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2021

# Annual Investment Managers Fees and Expenses Report

As of December 31, 2021

Commonwealth of Pennsylvania  
State Employees' Retirement System



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REVISION: The only revision made to this report is on page 2 with the addition of a footnote to clearly define the composition of SERS' Share of Profits column.

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# SERS' Investment Managers Fees and Expenses Summary

2021

Asset Class	Managers Fees	Managers Operating Expenses	Total Managers Fees and Operating Expenses	Total Profits including Carried Interest	Managers Share of Profits (Carried Interest)	SERS' Share of Profits <sup>1/</sup>
Real Estate	\$27,776,004	\$7,446,177	\$35,222,181	\$512,594,945	\$3,743,379	\$508,851,567
Private Credit	19,931,435	6,521,007	26,452,441	171,586,883	6,133,565	165,453,318
Private Equity	51,654,353	18,311,209	69,965,562	2,104,196,990	164,315,392	1,939,881,599
Public Markets	30,374,036	1,228,354	31,602,390	N/A	N/A	N/A
<b>Total</b>	<b>\$129,735,828</b>	<b>\$33,506,747</b>	<b>\$163,242,574</b>	<b>\$2,788,378,818</b>	<b>\$174,192,335</b>	<b>\$2,614,186,484</b>

Managers fees, performance fees, and managers operating expenses provided by SERS' Office of Financial Management. Total Profits including Carried Interest, Managers Share of Profits(Carried Interest) and SERS' Share of Profits are provided by StepStone except for the Keystone Legacy Fund which was provided by Fairview Capital.

Numbers may not add due to rounding.

## Definitions:

**Carried Interest** – The general partner's share of the profits generated through a private market fund.

**Managers Fees** – The annual fees charged by the fund/firm to cover the basic costs of running and administering a fund.

**Managers Operating Expenses** – These expenses include, but are not limited to, operating and other recurring expenses such as legal expenses, office expenses, audit fees, accounting fees, custodial fees, and third-party vendor fees.

**Performance Fees** – Performance fees are fees paid to a manager for exceeding certain performance thresholds. The calculation methodology is described in detail in each fund or separate account's legal documents (e.g., partnership agreement or side letter). Performance fees may be paid on a "rolling" basis for open-end funds or separate accounts, and are commonly paid by closed-end funds as investments are realized.

<sup>1/</sup>Includes unrealized gains of \$2.1 billion, return of capital of \$1.2 billion, realized gains of \$1.1 billion less capital contributed by SERS of \$1.8 billion. If the enhanced process used for the 2022 report was applied to this 2021 report, the total Net Profit Paid to SERS was \$1.1 billion (Gross Distributions of \$2.5 billion - Return of Capital to SERS of \$1.2 billion - Carried Interest Paid to GPs of \$174 million = Net Profits Paid to SERS of \$1.1 billion).

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## SERS' Investment Managers Fees and Expenses by Fund/Account

2021

Fund/Account Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
ABRY Advanced Securities Fund	\$(505)			
ABRY Mezzanine Partners	—			
ABRY Partners IV	—			
ABRY Partners V	—			
ABRY Partners VI	10,112			
ABRY Partners VII	74,580			
ABRY Partners VIII	44,574			
ABRY Senior Equity II	(5,980)			
Activum SG Fund VI	1,040,873			
Activum SG Fund VI Pennsylvania Side-Car	60,799			
ADV Opportunities Fund I	299,509	106,221	—	405,729
Advent International GPE VI-A	48,153	3,265	51,031	102,449
Advent International GPE VII-B	229,046	3,131	2,625,566	2,857,743
Advent International GPE VIII-B	586,424	38,134	5,593,737	6,218,295
Advent Latin American Private Equity Fund IV	(4,109)	41,123	—	37,014
Advent Latin American Private Equity Fund V	89,805	8,198	—	98,003
Advent Latin American Private Equity Fund VI	357,351	51,594	—	408,945
AG Asia Realty Fund	—			
Altaris Health Partners V	1,816			
Apollo Hybrid Value Fund	1,181,246			
Apollo Investment Fund IV	—			
Apollo Investment Fund IX	897,122			
Apollo Investment Fund V	—			
Apollo Investment Fund VI	—			
Ares PA Opportunities Fund - Direct Lending	132,546			
Ares PA Opportunities Fund - Distressed Debt	781,037			
Ares PA Opportunities Fund - Diversified Credit	86,883			
Ares PA Opportunities Fund - Special Situations	447,391			
ASF VII B	490,735			
ASF VII PA Co-Invest	60,062			
ASF VIII B	1,000,000			
ASF VIII PA Co-Invest	—			
Asia Alternatives Capital Partners	—	12,772	95,067	107,839
Asia Alternatives Capital Partners II	27,252	26,902	398,491	452,646
Asia Alternatives Capital Partners III	173,843	154,726	—	328,569
Asia Alternatives Capital Partners V	210,665	78,119	—	288,784
Asia Alternatives Korea Buyout Investors (Hahn & Co)	—	21,638	—	21,638
Audax Direct Lending Solutions Fund-A	1,263,909			
Audax Private Equity Fund	—			
Audax Private Equity Fund II	—			

