



December 4, 2015

Memorandum

To: Members of the Board

From: Domenic N. Savini, Assistant Director

Through: Wendy M. Payne, Executive Director

Subject: **Land: Department of Defense (DoD) Request.<sup>1</sup> – Tab C2**

### **MEETING OBJECTIVE**

**Review results of staff's preliminary research** regarding Board questions and concerns raised at the October 2015 meeting concerning land.

### **BRIEFING MATERIAL**

This staff memorandum consists of a brief background of the October 2015 Board meeting including relevant statistics and information on DoD and government land holdings, followed by an executive summary and staff's preliminary research into questions and concerns raised by Members at the October 2015 meeting.

Thank you and I look forward to our meeting.

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<sup>1</sup> The staff prepares Board meeting materials to facilitate discussion of issues at the Board meeting. This material is presented for discussion purposes only; it is not intended to reflect authoritative views of the FASAB or its staff. Official positions of the FASAB are determined only after extensive due process and deliberations.

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## BACKGROUND

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### BACKGROUND

At the October 2015 meeting the Board did not reach a final decision regarding land as it considered the draft exposure draft, *Establishing Opening Balances for General Property, Plant and Equipment: Amending Statement of Federal Financial Accounting Standards (SFFAS) 6, SFFAS 10, SFFAS 23, and Rescinding SFFAS 35*.

Specific to land, staff was asked to focus efforts in the following areas: (1) determining if there is information available by state or for the country, (2) further developing recommendations that would allow for a zero balance or an assigned value per acre, and (3) assisting the Board in determining if a DoD-centric approach should be applied to the government-wide level or if this issue should be deferred for a broader government-wide land project.

Specific to DoD land management, the defense instruction on natural resource conservation states:

The principal purpose of DOD Lands, waters, airspace, and coastal resources is to support mission-related activities. All DOD natural resources conservation program activities shall work to guarantee DOD continued access to its Land, air, and water resources for realistic military training and testing and to sustain the long-term ecological integrity of the resource base and the ecosystem services it provides.... DOD shall manage its natural resources to facilitate testing and training, mission readiness, and range sustainability in a long-term, comprehensive, coordinated, and cost-effective manner.<sup>2</sup>

#### Some Key Facts<sup>3</sup> about DoD land holdings:

- DoD manages over 24.9 million acres world-wide
- 97% of its land is within the 50 states and U.S. territories
- There are 4,127 defense sites within the 50 states and U.S. territories
- Holdings range in size from small parcels (less than an acre) to the 3.1 million acres (including some leased land) of the Nellis Air Force Range in Nevada
- The Army controls the largest percentage (45%) followed by the Air Force (37%)
- Management of military reservations is the responsibility of the various military departments and defense agencies
- Centralized direction is provided by the Secretary of Defense

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<sup>2</sup> Department of Defense Instruction 4715.03 of March 18, 2011, p. 2.

<sup>3</sup> Congressional Research Service (R42346), *Federal Land Ownership: Overview and Data*, dated 8 February 8 2012, [www.crs.gov](http://www.crs.gov), and DoD Base Structure Report, FY2015 Baseline, <http://www.acq.osd.mil/ie/download/bsr/CompletedBSR2015-Final.pdf>.

## BACKGROUND

**Table 1.0: FY 2014 U.S. and U.S. Territories - Land Acreage and Costs by Agency (Note 1)**

Department or Agency	Owned Acres**	Owned Annual Operating Costs**	Leased Acres	Leased Annual Operating Costs*
<b>Total</b>	<b>38,829,324</b>	<b>\$140,750,734</b>	<b>954,947</b>	<b>\$48,561,174</b>
Army Department***	9,939,817	\$0	564,092	\$0
Air Force Department***	8,002,316	\$0	103,411	\$0
Corps of Engineers***	7,600,660	\$35,418	100,304	\$335,824
Department of the Interior	6,281,204	\$631,383	5,266	\$1,110,633
Navy Department***	4,133,740	\$0	29,201	\$0
Department of Energy	2,205,053	\$977,822	9,115	\$2,671,907
National Aeronautics And Space Administration	186,443	\$9,670,152	5	\$48,679
Department of State	121,331	\$284,564	13	\$9,839
Department of Agriculture	119,908	\$0	19,809	\$2,185,878
Department of Homeland Security	70,031	\$6,496,647	14,991	\$10,802,494
Department of Transportation	59,295	\$3,047,893	92,905	\$13,822,095
Department of Justice	47,457	\$1,052,749	203	\$0
Department of Veterans Affairs	36,185	\$86,630,732	132	\$6,185,747
Department of Commerce	7,526	\$0	11,987	\$3,282,856
Department of Labor	4,395	\$1,615,095	1,682	\$11,204
Department of Health and Human Services	4,394	\$0	1,415	\$215,247
National Science Foundation	4,299	\$182,478	76	\$183,034
General Services Administration	3,551	\$24,949,326	322	\$3,341,613
Defense/WHS***	948	\$0	N/A	N/A
Environmental Protection Agency	604	\$4,636,820	19	\$4,354,125
Department of the Treasury	167	\$539,654	N/A	N/A
United States Agency for International Development	N/A	N/A	N/A	N/A

**Note 1 – Data DOES NOT INCLUDE PUBLIC DOMAIN LAND.** \* Includes operations and maintenance costs and rent, \*\* Includes federal government owned, foreign government owned, museum trust, state government owned, withdrawn land, and leased; does not include public domain land, \*\*\* Department of Defense. Source: *FY 2014 GSA's Federal Real Property Profile (FRPP)* database. CFO Act agencies are required to submit data to the FRPP annually.

## EXECUTIVE SUMMARY

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### EXECUTIVE SUMMARY

Staff has summarized below its recommendations which are more thoroughly detailed in the balance of this memorandum. Please note that staff recommendations are based on preliminary research and limited to addressing Board questions and concerns raised at the October 2015 meeting.

Staff recommendations concerning each of the Board questions and concerns follow:

**1. Determining if there is information available by state or for the country.**

- a. Staff notes that there are multiple sources of land valuation information available that could be used to assist DoD in assigning values to land. However, staff advises that prior to selecting any of the sources, further analysis is required to ascertain the impact if any, that these sources of land value information or combination thereof, would have on management assertions; for example, presentation and disclosure.

**2. Further developing recommendations that would allow for a zero balance or an assigned value per acre.**

- a. In staff's opinion, a null amount is more reliable and relevant than using an assigned value. Furthermore, the effort needed to assign values, including the diverted resources to perform such an exercise compared to questionable benefits seems difficult to justify.

**3. Assisting the Board in determining if a DoD-centric approach should be applied to the government-wide level or if this issue should be deferred for a broader government-wide land project.**

- a. Staff advises against applying a DoD-centric approach to the government-wide level and advises that this issue should be deferred for a broader government-wide project. Staff's justification for this recommendation is based upon the following points: (1) DoD's mission as it specifically relates to land is unique compared to other agencies, (2) DoD management practices do not include condition reporting on land, (3) DoD lands should be analyzed and categorized consistent with GSA's predominant use coding system and (4) a government-wide approach should be based on agency best practices.
- b. Staff advises that further research is required before the Board can be fully equipped to answer this question.

## INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

### INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

Table 2.0 below, *Snapshot of Some Available Information* identifies several sources of land valuation information which staff has been able to preliminarily assess. Sources include information from academic, commercial and governmental entities. A fair amount of the information can be readily obtained without charge, however, in some cases information will need to be purchased and/or requested as a special report.

As can be readily seen, there are in fact multiple sources of land valuation information available that could be used to assist DoD in assigning values to land. For example, DoD could elect to value portions of its land based on commercial/residential properties in a given area and then separately value acreage that is more suitable for farming using some other more appropriate basis. On the other hand, DoD could simply elect to use a macro (e.g., nation-wide) approach that would assign an equal value to each and every acre it owns.

