

**440 S 8th St Ste 210
Lincoln, NE 68508
(402) 471-2745**

**APPLICATION FOR STATE RECORDS BOARD GRANT
TO IMPROVE ACCESS TO PUBLIC INFORMATION
(Local Government Agency)**

The Nebraska State Records Board is sponsoring a grant program for county and municipal governments for the development of programs and technology to improve electronic access to public records by citizens and businesses. The grants may be used for the creation or enhancement of electronic access and delivery of government services and information, but not to fund ongoing operations. One of our highest priorities is to encourage collaboration and projects which can ultimately be used in multiple jurisdictions with minimal modification. Collaborative projects may be awarded grants in the amounts not to exceed \$25,000.00; single jurisdiction projects have a \$10,000.00 limit.

A collaborative grant must have more than one jurisdiction involved or be a project or application that can readily be shared and utilized by more than one jurisdiction. A single jurisdiction, in order to qualify as a collaborative grant, must provide a plan of how the application will be made available and shared with other jurisdictions at no charge.

Grant Criteria

Projects requesting funding must meet criteria #1-3. In addition, criteria #4-6 will be considered when reviewing funding requests:

1. Enhance the delivery of local government agency services and improve access to those services.
2. Meet the state's technology access clause for providing equal access to services for persons with disabilities. A copy of the technology access clause is available at: <http://www.nitc.state.ne.us/standards/index.html> under 2. Accessibility Architecture.
3. If the project or service created or improved pursuant to the grant application involves the licensing, permitting or regulation of businesses, then the project or service must allow integration with the State of Nebraska's Business Portal at: <http://www.nebraska.gov/index.phtml?section=business> and the One-Stop Online Business Registration System at: <http://www.nebraska.gov/osbr/cgi/domestic.cgi?OSBRApplication/init/init/None>

4. Improve the efficiency of agency operations.
5. Facilitate collaboration between local, state and federal agencies and other public institutions (if applicable).
6. Support public/private partnerships in the delivery of public services through the Official State portal, Nebraska.gov.

Grant applications will be considered by the Board at their quarterly meetings. For application due dates, Board meeting dates and any other questions about the process, please contact Cathy Danahy, Executive Director, at cathy.danahy@nebraska.gov or (402) 471-2745.

Local Agencies desiring grants from the Nebraska State Records Board for projects to create or improve electronic access to government information must complete the following application and follow any procedures outlined.

NOTE: All successful candidates will be required to submit a written project report to the State Records Board at the conclusion of their project.

If you need additional space for your answers please attach any documentation necessary. *Applications not completed in full will be returned to the requesting agency for completion and resubmission.*

I. GRANT SUMMARY

1. **Name of agency applying for grant:** Grant County, Nebraska
2. **Title of project:** GIS System for Grant County Assessor's Office
3. **Brief description of project:**

The Grant County Assessor is required to comply with the State of Nebraska Assessor regulations requiring the county's TerraScan assessor software to be updated with the most current Natural Resources Conservation Service (NRCS) soil survey information. The Assessor has obtained a bid from GIS Western Resources, Inc. to utilize GIS software and geospatial models to update the county's TerraScan database efficiently and accurately. Grant County is applying for this technical grant to obtain funding for this project.

4. **Grant request amount:** \$20,412.00
5. **Will there be a fee for accessing records associated with this project? If yes, provide any statutory reference or authorization for fee.**

There will not be a fee for accessing these records. All tabular data and geospatial datasets created are considered "public information" and therefore available to public at no cost.

II. GRANT DETAIL

1. Please describe the project in detail (you may attach this description).

Grant County will contract GIS Western Resources, Inc. to utilize Geospatial Information System (GIS) applications and to update the county's assessor database with the most current NRCS soil survey information, which is required to calculate property assessment values, allowing Grant County to comply with State Statute Section 77-1363. The system will create classes and subclasses to reflect uses appropriate for the valuation of such land according to law and is based on soil classification standards developed by the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture as converted into land capability groups by the Property Tax Administrator. The Grant County Assessor shall utilize this system to provide landowners with current and accurate property valuations, and to achieve more uniform and proportionate valuations.

