

Summary Annual Report

for the Michigan Military Retirement Provisions, a pension trust fund of the state of Michigan fiscal year ended Sept. 30, 2021

Prepared by Michigan Department of Technology, Management and Budget, Office of Retirement Services

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 Michigan Military Retirement Provisions (MMRP), henceforth referred to as the Provisions, for the fiscal year (FY) ended Sept. 30, 2021.

ORS assumed administration of the Provisions in 2015, and we are proud to provide this benefit to those who have served our state. Beginning in 2016, the state began pre-funding this benefit, as opposed to being pay as you go. This aligns with retirement industry best practices and these efforts will help ensure the security of this benefit for current and future generations of Michigan National Guard retirees.

Accomplishments

Newsletters shift to quarterly publication

Beginning in March, both the Connections and Proactive newsletters - for our retired and active customers, respectively - changed from biannual to guarterly 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.

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 adopts an iterative approach, reducing the cycle from development to market.

Accomplishments, continued

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,

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. 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 processed in mid-July for all retirement systems administered by ORS.

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 defined benefit public plans to be measured.

About the Michigan Military Retirement Provisions

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 MMRP 2021 ACFR, available on our website at **Michigan.gov/ORSMilitary**, the annual actuarial valuations as of Sept. 30, 2021, and additional analysis performed after Sept. 30, 2021.

Military pensions are protected by Michigan's Constitution. The Provisions' 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 Provisions pursuant to state law.

Executive summary

Prior to FY 2016 the Provisions were funded on a pay-as-you-go basis and the present value of assets reported in the valuation was \$0. Beginning with FY 2016 the Provisions are being funded on a pre-funding basis, which capitalizes on investment earnings on employer contributions to help fund the plan. Supplemental employer contributions made in FY 2018 and FY 2019 significantly increased the actuarial value of assets and improved the funded ratio.

The present value of assets as of Sept. 30, 2021, was \$63.2 million and the total actuarial accrued liability (AAL) was \$63.9 million resulting in a total unfunded actuarial accrued liability (UAAL) of \$0.7 million. The Provision's assets increased by \$6.3 million in FY 2021. Asset increases were primarily due to positive investment experience. The AAL increased by \$4.7 million primarily due to changes in actuarial assumptions.

The pension funding ratio increased by 2.8 percentage points even with investment returns being used for dedicated gains.

Statement of assets and liabilities			
FY 2021	Pension ¹		
AAL	\$63,895,269		
Present value of assets	\$63,156,676		
UAAL	\$738,593		
Funding ratio	98.80%		
FY 2020	Pension ²		
AAL	\$59,220,399		
Present value of assets	\$56,824,590		
UAAL	\$2,395,809		
Funding ratio	96.00%		
 2021 MMRP Pension Actuarial Valuation, Page B-1. 2020 MMRP Pension Actuarial Valuation, Page B-1. 			

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Membership

The Provisions' membership is comprised of former members of the Michigan National Guard (Army or Air) who have served a minimum of 19 years, 6 months, and 1 day of active National Guard service in the State Defense Forces and Michigan National Guard.

Plan membership and retirement allowances	
as of Sept. 30, 2021	
Membership ¹	
Active plan members	11,809
Inactive plan members or their beneficiaries currently receiving benefits	4,567
Inactive plan members entitled to but not yet receiving benefits	889
Total all Members	17,265
1. MMRP Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page D-1.	
Retirement allowances	
Average annual retirement allowance ²	
Non-special duty members	\$584
Special duty members	\$58,910
Total annual retirement allowances being paid ³	\$4,029,488
2. MMRP Pension Actuarial Valuation for the FY ended Sept. 30. 2021. Page D-2. Specia	l dutv

members are adjutants general and assistant adjutants general of the Michigan National Guard. 3. MMRP Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page C-2.

Assets and liabilities

The Provisions' total assets on a market basis as of Sept. 30, 2021, were \$69.8 million, mostly composed of cash and investments.

