WHEATON PRECIOUS METALS CORP	3,993,814	100,768,155	175,088,571
WHEELOCK + CO LTD	1,456,000	6,685,852	11,515,822
WHIRLPOOL OF INDIA LTD	72,185	1,962,669	1,983,603
WHITBREAD PLC	470,940	15,234,757	12,929,679
WHITECAP RESOURCES INC	969,800	7,581,594	1,587,852
WIENERBERGER AG	267,525	5,486,430	5,826,127
WIGMORE STREET (BDC III) LP	14,753,870	19,068,610	24,262,982
WIHLBORGS FASTIGHETER AB	317,428	2,529,167	5,195,834
WIJAYA KARYA PERSERO TBK PT	7,027,478	1,104,793	590,338
WILCON DEPOT INC	3,387,400	1,056,209	1,052,423

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
WILL SEMICONDUCTOR LTD A	54,500	1,412,300	1,555,855
WILLIAM HILL PLC	2,387,238	4,978,454	3,356,728
WILLIS TOWERS WATSON PLC	706,329	113,487,959	139,111,497
WILMAR INTERNATIONAL LTD	16,539,734	44,142,518	48,491,102
WILSON BAYLY HOLMES OVCON	106,747	999,989	620,515
WIN SEMICONDUCTORS CORP	953,000	6,840,177	9,657,747
WINBOND ELECTRONICS CORP	6,938,233	3,265,916	3,139,366
WING TAI HOLDINGS LTD	878,486	1,250,986	1,127,193
WINGTECH TECHNOLOGY CO LTD A	97,207	1,552,914	1,730,711
WINNING HEALTH TECHNOLOGY A	198,170	472,999	642,629
WINPAK LTD	73,600	2,716,092	2,247,448
WIPRO LTD	10,313,020	35,377,522	30,001,885
WISDOM EDUCATION INTERNATION	1,206,000	581,828	496,376
WISDOM MARINE LINES CO LTD	1,056,520	1,070,210	888,058
WISE TALENT INFORMATION TECH	264,800	760,633	586,968
WISETECH GLOBAL LTD	192,450	3,540,108	2,563,910
WISTRON CORP	24,539,507	18,346,947	29,775,605
WISTRON NEWEB CORP	659,521	1,566,543	1,439,548
WIWYNN CORP	198,000	4,135,515	5,382,094
WIX.COM LTD	98,126	14,597,105	25,141,844
WIZ SOLUCOES E CORRETAGEM DE	514,300	1,251,284	993,794
WIZZ AIR HOLDINGS PLC	84,325	2,825,069	3,475,846
WM MORRISON SUPERMARKETS	5,248,744	18,643,004	12,357,837
WOCKHARDT LTD	72,234	175,434	268,735
WOLONG ELECTRIC GROUP CO L A	117,026	180,098	185,942
WOLTERS KLUWER	2,348,379	155,000,751	183,364,697
WONDERS INFORMATION CO LTD A	114,026	326,082	355,742
WONIK HOLDINGS CO LTD	59,535	250,707	223,717
WONIK IPS CO LTD	83,653	1,463,138	2,479,303
WOODSIDE PETROLEUM LTD	2,230,211	63,912,757	33,243,577
WOOLWORTHS GROUP LTD	6,480,957	152,920,634	166,348,518
WOOLWORTHS HOLDINGS LTD	2,060,056	8,013,576	3,924,481
WOONGJIN THINKBIG CO LTD	108,561	568,648	214,802
WOORI FINANCIAL GROUP INC	4,358,410	53,615,699	31,922,178
WORKPOINT ENTERTAINMENT FOR	630,000	870,774	226,256
WORLD CO LTD	40,400	822,537	613,761
WORLD HOLDINGS CO LTD	20,200	685,224	319,613
WORLDLINE SA	342,655	22,383,470	29,664,467
WORLEY LTD	751,714	10,178,084	4,513,080
WOWOW INC	12,700	246,776	285,113
WOWPRIME CORP	145,177	710,362	396,593
WPG HOLDINGS LTD	3,565,760	4,591,589	4,743,550
WPP AUNZ LTD	774,352	496,651	149,280
WPP PLC	2,801,018	34,888,891	21,831,607

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
WRIGHT MEDICAL GROUP NV	297,367	7,371,040	8,837,747
WSP GLOBAL INC	250,061	9,334,576	15,286,402
WT MICROELECTRONICS CO LTD	820,038	1,008,262	1,099,239
WUCHAN ZHONGDA GROUP CO L A	448,586	299,507	266,966
WUESTENROT + WUERTTEMBERG	45,399	927,223	773,007
WUHAN DEPARTMENT STORE GRP A	126,900	214,228	281,278
WUHAN FINGU ELECTRONIC TEC A	111,860	344,077	327,321
WUHAN GUIDE INFRARED CO LT A	147,454	459,540	610,318
WUHAN JINGCE ELECTRONIC GR A	40,500	316,588	390,739
WUHAN P+S INFORMATION TECH A	194,400	203,683	174,776
WUHAN RAYCUS FIBER LASER T A	31,604	432,324	486,205
WUHU SANQI INTERACTIVE ENT A	359,601	1,784,353	2,379,006
WUHU TOKEN SCIENCE CO LTD A	3,447,845	5,800,358	5,458,767
WULIANGYE YIBIN CO LTD A	351,344	7,392,262	8,498,888
WUS PRINTED CIRCUIT CO LTD	392,625	432,241	423,172
WUS PRINTED CIRCUIT KUNSHA A	158,546	553,976	559,856
WUTONG HOLDING GROUP CO LT A	210,600	167,472	153,914
WUXI APPTec CO LTD A	67,001	740,441	914,929
WUXI APPTec CO LTD H	480,278	3,450,677	6,240,153
WUXI BIOLOGICS CAYMAN INC	2,010,500	22,053,888	36,783,529
WUXI LEAD INTELLIGENT EQUI A	70,301	426,501	459,226
WUXI TAIJI INDUS CO LTD A	347,700	455,171	580,966
WYNN MACAU LTD	3,382,800	7,572,877	5,822,443
X FAB SILICON FOUNDRIES SE	126,821	1,135,254	482,156
XCMG CONSTRUCTION MACHIN A	712,143	563,679	594,954
XEBIO HOLDINGS CO LTD	51,100	959,442	397,394
XENON PHARMACEUTICALS INC	78,107	658,713	979,462
XERO LTD	221,996	7,967,368	13,772,793
XIABUXIABU CATERING MANAGEME	662,000	1,236,641	652,566
XIAMEN C + D INC A	253,002	310,736	289,693
XIAMEN COMFORT SCIENCE + T A	92,700	151,011	143,752
XIAMEN FARATRONIC CO LTD A	37,100	255,078	324,109
XIAMEN INTERNATIONAL AIR A	49,079	142,099	124,257
XIAMEN INTERNATIONAL PORT H	2,124,000	297,795	172,651
XIAMEN INTRETECH INC A	14,698	106,647	120,383
XIAMEN ITG GROUP CORP LTD A	165,134	156,251	154,067
XIAMEN KINGDOMWAY GROUP CO A	101,700	265,248	373,211
XIAMEN MEIYA PICO INFORMAT A	74,316	207,186	208,321
XIAMEN TUNGSTEN CO LTD A	125,111	220,482	209,400
XIAMEN XIANGYU CO LTD A	356,400	267,127	276,088
XIAOMI CORP CLASS B	79,547,075	116,233,189	131,783,889
XINFENGMING GROUP CO LTD A	56,146	84,629	79,210
XINGDA INT L HOLDINGS	2,022,400	640,742	388,800
XINHU ZHONGBAO CO LTD A	765,767	327,550	322,583

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
XINHUA WINSHARE PUBLISHING A	32,380	52,404	46,551
XINHUA WINSHARE PUBLISHING H	1,038,000	767,899	703,120
XINHUANET CO LTD A	76,600	236,291	242,119
XINJIANG COMMUNICATIONS CO A	102,000	220,697	204,026
XINJIANG GOLDWIND SCI+TEC H	1,536,944	1,691,649	1,316,738
XINJIANG GOLDWIND SCI+TECH A	305,161	461,136	430,084
XINJIANG MACHINERY RESEARC A	245,742	141,069	135,827
XINJIANG TIANSHAN CEMENT A	876,900	1,483,266	1,871,784
XINJIANG YILITE INDUSTRY A	71,600	168,248	200,101
XINJIANG ZHONGTAI CHEMICAL A	190,224	142,437	121,813
XINTEC INC	382,000	729,121	1,450,084
XINXING DUCTILE IRON PIPES A	354,075	179,656	171,679
XINYANGFENG AGRICULTURAL A	115,650	147,720	144,520
XINYI ENERGY HOLDINGS LTD	2,178,000	645,154	688,489
XINYI GLASS HOLDINGS LTD	4,702,000	4,580,558	5,763,407
XINYI SOLAR HOLDINGS LTD	34,389,950	20,605,422	32,568,720
XINYU IRON + STEEL CO LTD A	388,800	245,876	224,241
XL AXIATA TBK PT	8,366,975	2,108,588	1,622,438
XP INC CLASS A	211,967	8,375,973	8,904,734
XTEP INTERNATIONAL HOLDINGS	2,543,016	1,353,038	846,529
XUJI ELECTRIC CO LTD A	98,736	174,556	184,238
XXENTRIA TECHNOLOGY MATERIAL	321,000	805,163	592,943
YA MAN LTD	66,600	722,660	657,450
YADEA GROUP HOLDINGS LTD	2,306,000	648,686	1,591,791
YAGEO CORPORATION	1,070,671	11,788,782	13,825,879
YAHAGI CONSTRUCTION CO LTD	65,800	440,516	478,778
YAKULT HONSHA CO LTD	288,100	13,571,041	16,957,269
YAKUODO HOLDINGS CO LTD	25,300	638,805	615,352
YAMABIKO CORP	79,300	571,453	660,803
YAMADA DENKI CO LTD	5,965,140	30,573,122	29,581,034
YAMAGATA BANK LTD/THE	72,900	1,544,821	896,680
YAMAGUCHI FINANCIAL GROUP IN	550,700	5,018,014	3,379,185
YAMAHA CORP	365,831	10,928,015	17,192,039
YAMAHA MOTOR CO LTD	656,065	11,050,590	10,264,983
YAMAMA CEMENT CO	234,190	1,245,478	1,354,818
YAMANA GOLD INC	2,476,800	6,130,064	13,420,546
YAMANASHI CHUO BANK LTD/THE	68,800	1,417,706	542,059
YAMASHIN FILTER CORP	84,700	932,802	832,986
YAMATO HOLDINGS CO LTD	817,671	13,506,054	17,659,299
YAMATO KOGYO CO LTD	105,460	3,107,428	2,145,662
YAMAZAKI BAKING CO LTD	1,042,200	19,016,582	17,929,492
YAMAZEN CORP	155,700	1,127,254	1,310,429
YANBU CEMENT CO	181,888	1,536,345	1,357,735
YANBU NATIONAL PETROCHEMICAL	2,035,416	28,471,533	27,782,804

