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Idaho State Board of Land Commissioners

Strategic Reinvestment Subcommittee Meeting

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Callan's Role

- Endowment Fund Investment Board – Janet Becker-Wold
 - Professional review and analysis on investment policy and procedures
 - Review and analysis on proposed investment initiatives for consistency with EFIB policies
 - Periodic performance reporting
 - Manager review and selection
 - Educate the EFIB and staff on current investment trends, issues and regulatory changes

- Land Board – Sally Haskins
 - Review and analysis of investment policies, strategies and annual plans
 - Review and analysis of proposed investment initiatives for consistency with Land Board Investment Policies and Strategies
 - Evaluation of performance of endowment assets and the combined trust of land and fund assets
 - Support the Land Board in hiring and monitoring project consultants
 - Assist the EFIB and Land Board (named fiduciaries) in obtaining the level of expertise they need to prudently fulfill their responsibilities as fiduciaries

History of Work for the Land Board

- Asset Allocation and Governance Review – November 2014
 - Perform an asset allocation analysis of the Total Land Grant Endowment
 - Review IDL valuation and revenue forecasting process
 - Review governance structure and provide recommendations
 - Review and develop investment policies and procedures
- Refinement of 2014 Asset Allocation – April 2018
 - Confirm for Public Schools, Agriculture College, Charitable Institutions, Normal School Penitentiary, School of Science, State Hospital South and University the criteria to be used to evaluate the best and highest use of monetary assets in the Land Bank
 - Confirmed for combined smaller endowments (all except Public Schools) the criteria to evaluate the best and highest use of Land Bank assets
 - Assess the impact of cabin or cottage site sales for Public Schools, Normal Schools and State Hospital South
 - Determine whether the asset allocation, reserves or distribution policies of the eight individual endowments should be changed
 - Update the Endowment Asset Allocation in light of 2017 Capital Market Expectations

Endowment Distribution Policy Objectives

Excerpt from Statement of Investment Policy – Land Grant Endowment, July 2018

The ultimate purpose of Idaho's land grant endowments is to provide a perpetual stream of income beneficiaries. To guide the determination of future distributions for the Idaho endowments, the following objectives, in priority order, are established by the Board of Land Commissioners.

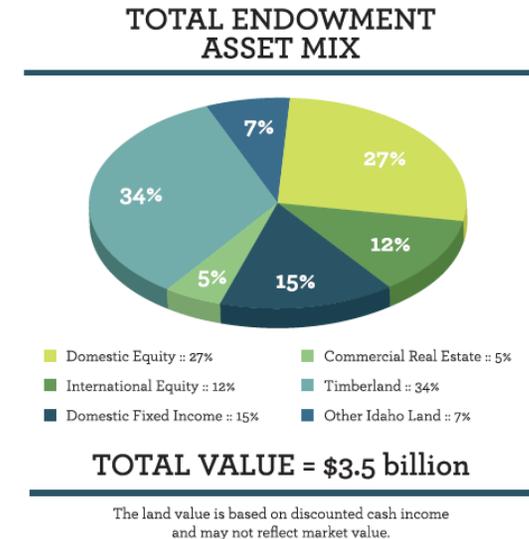
- Avoid reductions in total endowment distributions
- Maintain adequate Earnings Reserves to protect distributions from income shortfalls
- Grow distributions at least commensurate with inflation and student population growth

Subcommittee Questions – Asset Allocation

Asset Class	June 30, 2017 (Millions)	June 30, 2017 (%)	Target Asset Allocation*	Range
Financial Assets	\$2,108	59%	58%	50-65%
Timberland	\$1,190	34%	39%	30-50%
Other Idaho Lands	\$245	7%	2%	0-5%

*Excludes 1% Land Bank cash allocation

Note that the revised Investment Policy Statement, dated July 17, 2018, shows a 2% target to Grazing Land and 1% to cash. Although IDL did not identify what was included in Other Idaho Lands (7%), we assume that Land Bank assets of \$113 million (or 3.2%) is included.



