

Strategic Plan FY 2017 and Beyond

Endowment Fund Investment Board
Of the State of Idaho



August 11, 2016

Mission of the Endowment Fund Investment Board

Provide professional investment governance consistent with our constitutional and statutory mandates.

Goals

As our clients' individual needs for managing an endowment fund require, we will:

- Develop a prudent long-term investment strategy
- Utilize the best portfolio managers, consultants and other agents to execute that strategy
- Diligently evaluate performance over time
- Develop an effective distribution policy
- Help them fulfill their fiduciary responsibilities and communicate with their stakeholders

For our Board and staff, we will:

- Maintain a work environment which motivates and retains a knowledgeable and professional staff

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Objectives

Funds Overseen by the Endowment Fund Investment Board

<u>Fund</u>	<u>Client Fiduciary</u>
Land Grant Endowment Funds	Board of Land Commissioners
State Insurance Fund	Manager, State Insurance Fund
Bunker Hill Water Treatment Endowment	Dept. of Environment Quality
Stewardship Endowment	Dept. of Fish and Game
Trust Endowment	Dept. of Fish and Game
Trail of the Coeur d'Alenes Endowment	Dept. of Parks & Recreation
Ritter Island Endowment Fund	Dept. of Parks & Recreation

Objectives Applicable to All Clients

- Ensure compliance with a prudent Investment Policy
- Meet or exceed the client's fund benchmarks
- Continuously evaluate new investment approaches and emerging governance practices
- Provide regular, relevant communication of fund performance

Objectives Specific to the Land Grant Endowment Funds

- Distribute the maximum sustainable amount
- Maintain sufficient Earnings Reserves to protect distributions from temporary income shortfalls
- Grow distributions and the Permanent Fund faster than inflation and population growth
- Increase the diversification of the endowment funds to reduce volatility of earnings while maintaining expected return
- Assist with improving coordination/assimilation of real assets and financial assets as an overall portfolio

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Key performance measures and benchmarks

(including the rationale for their adoption)

The efficacy of the Endowment Fund Investment Board's management can best be measured by:

- *Stability and growth of distributions*
- *The risk-adjusted performance of the portfolios of each of our clients*
- *Growth in permanent corpus*

Risk/Return Measures & Benchmarks

These measures will be calculated annually and over multi-year periods

- *Measure: Return vs. benchmark*
 - *Endowment Funds: exceed Fund benchmark on a risk-adjusted basis, net of fees*
 - *State Insurance Fund: meet or exceed the Fund's benchmark, net of fees*
- *Measure: Return vs. peers*
 - *Endowment funds: Exceed median of peers on a risk-adjusted basis*

Rationale for establishing these measures/benchmarks

There is no single, perfect measure of the performance of an investment portfolio, so multiple performance measurements will be used, customized to the needs of each client and calculated for both annual and multi-year periods.

Return vs. benchmark: This is a relative return measure that calculates the value-added of "active" versus "passive" investing. One can invest in many (but not all) major asset

classes in the financial markets thru either index funds or via active management. Index funds essentially own a representative portion of the whole market and are therefore referred to as "passive" investments because they do not attempt to predict which specific securities in the class will perform best. "Active" investing attempts to select the assets within a class that will perform better than average. The efficiency of financial markets makes it challenging to earn active returns in excess of the passive index without taking extra risk.

Return vs. peers: Since a rising tide lifts all boats, comparison to relevant peers, adjusted for risk, allows one to measure whether a fund is doing better or worse than similar participants in the financial markets. It measures a fund's ability to make investment choices better than average, but is difficult to achieve over time because, by definition, half of all funds striving to be above average end up being below average. Also, certain peer group data is only available annually and one can never find a perfectly similar peer group, which limits the value of peer comparison.

