Statement of Investment Policy, Objectives, and Guidelines
Lowell Observatory Foundation
Approved December 2015
Amended June 2018
Amended February 2022

SCOPE OF THIS INVESTMENT POLICY

This statement of investment policy reflects the investment policy, objectives, and constraints of the Lowell Observatory Foundation (the "Foundation"). This statement addresses the management of all funds held by the Foundation except for any funds accepted and managed with specified investment restrictions.

PURPOSE OF THIS INVESTMENT POLICY STATEMENT

This statement of investment policy is set forth by the Board of Trustees of the Foundation in order to:

1. Define and assign the duties and responsibilities of all involved parties.
2. Establish a clear understanding for all involved parties of the investment goals and objectives of the Foundation's investment portfolio.
3. Offer guidance and limitations to all Investment Managers regarding the investment of Foundation assets.
4. Establish a basis for evaluating investment results.
5. Manage Foundation assets according to standards of prudence.
6. Establish the investment time horizon for Foundation assets.

In general, the purpose of this statement is to outline a philosophy which will guide the investment management of the assets toward the desired results. It is intended to be sufficiently specific to be meaningful, yet flexible enough to be practical.

GOAL OF THE INVESTMENT OF THE ENDOWMENT FUNDS

The Board of Trustees believes that future Lowell Observatory programs and research are as important as current programs and research. This is consistent with the philosophy that the Foundation expects to exist in perpetuity, and therefore, should provide for grant making in perpetuity. To attain this goal, the Foundation will continually balance the current needs of the Observatory with the anticipated future needs by maintaining a prudent long-term investment strategy that consistently supports its adopted Spending Policy.

While it is believed that assuming more risk within the portfolio may provide higher long-term returns over market cycles, and serve as protection against the impact of inflation on the portfolio, the current needs of the Observatory and the practical advantages of providing consistent distributions is the primary goal. Future gifts (contributions to this Foundation) are uncertain, and therefore, unpredictable. However, the Board of Trustees will look to anticipated future gifts to certain of its endowment funds as the main hedge against inflation for those funds and the source of "real" increases in support for the Observatory. With respect to any endowment funds for which it is not expected future gifts would be likely, a more conservative distribution/spending policy to attempt to mitigate the impact of inflation on the "real" value of the distributions made to the Observatory may be considered while taking into account the size of the fund, the known desires of the donor and any specific stipulated purpose of the distributions from the fund.

The Foundation's specific investment objectives will be established later in this document.

RESPONSIBILITY AND AUTHORITY FOR INVESTMENT ACTIVITIES

The Board of Trustees is responsible for and has full authority to direct and monitor the investment activities pertaining to Foundation assets. The Board may delegate to an external agent the management and investment of Foundation assets to the extent that it determines such a delegation is prudent under the circumstances subject to any specific limitation set forth in a gift instrument or in law. The Board shall act in good faith, with the care that an ordinary prudent person in a like position would exercise under similar circumstances, in all of the following:

1. Selecting an agent
2. Establishing the scope and terms of the delegation, consistent with the purposes of the Foundation,
3. Providing oversight to the agent's performance and compliance with the scope and terms of the delegation on an ongoing basis.

In their oversight of all investments of the Foundation, the Board will from time to time employ one or more of the following:

1. **Investment Manager.** The Investment Manager (or in the case of more than one, each Investment Manager) has discretion to purchase, sell, or hold the specific securities that will be used to meet the Foundation's investment objectives. Investment Managers will be held responsible and accountable to achieve the general objectives herein stated. In addition, an Investment Manager is responsible for their specific investment mandate. While it is believed that any imposed limitations will not hamper Investment Managers, each manager should request modifications which they deem appropriate.
2. **Custodian.** The Custodian will physically (or through agreement with a sub-custodian) maintain possession of securities owned by the Foundation, collect dividend and interest payments, redeem maturing securities, and effect receipt and delivery following purchases and sales. The Custodian shall also perform regular accountings of all assets owned, purchased, or sold, as well as the movement of assets into and out of each individual endowment fund.
3. **Additional specialists** such as attorneys, auditors, and others may be employed by the Board of Trustees to assist in meeting its responsibilities and obligations to administer Foundation assets prudently. All expenses for such experts must be

customary and reasonable, and will be borne by Foundation assets as deemed appropriate and necessary.

DEFINITIONS

1. "Investment Manager" shall mean any individual, or group of individuals, employed to manage the investments of all or part of the Foundation's investment portfolio.
2. "Securities" shall refer to the marketable investment securities that are defined as acceptable in this statement.
3. "Investment Horizon" shall be the time period over which the investment objectives as set forth in this statement are expected to be met. The investment horizon for the Foundation investment portfolio is long term, greater than ten (10) years.