Staff notes that further analysis is required to ascertain the impact if any, that these sources of land value information or combination thereof, would have on management assertions.<sup>4</sup>

Table 2.0 contains staff's preliminary assessments displayed as Pros and Cons and now follows:

**Table 2.0**  
**Snapshot of Some Available Information**

Source	Type of Information	Source of Major Data Elements	Pros	Cons
<b>Case-Shiller Home Price Indices<sup>i</sup></b>	National and Metropolitan area indices: Value of single-family housing	Sampled transactions.	<ul style="list-style-type: none"> <li>• Use of pre-existing homes to maintain constant quality</li> <li>• Updated monthly</li> </ul>	<ul style="list-style-type: none"> <li>• Residentially focused</li> <li>• Excludes new construction</li> </ul>
<b>Department of Agriculture:</b>	Country, State and County:	Surveys of farmers, ranchers,	Values are: <ul style="list-style-type: none"> <li>• Statistical</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculturally focused</li> <li>• Limited to farms with</li> </ul>

<sup>4</sup> AU-C 315 identifies assertions used by auditors (that is, asserted by management) and they are classified in 3 buckets: (1) transactions and events, (2) account balances, and (3) presentation and disclosure. Staff believes that depending upon the land valuation sources used, several assertions cutting across the 3 buckets could very well be impacted. For example, accuracy, classification, completeness, and valuation. Additional work is needed in this regard.

## INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

Source	Type of Information	Source of Major Data Elements	Pros	Cons
<b>National Agricultural Statistics Service</b> <sup>ii</sup>	Agricultural Statistics by commodity type and agricultural land values	livestock feeders, etc., and other agribusinesses.	<ul style="list-style-type: none"> <li>• Per acre</li> <li>• By land type: cropland, pasture, irrigated, etc.</li> <li>• Annual report updates and some ad-hoc reports available</li> </ul>	<p>sales over \$1,000</p> <ul style="list-style-type: none"> <li>• Farm real estate value includes the value of all land and buildings</li> <li>• Sampling and non-sampling errors need to be considered</li> </ul>
<b>Department of Interior</b> <sup>5</sup> <b>Bureau of Land Management</b> <sup>iii</sup>	Parcel specific land valuations Parcel specific demographic information	Parcel specific sales and transaction data.	<ul style="list-style-type: none"> <li>• Land/parcel specific valuations</li> <li>• Use of appraised values</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of transactions</li> <li>• Parcel specific values</li> </ul>
<b>Federal Housing Finance Agency</b> <sup>iv</sup>	House Price Index	Repeat mortgage transactions on single-family properties. Mortgages purchased or securitized by Fannie Mae or Freddie Mac.	<ul style="list-style-type: none"> <li>• Broad measure of single-family prices</li> <li>• Average price changes in repeat sales or refinancings on the same properties</li> </ul>	<ul style="list-style-type: none"> <li>• Residentially focused</li> <li>• Limited to set properties that are mortgaged or securitized</li> </ul>

<sup>5</sup> The BLM does not offer much land for sale because of a congressional mandate in 1976 to generally retain these lands in public ownership. The BLM does, however, occasionally sell parcels of land where agency land use planning finds disposal as an appropriate option.  
[http://www.blm.gov/nv/st/en/prog/Land\\_sales.html](http://www.blm.gov/nv/st/en/prog/Land_sales.html)

## INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

Source	Type of Information	Source of Major Data Elements	Pros	Cons
<b>Federal Reserve Study<sup>v</sup></b>	National - Land Valuations	Public records, interviews, and field inspections.	<ul style="list-style-type: none"> <li>• Academic integrity using regression analysis</li> <li>• Uses a national dataset of Land sales</li> <li>• Isolates land fluctuations</li> <li>• Land price indexes at national and metropolitan statistical areas</li> </ul>	<ul style="list-style-type: none"> <li>• Limited practical applicability</li> <li>• Regression components may not reflect government “Acquire-hold” asset management philosophy</li> <li>• Commercial/residential focus</li> <li>• Price fluctuations are notably larger than general market</li> <li>• Limited dataset of 170K transactions<sup>6</sup></li> </ul>
<b>GSA Office of Real Property Utilization and Disposal<sup>vi</sup></b>	Professional appraisal and related services to Federal agencies	Parcel specific sales and transaction data.	<ul style="list-style-type: none"> <li>• Land/parcel specific valuations</li> <li>• Use of appraised values</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of transactions</li> <li>• Parcel specific values</li> </ul>
<b>Lincoln Institute of</b>	Country, State and Metropolitan	Academic studies <sup>7</sup> based on:	<ul style="list-style-type: none"> <li>• Academic integrity using</li> </ul>	<ul style="list-style-type: none"> <li>• Land value is estimated by subtracting housing</li> </ul>

<sup>6</sup> For all of 2014, there were 4.93 million sales, a 3.1 percent decline from 2013 (5.09 million).

<http://www.realtor.org/news-releases/2015/01/existing-home-sales-rebound-in-december-2014-total-sales-finish-3-percent-below-2013>.

In 2014 REALTORS® reported an increase in Small Commercial Real Estate transactions (SCRE) sales volume of 10 percent year-over-year. In comparison, data for the Large Commercial Real Estate transactions (LCRE) segment showed a sales volume increase of 21 percent for 2014 vs. 2013. Over the 2009-14 period, sales volume for LCRE markets averaged 35 percent growth. For the same period, sales volume in SCRE markets averaged a negative one percent growth.

<http://economistsoutlook.blogs.realtor.org/2015/05/08/some-comparisons-small-and-large-commercial-real-estate-transactions/>

## INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

Source	Type of Information	Source of Major Data Elements	Pros	Cons
<b>Land Policy</b> <sup>vii</sup>	area - Land Valuations	<ul style="list-style-type: none"> <li>– Bureau of Economic Analysis, Federal Housing Finance Agency</li> <li>– Conventional Mortgage Home Price Index</li> <li>– Case-Shiller-Weiss price indexes</li> </ul>	<p>government information</p> <ul style="list-style-type: none"> <li>• Separate price indices for land and structures</li> <li>• Updated Quarterly</li> </ul>	<p>structure estimates</p> <ul style="list-style-type: none"> <li>• In calculating indexes, annual rents paid for rental units are used to estimate annual rents for owner-occupied units</li> </ul>
<b>Office of Management and Budget (OMB)</b> <sup>viii</sup>	Analytical Perspectives Table 31-2: Budget and Financial Reporting	Estimated using a model based on private land values.	<ul style="list-style-type: none"> <li>• Broad measure</li> <li>• Model-based</li> <li>• Multi-year reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Unofficial estimate</li> <li>• Values based on private land values</li> <li>• Last reported in FY2013 Budget.</li> </ul>

<sup>7</sup> Davis, Morris A. and Jonathan Heathcote, 2007, "The Price and Quantity of Residential Land in the United States," Journal of Monetary Economics, vol. 54 (8), p. 2595-2620; data located at Land and Property Values in the U.S., Lincoln Institute of Land Policy <http://www.lincolnst.edu/resources/>

**INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY**

**Agriculture: Farm Real Estate Average Value per Acre**

**Farm Real Estate Average Value per Acre – Regions and States: 2009-2013**

Region and State	2009 (dollars)	2010 (dollars)	2011 (dollars)	2012 (dollars)	2013 (dollars)
Northeast .....	4,810	4,690	4,690	4,790	4,850
Connecticut .....	12,000	11,500	11,600	11,200	11,100
Delaware .....	8,910	8,130	8,140	8,150	8,170
Maine .....	2,130	2,050	2,080	2,070	2,100
Maryland .....	7,380	6,980	6,870	6,760	6,930
Massachusetts .....	12,000	11,200	10,900	10,400	10,400
New Hampshire .....	4,770	4,690	4,560	4,440	4,310
New Jersey .....	13,800	13,100	12,800	12,300	12,800
New York .....	2,400	2,400	2,450	2,650	2,600
Pennsylvania .....	5,120	5,050	5,070	5,300	5,430
Rhode Island .....	15,800	14,600	14,400	13,800	13,800
Iowa .....	3,780	2,900	2,980	3,060	3,200
Missouri .....	2,160	3,220	3,450	3,880	4,240
Ohio .....	3,810	3,490	3,600	3,890	4,300
North Dakota .....	767	2,870	3,160	3,740	4,300
South Dakota .....	879	3,650	3,880	4,110	4,100
Northern Plains .....	1,000	3,830	4,460	5,190	5,880
Kansas .....	1,010	4,720	5,390	6,210	7,100
Nebraska .....	1,320	4,170	5,070	5,840	6,400
North Carolina .....	4,210	4,350	5,410	6,530	7,700
Tennessee .....	3,260	2,270	2,420	2,710	2,850
Virginia .....	4,750	3,850	4,160	4,640	5,100
West Virginia .....	2,360	2,330	2,580	2,540	2,550

**Note:** Farm real estate value: The value at which **all land and buildings** used for agriculture production including dwellings, could be sold under current market conditions, if allowed to remain on the market for a reasonable amount of time.