Land Grant Endowment Growth of Corpus Measures & Benchmarks

- **Measure:** Percent change in the Permanent Fund
 - Greater than inflation and population growth

Rationale for establishing the measure/benchmark

The mission and ultimate purpose of Idaho's land grant endowments is to provide a perpetual stream of income to the beneficiaries. To balance the needs of current and future beneficiaries, over time the corpus of the endowment funds should grow at a rate greater than the growth in inflation and population, so that endowment distributions can keep up with the growth in beneficiary funding needs.

Land Grant Endowment Distribution Measures & Benchmarks

- **Measure:** Stability of distributions to beneficiaries
 - No reductions in total endowment distributions
- **Measure:** Percent change in distributions to beneficiaries
 - Exceed inflation and population growth over a five-year period
- **Measure:** Level of Earnings Reserves
 - 500%-700% of the last year of approved distributions (depending on endowment)

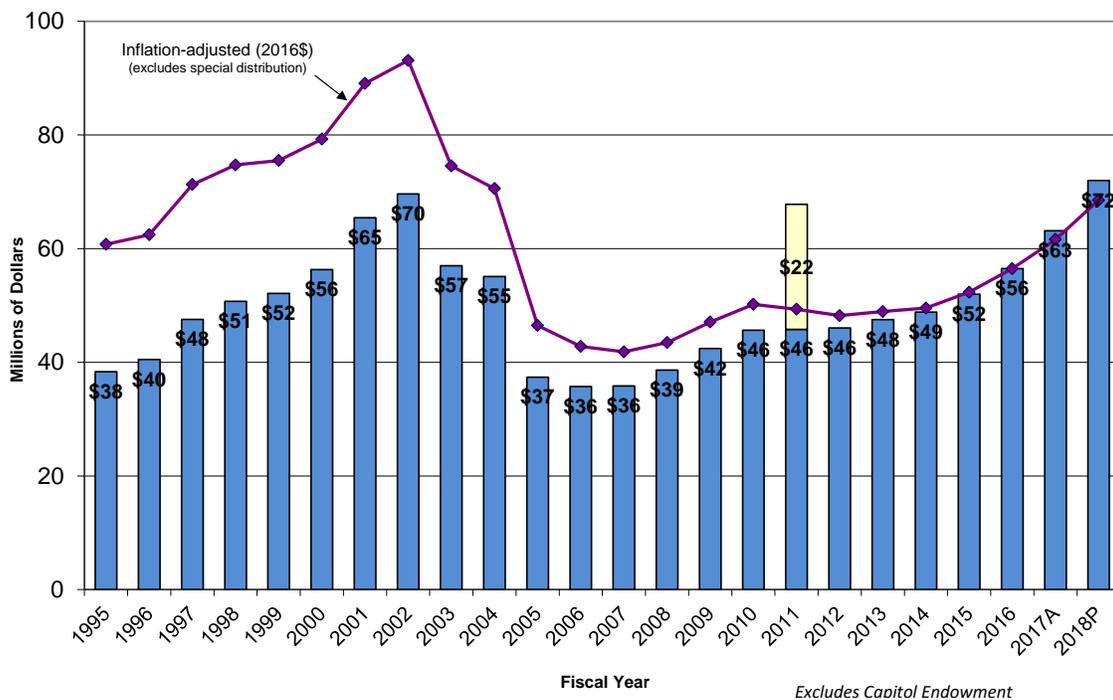
Rationale for establishing the measure/benchmark

The adequacy of the returns of the endowment funds and the efficacy of the Distribution Policy are ultimately measured in terms of the distributions to the beneficiaries, both in absolute dollars and in consistency from year-to-year. While the vision of the state's land and financial endowment assets is to grow distributions over time at a rate in excess of inflation and population growth, endowment beneficiaries experienced declining distributions for four years straight after FY 2002 due to lower timber revenues than expected, especially in FY 2003 and FY 2005, the significant bear market in equities in 2000-2002, and a high level of distributions in FY 2001 and FY 2002 relative to the size of the reserves. The drop in distributions in FY 2003 was especially traumatic, because it coincided with a significant shortfall in expected General Fund revenues.

