System of Record

Organizes and Manages the Legal Record of Ownership, Value and Location
System of Insight

Understand the factors impacting property value and use

- **Parcel Values**
  - Maui

- **Historic District Property Values**
  - Georgia

- **Tax Assessment**
  - Nebraska

- **Value Analysis Dashboard**

- **Trade Market Area Analysis**

- **Operations Dashboard**
System of Engagement

Engaging taxpayers, businesses and citizens with government

Public Notification

Residential Comparable Sales

Public Access to Tax/Parcel Data

My Tax Distribution

Modern Transparency
ArcGIS Enables Multiple Types of Systems

- System of Engagement
- System of Record
- System of Insight
ArcGIS – Modern Architecture

Simplifying and Expanding

- Client / Server → Web Services & Apps
- Stand-Alone Desktop → Connected Desktop
- Data Models → Web Maps & Layers
- Static Data → Real-Time
- Single Server → Distributed Computing
- Custom Applications → Configurable Templates & Apps
- Proprietary Data → Open Data & Shared Services
- 2D Features → 3D Features
- Spatial Analysis → Spatiotemporal & Big Data Analytics
- Digital Cartography → Smart Mapping
Web Services
Organizes and Securely Sharing Data…..

- Secure
- Standards-based
- Controlled Access via Identity
- Control Who Does What
  - View
  - Query
  - Edit
- Monitor/Track

https://http://esriland.maps.arcgis.com/home/item.html?id=5969689b642840e39cf0491669484e0b
Web GIS

Dynamically Abstracts and Organized All Types of Geospatial Data...

GeoInformation Model

GIS Maps & Data

Imagery

Enterprise Data

Real-Time (IoT)

Maps & Layers
Web GIS

WebGIS is a Transformational Architecture

Bringing Together Systems of Record with a System of Engagement
ArcGIS Apps

- Workforce
- Operations Dashboard
- Navigator for ArcGIS
- Collector for ArcGIS
- Survey123
- Explorer for ArcGIS
- Maps for Office
- Drone2Map
- Insights for ArcGIS
- ArcGIS Earth
- Templates….

Support your workforce and workflows…..
Hundreds of Ready-to-Use Maps & Apps

- Easily Configurable
- Fully Supported
- No Cost

450+ Solutions
500,000+ Downloads

Open-Source Solutions

Local & State Government
Utilities & Telecom
Emergency Management
Military & Security

Delivering Innovation & Best Practices
Land Records

Parties, Geometry, Rights

Documents and data - ownership, value, use, planning and development of real property

- Deeds
- Mortgages
- Leases
- Titles
- Liens
- Foreclosures
- Discharges
- Easements

- Plats
- Subdivisions
- Land Surveys
- Assessment Data
- Property Tax Data
- Images
- Parcels
- ……

And ancient indexing systems……..
Parcels

More than geometry…..

- Geometry
- Parcel ID
- Area
- Land Use Code
- Address
- Owner
- Value
- Grantor/Grantee
- School District
- Sale Date

- Sketch
- Improvements
- Construction Type
- Photos
- Value History
- Section-TWP-RNG
- Subdivision
- Tax Account Number
- Voting Ward
- Census Block

- Neighborhood
- Soils/Ag
- Zip Code
- Ownership History
- Parent Parcel
- Tax Districts
- Special Districts
- Lot/Block
- Zoning
- ……

Backbone of GIS……….
Recording & Parcel mapping

Recorder

- Recording
  - Index
  - Publish
  - Report

- Recorder/Registry
  - Document Search and Access

Assessor’s Office

- Mapping
  - Update Maps
  - Update Tax Data
  - Address
  - Valuation

User Community
Recording & Parcel mapping

Recorder

Transaction

Legal Documents

Recording

Index
Publish
Report

Recorder/Registry

Document Search and Access

Assessor’s Office

Mapping

Update Maps
Update Tax Data
Address
Valuation

Data Search and Access

Web Services

Mapping Portal

User Community

User Community
GIS & CAMA Integration

CAMA/Assessment / Tax Systems

Spatial Features in RDBMS
Geo-enriched Assessment / Tax Data

Python Scripts
Update Feature Service

Tax Parcel Geometry

New Parcel Descriptions

Parcel Editing Solution

GIS Portal/Cloud

Land Records Services

• Tax Parcels
• Sales
• Foreclosures
• Appeals
• Assessment Neighborhoods
• Tax Reverted Property
• Historic Parcels
• Parcel Basemaps
• Public Notification
• Others...

