



Summary Annual Report

for the State Police Retirement System, a pension and other post-employment benefits trust fund of the state of Michigan fiscal year ended Sept. 30, 2021

A message from the director



Director Anthony Estell

The Department of Technology, Management and Budget (DTMB), Office of Retirement Services (ORS) is pleased to present the Summary Annual Report for the State Police Retirement System (SPRS). henceforth referred to as the System, for the fiscal year (FY) ended Sept. 30, 2021.

ORS provides retirement and related retiree healthcare plans to help attract, retain, and reward a highly qualified workforce.

ORS is able to cost-effectively provide these benefits to retirees. In 2021, the total Defined Benefit (DB) pension administration cost was \$70 per active member and retiree. This was \$35 below the peer average of \$105 per active member and retiree (CEM Benchmarking).

Accomplishments

Pension statements go paperless

In October, pension statements for members of the public school, state employee, and state police retirement systems with active online accounts went paperless. Nearly 185,000 customers, almost half of the retiree population served by ORS, shifted to digital statements. The statements are still available in the retiree's miAccount. Retirees can choose to opt back in to paper statements if desired. After five statement cycles we have saved over \$560,000 in printing and mailing costs.

State police presentations recorded

The state police pre-retirement orientation for DB plan members within five years of retirement and the state police New Employee Orientation for Pension Plus participants have been recorded for use on demand. These recorded presentations allow for consistent, repeatable delivery of complex retirement plan information with the added benefit of 24/7 access. Viewers can now pause and re-watch any segment as they please, adapting the learning experience to meet their specific needs. This supports our goal to provide our members and participants with what they need when they need it to achieve a secure retirement.

Newsletters shift to quarterly publication

Average admin. cost

Beginning in March, both the Connections and Proactive newsletters — for our retired and active customers, respectively — changed from biannual to quarterly publications. The printed Connections newsletter also went entirely digital (the *Proactive* newsletter was already digital). We doubled our efforts to deliver more timely and relevant information in a predictable format, maintaining a digital presence through the pandemic and beyond. Historically the printed Connections newsletter required a lengthy publication cycle, which was a limiting factor in the production process. We also will save over \$30,000 a year in printing costs by moving Connections to digital delivery.

Infographics share remote work successes

As we adapted to remote work, ORS staff found new ways to engage customers and keep our work visible. Over the course of a year, leaders of each process reported notable work that was completed in their area each month. These reports were then converted into infographics representing the accomplishments of the business processes and shared regularly on our Facebook page. These posts were consistently among the top five in engagement for every month of the campaign.

Accomplishments, continued

Leadership fosters open communication with town halls, blogs, videos

Over the past year, we have normalized more frequent communications from our leadership team to staff. In addition to the biweekly blogs produced by ORS Director Anthony Estell, the ORS division directors and senior executive assistant began producing biweekly videos for staff. The result is a weekly cadence of leadership communication. Additionally, we have continued quarterly town hall events that are heavily dedicated to recognition, and include significant updates from leadership, along with leadership fielding questions from staff. These have all proved beneficial in maintaining an executive presence and being open and transparent with timely communications.

ORS exploring different approach to IT

In fall 2021, we began exploring the Agile methodology to develop technical solutions for the business with our partners in the DTMB Agency Services Supporting Retirement team. Historically, ORS has used a Waterfall approach to IT projects which involves fully developing a product before delivery. Value is gained upon project completion, not during development and testing. This pivot in practice processed in mid-July for all retirement adopts an iterative approach, reducing the

cycle from development to market. The time savings comes from first delivering simple, viable products and adding features and complexity in subsequent releases. ORS has already completed one release using this methodology. The new approach also introduced ORS to Azure DevOps software for planning and organizing the related business activities.

Regular one-on-one meetings sustain relationships, performance

One-on-one meetings between leaders and their direct reports have been a standard practice for several years at ORS. But with the disruption and isolation of remote work, these no-less-than-biweekly meetings have proved vital to build and maintain positive relationships, foster effective communication, and support performance management. Every leader is expected to establish oneon-one meetings with each of their direct reports and to adhere to specific outcomes.

ORS reaches new pension payment milestone

In July, for the first time in ORS' history, we issued over 300,000 pension payments in a single month. The new milestone was confirmed after the monthly pension payroll systems administered by ORS.

