

WATCH LIST

Purpose

The Board of Trustees ("Board" or "Trustees") of the Public School Teachers' Pension and Retirement Fund of Chicago ("CTPF" or the "Fund") established the following Watch List Policy ("Watch List") so that all decisions to add and remove investment managers to and from the Watch List, respectively, reflect a fair and objective evaluation. The Watch List criteria, outlined below, are used to identify investment managers that are eligible to be added to the Watch List. The Watch List guidelines also recognize when an investment manager has met the criteria to be removed from the Watch List.

I. Watch List Guidelines

The Board is responsible for monitoring the performance of the Fund's investment managers on an ongoing basis. The Board may place an investment manager on the Watch List at any time. The Board in its discretion may terminate an investment manager at any time without regard to the investment manager's Watch List status.

The Board may place an investment manager on the Watch List for a variety of reasons separated into two broad categories – qualitative and quantitative factors. The former focuses on personnel, organizational, risk, and legal issues, while the latter addresses performance.

Placing an investment manager on the Watch List will assist the Board in closely monitoring the investment manager's continued performance and compliance with the Board's Polices and may be helpful to resolve a specific concern or problem with qualitative or quantitative factors. Watch List guidelines are not to be mechanically applied. Rather, the Board, Investment Staff, and the Investment Consultant ("Consultant") shall conduct an appropriate formal review process prior to terminating a relationship with an investment manager; however, the Board in its discretion may terminate an investment manager without engaging in a formal review process if the Board determines that immediate action is necessary to prevent harm to the Fund.

A. Qualitative Factors

Below are **qualitative** factors the Board may consider in determining the appropriateness of placing an investment manager on the Watch List or whether a relationship with an investment manager should be terminated. Because of the subjective nature of qualitative analysis, each situation will be reviewed on a case-by-case basis.

FACTOR	EVALUATION	ACTION STEPS
Deviation from stated investment style and philosophy	 Style mapping – total fund analysis. Style attribution – manager specific style analysis. 	Assess if manager's style and philosophy are still consistent with the Fund's asset allocation structure. Place on watch list.
Changes in ownership or business plan	Requires immediate notification to the Fund of any pending changes in ownership.	Assess if change may detrimentally affect investment philosophy and asset performance. Place on watch list.
• Turnover of key personnel	Requires immediate notification to the Fund of any changes in key personnel.	Assess if the personnel turnover on the account creates a material risk. Place on watch list.
Litigation	Requires immediate notification to the Fund if investment manager is involved in any litigation.	Assess the severity and likely impact of the litigation on the Fund's portfolio. May place on "watch list".
• Compliance	Requires immediate notification to the Fund of any violations of compliance with Investment Policy Statement ("IPS"), federal & state security laws, or Investment Manager Agreement	Assess the severity of the violation and determine if violation is material. May place on "watch list".
Brokerage	Investment manager not meeting CTPF's brokerage requirements for four consecutive quarters.	Assess investment manager's ability to meet the Fund's brokerage requirements. Place on watch list.

B. Quantitative Factors – Public Market Investments

Below is a list of some of the **quantitative** factors that the Board may consider in determining the appropriateness of placing an investment manager on the Watch List or whether a relationship with an investment manager should be terminated. This list is not intended to be exhaustive as other factors may be considered, such as the characteristics of the strategy in question. Two consecutive quarters with of multiple failing criteria shall be considered an indicator of material risk.

Performance Criteria to be met:

PERFORMANCE TEST	BENCHMARK	FAIL CRITERIA
Rolling Three	Relative to appropriate	If manager fails to exceed the style benchmark over a
Years	style benchmark	3-year rolling period for two consecutive quarters
		• Equities – 200 bps below the index (net of fees)
		• Fixed Income Core – 50 bps below the index (net of fees)
		• Fixed Income Core Plus – 100 bps below index (net of fees)
Rolling Three	Relative to appropriate peer	If manager performs below the 50 th percentile (gross of
Years	group	fees) relative to the peer group over a 3- year rolling
		period for two consecutive quarters
Rolling Seven Years	Relative to the appropriate	If manager fails to exceed the style benchmark over a
	style benchmark	7-year rolling period for two consecutive quarters (net of fees)
Rolling Seven Years	Relative to the appropriate	If manager performs below the 50 th percentile (gross of
	peer group	fees) relative to the peer group over a 7-year rolling
		period for two consecutive quarters
Five Years	Relative to the information	If manager fails to maintain a positive information
	ratio	ratio and performs below the 50 th percentile relative to
		the peer group over five years for two consecutive qtrs.
Five Years	Relative to the up market	If manager fails to maintain an up market capture
	capture	above 90% and performs below the 50 th percentile
		relative to the peer group over five years for two consecutive quarters
Five Years	Relative to the down	If manager fails to maintain a down market capture
Tive Tears	market capture	below 90% and performs above the 50 th percentile
	market capture	relative to the peer group over five years for two
		consecutive quarters

C. Quantitative Factors – Private Market Real Asset Investments

Below are **quantitative** factors to be considered in determining the appropriateness of placing an investment manager on the watch list.

Both Performance Criteria to be met:

PERFORMANCE TEST	STRATEGY/BENCHMARK	FAIL CRITERIA
Rolling Five	- Open-end Core / NFI-ODCE	If manager fails to exceed the relevant
Years	Value Weighted Index	NCREIF index over a 5-year rolling period
	- Infrastructure / FTSE	for two consecutive quarters
	Core Developed Index	
Rolling Five	- Core / NFI-ODCE Value	If manager performs below the 50 th
Years	Weighted Index	percentile relative to the peer group over a
	- Non-Core / Vintage Year	5-year rolling period for two consecutive
	- Infrastructure / Vintage Year	quarters

When applicable, the Fail Criteria will be applied using time-weighted and dollar-weighted performance returns, as well as an equity multiple. Since robust benchmarks and peer groups may not be readily available for certain Infrastructure investments, the Board will assess Infrastructure investments on a case-by-case basis while also taking into account unique circumstances impacting each investment manager's performance. While termination of an investment manager with a close-end vehicle may be extremely difficult, if not impossible, Watch List history will serve as an important point of reference when the Board considers re-investing in that investment manager's follow-on or subsequent funds.

II. Watch List Review Process

When an investment manager is placed on the Watch List, Investment Staff and Consultant will conduct a formal review which includes:

- **A.** Notify the investment manager in writing and describe the reasons for placement on the Watch List.
- **B.** Request that the investment manager provide a written analysis of the qualitative or quantitative factors that led to their firm's placement on the Watch List.
- **C.** Research alternative investment opportunities in the event the investment manager is subsequently terminated.

Within one year from the date of being placed on the Watch List and after an assessment of the qualitative or quantitative factors that led to being on the Watch List, the Trustees shall determine an appropriate course of action. Possible courses of action include, but are not limited to:

- * Remove the investment manager from the Watch List if the qualitative or quantitative factors have been rectified or have sufficiently improved.
 - For quantitative factors, the investment manager will be evaluated over a period of up to one year. The evaluation will emphasize long-term performance;
- ❖ Keep the investment manager on the Watch List for an extended period of up to 1 year;
- ❖ Terminate the investment manager.

Based on the specific factors which led to the investment manager being on the Watch List, the Board with the assistance of the Investment Staff and Consultant shall determine specific qualitative or quantitative metrics on which to evaluate improvement. The same qualitative or quantitative factors highlighted above shall be used as guidelines to remove an investment manager from the Watch List. The decision to terminate an investment manager should not be taken lightly or made with blind reliance on quantitative or qualitative guidelines. The ultimate decision rests in the judgment and authority of the Board of Trustees following consultation with Investment Staff and the Consultant.

Nothing contained in this Watch List Policy mandates retention or termination of an investment manager.

History

Approved April 28, 2011 Revised April 25, 2013 Reviewed March 20, 2014 Revised August 20, 2015 Revised February 16, 2017

Review

The Board shall review this Watch List Policy annually.