

## **Extension Program Enhancement Funds Proposal - 2009**

Title: Promoting GIS knowledge and use by the public sector in rural Oklahoma: A Pilot Project

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Amount requested: \$5,000

<u>Budget:</u> Travel (10 Stillwater – Idabel trips):	\$3,000
1 File Transfer Protocol (FTP) server (separate desktop):	\$1,500
1 Terra-byte data server:	\$300
Supplies (training folders / handouts):	\$200

### Project Overview:

Geographic Information Systems (GIS) are becoming increasingly important across nearly all industries, but can be particularly useful for those in the public sector. For example, being able to map the location of residents in a flood zone is important for individuals involved in emergency planning; looking at the location of all delinquent taxpayers can be helpful to the tax assessor; and viewing the location of available power utilities, transportation routes, and land typology is beneficial to the local industrial authority. However, very few rural counties in Oklahoma have public sector employees with enough knowledge of GIS to use it in their specific job. This project will address that gap by developing GIS training tutorials and providing hands-on GIS training via an easy-to-use (and free) GIS tool in McCurtain County. Each tutorial will be tailored to specific tasks of interest to a particular entity, such as the ones listed above.

McCurtain County in southeastern Oklahoma is in a unique position to serve as a pilot project due to the large amount of GIS data collected and public interest that exists due to work performed on a previous project not affiliated with OSU. McCurtain County public entities have expressed high levels of interest in participating in the type of GIS training that this funding would establish. In particular, signed letters of support (attached) have been obtained from the county treasurer, tax assessor, and director of the Idabel Industrial Development Authority indicating that they are enthusiastic about their employees participating in GIS training that is specific to the responsibilities of their offices. Other public sectors, such as the EMS director and school and rural water districts, have also been engaged and are supportive of this effort.

### Proposed Programming Activities:

The primary goal of this project would be to create a pilot-level training program for rural county and municipal employees on how to use GIS data in their jobs. This would entail several steps on the part of OSU Extension, including:

- 1) Development and hosting of county-level website with all relevant publicly-available GIS data – designed for easy use by non-GIS employees
- 2) Development of detailed GIS training workshops for 5-7 public sector offices using ArcExplorer (a free, lightweight version of GIS that is designed for 1<sup>st</sup> time users)
- 3) Delivery of 5-7 GIS training workshops (each at different public sector site)
- 4) Enhancement of GIS modules / assessment for transferability to other counties

The “tricky” part of establishing this curriculum will lie in combining publicly available GIS data with the sometimes confidential private data housed at each public sector office (for example, delinquent taxpayer data). Trips to observe and make sure this private data is GIS compatible, along with training workshops geared specifically towards using a particular type of data, will ensure that employees will know how to meaningfully use GIS technology in areas of interest to them and their constituents. If this 1-year pilot project is successful, similar efforts could be performed in other rural counties. Several counties in southeast Oklahoma have heard of the previous McCurtain County effort and are interested in participating in the future.

#### Potential Impacts:

Perhaps the largest potential impact relating to this program is the establishment of the AgEcon department as a knowledge base for GIS education and use in rural Oklahoma. This could enhance current rural development programs while leading to increases in other work requested from our department, including:

- Enhancement of current rural EMS / hospital / solid waste analysis
- Inclusion of GIS techniques in County Training Program
- Feasibility studies dealing with rural school or water districts
- Planning efforts for mayors or industrial recruitment offices

Additional impacts include the items that the public or municipal entities would improve on after participating in the GIS training:

- *EMS*: Improved decision making regarding emergency planning, response, recovery
- *Tax collector / assessor*: Improved delinquent property collection, improved communication with constituents (better understanding of land issues)
- *County commissioner*: Better understanding of current road / infrastructure scenarios (aerial footage), improved site planning analysis
- *Mayors / city managers*: Improved assessment of asset data (fire hydrants, sewer lines), improved understanding of natural resources info in cities
- *Industrial authority*: Improved ability to work with interested parties to display relevant information (adjacent properties, boundaries, nearby infrastructure)
- *School districts*: Improved understanding of district maps, boundary planning scenarios, population forecasts; availability of a teaching tool that encourages student participation
- *Sheriff / police*: Improved methods of analyzing crime locations / potential patterns

In an effort to document program impact, participants will be required to provide updates to the county extension director on how the training has affected their job performance.