Honors

Government Finance Officers Association Award

The Government Finance Officers Association of the United States and Canada awarded the System with the Certificate of Achievement for Excellence in Financial Reporting for our FY 2020 annual comprehensive financial report (ACFR). This marks the 30th consecutive year ORS has received this prestigious award.

Public Pension Standards Award

ORS was awarded the 2021 Standards Award from the Public Pension Coordinating Council's Standards Program (PPCC) for both funding and administration. ORS has received this award every year since 2004. The PPCC Standards reflect expectations for public retirement system management and administration and serve as a benchmark for all DB public plans to be measured.

Summary Annual Report 2021 State Police Retirement System

About the State Police Retirement System

This report is issued in compliance with the Public Employee Retirement System Investment Act, 1965 Public Act (PA) 314, as amended. The contents come from the complete SPRS 2021 ACFR, available on our website at **Michigan.gov/ORSMSP**, the annual actuarial valuations as of Sept. 30, 2021, and additional analysis performed after Sept. 30, 2021.

State police pensions are protected by Michigan's Constitution. The System's net assets are held in trust to meet future benefit payments.

The State of Michigan Investment Board is the investment fiduciary and custodian of all investments of the System pursuant to state law.

Executive summary

The present value of the assets as of Sept. 30, 2021, was \$2.1 billion for pension and other post-employment benefits (OPEB), and the total actuarial accrued liability (AAL) was \$3.4 billion resulting in a total unfunded actuarial accrued liability (UAAL) of \$1.3 billion.

The System's assets increased by \$427.2 million in FY 2021. Asset increases were primarily due to positive investment experience. The AAL for pension and OPEB increased by \$285.5 million primarily due to revisions in actuarial assumptions. Under the dedicated gains policy, excess investment earnings were used to reduce the pension assumed rate of return (AROR) to 6.15% from 6.80% for the legacy DB and from 6.85% to 6.15% for the Pension Plus plan. For the OPEB plan the AROR was reduced from 6.90% to 6.25%.

Statement of assets and liabilities			
FY 2021	Pension ¹	OPEB ²	
AAL	\$2,609,251,714	\$780,148,507	
Present value of assets	\$1,752,172,229	\$371,900,833	
UAAL	\$857,079,485	\$408,247,674	
Funding ratio	67.2%	47.7%	
FY 2020	Pension ³	OPEB ⁴	
AAL	\$2,374,413,132	\$729,463,420	
Present value of assets	\$1,545,271,705	\$280,968,719	
UAAL	\$829,141,427	\$448,494,701	
Funding ratio	65.1%	38.5%	
2021 SPRS Pension Actuarial Valuat	ion, Page B-1.		

- 2021 SPRS OPEB Actuarial Valuation, Page A-2.
 2020 SPRS Pension Actuarial Valuation, Page B-1.
 2020 SPRS OPEB Actuarial Valuation, Page A-2.
- The pension funding ratio increased by 2.1 percentage points for the pension plan and by 9.2 percentage points for the OPEB plan even with investment returns being utilized for dedicated gains. Increases in funding ratios for both plans benefitted from positive investment returns and better than expected actuarial experience.

Membership

Members of the DB plan are enlisted Michigan State Police officers. Membership in the plan is automatic when officers complete recruit school and subscribe to the constitutional oath of office.

Members also include troopers participating in the Deferred Retirement Option Plan (DROP) and receiving employee wages.

Employees who work for the Michigan State Police, but are not enlisted officers, are not members of this plan.

Plan membership and retirement allowances as of Sept. 30, 2021	S
Membership ¹	
Retirees and beneficiaries currently receiving benefits	
Regular benefits	2,587
Survivor benefits	530
Disability benefits	207
Total	3,324
Current employees	
Vested	579
Non-vested	1,177
Total	1,756
Inactive employees	
Entitled to benefits and not yet receiving them	18
DROP participants	257
Total all members	5,355
1. Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page D-1.	
Retirement allowances ²	
Average annual retirement allowance	\$42,870
Total annual retirement allowances being paid	\$142,501,007
2. Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page D-2.	

Assets and liabilities

The System's total assets on a market basis as of Sept. 30, 2021, were \$2.3 billion, mostly composed of investments.

Total liabilities as of Sept. 30, 2021, were \$74.9 million and included accounts payable, obligations under securities lending, and other accrued long-term liabilities.

Total net assets held in trust for pension and OPEB increased by \$427.6 million from the previous year.

