



March 1, 2011

Mr. Dan Claypool  
Executive Director  
State of California  
Citizens Redistricting Commission  
1130 K Street, Suite 101  
Sacramento, California 95814  
RE: Request for Proposal – Redistricting

Dear Mr. Claypool,

Esri appreciates receiving the State of California's request for proposal (RFP) for consulting support for redistricting. Esri does not intend to submit a prime contractor bid in response to this solicitation but we would like to reserve the ability to act as a subcontractor on a team if the opportunity arises and we would also like to be able to offer our tools to successful bidders as appropriate should they be interested. And with that said, we are offering this qualified No-Bid letter in response for your consideration.

Esri and our business partners have over 30 years of experience applying the data management, analytical and reporting capabilities of geographic information systems (GIS) in the practice of redistricting. Esri offers agencies across the country a variety of tools to support their redistricting efforts. These tools are available for use on your desktop, or online through a web browser.

### **Desktop**

Esri offers a free add-on for ArcGIS Desktop, called [Districting for ArcGIS](#), which is a simple tool that enables users to easily create districting plans by grouping census tracts, ZIP Codes, and precincts. Considering the State's requirements for redistricting, we believe a more sophisticated solution is needed. Esri business partners such as [Citygate GIS](#) have built redistricting-specific solutions in the form of extensions for ArcGIS Desktop.

### **Online**

Additionally, Esri now offers [Redistricting Online](#), a web-based solution that allows users to rapidly and effectively create, edit, publish, review, and collaborate on redistricting plans through a robust, easy-to-use web application. Redistricting Online provides users with access to the 2000 and 2010 Census data required for redistricting and allows for plan creation and editing, plan management, district reporting, district integrity checks, plan publishing and sharing, and other useful tools to support the redistricting process in the cloud.

Esri's online tools provide agencies with a number of ways to publish redistricting plans and make them available to users through the web. You may also sign up for a free 30-day trial at

[www.esri.com/redistricting](http://www.esri.com/redistricting). Attached to this letter is a detailed product summary that provides more details regarding the Esri Redistricting solution. We would be happy to discuss this new technology with you or your staff, and to schedule a demonstration at your convenience.

Although Esri is not submitting a bid in response to this RFP, we respectfully ask to remain on your distribution list to receive future bid notices and related documents. If you need any additional information, please contact me at [REDACTED], or [REDACTED].

Sincerely,

Tony Lafferty  
Esri Account Manager  
California Regional Office

# Esri Redistricting Online

## Product Summary

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### Introduction

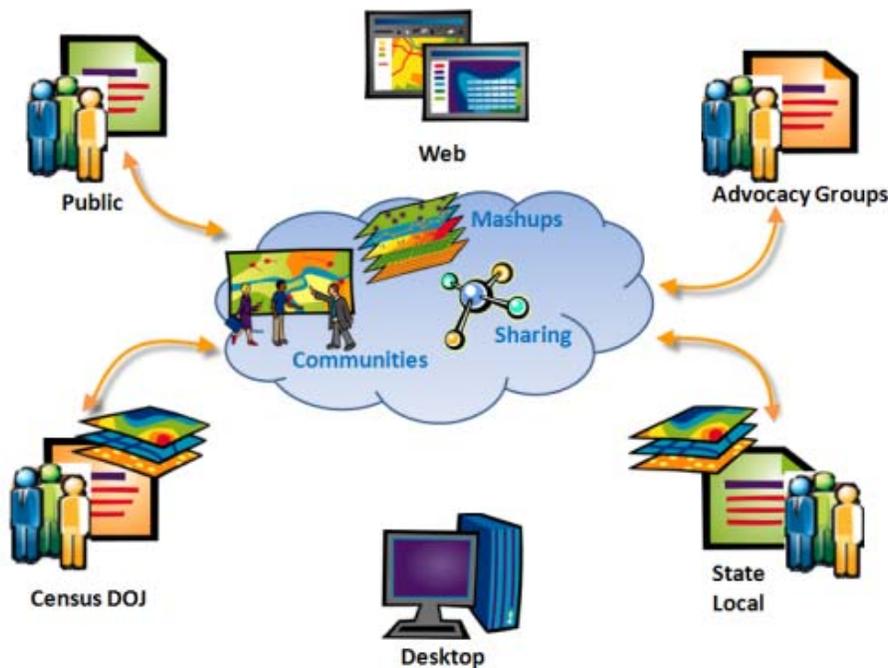
The Esri Redistricting Online Solution lets users rapidly and effectively create, edit, publish, review, and collaborate on redistricting plans that comply with federal law through a robust, easy-to-use web browser.

