

Serving those who keep us safe.

VITAL SIGNS

FISCAL YEAR 2023



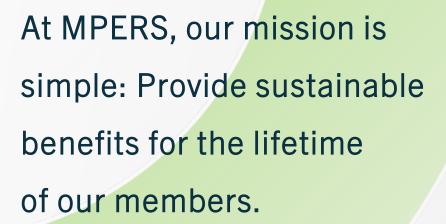
BENEFIT ADMINISTRATION



FINANCIAL / AUDIT



BUDGET







INVESTMENTS



BENEFIT ADMINISTRATION

Benefit Payments - Timeliness



PASS

No instances were noted of benefit payments initiated in the current year being paid out prior to the benefit effective date.

Benefit Payments - Accuracy



PASS

All sampled retirements agreed to supporting documentation without exception. Benefits appeared to be accurately calculated based on the retirees' information.

Compliance -Laws, Regulations, Policies



PASS

Administration of benefits is in compliance with all laws, regulations, and policies applicable to the System.

Cybersecurity - Policy, Up-to-Date



PASS

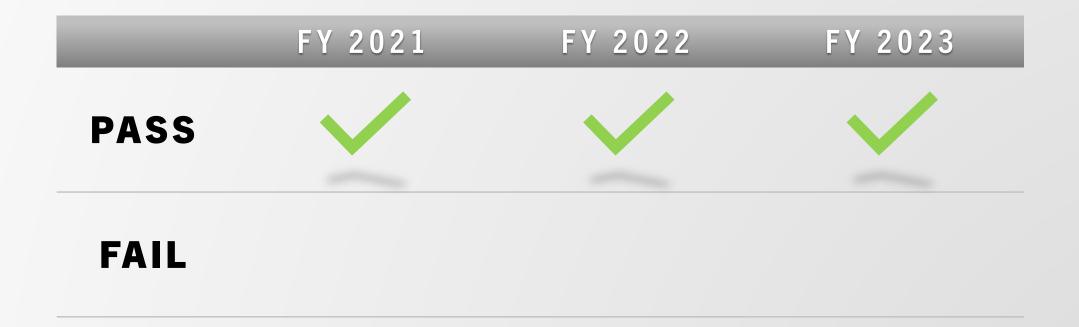
The cybersecurity policy was updated effective July 24, 2023, with the assistance of outside consultants.







BENEFIT PAYMENTS - TIMELINESS

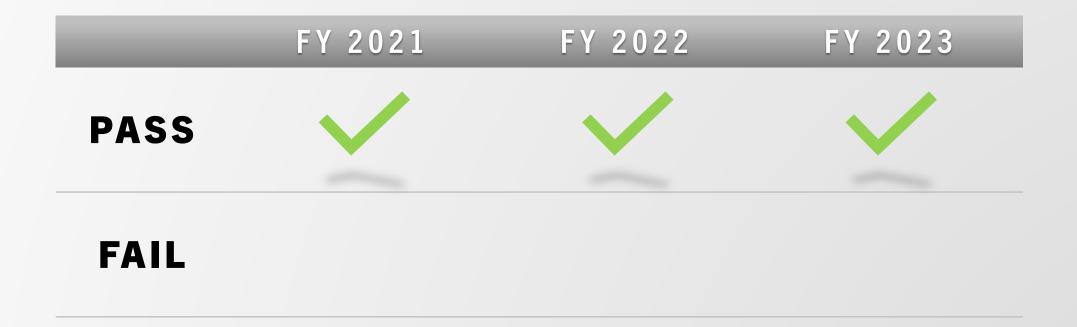








BENEFIT PAYMENTS - ACCURACY

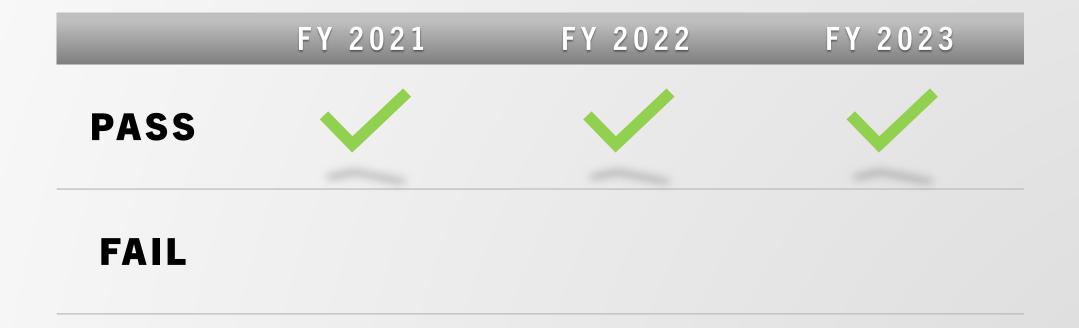








COMPLIANCE - LAWS, REGULATIONS, POLICIES

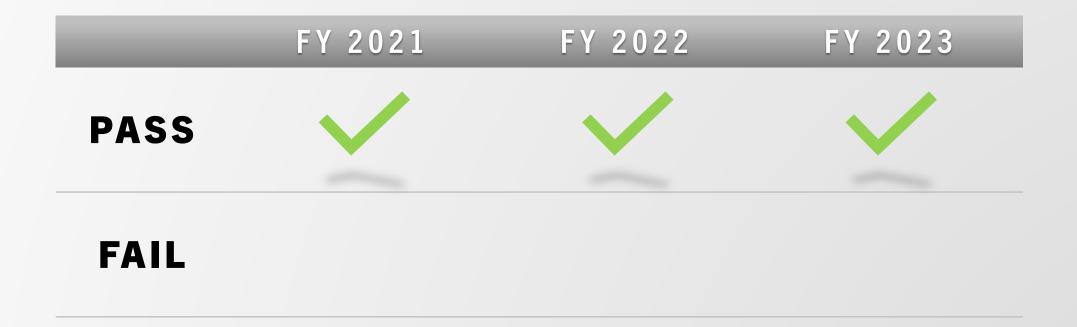








CYBERSECURITY - POLICY, UP-TO-DATE







Comprehensive Annual Financial Report - Timeliness



PASS

The Annual Report was dated December 23, 2022, and was submitted to GFOA on December 30, 2022.