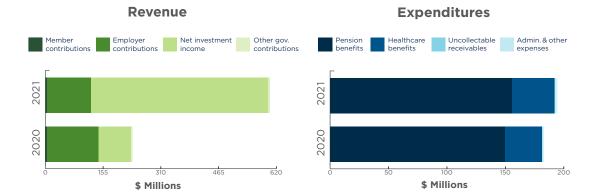
Assets and liabilities (dollar (combined pension and OPEB)	thousan	ds)	
Assets	FY 2020		FY 2021
Cash	\$ 18,048	\$	15,285
Receivables	12,510		24,583
Investments	1,759,343		2,178,643
Securities lending collateral	73,198		71,792
Total assets	\$ 1,863,099	\$	2,290,302
Liabilities	FY 2020		FY 2021
Accounts payable and other liabilities	2,083		3,089
Obligations under securities lending	73,198		71,792
Obligations under securities lending Other accrued liabilities long term	73,198 29		71,792 5
Other accrued liabilities long term	\$ 29	\$	5

Revenue and expenditures, change in net assets

The reserves needed to finance pension and OPEB are accumulated through the collection of employer and employee contributions including earnings on investments.

Contributions and net investment income for FY 2021 totaled \$602.4 million. The primary expenses of the System include the payment of pension benefits to members and beneficiaries, payment for health, dental, and vision benefits, uncollectable receivables, and the cost of administering the System.

Additions	FY 2020	FY 2021
Member contributions	\$ 4,100	\$ 3,850
Employer contributions	137,467	117,944
Other governmental contributions	4,577	4,663
Net investment income (loss)	87,725	475,724
Miscellaneous income	446	204
Total additions	\$ 234,314	\$ 602,385
Deductions	FY 2020	FY 2021
Pension benefits	\$ 149,407	\$ 155,315
Healthcare benefits	32,046	36,701
Refunds and transfers to other systems	11	113
Uncollectable receivables	-	745
Administrative and other expenses	1,588	1,478
Total deductions	\$ 183,052	\$ 194,352
Net position	FY 2020	FY 2021
Net increase (decrease) in net position	\$ 51,263	\$ 408,033
Beginning of year	1,736,527	1,807,383
End of year	\$ 1,787,789	\$ 2,215,417



2021 plan expenditures

Pension plan administrative and other expenses		Dollars
These expenditures are the administrative costs of running the System and are paid by DTMB, ORS and DTMB, Financial Servannual appropriation.	vices through an	
Personnel services		
Staff salaries	\$	219,374
Retirement and Social Security		122,995
Other fringe benefits		43,682
Subtotal	\$	386,052
Professional services		
Accounting	\$	24,769
Actuarial		84,030
Attorney general		57,899
Audit		78,600
Consulting		-
Medical		7,968
Subtotal	\$	253,265
Building and equipment		
Building rentals	\$	11,940
Equipment purchase, maintenance, and rentals		649
Subtotal	\$	12,589
Miscellaneous		
Travel and board meetings (excluding travel and education for board members)	\$	4
Office supplies		182
Postage, telephone, and other		21,243
Printing		1,967
Technological support		136,572
Subtotal		159,969
Travel and education for board members		-
Total administrative and other expenses	\$	811,875

2021 plan expenditures, continued

Health, dental, and vision expenses		Dollars
These expenditures are for self-insurance of the health, dental, and vision plans and are paid from the System's trust fund.		
Health fees	\$	560,374
Dental fees		101,518
Vision fees		3,858
Total health, dental, and vision expenses	\$	665,750
Investment expenses		Dollars
These expenditures are related to the Treasury, Bureau of Investments (BOI) for managing the System's assets and are paid	from the	System's trust fund.
Real estate operating expenses	\$	-
Securities lending expenses		90,322
Other investment expenses		
ORS-investment expenses		389,778
Custody fees		40,749
Management fees		8,211,153
Research fees		239,649
Total investment expenses	\$	8,971,651
Benefits paid to members		Dollars
These were the retirement benefits paid to members of the System during the FY.		
Retirement benefits	\$	155,315,322
Health benefits		34,164,770
Dental and vision benefits		2,536,467
Refunds of member contributions		113,255
Total payments to members	\$	192,129,813
Total of all sections	\$	202,579,089
DTMB, Financial Services report. The sum total of all the line items may not equal the total due to rounding. Treasury, BOI report.		