- How were land values developed on this page? What valuation method was used?
 - The valuations shown were taken directly from the Idaho Land Grant Endowments – A Report to Citizens 2017
 - Pie chart (shown above) was utilized to calculate component market values
 - Values shown were derived by multiplying percent per asset class times the total value of \$3.5 billion
 - Footnote in the Report to Citizens states that the land value is based on discounted cash income and may not reflect market value

Subcommittee Questions – Asset Allocation (continued)

- How was the asset allocation developed?
 - The asset allocation was determined by the original 2014 asset allocation study
 - The asset allocation reflects the estimated value of various land components for asset allocation purposes only
 - *A value is necessary to calculate a return*
 - *A value is necessary to determine the sizes of the land investments relative to the financial investments [these 2 sub-bullets contrast with the bullets below which say what the LEV is not]*
 - Risk, return and correlation assumptions were developed for each component
 - *The return assumption for timber land was 5.7% (risk =12%), grazing land was 3.3% (risk=6.8%)*
 - Unconstrained mixes suggested an additional investment in timberland could be considered if it can earn at least 5.7% (return assumption)
 - Land Board adopted the 2014 actual mix as the target: 58% financial assets; 39% timberland; 3% other (grazing land and cash equivalents)

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- Estimates of land valuations were determined using a land expectation value methodology (LEV)
 - *It is not an appraisal of the fair market value*
 - *It does not attempt to value individual tracks of land based on their specific characteristics*
 - *It is not intended to facilitate a transaction*
 - *LEV=Constant Real Annual Cash Flow / Real Annual Discount Rate*
 - For timberland
 - *The forecast cash flow is based on the volume of timber harvested, the price paid and non-timber income.*
 - *The discount rate is set consistent with the expected return on institutionally-managed timber*
 - For grazing land
 - *Cash flows were based on anticipated values for Animal Unit Months (AUMs) and the AUM grazing rate*

Subcommittee Questions – Asset Allocation (continued)

- How is the asset allocation designed to be used?
 - The asset allocation reflects the preferred financial assets allocation given the characteristics and amount of existing illiquid land assets (based on 2014 assumptions)
 - Used as a guide to the allocation of incremental assets
 - *Callan does not recommend setting a hard target for the amount of dollars invested, rather allowing opportunities to drive the decision (page 7, Strategic Reinvestment Plan, 2016)*
 - Sets objectives for return and risk
 - *Risk, return and correlation assumptions were developed for each component*
 - Ranges were established around each segment to recognize the difficulty managing to the established asset allocation
 - *The appropriate relative allocations of different financial assets depends in part on the allocation to illiquid land assets*

Subcommittee Questions – Asset Allocation (continued)

- Is the asset allocation what Callan recommends?
 - Callan is comfortable with the current target asset allocation given the future prudent deployment of Land Bank funds to get cash allocation down to 1% or so.
 - Lands and financial assets fall within the prescribed bands, while cash (Land Bank) is clearly over its 1% target
 - We recognize that as the financial assets have outperformed lands, they have grown in percent relative to the lands portfolio
- The 2018 study focused a decision making framework for deploying Land Bank Funds
 - The distribution policy objectives provided the guideposts for the 2018 study (see page 3)
 - The 2018 study re-visited the asset allocation and concluded that preference for financial assets versus land assets differs based on the assumed return from lands, the earnings reserve levels and primary objectives (e.g., growing real distributions; protection against a decline in distributions)
 - Focusing on cumulative real distributions, investment in the financial assets results in greater distributions in the expected and better-case outcomes while land reinvestment protects in poor capital market environments
 - Land reinvestment generally provides equal or better protection relative to the financial assets in terms of preventing a decline in distributions
 - Using a 3.5% net real hurdle rate, the study also concluded that deployment of Land Bank funds to the financial asset was preferable if the Land Board approved higher earnings reserves for Public Schools (500% to 600%) and Charitable Institutions (500% to 700%)
 - Study recognized the important role Lands play in dampening the volatility of the total Endowment
 - *Expected returns must be considered in addition to the risk mitigating role (meeting established hurdle rates)*