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
YANDEX NV A	2,046,693	80,426,296	102,375,584
YANG MING MARINE TRANSPORT	2,914,992	948,735	642,188
YANGO GROUP CO LTD A	363,539	338,377	325,814
YANGQUAN COAL INDUSTRY GRP A	212,951	138,964	127,034
YANGTZE OPTICAL FIBRE AND A	25,733	116,533	112,076
YANGTZE OPTICAL FIBRE AND H	409,000	797,962	751,461
YANGZHOU YANGJIE ELECTRONI A	78,000	224,938	369,596
YANGZIJANG SHIPBUILDING	4,968,600	4,180,257	3,312,281
YANLORD LAND GROUP LTD	1,530,700	1,442,368	1,283,767
YANTAI CHANGYU PIONEER A	34,045	138,155	164,351
YANTAI CHANGYU PIONEER B	489,449	1,140,513	1,017,995
YANTAI DONGCHENG PHARMACEU A	134,900	287,080	399,507
YANTAI EDDIE PRECISION MAC A	100,515	379,518	744,545
YANTAI JEREH OILFIELD A	87,961	365,023	385,461
YANTAI SHUANGTA FOOD CO LT A	206,400	399,263	505,343
YANTAI TAYHO ADVANCED MATE A	100,900	162,283	193,981
YANTAI ZHENGHAI MAGNETIC M A	135,525	162,106	165,908
YANZHOU COAL MINING CO A	112,523	147,352	139,339
YANZHOU COAL MINING CO H	4,765,569	4,734,516	3,560,135
YAOKO CO LTD	50,900	2,774,619	3,632,850
YAPI VE KREDI BANKASI	3,633,943	1,890,033	1,293,529
YARA INTERNATIONAL ASA	404,237	16,495,355	13,991,369
YASKAWA ELECTRIC CORP	601,100	13,966,587	20,754,484
YATAS YATAK VE YORGAN SAN. T	267,515	416,456	332,503
YC INOX CO LTD	802,100	624,735	676,924
YDUQS PARTICIPACOES SA	881,393	7,694,942	5,401,558
YEALINK NETWORK TECHNOLOGY A	213,422	1,528,587	2,059,369
YELLOW HAT LTD	68,560	594,242	943,069
YEONG GUAN ENERGY GROUP CO	175,000	537,625	358,250
YES BANK LTD	4,428,794	6,736,857	1,501,609
YFY INC	3,052,000	1,080,010	1,427,498
YG ENTERTAINMENT INC	25,224	962,154	781,140
YGSOFT INC A	1,369,540	2,231,973	2,445,158
YICHANG HEC CHANGJIANG PHA H	668,800	1,671,917	1,366,862
YIFAN PHARMACEUTICAL CO LT A	114,636	315,948	372,230
YIHAI INTERNATIONAL HOLDING	1,122,000	6,775,059	11,501,642
YINSON HOLDINGS BHD	1,082,300	1,442,939	1,490,215
YINTAI GOLD CO LTD A	182,480	382,215	404,474
YIT OYJ	395,162	3,588,915	2,148,119
YIXIN GROUP LTD	2,931,000	972,149	718,526
YIXINTANG PHARMACEUTICAL G A	46,947	197,006	246,279
YODOGAWA STEEL WORKS LTD	66,100	1,496,685	1,149,405
YOKOGAWA BRIDGE HOLDINGS COR	181,500	2,817,255	3,758,363
YOKOGAWA ELECTRIC CORP	1,972,971	25,377,630	30,723,375

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
YOKOHAMA REITO CO LTD	99,200	811,445	822,031
YOKOHAMA RUBBER CO LTD	245,500	3,957,925	3,445,215
YOKOWO CO LTD	45,000	1,249,942	1,045,697
YOMA STRATEGIC HLDGS LTD	2,794,162	1,237,540	630,917
YOMIURI LAND CO LTD	8,900	348,064	292,858
YONDOSHI HOLDINGS INC	48,700	944,734	800,795
YONEX CO LTD	88,100	742,239	477,717
YONGHUI SUPERSTORES CO LTD A	853,806	1,142,434	1,132,116
YONYOU NETWORK TECHNOLOGY A	1,580,385	7,577,990	9,852,134
YOROZU CORP	44,100	670,894	433,295
YOSHINOYA HOLDINGS CO LTD	155,500	2,289,762	3,207,003
YOTRIO GROUP CO LTD A	190,837	107,304	107,368
YOULCHON CHEMICAL CO LTD	29,754	263,193	359,912
YOUNG POONG CORPORATION	1,191	712,885	457,944
YOUNGONE CORP	73,688	1,443,751	1,556,034
YOUNGONE HOLDINGS CO LTD	13,548	478,200	435,325
YOUNGOR GROUP CO A	445,500	394,946	375,338
YOUZU INTERACTIVE CO LTD A	44,783	130,091	165,101
YPSOMED HOLDING AG REG	7,518	840,362	1,064,762
YTL CORP BHD	10,662,398	2,889,712	2,065,295
YTO EXPRESS GROUP CO LTD A	234,769	509,755	483,204
YUAN LONGPING HIGH TECH AG A	116,948	260,891	275,255
YUANTA FINANCIAL HOLDING CO	83,814,228	45,105,838	49,570,685
YUANTA SECURITIES KOREA	203,420	1,445,802	441,390
YUASA TRADING CO LTD	38,200	728,301	1,026,480
YUE YUEN INDUSTRIAL HLDG	1,635,044	4,878,594	2,485,123
YUEXIU PROPERTY CO LTD	14,934,889	3,142,313	2,659,219
YUEXIU TRANSPORT INFRASTRUCT	1,550,000	1,154,310	1,081,937
YUHAN CORP	400,389	14,479,604	16,843,067
YULON FINANCE CORP	335,600	1,028,444	1,239,824
YULON MOTOR COMPANY	2,027,067	1,488,852	1,480,564
YULON NISSAN MOTOR CO LTD	54,000	473,438	493,247
YUM CHINA HOLDINGS INC	813,804	21,821,600	39,119,558
YUNDA HOLDING CO LTD A	118,403	426,716	409,233
YUNGJIN PHARMACEUTICAL CO	205,141	1,852,896	941,413
YUNGSHIN GLOBAL HOLDING CORP	497,000	805,476	827,084
YUNNAN ALUMINIUM CO LTD A	277,454	167,869	171,004
YUNNAN BAIYAO GROUP CO LTD A	103,631	1,282,286	1,374,256
YUNNAN COPPER CO LTD A	151,163	221,255	226,720
YUNNAN ENERGY NEW MATERIAL A	64,247	485,380	597,596
YUNNAN TIN CO LTD A	148,413	189,858	179,587
YURTEC CORP	93,900	551,917	570,093
YUSHIN PRECISION EQUIPMENT	47,400	434,373	313,261
YUSHIRO CHEMICAL INDUSTRY CO	24,600	331,973	304,179

CalPERS 2019-2020 Annual Investment Report
International Equity

Security Name	Shares	Book Value	Market Value
YUSYS TECHNOLOGIES CO LTD A	66,100	370,214	403,191
YUYANG D+U CO LTD	120,036	611,949	121,747
YUZHOU GROUP HOLDINGS CO LTD	5,345,514	2,124,507	2,310,507
Z ENERGY LTD	790,719	2,975,802	1,374,369
Z HOLDINGS CORP	6,070,501	20,081,056	29,597,104
ZAI LAB LTD ADR	136,941	6,600,643	11,246,964
ZALANDO SE	374,152	15,864,802	26,381,966
ZAMIL INDUSTRIAL INVESTMENT	69,261	310,511	283,617
ZARDOYA OTIS SA	417,941	4,876,231	2,858,710
ZEALAND PHARMA A/S	89,136	2,974,768	3,054,503
ZEDER INVESTMENTS LTD	2,210,981	918,734	293,949
ZEE ENTERTAINMENT ENTERPRISE	1,959,243	8,676,780	4,439,865
ZEHNDER GROUP AG RG	23,067	818,995	905,591
ZENG HSING INDUSTRIAL CO LTD	124,000	583,265	584,182
ZENKOKU HOSHO CO LTD	161,200	5,894,836	6,051,444
ZENRIN CO LTD	74,900	860,882	842,135
ZENSHO HOLDINGS CO LTD	227,700	4,434,533	4,592,624
ZEON CORP	338,001	2,934,931	3,104,778
ZERIA PHARMACEUTICAL CO LTD	90,400	1,483,406	1,676,696
ZHANGZHOU PIENZEHUANG PHA A	54,358	1,070,716	1,308,216
ZHAOJIN MINING INDUSTRY H	8,488,000	9,070,529	9,911,218
ZHEFU HOLDING GROUP CO LTD A	168,609	99,002	92,240
ZHEJIANG CHINT ELECTRICS A	114,959	396,558	428,206
ZHEJIANG COMMUNICATIONS TECH	193,300	149,603	141,544
ZHEJIANG CONBA PHARMACEUTI A	237,387	194,982	184,565
ZHEJIANG CRYSTAL OPTECH A	114,716	258,549	277,948
ZHEJIANG DAHUA TECHNOLOGY A	268,639	690,451	729,500
ZHEJIANG DINGLI MACHINERY A	63,760	474,709	682,927
ZHEJIANG EXPRESSWAY CO H	3,441,304	3,138,755	2,433,194
ZHEJIANG GARDEN BIO CHEMIC A	79,000	147,732	160,030
ZHEJIANG HAILIANG CO A	132,841	177,461	164,312
ZHEJIANG HANGMIN CO LTD A	178,656	150,793	135,114
ZHEJIANG HISOAR PHARM A	143,625	148,163	160,596
ZHEJIANG HUACE FILM + TV A	156,078	156,980	159,959
ZHEJIANG HUAFENG SPANDEX A	569,908	410,319	408,452
ZHEJIANG HUAHAI PHARMACEUT A	133,098	506,735	638,387
ZHEJIANG HUAYOU COBALT CO A	101,430	505,056	557,183
ZHEJIANG JIEMEI ELECTRONIC A	65,306	209,586	276,767
ZHEJIANG JINGSHENG MECHANI A	1,172,360	3,811,104	4,100,053
ZHEJIANG JINGU CO LTD A	166,800	160,829	124,969
ZHEJIANG JINGXIN PHARMACEU A	119,800	192,188	181,035
ZHEJIANG JINKE CULTURE IND A	522,474	213,520	254,808
ZHEJIANG JIULI HI TECH A	138,900	150,205	143,336
ZHEJIANG JUHUA CO A	244,298	237,386	237,940

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
ZHEJIANG KAISHAN COMPRESSO A	76,584	130,523	141,495
ZHEJIANG LONGSHENG GROUP C A	290,169	535,411	524,627
ZHEJIANG MEDICINE CO LTD A	92,581	223,315	252,062
ZHEJIANG MEIDA INDUSTRIAL A	95,400	167,556	152,120
ZHEJIANG NARADA POWER SOUR A	145,200	232,805	218,803
ZHEJIANG NHU CO LTD A	195,370	722,233	803,674
ZHEJIANG ORIENT FINANCIAL A	367,968	326,716	357,351
ZHEJIANG RUNTU CO LTD A	101,987	143,717	131,771
ZHEJIANG SANHUA INTELLIGEN A	148,331	254,944	459,203
ZHEJIANG SATELLITE PETROCH A	84,617	173,021	194,614
ZHEJIANG SEMIR GARMENT CO A	89,500	104,415	89,195
ZHEJIANG SUPOR CO LTD A	42,279	419,929	424,338
ZHEJIANG TIANYU PHARMACEUT A	30,100	391,010	452,387
ZHEJIANG WANFENG AUTO A	194,643	183,502	178,296
ZHEJIANG WANLIYANG CO LTD A	131,990	157,146	161,953
ZHEJIANG WEIMING ENVIRONME A	47,000	140,420	154,140
ZHEJIANG WEIXING NEW BUILD A	134,897	244,939	221,774
ZHEJIANG WOLWO BIO PHARMAC A	87,700	570,140	771,734
ZHEJIANG XIANJU PHARMA A	155,421	241,949	369,982
ZHEJIANG XINAN CHEMICAL A	116,400	156,698	141,508
ZHEJIANG YANKON GROUP CO L A	239,722	136,340	120,300
ZHEJIANG YASHA DECORATION A	127,690	153,565	184,475
ZHEJIANG YONGTAI TECH A	77,863	124,048	134,943
ZHEN DING TECHNOLOGY HOLDING	4,950,000	17,860,362	21,558,576
ZHENGZHOU COAL MINING MACH A	132,669	110,179	110,462
ZHENGZHOU YUTONG BUS CO A	197,143	352,276	339,993
ZHENRO PROPERTIES GROUP LTD	2,096,000	1,385,065	1,311,614
ZHESHANG SECURITIES CO LTD A	106,217	148,066	148,798
ZHONGAN ONLINE P+C INSURAN H	792,800	2,576,017	3,922,854
ZHONGJI INNOLIGHT CO LTD A	56,635	453,789	504,376
ZHONGJIN GOLD CORP A	307,470	377,252	397,263
ZHONGLIANG HOLDINGS GROUP CO	1,268,500	991,445	900,174
ZHONGSHAN BROAD OCEAN MOTO A	149,986	78,252	76,540
ZHONGSHAN PUBLIC UTILITIES A	130,912	145,365	142,495
ZHONGSHENG GROUP HOLDINGS	1,469,438	4,069,980	8,133,578
ZHONGTIAN FINANCIAL GROUP A	1,156,300	525,094	526,326
ZHONGYU GAS HOLDINGS LTD	1,551,000	1,510,229	1,462,858
ZHONGYUAN ENVIRONMENT A	160,900	152,503	148,070
ZHOU HEI YA INTERNATIONAL HO	2,148,500	1,532,717	1,832,356
ZHUGUANG HOLDINGS GROUP CO	5,588,000	931,327	778,670
ZHUHAI ORBITA AEROSPACE SC A	116,000	184,546	178,081
ZHUZHOU CRRC TIMES ELECTRI H	1,185,246	5,127,005	3,012,644
ZHUZHOU HONGDA ELECTRONICS A	63,900	254,703	251,206
ZHUZHOU KIBING GROUP CO LT A	1,501,403	1,120,628	1,256,457

