

Investment Committee

Item Number 6 – Open Session

Subject: Adoption of Global Investment Performance Standards

Presenter(s): Chairperson

Item Type: Consent Information

Date & Time: January 27, 2021 - 0 minutes

Attachment(s): Attachment 1 – Meketa Opinion Letter

Attachment 2 – GIPS Asset Owner Report (inclusive of The Spaulding Group's verification and examination letters)

PowerPoints(s): None

PURPOSE

This agenda item provides the Investment Committee with CalSTRS Global Investment Performance Standards (GIPS®) Asset Owner Report and Independent Verifier's Report as of June 30, 2020.

DISCUSSION/SUMMARY

The GIPS standards are voluntary ethical standards for calculating and presenting investment performance based on the principles of fair representation and full disclosure. They provide transparency and comparability across peers. The standards are developed, maintained, and promoted through the collaboration of individual volunteers from the investment community, CFA Institute, and GIPS Standards Sponsors in over 40 markets. CFA Institute is a global not-for-profit association of investment professionals with the mission of leading the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

The GIPS standards establish a standardized, industry-wide approach for asset managers and asset owners (i.e. CalSTRS) calculating and presenting investment results to oversight bodies such as the CalSTRS Investment Committee. The CFA's objectives of the standards include ensuring accurate and consistent data, promoting self-regulation, and helping to instill stakeholder confidence. The GIPS standards are used to calculate performance across all asset classes, both public and private.

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CalSTRS investment performance is calculated systematically by the master custodian and derived from accounting records. Claiming compliance with GIPS standards does not change CalSTRS fundamental methods used for calculating performance. Claiming compliance with the GIPS standards entails three components for CalSTRS:

- 1. Documenting and abiding by a GIPS procedures document
- 2. Creating an annual GIPS Asset Owner Report (Attachment 2)
- 3. Engaging a verification firm to perform a performance verification and examination

The GIPS procedures document (available upon request) outlines CalSTRS requirements related to input data, valuation, and calculation. For CalSTRS, this included capturing all investment related expenses as part of a *Net-of-All-Fees return* presented in the Asset Owner Report. This return will slightly differ from the *published fiscal year end Net-of-Manager-Fees return* because it includes additional investment expenses captured through the Annual Investment Cost Report's process that are not typically included, specifically investment related expenses (vendor, software fees, etc.), internal salaries and other CalSTRS operating expenses. Beginning in 2021, CalSTRS will publish both returns, with the intent to publish only the GIPS return after three years of returns have been acquired.

One Year Returns as of June 30, 2020	
GIPS return (Net-of-All-Fees):	3.82%
Published return (Net-of-Manager-Fees):	3.88%

The GIPS Asset Owner Report (Attachment 2) is based on the requirements in the GIPS standards for presenting and disclosing investment performance. It presents a Net-of-All-Fees annual return along with policy and benchmark disclosures. CalSTRS is claiming compliance with the GIPS standards for the single fiscal year ending 2020. Future reports will present an additional year of performance each year, building up to a minimum of 10 years of GIPS-compliant performance. After three years, these reports will include the three-year annualized ex post standard deviation of the Total Fund and the Policy Benchmark.

CalSTRS engaged The Spaulding Group to perform an independent verification and examination. The verification process includes a review of our written policies and procedures, a review of the GIPS presentation, and sample composite testing around the components of the Total Fund return calculation. The examination process includes a full independent calculation of the Total Fund and Policy Benchmark performance returns, including tying out the results to source records, such as accounting and valuation.

Claiming compliance with the GIPS standards demonstrates staff's commitment to transparency, and higher performance reporting standards, for the Investment Committee, CalSTRS' Members and the public. Benefits include external guidance on standards, improved documentation and procedures, and better comparability across peers. In addition to the verification, the performance examination adds an added layer of confidence that the data being presented to the oversight body is consistent and transparent. Compliance helps ensure that the asset owner's investment

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performance is complete and fairly presented, regardless of whether assets are managed internally, externally, or both.



5796 Armada Drive Suite 110

760.795.3450

Carlsbad, CA 92008 Attachment 1 Investment Committee - Item 6 January 27, 2021

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MEMORANDUM

TO: Investment Committee, CalSTRS

FROM: Stephen McCourt, Allan Emkin, Neil Rue, Mika Malone, Eric White, Meketa Investment Group

Christopher Ailman CC: January 27, 2021 DATE: RE: GIPS Compliance

In 2020, Staff executed a process for CalSTRS to have a performance record that is compliant with GIPS (Global Investment Performance Standards). This process involved a significant amount of work from Staff, as well as the use of an external consulting firm (The Spaulding Group) to verify processes and performance results.

