



Esri International User Conference | San Diego, CA
Technical Workshops | July 14, 2011

Esri Redistricting Offerings

An Introduction

Will Isley & Ray Hardy

Overview – Esri Redistricting Online

- **Product Overview**
- **Feature Demonstrations**
 - **Subscription Site**
 - **Managed / On Site**
- **Architecture Overview**
- **A Look Ahead**
- **Questions**

Product Overview



Esri's Redistricting Online Solution

- Supports collaboration between government and citizens
- No software for users to install
- No local data management
- Easy to use
- Advanced plan analytics
- Built-in reporting
- Markup and Comments
- Plan Submission



Value Add Beyond Today's Offerings

- **Preassembled Data**
- **System Requirement: Browser**
- **Reduced Learning Curve**
- **Centralized Data Management**
- **Portable**

Redistricting Process and Collaboration

- Create
- Edit
- Publish
- Review
- Collaborate



Application Features

- Plan Creation, Management, and Sharing
- Charting & Reporting
- Map Markup
- Plan Publishing
- Plan Comparison
- Import / Export
- Thematic Mapping
- Integrity & Compactness
- Printing



Supported Geography & Demographics

- **Geographies**

- State
- County
- City (*2010 Only*)

- **Census Data**

- 2010 PL 94-171
- 2000 PL 94-171



New Plan

District caption:

Number of districts:

Census year: ☐ 2000 ☒ 2010

Select data hierarchy:

Select source geography:

- ▶ States
- ▶ Counties
- ▶ Cities and Towns (Places)

Next >

Demographics

Demographic Sets	Sum	Percent	Ideal
Alternative	<input type="checkbox"/>	<input type="checkbox"/>	
Alternative VAP	<input type="checkbox"/>	<input type="checkbox"/>	
Custom	<input type="checkbox"/>	<input type="checkbox"/>	
OMB	<input type="checkbox"/>	<input type="checkbox"/>	
OMB Non-Hispanic	<input type="checkbox"/>	<input type="checkbox"/>	
OMB Non-Hispanic VAP	<input type="checkbox"/>	<input type="checkbox"/>	
OMB VAP	<input type="checkbox"/>	<input type="checkbox"/>	
Standard	<input type="checkbox"/>	<input type="checkbox"/>	
MLTMNH	<input type="checkbox"/>	<input type="checkbox"/>	1,611
BLACKNH	<input type="checkbox"/>	<input type="checkbox"/>	74,056
TOTALHSP	<input type="checkbox"/>	<input type="checkbox"/>	12,062
TOTALNH	<input type="checkbox"/>	<input type="checkbox"/>	618,668
WHITENH	<input type="checkbox"/>	<input type="checkbox"/>	529,895
OTHERNH	<input type="checkbox"/>	<input type="checkbox"/>	1,563
ASIANNH	<input type="checkbox"/>	<input type="checkbox"/>	3,060
ASSIANNH	<input type="checkbox"/>	<input type="checkbox"/>	8,290
HPINNH	<input type="checkbox"/>	<input type="checkbox"/>	194
Standard VAP	<input type="checkbox"/>	<input type="checkbox"/>	
Universe	<input type="checkbox"/>	<input type="checkbox"/>	