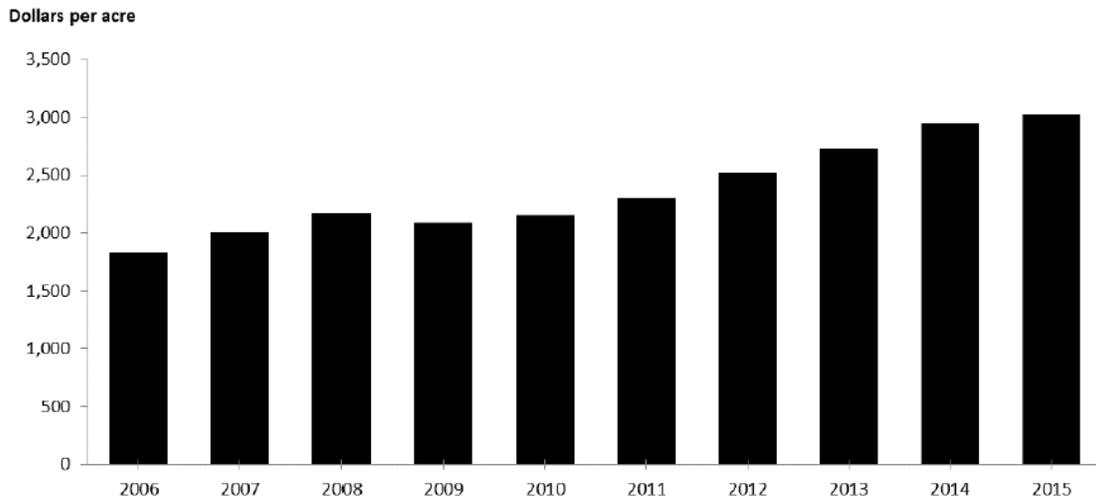
See footnote(s) at end of table.

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# INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

## Agriculture: Farm Real Estate – Other Presentations

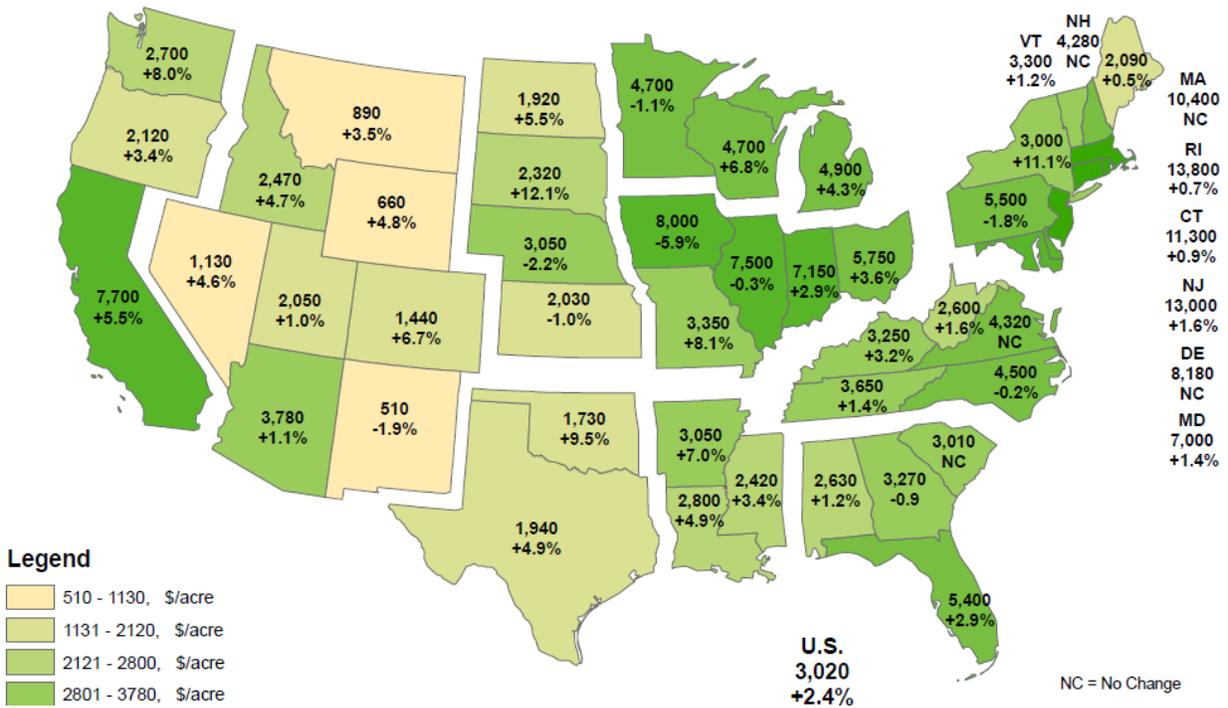
### Average Farm Real Estate Value - United States



USDA - NASS  
August 5, 2015

### 2015 Farm Real Estate Value by State

Dollars per Acre and Percent Change from 2014



# INFORMATION AVAILABLE BY STATE OR FOR THE COUNTRY

## OMB: Government Assets and Liabilities

31. BUDGET AND FINANCIAL REPORTING

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**Table 31-2. GOVERNMENT ASSETS AND LIABILITIES\***

(As of the end of the fiscal year, in billions of 2011 dollars)

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	
<b>ASSETS</b>																	
<b>Financial Assets:</b>																	
Foreign Exchange, SDRs, and Gold .....	Note that per OMB no official market value estimates for Land exist.											39	39	39	101	99	95
Cash, Checking Deposits, Other Monetary Assets .....	Note that per OMB no official market value estimates for Land exist.											61	84	391	288	320	345
Mortgages .....	Note that per OMB no official market value estimates for Land exist.											87	88	93	114	109	107
Other Loans .....	126	174	218	217	282	366	259	209	240	226	220	220	223	345	473	498	
Less Expected Loan Losses .....	-1	-3	-6	-11	-22	-21	-24	-31	-47	-46	-52	-47	-51	-85	-66	-52	
Other Treasury Financial Assets .....	65	86	64	62	84	116	196	224	299	333	331	328	313	450	379	376	
Subtotal .....	291	377	394	376	524	640	663	619	718	686	687	711	1,008	1,212	1,315	1,369	
<b>Nonfinancial Assets:</b>																	
Fixed Reproducible Capital .....	1,271	1,261	1,312	1,273	1,205	1,363	1,413	1,419	1,248	1,251	1,267	1,257	1,293	1,321	1,314	1,383	
Defense .....	1,095	1,029	1,041	950	853	992	1,017	993	813	788	801	799	830	843	845	891	
Nondefense .....	176	232	272	323	353	372	396	426	435	463	466	458	463	478	470	492	
Inventories .....	333	288	268	240	297	339	300	231	237	308	309	296	302	295	293	296	
Nonreproducible Capital .....	166	218	260	442	717	634	606	486	799	1,450	1,479	1,474	1,074	830	900	942	
Land .....	117	162	204	323	413	429	441	324	560	1,012	1,041	977	698	454	431	463	
Mineral Rights .....	50	56	56	119	305	205	165	162	239	437	438	497	376	376	469	479	
Subtotal .....	1,770	1,767	1,841	1,955	2,219	2,336	2,319	2,137	2,284	3,009	3,055	3,027	2,669	2,447	2,507	2,621	
Total Assets .....	2,060	2,144	2,235	2,331	2,743	2,976	2,982	2,756	3,002	3,694	3,741	3,738	3,677	3,659	3,822	3,989	

*“Although there are no official estimates of the market value of the Government’s vast land and mineral holdings, it is assumed here that Federal land values rise and fall along with private land values. Since the mid-1990s, oil prices have been volatile, which has caused the estimated market value of federally-owned proved reserves of oil and natural gas to fluctuate as well. In 2011, as estimated here, the combined real value of Federal land and mineral rights was \$0.9 trillion compared with \$1.5 trillion in 2006.”*

Source: *Budget of the United States Government, FY2013, Analytical Perspectives, Table 31-2.* <http://www.gpo.gov/fdsys/pkg/BUDGET-2013-PER/pdf/BUDGET-2013-PER.pdf>

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

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### ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

In addressing this question, staff has used both conceptual and practical approaches to help guide the Board in its discussions. Based upon staff's analysis as detailed and illustrated in the following pages, staff concludes that assigning a null amount (zero balance) is preferable to assigning values. In staff's opinion, a null amount is more reliable and relevant than using an assigned value that some would say is just a "guess." Furthermore, the effort needed to assign values, including the diverted resources to perform such an exercise compared to questionable benefits seems difficult to justify.

