



Quarterly Board Executive Summary Presentation

Texas Municipal Retirement System

Period Ended: March 31, 2022



Total Fund Performance

How Did TMRS Perform Relative to Investment Policy Benchmarks?

	Performance (%)						
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Total Fund	-1.73	-1.73	7.84	8.57	7.73	6.79	6.94
Actual Allocation Benchmark	-1.46	-1.46	7.17	8.53	7.58	6.60	6.76
Difference	-0.27	-0.27	0.67	0.04	0.15	0.19	0.18

The Total Fund returned -1.73% net of fees in the first quarter and 7.84% over the trailing 12 months.

- First Quarter – TMRS underperformed the Actual Allocation Benchmark (-1.46%) by 27 basis points.
 - Underperformance for the quarter was driven primarily by Hedge Funds and Real Estate, which trailed their custom benchmarks by 288 and 220 basis points, respectively.
- Trailing year – TMRS outperformed the Actual Allocation Benchmark (7.17%) by 67 basis points.
 - Private Equity and Non-Core Fixed Income drove relative performance over the trailing 12-months as the asset classes outpaced their custom benchmarks by 1553 and 242 basis points, respectively.
 - Hedge Funds and OPPM detracted from relative performance as they trailed their custom benchmarks by 299 and 257 basis points, respectively.

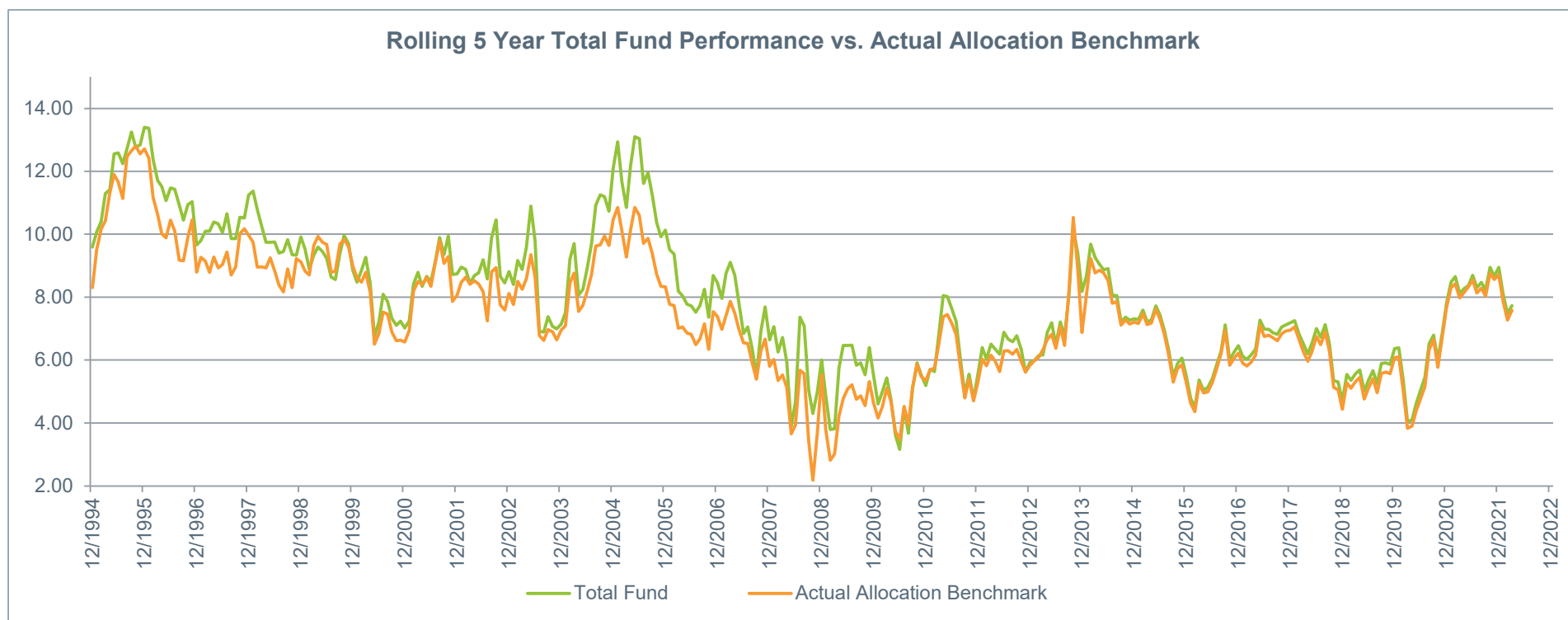
The Total Fund outperformed the Actual Allocation Benchmark net of fees for all periods longer than the trailing three-months as of March 31, 2022.