Data in this publication is unaudited.

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**REVISED****SERS' Investment Managers Fees and Expenses by Fund/Account****2021**

<b>Fund/Account Name</b>	<b>Managers Fees<sup>1/</sup></b>	<b>Managers Operating Expenses<sup>2/</sup></b>	<b>Managers Share of Profits (Carried Interest)</b>	<b>Total</b>
Audax Private Equity Fund III	\$—			
Audax Private Equity Fund V	—			
Audax Private Equity Fund VI	(30,017)			
Avenue Special Situations Fund VI	—			
AXA Secondary Fund III	—			
AXA Secondary Fund III-2	—			
AXA Secondary Fund IV	—			
AXA Secondary Fund V B	142			
Battery Ventures VIII	—			
Battery Ventures VIII Side Car Fund	—			
Berkshire Fund VI	(447)			
Berkshire Fund VII	37,443			
Berkshire Fund VIII	169,903			
Berwind Investment Partnership IX	14,270			
Berwind Investment Partnership VI	3,029			
BlackRock MSCI Emerging Markets Index	57,693	56,974	N/A	114,667
BlackRock MSCI World ex U.S. Index	285,802	435,740	N/A	721,543
BlackRock U.S. High Yield Bond Index	92,716	9,878	N/A	102,594
Blackstone Capital IV	—	2,669	140,760	143,429
Blackstone Capital Partners V	—	50,108	—	50,108
Blackstone Capital Partners VII	513,697	11,438	1,526,381	2,051,515
Blackstone Capital Partners VIII	1,050,000			
Blackstone Communications Partners I	—	1,622	—	1,622
Blackstone Keystone <sup>3/</sup>	11,203,427	—	N/A	11,203,427
Blackstone Property Partners	3,145,113	24,386	—	3,169,499
Blackstone Real Estate Partners V	—	12,327	90,506	102,833
Blackstone Real Estate Partners VI	—	16,340	159,877	176,217
Blackstone Real Estate Partners VII	375,238	63,146	236,456	674,841
Blue Moon Senior Housing II	627,131			
Blue Moon Senior Housing II Sidecar	148,010			
Brandywine Global	346,742	—	N/A	346,742
Brightwood Capital Fund IV	—			
Brown Brothers Harriman	445,617	—	N/A	445,617
Capvis Equity IV	603,090	36,474	—	639,564
Carlyle Energy Mezzanine Opportunities Fund	21,434			
Centerbridge Capital Partners I	(6,497)	14,127	198,758	206,388
Centerbridge Capital Partners III	(20,359)	10,160	1,468,809	1,458,609
CenterSquare Real Estate Securities	1,179,485	—	N/A	1,179,485
C-III Recovery Fund III	1,342,627			
Clearlake Capital Partners IV	17,212			
Clearlake Capital Partners V	(180,391)			
Clearlake Capital Partners VI	(240,587)			

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## SERS' Investment Managers Fees and Expenses by Fund/Account