GIPS is promoted by the CFA Institute, with a goal improving transparency, objectivity, and consistency in how investment performance is calculated and reported across the financial industry. Until recently, these Standards were used largely by asset managers (and the consultants and asset owners that evaluate asset manager performance), to ensure the veracity of performance track records used for marketing purposes. However, recently the CFA institute created a process for asset owners like CalSTRS to become GIPS compliant, to further public trust in asset owner performance being published.

CalSTRS is a very early adopter of the GIPS process for asset owners. We applaud Staff for taking the opportunity to create a GIPS-compliant performance record at CalSTRS for several reasons:

- It provides another auditing process on CalSTRS' return calculations.
- In the future, it will allow for more comparable return streams across asset owners for peer analysis.
- It highlights CalSTRS' commitment to transparency, accuracy, and objectivity.

For the Fiscal Year ended June 30, 2020, the first year of CalSTRS' GIPS-verified returns, the GIPS return for CaSTRS was 3.82%. The CalSTRS' published return for the same period was 3.88%. Both these returns are net of external management fees. The 6 basis point difference is a result of deducting internal costs, such as Staff compensation, vendor fees, and software expenses, as required by GIPS. Note that CalSTRS has been capturing these costs already in its annual cost reporting to the Investment Committee.

We look forward to discussing these changes with the Investment Committee at the January meeting. If you have any questions, please feel free to contact us at (760) 795-3450.

SPM/AE/MLM/jls

November 19, 2020

California State Teachers' Retirement System 100 Waterfront Place Sacramento, CA 95605

Independent Verifier's Verification Report

We are pleased to report that we have verified whether California State Teachers' Retirement System (the Asset Owner) has, for the periods July 1, 2019 through June 30, 2020, established policies and procedures for complying with the Global Investment Performance Standards (GIPS®) related to composite and total fund maintenance and the calculation, presentation, and distribution of performance that are designed in compliance with the GIPS standards, as well as whether these policies and procedures have been implemented on an asset owner-wide basis. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

The Asset Owner's management is responsible for its claim of compliance with the GIPS standards and the design and implementation of its policies and procedures. Our responsibilities are to be independent from the Asset Owner and to express an opinion based on our verification. We conducted this verification in accordance with the required verification procedures of the GIPS standards, which includes testing performed on a sample basis. We also conducted such other procedures as we considered necessary in the circumstances.

In our opinion, for the periods from July 1, 2019 through June 30, 2020, the Asset Owner's policies and procedures for complying with the GIPS standards related to composite and total fund maintenance, as well as the calculation, presentation, and distribution of performance, have been, in all material respects:

- Designed in compliance with the GIPS standards, and
- Implemented on an asset owner-wide basis.

This report does not relate to or provide assurance on any specific performance report of the Asset Owner or on the operating effectiveness of the Asset Owner's controls or policies and procedures for complying with the GIPS standards.

We greatly appreciate the opportunity to conduct this verification for you.

Sincerely,

The Spaulding Group, Inc.

The Spaulding Grays, Inc.



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November 19, 2020

California State Teachers' Retirement System 100 Waterfront Place Sacramento, CA 95605

Independent Verifier's Verification and Performance Examination Report

We are pleased to report that we have verified whether California State Teachers' Retirement System (the Asset Owner) has, for the periods July 1, 2019 through June 30, 2020, established policies and procedures for complying with the Global Investment Performance Standards (GIPS®) related to composite and total fund maintenance and the calculation, presentation, and distribution of performance that are designed in compliance with the GIPS standards, as well as whether these policies and procedures have been implemented on an asset owner-wide basis. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. We have also examined the Asset Owner's California State Teachers' Retirement System Total Fund for the periods July 1, 2019 through June 30, 2020.

The Asset Owner's management is responsible for its claim of compliance with the GIPS standards, the design and implementation of its policies and procedures, and for the accompanying California State Teachers' Retirement System Total Fund's GIPS asset owner report. Our responsibilities are to be independent from the Asset Owner and to express an opinion based on our verification and performance examination. We conducted this verification and performance examination in accordance with the required verification and performance examination procedures of the GIPS standards, which includes testing performed on a sample basis. We also conducted such other procedures as we considered necessary in the circumstances.

In our opinion, for the periods from July 1, 2019 through June 30, 2020, the Asset Owner's policies and procedures for complying with the GIPS standards related to composite and total fund maintenance, as well as the calculation, presentation, and distribution of performance, have been, in all material respects:

- Designed in compliance with the GIPS standards, and
- Implemented on an asset owner-wide basis.