2022 budget for plan expenditures

Pension plan administrative and other expenses		Dollars
These expenditures are the administrative costs of running the System and are paid by DTMB, ORS and DTMB, Financial Seannual appropriation.	ervices through an	
Personnel services		
Staff salaries	\$	238,377
Retirement and Social Security		123,762
Other fringe benefits		45,301
Subtotal	\$	407,441
Professional services		
Accounting	\$	25,512
Actuarial		99,320
Attorney general		52,109
Audit		73,336
Consulting		1,000
Medical		-
Subtotal	\$	251,277
Building and equipment		
Building rentals	\$	1,340
Equipment purchase, maintenance, and rentals		38
Subtotal	\$	1,378
Miscellaneous		
Travel and board meetings (excluding travel and education for board members)	\$	6
Office supplies		23
Postage, telephone, and other		4,908
Printing		192
Technological support		17,969
Subtotal		23,098
Travel and education for board members		_
naver and education for board members		

2022 budget, continued

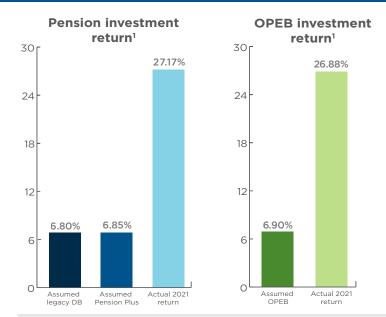
Health, dental, and vision expenses		Dollars
These expenditures are for self-insurance of the health, dental, and vision plans and are paid from the System's trust func	d.	
Health fees	\$	420,280
Dental fees		114,715
Vision fees		3,897
Total health, dental, and vision expenses	\$	538,892
Investment expenses		Dollars
These expenditures are related to the Treasury, BOI for managing the System's assets and are paid from the System's true	st fund.	
Real estate operating expenses	\$	-
Securities lending expenses		89,418
Other investment expenses		
ORS-investment expenses		362,494
Custody fees		44,416
Management fees		8,457,488
Research fees		378,645
Total investment expenses	\$	9,332,461
Benefits paid to members		Dollars
These are the projected retirement benefits paid to members of the System.		
Retirement benefits	\$	161,527,934
Health benefits		40,314,429
Dental and vision benefits		2,942,301
Refunds of member contributions		114,387
Total payments to members	\$	204,899,052
Total of all sections	\$	215,453,598
 DTMB, Financial Services report. The sum total of all the line items may not equal the total due to rounding. Treasury, BOI report. 		

Assumed and actual investment returns

The Michigan Department of Treasury, BOI administers all the System's investments in accordance with the Public Employee Retirement System Investment Act, PA 314 of 1965. The main objective is maximizing the rate of return while meeting the actuarial assumptions through maintaining a diverse portfolio, eliminating unnecessary risks, and investing prudently.

The AROR is a key assumption used by the plan actuary in determining the employer contribution rates each year. As a result of the dedicated gains policy, the AROR for the legacy DB plan was reduced from 6.80% to 6.15%, and from 6.85% to 6.15% for the Pension Plus plan.

The actual rate of investment return for the plans in FY 2021 was 27.17%. The AROR for OPEB was also reduced using the dedicated gains policy

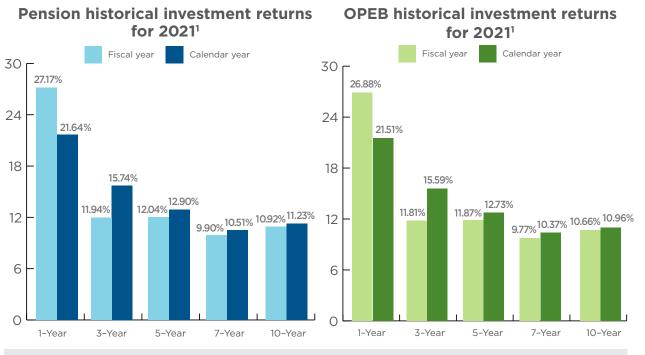


1. Treasury, BOI report. These figures are shown net of fees. Information shown in the ACFR is shown gross of fees.

from 6.90%. to 6.25% The actual rate of investment return for OPEB was 26.88%. All changes to the AROR are reflected in the Sept. 30, 2021, actuarial valuations, but for comparison with current year investment results, the prior-year assumptions are presented in the chart.