Since most beneficiary funding supports ongoing personnel costs, maintaining distributions year-over-year is strongly preferred.

Land Grant Endowment Distributions To Beneficiaries 1995-2018 Actual/Estimated, Net of General Funds Nominal and Inflation-Adjusted

(Net of General Fund contributions 1995-2000, 2006; includes special Public School distribution in 2011 of \$22M)



Source: Legislative Services, EFIB records

Earnings Reserve funds for all eight endowments are at or near target levels at the end of FY 2016. After analyzing the variability of land and fund revenues, the EFIB has determined that having at least five years of distributions should be sufficient to prevent the need to reduce a beneficiary's distribution in all but the most extreme disruptions of fund and land revenues. However, if expected land revenues, based on forecasts done by

the Department of Lands, are temporarily much lower than normal, the EFIB may recommend that an endowment temporarily hold additional years of reserves until land revenues recover.

At the end of each fiscal year, any reserves in excess of the level that is adequate and reasonable to secure future distributions thru a market downturn may be transferred to the Permanent Fund. This will allow the Permanent Fund, which is held primarily for the benefit of future beneficiaries, to grow over time at roughly the same rate as the Earnings Reserves, which are primarily for the benefit of current beneficiaries. The policy of setting distributions as a % of the Permanent Fund ties growth in distributions to growth in the permanent corpus, further aligning the interests of both current and future beneficiaries.

The Capitol Permanent Fund has a Maintenance Reserve Fund to accumulate earnings in preparation for major maintenance projects at the Capitol Building in ten years or more. Because it is intended to fund rare, one-time distributions, the Capitol Reserve is less sensitive to temporary disruptions in annual distributions from its Permanent Fund.

Other Endowments – Growth of Corpus Measure and Benchmark

- **Measure: Percent real change in the fund**
 - In excess of the rate of inflation over a five-year period

Rationale for establishing the measure/benchmark

The mission and ultimate purposes of the Bunker Hill Endowment, the Fish and Game Wildlife Mitigation Endowments, the Trail of the Coeur d'Alenes Endowment, and the Ritter Island Endowment Fund are to provide a perpetual stream of income to support certain operations. To balance the needs of current and future beneficiaries, over time the corpus of these endowment funds should grow at a rate greater than the growth in inflation so that endowment distributions keep up with the growth in beneficiary funding needs.

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External factors

that could significantly affect the achievement of our goals and objectives

The major outside factors impacting the EFIB are the returns and volatility of the financial markets and the level of timber revenues from endowment lands.

I. Financial Markets

All of the portfolios managed by the Endowment Fund Investment Board are subject to the variability of the financial markets and to the threat of eroding purchasing power due to inflation.

The EFIB attempts to mitigate some of the market risk by investing in diversified portfolios of assets so that the expected variation in the whole portfolio is less than the sum of the variations of each part. The following table demonstrates the sensitivity of each client's portfolio to different asset classes.

Exposure To Financial Markets By Client

	<i>% Of Assets Invested (Target Mix)</i>						
	<i>Land Grant Endowment Funds</i>	<i>Bunker Hill Water Treat. End. Fund</i>	<i>Fish & Game (Habitat Mitigation) Trust Stewardship</i>		<i>Parks & Recreation Ritter CDA Island Trail</i>		<i>State Insurance Fund</i>
Equities							
Developed markets							
U.S.	47%	47%	47%	47%	49%	49%	10%
Foreign	17%	17%	17%	17%	3%	3%	3%
Emerging markets	2%	2%	2%	2%	18%	18%	0%
Private equity	0%	0%	0%	0%	0%	0%	0%
High yield debt	0%	0%	0%	0%	0%	0%	0%
Total Equities	66%	66%	66%	66%	70%	70%	13%
Fixed Income							
Treasuries/Agencies							
Standard	9%	9%	9%	9%	11%	11%	48%
Inflation-protected	4%	4%	4%	4%	5%	5%	8%
Mortgages (agency)	6%	6%	6%	6%	7%	7%	8%
Mortgages (non-agency)	0%	0%	0%	0%	0%	0%	1%
Corporates, other	7%	7%	7%	7%	8%	8%	22%
Total Fixed Income	26%	26%	26%	26%	30%	30%	87%
Real Estate	8%	8%	8%	8%	0%	0%	0%
Absolute Return	0%	0%	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	100%
Duration/Maturity of							
Fixed Income (years)	5.9	5.9	5.9	5.9	5.8	5.8	4.2

