

March 20, 2008

## ISPLS- Indiana Society of Professional Land Surveyors

Meeting: ISPLS - Central Indiana Chapter Meeting

Date: April 10, 2008

Location: Metropolis Mall, Plainfield  
Stone Creek Restaurant  
2498 Futura Pkwy  
Plainfield, IN 46168  
(317) 837-9100

Time: 6:00 pm – Social  
7:00 pm - Business meeting and presentation

### **Presentation Title:**

Tie Card Pilot Project: PLSS Township, Range, and Section Corner Coordinates or County Surveyor Section Corner Descriptions at your finger tips by clicking on a point on the Indiana Map

### **Speaker Bio:**

Lorraine Wright, LPG, is a Geologist for the Indiana Department of Environmental Management. She is located in Indianapolis in the Engineering and GIS Services Section of the Science Services Branch of the Office of Land Quality. She uses Geographic Information System Software to analyze and interpret geological, chemical, and environmental information as it relates to properties to help in remediating environmental problems.

Lorraine is also a member of the Indiana Geographic Information Council. She was asked to co-chair the Cadastre, Boundaries, and Public Land Survey System (PLSS) Workgroup (formerly the Geodetic Workgroup) and to work with the surveying community to develop a state-wide PLSS Framework - GIS layer for Indiana.

### **Abstract**

The original Tie Card Pilot Project goal was to plot (in a GIS layer on a map) all the legally surveyed section corner “coordinates” that were tied to the Public Land Survey System (PLSS) corners. This GIS layer would be the “PLSS GIS Framework Layer” that linked to county data to give a state-wide view. We couldn’t achieve the goal because most counties do not have legally surveyed “coordinates” for the PLSS corners. County Surveyor’s have the Section Corner description cards but few counties have the equipment, funding, or staff that would enable them to purchase the needed equipment and collect “coordinates” using Global Position Systems (GPS). GPS is a relatively new technology when compared to historical surveying methods.

The IGIC Cadastre, Boundaries, and PLSS Workgroup (formerly the Geodetic Workgroup) was co-chaired by IDEM and ISPLS representatives. The group (participants from the public and private sector) worked together to find a solution (Phase I) that benefited all involved from the GIS and surveying communities to anyone dealing with land and property issues. The Workgroup developed a process for all counties to view their section corner descriptions cards on the Indiana Map, via the internet, by clicking on a point on a map.

The project combined surveying needs and making information available to the public in an easy to use Geographic Information System (GIS) layer (Tie Card Layer) on the Indiana Map/GIS Atlas website. It is a way to link County data (with different naming conventions into a State-wide

view). Workgroup participants helped develop the process, software and instructions needed to enable county participation.

The Workgroup developed processes and written instructions for:

- Scanning
- A state-wide naming convention for the “Tie Cards” that could be linked to the County’s naming convention
- Computerized map points (Grid Points) that could be used to hyperlink (connect) the scanned image of a Section Corner Description Card to a point on a map
- Renaming Software that made it easy to create a link between the County Section Corner Description Card (Tie Card) and the Statewide naming convention
- A free GIS software returned to the County Surveyor with their information in an easy to use GIS application for their office
- An internet site available for the County Surveyor to link to and/or host their scanned images of the Section Corner description cards (acting as a backup in the case of a disaster)

Workgroup participants:

- ❖ Indiana Department of Environmental Management
- ❖ Indiana Geographic Information Council
- ❖ Indiana Society of Professional Land Surveyors
- ❖ Indiana Association of County Surveyors
- ❖ Office of the State Geodetic Advisor
- ❖ Indiana Geological Survey
- ❖ Private sector businesses
- ❖ Other local and state agencies