

Investment Adviser and Consultant Contracts

Contracting Party	Investment Style	Total Assets under contract as of 12/31/18	Fiscal Year 2018 Fees Paid	Fiscal Year To Date 2019 Fees Paid ¹	Estimated Fees to be paid in Fiscal Year 2019
Domestic Equity					
AQR CAPITAL MANAGEMENT	Small Core	\$ 191,896,862	\$ 983,149	\$ 427,590	\$ 855,180
EMERALD ADVISORS	Small Growth	182,359,987	1,198,226	375,169	750,338
LSV ASSET MANAGEMENT	Smid Value	304,040,074	1,817,752	810,077	1,620,154
LSV ASSET MANAGEMENT	Large Value	1,019,089,408	2,243,573	1,103,006	2,206,012
MATARIN CAPITAL MANAGEMENT	Small Core	27,232,460	118,074	64,224	128,448
RHUMBLINE ADVISERS	Smid Core	155,278,744	2,886	2,853	5,706
RHUMBLINE ADVISERS	Large Core	3,786,051,264	218,729	152,847	305,694
RHUMBLINE ADVISERS	Large Value	379,678,545	934,937	4,415	17,660
ROBECO BOSTON PARTNERS	Large Value	595,786,993	1,192,262	604,155	1,208,310
T. ROWE PRICE ASSOCIATES ²	Large Growth	672,668,123	1,603,292	922,223	1,844,446
International Equity					
ACADIAN INTERNATIONAL	Large Core	878,784,887	2,932,008	1,427,569	2,855,138
AQR CAPITAL MANAGEMENT	Emerging	546,450,451	4,836,468	2,122,349	4,244,698
ARROWSTREET CAPITAL	Large Cap	905,315,956	530,669	559,480	1,118,960
AXIOM INTERNATIONAL	Emerging	383,576,970	4,080,574	1,696,964	3,393,928
BROWN CAPITAL MANAGEMENT	Large Core	53,407,856	387,354	191,973	383,946
DIMENSIONAL FUND ADVISORS	Emerging Small Cap	275,014,851	2,100,973	933,054	1,866,108
GRANDEUR PEAK	Smid Growth	202,010,713	0	42,121	168,484
JP MORGAN INTERNATIONAL	Large Core	375,901,199	1,366,362	222,141	444,282
JP MORGAN INVESTMENT MANAGEMENT	Emerging	415,249,786	3,007,017	1,314,633	2,629,266
LSV ASSET MANAGEMENT	Large Value	883,922,556	3,839,873	1,751,261	3,502,522
LSV ASSET MANAGEMENT	Small Value	254,716,423	0	49,872	199,488
MONDRIAN INVESTMENT PARTNERS	Active	478,589,012	2,585,767	1,031,246	2,062,492
NORTHERN TRUST MSCI EMERGING MARKETS	Emerging	55,799,360	42,036	19,663	39,326
NORTHERN TRUST	Large Core	2,482,831,259	597,467	291,479	582,958
STRATEGIC GLOBAL ADVISORS	Large Cap	533,501,842	1,837,717	877,919	1,755,838
STRATEGIC GLOBAL ADVISORS	Small Cap	297,064,167	975,169	929,673	1,859,346
WASATCH ADVISORS	Small Cap	198,112,683	3,278,861	1,405,504	2,811,008
Fixed Income					
ALLIANCE BERNSTEIN	Emerging Market Debt	277,275,437	0	287,888	575,776
DOLAN MCENIRY CAPITAL MANAGEMENT	Core Plus	486,001,071	733,601	418,216	836,432
DOLAN MCENIRY HIGH YIELD	Core Plus	240,091,607	1,008,880	521,433	1,042,866
FRANKLIN ADVISERS	International	788,122,407	2,811,860	1,234,230	2,468,460
GARCIA HAMILTON & ASSOCIATES	Core Plus	367,006,934	602,509	300,447	600,894
MACKAY SHIELDS, LLC	Core Plus	1,002,461,179	2,406,586	1,217,247	2,434,494
PACIFIC INVESTMENT MANAGEMENT COMPANY ²	Core Plus	511,277,458	3,529,703	1,904,548	3,809,096