GIS Western Resources, Inc. will not only provide the county with the updated soil information required for property assessments, but they will also provide additional tools that will allow the county assessor to provide land owners with parcel soil and parcel land use summaries and maps. This project will also allow for the identification and elimination of inaccuracies in current estimation of road acreage and conflicts between current land use classifications, and result in more accurate section and parcel boundary data.

The total initial cost of the project is \$25,412.00 and the yearly upkeep cost is \$25.00 to \$55.00 per hour depending on the number of required parcel updates. This upkeep cost will be provided for in the annual Grant County Assessor's budget.

2. Please describe who the beneficiary or recipient of this service will be and projected activity for access or use of the proposed service.

This project will benefit Grant County by bringing the county into compliance with Statute 77-1363 and by making the assessment of Grant County property more efficient.

3. Timeline for implementation (*a specific completion date (MM/YYYY) must be provided*). *Grant funds lapse if not expended prior to completion date.*

The scheduled completion date for this project is 12/31/2009.

4. Subdivision contribution to project (labor, equipment etc.).

The Grant County Assessor will provide copies of all existing agricultural, cadastral, and survey maps. The assessor's office will also assist with the QA/QC of database information and map data.

5. Is other funding available for this project (explain)?

Yes, partial funding has been budgeted from Grant County funds in the 2009/2010 assessor's budget. There was no budgeting for this project in the 2008/2009 budget.

6. Does the project require additional statutory authority (explain)?

Adequate statutory authority is already in place for this project.

7. Specify (in detail) what the grant money will be used for. Include a complete cost breakdown of the project. Please attach bids from vendors (if applicable).

This grant money will be used to help pay the projected \$25,412.00 expense of installing the GIS system in Grant County Assessor's Office to use in assessing rural property in Grant County. Prior to the start of the project Grant County did make a \$5000.00 project initiation fee payment to GIS Western Resources, Inc. June 30, 2009 to reserve their services (See attached cost estimate).

8. Why is the grant money needed for the project, and, if applicable, how will the service be sustained once the grant money is expended?

Grant County is a small county with a population of approximately 750 people including 1 village and two unincorporated villages. Grant County is really stressed to keep up with the additional expenses and time required to meet state mandates, while continuing to provide citizens with the services they require. Minimal maintenance will be required and can easily be provided for in the existing assessor's budget.

9. Please describe how this project will enhance the delivery of agency services or access to those services.

This project will increase the accuracy and efficiency of Grant County rural property assessment. It will also increase the speed in retrieving information when requested by Grant County taxpayers and other individuals.

10. Please describe how this project will improve the efficiency of agency operations.

This project will provide system that can aid in the quick, efficient, and accurate updating of parcel and agricultural and land use boundaries, Land Capability Groups (LCG) and property value assessment.

11. Please describe how this project will facilitate collaboration among other local, state and federal agencies and other public institutions.

Information generated during the course of this project will be maintained in a database that is structured to be compatible with the surrounding counties and

can be adapted for their use, thus facilitating easy transfer of information among systems.

12. Please describe how this project will support public/private partnerships in the delivery of public services through the Official State portal, Nebraska.gov?

Grant County is considering developing a website, which will be linked to the official state portal (Nebraska.gov). This website will provide information and links for all Grant County offices including the Grant County Assessor's office.

13. Does the project involve the licensing, permitting or regulation of business? If yes, explain how the project or service will allow integration with the State of Nebraska's Business Portal and the One-Stop Online Business registration system.

No, this project will not involve licensing, permitting or regulation of business.

III. TECHNICAL INFORMATION

Please see attached Project Outline & Technical Information Document for additional project details and technical information.

