

PAMAGIC MATTERS

APRIL 2013

Funning Up GIS for the PA GIS Conference

PaMAGIC Contest Array

In preparation for the Annual GIS Conference, and with the intention of 'funning it up', PaMAGIC is creating 12 prizes spread out over 3 categories:

Video Shorts - \$100 first prize, \$50 second place, \$25 third place cash prizes

What would you do if in charge? - 6 \$25 i-tune music or Android app store gift cards

GIS Smartphone App Reviews - 3 - \$25 i-tune music or Android app store gift cards

Video Shorts are to be original work relating to GIS generally and preferably GIS in PA. Loose criteria are: up to two minutes in length, generally forward-looking and creative, not sad or mean. Winners will be announced and shown during the PaMAGIC session at the GIS Conference. *One does not have to be a PaMAGIC member nor be present to win.* Suggested categories are:

Epic fails
Shifted priorities
Crazy how-to
Inspirational

What would you do if in charge of GIS in PA? Describe in words something you would do as GIS Czar of

the Commonwealth. We think you should be able to do it in 140 characters or less but a good paragraph would be OK as well.

GIS Smartphone App Review is just to let others know what you've found that works, and could include user tips, source info, history, competing apps. We'll publish a bunch of them but prizes will go to those with great info and insights to share.

Send your entries to: nlernst@hacc.edu by May 15. Please pass this on through your other networks

PAMAGIC Board Member—Eric Jespersen

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GPN's— Ugh!!

One of my clients was asking me about the proper format for a good key for GIS and Land Record integration and the subject of the GeoPIN came up. I wanted to review some of the thinking for the last 40 years about good land identifiers and went back to the source—D. David Moyer. I have known David for many years through the URISA connection and he has always been willing to share his thoughts. This year marks the 40th anniversary of Land Parcel Identifiers for Information Systems edited by Moyer and Fisher, published by the American Bar Foundation in 1973. Moyer mentions six criteria for a good key:

- Uniqueness—one and only one
 - Accuracy—spatial information stored as part of the key (GeoPIN)
 - Flexibility—compatible with various working systems
 - Economy—cost effective to implement, and
 - Accessibility—of source materials to access and use the number.
- I have had stability issues with GeoPIN's. Since most everything in a GIS is based on State Plane Coordinates even small datum shift might change the GeoPIN. With datum shifts from 1927, 1983 and another

one brewing soon, I am worried about any key that might not be stable or unique over time. David thought that the datum shifts would all be small, but even then the unique key might change even if slightly and could cause havoc with long term land record searches or linkages.

A datum shift brings up another issue about "corners" being assigned SPC too. Wouldn't they be impacted by the datum change too? Yes, and David volunteered the use of metadata to keep it all straight.

Something to think about? Or not?

PAMAGIC Board Member—Peirce Eichelberger

Time to Rethink Legal Descriptions in PA!

Since the 1988 enabling legislation from the Commonwealth for Uniform Parcel Identification (UPI) new efforts are highlighting the need for improved legal descriptions. As I work with Recorder of Deeds in Pennsylvania or Clerks (in other states) I am still amazed that the bulk of the public record, the legal description, is not checked or verified in any way prior to recordation. With a UPI program there is a renewed sense that the legal in the instrument cross-references to a proper map parcel or GIS polygon. This cross-referencing is a gigantic step in improving the quality of legal descriptions in Pennsylvania.

The ALTA (American Land Title Association) estimates (2008) that fully 40% of all instruments have errors! This sounds like the third world.

So often legal descriptions are “copied” from instrument-to-instrument with no double-checking and usually without a surveyor’s involvement. To make matters worse GIS mapping staff that want to use a legal description to check or update the map will normally have to reenter the legal in order to use COGO routines. Most of the time the legal is stored as a TIFF image and direct interchange with GIS is difficult at best.

Legals can be improved by:

- Implementing a UPI program (yes PA is a leader in this area)
- Getting surveyors involved in the preparation of any legal description involving real property,
- Storage of legal descriptions in a ASCII format, not just as a TIFF image, and
- Updating our subdivision ordinances to include State Plane Coordinates (SPC) and monument references within the legal description.

Peirce Eichelberger, PAMAG-IC Board Member

Calendar of Events

PA GIS Conference—
June 3-5—PennStater,
State College

**2013 Central PA GIS
Day—**November 20 FREE
registration, free exhibit
space) HACC Midtown

If you have an event that you would like to share with the PA GIS community, email it to our [newsletter editor](#).

New GIS/Survey Workshop Coming!

A new workshop is planned for the PAGIS conference on June 3rd. The workshop will be presented by a Surveyor (Peter Borbas) and by a GIS'er (Peirce Eichelberger). The workshop is open to PAGIS attendees at no additional cost, but seating is limited to the first 45 that sign up. The workshop is a joint effort by GLIS and URISA. The instructors will be engaging in a dialogue with the materials and you will come away with a renewed appreciation for the role of surveyors in so many things GIS. The GIS audience will gain a vast new perspective on the role of surveys and surveyors in all things dealing with legal descriptions. Peirce has authored over a dozen different workshops for URISA since the early 1980's. Peter has an enthralling message that will

captivate the attendees. He has a new take on “metadata” that will make you a believer.