Total liabilities as of Sept. 30, 2021, were \$2.2 million and included accounts payable and obligations under securities lending.

Total net assets held in trust for pension benefits increased by \$11.4 million from the previous year.

Assets and liabilities (dollars in thousands)				
Assets		FY 2020 ¹		FY 2021 ²
Cash	\$	1,548	\$	865
Receivables		1		3
Investments		54,653		66,774
Securities lending collateral		2,060		2,203
Total assets	\$	58,262	\$	69,845
Liabilities		FY 2020 ¹		FY 2021 ²
Accounts payable and other liabilities	\$	1	\$	1
Obligations under securities lending		2,060		2,203
Total liabilities		2,061		2,204
Net assets	\$	56,201	\$	67,641
 ACFR for the FY ended Sept. 30, 2020, Page 15. ACFR for the FY ended Sept. 30, 2021, Page 15. 		_		

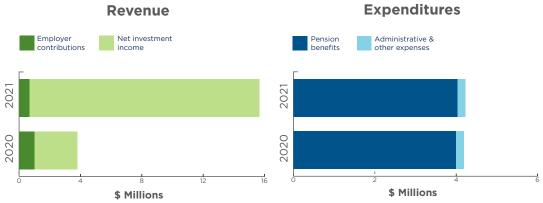
Liabilities in this context are exclusive of AAL for pension. The sum total of all the line items may not equal the total due to rounding.

Revenue and expenditures, change in net assets

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

Contributions and net investment income for FY 2021 totaled \$15.7 million. The primary expenses of the Provisions include the payment of pension benefits to members and beneficiaries and the cost of administering the Provisions.

Additions and deductions ¹ (dollars in thousands)				
Additions		FY 2020		FY 2021
Employer contributions	\$	1,000	\$	657
Net investment income (loss)		2,805		15,012
Transfers and miscellaneous income		1		-
Total additions	\$	3,806	\$	15,670
Deductions		FY 2020		FY 2021
Pension benefits	\$	3,989	\$	4,029
Administrative and other expenses		203		200
Total deductions	\$	4,192	\$	4,230
Net position		FY 2020		FY 2021
Net increase (decrease) in net position	\$	(387)	\$	11,440
Beginning of year		56,588		56,201
End of year	\$	56,201	\$	67,641
1. ACFR for the FY ended Sept. 30, 2021, Page 16.				



2021 plan expenditures

ension plan administrative and other expenses ese expenditures are the administrative costs of running the Provisions and are paid by DTMB, ORS and DTMB, Financial Se ersonnel services ersonnel services Staff salaries Retirement and Social Security Other fringe benefits Subtotal rofessional services Accounting Actuarial Attorney general	rvices through an \$ \$ \$	Dollars 46,159 25,879 9,193 81,231 2,946 36,759
nual appropriation. ersonnel services Staff salaries Retirement and Social Security Other fringe benefits Subtotal rofessional services Accounting Actuarial	\$ \$	46,159 25,879 9,193 81,231 2,946
Staff salaries Retirement and Social Security Other fringe benefits Subtotal rofessional services Accounting Actuarial	\$	25,879 9,193 81,231 2,946
Retirement and Social Security Other fringe benefits Subtotal rofessional services Accounting Actuarial	\$	25,879 9,193 81,231 2,946
Other fringe benefits Subtotal rofessional services Accounting Actuarial	•	9,193 81,231 2,946
Subtotal rofessional services Accounting Actuarial	•	81,231 2,946
rofessional services Accounting Actuarial	•	2,946
Accounting Actuarial	\$	
Actuarial	\$	
		36,759
Attorney general		
		11,580
Audit		44,900
Consulting		-
Medical		-
Subtotal	\$	96,185
uilding and equipment		
Building rentals	\$	1,362
Equipment purchase, maintenance, and rentals		31
Subtotal	\$	1,393
iscellaneous		
Travel and board meetings (excluding travel and education for board members)	\$	-
Office supplies		22
Postage, telephone, and other		4,364
Printing		1,028
Technological support		16,204
Subtotal		21,617
Travel and education for board members		-
otal administrative and other expenses	\$	200,426

