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2015
**EXCELLENCE IN
INNOVATION**
Awards Program

recognizes

Jackson County GIS

for development and implementation of the

Jackson Health GIS/GPS System

Team Members:

Kevin Jamison & Adam Blythe

LGFCU Excellence in Innovation Award Project Evaluation

Project Number	GG-1
Title of Program	Jackson Health GIS/GPS System
Program Category	General Government
Submission Date	4/2/2015 9:02:00 AM
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Implementation Date	1/6/2014
FLSA Designation	Both (if applicable to a team)
Project Team Members	Kevin Jamison, GIS Mapping Supervisor; Adam Blythe, GIS Analyst

Description of Productivity Improvement

The Environmental Health division of Jackson County Public Health was one of the last clients of Jackson County GIS to come online with enterprise GIS. Many challenges faced the employees of this department in the research of their historic well and septic permitting records. Veteran employees were retiring, taking with them knowledge of permits pulled throughout the decades. Field data was being kept on paper drawings only. A long orphaned PICK database was being used to track basic ownership and agent data taken when permits were opened. Confusion over changing parcel ID numbers in Tax Administration made it necessary to be in constant contact with Land Records to track down inactive PINs so that older site drawings could be located. Only a few Environmental Health Specialists were taking any kind of GPS coordinates in the field, and those coordinates were taken with recreational grade units with no GIS available to store the data. With the incredible growth in parcel count and permits pulled during the mid-2000's real estate market explosion, it became necessary to provide an efficient research tool for the Environmental Health staff. Enter GIS.

Problems Solved

Historic Research

The majority of research needed to track down permitting information can now be done in ESRI's ArcMap GIS software. A historic parcel layer marking the center of inactive parcel ID numbers is linked with historic permit scans. As new parcels are added, the historic parcel layer accounts for both new parcel IDs and those which become inactive. The parcel ID is used in conjunction with an index to pull images of paper permits to be viewed through the GIS software.

Locational Data

Specialists are locating well and septic systems with GPS. Future generations of Specialists will be able to see inspection sites on aerial photography and obtain approximate coordinates for the sites. Scanned permits are also available via hyperlink on those layers. Important information including who performed the inspection, the inspection date, and site information are readily available through the mapped locations.

Maps in the Field

Land Records parcel boundaries, road centerlines, well, septic, and well buffer information are available in the field on the GPS units. This helps the Specialists easily locate property lines and other features at the site that impact the permitting process.

Description of why this project was initiated

County of Jackson's Environmental Health division was essentially mapped on paper maps with no tracking of current parcel owners or parcel ID numbers. The Jackson Health GIS program was developed in house by Jackson County GIS to dynamically track well and septic permitting data. The goal of the project was to make Environmental Health self-sufficient in their research of historic well and septic permits by using an enterprise GIS and to enable the location of new well and septic sites by GPS. The scope of the project involved developing a specialized GIS for Environmental Health from the ground up

while integrating Tax Administration and E911 addressing datasets into the new GIS for research. What makes this project exemplary is the willingness of The Department of Public Health to give up their fear of GIS and new technology while embracing an ambitious project.

Quantifiable results (sustainability, cost savings, cost avoidance and/or a higher level of service).

Indication of what resources were used and what was done with any accrued time savings

The ultimate goal of the GPS workflow was to make all GPS units “grab and go”. The Specialists would be able to take the GPS off of its dock and go to work. Likewise, they would be able to return from the field, click one icon on the desktop, and check in their data to the enterprise. Eliminating the human side of GPS data administration alone saves 20 minutes per Specialist per day, allowing more time to focus on providing permits for the taxpayer.

The time it takes to research parcel ownership information has also been drastically cut. Phone calls to Land Records from Specialists and Environmental Health clerks for parcel research assistance have all but been eliminated. Environmental Health has become self-reliant in parcel research and location. Self-reliance has had a positive impact on productivity, especially with clerical and administrative work. It has also cut phone traffic in Land Records saving property mappers man hours.

Other descriptive information

All scripts used to interface the Trimble GPS units to the GIS were developed in house by the County of Jackson's GIS Department. All databases and GIS layers were also completely developed in house. No cost was accrued in software and equipment purchases above the licenses already in place at the County. The aspect of the project that made the biggest impact was teamwork. The Jackson Health GIS/GPS system promotes teamwork and community between County departments.