Contracting Party	Investment Style	Total Assets under	Fiscal Year 2018 Fees	Fiscal Year To Date	Estimated Fees to be paid in
		contract as of 12/31/18	Paid	2019 Fees Paid ¹	Fiscal Year 2019
PACIFIC INVESTMENT MANAGEMENT COMPANY ²	Global Inflation Linked Bonds	781,606,708	2,348,316	1,110,318	2,220,636
PRUDENTIAL GLOBAL INVESTMENT MANAGEMENT	Core Plus	847,098,048	1,112,471	619,574	1,239,148
PRUDENTIAL GLOBAL INVESTMENT MANAGEMENT	Emerging Market Debt	249,185,172	1,112,472	227,952	455,904
RAMIREZ ASSET MANAGEMENT	Core Plus	101,424,680	103,658	77,287	154,574
TAPLIN, CANIDA & HABACHT	Cash	1,256,543,582	720,147	421,302	842,604
TCW GROUP	International	810,818,068	2,644,316	1,598,889	3,197,778
Real Estate					
Barings R.E. Advisers LLC ²	Separate Managers	437,735,446	1,619,711	748,642	1,497,284
Barings R.E. Advisers II	Separate Managers	9,165,674	28,423	19,018	38,036
Capri Capital Partners, LLC ²	Separate Managers	1,028,882,892	2,508,015	1,085,937	2,171,874
Heitman Capital Management, LLC ²	Separate Managers	1,624,607,584	5,332,116	2,615,325	5,230,650
Invesco Real Estate ²	Separate Managers	828,227,061	2,362,171	1,297,439	2,594,878
Lincoln Property Company Realty Advisors I, Ltd. ²	Separate Managers	649,847,412	2,128,003	768,193	1,536,386
Lincoln Property Company Realty Advisors Ltd. Core	Separate Managers	317,593,947	437,807	286,467	572,934
Lincoln Property Transition	Separate Managers	431,257	145,057	24,368	48,736
Principal Real Estate Investors ²	Separate Managers	195,780,194	665,787	310,139	620,278
Fund of Funds					
Greenspring	Private Equity	31,574,462	0	0	0
Grosvenor	Absolute Return	314,870,297	2,296,125	1,199,430	2,398,860
Morgan Creek Partners Asia, L.P.	Private Equity	89,423,100	802,220	189,030	378,060
Investment Consultants					
RVK, Inc.	General consultant	NA	457,643	232,500	465,000
Stepstone Group Real Estate, LP	Real Estate consultant	NA	279,971	142,054	290,000
TorreyCove Capital Partners LLC	Private Equity consultant	NA	997,500	450,000	900,000
Aksia, LLC	Private Debt consultant	NA	0	153,767	500,000
Aksia, LLC	Diversified Strategies consultant	NA	0	19,726	200,000
Bard Consulting ³	Co-investment consultant	NA	0	0	NA
Caledon Capital Management, Inc. ³	Co-investment consultant	NA	0	0	NA
ORG Portfolio Management ³	Co-investment consultant	NA	0	0	NA
RCLCO Fund Advisors ³	Co-investment consultant	NA	0	0	NA
Stout Risius Ross, Inc. ³	Co-investment consultant	NA	0	85,000	NA
Torrey Cove Capital Partners ³	Co-investment consultant	NA	0	122,500	NA

¹ Fiscal Year To Date amounts represent fees incurred through December 31, 2018

² "Estimated fees to be paid" data includes base fee estimates only. A few managers have incentive fees which are based upon performance against benchmarks. Incentive fees are calculated on a quarterly or annual basis and excluded for this estimate.

³ No estimate as fees are paid on a case by case basis.

Factors that contributed to the selection of investment advisers and consultants included the experience and high quality of the firm's investment professionals, the soundness of the firm's investment philosophy and process, the strength and consistence of historical investment performance, the stability of the organization, and the strength of focus on risk management.

Disclosure in accordance with 40 ILCS 5/1-113.14(g)