Popular Annual Financial Report -Timeliness



PASS

The Popular Annual Financial Report is not a dated document. It was submitted to GFOA on December 30, 2022.

Monthly Tax Filings - Timeliness



PASS

Monthly filings were completed timely, and no penalties were incurred.

Quarterly Tax Filings - Timeliness



PASS

Quarterly filings were completed timely, and no penalties were incurred.

Annual Tax Filings - Timeliness



PASS

Annual filings were completed timely, and no penalties were incurred.





FINANCIAL / AUDIT

Unmodified Audit Opinion



PASS
Clean Audit Opinion

An unmodified opinion was issued for the System as of and for the year ended June 30, 2022, in a report dated November 8, 2022.

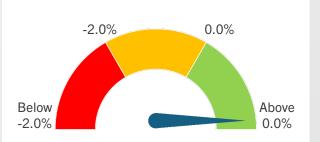
Contributions Received



PASS

100% of employer contributions were received at a 58% employer contribution rate for MODOT and 58.65% contribution rate for MSHP.

Funded Status - Change



2.3%

Increase

The funding status increased from 66.3% as of June 30, 2022, to 69.6% as of June 30, 2023, per review of the actuarial valuation.

Funded Status - Retiree Liability



PASS
Fully Funded

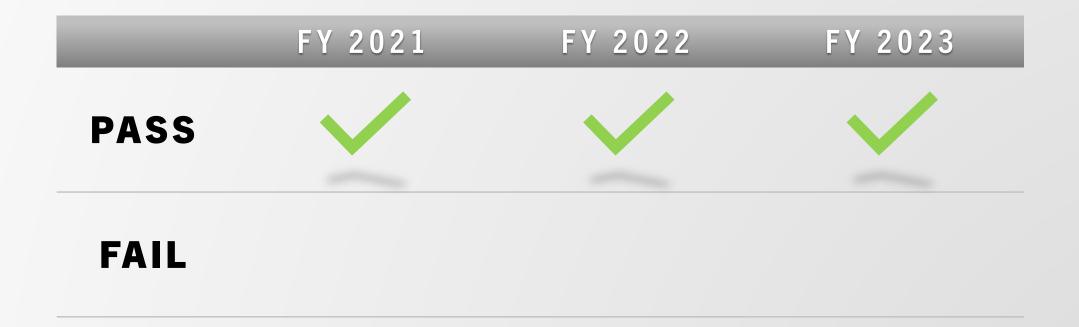
The funding status for the retiree liability was 100% as of June 30, 2023.