Table 3.0 analyzes the additional recognition criteria mentioned in our conceptual framework that one should consider before concluding that recognition of an item is appropriate. Please note that taken in a vacuum and from a purely recognition point of view (prior to selecting a measurement attribute), staff believes that it would be preferable to assign a value as opposed to using a null amount.

However, at Table 4.0 staff then analyzes the selection of a measurement attribute using our reporting objectives, qualitative characteristics, and cost-benefit constraints. This analysis leads staff to a contrary assessment concluding that it is preferable to use a null amount as opposed to assigning a value. The primary drivers leading staff to this conclusion circle around the qualitative characteristics of reliability and relevance, and then followed by cost-benefit constraints. These drivers are further explored in the 2 following sections entitled, *Factors Contributing to Land Value* and *Illustrating Reliability and Relevance of Assigned Values*.

### Recognition Criteria and Considerations

By and large DoD land meets the two essential characteristics established in SFFAC 5<sup>8</sup> required for a resource to be considered an asset: embodying economic benefits or services that can be used in the future and government control over the benefits or services by obtaining, denying, or regulating their access. Additionally, DoD land meets the two basic recognition criteria that an item or element should (a) meet the definition of an element of financial statements and (b) be measurable.<sup>9</sup>

However, Concept 5 further notes that although an item may meet the basic recognition criteria it might not be recognized because of measurement, materiality, or cost versus benefit considerations. As such, unrecognized elements become candidates for note disclosure or supplementary information. Table 3.0 analyzes the other recognition considerations mentioned in SFFAC 5.

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<sup>8</sup> Statement of Federal Financial Accounting Concepts (SFFAC) 5: *Definitions of Elements and Basic Recognition Criteria for Accrual-Basis Financial Statements*. Par.22

<sup>9</sup> Ibid. Footnote 7, Par 5.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

**Table 3.0**  
**Meeting Other Recognition Considerations**

<b>Other Criteria</b>	<b>Zero Balance</b>	<b>Assigned Value</b>	<b>Comments</b>
<b>Is the item material?</b>	<b>YES</b>	<b>YES</b>	In most cases land can be assumed to be (at least) qualitatively material.
<b>Do benefits exceed costs?</b>	<b>YES<sup>10</sup></b>	<b>QUESTIONABLE</b>	At present, efforts to assign monetary values (not symbolic or token) can be expected to exceed benefits.
<b>Can a monetary amount can be determined with reasonable certainty or is reasonably estimable?</b>	<b>QUESTIONABLE</b>	<b>QUESTIONABLE</b>	Either option is problematic in this regard. That is, how reasonably certain can we be that land has a zero balance? Also, can compiling values from multiple sources for identical/similar land holdings be considered reasonably estimable?

<sup>10</sup> Assuming adequate disclosures are made to the PP&E Note. Such disclosures could include number of acres, location information, predominant use of land, condition related information, etc.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

### Measurement Criteria and Considerations

Staff believes that the first essential characteristics required for a resource to be considered an asset, that is, embodying economic benefits is central to the land valuation question at-hand. Specifically, because the Board has previously noted that land is not a depreciable asset and does not directly factor into the cost of services, measurement attributes reflecting estimates of historical land costs have very little, if any informational value.<sup>11</sup> As such, an appropriate measurement attribute for land should help reflect the economic benefits that can be used in the future. Because selections of a measurement attribute can affect the usefulness of reported information for decision making, our concepts also remind us that selecting a measurement attribute depends upon users' needs.

Therefore, in selecting an appropriate measurement attribute, SFFAC 5<sup>12</sup> notes that the Board expects that the selection of an attribute in specific circumstances will be based on the reporting objectives, qualitative characteristics, and cost-benefit constraints applicable to financial information, all of which are analyzed below.<sup>13</sup>

**Table 4.0**  
**Selecting an Appropriate Measurement Attribute**

Criteria	Zero Balance	Assigned Value	Comments
<b>Reporting Objectives:</b>			
Budgetary Integrity	Indirect negative-affect	Indirect positive-affect	<b>Land values contribute to a comprehensive understanding of how an entity's budgetary resources have been used and how information on the use of budgetary resources relates to information on the costs of</b>

<sup>11</sup> November 1995 SFFAS 6. Par 136: The Federal Government owns vast amounts of land and its use of land is diverse. In some instances Federal Land is integral to the ownership of general PP&E. For example, the cost of Land upon which an office building is sited is integral to the cost of that building. Land acquired for or in connection with general PP&E will be recognized on the balance sheet to provide a more comprehensive measure of the assets devoted to general government operations. However, since land is not a depreciating asset, depreciation expense will not be recognized on Land included in general PP&E.

<sup>12</sup> Ibid Footnote 6, Par.8

<sup>13</sup> Reporting objectives and qualitative characteristics can be found at Statement of Federal Financial Accounting Concepts 1: *Objectives of Federal Financial Reporting*, beginning at Paragraphs 105 and 156, respectively.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

Criteria	Zero Balance	Assigned Value	Comments
			program operations.
Operating Performance	Little to no negative-affect	Little to no positive-affect	Information on land, not necessarily limited to land values can assist users in evaluating service efforts, costs, and accomplishments.
Stewardship <sup>14</sup>	Little to no negative-affect	Little to no positive-affect	Information on land, not necessarily limited to land values can assist users in assessing the government's operations and investments; e.g., has government's financial position improved?, and whether future budgetary resources are sufficient to sustain public services and to meet obligations?
Systems and Control	Direct negative-affect	Direct positive-affect	Requiring the accounting for land values can foster and bolster entity systems and internal controls to help ensure for example that (1) transactions are executed appropriately, (2) are in accord with the purposes authorized, and (3) assets are properly safeguarded.

<sup>14</sup> Per the Board October 2015 TAB B-2, Draft ED, Par. A-25: Because land is not depreciated, the benefits of capitalizing it are primarily in the period of acquisition. That is, the cost of the land is identified so the acquisition can be evaluated and capitalized so the period operating costs are not overstated. In future periods, the ongoing benefit is that accountability for the asset is established. The alternatives are intended to reduce the barriers to and cost of adopting GAAP.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

Criteria	Zero Balance	Assigned Value	Comments
<b>Qualitative Characteristics:</b>			
Relevance	Direct positive-affect	Direct negative-affect	Assigning values that may measure historical cost and not reflect the embodied economic benefits provide little to no user benefit. Also, assigning values that may come from multiple sources for identical/similar land holdings lacks a logical underpinning.
Understandability	Direct positive-affect	Little to no positive-affect	To assist user comprehension, information should be expressed as simply as possible. In this regard, a zero balance may be easier to comprehend than explaining the rationale and basis for assigned values.
Reliability <sup>15</sup>	Direct positive-affect	Direct negative-affect	Information should be verifiable, free from bias and represent what it purports to be. In this regard, a zero balance may be more reliable than assigning values that may come from multiple sources for identical/similar land holdings.
Comparability	Little to no negative-affect	Little to no positive-affect	Reporting differences between entities should reflect underlying

<sup>15</sup> Statement of Federal Financial Accounting Concepts 1: *Objectives of Federal Financial Reporting*, Par. 161. Relevance encompasses many of the other characteristics. For example, if the information provided in a financial report is not timely or reliable, it is not relevant.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

Criteria	Zero Balance	Assigned Value	Comments
			transactions rather than selection of different accounting procedures/practices. A zero balance may affect comparability in the affected period.
Consistency	Little to no positive-affect	Little to no negative-affect	Either of these methods should have little to no affect regarding consistency as they are intended for a one-time application. However, assigning different values to similar parcels may adversely affect consistency more than merely assigning a zero amount.
Timeliness <sup>16</sup>	Direct positive-affect	Direct negative-affect	Assigning values may adversely sacrifice timeliness. Given constrained resources, the effort required to analyze and compile information may not only take longer to produce, but impact other major financial statement preparation initiatives.

