(STREETING)	

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

In accordance with this Solicitation, the Offeror shall complete <u>this</u> Offer Form, indicating the Offeror's responses in the spaces provided. Additional pages may be added, as long as they are clearly referenced to <u>this</u> Offer Form in the spaces provided.

If such additional pages are added, the Offeror shall include the following Solicitation information (as indicated above) at the top of all additional pages: (1) <u>this</u> "Offer Form" number, (2) the Solicitation's number, and (3) the Solicitation's title.

Any Offeror that does not include <u>this</u> completed Offer Form, or that does include an incomplete Offer Form, or that includes a completed Offer Form with unacceptable responses may cause its entire Offer to be deemed unacceptable and, therefore, non-responsive and not available for award.

1 Provide a detailed explanation of Offeror's method of approach to perform the Work set forth in the Statement of Work Sections 2.1 through 2.4.

TerraSystems Southwest, Inc. (TSSW) proposes a comprehensive solution to assist the AIRC with their voter mandated task of obtaining consultant services for the purpose of redistricting congressional and State legislative districts. The TSSW Team is one of untarnished integrity, impartial and balanced in our principles, focused on providing the State of Arizona and its citizens with professionally developed geographic analytics supported by innovative public outreach and involvement. During difficult economic times, keeping projects local is a bonus and resonates well with citizens concerned about our local economy. We are their neighbors, associates or acquaintances from their children's school. As long-time Arizonan residents, we take pride in our State. The TSSW Team understands the importance of this project to instill confidence in voters that government processes are transparent and conducted with integrity and reliability. The TSSW team will deliver just that with diligence and a meticulous attention to detail for which we are nationally recognized.

TSSW plans to employ leading edge "cloud-based" GIS computing technology combined with traditional GIS analyses powered by Esri's ArcGIS platform, the worldwide leader in Geographic Information Systems software. Esri Redistricting Online (<u>http://www.esri.com/software/redistricting/index.html</u>) is a web-based application that establishes an online community where users can collaborate and design district plans. It uses GIS mapping technology, Esri data, and the latest available Census data, to allow state and local government to prototype multiple redistricting scenarios before finalizing new boundaries. Both standard GIS and related internet technology will be used to facilitate a redistricting process that is responsive to inputs from both the AIRC and the public, while being both technically sound and defensible. The resulting scenarios will be communicated to the AIRC and the public using professional cartographic techniques and standards such as advanced symbology, embedded graphs, charts and statistics, as well as visually aesthetic supplemental graphics which create interest and increase readability of all mapping products. See *Appendix D: Cartographic Products* for examples of our published map products.

Zimmerman Public Affairs (ZPA) is an award-winning multi-disciplinary communications firm with a reputation for building consensus among disparate groups. Recent successes have ranged from passage of a controversial road plan to the adoption of a regional rebranding of Tucson's transit system.

Additionally, ZPA has become known for excellent and thorough data collection for both public participation and survey research. The company's clients have included political committees, major businesses, school districts, municipalities and the news media.

ZPA belongs to the International Association for Public Participation (IAP2) and subscribes to its code of ethics.



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

Section	Method of Approach
	TSSW will use Esri's software suite <i>ArcGIS</i> (ArcInfo) and <i>Esri Redistricting</i> , a specialized Web- based application created by Esri and specifically designed for the challenges related to redistricting at the state and local level (See TSSW Appendix C: Proposal for the Esri Redistricting Solution). Esri's GIS software platform is the most widely used GIS software around the world, including many Federal, State and Local agencies in Arizona.
	To create the first iteration of districts in a grid-like pattern across the State, TSSW plans to apply a "quadtree spatial decomposition" approach in which the State is divided into a hierarchy of nested, equal area squares with each census block assigned to a square and then aggregated into "grid-like" districts until the desired population balance has been achieved. This will be a process of selecting census tracts, block groups and blocks to create the desired number of districts in as close to a grid pattern as the geography and need for population-balanced districts will allow.
	TSSW will import our initial redistricting map(s) into the Esri Redistricting Online tool to cross-check and refine our effort using the application's analytical tools. This platform will also allow us to quickly publish and share our work with the AIRC over the Internet and to efficiently gather their comments and edits either via a web browser and/or in interactive session(s) with the Commission.
2.1	Draft maps generated throughout the project will also be available from the project website (see example website mock-up in Appendix D: Onward Arizona - Redistricting 2011) as compressed PDF files through the <i>Resource Room</i> link under "Download Draft Maps" sub link. For additional flexibility on gathering comments and feedback, those with access to software that allows for PDF document review and editing such as Adobe® Acrobat® X Pro (http://www.adobe.com/products/acrobatpro/features.html) can easily mark up the draft PDF map by using familiar commenting tools such as sticky notes and red line tools where users can actually draw in lines manually while manipulating their appearance (color, line weight). These marked up PDFs can then be submitted to the TSSW Team through either an upload process presented as a link on the website or by email submittal using a dedicated email address such at <u>RedistrictingComments2011@terrasw.com</u> .
	For efficiency purposes, we suggest a "linear" approach to map creation and review process. This will facilitate the necessary condensed timeframe by minimizing when possible, the number of datasets and maps that need to be maintained. A linear approach to this process means that as each phase of the project moves forward, one alternative which may be the combination of several scenarios presented to the AIRC and public, together with resulting comments, will move forward into the next phase of mapping. Given the nature of this effort and the anticipated level of public participation and input, a modified linear approach may need to be accommodated.
2.2	TSSW proposes to apply a series of automated and manual procedures to evaluate each redistricting plan in relation to its congruity with the stated AIRC goals, including compliance with the United States Voting Rights Act of 1965 and respecting communities of interest where practicable. We will work with the AIRC to identify and collect various GIS datasets that will assist us in this analysis. Meetings with the Commission will be either in-person or via a web-based conferencing tool (GoTo Meeting) provided by TSSW. GoToMeeting (<u>http://www.gotomeeting.com/fec/</u>) is a web conferencing tool and online meeting tool allowing Commissioners and staff to view TSSW computers running the specified GIS software in real time as changes or adjustments are made. In both cases, we will have access to GIS tools and in-progress redistricting maps.
	One of the specified subtasks in this section is to consider communities of interest (COI) when creating district boundaries to the extent that is practical. The first step in determining this is to explicitly define what a community of interest is. The TSSW Team defines a community of interest as: "A region which is defined by actual shared interests or by some common thread of cultural, social, economic or political interests."



