



Fit-for Purpose Approaches to Land Administration

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Land Administration

GIS is the platform for land administration

Land administration is the process of determining, recording, and disseminating of information about ownership, value and use of land when implementing land management policies.

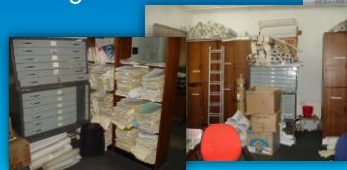
Source: UN/ECE Land Administration Guidelines 1996



Benefits of Good Land Administration

Key to addressing global challenges.....

- Secure Tenure
- Equitable Land and Property Taxation
- Support for Government Functions
- Manage Land Disputes
- Protect State Lands
- Poverty Alleviation
- Support for Land Markets
- Improved Land Planning
-



Leveraging the capabilities in ArcGIS.....

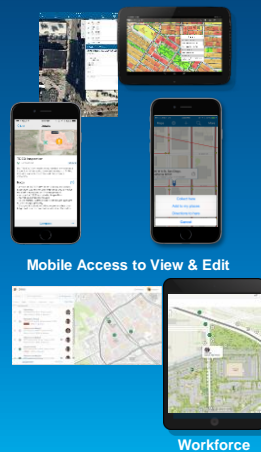
GIS and Cadastre Solutions

Core cadastre capabilities.....

