

**Western States Land
Commissioners Association**

Asset Management Subcommittee

**The Case for Uniform
Land Asset Reporting**

July 2008

Introduction

A subcommittee of WSLCA's Asset Management Committee (Montana, Idaho and Oregon with assistance from Utah, Washington, Colorado and Texas) has developed a proposal for the Association's consideration consisting of:

- (1) Uniform land asset classification system; and
(2) Uniform performance measurements.

Both asset management components were jointly developed and have been tested by the three states in a 'pilot project' and presented in this report (see Appendix E for a list of contributors). As expected, much conversation and comparison has been necessary to determine both the measures and methods. Consistent and uniform use of terms and methods has proven to be of paramount importance.

The pilot project demonstrated that state trust land managers were able to:

- fashion a uniform land asset classification system presumed to be applicable to all states;
- identify uniform and consistent methods of compiling financial and management information; and
- develop a performance measures data template that depicts meaningful financial and management performance information in a form that yields state to state comparison and the future establishment of performance targets or goals.

This work, once consistently implemented, can produce significant benefits to state trust land managers. The ability to benchmark performance to similar operations is critically important for asset allocation, investment, budget allocation and workload planning. The political and policy benefits are obvious. In the past, true and accurate comparisons between states and similar business sectors has been inconsistent and frequently lacks 'apples to apples' application. The pilot project demonstrates the possibility of creating an analytical tool for performance comparison that assures comparability, impartiality and utility.

The Asset Management Subcommittee recommends the following:

1. Adopt the Performance Measurements reporting template depicted in Appendix A of this report.
2. Adopt the uniform land asset classification system depicted in this report.
3. Direct the Asset Management Subcommittee to prepare instructions to WSLCA members offering the opportunity to voluntarily participate in a second pilot project.
4. Request the Asset Management Subcommittee to compile the results of the second pilot project and report at the Winter 2009 Conference with recommendations for changes to (1) or (2).
5. Authorize the expenditure of up to \$10,000 from WSLCA funds for assistance to the Asset Management Subcommittee in administering, compiling and preparing the second pilot report.
6. Encourage all WSLCA members to participate in the second pilot project.

A presentation of this paper was made at the summer 2008 WSLCA conference (Boise, ID). The membership approved providing up to \$5000 to the subcommittee to continue work on the Uniform Land Asset Reporting project. In addition, several states offered to participate in the next phase including Washington, Texas and Minnesota. A status report will be presented at the winter 2009 conference (Santa Fe NM) including a compilation of reporting from participating states for FY 08.

Background

Measuring performance against established standards or goals has been a common practice in business for years. More recently the concept has taken hold in government. Oregon and Montana state government, for example, require each agency to develop, monitor and report on legislatively-approved measures and targets. Agency performance is judged by how well each agency meet or exceeds the targets.

Performance standards are comprised of two elements: a measure and a target. The measure is both a unit and a method; while the target is the goal to be reached or exceeded. An example of a measure is net

income (e.g. revenue minus expenses = net income); the target or measure could be: net operating income is to increase 5% or greater each fiscal year.

In 2000 the WSLCA, under the direction of the Asset Management Committee, commissioned a study of Performance Standards applicable to the activities of the member states. The report entitled: *Trust Performance Measurement* was completed by Agland Investment Services, Inc. (Larkspur, CA). The report included the following specific policy recommendations for the Association and managers of state trust lands:

- Establish values on an annual basis for the asset either through an appraisal process or estimation procedure based on class of asset; a significant portion of the financial returns for land is found in asset appreciation or asset enhancement.
- Maintain financial, environmental and social records on the basis of asset class (portfolio of assets) maintaining portfolios of like assets for ease of management and establishment of performance measures.
- Establish an asset or strategic plan for the management of the lands to include a mission statement and realistic goals. Performance measures can then be established that will measure progress in meeting the goals.
- Utilize the same asset or strategic planning committee composed of board, staff and stakeholders as the means for establishing performance measures. Provide the necessary training and information resources to the committee.
- Select a limited number of easy to calculate financial, environmental and social performance measures, for all or a selected portion of the land portfolio as a start. More detailed and complex measures can follow at a future date.
- Environmental and social performance measures are particularly useful and applicable when focused on specific regional or site-specific sensitive areas.

Addressing the financial reporting needs first¹, at WSLCA's Winter 2006 Conference (Seattle) the Asset Management Committee began the work to establish uniform performance standards for land assets. The goal has been to standardize reporting of WSLCA member financial and management data, which in turn should help trustees make more informed decisions regarding the management, disposition and acquisition of state trust lands for the benefit of the various common schools (K-12), universities and other beneficiaries.

By spring 2006, Montana, Oregon and Idaho assumed leadership roles and other participating states included Washington and Colorado. Initial efforts have been aimed at identifying methods for maintaining the financial records by establishing common land asset classes and performance measures (e.g. return on asset value, net income/gross revenue). As some methods rely on land valuation as an important component, determining how to efficiently and economically obtain this information occupied the Committee's attention. Most work has been done through subcommittees and reported out to the full Committee and Association membership at the Summer 2006 (Sheridan, WY), Winter 2007 (Las Vegas, NV), Summer 2007 (Salt Lake City, UT) and Winter 2008 (Austin, TX) meetings.

Governmental Accounting Standards Board Standard

In spring 2007, the Governmental Accounting Standards Board (GASB) released an Exposure Draft (ED 3-21) entitled: *Land And Other Real Estate Held as Investment by Endowments*. This proposal called for land and other real estate held as investments by endowments to be reported at fair value with changes in fair value during the reporting period reported as investment income. The Asset Management Committee polled member states concerning ED 3-21 and provided comments to GASB. In its response, WSLCA stated:

- state trust lands are not the same as real estate assets of endowments and permanent funds;

¹ Environmental and social performance measures are not discussed in this report; but could be explored later by the Asset Management Committee.

- the state land asset is not liquid; disposal of trust lands is closely controlled in each state. The timing of sales, if allowed at all, cannot be used to distort fund earnings;
- for state trust land managers, policy makers and beneficiaries there are equivalent or better metrics or performance measures than land value-based measures to determine what constitutes acceptable performance;
- obtaining up-to-date land value information would be costly; accuracy would vary from state to state and would be difficult to keep current and timely; and
- no entities are comparable to state trust land managers; comparison with private entities or endowment or permanent fund managers is fundamentally flawed.