Information Products

• Maps
• Apps

.....
GIS & CAMA Integration

Extract Transform and Load - ETL

Property Characteristics
Value and Tax Information
Sales, Foreclosures, Appeals

Python Scripts Produce New Layers
Tax Parcel Geometry w/ Property Characteristics
• Sales
• Foreclosures
• Appeals
• Assessment Neighborhoods

GIS Portal/Cloud

Land Records Services
• Tax Parcels
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• Others...

Information Products
• Maps
• Apps
• …..

CAMA/Assessment / Tax Systems

Parcel Editing Solution
GIS & CAMA Integration

Rapid Deployment

CAMA/Assessment / Tax Systems
- Parcel Editing
- Tax Parcel Geometry
- Python Scripts
- Update Feature Service

GIS Portal/Cloud

Land Records Services
- Tax Parcels
- Sales
- Foreclosures
- Appeals
- Assessment
- Neighborhoods
- Tax Reverted Property
- Historic Parcels
- Parcel Basemaps
- Public Notification
- Others...

Information Products
- Maps
- Apps
- ....
Challenges

Common Goals and Challenges for Assessors

• Maintaining trust and confidence of the public
• A lot of business systems….out of sync
• Keeping data current
• Minimizing appeals
• Transparent operations
• Reducing counter traffic
• Discover untaxed property

• Improved analysis
• Discover trends and patterns
• Sharing data
• Training
• Field appraiser management
• New devices
• Reduce operational costs
Challenges

Common Goals and Challenges for Clerks and Recorders

- Maintaining trust and confidence of the public
- A lot of business systems…out of sync
- Keeping data current/backlog
- Minimizing appeals
- Transparent operations
- Reducing counter traffic
- Generating revenue
- Improved analysis
- Discover trends and patterns
- Sharing data
- Training
- New devices
- Reduce operational costs
ArcGIS
Supporting the entire assessor’s office

Field Appraisers  Assessors  Taxpayer Engagement  Work Anywhere  Government Integration

Professional GIS

CAMA
Permitting Systems

Web GIS

Making Mapping and GIS Available Across Your Organization….
ArcGIS for Assessment and Taxation

Supporting Assessor Requirements

- Parcel Management
- Field Operations
- Value Analytics
- Public Relations

- Parcel Editing
- Quality Control
- Map Production
- Address Management

- Mobile Access to View & Edit
- Workforce

- Foreclosure Mapping
- Construction Permit Visualization
- Property Appraisal
- Visualize Property Value

- CAMA Visualization
- Residential Comp Finder

- Modern Public Access
- Identify Flood Risk
- File Assessment Appeals
- Open Data

- Workforce
- Value Analytics
Parcel Data Management

- Deed Examining
- Workflow Manager
- Tax Map Book
- Community Parcels
- Parcel Editing Solution
- Data Reviewer for Tax Parcels
- PLSS Editing
- Addressing

Collect, Organize and Manage Data in the System of Record.....
Purpose-Built Tools

Integrity, Topology, History

- Feature Adjustment
  - Coordinate Updates
  - Control Points
  - Measurements
  - Parcel Fabric

Aligning Data Using Measurements.....
“By adopting a commercially supported package that’s compliant with national and federal standards, we’ve built a solid foundation for the future for the BLM,” Don Buhler, National Cadastral Director, BLM.

BLM – PLSS Managed in the Parcel Fabric
Support Parcel Aggregation

Web GIS solution for parcel aggregation

Authoritative Parcel Data

Community Parcel Layer

Information Products

Contributor Tools

Aggregation Model

Maps and Apps

Revenue
Audit
Health
Transportation
Econ/Dev
Environment
....

COTS Tools for aggregating and sharing
Field Operations

COTS Tools for Managing Field Appraisers

Understand backlog, navigate efficiently, collect effectively……
Public Relations

- Engage and inform the public and stakeholders...

Maintain Taxpayer Trust and Confidence

- Portal
  - Comparable Sales Finder
  - Tax Parcel Viewer
  - Identify Flood Risk

- Top 25 Taxpayers

- Story Maps

- Open Data

- Assessment Appeal

Engage and inform the public and stakeholders.....
Resources
Training, Support, Sustainable Solutions
Training & Support

Supporting Lifelong Learning

- **Authoritative Resources**
  - Thousands of hours of professionally developed and curated content

- **Relevant Training for Your Role**
  - Content for everyone – professionals, students, educators

- **Many Ways to Learn**
  - Multiple option and formats to meet your needs

- **Helping You Grow**
  - Content for all stages along your learning journey
Land Records Webinars

http://go.esri.com/land-records-webinar

Getting the Most Out of Your GIS
Field Force Management
Maps and Excel
Value Analysis

Realizing Efficiencies
Engaging Your Constituents
Planning for Next Year