Historical investment returns

Historical investment returns for both pension and OPEB are presented in the following charts.



1. Treasury, BOI report. These figures are shown net of fees. Information shown in the ACFR is shown gross of fees.

Investments and earnings

A key function of the investment fiduciary is to ensure the System's investment portfolio is diversified. Having a diverse portfolio helps to maximize investment income responsibly while minimizing risk. Even though market performance may fluctuate, the long-term performance of the System's portfolio is stable.

Investments and earnings ¹		
	Market value	nvestment and nterest income
Fixed income pools	\$ 221,360,385	\$ 7,888,074
Domestic equity pools	503,558,623	127,154,383
Real estate and infrastructure pools	153,828,762	19,143,900
Private equity pools	510,733,262	189,930,737
International equity pools	356,192,579	74,021,143
Absolute return pools	117,233,151	13,321,708
Real return and opportunistic pools	265,910,963	52,730,222
Short-term investment pools	64,710,594	166,136
Market value and net investment gain	\$ 2,193,528,319	\$ 484,356,303



Fixed income pools - 10.1%

Domestic equity pools - 23.0%

Real estate and infrastructure pools - 7.0%

Private equity pools - 23.3%

International equity pools - 16.2%

Absolute return pools - 5.3%

Real return and opportunistic pools - 12.1%

Short-term investment pools - 3.0%

Market and actuarial funding ratios

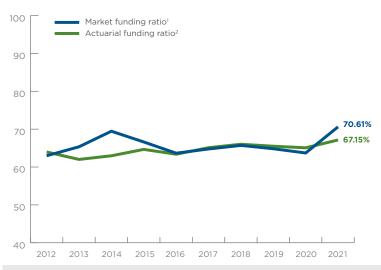
Pension

The market funding ratio is based on the market value of assets at FY end. The actuarial funding ratio is the best practice used by all pension plans nationwide. It incorporates a five-year smoothing period, which minimizes volatility in a pension system's funding requirements.

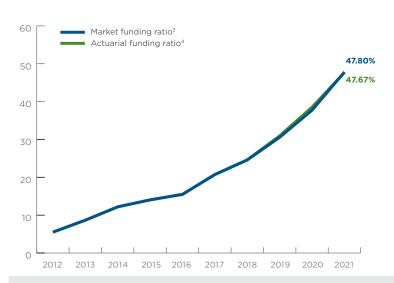
OPEB

Starting in FY 2013, the System began pre-funding OPEB costs. Pre-funding is a best practice that invests assets and allows investment returns to help fund the plan. Many states do not pre-fund OPEB costs. This reform put Michigan on the leading edge of OPEB funding practices.

Prior to FY 2018, the market funding ratio was equal to the actuarial funding ratio. Five-year smoothing was adopted for the OPEB plan with the 2018 valuation so separate actuarial and market funding ratios will be calculated. The market value of assets as of Sept. 30, 2021, was \$373 million, while the actuarial value of assets was \$372 million.



Calculated on market value of assets.
 Pension Actuarial Valuation for the FY ended Sept. 30, 2021, pages B-5 and C-8.



3. Calculated on market value of assets.

OPEB Actuarial Valuation for the FY ended Sept. 30, 2021, pages A-2 and D-2.

^{1.} ACFR for the FY ended Sept. 30, 2021, Page 74.

Member and employer contributions

Employer contributions

Statute requires the employer to contribute to finance the benefits of plan members. These employer contributions are determined annually by the System's actuary and are based upon level percent of payroll funding principles so the contribution rates remain stable.

Definition of normal cost

Normal cost is the cost of the retirement benefit a member earns each year and is set using the AROR in addition to other actuarial assumptions. After member contributions are accounted for, the employer pays the remainder of the normal cost as shown below.

Member and employer pension contributions ¹		
Member contributions		
Weighted average		
Legacy DB	1.54%	
Pension Plus	4.00%	
Employer contributions		
Normal cost of benefits expressed as a percentage of value	ation payroll	
Legacy DB	26.68%	
Pension Plus	12.42%	
UAAL contribution rate expressed as a percentage of value	ation payroll	
Legacy DB	54.50%	
Pension Plus	54.50%	
Valuation payroll	\$145,283,709	
Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page This is the DB component of Pension Plus. There is an additional 1% for the DC component.		