The WSLCA encouraged GASB to further investigate methods of establishing metrics or performance standards that are relevant for state trust land managers and pledged to assist GASB in their efforts.

While GASB has now decided to provide an exception for state trust land agencies from its fair value reporting requirements, GASB officials have indicated that they will be revisiting the issue. To date there has been no movement by GASB on this issue. There is also considerable interest by the governmental reporting officials in performance measurement. GASB representatives intend to follow-up on the Association's efforts to determine uniform asset types and performance indicators, and how reporting is employed among member states.

The Asset Classification and Performance Measurements Pilot Project

A subcommittee of WSLCA's Asset Management Committee made up primarily of Montana, Idaho and Oregon (with assistance from Utah, Washington, Colorado and Texas) has developed a proposal for the Association's consideration consisting of:

1. uniform land asset classification system; and
2. uniform performance measurements (See Sample Template in Appendix A). Both

asset management components were jointly developed and have been tested by the three states as a 'pilot project'. The results of the 'pilot' are put forward in this report. As expected, much conversation and comparison has been necessary to determine both the measures and methods.

Uses and Benefits of a Uniform Asset Classification

The various land asset classes, when consistently applied, enable states to more directly compare their financial performance to other states with similar mandates, as opposed to, or in conjunction with, comparisons made with the private sector. In addition to being able to more directly compare performance, the agreed upon asset classes would also provide the framework for how assets could be appraised (valued), while also providing a range of expected returns based on asset value.

The following table describes the various asset classes and subclasses defined by the Asset Management subcommittee during the pilot project. The use of subclasses is often necessary when an asset group is too broad to produce meaningful information without greater understanding of the underlying assets. Therefore, certain asset types, such as commercial real estate, require reporting by subclass to provide more homogeneous results for benchmarking purposes.

Uses and Benefits of Performance Measurement

For trust land management to maximize economic value, it must take advantage of its strengths while simultaneously correcting weaknesses. Accounting focuses on how financial statements are organized, but financial analysis is dedicated to comparing performance and evaluating trends over time. Such evaluation can help predict future performance, and more importantly, serve as a starting point for trust land managers to plan actions that will affect future financial performance.

If trust land managers are to find value in performance measurement all participants must understand the components of each calculation; and

Asset Classification & Subclass	Asset Description
1. Forest	Lands capable of regenerating and growing successive crops of commercial forest products on a sustainable basis. Generally defined by eco-region.
2. Agriculture	Lands used for growing cultivated plants or agricultural produce such as grains, vegetables or fruits (vineyards/orchards).
a. Dryland	Agriculture land used for growing various crops without additional water, other than normal precipitation.
b. Irrigated	Agriculture land used for growing various crops with the supplemental addition of water.
3. Rangeland	Lands supporting natural vegetation, generally grasses, forbs and small brush, suitable for grazing by domestic livestock & wildlife.
4. Real Estate (Commercial)	Lands normally recognized as “commercial” in local zoning regulations, including retail and light industrial businesses, public facilities, energy resources, communication sites, hospitality establishments, etc.
a. Energy Resources	Uses that include wind, solar and biomass. Excludes minerals obtained through surface and subsurface extraction.
b. Communications	Lands used for cell phone and satellite towers.
c. Retail/Office	Uses that include commercial office (includes government offices), service and retail businesses, parking lots/structures, medical arts complexes hotels and theaters.
d. Recreation	Lands used for resort recreation, RV parks, ski hills, water parks and outfitter guide services, etc. Seasonal, temporary, non-consumptive use of lands that may include dispersed recreational use (hunting, fishing, trapping, camping, hiking, trails), etc.) Recreational facilities operated by related public entities such as developed campgrounds, fishing access sites or other similar recreation activities.
e. Military Facilities	Lands used for armories, military training ranges, military bases, etc.
f. Industrial	Uses that include manufacturing, warehousing, sanitary landfills, intermodal shipping, irrigation facilities, feedlots, electrical substations, etc.
5. Real Estate (Residential)	Land used for single or multi-family residential uses to include condominiums, multi-family developments, cottages, cabins, and home sites
a. Home sites	Land that is sold or intended to be sold for residential subdivisions, individual parcels or lots. This subclass also includes those sales processed from lot sales that are addressed by a “Participation Agreement”.
b. Cottage/Cabin sites	Land that is leased for the purpose of developing residential cottage or cabin sites. The land is retained in ownership by the Trust.

6. Minerals	<p>Land used for the extraction of minerals and other natural materials found above or beneath the land.</p> <ul style="list-style-type: none"> • <i>Oil and Gas</i>. Includes liquid hydrocarbon mixtures and gases used primarily as fuels and contained in underground reserves. Does not include shale or oil sands, see “Other Materials”. • <i>Coal</i>: Carbon-containing material formed from fossilized plants and used as fuel. • <i>Aggregate</i>: Course or fine aggregate used in concrete, road base, fill, etc. • <i>Geothermal</i>: Potential thermal or electrical power derived from the thermal energy contained in the earth. • <i>Other Materials</i>: Includes precious metals, decorative rock, phosphates, shale, oil sands, etc.
7. Conservation	<p>Conservation lands are generally lands for which certain real property rights have been removed or otherwise restricted temporarily or permanently to maintain temporary or permanent rights for open space, preservation of habitat, natural areas, parks, or other such purposes. Sample uses include Habitat Conservation Plan areas (HCPs) or state or federally-designated natural areas.</p>
8. Aquatic Lands/Navigable Waters	<p>Uses above, beneath or across navigable rivers and lakes and generally defined by the historic high water mark for the water body. Typical uses include: marinas, floating homes, commercial, industrial or retail structures on piers or floats and hydroelectric facilities.</p>

the calculations must be performed consistently. Different accounting practices can distort results and make ‘apples to apples’ comparisons difficult.

Consistent with the recommendations in the *Trust Performance Measurement* report, a number of easy-to-calculate financial performance measures are presented for use by state trust land managers.