Total Fund Performance

How Did TMRS Perform Relative to Investment Policy Benchmarks?

The Total Fund performance expectation, as stated in the Investment Policy Statement, is to exceed the Actual Allocation Benchmark over rolling five-year periods.

- Five-year – TMRS outperformed the Actual Allocation Benchmark by 15 basis points, net of fees.
- The chart below shows that TMRS has beaten the five-year rolling performance expectation 93% of time since 1994, and 97% over the last ten years.



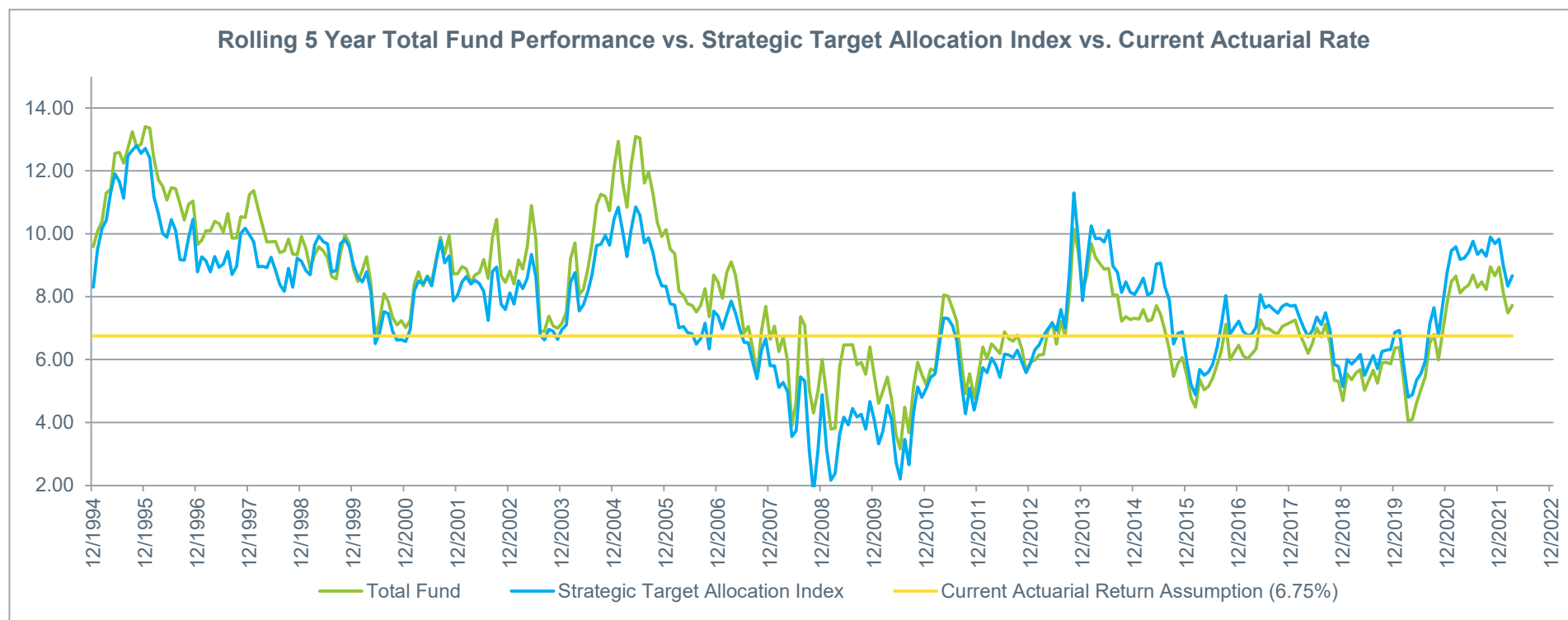
Performance shown is net of fees. Please see the Addendum for custom benchmark definitions.