**CalPERS 2019-2020 Annual Investment Report
International Equity**

Security Name	Shares	Book Value	Market Value
ZIGEXN CO LTD	131,800	742,852	411,703
ZIGNAGO VETRO SPA	55,950	428,103	837,032
ZIJIN MINING GROUP CO LTD A	1,259,100	703,938	783,144
ZINUS INC	16,755	1,094,857	1,114,353
ZINWELL CORPORATION	402,000	338,068	274,545
ZIP CO LTD	687,338	1,712,816	2,475,004
ZJBC INFORMATION TECH CO A	110,300	153,336	139,861
ZOJIRUSHI CORP	104,400	1,453,768	1,318,003
ZOOMLION HEAVY INDUSTRY H	3,186,144	2,279,723	2,454,216
ZOOMLION HEAVY INDUSTRY S A	592,733	520,168	538,764
ZOOPLUS AG	14,746	1,878,266	2,418,048
ZORLU ENERJI ELEKTRIK URETIM	968,263	253,697	289,571
ZOZO INC	229,800	3,993,132	5,103,590
ZTE CORP A	1,690,954	9,911,235	9,592,455
ZTE CORP H	1,783,788	4,628,777	5,454,622
ZUIKO CORP	9,200	463,310	425,527
ZUKEN INC	34,000	375,501	901,960
ZUMTOBEL GROUP AG	66,165	872,546	477,091
ZURICH INSURANCE GROUP AG	1,270,620	402,369,839	448,146,487
ZYMEWORKS INC	98,458	2,318,458	3,551,380
Total		83,731,194,136	84,681,435,887

CalPERS 2019-2020 Annual Investment Report
Domestic REITS

Security Name	Shares	Book Value	Market Value
ACADIA REALTY TRUST	187,879	5,096,846	2,438,669
AG MORTGAGE INVESTMENT TRUST	65,800	751,835	209,902
AGNC INVESTMENT CORP	4,627,482	84,751,810	59,694,518
AGREE REALTY CORP	119,078	7,117,772	7,824,615
ALEXANDER + BALDWIN INC	198,825	4,129,914	2,423,677
ALEXANDER S INC	4,701	1,735,221	1,132,471
ALEXANDRIA REAL ESTATE EQUIT	768,631	100,625,903	124,710,380
AMERICAN ASSETS TRUST INC	112,111	4,689,191	3,121,170
AMERICAN CAMPUS COMMUNITIES	318,919	13,533,717	11,149,408
AMERICAN FINANCE TRUST INC	248,918	3,057,020	1,975,164
AMERICAN HOMES 4 RENT A	587,346	12,909,846	15,799,607
AMERICAN TOWER CORP	2,721,305	449,259,522	703,566,195
AMERICOLD REALTY TRUST	569,841	18,722,917	20,685,228
ANNALY CAPITAL MANAGEMENT IN	12,062,848	122,883,562	79,132,283
ANTHRACITE CAPITAL INC	287,215	0	0
ANWORTH MORTGAGE ASSET CORP	216,452	1,067,652	367,968
APARTMENT INVT + MGMT CO A	332,015	13,608,703	12,497,045
APOLLO COMMERCIAL REAL ESTAT	345,029	6,278,829	3,384,734
APPLE HOSPITALITY REIT INC	485,535	8,189,987	4,690,268
ARBOR REALTY TRUST INC	228,142	2,128,082	2,108,032
ARES COMMERCIAL REAL ESTATE	68,357	900,893	623,416
ARMADA HOFFLER PROPERTIES IN	124,021	1,896,464	1,234,009
ARMOUR RESIDENTIAL REIT INC	141,593	3,827,935	1,329,558
ASHFORD HOSPITALITY TRUST	182,000	1,326,120	131,513
AVALONBAY COMMUNITIES INC	1,181,947	211,999,917	182,776,284
BLACKSTONE MORTGAGE TRU CL A	289,755	9,602,840	6,980,198
BLUEROCK RESIDENTIAL GROWTH	52,598	490,937	424,992
BOSTON PROPERTIES INC	501,343	57,199,147	45,311,380
BP PRUDHOE BAY ROYALTY TRUST	44,000	2,393,107	146,520
BRAEMAR HOTELS + RESORTS INC	61,700	1,100,903	176,462
BRANDYWINE REALTY TRUST	568,483	7,109,272	6,190,780
BRIXMOR PROPERTY GROUP INC	689,468	14,132,792	8,838,980
BROADMARK REALTY CAPITAL INC	284,658	2,424,614	2,695,711
BROOKFIELD PROPERTY PARTNERS	945,603	16,408,852	9,352,014
BROOKFIELD PROPERTY REIT I A	126,804	2,493,019	1,262,968
BRT APARTMENTS CORP	15,721	201,125	170,101
CAMDEN PROPERTY TRUST	811,818	74,522,250	74,054,038
CAPSTEAD MORTGAGE CORP	216,626	2,044,697	1,189,277
CARETRUST REIT INC	211,675	3,831,367	3,632,343
CATCHMARK TIMBER TRUST INC A	107,660	1,032,483	952,791
CBL + ASSOCIATES PROPERTIES	257,400	3,589,519	70,167
CCF III, LLC	126,537,344	126,537,344	126,466,737

CalPERS 2019-2020 Annual Investment Report
Domestic REITS

Security Name	Shares	Book Value	Market Value
CCP2020	310,659,037	300,473,821	274,466,948
CEDAR REALTY TRUST INC	173,900	1,267,414	172,161
CHATHAM LODGING TRUST	105,727	1,962,834	647,049
CHERRY HILL MORTGAGE INVESTM	33,387	574,790	301,151
CHIMERA INVESTMENT CORP	592,399	9,164,233	5,692,954
CIM COMMERCIAL TRUST CORP	3,482	71,576	37,536
CITY OFFICE REIT INC	103,849	1,312,227	1,044,721
COLONY CAPITAL INC	1,106,738	12,965,969	2,656,171
COLONY CREDIT REAL ESTATE IN	186,580	2,949,355	1,309,792
COLUMBIA PROPERTY TRUST INC	253,563	5,866,325	3,331,818
COMMUNITY HEALTHCARE TRUST I	47,579	1,984,268	1,945,981
CONDOR HOSPITALITY TRUST INC	15,803	157,240	64,792
COREENERGY INFRASTRUCTURE TRU	31,322	1,055,310	286,596
COREPOINT LODGING INC	90,695	689,908	381,826
CORESITE REALTY CORP	89,871	7,812,517	10,879,783
CORPORATE OFFICE PROPERTIES	251,686	7,627,372	6,377,723
COUSINS PROPERTIES INC	335,764	12,272,674	10,015,840
CROWN CASTLE INTL CORP	3,493,944	401,328,003	584,711,528
CUBESMART	432,207	11,607,849	11,665,267
CYRUSONE INC	257,493	14,897,640	18,732,616
DIAMONDROCK HOSPITALITY CO	462,612	4,418,509	2,558,244
DIGITAL REALTY TRUST INC	833,415	88,699,855	118,436,606
DIVERSIFIED HEALTHCARE TRUST	545,656	8,677,465	2,414,528
DOUGLAS EMMETT INC	371,036	12,753,934	11,375,964
DUKE REALTY CORP	3,087,040	88,531,270	109,250,346
DYNEX CAPITAL INC	44,800	902,740	640,640
EAGLE HOSPITALITY TRUST	1,719,500	954,227	235,572
EASTERLY GOVERNMENT PROPERTI	168,981	3,391,316	3,906,841
EASTGROUP PROPERTIES INC	85,808	7,059,538	10,177,687
ELLINGTON RESIDENTIAL MORTGA	11,100	126,873	114,330
EMPIRE STATE REALTY TRUST A	338,784	5,077,266	2,371,488
EPR PROPERTIES	239,992	12,687,867	7,950,935
EQUINIX INC	464,928	198,857,128	326,518,934
EQUITY COMMONWEALTH	263,513	7,411,738	8,485,119
EQUITY LIFESTYLE PROPERTIES	1,457,417	89,368,549	91,059,414
EQUITY RESIDENTIAL	3,117,986	213,469,691	183,399,937
ESSENTIAL PROPERTIES REALTY	202,133	4,316,285	2,999,654
ESSEX PROPERTY TRUST INC	553,538	140,021,849	126,854,303
EXANTAS CAPITAL CORP	62,200	1,466,678	164,830
EXTRA SPACE STORAGE INC	1,081,522	97,847,251	99,900,187
FARMLAND PARTNERS INC	57,748	393,252	395,574
FEDERAL REALTY INVS TRUST	613,358	75,157,930	52,264,235

CalPERS 2019-2020 Annual Investment Report
Domestic REITS

Security Name	Shares	Book Value	Market Value
FIRST INDUSTRIAL REALTY TR	282,622	8,571,348	10,863,990
FOUR CORNERS PROPERTY TRUST	156,682	3,286,476	3,823,041
FRANKLIN STREET PROPERTIES C	236,754	2,625,748	1,205,078
FRONT YARD RESIDENTIAL CORP	110,706	2,260,049	963,142
GAMING AND LEISURE PROPERTIE	461,906	15,377,796	15,981,948
GETTY REALTY CORP	74,705	1,989,390	2,217,244
GLADSTONE COMMERCIAL CORP	74,441	1,433,058	1,395,769
GLADSTONE LAND CORP	41,873	487,701	664,106
GLOBAL MEDICAL REIT INC	93,471	917,600	1,059,026
GLOBAL NET LEASE INC	207,081	4,196,654	3,464,465
GOTHAM OFFICE REALTY PARTNERS	151,135	151,135	35,000
GRANITE POINT MORTGAGE TRUST	124,545	2,286,191	894,233
GREAT AJAX CORP	47,208	608,611	434,314
HANNON ARMSTRONG SUSTAINABLE	157,736	4,058,886	4,489,167
HEALTHCARE REALTY TRUST INC	302,150	9,426,161	8,849,974
HEALTHCARE TRUST OF AME CL A	488,602	13,814,874	12,957,725
HEALTHPEAK PROPERTIES INC	4,320,285	132,724,908	119,067,055
HERSHA HOSPITALITY TRUST	77,719	1,459,202	447,661
HIGHWOODS PROPERTIES INC	231,509	9,775,708	8,642,231
HOST HOTELS + RESORTS INC	1,633,425	25,710,064	17,624,656
HUDSON PACIFIC PROPERTIES IN	340,706	10,888,344	8,572,163
HUGOTON ROYALTY TRUST	186,000	120,900	26,598
HUNT COMPANIES FINANCE TRUST	25,029	70,582	66,327
INDEPENDENCE REALTY TRUST IN	212,946	2,286,735	2,446,750
INDUSTRIAL LOGISTICS PROPERT	143,395	2,948,479	2,946,767
INNOVATIVE INDUSTRIAL PROPER	36,949	3,318,462	3,252,251
INVESCO MORTGAGE CAPITAL	689,579	7,265,727	2,579,025
INVESTORS REAL ESTATE TRUST	27,499	2,297,753	1,938,405
INVITATION HOMES INC	4,556,875	117,850,721	125,450,769
IRON MOUNTAIN INC	2,291,214	73,700,989	59,800,685
ISTAR INC	173,730	1,796,481	2,140,354
JBG SMITH PROPERTIES	270,921	9,507,089	8,011,134
JERNIGAN CAPITAL INC	49,098	951,837	671,661
KILROY REALTY CORP	258,672	17,031,529	15,184,046
KIMCO REALTY CORP	933,063	20,521,758	11,980,529
KITE REALTY GROUP TRUST	191,062	4,095,813	2,204,855
KKR REAL ESTATE FINANCE TRUS	63,186	1,197,789	1,047,624
LADDER CAPITAL CORP REIT	234,275	3,702,233	1,897,628
LAMAR ADVERTISING CO A	195,227	11,736,748	13,033,355
LAND MANAGEMENT CO RESMARK	803,238,879	418,052,304	393,878,564
LEXINGTON REALTY TRUST	572,997	6,008,980	6,045,118
LIFE STORAGE INC	106,068	8,749,639	10,071,157