2021

Fund/Account Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
Clearlake Opportunity Partners II	\$458,476			
Clerestory Small Cap Real Estate Fund I	(383)			
Colony Investors VIII	—			
CVC Capital Partners VII	1,129,211	509,354	—	1,638,564
CVC Capital Partners VIII (A)	512,044			
Dover Street VII	30,000	2,989	574,522	607,512
Eaton Vance	315,077	124,481	N/A	439,559
Emerald Asset Management	3,444,684	—	N/A	3,444,684
Entrust Keystone	21,069	—	N/A	21,069
Eureka Growth Capital III	168,647	26,109	4,207,299	4,402,056
Eureka II	—	21,945	—	21,945
Fidelity Institutional Asset Management	1,852,429	—	N/A	1,852,429
Forest I.M.A.	19,553			
Francisco Partners II	—			
Francisco Partners III	71,411			
Francisco Partners IV	225,275			
FSN Capital IV	206,599			
FSN Capital V	1,165,745			
Glendon Opportunities Fund II	2,377,258			
GlobeFlex Capital	855,435	—	N/A	855,435
Great Hill Equity Partners IV	—			
GTCR Fund XI	168,516			
GTCR Fund XII	384,320			
GTCR VIII	—			
H.I.G. Bayside Debt & LBO Fund II	112,625			
H.I.G. Bayside Loan Opp. Fund III	374,434			
H.I.G. Bayside Loan Opp. Fund IV	101,743			
H.I.G. Brazil and Latin America Partners	1,071,370			
H.I.G. Europe Capital Partners II	767,146			
H.I.G. Growth Buyouts & Equity Fund II	190,181			
Hahn & Company II	909,989			
Hahn & Company III	1,125,000			
Hahn & Company III - Supplemental Fund	158,042			
HarbourVest IPEP III	—	715	—	715
HarbourVest PA Co-Investment Fund	562,424			
HarbourVest Partners VI	—	2,821	—	2,821
HarbourVest Partners VII	—	46,342	80,582	126,924
HarbourVest Partners VIII	189,876	11,342	130,342	331,560
Harris Associates	1,234,880	—	N/A	1,234,880
Hawkeye Scout Fund I	—	2,290	1,680,100	1,682,390
Hawkeye Scout Fund II	229,634	18,389	—	248,023

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## SERS' Investment Managers Fees and Expenses by Fund/Account

2021

Fund/Account Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
Heitman America Real Estate Trust	\$798,402			
Heitman I.M.A. <sup>4/</sup>	2,034,609		N/A	
Hellman & Friedman Capital Partners IX	122,449			
Hellman & Friedman Capital Partners VI	—	21,175	—	21,175
Hellman & Friedman Capital Partners VIII	306,693	11,745	2,103,002	2,421,440
Hellman & Friedman Capital Partners X	741,758			
Henderson Park Enhanced Income Fund	2,375,830			
HIPEP V-Asia Pacific & Rest of World	22,500	11,355	—	33,855
Horizon Impact Fund	195,001	65,002	426,870	686,872
Horizon Impact Fund B	588,571	124,247	—	712,818
hotelAVE I.M.A.	391,071		N/A	
HPS Mezzanine Partners 2019	745,131			
ICG Europe Fund VII	754,008			
ICG Europe Mid-Market Fund	395,946			
ICG North American Private Debt Fund II	—			
Incline Equity Partners III	(128,507)	10,027	949,138	830,658
Insight Partners XII	514,385			
Insight Venture Partners IX	750,985	40,093	3,847,391	4,638,469
Insight Venture Partners VI	—	1,260	58,873	60,132
Insight Venture Partners VII	(10,122)	67,823	1,523,205	1,580,906
Insight Venture Partners VIII	270,046	10,852	3,046,414	3,327,312
Insight Venture Partners X	1,573,718	35,507	4,425,109	6,034,334
Insight Venture Partners XI	1,074,199			
JMI Equity Fund VI	—			
JMI Equity Fund VII	10,043			
JMI Equity Fund VIII	364,500			
Kelso VIII	—	71,955	5,237,439	5,309,394
Keystone Legacy Fund	2,367,327	5,318,107	32,309,827	39,995,261
KPS Special Situations Fund IV	—	9,132	3,993,843	4,002,975
KPS Special Situations Fund V	(64,407)			
KPS Special Situations Mid-Cap Fund	125,229			
LaSalle I.M.A.	1,291,851		N/A	
LaSalle Takeover I.M.A.	4,163,252		N/A	
LBC Credit Partners III	147,915			
Leading Edge Investment Advisors	2,274,361	—	N/A	2,274,361
LEM Multifamily Fund VI	358,696			
LEM Real Estate High-Yield Debt Fund III	—	(3,914)	—	(3,914)
Lexington Capital Partners V	(6,751)			
Lexington Capital Partners VI	—			
Lightspeed India Partners I	375,000			