Cadastre Management



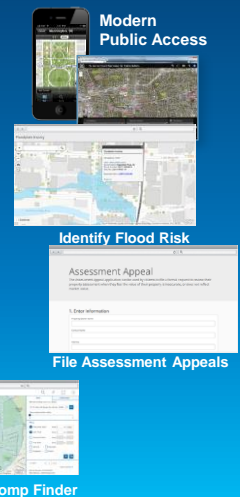
Field Operations



Valuation Analysis

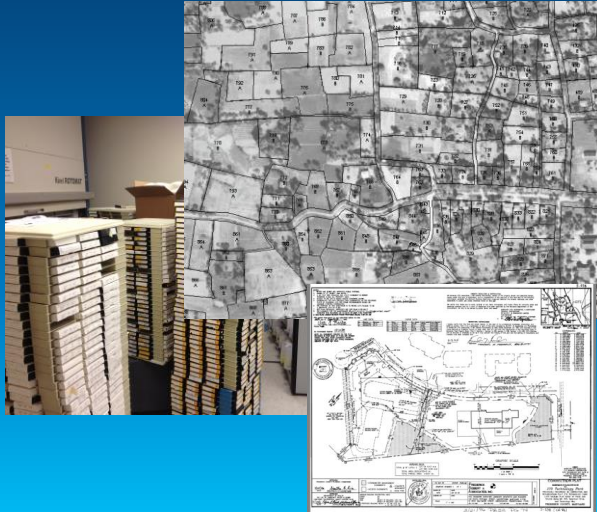


Public Engagement



System of Record

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



Cadastral History



Quebec, Canada

Parcel Query



Auckland,
New Zealand

Tax Parcels

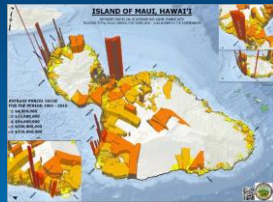


Wisconsin

System of Insight

Understand the factors impacting property value and use

Parcel Values



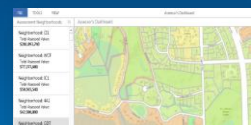
Maui

Historic District Property Values



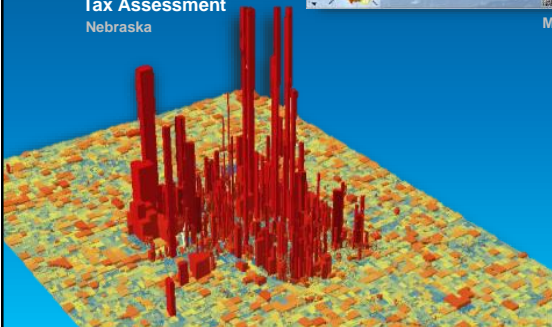
Georgia

Value Analysis Dashboard

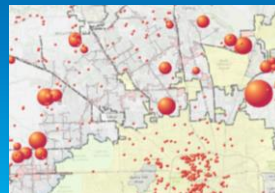


Tax Assessment

Nebraska

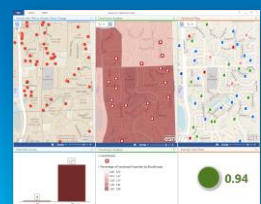


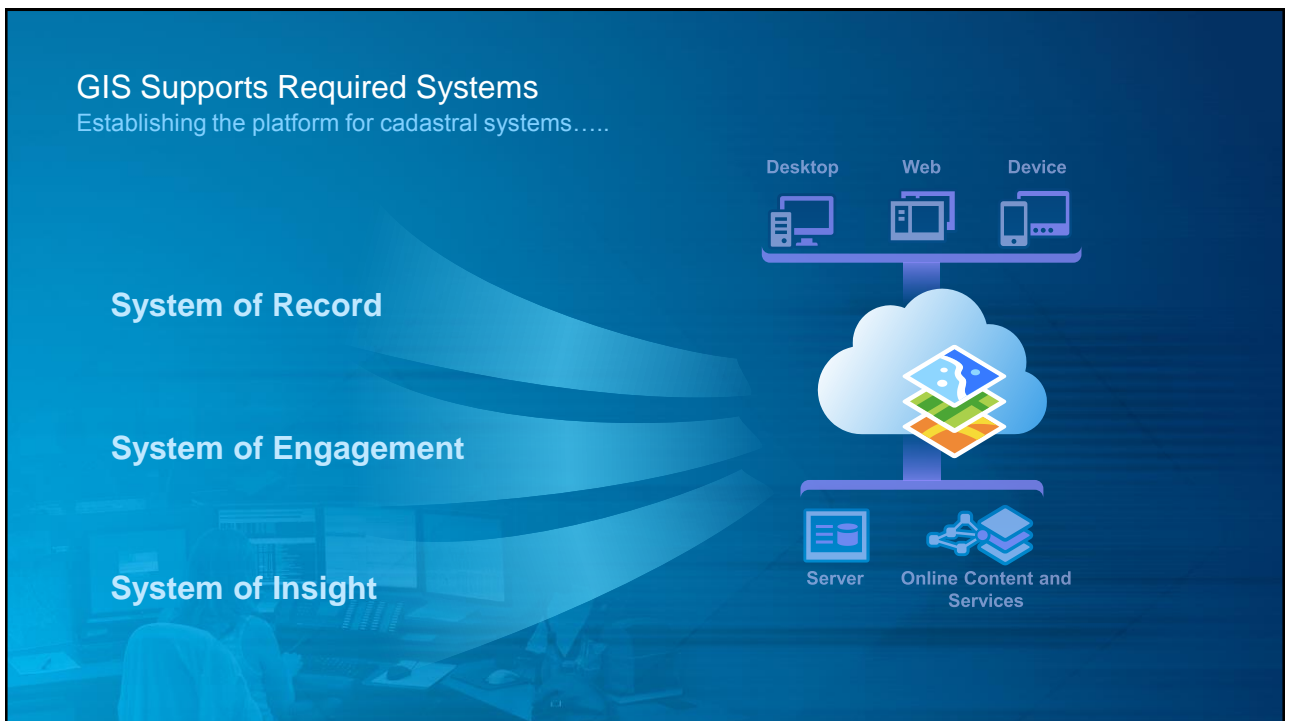
Residential Platting



Texas

Operations Dashboard





Web GIS Shifts the Focus

Updating the Architecture



Client / Server	→	Web Services & App
Stand Alone Desktop	→	Connected Desktop
Data Models	→	Web Maps
Static Data	→	Real-Time
Custom Applications	→	Configurable Templates and Apps
All Purpose Applications	→	Focused Apps
Proprietary Data	→	Open Data & Shared Services