Also, in our opinion, the Asset Owner has, in all material respects:

- Constructed the California State Teachers' Retirement System Total Fund and calculated the California State Teachers' Retirement System Total Fund's performance for the periods from July 1, 2019 through June 30, 2020 in compliance with the GIPS standards, and
- Prepared and presented the accompanying California State Teachers' Retirement System Total Fund's GIPS asset owner report for the periods from July 1, 2019 through June 30, 2020 in compliance with the GIPS standards.

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We have not been engaged to examine, and did not examine, the Asset Owner's California State Teachers' Retirement System Total Fund for any periods prior to July 1, 2019 and, accordingly, we express no opinion on the GIPS asset owner report of the Asset Owner's California State Teachers' Retirement System Total Fund for any periods prior to July 1, 2019.

This report does not relate to or provide assurance on any specific performance report of the Asset Owner other than the Asset Owner's accompanying California State Teachers' Retirement System Total Fund's GIPS asset owner report, or on the operating effectiveness of the Asset Owner's controls or policies and procedures for complying with the GIPS standards.

We greatly appreciate the opportunity to conduct this verification and performance examination for you.

Sincerely,

The Spaulding Grays, Inc.
The Spaulding Group, Inc.

Global Investment Performance Standards Asset Owner Report CalSTRS Total Fund

1-Year Period Ending	Total Fund t-of-Fees turn (%)	Custom lended Benchmark Return (%)	3-Year Standard Deviation Total Fund (%) ¹	3-Year Standard Deviation Benchmark (%) ¹	Number of Portfolios	Total Fund Assets (\$MM)	Total Asset Owner Assets (\$MM)
30-Jun-20	3.82%	3.73%	N/A	N/A	241	\$246,028	\$246,028

California State Teachers' Retirement System (CalSTRS) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. CalSTRS has been independently verified for the periods July 1, 2019 through June 30, 2020.

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 CalSTRS Total Fund has had a performance examination for the periods July 1, 2019 through June 30, 2020. The verification and performance examination reports are available upon request.

GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

¹ The three-year annualized standard deviation measures the variability of the Total Fund and the benchmark for the 36-month period. The composite standard deviation is calculated using net returns. For periods marked "N/A", it is not presented because the composite history is shorter than 36 months.

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Asset Owner Definition:

For the purposes of complying with the GIPS standards, the asset owner is defined as the California State Teachers' Retirement System (CalSTRS). The Teachers' Retirement Fund is a special trust fund established by law that holds the assets of the Defined Benefit, Defined Benefit Supplement and Cash Balance Benefit programs. The Fund assets are held for the exclusive purpose of providing benefits to participants in the pension or retirement system and their beneficiaries, and defraying reasonable expenses of administering the system.

Performance Calculations:

Valuations are computed and performance is reported in U.S. Dollar (\$). Performance presented is net of actual internal and external investment costs, including non-claimable withholding taxes. Performance of external managers is captured net of advisory and management fees, as well as performance fees and carried interest, if applicable. Internal investment management related expenses include personnel, investment research services, trading, custodian services, portfolio accounting services, performance measurement services, legal and technology services. Total internal management expenses accounted for roughly 4 basis points for period shown.

Total Fund and Benchmark Description:

The CalSTRS Total Fund includes all individual portfolios that are combined into one aggregate fund. The plan's overall mandate pursued using both internal and external managers to invest in a broad range of asset classes and strategies. There are five performance objectives identified for the overall Total Fund: (a) relative to the Actuarial Rate of Return, which we set at 7.0%; (b) relative to CalSTRS liabilities, which we measure by using the actuarial rate of return to discount the liabilities which then gives us our funded ratio; (c) relative to inflation, which we measure as the Consumer Price Index plus 4.25%; and (d) relative to the Policy Benchmark Index and (e) relative to the CalSTRS reference portfolio. The Total Fund incepted on June 1, 1986 and has been in compliance with the GIPS standards since July 1, 2019. External managers have been used for all periods presented.

CalSTRS may employ leverage or use derivatives and/or short positions for investment, hedging, or in order to maintain target range exposure in asset classes and to reduce transaction costs that would otherwise be incurred by the buying and selling of actual securities. Limits and restrictions are defined in the CalSTRS' Investment Policy and Management Plan (IPMP).

The Policy Benchmark Index is weighted by the policy target asset allocation and calculated on a monthly basis. The benchmark strategic weights and asset class allocations are presented in the table below as of June 30, 2020. Strategic weights and asset class allocations for prior periods are available upon request.

California State Teachers' Retirement System January 27, 2021 CALSTRS

Asset Class	Asset Class Allocation as of June 30, 2020	Benchmark Strategic Weight as of June 30, 2020	Custom Benchmark
Global Equity	46.9%	51%	Dynamic weighting of: (55%) Russell 3000 Custom Index, (41%) MSCI All Country World Index (ACWI) ex-U.S. Custom (IMI), (< 1 bps) MSCI World ex-U.S. Custom Min Vol (USD) index, (2%) MSCI ACWI ex-U.S. Index,

Custom Index

Capital (10%)

Index.