<b>Cost-benefit Constraints</b>	Direct positive-affect	Direct negative-affect	At present, efforts and related costs to assign monetary values (apart from symbolic or token amounts) can be expected to exceed benefits.
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<sup>16</sup> Ibid Footnote 12, Par.161.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

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### Factors Contributing to Land Value

Appraisers and economists tell us that a land site should be made available to the users who can make the “highest and best use” of the site and that factors such as physical attributes, legal or government constraints, social expectations, and economic forces all affect the value ascribed to land. Generally, the “highest and best use” considers only the uses that are:

1. legally permissible,
2. physically possible, and
3. economically feasible.

As previously mentioned SFFAC 5 states that a resource can be considered an asset when two characteristics exist. First, the resource embodies economic benefits or services that can be used in the future and second, the government controls access to the economic benefits or services.<sup>17</sup> If in fact the characteristic of embodying economic benefits is central to the land valuation question at-hand, measurement attributes such as fair value or replacement cost that best reflect this characteristic will assist users in assessing the “highest and best use” of land.”

However, as shown at Table 4.0, even assigning values that purport to be representative of an asset’s embodied economic benefits may fall short of meeting the qualitative characteristics of reliability and relevance.

- Reliability - Although reliability does not imply precision or certainty, assigning values that may come from multiple sources for identical/similar land holdings draws into question the degree of estimation (variance) in the measurement process. Moreover, the measurement process can be drawn into question because identical or similar land holdings may be assigned significantly different values merely based upon the availability of the underlying/supporting data. Also, take for example the use of a national or even county index. To what extent can the user be assured that nothing material has been omitted from the information and that the index is not misleading and faithfully represents the land’s value?
1. Relevance – To be relevant information should (1) have a logical relationship between the information provided and the purpose for which it is needed and (2) be capable of making a difference in a user’s assessment of a problem, condition, or event. For example, assigning values that may come from multiple sources for identical/similar land holdings lacks a logical underpinning. Similarly, to what degree can users be reasonably expected to make decisions based upon values derived from a national or even county index?

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<sup>17</sup> Ibid Footnote 7, Par. 22.

## ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

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### Illustrating Reliability and Relevance of Assigned Values

On the following page staff graphically presents 3 different data sets of land values to contrast and compare how assigned values from different sources would look to a user.

The first graph is directly derived from OMB's FY2013 federal budget as shown on page 12. The next 2 graphs use national index data taken from the Federal Housing Finance Agency (FHFA) and the Case-Schiller Home Price (CS) data-set, both of which are discussed at Table 2.0.

FHFA and CS information is presented for Q4 periods beginning 1975 through 2011. For ease of illustration OMB fiscal year-end information has been re-labeled consistent with the other 2 data-sets.

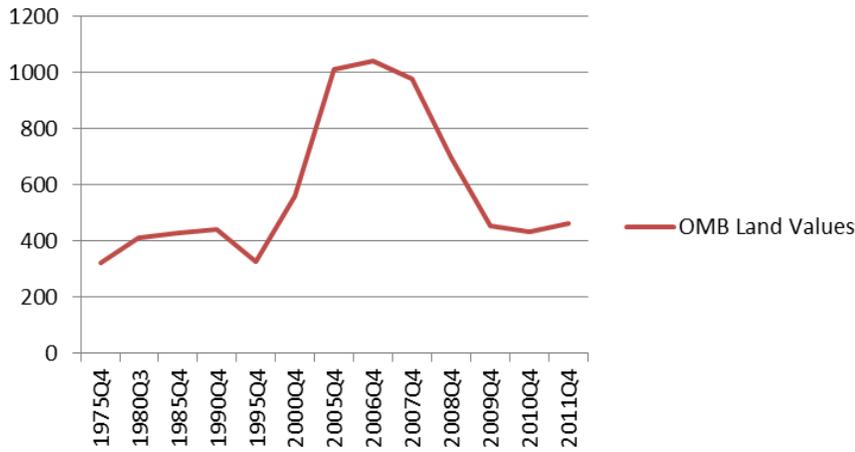
What becomes immediately obvious in the graphs is how well the different data-sets correlate to one another. Although OMB's assumption of federal land value fluctuations are more pronounced, the values track very closely to both the FHFA and CS data.

As such, some questions a user may ask that directly bear upon reliability and relevance include:

1. Why do federal land values rise and fall with private land values especially given their vastly different purposes (constitutional versus residential/commercial)?
2. How do federal land values track to non-residential land values? That is, why aren't federal land values based more on commercial applications of "highest and best use"?
3. Why do federal land values track so well to single-family properties? Can this hold true for all of the government's land holdings? What about federal land holdings in rural or agricultural areas?
4. If the government does not intend selling or otherwise conveying this land into private hands, why is a market value even being assigned? Does this mean that the government has intentions of selling its land holdings in the near-term?
5. If federal land values in fact rise and fall along with private land values, how much did it cost the government to tell me something that I already know or can easily figure out?

# ZERO BALANCE OR AN ASSIGNED VALUE PER ACRE

**Federal Budget Analytical Perspectives Table 31-2**



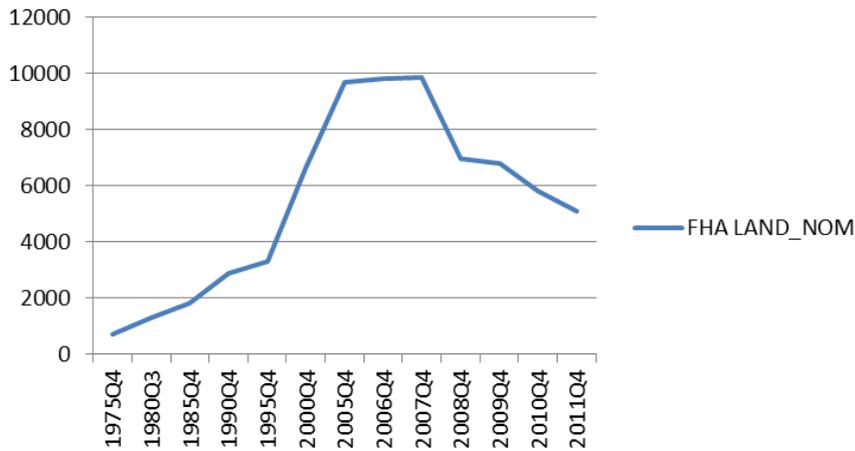
Federal Land values rise and fall along with private Land values.

Values are in billions of FY2011 dollars.

The correlation coefficient or R relative to:

- FHFA = 0.8756 or 87.56%
- CS = 0.9096 or 90.96%

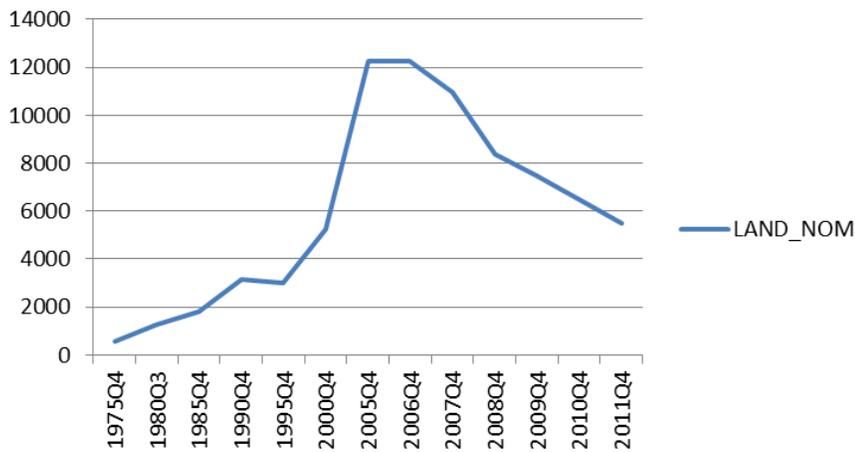
**Federal Housing Finance Agency Index**



Price Index based on repeat mortgage transactions on securitized single-family properties.

Market values are in billions of current dollars.

**Case-Shiller Home Price Index**



Price Index based on use of pre-existing homes to maintain constant level of quality on the same single-family properties.