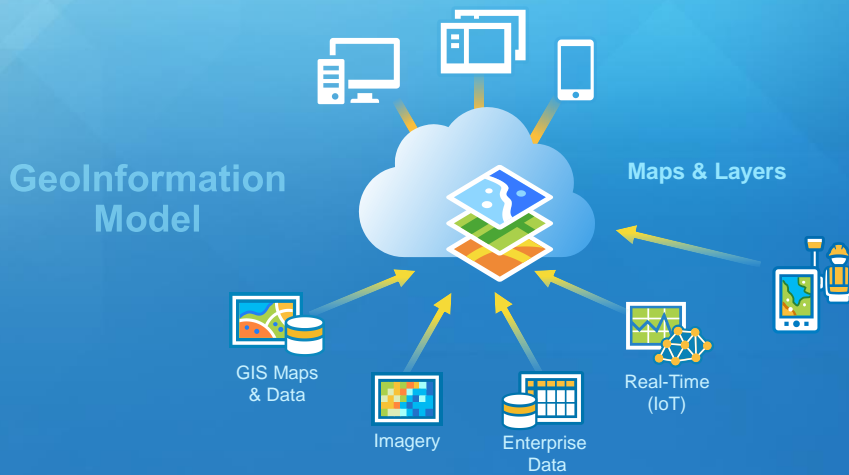
Web GIS Is Transforming GIS

Opening, Integrating and Simplifying Everything



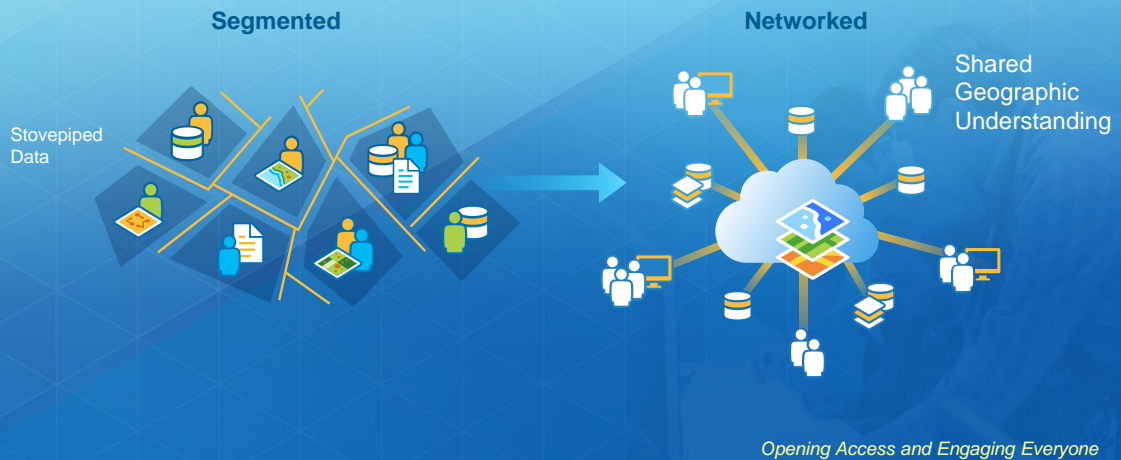
*Integrating Existing Systems . . .
... Creating a System of Systems*

WebGIS Dynamically Abstracts and Organizes All Types of Geospatial Data



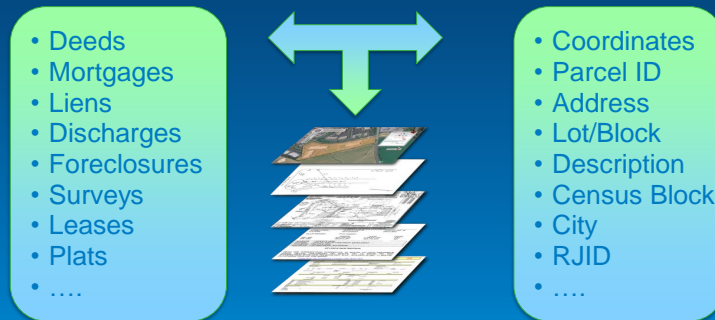
Web GIS Integrates Organizations

Creating Shared Information and Facilitating Collaboration



Registry and Cadastre – Location Data

Linking spatial and non-spatial data....

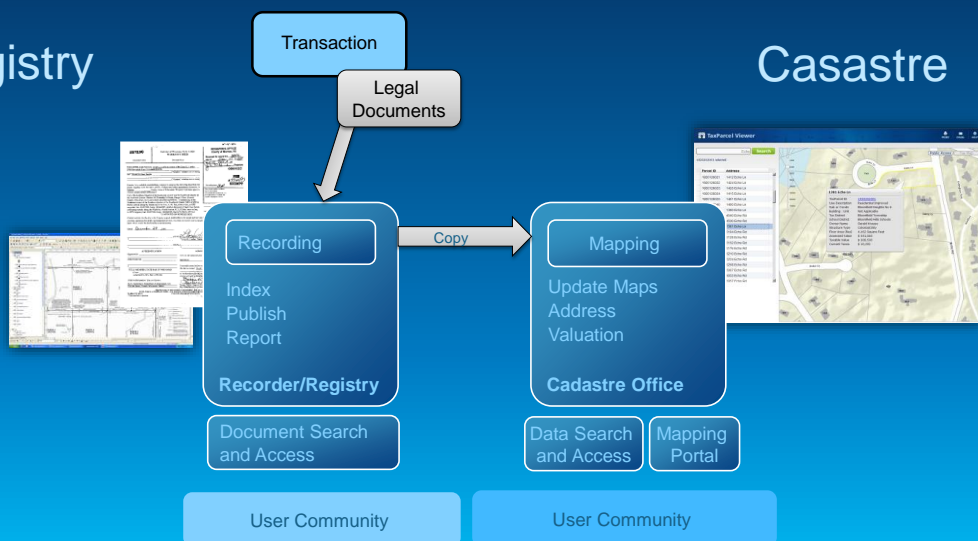


Registry and Cadastre

Traditional workflow....