CalPERS 2019-2020 Annual Investment Report
Domestic REITS

Security Name	Shares	Book Value	Market Value
LTC PROPERTIES INC	86,496	3,581,061	3,258,304
MACERICH CO/THE	500,884	15,608,635	4,492,929
MACK CALI REALTY CORP	203,533	5,258,067	3,112,020
MANULIFE US REAL ESTATE INV	3,166,276	2,698,529	2,390,538
MEDICAL PROPERTIES TRUST INC	1,322,807	21,377,064	24,868,772
MFA FINANCIAL INC	1,293,635	8,170,471	3,221,151
MGM GROWTH PROPERTIES LLC A	294,451	8,738,053	8,012,012
MID AMERICA APARTMENT COMM	960,143	95,965,127	110,099,598
MONMOUTH REAL ESTATE INV COR	210,293	2,601,527	3,047,146
NATIONAL RETAIL PROPERTIES	386,214	17,292,860	13,702,873
NATIONAL STORAGE AFFILIATES	137,876	4,092,617	3,951,526
NATL HEALTH INVESTORS INC	108,725	6,661,243	6,601,782
NEW RESIDENTIAL INVESTMENT	1,528,764	17,710,750	11,358,717
NEW SENIOR INVESTMENT GROUP	187,020	2,405,422	677,012
NEW YORK MORTGAGE TRUST INC	838,129	4,314,333	2,187,517
NEXPOINT RESIDENTIAL	48,927	1,760,198	1,729,569
OFFICE PROPERTIES INCOME TRU	109,030	6,083,288	2,831,509
OMEGA HEALTHCARE INVESTORS	511,982	17,349,388	15,221,225
ONE LIBERTY PROPERTIES INC	34,842	690,562	613,916
ORCHID ISLAND CAPITAL INC	146,342	938,591	689,271
OUTFRONT MEDIA INC	326,901	5,824,120	4,632,187
PARAMOUNT GROUP INC	510,575	7,287,005	3,936,533
PARK HOTELS + RESORTS INC	773,793	16,853,101	7,652,813
PEBBLEBROOK HOTEL TRUST	299,673	9,043,613	4,093,533
PENN REAL ESTATE INVEST TST	155,900	1,903,618	212,024
PENNYMAC MORTGAGE INVESTMENT	225,960	4,830,771	3,961,079
PERMIAN BASIN ROYALTY TRUST	103,899	438,528	342,867
PHYSICIANS REALTY TRUST	454,187	8,062,539	7,957,356
PIEDMONT OFFICE REALTY TRU A	281,397	5,205,726	4,674,004
PLYMOUTH INDUSTRIAL REIT INC	29,800	325,315	381,440
POTLATCHDELTIC CORP	146,064	5,971,466	5,554,814
PREFERRED APARTMENT COMMUN A	108,535	1,601,058	824,866
PROLOGIS INC	2,064,496	133,608,624	192,679,412
PS BUSINESS PARKS INC/CA	44,807	4,582,894	5,932,447
PUBLIC STORAGE	1,338,202	273,204,291	256,787,582
QTS REALTY TRUST INC CL A	133,923	6,121,675	8,583,125
RAYONIER INC	309,041	8,794,663	7,661,126
READY CAPITAL CORP	81,339	1,000,032	706,836
REALTY INCOME CORP	2,826,467	175,216,992	168,174,787
REDWOOD TRUST INC	253,789	4,275,763	1,776,523
REGENCY CENTERS CORP	1,343,358	84,508,698	61,646,699
RETAIL OPPORTUNITY INVESTMEN	262,040	4,371,136	2,968,913

CalPERS 2019-2020 Annual Investment Report
Domestic REITS

Security Name	Shares	Book Value	Market Value
RETAIL PROPERTIES OF AME A	493,566	6,767,179	3,612,903
RETAIL VALUE INC	37,407	1,131,120	462,351
REXFORD INDUSTRIAL REALTY IN	259,827	10,073,366	10,764,633
RLJ LODGING TRUST	382,021	7,257,557	3,606,278
RPT REALTY	183,926	2,439,302	1,280,125
RYMAN HOSPITALITY PROPERTIES	112,936	5,402,555	3,907,586
SABINE ROYALTY TRUST	32,575	1,626,224	902,979
SABRA HEALTH CARE REIT INC	461,237	10,032,151	6,655,650
SACRAMENTO VENTURE HINES BASE	53,499,186	53,499,186	56,646,918
SACRAMENTO VENTURE HINES DT	51,996,222	51,558,970	51,970,224
SAFEHOLD INC	35,877	1,724,395	2,062,569
SAN JUAN BASIN ROYALTY TR	95,200	2,123,502	217,056
SAUL CENTERS INC	26,469	1,335,108	854,155
SBA COMMUNICATIONS CORP	247,775	33,153,645	73,817,128
SERITAGE GROWTH PROP A REIT	75,180	3,198,157	857,052
SERVICE PROPERTIES TRUST	373,743	9,116,489	2,649,838
SF MISSION STREET PARTNERS	1,652,987	1,652,987	197
SIMON PROPERTY GROUP INC	707,343	90,006,512	48,368,114
SITE CENTERS CORP	313,320	8,091,368	2,537,892
SL GREEN REALTY CORP	314,869	18,947,479	15,519,893
SOTHERLY HOTELS INC	23,200	150,568	58,232
SPIRIT MTA REIT	72,030	0	0
SPIRIT REALTY CAPITAL INC	232,726	11,559,783	8,112,828
STAG INDUSTRIAL INC	332,520	9,255,204	9,749,486
STARWOOD PROPERTY TRUST INC	674,578	15,498,571	10,091,687
STORE CAPITAL CORP	503,968	15,483,350	11,999,478
SUMMIT HOTEL PROPERTIES INC	235,733	2,828,083	1,397,897
SUN COMMUNITIES INC	791,954	107,494,331	107,452,319
SUNSTONE HOTEL INVESTORS INC	504,902	6,365,799	4,114,951
TANGER FACTORY OUTLET CENTER	206,451	4,539,081	1,471,996
TAUBMAN CENTERS INC	134,475	6,878,836	5,077,776
TECHCORE 2019	42,631,855	42,631,855	42,631,855
TERRENO REALTY CORP	149,911	6,217,818	7,891,315
TEXAS PACIFIC LAND TRUST	17,338	7,565,833	10,310,735
TPG RE FINANCE TRUST INC	132,710	2,366,439	1,141,306
TRANSCONTINENTAL REALTY INV	673	23,963	20,203
TWO HARBORS INVESTMENT CORP	682,432	10,461,277	3,439,457
UDR INC	2,470,221	98,959,016	92,336,861
UMH PROPERTIES INC	81,320	1,097,847	1,051,468
UNITI GROUP INC	440,536	6,583,643	4,119,012
UNIVERSAL HEALTH RLTY INCOME	28,863	1,994,853	2,294,320
URBAN EDGE PROPERTIES	266,436	4,737,571	3,162,595

**CalPERS 2019-2020 Annual Investment Report
Domestic REITS**

Security Name	Shares	Book Value	Market Value
URSTADT BIDDLE CLASS A	69,868	1,454,704	830,032
URSTADT BIDDLE PROPERTIES	3,345	68,299	33,621
VENTAS INC	835,842	48,342,851	30,608,534
VEREIT INC	2,425,863	25,636,967	15,598,299
VICI PROPERTIES INC	1,234,342	28,090,856	24,921,365
VORNADO REALTY TRUST	410,708	25,181,389	15,693,153
WASHINGTON PRIME GROUP INC	377,500	3,511,613	317,402
WASHINGTON REIT	182,622	5,630,859	4,054,208
WEINGARTEN REALTY INVESTORS	283,979	8,292,995	5,375,722
WELLTOWER INC	940,643	67,939,009	48,678,275
WESTERN ASSET MORTGAGE CAPIT	105,800	763,430	289,892
WEYERHAEUSER CO	1,680,615	42,945,996	37,746,613
WHITESTONE REIT	90,866	1,088,394	660,596
WHITNEY RANCH RESMARK	45,816,111	44,829,273	52,399,199
WP CAREY INC	1,445,490	110,438,205	97,787,399
XENIA HOTELS + RESORTS INC	262,172	5,181,081	2,446,065
Total		6,336,055,224	6,440,712,824

**CalPERS 2019-2020 Annual Investment Report
International REITS**

Security Name	Shares	Book Value	Market Value
ABACUS PROPERTY GROUP	866,722	2,005,011	1,599,258
AEDIFICA	62,105	5,547,625	6,786,990
AIMS APAC REIT	1,290,900	1,342,760	1,128,919
ALLIED PROPERTIES REAL ESTAT	290,800	9,338,070	8,745,351
ALONY HETZ PROPERTIES + INV	243,779	2,680,110	2,418,103
ALSTRIA OFFICE REIT AG	417,254	6,087,083	6,214,151
ARA LOGOS LOGISTICS TRUST	2,457,824	1,655,492	995,427
ARENA REIT	653,573	1,073,067	985,467
ARGOSY PROPERTY LTD	1,958,900	1,599,268	1,469,114
ARTIS REAL ESTATE INVESTMENT	292,899	3,627,166	1,623,632
ASCENDAS REAL ESTATE INV TRT	26,004,217	50,900,730	59,089,902
ASCOTT RESIDENCE TRUST	4,154,200	2,145,913	2,977,814
ASSURA PLC	6,044,468	4,945,628	5,862,811
ATTACQ LTD	1,657,462	1,392,366	478,875
AVENTUS GROUP	967,628	1,713,680	1,392,383
AXIS REAL ESTATE INVESTMENT	2,589,100	1,158,599	1,244,702
BEFIMMO	50,897	3,541,704	2,278,024
BIG YELLOW GROUP PLC	382,546	3,364,356	4,745,648
BOARDWALK REAL ESTATE INVEST	87,100	3,505,153	1,899,957
BRITISH LAND CO PLC	2,148,457	19,134,782	10,257,509
BWP TRUST	1,161,095	2,453,979	3,061,755
CAN APARTMENT PROP REAL ESTA	924,600	32,173,259	32,985,546
CAPITAL + COUNTIES PROPERTIE	1,764,941	5,126,640	3,186,094
CAPITALAND COMMERCIAL TRUST	23,308,777	29,864,028	28,236,861
CAPITALAND MALL TRUST	21,542,691	34,988,718	30,266,782
CAPITALAND RETAIL CHINA TRUS	1,783,363	1,752,605	1,610,722
CARMILA	87,182	2,104,175	1,194,605
CDL HOSPITALITY TRUSTS	1,868,560	1,966,974	1,366,210
CENTURIA INDUSTRIAL REIT	817,413	1,695,510	1,784,040
CENTURIA OFFICE REIT	871,224	1,635,430	1,211,672
CHAMPION REIT	4,674,000	2,892,128	2,430,339
CHARTER HALL GROUP	1,086,056	8,482,353	7,245,692
CHARTER HALL LONG WALE REIT	1,015,780	3,538,917	2,993,280
CHARTER HALL RETAIL REIT	1,121,319	3,029,896	2,586,294
CHARTER HALL SOCIAL INFRASTR	778,802	1,489,943	1,260,082
CHOICE PROPERTIES REIT	611,135	5,922,148	5,716,490
COFINIMMO	59,192	7,732,785	8,137,335
COMINAR REAL ESTATE INV TR U	398,900	5,641,196	2,395,743
CONCENTRADORA FIBRA DANHOS S	531,600	825,509	502,451
COVIVIO	107,873	10,601,446	7,814,663
CPN RETAIL GROWTH LEASEH FOR	3,624,200	3,208,728	3,048,749
CROMWELL EUROPEAN REIT	1,478,700	635,887	697,537