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**REVISED****SERS' Investment Managers Fees and Expenses by Fund/Account****2021**

<b>Fund/Account Name</b>	<b>Managers Fees<sup>1/</sup></b>	<b>Managers Operating Expenses<sup>2/</sup></b>	<b>Managers Share of Profits (Carried Interest)</b>	<b>Total</b>
Lightspeed Venture Partners VIII	\$165,184			
LLR Equity Partners II	—			
LLR Equity Partners III	(18,147)			
LLR Equity Partners IV	241,205			
LLR Equity Partners V	990,086			
LLR Equity Partners VI	1,100,361			
Lowe GTO	(30,000)		N/A	
Lubert Adler Fund VII	183,920	61,579	—	245,499
Macquarie Emerging Markets	2,535,020	225,339	N/A	2,760,359
Madison Dearborn Capital Partners IV	—	(4,364)	172,688	168,324
Madison Dearborn Capital Partners V	—	6,189	43,603	49,792
Madison Dearborn Capital Partners VI	—	26,530	4,165,035	4,191,564
Martin Currie Investment Management	2,606,822	—	N/A	2,606,822
Mellon HY Beta Fund	177,762	23,568	N/A	201,330
Mellon Investments Corporation Bond Index	374,083	17,821	N/A	391,904
Mellon Investments Corporation Intermediate Credit Bond Index	128,164	—	N/A	128,164
Mellon Investments Corporation Intermediate Treasury Bond Index	18,440	—	N/A	18,440
Mellon Investments Corporation Long Duration Bond Index	59,123	—	N/A	59,123
Mellon Investments Corporation Long Term Credit Bond Index	49,615	—	N/A	49,615
Mellon Investments Corporation Russell 1000	506,311	—	N/A	506,311
Mellon Investments Corporation Russell 2000 Core	119,904	—	N/A	119,904
Mellon Investments Corporation Russell 2000 Value	150,215	—	N/A	150,215
Mellon Investments Corporation Securitized Index	49,950	24,048	N/A	73,998
Meritech Capital Partners IV	31,553			
Meritech Capital Partners V	377,256			
Mesirow Financial Real Estate Value Fund III	334,872	—	—	334,872
Neuberger Berman PA Co-Investment Fund	277,303			
New Century Advisors	305,326	—	N/A	305,326
New Enterprise Associates 12	—	—	144,075	144,075
New Enterprise Associates X	—	—	1,872,295	1,872,295
Newbridge Asia IV	52			
NewSpring Growth Capital II	—			
NewSpring Growth Capital III	117,390			
NGP XII	1,026,475			
NISA Investment Advisors	602,301	—	N/A	602,301
Oak Street Real Estate Capital Fund IV	805,410	781,959	—	1,587,369
Oak Street Real Estate Capital Fund V	230,241			

*Data in this publication is unaudited.*

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# SERS' Investment Managers Fees and Expenses by Fund/Account