Market values are in billions of current dollars.

## APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

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### APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

Staff advises against applying a DoD-centric approach to the government-wide level and advises that this issue should be deferred for a broader government-wide project.

Staff's conclusion is based on the following.

1. DoD's mission is uniquely different than most of the other agencies managing land. As noted by the Congressional Research Service<sup>18</sup>, DoD policy clearly states that,

***“The principal purpose of DOD Lands.....is to support mission-related activities. All DOD natural resources conservation program activities shall work to guarantee DOD continued access to its land....for realistic military training and testing...”***

Contrast this to USDA's mission statement,

***“We provide leadership on....natural resources, rural development....based on public policy, the best available science, and effective management. We have a vision to provide economic opportunity....to promote agriculture production....and to preserve our Nation's natural resources through conservation, restored forests, improved watersheds, and healthy private working lands.”*** [www.usda.gov/wps/portal/usda/usdahome?navid=ABOUT\\_USDA](http://www.usda.gov/wps/portal/usda/usdahome?navid=ABOUT_USDA)

And now compare to an excerpt from Interior's Bureau of Land Management's mission statement,

***“The mission of the National Conservation Lands is to conserve, protect, and restore these nationally significant landscapes .... where people live, work and play. They offer exceptional opportunities for recreation, solitude, wildlife viewing, exploring history, scientific research, and a wide range of traditional uses. These are places that spark the imagination. The National Conservation Lands sustain for the future - and for everyone - these remarkable landscapes of the American spirit.”*** [www.blm.gov/wo/st/en/prog/blm\\_special\\_areas/NLCS.html](http://www.blm.gov/wo/st/en/prog/blm_special_areas/NLCS.html)

In staff's opinion, such vast differences in mission affect how land is used, managed, and maintained. This in turn has a direct impact on how land is valued.

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<sup>18</sup> Ibid. Footnote 3.

## APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

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2. DoD does not track condition information on land. As part of staff's analysis, we learned that DoD does not have a policy in place to track condition information on its land holdings. As such, it would be quite difficult taking any DoD approach and attempting to make it "generally accepted" when there are other agencies that do monitor condition information on their land holdings. Also, not having condition information on land has a direct impact on valuation.
3. Before a DoD approach can be considered for government-wide application, DoD lands should be analyzed and categorized consistent with GSA's Predominant Use<sup>19</sup> coding system (there are 24 different land-use categories). Predominant use simply means the greatest use of the land. As stated earlier, the way land is used directly affects how it is valued. Staff advises that additional research in this regard be conducted.
4. Lastly, a government wide approach should be based on agency best practices that have evolved over time. Staff advises that additional research in this regard be conducted.

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<sup>19</sup> Federal Real Property Council, 2014 Guidance for Real Property Inventory Reporting.  
[http://www.gsa.gov/portal/mediald/192315/fileName/FY\\_2014\\_FRPP\\_Data\\_Dictionary.action](http://www.gsa.gov/portal/mediald/192315/fileName/FY_2014_FRPP_Data_Dictionary.action)

# APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

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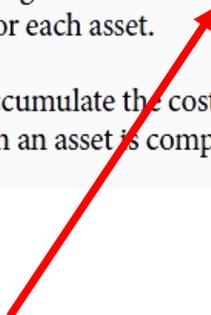
## U.S. Army Corps of Engineers

### 1.M. General Property, Plant and Equipment

USACE General Property, Plant, and Equipment (PP&E) is capitalized at historical acquisition cost plus capitalized improvements when an asset has a useful life of two or more years, and the acquisition cost exceeds \$25 thousand with the exception of buildings and structures related to hydropower projects which are capitalized regardless of cost.

USACE uses estimates to support the historical costs of its real property assets, including the administrative costs of land, acquired prior to FY 1999, and personal property assets acquired prior to FY 2003. The estimates are necessary because certain supporting documentation to substantiate recorded costs for those assets is no longer available. Management's estimation methods, which are consistent with the principles, relevant to USACE circumstances, as contained in SFFAS No. 6, *Accounting for Property, Plant and Equipment*; SFFAS No. 23, *Eliminating the Category National Defense Property, Plant And Equipment*; and SFFAS No. 35, *Estimating the Historical Cost of General Property, Plant, and Equipment: Amending Statements of Federal Financial Accounting Standards 6 and 23*; consist of using a combination of appropriation or engineering documents, or other available real estate, financial, appropriations, and operations data, combined with written management attestation statements, to estimate and support the original acquisition or construction costs recorded for each asset.

Construction in Progress (CIP) is used to accumulate the cost of construction and accumulated costs are transferred from CIP to the relevant asset category when an asset is completed.



Note the data sources for estimates – combination of appropriation or engineering documents, real estate, financial, appropriations, and operations data combined with management attestations.

Source: U.S. Army Corps of Engineers, AFR 2014, page 48.  
[http://www.publications.usace.army.mil/Portals/76/Publications/Miscellaneous/FY\\_2014\\_USACE\\_Annual\\_CW\\_Financial\\_Report.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/Miscellaneous/FY_2014_USACE_Annual_CW_Financial_Report.pdf)

# APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

## NOTE 8. GENERAL PROPERTY, PLANT & EQUIPMENT, NET

As of September 30 <i>(\$ in thousands)</i>	2014				
	Depreciation/ Amortization Method	Service Life (yrs)	Acquisition Value	(Accumulated Depreciation/ Amortization)	Net Book Value
<b>Major Asset Classes</b>					
Land	N/A	N/A	\$ 9,057,234	\$ N/A	\$ 9,057,234
Buildings, Structures, and Facilities	S/L	20 - 100	33,177,696	(17,190,306)	15,987,390
Leasehold Improvements	S/L	Lease term	60,048	(34,426)	25,622
Software	S/L	2 - 10	135,705	(104,058)	31,647
General Equipment	S/L	5 - 50	2,014,248	(1,039,687)	974,561
Construction-in- Progress	N/A	N/A	3,474,608	N/A	3,474,608
<b>Total General PP&amp;E</b>			<b>\$ 47,919,539</b>	<b>\$ (18,368,477)</b>	<b>\$ 29,551,062</b>

As of September 30 <i>(\$ in thousands)</i>	2013				
	Depreciation/ Amortization Method	Service Life (yrs)	Acquisition Value	(Accumulated Depreciation/ Amortization)	Net Book Value
<b>Major Asset Classes</b>					
Land	N/A	N/A	\$ 9,040,646	\$ N/A	\$ 9,040,646
Buildings, Structures, and Facilities	S/L	20 - 100	31,876,370	(16,636,063)	15,240,307
Leasehold Improvements	S/L	Lease term	40,382	(33,336)	7,046
Software	S/L	2 - 10	132,751	(96,126)	36,625
General Equipment	S/L	5 - 50	1,971,684	(985,349)	986,335
Construction-in- Progress	N/A	N/A	4,091,875	N/A	4,091,875
<b>Total General PP&amp;E</b>			<b>\$ 47,153,708</b>	<b>\$ (17,750,874)</b>	<b>\$ 29,402,834</b>

### Legend for Depreciation Methods:

S/L = Straight Line      N/A = Not Applicable

### Other Information

Power generated by hydroelectric power plants operated and maintained by USACE is transmitted to Marketing Administrations for distribution to power companies across the United States. The service hydropower project related assets is derived from guidance provided by the Federal Energy Regulator based on industry standards. The hydropower project related assets make up \$11.0 billion of the net book value of USACE's PP&E in FY 2014 and \$10.3 billion in FY 2013.

Note the amount given for the FY2014 GPP&E estimate – \$26.1 billion or 88.47% of total GPP&E (\$26.1 / \$29.5).

As of September 30, 2014, approximately \$26.1 billion of the acquisition value recorded in the PP&E line is being supported by alternate methods described in Note 1.L, "General Property, Plant, and Equipment", and \$26.2 billion as of September 30, 2013. The net book value is \$8.7 billion at September 30, 2014, and \$10.3 billion at September 30, 2013.

Note 9, "Stewardship Property, Plant and Equipment" provides the physical quantity information for multi-use heritage assets that are recognized and presented with general PP&E in the basic financial statements.

There are no restrictions on the use or convertibility of general PP&E.