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

After collaborating with the AIRC committee on any necessary changes to the concept of what defines a community of interest, TSSW staff will research and acquire such data if readily available. This may include but not be limited to contacting local jurisdictional planning departments to see if similar data has previously been created, as well as standard data acquisition researching techniques. Communities of interest may be further defined through public input and analysis of additional information such neighborhoods, churches, school districts, parks, and businesses. The public participation plan is designed to maximize public outreach and involvement. Our public outreach program incorporates the solicitation of this type of information through a variety of means including on-line survey, website, meetings, and social media. The information gleaned from this process will be collected and presented to the AIRC. Per the AIRC's direction the communities of interest boundaries will be modified to reflect public input In addition, TSSW staff will process the Census 2000 STF3a long form data for inclusion in a change analysis with related 2010 community survey data extracted from the Esri Redistricting software. This change analysis will uncover "hot spots" where communities of interest that have experienced significant dynamic change in the last ten years will be identified. Polygons encompassing such areas will be created for use in resulting analyses reviewing the relationship between the newly created district boundaries and these community interest "hot spots". All documents relating to the change analysis resulting in a proposed COI boundary change will be meticulously documented and archived in order to justify and account for the change at a later date, if required. The Esri Redistricting Web-based software provides tools that perform automated checks of redistricting plans many of which are congruent with the goals stated in the RFP. 2.2.2 Equal Population – as changes in districts are made by adding or removing census blocks, population and demographic totals are automatically updated. In addition, any other geographic layer the commission wishes to include can be integrated into this analysis. 2.2.3 Geographic Compactness and Contiguity – there are a number of compactness tests we can apply to one or more re-districting plans. These include polygon area or perimeter length tests, Reock Test, Area / Convex Hull Test, Grofman Test, Schwartzberg Test, Polsby Popper Test and a holes test. These tests are described further in Appendix C of this response. The software will also analyze and locate all non-contiguous and unassigned geographical areas. Additional functionality includes the ability to "lock" census features to prevent geographies from being assigned to a district other than the district to which it is assigned. 2.2.4 Communities of Interest - The Esri Redistricting software will be utilized to tabulate the 2010 census data by age, gender, race, ethnicity, language, urban vs. rural area, income, employment, occupation, poverty status, and education, veteran's status, and household and family relationships defining areas of similar characteristics to be classified as communities of interest as noted above. 2.2.5 The Esri Redistricting application provides access to various high-quality on-line administrative and jurisdictional boundary maps. We can also load data from local data sources. The software will further list each county that is included in a district. Counties that are split (overlap) multiple districts, will be denoted with an asterisk. This will facilitate the goal of respecting geographic features, jurisdictional boundaries and undivided census tracts where practical. TSSW has developed good working relationships with many data providers across the State which will help the Commission identify, evaluate and use the



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

	best available map data.
	2.2.6 The Esri Redistricting software can be configured to load and analyze custom local data sets that the AIRC chooses to provide. This may include voter registration and voting history information as downloaded and processed by TSSW from the Secretary of State and Dept. of Justice websites.
	Where the Esri software does not have built-in capability, we will use standard GIS operations such as geographic overlay, proximity analysis and summary reports to evaluate redistricting plans :
	2.2.4 For communities of interest as defined through the collaborative process with the AIRC, TSSW staff will utilize the data created from the processed Census 2000 long form data (STF3a) in a resulting change analysis with the data extracted from the Esri Redistricting software. TSSW staff will closely analyze the identified "hot spot" areas and identify those communities that might be split or otherwise impacted in an undesirable manner by the change in district boundary. This information would then be presented to the AIRC and implications related to the new boundaries explored. At the direction of the AIRC, district boundaries would then be adjusted to minimize the impact on areas of concern while also making suitable adjustments to preserve population count balances.
	2.2.6 TSSW can process and analyze summary information of various demographic, voting histories and other AIRC designated/provided data for any given redistricting plan with an eye to evaluating its competiveness. Such analysis might include comparison of numbers of registered voters, numbers of each party voting in recent elections, election results by party, and other voting results.
2.3	After the initial phase is complete, TSSW will import and overlay voter registration data into the customized Redistricting package and/or our GIS software to evaluate one or more completed redistricting plans for their political competitiveness. This analysis will include summaries of voters by party in each voting district, aggregated to newly proposed districts. We can also do comparison summaries between new and old voting districts. Where there are boundaries that cross between the old and new voting districts, we will use an area-proportional allocation of voters to the new districts. Additional techniques or variable comparison suggested by the AIRC, including visual review and adjustment by Commission members, can be conducted interactively using video conferencing combined with web-based conferencing enabled by GoToMeeting software. GoToMeeting is a web conferencing tool allowing Commissioners and staff to view TSSW computers running the specified GIS software in real time as changes or adjustments are made. This process will allow for instant response to questions or different proposed scenarios. Further, it will make the entire redistricting process more responsive to Commissioner and Public input, provide a transparent platform for such review and input, as well as increase the efficiency of all review processes. In short, it will further enhance access and collaboration between the AIRC, the TSSW Team, and if desired, the public.
2.4	The TSSW Team will use a variety of vehicles to advertise and facilitate the distribution of draft maps for public input and comment for the required 30 day minimum period. Budget allowing, copies of the proposed legislative and congressional maps will be published in major newspapers serving each county accompanied with the information about ways to submit comments.
	We will take advantage of local repositories for information like public libraries , municipal and county buildings to leave 'displays' containing take-away paper versions of each map and comment cards that can be returned postage – paid. Again, instructions on website access will be provided. And finally we will use this opportunity to print news stories that promote public comment. This will be accomplished through produced PSA's and editorial board meetings.
	ArcGIS Online is a web-based application for the Esri ArcGIS Community which facilitates the sharing of geographic information, maps and related services in a "cloud computing environment". The cloud is a systems architecture model for Internet based computing - i.e. the development/use



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

of computer technology and software over the Internet.

