



4.3.8 Cadastral Survey Services (S)

4.3.8.1 Cadastral Survey Services Summary Process Description

The overall process starts with: Receive an inquiry or directive for survey services to address a need.

It ends with: Perform an update to Cadastral information as well as distribution of survey service results and action taken to resolve the initial need, as necessary.

The Cadastral Survey process starts with either an individual beneficiary, Tribe, BIA or external party (e.g. judicial direction) identifying a need for survey services. The inquiry is reviewed to assure it pertains to Trust land and the interested party would benefit from survey services. If that review affirms the need, supporting information is accumulated by BIA or the Tribe, which either sends an informal request to BLM or decides to pursue non-BLM survey services. If resolution of the need can be performed by a non-BLM source, the request is given to a private survey contractor or performed by BIA or Tribal staff. Generally, there is no federal or local authority for non-BLM surveys performed on Trust lands and BLM has no involvement in them.

Survey services may be needed to resolve a trespass, to develop or protect a natural resource, to determine reservation boundaries for law enforcement purposes, or to provide a legal description for any number of land management needs. If the informal request is sent to BLM, BLM performs a preliminary analysis, and then describes and costs a proposed solution. BIA, in consultation with individual requestors or Tribes, considers funding availability and importance of the need and then assigns a priority (or puts the informal request on hold if a low priority). BIA turns these informal requests into a list of formal requests and submits it to BLM with the priority and funding identified. When work begins, BLM accumulates needed additional data and pursues a research and analysis sequence, depending on whether a full Cadastral Survey or one or more other services is required. After performing the survey or consultation service, official records, written reports, and digital products or other results are prepared and distributed to BIA, the Tribe, and /or requestor. Records in official systems are updated and annual reports are developed and distributed.

Funds for Cadastral Surveys are provided by the BIA headquarters office to the BLM under a national Interagency Agreement (IA) negotiated by both bureaus. This IA distributes funds to the various BLM State Offices based on an emphasis for BLM/BIA Project Offices and prior year commitments. BIA and BLM are currently working together developing a priority setting process that places more emphasis on Regional Office priorities.



Events:

- Litigation
- Congressional Mandate for Border Adjustment
- Identified Unsurveyed Land
- Law Enforcement
- Request for Survey Services
- Consultation Request to BLM by Walk-in, Phone, Email, or Field Meeting
- Lease Compliance Findings
- Request for Non-BLM Services (only occurs on an as needed basis)
- Critical Short-Time Frame Event (Non-BLM services contracted for partitionment of non-riparian areas, homesites, new fences built, homesite boundary dispute, accretion, flooding, land exchange, ROW)
- Informal Request from Agency to Regional Office or as needed
- Backlog of Requested Surveys
- Conveyance (e.g. acquisition or disposal of land)
- Written Correspondence

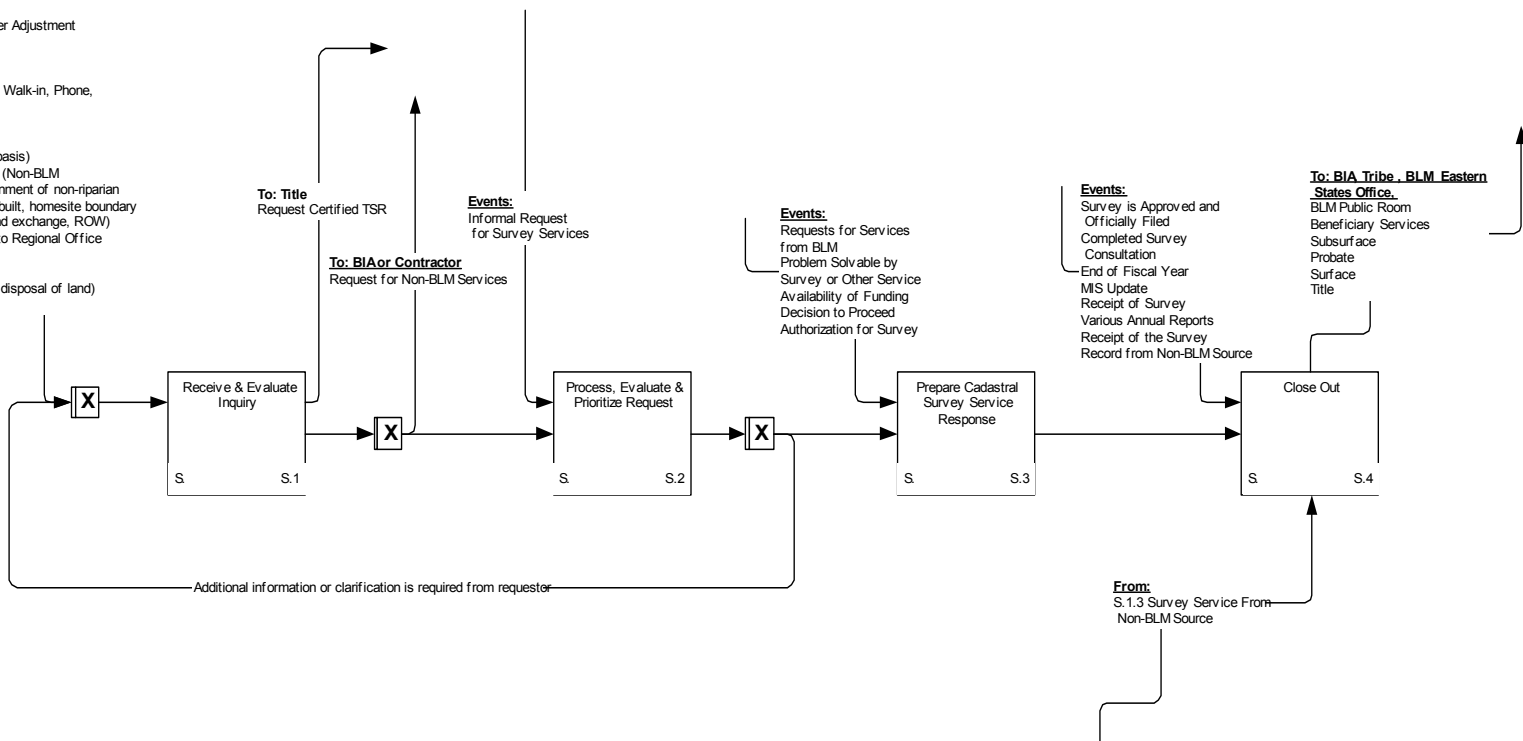


Figure 4.3.8- 1 Cadastral Survey Services High Level Diagram



Cadastral Survey Services Objectives

A Cadastral Survey is a federally authorized and conducted land survey that shows and records property boundary lines and official acreages. Cadastral Surveys create, reestablish, mark, and define boundaries of tracts of federal interest and Indian Trust lands for all resource management purposes. Cadastral Surveys are considered an inherently federal function. These surveys, and the boundaries created or vested in the lands affected, cannot be ignored, repudiated, altered, or corrected, unlike administrative or scientific surveys of an informative character that may be amended with changing conditions or because they are not executed according to the standards now required for accuracy. Cadastral Surveys require detailed investigation on the history of land use as well as legal and historical documents research matching physical evidence with these records. In the majority of the United States, Cadastral Surveys are the framework from which original title, legal land descriptions, private and other federal surveys originate.

BLM is responsible for program management, leadership, policy development, and maintenance of standards and procedures for the Public Land Survey System (PLSS). BLM Cadastral Surveys are considered the standard for such surveys and carry the full authority and weight of the US government. By federal statute (25 USC 176) surveys of any Indian land or other Reservations are to be performed under the direction and control of BLM. However, in some cases surveys are performed for BIA, the Tribes, and individuals by their own staff or private survey companies. BIA provides funds for BLM Cadastral Survey services to BLM on a reimbursable basis. Occasionally, individuals or Tribes may provide funding directly to BLM for services and BIA is not involved in that process.

As noted in Chapter 1, the specific Trust Strategic Goals and Objectives that relate to Cadastral Survey services are as follows:

a) Strategic Goal 1 - Beneficiary Services

Enhance and maintain a beneficiary focus of providing service to and maintaining communications with beneficiaries.

b) Strategic Goal 2 - Ownership Information

Verify, track, and maintain the land, natural resource, and fund asset ownership information required to manage assets effectively and to provide beneficiary services.

Objective 2.2 Surveys

Establish accurate and up-to-date surveys to ensure correct boundaries for trust individual and Tribal lands and any resulting revenue distribution.

Objective 2.3 Title, Realty, and Administrative Information

Develop, maintain, and make readily available accurate and current asset ownership and administrative information that is managed to professional fiduciary standards.

c) Strategic Goal 3 - Land and Natural Resource Assets

Provide stewardship and management of land and natural resource assets in the best interests of the beneficiaries, while fulfilling fiduciary and legal responsibilities.

Objective 3.1 Land and Natural Resource Asset Plans and Stewardship Strategies

Develop land and natural resource asset plans and stewardship strategies.



Objective 3.2 Preservation and Protection of Land and Natural Resource Assets

Preserve and protect the long-term viability of land and natural resource assets consistent with fiduciary duties and with the beneficiary's intended use of the assets.

Objective 3.3 Land and Natural Resource Asset Business Management

Manage land and natural resource assets effectively and proactively to obtain fair market value for beneficiaries, as required, and to incorporate beneficiary requirements.

Objective 3.4 Appraisals

Obtain appraisal information, as necessary, on trust and restricted lands for Tribal and individual Indian owners, using methods and techniques that meet professional standards.

d) Strategic Goal 6 - Administrative Services

Develop, maintain, and coordinate administrative services to support the effective and efficient fulfillment of DOI trust management responsibilities.

Objective 6.6 Business Practices

Develop and maintain business processes and practices that are based on professional standards that are complete, consistent, and reliable.

Objective 6.7 Performance Measures

Develop, maintain, and use clear performance measures to manage trust operations and to assess performance.



4.3.8.2 Receive & Evaluate Inquiry (S.1)

Starts with: Receive a request for a survey service from a beneficiary, Tribe, BIA or external party.

Ends with: Send an informal request for a survey or service to the BIA Regional Office.

This step starts with an individual beneficiary, Tribe, BIA or external party (e.g. judicial action) requesting survey services at a BIA Agency Office or directly to BLM. Events that would trigger an inquiry for survey services may include: litigation, trespass situations, need for homesites, conveyances, and resource development.

The inquiry is reviewed to assure it pertains to Trust land and the interested party would benefit from survey services. Often, this review involves a field investigation of the property in question by BIA Agency or Tribal staff. If that review affirms the need, BIA or the Tribe accumulates supporting information and either develops a listing of survey needs that become informal requests to send to BLM or decides to pursue non-BLM survey services. For example, non-BLM sources are used when a survey is needed for Rights of Way, construction purposes, or when a need is identified which has been determined to have such a short time frame that BLM cannot respond in a timely manner. If resolution of the need can be performed by a non-BLM source, the request is contracted to a private surveyor or performed by BIA Agency or Tribal staff.

If the survey service is to be performed by BLM, the BIA Agency Office forwards the inquiry to the BIA Regional Office. Tribes contact BLM directly if the Tribe will be providing the funding. The BIA Regional Office then prioritizes the list of needs identified by all the BIA Agencies within the Region and determines if funding is available. This is usually performed once or twice a year. After the prioritization and funding has been completed, the BIA Regional Office sends a listing of informal requests to BLM for review.

There are currently 12 Cadastral Survey Project or Field Offices, each established to serve a specific Tribe or BIA office. These offices are managed by BLM Cadastral Surveyors and may be staffed by BLM, BIA, and Tribal employees. Because of the close working relationship between these offices and BIA and the Tribes, initial inquiries for Cadastral Survey services are generally prioritized here. In Regions with Project Offices, funds for surveys may have been allocated under a local agreement with BIA, and in some cases, a Tribe provides funds, people and other resources.

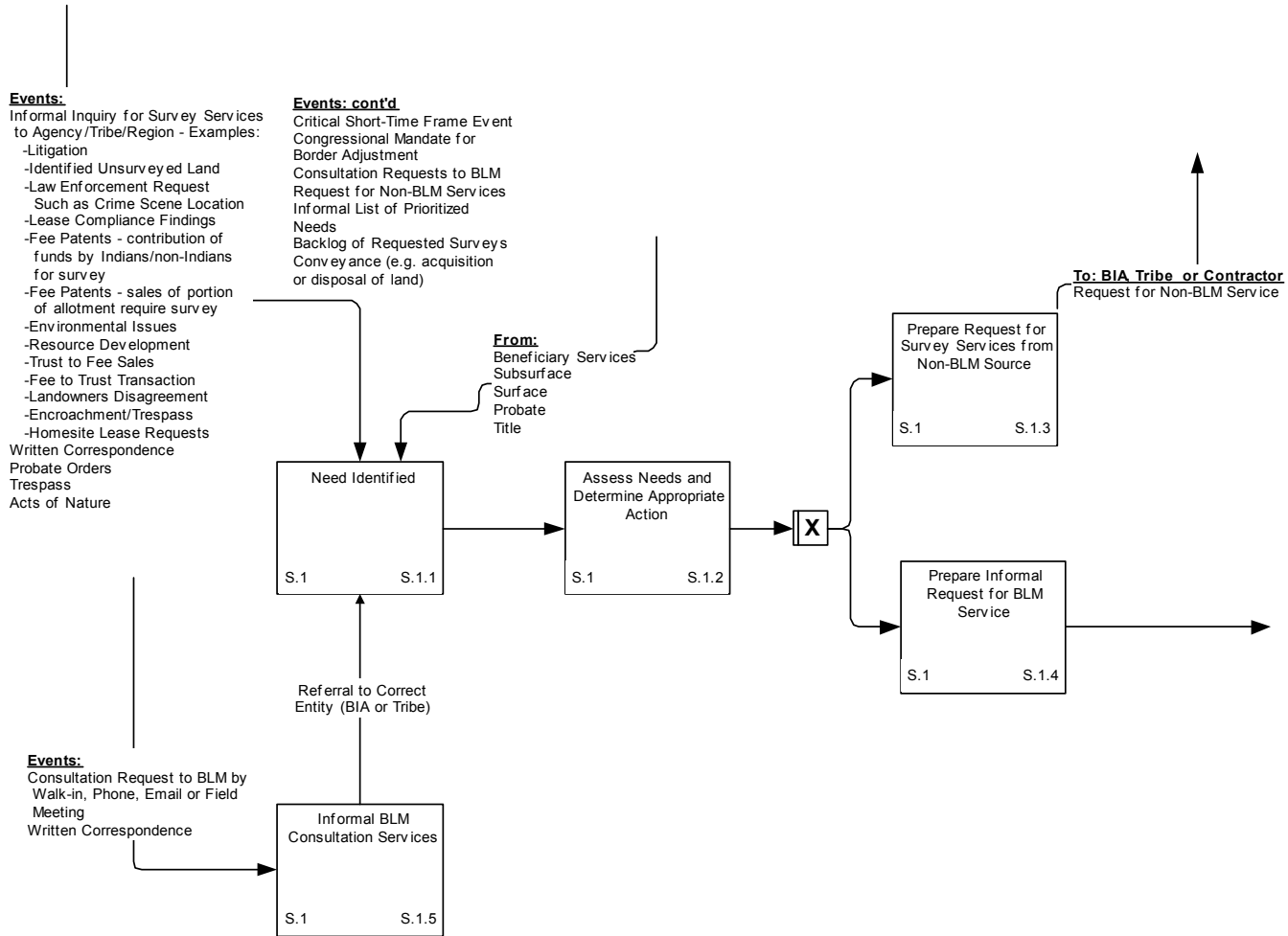


Figure 4.3.8- 2 Receive and Evaluate Inquiry IDEF (3)



Beneficiary Involvement for Receive & Evaluate Inquiry

Beneficiary involvement in this process step involves making the initial inquiry as well as supplying information to define the issue.

Receive & Evaluate Inquiry Significant Notes

- a) There is no standardized way to evaluate and process needs. Every region and agency has different methods to identify survey needs. Different staff within BIA are employed to process the needs once identified, such as Rights Protection Specialists, Natural Resource Officers, and Realty Officers. Other federal entities, Tribes, and private individuals identify needs.
- b) Private companies are working with Tribes to conduct surveys of Trust lands and allotments without the involvement of BIA or BLM. Information and records are not being shared once the survey is completed. Some Tribes feel this information is proprietary.
- c) Where Project Offices exist, the Cadastral Survey services process is condensed due to the close working relationships between the Tribes, BIA and BLM staff. Project Offices are funded by long-term agreements between BIA and BLM; however, these arrangements allow low-priority projects to take precedence over higher-priority needs of some regions.
- d) Some Title Status Reports contain inaccurate ownership information and legal descriptions not based on current surveys. Frequently, encumbrances such as Rights of Way are not consistently recorded. The same has been reported with Probate Orders.



Receive & Evaluate Inquiry Detail Description

Need Identified (S.1.1)

Starts with: Receive an inquiry or complaint, litigation, or congressional mandate.

Ends with: Determine that the need is valid.

An individual Indian landowner, Tribe, or BIA Agency representative will identify a situation in which a Trust asset may require a boundary determination. A survey service may be needed to resolve a trespass, to develop or protect a natural resource, to determine reservation boundaries for law enforcement purposes, or to provide a legal description or location for a homesite. An infrequent but significant activity results from congressional or legal actions or mandates that may require surveys. At this stage of the process, most inquiries are handled informally by BIA or the Tribes at Field Office locations and are evaluated on a case-by-case basis to determine if (1) the lands are Trust, (2) the individuals involved are Indian and entitled to a service, and (3) a survey or consultation service will contribute to the resolution of the problem. Often the individuals making the inquiry are not aware of the services available or how to acquire those services. The events that would trigger an inquiry for survey services include:

- a) Litigation
- b) Identified Unsurveyed Land
- c) Law Enforcement Request
- d) Lease Compliance Findings
- e) Fee Patents - contribution of funds by Indians/non-Indians for survey
- f) Fee Patents - sales of portion of allotment require survey
- g) Environmental Issues
- h) Resource Development (timber sales, short term leasing of resources)
- i) Trust to Fee Sales
- j) Fee to Trust Transaction (surveyed by private contractor)
- k) Landowners Disagreement
- l) Encroachment/Trespass (potential rights protection issue)
- m) Homesite Lease Requests in a Given Area

BLM State Offices and BLM/BIA Project Offices frequently work with Tribes and BIA Agencies to help them identify their needs and help determine the best solution. Resource development or lease compliance inspections may identify boundary related problems, which could require further field investigations by BIA Agency staff or BLM Project Office staff to determine the validity of the need.

Requirements for a survey needed to identify a “residential” or “homesite” for construction or mortgage purposes, or to fulfill congressional requirements, will generally not require Step S.1.1.

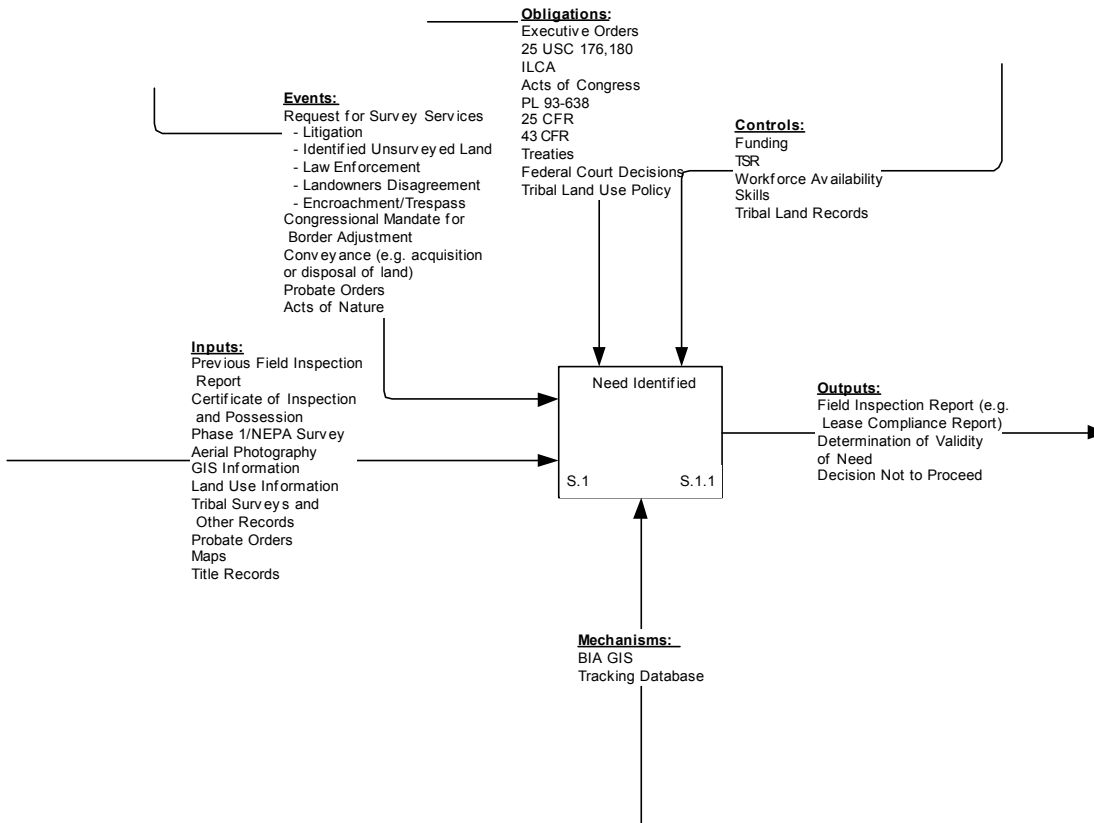


Figure 4.3.8- 3 Need Identified IDEF (0)



Assess Needs and Determine Appropriate Action (S.1.2)

Starts with: Research and/or possibly a field inspection that has validated the need.
Ends with: Document findings in response to the request from additional field inspections.

This step can be a very short timeframe event and may be handled at the moment the inquiry is received in a BIA or Tribal office. However, in some cases this process could be extensive involving Natural Resource Specialists, Rights Protection Specialists, Realty Staff, attorneys and individuals familiar with the area of concern and the associated issue. Additional research is often performed and a field inspection of the subject area may be required. BLM staff is often involved with BIA or the Tribe in analyzing the need and determining the most appropriate action. At times, consultation with DOI Solicitors and/or private attorneys is necessary to clarify the situation. After analysis, if BIA or the Tribe decides to move the request forward, a decision is made to either request a Cadastral Survey service from BLM or to pursue a survey service from a non-BLM source.

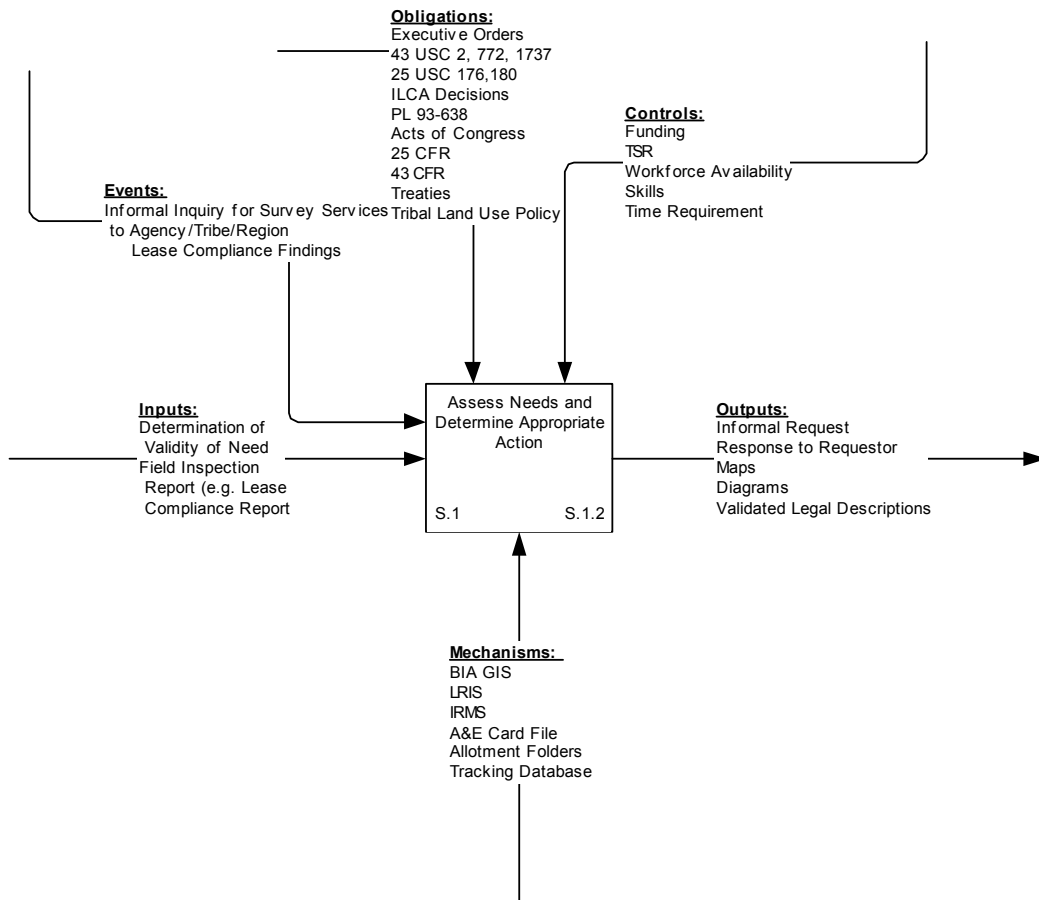


Figure 4.3.8- 4 Assess Needs and Determine Appropriate Action IDEF (0)



Prepare Request for Survey Services from Non-BLM Source (S.1.3)

Starts with: Decide to request survey from non-BLM source and/or BIA keeps the work in-house.
Ends with: Complete a signed survey plat with corners identified or an administrative survey without signature or monuments.

Surveys from non-BLM sources include those acquired via contracts between state licensed private surveyors and BIA, individuals or a Tribe; those performed by BIA or Tribal survey staff; or those acquired from third party sources who contracted the survey in concert with another activity such as the development of timber resources or acquisition of Rights of Way. Individuals may acquire this type of survey at their expense without informing BIA or the Tribe even though the survey may affect Trust interests. These surveys may or may not establish boundary monuments or recordable documents such as plats (the drawing which represents the particular area included in a survey) and are often considered by the requestor to be administrative in nature. The requestor often assumes that these administrative surveys do not need to be completed under normal state or federal survey authorities. This type of survey is often used to identify allotment boundaries for fencing or residential construction. Generally, there is no professional oversight provided for these surveys by BIA or the Tribes. These surveys have been used to create new legal descriptions of Trust lands and in trust-to-fee and trust-to-trust conveyances. BLM is not involved with these surveys.

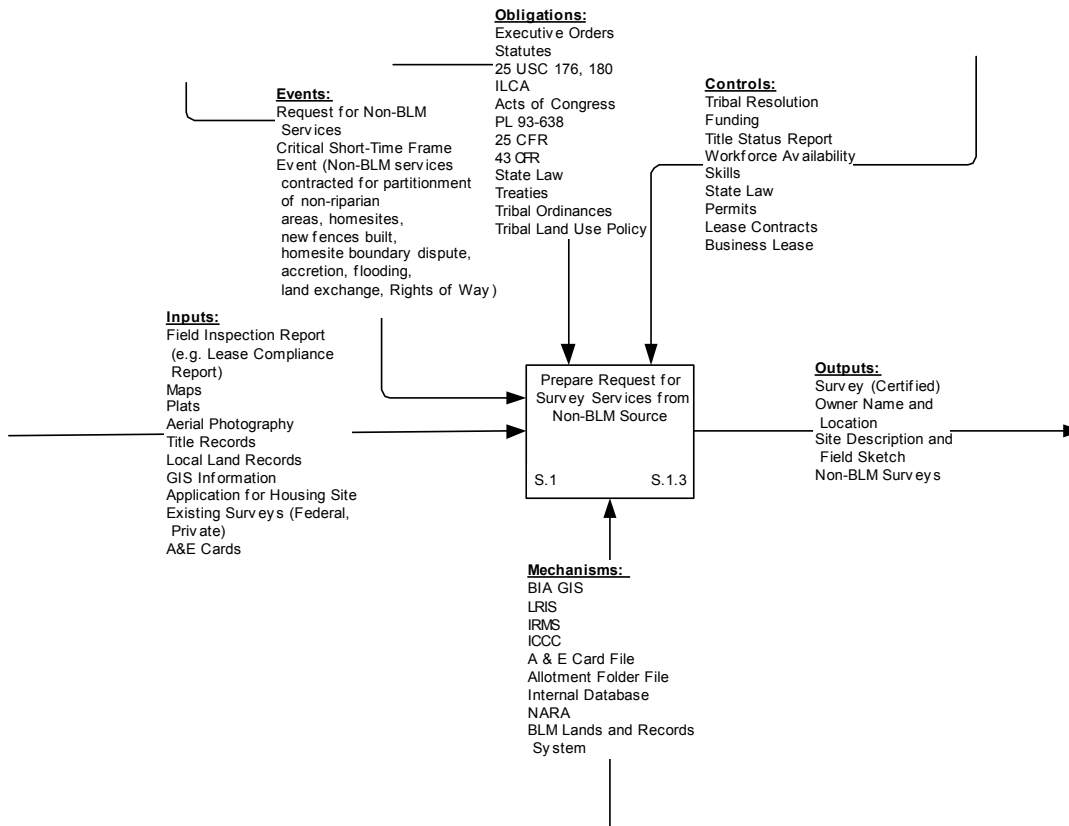


Figure 4.3.8- 5 Prepare Request for Survey Services from Non-BLM Source IDEF (0)



Prepare Information Request for BLM Service (S.1.4)

Starts with: Notification to the BIA Regional Office from a BIA Agency or Tribe that a Cadastral Survey is needed.

Ends with: Begin the BIA Regional Office or BLM process.

A listing of needs for BLM Cadastral Survey services is developed, generally at the BIA Agency or Tribal level. The informal list will include both newly identified needs and older requests for surveys that may have been backlogged for many years. BIA Agencies or the Tribes forward the list of informal requests, and on occasion a formal request, to the BIA Regional Office for prioritization and funding. In Regions with Cadastral Survey Project or Field Offices, the requests may be prioritized at the BIA Agency or Field Office level in consultation with BLM. In BIA Regions with Project Offices, funds for surveys may have been agreed to under a local agreement with BIA and priorities are developed between the Project Office, BIA Agency, and the Tribe. In some areas, especially BIA Agencies or Field Offices without Superintendents or Field Representatives, the informal priority setting process is accomplished at the Regional level and may involve individual requestors or Tribes.

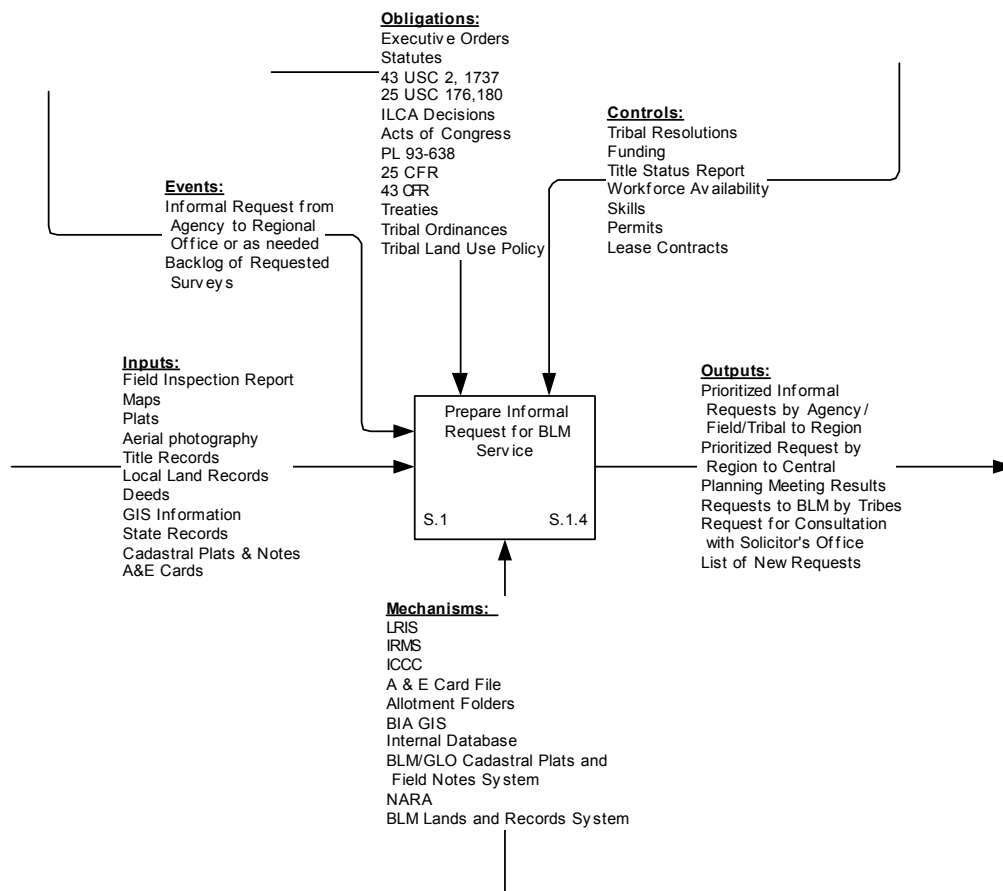


Figure 4.3.8- 6 Prepare Informal Request for BLM Service IDEF (0)



Informal BLM Consultation Services (S.1.5)

Starts with: Send an informal request for information to BLM staff.

Ends with: Provide information or a referral to BIA or the Tribe for survey services.

Questions regarding survey, ownership, or land records are addressed to BLM Cadastral staff working in State, Field, or Project Offices. Individuals, Tribal staff, attorneys, or other specialists working in Indian Country will initiate an inquiry, which may be simple to complete or may require considerable time and resources. If the inquiry cannot be adequately addressed in a minimum amount of time by BLM staff, the inquiry is referred to BIA or the Tribe for further consideration. These informal consultations may end with a Cadastral Survey, a non-BLM survey, or other consultation service, but usually end with the inquiry being addressed.

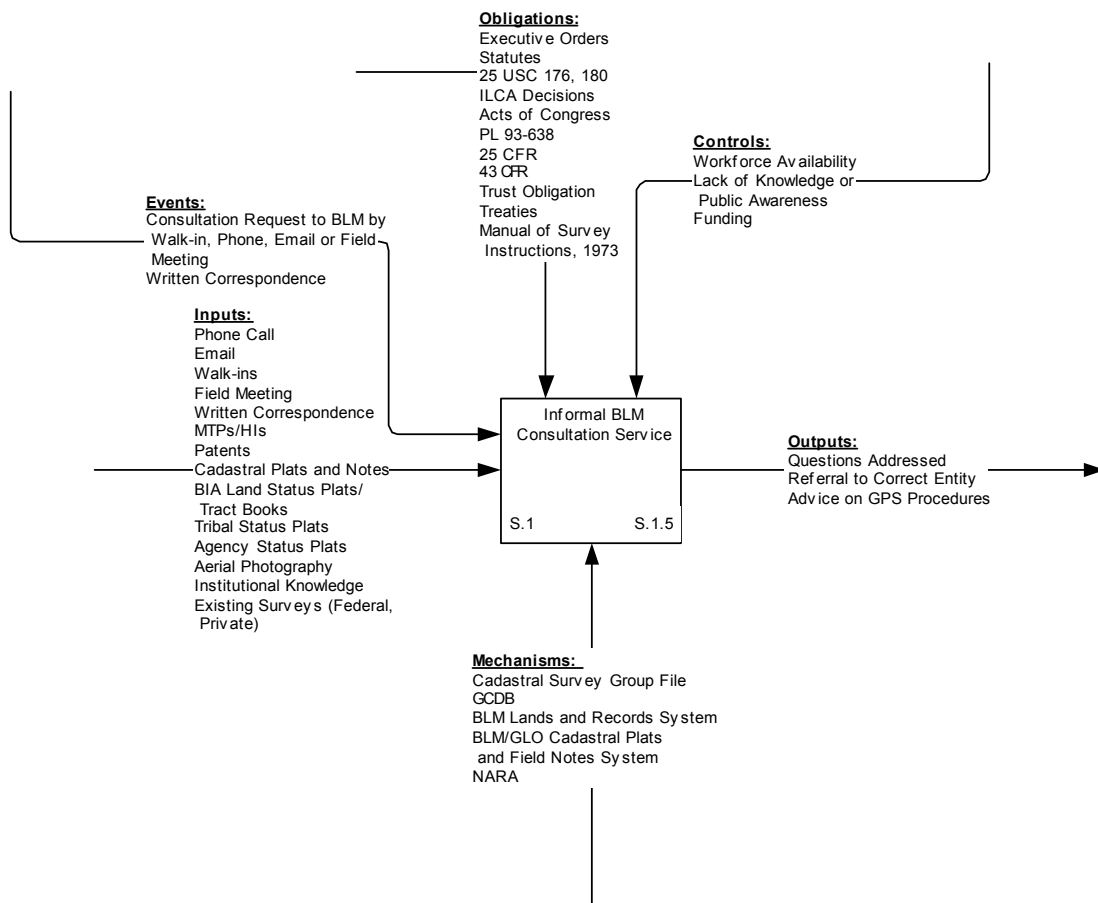


Figure 4.3.8- 7 Informal BLM Consultation Services IDEF (0)



4.3.8.3 Process, Evaluate & Prioritize Request (S.2)

Starts with: Receive an informal request for BLM survey services from BIA or a Tribe.

Ends with: Deliver to BIA or a Tribe a BLM report on the proposed solution; a decision; and a formal request to proceed.

An informal list of needs for a survey or survey service is submitted to BLM from BIA or a Tribe. BLM performs a preliminary analysis, and then describes and costs a proposed solution. BIA or the Tribe, in consultation with the requestor, considers funding availability and importance of the need and then assigns a priority (or puts the informal request on hold if a low priority). BIA or the Tribe then resubmits to BLM a formal request for a survey with the priority and funding identified. At any time during this process, BLM may also identify to BIA future survey projects for consideration that BLM found in the course of other Cadastral Surveys or the identification of important unsurveyed lands.

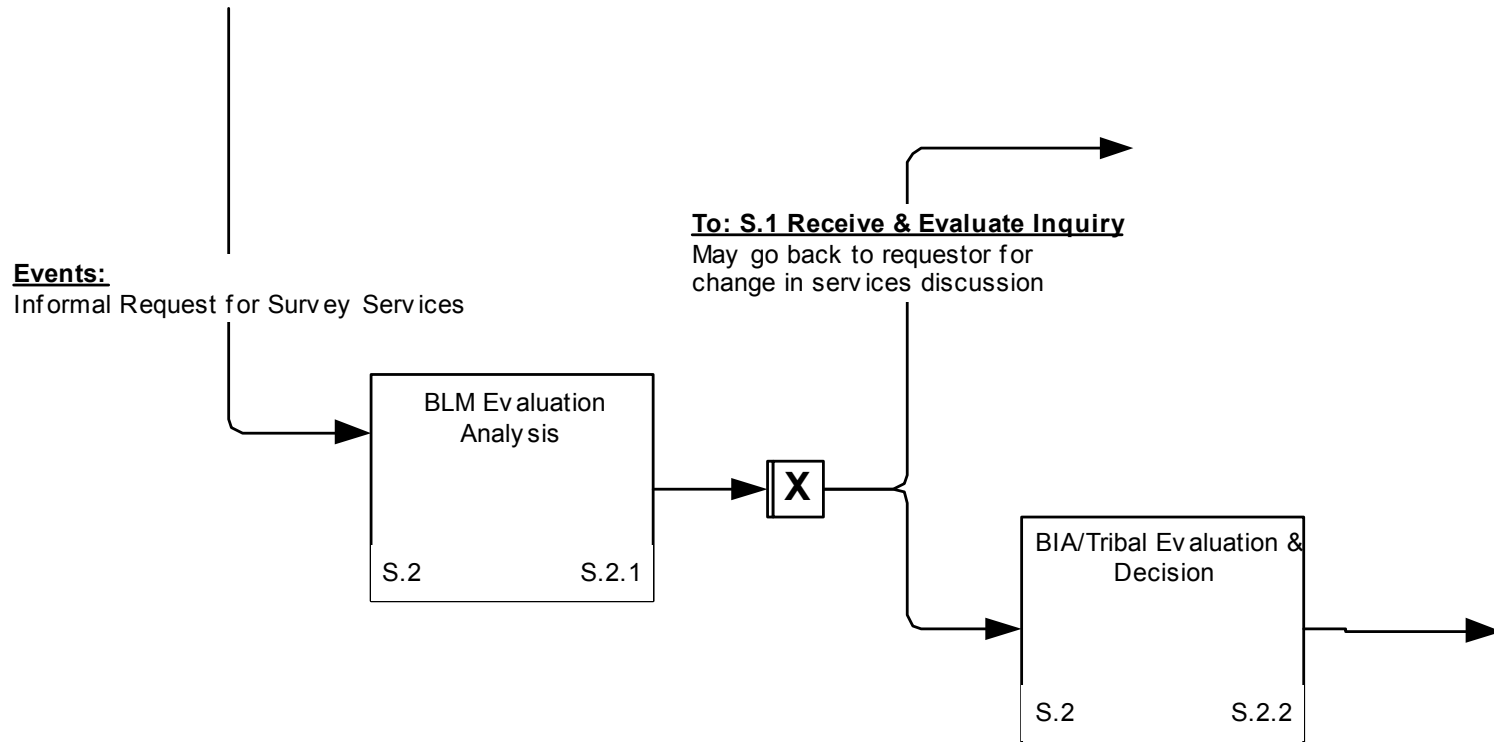


Figure 4.3.8- 8 Process, Evaluate & Prioritize Request IDEF (3)



Beneficiary Involvement for Process, Evaluate & Prioritize Request

Beneficiary involvement in this process step involves providing additional information when necessary.

Process, Evaluate & Prioritize Request Significant Notes

- a) Funds are being allocated each fiscal year by BIA, but are not being distributed to BLM offices for six to eight months after being identified.



Process, Evaluate & Prioritize Request Detail Description

BLM Evaluation Analysis (S.2.1)

Starts with: Receive an informal request from BIA or a Tribe for a survey service.

Ends with: Determine that a survey or other service is the best solution with a cost estimate and proposed solution.

An initial list of needs for surveys is prioritized by the BIA Regional Office and, through consultation with the BLM State Office, a rough estimate of the cost and scope of the survey project or service is developed. This is an iterative process between BLM and BIA. Through discussions between BLM and BIA a determination is made on whether or not BLM can resolve the request with an official Cadastral Survey or some other service. Upon completion, the estimate and proposed solution are returned to BIA or the Tribe for consideration.

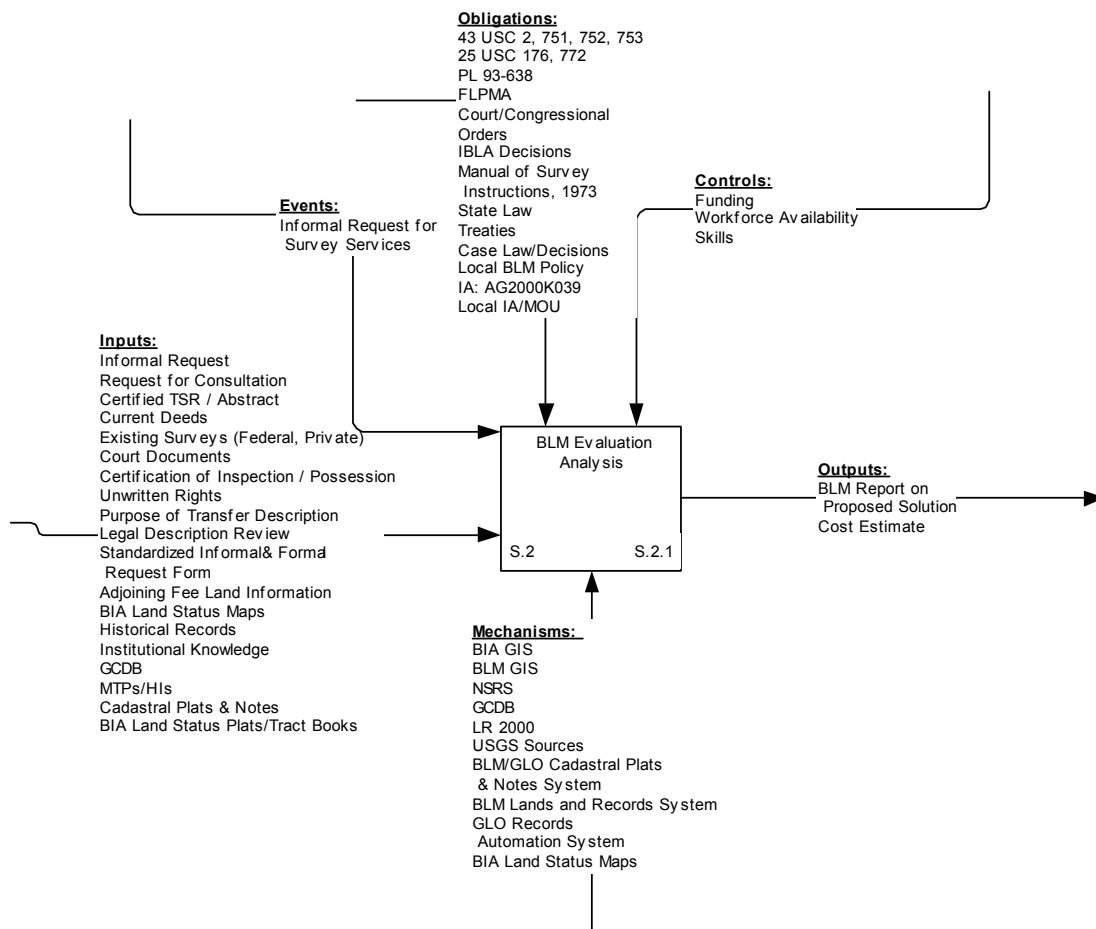


Figure 4.3.8- 9 BLM Evaluation Analysis IDEF (0)



BIA or Tribal Evaluation and Decision (S.2.2)

Starts with: BLM working with the BIA Regional Office/BIA Agency/Tribes to evaluate proposed solution.

Ends with: Make a decision on whether or not to proceed; develop a formal request.

The BIA Regional Office, BIA Agency or Tribe evaluates the proposed solution, including a cost estimate, provided by BLM and makes a decision on whether or not to proceed. If the decision is affirmative, BIA or the Tribe will notify BLM of the decision with funding identified. Generally, the surveys will be accomplished on a reimbursable basis by BLM from appropriations made available to BIA. Some Tribes and BIA offices will place funds for surveys or services on deposit to be directly charged by BLM. If the decision is not to proceed, the BIA Regional Office may place the need in a backlog position for future reconsideration or may advise the requestor that the need will not be addressed.

Funds for Cadastral Surveys are provided by the BIA Headquarters Office to the BLM under a national Interagency Agreement (IA) negotiated by both bureaus. This IA distributes funds to the various BLM State Offices based on an emphasis for BLM/BIA Project Offices and prior year commitments. The BIA Regional Offices then identify specific projects not handled by Project Offices for funding.

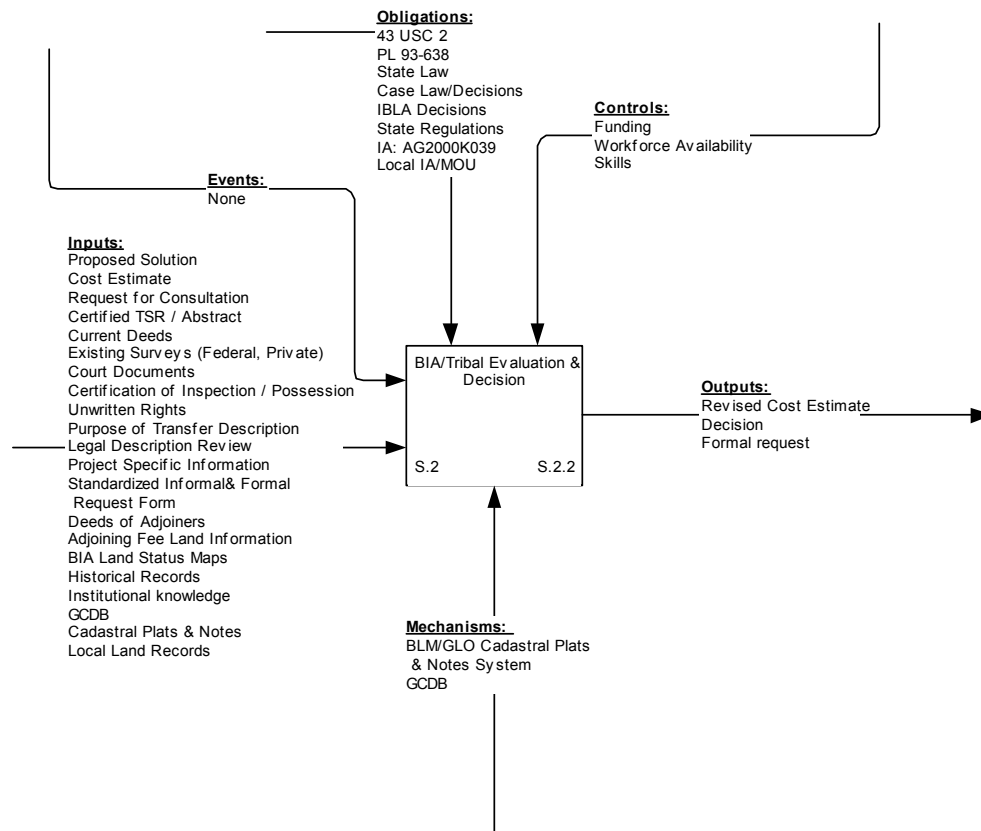


Figure 4.3.8- 10 BIA/Tribal Evaluation & Decision IDEF (0)



4.3.8.4 Prepare Cadastral Survey Service Response (S.3)

Starts with: Receive a prioritized formal request from BIA or a Tribe.

Ends with: Deliver a written report, Cadastral Survey or other service to BIA or a Tribe.

BLM receives the prioritized formal request from BIA or a Tribe and assigns the work internally, frequently entering it in a queue. BLM initially accumulates needed additional data or requirements from the requestor and pursues a research and analysis sequence. If a Cadastral Survey is not required, one or more other BLM survey-related service may be requested. Services other than a Cadastral Survey provided by BLM to BIA and beneficiaries may include:

- a) Geodetic Control
- b) Expert Witness Service
- c) Maps and Diagrams
- d) Geographic Coordinate Data Base (GCDB)
- e) Boundary Investigation Reports
- f) Record Investigation
- g) Review or Writing of Legal Descriptions
- h) River Movement Studies
- i) Response to Request for Technical Advice
- j) Workshops (Training)

If a Cadastral Survey is required, the request is given to BLM for completion.



Events:

- Problem Solvable by Survey or Other Service
- Congressional Inquiry
- FOIA Requests
- Alaskan Allotments (original survey)
- Fee to Trust Applications

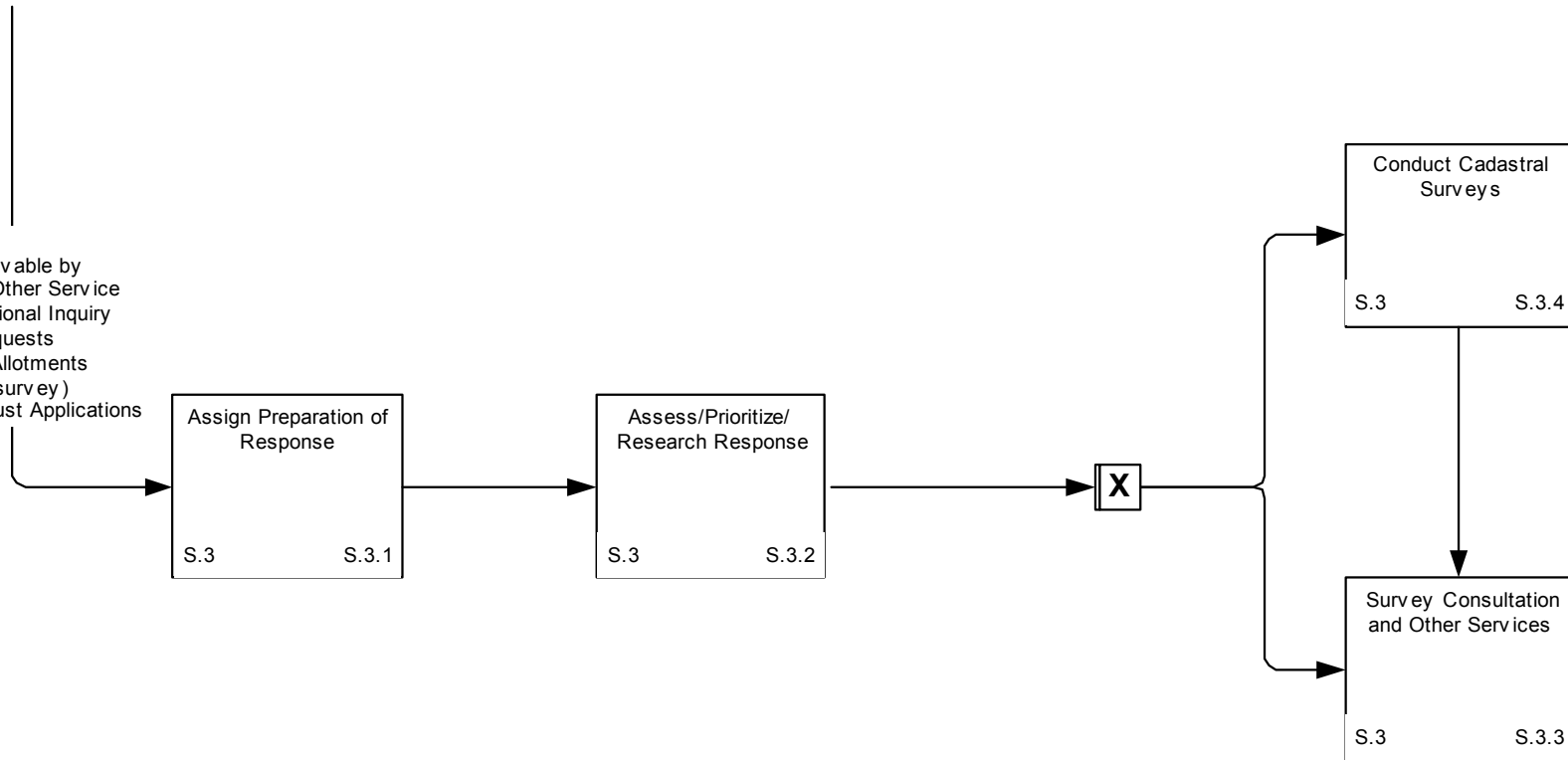


Figure 4.3.8- 11 Prepare Cadastral Survey Service Response IDEF (3)



Beneficiary Involvement for Prepare Cadastral Survey Service Response

Beneficiary involvement in this process step involves giving testimony, acting as witnesses, providing information as needed, and possibly providing funding or other resources.

Prepare Cadastral Survey Service Response Significant Notes

- a) There is a breakdown in the indexing and recordkeeping of Cadastral Surveys. The Cadastral Survey Index (CS) is not being maintained or kept current by BLM.
- b) Scheduling of surveys is constrained by weather, terrain, and logistical planning. Surveys cannot be performed during the winter in the northern states: difficult terrain may cause the length of the survey to be much longer than expected, and in Alaska, equipment and aircraft support have to be scheduled far in advance.
- c) It is important to be sensitive to the cultural importance of the land, sacred sites, and archeological sites while conducting surveys.



Prepare Cadastral Survey Service Response Detail Description

Assign Preparation of Response (S.3.1)

Starts with: Receive a prioritized, formal request from BIA or a Tribe.

Ends with: Assign the request to an individual in BLM to conduct more in-depth research.

The Cadastral Survey staff within a BLM State Office will receive the prioritized formal requests from BIA or a Tribe and will assign an individual to begin the research required to prepare the response.

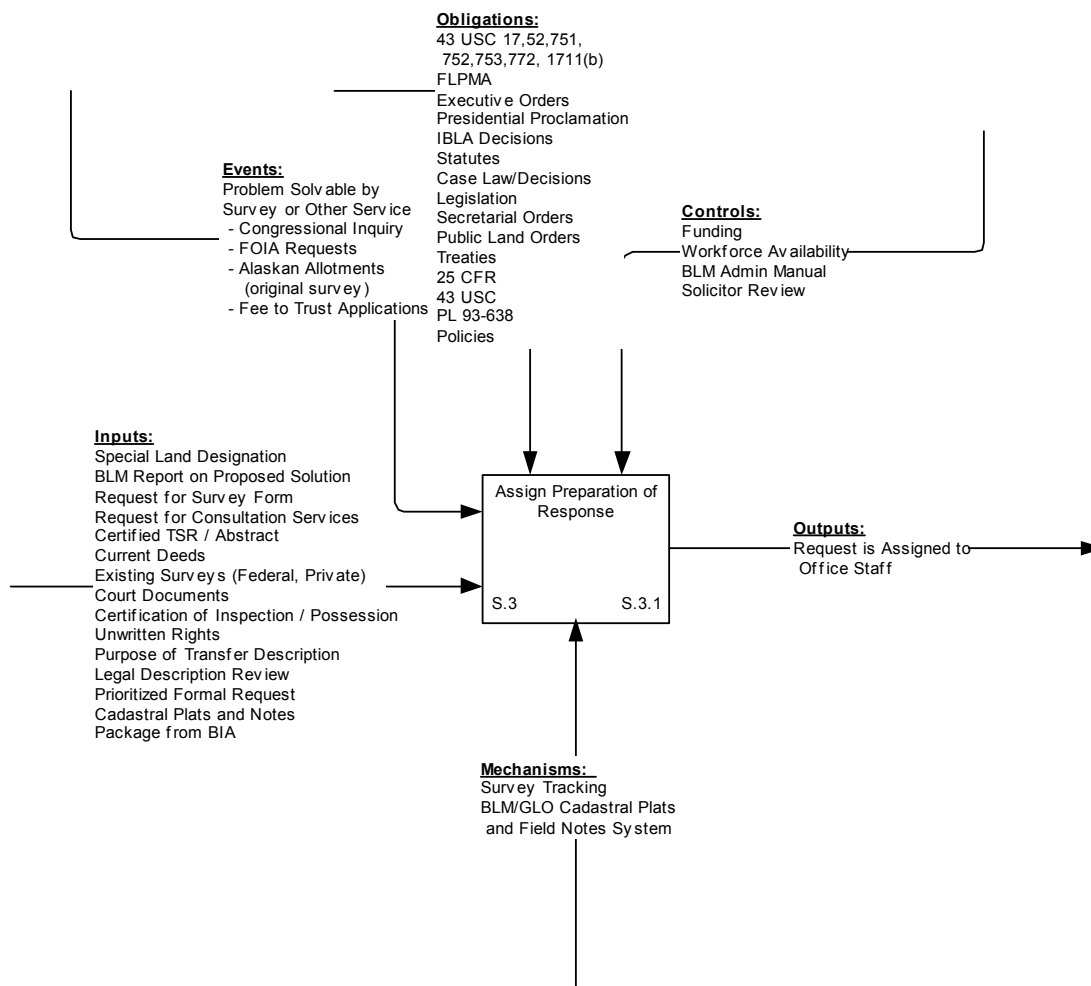


Figure 4.3.8- 12 Assign Preparation of Response IDEF (0)



Assess, Prioritize, and Research Response (S.3.2)

Starts with: Assigned BLM Cadastral Survey staff to research the response to the formal request.

Ends with: Determine the scope of the request and a decision by the requestor to proceed.

The BLM Cadastral Survey staff conducts in-depth research of historical, survey, land and ownership records, federal and state court decisions, OHA/IBLA decisions, statutes, and regulations that are necessary to perform a Cadastral Survey or provide another service. If the findings of the research determine that a significantly different cost estimate or approach is needed from what was initially proposed, then the requestor will be notified for a final decision. As required, fund authorization documents and Interagency Agreements (IA) may be prepared by BLM and BIA for the project or projects.

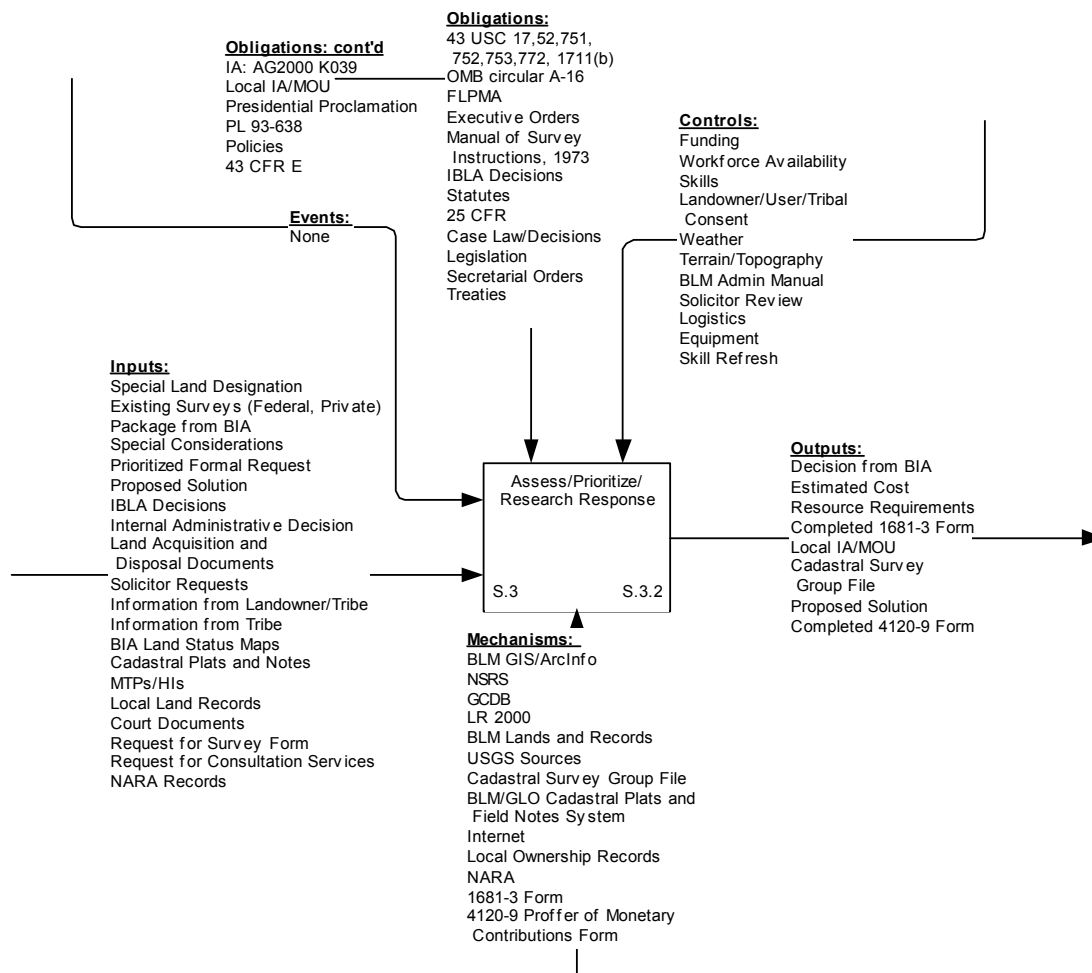


Figure 4.3.8- 13 Assess, Prioritize, and Research Response IDEF (0)



Survey Consultation and Other Services (S.3.3)

Starts with: Identify the service that can be provided by BLM for BIA and beneficiaries.
 Ends with: Deliver the service or product to the requestor.

BLM provides consultation and other services to BIA and beneficiaries to resolve specific needs. These products or services may be in addition to a Cadastral Survey but frequently stand alone. The results of one of these services or products could indicate a need for a subsequent Cadastral Survey. The deliverable products or services may include one or more of the following examples:

- a) Geodetic Control
- b) Expert Witness Service
- c) Maps and Diagrams
- d) Geographic Coordinate Data Base (GCDB)
- e) Boundary Investigation Reports
- f) Record Investigation
- g) Review or Writing of Legal Descriptions
- h) River Movement Studies
- i) Response to Request for Technical Advice
- j) Workshops (Training)

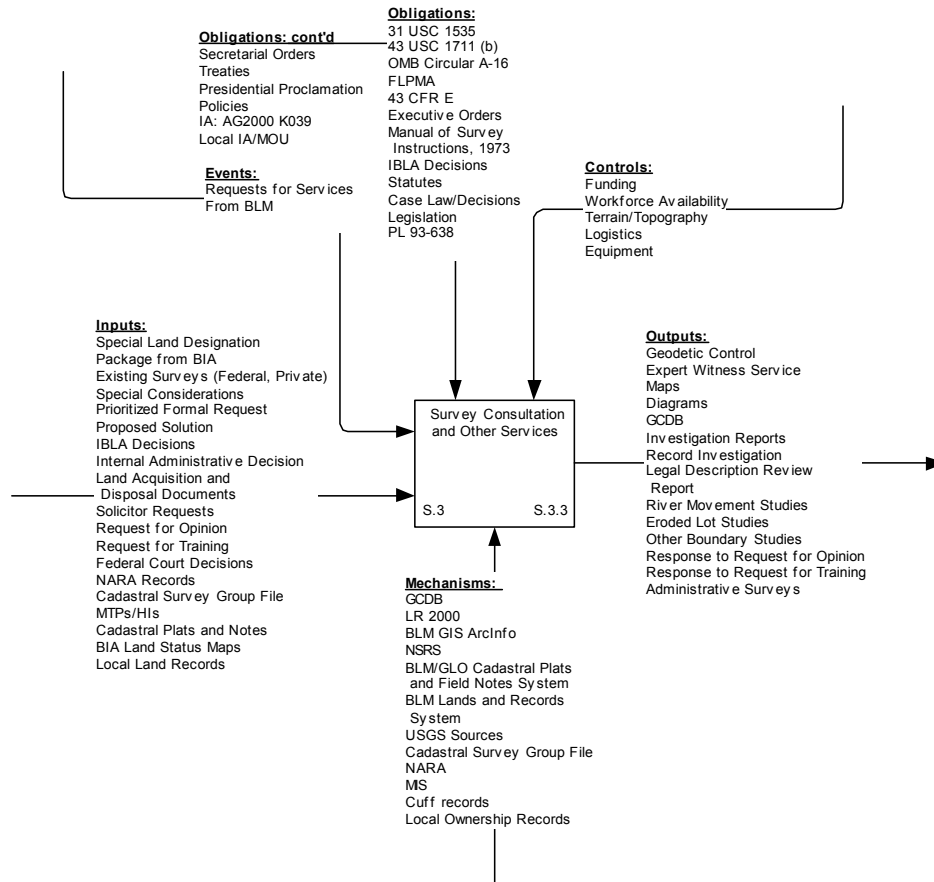


Figure 4.3.8- 14 Survey Consultations and Other Services IDEF (0)



Conduct Cadastral Survey (S.3.4)

Starts with: Confirmed decision that an official Cadastral Survey is needed.

Ends with: Approved and officially filed Cadastral Survey with notice of the filing usually published in the Federal Register.

Note: Because of the complexity of the various types of Cadastral Surveys performed by BLM and recent modeling and reengineering efforts that have been completed, a decision was made at the beginning of the As-Is Model study not to focus on this aspect of the process. Documents already exist that model this activity.

This activity is typically executed by BLM staff operating from BLM State Offices and/or BLM/BIA Project or Field Offices dedicated to performing work on behalf of BIA or a Tribe. The Cadastral Survey process is complex and may generate numerous electronic and paper records and files. Some of the records are legal instruments required by law in order to perform a survey and must be retained as permanent records of the United States. In some instances, during the course of completing the survey, information is created that moves to process step **S.3.3** for completion of other products; e.g. maps, diagrams, GCDB data.

The Cadastral Survey process may be performed in a matter of weeks or it may require years to complete depending upon the magnitude, complexity, legal issues, and availability of funding for the project. BIA, BLM and Tribes have partnered in about 12 locations to establish Cadastral Survey Project or Field Offices dedicated to performing surveys for extended periods for a Tribe or geographic region. In some locations, BIA or the Tribes may contribute facilities, resources and staff for the survey activity as outlined in Interagency Agreements (IAs) or Memorandums of Understanding (MOUs).

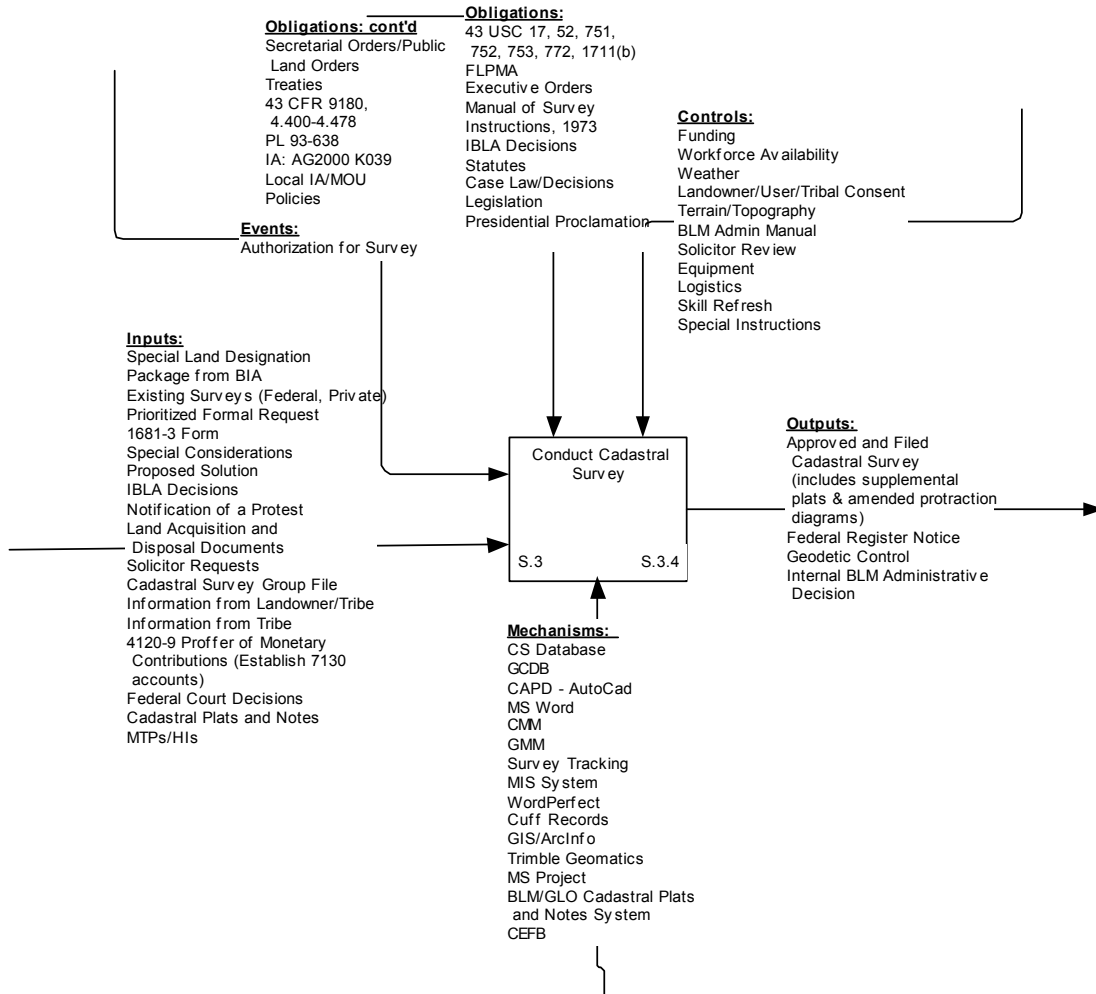


Figure 4.3.8- 15 Conduct Cadastral Survey IDEF (0)



4.3.8.5 Close Out (S.4)

Starts with: Officially filed Cadastral Survey, consultation or other service delivered, or non-BLM survey completed.

Ends with: Updated land title and administrative records and/or take action to resolve the initial need.

BLM interfaces with requestors to discuss the outcomes of information to interested parties and updates records, such as Public Land Statistics and those of the Land Office of the U.S. If a Cadastral Survey has been completed, copies of the final records are typically distributed to the requestor and various BIA and Tribal entities as needed. The original official records of plats and field notes are permanently filed in BLM State Offices. Original duplicate copies are filed with the BLM's Eastern States Office on behalf of the Secretary, DOI. Products of a survey consultation or other service, such as written reports or digital products are distributed to the requestor. BIA and BLM land title record systems are updated and annual reports are developed and distributed.

Tribes and some BIA offices have contracted for surveys from non-BLM sources and the disposition of the results of these surveys varies greatly. In addition, there is no central repository for the records, if they were produced. Some Tribes have acquired surveys or related services from private contractors or their own staff. Tribes often hold that these records are proprietary and may not make them available to BIA or other record keeping entities.

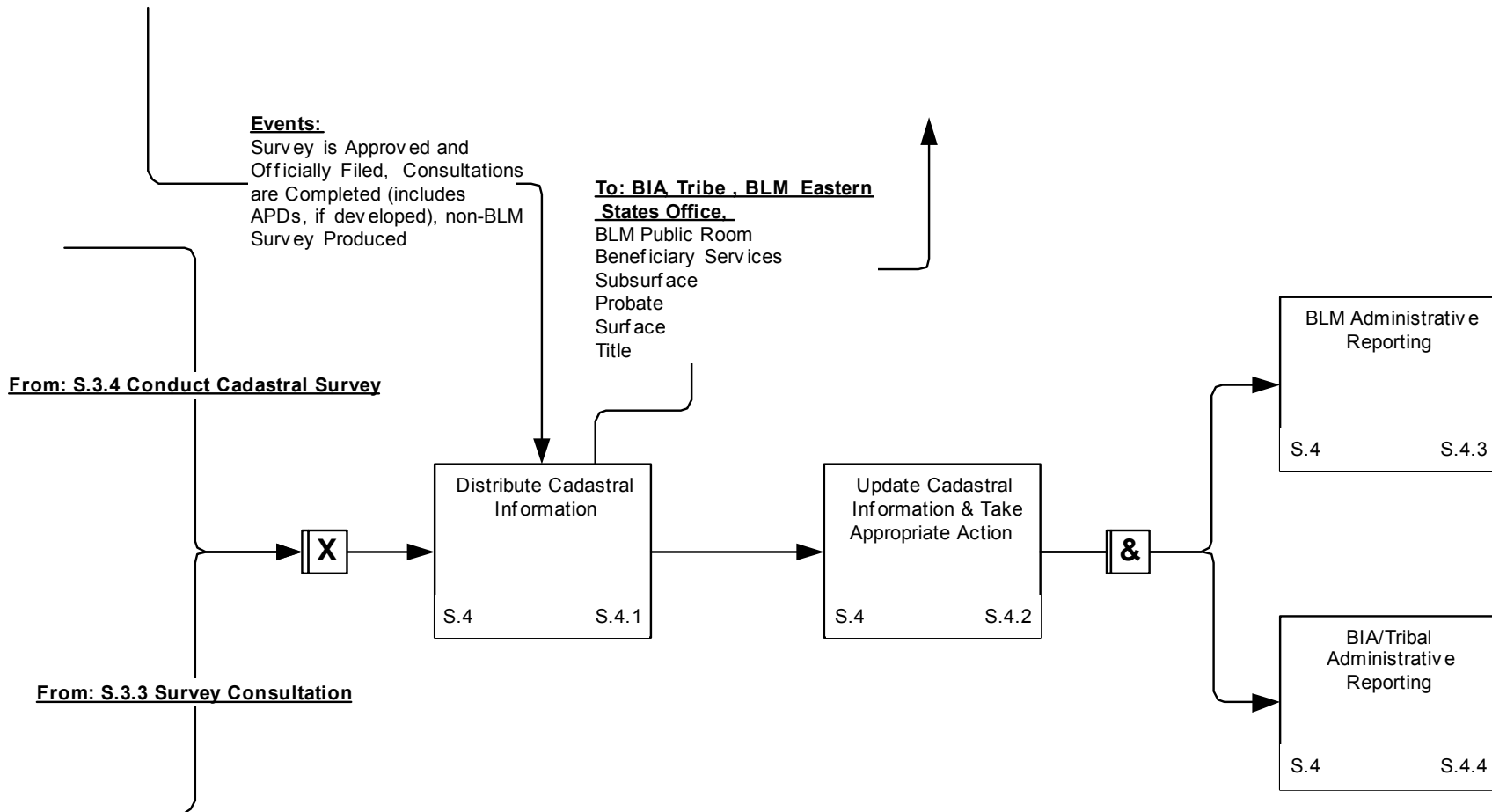


Figure 4.3.8- 16 Close Out IDEF (3)



Beneficiary Involvement for Close Out

Beneficiary involvement in this process step involves Tribal updates of their records. Additionally, beneficiaries may be notified of and involved in the final resolution of the action taken to resolve the original need

Close Out Significant Notes

- a) There is no standardized distribution list or agreement for distributing survey and consultation results. Each BLM State Office determines what is the best method and format, and who receives the results. However, all BLM State Offices are required to send a duplicate original to the BLM Eastern States Office to keep on file as the Secretary's copy.
- b) Automated systems are not being kept current and current survey results (changes in legal descriptions and acreages) may not be recorded on TSRs.



Close Out Detail Description

Distribute Cadastral Information (S.4.1)

Starts with: Officially file Cadastral Survey, complete non-BLM survey or complete survey consultation.

Ends with: Deliver information to identified distribution locations as well as the requestor/beneficiary.

Tribes and some BIA offices have contracted for surveys from non-BLM sources and the disposition of the results of the surveys varies greatly. In addition, there is no central repository for the records, if they were produced. Some Tribes have acquired surveys or related services from private contractors or their own staff. Tribes often hold that these records are proprietary and may not make them available to BIA or other record keeping entities.

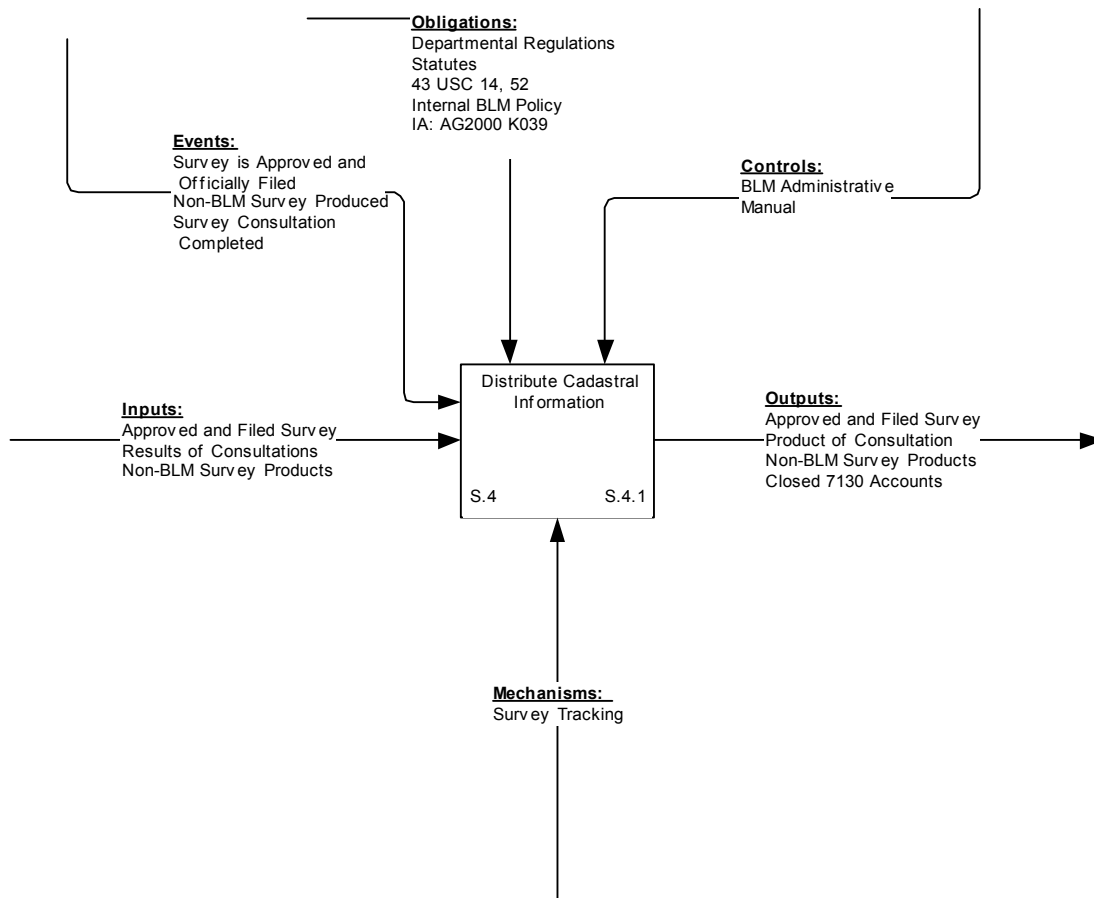


Figure 4.3.8- 17 Distribute Cadastral Information IDEF (0)



Update Cadastral Info and Take Appropriate Action (S.4.2)

Starts with: Receive final records in the BIA Regional Office, LTRO/TSO/TSC, BIA Agency, Tribes and BLM State Offices.