Total Fund Performance

How Did TMRS Perform Relative to Investment Policy Benchmarks?

TMRS exceeded the Board's Assumed Long-Term Rate of Return of 6.75% for the five-year period.

- Although not fully implemented to the Strategic Target Allocation, the chart below illustrates TMRS' rolling five-year returns relative to the Strategic Target Allocation Index as a gauge for the effectiveness of the Board-approved Strategic Target Allocation, which was designed to meet or exceed the actuarial return assumption of 6.75%. The five-year return for the Strategic Target Allocation Index was 8.66%.



Asset Class Performance

How Did TMRS' Asset Classes Perform Relative to Their Respective Benchmarks?

TMRS' Asset Class relative performance was mixed for the first quarter of 2022.

- Relative Outperformers – Three of the seven Asset Classes matched or exceeded their benchmarks, net of fees, in the quarter. Non-Core Fixed Income and Private Equity were the top relative performers, beating their custom benchmarks by 262 and 139 basis points, respectively.
- Relative Underperformers – Hedge Funds and Real Estate were the primary detractors in the first quarter, trailing their custom indices by 288 and 220 basis points, respectively. OPFM and Total Equity also trailed their primary benchmarks by 154 and 64 basis points, respectively.

The Investment Policy Statement performance expectations for each Asset Class performance is to meet or exceed their respective benchmarks over rolling five-year periods. As shown below, five of the seven asset classes outperformed their respective benchmarks for the 5-year period. Total Equity trailed its custom benchmark by 73 basis points and Other Public & Private Markets trailed its custom benchmark by 29 basis points.

TMRS Composite Objectives - Policy Benchmarks				
Objective: Meet or exceed its policy benchmark performance net of fees over rolling five year periods.				
TMRS Composites	Benchmark	5 Year Composite Return	5 Year Benchmark Return	Meets Objective
Total Equity	Total Equity Benchmark	10.76	11.49	No
Core Fixed Income	Bloomberg US Agg Bond Index	2.48	2.14	Yes
Non-Core Fixed Income	Non-Core Fixed Income Benchmark	5.17	4.16	Yes
Other Public & Private Markets	OPFM Benchmark	5.73	6.02	No
Real Estate	NCREIF ODCE Index	9.30	8.55	Yes
Hedge Funds	Hedge Funds Benchmark	5.20	5.02	Yes
Private Equity	Private Equity Benchmark	23.48	20.62	Yes

Performance shown is net of fees. Please see the Addendum for custom benchmark definitions.