At the direction of the AIRC, we can publish draft redistricting plans to the standard ArcGIS Online web application for public viewing and comment if provided access to an existing State of Arizona ArcGIS Server Platform license. Alternatively, a separate ArcGIS Server license could be purchased from Esri that would be specifically maintained for this and future redistricting related efforts. The cost of this software license would be an additional expense to this process, usually running in the neighborhood of \$40,000. However, the increased benefits from using the ArcGIS Server technology could be substantial. The functionality of ArcGIS Online is in addition to the online viewing and commenting capability of the Redistricting software for desktop/laptop users, would allow us to publish custom maps not generated using the Redistricting package. This would dramatically increase project flexibility and the data/maps that could be shared with the public through enhanced online project capability. A second reason which supports using both the Redistricting software and custom ArcGIS Online map publications is the availability of mobile device applications. Such applications are currently under development at Esri that will allow the Redistricting software to be available with limited functionality on a variety of mobile devices later in 2011. However, this functionality is currently available directly using ArcGIS Online.

Using either the Redistricting Online software and/or custom ArcGIS Server platform together with ArcGIS Online, TSSW can assign viewing and editing privileges to specific individuals, groups or the general public, per AIRC direction. The site will allow desktop users to mark up maps with redlines and comments. With the Redistricting Online application, users with appropriate privileges may also create their own version of a plan and that version can be saved and compared with the official Commission version at the direction of the AIRC. These "Intelligent Web Maps" can be viewed by anyone using basic desktop/laptop computers with the more limited functionality for mobile devices noted above.

Publication quality map exhibits will be created by TSSW outside of the Redistricting web-based software using standard desktop ArcGIS. These cartographic exhibits displaying the draft boundaries will be available for viewing and/or download off the project website as describe earlier in Section 2.1. It would be these custom cartographic maps that could be uploaded directly to ArcGIS Online using a State owned ArcGIS Server license. Desktop users would also be able to submit comments electronically on these maps as mentioned above. As mentioned above, ArcGIS Online maps do have the functionality to be available on mobile devices such as iOS (iPad, iPhone or iPod), Microsoft Windows phone/devices, and Android technology devices. People using such mobile devices would be able to view the draft maps; however, their comments would need to be submitted through the project website or via email due to bandwidth limitations with mobile devices.

The TSSW Team will have for public display several dry-mounted displays. We will take advantage of local repositories for information like public libraries , municipal and county buildings to leave 'displays' containing take-away paper versions of each map and comment cards that can be returned postage – paid. Again, instructions on website access will be provided. Finally, we will use this opportunity to print news stories that promote public comment. This will be accomplished through produced PSA's and editorial board meetings. E-size (34 inches x 44 inches) maps to be used as display props at the public meeting printed using our in-house high resolution plotter. 8 1/2 x 11 color copies of maps will also be made available at the meetings. Several E-size maps that are not mounted will be available as "working maps" for meeting attendees - allowing them to manually draw lines and write comments directly on the hard copy maps. Any comments generated or collected at public meetings using hard-copy maps will be processed and archived. E size and smaller hard copy maps with comments written on them will be scanned for archiving and a document summarizing all of the comments will be attached to the scanned map for electronic project archival purposes. TSSW Team will present these to the AIRC and will conduct any changes necessary to the draft boundaries based on the evaluation and input of the AIRC.

	Attachment "2" - Questionnaire	STATE OF ARIZONA	
, S	Solicitation No. ADSPO11-00000704	Agency: Arizona Department of Administration	
	Description: State Redistricting Mapping Services	Customer: Arizona Independent Redistricting Commission	

2 Provide a detailed explanation of Offeror's experience in previous contracts of similar scope to this Solicitation's scope.

The TSSW Team has direct experience in assisting jurisdictions with their re-districting processes as well as related large scale GIS projects involving Census data. Our experience is detailed in a following section. TSSW also has extensive experience successfully managing projects of this scope as detailed below. We have successfully executed the role of Project Coordinator on multi-million dollar GIS-oriented projects, supervising and coordinating multiple technologies and consulting contractors under the main project umbrella.

- Santa Cruz County 2011 Redistricting Project: Curtis White of Global Systems Modeling is currently providing technical support to Santa Cruz County, Arizona, for their 2011 Redistricting effort. County Supervisor, Community College and Justice of the Peace districts are the targets of this effort. The goal is to create new precinct boundaries that will meet various legal requirements. Specific assignments include:
 - Acquiring and processing Census 2010 PL 94-171 data for the County into GIS (ESRI ArcGIS) format
 - Processing County's current (2001) district information into compatible format (2010 geography changed significantly from 2000)
 - Assess new population counts for current district boundaries
 - Provide GIS analysis, as requested, to determine possible redistricting scenarios forconsideration
 - Process multiple redistricting scenarios at the County's direction
 - Prepare appropriate maps and reports of these scenarios, as well as final maps
 - o Assist County in submittal of Redistricting Request to the US Dept. of Justice
 - Prepare technical documentation of all processing done
 - Provide finished precinct boundaries, district boundaries and Census 2010 data in ArcGIS File Geodatabase format for future use with the County's GIS system

All GIS data processing is being done with ESRI's ArcGIS software. As part of this effort, GSM developed numerous Model Builder tools to automate processing scenarios (e.g., generate new district boundaries with population totals by district).