ANNUAL REPORT - TIMELINESS

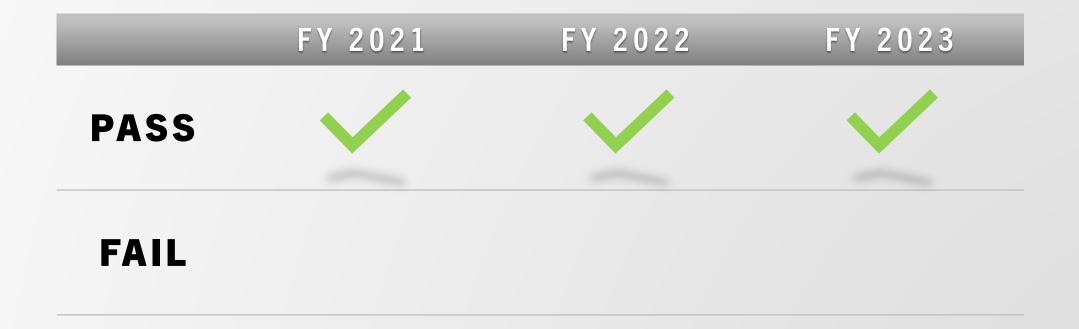








POPULAR ANNUAL FINANCIAL REPORT - TIMELINESS

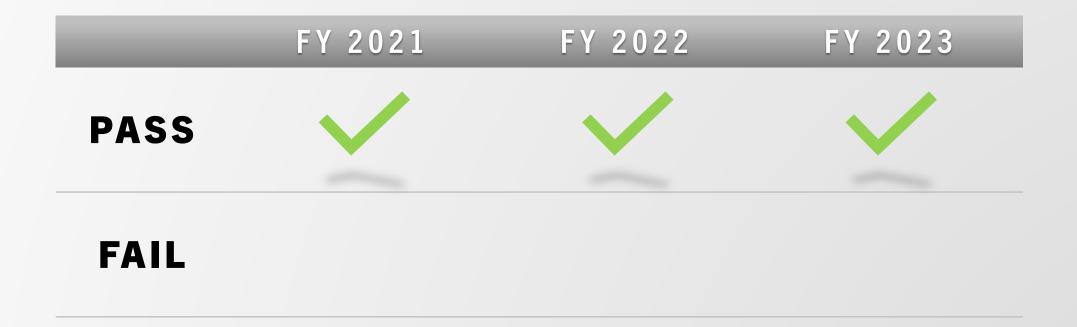








MONTHLY TAX FILINGS - TIMELINESS

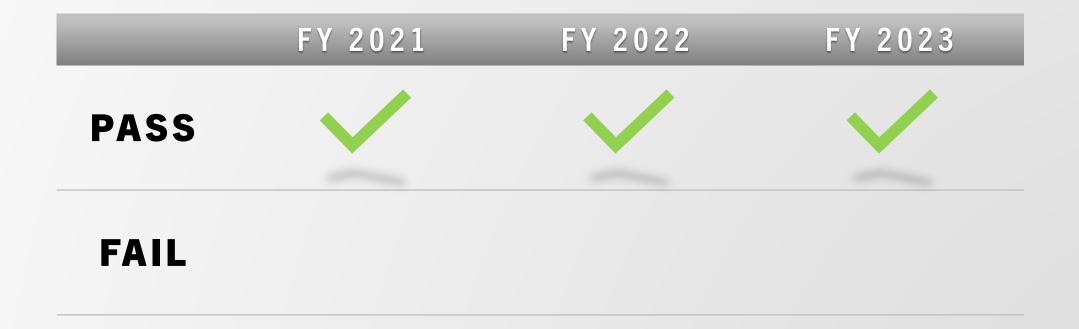








QUARTERLY TAX FILINGS - TIMELINESS

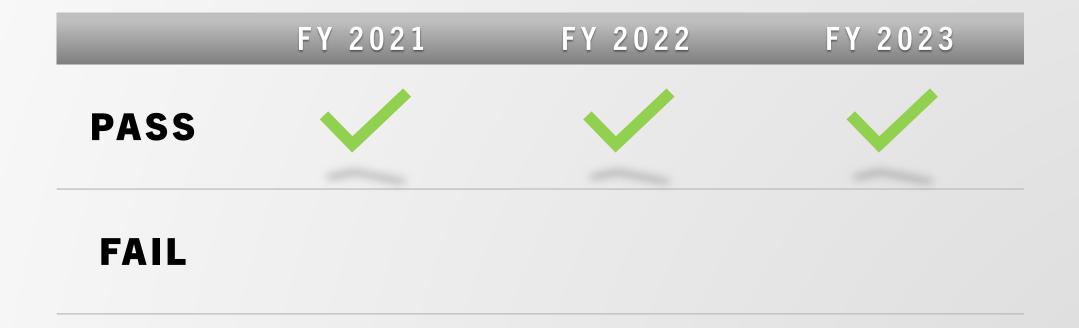








ANNUAL TAX FILINGS - TIMELINESS

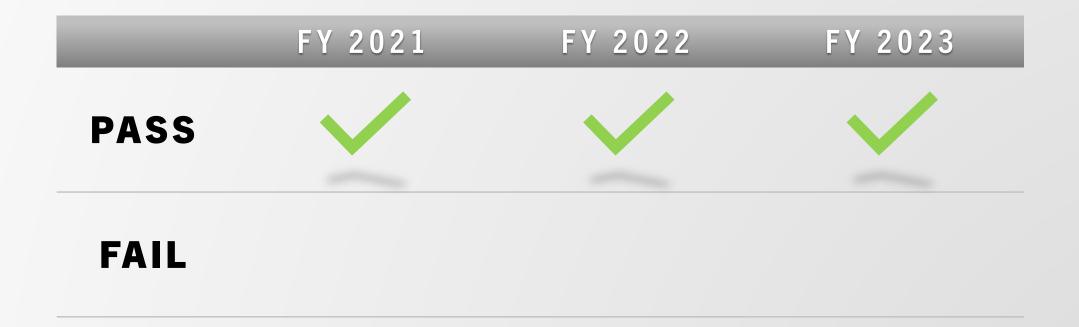








UNMODIFIED AUDIT OPINION

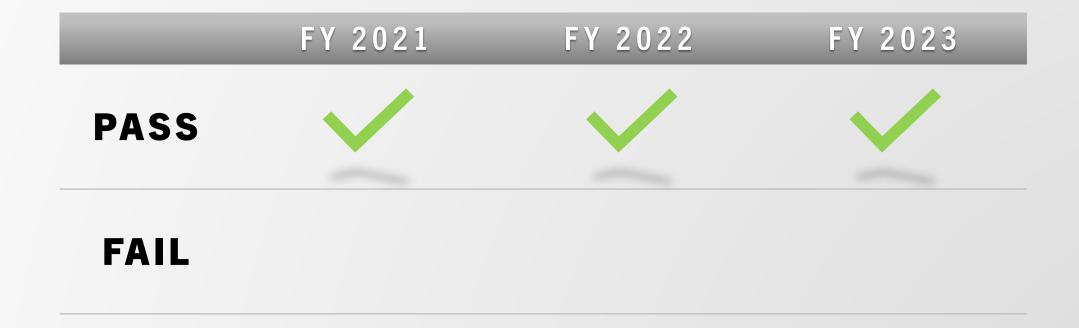








CONTRIBUTIONS RECEIVED

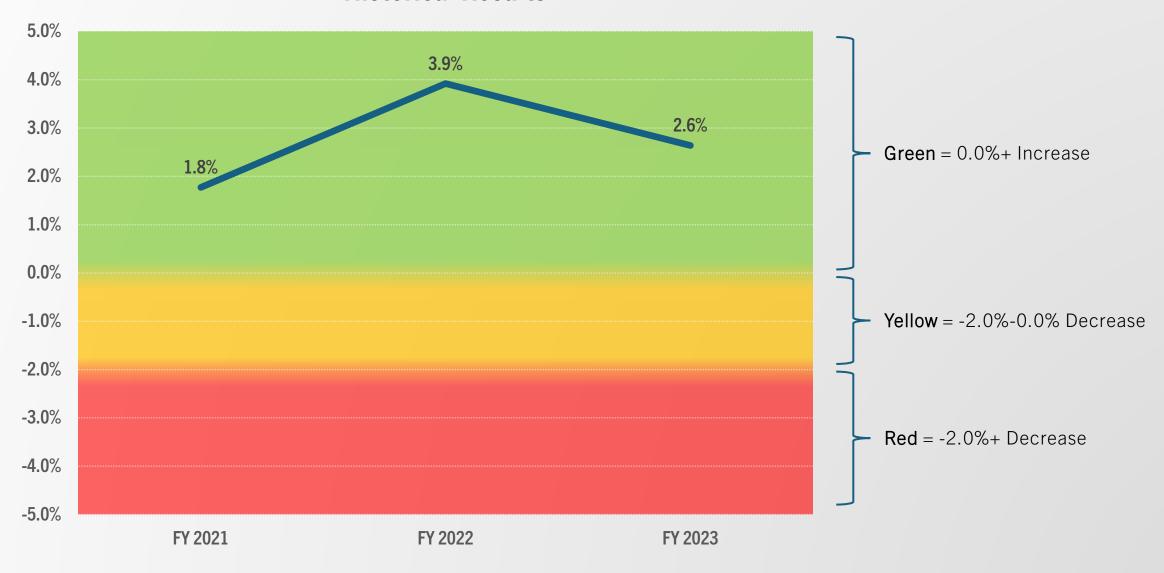








FUNDED STATUS - CHANGE









FUNDED STATUS - RETIREE LIABILITY







Actual vs. Budgeted Operating Expenses

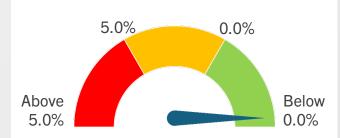


PASS

Under Budget

Actual administrative expenses were approximately 2.6% under budget, and after consideration of the investment budget and actual expenses, the total expense for the year ended June 30, 2023, was approximately 86% of the total budget.