2021 plan expenditures, continued

Investment expenses
These expenditures are related to the Treasury, Bureau of Investments (BC
Real estate operating expenses
Securities lending expenses
Other investment expenses
ORS-investment expenses
Custody fees
Management fees
Research fees
Total investment expenses
Benefits paid to members
These were the retirement benefits paid to members of the Provisions dur
Retirement benefits
Refunds of member contributions
Total payments to members
Total of all sections
 DTMB, Financial Services report. The sum total of all the line items may Treasury, BOI report.

		Dollars
nts (BOI) for managing the Provisions' assets a	and are paid from the Pr	ovisions' trust fund.
	\$	-
		2,783
		12,559
		1,259
		256,771
		7,424
	\$	280,796
ons during the FY.		
	\$	4,029,430
		58
	\$	4,029,488
	\$	4,510,710
ns may not equal the total due to rounding.		

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2022 budget for plan expenditures

Budget for plan expenses for FY ending Sept. 30, 2022 ^{1,2}		
Pension plan administrative and other expenses		Dollars
These expenditures are the administrative costs of running the Provisions and are paid by DTMB, ORS and DTMB, Financial annual appropriation.	Services thro	ugh an
Personnel services		
Staff salaries	\$	50,157
Retirement and Social Security		26,040
Other fringe benefits		9,534
Subtotal	\$	85,732
Professional services		
Accounting	\$	2,975
Actuarial		38,200
Attorney general		12,391
Audit		43,363
Consulting		500
Medical		-
Subtotal	\$	97,429
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		3,018
Printing		812
Technological support		17,969
Subtotal		21,828
Travel and education for board members		-
Total administrative and other expenses	\$	206,366

2022 budget, continued

Investment expenses		Dollars
These expenditures are related to the Treasury, BOI for managing the Provisions' assets and are paid from the Provision	ns' trust fund.	
Real estate operating expenses	\$	-
Securities lending expenses		2,755
Other investment expenses		
ORS-investment expenses		12,685
Custody fees		1,322
Management fees		184,875
Research fees		11,507
Total investment expenses	\$	213,144
Benefits paid to members		Dollars
These are the projected retirement benefits paid to members of the Provisions.		
Retirement benefits	\$	4,069,724
Refunds of member contributions		59
Total payments to members	\$	4,069,783
Total of all sections	\$	4,489,293
1. DTMB, Financial Services report. The sum total of all the line items may not equal the total due to rounding.		

DTMB, Financial Services report. The sum total of all the line items n
 Treasury, BOI report.

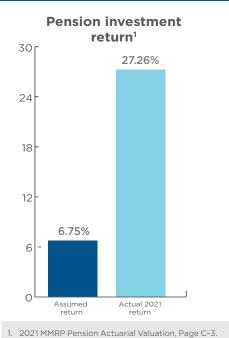
Assumed and actual investment returns

The Michigan Department of Treasury, BOI administers all the Provisions' 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 assumed rate of return (AROR) is a key assumption used by the plan actuary in determining the employer contribution each year. As a result of the dedicated gains policy, the AROR was reduced from 6.75% to 6.00%.

The actual rate of investment return for the Provisions in FY 2021 was 27.26%. Changes to the AROR are reflected in the Sept. 30, 2021, actuarial valuation, but for comparison with the current year investment results the prior-year assumptions are presented in the chart.

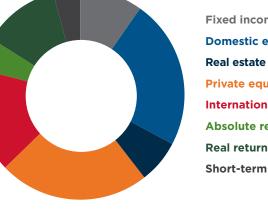
Because the Provisions began pre-funding in FY 2016, long-term investment results are not available. As the Provisions gain investment experience, these elements will be included in future reports.



