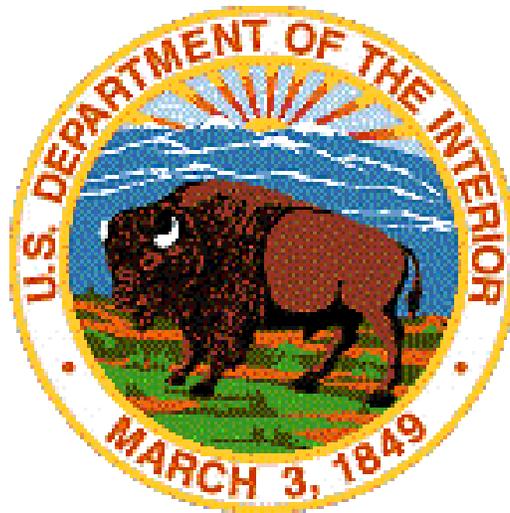


**United States Department of the Interior**  
**Office of the Special Trustee for American Indians**



**Land Buy Back Program for Tribal Nations**

**Real Estate Appraisal Methodologies**

**August 5, 2013**

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## Background

The Department of the Interior has been charged with developing and implementing valuation methods and techniques to complete valuations of Indian trust lands to facilitate the Cobell Settlement and requirements of the Indian Land Consolidation Act and other related valuation requirements. In the *Elouise Pepion Cobell, et al vs. Ken Salazar, Secretary of the Interior, et al. Settlement Agreement*, the language states, “the Interior Defendants shall offer fair market value in accordance with 25 U.S.C. § 2214”. For purposes of 25 U.S.C., Chapter 24 §2214, Indian Land Consolidation Act, the Secretary may develop a system for establishing the fair market value of various types of lands and improvements. The language of “Fair Market Value” describes the process for the Office of the Special Trustee for American Indians (OST) to ensure that impartial opinions of value, provided to support the Indian Land Consolidation Program, are consistent with requirements identified in national appraisal standards.

To advance the Cobell Settlement appraisal implementation efforts, on June 13, 2011 a memorandum was written by the Office of the Inspector General (OIG), “Advisory - Indian Land Consolidation: Mass Appraisals of Indian Lands Report No. WR-EV-BIA-0001-2011”. The Advisory addressed the OAS operations, shortfalls and possible recommendations to those shortfalls. The recommendations were founded on present research and on a historical report, the Appraisal Foundation’s<sup>1</sup> 2003 evaluation of the Office of Appraisal Services (OAS) operations. In both the historical and present evaluations there appears to be a shortage of OAS appraisers. To alleviate the shortfall, the Foundation identified the use of mass appraisal techniques as a possible long-term solution.

The Land Buy Back Program for Tribal Nations (*Buy-Back Program*) was established via Secretarial Order 3325 on December 17, 2012. Sec. 6 c (2) Office of the Special Trustee for

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<sup>1</sup> Established in 1987 by the appraisal profession in the United States, the Appraisal Foundation is a non-profit organization dedicated to the advancement of professional valuation.

American Indians identifies, "... will have primary responsibility for determining fair market values for trust or restricted tracts with fractional ownership interests ..."

Based upon the above documents, OAS is tasked with providing thousands of opinions of value for a wide array of properties ranging from unimproved agricultural lands to highly developable commercial properties within ten (10) years. The assignment will encompass a wide range of geographic locations, surface and subsurface rights, and fractional interest property rights.

OAS recognizes that the mass appraisal process will not be beneficial or appropriate for all reservations or it may be appropriated for certain land uses within a reservation. The reasons include, but are not limited to, 1) insufficient available data; 2) property characteristics, etc. In cases where the mass appraisal process is not appropriate other methodologies, including project reports, market studies, individual site specific appraisal reports will be developed and implemented.

The appraisal assignments will follow the Valuing Fractionalized Tracts As If Fee Simple policy and the No Improvements Memo (*See Addenda 2 – Supporting Documents*). Based upon the above policies, all appraisals will not include fractional ownership and structural improvements

## **Purpose**

The purpose of this document is to identify the appraisal methodologies OST will use for the Land Buy-Back Program for Indian Nations.

## **General Methodologies Description**

To meet the objectives outlined above, OAS will employ the following methods:

- I. Market Analysis: Market analysis is completed to determine base land values, adjustment factors and their corresponding adjustment values. The preferred method for analyzing markets is regression analysis with paired sales analysis to be implemented when there are not adequate data to produce credible market models from regression analysis.
- II. Appraisal Products
  - a. Mass appraisal techniques will be used to provide opinions of value wherever the property type and data are sufficient to support a mass appraisal model (*homogeneous land types/highest and best use, similar market area, etc.*).
  - b. Where parcels are not amenable to mass appraisal, a cascading choice of methodologies will be employed to estimate values, as follows:

- i. Project appraisals where there are similar highest and best uses and efficiencies to be gained through elimination of repetitive reporting.
- ii. Property-specific appraisals, where the property has unique characteristics that cannot be effectively modeled or grouped with other parcels in a project appraisal.

## Definition of Market Value

The definition of market value is “The amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would have sold on the effective date of the appraisal, after a reasonable exposure time on the open competitive market, from a willing and reasonably knowledgeable seller to a willing and reasonably knowledgeable buyer, with neither acting under any compulsion to buy or sell, giving due consideration to all available economic uses of the property at the time of the appraisal.’ [Interagency Indian Land Acquisition Conference, Uniform Appraisal Standards for Federal Land Acquisition, 5<sup>th</sup> ed. (Appraisal Institute, 2000).]

## Assumptions and Limiting Conditions:

The Assumptions and Limiting Conditions are applicable to all appraisals conducted under the Buy-Back Program:

1. The legal descriptions provided to the appraiser are assumed correct. No responsibility is assumed for such matters including legal matters, title, boundary survey, encumbrances, liens, ownership, etc. The subject properties are appraised as Trust Land administered for the benefit of the Indian owners by the United States Government. Under this ownership, it is assumed to be similar to a fee simple estate as though free and clear of all encumbrances except as specifically noted within this report. The undersigned appraiser reserves the right to alter these value conclusions if significant new data is presented.
2. The data and opinions furnished by others and contained in the appraisal reports are considered reliable and correct. If errors or omissions are subsequently found which might directly affect the information, or conclusions offered in this report, the appraiser reserves the right to modify or correct such errors, omissions, and conclusions.
3. If the existence of hazardous materials/toxic substances is known or is discovered, the appraiser is not qualified to evaluate the impact of the materials and the value conclusions will become null and void. For the purposes of these reports, excluding known hazardous material subject properties, the subject sites are assumed to be clean and not contaminated.
4. Except as noted, the reports assume the subject properties to be free of adverse soil conditions which would prohibit development of the properties to its Highest and Best Use.

5. The appraiser has not received or discovered any actual anthropological discoveries that may be present on the subject properties. For purposes of these reports, the subject properties are assumed to be free of anthropological discoveries. If any anthropological evidence is discovered on the subject properties, the value conclusion set forth in this report becomes null and void.
6. Acreages of the subject properties and any comparable sales used were developed from either spreadsheets provided by the client, BIA TAAMS, county records, third party contractors or private title policies. It is considered that these sources are accurate within reasonable limits. If there is a discrepancy in the location and size of the subject properties per the TAAMS provided spreadsheet and the Title Status Report (TSR), the TSR will be the basis for determining acreage. The appraiser reserves the right to alter her/his value conclusions, if significant new data is presented.
7. The valuation of each component of the subject properties may or may not be the market value of the whole.
8. Since this is the acquisition of land rights, there is only one theoretical purchaser (Department of the Interior) and market exposure was not considered.
9. It is assumed that all applicable zoning and use regulations and restrictions have been complied with unless nonconformity has been stated, defined, and considered in this appraisal report.
10. Per direction of the client, DOI, the appraiser was given the direction not to inspect the all subject properties due to time limitations. Per 2012-2013 USPAP, although, not required, the primary reason for the inspection of a property is to gather information about the characteristics of the property that are relevant to its value. As the appraiser did not perform an inspection of all subject properties, this appraisal is considered a “desktop appraisal”.
11. All maps, plans, and diagrams contained in the report are for illustrative purposes only. They are not to be construed as accurate nor relied upon for any other purpose.
12. This appraisal is based on the premise that the subject properties are in full compliance with all applicable federal, state and local environmental regulations and laws unless otherwise stated in this report.
13. It is assumed that the subject properties will be under prudent and competent ownership and management.
14. The client of the appraisal is the person or firm ordering the appraisal report, regardless of who occupies or legally owns the subject property or who paid for the report.
15. Appraisal reports are intended to conform with requirements of the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation (USPAP), Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs, where applicable, 49 CFR Part 24, Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book), as applicable, and is subject to contingent and limiting conditions and assumptions set forth.

16. The appraiser will not disclose the contents of the appraisal report, except as provided by the requirements of the Uniform Standards of Professional Appraisal Practice (USPAP), Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs, 49 CFR Part 24, Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book), as applicable and the Freedom of Information Act.
17. If Mineral Assessment and Market Analysis of the Allotted Lands conducted by the Office of Minerals Evaluation states there is “no mineralization on the parcels of land “trust” subject properties that were identified as having both surface and subsurface rights; It is assumed that mineral rights have no value. No opinion is expressed as to the value of subsurface oil, gas, or mineral rights or whether the real property is subject to subsurface entry for the exploration or removal of such material except as is expressly stated.
18. This analysis is of surface rights and it is assumed that the subsurface rights, per the minerals study, (line item 21 above) have no mineralization that have current economic value. (See addendum) Water rights and air rights were not considered in the report.
19. The subject properties are being valued as vacant land only with no improvements; where improvements exist and affect the highest and best use of the property, the appraiser will take into account the resultant highest and best use.
20. It is assumed there is legal ingress and egress to the subject properties.
21. It is assumed subject properties located in Seismic Zone designations will not hamper any uses on the subject properties.
22. Subject properties located in non-disclosure states in dealing with confirmation of sales are only reliable on the information as provided by the parties in the market transactions. Information received is assumed to be reliable.
23. Acceptance or use of the appraisal reports constitutes acceptance of the foregoing assumptions and limiting conditions.

**EXTRAORDINARY ASSUMPTIONS:**

- 1) This is a desktop appraisal as the appraiser did not perform a field inspection on all of the subject properties or comparable sales, but used sources the appraiser believes are reliable to include aerials, topographical maps, BIA TAAMS data, county assessors’ data, MLS, and contract appraisers’ sales data and knowledge of the area, of which credible results can still be developed.
- 2) Encumbrances to include, but not limited to, telephone, utilities and access are legal and approved.
- 3) Not all encumbrances are assumed to affect value.
- 4) **Subject Property TAAMS Data:** The list of subject properties including Region, Land Area Code (*reservation*), tract prefix, tract number, tract suffix, legal acreage and legal land description will be provided by the Bureau of Indian Affairs’ (BIA) Trust Asset and Accounting Management

System (TAAMS) to OAS. The TAAMS data is the official record for property held in trust for fractionated interest owners; as such, the data is assumed to be correct when received for use in the valuation process. The BIA will also provide the corresponding Geographic Information System (GIS) polygons (i.e., shapefiles) for these properties to OAS. Again, the GIS data (*polygons*) are assumed to be correct.

- 5) Not all comparable sales were verified by the undersigned but are assumed to be accurate and reliable

#### **HYPOTHETICAL CONDITION:**

- 1) A hypothetical condition has been applied in that the appraisal is considered to be under one ownership, although the subject property (parcel) consists of numerous interests that have never been legally partitioned from the whole estate. The use of this hypothetical condition is in line with DOI and OAS policy as described in the 7/12/2007 Interoffice Memorandum (*see Addenda 2 – Supporting Documents; Valuing Fractionalized Tracts As If Fee Simple Memo.*)
- 2) The property rights for trust and restricted lands are assumed to be equivalent to fee simple status
- 3) Subject properties will be appraised as vacant land, with the exception of improvements on trust lands which may affect the highest and best use determination for the property, e.g., as site ready land.<sup>2</sup>

Acceptance and/or use of the appraisal reports constitutes acceptance of the foregoing assumptions and limiting conditions.

## **Timber Resource Methodology**

***The Timber Resources Methodology is applicable to all appraisals conducted under the Buy-Back Program.***

Timber resources are valued based upon BIA regional policies, procedures and standards. There is not a national policy, procedure or standards. Typically, BIA and/or the Tribe completes a timber cruise identify the tree species and condition, processing facilities, transportation system, ability to assemble adjoining timber rights for economic sized harvesting, market supply/demand/prices and concludes a timber **resource** value. This is not a timber **estate** value.

## **Mineral Resource Methodology**

***The Mineral Resources Methodology is applicable to all appraisals conducted under the Buy-Back Program.***

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<sup>2</sup> As a general rule, the Department considers permanent improvements to be non-trust-property." 76 Fed. Reg. 7,500, 7,501 (Feb. 10, 2011).

The mineral resource reservation/area-wide analysis methodology which allows for simultaneously analyzing (*on an individual parcel by parcel level*) a large number of parcels was developed by OME for, and is ideally suited for the large number of evaluations of mineral estates required for the activities of the Buy-Back Program. If these parcels were not analyzed in a simultaneous fashion, the costs for piece-meal analysis of parcels could be exorbitant. OME's reservation/area-wide assessment methodology allows for efficient and economical analysis of parcels.

In this methodology, OME, with its assemblage of minerals data, creates a digital/geographic information systems (*GIS*) master template view of the mineralization for each reservation and surrounding area being analyzed. Once the geology, mineralization, and market potential, etc. is known for the entire reservation or area (*essential background analysis*), all the lands associated with the reservation or area that need evaluation can be cost effectively analyzed. Once this master reservation/area-wide view of mineralization is constructed, each individual land parcel can then be placed over this master template to view whether there is mineralization, and the type of mineralization, etc.

The minerals evaluations being conducted by OME include an extensive study of geology, mineral markets, mineral deposits, development potential, etc., and include contact with, academic, governmental (*county, state, and federal*), and tribal sources regarding the mineral potential of the subject land. The minerals evaluations rely heavily on the synthesizing and analysis of information obtained through contacts with area, minerals, and commodity market experts. The best available historical as well as current information is used and the assessment filters (*current economic conditions, technological feasibility, cultural acceptance, potential marketability, and environmental viability*) are applied during the analyses.

OME develops layered templates for each reservation or area. These templates show the areas of mineralization based upon detailed geologic and commodity market information while considering mineability factors. OME then identifies those deposit areas that have a high likelihood for development. When the parcel locations are placed over these layers, parcels can easily be identified as having valuable mineralization or not, thereby providing essential information for both consolidation, probate, and other title transfer valuation issues.

OME concludes a mineral **resource** value. This is may or may not be the contributory value of the mineral **estate**.

## Mass Appraisal Methodology

### Applicability

Mass appraisal (*see Addenda 1 – Definitions*) will be used in situations where the real estate appraisers have determined there is a high level of homogeneous land use types (*pasture, dry crop, recreational, rural residential, etc.*), highest and best use, and active markets with consistent pricing.

Although mineral and timber evaluations will be provided by the OME and BIA, respectively, and will be used by OAS when reconciling the contributory value of each estate; mass appraisal will not be used when OAS and BIA identify there is a commercial value to the mineral and/or timber resources. Due to the complexity of multiple estate appraisals, parcels with commercially viable timber or mineral resources will be valued with project appraisals or property specific appraisals.

### General Description

OAS will use mass appraisal to provide opinions of value based upon the reconciled, contributory value of the surface estate, timber estate (*when applicable*), and subsurface estate (*when applicable*) for individual properties.

**Market Analysis:** OAS determines the data needed in the appraisal process, gathers the sales information from county governments and real estate professionals, verifies the sales information with buyers, sellers and real estate professionals, and documents the sales in a database. The sales data are analyzed using either paired sales analysis or regression analysis (*based upon neighborhoods*) to establish adjustment factors and adjustment values.

**Subject Property Analysis:** OAS identifies the physical characteristics of each subject property (size, land use, access, etc.) using a combination of inspection, file reviews and GIS analysis. The information will be stored digitally for comparison to sales data and appraisal reporting. Although mineral and timber evaluations will be provided by the OME and BIA, respectively, and will be used by OAS when reconciling the contributory value of each estate; mass appraisal will not be used when OAS and BIA identify there is a commercial value to the mineral and timber resources.

**Report Generation:** OAS will use the Mass Appraisal Valuation System (MAVS) which incorporates the results from mass appraisal reports, timber estate contributory value (*when applicable*), and subsurface estate contributory value (*when applicable*) with subject property information to produce restricted use appraisal reports. The resulting

appraisals clearly disclose the reports are not valid without the supporting mass appraisal report.

## Standards

USPAP Standard 6 – Mass Appraisal, Development and Reporting

International Association of Assessing Officers, Standard on Ratio Studies

## Flexibility

To help provide flexibility for the appraisers, multiple market analysis options may be used including paired sales analysis and regression analysis. Two mass appraisal reports are provided to demonstrate the two market analysis options, **although paired sales analysis or regression analysis may be used in either situation, as the appraiser(s) deem appropriate.**

For demonstration purposes, the sample Benchmark Mass Appraisal Report (*see Addenda 3 – Report Templates; Benchmark Mass Appraisal Report*) uses paired sales analysis to quantify adjustment factors and adjustment values. MAVS then compares the subject properties to the benchmark properties and applies the adjustment values to provide a value opinion for the subject properties. Regression analysis may be used for the Benchmark Mass Appraisal Report if the appraiser(s) identify it to be the appropriate analysis tool.

For demonstration purposes, the Regression Mass Appraisal Report (*see Addenda 3 – Report Templates; Regression Mass Appraisal Report*) uses regression analysis to quantify adjustment factors and adjustment values. MAVS then compares the subject properties to the benchmark properties and applies the adjustment values to provide a value opinion for the subject properties. Paired sales analysis may be used for the Mass Appraisal Report if the appraiser(s) identify it to be the appropriate analysis tool.

## Subject Property Identification

Using the descriptive data provided by the BIA for the tracts/parcels to be analyzed, for agricultural properties, OAS will select the corresponding GIS parcel polygons to clip to the Farm Services Agency (FSA) Common Land Use (CLU) data, resulting in the subject property preliminary land use acreages.

OAS will review the CLU labeling accuracy by visually comparing the CLU labeling to the FSA National Agriculture Imagery Program (NAIP) satellite imagery. If an inconsistency is identified (*CLU shows pasture, NAIP shows dry crop*) the reviewer will re-label the polygon with the dry crop coding. If a polygon boundary location discrepancy is identified (*field boundary is in middle of field rather than the field edge*), all impacted polygon boundaries will be corrected. If a polygon is missing (*CLU identifies badlands as pasture, OAS identifies pasture as Low Utility*), the Natural Resources Conservation Service's (NRCS) soils data will be used to identify the

badlands (*soil type Ba*) and add it to the CLU data. If the reviewer cannot identify the land use types from the NAIP satellite imagery, the reviewer will verify the land use types with the BIA Agency staff and/or aerial/ground observation.

OAS will combine similar land use polygons for each parcel of land to calculate the acreage of each land use type for each parcel. The resulting CLU land use acreage will be divided by the total CLU parcel acreage to provide a percent (%) parcel land use acreage (*10% dry crop, 85% pasture, 5% low utility*). These percentages will be applied to the TAAMS legal acreage to ensure the total parcel acreage and corresponding land use acreages are correct and any minor discrepancies between the TAAMS acreage and the CLU acreage are remedied.

For non-agricultural properties, OAS will consult with BIA for land use and/or verify the land use types with aerial/ground observation. Land use types, site improvements, location, etc. information is commonly maintained by the BIA in homesite or business lease files. OAS may use this information or develop new information based upon site inspections, county information, etc.

### **Highest and Best Use Analysis**

The highest and best use of the property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to the maximum allowed usage of the property. The highest and best use of agricultural property is typically its current use. This is due in part to the fact that there is little demand for residential or commercial development in rural areas. In some situations, such as a pasture property next to a community that is experiencing residential growth, an appraiser may determine the highest and best use is residential development rather than the current pasture use.

Using GIS, the appraisers can zoom to each tract that needs to be appraised and review physical characteristics. The GIS data are also setup to easily identify multi-parcel tracts that may have different highest and best use for the non-contiguous parcels. The appraiser(s) will consider the legal, physical and financial characteristics for each parcel when determining its highest and best use and change the use identification as needed.

### **Area Analysis**

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market.

## Neighborhoods

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on various market areas within each of the political entities known as independent school districts. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of appraisal.

Appraisers combine similar types of property (*dry crop farming, irrigated farming, recreational, pasture, commercial, etc.*) into “neighborhoods”. Market sales and market participant interviews are reviewed to confirm which areas have similar highest and best use, market activity and market consistency. For example, review of market data may show there have been a considerable number of dry cop sales on a reservation. Sales in the west half range in price from \$300/ac to \$350/ac. The sales in the east half range in price from \$400/ac - \$500/ac. Based upon the similar land use and the presence of adequate sales data with consistent price patterns, the appraiser would identify two neighborhoods for dry crop land; a West neighborhood and an East neighborhood.

Concurrently, market data may show a North and South neighborhood for recreational properties.

Property types without a reasonable number of sales and consistent pricing will not be included in the mass appraisal process.

Using these neighborhoods, adjustment values are applied to all subject properties when producing value opinions.

## Source Data Development

Population/industry trends, land use types/acreages, zoning will be researched from the U.S. Census, NRCS, FSA, counties, chambers of commerce, state agricultural statistical organizations. Necessary real estate sales information as determined though typical scope of work process, will be researched and verified with buyers, sellers, realtors, real estate professionals and county governments. Timber characteristics and contributory value will be provided by the BIA. Mineral characteristics and resource value will be provided by OME.

The sales will be documented in database with all supporting documents (*deeds, property cards, affidavits, plats, etc.*) attached to each sale. The sales will be documented with standardized property type definitions in manner that will facilitate filtering based upon adjustment factors, county, date, etc. and easily exported for statistical analysis.

### **Adjustment Factors/Values**

The appraisers identify market/property characteristics/attributes that affect property value in each neighborhood and their corresponding adjustment values through market participant interviews and data analysis. If market participants identify low interest rates and paved access are characteristics they found important when buying recreational land, the appraisers will complete either paired sales analysis or regression analysis to quantify the contributory value of each factor (*market conditions and access*) to sale prices.

### **Regression Analysis Model Calibration**

When OAS uses regression analysis, it will develop models for adjustment factors identified by market participants as being important to the real estate market. A subset of the sales data will be reserved (*last year's sales of a five-year dataset*) and develop the model(s) without the reserved data. If there is a lack of sales and the market conditions are static, the appraiser can use a longer time period of sales up to 10 years. Once an appraiser has developed a preliminary model (*with the non-reserved sales*) that he/she feels may be reliable (*verified the models qualitative stats, r2, t-stat, are reasonable*), the appraiser will complete a ratio analysis (*consistent with International Association of Assessing Officers, Standard on Ratio Studies*) to test the model reasonableness. The model results will be applied to the reserved sales. The reserved sales' indicated values will be compared to their actual sales prices. The model will be considered reasonable when the model complies with the appraiser established confidence intervals and Coefficient of Dispersion (COD)<sup>3</sup> ratios which will be documented in the mass appraisal report. For the development and review of pilot mass appraisal models, OAS will contract a consultant with expertise in mass appraisal models to work with OAS before the methodology is applied to other reservations. The model will then be re-run with both the reserved and non-reserved sales. The model results will then be used in the mass appraisal system to apply to the subject properties and generate restricted use reports.

Exploratory data analysis (*frequency distributions, graphs, outlier identification*) will be conducted prior to model development.

Models will be re-calibrated if the ratio analysis is not within a reasonable deviation by reviewing the sales for proper data entry, verification, etc. Sales that are not considered

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<sup>3</sup> The Coefficient of Dispersion measures variability about the median of a dataset, and is an indicator of uniformity or variability of the data, i.e., equity within a dataset on homogeneous properties. Standard on Ratio Studies §5.4.1, International Association of Assessing Officers, April, 2013.

representative of the neighborhood/market will be removed from the model and the model will be re-run.

Results from models that do not meet the ratio analysis standards will not be used in the mass appraisal process.

### **Paired Sales Analysis Model Calibration**

When OAS uses paired sales analysis, it will develop models for adjustment factors identified by market participants as being important to the real estate market.

The paired sales analysis model results (*adjustment factors and adjustment values*) will be applied to benchmark properties (*typical tracts for each property type, e.g., 160 ac dry crop properties with gravel access and no utilities*) for each property type in each neighborhood to provide a value opinion. The sales will then be compared to the benchmark properties with the model results applied for differences between the benchmark property and the sales.

The appraiser will complete a ratio analysis to test the model's reasonableness. The indicated values of the resulting sales will be compared to their actual sales prices. The model results will then be used in the mass appraisal system to apply to the subject properties and generate restricted use reports.

Models will be re-calibrated if the ratio analysis is not within a reasonable deviation by reviewing the sales for proper data entry, verification, etc. Sales that are not considered representative of the neighborhood/market will be removed from the model and the model will be re-run.

Results from models that do not meet the ratio analysis standards will not be used in the mass appraisal process. The cost approach will not be used because it is assumed there are no improvements (*See Assumptions and Limiting Conditions*).

### **Approaches to Value**

The income approach may be used if the property type being appraised is purchased for a cash lease income stream. The sale comparison approach may be used if buyers of the property type being appraised typically compare one property to another to aid in the purchase process. The cost approach will not be used because it is assumed there are no improvements (*See Assumptions and Limiting Conditions*).

### **Applying the Regression Model Conclusions**

The regression model results (*base land value, adjustment factors, and adjustment values*) will be applied to the subject properties using the MAVS to produce Statement of Value for a Single

Property reports for the Buy-Back Program<sup>4</sup>. For example if the regression model identifies market conditions was the only factor that recreational property buyers found important in neighborhood 1, the corresponding base land value is \$100/ac and the market conditions adjustment value is \$10/ac, a 200 acre subject recreational property in neighborhood 1's value opinion would be \$22,000:

	Property Type	Recreational
	Neighborhood	1
	Base Land Value/Ac	\$ 100
+	Market Conditions Adjustment/Ac	\$ 10
=	Adjusted Land Value/Ac	\$ 110
*	Subject Acres	\$ 200
+	Subject Value Opinion	\$ 22,000

### Applying the Paired Sales Analysis Model Conclusions

The paired sales analysis model results (*adjustment factors, and adjustment values*) and benchmark base land values will be applied to the subject properties using the MAVS to produce restricted use reports. For example if the paired sales analysis model identifies that market conditions was the only factor that recreational property buyers found important in neighborhood 1, the corresponding base land value is \$100/ac and the market conditions adjustment value is \$10/ac, a 200 acre subject recreational property in neighborhood 1 would have a value opinion of \$22,000:

	Property Type	Recreational
	Neighborhood	1
	Base Land Value/Ac	\$ 100
+	Market Conditions Adjustment/Ac	\$ 10
=	Adjusted Land Value/Ac	\$ 110
*	Subject Acres	\$ 200
+	Subject Value Opinion	\$ 22,000

### Reporting

OAS will produce a Mass Appraisal Report for each market analyzed (see Addenda 3 – Report Templates – Benchmark Mass Appraisal Report or Regression Mass Appraisal Report). MAVS will generate Mass Appraisal Statement of Value reports (*USPSP Standard 1 & 2 compliant*) that will be digitally stored in pdf format (see Addenda 3 Report Templates; Mass Appraisal Statement of Value).

<sup>4</sup> The individual property reports produced through MAVS are controlled for use only with the Buy-Back Program, although the Director of OAS may approve the use of the reports for other situations.

## Review

100% of mass appraisal reports will be reviewed. 100% of mass appraisal model results encoded into MAVS will be reviewed by a person other than the encoder. 10% of Mass Appraisal Statement of Value reports will be reviewed.

## Project Appraisal Methodology

### Applicability

Project appraisals will be used in situations where the real estate appraisers have determined there is a high level of homogeneous land use types, highest and best use within a well-defined project area (*rural residential properties located within a 2 mile buffer neighborhood of Highway 44, between Wilson, SD and Highway 73*).

Properties with timber or mineral resources with commercial value as identified by OME and BIA may be valued with the project appraisal methodology as the appraiser deems appropriate.

### General Description

“Some government projects require the acquisition of a large number of parcels of real property, and individual appraisers are assigned to appraise a number of these parcels at the same time. On occasion, it is logical to include the appraisal of more than one parcel in a single report. Thus, under certain circumstances, such *project or multiple parcel* appraisal reports may be appropriate. Project appraisal reports are not appraisal shortcuts; they are clerical shortcuts. Assuming the criteria set forth herein is met, project appraisal reports may be acceptable for the purposes of negotiated purchase, and for initial review purposes by the Department of Justice, and even for trial purposes.

Project appraisal reports are appropriate when 1) all of the parcels appraised are total acquisitions, or partial acquisitions of nominal and/or consistent nature; 2) all parcels are vacant or have similar improvements; 3) all parcels are located within a relatively homogeneous geographical area; 4) all parcels have the same, or similar, highest and best use; 5) the most relevant method of valuation is the same for all parcels, and; 6) the same array of market data will be relied on in the valuation of each parcel.”<sup>5</sup>

### Standards

USPAP Standard 1 and 2, with supporting guidance from UASFLA, Section D-17; Project Appraisal.

### Flexibility

To help provide flexibility for the appraisers, multiple market analysis options may be used including matched pairs analysis and regression analysis. Two project appraisal reports are provided to demonstrate the two analysis options, **although matched pairs analysis or regression analysis may be used in either situation as the appraiser(s) deem appropriate.**

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<sup>5</sup> Uniform Appraisal Standards for Federal Land Acquisitions; Section D-17

For demonstration purposes, the sample Matched Pairs Project Appraisal Report (*see Addenda 3 – Report Templates; Matched Pairs Project Appraisal Report*) uses matched pairs analysis to quantify adjustment factors and adjustment values. Regression analysis may be used for the Benchmark Mass Appraisal Report if the appraiser(s) identify it to be the appropriate analysis tool.

For demonstration purposes, the Regression Project Appraisal Report (*see Addenda 3 – Report Templates; Regression Project Appraisal Report*) uses regression analysis to quantify adjustment factors and adjustment values. Matched pairs analysis may be used for the Mass Appraisal Report if the appraiser(s) identify it to be the appropriate analysis tool.

### **Subject Property Identification**

OAS will identify the subject property legal characteristics (*legal description, size, encumbrances, etc.*) from TAAMS and physical characteristics from inspection, BIA documentation and/or GIS analysis.

If using GIS analysis, OAS will use the descriptive data provided by the BIA for the tracts/parcels to be analyzed, for agricultural properties, select the corresponding GIS parcel polygons to clip to the Farm Services Agency (FSA) Common Land Use (CLU) data, resulting in the subject property preliminary land use acreages.

OAS will review the CLU labeling accuracy by visually comparing the CLU labeling to the FSA National Agriculture Imagery Program (NAIP) satellite imagery. If an inconsistency is identified (*CLU shows pasture, NAIP shows dry crop*) the reviewer will re-label the polygon with the dry crop coding. If a polygon boundary location discrepancy is identified (*field boundary is in middle of field rather than the field edge*), all impacted polygon boundaries will be corrected. If a polygon is missing (*CLU identifies badlands as pasture, OAS identifies pasture as Low Utility*), the Natural Resources Conservation Service's (NRCS) soils data will be used to identify the badlands (*soil type Ba*) and add it to the CLU data. If the reviewer cannot identify the land use types from the NAIP satellite imagery, the reviewer will verify the land use types with the BIA Agency staff and/or aerial/ground observation.

OAS will combine similar land use polygons for each parcel of land to calculate the acreage of each land use type for each parcel. The resulting CLU land use acreage will be divided by the total CLU parcel acreage to provide percent (%) parcel land use acreage (*10% dry crop, 85% pasture, 5% low utility*). These percentages will be applied to the TAAMS legal acreage to ensure the total parcel acreage and corresponding land use acreages are correct and any minor discrepancies between the TAAMS acreage and the CLU acreage are remedied.

For non-agricultural properties, OAS will consult with BIA for land use and/or verify the land use types with aerial/ground observation. Land use types, site improvements, location, etc. information is commonly maintained by the BIA in homesite or business lease files. OAS may use this information or develop new information based upon site inspections, county information, etc.

OAS may reference the Mass Appraisal Report to identify local market areas/trends, and factors market participants view as significant to real property values or may document such information directly in the project report.

OAS will consult with the BIA regarding the characteristics and value of timber resources. This may or may not be the contributory value of the timber estate. See **Timber Resource Methodology**.

OAS will consult with the Office of Minerals Evaluation (OME) regarding the presence and value of mineral resources. This may or may not be the contributory value of mineral estate. See **Mineral Resource Methodology**.

## Area Analysis

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market.

## Neighborhoods

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on various market areas within each of the political entities known as independent school districts. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of the appraisal.

Appraisers combine similar types of property (*dry crop farming, irrigated farming, recreational, pasture, commercial, etc.*) into “neighborhoods”. Market sales and market participant

interviews are reviewed to confirm which areas have similar highest and best use, market activity and market consistency. For example, review of market data may show there have been a considerable number of dry cop sales on a reservation. Sales in the west half range in price from \$300/ac to \$350/ac. The sales in the east half range in price from \$400/ac - \$500/ac. Based upon the similar land use and the presence of adequate sales data with consistent price patterns, the appraiser would identify two neighborhoods for dry crop land; a West neighborhood and an East neighborhood.

### Source Data Development

Population/industry trends, land use types/acreages, zoning will be researched from the U.S. Census, NRCS, FSA, counties, chambers of commerce, state agricultural statistical organizations. Real estate sales information will be researched and verified with buyers, sellers, realtors, real estate professionals and county governments. Timber characteristics and contributory value will be provided by the BIA. Mineral characteristics and resource value will be provided by OME.

The sales will be documented in database with all supporting documents (*deeds, property cards, affidavits, plats, etc.*) attached to each sale. The sales will be documented in manner that will facilitate filtering based upon adjustment factors, county, date, etc. and easily exported for statistical analysis.

### Highest and Best Use Analysis

The highest and best use of the property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to the maximum allowed usage of the property. The highest and best use of agricultural property is typically its current use. This is due in part to the fact that there is little demand for residential or commercial development in rural areas. In some situations, such as a pasture property next to a community that is experiencing residential growth, an appraiser may determine the highest and best use is residential development rather than the current pasture use.

As all parcels will have the same or similar highest and best use, however, if after the analysis a parcel or more than one parcel is determined not to have the similar highest and best use as the rest of the parcels in the project report, the unique parcel(s) should be excluded from the project report and a separate narrative report prepared.<sup>6</sup> The appraisers can zoom to each tract that needs to be appraised to review the GIS physical characteristics results. The GIS data are also setup to easily identify multi-parcel tracts that may have different highest and best use for the non-contiguous parcels. The

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<sup>6</sup> UASFLA Section D, 11, page 105

appraiser(s) will consider the legal, physical and financial characteristics for each parcel when determining its highest and best use and change the use identification as needed.

## Approaches to Value

UASFLA Section D.17 states only the most relevant method of valuations is to be the same for all parcels. The standard approaches to value should be discussed and their applicability or non-applicability to the parcels<sup>4</sup>.

The cost approach to value provides a value indication that is the sum of the estimated land value and the estimated depreciated cost of the buildings and other improvements. As improvements will not be valued, the cost approach is not applicable.

The income approach is a valuation technique which relies upon the anticipated future income discounted to a present value estimate. This technique is most applicable in valuing properties that have a historic income stream. If none of the subject tracts are leased nor provide an income stream, the income approach is not deemed to be a reliable indicator of value due to a lack of comparable income producing market data for these land types. However, the income approach may be used in the project report if the properties do have a historic income stream. If the income approach is used, comparable rental properties should be identified, described and discussed. As the similarity exists between all individual parcels in the project report, capitalization rates should be the same.

The sales comparison approach to value compares the subject property(ies) being appraised with similar properties that have been recently sold. The sales comparison approach is most applicable if sufficient sales data are available for similar properties. The project report guidelines suggests that a discussion of how the comparable sales will be used in the individual reports.

## Adjustment Factors/Values

The appraisers identify market/property characteristics that affect property value in each neighborhood and their corresponding adjustment values through market participant interviews and data analysis. If market participants identify low interest rates and paved access are characteristics they found important when buying recreational land, the appraisers will complete either matched pairs analysis or regression analysis to quantify the contributory value of each factor (*market conditions and access*) to sale prices.

## Regression Analysis Model Calibration

When OAS uses regression analysis, it develops models for adjustment factors identified by market participants as being important to the real estate market. A subset of the sales data will be reserved (*last year's sales of a five-year dataset*) and the model(s) will be developed without the reserved data. Once an appraiser has developed a preliminary model (*with the non-*

*reserved sales*) that he/she feels may be reliable (*verified the models qualitative stats, r2, t-stat, are reasonable*), the appraiser will complete a ratio analysis (*consistent with International Association of Assessing Officers, Standard on Ratio Studies*) to test the model reasonableness. The model results will be applied to the reserved sales. The reserved sales' indicated values will be compared to their actual sales prices. The reserved sales' indicated values will be compared to their actual sales prices. The model will be considered reasonable when the model complies with the appraiser established confidence intervals and COD ratios which will be documented in the mass appraisal report. The model will then be re-run with both the reserved and non-reserved sales. The model results will then be used in the mass appraisal system to apply to the subject properties and generate restricted use reports.

Exploratory data analysis (*frequency distributions, graphs, outlier identification*) will be conducted prior to model development. Models will be re-calibrated if the ratio analysis is not within a reasonable deviation by reviewing the sales for proper data entry, verification, etc. Sales that are not considered representative of the neighborhood/market will be removed from the model and the model will be re-run.

### **Paired Sales Analysis Model Calibration**

When OAS uses paired sales analysis, it will develop models for adjustment factors identified by market participants as being important to the real estate market.

The paired sales analysis model results (*adjustment factors and adjustment values*) will be applied to benchmark properties (*typical tracts for each property type, e.g., 160 ac dry crop property with gravel access and no utilities*) for each property type in each neighborhood to provide a value opinion. The sales will then be compared to the benchmark properties with the model results applied for differences between the benchmark property and the sales.

The appraiser will complete a ratio analysis to test the model reasonableness. The resulting sales' indicated values will be compared to their actual sales prices. The model will be considered reasonable if the indicated values have a reasonable deviation (*+/-20%-25%*) from the actual sale price. The model results will then be used in the mass appraisal system to apply to the subject properties and generate restricted use reports.

Models will be re-calibrated if the ratio analysis is not within a reasonable deviation by reviewing the sales for proper data entry, verification, etc. Sales that are not considered representative of the neighborhood/market will be removed from the model and the model will be re-run.

### Applying the Regression Model Conclusions

The regression analysis model results (*adjustment factors and adjustment values*) will be applied to the subject properties to produce Statement of Value for a Single Property reports. The Statement of Value Report follows the restricted use report requirements. For example if the paired sales analysis model identifies the presence of electricity, which is the only factor that recreational property buyers found important in neighborhood, the electricity adjustment is \$20/ac, a 10 acre subject (\$200).

	Subject	Sale1	Sale2	Sale3
Sale Price		\$ 20,000	\$ 22,000	\$ 21,000
Acres	10	10	10	10
\$/Ac		\$ 2,000	\$ 2,200	\$ 2,100
HBU	Recreation	Recreation	Recreation	Recreation
Electricity	Yes	No	Yes	No
Adjustment		\$ 200		\$ 20
Adj \$/ac		\$ 2,200	\$ 2,200	\$ 2,120
Value Indication		\$ 20,200	\$ 22,000	\$ 21,200
% Adj		1%	0%	1%
Reconciled Value	\$ 22,000			

The sales are adjusted to the level of the subject (has electricity), with Sale2 the most similar at \$22,000.

Contributory value for various estates (*mineral, surface, timber, etc.*) will be thoroughly analyzed in the appraisal process. Mineral and timber **resource** values provided by the BIA and OME will assist in establishing the appraiser’s determination of contributory value of each estate, but may or may not be considered the contributory value of the mineral **estate**.

### Applying the Paired Sales Analysis Model Conclusions

The paired sales analysis model results (*adjustment factors and adjustment values*) will be applied to the subject properties to produce Statement of Value for a Single Property reports. For example if the paired sales analysis model identifies the presence of electricity, which is the only factor that recreational property buyers found important in neighborhood, the electricity adjustment is \$20/ac, a 10 acre subject (\$200).

	Subject	Sale1	Sale2	Sale3
Sale Price		\$ 20,000	\$ 22,000	\$ 21,000
Acres	10	10	10	10
\$/Ac		\$ 2,000	\$ 2,200	\$ 2,100
HBU	Recreation	Recreation	Recreation	Recreation
Electricity	Yes	No	Yes	No

<b>Adjustment</b>		\$ 200		\$ 20
<b>Adj \$/ac</b>		\$ 2,200	\$ 2,200	\$ 2,120
<b>Value Indication</b>		\$ 20,200	\$ 22,000	\$ 21,200
<b>% Adj</b>		1%	0%	1%
<b>Reconciled Value</b>	<b>\$ 22,000</b>			

The sales are adjusted to the level of the subject (*has electricity*), with Sale2 the most similar at \$22,000.

## Qualitative Techniques

Relative comparison analysis is the study of the relationships indicated by market data and similar to paired data analysis, but quantitative adjustments are not made. The technique is used if there is not the quantity of data in the market and also it reflects the imperfect nature of the real estate market. It is used to determine whether the characteristics/attributes of a comparable property are inferior, superior or similar to those of the subject property.

For example, if market participants identify the presence of electricity and access type are the property characteristics they found important when purchasing recreational properties, a qualitative analysis would be completed as follows:

	<b>Subject</b>	<b>Sale1</b>	<b>Sale2</b>	<b>Sales 3</b>
<b>Sale Price</b>		\$ 20,000	\$ 22,000	\$ 21,000
<b>Acres</b>	10	10	10	10
<b>HBU</b>	Recreation	Recreation	Recreation	Recreation
<b>Electricity</b>	Yes	No	Yes	Yes
<b>Adjustment</b>		Upward		
<b>Access</b>	Gravel	Gravel	Paved	Gravel
<b>Adjustment</b>			Downward	
<b>Value Indication</b>		>\$20,000	<\$22,000	\$21,000
<b>Reconciled Value</b>	\$21,000			

Sale1 did not have electricity resulting in an upward adjustment to bring it to the level of the subject with electricity on the property, resulting in and a value indication >\$20,000. Sale2 had paved access resulting in a downward adjustment to bring it to the level of the subject with gravel access, resulting in <\$22,000 value indication. Sale3 was similar to the subject with electricity and gravel access with no adjustments, resulting in \$21,000 value indication. Placing primary emphasis on Sale3 as it is the most similar to the subject and with the supporting indications from Sale1 and Sale2, a reconciled value indication of \$21,000 is indicated.

## **Reporting**

OAS will generate project reports (*UASFLA , Section D-17 compliant*) that will be digitally stored in pdf format (*see Addenda 3 - Report Templates; Project Report*).

## **Review**

100% of project reports will be reviewed.

## Property Specific Appraisals Methodology

### General Description

Property specific appraisals are completed one property at a time, based upon the physical and economic characteristics of the subject as compared to sales of similar properties.

The appraiser will use the sales comparison approach and/or the income approach to produce summary reports. The cost approach will not be used as it is assumed that any structural improvements that may exist are not held as part of the trust assets and thus are not part of the estate to be appraised. The appraiser will use quantitative adjustments (*see the sections below titled “Market Conditions” and “Market Influences”*) and/or qualitative adjustments for factors that influence value, but cannot be quantified.

### Standards

USPAP Standard 1 – Real Property Appraisal Development, USPAP Standard 2 – Real Property Appraisal Reporting.

### Applicability

Project specific appraisals will be completed for non-homogeneous properties that the appraisers have identified are not amenable to mass appraisal, e.g, restaurant, landfill, etc. These are properties that are few in number, unique, and where there are relatively few comparable sales therefore an appraiser cannot document a tight value range.

### Flexibility

To help provide flexibility for the appraisers, multiple market analysis options may be used including paired sales analysis and regression analysis. Two project appraisal reports are provided to demonstrate the two analysis options, **although paired sales analysis or regression analysis may be used in either situation as the appraiser(s) deem appropriate.**

For demonstration purposes, the sample paired sales analysis Project Appraisal Report (*see Addenda 3 – Report Templates; paired sales analysis Project Appraisal Report*) uses paired sales analysis to quantify adjustment factors and adjustment values. Regression analysis may be used for the Benchmark Mass Appraisal Report if the appraiser(s) identify it to be the appropriate analysis tool.

For demonstration purposes, the Regression Project Appraisal Report (*see Addenda 3 – Report Templates; Regression Project Appraisal Report*) uses regression analysis to quantify adjustment factors and adjustment values. paired sales analysis may be used for the Mass Appraisal Report if the appraiser(s) identify it to be the appropriate analysis tool.

## Subject Property Identification

OAS will identify the subject property legal characteristics (*legal description, size, encumbrances, etc.*) from TAAMS and physical characteristics from inspection, BIA documentation and/or GIS analysis.

If using GIS analysis, OAS will use the descriptive data provided by the BIA for the tracts/parcels to be analyzed, for agricultural properties, select the corresponding GIS parcel polygons to clip to the Farm Services Agency (FSA) Common Land Use (CLU) data, resulting in the subject property preliminary land use acreages.

OAS will review the CLU labeling accuracy by visually comparing the CLU labeling to the FSA National Agriculture Imagery Program (NAIP) satellite imagery. If an inconsistency is identified (*CLU shows pasture, NAIP shows dry crop*) the reviewer will re-label the polygon with the dry crop coding. If a polygon boundary location discrepancy is identified (*field boundary is in middle of field rather than the field edge*), all impacted polygon boundaries will be corrected. If a polygon is missing (*CLU identifies badlands as pasture, OAS identifies pasture as Low Utility*), the Natural Resources Conservation Service's (NRCS) soils data will be used to identify the badlands (*soil type Ba*) and add it to the CLU data. If the reviewer cannot identify the land use types from the NAIP satellite imagery, the reviewer will verify the land use types with the BIA Agency staff and/or aerial/ground observation.

OAS will combine similar land use polygons for each parcel of land to calculate the acreage of each land use type for each parcel. The resulting CLU land use acreage will be divided by the total CLU parcel acreage to provide percent (%) parcel land use acreage (*10% dry crop, 85% pasture, 5% low utility*). These percentages will be applied to the TAAMS legal acreage to ensure the total parcel acreage and corresponding land use acreages are correct and any minor discrepancies between the TAAMS acreage and the CLU acreage are remedied.

For non-agricultural properties, OAS will consult with BIA for land use and/or verify the land use types with aerial/ground observation. Land use types, site improvements, location, etc. information is commonly maintained by the BIA in homesite or business lease files. OAS may use this information or develop new information based upon site inspections, county information, etc.

OAS may reference the Mass Appraisal Report to identify local market areas/trends, and factors market participants view as significant to real property values or may document such information directly in the project report.

OAS will consult with the BIA regarding the characteristics and value of timber resources. This is not the contributory value of the timber estate. See **Timber Resource Methodology**.

OAS will consult with the Office of Minerals Evaluation (OME) regarding the presence and value of mineral resources. This may or may not be the contributory value of the timber estate. See **Mineral Resource Methodology**.

### Area Analysis

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market.

### Neighborhoods

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on various market areas within each of the political entities known as independent school districts. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of appraisal.

Appraisers combine similar types of property (*dry crop farming, irrigated farming, recreational, pasture, commercial, etc.*) into “neighborhoods”. Market sales and market participant interviews are reviewed to confirm which areas have similar highest and best use, market activity and market consistency. For example, review of market data may show there have been a considerable number of dry crop sales on a reservation. Sales in the west half range in price from \$300/ac to \$350/ac. The sales in the east half range in price from \$400/ac - \$500/ac. Based upon the similar land use and the presence of adequate sales data with consistent price patterns, the appraiser would identify two neighborhoods for dry crop land; a West neighborhood and an East neighborhood.

Concurrently, market data may show a North and South neighborhood for recreational properties.

## Highest and Best Use Analysis

The highest and best use of a property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to the maximum allowed usage of the property. The highest and best use of agricultural property is typically its current use. This is due in part to the fact that there is little demand for residential or commercial development in rural areas. In some situations, such as a pasture property next to a community that is experiencing residential growth, an appraiser may determine the highest and best use is residential development rather than the current pasture use. Appraisals of multiple estate properties (*mineral, surface, timber, etc.*) will include the various estates in the highest and best use analysis including mineral and timber resource information from the BIA and OME.

The appraisers can zoom to each tract that needs to be appraised to review the GIS physical characteristics results. The GIS data are also setup to easily identify multi-parcel tracts that may have different highest and best use for the non-contiguous parcels. The appraiser(s) will consider the legal, physical and financial characteristics for each parcel when determining its highest and best use and change the use identification as needed.

## Adjustment Factors/Values

The appraisers identify market/property characteristics that affect property value in each neighborhood and their corresponding adjustment values through market participant interviews and data analysis. If market participants identify low interest rates and paved access are characteristics they found important when buying recreational land, the appraisers will complete either paired sales analysis or regression analysis to quantify the contributory value of each factor (*market conditions and access*) to sale prices.

## Source Data Development

Population/industry trends, land use types/acreages, zoning will be researched from the U.S. Census, NRCS, FSA, counties, chambers of commerce, state agricultural statistical organizations. Real estate sales information will be researched and verified with buyers, sellers, realtors, real estate professionals and county governments. Timber characteristics and contributory value will be provided by the BIA. Mineral characteristics and resource value will be provided by OME.

The sales will be documented in database with all supporting documents (*deeds, property cards, affidavits, plats, etc.*) attached to each sale. The sales will be documented in manner that will facilitate filtering based upon adjustment factors, county, date, etc. and easily exported for statistical analysis.

## Regression Analysis Model Calibration

When OAS uses regression analysis, it will develop models for adjustment factors identified by market participants as being important to the real estate market. A subset of the sales data will be reserved (*last year's sales of a five-year dataset*) and the model(s) will be developed without the reserved data. Once an appraiser has developed a preliminary model (*with the non-reserved sales*) that he/she feels may be reliable (*verified the models qualitative stats, r2, t-stat, are reasonable*), the appraiser will complete a ratio analysis to test the model reasonableness. The model results will be applied to the reserved sales. The reserved sales' indicated values will be compared to their actual sales prices. The reserved sales' indicated values will be compared to their actual sales prices. The model will be considered reasonable when the model complies with the appraiser established confidence intervals and COD ratios which will be documented in the mass appraisal report. The model will then be re-run with both the reserved and non-reserved sales. The model results will then be used in the property specific appraisal.

Exploratory data analysis (*frequency distributions, graphs, outlier identification*) will be conducted prior to model development. Outliers will be removed prior to model development and testing. Models will be re-calibrated if the ratio analysis is not within a reasonable deviation by reviewing the sales for proper data entry, verification, etc. Sales that are not considered representative of the neighborhood/market will be removed from the model and the model will be re-run.

Results from models that do not meet the ratio analysis standards will not be used in the property specific appraisal.

## Paired Sales Analysis Model Calibration

When OAS uses paired sales analysis, it will develop models for adjustment factors identified by market participants as being important to the real estate market.

The paired sales analysis model results (*adjustment factors and adjustment values*) will be applied to benchmark properties (*typical tracts for each property type, e.g., 160 ac dry crop property with gravel access and no utilities*) for each property type in each neighborhood to provide a value opinion. The sales will then be compared to the benchmark properties with the model results applied for differences between the benchmark property and the sales.

The appraiser will complete a ratio analysis to test the model reasonableness. The resulting sales' indicated values will be compared to their actual sales prices. The model will be considered reasonable if the indicated values have a reasonable deviation (*+/-20%-25%*) from the actual sale price. The model results will then be used in the property specific appraisal.

Models will be re-calibrated if the ratio analysis is not within a reasonable deviation by reviewing the sales for proper data entry, verification, etc. Sales that are not considered representative of the neighborhood/market will be removed from the model and the model will be re-run.

Results from models that do not meet the ratio analysis standards will not be used in the property specific appraisal.

### Approaches to Value

The income approach may be used if the property type being appraised is purchased for a cash lease income stream. The sale comparison approach may be used if buyers of the property type being appraised typically compare one property to another to aid in the purchase process. The cost approach will not be used because it is assumed there are no improvements (*See Assumptions and Limiting Conditions*).

### Applying the Regression Model Conclusions

The regression analysis model results (*adjustment factors and adjustment values*) will be applied to the subject properties to produce summary reports. For example if the paired sales analysis model identifies the presence of electricity , which is the only factor that recreational property buyers found important in neighborhood, the electricity adjustment is \$20/ac, a 10 acre subject (\$200).

	Subject	Sale1	Sale2	Sale3
Sale Price		\$ 20,000	\$ 22,000	\$ 21,000
Acres	10	10	10	10
\$/Ac		\$ 2,000	\$ 2,200	\$ 2,100
HBU	Recreation	Recreation	Recreation	Recreation
Electricity	Yes	No	Yes	No
Adjustment		\$ 200		\$ 20
Adj \$/ac		\$ 2,200	\$ 2,200	\$ 2,120
Value Indication		\$ 20,200	\$ 22,000	\$ 21,200
% Adj		1%	0%	1%
Reconciled Value	\$ 22,000			

The sales are adjusted to the level of the subject (*has electricity*), with Sale2 the most similar at \$22,000.

### Applying the Paired Sales Analysis Model Conclusions

The paired sales analysis model results (*adjustment factors, and adjustment values*) will be applied to the subject properties to produce restricted summary reports. For example if the paired sales analysis model identifies the presence of electricity , which is the only factor that

recreational property buyers found important in neighborhood, the electricity adjustment is \$20/ac, a 10 acre subject (\$200).

	<b>Subject</b>	<b>Sale1</b>	<b>Sale2</b>	<b>Sale3</b>
<b>Sale Price</b>		\$ 20,000	\$ 22,000	\$ 21,000
<b>Acres</b>	10	10	10	10
<b>\$/Ac</b>		\$ 2,000	\$ 2,200	\$ 2,100
<b>HBU</b>	Recreation	Recreation	Recreation	Recreation
<b>Electricity</b>	Yes	No	Yes	No
<b>Adjustment</b>		\$ 200		\$ 20
<b>Adj \$/ac</b>		\$ 2,200	\$ 2,200	\$ 2,120
<b>Value Indication</b>		\$ 20,200	\$ 22,000	\$ 21,200
<b>% Adj</b>		1%	0%	1%
<b>Reconciled Value</b>	<b>\$ 22,000</b>			

The sales are adjusted to the level of the subject (has electricity), with Sale2 the most similar at \$22,000.

### Qualitative Techniques

Relative comparison analysis is the study of the relationships indicated by market data and similar to paired data analysis, but quantitative adjustments are not made. The technique is used if there is not the quantity of data in the market and also it reflects the imperfect nature of the real estate market. It is used to determine whether the characteristics/attributes of a comparable property are inferior, superior or similar to those of the subject property.

For example, if market participants identify the presence of electricity and access type are the property characteristics they found important when purchasing recreational properties, a qualitative analysis would be completed as follows:

	<b>Subject</b>	<b>Sale1</b>	<b>Sale2</b>	<b>Sales 3</b>
<b>Sale Price</b>		\$ 20,000	\$ 22,000	\$ 21,000
<b>Acres</b>	10	10	10	10
<b>HBU</b>	Recreation	Recreation	Recreation	Recreation
<b>Electricity</b>	Yes	No	Yes	Yes
<b>Adjustment</b>		Upward		
<b>Access</b>	Gravel	Gravel	Paved	Gravel
<b>Adjustment</b>			Downward	
<b>Value Indication</b>		>\$20,000	<\$22,000	\$21,000
<b>Reconciled Value</b>	\$21,000			

Sale1 did not have electricity resulting in an upward adjustment to bring it to the level of the subject with electricity on the property, resulting in and a value indication >\$20,000. Sale2 had paved access resulting in a downward adjustment to bring it to the level of the subject with gravel access, resulting in <\$22,000 value indication. Sale3 was similar to the subject with electricity and gravel access with no adjustments, resulting in \$21,000 value indication. Placing primary emphasis on Sale3 as it is the most similar to the subject and with the supporting indications from Sale1 and Sale2, a reconciled value indication of \$21,000 is indicated.

