<County Name>, Arkansas

CONTRACT SPECIFICATIONS

Creation of Updated District Boundaries to Reflect the 2010 Federal Decennial Census

Proposals must be submitted no later than:
<Time>
<Date>

To constitute a valid submission, proposals must:

1. Be submitted by the specified date and time (see above),
2. Address all requirements established herein, and
3. Contain the completed certification found in SECTION 5.0.

For general information regarding this document, please contact:

<Name of County Clerk>, County Clerk, *<Name of County>*, Arkansas
<Mailing Address>
<City Name>, AR *<ZIP Code>*
<9-Digit Phone Number>

<County Name>, Arkansas

CONTRACT SPECIFICATIONS

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SECTION 1.0: INTRODUCTION AND GENERAL INFORMATION

1.1   PURPOSE: By Arkansas law, the political subdivisions of the State are required to review the boundary lines of various election districts after each decennial census. This ensures the citizens of the county are equally represented by their elected officials. This process is widely known as redistricting. The purpose of this document is to outline the deliverables and specifications for the delivery of services and Geographic Information Systems (GIS) data to assist the County Election Commission, school board, or city council in redistricting the various election districts. These may include Justice of the Peace Districts, city wards, and Public School Board of Directors zones.

The process of establishing new districts or updating boundary lines is subject to certain constitutional and statutory requirements. It is the responsibility of the contractor to become familiar with and adhere to these requirements. Questions about any of the various election districts should be directed to the appropriate point of contact as described in the following section.

1.2   POINTS OF CONTACT: Questions regarding these contract specifications shall be addressed to the individual listed below:

Justice of the Peace Districts:
<Name of County> County Election Commission
Attn: *<Name of County Clerk>*, County Clerk
<Mailing Address>
<Name of City>, AR *<ZIP code>*

School Board of Directors Zones:
<Name of School District> Public School District
Attn: *<Name of Superintendent>*, Superintendent
<Mailing Address>
<Name of City>, AR *<ZIP code>*

City Wards:
City of *<Name of City>* Mayor's Office
Attn: Honorable *<Name of Mayor>*, Mayor
<Mailing Address>
<Name of City>, AR *<ZIP code>*

Section 2.0: SCOPE OF WORK AND DELIVERABLES

2.1   SCOPE OF WORK: The successful proposer will create an updated *<Data Layer>* spatial data layer for *<County Name>*, Arkansas, which reflects 2010 federal decennial census. Updated district boundaries will adhere to constitutional and statutory requirements and the descriptions and specifications outlined in subsequent sections.

The contractor shall use the US Census Bureau census block boundary file, hereafter referred to as block(s), as the foundation layer used to build each district area. A redistricted area can be composed of many blocks; however, it is desirable that no district boundary split a block. In the event a block must be split, the boundary line splitting the block shall follow and be topologically coincident with a photo-identifiable physical feature. These will be features such as roads, railroads, stream and rivers. A reference list of supplemental GIS data representing these physical features and links where these data can be accessed are contained in Section 2.2.6 of this document.

The attribute table of the census block data layer will provide a summary of total population in the block. This population summary can be totaled for the entire county and will represent the official count of population for redistricting purposes. The total population count will be divided by the number of districts required to estimate the ideal district population. To explain further, if a county's population falls into the category requiring nine Quorum Court districts, 9000 persons for example, the ideal population size in each district would be 1,000 persons. Put another way, 9,000 persons divided by 9 districts equals 1,000 persons per district.

Due to the nature of the data and other legal and policy requirements, it is technically challenging to create districts that are perfectly equal in population size. Exact equality of population is a goal but not a requirement; however, districts created in the plan must comport with legal standards for equality of population.   Actual variation among the proposed districts should be minimized while attempting to achieve numeric equality. Prospective contractors should also be aware that some counties contain state correctional facilities whose permanent inmate populations which will be reflected in the corresponding census block. Those counties include Chicot, Hot Spring, Izard, Jackson, Jefferson, Lee, Lincoln, Miller, Mississippi, Pulaski, Saline, and Washington. These populations will need to be accounted for when grouping census blocks into a new election district. Spatial data representing the locations of these correctional facilities can be obtained via Geostor, Arkansas' geospatial data clearinghouse. Links to these data can be found in section 2.2.5 below.

In addition to providing the county with updated district boundaries, another important goal of the work will be to update the existing seamless statewide district data that resides on GeoStor. In order to facilitate the efficient incorporation of the updates into the existing data, specific database schema shall be adhered to. Details about the schema which shall be used are found in Section 2.2.4 and Appendix A.

2.2   DELIVERABLES: The deliverables shall consist of:

1) At least one draft plan for review by the county,

2) Topologically correct polygon spatial data in shapefile format representing the specific type of election district as well as the associated feature attribute tables (See Appendix A), and

3) A series of maps in Adobe PDF format representing the final approved districts for the entire county and each individual district.

2.2.1   Draft Plans: There will be instances the county may require several draft plans. A draft plan will represent a potential redistricting configuration in the county that shall be composed of multiple blocks. However, a given plan may result in inconvenient election administration, polling place locations, or other scenarios that will be known to local officials.

A draft plan shall be composed of two parts. Part one shall be a GIS-based map depicting groups of census block polygons that are thematically associated with each district in the county. At the draft phase, the GIS-based maps will display the individual census block polygons rather than those polygons being combined into a single district polygon. This will allow population based apportionments to be performed more intuitively and accurately. Appropriate thematic symbology will need to be used to ensure clear depiction of the districts.

Part two shall be a tabular report depicting at minimum the following attributes:

1) The unique geo-identifier (GEOID) assigned by the U.S. Census Bureau for each block,

2) The new district number associated with each block,

3) The population of each block,

4) A total population for the new district, and

5) The percent deviation from the ideal district population.

The County Election Commissioners will judge these plans and decide upon the final version which is in the best interest of voters, election administration, and polling sites. Final adopted district boundaries shall be established by combining the individual blocks which make up a specified district.

2.2.2   Coordinate System: The contractor shall create and deliver the shapefiles using the UTM coordinate system, Zone 15 north, North American Datum 1983, and the units shall be meters.

2.2.3   Topologically Correct Spatial Data: All new district data shall be a seamless polygon data layer in a shapefile format covering the geographic extent of the county, city, or school district, as applicable. The successful proposer shall create and maintain the requisite map topology. The following topology rules shall apply. The county reserves the right to deny all, or any portion, of district boundary data that does not meet these topology rules.

Rule	Description
Must Not Overlap	Requires that the interior of polygons in the feature class not overlap. The polygons can share edges or vertices. This rule is used when an area cannot belong to two or more polygons. It is useful for modeling

administrative boundaries, such as ZIP Codes or voting districts, and mutually exclusive area classifications, such as land cover or landform type.

Must Not Have Gaps   This rule requires that there are no voids within a single polygon or between adjacent polygons. All polygons must form a continuous surface. An error will always exist on the perimeter of the surface. You can either ignore this error or mark it as an exception. Use this rule on data that must completely cover an area. For example, soil polygons cannot include gaps or form voids—they must cover an entire area.

2.2.4   Database Schema: In order to facilitate the efficient incorporation of county updates into existing statewide district datasets, specific database schema shall be adhered to. Details for schemas applicable to specific data layers are found in Appendix A.

2.2.5   Existing Data Used in the Creation of the Deliverable: In the event that census block boundaries are split by identifiable features such as administrative boundaries, roads, or streams, applicable statewide framework datasets available via Geostor shall be utilized. Specific framework datasets which should be used are:

Feature type	Dataset
Census Blocks	2010 Census Blocks *(when released)*
	http://bit.ly/AR2010CensusBlocks
Justice of Peace Districts	Justice of Peace Districts
	http://bit.ly/ARJPDistricts
Roads	ACF: Arkansas Road Centerline File (line)
	http://bit.ly/ARRoads
Streams (linear)	Medium Resolution: National Hydrography Dataset Flowline
	http://bit.ly/ARStreams
Rivers (area)	Medium Resolution: National Hydrography Dataset Landmark
	http://bit.ly/ARRivers
Waterbodies	Medium Resolution: National Hydrography Dataset Waterbody
	http://bit.ly/ARWaterbodies
City Limits	City Limit (polygon)
	http://bit.ly/ARCityLimits
School Districts	Public School District Boundary (polygon)
	http://bit.ly/ARSchoolDistricts
Railroads	Railroad (line)
	http://bit.ly/ARRailroad
County Boundaries	County Boundary (polygon)
	http://bit.ly/ARCountyBoundary

Supplementary Data

Other supplementary data are available for the user to assist in the identification of physical features and other information that may inform the redistricting process.

Feature Type	Dataset
Orthoimagery	Arkansas Digital Orthoimagery Data
	http://bit.ly/AROrthos
Address Points	Address Point File
	http://bit.ly/ARAddressPoints
Correctional Institutions	Correctional Institution (point)
	http://bit.ly/ARCorrectionalInstitutions

**Note: The correctional institution dataset contains all jails and prisons in Arkansas. To identify state correctional facilities, users should query the dataset for 'NAICSCODE' = 922140.

2.2.6   Maps: The contractor will be required to provide the county with presentation quality district maps in Adobe PDF format. These maps shall be based on the final plan adopted by the County Election Commission. The maps will represent the entire county as well as each individual district. In addition to the revised district boundaries, map content shall include, at a minimum, appropriately and clearly symbolized and labeled county boundaries, city limits boundaries, roads, and streams. Specific map size will be at the discretion of the county; however, typical map sizes would be E (36"x48"), 11"x17", and 8 ½"x11".

2.2.7   Software: The contractor will list GIS software to be used to perform topological control processes. If the software is other than an ESRI ArcGIS product, the procedures and steps taken to achieve topological accuracy and to convert the deliverable into the required format shall be documented with the deliverable.

2.2.8   Deliverable Media: All digital data associated with these contract specifications shall be delivered on mutually agreed upon media, including but not limited to:

a.   CD
b.   DVD
c.   Portable USB hard drive
d.   Portable USB flash drive
e.   Electronic delivery by email attachment or File Transfer Protocol (FTP)

2.2.9   Database Backup: The contractor shall be required to systematically create a computer data backup of all data associated with the project for the duration of the project. The backup shall be part of the deliverable, and shall be restored in the event of a system failure of the contractor equipment during the development of the data.

2.2.10   Relinquishment of Data Rights: The contractor must agree to release all rights of ownership, copyright, and distribution rights of the data deliverables resulting from these contract specifications to *<County Name>*, Arkansas.

2.2.11   Metadata: The data deliverable resulting from these contract specifications will be documented in accordance with Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata Version 2 (FGDC-STD-001-1998).

2.2.12   Quality Control: The contractor shall provide a detailed description of their internal quality control processes. The county will perform quality control to ensure accurate topology as well as adherence to the statewide framework datasets. The county also reserves the right to enlist the oversight of the Arkansas Geographic Information Office (AGIO) for management and quality control.   The county reserves the right to deny acceptance of all, or any portion, of the deliverable data that does not meet aforesaid quality control measures.

2.2.13   Time Period for Completion: All deliverables described in this contract specifications document shall be completed and returned to the county within a period of *<Time Period>* days after the successful proposer is notified.

SECTION 3.0: PREPARING AND SUBMITTING A PROPOSAL

3.1   GENERAL INSTRUCTIONS: Selection will be based on information submitted by the respondent. In order to be considered, prospective contractors must fully comply with instructions contained herein. Nonconforming submittals shall be rejected.

3.2   COVER LETTER: Each respondent shall provide a cover letter detailing the company's qualifications, experience, and competence for producing the required deliverable in the specified time period, and it shall contain a summary of the methods to be used by the prospective contractor. In addition, the prospective contractor's price for completing the required services shall be included in the cover letter. Other details pertaining to pricing are found below.

3.3   CONTRACTOR INFORMATION: With submitted proposals, each prospective contractor must include company name, complete office address, telephone number, and name of the primary contact person responsible for submitting the proposal.