Cost Per Member



\$196

Below Average Cost

We reviewed the calculated average cost per member, noting MPERS reported spending \$196 per member as compared to the average \$313 spent per member in the reviewed peer group.

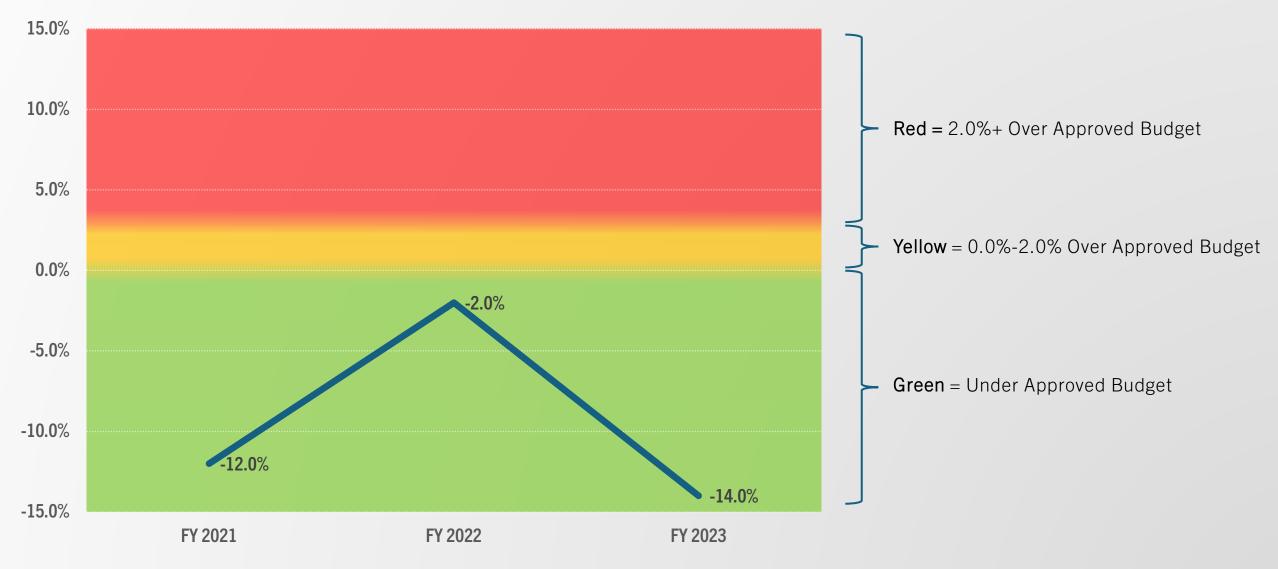






ACTUAL VS. BUDGETED OPERATING EXPENSES



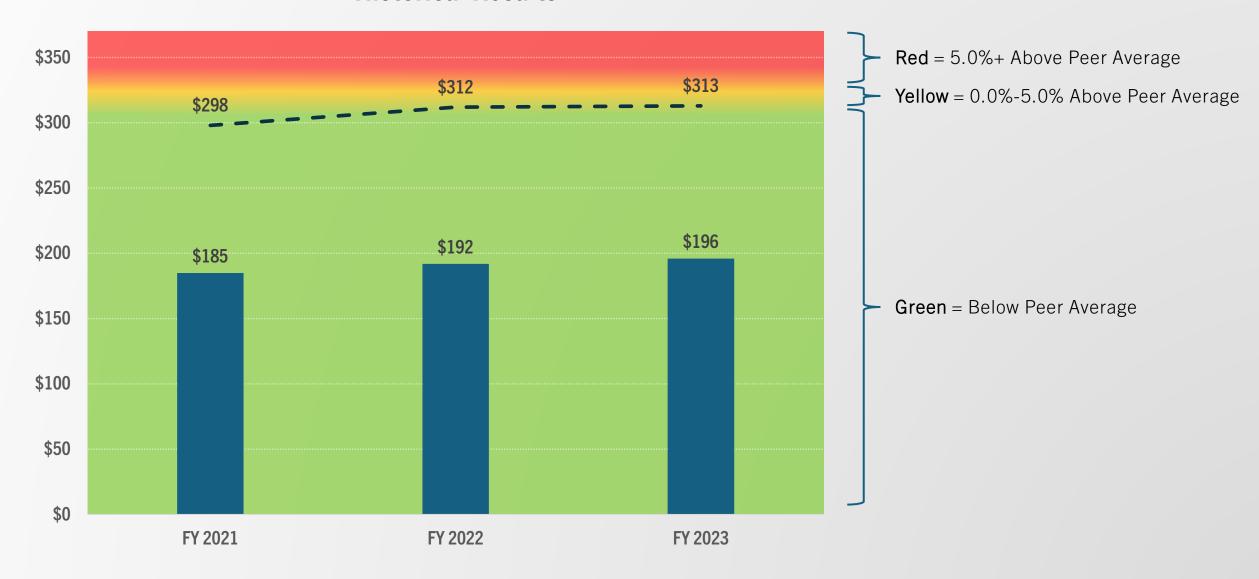








COST PER MEMBER









COMMUNICATION

New Trustee Onboarding



3Meets Expectations

One trustee was appointed during the year ended June 30, 2023. This trustee gave their onboarding experience a rating of 3, indicating that the experience met their expectations.

Organizational Satisfaction - Staff



2.76
Excellent

Results from the staff survey noted an overall weighted average score of 2.76, exceeding the threshold of 1.5.

Organizational Satisfaction - Board



PASS
100% Participation

All trustees returned Code of Conduct and Conflict of Interest Acknowledgment Forms n 2023 (for FY24).

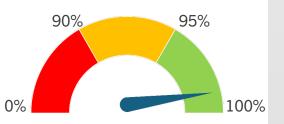
Member Satisfaction - Seminars



96%Above Average

Member surveys noted 96% of responses indicated above-average satisfaction.