A profitability ratio such as return on asset (ROA) can reveal the net result of policy and trust land management decisions. ROA demonstrates how well assets have been deployed. A suite of other profitability and management efficiency ratios, such as cost per unit managed or gross revenue as a percentage of net revenue, is also helpful since there is no one calculation or number that can communicate a complete picture for management.

Due to the complexity of valuing mineral estates, the pilot project excluded the *Minerals* asset classification. As was pointed out in WSLCA’s response to GASB, attempts to survey and value this asset type, whether active or undeveloped, is a complex and costly proposition.

Return on Asset (ROA) or Total Return and other Measures

ROA, sometimes referred to as Total Return, is a profitability measure determined by the following formula:

$$\frac{(\text{Gross Revenue} - \text{Management \& Development Expense}) + (\text{Ending Asset Value} - \text{Beginning Asset Value})}{\text{Beginning Asset Value}}$$

The use of Total Return is desirable because it transcends public and private sector boundaries. The calculation also normalizes the variability of cash receipts within the same asset class. For example, forage values differ across landscapes such that certain regions command higher lease rates. Transition values aside, the higher earnings capacity of the land generally translates to a higher asset value per acre, but the return on asset should be similar to returns from peer assets meeting the definition of the *Rangeland* asset classification.

While reporting the total rate of return is important, reflecting what portion is derived from value appreciation versus the contribution from cash (net revenue generated) further enhances the ability to evaluate performance and to make informed management decisions. The three states (MT, ID and OR) have compiled this information in *Figure 1*, *Figure 2*, and *Figure 3*.

Data was compiled by each state for FY 07 (July 1, 2006 to June 30, 2007). Between *Figure 1* and *Figure 2* the analysis perspective shifts from programs to income generating activities and to specific asset classes. *Figure 1* reviews profits associated with each activity relative to the required inputs: land, money and labor. *Figure 2* measures a new set of returns by asset class. *Figure 3* links asset classes to activities by net income.

Figure 1. Trust Lands Net Income by Activity FY(2007)²**Montana State Trust Lands Net Income by Activity (2007)**

Activity	Acres	FTE	Gross Income	Net Income	Cost/Acre	Net Income/Acre	Cost/Gross Income	Net Income/FTE
Agriculture	572,693	5.93	\$9,853,629	\$9,507,866	\$0.60	\$16.60	4%	\$1,603,350
Grazing	4,082,800	17.81	\$7,868,725	\$6,830,271	\$0.25	\$1.67	13%	\$383,508
Forest Mgmt	480,548	69.76	\$7,482,894	\$2,286,943	\$10.81	\$4.76	69%	\$32,783
Real Estate (Commercial)	5,583	9.52	\$1,072,941	\$586,459	\$87.14	\$105.04	45%	\$61,603
Real Estate (Conservation)	14,218	1	\$92,241	\$80,595	\$0.82	\$5.67	13%	\$80,595
Real Estate (Residential)	1,870	9.52	\$1,288,897	\$802,415	\$260.15	\$429.10	38%	\$84,287
Recreational Use	5,150,259	---	\$1,092,280	\$990,652	\$0.02	\$0.19	9%	---
Easement	---	3	\$6,559,062	\$6,405,759	---	---	2%	\$2,186,354
Minerals (Coal)	13,841	0.26	\$3,770,997	\$3,751,068	\$1.44	\$271.01	1%	\$14,427,185
Minerals (Oil & Gas)	1,798,550	15.19	\$26,567,352	\$25,511,775	\$0.59	\$14.18	4%	\$1,679,511
Total		132.01	\$65,649,018	\$56,753,802			14%	\$429,920

Idaho State Trust Lands Net Income by Activity (2007)

Activity	Acres	FTE	Gross Income	Net Income	Cost/Acre	Net Income/Acre	Cost/Gross Income	Net Income/FTE
Forest Management	1,035,253	114.34	\$64,293,943	\$49,190,383	\$14.59	\$47.52	23%	\$430,211
Grazing	1,789,014	16.5	\$1,589,351	\$61,681	\$0.85	\$0.03	96%	\$3,738
Agriculture	19,791	1.05	\$321,454	\$250,139	\$3.60	\$12.64	22%	\$238,227
Commercial Real Estate	---	2.7	\$2,498,653	\$1,464,007	n/a	---	41%	\$542,225
Conservation & Recreation	28,010	0.5	\$59,201	\$25,584	\$1.20	\$0.91	57%	\$51,168
Residential Real Estate	2,260	2.15	\$4,459,820	\$4,326,753	\$58.88	\$1,914.49	3%	\$2,012,443
Minerals	56,969	3.05	\$3,273,907	\$2,946,939	\$5.74	\$51.73	10%	\$966,209
Total		140.29	\$76,496,330	\$58,265,486			24%	\$415,322

Oregon State trust Lands Net Income by Activity (2007)

Activity	Acres	FTE	Gross Income	Net Income	Cost/Acre	Net Income/Acre	Cost/Gross Income	Net Income/FTE
Agriculture (all types)	5,856	0.4	\$185,508	\$164,305	\$3.62	\$28.06	11%	\$410,762
Grazing	628,496	1.6	\$394,223	\$180,577	\$0.34	\$0.29	54%	\$112,861
Forest Mgmt	106,496	39*	\$12,590,076	\$9,063,582	\$33.11	\$85.11	28%	\$232,399
Real Estate (all types)	4,957	1.3	\$704,043	\$90,494	\$123.77	\$18.26	87%	\$69,611
Minerals (all types)	820	0.7	\$408,143	\$348,105	73.22	\$424.52	15%	\$497,293
Total		43	\$14,281,993	\$9,847,063			31%	\$229,000

²Minerals subsurface activities are presented in Figure 1 but minerals as an asset class are not included in any other standard reporting for complexity reasons.

