TEXAS PENSION REVIEW BOARD

P.O. Box 13498, Austin, TX 78711 | Phone: (800) 213-9425 or (512) 463-1736 | Fax: (512) 463-1882 | Email: prb@prb.texas.gov

INVESTMENT RETURNS AND ASSUMPTIONS REPORT **PRB-1000**

Retirement System Profile

Texas Municipal Retirement System	**(512) 476-7577**
System Name	Phone Number: (xxx) xxx-xxxx
Yup Kim	**ykim@tmrs.com**
Report Contact Name (Please Print)	E-mail Address

Actual Rate of Return

(Most Recent 10 Fiscal Years)

Fiscal Year End (MM/DD/YYYY)	Net Return (Percent)	Gross Return (Percent)	Gross Return Methodology	
			Not Net of Admin Expenses	Net of Admin Expenses
12/31/2023	11.64%	12.50%	◉	○
12/31/2022	-7.35%	-6.66%	◉	○
12/31/2021	12.86%	13.61%	◉	○
12/31/2020	7.65%	7.88%	◉	○
12/31/2019	14.71%	14.96%	◉	○
12/31/2018	-2.43%	-2.11%	◉	○
12/31/2017	13.78%	14.27%	◉	○
12/31/2016	7.04%	7.42%	◉	○
12/31/2015	.10%	.34%	◉	○
12/31/2014	5.85%	5.99%	◉	○

Gross Return Methodology - In the last column, please indicate the methodology used to calculate each gross return presented as either: The Gross Return is not net of administrative expenses or the Gross Return is net of administrative expenses.

Actuarial Assumed Rate of Return

(Most Recent 10 Actuarial Valuations)

Valuation Date (MM/DD/YYYY)	Assumed Return (Percent)	Assumed Return Methodology		
		Net All Expenses	Net Investment Fees Only	Other
12/31/2023	6.75%	◉	○	○
12/31/2022	6.75%	◉	○	○
12/31/2021	6.75%	◉	○	○
12/31/2020	6.75%	◉	○	○
12/31/2019	6.75%	◉	○	○
12/31/2018	6.75%	◉	○	○
12/31/2017	6.75%	◉	○	○
12/31/2016	6.75%	◉	○	○
12/31/2015	6.75%	◉	○	○
12/31/2014	7.0%	◉	○	○

Assumed Return Methodology - In the last column, please indicate the methodology underlying each assumed rate of return as either: The return is net of all expenses; the return is net of investment fees; or, “Other”. If “Other”, please describe methodology used in **Additional Comments** section.

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LONG-TERM RATES OF RETURN PRB-1000

Annualized Rolling Rate of Return Information

Please check the appropriate box for the methodology used to calculate the rates of return requested in the following section:

☐ Arithmetic Mean ☒ Geometric Mean (Time-Weighted Return) ☐ Internal Rate of Return

Most Recent	1-Year Period	3-Year Period	10-Year Period	30-Year or Since Inception Period
Rolling Gross	12.50%	6.06%	6.58%	7.40%
Rolling Net	11.64%	5.29%	6.12%	7.24%

*If the system's inception date is less than 30 years from the report date, please enter the inception date:

Date of Inception (MM/DD/YYYY)	

RETURNS AND ASSUMPTIONS – ADDITIONAL COMMENTS

Please use this text box to provide any additional information or commentary that may help clarify information provided in the previous form.

The 2021 through 2023 net returns are net of internal and external investment fees and expenses. Net returns prior to 2021 are net of external fees and expenses only.

Annual returns prior to 2020 are based on lagged accounting numbers and are the same as those reported in previous PRB 1000 reports.

TMRS claims compliance with Global Investment Performance Standards (GIPS) with the TMRS Trust Fund examined and organization verified for 2021, 2022, and 2023. All valuations are in USD. GIPS is a registered trademark of the CFA Institute. CFA Institute does not endorse or promote TMRS, not does it warrant the accuracy or quality of the content contained herein. A copy of the GIPS Asset Owner Reports can be obtained by emailing invrisk@tmrs.com.

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RETURNS AND ASSUMPTIONS – UNAVAILABLE INFORMATION **PRB-1000**

Please list any unavailable information requested in this form in the text box below, including an explanation of why the information is unavailable. Completion of this form fulfills the requirements stated in Section 802.108 (c) of Texas Government Code.

☒ By marking this box, I certify that the information provided is accurate based on the methodology used; and that the retirement system for which this form is being provided agrees to a timely submission of the unavailable information if it becomes available.

CERTIFICATION

I certify that, as an official representative of the retirement system for which this report is being presented, I have the authority to provide the requested information, and that I have verified, to the best of my knowledge, that the information presented is complete, as far as indicated, and accurate. (Note: By typing your name below, you are signing this document.)

David B. Wescoe	7/9/2024	Executive Director
First Authorizing Signature	Date	Title of First Authorizer
(512) 225-3731		dwescoe@tmrs.com
First Authorizer Phone Number		First Authorizer Email
Yup Kim	7/9/2024	Chief Investment Officer
Second Authorizing Signature	Date	Title of Second Authorizer
(512) 225-3787		ykim@tmrs.com
Second Authorizer Phone Number		Second Authorizer Email

Information provided in this document may be based on methodologies assumed to be reasonable by the reporting entity. The information provided herein may be unaudited and is considered the best approximation of the plan at the time of submission. Additionally, the information provided in this document must be based on the fiscal year of the public retirement system submitting the report.

The following GIPS® Asset Owner Report is required for Texas Municipal Retirement System's compliance with the Global Investment Performance Standards (GIPS®). The GIPS® Asset Owner Report was not included with the PRB-1000 report submitted to the Texas Pension Review Board.

GIPS® Asset Owner Report

TMRS Trust Fund

Year	Total Trust Net Return (%)	Blended Benchmark Return (%)	Total Trust (Net) 3-Yr St Dev (%)	Blended Benchmark 3-Yr St Dev (%)	Number of Portfolios	Total Trust Assets ($M)	Total Asset Owner Assets ($M)
2023	11.64%	11.99%	7.41%	10.29%	281	$39,325	$39,325
2022	-7.35%	-12.36%	N/A	N/A	264	$35,456	$35,456
2021	12.86%	12.23%	N/A	N/A	220	$38,459	$38,459

Texas Municipal Retirement System (TMRS) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. TMRS has been independently verified for the periods January 1, 2021 through December 31, 2023.

An asset owner that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the asset owner's policies and procedures related to total fund and composite maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on an asset owner–wide basis. The TMRS Total Trust has had a performance examination for the periods January 1, 2021 through December 31, 2023. The verification and performance examination reports are available upon request.

Texas Municipal Retirement System (TMRS or the System) was created by the Texas Legislature in 1947 and began operations in 1948 to provide retirement, disability, and death benefits for employees of Texas cities as directed by the TMRS Board of Trustees. TMRS investments are held in the TMRS Trust Fund for the exclusive benefit of the active and inactive members, retirees, and beneficiaries of the System.

The inception date of the TMRS Total Trust is January 1, 1989. The specific performance objectives include, but may not be limited to, the following:

- Achieve a total rate of return over rolling 5-year periods meeting or exceeding the Actuarial Return Assumption of 6.75%
- Exceed an appropriate benchmark reflective of asset class participation over rolling five-year periods (i.e., actual allocation index during the implementation period and Strategic Target Allocation Index once fully implemented).

External managers were utilized for all periods presented.

The Total Trust blended benchmark is calculated monthly using a blend of the asset class benchmarks based on the Total Trust's asset class weights. Each asset class uses a total return benchmark. Rollup of underlying manager benchmarks are rebalanced monthly using the weighted average returns of the benchmarks of all the underlying manager benchmarks in the asset class. The weights listed in the following table are as of December 31, 2023. Strategic targets and asset class underlying manager benchmarks and weights for prior periods are available upon request.

Asset Class	Description	Benchmark	Strategic Target 12/31/23	Asset Class Weight 12/31/23
Global Equity	The Global Public Equity allocation is intended to provide capital appreciation and is structured using both active and passive management, with the overall objective of exceeding its benchmark performance net of fees over rolling five-year periods. Passively Managed strategies will replicate broad market capitalization weighted indices.	MSCI All Country World Investable Market Index (Net)	35	36.3
Core Fixed Income	The Core Fixed Income allocation diversifies the risk of the overall investment portfolio with a secondary goal of capital preservation. The performance objective is to exceed its benchmark performance net of fees over rolling five-year periods. The portfolio is structured to include US Treasury, Government-Related, Corporates, Securitized (RMBS, CMBS, and ABS) investments, and municipal bonds, among other allowable investments.	Bloomberg Barclays US Aggregate Bond Index	6	5.9
Non-Core Fixed Income	The Non-Core Fixed Income allocation diversifies the risk of the overall investment program and is designed to provide both income and capital appreciation. The overall objective is to exceed its benchmark performance net of fees over rolling five-year periods. The portfolio is structured to include Global High Yield Debt, Loans/Direct Lending, Emerging Market Debt, Opportunistic Fixed Income, and Structured Credit.	Bloomberg Barclays US Aggregate Bond Index + 1.50%	20	19.5
Real Estate	The purpose of the real estate allocation is to enhance total return and provide diversification to the overall investment portfolio. The objective is to exceed its benchmark performance net of fees over rolling five-year periods. TMRS' allocation to real estate will be diversified among a variety of private and public market investment types by property type (e.g., multi-family, office, industrial, retail, etc.) and strategy (core, value-add, opportunistic) to maximize diversification benefits.	NCREIF-ODCE Index (Net)	12	11.7
Other Public & Private Markets	The Other Public & Private Markets asset class is used for return enhancement, diversification, and inflation protection.	MSCI All Country World Investable Market Index (Net)	12	9.2

	The Other Public & Private Markets opportunity set includes, but is not limited to, the following: • GTAA / Global Macro • Inflation Linked Securities • Inflation Sensitive Equities • Commodities • Private Real Estate / REITS • Private / Listed Infrastructure • Natural Resources • Private Assets • Financing Strategies			
Hedge Fund	The Hedge Fund portfolio includes strategies that provide both favorable stand-alone risk-adjusted returns as well as the benefit of diversification for the overall plan. Hedge Fund Managers can make investment which add value to portfolios by achieving favorable risk-adjusted returns in most market environments while also reducing overall portfolio volatility. The list of strategies that the TMRS Hedge Fund portfolio may utilize includes, but is not limited to: • Equity Strategies • Event Driven • Credit Strategies • Relative Value: • Multi-Strategies: • Global Macro: and • CTA/Commodity/Currency	HFRI Asset Weighted Composite Index	5	5.4
Private Equity	The Private Equity asset class is intended to enhance the total fund performance through investment in non-publicly traded securities by generating a long-term rate of return that exceeds that of publicly traded equities. Private equity investments are expected to be illiquid and long-term in nature. Private equity strategies generally include, but are not limited to, buy-outs in private companies, venture capital, growth oriented or minority equity investments; and special situations or opportunistic investments such as distressed securities and lending strategies, mezzanine and hybrid positions or other structured investments. The private equity market can be accessed using the primary market as well as secondaries and co-investments.	MSCI All Country World Investable Market Index (Net)	10	11.5
Cash Equivalents	Cash balances are generated for the purpose of satisfying cash flow requirements of the System, reallocating assets between	30 Day US Treasury Bills	0	0.6

	portfolios, and from ordinary investment activity within a Manager's portfolio. The investment objective is to safeguard principal, maintain adequate liquidity to meet anticipated needs, and earn incremental yield. The performance objective is to exceed the return of the benchmark.			

The Total Trust performance is calculated monthly using time-weighted rates of return. Net returns are net of actual transaction costs, non-reclaimable withholding taxes on dividends, interest, and capital gains, fees and expenses related to externally managed pooled funds, fees from externally managed separate accounts, and investment management costs. Investment management costs include investment personnel compensation, benefits, data valuation fees, consulting and legal services, investment research services, custody fees, and performance measurement and compliance services. As of December 31, 2023, 82% of Total Trust assets were valued using the NAV practical expedient. For some assets, preliminary, estimated values are used to determine fair value. Valuations are reported in USD. Policies for valuing investments, calculating performance, and preparing GIPS asset owner reports are available upon request.

The three-year annualized ex post standard deviation measures the variability of the Total Trust returns and the blended benchmark returns for the 36-month period. For the Total Trust, the three-year annualized ex post standard deviation is calculated using net-of-fees returns. The three-year annualized ex post standard deviation is not required when the Total Trust does not yet have a three-year GIPS-compliant track record.