Custom Variable

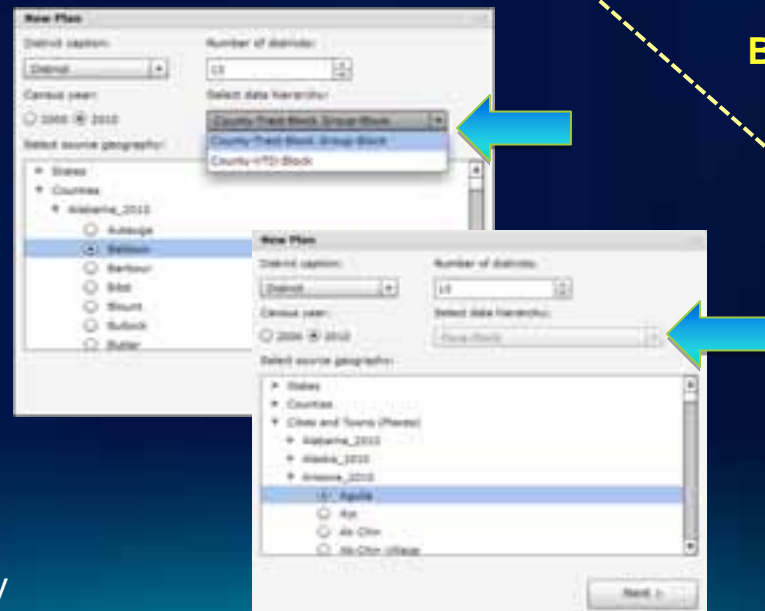
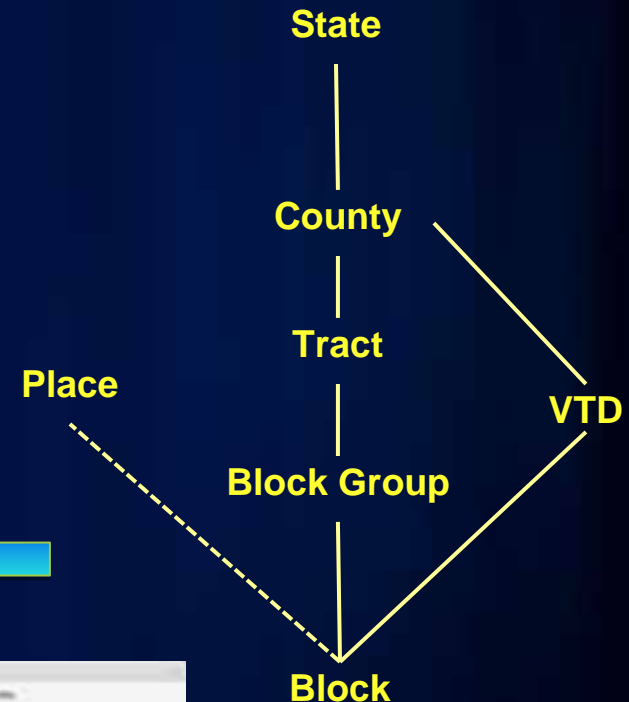
Source Geography

- **Geography Hierarchies**

- Block / Block Group / Tract / County
- Block / VTD / County
- Blocks
- Custom *

- **Demographics**

- PL 94-171
- Custom *



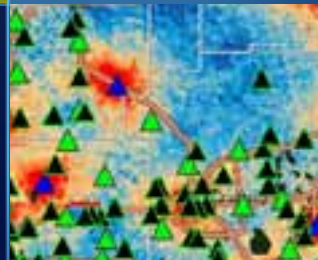
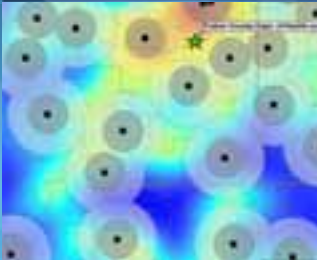
* Hosted & On Site Deployments Only

DeKalb County Board

Fulton County Dept. of Health and Wellness/District 3, Unit 2, 04

Subscription Site Demos

Will Isley



Demo 1 - Creating a Plan from Import

1. Create a **New Plan**
2. **Import** a Block Equivalency File
3. Run **Integrity Tests**
4. **Edit** District Assignments to Fix **Contiguity**

Demo 2 – Adding Locations and Locking

1. Add **Locations** of where Incumbents Live
2. **Lock** Blocks that contain Incumbents
3. Show Locks' effect on **District Assignment**

Demo 3 – Thematic Mapping

1. Show **District Boundaries** (Remove Fill)
2. Overlay a **Thematic Map**
3. **Edit** District Assignments to Fix **Deviation**

Demo 4 – Reporting & Calculated Fields

1. Create a **Calculated Field**
2. Select **Population Summary** Report
3. Select **Fields** to Display

Demo 5 – Publishing

1. **Publish** Plan to ArcGIS.com
2. Login to **ArcGIS.com**
3. **View** District Plan
4. Build and Save District Plan **Web Map**
5. **Share** to “Everyone”

Deployment Options

- **Online Subscription (SaaS)**
 - Per user pricing
 - Census PL 94-171 Demographics
- **Esri Managed (Hosted)**
 - Configured for organization
 - Custom demographics & reference layers
 - Hosting managed by Esri Managed Services
- **On Premise**
 - Installed behind organizations firewall
 - Custom demographics & reference layers
 - Hosting managed by organization



Hosted / On Premise Additional Features

- **Custom Demographics**
 - Example: ACS Data, Election results, etc.
- **Reference Map Layers**
 - Example: Precincts, Neighborhoods, Historical Plan, etc.
- **Privilege based Citizen Engagement**
 - Administration Console
 - Plan Submission with Integrity Checks
 - Configurable Plan Templates
 - “Learn” page