CalPERS 2019-2020 Annual Investment Report
International REITS

Security Name	Shares	Book Value	Market Value
CROMWELL PROPERTY GROUP	5,700,234	4,887,611	3,532,150
DAIWA HOUSE REIT INVESTMENT	11,994	27,796,048	28,238,180
DAIWA SECURITIES LIVING INVE	544	461,256	506,258
DERWENT LONDON PLC	280,358	13,282,930	9,616,356
DEXUS	2,571,312	18,520,677	16,287,203
DREAM OFFICE REAL ESTATE INV	102,973	2,490,158	1,551,399
EMBASSY OFFICE PARKS REIT	530,000	2,820,387	2,405,098
EMIRA PROPERTY FUND LTD	915,102	913,151	341,814
EMLAK KONUT GAYRIMENKUL YATI	4,395,671	993,695	1,314,581
EQUITES PROPERTY FUND LTD	1,165,604	1,617,760	1,120,992
ESR REIT	5,613,586	2,168,101	1,589,453
EUROCOMMERCIAL PROPRTIE CV	117,188	4,249,497	1,500,465
FAR EAST HOSPITALITY TRUST	2,256,694	1,778,887	800,734
FIBRA UNO ADMINISTRACION SA	6,907,300	11,073,554	5,455,413
FIRST REAL ESTATE INVNT TRUST	1,249,867	1,020,422	622,671
FORTRESS REIT LTD	4,807,631	5,905,947	2,329,129
FORTUNE REIT	3,263,000	3,046,334	2,934,424
FRASERS CENTREPOINT TRUST	1,687,242	2,548,278	2,793,827
FRASERS HOSPITALITY TRUST	1,982,300	1,050,959	660,743
FRASERS LOGISTICS + COMMERCI	5,904,770	4,330,116	5,036,863
FRASERS PROPERTY THA FOREIGN	3,280,800	1,577,797	1,581,620
GDI PROPERTY GROUP	1,041,643	891,745	799,646
GECINA SA	121,310	18,086,232	14,987,426
GOODMAN GROUP	4,241,631	27,722,917	43,367,384
GPT GROUP	4,551,474	15,162,912	13,067,485
GRANITE REAL ESTATE INVESTME	130,557	5,349,492	6,715,729
GREAT PORTLAND ESTATES PLC	624,609	4,916,244	4,877,569
GROWTHPOINT PROPERTIES AUSTR	663,396	1,680,228	1,461,594
GROWTHPOINT PROPERTIES LTD	6,890,756	11,436,752	5,294,480
H+R REAL ESTATE INV REIT UTS	665,671	12,015,181	4,770,153
HAMMERSON PLC	1,828,610	6,406,102	1,813,420
HIBERNIA REIT PLC	1,661,426	2,599,023	2,089,954
HOTEL PROPERTY INVESTMENTS	341,571	752,255	681,998
HYPROP INVESTMENTS LTD	597,952	3,186,000	770,541
ICADE	74,477	7,146,689	5,186,228
IGB REAL ESTATE INVESTMENT T	4,030,200	1,766,070	1,683,561
IMMOBILIARE GRANDE DISTRIBUZ	143,938	1,195,211	566,632
INGENIA COMMUNITIES GROUP	661,598	1,487,274	2,045,241
INMOBILIARIA COLONIAL SOCIMI	755,133	8,516,523	6,649,321
INTU PROPERTIES PLC	2,100,904	2,690,661	46,103
INVESTEC PROPERTY FUND LTD	1,270,486	1,251,472	683,686
IS GAYRIMENKUL YATIRIM ORTAK	1,020,783	288,351	290,387

**CalPERS 2019-2020 Annual Investment Report
International REITS**

Security Name	Shares	Book Value	Market Value
JAPAN PRIME REALTY INVESTMEN	4,901	18,235,138	14,355,249
JAPAN REAL ESTATE INVESTMENT	8,103	45,043,565	41,534,588
KEPPEL DC REIT	2,894,208	3,271,652	5,269,552
KEPPEL PACIFIC OAK US REIT	1,691,700	1,104,207	1,184,190
KEPPEL REIT	4,612,800	4,189,900	3,637,203
KIWI PROPERTY GROUP LTD	3,625,460	3,456,564	2,450,584
KLEPIERRE	446,730	18,004,500	8,898,444
KOREA ASSET IN TRUST CO LTD	145,392	715,885	339,049
LAND SECURITIES GROUP PLC	1,681,636	23,714,882	11,490,403
LAR ESPANA REAL ESTATE SOCIM	152,701	1,453,257	796,646
LASALLE LOGIPOINT REIT	354	421,898	545,347
LENDLEASE GLOBAL COMMERCIAL	2,051,100	1,090,454	999,784
LINK REIT	17,521,553	164,945,439	143,216,250
LIPPO MALLS INDONESIA RETAIL	4,934,800	1,234,731	477,544
LONDONMETRIC PROPERTY PLC	2,024,907	4,680,215	5,269,162
LOTTE REIT CO LTD	209,681	1,004,280	960,504
MACQUARIE GOODMAN PROPERTY T	2,624,692	2,539,679	3,429,980
MACQUARIE MEXICO REAL ESTATE	1,739,000	2,384,327	1,775,350
MAPLETREE COMMERCIAL TRUST	5,163,816	7,715,141	7,143,948
MAPLETREE INDUSTRIAL TRUST	3,612,000	5,869,351	7,430,873
MAPLETREE LOGISTICS TRUST	5,979,400	6,619,435	8,315,140
MAPLETREE NORTH ASIA COMMERC	5,288,400	4,941,769	3,506,519
MERCIALYS	146,246	3,336,937	1,223,709
MERLIN PROPERTIES SOCIMI SA	774,034	9,837,821	6,415,850
MIRVAC GROUP	9,305,296	16,618,248	13,902,529
MONTEA	30,967	2,537,070	3,102,428
NATIONAL STORAGE REIT	2,278,451	2,841,779	2,894,276
NEWRIVER REIT PLC	715,841	2,749,413	555,462
NIPPON BUILDING FUND INC	7,825	48,647,950	44,533,995
NIPPON PROLOGIS REIT INC	12,852	28,823,100	39,073,606
NORTHVIEW APARTMENT REAL EST	145,900	3,353,608	3,725,699
NSI NV	40,546	2,837,741	1,568,827
OUÉ COMMERCIAL REAL ESTATE I	5,183,133	2,089,407	1,411,842
PARKWAYLIFE REAL ESTATE	922,000	1,758,372	2,207,433
PAVILION REAL ESTATE INVEST	1,889,100	788,633	705,382
PLA ADMINISTRADORA INDUSTRIA	1,878,200	3,139,141	2,174,313
PRECINCT PROPERTIES NEW ZEAL	2,411,911	1,997,562	2,437,688
PRIMARY HEALTH PROPERTIES	2,874,051	4,698,865	5,561,147
PROLOGIS PROPERTY MEXICO SA	1,075,697	2,165,037	1,913,788
PROSPERITY REIT	2,810,958	763,592	837,798
RDI REIT PLC	602,293	2,026,792	613,960
REDEFINE PROPERTIES LTD	13,291,223	8,185,015	2,532,026

CalPERS 2019-2020 Annual Investment Report
International REITS

Security Name	Shares	Book Value	Market Value
REIT 1 LTD	421,825	1,497,228	1,540,579
RESILIENT REIT LTD	735,000	3,507,304	1,832,530
RETAIL ESTATES	23,924	2,211,241	1,609,527
RIOCAN REAL ESTATE INVST TR	737,386	15,837,363	8,315,895
RURAL FUNDS GROUP	780,706	1,267,488	1,032,031
SA CORPORATE REAL ESTATE LTD	5,893,758	1,689,584	434,188
SABANA SHARIAH COMP IND REIT	2,352,133	1,195,216	590,120
SAFESTORE HOLDINGS PLC	498,552	3,099,604	4,472,241
SCENTRE GROUP	12,177,856	34,195,764	18,194,263
SCHRODER REAL ESTATE INVESTM	1,251,995	892,272	467,957
SEGRO PLC	9,580,687	84,247,924	105,949,230
SELLA CAPITAL REAL ESTATE LT	453,449	944,749	741,566
SHAFTESBURY PLC	531,035	4,586,868	3,461,176
SHOPPING CENTRES AUSTRALASIA	2,464,619	4,218,448	3,699,220
SMARTCENTRES REAL ESTATE INV	325,500	7,231,720	4,997,214
SOILBUILD BUSINESS SPACE REI	2,314,705	1,199,037	647,099
SPH REIT	1,382,400	1,094,858	867,066
STARHILL GLOBAL REIT	3,415,600	2,023,290	1,248,669
STOCKLAND	5,613,558	18,013,611	12,792,932
SUNLIGHT REAL ESTATE INVEST	2,623,000	1,051,215	1,302,963
SUNTEC REIT	16,783,576	22,343,661	16,963,437
SUNWAY REAL ESTATE INVESTMEN	3,961,200	1,676,909	1,497,583
TORUNLAR GAYRIMENKUL YATIRIM	377,158	172,892	183,221
TRITAX BIG BOX REIT PLC	3,874,192	7,242,919	6,941,083
UNIBAIL RODAMCO WESTFIELD	317,168	55,819,700	17,868,359
UNITE GROUP PLC/THE	746,885	6,584,190	8,674,805
UNITED URBAN INVESTMENT CORP	18,193	27,567,801	19,527,732
VASTNED RETAIL NV	41,062	2,008,437	876,257
VICINITY CENTRES	8,827,140	16,324,929	8,690,804
VITAL HEALTHCARE PROPERTY TR	903,019	1,164,472	1,450,390
VUKILE PROPERTY FUND LTD	2,071,594	2,872,322	916,867
WAREHOUSES DE PAUW SCA	306,037	4,718,380	8,352,529
WAYPOINT REIT	1,536,322	2,731,488	2,750,170
WERELDHAVE BELGIUM NV	5,699	519,209	352,046
WERELDHAVE NV	87,480	4,354,533	803,220
WHA PREMIUM GROWTH F	2,952,700	1,456,410	1,528,535
WORKSPACE GROUP PLC	317,189	2,464,989	2,561,190
YUEXIU REAL ESTATE INVESTMEN	2,887,000	1,903,936	1,314,906
Total		1,365,366,029	1,165,862,553