**2021**

<b>Fund/Account Name</b>	<b>Managers Fees<sup>1/</sup></b>	<b>Managers Operating Expenses<sup>2/</sup></b>	<b>Managers Share of Profits (Carried Interest)</b>	<b>Total</b>
Oak Street Real Estate Capital Net Lease Property Fund	\$2,420,824			
Oaktree Opportunities Fund IX	475,044			
Oaktree Power Opportunities Fund III	(5,665)			
OCM Opportunities Fund V	—			
OCM Opportunities Fund VI	—			
OCM Opportunities Fund VII	—			
OCM Opportunities Fund VII b	—			
OCM Opportunities Fund VIII	(1,967)			
OCM Opportunities Fund VIII b	64,491			
OCM Principal Opportunities Fund IV	—			
OCM/GFI Power Opportunities Fund II	—			
PAAMCO	6,537	—	N/A	6,537
Penn Asia Investors	—	1,160,297	—	1,160,297
Permira Credit Solutions IV Master (Feeder) SCSp	778,039			
Permira European Fund II	—			
Permira European Fund III	—			
Permira IV	—			
Permira Susquehanna Opportunities - Buyout	101,259			
Permira Susquehanna Opportunities - Credit	151,886			
Permira VI	529,370			
Permira VII	1,157,508			
PIMCO Core <sup>5/</sup>	1,433,039	—	N/A	1,433,039
PIMCO U.S. Treasuries	484,983	—	N/A	484,983
Pine River Fund	313	—	N/A	313
Platinum Equity Capital Partners III	—	—	867,877	867,877
Primavera Capital Fund II	831,770	—	—	831,770
Primavera Capital Fund III	1,376,759			
Providence Equity Partners V	—			
Providence Equity Partners VI	—			
Providence Strategic Growth Europe	2,911,159			
Providence Strategic Growth II	402,830	324,665	—	727,495
Providence Strategic Growth III	601,669	785,408	—	1,387,077
Providence Strategic Growth IV	896,128			
Prudential Latin America Residential Fund III	4,296			
Prudential Latin America Retail Fund I	—			
Prudential Senior Housing Fund IV	—			
Prudential Senior Housing Fund V	436,925			
Prudential Senior Housing Fund VI	936,570			
PSG V	620,879			

**REVISED****SERS' Investment Managers Fees and Expenses by Fund/Account****2021**

<b>Fund/Account Name</b>	<b>Managers Fees<sup>1/</sup></b>	<b>Managers Operating Expenses<sup>2/</sup></b>	<b>Managers Share of Profits (Carried Interest)</b>	<b>Total</b>
Ridgemont Equity Partners II	\$423,211			
Rockpoint Finance Fund I	1,770			
Rockpoint Real Estate Fund II	4,426			
Rockpoint Real Estate Fund III	40,968			
Rockpoint Real Estate Fund V	497,589			
RRJ Capital Master Fund III	287,356			
Rubicon First Ascent	916,027			
SEI Structured Credit Fund	1,074,536	—	N/A	1,074,536
Sentinel Capital Partners V	(16,824)			
Silver Lake Partners V	335,114	56,219	2,476,468	2,867,801
Sixth Street Opportunities Partners IV (A)	751,367			
Sixth Street TAO 4.0 (B)	804,790			
Sixth Street TAO Contingent (D)	860,091			
SRE Opportunity Fund III	740,018			
SRE Opportunity Fund III Select	78,603			
Starwood Fund VI	—			
Starwood Fund VII	—			
Starwood Fund VIII	37,052			
Sterling Group Partners IV	53,214	111,316	1,721,933	1,886,463
Stone Harbor EMD	302,392	—	N/A	302,392
Stone Harbor HY	318,235	—	N/A	318,235
T. Rowe Price Stock Distribution Account	736,318	—	N/A	736,318
TA X	—			
Taplin, Canida & Habacht (TCH)	296,500	—	N/A	296,500
TCV X	1,493,750			
TDR Capital IV	1,673,548	—	—	1,673,548
Thoma Bravo Discover Fund III	196,955			
Thoma Bravo Fund XIII	1			
Thoma Bravo Fund XIV	—			
TPG Asia V	—	16,673	148,484	165,157
TPG Partners III	—			
TPG Partners IV	—			
TPG Partners V	—	9,039	—	9,039
TPG Partners VI	—	30,502	833,110	863,612
TSG8	1,604,503			
UBS Trumbull Property Fund	236,553	14,298	—	250,851
ValStone Opportunity Fund V	235,402	110,437	—	345,838
Vista Equity Partners Fund VI	2,032,477			
Vista Equity Partners Fund VII	1,106,016			
Walter Scott & Partners Limited	2,998,592	—	N/A	2,998,592