1. Describe the hardware, software, and communications needed for this project and explain why these choices were made.

Grant County currently has all software and hardware required for this project. We have recently upgraded our hardware and software to accommodate the TerraScan assessor software, and Microsoft Access parcel summary and report generation tools. We have also added internet capabilities to the system to allow GIS Western Resources, Inc. to remotely update database and parcel summary data.

2. Address any technical issues with the proposed technology including:

- **Conformity with general accepted industry standards. Projects which interface with other state systems (such as distance learning systems) must meet NITC technical standards and guidelines (NITC standards and guidelines are located at: <http://www.nitc.state.ne.us/standards/>).**
- **Compatibility with existing institutional and/or statewide infrastructure.**
- **Reliability, security and scalability (future needs for growth or adaptation).**

No known hardware, software, or networking technical issues are related to the project. In addition, all parcel boundaries created for the purpose of soil

extraction will be created to comply with NITC Land Record Information Standards, and Geospatial Metadata Standards, thus insuring compatibility of the Grant County land records with statewide county land records.

The proposed system has been proven reliable, secure, and is designed to easily adapt and grow to meet future needs.

- 3. Describe how the project will comply with the State's Technology Access Clause: <http://www.nitc.state.ne.us/standards/index.html> under 2. Accessibility Architecture.**

Information retrieved from this system will be available to people with disabilities by telephoning, emailing, or visiting the Grant County assessors' office.

- 4. Describe how technical support will be provided.**

The Grant County Assessor will be able to receive technical support from GIS Western Resources, Inc. by contacting the project coordinate at any time to receive assistance by telephone, remote assistance, or to request onsite support.

IV. STATE LAW COMPLIANCE.

Nebraska law, sections 4-108 through 4-114 (LB 403, 2009), states that no political subdivision of the State shall provide public benefits, to include grants or contracts, to a person not lawfully present in the United States. The undersigned, on behalf of the political subdivision grant applicant, by signing this grant application, affirmatively states and acknowledges that the political subdivision will comply with this law.

V. CONTACT INFORMATION & SIGNATURE

Contact person for any questions regarding this application:

[Christee L. Haney](#)

Phone #[\(308\) 458-2488](tel:3084582488) **E-mail:** haneycl@live.com

Signed this _____ day of _____, _____

Agency Director

Please return to:
Nebraska State Records Board
440 S 8th St. Suite 210
Lincoln, NE 68508
(402) 471-2745

(Last updated 08/31/2009)

COUNTY PARCEL, LAND USE & SOIL EXTRACTION PROJECT OUTLINES

09/29/09

Catherine A. Danahy
Executive Director, NE State Records Board
Deputy Secretary of State for Records Management
Records Management Division
Secretary of State's Office
440 South 8th Street, Suite 210
Lincoln, NE 68508

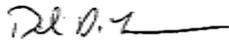
I have constructed the following project outline to provide the Nebraska State Records Board the supplemental information it requested, regarding project goals and related technical information.

This scope of work includes:

- Project descriptions
- Project Assumptions and Procedures
- Data Standards
- Project Deliverables

Please feel free to contact me with any questions you may have, or to request additional information.

Sincerely,



Dale Hanna
GIS Western Resources, Inc.
GIS Project Manager
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P.O. Box 1166 North Platte, NE 69103
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PROJECT DESCRIPTIONS

The counties of Arthur, Blaine, Grant, Hooker, Logan, and McPherson (Nebraska) are seeking assistance with the incorporation of recently updated Natural Resources Conservation Service (NRCS) Soil Survey Data into current property assessment software (TerraScan & MIPS), thus allowing the counties to achieve compliance with Neb. Rev. Stat. Sec. 77-1363, requiring:

Agricultural land and horticultural land shall be divided into classes and subclasses of real property under section 77-103.01, including, but not limited to, irrigated cropland, dryland cropland, grassland, wasteland, nurseries, feedlots, and orchards, so that the categories reflect uses appropriate for the valuation of such land according to law. Classes shall be inventoried by subclasses of real property based on soil classification standards developed by the Natural Resources Conservation Service of the United States Department of Agriculture as converted into land capability groups by the Property Tax Administrator. County assessors shall utilize and implement soil surveys in the assessment year after the soil survey maps become available from the Natural Resources Conservation Service of the United States Department of Agriculture. Nothing in this section shall be construed to limit the classes and subclasses of real property that may be used by county assessors or the Tax Equalization and Review Commission to achieve more uniform and proportionate valuations.