Member Satisfaction - Staff Interactions



99% Above Average

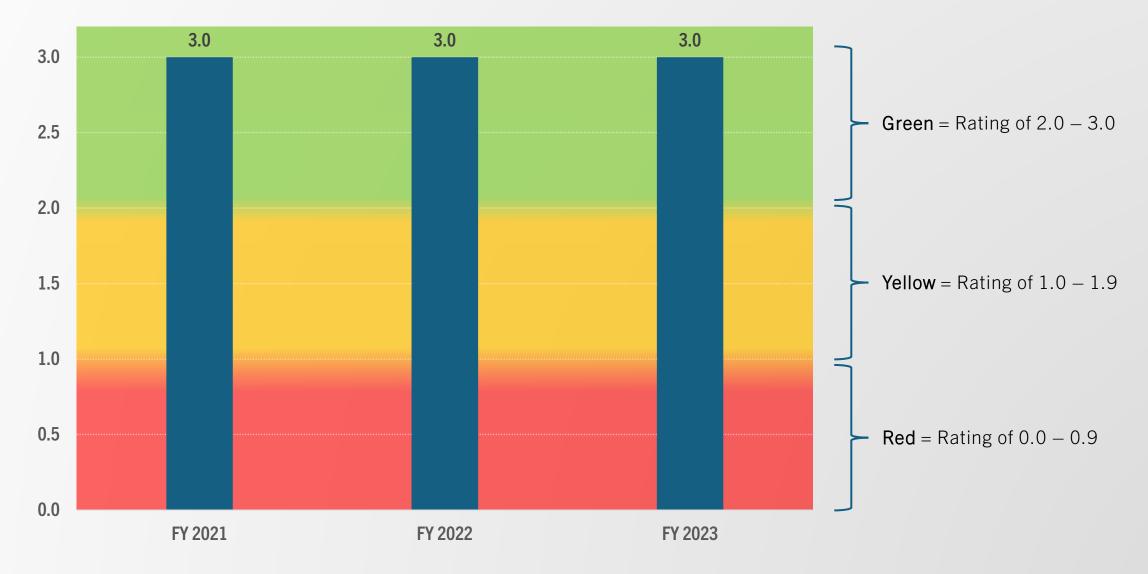
Member surveys noted 99% of responses indicated above-average satisfaction with services provided.