Ends with: Updated records in all offices and action taken as necessary.

Record keeping offices include the BIA Regional and Agency Offices, BIA Land Title and Records Offices, BIA Title Servicing Centers and BLM State Office Public Rooms. These offices will update various manual and automated record systems reflecting changes in legal descriptions and acreages. Timing or content of updates often are not synchronized. BIA and the Tribes usually file survey results with a project file but do not maintain separate survey record files. The process ends when appropriate action has been taken to resolve the need of the requestor. The action may be an administrative remedy or may involve litigation.

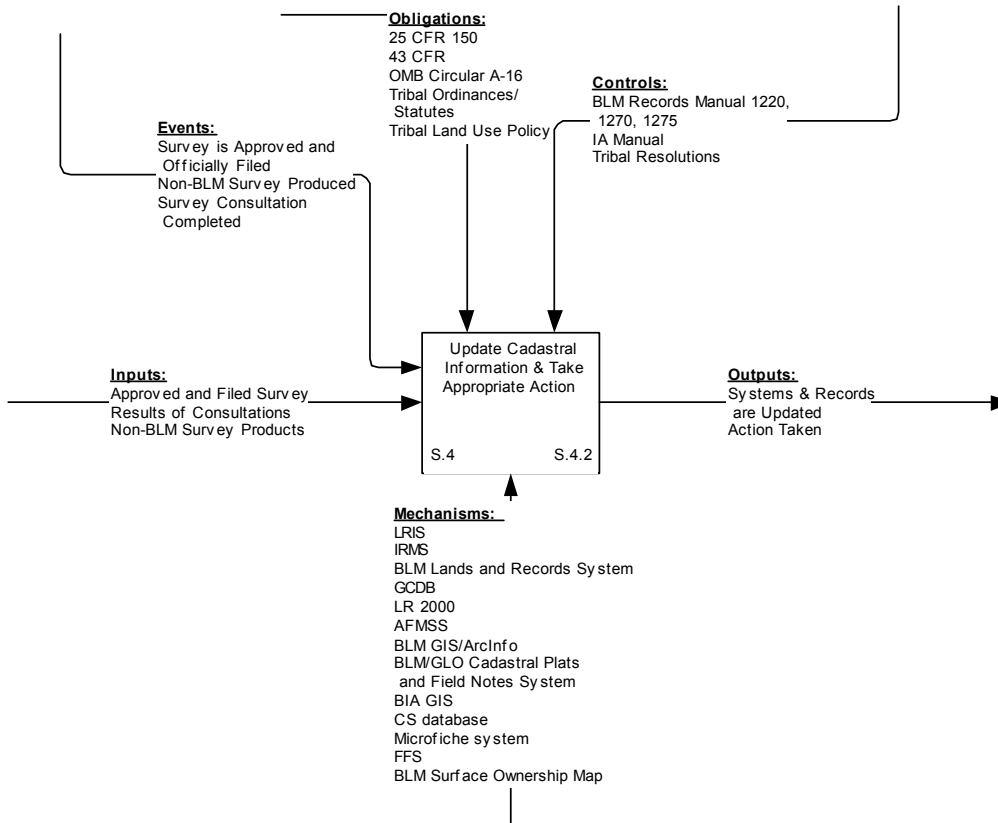


Figure 4.3.8- 18 Update Cadastral Information & Take Appropriate Action IDEF (0)



BLM Administrative Reporting (S.4.3)

Starts with: Identify reporting requirements.
Ends with: Complete reports.

Annual reporting requirements are usually performed at the end of the fiscal year. Reports include an annual report to BIA on accomplishments; final reports of expenditures and accomplishments tracked in BLM's Management Information System (MIS); GPRA reports; and published annual Public Land Statistics.

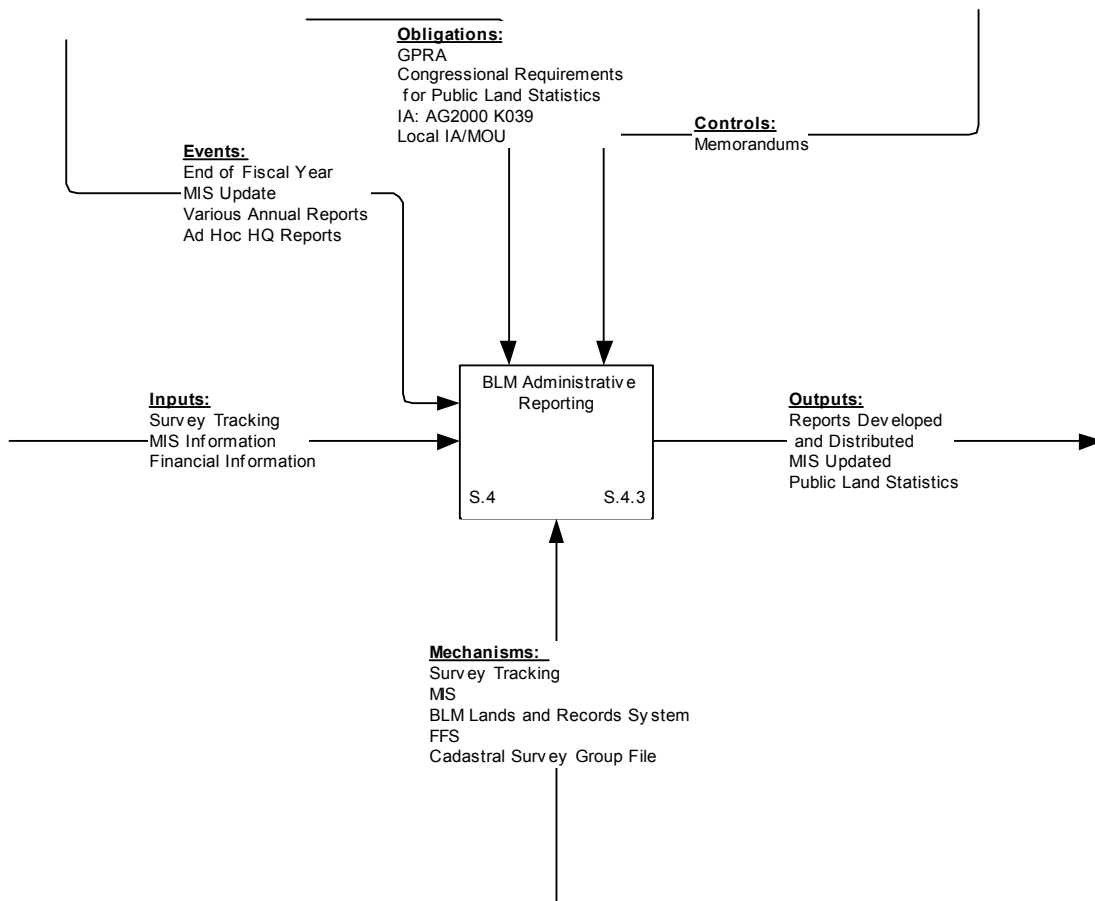


Figure 4.3.8- 19 BLM Administrative Reporting IDEF (0)



BIA or Tribal Administrative Reporting (S.4.4)

Starts with: Identify reporting requirements.
Ends with: Complete reports.

Annual reporting requirements are usually performed at the end of the fiscal year. The BIA Annual Reports of Indian land activity to Tribal Offices and the BIA Central Office are developed and delivered.

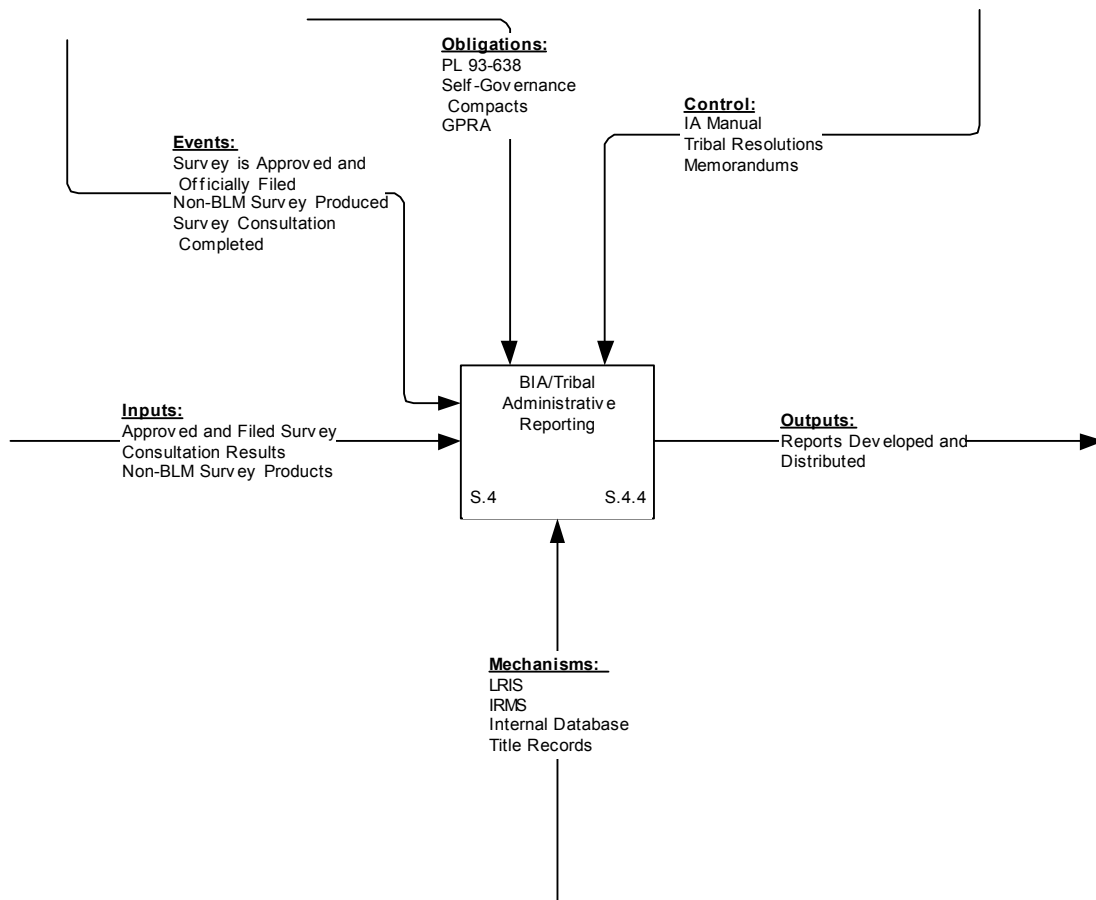


Figure 4.3.8- 20 BIA/Tribal Administrative Reporting IDEF (0)



4.3.8.6 Cadastral Survey Services Variance Tables by Region

The following variances are based upon the information provided by the participants at the work sessions. In many cases, participants did not represent all functional areas of the Indian Trust. Therefore, the variances are not necessarily all-inclusive and may represent the participants' perceptions of the functions being performed.

Table 4.3.8- 1 Great Plains Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BIA Rosebud Agency Office	Role	BIA Agencies have in-house survey staff – Survey Technicians.	Procedural	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.	Medium	Medium
BLM Wyoming State Office	Inputs	Nebraska Natural Resource Commission, status maps.	Procedural	Minimal, another source of information and maps.	Low	Minor
BIA Regional Office	Mechanism	MAD – Management Accounting and Distribution database is used.	System	Region- and Agency-specific computer systems may decrease the effort required to complete local Trust activities. These systems, however, may increase the complexity of, and investment in, information support as compared to common mechanisms.	High	Medium
Turtle Mountain Band of Chippewa Indians	Role	Have in-house Tribal survey staff.	Tribal Policy Tribal Land	According to 25 USC 176, surveys on Indian lands will	Medium	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
			Code	be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.		

Table 4.3.8- 2 Midwest Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BIA Regional Office	Organization	The USDA provides rural development loans that may require surveys.	Federal Law	Workload issue, may not be enough manpower to complete all the cases.	Low	Medium
BIA Regional Office	Roles	Archeologist identifies survey needs as part of required compliance activities. Antiquities Act	Federal Law	Another method of identifying needs.	Medium	Major
BIA Great Lakes Agency Office	Roles	The Forestry Manager does Field Inspections which may identify the need.	Procedural	Another method of identifying needs.	Medium	Minor
BLM Eastern States Office	Outputs	Notice of pending filing of approved surveys is published.	Procedural	Before filing the survey, it is published in local papers and in the Post Office.	Medium	Minor
BLM Eastern States Office	Mechanism	Private archives of survey records are used.	Procedural	Another source of records research.	Low	Minor
Mille Lacs Band of Chippewa Indian	Role	Director of Real Estate updates GIS and manual files from the private surveyors. Also, have an	Procedural	None.	Low	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		automated spreadsheet to track leases.				
BLM Eastern States Office	Mechanism	A unique automated Group Survey Tracking database is used.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BIA Great Lakes Agency Office	Mechanism	Using Great Lakes Agency Database (GLAD), a version of MAD used by this Agency for ownership and tract valuation.	System	Region- and Agency-specific computer systems may decrease the effort required to complete local Trust activities. These systems, however, may increase the complexity of, and investment in, information support as compared to common mechanisms.	High	Medium
BLM Eastern States Office	Mechanism	A unique tracking system for the Secretary's Copy of all survey records produced by BLM is used.	System	In-house system developed and funded within one specific office. This is the only BLM office required to perform this service.	Medium	Minor
BIA Regional Office	Comments	The Regional Office is developing an automated tracking system for land/realty and survey actions.	System	In-house system developed and funded within one specific office, not shared by other BIA offices.	Medium	Minor
BIA Regional Office	Inputs	Housing and land assignments, agreement between the Tribe and an individual, for housing sites.	Tribal Law	These agreements may provide information necessary for the survey.	Low	Medium
Mille Lacs Band of Chippewa Indian	Events	Mille Lacs contracts with private surveyors to provide services at	Tribal Policy	According to 25 USC 176, surveys on Indian lands will	Medium	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		the rate of \$90,000 per year as a result of increased activity for housing and casinos.		be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.		
Mille Lacs Band of Chippewa Indian	Roles	Tribal Realty Officer and Land Use Planner work with BLM to answer Tribal members questions. Also involved from the Tribe include: Tribal Chief, Commissioner of Natural Resources, and Tribal Attorneys, who may initiate the need, evaluate the need and provide approval.	Tribal Procedures	BLM is brought into the process earlier and reduces the amount of time needed for the process.	Medium	Medium

Table 4.3.8- 3 Eastern Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Eastern Region	Organization	HUD requires surveys for housing sites, leases, and financial aid.	Federal Law	Workload issue, not enough manpower to complete all the cases.	Low	Medium
BIA Regional Office	Obligations	Special Acts of Congress and with states for fee to trust transactions. These are agreements made prior to the formation of the US between	Federal Law	Surveyors must use these as considerations when surveying colonial states.	High	Major



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		Tribes and state governments.				
BLM Eastern States Office	Outputs	Notice of pending filing of approved surveys is published.	Procedural	Before filing the survey, it is published in local papers and in the Post Office.	Medium	Minor
BLM Eastern States Office	Mechanism	Private archives of survey records are used in research.	Procedural	Another source of records research.	Low	Minor
BIA Agency Office LTRO	Role	Superintendent must authorize updates before systems are changed. LTRO Manager must approve updates to LRIS.	Procedural	Adds extra time and could delay updates.	Medium	Medium
BLM Eastern States Office	Mechanism	A unique automated Group Survey Tracking database is used.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BLM Eastern States Office	Mechanism	A unique tracking system for the Secretary's Copy of all survey records produced by BLM is used.	System	In-house system developed and funded within one specific office. This is the only BLM office required to perform this service.	Medium	Minor
BIA Regional Office	Comments	The Regional Office is developing an automated tracking system for land/realty and survey actions.	System	In-house system developed and funded within one specific office, not shared by other BIA offices.	Medium	Minor
BIA Regional Office	Inputs	Possessionary Agreements, agreement between the Tribe and an individual, for housing sites.	Tribal Law	These agreements may provide information necessary for the survey.	Low	Medium