The instructors will present much of the material in a “point-counterpoint” format that will engage the attendees in every section. Peirce and Peter will share some of the following:

- A new datum is coming—ready or not?
- Let's think about legal descriptions in a whole new way.
- Cool geodetic stuff that only Peter can make exciting!
- CAD and GIS—the interface, datums and sharing data
- State Plane Coordinates and monuments in legal descriptions—long over due!
- GPS—surveying and just finding things, what is the difference?

- Surveying and GIS, how we need each other like never before.
- Rise of the subparcels—implications for GIS, cadastral layers and many others.
- GeoPIN's—the good, the bad and the really ugly.
- PA's UPI program and its impact on the courthouse.
- Cool stories from the field.

A much-anticipated workshop 20 years in the making. If you are a GIS'er or a Surveyor you will not want to miss this new workshop.

Peirce Eichelberger, Board Member

U.S. Census Update

County, Puerto Rico Municipio, Metropolitan and Micropolitan Area Population Estimates: July 1, 2012

Internet tables showing population estimates, rankings and components of change for the nation's counties, county equivalents, metro and micro areas since the 2010 Census and up to July 1, 2012. Internet address:

<<http://www.census.gov/newsroom/releases/archives/population/cb13-46.html>>.

Census Bureau Releases New Extraction Tool for Local Employment Dynamics Data

The U.S. Census Bureau today released a beta version of a tool that gives data users the ability to access all 30 Local Employment Dynamics Quarterly Workforce Indicators, including measures of employment, turnover, hiring, job creation, job destruction and average monthly earnings. Researchers and policy-makers often use the

Quarterly Workforce Indicators to study demographic and longitudinal trends in the nation's changing labor force. Primarily for advanced users, the new tool allows users to extract data for specific geographies and industries without first downloading large data sets. The data are available in comma separated value (.csv) format for states, counties, metropolitan and micropolitan areas, and workforce investment areas. Future updates to the tool will include additional Local Employment Dynamics data products.

Visit <<http://ledextract.ces.census.gov/>> for more information on the extraction tool.

2006-2010 County-to-County Migration Flows Mapper Tool and 2006-2010 County-to-County Characteristics Migration Tables

Based on data collected during the American Community Survey from 2006 to 2010, the county-to-county migration tables give added information on the paths of the 17.3 million people who moved to another

county. The tables provide the current county of residence, the county of residence one year ago and the estimated number of movers between the counties. Additional tables provide the same information broken down by selected characteristics: age, sex, race or Hispanic origin. The Census Bureau has developed its first beta version of an online mapping tool called Census Flows Mapper. It is an interactive application that allows users to select a county in the U.S. and view the outbound, inbound and net migration flows for that county. Additionally, users can choose flows based on characteristics such as age, sex, race or Hispanic origin. The application also allows users to download the data for the flow they have selected, zoom in and out on the map to an area of interest, view additional statistics of the selected county and print their map to a PDF file. Internet address: <http://www.census.gov/newsroom/releases/archives/ameri-can_community_survey_acs/cb13-52.html>.

- We have always defined “champion” as someone of influ-

ence who can understand and advance the entire gamut of geospatial technologies and applications. *We need to seek and encourage champions for smaller portions of the spectrum.*

- Certain levels of government are already the “authoritative source” for specific data but we do not necessarily accommodate their data as such; we seek to define new stewards when we *should be assisting the real stewards to publish consistent data.*

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GIS and Baseball

Baseball, noted as the national pastime of the United States, engages many fans from Opening Day in April up until the World Series is held in October of each year.

So how does cartography and baseball mix? Very well in some cases. You can even put your map on an actual baseball or you can go old fashioned and use push pins to chart the baseball stadiums you've visited with this [map from Ham-macher Schlemmer](#).

United Countries of Baseball Map
What would the territories be of Major League Baseball (MLB) teams? This fictitious map looks at the supposed territories of the National and American leagues based on local fan loyalty.

The map was created by Nike as a promotional campaign in 2007 as part

of the launch of an apparel line with MLB and was created by the ad agency, Cole and Weber United. A case study from Cole and Weber United proposed the campaign as a way for Nike to build a relationship with “fans, not just athletes.”

According to a promotional piece echoing the case study (YouTube video), this campaign has a second part envisioned which incorporated fan input in making a second map for the following year. I can only assume this marketing campaign was unsuccessful because neither a second map nor the associated apparel exists. The referenced unitedcountriesofbaseball.com domain now is occupied by Thai content.

-from gislounge.com, Caitlin Dempsey



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Map of Cardinals