Source: Laws 1985, LB 271, § 8; Laws 1988, LB 1207, § 5; Laws 1989, LB 361, § 17; Laws 1991, LB 320, § 9; Laws 1994, LB 902, § 19; Laws 1995, LB 490, § 139; Laws 1997, LB 270, § 81; Laws 1999, LB 403, § 7; Laws 2001, LB 170, § 15; Laws 2004, LB 973, § 30; Laws 2006, LB 808, § 36.

To help the counties achieve their goals, GIS Western Resources, Inc. will utilize Geospatial Information System (GIS) tools and geospatial models to:

1. Extract parcel, section, and land use boundaries.
2. Extract recently defined NRCS Soil Survey Soils and calculate the total area of each soil type for each parcel land use.
3. Assign Land Capability Group (LAND USE or LVG) codes to each land use based on intersecting soils, using customized geospatial models.
4. Incorporate updated land use and soil databases into existing property assessment software (TerraScan/MIPS).
5. Export and integrate parcel land use and soil maps into reports using Microsoft Access Parcel Report Generator developed and provided at no additional cost by GIS Western Resources, Inc.
6. Ensure that all extracted data (parcels, sections, and land use) meet Nebraska Information Technology Commission (NITC) Geospatial Metadata and Land Record Information and Mapping Standards.
7. Export parcel and land use layers to formats (.kml) that can be used in open source mapping applications such as Google Earth and ArcExplorer.

PROJECT ASSUMPTIONS & PROCEDURES

This project outline is based on the following assumptions.

1. All parcel boundary, land use boundary, and soil extraction and acreage calculations will be performed by GIS Western Resources, Inc. Following project completion, datasets will be maintained by GIS Western Resources, Inc. at an hourly rate. All updated information (TerraScan/MIPS updates, and parcel soil and land use maps) will be remotely loaded into existing databases by GIS Western Resources, Inc.
2. To assist with parcel and land use boundary extraction and decrease the overall cost of the project, the assessor office's will provide GIS Western Resources, Inc. with all sources pertaining to the delineation of current property boundaries, including but not limited to:
 - a. Recent property assessment reports
 - b. Cadastral maps
 - c. Surveys
 - d. Past county soil surveys
 - e. Plat maps
3. To assist with conversion from existing soil codes to current NRCS soil codes, county assessors will provide GIS Western Resources, Inc. with a Microsoft Excel spreadsheet containing the most current soil conversion information.
4. GIS Western Resources, Inc. will acquire the following geospatial data required for parcel boundary, land use boundary, and soil extraction:
 - a. Natural Resources Conservation Service / United States Department of Agriculture, National Agriculture Imagery Program County Mosaics (2003 through 2007), Digital Ortho Quad County Mosaic, and enhanced Digital Ortho Quad imagery.
 - b. Natural Resources Conservation Service, SSURGO Soil Survey Spatial and Tabular Data (2008).
 - c. Nebraska Department of Roads, General Highway Maps (1999).
 - d. United States Geological Survey (USGS) 1:24,000 topographic maps.
 - e. Nebraska State Surveyor's Office GLO Original & Resurvey Plat Maps, and Bureau of Land Management (BLM) surveys.
5. Prior to project initiation, GIS Western Resources, Inc. and county representatives (county assessors) will construct a Standard Operating Procedure that will provide guidelines for project initiation, execution, and completion.
6. GIS Western Resources, Inc. will provide county officials and Nebraska State Record Board officials with periodic reports outlining project progress. This report will also identify any potential problems which might affect project completion.
7. GIS Western Resources, Inc. will integrate the extracted soils database into the current property assessment software (TerraScan or MIPS), with technical assistance from the software provider. **Counties will be responsible for any charges the software provider might implement for integration of the updated soils database.**