CalPERS 2019-2020 Annual Investment Report
Derivatives

Security Name	Par Value	Book Value	Market Value
BCP510FX5 TRS USD R E	750,000	1,717,852	1,502,513
BCP510FX5 TRS USD P V 01MLIBOR	(1,717,852)	(1,717,852)	(1,717,852)
BCP4SF1S2 TRS USD R E	4,900,000	102,120,542	110,349,063
BCP4SKVP4 TRS USD R E	500,000	1,332,758	1,295,804
BCP4SKVP4 TRS USD P V 01MLIBOR	(1,332,758)	(1,332,758)	(1,332,758)
BCP4SF1S2 TRS USD P V 03MLIBOR	(102,120,542)	(102,120,542)	(102,120,542)
BCP4PJKV9 TRS USD R E	6,623,968	146,440,458	149,173,197
BCP520VD0 TRS USD R E	1,215,743	26,870,230	27,378,796
BCP4TNA3 TRS USD R E	976,000	21,577,018	21,979,732
BCP4MDMA9 TRS USD R E	538,737	10,976,100	12,132,474
BCP4NH369 TRS USD R E	244,053	4,950,072	5,496,127
BCP4MUJM9 TRS USD R E	211,100	4,412,032	4,754,018
BCP4MJ1F8 TRS USD R E	196,320	4,035,947	4,421,169
BCP4N4W33 TRS USD R E	188,042	3,932,721	4,234,747
BCP4RE0C2 TRS USD R E	176,588	3,690,722	3,976,800
BCP510EG3 TRS USD R E	2,610,935	2,217,467	2,196,859
BCP52M6J7 TRS USD R E	689,790	1,579,412	1,579,412
BCP52HNZ3 TRS USD R E	500,000	1,144,850	1,144,850
BCP4ZS9L3 TRS USD R E	229,990	794,845	776,993
BCP52HP32 TRS USD R E	165,700	572,460	572,460
99S1AXJD9 TRS USD R F 4.10000	146,440,458	0	1
99S19UD43 TRS USD R F 5.10000	10,976,100	0	0
99S1ACKG6 TRS USD R F 5.80000	4,950,072	0	0
99S19V7P1 TRS USD R F 5.10000	4,035,947	0	0
99S19ZZP1 TRS USD R F 5.10000	4,412,039	0	0
99S1A7AV5 TRS USD R F 5.50000	3,932,721	0	0
99S19V7P1 TRS USD P F .00000	(4,035,947)	0	(0)
99S19ZZP1 TRS USD P F .00000	(4,412,039)	0	(0)
99S1A7AV5 TRS USD P F .00000	(3,932,721)	0	(0)
99S1ACKG6 TRS USD P F .00000	(4,950,072)	0	(0)
99S19UD43 TRS USD P F .00000	(10,976,100)	0	(0)
99S1AXJD9 TRS USD P F .00000	(146,440,458)	0	(1)
BCP52HP32 TRS USD P V 01MLIBOR	(572,460)	(572,460)	(572,460)
BCP4ZS9L3 TRS USD P V 01MLIBOR	(794,845)	(794,845)	(794,845)
BCP52HNZ3 TRS USD P V 01MLIBOR	(1,144,850)	(1,144,850)	(1,144,850)
BCP52M6J7 TRS USD P V 01MLIBOR	(1,579,412)	(1,579,412)	(1,579,412)
BCP510EG3 TRS USD P V 01MLIBOR	(2,217,467)	(2,217,467)	(2,217,467)
BCP4RE0C2 TRS USD P V 03MLIBOR	(3,690,722)	(3,690,722)	(3,690,722)
BCP4N4W33 TRS USD P V 03MLIBOR	(3,932,721)	(3,932,721)	(3,932,721)
BCP4MJ1F8 TRS USD P V 03MLIBOR	(4,035,947)	(4,035,947)	(4,035,947)
BCP4MUJM9 TRS USD P V 03MLIBOR	(4,412,032)	(4,412,032)	(4,412,032)
BCP4NH369 TRS USD P V 03MLIBOR	(4,950,072)	(4,950,072)	(4,950,072)

CalPERS 2019-2020 Annual Investment Report
Derivatives

Security Name	Par Value	Book Value	Market Value
BCP4MDMA9 TRS USD P V 03MLIBOR	(10,976,100)	(10,976,100)	(10,976,100)
BCP4TNA3 TRS USD P V 03MLIBOR	(21,577,018)	(21,577,018)	(21,577,018)
BCP520VD0 TRS USD P V 03MLIBOR	(26,870,230)	(26,870,230)	(26,870,230)
BCP4PJKV9 TRS USD P V 03MLIBOR	(146,440,458)	(146,440,458)	(146,440,458)
BCP4KX102 IRS USD R F 1.93050	1,000,000	1,000,000	1,120,002
BCP4KX193 IRS USD R F 2.20136	500,000	500,000	671,793
BCP4KX193 IRS USD P V 03MLIBOR	(500,000)	(500,000)	(500,000)
BCP4KX102 IRS USD P V 03MLIBOR	(1,000,000)	(1,000,000)	(1,000,000)
BCP51L3Q7 TRS USD R E	100,000	13,383,963	13,677,776
BCP51L3Q7 TRS USD P V 03MLIBOR	(13,383,963)	(13,383,963)	(13,383,963)
BCP4Y0TK5 TRS USD R E	197,943	1,093,208,508	1,257,268,615
BCP4Y2YQ2 TRS USD R E	197,943	1,242,963,076	1,257,268,615
BCP4Y0TG4 TRS USD R E	192,000	933,354,048	1,219,520,640
BCP4Y2Y66 TRS USD R E	35,128	253,878,768	257,941,321
BCP4Y2ZD0 TRS USD R E	35,128	253,878,768	257,941,321
BCP4Y5KE7 TRS USD R E	33,000	243,987,972	242,315,633
BCP4Y5KE7 TRS USD P V 03MLIBOR	(243,987,972)	(243,987,972)	(243,987,972)
BCP4Y2Y66 TRS USD P V 03MLIBOR	(253,878,768)	(253,878,768)	(253,878,768)
BCP4Y2ZD0 TRS USD P V 03MLIBOR	(253,878,768)	(253,878,768)	(253,878,768)
BCP4Y0TG4 TRS USD P V 03MLIBOR	(933,354,048)	(933,354,048)	(933,354,048)
BCP4Y0TK5 TRS USD P V 03MLIBOR	(1,093,208,508)	(1,093,208,508)	(1,093,208,508)
BCP4Y2YQ2 TRS USD P V 03MLIBOR	(1,242,963,076)	(1,242,963,076)	(1,242,963,076)
BCP4FA3Y2 TRS USD R E	133,015	843,940,537	844,867,385
BCP4FA3Y2 TRS USD P V 03MLIBOR	(843,940,537)	(843,940,537)	(843,940,537)
BCP4Y7R48 TRS USD R E	210,000	1,338,862,770	1,333,850,700
BCP4Y0T17 TRS USD R E	190,000	1,183,209,610	1,206,817,300
BCP4Y0TB5 TRS USD R E	180,000	1,120,935,420	1,143,300,600
BCP4Y7S13 TRS USD R E	47,500	344,983,238	348,787,653
BCP4Y0TY5 TRS USD R E	34,000	240,183,378	249,658,532
BCP4Y0TY5 TRS USD P V 03MLIBOR	(240,183,378)	(240,183,378)	(240,183,378)
BCP4Y7S13 TRS USD P V 03MLIBOR	(344,983,238)	(344,983,238)	(344,983,238)
BCP4Y0TB5 TRS USD P V 03MLIBOR	(1,120,935,420)	(1,120,935,420)	(1,120,935,420)
BCP4Y0T17 TRS USD P V 03MLIBOR	(1,183,209,610)	(1,183,209,610)	(1,183,209,610)
BCP4Y7R48 TRS USD P V 01MFEDFU	(1,338,862,770)	(1,338,862,770)	(1,338,862,770)
BCP4QG7M9 IRS USD R V 03MLIBOR	29,700,000	29,700,000	23,910,162
BCP4QG7M9 IRS USD P F 1.64330	(29,700,000)	(29,700,000)	(29,700,000)
E-MINI RUSS 2000 SEP20	502,500	0	0
EURO STOXX 50 SEP20	247,270	0	0
FTSE 100 IDX FUT SEP20	59,250	0	0
MSCI EAFE SEP20	931,250	0	0
MSCI EMGMKT SEP20	1,885,000	0	0
S+P MID 400 EMINI SEP20	13,000	0	0

**CalPERS 2019-2020 Annual Investment Report
Derivatives**

Security Name	Par Value	Book Value	Market Value
S+P/TSX 60 IX FUT SEP20	712,000	0	0
S+P500 EMINI FUT SEP20	1,029,950	0	0
SPI 200 FUTURES SEP20	65,150	0	0
TOPIX INDX FUTR SEP20	52,450,000	0	0
US 10YR NOTE (CBT)SEP20	2,970,200,000	0	0
US 10YR ULTRA FUT SEP20	1,270,600,000	0	0
US LONG BOND(CBT) SEP20	1,010,600,000	0	0
US ULTRA BOND CBT SEP20	2,320,400,000	0	0
Total		0	535,547,521

**CalPERS 2019-2020 Annual Investment Report
Real Estate Partnerships**

Security Name	Book Value	Market Value
AEW SENIOR HOUSING COMPANY	100,000	100,000
ARA ASIA DRAGON FUND II	(29,315,371)	106,520
ARA CHINA LT HOLD (CHINA LTH)	776,786,079	922,926,728
BLACKSTONE PROPERTY PARTNERS E	713,249,732	808,873,697
CALEAST CANADA LTD PARTNERSHIP	1,029,795	325,928
CALEAST INDUSTRIAL INV LLC	(11,422,849)	2,492,535
CALEAST SOLSTICE BASE	2,108,905,115	4,764,227,545
CALEAST SOLSTICE DT LAND	509,565,060	190,841,797
CALEAST SOLSTICE DT OTHER	1,146,242,574	736,617,889
CALEAST SOLSTICE LLC	(1,363,633)	(3,108,449)
CALWEST CALPERS GIP	10,482,845	8,327,845
CANYON CATALYST FUND II, LLC	392,632,426	499,471,243
CANYON CATALYST FUND, LLC	6,264,745	(1,507)
CANYON JOHNSON URBAN FD III LP	3,262,404	20,230
CIM CORE URBAN REIT LLC	15,719,695	42,930
CIM FUND III	117,300,550	307,917,463
FSP BASE	3,613,719,236	6,373,025,150
FSP DT 2012 AND BEYOND	(333,397,421)	9,552,899
GOLDEN REEF INFRASTRUCTURE TRU	1,161,935,477	1,046,588,341
GRI BASE	830,237,282	2,852,679,525
GRI DT 2012 AND BEYOND	16,011,862	25,523,453
HEARTHSTONE HSG PRTRNS II LLC	(3,154,752)	617,980
HEARTHSTONE MSII	(1)	(1,422)
HINES CALPERS BRAZIL FUND II	88,602,686	57,638,882
HINES CALPERS CHINA FUND	1,733,444	218,426
HINES CALPERS GREEN	204,751,070	349,304,917
HINES CALPERS MEXICO FUND II	67,247	1,863
HINES EUROPEAN DEVELOPMENT FD	7,985,601	6,835,004
HOLLYWOOD PARK COINVESTMENT	(11,732,336)	40,962,318
IHP INVESTMENT FUND III	182,188,605	106,158,385
IMI BASE	2,259,674,737	6,010,303,204
IMP ICMI	572,816,751	647,347,657
IMP ABACA	180,000,282	192,283,141
IMP BASE	2,903,893,282	5,545,916,078
IMP DT 2012 AND BEYOND	155,992,505	288,883,299
INSTITUTIONAL HSG PARTNERS LP	(27,929,467)	(32,985)
INSTITUTIONAL LOGISTICS PTNRS	1,020,655,184	1,475,519,353
IVY INVESTMENT VEHICLE LDC	(31,567,446)	(3,509,369)
KC 2011 LLC	22,668,309	(5,404,918)
KSC AFFORDABLE HOUSING	14,040,217	174,000
LAND MANAGEMENT COMPANY LLC	(51,894)	(51,894)
LASALLE JAPAN LOGISTICS II	(37,212)	987

**CalPERS 2019-2020 Annual Investment Report
Real Estate Partnerships**

Security Name	Book Value	Market Value
NATIONAL OFFICE PARTNERS (CWP)	564,173	311,903
ORA MULTI FAMILY INVESTMENT I	6,905,036	24,139,639
ORA RESIDENTIAL INVESTMENTS	16,271,916	106,268,254
PACIFIC MULTIFAMILY INVESTORS	1,190,455,333	1,608,165,871
PLA RETAIL FUND I	2,038,543	1,113,515
STOCKBRIDGE REAL ESTATE FD II	5,012,578	6,927,628
STRGC PROPERTY FUND ASIA SCSP	239,310,304	255,916,047
TECHCORE, LLC	784,791,720	1,399,818,865
TOWER BRIDGE INFRASTRUCTURE PA	(28,325,299)	678,013,138
WHITNEY RANCH VENTURE SWBO	17,822	17,354
XANDER CASSANDER CO INVESTMENT	155,093,700	697,922
Total	20,960,678,242	37,341,106,803

CalPERS 2019-2020 Annual Investment Report
Private Debt and Loans

Security Name	Book Value	Market Value
ALLIED UNIVERSAL HOLDCO LLC	50,000,000	46,926,000
FEDERATED TRADE FINANCE	62,197,461	62,098,753
MESA WEST CORE LENDIG FUND LLC	209,585,000	209,585,000
OAKTREE GILEAD INVESTMENT FUND, L.P. - SERIES A	18,000,000	18,000,000
PIMCO DISCO FUND III LP	60,000,000	60,576,000
TRANSFORM SR HOLDING LLC	64,761,905	56,990,476
Total	464,544,366	454,176,229