Figure 2. Trust Lands Returns by Asset Class FY(2007)³**Montana State Trust Land Returns by Asset Class (2007)**

Asset Class	Surface Acres	2006 Asset Value	Net Income	Appreciation	Income Return	Capital Return	Total Return
Agriculture (Dryland)	562,222	\$317,592,632	\$9,218,785	\$13,176,055	2.9%	4.1%	7.1%
Agriculture (Irrigated)	10,471	\$26,721,577	\$404,518	\$1,870,510	1.5%	7.0%	8.5%
Forest Lands	480,548	\$672,853,048	\$2,513,317	\$37,908,044	0.4%	5.6%	6.0%
Navigable Waters	196,045	---	\$593,314	---	---	---	---
Range Lands	4,082,800	\$2,329,095,699	\$7,602,812	\$107,586,112	0.3%	4.6%	4.9%
Real Estate (Commercial)	5,583	\$62,108,379	\$6,992,218	\$2,632,348	11.3%	4.2%	15.5%
Real Estate (Conservation)	14,218	\$11,260,656	\$80,595	\$450,426	0.7%	4.0%	4.7%
Real Estate (Residential)	1,870	\$34,697,850	\$725,763	\$1,470,604	2.1%	4.2%	6.3%
Total	5,353,757	\$3,454,329,841	\$28,131,322	\$165,094,098	0.8%	4.8%	5.6%
Trust and Legacy Fund	0	\$423,153,735	\$26,474,491	\$0			6.2%
Long-Term Government Bonds							5.4%
Intermediate-Term Government Bonds							5.3%

Idaho State Trust Land Returns by Asset Class (2007)

Asset Class	Surface Acres	2006 Asset Value	Net Income	Appreciation	Income Return	Capital Return	Total Return
Forest Lands	1,035,253	\$1,253,524,740	\$49,259,582	\$87,143,431	3.9%	7.0%	10.9%
Rangeland	1,403,946	\$811,154,091	\$106,219	\$42,692,321	0.0%	5.3%	5.3%
Agriculture	19,791	\$15,287,442	\$250,139	\$8,287,751	1.6%	54.2%	55.8%
Real Estate (Commercial)	0	\$45,242,771	\$1,375,854	\$4,799,904	3.0%	10.6%	13.7%
Real Estate (Residential)	2,260	\$242,892,500	\$4,326,753	\$94,256,500	1.8%	38.8%	40.6%
Total	2,461,250	\$2,368,101,544	\$55,318,547	\$237,179,907	2.3%	10.0%	12.4%
Endowment Fund Investment Board		\$949,834,289	\$24,633,663				16.2%

Oregon State Trust Land Returns by Asset Class (2007)

Asset Class	Surface Acres	2006 Asset Value	Net Income	Appreciation**	Income Return	Capital Return	Total Return
Agriculture (all types)	5,856	\$7,140,000	\$164,305	\$340,000	2.3%	4.8%	7.1%
Forest Lands	106,496	\$553,875,000	\$9,063,582	\$26,375,000	1.6%	4.8%	6.4%
Range Lands	628,496	\$55,860,000	\$198,591	\$2,793,000	0.4%	5.0%	5.4%
Real Estate (all types)	4,957	\$34,335,000	\$90,494	\$1,635,000	0.3%	4.8%	5.0%
Total		\$651,210,000	\$9,516,972	\$31,143,000	1.5%	4.8%	6.2%

Returns have been calculated similar to Nat'l Council of Real Estate Investment Fiduciaries (NCREIF) standards. Government bonds (Ibbotson, 2006) have been included for baseline investment comparison.

Figure 3. Trust Lands Net Income by Asset Class and Activity FY (2007)**State Trust Lands Net Income by Asset Class and Activity (2007)**

Montana		Idaho		Oregon	
Asset Class	Net Income	Asset Class	Net Income	Asset Class	Net Income
Agriculture (Dryland)	\$9,218,785	Agriculture	\$250,139	Agriculture	\$164,306
Agriculture	\$9,103,348				
Recreational Use	\$115,437				
Agriculture (Irrigated)	\$404,518				
Forest Lands	\$2,513,317	Forest Lands	\$49,259,582	Forest Lands	\$9,063,582
Forest Mgmt	\$2,286,943	Forest Mgmt	\$49,190,383	Timber sales	
Grazing	\$123,700	Grazing	\$22,205	Communication site	
Recreational Use	\$102,674	Conservation	\$12,792	Special Use lease	
		Commercial	\$34,202		
Navigable Waters	\$593,314				
Range Lands	\$7,602,812	Range Lands	\$106,219	Range Lands	\$198,591
Grazing	\$6,830,271	Grazing	\$39,476	Grazing lease	
Recreational Use	\$772,541	Commercial	\$53,951	Easement	
		Conservation	\$12,792	Communication	
				Special Use lease	
				Temporary Use permit	
Real Estate (Commercial)	\$6,992,218	Real Estate (Commercial)	\$1,375,854	Real Estate	\$90,494
Real Estate Mgmt	\$586,459			Cabin site lease	
Easements	\$6,405,759			DSL HQ Bldg rentals	
				Special Use lease	
Real Estate (Conservation)	\$80,595			Easement	
				Grazing lease	
Real Estate (Residential)	\$725,763	Real Estate (Residential)	\$4,326,753		
Total	\$28,131,322	Total	\$55,318,547	Total	\$9,516,973

Calculating Revenue and Expense Components

Developing reports as presented in *Figures 1,2 and 3* will bring value to the WSLCA if all participating trust land managers account for and report results consistently. The variability in accounting systems between member states will require participants to gain knowledge of how their costs are reported and managed. A fundamental tenet is that net income must represent all revenue and all expense necessary to administer these assets. States are encouraged to visit with their accounting department, state treasurer, or state controller (whoever does budget appropriations and accounting) to ensure accurate reporting. If a reporting system does not currently allocate a portion of administrative overhead or governmental overhead to each asset class, system modifications or a manual allocation step is necessary.

The allocation of administrative/indirect overhead is not dictated by generally accepted or governmental accounting principles. Rather, state trust land managers are free to choose the most applicable allocation methodology for their business, provided it is used consistently. In Idaho, for example, a combination of acres managed and FTE usage by program is used to allocate indirect cost. While in Oregon, at least for the pilot effort, indirect costs and capital improvements have not been captured except for the *Forest* asset class.

In the future it would be prudent to further explore how member states are allocating or accounting for costs (personnel, operating, capital) by trust beneficiary and standardize where appropriate for the reasons mentioned above.