ASSIGNMENT OF RESPONSIBILITY

Responsibility of the Investment Manager

Each Investment Manager will have full discretion to make all investment decisions for the assets placed under its jurisdiction, while observing and operating within all policies, guidelines, constraints, and philosophies as outlined in this statement. Specific responsibilities of the Investment Manager include:

1. Discretionary investment management including decisions to buy, sell, or hold individual securities, and to alter asset allocation within the guidelines established in this statement.
2. Reporting, on a timely basis, quarterly investment performance results.
3. Communicating any major changes to economic outlook, investment strategy, or any other factors which affect implementation of the investment process employed to accomplish the stated investment objective.

GENERAL INVESTMENT PRINCIPLES

1. Subject to the intent of a donor expressed in a gift instrument, the Foundation, in managing and investing its funds, shall consider the purposes of the Foundation and the purposes of each individual fund.
2. Foundation assets shall be invested with reasonable care, skill and caution and they shall be managed and invested as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances. Individual investment decisions shall not be evaluated in isolation but within the context of the entire portfolio and as part of the overall investment strategy and objective. The general standards to be followed are outlined and promulgated in the Arizona Prudent Investor Rule (A.R.S. Title 14, Chapter 11, Article 9).
3. Investment of Foundation assets shall be diversified so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.

INVESTMENT OBJECTIVES

The primary purpose of Foundation funds is to support the ongoing research and operations of Lowell Observatory. Given the significant dependence the Observatory has on receiving distributions from the Foundation funds for operating and other purposes, there is high importance attached to assuring a stable and steady income stream and the continued growth of Foundation assets. In order to meet its ongoing objectives in supporting Lowell Observatory, the investment strategy of the Lowell Observatory Foundation will be to emphasize total return; that is, the aggregate return from realized and unrealized capital appreciation and dividend and interest income. Specifically, the primary objective in the investment management for Foundation assets shall be:

Moderate Growth - The primary emphasis is to provide long-term capital appreciation with a secondary concern for income. The portfolio will invest in securities with potential for growth in value over the long-term but will diversify with other types of assets so as to reduce the volatility of the portfolio. Although the Foundation's objective is to annually increase the portfolio's asset value at least by the amount of the annual distribution rate and fees and expenses, it is recognized that this objective will not be achieved each calendar year.

SPECIFIC INVESTMENT GOALS

It is the goal of the Foundation investment portfolio's total return to, over time, meet or exceed the annual distribution/spending rate and fees and expenses. The stated investment goals above are the objectives of the aggregate of the Foundation's investment portfolio. The goal of each Investment Manager, shall be to:

1. Meet or exceed their established benchmarks, or blended benchmarks, selected and agreed upon by the Board of Trustees that most closely corresponds to the style of investment management.
2. Display an overall level of risk in the portfolio which is consistent with the risk associated with the benchmarks specified in 1. above.

DEFINITION OF INVESTMENT RISK

The Board of Trustees realizes that there are many ways to define investment risk. It believes that any person or organization involved in the process of managing Foundation assets must understand how it defines investment risk so that the assets are managed in a manner consistent with Foundation objectives and investment strategy as defined in this statement of investment policy. The Board of Trustees defines investment risk as the potential for variability of returns as well as the fluctuation in the value of an investment which could result in loss of principal. Some specific causes of investment risk are: general market fluctuations, industry-specific market fluctuations, trends in interest rates and foreign exchange rates and also company specific factors. The Board believes that a fundamental way to manage investment risk is through diversification and measured by standard deviation.

LIQUIDITY

To minimize the possibility of a loss occasioned by the sale of a security forced by the need to meet a planned distribution, the Board of Trustees may periodically provide the Investment Manager with an estimate of expected distributions and the timing of those distributions. The Board will notify the Investment Manager in a timely manner, to allow sufficient time to build up necessary liquid reserves. To maintain the ability to deal with planned distributions, it is anticipated that, subject to market conditions, a minimum of 2% of the Foundation's assets will be maintained in cash or cash equivalents, including money market funds or short-term U.S. Treasury bills.

MARKETABILITY OF ASSETS

The Board of Trustees requires that at least 75% of the Foundation's investment portfolio be invested in readily marketable securities, defined as securities that can be transacted quickly and efficiently on established financial exchanges.