Source: U.S. Army Corps of Engineers, AFR 2014, page 54  
[http://www.publications.usace.army.mil/Portals/76/Publications/Miscellaneous/FY\\_2014\\_USACE\\_Annual\\_CW\\_Financial\\_Report.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/Miscellaneous/FY_2014_USACE_Annual_CW_Financial_Report.pdf)

# APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

## U.S. Department of Energy

### I. GENERAL PROPERTY, PLANT, AND EQUIPMENT, NET

Property, plant, and equipment that are purchased, constructed, or fabricated in-house, including major modifications or improvements, are capitalized at cost. The Department's property, plant, and equipment capitalization threshold, except as noted below, is \$500,000. The capitalization threshold for Nuclear Waste Fund (NWF) is \$50,000. The capitalization threshold for the Power Marketing Administrations (PMAs) and FERC range from \$5,000 to \$50,000 or may depend on whether particular equipment is considered a major unit of property, which is capitalized upon purchase, or a minor unit, which is generally expensed. The capitalization threshold for internal use software is \$750,000, except for the PMAs and FERC, which use thresholds ranging from \$5,000 to \$150,000 (see [Note 9](#)).

Note discussion concerning GPP&E capitalized at cost.

### 9. General Property, Plant, and Equipment, Net

(\$ IN MILLIONS)	ACQUISITION COSTS	ACCUMULATED DEPRECIATION	NET BOOK VALUE	ACQUISITION COSTS	ACCUMULATED DEPRECIATION	NET BOOK VALUE
	FY 2014			FY 2013		
Land and land rights	\$ 2,121	\$ (985)	\$ 1,136	\$ 2,074	\$ (955)	\$ 1,119
Structures and facilities	46,987	(27,634)	19,353	45,949	(26,787)	19,162
Internal use software	958	(648)	310	895	(600)	295
Equipment	19,030	(12,254)	6,776	18,610	(11,946)	6,664
Natural resources	112	(17)	95	108	(16)	92
Construction work in process	5,311	-	5,311	6,013	-	6,013
<b>Total general property, plant &amp; equipment</b>	<b>\$ 74,519</b>	<b>\$ (41,538)</b>	<b>\$ 32,981</b>	<b>\$ 73,649</b>	<b>\$ (40,304)</b>	<b>\$ 33,345</b>

Note that Land is commingled with Land rights.

Source: U.S. Department of Energy, AFR2104, pages 49 and 62.  
[http://www.energy.gov/sites/prod/files/2014/11/f19/DOE\\_FY2014\\_AFR.pdf](http://www.energy.gov/sites/prod/files/2014/11/f19/DOE_FY2014_AFR.pdf)

# APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

## U.S. Department of the Interior

### NOTES TO PRINCIPAL FINANCIAL STATEMENTS

Note discussion concerning Land.

are depreciated over a useful life from 10 to 80 years, with the exception of dams and certain related property, which are depreciated over useful lives of up to 100 years. Equipment, vehicles, and aircraft are depreciated over useful lives generally ranging from 2 to 50 years. Capital leases and leasehold improvements are amortized over the shorter of the estimated useful life or the life of the lease.

For land, buildings, structures, land improvements, leasehold improvements, and facilities purchased prior to October 1, 2003, capitalization thresholds were established by the individual bureaus and generally ranged from \$50,000 to \$500,000. For these same items purchased subsequent to September 30, 2003, DOI has established a capitalization threshold of \$100,000 with the exception of dams and certain related property, which are fully capitalized.

For equipment, vehicles, aircraft, and capital leases of other personal property, DOI has established a capitalization threshold of \$15,000. There are no restrictions on the use or convertibility of DOI general purpose PP&E.

In accordance with the standards, DOI recorded certain general PP&E acquired on or before September 30, 1996, at its estimated net book value (i.e., gross cost less accumulated depreciation) or its estimated gross cost. The DOI estimated these costs and net book values based on available historic supporting documents, current replacement cost deflated to date of acquisition, and the cost of similar assets at the time of acquisition.

**Construction in Progress.** Construction in Progress (CIP) is used for the accumulation of the cost of construction or major renovation of fixed

**Internal Use Software.** Internal use software includes purchased commercial off-the-shelf (COTS) software, contractor-developed software, and software that was internally developed by agency employees. Internal use software is capitalized at cost and amortized over a useful life of five years, if the acquisition cost is \$100,000 or more.

#### J. Stewardship Assets

Stewardship assets consist of public domain land, Indian trust land, and heritage assets such as national monuments and historic sites that have been entrusted to DOI to be maintained in perpetuity for the benefit of current and future generations.

The majority of public lands, presently under the management of DOI were acquired by the Federal Government during the first century of the Nation's existence and are considered stewardship land. A portion of these lands has been reserved as national parks, wildlife refuges, and wilderness areas, while the remainder is managed for multiple uses. The DOI is also responsible for maintaining a variety of cultural and natural heritage assets, which include national monuments, historic structures, and library and museum collections.

The stewardship land and heritage assets managed by DOI are considered priceless and irreplaceable. As such, DOI assigns no financial value to them and the PP&E capitalized and reported on the Balance Sheet excludes these assets. Note 9, *Stewardship Assets*, provides additional information concerning stewardship land and heritage assets. The Required Supplementary Information Section provides information on the condition of stewardship land and heritage assets.

**Multi-Use Heritage Assets.** Some heritage assets

# APPLICABILITY OF DOD APPROACH TO GOVERNMENT-WIDE

## NOTES TO PRINCIPAL FINANCIAL STATEMENTS

### NOTE 8. GENERAL PROPERTY, PLANT, AND EQUIPMENT, NET

General purpose PP&E consists of buildings, structures, and facilities used for general operations, power, irrigation, fish protection, wildlife enhancement, and recreation; land and land improvements acquired for general operating purposes; equipment, vehicles, and aircraft; construction in progress; capital leases; leasehold improvements; and internal use software.

All general purpose PP&E are capitalized at acquisition cost and depreciated using the straight-line amortization method over the assigned useful lives of the property.

The PP&E categories with corresponding acquisition cost and accumulated depreciation as of September 30, 2014, are shown in the following table:

<i>(dollars in thousands)</i>	Acquisition Cost	Accumulated Depreciation	Net Book Value
Land and Land Improvements	\$ 2,307,578	\$ (149,267)	\$ 2,158,311
Buildings	5,182,556	(2,071,297)	3,104,259
Structures and Facilities	23,339,111	(11,171,510)	12,165,601
Leasehold Improvements	60,630	(31,509)	29,121
Construction in Progress			
Construction in Progress - General	2,456,474	-	2,456,474
Construction in Progress in Abeyance	635,085	-	635,085
Equipment, Vehicles, and Aircraft	2,847,551	(1,599,494)	1,248,057
Internal Use Software			
In Use	571,965	(356,591)	215,374
In Development	27,514	-	27,514
<b>Total Property, Plant, and Equipment</b>	<b>\$ 37,428,464</b>	<b>\$ (15,388,668)</b>	<b>\$ 22,039,796</b>

Note that Land is commingled with Land improvements.

Note that all GPP&E is capitalized at acquisition cost.

Source: U.S. Department of the Interior, AFR 2014, page 88.  
<https://www.doi.gov/sites/doi.gov/files/uploads/PFM%20AFR%20FY%202014.pdf>

# Property Tax Assessment Case Study

## Property Tax Assessment Case Study

Real Estate - Residential Property - Vacant Land

**Property Detail**

Account Number	[REDACTED]
GPIN	[REDACTED]
Parent Account	[REDACTED]
Owner Name	[REDACTED] Baptist Church
Property Address	[REDACTED] St
Neighborhood	130700
Property Use	Vacant Land
Plate	0398
Mailing Address	[REDACTED] Norfolk VA 23505 [REDACTED]
Legal Description	1 Blk 3 N Titustown
Parcel Approximate Area (Sq Ft)	NA
Parcel Approximate Acreage	NA
House Plate Number	[REDACTED]

**Sales / Assessment History**

- Schools
- Municipal Services
- Planning
- Public Safety
- Civic
- Code Enforcement Cases
- Building Permits
- Building Plan Review
- Legend

35 feet wide

29



110 feet long



3850 square feet

# Property Tax Assessment Case Study

Real Estate - Residential Property - Vacant Land

**Property Detail**

**Sales / Assessment History**

**Sales**

Owner	Transfer Date	Sale Price	Type	Deed Reference
[Redacted]	5/27/2008	\$0	Single	080015265
[Redacted]	6/21/2007	\$40,000	Transfer	070024181
[Redacted]	2/20/2007	\$0	Single	070007391

**Assessments**

Effective Date	Land Value	Improvement Value	Total Value
07/01/2015	\$17,000	\$0	\$17,000
07/01/2014	\$17,000	\$0	\$17,000
07/01/2013	\$17,000	\$0	\$17,000
07/01/2012	\$17,000	\$0	\$17,000
07/01/2011	\$17,000	\$0	\$17,000

Schools  
Municipal Services  
Planning  
Public Safety

Map labels: 1001, 1000, 30, 1, 7730, 949, 945, 937, 952, 948, 944, 940, 936, 110', 35', SEASEMENT - CITY.