*Data in this publication is unaudited.*

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## SERS' Investment Managers Fees and Expenses by Fund/Account

2021

Fund/Account Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
Weathergag Venture Capital	\$81,407	\$36,398	\$336,908	\$454,713
Weathergag Venture Capital II	150,205	122,117	2,112,852	2,385,174
Westbrook Fund V	(11,515)	16,037	—	4,522
Westbrook Fund VI	—	6,115	—	6,115
Westbrook Fund VII	36,808	—	—	36,808
Westbrook Fund VIII	40,155	—	—	40,155
Wind Point Partners IX-A	1,023,810			
Wind Point Partners VIII	265,745			
Xponance	1,754,764	310,505	N/A	2,065,269
<b>Total</b>	<b>\$129,735,828</b>	<b>\$33,506,747</b>	<b>\$174,192,335</b>	<b>\$337,434,909</b>

N/A - Not Subject to Carried Interest.

Managers fees, performance fees, and managers operating expenses provided by SERS' Office of Financial Management. Carried Interest details provided by StepStone except for the Keystone Legacy Fund which was provided by Fairview Capital.

Numbers may not add due to rounding.

<sup>1/</sup> Manager fees may include accrual (estimate) true-ups.

<sup>2/</sup> Includes normal operating expenses associated with running the partnership or portfolio. These include legal expenses, office expenses, audit fees, accounting fees, custodial fees, and third-party vendor fees.

<sup>3/</sup> On October 1, 2021, the Blackstone Keystone portfolio was moved from the Private Credit asset class to the Fixed Income asset class. The Blackstone Keystone manager fees and performance fees for January through September 2021 are included in the Private Credit asset class, while the manager fees and performance fees for October through December 2021 are included in the Fixed Income asset class. The Blackstone Keystone manager fees include \$ [REDACTED] for their 2021 performance fees (\$ [REDACTED] in Private Credit and \$ [REDACTED] in Fixed Income).

<sup>4/</sup> The Heitman I.M.A. manager fees include a performance fee accrual of \$ [REDACTED] for 2021.

<sup>5/</sup> The PIMCO Core manager fees include a performance fee accrual of \$ [REDACTED] for 2021.

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## SERS' Real Estate Fees and Expenses by Manager

2021

Manager Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
Activum	\$1,101,672			
Angelo Gordon	—			
Berwind	17,299			
Blackstone	3,520,351	116,200	486,839	4,123,390
Blue Moon	775,141			
C-III	1,342,627			
CenterSquare	1,179,485	—	N/A	1,179,485
Clerestory	(383)			
Colony	—			
Forest	19,553			
Hawkeye	229,634	20,679	1,680,100	1,930,412
Heitman <sup>3/</sup>	2,833,011			
Henderson Park	2,375,830			
hotelAVE	391,071		N/A	
LaSalle	5,455,103		N/A	
LEM	358,696			
Lowe	(30,000)		N/A	
Lubert Adler	183,920	61,579	—	245,499
Mesirow	334,872	—	—	334,872
Oak Street	3,456,475			
PGIM	1,377,791			
Rockpoint	544,753			
Rubicon	916,027			
Singerman	818,621			
Starwood	37,052			
UBS	236,553	14,298	—	250,851
ValStone	235,402	110,437	—	345,838
Westbrook	65,449	22,152	—	87,601
<b>Total Real Estate</b>	<b>\$27,776,004</b>	<b>\$7,446,177</b>	<b>\$3,743,379</b>	<b>\$38,965,559</b>

N/A - Not Subject to Carried Interest.

Managers fees, performance fees, and managers operating expenses provided by SERS' Office of Financial Management. Carried Interest details provided by StepStone.