Source: EFIB analysis

For the land grant Endowment Funds, gains in the Permanent Fund are recognized as income only when the Fund has a total cumulative gain net of inflation (i.e. passes its "gain benchmark", the June 2000 level adjusted for inflation and certain deposits). This total real income approach protects the inflation-adjusted corpus or principal in the permanent fund, since gains in any one year will first be applied to offset any past losses in principal. However, this approach will also result in zero revenues flowing to reserves in years in which there are cumulative losses in the securities market. Historically, market losses in a 66% equity, 26% fixed income, and 8% real estate portfolio have occurred in one year out of three. Also, in each twenty-five-year historical period there has been one period where no income would have accrued from the permanent fund to earnings reserve for five consecutive years.

II. Variation in Land Revenues

For the endowment funds, the performance of the land assets is another major external factor that can significantly affect the achievement of the objective of maximizing sustainable distributions (increasing payouts while avoiding reductions). About half of the sensitivity of the return on total endowment assets is driven by the cash return on the lands and about half by the total return of the funds.

The total cash available for distribution to endowment beneficiaries is highly influenced by variations in net cash earnings of the endowment lands. Over the last sixteen fiscal years, these earnings have averaged \$45 million annually, with a range of about plus or minus \$10 million (about 20%) except for 2010, when revenues plunged 50% below average and 2014, when revenues jumped almost 40% above average.

Land Revenues Net of Management Costs (millions of \$)

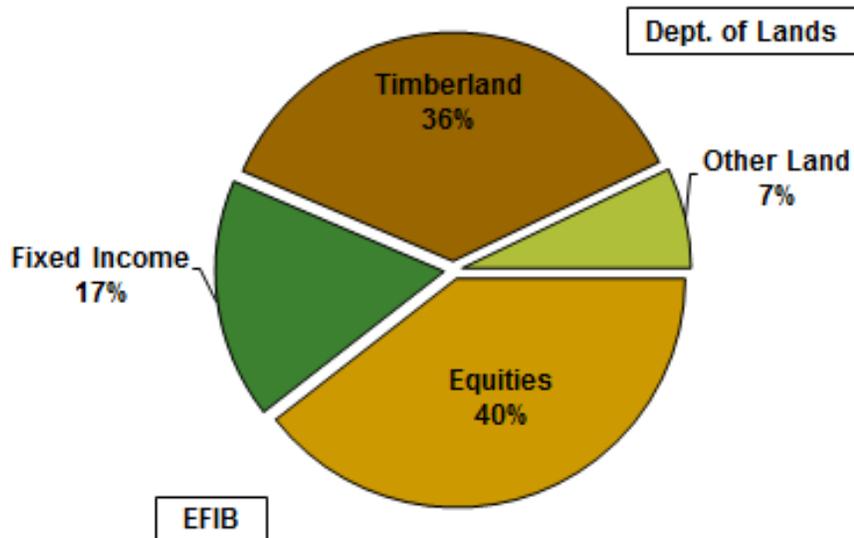
<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>Average</u>
49	42	35	50	38	48	54	50	35	21	41	40	48	64	55	53	45

Source: Legislative Services, EFIB analysis

By 2019, when plan dispose of most commercial properties and cottage sites is complete, at least 85% of the net land revenues of each of the endowments come from the sale of timber, so the earnings from their land is very sensitive to the price and volume harvested of timber.