35 W by 110 L = 3850 square feet. Since 43560 square feet are in an acre, this parcel equals  $43560/3850 = 11.31 \times \$17,000 = \$192,343$  per acre

# Property Tax Assessment Case Study

<b>Residential</b>	Mailing Address	[REDACTED] SPRINGFIELD VA 22153
<b>Commercial</b>	Book	23919
<b>Map</b>	Page	[REDACTED]
<b>Structure Size</b>	<b>Additional Owners</b>	
	[REDACTED]	
	<b>Parcel</b>	
	Property Location	[REDACTED]
	Map #	[REDACTED]
	Tax District	60000
	District Name	MT VERNON
	Land Use Code	Single-family, Detached
	Land Area (acreage)	
	Land Area (SQFT)	<u>10,784</u>
	Zoning Description	R-3C(R-3 w/Cluster Dev)
	Utilities	WATER CONNECTED SEWER CONNECTED GAS CONNECTED
	County Historic Overlay District	NO For further information about Historic Overlay Districts, <a href="#">CLICK HERE</a>
	Street/Road	PAVED
	Site Description	BUILDABLE-AVERAGE LOT



## Property Tax Assessment Case Study

Values					
Tax Year	2015				
Current Land	<u>\$170,000</u>				
Current Building	\$200,850				
Current Assessed Total	\$370,850				
Tax Exempt	NO				
Note					
Values History					
Tax Year	Land	Building	Assessed Total	Tax Exempt	
2015	\$170,000	\$200,850	\$370,850	NO	
2014	\$165,000	\$189,730	\$354,730	NO	
2013	\$155,000	\$183,800	\$338,800	NO	
2012	\$145,000	\$177,870	\$322,870	NO	
2011	\$141,000	\$172,690	\$313,690	NO	
2010	\$148,000	\$185,690	\$333,690	NO	
2009	\$154,000	\$199,670	\$353,670	NO	
2008	\$181,000	\$221,860	\$402,860	NO	
2007	\$160,000	\$269,540	\$429,540	NO	
2006	\$160,000	\$269,540	\$429,540	NO	
2005	\$135,000	\$191,200	\$326,200	NO	
2004	\$96,000	\$163,415	\$259,415	NO	
2003	\$77,000	\$160,995	\$237,995	NO	
2002	\$67,000	\$123,395	\$190,395	NO	
2001	\$60,000	\$105,560	\$165,560	NO	
2000	\$50,000	\$103,295	\$153,295	NO	

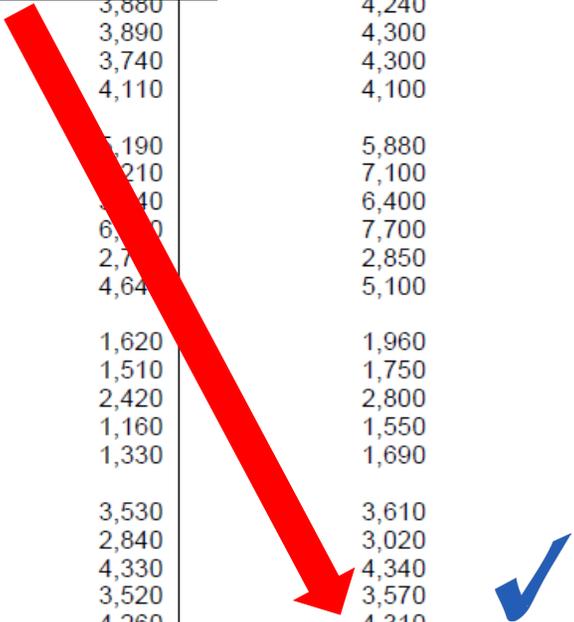
We are given 10784 square feet. Since 43560 square feet are in an acre this parcel equals  $43560/10784 = 4.04 \times \$170,000 = \$686,684$  per acre

# Property Tax Assessment Case Study

## Farm Real Estate Average Value per Acre – Regions and States: 2009-2013

Region and State	2009 (dollars)	2010 (dollars)	2011 (dollars)	2012 (dollars)	2013 (dollars)
Northeast .....	4,810	4,690	4,690	4,790	4,850
Connecticut .....	12,000	11,500	11,600	11,300	11,100
Delaware .....	8,910				8,170
Maine .....	2,130				2,100
Maryland .....	7,380				6,930
Massachusetts .....	12,000				10,400
New Hampshire .....	4,770				4,310
New Jersey .....	13,800				12,800
New York .....	2,400				2,600
Pennsylvania .....	5,120				5,430
Rhode Island .....	15,800				13,800
Vermont .....	2,880				3,200
Lake States .....	3,240	3,220	3,450	3,880	4,240
Michigan .....	3,670	3,490	3,600	3,890	4,300
Minnesota .....	2,810	2,870	3,160	3,740	4,300
Wisconsin .....	3,700	3,650	3,880	4,110	4,100
Corn Belt .....	3,550	3,830	4,460	5,190	5,880
Illinois .....	4,450	4,720	5,390	6,210	7,100
Indiana .....	3,960	4,170	5,070	5,940	6,400
Iowa .....	3,780	4,350	5,410	6,900	7,700
Missouri .....	2,160	2,270	2,420	2,700	2,850
Ohio .....	3,810	3,850	4,160	4,640	5,100
Northern Plains .....	1,000	1,080	1,290	1,620	1,960
Kansas .....	1,010	1,060	1,240	1,510	1,750
Nebraska .....	1,320	1,470	1,840	2,420	2,800
North Dakota .....	767	821	930	1,160	1,550
South Dakota .....	879	945	1,090	1,330	1,690
Appalachian .....	3,490	3,480	3,520	3,530	3,610
Kentucky .....	2,800	2,780	2,750	2,840	3,020
North Carolina .....	4,210	4,120	4,340	4,330	4,340
Tennessee .....	3,260	3,460	3,510	3,520	3,570
Virginia .....	4,750	4,500	4,350	4,260	4,310
West Virginia .....	2,360	2,330	2,580	2,540	2,550

**How relevant or reliable is the Farm Real Estate Average value of \$4,310 per acre when one compares this state-wide agricultural-based figure to (property tax) assessed values for land parcels located in the vicinity of Norfolk Naval Base (\$192,343 per acre) and Fort Belvoir (\$686,684 per acre)?**



See footnote(s) at end of table.

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## END NOTES

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### END NOTES to Table 2.0: Snapshot of Some Available information

<sup>i</sup> [www.djindexes.com](http://www.djindexes.com)

<sup>ii</sup> [www.nass.usda.gov/Charts\\_and\\_Maps/Land\\_Values](http://www.nass.usda.gov/Charts_and_Maps/Land_Values) and also: Statistical Bulletin Number 1031, *Agricultural Land Values, Final Estimates 2009-2013* dated June 2014

<sup>iii</sup> **NOTE: State specific:** [www.blm.gov/mt/st/en/prog/lands\\_realty/landsales.html](http://www.blm.gov/mt/st/en/prog/lands_realty/landsales.html)

<sup>iv</sup> [www.fhfa.gov/DataTools](http://www.fhfa.gov/DataTools)

<sup>v</sup> [www.federalreserve.gov/pubs/feds/2010/201016/201016pap.pdf](http://www.federalreserve.gov/pubs/feds/2010/201016/201016pap.pdf)

<sup>vi</sup> <http://disposal.gsa.gov/AppraisalServices>

<sup>vii</sup> <http://www.lincolnst.edu/resources/>

<sup>viii</sup> <http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET>