SOLE SOURCE DETERMINATION

The Purchasing Division has been requested to approve a sole source purchase for the commodity or service described below. Pursuant to West Virginia Code 5A-3-10c, the Purchasing Division is attempting to determine whether the commodity or service is a sole source procurement. If you believe your company meets the required experience and qualification criteria stated below, please e-mail the Purchasing Division at team@wvadmin.gov to express your interest in the project. Please forward any and all information that will support your company's compliance with required qualification and eligibility criteria along with any other pertinent information relative to this project to the Purchasing Division no later than August 16, 2006.

Requisition Number: TAX07003

Department/Agency: West Virginia State Tax Department

Detailed Description of Project:

See Attached Specifications

Proposed Sole Source Vendor: Marshall University Research Corporation

Specific Eligibility Criteria:

Must be able to:

Provide countywide seamless digital tax parcel data in geo-database format with parcel identification numbers and annotations by converting existing paper tax maps and/or existing digitized county data.

Provide separate feature layers of stream, road, and railroad in project areas.

Provide linking of the digital tax parcel polygons to the assessors attribute database to create a GIS for general use by all county offices.

Link GIS maps with Integrated Assessment Systems (IAS) database.

Link GIS maps to extracted database.

Customize software to include (1) a functional interface for the GIS graphic data and IAS system textural data; (2) make interface compatible with the individual county's chosen software; and (3) customize queries and reports based on the individual assessor's needs.

Specific Qualification Criteria:

Must have a minimum of 5 years experience in the specific eligibility criteria and to have performed all of those outlined activities in a minimum of 6 counties in West Virginia for use by the county assessor.

WEST VIRGINIA DEPARTMENT OF TAX AND REVENUE
AND MARSHALL UNIVERSITY
DATA CONVERSION AGREEMENT AND SPECIFICATIONS

A. Raleigh County

1. Project Set-Up

All map files will be supplied by Raleigh County. Next project workflow parameters will be developed.

2. Preliminary Design File Set-up

All drawings will need to be exported into 2-D drawings, and all curves, complex shapes/strings and dimensions must be transformed into simplest form. MURC will then scale and change current working units to ensure consistency with existing mapping. Each file will then be fenced and moved to its general location in relation to the existing mapping. MURC will then be able to begin the geo-referencing process.

3. Georeference Existing Design Files

The existing design files will be geo-referenced to best fit the orthophoto base. MURC will identify road intersections within the source file and then identify the same road intersections on the orthophoto images. MURC will then "warp" the source file to best fit the orthophoto base. This process is intended to move each file to its approximate location with relation to the underlying orthophoto.

To begin this process, MURC will first copy the insets located on each map to a separate design file. Next, several "control points" will be identified within the source files. These locations will primarily be road intersections, or any feature that can be clearly identified within the source file and on the orthophotos. Once these "control points" are identified, the existing parcel data will be "rubber sheeted" to fit the orthophoto with the best-fit possible based on the control points.

4. Parcel Linework Adjustment and Digitizing

After the design files have been fitted to the orthophotos, MURC will fine-tune the position of each parcel line. This may include scaling, moving, and/or rotating to adjust the design file to match the features identified on the orthophoto. Fine tune adjustment will be performed on a block-by-block basis in urban areas in order to achieve the most accurate solution possible. Linework for similar types of features at all scales will be of consistent weight. Limits of each map will be drawn as a closed polygon but will edgematch to surrounding maps. County will be responsible for locating all "floating" parcels and making decisions on all questionable contacts.

5. Text/Symbol Adjustment
Each text item will be scaled, rotated or adjusted to fit the new linework and suitable for plotting. Example of items to include (but not limited to) is dimensions (for parcels shown with less than 1 acre), acreages (for parcels of 1 AC or more). All text features will be placed so they are right reading. Additional text (i.e. parcel #, lot numbers, railroads etc) will be reflected in the attribute table.

6. Preliminary and Final Linework Processing
After the linework and text features have been clearly placed, scaled and rotated, MURC will ensure that all work is topologically structured, clean, and without duplicate points, etc. The parcel lines and district boundary lines will also be included in this check.

7. Geo-database
All parcels will have geo-database attached. This data will include district, map, parcel number, sub-parcel and account number. It will also include the data from the State Tax Dept. program IAS 4.

8. Pilot Project
Initially MURC will receive 5-7 maps to use as a pilot project. These maps will join the existing spatially placed maps (Beckley Corporation). These maps will include varying scaled drawings, insets & inserts. The extent of the pilot project shall include at least one insert map. MURC will perform all tasks and submit to the State Tax Dept and to the County for review and comments. Once the State Tax Dept. and the County have accepted the pilot project, work will proceed by MURC on a district-by-district basis.

9. Final Product
The final product will consist of a seamless, countywide digital tax parcel data in geo data base format. This geo database will contain each parcel's attribute information following the conventions of Table 1. MURC will follow the conventions of special parcel Ids shown in Table 2.

The final product will also include feature layers of stream, road and railroad with names as attributes where they exist. Information of these feature layers may be obtained and incorporated from the planametric data provided by Statewide Addressing Mapping Board.

Table 1

Name of Parcel Attribute Field	Example of Parcel Attribute
DISTRICT	04
MAP	16
PID	27.3
PCL	0027
SUBPCL	0003
ROOTID	41-04- 16-0027-0003-0000

Table 2

Special Parcel ID	Type of Special Parcel
9999.1	Water
9999.2	Road Right of Way
9999.3	Railroad Right of Way
9999.5	"Island" Parcel Assessed in Other County
9999.6	US Government Parcel w/o Parcel Number
9999.7	Exempt w/o Parcel Number
9999.9	Problem Parcel

10. Deliverables

Upon approximately 75% completion of district maps, MURC will submit to the State Tax Dept. and the County for review.

Countywide seamless digital tax parcel data in geo database format with parcel identification numbers and annotations, including dimensions and acreages as required on the original tax maps, along with feature layers of stream, road, and railroad having name attribute information, obtained and incorporated from the planametric data provided by Statewide Addressing Mapping Board, to create datasets for Raleigh County. Data required hereby shall be completed and delivered by June 30, 2007. Once the project has been completed and accepted, it will be delivered to the State Tax Dept, and the County on CD.

B. Gilmer, Morgan, Taylor and Wetzel Counties

The following procedures will be used for digital conversion of Tax Parcel Maps for State Tax Department.

1. WARPING

The rural 1:4800 scanned images will be geo-referenced to real world coordinates using the transportation and hydrography layers from the 1:24000 Digital Line Graphs (DLG) generated for the Mineral Lands Mapping Program (MPMP) or more accurate available photography. All urban or town parcels (1:1200) will be geo-

referenced to the 1 meter resolution USGS Digital Orthophoto Quarter Quadrangles (DOQQs) or more accurate available photography.

2. VECTORIZATION

The scanned image and/or DOQQs or more accurate available photography will be used as a background for "heads up" digitizing or correction of existing digitized parcel boundaries as necessary. Parcels with significant linework modification will be flagged for the review of State Tax Department staff.

3. ATTRIBUTE TAGGING

Parcel Identification Numbers (PINs) will be captured for each parcel specified on the map. Parcels that originate on an adjacent map will be tagged on its respective map only (no double tagging of parcels). Generic tagging will be provided for rights of way and large bodies of water.

4. QUALITY CHECKING

The parcel shapefile will be quality checked for gaps and overlaps of polygons, missing parcels and general attribute integrity.

5. EDGE MATCHING

Linework for each parcel that extends into an adjacent map will be matched to the corresponding linework in the adjacent map. This procedure may require assistance from State Tax Department staff.

6. FINAL PRODUCT

The final product for each county will consist of a seamless, countywide, surface parcel polygon shapefile in ESRI format. This shapefile will contain each parcel's attribute information following the conventions of Table 1. The conversion contractor will follow the conventions of special parcel IDs shown in Table 2.

The final product will also include a single, separate, ESRI format shapefile for each line coverage of the roads, water, and hydrology with names as attributes where they exist.

TABLE 1

Name of Parcel Attribute Field	Example of Parcel Attribute
DISTRICT	4
MAP	16
PID	0027-0003
ID	42-04-0016-0027-0003-0000

TABLE 2

Special Parcel ID	Type of Special Parcel
9999.1	Water
9999.2	Road Right of Way
9999.3	Railroad Right of Way
9999.5	"Island" Parcel Assessed in Other County
9999.6	US Government Parcel w/o Parcel Number
9999.7	Exempt w/o Parcel Number
9999.9	Problem Parcel