The solution was designed to help state and local governments develop redistricting plans in response to the 2010 Census. Those plans must comply with provisions of the federal Voting Rights Act of 1965 for covered jurisdictions as well as specific state laws regarding the creation of legislative, congressional, and other elective districts. In addition, advocacy groups and the general public can use the Redistricting Online Solution to evaluate proposed plans, provide input to decision makers, and collaborate with others to develop alternative plans for consideration.

It can be used to develop district boundaries that are substantially equal in population based on race, existing communities, voting age population, and other data variables collected by the U.S. Census Bureau and local jurisdictions.

It provides users with access to the 2000 and 2010 Census data required for redistricting and includes tools for plan creation and editing, plan management, district reporting, district integrity checks, plan publishing and sharing, and other useful tools that support the redistricting process.

It supports multiple deployment models: on-premise, Managed Services, or Software-as-a-Service (SaaS). At the request of the client, Esri will provide a proposal for the appropriate deployment option.



## Benefits

Esri Redistricting Online provides a high-value, cost-effective alternative for many organizations. Redistricting Online:

- ✓ Reduces implementation time and cost. Access to redistricting capabilities and data is made accessible through a web browser which eliminates the need for software installation, or through a high-end desktop or laptop computer.
- ✓ Reduces operational costs through the provision of a centrally managed IT infrastructure, application software, and redistricting data.
- ✓ Increases collaboration, sharing, and consensus and community building by supporting multiple users in a flexible, highly scalable environment.
- ✓ Reduces training time and cost through the provision of an easy-to-use web interface, intuitive operation, and focused redistricting planning and evaluation functionality.
- ✓ Eliminates the need for extensive GIS knowledge and experience.
- ✓ Increases deployment flexibility by offering multiple implementation options to meet specific customer financial considerations, policies, security, and IT standards: (1) Managed Services, (2) On-Premise, and (3) Software as a Service (SaaS).
- ✓ Gives jurisdictions a cost-effective way to provide access to the general public. This increases transparency, repeatability, and defensibility of proposed redistricting plans through the use of standard processes and analyses.

## Key Features

Esri's Redistricting Solution provides an interactive web-based application called Redistricting Online that focuses on creating and maintaining redistricting plans. The Redistricting Online Solution is based on ArcGIS Server and the ArcGIS API for Flex to provide a rich Internet application (RIA) user experience. Redistricting Online provides planners and decision makers with a common operating picture and the sophisticated geospatial analysis tools necessary to perform work related to the complex issue of redistricting. With Redistricting Online these are just some of the functions you can perform:

### Plan Creation and Editing

The Redistricting Online Solution is a web-based solution with a straightforward mapcentric interface that provides easy-to-use tools for creating, editing, and viewing district plans.

Plan creation and editing is simple with the Redistricting Online Solution. The Web-based application lets you:

- ✓ Delineate district boundaries using census geographies (blocks, block groups, tracts, counties or blocks, VTs, counties)
- ✓ Monitor demographics of critical geography selections and visualize their impact to a district profile
- ✓ Direct or two-step district assignment of user-selected geographies
- ✓ Lock or unlock district assignments to a selected geography
- ✓ Undo / redo district assignment history to a plan's last save point
- ✓ Prevent geographies from being assigned to more than one district and identify areas that have yet to be assigned to a district
- ✓ Define contiguous and non-contiguous districts

### Census and Custom Geography Data

The Redistricting Online Solution is complete with preprocessed census data—2000, 2010 TIGER, and Public Law (P.L.) 94-171. Esri offers an optional data service package to support clients with the integration of custom data

sets supplied by the client. The add-on data is integrated into the Redistricting Online Solution data store by Esri, before the solution is brought online for your organization. The following is supported:

- ✓ Pre-deployment, customer-provided data in ArcGIS-supported formats (TIGER/Line shapefile, shapefile, file geodatabase)
- ✓ Census TIGER data (geography files) for 2000 and 2010 (when available)
- ✓ Census geography definitions (blocks, block groups, tracts, counties or blocks, VTDs, counties)
- ✓ Census P.L. 94-171 population attribute data (race, ethnicity, etc.) related to census geographies

### **Map Navigation**

The following map viewer navigation features are supported by the Redistricting Online Solution:

- ✓ Zoom in / zoom out by bounding box
- ✓ Zoom in / zoom out by scale slider
- ✓ Zoom in / zoom out by mouse wheel
- ✓ Zoom to address
- ✓ Zoom to selection
- ✓ Zoom to ZIP Code
- ✓ Zoom to place name
- ✓ Zoom to latitude / longitude
- ✓ Zoom to district by name
- ✓ Zoom to unassigned geographies
- ✓ Zoom to selected geographies
- ✓ Overview map navigation

### **Mashups**

The Redistricting Online Solution supports the following map viewer mashup capabilities and augments the online district plan map with easy-to-use overlays of auxiliary data:

- ✓ Add maps from ArcGIS.com (street maps, satellite imagery, terrain, topographic, etc.)
- ✓ Add map resources hosted by your organization or other organizations through ArcGIS Server
- ✓ Plot uploaded addresses (such as incumbents' residences) or coordinate-based data (CSV, Excel, shapefile)

### **Redlining**

The Redistricting Online Solution supports the following redlining or mark-up capabilities to district maps:

- ✓ Add user-defined notes
- ✓ Add user-defined shapes (points, lines, polygons, circles, and arrows)
- ✓ Add graphic image files (for example: GIF, JPEG, PNG)

### **Feature Selection**

The Redistricting Online Solution supports geographic feature selection capabilities for assignment of features to a district:

- ✓ Select by attribute (Query Builder)
- ✓ Select by point

- ✓ Select by user drawn box, polygon, line, polyline, circle
- ✓ Select by district name
- ✓ Select unassigned districts
- ✓ Select by proximity (feet, yards, miles, meters, kilometers)
- ✓ Select by spatial overlay (for example:, select by another layer's spatial geography) with an optional attribute filter

### **Plan Publication and Sharing**

The Redistricting Online Solution seamlessly integrates with ArcGIS.com to support accessibility restrictions for public group or private access. This solution provides access to a plan online, reducing the need for paper map production. The supported capabilities include:

- ✓ Sharing district plans between users and groups such as legislators, advocacy groups, and team members of the Reapportionment Office.
- ✓ Publishing plans to ArcGIS.com, with the capability to leverage all capabilities provided by ArcGIS.com on the plan, including secure access to groups.

### **Data Export**

The Redistricting Online Solution provides the ability to export plans to a variety of formats for sharing with other systems and applications. The following export capabilities are supported:

- ✓ Export district plans (PDF, text / ASCII, file geodatabase, etc.)
- ✓ Export reports (text / ASCII, CSV, Excel)
- ✓ Export plans to DOJ/OMB format (block assignments)

### **Printing**

To support workflows that require paper and PDF reports and maps, the following printing options are supported by the Redistricting Online Solution:

- ✓ Print tabular reports based on census geographies and census data
- ✓ Print maps to predefined templates with basic map information
- ✓ Production of multipage district plan map books
- ✓ Print to all standard paper sizes: E-size, B-size, letter size, plotter size, 8 ½" x 11"

### **Plan Integrity**

There are a number a data quality checks contained in the Redistricting Online Solution, including:

- ✓ Checks that the total number of districts required by the plan is enforced
- ✓ Cross check to prevent a geography assignment to more than one district
- ✓ Cross checks to ensure summation of district populations matches client population totals
- ✓ Check validates districts have contiguous geographies (optional)
- ✓ Check for plan compactness
- ✓ Check for district(s) that violate allowable population deviation

### **Reporting**

Reporting is supported by the solution at two levels: 1) a statistics table that reflects working census demographics by district, updated upon each geography assignment to a district, and 2) ad-hoc tabular reporting / charting against the districting plan. The following feature set is provided:

The following predefined report templates will be included:

- ✓ Population Summary Report
- ✓ All District Summary Report
- ✓ District Geography Report
- ✓ Voting Age Population Report
- ✓ District Statistics Report
- ✓ Unassigned Geography Report
- ✓ Plan Comparison Report

Users may create report templates against:

- ✓ Census P.L. 94-171 population demographic data at the following district, block, block group, and tract levels
- ✓ Customer-specific data integrated via the data add-on pack (for example, historical voting data)

Reporting functionality will support the following capabilities:

- ✓ Save report templates and use them across districting plans
- ✓ Create formula fields to report against
- ✓ Generate charts and graphs in reports
- ✓ Embed graphics into a report
- ✓ Export statistics table and reports (CSV, PDF, Excel)
- ✓ Display demographic changes between districts caused by geography assignment(s)
- ✓ Display ideal versus actual district population
- ✓ Share reports with other users and groups

## **Plan Management**

The Redistricting Online Solution has a districting plan explorer that provides the following features:

- ✓ Centralized plan management
- ✓ Save a copy of a plan ("Save As") or save a copy of portions of a plan (select plan features)
- ✓ Lock plans as "Read-only"
- ✓ Maintain a log of access and modifications to a plan (for example, created, opened, or saved)
- ✓ Maintain plan metadata
- ✓ Ability to merge plans for consolidated district plan assignments
- ✓ Overlay plan comparison / visualization
- ✓ "Folder-like" districting plan explorer to manage and categorize plans by keyword

## **Plan Management Administration and Access Control**

The Redistricting Online Solution supports the creation, storage, and retrieval of district plans from the Redistricting Database. As such, this module of the Redistricting Online Solution also regulates plan access and user/group management. The Redistricting Online Solution supports user entities with the following rights.

Users can:

- ✓ Create groups
- ✓ Invite other users of the system to join groups they create
- ✓ Delete groups they created
- ✓ Modify membership to groups they created
- ✓ Share plans with their groups (with read or read/write access)
- ✓ Accept or reject membership to groups they have been invited to
- ✓ View and modify (if shared with write access) plans shared to their group

Users cannot:

- ✓ See groups they are not members of
- ✓ View or modify plans not shared to a group they belong to

### Thematic Mapping

Thematic Mapping provided by the Redistricting Online Solution allows users to build a thematic layer by selecting a variable used to classify the geographies into different groups (for example, population density or demographic concentration). The following capabilities are supported:

- ✓ Thematic maps based on census geographies
- ✓ Selectable color ramps
- ✓ User modification of class break ranges (not SaaS model)
- ✓ User modification of polygon symbology for class breaks (including fill color, fill pattern)
- ✓ Thematic map legend
- ✓ Preconfigured thematic map templates
- ✓ Thematic map labeling

### Deployment Options

The solution can be sold and deployed in three ways:

- **Esri Managed Services** – an instance of the Redistricting Online Solution will be created for the client, configured with the appropriate census data, custom client data, and other configuration parameters. The instance will be hosted and managed by Esri Managed Services.
- **On-Premise** – the Redistricting Online Solution will be installed and configured at the client location. Prior to arriving on-site, Esri will configure the appropriate census data, custom client data, and other configuration parameters that can be established before Esri's arrival on-site. Once on-site, the solution stack will be installed and configured on the client's infrastructure. A technology transfer to the administrators, who are qualified to manage ArcGIS Server, will be conducted for the ongoing support and maintenance of the solution. The instance will be hosted and managed by the client.
- **Software-as-a-Service (SaaS)** – a subscription model where a user gets access and can login to the solution that is entirely managed by Esri. The user will have access to all of the functionality of the solution, but it will not be configured for a specific area and custom data cannot be incorporated. The

user can add content from accessible ArcGIS services that have been published such as those that can be found on ArcGIS.com.

### **Option 1: Esri Managed Services**

An instance of the Redistricting Online Solution will be created for the client, configured with the appropriate census data, custom data, and other configuration parameters. The instance will be hosted and supported by Esri Managed Services, which includes providing external HTTP access to the Redistricting Online Solution, operational hosting and monitoring, and troubleshooting technical support incidents through Tier 2 Hosted Environment Support.

This deployment option will address the following service level targets to support the client's operational requirements:

- ✓ 24x7 System Access
- ✓ 95% System Availability
- ✓ Hosting Environment to support up to 20 concurrent users
- ✓ 20 GB of Custom Data Storage
- ✓ Data Backup and Archive
- ✓ Annual Update of Custom Data
- ✓ 24x7 Monitoring and Tier 2 Hosted Environment Support

The client will provide the first point of contact (Tier 1 Helpdesk Support) for Redistricting Online Solution to their end users to address any operational use or technical issues. This support consists of answering user questions, replicating and reviewing reported issues, addressing solution use or training requirements (if appropriate), and documenting and communicating validated technical issues to Esri technical support staff (Tier 2 Hosted Environment Support).

Key assumptions for Esri Managed Services deployment of the solution:

- ✓ Assumes a twelve (12) month hosting commitment commencing upon execution of the appropriate contract documents signed by both parties.
- ✓ Esri will use the client custom data content as-is and is not responsible for cleansing any erroneous data received from the client.
- ✓ The custom data content does not exceed 20 GB.

### **Option 2: On-Premise**

The Redistricting Online Solution will be installed and configured at the client's location by Esri Professional Services staff. Prior to Esri's arrival on-site, Esri will configure the appropriate census data, custom data, and other configuration parameters that can be established before arriving on-site. Once on-site, the solution stack will be installed and configured on the client's infrastructure. A technology transfer to the administrators, who are qualified to manage ArcGIS Server, will be conducted for the ongoing support and maintenance of the solution.