INVESTMENT GUIDELINES

Allowable Assets

1. Cash Equivalents
   - Treasury Bills
   - Money Market Funds
   - Commercial Paper
   - Banker's Acceptances
   - Repurchase Agreements
   - Certificates of Deposit
2. Fixed Income Securities (which shall include all forms of debt obligations)
   - U.S. Government and Agency Securities
   - Foreign Government or Corporate Notes and Bonds
   - Mortgage Backed Bonds
   - Preferred Stock
3. Equity Securities
   - Common Stocks
   - Convertible Notes and Bonds
   - Convertible Preferred Stocks
   - American Depository Receipts (ADRs) of Non-U.S. Companies
   - Stocks of Non-U.S. Companies (Ordinary Shares)

   REITs (Real Estate Investment Trusts)
4. Hard Assets

   Commodities
5. Liquid Alternative Assets

   Diversified Hedge Funds

   Managed Futures
6. Funds or partnerships that hold any of the above

Asset Allocation Guidelines

The management of Foundation assets shall be in accordance with the following asset allocation guidelines:

1. Aggregate Foundation Asset Allocation Guidelines (at market value)

	Target	Min	Max
Equities (Large Cap, Mid Cap, Small Cap, Int'l			

Developed, Int'l Emerging)	60%	45%	75%
Fixed Income (High Yield, Long Term, Short/Intermediate, International)	28%	15%	45%
Alternative Investments (REITs, Pvt Equity, Hedge Funds, Commodities)	10%	0%	15%
Cash and Equivalents (Money Markets, T-Bills, etc.)	2%	0%	20%

2. In the event that the above aggregate asset allocation guidelines are violated, for reasons including but not limited to market price fluctuations, the Board of Trustees will instruct the Investment Manager to bring the portfolio(s) into compliance with these guidelines as promptly and prudently as possible.

Diversification for Investment Manager

The Board of Trustees does not believe it is necessary that securities held in the Foundation investment portfolio represent a cross section of the economy. However, in order to achieve a prudent level of portfolio diversification, the individual securities of any one company, U.S. government agency, or other issuer should not exceed 5% of the total portfolio, and no more than 20% of the total portfolio should be invested in any one industry.

Guidelines for Fixed Income Investments and Cash Equivalents

1. Foundation assets may be invested in below investment grade bonds as defined by rating agencies (Standard and Poor's, Moody's)
2. Foundation assets may be invested only in commercial paper rated A1 or P1(or equivalent) or higher.
3. Fixed income maturity restrictions are as follows:
   - Maximum maturity for any single security is 30 years.
   - Weighted average portfolio maturity may not exceed 15 years.
4. Money Market Funds selected shall contain securities whose credit rating at the absolute minimum would be rated investment grade by Standard and Poor's, and/or Moody's.

SELECTION OF INVESTMENT MANAGERS

The selection of an Investment Manager must be based on prudent due diligence procedures. A qualifying Investment Manager must be a registered investment advisor under the Investment Advisors Act of 1940, or a bank or insurance company.

INVESTMENT MANAGER PERFORMANCE REVIEW AND EVALUATION

Performance reports generated by the Investment Manager shall be compiled at least quarterly and provided to the Board of Trustees for review. The investment performance of the total portfolio, as well as asset class components, will be measured against the established performance benchmarks. Consideration shall be given to the extent to which the investment results are consistent with the investment objectives, goals, and guidelines as set forth in this statement. The Board of Trustees possesses the authority to make decisions regarding the retention of all Investment Managers. However, it expects that the evaluation of an Investment Manager will take place with at least a three year time period and it reserves the right to direct the termination of a manager for any reason including the following:

1. Investment performance which is significantly less than or more than anticipated given the discipline employed and the risk parameters established, or an unacceptable justification of results.
2. Failure to adhere to any aspect of this statement of investment policy, including communication and reporting requirements.
3. Significant qualitative changes to the investment management organization.

Investment Managers shall be reviewed regularly regarding performance, personnel, strategy, research capabilities, organizational and business matters, and other qualitative factors that may impact their ability to achieve the desired investment results.

INVESTMENT MANAGER EVALUATION

The Board of Trustees will annually evaluate and review the services of the Investment Manager. The specific accountabilities that are expected to be weighed most heavily include:

1. Ongoing communication with the Foundation
2. Timeliness of reporting to the Foundation
3. Frequency of turnover of the portfolio
4. Overall performance relative to established benchmarks and within the context of the established investment objective

INVESTMENT POLICY REVIEW

To assure continued relevance of the guidelines, objectives, financial status and capital markets expectations as established in this statement of investment policy, the Board of Trustees plans to periodically review this policy to ensure it continues to meet the goals and objectives of the Foundation and its donors as well as the needs of the Observatory.

This statement of investment policy was adopted on February 23, 2016 by the Board of Trustees of the Lowell Observatory Foundation.

Addendum I to Investment Policy Statement

Sample Comparative Benchmarks

Equities:

S&P 500 Index
Russell 2000 Index
Russell Mid-Cap Index
MSCI EAFE (Europe, Australia, Far East) Index
MSCI Emerging Markets Index
MSCI All Country World Index

Alternatives:

HFRX Global Fund Index

Bloomberg Commodity Index

Bonds:

Barclay's U.S. Aggregate Bond Index

Barclay's Global Aggregate Bond Index
JP Morgan Emerging Market Bond Index

Cash:

U.S. T-Bills

February 23, 2016