### Reporting

OAS will generate summary reports (*USPAP Standards 1 & 2 compliant*) that will be digitally stored in pdf format.

### Review

100% of property specific appraisal reports will be reviewed.

## Addenda 1 – Definitions<sup>7</sup>

**Arm’s-Length Transaction** is a transaction between unrelated parties who are each acting in his or her own best interest.

**Automated Valuation Model (AVM)** is a computer software program that queries property and market data, analyzes comparable property and market information to assign a value or range of value to a particular property, or generates metrics applicable to assessing the credibility of valuation-related statements or conclusions.

**Market Conditions** is an element of comparison in the sales comparison approach; comparable properties can be adjusted for differences in the points of the real estate cycle at which the transactions occur. Market conditions are sometimes called a *time adjustment* because the differences in dates of sale are often compared, although the usage can be misleading.

**Market Study** is a macroeconomic analysis that examines the general market conditions of supply, demand, and pricing or the demographics of demand for a specific area or property type. A market study may also include analyses of construction and absorption trends.

**Mass Appraisal** is the process of valuing a universe of properties as of a given date using standard methodology, employing common data, and allowing for statistical testing<sup>8</sup>. Often associated with real estate tax assessment valuation.

**Mass Appraisal Program Systems (MAPS)** estimate market values and market rental values of Indian Trust properties. The purpose of MAPS is to ensure consistency in developing and reporting of mass appraisals, AVMs, and market studies for the reporting of market values and market rents. Consistency in valuation methods, techniques and reporting supports the integrity of the appraisal process.<sup>9</sup>

**Mass Appraisal Model** is a mathematical expression of how supply and demand factors interact in a market.

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<sup>7</sup> Definitions are from The Dictionary of Real Estate Appraisal, 5<sup>th</sup> Edition, Chicago, Ill, 2010 unless otherwise noted.

<sup>8</sup> (USPAP, 2010-2011 edition, The Appraisal Foundation, Washington, DC)

<sup>9</sup> MAPS, Office of Office of the Special Trustee of American Indians, Office of Appraisals, 2012

**Undivided Fractional Appraisal System (UFAS)** is an AVM used in the Great Plains Region.<sup>10</sup>

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<sup>10</sup> UFAS, Access software, Office of the Special Trustee of American Indians, Office of Appraisals, 2006

## Addenda 2 – Supporting Documents

### Advisory - Indian Land Consolidation: Mass Appraisals of Indian Lands Report No. WR-EV-BIA-0001-2011

ADVISORY



OFFICE OF  
**INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR

## INDIAN LAND CONSOLIDATION ADVISORY

Mass Appraisals of Indian Lands

Report No.: WR-EV-BIA-0001-2011

June 2011



OFFICE OF  
**INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR

JUN 13 2011

Memorandum

To: Meghan Conklin  
Associate Deputy Secretary

From: Kimberly Elmore *Kimberly Elmore*  
Assistant Inspector General for Audits, Inspections, and Evaluations

Subject: Advisory – Indian Land Consolidation: Mass Appraisals of Indian Lands  
Report No. WR-EV-BIA-0001-2011

This advisory, regarding the U.S. Department of the Interior's (Department) upcoming endeavor to implement the land consolidation portion of the *Cobell* settlement, is part of our ongoing effort to monitor and evaluate the accountability of funding appropriated to the Department in the settlement. Although the *Cobell* settlement was approved by Congress and signed into law, it is not final until the court oversees a notice and hearing process. During this time, the Department will be conducting tribal consultations regarding Indian land consolidation strategies. As a result, these advisories serve to provide information to the Department in advance of implementation efforts.

We interviewed officials at the Office of the Special Trustee for American Indians, Office of Appraisal Services (OAS), and the Department Office of Valuation Services. We conducted our work in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency.

In our January 2011 report, "Coordination of Efforts to Address Indian Land Fractionation" (Report No. WR-EV-BIA-0002-2010), we identified that OAS was understaffed and unable to keep up with current appraisal workload demands. OAS currently has 12 regions and is funded for 76 positions, including appraisers, administrative support, and management positions. As of January 2011, OAS had over 1,000 appraisal reports past due and more than 2,500 open appraisal requests.

The Appraisal Foundation<sup>1</sup> (Foundation) reported<sup>2</sup> on the effect of understaffing on workload in a 2003 evaluation of OAS operations. The Foundation identified the use of mass appraisal techniques as a possible long-term solution to alleviate staff shortages. Mass appraisal techniques facilitate more appraisals per staff position because the process involves valuing a universe of real properties by using standard valuation methodology and employing common

<sup>1</sup> Established in 1987 by the appraisal profession in the United States, the Appraisal Foundation is a non-profit organization dedicated to the advancement of professional valuation.

<sup>2</sup> "Evaluation of the Appraisal Organization of the Office of Special Trustee for American Indians, Office of Appraisal Services," prepared by The Appraisal Foundation, August 29, 2003

data. Furthermore, professional appraisal standards<sup>3</sup> identify that estimates of value that allow for statistical review and analysis of results are obtained through the mass appraisal's systematic approach and uniform application of appraisal methods and techniques.

Mass appraisers must develop mathematical models that, with reasonable accuracy, represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. The models may be specified using the cost, sales comparison, or income approaches to value. Appraisers engaged in mass appraisal are required to take reasonable steps to ensure that the quantity and quality of the factual data that are collected are sufficient to produce credible appraisals. Appraisers have a professional responsibility to ensure that, on an overall basis, models produce value conclusion that meet attainable standards of accuracy.

Due to the overwhelming volume of appraisal requests for fractionated tracts, combined with the nature and complexity of the real estate and ownership, the Foundation found mass appraisal techniques appropriate for these types of appraisals. The Foundation further recommended that OAS hire a qualified and experienced mass appraisal organization, firm, or appraiser to validate the techniques used to ensure compliance with professional appraisal standards.

### **OAS implementation of a mass appraisal system**

OAS is currently developing the Mass Appraisal Program System (MAPS). MAPS is a mathematical mass appraisal model for the appraiser to use in estimating fair market value. According to OAS, MAPS will both reduce time in appraisal reporting by optimizing appraisal resources and providing consistency in realty valuation estimates. MAPS updates the Undivided/Fractionated Appraisal System (U/FAS) currently used by the Great Plains Region. Both models are used only for tracts with fractional ownership. Since October 2009, the use of U/FAS has accounted for more than 80 percent of appraisal reports completed in the Great Plains Region, which is about one-third of all total appraisal reports completed by OAS.

U/FAS values a fractional interest of a whole tract based on the tract's income potential, while MAPS will value the whole tract based on comparable sales data. According to OAS, the sales comparison approach that MAPS provides more closely aligns the appraiser's fair market valuation opinion to the local market. MAPS will also improve efficiency by identifying the appraisal client as the Secretary of the Interior, or his designee. Currently, appraisal reports identify a specific BIA office as its client, which restricts use of the report and requires OAS to complete multiple appraisals of the same property. OAS plans to resolve this issue to enable a larger audience to use the MAPS generated appraisal reports.

Appraisal reports generated from U/FAS and MAPS are considered Trust documents because they include allotment numbers, which are pulled from the Trust Accounting and Asset Management System (TAAMS), as identifiers. According to OAS, the Bureau of Indian Affairs'

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<sup>3</sup> Federal land acquisitions must conform to the Uniform Appraisal Standards for Federal Land Acquisitions, which in turn conform to the Uniform Standards of Professional Appraisal Practice.

(BIA) Office of the Chief Information Officer initially raised concerns over data security of trust information stored in a system outside of TAAMS. OAS clarified, however, that neither the current U/FAS nor the planned MAPS stores trust information within its system. Instead, stored data consists of historical market data, which is used to identify trends, support work files, and generate values for probate packages as of certain dates.

After undergoing validation of the system, OAS plans to deploy MAPS in a phased approach, beginning with the Great Plains Region and followed by the Rocky Mountain and Navajo Regions. Validation will involve both OAS and an independent third-party working to ensure that MAPS complies with professional appraisal standards. While no firm commitments have been made, OAS is working with the Department Office of Valuation Services to obtain validation from an entity such as the Appraisal Foundation to conduct the third-party testing. OAS plans to initiate outreach to the tribes and BIA's offices once validation is complete.

### **Timely implementation requires readily available and accurate land characteristic data**

According to OAS, availability of accurate geospatial data will aid the office in establishing MAPS as its mass appraisal system. Geospatial data identifies land characteristics, such as pasture or cropland, which is critical for the appraiser to determine market value. Such geospatial data was historically available through the U.S. Department of Agriculture's Farm Service Agency (FSA). With the enactment of the Food, Conservation, and Energy Act of 2008 (P.L. 110-234), however, FSA is prohibited from disclosing the geospatial data it collects.

Per the legislation, the Secretary of Agriculture may release or disclose information to a person or any Federal, state, local, or tribal agency working with a U.S. Department of Agriculture program. Though the Departments of Agriculture<sup>5</sup> and Interior have separate programs aimed to help tribes purchase highly fractionated lands, OAS has stated that it has been unsuccessful in obtaining approval from local FSA offices to access the geospatial data. Without the FSA-provided geospatial data, OAS expects that the time needed to deploy MAPS to other regions will increase because OAS will have to manually input agricultural data from TAAMS. Further, the TAAMS data is less accurate than FSA's data because TAAMS does not fully identify agricultural characteristics.

### **Recommendations**

1. Analyze MAPS' application for use in the *Cobell* consolidation effort.
2. An independent appraisal organization should evaluate MAPS for compliance with professional appraisal standards.
3. Obtain a legal opinion from the Office of the Solicitor on whether the Agriculture Secretary's disclosure authority (P.L. 110-234) would permit the sharing of geospatial data with DOI personnel. If the answer is yes, initiate discussions with the U.S.

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<sup>5</sup> Subtitle F, Sec. 5501 of P.L. 110-234 authorizes the Secretary of Agriculture to make and insure loans American Indian tribes or tribal corporations to purchase highly fractionated land.

Department of Agriculture's senior officials regarding OAS' ability to access FSA's geospatial data of agricultural lands for use in MAPS.

Please provide a written response to this advisory within 30 days after the conclusion of the Department's tribal consultation efforts. The response should detail the Department's corrective action plan, as well as targeted completion dates and title(s) of the official(s) responsible for implementation. Information contained in this advisory will be included in our semiannual report to Congress. Please contact me at 202-208-5745 if you have any questions.

cc: Deputy Secretary, U.S. Department of the Interior  
Assistant Secretary – Indian Affairs  
Principal Deputy Special Trustee, Office of the Special Trustee for American Indians  
Director, Bureau of Indian Affairs  
Audit Liaison, Office of the Secretary  
Audit Liaison, Indian Affairs

## **Report Fraud, Waste, and Mismanagement**



Fraud, waste, and mismanagement in Government concern everyone: Office of Inspector General staff, Departmental employees, and the general public. We actively solicit allegations of any inefficient and wasteful practices, fraud, and mismanagement related to Departmental or Insular Area programs and operations. You can report allegations to us in several ways.