NEW TRUSTEE ONBOARDING

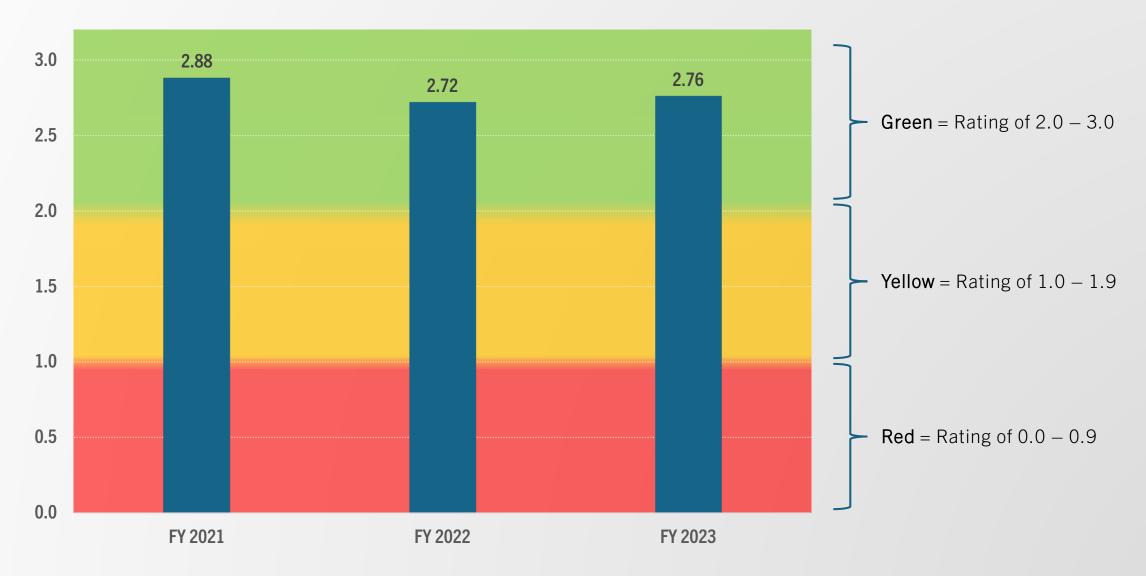








ORGANIZATIONAL SATISFACTION - STAFF

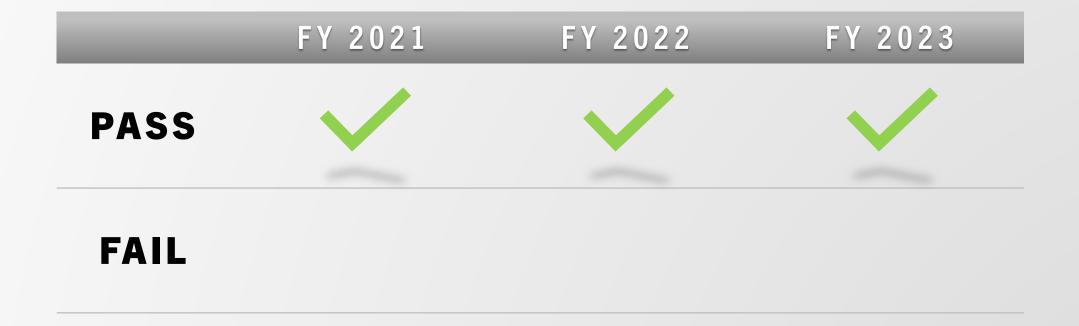








ORGANIZATIONAL SATISFACTION - BOARD

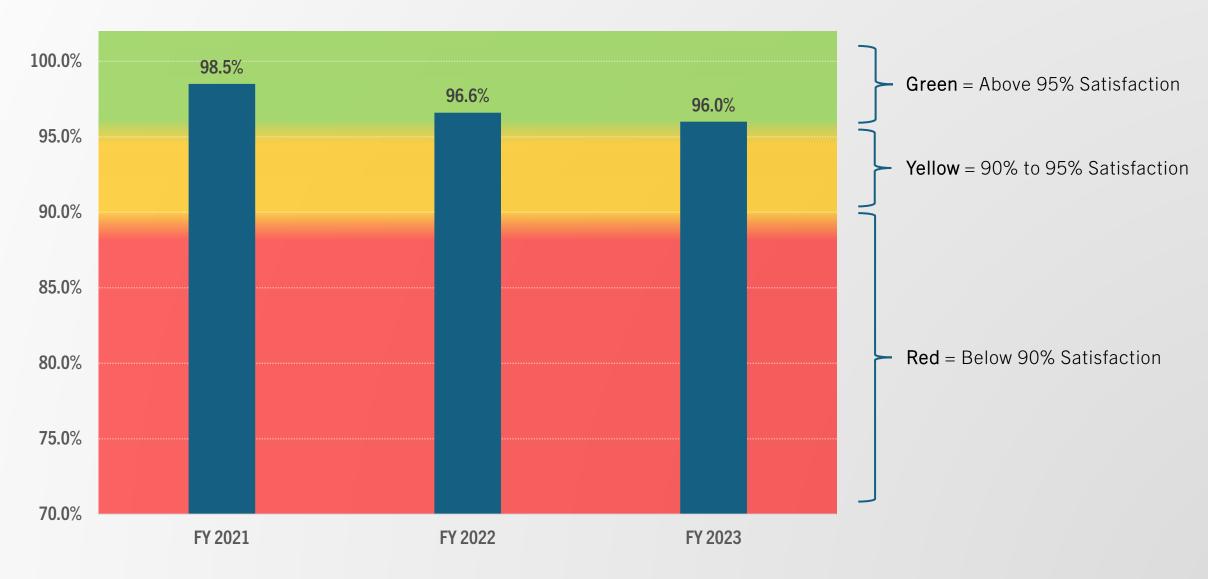








MEMBER SATISFACTION - SEMINARS

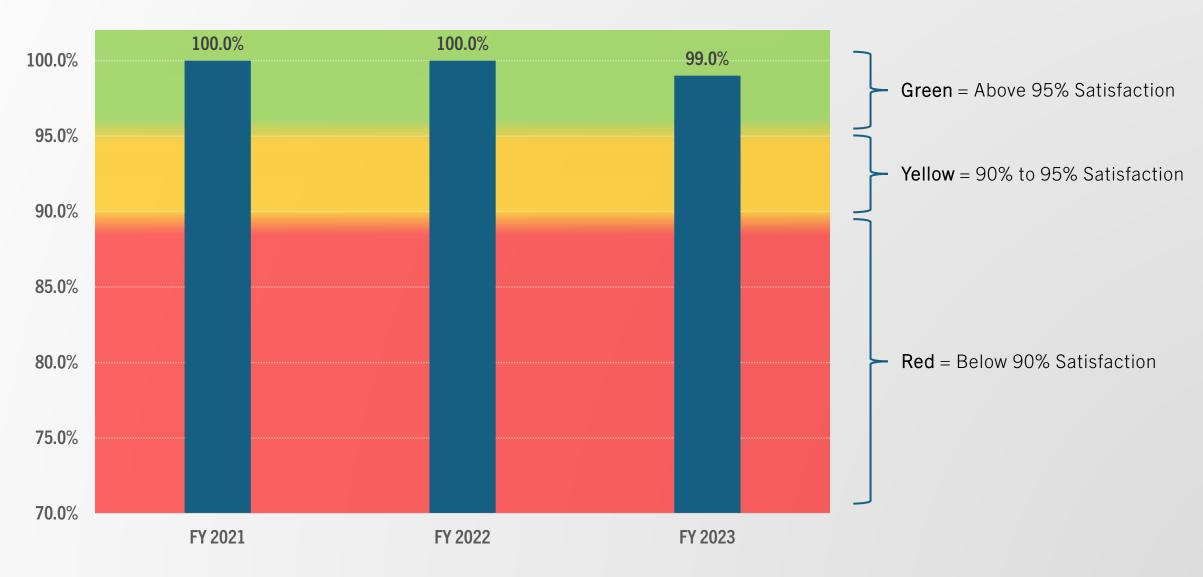








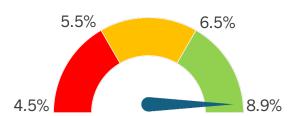
MEMBER SATISFACTION - STAFF INTERACTIONS







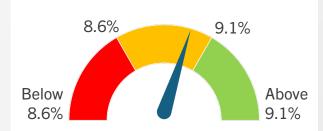
Total Return vs. Actuarial Assumption



8.9%Exceeds Assumed Rate

Total return of 8.9% for the year ended June 30, 2023, was above the assumed investment rate of return of 6.5%.

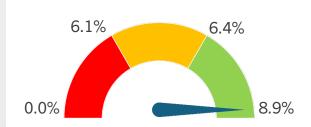
Total Return vs. Peers' Return



8.9%Below Peer Median

Total return of 8.9% for the year ended June 30, 2023, falls below the InvMetrics Public DB Net Median 1-year investment return of 9.1%.

Total Return vs. Policy Benchmark



8.9%Above Policy Index

Total return of 8.9% for the year ended June 30, 2023, exceeds the 1-year policy index return of 6.4%.

Current Allocation vs. Policy Allocation



PASS
Within Ranges

Investment allocations are in compliance with the sub-asset class ranges outlined in the investment policy as of June 30, 2023.





Volatility - 5-Year



PASS

Below Peer Median

Volatility at five years, as measured by the standard deviation, was 7.3% for the five years ended June 30, 2023, as compared to the peer universe median of 12.4%.

Volatility - 10-Year



PASS

Below Peer Median

Volatility at ten years, as measured by the standard deviation, was 5.7% for the ten years ended June 30, 2023, as compared to the peer universe median of 9.7%.

Sharpe Ratio - 5-Year



PASS

Above Peer Median

MPERS' five-year Sharpe ratio was 1.1% for the five years ended June 30, 2023, as compared to the peer universe median of 0.4%.

Sharpe Ratio - 10-Year



PASS

Above Peer Median

MPERS' ten-year Sharpe ratio was 1.4% for the ten years ended June 30, 2023, as compared to the peer universe median of 0.7%.

Risk and Liquidity
Analysis



PASS

Verified

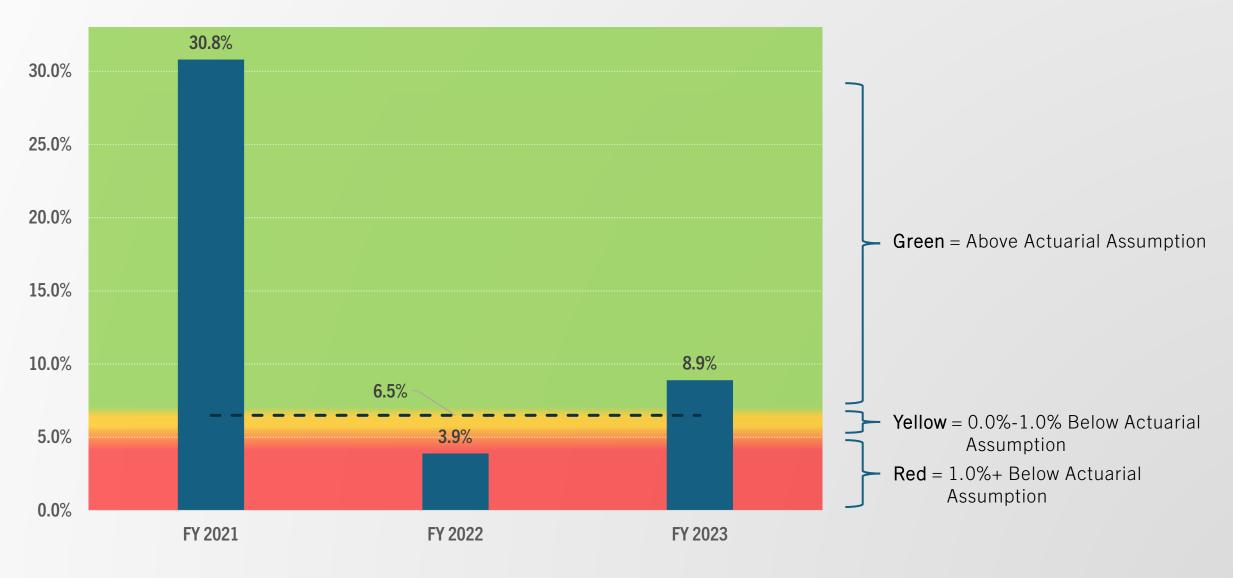
Investment Performance report as of June 30, 2023, evidence of the risk and liquidity analysis performed by NEPC, LLC.







