## **Department of the Interior**

## Responses to Recommendations from The Appraisal Foundation External Review of the Valuation Plan and Methodologies for the Land Buy-Back Program for Tribal Nations

The Appraisal Foundation, in completing its external review of the valuation plan for the Land Buy-Back Program (BBP) determined that the Valuation Plan, as presented by the Office of Appraisal Services (OAS) and the Department of the Interior (DOI), represents a methodologically sound approach to meeting the requirements of the Buy-Back Program. The Appraisal Foundation recognized the significant magnitude of the valuation challenge with the Land Buy-Back Program, and reviewed the planned methodology, including extensive use of mass appraisal techniques. The Foundation concluded in their Report: "We concur with OAS overall plan as summarized above and agree that mass appraisal methods should be used whenever possible because they would normally accommodate the most properties and thus be most efficient."

The Foundation also provided a set of recommendations to further strengthen the program, and support achievement of timely and quality appraised values from which offers can be determined for purposes of the Buy-Back Program. The recommendation and the Department's response are as follows:

## CONCLUSIONS AND RECOMMENDATIONS

1. The agency should clarify and state which properties will be considered in the buy-back program. We understand that the program will exclude reservations east of the Mississippi and in Alaska. We also understand that it will focus primarily on the purchase of as many fractional interests as possible. "Accordingly, it is important to effective valuation management that the Buy-Back Program establish priorities and focus resources where they can be most effective in using the tools available to achieve program goals. For example, it was stated that 40 reservations have 85% of the fractional interests potentially subject to the program, and presumably the valuation priority will be on these reservations.

Department response: The BBP is cognizant of the need for priorities in meeting the goal of reducing fractionation by acquiring as many fractional interests as possible. While the most highly fractionated reservations will be given early attention, this over-riding goal must be balanced with other goals, including Tribal priorities in acquisition of properties. The DOI BBP has identified the purchasable tracts, established ceiling amounts against which acquisitions can be made, and provided the TAAMS allotment lists to Tribes to enable them to identify the priority properties from the list of purchasable properties. OAS/BBP division will receive a final priority property list for the top 40 reservations by October 31, 2013, after tribal selection of priorities have been completed.

2. The agency should review the definition of market value and standardize the definition.

Department response: The Department agrees and will use the definition of Market Value established under the Uniform Appraisal Standards for Federal Land Acquisition, which will be reflected in each

property specific appraisal report and also in the Mass Appraisal Report and Mass Appraisal Statement of Value for a Single Property opinion of value

3. Consider a pilot reservation to test this process and use it as a prototype for the other reservations. The South Dakota region and another region should be considered.

Department Response: The Buy Back Program is engaging early with several tribes in the Great Plains/Rocky Mountain region, allowing for model testing for accuracy and validation of market consistency on several reservations prior to implementation on a broader scale.

4. Consider retention of a consultant with expertise in mass appraisal to work with OAS on pilot models or at least review those models before the methodology is applied to other reservations.

Department Response: The Department agrees, and the OAS/BBP will contract for a Multiple Regression Appraisal specialist for the pilot models to assure credibility and reliability of multiple regression mass appraisals.

5. In addition to considering confidence intervals as summarized in this report, when confidence intervals cannot be developed due to limited sales or the use of single property appraisal methods, the administration should consider any additional information from the appraisal report and data analysis in determining the offer value.

Department response: The market value for a site specific appraisal is determined by the appraiser of record and derived in the development, analysis and final conclusion as to the opinion of value, which will be provided to the Buy-Back Program Office for use in determining offer prices.\* However, where multiple regression analysis is used in mass appraisals, and the data permits development of confidence intervals, the Office of Appraisal Services can also provide confidence intervals upon request for the information of the buy-Back Program Office. The BBP administration will be provided copies of reports for site specific appraisals for use in determining a fair offer price\*.

6. The OAS should try to develop a program for data sharing with Farm Credit. This would help the agency to receive all of the sales available in each area.

Department response: Farm Credit Services (FCS) has indicated they are not interested in getting the DUNS number and SAM registration necessary for bulk acquisition of data. However, the Department will continue to work with FCS to acquire data on a reservation-by-reservation basis and will encourage a change in policy with FCS.

7. OAS should consider the use of statistical software such as SPSS to assist in mass appraisal analysis. Such software would also facilitate quality control analysis (sales ratio studies) and development of confidence intervals. Excel can also be used be used to the same ends, although OAS should understand the limitations of Excel for multiple regression analyses (MRA) and statistical analyses.

Department response: The Department agrees and OAS/BBP divisionhas purchased two SPSS licences for use in developing mass appraisals and will further evaluate the SPSS application. Given that mass

appraisals may be beneficial at all reservations applying the multiple regression analysis models using SPSS would ensure thorough and sound data analysis.

8. Exploratory data analysis should be conducted prior to model development. This would include frequency distributions, graphs, and outlier identification. Outliers should be removed prior to model development and testing. Time trends in sales should also be explored at this point, although final adjustments can be, at the analyst's option, developed during modeling.

Department Response: The Department agrees, and has incorporated this recommendation into the plan in the section relative to Regression Analysis Model Calibration

9. OAS should develop documentation and reporting requirements for staff to use in determining which valuation process and reporting procedure to use in different circumstances. The four methods are Multiple Regression Analysis, benchmarks, Project Appraisal, and property specific appraisal.

Department Response: The Department agrees that the OAS will establish protocols to ensure that OAS Buy-Back Program staff comply with appraisal standards and best practices; those standards require that the appraiser determine the appropriate valuation process. An independent quality assurance review appraisal will oversee all OAS regions involved in the BBP \*to ensure compliance with the Uniform Standards for Professional Appraisal Practice.

10. OAS should maximize use of Arc GIS for data review, plotting the distribution of sales, defining neighborhoods, and plotting estimated values and sales ratios.

Department Response: The Department agrees, and OAS is currently developing and implementing ArcGIS in the distribution of sales and defining neighborhoods. The plotting of estimated values as an analytical tool will be conducted within OAS as a part of the valuation process.

11. OAS should use sales ratios to review the quality of values generated by mass appraisal methods (MRA or paired sales analysis with benchmark values). OAS should define performance goals based on IAAO ratio standards, e.g., median levels of appraisal of 0.90 to 1.10 and coefficients of dispersion (CODs) of no more than 20% to 30% depending on the homogeneity of markets.

Department Response: The Department agrees and OAS/BBP division will use sales ratios to review the quality of values generated by mass appraisal methodologies. This recommendation been incorporated into the Valuation Plan in the Regression Analysis Model Calibration section of the Plan document, including references the IAAO ratio standards.

12. OAS should validate appraisals using a holdout group. The current plan calls for assigning the last available year of sales to the holdout group. The analyst would run sales ratios both for the model and holdout groups of sales. Assuming results meet required standards, the model would be rerun on the combined model and holdout groups to maximize sample size.

Department Response: The Department agrees. OAS/BBP will follow this protocol and has incorporated appropriate language into the Valuation Plan.

13. If there are a lack of sales and static market conditions, the agency should consider using a longer time period of sales (up to 10 years).

Department Response: The Department agrees. The OAS/BBP will follow this protocol and has incorporated appropriate language into the Valuation Plan. OAS has been using longer time periods for sales in the regular work when necessary.

14. OAS should standardize the definitions of recreation, open space, and agricultural use for each region based on highest and best use analyses.

Department Response: The Department agrees. The Office of Appraisal Services has developed data dictionaries reflecting the definitions and has incorporated appropriate language into the Valuation Plan.

15. When value estimates incorporate the contribution of mineral values or timber values, Standards 1 and 2 will apply. Incorporating the values from a timber and or mineral value would not be applicable to a mass appraisal process, except when such contributions are nominal.

Department Response: The Department agrees; The OAS Valuation Plan reflects that B and S tracts with \$0 resource value can be used in mass appraisal, but where there is a contributory value from minerals or timber, another methodology will be employed.

16. The *Uniform Appraisal Standards for Federal Land Acquisitions* (UASFLA or "the Yellow Book") was last updated in 2000 and the current USPAP is the 2012-2013 version. There could be some inconsistency with the Yellow Book versus the current USPAP versions and the agency personnel involved with the group that established the Yellow Book should call for a review and possible update to the Yellow Book.

Department Response: The Department will bring The Appraisal Foundation's recommendation to the attention of the Interagency group responsible for the Yellow Book.

17. The staff should attend educational offerings from recognized mass appraisal programs.

Department Response: The Department is committed to ongoing professional development and the Office of Appraisal Services will handle this recommendation through including mass appraisal classes in the Individual development Plans for OAS/BBP division staff.

18. The Agency should clarify and state which properties will be considered in the buy-back program. Also they should make a decision on which reservations the mass appraisal process would not be beneficial.

Department Response: The Department agrees and is working through the Buy-Back Program Office to specify properties to be considered. Further, in consultations with OAS, decisions on where mass appraisal is appropriate will be considered as the land analysis is completed for each reservation.

19. The Agency should consider a pilot reservation to test this process and use it as a prototype for the other reservations. The South Dakota region and another region should be considered where adequate sales information exists.

Department response: The Department agrees. See response to number 3.

20. OAS should report most probable market values based on the definition of market value established for the program, but should also consider providing additional information for use by the Buy Back Program administration in establishing the offer amounts for fractional interests to be acquired. For example, confidence intervals developed during statistical analysis could provide guidance in setting offer amounts consistent with the program goals.

Department Response: The Department agrees. See response to number 5.