Numbers may not add due to rounding.

<sup>1/</sup> Manager fees may include accrual (estimate) true-ups.

<sup>2/</sup> Includes normal operating expenses associated with running the partnership or portfolio. These include legal expenses, office expenses, audit fees, accounting fees, custodial fees, and third-party vendor fees.

<sup>3/</sup> The Heitman manager fees include a performance fee accrual of \$ [REDACTED] in the Heitman I.M.A. account for 2021.

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## SERS' Private Credit Fees and Expenses by Manager

2021

Manager Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
Apollo	\$1,181,246			
Ares	1,000,466			
Audax	1,263,909			
Blackstone <sup>3/</sup>	8,408,822	—	—	8,408,822
Brightwood	—			
Clearlake	458,476			
Glendon	2,377,258			
HPS	745,131			
ICG	1,149,954			
Permira	929,925			
Sixth Street	2,416,248			
<b>Total Private Credit</b>	<b>\$19,931,435</b>	<b>\$6,521,007</b>	<b>\$6,133,565</b>	<b>\$32,586,006</b>

Managers fees, performance fees, and managers operating expenses provided by SERS' Office of Financial Management. Carried Interest details provided by StepStone.

Numbers may not add due to rounding.

<sup>1/</sup> Manager fees may include accrual (estimate) true-ups.

<sup>2/</sup> Includes normal operating expenses associated with running the partnership or portfolio. These include legal expenses, office expenses, audit fees, accounting fees, custodial fees, and third-party vendor fees.

<sup>3/</sup> On October 1, 2021, the Blackstone Keystone portfolio was moved from the Private Credit asset class to the Fixed Income asset class. The Blackstone Keystone manager fees and performance fees for January through September 2021 are included in the Private Credit asset class, while the manager fees and performance fees for October through December 2021 are included in the Fixed Income asset class. The Blackstone Keystone manager fees include \$ [REDACTED] for their 2021 performance fees (\$ [REDACTED] in Private Credit and \$ [REDACTED] in Fixed Income).

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## SERS' Private Equity Fees and Expenses by Manager

2021

Manager Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
ABRY	\$122,781			
ADV	299,509	106,221	—	405,729
Advent	1,306,670	145,446	8,270,333	9,722,450
Altaris	1,816			
Apollo	897,122			
Ardian	1,550,939			
Ares	447,391			
Asia Alternatives	411,761	1,454,453	493,558	2,359,772
Audax	(30,017)			
Avenue	—			
Battery Ventures	—			
Berkshire	206,898			
Blackstone	1,563,697			
Capvis	603,090	36,474	—	639,564
Carlyle	21,434			
Centerbridge	(26,856)	24,287	1,667,567	1,664,998
Clearlake	(403,766)			
CVC	1,641,254			
Eureka	168,647	48,054	4,207,299	4,424,001
Francisco Partners	296,686			
FSN Capital	1,372,344			
Great Hill	—			
GTCR	552,836			
H.I.G.	2,617,498			
Hahn & Company	2,193,031			
HarbourVest	1,588,372			
Hellman & Friedman	1,170,900			
Incline	(128,507)	10,027	949,138	830,658
Insight Venture Partners	4,173,211			
JMI	374,543			
Kelso	—	71,955	5,237,439	5,309,394
Keystone	2,367,327	5,318,107	32,309,827	39,995,261
KPS	60,822			
LBC	147,915			
Lexington	(6,751)			
Lightspeed	540,184			
LLR	2,313,505			
Madison Dearborn	—	28,355	4,381,326	4,409,681
Meritech	408,809			
New Enterprise	—	—	2,016,370	2,016,370

Data in this publication is unaudited.