Registry

Casastre

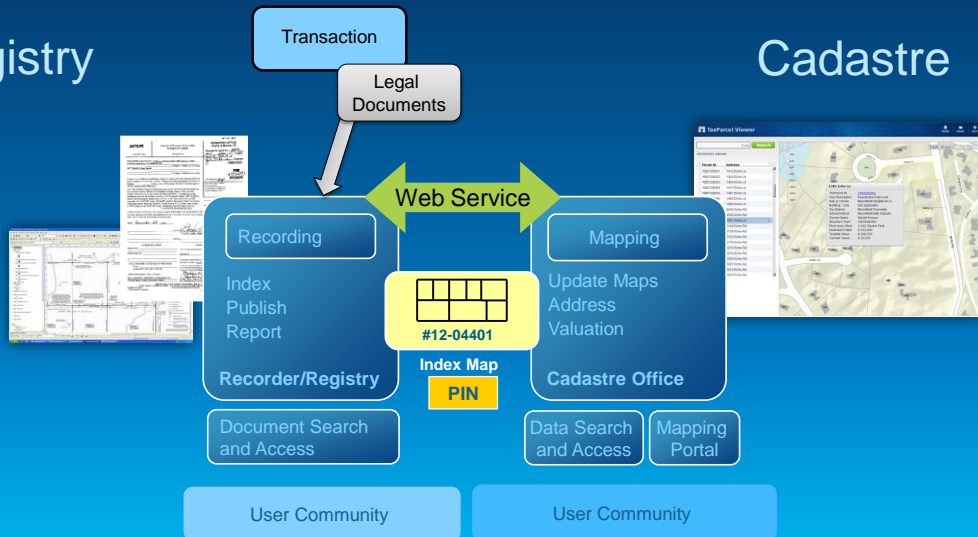


Registry and Cadastre

WebGIS workflow....

Registry

Cadastre



Collaboration in Colombia

COTS, standards, security.....



- IGAC – National Mapping Agency
- Kadaster International
- Trimble
- Esri
- Esri Colombia



ISO 19152:2012^o

Geographic information -- Land Administration Domain Model (LADM)



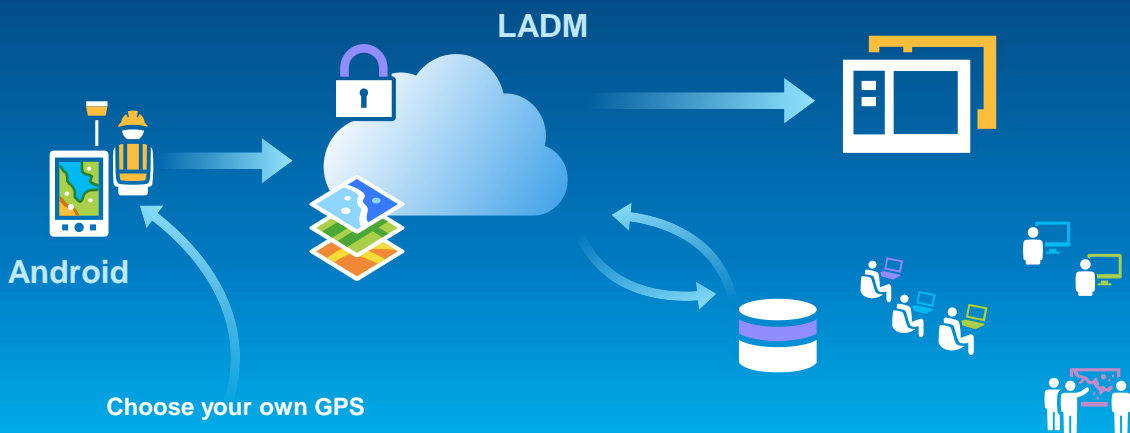
Why this Approach?

Fit-for-purpose and fit-for-the-future in a couple of weeks.....

- Fast-to-Implement
- Standards-based
- Low Cost
- Accurate
- No Software Development
- Secure
- Leverages External Data
- Uses Many Devices
- Future Proof
- Scalable
- Repeatable
- Works Disconnected

Leveraging Modern Approaches

COTS and configurable



Startup Cadastre Workflow

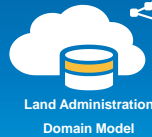
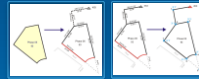
Fit for Purpose....Fit for the Future.....Scalable.....Secure....

Field Data Collect

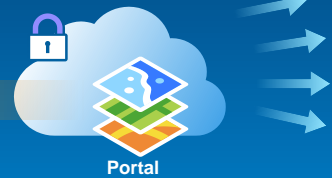


Manage

Standard Parcel Workflows



Share/Publish



Outputs

Title
Valuation
Tax Roll



Understanding our world.