- Arizona Secretary of State's Office Voter District Data Conversion Project for SOE Election Data Software: In 2010, TSSW completed the creation and/or conversion of voter district data for three rural counties – Apache, Navajo and Greenlee for use by the State's Election Data software contractor SOE Software (<u>http://www.soesoftware.com/customers.aspx</u>). TSSW staff worked closely with Secretary of State staff member Craig Stender and SOE Software staff to create GIS datasets useable by the custom SOE Election Data software – used to visualize election results in the November 2010 election. TSSW worked on a tight deadline to incorporate necessary database design functionality needed to accommodate the SOE custom software. To the delight of SOS and SOE staff, we delivered early with a high quality product, catching issues related to anomalies in the precinct boundaries vs. County boundary datasets.
- Santa Cruz County 2010 Statistical Areas Program Project: Curtis White of Global Systems Modeling provided technical support to Santa Cruz County, Arizona, for the Census 2010 Participant Statistical Areas Program (PSAP) process; did all data processing and submitted information to US Census Bureau per their stated requirements. In consultation with County staff, prepared suggested changes to Census Block Group, Census Tract and Census Designated Places (CDPs) boundaries. This processing required meeting stated population requirements for Block Groups and Census Tracts based on estimated current (2009) population counts. All GIS data processing was done with Census Bureau's MAF/TIGER Partnership Software v4.6, a requirement for this process.
- Santa Cruz County 2010 Local Update of Census Addresses (LUCA)Project: Provided technical support to Santa Cruz County, Arizona, for the Census 2010 Local Update of Census Addresses (LUCA) process; did all data processing and submitted information to US Census Bureau per their stated requirements. The County elected to use the Address Count List (ACL) option for their submittal. Part of

Attachment "2" - Questionnaire	STATE OF ARIZONA
Solicitation No. ADSPO11-00000704	Agency: Arizona Department of Administration
Description: State Redistricting Mapping Services	Customer: Arizona Independent Redistricting Commission

this effort required production of a Census Block map atlas that could be used by field crews in updating household counts by blocks. In addition, submitted numerous suggested revisions to the TIGER data for street segments and address ranges based on the County's GIS road centerline file, which I had the lead in developing (primary purpose of County data was for support of E911 dispatching). All GIS data processing was done with ESRI's ArcGIS software.

t

Arizona Broadband Mapping Project: TSSW is providing all the GIS support to the on-going, 5-year federally mandated broadband mapping program for the State of Arizona. Beginning in late 2009, TSSW was selected to provide GIS database and conversion support for this leading-edge nationwide project. The TSSW Team is responsible for a variety of complex database design and progressing tasks that have required extensive coordination with technical staff from the National States Geographic Information Council (NSGIC) and the National Telecommunications Information Administration (NTIA) to refine the initial NSGIC geodatabase model to be compatible with Congressional requirements for the submittal of broadband information. As part of this work, TSSW staff and subcontractors (GSM) have downloaded and processed Census 2000 and Census 2010 geography. Broadband provider information reporting criteria has required data analysis and processing to aggregate and report summaries of broadband service by census blocks and TIGER road segments.

The TSSW Team developed, tested, and refined a very detailed workflow to process data coming from scores of different broadband providers into a standardized series of tables and geodatabase feature classes. This work is documented in a series of working papers, checklists and applications that ensure repeatability when the State takes over the maintenance of the broadband database. Nearly 3 million records of raw data have been processed into almost 200,000 features submitted to the NTIA

The TSSW Team's database design, tracking mechanism, documentation and related analyses were recently acknowledged by the Geospatial Information Officer (GIO) of the Federal Communications Commission as an important contribution to the development and maintenance of the National Broadband Map; and our analytical approach was noted by the GIO as a technique that the National Broadband Mapping unit and other states could learn from. He further commented that our novel insightful approach, together will our long history of GIS expertise, has resulted in exceptional data.

- **CAAG Census Geography Update:** Mid-decade, prior to the release of the spatially re-aligned Census 2000 geography, TSSW developed and applied an innovative approach to re-aligned every Census block in Pinal County to more spatially accurate aerial imagery. This process allowed for use of Census 2000 data in CAAG's socio-economic and transportation modeling processes. This process was completed in a very short timeframe and on a limited budget, saving CAAG thousands of dollars in conversion time and providing CAAG with more accurate data than had ever been previously available.
- Maricopa Association of Governments (MAG) Socioeconomic Modeling and Research Support -Transportation and Land Use Modeling Database Update: TSSW is currently updating several complex GIS data layers for use in MAG's socio-economic and transportation modeling efforts. We have developed a number of innovative approaches to updating layers and ensuring their proper spatial registration to one another. Automated routines and detailed procedures have been or are being developed to more quickly and efficiently update public land, major roads, freeways, parks, canals, watercourses and other GIS datasets.
- Maricopa Association of Governments GIS Database Enhancement Project: From early 2000 through 2003, TerraSystems provided administrative oversight and technical assistance to the Maricopa Association of Governments GIS Database Enhancement Project, a mulit-million dollar large scale GIS data conversion and automation project that culminated in the creation of a new street network file for Maricopa County, as well as a variety of socioeconomic and land use datasets facilitating land use, air quality, and transportation planning. TSSW coordinated the work of four independent subcontractors to MAG, including project scheduling and quality assurance of deliverables. TSSW also performed a street network update in-house for MAG on a separate contract to bring the 2000 work current to 2003 using aerial imagery and customized applications.



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

Zimmerman Public Affairs - At the heart of good community outreach is an appreciation for – and understanding of – the diverse people, interests and issues that are important to the citizens of an area. ZPA has strong experience in providing effective community relations and public outreach programs.