TOTAL RETURN VS. ACTUARIAL ASSUMPTION

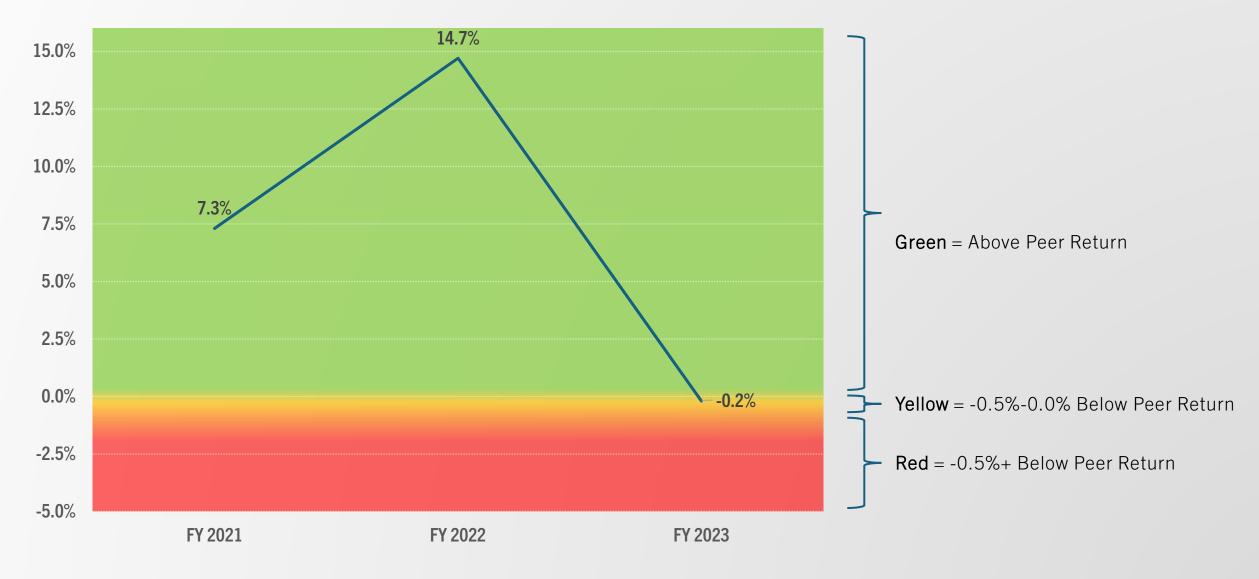








TOTAL RETURN VS. PEERS' RETURN

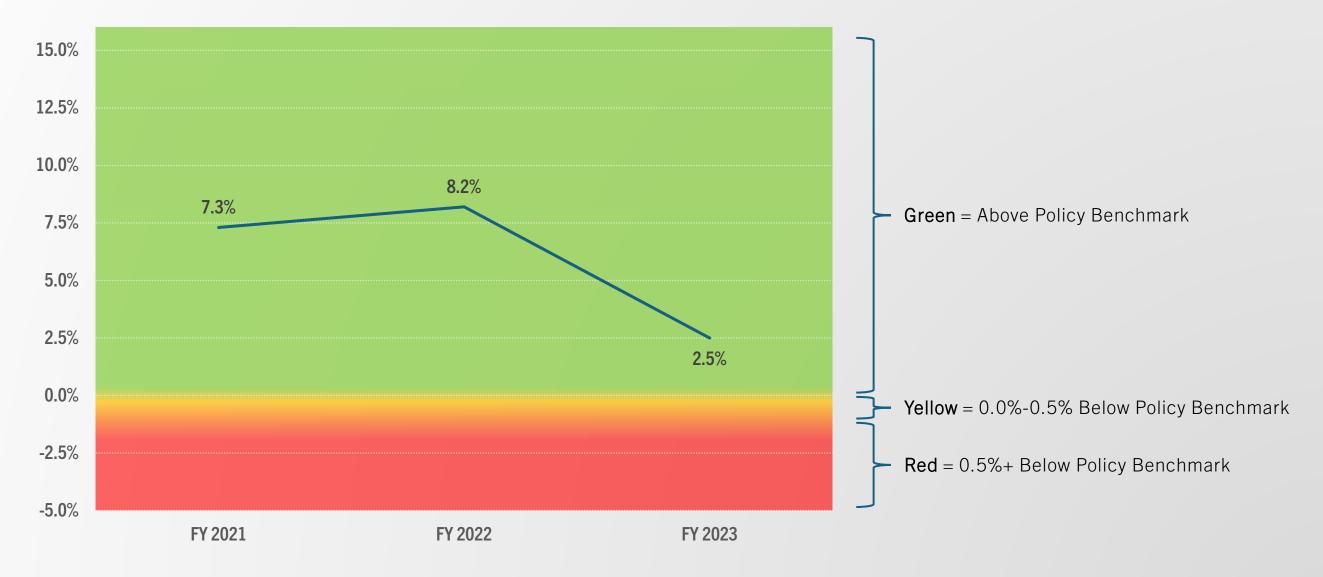








TOTAL RETURN VS. POLICY BENCHMARK

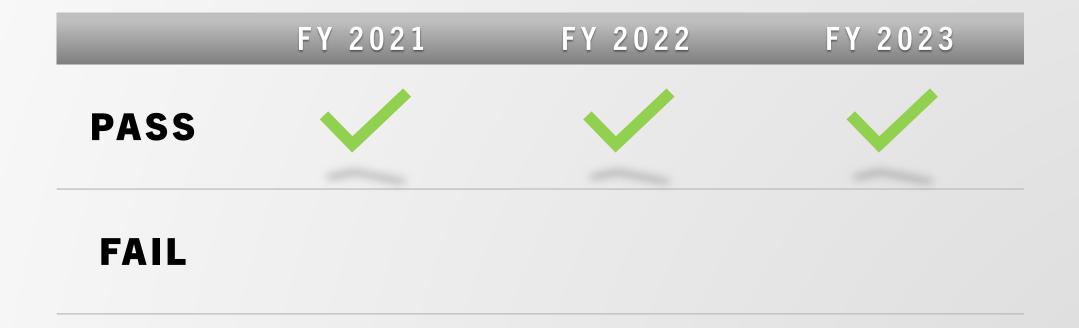








CURRENT ALLOCATION VS. POLICY ALLOCATION

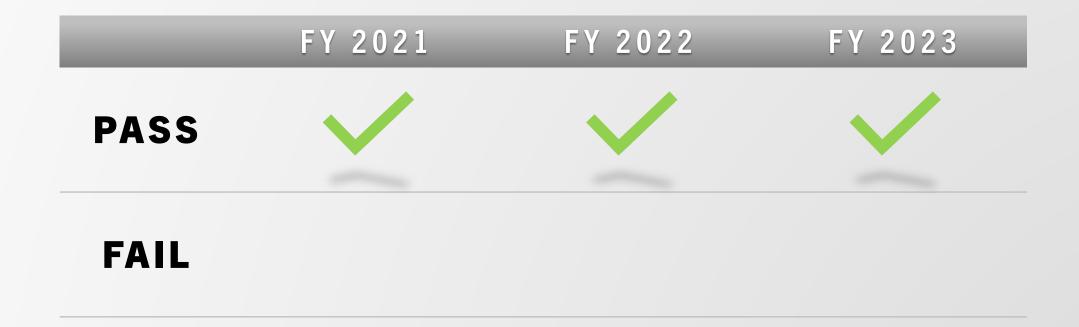








VOLATILITY - 5-YEAR









VOLATILITY - 10-YEAR

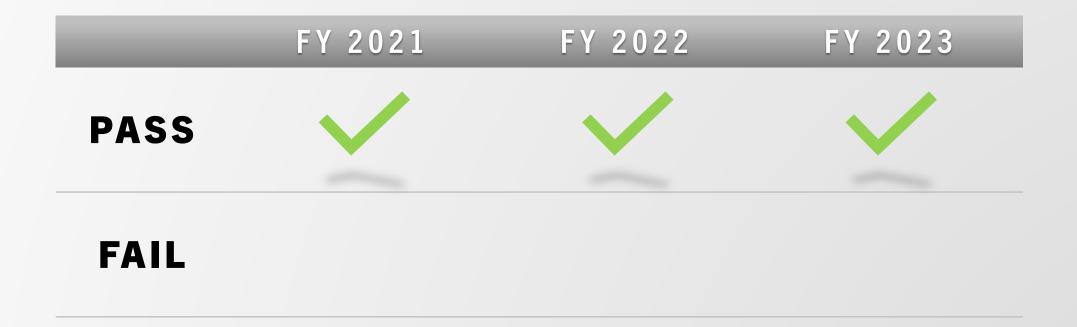








SHARPE RATIO - 5-YEAR

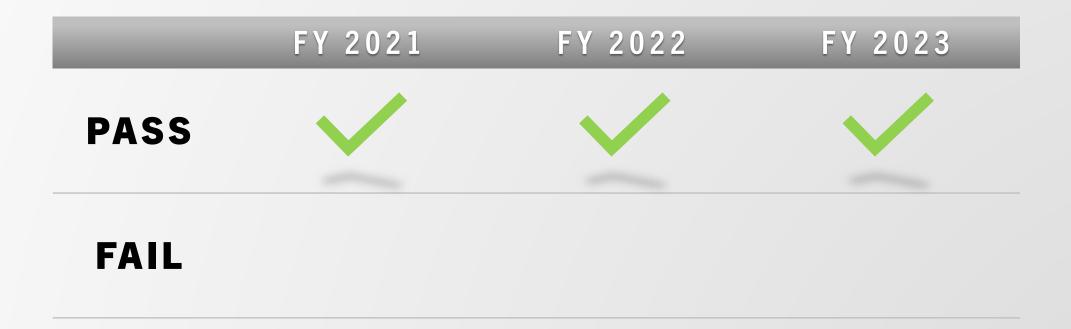








SHARPE RATIO - 10-YEAR









RISK AND LIQUIDITY ANALYSIS