The client will provide the first point of contact (Tier 1 Helpdesk Support) for Redistricting Online Solution to their end users to address any operational use or technical issues. This support consists of answering user questions, replicating and reviewing reported issues, addressing solution use or training requirements (if appropriate), and documenting and communicating validated technical issues to Esri technical support staff (Tier 2).

Key assumptions for on-premise deployment of the solution:

- ✓ The client will procure all necessary hardware and software licenses required to support the Redistricting Online Solution.
- ✓ The client is responsible for maintaining all hardware and facilities associated with managing the Redistricting Online Solution.
- ✓ The client has qualified GIS administrators to maintain the installed software and support the Redistricting Online Solution and hosting environment.
- ✓ The client currently has licensing for ArcGIS Desktop.
- ✓ The instance will be hosted, managed, and maintained by the client.

### **Option 3: Software-as-a-Service (SaaS)**

Access to the Redistricting Solution will be provided to users via a subscription model. The user will be provided a login and external HTTP access to the Redistricting Online Solution. The solution is entirely managed by Esri. The user will have access to all of the functionality of the solution, but it will not be configured for a specific area and custom data cannot be incorporated. The user can add (mash up) content from accessible ArcGIS services that have been published such as those that can be found on ArcGIS.com.

Key assumptions for SaaS deployment of the solution:

- ✓ Assumes a 12 month subscription.
- ✓ Standard Esri technical support will be required.
- ✓ Training materials and other supporting documentation will be provided via the Redistricting Online Solution Resource Center.

## **FAQs**

### **Q: How does this relate to the existing Redistricting Add-on?**

**A:** Esri has a free add-on to ArcView that enables users to perform simple redistricting on their desktop. The add-on is limited and not recommended for professional redistricting, but it can be useful for small organizations wanting to re-draw their district boundaries. The free add-on is now available in ArcGIS 10. To download the add-on please visit <http://www.esri.com/software/arcgis/extensions/districting/download.html>.

Esri also has partners, including [Citygate GIS](#) (autoBound), who have developed professional redistricting extensions to ArcView. These extensions have more analytical and reporting functionality than the Esri free districting add-on described above. As of today, these partners offer desktop tools for redistricting while Esri Redistricting Online is based on ArcGIS Server technology.

### **Q: Who would use Esri Redistricting Online instead of the free ArcView Add-on?**

**A:** Esri Redistricting Online is a web enterprise offering available for professional redistricting. This offering is useful for organizations that would like to provide the ability for multiple users to draw district plans as well as analyze and share plans across the organization or with the public through the web.

### **Q: Is there an option for an organization to host the Esri Redistricting Online Solution behind their firewall?**

**A:** The Esri Redistricting Online application can be deployed on-premise with support from Esri Professional Services consultants. This support consists of one (1) week of remote support to prepare for the deployment, and one (1) week onsite to support deployment, documentation, technical transfer, etc. The customer is responsible for maintaining and supporting the application and related infrastructure once Esri Redistricting Online has been successfully deployed.

Esri also offers Managed Services for customers who do not have IT staff that is well-experienced in supporting enterprise GIS systems. Esri Managed Services offers 24/7 support and monitoring of the Redistricting Online application for those customers who do not have the ability to provide the infrastructure and technical resources associated with managing the application.

**Q: Can custom data be added to the Redistricting Online system that is hosted by Esri?**

**A:** Esri Redistricting Online can be paired with Esri Managed Services as a deployment option. This deployment option can be customized, subject to modifications in a proposal, based on specific organizational and operational requirements. By taking advantage of the Esri Managed Services deployment option, the Esri Redistricting Online user experience is completely web-based and does not require the customer to plan for the infrastructure and resources required to manage and maintain the software, hardware and data components.

**Q: Can the solution be customized?**

**A:** The solution can be customized by Esri Professional Services to add, modify, and remove functionality when the customer purchases their own instance of the solution. However, the solution out of the box is designed to be configurable for these instances. For the SaaS deployment model, it cannot be customized.

**Q: Is there a way to evaluate the application?**

**A:** The application can be evaluated by signing up for a free 30-day trial at [www.esri.com/redistricting](http://www.esri.com/redistricting). The trial version includes the full set of functionality described above, however only the 2000 Census data is accessible.

## **Contact Information**

For questions regarding Esri Redistricting Online or to request a quote, please send an email to

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