EBCI: PARCEL DATA CONVERSION PROJECT

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About the Eastern Band of Cherokee Indians

- Located in western North Carolina
- Reservation borders the Great Smokey Mountains National Park
- Comprised of approx. 13,000 recognized tribal members
Cherokee
Tribal Integrated Geographic Information System

Turning Data and Information into Business-Relevant Knowledge

Enterprise GIS for EBCI

Executive Dashboard Reporting

Emergency Preparedness & Response

Building Inspection

Environmental Management

Statistical Demographic

Economic Development

Project Management Workflow

Centralized Housing Services

Site Selection

Engineering Design

EDMS

GEMS

GIS

WORKFLOW

Cultural Site Preservation & Protection

Permitting Compliance

Infrastructural & Utilities Inventory Management

Land Records Property Management

Infrastructure & Utilities Inventory Management

Enterprise GIS for EBCI
1.8 Million pages of Land Records (130 years)

- Local Bureau of Indian Affairs (BIA) files
- Tribal Documents
- National Archives
- State Archives
- Land Title Records Office (LTRO)
  - Trust Asset and Accounting Management System (TAAMS) (US DOI, Indian trust accounts)
The following is the amount collected from the tenants on the Dominion Lords:

R. & Carter
M. P. Smith
Brown, Low, Young
W. P. Palmer

£8.00
1.2.1
5.0.0
The goal of this Parcel Data Conversion project is to convert the Federal/ Tribal hardcopy legal land records into spatial features.
Tribal Land Records Challenge

- Documents organized by Community(?) / individual tribal member name vs. individual parcel
- Parcel numbering /naming conventions
- Duplication of documents
- Identifying the most current version of a document
- Non-standardized terminology and procedures associated with possessory holdings documents
- Ownership practices unique to a tribal land ownership and transaction system
- Documents lack sufficient information to accurately locate, capture or attribute features
- Orphan /missing documents from land holdings files
  - 140,000 documents missing basic information (parcel #, date, Community) = Costly research
Document describes sale of Parcel 32 from Edwin to Abel and Amy...

**BIA Filing System**

If the documents are organized by individual, a copy of the document must be stored in three different folders.

If the documents are organized by parcel, a copy of the document only needs to be stored in one folder.
In order to capture the lineage of Parcel 48, need to find all associated documents...

If the documents are organized by individual, finding all documents related to a single parcel is difficult and inefficient.
The focus of the Parcel Data Conversion Project is to capture the lineage of each parcel in the Tribe’s Integrated GIS.
As part of the parcel lineage, information is being capture for...

- **Current vs. Historic Parcels**
  - Does this parcel exist today?

- **Parent and Child Parcels**
  - What parent parcel was a child parcel subtracted from?
  - What child parcels were subtracted from a parent parcel?

- **Land Transactions:**
  - What tribal members were involved in each land transaction?
  - When did the transaction occur?
  - Who was the grantor and who was the grantee?

- **Ownership Types**
  - Sole, Tenants In Common, Life Estate, etc.
1. Open PDF document.
3. No → In TS, highlight row text red. Mark doc as a duplicate and note in Comments field what doc it is a duplicate of.
4. Tag each feature with a unique ID (e.g. BLM_00000001).
7. Capture feature geometry using legal description.
8. Populate feature class attributes.
9. Populate geometry-related TS fields.
10. Georeference plat map.
11. QC populated TS, captured feature and feature attributes.
Tribal members often leave their land to their children. Over several generations this can result in a very extensive and complicated parcel lineage.
Two different plat maps. Both have the same document date signed by BIA. Each document shows different parcel information.

How do we determine which is the ‘correct’ or ‘current’ version?
Features captured

Primary Tribal Area…

Primary Tribal Area zoomed in…

… with Cherokee Community features…

… and Upper Cherokee features…

… and Lower Cherokee features.
Land Title Records Office (TAAMS data)
BLM Cadastral Surveys
Land Title Records Office (TAAMS)
Survey Control Monuments
NGAC Gov to Gov Relationship With Tribes

- Improve Relationships
- Current and Planned Activities
  - Input from Tribes on DOI Projects
    - Tribal Land Records / TAAMS
  - Promote Apps for Gov To Gov collaboration
    - Fee to Trust facilitation
    - Tribal Boundary Encroachment
    - Cultural Site Protection “Permitting”
    - FGDC Cultural Resources Standards
- TWO way Communication
ESRI and EBIC Project Teams

EBCI
- David Wyatt (GIS Manager)
- LeChay Arch (GIS Tech)
- Temporary Staff

ESRI
- Jan Mares (Project Manager)
- Jessie Hanson-McFarlane (Technical Lead)
- ESRI India (Sub-Contractor)

ESRI
- John Young (Federal)
- John Karagiannis (Developer)