Table 4.3.8- 4 Alaska Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Alaska Region BLM Alaska State Office	Process Description Output	<p>BIA and BLM staff hold regular meetings to develop the Alaska Strategic Management Plan which identifies and prioritizes multi-year survey needs as required by various federal laws pertaining to Alaska. Essentially all surveys are conducted for original conveyance of lands to individual allottees or to native villages or corporations. Funds for these surveys are provided by appropriations to BLM or on a reimbursable basis by BIA. Much of the field work associated with Cadastral Surveys is accomplished under authority of PL 93-638 by native corporations and Tribal consortiums with oversight by BLM.</p> <p>1906 Native Allotment Act Alaskan Native Claims Settlement Act of 1971 Alaska Natural Interest Lands Conservation Act 1926 Alaska Native Townsite Act Point Hope Act 1998 Viet Nam Veterans Allotment Act</p>	Federal Law Procedural	Both BIA and BLM have a Strategic Plan from which to work in order to develop plans on achieving survey needs. BLM issues original conveyance to the allottee and BIA must process and record the Trust transaction.	High	Major



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Alaska Region	Organization	BIA must request the Veterans Administration verify the status of veterans in order for them to receive a new allotment. 1998 Viet Nam Veterans Allotment Act	Federal Law	Adds complexity to the process as another Federal Agency is involved.	Medium	Major
Realty Service Providers Tribal Realty Offices	Comments	Realty Service Providers is a generic term used in Alaska to indicate realty services provided by the BIA Region, Field Office, single Tribe under PL 93-638, or consortium (i.e. Tanana Chiefs Council). There are 30 Tribal Realty Offices that perform this work. PL 93-638	Federal Law Procedural	Organizations other than BIA are providing realty services resulting in a duplication of realty services.	High	Major
Tribes Realty Service Providers	Organization	Tribes and RSP's are performing field work associated with Cadastral Surveys under contract. Tribes often subcontract to private survey contractors. PL 93-638 Tribal Initiative	Federal Law	The survey may not be completed and may not be performed to the standard. There could be a possible conflict of interest.	High	Major
BLM Cadastral Staff	Role	BLM provides oversight for contracts. This oversight includes contract preparation, negotiation, monitoring and inspection, and product review. BLM must also approve the final product. PL 93-638	Federal Law Procedural	A major workload that impacts BLM's ability to provide other services.	High	Major
BLM Alaska State Office	Inputs	In the case of original Alaskan	Federal Law	The lengthy application	High	Major



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		Native allotments, BLM Conveyance staff adjudicates the allotment application, surveys the allotment, and issues the patent conferring ownership. They distribute information to the appropriate offices handling allotment title information. 1906 Native Allotment Act Alaskan Native Claims Settlement Act of 1971 Alaska Natural Interest Lands Conservation Act 1926 Alaska Native Townsite Act Point Hope Act 1998 Viet Nam Veterans Allotment Act		processing time being taken results in situations where some allottees are deceased without receiving their allotments. Constrained by funding, weather, the Alaska Strategic Management Plan priorities, and logistics required to plan for the activities. Information must be distributed in order for title to be placed and recorded into Trust.		
BLM Conveyance Management Staff	Process Description	The request for the survey comes from within BLM through the Conveyance Management organization and those requests becomes input into the Alaska Strategic Management Plan. 1906 Native Allotment Act Alaskan Native Claims Settlement Act of 1971 Alaska Natural Interest Lands Conservation Act 1926 Alaska Native Townsite Act Point Hope Act 1998 Viet Nam Veterans	Federal Law	None.	Low	Major



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		Allotment Act				
BIA Agency Office	Organization	The Alaska Title Service Center provides records for research purposes when identifying information associated with an allotment.	Procedural	Duplicate files are used for research instead of the official LTRO records.	Medium	Minor
BIA Agency Office Tribe	Events	The Agency Offices receive requests for surveys to partition allotment via Gift Deed Application, Trust to fee sales, estate splits.	Procedural	Used to prevent fractionation of land. Too many requests coming in than can currently be handled by BIA or BLM due to funding constraints.	High	Minor
BIA Agency Office	Events	There is a backlog of need to survey aliquot part described allotments.	Procedural	Beneficiaries are unable to locate their allotment boundaries due to funding constraints.	Medium	Minor
Private Contractors	Organization	Private contractors provide support such as aircraft services, living quarters, food services, equipment, etc.	Procedural	Some surveys cannot be completed without this support. Aircraft support must be provided by OAS operators, only.	High	Medium
Alaska Region	Control	BIA Alaska has its own unique realty manual – BIA Alaska Realty Manual.	Procedural	Have different procedures than the realty manuals in the lower 48.	Medium	Medium
Other	Role	Applicant allottee has the opportunity to review and approve the location of the survey prior to conveyance.	Procedural	The allottee may not approve the survey and the process has to start over.	High	Major
BLM Alaska State Office	Comment	Alaska BLM has a unique internal policy on distribution on approved but not officially filed	Procedural	A departure from the procedures identifying an “official survey” in the	Low	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		records. The survey is not considered “officially filed” until the Master Title Plat has been updated. Surveys are not posted in the Federal Register and are considered filed when electronic records are updated.		lower 48. The business impact of this is unknown at this time.		
BLM Alaska State Office	Role	BLM has hired a contractor (ex-BLM) to review surveys.	Procedural	Workload issue, BLM staff is unable to complete all the reviews.	Medium	Minor
BLM Alaska State Office	Mechanism	Alaska Land Information System (ALIS) is used for tracking the status of allotments and is used by BLM, BIA, Tribes, and the Title Service Center.	System	Unique system to Alaska tracking conveyance and ownership information, no business impact to the process.	Medium	Minor
BIA Regional Office	Mechanism	The Regional Office has an Access database that describes and tracks allotments conveyed but never monumented.	System	A stand-alone system developed by the region that required money and effort to develop and maintain.	Low	Minor
Nome Agency Office	Mechanism	The Tribe has an Access database that tracks information pertinent to PL 93-638 contracts for surveys.	System	A stand-alone system developed by the Tribe that required money and effort to develop and maintain.	Low	Minor
BLM Alaska State Office	Mechanism	Informix database of Cadastral information is used.	System	Unique system developed by BLM Alaska, in use in this region only.	Low	Minor
BIA Field Office	Mechanism	Unique Allotment Tracking System used by BIA.	System	Stand-alone system developed in-house by BIA.	Low	Minor
Tribal	Mechanism	Unique Allotment Tracking System used by Tribes.	System	Stand-alone systems developed in-house by	Low	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				various Tribes.		
Alaska Title Service Center	Mechanism	Access database used for tracking allotment and related information.	System	Stand-alone system developed in-house by the Alaska Title Service Center.	Low	Minor
BLM Alaska State Office	Mechanism	Scanning system for survey records.	System	Digitized survey records making for faster record retrieval and distribution.	Medium	Minor
Tribes	Input	Tribes authorize survey work under Tribal Resolution and may perform the survey work.	Tribal Law	Permission to proceed with survey is needed before work begins.	Medium	Major

Table 4.3.8- 5 Northwest Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Tribes	Organization	Other federal entities, such as National Parks Service, National Forest Service, US Fish and Wildlife may provide funds and assistance to Tribes for land acquisitions and surveys. Endangered Species Act	Federal Law	Other federal entities are involved in the process to provide for environmental protection.	Medium	Major
BIA Regional Office	Events	There is an existing need to survey pre-1966 Trespass cases, 200 exist but only 1-2 a year can be resolved. 2415 Claims	Federal Law	Workload issue, not enough manpower to complete all the cases.	Low	Medium
BIA Regional Office	Events	There are 200-300 HUD housing	Federal Law	Workload issue, not enough	Low	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		sites needing survey, based on the HUD Residential Plan.		manpower to complete all the cases.		
Yakama Nation	Process Description	The Yakama Model is a GIS system built on Cadastral data which gives the Tribe the ability to integrate existing information for realty, Wapato Irrigation Project (WIP), Indian Health Service, emergency services, transportation data, Rights-of-Way data, leases, farm plans, allotment data, etc. into a single consolidated view of land ownership and use. The Project Office, working with the Tribe, updates digital data for GIS applications. See work session template for more in-depth information.	Procedural	Benefits of the model include improving Tribal sovereignty by giving them control over their assets and resources. It has allowed the Tribe to make pro-active management decisions based on real data not supposition. One of the issues with this model is availability of original landownership and use records. Without these records, this model would be hard to recreate.	High	Major
Tribes BIA Agency Offices BLM Project Offices	Process Description	When BIA is funding a Project Office or funds are contributed by Tribes, the BIA Regional Office is not involved in identifying the needs.	Procedural	Project Offices create a streamlined process that reduces the time to move through the process.	High	Medium
BIA Regional Office	Comment	There is an inconsistency within the region on funding different types of survey needs, i.e. allotments for some Tribes are being funded by BIA and others are required to provide their own	Procedural	Some survey needs are never addressed, as the Tribes cannot afford them.	Low	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		funds.				
BIA Agency Office Tribe	Roles	BIA and Tribal GIS staff work together to assess needs and prioritize survey requirements.	Procedural	Streamlines the process by reducing the time necessary to assess and prioritize.	Medium	Medium
BLM Oregon State Office	Events	BLM is receiving requests from non-Indian adjoiners (fee landowners) and Tribes to survey Trust lands.	Procedural	BIA is not involved in the process and funds are contributed to BLM by requestors. BLM does not have the manpower to complete surveys for non-Indian landowners.	Medium	Medium
BLM Oregon State Office	Control	BLM staff is providing contract expertise to Tribes for private surveyors.	Procedural	Workload issue, the more assistance is given, the less time is available for survey work.	Low	Minor
BIA Regional Office	Control	Resource development plans (i.e. timber sales) impact the scheduling of when work can be completed.	Procedural	Allows better planning for resource development.	Low	Minor
BLM Oregon State Office BLM Idaho State Office	Mechanism	Unique automated Survey Tracking databases are used.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BLM Oregon State Office BIA Regional Office	Process Location	90% of the funding for Cadastral Survey in the Northwest Region is earmarked for Project Offices leaving only 10% of funds available for remainder of region.	Procedural	BIA Region is only able to address the highest priorities due to receiving 10% of the funds for survey. Project Offices may be addressing lower priority surveys across the region	High	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				due to this funding agreement.		
BLM Idaho State Office	Inputs	Records are missing from previous Indian Service surveys.	Procedural	The lack of records is affecting land ownership and Trust assets.	High	Major
BIA Regional Office	Comments	Flathead Reservation has not received survey services since being transferred from Rocky Mountain Region to Northwest Region without budget.	Procedural	The Reservation is in need of survey services but not receiving them until the budget issue is resolved.	High	Medium
BLM Idaho State Office	Role	BLM has hired a contractor (ex-BLM) to review surveys.	Procedural	Workload issue, BLM staff is unable to complete all the reviews.	Medium	Minor
BLM Oregon State Office	Outputs	BLM notifies professional survey organizations of approved surveys through monthly newsletter publications.	Procedural	None.	Low	Minor
BLM Oregon State Office	Comments	Indian lands conveyances are not being noted on the Master Title Plats/Historical Indexes for the state of Washington.	Procedural	Public Land Records are not noting changes in Title on Indian lands.	High	Medium
BLM Idaho State Office BLM Oregon State Office	Comments	Distribution of plats and field notes is inconsistent and there are recording issues in the format of the records in BIA, Tribal, and local record offices.	Procedural State Law	Some offices may not be using complete records and other offices may not accept the records to be filed since they don't fit their format requirements.	High	Major
BLM Yakama Project Office Yakama Nation	Outputs	The Project Office, working with the Tribe, provides digital information to the Tribe to update their own GIS system.	Procedural	Facilitates the updating of electronic records.	Medium	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Tribe	Mechanism	Various Tribes have independently developed GIS systems for resource management. OMB Circular A-16	System	Developed and funded independently by each Tribe and data is not shared with anyone else.	Medium	Medium
BLM Oregon State Office	Mechanism	Scanning system for survey records is used.	System	Digitized survey records making for faster record retrieval and distribution.	Medium	Minor
BLM Oregon State Office	Mechanism	Official record of the survey is an electronic copy as opposed to the paper copy in the BLM/GLO Cadastral Plats and Notes System.	System	The records are available electronically.	Medium	Medium

Table 4.3.8- 6 Eastern Oklahoma Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BLM New Mexico State Office	Inputs	BLM is using Interior Board of Indian Appeals decisions as a basis for surveys.	Case Law	Historical decisions regarding Indian land that are used in present survey considerations.	High	Major
BLM Muskogee Cadastral Office	Organization	BLM is referring survey needs to the Ok. Society of Land Surveyors when the need can be met by private contractors.	Procedural	A need in Indian country is referred to the most appropriate entity for resolution.	Low	Minor
BIA Regional Office	Roles	Legal Instrument Examiners may initiate a consultation or provide assistance to BLM to resolve inquiries.	Procedural	None, another source to facilitate the consultation.	Low	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Eastern Oklahoma Region	Office	Per the Regional Office, Agencies hire licensed surveyors to provide survey services or BIA staff perform surveys.	Procedural	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.	High	Medium
BLM New Mexico State Office	Mechanism	A unique manual Survey Tracking database is used. The office is developing an automated Survey Tracking database for the future.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BIA Regional Office	Mechanism	The region keeps a survey file with all BLM surveys, in one place, not scattered among various case files.	Procedural	BLM/GLO survey records can be found in one place in the office.	Medium	Minor
BIA Regional Office	Events	Application for a permit to drill may require a survey.	Regulation	Applicant may hire a private surveyor or request a survey from BIA.	High	Major
BLM New Mexico State Office	Inputs	BLM receives correspondence from an oil company identifying problems with riparian boundary areas on future Indian leases.	Regulation Procedural	The lease cannot be issued until the boundary issues or legal descriptions are resolved.	High	Major
Eastern Oklahoma Region	Mechanism	This region is using TAAMS.	System	Region- and Agency-specific computer systems may decrease the effort required to complete local Trust activities. These systems, however, may increase the complexity of,	High	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				and investment in, information support as compared to common mechanisms.		
BIA Regional Office	Mechanism	Allotment schedules are used in Eastern Oklahoma Region, which are the base records from the original survey that started the A&E cards.	System	Provides another record system for research purposes.	Low	Minor
BLM New Mexico State Office	Mechanism	Columbus, a geodetic analysis tool is used by BLM.	System	Off-the-shelf software used to do geodetic survey analysis.	Low	Minor
BLM New Mexico State Office Tribes	Roles	Tribal attorneys are involved in consultation and lawsuits filed on behalf of the Tribe and request input from BLM.	Tribal Law	Workload issue, participating in these requests takes time away from other duties.	High	Major

Table 4.3.8- 7 Southern Plains Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BLM New Mexico State Office	Inputs	BLM is using Interior Board of Indian Appeals decisions as a basis for surveys.	Case Law	Historical decisions regarding Indian land that are used in present survey considerations.	High	Major
BLM Moore Field Office	Organization	BLM is referring survey needs to the Ok. Society of Land Surveyors when the need can be met by private contractors.	Procedural	A need in Indian country is referred to the most appropriate entity for resolution.	Low	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BIA Horton Field Office	Organization	The Farm Service Administration is providing historical information on land use for the Horton Field Office.	Procedural	Minimal, another source of information and maps.	Low	Minor
BIA Regional Office	Role	Legal Instrument Examiners may initiate a consultation or provide assistance to BLM to resolve inquiries.	Procedural	Minimal, another source to facilitate the consultation.	Low	Minor
Southern Plains Region	Office	Per the Regional Office, Agencies hire licensed surveyors to provide survey services or BIA staff perform surveys.	Procedural	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.	High	Medium
BIA Regional Office	Inputs	LRIS and TAAMS databases are used together as an automated land records system.	Procedural	Using these two systems together provides a more complete picture of land use and status information than as stand-alone systems. TSR's, which are often inaccurate, do not provide enough information.	High	Medium
BLM New Mexico State Office	Mechanism	A unique manual Survey Tracking database is used. The office is developing an automated Survey Tracking database for the future.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BIA Regional Office	Mechanism	The region keeps a survey file	Procedural	BLM/GLO survey records	Medium	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		with all BLM surveys, in one place, not scattered among various case files.		can be found in one place in the office.		
BIA Regional Office	Comments	Potential review of legal descriptions on fee-to-trust could be about 100/year.	Procedural	Workload issue, not enough manpower to complete all the cases.	High	Medium
Southern Plains Region	Comments	LTRO's are two-four years behind in updating automated systems with information, due to lack of staff.	Procedural	Causing problems and delays in Agencies regarding Estate Planning.	High	Medium
BIA Regional Office	Events	Application for a permit to drill may require a survey.	Regulation	Applicant may hire a private surveyor or request a survey from BIA.	High	Major
BLM New Mexico State Office	Inputs	BLM receives correspondence from an oil company identifying problems with riparian boundary areas on future Indian leases.	Regulation Procedural	The lease cannot be issued until the boundary issues or legal descriptions are resolved.	High	Major
BIA Regional Office	Mechanism	Allotment schedules are used in Southern Plains Region, which are the base record from the original survey that started the A&E cards.	System	Provides another record system for research purposes.	Low	Minor
BIA Regional Office	Mechanism	Using the Real Estate Module (REM) as a replacement for IRMS.	System	Region- and Agency-specific computer systems may decrease the effort required to complete local Trust activities. These systems, however, may increase the complexity of, and investment in, information support as	Medium	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				compared to common mechanisms.		
BIA Regional Office	Mechanism	Land Title Mapping System (LTMS) is used for generating land status maps.	System	In-house system developed and funded within one specific office, not shared by other BIA offices.	Medium	Medium
BLM New Mexico State Office	Mechanism	Columbus, a geodetic analysis tool is used by BLM.	System	Off-the-shelf software used to do geodetic survey analysis.	Low	Minor