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
57 STARS GLOBAL OPPORTUNITIES FUND 2 (CALPERS), LLC	217,145,040	477,254,180
57 STARS GLOBAL OPPORTUNITIES FUND, LLC	436,343	108,163,204
AACP AP INVESTORS, LP	10,038,698	139,321
AACP CHINA DEBT INVESTORS, LP	1,499,563	110,608
AACP CHINA GROWTH INVESTORS	15,554,447	2,075,819
AACP CHINA VENTURE INVESTORS A, LP	8,063	26,152
AACP INDIA INVESTORS B	3,638,366	6,878,991
AACP INDIA INVESTORS C	4,733,964	6,761,464
AACP INDIA VENTURE INVESTORS A	3,269,445	96,887
ABERDARE VENTURES IV, LP	44,066,768	22,735,015
ADVENT INTERNATIONAL GPE V-D, LP	6,500,876	3,232,985
ADVENT INTERNATIONAL GPE VI-A, LP	116,843,939	59,255,067
ADVENT INTERNATIONAL GPE VII-C, LP	252,466,613	255,132,913
ADVENT INTERNATIONAL GPE VIII-B LIMITED PARTNERSHIP	468,500,002	493,184,330
ADVENT LATIN AMERICA PRIVATE EQUITY FUND IV-D, LP	44,845,618	30,667,631
ADVENT LATIN AMERICA PRIVATE EQUITY FUND V-H LP	59,713,164	37,035,358
ADVENT LATIN AMERICAN PRIVATE EQUITY FUND III-D LP	7,003,196	5,434,116
AFFINITY ASIA PACIFIC FUND III LP	66,873,691	3,018,496
AISLING CAPITAL II, LP	52,901,529	3,290,880
AISLING CAPITAL III, LP	40,883,674	4,542,012
ALTA V LIMITED PARTNERSHIP	11,644,856	9,747
AP ALTERNATIVE ASSETS (AAA), LP	63,326,248	600,001
APOLLO CO-INVESTORS (MHE), LP	1,095,102	6,205,104
APOLLO CREDIT OPPORTUNITY FUND I, LP	0	13,555
APOLLO EUROPEAN PRINCIPAL FINANCE FUND, LP	466,276	182,270
APOLLO INVESTMENT FUND IV, LP	0	167,708
APOLLO INVESTMENT FUND IX, LP	133,895,824	121,708,090
APOLLO INVESTMENT FUND V, LP	0	2,153,807
APOLLO INVESTMENT FUND VI, LP	62,810,231	9,898,288
APOLLO INVESTMENT FUND VII, LP	140,066,200	64,997,717
APOLLO INVESTMENT FUND VIII, LP	337,156,342	340,138,621
APOLLO SPECIAL OPPORTUNITIES MANAGED ACCOUNT, LP	0	95,770,045
ARCLIGHT ENERGY PARTNERS FUND IV, LP	19,782,688	481,668
ARES CORPORATE OPPORTUNITIES FUND II, LP	2,703,687	345,670
ARES CORPORATE OPPORTUNITIES FUND III, LP	31,537,703	28,804,423
ARES CORPORATE OPPORTUNITIES FUND V, LP	334,626,830	331,508,178
ARES CORPORATE OPPORTUNITIES FUND, LP	4,491,167	257,703
ASIA ALTERNATIVES CAPITAL PARTNERS II LP	18,183,722	32,549,704
ASIA ALTERNATIVES CAPITAL PARTNERS, LP	12,875,762	6,256,876
AVATAR INTERNATIONAL INVESTORS, LP	0	38,946
AVATAR NORTH AMERICA INVESTORS, LP	5,659,558	700,088
AVENUE SPECIAL SITUATIONS FUND VI (A), LP	3,245,391	10,561,674

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
BARING VOSTOK PRIVATE EQUITY FUND IV L.P. / SUPPLEMENTAL	59,477,225	14,695,930
BDC III C LP	72,611,867	100,933,699
BE VI 'H' LP	129,183,409	121,212,970
BIRCH HILL EQUITY PARTNERS (US) III, LP	78,819,839	6,488,941
BIRCH HILL EQUITY PARTNERS (US) IV, LP	82,550,799	107,251,705
BLACKSTONE / GSO CAPITAL SOLUTIONS FUND, LP	82,721,276	4,011,072
BLACKSTONE CAPITAL PARTNERS IV LP	6,301,039	4,923,625
BLACKSTONE CAPITAL PARTNERS V LP	139,748,089	18,456,472
BLACKSTONE CAPITAL PARTNERS VI LP	289,554,849	245,269,656
BLACKSTONE CAPITAL PARTNERS VII, LP	429,063,740	465,415,036
BLACKSTONE COMMUNICATIONS PARTNERS I LP	43,378,691	564,227
BLACKSTONE FIRST EAGLE CO-INVEST LP	66,819,283	43,563,232
BLACKSTONE GTS CO-INVEST, LP	101,036,412	113,431,054
BLACKSTONE TACTICAL OPPORTUNITIES FUND - C LP	298,746,350	213,933,770
BLACKSTONE TACTICAL OPPORTUNITIES FUND (KG CO-INVEST) LP	93,275,957	83,616,110
BLACKSTONE TACTICAL OPPORTUNITIES FUND (T4U CO-INVEST) LP	45,041,541	51,133,724
BLACKSTONE TACTICAL OPPORTUNITIES FUND II - C LP	309,377,385	303,343,271
BLACKSTONE TACTICAL OPPORTUNITIES FUND III-C (SURGE) LP	107,408,125	110,091,609
BLACKSTONE TACTICAL OPPORTUNITIES FUND III-C LP	129,904,257	115,040,633
BRIDGEPOINT EUROPE II 'A' LP	25,359,758	365,471
BRIDGEPOINT EUROPE II 'C' LP	1,359,896	58,959
BRIDGEPOINT EUROPE III 'C' LP	11,699,898	7,127,160
BRIDGEPOINT EUROPE III 'D' LP	105,540,993	42,378,202
BRIDGEPOINT EUROPE IV 'B' LP	33,247,484	16,836,567
BRIDGEPOINT EUROPE IV 'D' LP	97,462,981	63,881,658
BRIDGEPOINT EUROPE V	312,525,202	375,581,447
CALIFORNIA ASIA INVESTORS, LP	51,445,462	94,211,022
CALIFORNIA COMMUNITY VENTURE FUND, LLC	22,649,485	6,905,783
CALIFORNIA EMERGING VENTURES II, LLC	610,599,739	27,411,300
CALIFORNIA EMERGING VENTURES III, LLC	205,038,171	37,043,139
CALIFORNIA EMERGING VENTURES IV, LLC	236,305,124	136,309,012
CALIFORNIA MEZZANINE INVESTMENT FUND, LP	36,341,821	31,476,342
CALPERS CLEAN ENERGY & TECHNOLOGY FUND, LLC	363,762,600	59,650,519
CALPERS CORPORATE PARTNERS, LLC	172,735,169	1,128,501
CALPERS WELLSPRING V, LP	15,616,105	13,129,034
CAPITAL LINK FUND I, LLC	231,603,281	124,503,808
CAPITAL LINK FUND II, LLC	182,499,352	99,550,782
CAPITAL LINK MANAGEMENT, LLC	0	1,529,890
CARLYLE ASIA GROWTH PARTNERS IV, LP	56,702,978	24,953,745
CARLYLE ASIA PARTNERS II, LP	28,255,077	1,536,116
CARLYLE ASIA PARTNERS III, LP	7,845,467	941,589
CARLYLE ASIA PARTNERS III, LP	81,620,710	21,053,828

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
CARLYLE ASIA PARTNERS V, LP	48,321,813	37,502,462
CARLYLE EUROPE PARTNERS II, LP	2,907,095	556,214
CARLYLE EUROPE PARTNERS III, LP	120,128,068	22,687,231
CARLYLE EUROPE PARTNERS V, S.C.SP.	93,277,329	81,933,734
CARLYLE EUROPE TECHNOLOGY PARTNERS II, LP	8,900,857	1,548,734
CARLYLE GLOBAL FINANCIAL SERVICES PARTNERS, LP	1,959,619	797,085
CARLYLE HAVASU COINVESTMENT, LP	72,389,611	72,267,707
CARLYLE JAPAN PARTNERS II, LP	26,652,262	1,204,725
CARLYLE PARTNERS V, LP	227,298,584	82,842,888
CARLYLE PARTNERS VI, LP	395,408,936	461,404,341
CARLYLE PARTNERS VII, LP	276,754,994	247,957,530
CARLYLE REALTY PARTNERS III, LP	10,215,540	668,643
CARLYLE STRATEGIC PARTNERS II, LP	0	3,225,370
CARLYLE STRATEGIC PARTNERS IV, LP	62,891,378	39,716,085
CARLYLE U.S. EQUITY OPPORTUNITIES II, LP	144,923,056	128,050,413
CARLYLE U.S. GROWTH FUND III, LP	19,443,885	1,534,239
CARLYLE VENTURE PARTNERS II, LP	40,800,099	835,790
CARLYLE/RIVERSTONE GLOBAL ENERGY AND POWER FUND III, LP	127,465,968	10,078,557
CASTLELAKE I, LP	9,734,165	7,258,738
CDH FUND V, LP	149,959,796	211,950,926
CENTERBRIDGE CAPITAL PARTNERS III, LP	107,472,140	121,253,423
CERBERUS CAL II PARTNERS, LP	399,009,901	332,916,305
CERBERUS CP PARTNERS LP	0	560,301,899
CERBERUS INSTITUTIONAL PARTNERS V, LP	0	219,773,373
CHK MID-CON CO-INVEST VEHICLE ROYALTY, LP	7,220,381	54,088
CLARUS LIFESCIENCES I, LP	20,422,420	4,281,817
CLARUS LIFESCIENCES II, LP	26,556,668	5,216,772
CLAYTON, DUBILIER & RICE FUND X, LP	82,527,475	82,917,063
CLEARLAKE CAPITAL PARTNERS III, LP	35,126,186	29,372,622
CLEARLAKE CAPITAL PARTNERS IV, LP	51,827,090	60,460,603
CLEARLAKE CAPITAL PARTNERS V, LP	58,565,733	72,119,132
CLEARLAKE OPPORTUNITIES PARTNERS (P), LP	46,508,212	42,177,227
CLEARWATER CAPITAL PARTNERS FUND II HOLDINGS, LP	1,882,024	2,018,984
CLEARWATER CAPITAL PARTNERS FUND III, LP	8,578,102	29,509,957
COLLER INTERNATIONAL PARTNERS V-A, LP	33,325,359	22,524,786
CVC CAPITAL PARTNERS STRATEGIC OPPORTUNITIES COMPOUNDING CAPITAL LP	867,782,127	1,033,944,486
CVC CAPITAL PARTNERS VI, LP	421,130,297	582,353,750
CVC CAPITAL PARTNERS VII (A) LP	272,092,129	270,958,499
CVC EUROPEAN EQUITY PARTNERS III LP	24,588,005	13,596,306
CVC EUROPEAN EQUITY PARTNERS IV (D) LP	120,944,319	287,436
CVC EUROPEAN EQUITY PARTNERS TANDEM FUND (B) LP	116,211,213	360,963
CVC EUROPEAN EQUITY PARTNERS V (B) LP	97,595,626	46,665,046