Actuarial assumptions

Actuarial valuations for both the pension and OPEB plans involve estimates of the value of reported amounts and assumptions about the probability of the occurrence of events far into the future. Examples include assumptions about future employment, investment performance, and the healthcare cost trend.

Pension and OPEB	
Actuarial cost method	Entry age, normal
Amortization method	Level percent of payroll
Payroll growth assumption ²	1.25% reduced to 0% by Sept. 30, 2024
Amortization period ³	Closed period, ending Sept. 30, 2038
Asset valuation method	5-year smoothed
Wage inflation rate	2.75%
OPEB	
Healthcare cost trend rate	
Pre-65	7.50% year 1 graded to 3.50% year 15, 3.00% year 120
Post-65	6.25% year 1 graded to 3.50% year 15, 3.00% year 120
Dental and vision premiums	3.50% each year, 3.00% year 120
AROR—closed plan ⁴	6.25%
Pension—AROR	
Legacy DB—closed plan	6.15%
Pension Plus—open plan	6.15%
increments beginning with the Sept. 30, 2019, vain, the amortization method for both pension an 3. PA 674 of 2018 extended the amortization period 4. The OPEB plan closed to new troopers and sergiparticipate in the Personal Healthcare Fund and health reimbursement account upon their first te	ction to the payroll growth assumption to 0% in 50 basis point duations. Once the 0% payroll growth assumption is fully phased- d OPEB will be level-dollar.

Investment service providers

A service provider is any individual, third-party agent or consultant, or other entity that receives direct or indirect compensation for consulting, investment management, brokerage, or custody services related to the System's assets.

Advent International Corp. AEW Capital Management LP Affinity Equity Partners Ancora Advisors LLC Angelo Gordon Aon Hewitt

Apax Partners Worldwide LLP Apollo Global Management Inc. Apollo Private Equity

ArcLight Capital Partners LLC

Ardian

Ark Investment Management LLC Asana Partners

Attucks Asset Management LLC Avanath Capital Management LLC

Axiom Asia Private Capital

Bank of Montreal Barclays Capital

Barings Alternative Investments

Barron's

Basalt Infrastructure Partners LLP

BB&T Capital Markets BC Partners BCA Research

BentallGreenOak Beringea

Berkshire Partners LLC

BGC Partners

Bivium Capital Partners LLC

BLA Schwartz BlackRock

Blackstone Alternative Asset

Management LP Blackstone Group Blackstone Private Equity

Bloomberg

Bloomberg AIM - Order Management System

BNP Paribas BNP Paribas Finance BNY Convergex G. Bridgepoint Capital

BroadRiver Asset Management LP

Brookfield Asset Management Inc. BTIG Brokers

Burgiss; Private I Platform; Private

Informant

Cantor Fitzgerald

Capital Institutional Services Inc. Capri Capital Partners LLC

The Carlyle Group LP Centerbridge Partners

Cerberus Manitou Residential Loan

Charlesbank Capital Partners CIM Investment Advisors

Citigroup

Citigroup Global Markets Inc.

Clarion Partners

Clarkston Capital Partners LLC

Coller Capital

Columbia Management Investment

Advisors

Cornerstone Macro LP

CoStar Realty Information Inc.

Cowen & Co. LLC **Credit Suisse Securities**

CreditSights **CUSIP Global Services Cutter Associates**

CVC Capital Partners Czech Asset Management LP D.A. Davidson Companies

DAIWA

Dalmore Capital Limited

Deutsche Bank

Domain Capital Advisors LLC Domain Capital Group LLC Dow Jones & Company Inc.

Drexel Hamilton

Effissimo Capital Management

eFront (Via Domain) eFront/FrontInvest **Empirical Research Partners**

EnCap Investments LP EnTrust White Pine Partners LP Ernst & Young (Foreign Investing Tax

Consulting)

FactSet Data Systems Fidelity Institutional Asset

Management

FIMI Opportunity Funds

Financial Times

Fortress Investment Group LLC Fox Paine & Company LLC Freeman Spogli & Co.

FRT/Financial Recovery Technologies

LLC

FTN Financial

FTSE International Ltd. (Data)

Gaw Capital

Genstart Capital LLC Glass Lewis & Co. LLC Glen Eagle Wealth LLC Goldman Sachs Group Inc.

Great Mountain Partners

Green Street

Grosvenor Capital Management

HarbourVest Partners LLC Harvest Partners LLC

Heitman Capital Management LLC

Hellman & Friedman Hilltop Securities Inc.