Determining Asset Value

Determining asset value may be the most costly aspect of the project for state trust land managers to develop. Similar to revenue and expense reporting, the key is consistent application of a methodology. Some options require staff research while others may be effectively contracted.

The list below demonstrates the variety of methods typically acceptable for valuation and accounting standards.

- Regional value research based on agency land sales experience.
- Regional value research using USDA agricultural statistics, local county assessor sales and taxing information (generally results in very conservative values).
- Mass appraisal techniques for similar lands, generally by asset type with very well defined scoping criteria. Use mass appraisals every 5-10 years with an indexing method for intervening periods to logically escalate values. See appendix D for excerpts from Idaho's sample mass appraisal contract; appraisal instructions.
- Land Expectation Valuation (LEV) analysis for lands with production capabilities; specific parcel analysis.
- Discounted reserve resource assessment for mineral estate valuation.
- Targeted third party appraisals for transition lands and to determine Highest and Best Use opportunities.
- Internal staff appraisals.
- Agency land value databases developed using in-house staff and expertise in conjunction with external resources as necessary (database design, indexing with county data, etc.). See appendix C for a discussion of Montana's land valuation database concept.

Data Collection, Compilation and Reporting

Consistent, meaningful and timely information is essential to optimizing trust land management performance. Without question, developing a uniform WSLCA reporting methodology requires effort and resources at both centralized and state level. One option would be to employ a centralized, simple, web-based collection tool (e.g. hosted by a particular state or contracted entity). Each participating state trust land agency could easily login to this central point to report their raw data. A host state or WSLCA contractor would compile data and design an output report to facilitate annual reporting and performance examination by the WSLCA and participating state trust land managers.

Performance Comparisons: Who's comparable to Trust Land Managers?

The logical peer group for comparison should include state trust land managers. Once the success of the pilot project is proven and adopted, the WSLCA may choose to enhance its benchmark comparisons to include private trust or investment firms in similar market sectors. To the extent possible, private sector firms could be selected who operate within specific regions and markets to ensure comparability. It is recognized that a financial statement comparison

between a state and similar private sector firms will require the development and conversion of financial statements, both an income statement and a balance sheet, from a government accounting basis to traditional accrual basis.

The following table identifies general characteristics of each asset classification, including the range of returns currently demonstrated and generally expressed as ROA, and the recommended valuation method and valuation frequency.

Asset Classification, Valuation and Proposed Benchmarks			
Asset Class	Peer ROA ¹	Valuation Method	Frequency
Forest	3% - 10%	<ul style="list-style-type: none"> • Various Stumpage Price Indices • Independent or Internal Appraisal - Management Recommendation 	Annual Index, periodic mass appraisal
Agriculture	2% - 5%	Independent or Internal Appraisal - Management Recommendation	Annual Index, periodic mass appraisal
Rangeland	.5% - 5%	Independent or Internal Appraisal - Management Recommendation	Annual Index, periodic mass appraisal
Real Estate (Commercial)	3% - 15%	Independent or Internal Appraisal - Management Recommendation	Annual Index, periodic mass appraisal
Real Estate (Residential)	3% - 12%	Independent or Internal Appraisal - Management Recommendation	Annual Index, periodic mass appraisal
Minerals	3% - 18%	<ul style="list-style-type: none"> • Unproven Site – bare land value only • Proven, Unopened Site – bare land value only or NPV of future earnings less development cost • Producing Sites – NPV future earnings • Closed / Abandoned Site – reversion value, possible liability to reclaim 	Dictated by changing stages of property characteristics and uses
Conservation	1% - 5%	Western states survey	Annual
Rights-of-Way ²	% of FMV	Western states survey	Annual
Long-term Government Bonds	5.4%		Annual

¹ Peer ROA represents the variation of returns demonstrated by Western states, including but not limited to MT, WA, OR, CO, NM, AZ, and researching other private real estate portfolio returns.

² The granting or receiving of rights-of-way can occur in combination with any asset type. Rights-of-way are shown in this table

Another comparison is between total return from all asset classes or an individual asset class (e.g. Forest) with financial instruments such as Permanent Fund annual return or the mean government bond absolute return. These alternative investments proxy the cost of capital and can be used to test the efficiency of each asset class or the total land portfolio. Principally, asset classes which improve on the designated alternative return can be thought of as adding economic value to the trusts. It is important to note that long-term average returns are more suitable for the evaluation of assets as they help identify and neutralize the influence of outlier annual returns.

At this time, the Asset Management Subcommittee makes no recommendation as to performance targets or goals.

Results and Analysis of Pilot Project

The pilot project demonstrated that state trust land managers were able to:

- fashion a uniform land asset classification system presumed to be applicable to all states;
- identify uniform and consistent methods of compiling financial and management information; and
- develop a performance measures data template that depicts meaningful financial and management performance information in a form that yields state to state comparison and the future establishment of performance targets or goals.

This work, once consistently implemented, can produce significant benefits to state trust land managers. The ability to benchmark performance to similar operations is critically important for asset allocation, investment, budget allocation and workload planning. The political and policy benefits are obvious. In the past true and accurate comparisons between state's and similar business sectors have been inconsistent and frequently lack 'apples to apples' application. The pilot project demonstrates the possibility of creating an analytical tool for performance comparison that

assures comparability, impartiality and utility.

Recommendation

The Asset Management Subcommittee makes the following recommendations to the WSLCA:

1. Adopt the Performance Measurements reporting template depicted in Appendix A of this report.
2. Adopt the uniform land asset classification system depicted in this report.
3. Direct the Asset Management Subcommittee to prepare instructions to WSLCA members offering the opportunity to voluntarily participate in a second pilot project.
4. Request the Asset Management Subcommittee to compile the results of the second pilot project and report at the Winter 2009 Conference with recommendations for changes to (1) or (2).
5. Authorize the expenditure of up to \$10,000 from WSLCA funds for assistance to the Asset Management Subcommittee in developing, administering, compiling and preparing the second pilot project report. The Subcommittee would explore options for web-based data collection to facilitate ease of reporting.
6. Encourage all WSLCA members to participate in the second pilot project.