Examples of recent staff experience that include public outreach work:

- Regional Transportation Plan
- Let's Go Tucson
- University of Arizona Science Center
- Augusta Resources Corporation
- Grant Road Public Participation Project
- Rural/Metro
- Keep Marana Clean project
- 17 Tribes Indian Gaming Initiative

In the above mentioned projects, the ZPA team provided the following services:

- Strategic communications planning
- Public affairs and issue management
- Community outreach and public participation programs
- Citizen meetings, town halls and grassroots/grass tops communication
- Advertising production for print, broadcast, Internet and social media
- Press relations and story placement
- Direct mail and collateral materials
- Media planning/media buying
- Crisis communications planning and counseling
- Speechwriting and presentation coaching
- Special event and conference management
- Customer service evaluation and training
- Graphic design
- Focus groups
- Survey and opinion polling research



Solicitation No. ADSPO11-00000704

STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

3 Provide Offeror's Organization Chart with names and titles clearly noted, all personnel who will provide services and the services each will provide clearly identified as required in Statement of Work Section 2.15, and the relationship of the project leader to management and to support personnel clearly illustrated.



4 Provide a proposed time line detailing a suggested schedule for delivery of maps and a suggested schedule for the Arizona Independent Redistricting Commission (IRC) to follow as required in Statement of Work Sections 2.5.4 and 2.6:

Mapping Phase	Start	End
Initial Meeting and Map Plan Refinement	06/20/11	06/25/11
Equal Population Grid Map	06/27/11	07/15/11
Hispanic and Native American Refinement	07/18/11	08/19/11
Compactness and Contiguity Refinement	08/22/11	09/09/11
Communities of Interest	09/12/11	10/14/11
Political Competiveness Analysis	10/17/11	11/04/11
Develop Draft Final Map	11/07/11	12/02/11
Develop Final Map	12/05/11	12/30/11

5 Provide a detailed explanation of how Offeror will satisfy each of the individual requirements set forth in Statement of Work Sections 2.5.1 through 2.5.17:



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

Section	Method of Approach		
2.5.1	We will obtain an official copy of the Census P.L. 94-171 data by download from the official Census web site. The various census geographies will be processed into individual GIS layers and their related attribute information processed and joined to the appropriate GIS layer. This same information will be available to users of the Esri Redistricting application and we will confirm our local copy matches the one being used by the Esri web service.		
	We will work through the AIRC to obtain voter registration information from the Secretary of State's office and join it to the voting district GIS layers as defined in the Census TIGER files or provided by the State GIS group.		
2.5.1.1	We will download federal census and state election data from official, authoritative sites, extensively documenting the entire data acquisition process including file date, sources, file characteristics and other pertinent information. We will compare field totals such as total population and population by the various race and ethnicity categories against each other as well as against official population numbers to be sure no corruption of the database has occurred. Further, we will conduct periodic comparisons with archived certified original data with production datasets to ensure data integrity and that no tampering with the data has occurred. We will contact the Census Bureau and/or the Secretary of State office if there appear to be any discrepancies.		
2.5.2	Esri will provide Managed Services for Esri Redistricting, an on-line redistricting application and database which includes providing secure HTTPS access to the web application, operational hosting and monitoring, and troubleshooting technical support for the TSSW team. Esri's Redistricting solution will target the following service levels to support TerraSystems Southwest operational requirements for the State:		
	 24/7 System Access 95% System Availability Hosting Environment to support up to 100 active users 20 GB of Custom Data Storage Data Backup and Archive Annual Update of the State's Custom Data 24/7 Tier 2 Hosted Environment Support and Monitoring (TSSW will be primary contact and will forward un-resolved issues to Esri staff). 		
	In addition, TSSW maintains a full suite of Esri desktop GIS software products and hardware for performing supplemental manual re-districting operations. This hardware includes laptops suitable for remote public meetings and a video projector for displaying results to the public.		
2.5.3	We will provide a web-based map interface that can provide many views of proposed districts and the census geography from which they are constituted. One of the most basic views may be the nine proposed congressional districts and 30 proposed State legislative districts labeled with their total Census 2010 population and color coded as to above or below the "balanced population" number. As users zoom into any given district or districts, more detailed census geography will become visible.		
	We can have the online-map symbolized on any Census or election attribute the AIRC decides they want to see. For example, we display the percent Hispanic and Native American populations in each proposed district, either as a color code or in a pie chart format associated with each district. We can also display communities of interest in relationship to Census 2000 or 2010 demographic information or voting district information.		
2.5.4	Draft maps will be posted on-line as interactive maps and will also be made available as PDF downloads from the AIRC website. Interactive (viewable or editable) proposed district maps can be made available immediately on- line for open (public) or restricted access per AIRC direction and the PDF versions provided to AIRC staff for posting on the webpage within 24 hours. We propose		