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## SERS' Private Equity Fees and Expenses by Manager

2021

Manager Name	Managers Fees <sup>1/</sup>	Managers Operating Expenses <sup>2/</sup>	Managers Share of Profits (Carried Interest)	Total
NewSpring	\$117,390			
Neuberger Berman	277,303			
NGP	1,026,475			
Oaktree	531,903			
Permira	1,788,137			
Platinum	—	—	867,877	867,877
Primavera	2,208,529			
Providence	—			
PSG	5,432,665			
Ridgemont	423,211			
RRJ	287,356			
Sentinel	(16,824)			
Silver Lake	335,114	56,219	2,476,468	2,867,801
Sterling	53,214	111,316	1,721,933	1,886,463
T.Rowe Price	736,318	—	N/A	736,318
TA	—			
TCV	1,493,750			
TDR	1,673,548	—	—	1,673,548
Thoma Bravo	196,956			
TPG	52			
TSG	1,604,503			
Vista Equity	3,138,492			
Weathergage	231,612	158,515	2,449,760	2,839,887
Wind Point	1,289,555			
<b>Total Private Equity Fees and Expenses</b>	<b>\$51,654,353</b>	<b>\$18,311,209</b>	<b>\$164,315,392</b>	<b>\$234,280,953</b>

N/A - Not Subject to Carried Interest.

Managers fees, performance fees, and managers operating expenses provided by SERS' Office of Financial Management. Carried Interest details provided by StepStone except for the Keystone Legacy Fund which was provided by Fairview Capital.

Numbers may not add due to rounding.

<sup>1/</sup> Manager fees may include accrual (estimate) true-ups.

<sup>2/</sup> Includes normal operating expenses associated with running the partnership or portfolio. These include legal expenses, office expenses, audit fees, accounting fees, custodial fees, and third-party vendor fees.

**REVISED****SERS' Public Markets Fees and Expenses by Manager****2021**

<b>Manager Name</b>	<b>Managers Fees<sup>1/</sup></b>	<b>Managers Operating Expenses<sup>2/</sup></b>	<b>Total</b>
BlackRock	\$436,212	\$502,592	\$938,804
Blackstone <sup>3/</sup>	2,794,605	—	2,794,605
BMO	296,500	—	296,500
Brandywine	346,742	—	346,742
Brown Brothers	445,617	—	445,617
Eaton Vance	315,077	124,481	439,559
Emerald	3,444,684	—	3,444,684
Entrust	21,069	—	21,069
Fidelity	1,852,429	—	1,852,429
GlobeFlex	855,435	—	855,435
Harris	1,234,880	—	1,234,880
Leading Edge	2,274,361	—	2,274,361
Macquarie	2,535,020	225,339	2,760,359
Martin Currie	2,606,822	—	2,606,822
Mellon Investments Corporation	1,633,565	65,437	1,699,002
New Century	305,326	—	305,326
NISA	602,301	—	602,301
PAAMCO	6,537	—	6,537
PIMCO <sup>4/</sup>	1,918,022	—	1,918,022
Pine River	313	—	313
SEI	1,074,536	—	1,074,536
Stone Harbor	620,627	—	620,627
Walter Scott	2,998,592	—	2,998,592
Xponance	1,754,764	310,505	2,065,269
<b>Total Public Markets</b>	<b>\$30,374,036</b>	<b>\$1,228,354</b>	<b>\$31,602,390</b>

Managers fees, performance fees, and managers operating expenses provided by SERS' Office of Financial Management.

Numbers may not add due to rounding.

<sup>1/</sup> Manager fees may include accrual (estimate) true-ups.

<sup>2/</sup> Includes normal operating expenses associated with running the partnership or portfolio. These include legal expenses, office expenses, audit fees, accounting fees, custodial fees, and third-party vendor fees.

<sup>3/</sup> On October 1, 2021, the Blackstone Keystone portfolio was moved from the Private Credit asset class to the Fixed Income asset class. The Blackstone Keystone manager fees and performance fees for January through September 2021 are included in the Private Credit asset class, while the manager fees and performance fees for October through December 2021 are included in the Fixed Income asset class. The Blackstone Keystone manager fees include \$ [REDACTED] for their 2021 performance fees (\$ [REDACTED] in Private Credit and \$ [REDACTED] in Fixed Income).

<sup>4/</sup> The PIMCO manager fees include a performance fee accrual of \$ [REDACTED] in the PIMCO Core account for 2021.