Investments and earnings

A key function of the investment fiduciary is to ensure the Provisions' 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 Provisions' portfolio is stable.





1. ACFR for the FY ended Sept. 30, 2021, Page 57.

Market value	Total investment and interest income
\$ 6,714,293	\$ 250,632
15,465,789	4,007,850
4,625,797	599,956
15,693,581	5,991,503
10,907,520	2,339,199
3,484,982	418,105
8,113,327	1,669,795
2,633,294	5,640
\$ 67,638,583	\$ 15,282,680

Fixed income pools - 9.9%

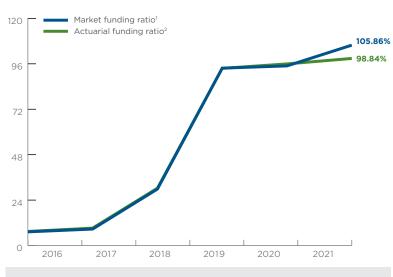
- **Domestic equity pools 22.9%**
- Real estate and infrastructure pools 6.8%
- Private equity pools 23.2%
- International equity pools 16.1%
- Absolute return pools 5.2%
- Real return and opportunistic pools 12.0%
- Short-term investment pools 3.9%

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.

The Provisions began pre-funding in FY 2016. As of Sept. 30, 2021, there were \$63.2 million in actuarial assets available to offset the liabilities of the plan. This amount represents a 98.84% actuarial funding ratio. There were \$67.6 million in net assets on a market basis as of Sept. 30, 2021. This represents a 105.86% market funding ratio.



Calculated on market value of assets. 2. MMRP Pension Actuarial Valuation for the FY ended Sept. 30, 2021, pages B-1 and C-2.

Member and employer contributions

Employer contributions

Statute requires the employer to contribute to finance 100% of the benefits of plan members. These employer contributions are determined annually by the Provisions' actuary and are based upon level-dollar funding principles so the contributions remain stable.

Definition of normal cost and UAAL

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

Actuarial valuations for the pension plan 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 and investment performance.

Actuarial Amortizat

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Member and employer pension contributions			
Employer contributions			
Normal cost of benefits ¹	\$	1,257,963	
UAAL contribution ¹		92,405	
Valuation payroll ²	\$	524,953	
 MMRP Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page A-1. MMRP Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page D-3. Valuation payroll represents only special duty member's payroll. 			

actuarial assumptions. The UAAL contribution is the cost of gradually bringing the Provisions' funding level to 100% over the amortization period. The state pays 100% of both the normal cost and the UAAL contribution.

Actuarial assumptions for FY ended Sept. 30, 2021¹

Actuarial cost method	Entry age, normal		
Amortization method	Level-dollar		
Amortization period	Closed period, ending Sept. 30, 2038		
Asset valuation method	5-year smoothed		
Wage inflation rate	2.75%		
AROR—open plan	6.00%		
1. MMRP Pension Actuarial Valuation for the FY ended Sept. 30, 2021, Page E-2.			

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 Provisions' 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 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 GTCR 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

Investment service providers, continued

Permira

PGIM Inc.

Piper Jaffray

PricingDirect

Rialto Capital

Riverside

Silver Lake

III LP

Soc Gen

Pitchbook

Preain

PIMCO

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 Morgan Stanley MP Securitized Credit Fund LP MSCI BarraOne MUEG Multi-Bank Securities Inc. Napier Park Global Capital New York Times NGP Energy Capital Nordic Capital

Journal of Portfolio Management

Odyssey Investment Partners Omego TradeSuite/DTCC Orion Resource Partners Paladin Realty Partners LLC Parallel Resource Partners Parthenon Capital Inc.

PIMCO Mortgage Fund

PPC Enterprises LLC

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

Ridgewood Capital Management LLC Ridgewood Energy

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

Sixth Street Partners SJC Direct Lending Revolver Fund

Sprott Resource State Street Bank State Street Global Advisors

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 UBS 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



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.

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Michigan.gov/ORSMilitary

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