N/A

N/A

Special Mandates (6%)

(46%) SG Trend Index,

Index (Series L),

Fixed Income

Private Equity

Risk

Mitigating

Strategies

(RMS)

Inflation

Sensitive

Liquidity

Innovative

Strategies
Strategic

Overlay

Real Estate

12.6%

14.3%

9.8%

8.5%

3.1%

4.1%

0.3%

0.3%

13%

13%

9%

9%

3%

2%

0%

0%

(2%) MSCI World Custom Low Carbon Target Net Index (95%) Bloomberg Barclays U.S. Aggregate Custom Index (5%) Bloomberg Barclays U.S. High Yield 2% Issuer Capped

lagged), further detailed in the Private Equity Policy.

(12%) HFRI Macro: Discretionary Thematic Index,

(4%) Eurekahedge Multi-Factor Risk Premia Index

(2%) NCREIF Timberland Fund Index,

(20%) Bloomberg Commodity Index,

(1%) Alerian MLP Daily index, (2%) CPI+3% (quarter lagged), (62%) CPI+4% (quarter lagged)

90-day Treasury Bill Index

Traditional: Buyout (71%), Debt-Related (10%) and Venture

Non-Traditional: Longer Term (2%), Multi Strategy (1%) and

(38%) Bloomberg Barclays U.S. Treasury 20+year Total Return

(13%) Bloomberg Barclays U.S. Treasury Inflation Linked-Bond

NCREIF ODCE Value Weighted index, Net of fees (quarter lagged)
Dynamically weighted blend of the CalSTRS Custom Private Equity
Traditional and Non-Traditional Indices comprised of segments of
the State Street Global Exchange Private Equity Index (quarter

Global Equity comprises of U.S., non-U.S. developed, and emerging markets. The Portfolio shall be managed under an active risk budget framework, as defined in the CalSTRS Global Equity Investment Policy, utilizing both active and passive management strategies.

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Fixed Income comprises of investment grade and non-investment grade securities. The portfolio will target 80 percent using an enhanced indexing strategy, while 20 percent will be externally actively managed using a broader universal fixed income and high-yield securities opportunity set. The internally managed portfolio will emphasize tracking the risk characteristics of the performance benchmark.

The Real Estate Portfolio will be comprised of direct real estate investments, joint venture/value added investments, and commingled funds (opportunistic funds) with adopted targets of 60 percent to core, 20 percent value added and 20 percent to higher-risk tactical investments. Leverage maybe applied within the constraints set forth in the CalSTRS Real Estate Investment Policy.

The Private Equity Portfolio can include limited partnerships, (and other limited liability vehicles), direct investments in general partnerships, co-investments, and secondary interests in the following market segments: Buyouts, Venture Capital, Debt Related, Core Private Equity, and Private Equity Special Mandates. The primary objective for the Private Equity Portfolio is to provide enhanced investment returns over those available in the public market.

The purpose of RMS is to help diversify CalSTRS portfolio large exposure to global economic growth within the overall investment portfolio. This class will contain assets and investment strategies with structural aspects that provide improved diversification and potential protection in negative equity markets. This class will consist of four core strategies; long-term U.S. Government Bonds, Trend Following, Global Marco, and Systematic Risk Premia.

Inflation Sensitive consists of several asset types that, when combined, should produce a relatively stable return stream, with a return level between equities and fixed income, and an overall higher correlation to inflation than equity or fixed income. The initial portfolio was comprised of global inflation linked bonds/securities and infrastructure investments. Additional investment areas and strategies have been added upon the Investment Committee's approval.

Innovative Strategies will invest in a diversified portfolio of assets that generally fall outside of the traditional asset classes currently used by the Board. The purpose is to provide the Board with the opportunity to invest in a wide spectrum of investment opportunities that will be required to demonstrate success before committing larger dollar amounts to a specified strategy.

Liquidity shall be managed internally with emphasis on safety and liquidity. The portfolio shall be comprised of investment grade securities; and other appropriate securities as approved in the policies and procedures.

Other Disclosures:

A list of total fund descriptions, a list of composite descriptions, and policies for valuing investments, calculating performance and preparing a GIPS Asset Owner Report are available upon request.

Private assets are valued quarterly, and valuations are adjusted intra-quarter to reflect capital contributions and distributions as they occur. Controlling interests in real assets and directly held private equity investments are valued annually by an independent third party. These investments are immaterial as they represent 9.26% of the total net investments as of June 30, 2020.