Subcommittee Questions – Reserves

Summary Conclusions from 2018 Study

- Relative to the 2014 study
 - The expected return on the financial assets is 50 basis points lower (6.3% versus 6.8%)
 - Projected net land revenues have generally declined for most endowments
 - Projected land revenue volatility is higher for seven of the eight endowments
- Reserve levels
 - Reserve levels need to rise for two of the eight endowments in order to obtain the same level of comfort that distributions will not decline (10 year projection) at the 95th percentile
 - *Public Schools needs to increase from 500% to 600% and Charitable Institutions from 500% to 700%*
 - *Temporary increases to 700% for State Hospital South and Normal Schools should be made permanent*
 - *The EFIB voted at a special board meeting on March 12, 2018 to recommend the above changes in earnings reserve levels to the Land Board*
- The stability of the distributions is determined by several interconnected factors
 - The size of the reserves
 - The expected return and volatility of the financial assets
 - The financial assets allocations
 - The expected return and volatility of the land assets
 - The land assets allocations

Subcommittee Questions

Relationship Between Timber and Financial Assets

- Timberland performance is linked to the underlying derived demand for wood products in the U.S.
 - In the U.S., positive timberland performance (and rising prices) requires the demand for lumber (lumber consumption), which is made up from not just housing starts (~33%) , but also residential improvement (~38%), industrial uses (~24%) and nonresidential (~5%)
- While there is a low correlation between timber and financial assets (0.11 to the S&P 500 and 0.06 to the Bloomberg Aggregate*) there is a broad economic relationship
 - No correlation to financial markets implies a neutral relationship, a negative correlation would indicate counter cyclicity
 - If the U.S. economy slows, unemployment may rise, salaries fall, demand for housing may fall, new construction declines, resulting in lower demand for timber

* 15 years ended June 30, 2019

Subcommittee Questions

- How was the hurdle rate developed and set?

- The hurdle rate is the rate of return required for new investments. It is different from the Long Term Policy Target which is a portfolio return target set in the Investment Policy Statement. (see footnote 4 on page 3 of the May 2016 Reinvestment Plan).
- Callan views reinvestment as a capital allocation question – not as a mechanism to fill certain buckets or asset allocation targets
 - *What is the best use of the marginal dollar for the total portfolio (the marginal dollar is the land bank proceeds)?*
 - *The hurdle rates are established based on the underlying premise that the acquisition needs to be accretive*
- The hurdle rate is just a starting point – the risk profile of each transaction and market dynamics will dictate the return that will be required such that some transaction may have returns above the hurdle rate (page 7, May 2016 Reinvestment Plan)

The Callan report suggested a framework for making investment decisions for timberland and farmland (Items 1-5 below). These and other relevant decision-making factors (6-8 below) are applicable to establishing priorities for investment of the Land Bank.*

1. *Is the investment consistent with the overall asset allocation and objectives of the total portfolio as set forth in the Investment Policy Statement and in the Strategic and Annual Plans?*
2. *Comparison of the risk adjusted return and the net return relative to other choices (e.g. stocks, bonds, other land types). In other words, what are the other choices for investment?*
3. *Does it make a difference and move the needle from an overall portfolio perspective?*
4. *Completion of a full underwriting of the potential investment including upside, base case, and downside scenarios with identification of assumptions and risks alongside of the returns (both the return gross of fees and net of all fees and costs);*
5. *Detailed outline of the business plan for the investment and the plan for execution including consideration of the internal and external resources required to execute the plan and associated costs;*
6. *Market fundamentals;*
7. *Availability of transactions; and*
8. *Institutional investment trends, processes, and implementation for timberland and farmland.*

*Strategic Re-Investment Plan, May 2016, page 2

Subcommittee Questions

Hurdle Rates

- What impact did the state's prohibition on selling timberland have on setting the rate?
 - It was not considered
- Were timberland fire costs to the general fund considered?
 - They were not considered
- Under what circumstances should the hurdle rate be reconsidered?
 - Annually as noted in the footnote 4, page 3, May 2016 Reinvestment Plan
 - Changes to long term projected returns for land assets and financial assets
 - Changes to market conditions could influence it – e.g., trigger a move upward