Managed / On Site Demo

Ray Hardy



Demo 6 – Citizen Account Creation

1. Create an **Account**
2. Show **Citizen** Experience
 - Branding
 - “Learn” tab
 - Reference Layers
 - Custom Demographics
 - “Submit” tab

Demo 7 – Sharing

1. Opening a **Default Plan**

- Unassigned Plan
- City Default Plan

2. **Assign** Geography

3. Create a **Group**

4. **Invite** User to a Group

5. **Share** Plan

Demo 8 – Collaboration (Markup & Comments)

1. Accept **Invite**
2. Open **Shared Plan**
3. Make Plan **Edits**
4. Make Plan **Comment**
5. **Mark Up** Plan (Polyline & Label)
6. **Save** Plan

Demo 9 – Plan Submission & Review

1. Open Plan as **Reviewer**
2. Do Geographical Plan **Comparison**
3. Run **Plan Comparison Report**
4. Show Plan **Submission** Dialog

System Roles



Redistricting Online Roles / Users

Administrator

- Manages Users
- Manages Roles
- Configures App



Plan Editors

- Defines Districts
- Generates Reports
- Publishes Plans



Plan Reviewers

- Reviews submitted Plans
- Accepts or Rejects Modifications



Plan Submitters (Citizen)

- Views State, County, and City Plans
- Suggests Modifications



Demo 10 – Administration Console

1. **User** Management
2. **Role** Management
3. Application **Configuration**
4. **Privileges**

Current Customers

States



Alabama



Utah



Hawaii



Washington, D.C.

Cities

Sacramento



Fort Worth



San Diego

Counties

San Bernardino



Los Angeles

Salt Lake



Managed Services Deployment

- **Infrastructure**
 - HW, SW, Network, Security, & Facilities
- **Deployment**
 - Staging & Production
- **Data Management**
 - Data Updates & Backup
- **3 Tiers of Technical Support**
 - Helpdesk, Environment, & Application
- **Monitoring**
 - Database, Application, & Services



On Premise Deployment

- **1 week Remote Deployment Preparation Support**
- **1 week Onsite Deployment Support**
 - Data loading
 - Application deployment
 - Testing
 - Training and documentation
- **1 week Follow-on Remote Support**

Architecture Overview



Architecture Overview



Data Tier

- Census Data
- Redistricting Database
- Custom Data Package

Data Tier



Census Data File Geodatabase



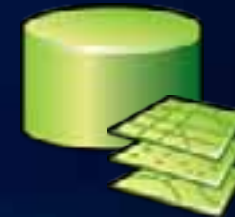
- Tracts
- Blocks
- Block Groups
- VTDs
- Demographics

Redistricting Database (ArcSDE & PostgreSQL)



- District Plans
- Users / Groups
- Plan Access Control Lists

Custom Data Package



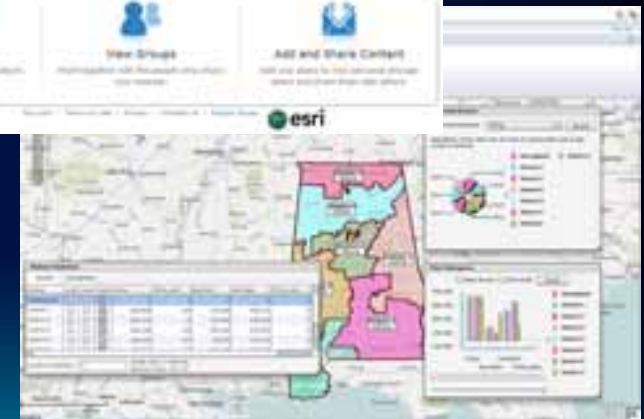
- Historical Election Data
- School Precincts
- House & Senate Districts
- etc.

Look Ahead



Look Ahead

- Redistricting Portal
- District Plan Viewer
- District Plan Publishing
- Election Management



Fulton County Dept. of Health and Wellness/District 3, Unit 2, 2014

DeKalb County Board

Look Ahead

Will Isley



Demo 11 – Redistricting Portal & Plan Viewer

1. Look at **Gallery**
2. **Search** it in the Portal
3. View Plan in the **Viewer**
 - Charting
 - Demographics
 - Integrity Tests
 - Report
 - Markup Map

More Information

- **Resource Center:**
 - <http://resources.arcgis.com/content/redistricting/about>
- **Free 30 day trial:**
 - <http://www.esri.com/apps/Products/Redistricting/freeTrial2011>
- **Support**
 - Redistricting Online redistricting@esri.com
- **Sales:** 1-800-447-9778

... or stop by the **Managed Services** booth

Questions





esri