Table 4.3.8- 8 Rocky Mountain Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BIA Rocky Boy's Agency Office	Events	ILCA is causing Trust to fee patents to be issued. ILCA	Federal Law	Will cause large increase in need for Cadastral Surveys.	High	Major
BLM Montana State Office Fort Peck Tribes	Process Description	BLM is negotiating PL 93-638 contract with Fort Peck Tribes to perform Cadastral Surveys. PL 93-638	Federal Law	The Tribes will be performing their own Cadastral Surveys by a BLM employee assigned to the Tribe, with BLM oversight.	Medium	Major
BIA Wind River Agency Office	Role	The Agency has a Soil Conservation Specialist to develop farm plans and in so doing, identifies needs.	Procedural	Another source for identifying needs.	Low	Minor
BLM Montana State Office	Outputs	BLM provides posting and marking of reservation	Procedural	Workload issue, but also provides visible boundaries	Medium	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		boundaries.		for Indian and non-Indian use.		
BIA Regional Office	Mechanism	National Resource Information System (NRIS) is a report of various natural resource related leases and is used in this region.	System	Minimal, automated reporting system.	Low	Minor
BIA Rocky Boy's Agency Office	Mechanism	Using NIOGEMS – an oil and gas computer mapping system that also contains lease information.	System	In-house system developed and funded within one specific office, not shared by other BIA offices.	Low	Minor
Rocky Mountain Region	Mechanism	This region is using TAAMS.	System	Region- and Agency-specific computer systems may decrease the effort required to complete local Trust activities. These systems, however, may increase the complexity of, and investment in, information support as compared to common mechanisms.	High	Medium
BLM Montana State Office	Mechanism	Using SURVSTAT – a survey tracking system.	System	In-house system developed and funded within one specific office, not shared by other BLM offices.	Low	Minor
Tribes	Organization	The Tribes hire private contract surveyors and in some instances, have in-house Tribal survey staff.	Tribal Policy Tribal Land Code	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal	Medium	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				land record system as official acts of the U.S.		

Table 4.3.8- 9 Navajo Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Navajo Region Navajo Nation BLM Arizona State Office	Organization	Navajo/Hopi Relocation Commission is acquiring lands for resettlement. BLM must survey the land. Navajo/Hopi Relocation Act	Federal Law	Workload issue, BLM staff is unable to complete all the surveys.	High	Major
Navajo Nation	Events	Unique events start the survey process in Navajo. These include: residential leases on allotted lands, homesite leases on Tribal lands, Base Realignment and Closing Commission, business development plans, and relinquishment of BIA administrative areas.	Federal Law Tribal Law Procedural	Workload issue, BLM staff is unable to complete all the surveys.	High	Major
Navajo Region	Process Description	BIA, BLM and the Tribe meet to identify priorities and develop a Five Year Plan for surveys. The majority of surveys for the Navajo Reservation are original surveys.	Procedural Tribal Policy	The meeting results in a streamlined priority setting process.	Medium	Minor
Navajo Nation BLM Navajo Project Office	Process Description	A BLM Project Office exists that works closely with the Navajo	Procedural Tribal	The Cadastral Survey Services process is	High	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		Tribe Lands Department to assess and prioritize survey needs. The Tribe provides resources (employees, housing) to assist in the Cadastral Surveys.	Resolutions	compressed into fewer activities resulting in shorter timeframe for evaluation and analysis. The availability of Tribal staff and their availability for travel are constraints to completing surveys.		
BLM Navajo Project Office Navajo Nation	Inputs	Tract Books maintained by BIA representing ownership status and allotment information are used. The Tribe maintains a separate copy.	Procedural	Provides another reference source. The two sets of books may not be kept in sync.	Low	Minor
Navajo Region	Comments	The Navajo Nation perceives that the majority of the BIA's focus is on allotted lands instead of Tribal Trust lands.	Procedural	Minimal.	Low	Medium
BLM Navajo Project Office Navajo Nation	Outputs	The Project Office, working with the Tribe, provides digital information to the Tribe to update their own GIS system.	Procedural	Facilitates the updating of electronic records.	Medium	Minor
Navajo Nation Navajo Region Southwest Region	Comment	There is a coordination issue between "Big Navajo" and the "Bands". Big Navajo activities are handled by the Navajo BIA Region and activities for the Bands are coordinated by the Southwest BIA Region.	Procedural	Commercial leasing activities may be hindered by the lack of coordination and communication.	Medium	Medium
BLM Arizona State Office	Mechanism	Scanning system for survey records is used.	System	Digitized survey records making for faster record retrieval and distribution.	Medium	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Navajo Nation	Process Description	Surveys for homesites may be provided by Navajo Tribal Lands Department or by private surveyors hired by the applicant. These surveys are submitted to BIA for approval of the homesite. The Navajo Housing Authority provides funding for home purchase. Navajo Nation Homesite Lease Policy and Procedures	Tribal Policy	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.	Medium	Medium
Navajo Nation	Organization	Various Tribal entities such as Navajo Housing Authority, Navajo Energy Construction Authority Commission, and Navajo Tribal Utilities Authority are identifying needs to the BLM Project Office.	Tribal Policy	BIA is not always involved in identifying survey needs.	High	Major
Navajo Nation	Role	Various Tribal staff including Director of Navajo Lands Department, Navajo Lands Survey Supervisor, Tribal Natural Resource Officer, contribute to the decision making process regarding survey needs.	Tribal Policy	May impact the length of time needed to receive approval.	High	Major



Table 4.3.8- 10 Southwest Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BLM New Mexico State Office	Inputs	BLM is using Interior Board of Indian Appeals decisions as a basis for surveys.	Case Law	Historical decisions regarding Indian land that are used in present survey considerations.	High	Major
BIA Regional Office BLM New Mexico State Office BLM Colorado State Office	Organization	Various external organizations (Bureau of Reclamation, Colorado Dept. of Transportation, U.S. Forest Service, military) identify survey needs to BIA or BLM. These organizations may contribute funding and records.	Federal Law Procedural	Workload issue, not enough manpower to complete all the cases.	Low	Medium
BIA Regional Office	Role	Archeologists are involved in the process.	Federal Law Procedural	Make inquiries regarding archeological sites.	Low	Minor
BIA Regional Office	Obligations	Tribes are using private surveyors to survey. The Tribe then sells or exchanges restricted fee Trust lands to consolidate land holdings and to resolve trespass cases. ILCA U.S. v. Joseph, NM 1877, 94 U.S. 614	Federal Law	Because of the land grant status of certain Pueblo's, the authority to survey and sell lands by Pueblos may be unique in New Mexico.	High	Major
BIA Regional Office	Role	The region has its own Land Surveyor on staff.	Procedural	Provides technical expertise and consultation and executes surveys. According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being	High	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				recorded into the federal land record system as official acts of the U.S.		
BLM New Mexico State Office BLM Colorado State Office	Mechanism	A unique manual Survey Tracking database is used. The office is developing an automated Survey Tracking database for the future.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BIA Regional Office	Mechanism	A unique manual Survey Request Tracking database is used.	Procedural	In-house system developed within one specific office, not shared by other BIA offices.	Medium	Minor
Southern Ute Tribe	Mechanism	A unique manual Survey Request Tracking database is used.	Procedural	In-house system developed within one specific office, not shared by other Tribal offices.	Medium	Minor
BIA Regional Office	Comments	BIA and/or private surveys are being used for land assignments.	Procedural	BIA does not feel that official surveys are needed since no title is transferred.	High	Medium
BLM New Mexico State Office	Role	GIS staff helps evaluate the informal request and produces GIS products.	Procedural	BLM surveyors have a more robust method of evaluating survey needs than is found elsewhere since GIS is combined with Cadastral staff.	Medium	Minor
BLM New Mexico State Office BLM Colorado State Office	Organization	BLM is using private contractors for initial GCDB data collection.	Procedural	Work is outsourced to private contractors to alleviate BLM workload.	Medium	Minor
BLM New Mexico State Office BLM Colorado State Office	Organization	DOI and OHTA is providing and requesting information regarding Cobell litigation.	Procedural	Workload issue, answering these requests takes time away from survey duties.	Medium	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BLM Colorado State Office	Mechanism	BLM is using Leica SkiPro, a GPS computational and adjustment software.	Procedural	Off-the-shelf software for GPS collection and computations.	Low	Minor
BLM New Mexico State Office	Mechanism	Columbus, a geodetic analysis tool is used by BLM.	System	Off-the-shelf software used to do geodetic survey analysis.	Low	Minor
BLM Colorado State Office	Mechanism	Scanning system for survey records and posting non-Trust surveys on the Internet.	System	Digitized survey records making for faster record retrieval and distribution.	Medium	Minor
Tribes BLM New Mexico State Office BLM Colorado State Office	Role	Tribal attorneys are involved in consultation and lawsuits filed on behalf of the Tribe.	Tribal Law	Workload issue for BLM, participating in these requests takes time away from other duties.	High	Major
Southern Ute Tribe	Organization	The Tribe hires private contract surveyors and have in-house Tribal survey staff.	Tribal Policy Tribal Land Code	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.	Medium	Medium
Southern Ute Tribe	Process Description	The Tribal Lands and Resource Dept. is developing reports to the Tribe on accomplishments and financial information.	Tribal Policy	None.	Low	Minor
Southern Ute Tribe	Role	The Tribal Lands Coordinator files the survey and develops reports.	Tribal Policy	None.	Low	Minor



Table 4.3.8- 11 Western Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
Tribe BIA Regional Office BLM Arizona State Office	Inputs	Findings of a Court appointed Special Master dealing with matters along the Colorado River are used.	Court Decisions	Could affect Indian or Trust ownership.	High	Major
BIA Regional Office BLM Arizona State Office	Organization	Various external organizations (Indian Health Service, CalTrans, Bureau of Reclamation, Corps of Engineers, EPA, local government, FAA, military) identify survey needs to BIA or BLM. These organizations may contribute funding and records. Clean Water Act, Sections 401 and 404	Federal Law Procedural	Workload issue, not enough manpower to complete all the cases.	Low	Medium
BLM Nevada State Office	Organization	BLM sends an annual letter to Tribes requesting their survey needs. See work session template for additional information.	Procedural	Tribes are identifying their needs without the BIA being involved. Priorities are not being established at the regional level, only on a Tribe by Tribe basis by the BLM. This affects how funding is applied.	High	Minor
BIA Regional Office	Comments	Certified TSR's are nearly impossible to get and often inaccurate.	Procedural	TSR's have not been updated in a timely manner. The system (LRIS) may not be accurate and the source data that updates LRIS has been inaccurate.	High	Medium
BLM Arizona State Office	Mechanism	A unique automated Survey	Procedural	In-house system developed	Medium	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BLM Nevada State Office BLM Utah State Office		Tracking database is used.		and funded within one specific office, not shared by other BLM offices.		
BLM Nevada State Office	Comments	The BLM State Office is providing preliminary survey data before the survey is official.	Procedural	Workload issue, not enough manpower to complete all the cases.	Medium	Medium
BLM Arizona State Office BLM Nevada State Office BLM Utah State Office	Mechanism	Scanned Master Title Plats and Historical Indexes are used in these offices.	Procedural	Facilitates records distribution.	Low	Minor
BLM Nevada State Office	Mechanism	A unique automated Title Tracking database is used.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
Tribes	Organization	Tribes may contribute funds, tools, services, and other resources and make final decision to proceed.	Tribal Policy	Tribal staff may assist BLM during surveys.	High	Minor

Table 4.3.8- 12 Pacific Region Cadastral Survey Variances

Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
BIA Regional Office	Process Description	Pacific Region does not utilize non-BLM sources for surveys due to past legal problems. IBLA 83-370	IBLA Decision	BIA will not provide funds for non-BLM surveys. If Tribes want private surveyors, they must fund themselves or hire their own survey staff.	High	Major
Other	Organization	California Indian Legal Services	Procedural	Workload issue, not enough	Medium	Major



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		identify the need and may be involved in litigation on behalf of Tribes.		manpower to complete all the cases.		
Agua Caliente Band of Cahuilla Indians	Role	Tribal Planners and GIS Specialists identify the need, provide consultation and determine action. Tribe is using GIS capabilities to identify survey needs and problems with boundaries and acreage.	Procedural	Streamlines the process of identifying and assessing survey needs.	Low	Minor
BIA Regional Office	Comments	Certified TSR's are nearly impossible to get and often inaccurate.	Procedural	TSR's have not been updated in a timely manner. The system (LRIS) may not be accurate and the source data that updates LRIS has been inaccurate.	High	Medium
BLM California State Office	Comments	BLM has sent out an information pamphlet to Tribes and Agencies on how to request Cadastral Surveys and a notice of availability of new funds.	Procedural	Workload issue, may not have enough manpower or money to respond to all requests.	Medium	Medium
BLM California State Office	Inputs	BLM uses the Contract Survey Examination Log to detect if early surveys are fraudulent.	Procedural	Another source of historical information for research purposes.	Low	Minor
BLM California State Office	Outputs	BLM provides posting and marking of reservation boundaries.	Procedural	Workload issue, but also provides visible boundaries for Indian and non-Indian use.	Medium	Minor
BLM California State Office	Beneficiary Involvement	Tribes may be consulted on surveyors BLM wishes to assign to major projects.	Procedural	Facilitates the communication and working relationship	High	Minor



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
				between BLM and the Tribes. Also, the Tribe may not approve the surveyor assigned which could delay the project.		
BLM California State Office	Mechanism	A unique automated Survey Tracking database is used.	Procedural	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BLM California State Office	Outputs	BLM distributes a copy of the survey record to BIA in the form of a 35mm Microfiche Aperture Card.	Procedural	BLM and BIA must maintain 35mm filming and reading capabilities.	Low	Minor
Pacific Region	Mechanism	Allotment schedules are used in Pacific Region, which are the base record from the original survey that started the A&E cards.	System	Provides another record system for research purposes.	Low	Minor
BLM California State Office	Mechanism	Cost estimator spreadsheet is used to provide project cost estimates.	System	In-house system developed and funded within one specific office, not shared by other BLM offices.	Medium	Minor
BLM California State Office	Mechanism	A unique manual, Workflow Process Planning tool is used.	System	In-house system developed within one specific office, not shared by other BLM offices.	Medium	Minor
BIA Regional Office	Mechanism	Pacific Region is only using the Income Distribution module of IRMS.	System	Only one area of IRMS is being updated, the status of the rest of IRMS is unknown.	Medium	Medium
BLM California State Office	Mechanism	Pacific Region has their own	System	Maintaining an independent	Medium	Medium



Areas Affected by the Variance	Category	Variance Description	Reason for Variance	Business Impact	Degree of Business Impact	Difficulty of Change
		version of the Cadastral Survey Index.		duplicate system. The CS Index being used by the rest of BLM is not being maintained or kept current.		
BLM California State Office	Mechanism	Scanning system for survey records is used.	System	Digitized survey records making for faster record retrieval and distribution.	Medium	Minor
Tribes	Process Description	Tribes have hired their own survey staff.	Tribal Initiative	According to 25 USC 176, surveys on Indian lands will be under the direction and control of BLM. These surveys are not being recorded into the federal land record system as official acts of the U.S.	High	Major