STATE OF ARIZONA

Agency: Arizona Department of Administration

Customer: Arizona Independent Redistricting

Commission

Description: State Redistricting Mapping Services

	to use a secure FTP site for the transmission of maps and data between TSSW and the AIRC.
	Draft maps generated throughout the project will also be available from the project website (see example website mock-up in Appendix D) as compressed PDF files through the <i>Resource Room</i> link under "Download Draft Maps" sub link. For additional flexibility on gathering comments and feedback, those with access to software that allows for PDF document review and editing such as Adobe® Acrobat® X Pro (<u>http://www.adobe.com/products/acrobatpro/features.html</u>) can easily mark up the draft PDF map by using familiar commenting tools such as sticky notes and red line tools where users can actually draw in lines manually while manipulating their appearance (color, line weight). These marked up PDFs can then be submitted to the TSSW Team through either an upload process presented as a link on the website or by email submittal using a dedicated email address such at <u>RedistrictingComments2011@terrasw.com</u> .
2.5.5	The Esri Redistricting software can export redistricting maps in a variety of formats for review, including official Department of Justice formats, by the Secretary of State. TSSW will also provide all accompanying documentation related to map revisions documented during public meetings and be available to respond to guestions from the AIRC during the certification process.
2.5.6	Esri will provide optional training support for up to 8 training sessions for the Redistricting Solution.
	Details of these optional sessions is shown in Appendix A.
	The Esri Redistricting software also offers a number of resources such as software training sessions, extensive online help documentation, and a Redistricting Resource Center which provides
	access to video tutorials, forums, blogs, and other tools that allows users to successfully achieve
	their desired results throughout the redistricting process.
	Finally, TSSW team members proficient in the Redistricting application will be available via
	understanding and use of the software.
2.5.7	The TSSW Team will provide a PowerPoint presentation (.ppt) that can support additions as the process proceeds. The initial presentation will
	show the process and time frame at the state level
	give an overview of Census data
	 explain the way GIS technology is used to analyze and process it for redistricting purposes
	from a layperson's point of view (i.e., simple English, GIS jargon explained or not used).
	example maps
	outline the public participation process
	direct viewers to the website
	This presentation will be used at all public meetings and updated during each phase to show the
	most recent maps.
2.5.8	I SSW will provide a laptop computer, a high resolution video projector and at least one staff person skilled in operating the GIS software for each public meeting scheduled by the AIRC. We will also
	advertise the web site address for the online mapping site at each public meeting and explain to
	participants how to get started. Finally, we will explain at public meetings how to download PDF
	arrange download capability.
2.5.9	The TSSW Team will assist in the scheduling, coordination and facilitation of all AIRC public
	hearings and the additional stakeholder interactive workshops. We will work with AIRC to
	in and collection of comments. We will place additional notices or advertising as agreed upon to
	promote the meeting. The actual cost of meeting locations if any and refreshments will be
	paid directly by the AIRC. One suggestion would be to coordinate with county manager in each
	county to use board of supervisor facilities in that county.



STATE OF ARIZONA

Solicitation No. ADSPO11-00000704

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

٦

	Assuming the availability of a broadband internet connection, we will be able to zoom, pan, query and perform other GIS tasks against the latest published redistricting map(s). We will use on-line redlining to add comments directly to the maps being viewed. We will also take notes in Word or Excel format referenced to a map or a specific geography on the map. If broadband is not available at a meeting location, we will use standard GIS software to view the maps, though some of the functionality, such as real-time re-totaling of population as district boundaries are changed will be missing.
2.5.10	 The public participation plan for this AIRC redistricting process promotes outreach that will inform, consult and involve residents of Arizona. The commitment to promote public participation and transparency in the redistricting process drives the contents of this plan to ensure the widest practicable participation and dissemination of pertinent redistricting information and materials. To accomplish this, the plan includes the following major elements: Expansion and interactive links with the AIRC Redistricting Website On-line mapping service Invite and capture public comment, including public outreach meetings, website and use of social media Advertise public meetings and promote other ways to participate beyond open meeting law requirements Publish fact sheets(on-line and hand-out) E-mail and listserve updates "How to participate" handbook (on-line and printed) On-line survey (communities of interest)
	 Facilitated outreach with stake holders in each community to determine community of interest and/or unique community needs Use of existing community information repositories Public access to review submitted plans with comments and interactive features Expansion and branding of the AIRC Redistricting Website AIRC Website will be the primary source to disseminate all redistricting information and materials, including providing online redistricting software for the public to submit Information, and materials, including providing online redistricting software for the public to submit Information.
	 Redistricting background information Applicable redistricting law and redistricting principles Public Access Plan Meeting schedules, agendas, and minutes Summary of public comments/letters Timeline and schedule of important dates Current districts and data Glossary of terms/Frequently Asked Questions Handbook – "Why I should participate in the re-districting process" Spanish version on how to participate Resources
	 On-line Mapping The Esri Redistricting solution allows users to 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. The online mapping service will allow the public to edit maps and input comments tied to specific locations on a draft redistricting map. This service will be based by ESRI for anyone that base

[rev 052411 / ADSPO11-00000704]



Solicitation No. ADSPO11-00000704

STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

access to a personal computer and a broadband internet connection. In addition, we will create PDF versions of draft maps which can be downloaded from the AIRC website. We will coordinate with AIRC IT staff to set up a "Contact Us" link on your redistricting page so that the public can submit comments via email or follow the AIRC on Facebook or Twitter. **Community Outreach** In an effort to balance the number of formal meeting and the need to continuously receive public input, a combination of traditional meetings and diverse on-line communication tools will be deployed through the process. All of the outreach efforts will be guided by the data, the legal guidelines and a serious commitment to receive, understand and take into consideration the opinions we get from citizens as well as advocates. The promise to the public is that we will keep you informed listen and acknowledge concerns • provide feedback on how public input influenced the decision-making • keep accurate track on the process and the input provide guidance in how to use the online mapping site The plan includes fifteen formal public meetings conducted by the AIRC members, one in each of the fifteen Arizona counties. They will be scheduled starting with phase one and continue until the maps reflecting communities of interest are overlaid. The main focus of these meeting will be to gather information on residents views of community interest and factors influencing uniqueness of communities. After those series of meeting, a brainstorm session will be conducted with commissioners to help analyze and prioritize the information gathered and give direction to the next mapping phase. **Stakeholders Meetings** Participatory workshops will be held with interested stakeholders in each county to allow advocacy groups, educators and the general public to evaluate proposed plans, provide input to decision makers, and collaborate with others to develop alternative plans for consideration. Using a broadband internet connection, we will be able to zoom, pan, query and perform other GIS tasks against the latest published redistricting map(s). We will use on-line redlining to add comments directly to the maps being viewed. The group interactive sessions will be documented and submitted as part of the written comment A listing of all scheduled community meetings, as well as summaries of those meetings already conducted, will be placed on the AIRC Redistricting Website. In addition, the outreach will include the following: News advisories/press releases: • Media advertising: E-mail notices publicizing meetings and public hearing to cities, neighborhood councils, and interested organizations, communities, and individuals; Pursuit of vehicles to promote accessibility to the redistricting process and activities of the Commission in English and Spanish (as possible) Use of social network technology such as Twitter and Facebook, Skype and You Tube. **Public Access to Submitted Redistricting Plans** Members of the public will have the opportunity to submit proposed redistricting plans for consideration to the AIRC. This will be facilitated in part, by providing free online redistricting tools on the Redistricting Website, as well as providing redistricting information and materials. However, proposed redistricting plans may also be submitted by mail or hand delivery. The