3.4   PLACE AND TIME OF SUBMITTAL: Prospective contractors must submit two (2) copies of their completed proposal along with any supplementary information to *<County Name>* County Clerk's Office no later than *<Closing Time>* on *<Closing Date>*.

Mail to:
<County Name> County Clerk's Office
Attn: *<Name of Clerk>*, County Clerk
<Mailing Address>
<City Name>, AR *<ZIP Code>*

Deliver to:
<County Name> County Clerk's Office
Attn: *<Name of Clerk>*, County Clerk
<Physical Address>
<City Name>, AR *<ZIP Code>*

Proposals received after the date and hour specified will be considered late and will be automatically disqualified. Late proposals will be returned unopened.

3.5   INCURRING COSTS: *<Name of County>* County is not liable for any cost incurred by prospective contractors in replying to this specifications document. The cost of developing and submitting the proposal is entirely the responsibility of the prospective contractor. This includes costs to determine the nature of this engagement, preparation and submission of proposal, and all other costs associated with these contract specifications.

3.6   RIGHT OF REJECTION: *<Name of County>* County reserves the right to award this contract to the firm that best meets the requirements of the specifications, and not necessarily to the firm submitting the lowest pricing. The county reserves the right to reject any or all proposals prior to execution of the contract, with no penalty to the county.

3.7   PRICING: Each prospective contractor will submit fixed one-time pricing for the GIS data deliverables described in Section 2.0 above.

3.8   PRICE PROTECTION: Pricing provided to the county as a result of this contract specifications document shall be in effect for a period of 60 days from the date and time of proposal opening.

SECTION 4.0: EVALUATION AND AWARD

4.1   EVALUATION: In order to select the firm whose proposal is most advantageous to the county, prospective contractors will be evaluated based on their submitted pricing as well as demonstrated qualifications and experience. As stated in the 'RIGHT OF REJECTION' section above, the county reserves the right to award this contract to the firm that best meets the requirements specified in this document, and not necessarily to that submitting the lowest pricing.

4.2   AWARD: Award will be made based upon the evaluation of all proposals received in response to this solicitation and the determination of the proposal considered to be the most advantageous to the county. The successful contractor will be notified by mail once the selection has been made.

4.3   PAYMENT: Payment to the contractor will be made according to the following schedule:

>   30% at start of contract
>   40% upon delivery of initial draft plan
>   30% upon acceptance of the final plan by the election commission

SECTION 5.0: CERTIFICATION

THIS PAGE MUST BE COMPLETED, SIGNED, AND RETURNED FOR THIS PROPOSAL TO BE CONSIDERED.
(Must be original, in ink. No photocopies.)

I, the undersigned, affirm that this proposal is made on behalf of the below-named individual/company, for whom I have legal authority to commit to the terms and conditions set forth in the contract specifications and this response, to which I/we agree to be bound if this proposal is found acceptable by; and that this proposal is made without any collusion or coercion on the part of any person, firm, corporation or other entity.

Company Name: _____

Address: _____

_____

Representative: _____

Title: _____

Phone: _____

Fax: _____

Email: _____

Signature: _____

Date: _____

APPENDIX A – DISTRICT POLYGON ATTRIBUTE TABLE SCHEMAS

The following tables illustrate the minimum attributes of the polygon features that shall be delivered with the district polygons. Each value entered in an attribute table shall have a corresponding polygon and vice-versa.

Justice of the Peace Districts

Field Name	Type	Length	Description
County	Text	15	Stores the name of the county.
FIPS	Text	3	Stores the unique FIPS code of the county.
District	Text	5	Stores the district number of the 2010 redistricted Justice of Peace districts.

School Districts

Field Name	Type	Length	Description
LEA	Text	7	Stores the Arkansas Department of Education local education agency unique identifier
Unified	Text	5	Stores US Department of Education unique identifier
Name	Text	30	Stores the school district name
Zone	Text	5	Stores the number of the 2010 redistricted school board zones.

City Wards

Field Name	Type	Length	Description
City	Text	30	Stores the name of the city.
FIPS	Text	5	Stores the unique FIPS code of the city.
District	Text	5	Stores the district number of the 2010 redistricted City Wards.