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<b>By Internet:</b>	www.doioig.gov	
<b>By Phone:</b>	24-Hour Toll Free:	800-424-5081
	Washington Metro Area:	703-487-5435
<b>By Fax:</b>	703-487-5402	
<b>By Mail:</b>	U.S. Department of the Interior Office of Inspector General Mail Stop 4428 MIB 1849 C Street, NW. Washington, DC 20240	

## Valuing Fractionalized Tracts As If Fee Simple Memo

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### INTEROFFICE MEMORANDUM

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**TO:** ALL STAFF AND CONTRACT APPRAISERS FOR THE OFFICE OF APPRAISAL SERVICES IN THE OFFICE OF THE SPECIAL TRUSTEE FOR AMERICAN INDIANS

**FROM:** KATHRYN GEARHEARD, MAI, DEPUTY CHIEF APPRAISER, DOI

**SUBJECT:** VALUING FRACTIONALIZED TRACTS AS IF FEE SIMPLE

**DATE:** 7/12/2007

**CC:** ROSS SWIMMER, SPECIAL TRUSTEE; ROBERT JAEGER, ILCP

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Many tracts of Trustee and other Indian lands are held by multiple owners. Often the Office of Appraisal Services is asked to value these tracts as fee simple, ignoring those multiple owners' interests. It may be appropriate to value the property in this manner for business or other purposes. Uniform Standards of Professional Appraisal Practice, allows the appraiser to consider the client's need and, if appropriate, use a Hypothetical Condition in the Appraisal Report. When such a condition is used, the appraiser avoids misleading users of the report by making this declaration.

Requests for valuations of undivided fractionated interests as a single ownership are common in the Indian Land Consolidation Program (ILCP). This statement may also apply when valuing direct purchases of undivided fractionated interests of Indian allotments by Indian tribes operating under BIA-approved tribal land consolidation programs. There may be need for consideration of this Hypothetical condition in similar, yet to be identified fractionalized properties.

OAS staff and contract appraisers are therefore directed to use the following Hypothetical Condition when he or she determines it is appropriate to value the real estate tract as if fee simple ownership when the actual case is multiple owners with various interests.

**Hypothetical Condition:** The subject tract under appraisal is considered to be one ownership, although the tract consists of numerous interests which have never been legally partitioned from the whole estate. Use of this condition affects the assignment results.

This statement **must** appear in the section of the report which identifies the interest to be appraised. The appraiser may wish to insert this statement elsewhere in the report as he or she feels is appropriate.

#### **Justification for Creditable Analysis**

Some of the following explanation may be included in the report but primarily is offered for the appraiser's understanding of this OAS directive.

OAS has recently analyzed market data which clearly indicates that the Market Value of individual fractional interests differs from the divided Market Value of the whole tract. OAS has advised the client of this analysis.

ILCP determined that the program wishes to purchase these fractional interests based on the proportionate value of the whole estate in accordance with each co-owner's undivided fractionated interests. ILCP rules allow the program to purchase interests at other than Market Value. With this full disclosure OAS agrees the direction from the client is acceptable.

By appraising the tract instead of the interests, OAS appraisers are still obligated to avoid misleading appraisals and comply with USPAP and UASFLA. It is essential that the appraiser avoid any risk of violating the following standards:

USPAP Scope of Work Rule by failing to develop creditably results,

USPAP SR 1-1 by committing an error of omission,

USPAP SR1-2 (d) by failing to identify the interest to be valued

USPAP SR1-2(e) v by failing to identify that the subject is a fractional interest

USPAP SR 1-4(e) by valuing the whole through the sum of the parts

USPAP SR2-2(a) (x) by failing to state extraordinary assumptions or hypothetical conditions

There is no law or rule that allows OAS to use the Jurisdiction Exception when valuing fractional interests.

UASFLA Unit Rule forbids appraisals that value by summation or accumulation. (Sec. B-13 page 54)

Both UASFLA and USPAP permit appraisers to consider a client's request.

UASFLA allows for the property to be valued as a whole in fee simple conditions when it is the government's intention to acquire the whole tract. ILCP's purchase is not a typical government acquisition of fractional ownership since the government normally acquires the entire set of interests in a single purchase. (Sec. B-13 page 53) The argument can be made that the government (acting through the Department of Justice) would view ILCP's purchase plan as reasonably similar to other government purchases. On this basis and given USPAP's example of hypothetical conditions, OAS can comply with these standards when fulfilling ILCP's desire to have whole tracts appraised.

## Secretarial Order 3325



THE SECRETARY OF THE INTERIOR  
WASHINGTON

ORDER NO. 3325

Subject: Land Buy-Back Program for Tribal Nations

**Sec. 1 Purpose.** This Order establishes the Land Buy-Back Program for Tribal Nations (Buy-Back Program) in the Office of the Secretary to ensure implementation of all land consolidation aspects of the Settlement Agreement in *Cobell v. Salazar*, No. 96-CV-1285-JR.

**Sec. 2 Background.** The *Cobell* Settlement Agreement (as confirmed by the Claims Resolution Act of 2010 (Pub. L. No. 111-291) and approved with finality after appeals were exhausted to the U.S. Supreme Court (Settlement)), provides for a \$1.9 billion Trust Land Consolidation Fund (Fund). The Settlement charges the Department of the Interior (Department) with the responsibility to expend the Fund within a 10-year period to acquire, at fair market value, fractional interests in trust or restricted land that individuals are willing to sell to the Department. Acquired interests will remain in trust or restricted status and be consolidated for beneficial use by tribal communities. As an additional incentive to participate in the Buy-Back Program, the Settlement provides that a portion of the Fund will be contributed to an Indian Education Scholarship Fund for American Indian and Alaska Native students when individuals sell fractional interests under the Buy-Back Program. As provided in the Settlement, administrative costs, including support for the Secretarial Commission on Trust Reform, must not exceed 15 percent of the Fund. Given the size, limited duration, and importance of the Fund and Buy-Back Program, the Buy-Back Program will be established in the Office of the Secretary, subject to the oversight of the Deputy Secretary, to facilitate coordinated engagement and accountability within the Department and streamlined projects and the prioritization of resources.

**Sec. 3 Authority.** This Order is issued under the authority of Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended; and the Settlement.

**Sec. 4 Consultation.** The Department recognizes its obligation to engage in government-to-government consultation with Tribal Nations in connection with the Settlement. Consultation has been underway since 2011, before final approval of the Settlement, and the Department will continue consultations regarding the implementation of the Buy-Back Program.

**Sec. 5 Goals and Priorities of the Buy-Back Program.** The Buy-Back Program is a collaborative endeavor that will depend upon the expertise and direct involvement of all relevant bureaus and offices of the Department, as well as tribes, in order to realize the historic

opportunities afforded by the Settlement. The Buy-Back Program has the following goals and priorities:

- a. Reduce the number of fractional interests in trust or restricted lands, giving priority to the most highly fractionated tracts of land in accordance with the Settlement;
- b. Increase the number of trust or restricted acres in tribal land bases by focusing on cost-effective acquisitions, which will promote tribal sovereignty and self-determination;
- c. Increase the number of trust or restricted tracts in which the tribe has majority ownership in order to facilitate economic development or other uses;
- d. Target fractionated tracts that are amenable to cost-efficient valuation techniques;
- e. Actively consult with tribes to realize opportunities for tribal participation and assistance and to identify and accommodate their acquisition priorities to the fullest extent practicable consistent herewith;
- f. Actively report progress and communicate with Indian country throughout the life of the Buy-Back Program;
- g. Provide clear, concise information and guidance to individual Indian land owners concerning their fractional interests and the opportunity to voluntarily participate in the Buy-Back Program; and
- h. Manage administrative expenses in the most cost-efficient manner possible, in a way that facilitates effective, long-term trust management and systems integration.

**Sec. 6 Responsibilities and Functions.** The Buy-Back Program will draw on the expertise and capabilities throughout the Department, including, in particular, the Assistant Secretary – Indian Affairs; Bureau of Indian Affairs; Office of the Special Trustee for American Indians; Assistant Secretary – Land and Minerals Management; Office of the Solicitor; the Assistant Secretary – Policy, Management and Budget; and the Office of the Secretary. New positions, including those referenced herein, will be established to ensure accountability. The high-level board described in Section 6.b will provide oversight.

- a. **Buy-Back Program Manager and Tribal Liaison.** The Buy-Back Program is headed by a Program Manager in the Office of the Secretary who reports to the Deputy Secretary. The Program Manager provides leadership, coordination, communication, management, reporting, and oversight; maintains strong, collaborative government-to-government relationships with tribes, in part by establishing cooperative agreements with tribes

and by active consultation, which will be managed by a Tribal Liaison; manages the Fund in accordance with the Settlement; and establishes performance-based reimbursable support agreements or memorandums of understanding to facilitate Fund expenditures by bureaus and offices.

b. **Tribal Nations Land Buy-Back Oversight Board (Board).** A Board is hereby established to provide policy guidance, ideas for improvement, oversight, and other assistance to the Buy-Back Program. The Secretary, or the Deputy Secretary as designee, shall chair the Board, which shall include the following members: Solicitor; Assistant Secretary – Indian Affairs; Special Trustee for American Indians (or the Principal Deputy Special Trustee as designee); Director, Bureau of Indian Affairs; Deputy Assistant Secretary – Technology, Information & Business Services; and Director, Bureau of Land Management.

c. **Bureaus and Offices.** The Buy-Back Program will be accomplished with the direct participation and full cooperation of the bureaus and offices reporting to the Assistant Secretary – Indian Affairs; Special Trustee for American Indians; the Assistant Secretary – Policy, Management and Budget; and the Assistant Secretary – Land and Minerals Management. Bureaus and offices will implement the Buy-Back Program in a manner that ensures tracking and accountability for use of the Fund.

(1) Bureau of Indian Affairs will have an Acquisition Director with primary responsibility for planning and executing land acquisition and title related functions of the Buy-Back Program.

(2) Office of the Special Trustee for American Indians will have primary responsibility for determining fair market values for trust or restricted tracts with fractional ownership interests, which will be managed by a Deputy Director for Valuations; and developing an accountable process to post payments from the Fund to individual Indian money accounts for the acquisition of fractional interests.

#### **Sec. 7 Buy-Back Program Requirements.**

a. In coordination with the Program Manager, the heads of all bureaus and offices identified in Section 6.c will ensure that performance measures and standards regarding the Buy-Back Program are included in employee performance appraisal plans for the employees that directly support the Buy-Back Program and that ratings reflect input received from the Program Manager.

b. Each bureau and office with primary responsibility will coordinate with and report regularly to the Program Manager regarding their implementation of the Buy-Back Program as may be further outlined in written agreements or memorandums of understanding.

c. Bureaus and offices will provide the Program Manager or a designee with access to all records, systems, documents, files, and other material, as well as to any officer and employee or contractor thereof, as the Program Manager deems necessary for Buy-Back Program implementation.

d. The Program Manager, bureaus, and offices will ensure that proper internal controls are in place, funds are expended appropriately, and auditors have access to all pertinent records and financial reports.

**Sec. 8 Delegations.** All of the authority necessary to carry out the responsibilities and functions of the Buy-Back Program is delegated to the Program Manager. This authority may be further delegated. Officials in the bureaus and offices described in Section 6 are delegated the authority necessary to carry out the responsibilities and functions herein.

**Sec. 9 Expiration Date.** This Order is effective immediately. It will remain in effect until its provisions are converted to the Departmental Manual or until it is amended, superseded, revoked, or until the Fund is fully expended or the time period expires, whichever occurs first.