Appendix A

State Trust Lands Comparative Return on Asset - All Asset Types (FY 2007)

State	Income Return	Capital Return	Total Return(ROA)
Idaho	2.4%	10.0%	12.4%
Montana	0.8%	4.8%	5.6%
Oregon	1.5%	4.8%	6.3%
Long-term Government Bonds			5.4%

State Trust Lands Comparative Performance - Forest Management (FY 2007)

State	Cost/Acre	Net Income/Acre	Cost/Gross Income	Net Income/FTE
Idaho	\$14.59	\$47.52	23%	\$430,211
Montana	\$10.81	\$4.76	69%	\$31,783
Oregon	\$33.11	\$85.11	28%	\$232,399

State Trust Lands Comparative Performance - Agriculture (FY 2007)

State	Cost/Acre	Net Income/Acre	Cost/Gross Income	Net Income/FTE
Idaho	\$3.60	\$12.64	22%	\$238,227
Montana	\$0.60	\$16.60	4%	\$1,603,350
Oregon	\$3.62	\$28.06	11%	\$410,762

State Trust Lands Comparative Performance - Grazing (FY 2007)

State	Cost/Acre	Net Income/Acre	Cost/Gross Income	Net Income/FTE
Idaho	\$0.85	\$0.03	96%	\$3,738
Montana	\$0.25	\$1.67	13%	\$383,508
Oregon	\$0.34	\$0.29	54%	\$112,861

Appendix B

Overview of Montana Trust Land Management Division Asset Valuation Process

Each Montana state trust land parcel is assigned a land class based on its predominant use and principle value:

- Class 1 – Grazing
- Class 2 – Timber
- Class 3 – Agriculture
- Class 4 – Other

There are unique challenges in the valuation of each class of land. The various asset class valuation methods are described below.

Asset Valuation of Class 1 (grazing – 4,060,385 acres) and Class 3 (agriculture – 570,721 acres) Lands

Class 1 (grazing) and 3 (ag) lands are grouped by land office. The ag lands are further delineated by dry upland agriculture lands (557,722 acres) and irrigated agriculture lands (12,999 acres) within each land office.

FY 2006 Average Asset Value per Acre for Grazing and Agriculture Lands by Land Office

	CLO	ELO	NELO	NWLO	SLO	SWLO
Grazing	792	327	514	2,250	578	1,722
Agriculture	858	354	557	2,438	626	1,865

Asset Valuation of Class 4 (other – 21,566 acres) Lands

The asset value of Class 4 (other) lands are determined by land office using various methods. Approximately 68% (14,578 acres) of the classified “other” lands are grazing-type lands leased for conservation purposes. These are relatively low-valued lands compared to the remaining residential and commercial lands.

Comparable sales and recent appraisals are used to determine an average price per acre for residential lands within each land office. Residential lands represent

After delineating the acres of grazing land within each land office, an average price per acre for grazing lands within each land office is calculated from land price information for grazing lands from the National Agricultural Statistics Service Website and from comparable sales, recent appraisals and local expertise. www.nass.usda.gov/Statistics_by_State/Montana/

The asset value for grazing lands is calculated by multiplying the average price per acre for that land office by the number of grazing acres within that land office.

A similar approach is used for determining the asset value for agriculture lands. However, the average price per acre for agriculture lands within each land office is a weighted average based on the number of dry upland agriculture lands and irrigated agriculture lands within that land office. Overall, irrigated agriculture lands make up only 2% of the total agriculture lands, whereas dry upland agriculture lands represent 98%. Ag land prices are also calculated from information obtained from the National Agricultural Statistics Service website, comparable sales, recent appraisals and local expertise.

about 13% (2,734 acres) of the lands classified as “other”. The remaining 4,254 acres (19%) classified as “other” are commercial/industrial lands. Depending on the type of commercial/industrial use, these lands may be valued by comparable sales, recent appraisals, local expertise and expected lease revenue (commercial leases include wind turbines, radio towers, stores, etc.). Refer to the FY 2006 REMB Annual Report for more details of lease revenue and a breakdown of acres for classified “other” lands - www.dnrc.mt.gov/About_Us/publications/2006/2006REMBAR.pdf

FY 2006 Average Asset Value per Acre for “Other” Lands by Land Office

	CLO	ELO	NELO	NWLO	SLO	SWLO
Other	5,003	2,255	3,907	7,095	4,001	5,694

Asset Valuation of Class 2 (timber – 479,332 acres) Lands

Unlike the market approach used to determine the asset values for Class 1, 3 and 4 lands, a capitalization approach was used to value classified timber lands prior to FY 2006. While this method has merit, the capitalization approach typically understates the true market value of timber lands since it does not take “other” values into account such as development potential, recreation, etc. In the FY 2006 Return on Asset Report, the asset value using the capitalization method resulted in an overall timberland value of \$750/ac compared to \$1462/ac using a land valuation approach.

A two-step process was employed to determine the asset value of the classified forest lands for the FY 2006 Return on Asset Value Report.

The first step in the asset valuation process for classified forest lands involved using a modified version of the spatial analysis approach and GIS layers that were developed for the Real Estate Management Programmatic Plan. This spatial analysis resulted in classified forest lands being grouped into 1 of 4 tiers within each land office based on overlaying several spatial/data layers. These layers included cadastral ownership, digital elevation model (DEM), trust land ownership, roads, business locations, airports,

streams, demographic data, public land ownership, floodplain, grizzly bear recovery and occupied lands and others. (NOTE: A more detailed description of this approach is found in Appendix C of the Final Real Estate Management Programmatic EIS at www.dnrc.mt.gov/trust/programmatic/)

Tier 3 timber lands represent those most suitable for possible development, sale or other uses. Tier 2 and Tier 1 timber lands are also potentially “developable,” but some factor or combination of factors make them less desirable than Tier 3 lands. Tier 4 or uncategorized lands are those that are not suitable for development and are best maintained as forest lands. The majority of acres are in Tier 4.

Once the timber lands were grouped into tiers within each land office, an average price per acre for Tier 3 lands for each land office was determined based on comparable sales, recent appraisals, conservation easement values and local expertise. Tier 2 lands were 75% of Tier 3 land values and Tier 1 lands were 50% of Tier 3 lands. These values reflect additional values above the discounted revenue from timber management used previously. Tier 4 lands were valued at 25% of Tier 3 lands by land office (similar to the capitalization value) which reflect timberlands with no anticipated development potential in the foreseeable future.