Hokenson Global Demographics Hopen Life Sciences Ventures HPS Investment Partners III LLC Huron Capital Partners LLC InSight Venture Partners

Invesco Ltd.

Investor Education Speakers Bureau,

Inc./Gregory Valliere Investors Diversified Realty

Irradiant Partners

Institutional Shareholder Services Inc.

J.P. Morgan Jefferies JM IV LP

Journal of Portfolio Management

Investment service providers, continued

JP Morgan

JP Morgan Securities LLC

Kavne Anderson Capital Advisors LP

KBS Realty Advisors Kelso & Company

Kensington Realty Advisors

KKR & Co.

Kohlberg, Kravis, Roberts & Co. L&B Realty Advisors LLP

LA Capital Management Landmark Realty Advisors

LaSalle Investment Management Lazard Asset Management

Leuthold Group LLC LGT Capital Partners Lombard International Life

Assurance Company

Lonestar

Loomis Sayles & Company

Lubert-Adler Management Company

Managed Asset Portfolios Marathon Asset Management MarketAxess Corporation

Martin Currie Inc.

Mellon Capital Management Merill Lynch (Bank of America) Merill Lynch Pierce Fenner & Smith LLC

Merit Energy Company Mesirow Financial Inc.

Metropolitan West Asset Management

MFR Securities

Mischler Financial Group MKM Holdings LLC MKM Partners

Money Media Inc./FundFire Monument Park Fund LP

Moody's Analytics - CreditView ABS and ABCP

MP Securitized Credit Fund LP

MSCI BarraOne MUEG

Morgan Stanley

Multi-Bank Securities Inc. Napier Park Global Capital **New York Times**

Nordic Capital

NGP Energy Capital

Odyssey Investment Partners Omego TradeSuite/DTCC Orion Resource Partners

Paladin Realty Partners LLC Parallel Resource Partners

Parthenon Capital Inc.

Permira PGIM Inc. PIMCO

PIMCO Mortgage Fund

Piper Jaffray Pitchbook

PPC Enterprises LLC

Pregin PricingDirect

Principal Financial Group Principal Real Estate Advisors

Pritzker Private Capital Proprium Capital Partners LP

Prudential Investment Management

Putnam Advisory Company Q2 - Investment Accounting and

Portfolio Management System QED/Broadridge Financial Solutions

Raymond James & Associates Inc. RBC Capital Markets LLC

Renaissance Venture Capital Rhone Capital Rialto Capital

Ridgewood Capital Management LLC

Ridgewood Energy

Riverside

Robert W. Baird & Co. Inc. The Rohatyn Group Rosenberg Research R.W. Pressprich & Co. Scotia Capital Inc. Seizert Capital Partners

Shamrock Capital Advisors LLC Silver Lake

Sixth Street Partners

III LP Soc Gen Sprott Resource State Street Bank

State Street Global Advisors

SJC Direct Lending Revolver Fund

Stifel Nicolaus & Co. Inc.

Stockbridge Capital Group Stonepeak Advisors LLC Strategas Securities LLC

SunTrust Robinson Humphrey Susquehanna International Group LLP

T. Rowe Price

Tahquamenon Fund LP The Carlyle Group The John Buck Company The Riverside Company

Thomas Bravo

TICP SMA Management TIS Group/The Institutional Strategist

TPG Capital TPG Global LLC

TPG Real Estate Advisors Transwestern Investment Group Trilantic Capital Management LLC

Trophy Property

True North Management Group

TSG Consumer Partners Turnbridge Capital Management LLC

Turning Rock Partners

U.S. Bancorp Investments Inc.

Value Line

Veritas Capital Fund Management LLC

Vida Capital Inc. Visium Balanced Fund LP Vista Equity Partners Warburg Pincus LLC

Warwick Energy Group Wayne Co.

Wellington Trust Company Wells Fargo Securities LLC

Westlaw Wilshire Atlas Wilshire Compass

Summary Annual Report 2021 19 State Police Retirement System



Michigan Office of Retirement Services

Department of Technology, Management and Budget Anthony Estell, director

Our purpose

ORS is an innovative retirement organization driven to empower our customers for a successful today and a secure tomorrow.

Mailing address: PO Box 30171, Lansing, MI 48909-7671 Phone: 800-381-5111 Fax: 517-284-4416

Michigan.gov/ORSMSP

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