8. To minimize cost, GIS Western Resources, Inc. will provide each county with a customized Microsoft Access Parcel Report Generator (assuming that suitable hardware/software is available to run the program), so that county officials and landowners can generate and review updated parcel soil reports. Following review and verification of each parcel summary, all summaries will be provided to the county assessors for attachment to assessment files and/or TerraScan parcel records, and for dispersal to the public. Each county will be allowed to retain the Parcel Report Generator following project completion to generate parcel soil and land use maps and reports for customers.
9. All data generated will be non-propriety and will be distributed by each county. Data can be distributed to the public as Parcel Reports (including land use and soil maps), or as .kml or .shp files that can be utilized in open source mapping applications such as Google Earth and ArcExplorer. Requests for data would be submitted directly to each county.
10. GIS Western Resources, Inc. will make every effort to complete all projects by December 31, 2009. GIS Western Resources, Inc. will contact the client if issues arise that will prevent the project from being completed by the established deadline.
11. Copies of the parcel, land use, and soil databases will be kept at GIS Western Resources, Inc. main office (109 E 2nd St. Suite 2, North Platte, NE 69101) for backup and maintenance purposes.

DATA STANDARDS

Data will be extracted/formatted according to Land Record Information and Mapping, and Geospatial Metadata Standards.

1. All original datasets (parcel and land use) will be assigned the following datum and projection information when database is created:
 - Projected coordinate system: NAD 1983 State Plane Nebraska FIPS 2600 (Feet)
 - Geographic coordinate system: North American Datum 1983, North American Vertical Datum 88.
2. Primary corners for each county will be identified and used to verify county jurisdictional boundaries. Identification of primary corners will be conducted using one of the following methods:
 - a. GIS Western Resources, Inc. will use a Global Positioning System (GPS), to record geographic coordinates of existing section markers (if available).
 - b. County surveyor will survey and mark the corner of the county boundary and then make the geographic location of the marker available to GIS Western Resources, Inc for incorporation into county parcel datasets.

3. GIS Western Resources, Inc. has conducted thorough research to identify the best data available for identifying section boundaries, on which parcel boundaries will be created. Mr. Steven Cobb of the Nebraska State Surveyor's Office was contacted to determine the best available source of PLSS data for the region (Sandhills) in which the counties reside. Mr. Cobb stated that most section boundary markers within the region have been lost or buried throughout the years, and the best dataset available for section boundary identification in the Sandhills region is the United States Geological Survey's (USGS) 1:24,000 scale Topographic Maps. He also stated that caution should be taken when using the USGS Topographic Maps due to inaccuracies in the data. The USGS was contacted regarding the topographic map datasets, and verified that the maps were created using original GLO surveys, but that the maps are not to be considered "legal documents" identifying section boundaries. The Nebraska State Surveyors Office has original GLO and Resurvey Maps available for the region, however, the accuracy of these maps is uncertain.

Current PLSS section boundary datasets published by the Nebraska Department of Natural Resources (DNR) will not be used in parcel boundary extraction because the dataset was created by digitizing the SE corner of each section and then using these points to construct a polygon representing the four corners of each section. This procedure did not take into account section offset between township, range, and county boundaries, resulting in angled and inaccurate section boundaries. In addition, it is believed that the data was extracted at a much smaller scale (1:50,000 or 1:100,000), resulting in reduced accuracy. The Nebraska DNR was contacted regarding the PLSS data, and confirmed the potential inaccuracies in the PLSS section dataset.