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
EMALTERNATIVES INVESTMENTS, LP	47,397,953	38,504,627
ENERGY FUTURE HOLDINGS CORPORATION	74,950,590	525
ESSEX WOODLANDS HEALTH VENTURES FUND VIII, LP	88,611,507	52,814,509
FIRST RESERVE FUND XI, LP	336,153,388	391,955
FIRST RESERVE FUND XII, LP	233,701,435	32,648,792
FIRST RESERVE FUND XIII, LP	336,366,304	257,421,040
FOUNDATION RADIOLOGY GROUP	15,160,369	14,373,840
FRANCISCO PARTNERS II, LP	63,592,802	28,312,364
FRANCISCO PARTNERS III, LP	38,379,736	72,532,325
GCM GROSVENOR DEM II, LP	158,881,175	171,802,028
GCM GROSVENOR DEM III, LP	47,084,380	40,698,043
GCM GROSVENOR DEM, LP	67,823,572	70,499,415
GOLDEN STATE INVESTMENT FUND, LLC	219,160,838	105,672,781
GRANDVAL II, LP	175,291,959	175,539,647
GRANDVAL, LP	15,413,644	13,844,612
GREEN EQUITY INVESTORS V, LP	53,975,971	133,635,423
GSO CAPITAL OPPORTUNITIES FUND II LP	101,449,737	50,919,652
GSO CAPITAL OPPORTUNITIES FUND LP	22,881,363	1,022,023
GSO CAPITAL SOLUTIONS FUND II, LP	170,468,425	47,327,490
GSO ENERGY PARTNERS-C II LP	160,827,473	109,158,431
GSO ENERGY PARTNERS-C LP	311,559,400	115,914,832
H&F HOCKEY PARTNERS, LP	24,552,780	102,659,249
H&F SPOCK 1, LP	98,004,268	178,489,489
HELLMAN & FRIEDMAN CAPITAL PARTNERS VI	129,042,789	22,975,423
HELLMAN & FRIEDMAN CAPITAL PARTNERS VII	94,221,175	343,429,587
HELLMAN & FRIEDMAN CAPITAL PARTNERS VIII, LP	468,485,971	475,139,409
ICV PARTNERS II, LP	12,154,282	623,124
INSIGHT VENTURE PARTNERS GROWTH-BUYOUT COINVESTMENT FUND (B), LP	333,361,240	718,676,956
INSIGHT VENTURE PARTNERS IX, LP	95,442,924	187,856,823
INSIGHT VENTURE PARTNERS VI, LP	9,666,265	544,367
INSIGHT VENTURE PARTNERS X, LP	234,500,000	272,763,600
ITHACA LP	65,274,334	125,108,249
KHOSLA VENTURES III, LP	146,153,157	61,354,221
KHOSLA VENTURES SEED, LP	58,224,216	33,260,118
KKR 2006 FUND LP	205,044,136	102,830,605
KKR ASIAN FUND II LP	423,690,732	431,864,316
KKR ASIAN FUND LP	77,075,122	5,351,515
KKR EUROPEAN FUND II, LP	69,301,643	738,300
KKR EUROPEAN FUND III, LP	78,427,433	13,636,617
KKR MILLENNIUM FUND LP	54,679,298	121,606
KM CORPORATE PARTNERS FUND II, LP	110,683,064	90,316,425
KPS SPECIAL SITUATIONS FUND III, LP	0	1,086,554

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
LIME ROCK PARTNERS IV AF, LP	83,507,363	59,146,428
LIME ROCK PARTNERS IV, LP	24,498,587	113,465
LIME ROCK PARTNERS V, LP	57,834,312	13,439,528
LINDSAY GOLDBERG IV, LP	142,806,937	167,005,718
LION CAPITAL FUND II, LP	110,403,683	8,213,230
MADISON DEARBORN CAPITAL PARTNERS IV, LP	31,157,932	3,377,271
MADISON DEARBORN CAPITAL PARTNERS V, LP	56,385,359	4,128,618
MHR INSTITUTIONAL PARTNERS II LP	19,692,685	23,594,869
MHR INSTITUTIONAL PARTNERS III LP	168,291,900	83,349,761
NEW MOUNTAIN PARTNERS II, LP	18,357,177	2,337,658
NEW MOUNTAIN PARTNERS III, LP	117,431,745	256,421,216
NEWBRIDGE ASIA IV, LP	61,223,638	2,507,998
OAK HILL CAPITAL PARTNERS II, LP	26,276,787	943,856
OAK HILL CAPITAL PARTNERS III, LP	118,398,613	47,317,839
OAKTREE OPPORTUNITIES FUND VIIIB, LP	0	49,878,437
ONEX PARTNERS IV, LP	228,794,796	161,436,235
ONEX PARTNERS V-B LP	137,241,658	107,212,909
ONEX SIG CO-INVEST LP	29,987,832	71,705,764
PAG ASIA I LP	56,739,768	54,911,123
PAGAC DRONE HOLDING I LP	50,837,195	42,437,365
PALLADIUM EQUITY PARTNERS III, LP	98,373,635	3,857,439
PALLADIUM EQUITY PARTNERS V, LP	37,496,188	33,061,345
PATRIA BRAZILIAN PRIVATE EQUITY FUND V, LP	108,073,183	118,354,617
PERMIRA EUROPE III	18,947,172	309,051
PERMIRA GROWTH OPPORTUNITIES I LP 1	65,300,000	57,971,454
PERMIRA IV LP 2	41,105,564	31,116,509
PERMIRA V, LP	201,812,120	275,849,152
PERMIRA VI LP 1	429,726,991	454,159,869
POLISH ENTERPRISE FUND VI, LP	45,670,148	8,875,798
PROVIDENCE EQUITY PARTNERS V	41,079,534	1,677,688
PROVIDENCE EQUITY PARTNERS VI LP	165,005,901	70,729,098
RFG PRIVATE EQUITY LIMITED PARTNERSHIP NO. 1A, 1B AND 1C	13,315,329	1,182
RIVERSTONE FIELDWOOD PARTNERS, LP	55,104,740	519,858
RIVERSTONE GLOBAL ENERGY AND POWER FUND V, LP	350,372,684	97,882,566
RIVERSTONE GLOBAL ENERGY AND POWER FUND VI, LP	394,873,470	142,188,408
RIVERSTONE/CARLYLE GLOBAL ENERGY AND POWER FUND IV, LP	211,823,845	35,149,642
RIVERSTONE/CARLYLE RENEWABLE & ALTERNATIVE ENERGY FUND II, LP	166,759,930	88,920,152
RIVERWOOD CAPITAL PARTNERS (PARALLEL - A) LP	34,644,007	41,096,849
SACRAMENTO PRIVATE EQUITY PARTNERS, LP	1,354,235	109,055,914
SAIF PARTNERS III LP	28,578,353	189,130,860
SAIF PARTNERS IV, LP	86,975,427	170,433,868
SANKATY MANAGED ACCOUNT (CALPERS), LP	165,091,913	220,512,424

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
SILVER LAKE PARTNERS II, LP	6,907,953	108,323
SILVER LAKE PARTNERS III, LP	106,535,374	60,462,707
SILVER LAKE PARTNERS IV, LP	251,873,018	380,576,130
SILVER LAKE PARTNERS V, LP	267,519,506	285,263,807
SILVER LAKE TECHNOLOGY INV SUMERU	1,886,713	7,873
SILVER LAKE TECHNOLOGY INVESTORS IV, LP	57,333,980	104,071,723
SILVER LAKE TECHNOLOGY INVESTORS V, LP	78,404,919	86,426,761
SIRIS PARTNERS III, LP	57,087,247	61,795,893
SIRIS PARTNERS IV, LP	53,835,457	45,370,208
SL SPV-1, LP	81,874,842	90,579,448
SL SPV-2, LP	49,300,924	43,451,320
TAILWIND CAPITAL PARTNERS (PP), LP	36,454,521	4,774,550
TAILWIND CAPITAL PARTNERS II, LP	96,074,407	116,353,024
TAILWIND CAPITAL PARTNERS III, LP	72,245,110	66,061,796
TCP II CO-INVEST B, LP	39,587,204	62,953,074
TCV X, LP	66,395,000	62,038,492
THE CENTRAL VALLEY FUND II SBIC, LP	3,379,003	9,374,594
THE RESOLUTE FUND II, LP	93,059,687	68,013,484
THE RISE FUND (A), LP	50,794,917	49,933,689
THOMAS H. LEE EQUITY FUND VI, LP	18,152,981	3,965,991
TOWERBROOK INVESTORS II, LP	32,506,028	3,931,433
TOWERBROOK INVESTORS III, LP	84,213,689	4,263,717
TOWERBROOK INVESTORS IV (ONSHORE), LP	232,700,070	293,449,566
TOWERBROOK STRUCTURED OPPORTUNITIES FUND (ONSHORE), LP	186,765,998	184,893,482
TPG ASIA V, LP	143,140,441	60,857,917
TPG ASIA VII (A), LP	155,965,102	134,392,477
TPG BIOTECHNOLOGY PARTNERS II, LP	43,319,517	2,404,513
TPG BIOTECHNOLOGY PARTNERS III, LP	71,064,261	84,405,915
TPG GOLDEN BEAR PARTNERS, LP	106,655,842	100,605,363
TPG GROWTH IV, LP	46,828,465	41,252,787
TPG HOLDINGS LP	20,307,497	43,887,142
TPG PARTNERS IV, LP	69,759,857	2,421,309
TPG PARTNERS V, LP	266,624,873	11,306,880
TPG PARTNERS VI, LP	327,754,563	153,713,061
TPG STAR, LP	85,237,072	20,758,764
TRIDENT VI	145,713,022	204,792,658
TRIDENT VII, LP	215,841,556	231,331,857
TRITON FUND IV LP	59,223,290	47,559,217
T-VI CO-INVEST-A LP	23,504,454	74,574,390
VALOR EQUITY PARTNERS IV LP	64,194,083	86,662,140
VANTAGEPOINT CLEANTECH PARTNERS, LP	21,178,799	4,162,015
VANTAGEPOINT VENTURE PARTNERS 2006 (Q), LP	92,964,033	22,400,625

CalPERS 2019-2020 Annual Investment Report
Private Equity

Security Name	Book Value	Market Value
VICENTE CAPITAL PARTNERS GROWTH EQUITY FUND, LP	5,910,446	8,089,301
VISTA EQUITY PARTNERS FUND VII-Z, LP	101,678,586	93,877,800
W CAPITAL PARTNERS II, LP	45,694,561	7,418,660
WCAS XIII, LP	79,369,081	69,153,645
WELLSPRING CAPITAL PARTNERS V, LP	93,528,754	59,851,867
WELSH, CARSON, ANDERSON & STOWE XI, LP	50,844,305	36,166,762
WELSH, CARSON, ANDERSON & STOWE XII, LP	248,302,286	304,867,372
WIGMORE STREET CO-INVESTMENT NO. 1 LP	58,828,016	95,255,630
WIGMORE STREET VI CO-INVESTMENT NO. 1 LP	33,546,718	30,129,941
WLR RECOVERY FUND II, LP	23,143,615	338,476
WLR RECOVERY FUND III, LP	118,722,283	11,694,501
WLR RECOVERY FUND IV, LP	130,218,665	13,344,455
YUCAIPA AMERICAN ALLIANCE FUND I, LP	75,212,121	13,853,847
YUCAIPA AMERICAN ALLIANCE FUND II, LP	234,421,797	364,155,883
YUCAIPA CORPORATE INITIATIVES FUND I, LP	128,066,551	5,399,909
YUCAIPA CORPORATE INITIATIVES FUND II, LP	52,740,811	19,035,281
Total	27,987,388,984	23,390,849,252

**CalPERS 2019-2020 Annual Investment Report
Infrastructure Partnerships**

Security Name	Book Value	Market Value
ALINDA INFRASTRUCTURE	(2,817,120)	0
ALINDA INFRASTRUCTURE FUND II	44,376,325	82,618,511
ARCHMORE INT INFR FUND II C LP	96,927,681	97,932,433
CARLYLE INFRASTRUCTURE PARTNER	(2,416,310)	1,003,355
CIM INFRASTRUCTURE FUND	(9,003,271)	339,915,257
CONCESSION INVESTMENT HLDG LLC	364,797,702	536,825,720
GLOBAL INFRASTR PRTNRS FUND II	161,625,834	244,254,940
HARBERT GULF PACIFIC POWER (GP	1,131,866,198	1,505,564,274
HARBERT POWER FUND V (HPF V)	54,807,774	82,597,233
NEPTUNE REGIONAL TRANS SYS LLC	169,726,383	280,685,515
NH INFRASTRUCTURE PTNR II LP	125,963,172	223,783,652
UBS INTL INFRA FUND II (B) LP	45,613,025	46,086,124
Total	2,181,467,393	3,441,267,015

**CalPERS 2019-2020 Annual Investment Report
Forestland**

Security Name	Book Value	Market Value
TIMBERLAND LINCOLN TIMBER CO	884,673,851	851,771,061
TIMBER INTERNATIONAL	210,051,973	415,998,900
SOUTHERN DIVERSIFIED	2,403,768	2,035,662
Total	1,097,129,592	1,269,805,623



**California Public Employees'
Retirement System**
400 Q Street
P.O. Box 942701
Sacramento, CA 94229-2701
(916) 795-3991
TTY: (877) 249-7442
www.calpers.ca.gov