Solicitation No. ADSPO11-00000704

STATE OF ARIZONA

Agency: Arizona Department of Administration

Customer: Arizona Independent Redistricting

Commission

Description: State Redistricting Mapping Services

	following will be provided with the redistricting software to assist in developing redistricting
	A list of datasets Statutary and other logal requirements for redistricting
	 Statutory and other legal requirements for redistricting Instructions/requirements for submitting a redistricting plan
	 Specific plans may be considered at AIRC Committee meetings. Proposers may wish to
	attend the meetings and testify on their plans.
2.5.11	All redistricting map versions will have a unique identifier assigned. All significant variations or
	changes in a draft map submitted by the public or made interactively during a public session will be
	draft map will be classified into one or more categories of concern for easier reference and retrieval.
2.5.12	All comments related to an existing draft map will be tagged with unique map identifier (e.g. name
	plus revision number). These maps will be archived and therefore any comment related to them
	will allow access to the map in the archive. In addition, more general comments not specifically
2513	related to a map, including process, public involvement, etc. will be coded and archived.
2.0.10	from the GIS in the DOJ required format.
2.5.14	The Esri Redistricting software can export redistricting maps in a variety of formats for use in legal
	documented during public meetings and be available to respond to questions from the AIRC during
	the certification process. Preparation and court-time will be billed at standard hourly rates and is not
	included in this proposal as we cannot anticipate the demand for these services.
2.5.15	TSSW will coordinate weekly teleconferences with AIRC staff and attend all AIRC public meetings in
	person or via teleconference. We will produce monthly progress reports and be available by phone during require the teleconference.
	may have. The online mapping service will provide an ongoing access to all up-to-date documents.
2.5.16	TSSW will provide a laptop computer capable of displaying and manipulating the various draft
	redistricting maps. We will also provide one high-resolution video projector for all public meetings.
	We will assume that broadband internet connections will be available at any venue in which we
	x 100" 600 DPI plotter for production of hardcopy maps.
2.5.17	The TSSW team will collect and tabulate comments from the public received from many sources
	including but not limited to the following:
	 formal testimony submitted in writing
	On-line comments submitted to the website comments and map redines received from ArcGIS com
	comments received by Face book or Twitter
	 comment cards accompanying map display at public places
	 manual mark-up of hard copy maps, depending on the clarity of such mark-ups
	letters or emails received by Commissioners or other AIRC staff
	Archival of all maps, including maps used at public meetings which may contain handwritten
	comments. These may be archived as hard copy maps or alternatively as scanned digital
	images.
	All of the data will be kept in a usable archival manner and be submitted in both electronic (text,
	Excel, Word or PDF) and in hard copy format (indexed notebooks). The notebooks and
	reference.
	Archives of redistricting versions will be kept both as "frozen" GIS layer in the GIS database as PDF snapshots, and as hardcopy printouts.



Solicitation No. ADSPO11-00000704

STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

In addition, the comments will be coded and organized by the categories in a responsiveness summary. A responsiveness summary can be an effective way to demonstrate how public comments are addressed in the decision making process. This summary will also include the full data analysis of the on-line survey.

6 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.7.

TSSW team will assist the AIRC staff in developing and managing of social media sites such as Facebook, Twitter etc. We can cross link the mapping site to the AIRC redistricting webpage, Facebook and Twitter accounts and encourage the public to follow and comment on the Commissions progress on redistricting through these media. TSSW will assist AIRC staff in monitoring comments on these sites.

Social Media is an important part of "Intelligent Web Maps" and would be encouraged as part of our public outreach. Social media provides what is called "dynamic source data" in real-time and can be empowered and incorporated into our Interactive Web presence for the Redistricting 2011 effort. ArcGIS Online integrates directly with Twitter or Facebook, meaning that while using ArcGIS Online, a user can search for Tweets on Twitter or posts on Facebook related to the Redistricting 2011 project.

We assume AIRC current website- azredistricting.org will host redistricting resources and information for public access. TSSW team will assist in minor webpage creation and functionality, if needed.

7 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.8.

The Esri Redistricting program we propose to use will do automatic tabulation's of AIRC-defined Census attributes as district boundaries are modified. District statistics let users view a total count or percentage of the population in the proposed districts. The District Statistics dialog box also displays the target mean that can be used as a reference guide for the total population for each district in a plan.

8 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.9.

All redistricting map versions will have a unique identifier assigned. All significant variations or changes in a draft map submitted by the public or made interactively during a public session will be recorded and documented as to the original map revision number and what has changed. All comments related to an existing draft map will be tagged with unique map identifier (e.g. name plus revision number). These maps will be archived and therefore any comment related to them will allow access to the map in the archive. In addition, more general comments not specifically related to a map, including process, public involvement, etc. will be coded and archived.

9 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.10.

TSSW will provide online access to all major map drafts as well as uploading all PDF versions, reports, notes, etc. to a secure FTP site where AIRC staff can access, download and store for their use.

All supporting documentation used to compile the public comments logs and reports will be kept in binder that will be readily accessible. Computer generated logs and reports will be posted on line.

10 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.11.

As part of preparation for this RFP response, TSSW has a detailed work plan and timeline (organized by weeks) ready for AIRC review and modification starting project inception. See Appendix B.



Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

11 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.12.

The TSSW Team will provide a monthly progress report as well as a weekly phone update to AIRC staff throughout the duration of the project. The report will capture the activities of the previous month, including responsiveness summaries from all sources of the public participation effort. It will include an upcoming challenges section and highlight any immediate discussion or needs. We will also be available by phone during regular business hours to respond within 24 hours to any short-term requests for progress information.

12 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.13.