When financial and land assets are combined, the mix of total endowment assets is approximately 36% Timberland, 40% Equities, 17% Fixed Income and 7% other Real Estate (primarily vacation property ground rents). Land assets are valued based on expected cash flow, which excludes the incremental value of land being held for conversion to higher and better use (which appraisals estimate could add over \$1 billion to the value based on cash flow).

Mix of All Endowment Assets (Assuming Land value of \$1.4 billion)



Total value of all assets = approximately \$3.3 billion

Land value is based on expected cash income.

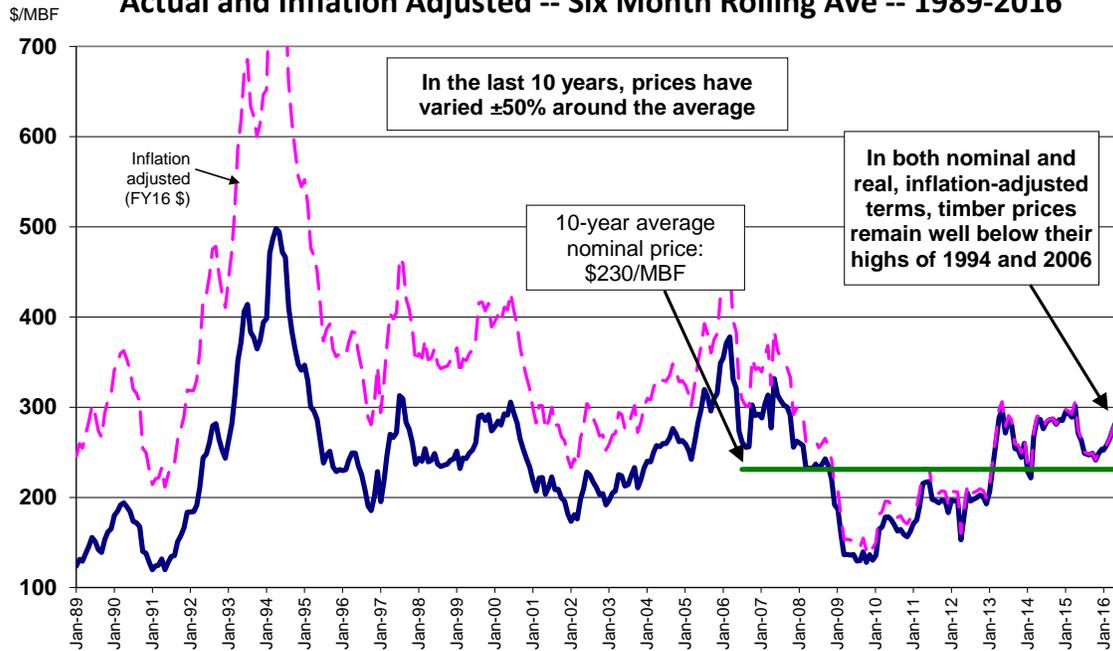
Source: EFIB staff estimates, Callan, IDL as of May, 2015

These ratios will shift with the addition in FY 2017 of commercial real estate in the fund portfolio and with the sale of cabin sites. Since over a third of total endowment earnings come from timber, a major external factor outside the Endowment Fund Investment Board's control is the price of timber and the volume of harvest.

The following graph demonstrates the variability of timber prices.