FY 2006 Average Asset Value per Acre for Timber Lands by Land Office.

	CLO	ELO	NELO	NWLO	SLO	SWLO
Timber ¹	1,300	0	0	1,578	0	1,079

¹Timber values for each land office are the weighted average of the four (4) tiers of timber land within that land office.

Appendix C

Excerpt from Idaho Department of Land Mass Appraisal Contract

APPRAISAL INSTRUCTIONS

I. SCOPE OF WORK - APPRAISAL STANDARDS

The purpose of this appraisal is to determine a gross land value (land value not value of the resource growing or improvements constructed on the property) by land classifications as indicated on the attached map and listed below:

1. Residential
2. Forest Land
3. Range Land (Grazing)
4. Agriculture Land (Cropland - Irrigated)
5. Agriculture Land (Cropland – Dry Land)

The property being appraised includes a total of **2.46** million acres of state endowment land located throughout the State of Idaho (Exhibit #1). A total of fourteen (14) Appraisal Zones have been established and are displayed on the attachment map (Exhibit #2). Appraisal Zone boundaries follow established county lines (see attached map(s) and data base).

The appraisal shall conform to the Uniform Standards of Professional Appraisal Practice, (USPAP), and comply with the requirements of the appraisal contract. The Appraiser shall, be a Certified General Appraiser (licensed in the State of Idaho), and also be required to have a Bachelor of Science (B.S.) Degree in the related field for those land classifications that are being appraised, i.e. forest resource management, range management, agricultural sciences. A Member of the Appraisal Institute (MAI) or comparable designation is preferred but not required, but the Appraiser shall have at least five (5 year's experience appraising properties including forest and grazing land, agriculture (cropland dry land & irrigated) and at least two (2) years experience appraising residential/recreational (summer homes) real estate. Any departure or deviation from USPAP or from the standards of this contract shall be by prior written approval from the state Contract Supervisor.

II. GENERAL REQUIREMENTS

The Appraiser will be appraising state endowment land, located across the State of Idaho by appraisal zones and land classifications, displayed in the attachment and described in the land plat data base legal descriptions.

1. The Appraiser may make field inspection and identification of the various items of the property and shall make such investigations and studies as are appropriate and necessary to enable the appraiser to derive sound conclusions and to prepare a summary/self contained appraisal report to be furnished under this agreement. The Appraiser shall inspect the subject property as required, perform the analyses and prepare the conclusions in the report, and personally confirm (or re-confirm) the sales by Multiple Listing Services (MLS). At least five (5) comparable sales will be required for each value zone and land classification if available. A minimum of two (2) photos showing different portions of the property and a plat map will be required for each comparable used. Comparables may be used from adjacent zones with similar land classification types if within zone comparables are not available and approved by the Contract Supervisor.
2. The Contractor (Appraiser) will be provided reasonable access to inspect the property in question as part of the required work in performance of the contract.

III. PROPERTY RIGHTS TO BE APPRAISED AND VALUES TO BE REPORTED

The Appraiser shall view the land as though vacant and unimproved, subject to any outstanding rights and reservations of record. No title report shall be necessary for the appraisal. The Appraiser shall be provided with electronic copies of maps and CD's displaying ownership boundaries and location of property. Improvements are not to be included in the value conclusion and the Appraiser must research, and when applicable, adjust the sales in order to reach

a bare land value conclusion.

1. Each property classification type in each zone is to be appraised as a whole.
2. For agriculture land, a parcel-by-parcel approach is to be utilized (This may change prior to offering the contract).
3. A most probable value range will be concluded for each classification type by appraisal zone and then by classification type state wide.
4. Comparables may be a weighted average to establish values.
5. The appraiser may recommend value zone changes as a result of their market data research.
6. Once the values are established, the appraiser is requested to identify possible lands/areas that could have a higher and better use/value and provide recommendations.

IV. DEFINITION OF VALUE TO BE SOUGHT

Market value is defined in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), as well as the Uniform Standards for Professional Appraisal Practice (USPAP):

- A. The most probable price (value range) which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:
 1. buyer and seller are typically motivated;
 2. both parties are well informed or well advised, and acting in what they consider their own best interest;
 3. a reasonable time is allowed for exposure in the open market;

4. payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and
5. the price (value range) represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Other definitions used in the appraisal shall be derived from the most recent edition of The Dictionary of Real Estate Appraisal.

V. DATE OF VALUE ESTIMATE

The appraisal shall report a separate date of inspection, and the date of valuation or date of the report, as provided in the current addition of USPAP. The date of value estimate is the date at which the analysis, opinions and advice apply.

VI. APPRAISAL REPORT

The appraisal report shall at a minimum be a summary appraisal report, as described in the USPAP. Minimum content requirements for the summary appraisal are discussed below, and further summarized on Attachment #2.

1. Upon completion of the property inspections, data collection and analyses, the Appraiser shall prepare and furnish three (3) copies of a draft appraisal report to Idaho Department of Lands (IDL) for review prior to the final report. The draft report shall, in form and substance, conform to recognized appraisal principles and practices applicable to determine value; shall present adequate and factual data to support rates and amounts used in the appraisal report; and relate conclusions to those facts. A meeting with the Land Board may be needed to discuss the results of the appraisal. The Appraiser shall respond to such review and comment by IDL. All communications shall be through the Contract Supervisor.
2. The Appraiser may provide a separate comparable sales report, or incorporate the sales data into the report. In the event a

separate sales report is provided, one copy of the sales report shall be provided for each copy of the appraisal specified by the contract (hard copy and electronic format). Comparable sales are to be listed for each Appraisal Zone and land classification. The comparables shall be delivered in hard copy and electronic format.

3. Based upon the preliminary draft report input received, three (3) copies of a final report and one electronic copy of a presentation will be prepared including graphics (e.g., poster boards) and Power Point presentations will be utilized as appropriate and necessary

for presentations to IDL Executive Staff, Endowment Reform Task Force and the State Land Board. A separate executive summary is to be provided (10 copies) when the final report is completed. The appraisal report shall include, but not be limited to, the items outlined in Attachment #2 (Appraisal Report Outline) attached hereto. The report must be sufficiently descriptive to enable a reader to ascertain the estimated market value of the property.