The TSSW Team will coordinate with AIRC staff prior to all public input hearings to be sure that appropriate materials are available and presented in a concise and coherent fashion. We will have at least one GIS Analyst or GIS Manager from TSSW at all public input hearings to answer questions, show maps and demonstrate the mapping software. The public involvement team will jointly facilitate the public interaction at the commission hearing ensuring a smooth and fair process for receiving information both verbally and in writing. The TSSW Team will work cooperatively with AIRC staff to plan and facilitate stakeholder online interactive workshops.

13 Provide a detailed explanation of how Offeror will satisfy the requirements set forth in Statement of Work Section 2.14.

TSSW will maintain all files behind a secure firewall and stored on encrypted hard drives. We will transmit files to the AIRC through a secure FTP site controlled and maintained by TSSW. We will perform verified, bi-weekly backups of project data and store back-ups offsite. All workstations will run anti-virus software with real-time checking. The online web application will be run using HTTPS protocol for security.

14 For the ten-year period preceding this offer, provide a detailed explanation of Offeror's political activity and services performed, whether voluntary or for a fee, for a political candidate, as an officer of a political committee, or as a campaign worker or fundraiser.

TSSW principals have not engaged in any organized political activities in the past ten years. We have produced a handful of voting precinct maps for local Tucson members of the Democratic Party free of charge over that time period.

Global Systems Modeling has not engaged in any organized political activities over the past ten years.

Priyanka Miller, Independent GIS Consultant, has not engaged in any organized political activities over the past ten years.

Peter Zimmerman, (ZPA Principal) see Appendix G Table 1 for political activity in the last 10 years.

Carol Zimmerman, (ZPA Principal) see Appendix G Table 1 for political activity in the last 10 years.

Whitney Misenhimer (ZPA Employee) Republican – has had no volunteer or paid political activity in the last 10 years except as required by her current employment.

Tina Altounian (ZPA sub), Democrat – has had no volunteer or paid political activity in the last 10 years except as required by her current employment.

(STERIO)	
alla a	

Agency: Arizona Department of Administration
Customer: Arizona Independent Redistricting

Commission

Description: State Redistricting Mapping Services

taken a position on a ballot initiative or sought to influence the redistricting process.

15 For the ten-year period preceding this offer, provide a detailed explanation of services performed by Offeror, whether voluntary or for a fee, as a lobbyist or consultant for any political party, interest group or other entity that has supported, donated money to, or raised money for, or provided in-kind support for a candidate for public office or

TSSW Principle Howard Ward- has not engaged in any political activity or donation of this type in the past ten years.

TSSW Principle Cheryl Thurman- has not engaged in any political activity or donation of this type in the past ten years.

Curtis White of Global Systems Modeling- has not engaged in any political activity or donation of this type in the past ten years.

Priyanka Miller, Independent GIS Consultant- has not engaged in any political activity or donation of this type in the past ten years.

Peter Zimmerman, ZPA Principal- see Appendix G Table 2 for political donations in the last 10 years.

Carol Zimmerman, ZPA Principal- see Appendix G Table 2 for political donations in the last 10 years.

Whitney Misenhimer, ZPA Employee- Republican – has not engaged in any political activity or donation in the last 10 years.

Tina Altounian, ZPA sub, Democrat – has not engaged in any political activity or donation in the last 10 years.

16 For the ten-year period preceding this offer, provide the date, nature and amount of political contributions by Offeror:

TSSW Principle Howard Ward has not made any political contributions in the past ten years.

TSSW Principle Cheryl Thurman has made two political donations in the past ten years: 02/28/11 – Donation to the League of American Voters - \$10.00 12/30/10 – Donation to the College Republicans - \$5.00

Curtis White of Global Systems Modeling has not made any political contributions in the past ten years.

Priyanka Miller, Independent GIS Consultant, has not made any political contributions in the past ten years.

Peter Zimmerman, ZPA Principal -see Appendix G Table 2 for political donations in the last 10 years.

Carol Zimmerman, ZPA Principal-see Appendix G Table 2 for political donations in the last 10 years.

Whitney Misenhimer, ZPA Employee- has not made any political contributions in the past ten years.

Tina Altounian, ZPA sub-has not made any political contributions in the past ten years.

17 For the ten-year period preceding this offer, describe the date, source, nature and amount of any donations or other funding from any source whether in cash or in kind used to support the operations of Offeror:

TSSW has received no donations or other funding from any source to support its operations.

Global Systems Modeling has received no donations or other funding from any source to support its operations.

Priyanka Miller, Independent GIS Consultant, has received no donations or other funding from any source to support her Independent Consulting business.



STATE OF ARIZONA

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

Zimmerman Public Affairs has received no donations or other funding from any source to support its operations.

18 Has Offeror filed bankruptcy within the last five (5) years?

No. TSSW, nor any of its subcontractors (Global Systems Modeling, Priyanka Miller – Independent GIS Consultant, Zimmerman Public Affairs) have <u>ever</u> filed bankruptcy.

19 Has Offeror had a contract within the last five (5) years that was terminated for cause due to breach or similar failure to comply with that contract? If "yes," please identify and summarize applicable details. Otherwise, if "no," state "No."

No. TSSW, nor any of its subcontractors (Global Systems Modeling, Priyanka Miller – Independent GIS Consultant, Zimmerman Public Affairs) have ever had a contract terminated for any reason.

20 Offeror must list any lawsuits against the Offeror that have occurred within the last five (5) years, including any that may be currently pending.

None. TSSW, nor any of its subcontractors (Global Systems Modeling, Priyanka Miller – Independent GIS Consultant, Zimmerman Public Affairs), have never had any lawsuits filed against them or any currently pending.

21 Describe and explain any personal, family, or financial relationships or commitments that Offeror has that a reasonable person would consider likely to improperly influence someone making a redistricting decision.

None. TSSW, nor any of its subcontractors (Global Systems Modeling, Priyanka Miller – Independent GIS Consultant, Zimmerman Public Affairs), have any relationships or commitments that would be reasonably considered to improperly influence someone making a redistricting decision.