Idaho Endowment Land Log Auction Price Trends

Actual and Inflation Adjusted -- Six Month Rolling Ave -- 1989-2016

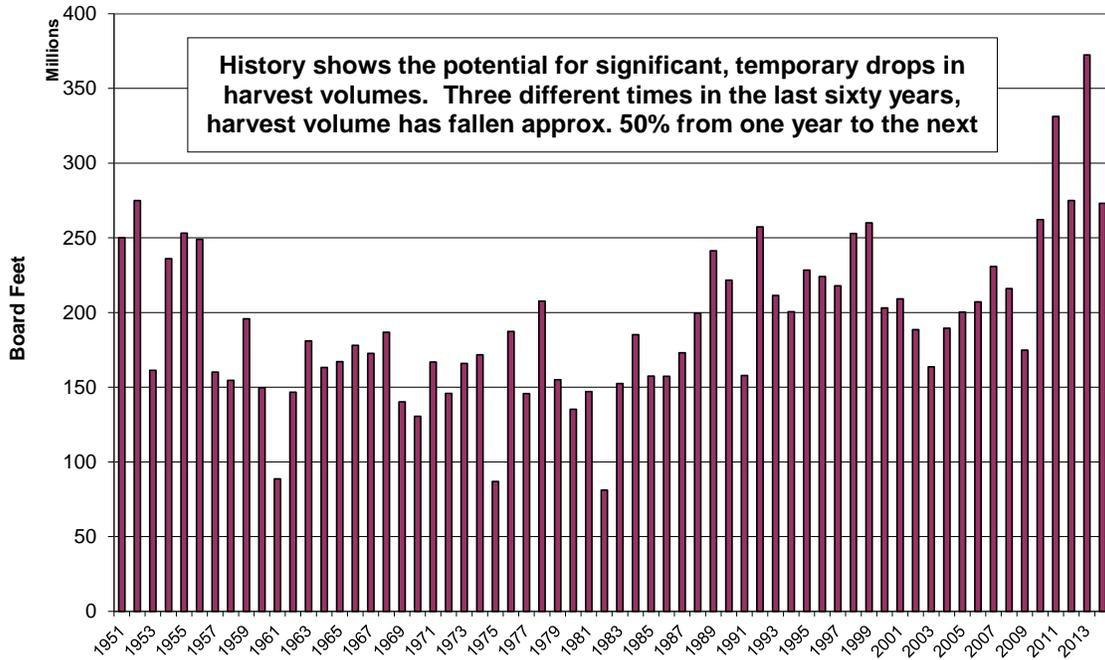


Source: Idaho Department of Lands, EFIB analysis

Like the stock market, timber prices are essentially unpredictable, so this adds significant risk of error to any cash flow forecast the Department of Lands or the EFIB might use to develop recommended distribution levels.

As shown in the graph that follows, the volume of total harvest can also vary significantly from year-to-year.

Idaho Endowment Land Sawlog Harvest Volume By Calendar Year 1951-2014



Calendar Years (Source: Department of Lands)

Because 70% of the endowment timberlands are for the benefit of public schools, the above graph is a fair representation of the variation in harvest levels on school lands. However, since the land bases of the other eight endowments are significantly smaller (see table below), the variations in their harvest levels from year to year are even larger than the graph above implies and therefore more difficult to predict.

<u>Endowment</u>	<u>Forest Land Acres</u>	<u>% of Total</u>
Public School	683,826	70%
School of Science	63,606	7%
Charitable Institutions	63,122	6%
Normal School	43,607	4%
University of Idaho	42,665	4%
Penitentiary	27,125	3%
State Hospital South	26,192	3%
Agricultural College	15,173	2%
Capitol	7,228	1%
Total	<u>972,544</u>	<u>100%</u>

Source: Idaho Department of Lands 6/30/2015

The variability of land revenues for all of the smaller endowments over the past fifteen years is two to four times greater than the Public School endowment, as shown below.

Volatility Of Land Revenues

	<u>Average Annual Revenues (\$ millions)</u>	<u>16-Year Standard Deviation (% of Average)</u>
Public School	40.0	16%
Normal School	4.2	27%
School of Science	4.2	36%
University of Idaho	3.9	39%
State Hospital South	4.8	43%
Charitable Institutions	4.6	48%
Penitentiary	2.1	55%
Agricultural College	1.0	63%
	<u>64.9</u>	<u>17%</u>

Source: EFIB analysis thru FY 2016. Data is not available for the Capitol Permanent Fund.

Volatility for Normal School, State Hospital South is expected to rise in thru 2020 as the current plan to dispose of commercial buildings and cottage sites is completed.