  
Secretary of the Interior

Date: **DEC 17 2012**



**United State Department of the Interior**  
**OFFICE OF THE SPECIAL TRUSTEE FOR AMERICAN INDIANS**  
Office of Appraisal Services  
Land Buy Back Program  
4400 Mashead St. NE/Room 3148  
Albuquerque, NM 87109  
(305) 816-1318

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**Value Opinion:** <Value Opinion> rounded to <Rounded Value Opinion> (U.S. Dollars)  
**Existing Use:** <Existing Use> **Use Reflected in Report:** <Existing Use>  
**Highest and Best Use:** <HBU>

**GENERAL ASSUMPTIONS, EXTRAORDINARY ASSUMPTIONS, LIMITING CONDITIONS, AND HYPOTHETICAL CONDITIONS**

The acceptance of the appraisal assignment and value opinion as submitted are contingent upon the following general and extraordinary assumptions, limiting and hypothetical conditions. Uses of the hypothetical conditions and/or extraordinary assumptions may affect the assignment results.

**GENERAL ASSUMPTIONS**

- o No responsibility is assumed for the legal description provided or for matters pertaining to legal or patent considerations. No attempt has been made to render an opinion easement status. The appraiser cannot guarantee the property is free of encroachments or easements.
- o The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.
- o All studies and consultation reports used in the appraisal process are assumed to be correct, unless otherwise noted.
- o It is assumed there are no hidden or unapparent conditions of the property or subsoil that renders it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.
- o It is assumed the property is in full compliance with all applicable regulations and laws, unless the lack of compliance is stated, described, and considered in the analysis.
- o It is assumed all required licenses, permits, consents, and other authorities for all entities or organizations can be obtained for the use on which the value opinion contained in this report is based.
- o It is assumed the real estate within the boundaries or property lines of the property described there is no encroachments or trespass, unless otherwise noted.

**EXTRAORDINARY ASSUMPTIONS**

- o It is assumed the real estate under appraisal is free and clear of all liens which may affect title.
- o It is assumed easements and/or rights-of-way not of record have been properly approved by the Superintendent, Bureau of Indian Affairs (BIA).
- o It is assumed the current land uses provided by geographic information system (GIS) data analysis are accurate. No physical inspection of the real estate was performed by the appraiser. Use of this condition may affect the assignment results.

**LIMITING CONDITIONS**

- o

**United State Department of the Interior**  
**OFFICE OF THE SPECIAL TRUSTEE FOR AMERICAN INDIANS**  
Office of Appraisal Services  
Land Buy Back Program  
4400 Masthead St. NE/Room 314B  
Albuquerque, NM 87109  
(305) 816-1318

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**HYPOTHETICAL CONDITIONS**

- It is assumed the real estate interest under appraisal is held in "Fee Simple" subject to encumbrances and restrictions of record.
- It is assumed the current land uses provided by geographic information system data analysis are accurate. No physical inspection of the real estate was performed by the appraiser. Use of this condition may affect the assignment results.

**CERTIFICATION**

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in the report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three year period immediately preceding acceptance of this assignment.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the developing or reporting of a predetermined value or direction of value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions and conclusions were developed, and this report was prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- I have not made a personal inspection of the property that is the subject of this report.
- OAS BBP personnel and/or their representatives provided GIS physical characteristic analysis of the property that is the subject of this report.
- OAS BBP personnel and/or their representatives provided comparable sales data and analysis.

In my opinion, as of the effective date of this report, the market value of the real property under appraisal is <Value Opinion> rounded to <Rounded Value Opinion> (U.S. Dollars).

<Today>

<Signature>  
Certified General Appraiser #<License>  
Office of Appraisal Services – Buy Back Program  
Masthead /Rm 214B

Office of Appraisal Service #<OASIS CaseNo>

Page 3 of 3

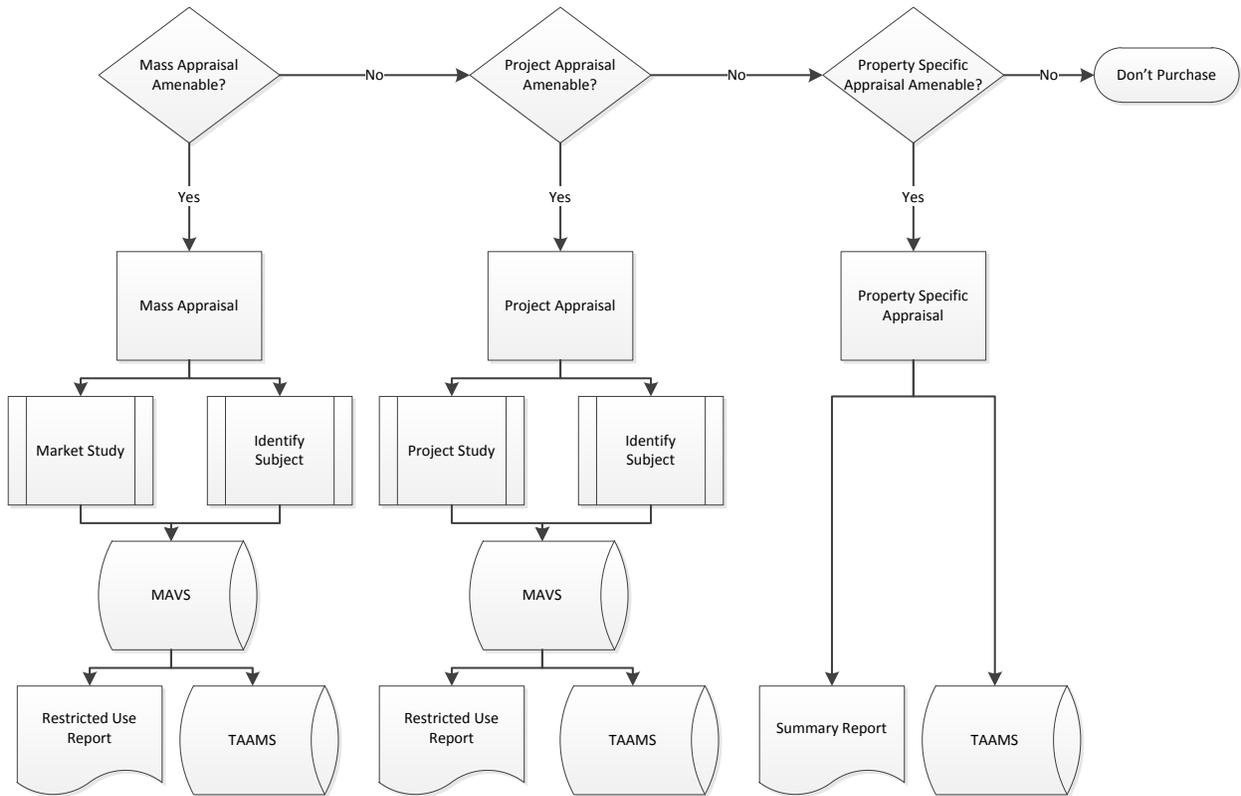
**Benchmark Mass Appraisal Report**

**Regression Mass Appraisal Report**

**Project Report**

# Addenda 4 - Flowcharts

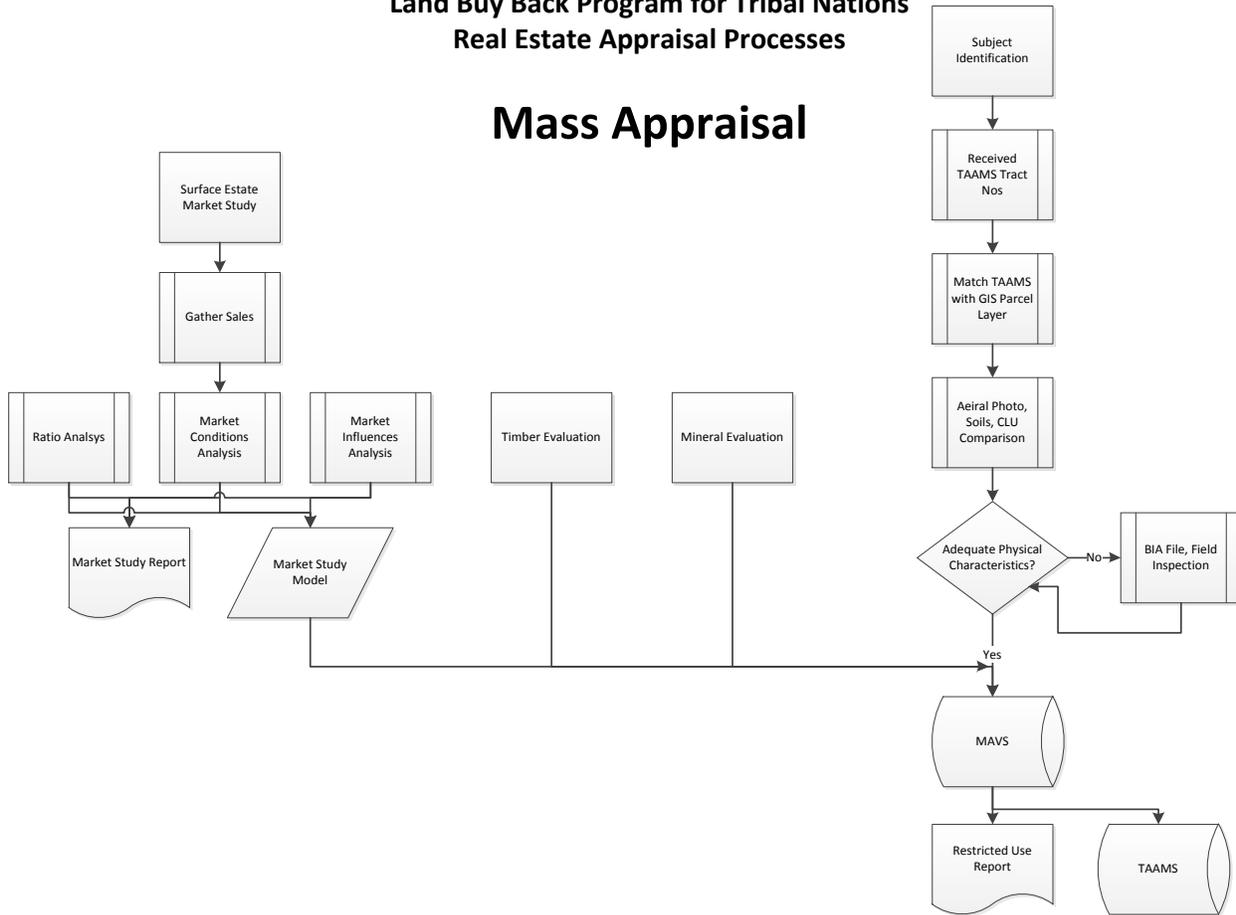
## Overview



# Mass Appraisal

## Land Buy Back Program for Tribal Nations Real Estate Appraisal Processes

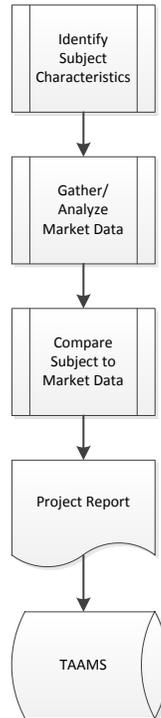
### Mass Appraisal



## Project Appraisal

### Land Buy Back Program for Tribal Nations Real Estate Appraisal Processes

# Project Appraisal



## Property Specific

### Land Buy Back Program for Tribal Nations Real Estate Appraisal Processes

# Property Specific Appraisal