Asset Class Performance

	Allocation		Performance (%)									
	Market Value (\$)	%	Quarter	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	Since Incep.	Inception Date
Total Fund	37,042,143,181	100.00	-1.73	-1.73	7.84	8.57	7.73	6.79	6.94	6.80	8.41	01/01/1989
Actual Allocation Benchmark			-1.46	-1.46	7.17	8.53	7.58	6.60	6.76	6.55	7.90	
Difference			-0.27	-0.27	0.67	0.04	0.15	0.19	0.18	0.25	0.51	
Total Equity	13,194,842,770	35.62	-6.11	-6.11	5.60	12.47	10.76	9.36	10.11	N/A	7.02	02/01/2008
Total Equity Benchmark			-5.47	-5.47	6.30	13.49	11.49	9.88	10.44	N/A	7.22	
Difference			-0.64	-0.64	-0.70	-1.02	-0.73	-0.52	-0.33	N/A	-0.20	
Core Fixed Income	1,840,615,592	4.97	-5.91	-5.91	-3.92	2.05	2.48	2.16	2.47	3.67	6.97	01/01/1989
Fixed Income Benchmark			-5.93	-5.93	-4.15	1.69	2.14	1.87	2.24	3.40	6.45	
Difference			0.02	0.02	0.23	0.36	0.34	0.29	0.23	0.27	0.52	
Non-Core Fixed Income	7,477,820,761	20.19	0.09	0.09	3.56	5.13	5.17	4.65	N/A	N/A	4.60	10/01/2014
Non-Core Fixed Income Benchmark			-2.53	-2.53	1.14	4.05	4.16	3.57	N/A	N/A	3.66	
Difference			2.62	2.62	2.42	1.08	1.01	1.08	N/A	N/A	0.94	
OPPM	3,947,427,669	10.66	-2.06	-2.06	7.52	6.54	5.73	4.49	3.84	N/A	4.31	02/01/2011
OPPM Benchmark			-0.52	-0.52	10.09	6.75	6.02	5.07	3.74	4.66	4.46	
Difference			-1.54	-1.54	-2.57	-0.21	-0.29	-0.58	0.10	N/A	-0.15	
Real Estate	4,470,584,978	12.07	5.46	5.46	20.83	8.68	9.30	10.11	10.79	N/A	10.51	01/01/2012
Real Estate Benchmark			7.66	7.66	21.28	8.94	8.55	9.47	10.36	6.72	10.41	
Difference			-2.20	-2.20	-0.45	-0.26	0.75	0.64	0.43	N/A	0.10	
Hedge Funds	2,830,743,780	7.64	-1.57	-1.57	0.41	4.94	5.20	4.71	N/A	N/A	4.39	08/01/2014
Hedge Funds Benchmark			1.31	1.31	3.40	6.65	5.02	3.54	4.10	2.56	3.69	
Difference			-2.88	-2.88	-2.99	-1.71	0.18	1.17	N/A	N/A	0.70	
Private Equity	3,088,596,809	8.34	7.49	7.49	40.85	27.02	23.48	N/A	N/A	N/A	19.19	01/01/2016
Private Equity Benchmark			6.10	6.10	25.32	22.17	20.62	N/A	N/A	N/A	16.99	
Difference			1.39	1.39	15.53	4.85	2.86	N/A	N/A	N/A	2.20	
TMRS Unallocated Cash	191,510,821	0.52	0.03	0.03	0.05	0.73	1.01	0.91	0.69	N/A	0.59	06/01/2008
FTSE 30 Day T-Bill Index			0.01	0.01	0.04	0.70	1.04	0.79	0.56	0.70	0.47	
Difference			0.02	0.02	0.01	0.03	-0.03	0.12	0.13	N/A	0.12	

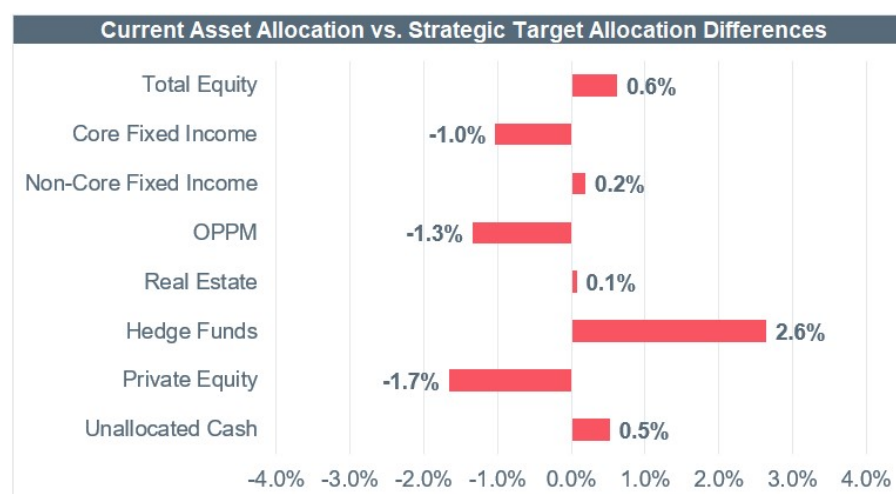
Performance shown is net of fees. Please see the Addendum for custom benchmark definitions.

