Spatial Lens: Key to Achieving Global Goal
Linking Data – Policy – People

Land Administration – Best Practices, Innovation, Cooperation

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Esri Users
Addressing All the World’s Challenges

1,100 National Government Agencies
2,200 States & Regional Agencies
20,000 Cities & Local Governments
30,000+ Businesses
3,300 Utilities
5,000 Natural Resources Companies
7,000 Colleges & Universities

Creating the maps that run the world
What Is GIS Today?
A System for Managing, Analyzing, and Applying Geographic Information

Integration
Leveraging Location... and Technology

Communication
... Maps and Visualization

Analytics
Geographic Sciences... and Modeling

... and Solving Problems Holistically
A Platform for Organizations... and Society

Understanding
GIS

Organizes and Manages All Aspects of Geographic Knowledge

Data, Information Products, Apps, Models . . .
. . . and People and Their Organizations

Catalog

Sites

Integrated User Experiences

Portal

Apps, Models & Notebooks

Data & Services

Information Products

People Identities and Roles

Organizations & Groups

People

Content
Creating a Common Language

GIS Integrates All Types of Data

Maps, Scenes, Layers

Images, Tabular, Unstructured, Vector, 3D, Big Data, Real-Time (IoT), Lidar

GIS Integrates All Types of Data
GIS

Empowers All Aspects of Land Administration

System of Record
Data Management and Integration

System of Engagement
Sharing, Collaboration, and Dissemination

System of Insight
Analytics, Models, and Data Exploration

... Leveraging the Power of Location
Open and Interoperable

Open Standards and Formats

- XLSForm
- GML
- SQL
- SLD
- SOAP
- WMTS
- KML
- LAS
- INSPIRE
- Shapefiles
- IMDF
- WCS
- IFC
- Web Scene (3D)
- LERC
- CSW
- WPS
- REST
- OneGeology
- OPeNDAP
- JSON
- WaterML
- netCDF
- GeoPackage
- CityGML

Direct Product Integration

- MS Office
- SQL Server
- SharePoint
- Adobe Creative Cloud
- Jupyter Notebook
- Oracle
- Hadoop
- AutoCAD
- Revit
- PostgreSQL
- Dameng
- SQLite

Open Software Architecture

- Open Data Access
- Open APIs & SDKs
- Open-Source Contributions
- Extensible Architecture
- Embeddable

. . . Successfully Integrating Into Thousands of Systems
GIS as a platform for Land Administration

GIS creates, manages and disseminates land information

- Cadaster
- Titling
- Surveying
- Addressing
- Census
- ROW

- Valuation
- Taxation
- Subsidies

- Land Use
- Land Use
- Permitting
- Land Consolidation
- Eviction

- Land Development
- Permitting
- Acquisition
- Expropriation
- Preemption

- Land Market
- Land Market
- Trading

- Land Applications
- Land Services
- Land Information Data
GIS Platform

Provides an information infrastructure for land administration services

Field operations
- Mobile devices

Operations & Planning
- Land Administration GIS Platform
  - Operational and services data generation (Information Assets)

Other Services
- ATM

Operations & Planning
- Mobile devices
New, Sustainable Workflows

Integrating the latest technologies and open for innovation

Field Data Collect
- Survey
- Aerial Photography
- Drones
- Satellite Imagery
- GPS
- Collector for ArcGIS

Data Collection Specifications

Process
- Land Administration Domain Model

Share/Publish
- Portal
- Outputs
  - Title
  - Valuation
  - Tax Roll
What Do We Need to Do?

Build sustainable solutions by leveraging...

Secure, Scalable Platforms
Manage all types of Data
Open Standards
Ready-to-Use Apps
Strong Developer Platform
Distributed and Services-based
Innovating and Evolving Over time
Empowering Local Entrepreneurial Ecosystem