Due the known inaccuracies of existing data sources, GIS Western Resources, Inc. will use USGS Topographic Maps as the primary source for identifying section boundaries. The area (acres) of each extracted section boundary will be calculated and compared to the "recorded" acreages that each county assessor has on file. Extracted sections will only be considered "acceptable" if their calculated acreages that are within +/- 1% of the total "recorded" acres. Unacceptable sections will then be compared to all other existing data sources (GLO surveys, resurveys, known GPS locations, etc.) to resolve the error. Sections containing errors that cannot be resolved may require the county to request a resurvey of the boundary.

4. Datasets will be extracted between 1:4,800 and 1:9,600 scale for rural areas, and 1:1,200 scale for towns and villages. Plat maps and county surveys of both rural and urban areas will also be used to increase data accuracy where available.

5. The most current Aerial imagery (NRCS/USDA NAIP county mosaics, USGS DOQs, etc.) and current county assessor land use descriptions for each parcel will be used to extract all land use information. Imagery will also be used as a “general” guide to gage the accuracy of parcel boundaries by comparing extracted boundaries to features such as roads and fence lines.
6. The parcel, land use, and section data will be collected and stored in a “master” file geodatabase. From this “master” database, data can be exported to other commonly used formats (.shp, .kml, personal database, etc.).
7. Parcels and lots will be assigned a unique identifier as defined by each county. All of the counties currently use parcel and lot identification numbers, which are stored in TerraScan and MIPS assessor software databases. All other attribute data that is stored in TerraScan and MIPS databases will be joined to the datasets using the parcel and lot identification numbers.

DELIVERABLES

GIS Western Resources, Inc. will provide each county with the following deliverables:

1. Database containing updated soil acreages, land use acreages, and land value codes for each county parcel, and formatted so that it can be loaded into existing TerraScan and MIPS assessor software.
2. Section boundary geodatabase.
3. Parcel boundary geodatabase (attributed and projected NITC Geospatial Metadata and Land Record Information and Mapping Standards).
4. Land use boundary geodatabase.
5. Microsoft Access Parcel Report Generator for reviewing parcel, land use, and soil data, and for creating parcel summaries, which include parcel land use and parcel soil maps and acreage summaries for each.

3. To assist with conversion from existing soil codes to current NRCS soil codes the Grant County Assessor's office would provide Mr. Hanna with a Microsoft Excel spreadsheet containing the most current soil conversion information.
4. Mr. Hanna would obtain the following geospatial data required for parcel boundary, LCG boundary, and soil extraction:
 - a. Natural Resources Conservation Service / United States Department of Agriculture, National Agriculture Imagery Program County Mosaics (2006 (1m) & 2007 (2m)).
 - b. Natural Resources Conservation Service, SSURGO Soil Survey Spatial and Tabular Data (2008).
 - c. Nebraska Department of Roads, General Highway Maps (1999).
5. Mr. Hanna would integrate the extracted soils database into the current property assessment software (TerraScan), with technical assistance from the software provider. Grant County would be responsible for any charges the software provider might implement for integration of the updated soils database.
6. To minimize cost to the county, Mr. Hanna would provide the Grant County Assessor's Office with a customized Microsoft Access Soil Summary Report Generator (assuming that suitable hardware/software is available to run the program), so that county officials and landowners can generate and review updated parcel soil reports. Following review and verification of each parcel summary, all summaries would be provided to the Grant County Assessor for attachment to assessment files and/or TerraScan parcel records, and for dispersal to landowners.

ESTIMATED COST SUMMARY

The following table outlines standard project Task Levels and associated hourly rates. Task Levels are determined by the complexity and/or skill level required to complete a task. Therefore, more complex tasks will have a higher hourly rate associated.

TABLE 1: TASK LEVEL HOURLY RATE BREAKDOWN

TASK LEVEL	HOURLY RATE
PROJECT MANAGEMENT	\$55.00
LEVEL 1 (ADVANCED TASK)	\$45.00
LEVEL 2 (INTERMEDIATE TASK)	\$35.00
LEVEL 3 (ENTRY LEVEL TASK)	\$25.00