Asset Allocation Relative to Target

How Is TMRS Positioned Relative to the Board's Strategic Target Allocation?

The Total Fund market value was \$37.0 billion as of March 31, 2022, a decrease of approximately \$737 million for the calendar year to date. All asset classes were within their respective Strategic Target Asset Allocation ranges as of quarter-end.

	Market Value (\$)	Current (%)	Target (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	37,042,143,181	100.0	100.0	-	-
Total Equity	13,194,842,770	35.6	35.0	25.0	45.0
Core Fixed Income	1,840,615,592	5.0	6.0	1.0	11.0
Non-Core Fixed Income	7,477,820,761	20.2	20.0	15.0	25.0
OPPM	3,947,427,669	10.7	12.0	7.0	17.0
Real Estate	4,470,584,978	12.1	12.0	7.0	17.0
Hedge Funds	2,830,743,780	7.6	5.0	0.0	10.0
Private Equity	3,088,596,809	8.3	10.0	5.0	15.0
Unallocated Cash	191,510,821	0.5	0.0	0.0	3.0



Addendum

Composite Benchmark Comments

The **Actual Allocation Benchmark** is calculated monthly using beginning of month asset class weights applied to each corresponding benchmark return and currently consists of the following:

- Total Equity Benchmark
- Fixed Income Benchmark
- Non-Core Fixed Income Benchmark
- OPPM Benchmark
- Real Estate Benchmark
- Hedge Funds Benchmark
- Private Equity Benchmark
- FTSE 30 Day T-Bill Index

The **Strategic Target Allocation Index** represents asset allocation targets adopted historically and currently consists of the following:

- 35.0% Total Equity Benchmark
- 6.0% Fixed Income Benchmark
- 20.0% Non-Core Fixed Income Benchmark
- 12.0% OPPM Benchmark
- 12.0% Real Estate Benchmark
- 5.0% Hedge Funds Benchmark
- 10.0% Private Equity Benchmark

Asset Class Composite Benchmarks:

The **Total Equity Benchmark** is calculated monthly and consists of 50% Russell 3000 Index and 50% MSCI EAFE Index (USD) (Net) through 07/31/2010; a blend of the Russell 3000 Index, MSCI ACW Ex US IM Index (USD) (Net) and MSCI EAFE Index (USD) (Net) at beginning of month investment weights through 11/30/2012; and a blend of the Russell 3000 Index and MSCI ACW Ex US IM Index (USD) (Net) at beginning of the month weights through 12/31/2018; and MSCI ACW IM Index (USD) (Net) thereafter.

The **Fixed Income Benchmark** is calculated monthly and consists of the Bloomberg US Gov't Crdt Lng Trm Bond Index through 06/30/2009; Bloomberg US Agg Bond Index thereafter.

The **Non-Core Fixed Income Benchmark** is calculated monthly using beginning of the month sub-asset class weights within the Non-Core Fixed Income Composite applied to each sub-asset class primary benchmark return through 6/30/2021, and the Bloomberg US Agg Bond Index + 1.5% on an unlagged, month lagged, or quarter lagged basis in proportion of the managers in the composite on an unlagged, month lagged, or quarter lagged basis.

The **OPPM Benchmark** is calculated monthly using beginning of the month sub-asset class weights within the OPPM Composite applied to each sub-asset class primary benchmark return through 6/30/2021, and the MSCI ACW IM Index (USD) (Net) on an unlagged, month lagged, or quarter lagged basis in proportion of the managers in the composite on an unlagged, month lagged, or quarter lagged basis.

The **Real Estate Benchmark** is the NCREIF ODCE Index (Gross), one quarter lag through 06/30/2021, and NCREIF ODCE Index (Net), one quarter lag thereafter.

The **Hedge Funds Benchmark** is calculated monthly and consists of the HFRI FOF: Dv'd Index (1 Mo Lag) through 6/30/2021, and HFRI Asset Weighted Composite Index (1 Mo Lag) thereafter.

The **Private Equity Benchmark** is set equal to the Composite return through 6/30/2021, and MSCI ACW IM Index (USD) (Net), one quarter lag thereafter.

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