4. A list of parcels visited and field notes of the visits will be required in electronic format.

VII. TIME SCHEDULE/PAYMENT SCHEDULE FOR DELIVERABLES

- a. Time schedule for deliverables and rate schedule for payment to the Contractor:

	Activity / Deliverable	Delivery Date	Payment
1.	After seven (7) appraisal zones have been completed, list of parcels visited and field notes	April 27, 2007	25% of contract value
2.	After all 14 appraisal zones are completed, list of parcels visited and field notes	June 15, 2007	25% of contract value
3.	After the draft report is completed	August 24, 2007	25% of contract value
4.	After the final report is completed	September 28, 2007	Remaining 25% of contract value

Project Presentation: Mutually agreed date between the IDL and the Contractor but no later than September 24, 2007.

- b. All reports will be in both electronic form and hard copy form. All reports will be displayed in 8½” X 11”, paper format, and will include graphic, as well as numeric displays.
- c. All deliverable(s) will become the property of the State of Idaho, Department of Lands with full unlimited rights of use, reproduction, and alteration provided such rights do not violate any preexisting use agreements. IDL grants Contractor and Contractor’s agents the right to unrestricted and royalty-free use of any and all deliverables developed under this contract, provided such use in no way breaches any confidentiality or end-use agreements.

- d. Any techniques or methodologies employed or developed by Contractor and/or Contractor’s agents to provide the deliverables under this agreement shall remain the property of the Contractor and/or the Contractor’s agents. To the extent the Contractor and/or the Contractor’s agents have legal authorization to do so, the Contractor and/or the Contractor’s agents grant IDL the right to utilize any such methods or techniques royalty-free for IDL’s unrestricted use and application.

VIII. ATTACHMENTS

1. Appraisal Instructions.
2. Appraisal Report Outline.
3. CD-Legal descriptions of state lands.
4. CD-Orthoquad Maps

IX. EXHIBITS

1. State Ownership Map.
2. Appraisal Zone(s) Boundary Map.

APPRAISAL REPORT OUTLINE

Appraisal preparation, documentation and reporting shall be in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP).

The content of a Self Contained/Summary Appraisal Report must be consistent with the intended use of the appraisal and, at a minimum:

State the identity of the client and any intended users by name or type;

State the intended use of the appraisal;

Detail information sufficient to identify the real estate involved in the appraisal, including the physical and economic property characteristics relevant to the assignment;

State the real property interest appraised;

State the purpose of the appraisal, including the type and definition of value and its source;

State the effective date of the appraisal and the date of the report;

Detail sufficient information to disclose to the client and any intended users of the appraisal the scope of work used to develop the appraisal;

State all assumptions, hypothetical conditions, and limiting conditions that affected the analysis, opinions, and conclusions;

Detail the information analyzed, the appraisal procedures followed, and the reasoning that supports the analysis, opinions, and conclusions;

State the use of the real estate existing as of the date of value and the use of the real estate reflected in the appraisal; and, when the purpose of the assignment is market value, summarize the support and rationale for the appraiser's opinion of the highest and best use of the real estate;

State and explain any permitted departures from specific requirements of STANDARD 1 and the reason for excluding any of the usual valuation approaches;

Include a signed certification in accordance with Standard Rule 2-3.

Appendix D

Overview of Oregon Department of State Land's Land Asset Valuation Method

The Oregon Department of State Lands (DSL) re-valued its Common School Trust Land during the revision of its Asset Management Plan (AMP) in 2005. Conducted by contract appraisers at a cost of about \$70,000, the project consisted of a variety of approaches to estimating fair market value of nearly 800,000 acres of forest, agriculture, urban and rangeland throughout Oregon.

Market values were derived from a combination of appraisals conducted as part of the AMP preparation and real market values (RMV) provided by county assessor offices. Available valuation information was very limited. For example, the valuation for DSI lands classified as Industrial/Commercial/Residential or ICR lands was based upon appraisal of only a fraction of the respective portfolios; and adequate data was unavailable for Mineral and Energy Resources to estimate any comprehensive value.

Some properties were valued using "standard" appraisal methods that relied on a compilation of land sales to determine estimated values. Agricultural lands and Rangelands were valued in a mass appraisal

format, with value conclusions segregated by blocked versus scattered parcels and by region. A benefit-cost approach was used to value the Elliott State Forest (86,000 acres) based on a separate cost-benefit analysis prepared for the Department by a consultant. Other Forest lands were valued based upon a combination of land and immediate timber harvest values. Special Stewardship lands and Waterways were not valued as they are not principally managed for revenue production.

For the purposes of WSLCA's Asset Management Subcommittee pilot project, land values in the 2006-2016 AMP were increased at the modest rate of 4.75% to 5% per year based on the best professional judgment of forest land managers and appraisers. The DSL is currently working with the Oregon Department of Revenue farm, range and rural lands appraisal staff to develop a valuation trend model that can be used to annually revalue trust lands I those asset classes. Forest lands will likely be revalued based upon consultation with forestry consultants, appraisers and forest economists. ICR properties will be physically reappraised periodically. A goal would be to reappraise nearly all of the 5000 acres of ICR lands once every three years. County assessor values for these lands might substitute for actual appraisals in the event workload or fiscal resources are not available.

Appendix E

Relevant Documents

Idaho

Idaho State Board of Land Commissioners, State Trust Lands Asset Management Plan
www.idl.idaho.gov/am/amfiles/final AMP %20Aprvd Dec2007.pdf

Montana

2007 Return on Assets Report. Montana Department of Natural Resources & Conservation: Trust Land Management Division

www.dnrc.mt.gov/trust/reports/return_on_assets/ReturnonAssets07.pdf

2007 Annual Report. Montana Department of Natural Resources & Conservation: Trust Land Management Division

www.dnrc.mt.gov/About_Us/publications/2007/TLMDar.pdf

Oregon

2006-2016 Asset Management Plan, Oregon Department of State Lands
<http://oregonstatelands.us/DSL/DO/amp.shtml>

Annual Report on Land Asset Management Plan for 2006-2007 (FY07)
February 12, 2008

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