

# PAMAGIC MATTERS

SEPTEMBER 2012

## Geo-Council Legislative History

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In accordance with its mission, PaMAGIC has been a continual proponent of a Geospatial Advisory Council representing public, private, and academic interests of all levels. Established in 1996 as an ad hoc coordinating body, PaMAGIC has developed GIS data standards, promoted coordinated data development and practiced mutual education among its members. We were one of only three (3) groups from outside state agencies to participate in the PA Geographic Information Council (PAGIC) established in 1999; that group is inactive at this point. Our participation in legislative hearings in 2003 and 2004 resulted in House Resolution 882 recommending Executive-level strategic planning and coordination of geospatial technologies. That resolution was the impetus for a series of legislative efforts that continually refined the concepts and development of a state-wide Council:

- HR 882 - Passed October 2004
- HB 2871 - introduced w/ o passage 2005-06
- HB 1304 - introduced w/ o passage 2007-08
- HB 2300 - introduced w/ o passage 2009-2010
- HB 1701 - introduced 2011

The language of the original HR 882 still resonates, and is perhaps even more pertinent in the current era of restricted budgets, public expectations for digital maps and information, and consolidated IT systems. The differences among the bills that did not pass in the subsequent Legislative Sessions were primarily in their membership, the placement and function within the Executive, and in the structure of a Geo-Council. HB 2300 finally achieved a balance among the private, public, and academic interests to be represented on the Council, and a defined role as an Advisory Board under the Administrative Code.

The current iteration is HB 1701 which is essentially a re-introduction of the language of HB 2300, and the prime sponsor is Representative Bryan Cutler. HB 1701 passed the House unanimously in April 2012, at which point it was referred to the Senate. The Corbett Administration has asked for some changes to the structure of the Council, and Representative Cutler is working directly with the Governor's legislative staff to make changes where they do not limit the Council's potential. Rep. Cutler has sought the advice and aid of a coalition

consisting of PaMAGIC, PA-MAPPS, and the County GIS Pros.

The current legislative session ends this year and no sessions are scheduled until after the elections in November. We may ask for your support in the form of letters and calls to your State Senator in support of a revised Geo-Council. To see the current language and to examine the series of bills from previous sessions, go to: <http://www.pamagic.org/initiatives/Pages/LegislativeInfo.aspx>.

- Eric Jespersen, Fisher Associates and PAMAGIC Treasurer

## Urisa Turns 50!

URISA— the Urban and Regional Systems Association— will celebrate its 50th anniversary in Portland, Oregon from September 30 to October 4 at the GIS-Pro 2012 Conference. To learn more about URISA, an association for GIS professionals, go to [www.urisa.org](http://www.urisa.org).

# President's Corner



**PAMAGIC President  
Ken Juengling**

How do you keep up the technology? Promote what you are doing? For some it is a matter of reading the traditional trade magazines. For others it is a matter of going online for a news or industry feed. Some prefer LinkedIn, others Facebook. Twitter is also another means of getting brief messages and pictures out

to capture a moment or update others with your thoughts. With so many means of communication, it is often a challenge to find time to keep up on all of it. Please enter a discussion into our PAMAGIC social media outlets: LinkedIn group PAMAGIC; yahoo listserv; facebook to put your ideas in motion!

## Calendar of Events

**Northwest GIS Conference—October 18 & 19**

**Central PA GIS Day—November 14 (FREE registration, free exhibit space)  
HACC Midtown**

**Esri MUG 2012 Annual Conference—December 11-12**

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

## ESRI Maps for Microsoft Office

Why do we use maps? The most common response is to locate features, find directions to a new summer getaway, or determine how close our favorite restaurant is to the local movie theater. With the latest advancements in GPS navigation and the instantaneous culture of Facebook and Twitter, maps on demand is a part of everyday life. When I develop a map as a GIS professional, I often want to share this map with project team members or others in my organization instantly. With the development of [ArcGIS Online](#), the process of developing a map and publishing this to the Web is simply a few clicks away. In July 2012, Environmental Systems Research Institute (ESRI) released a new tool that allows students, professionals, and educators to “power up” their Word documents. **ESRI Maps for Office** extends desktop publishing capabilities of Microsoft Office products, PowerPoint and Excel. ESRI Maps for Office is an add-on for Microsoft Office 2010 that allows users to develop and share

powerful, interactive maps directly within the Office interface.

By bringing the power of location analytics to Microsoft Office, Esri Maps for Office extends mapping and geographic intelligence capabilities to new people and departments,” said Jack Dangermond, Esri president. “Esri Maps for Office is the next necessary step to offering more robust business analytics throughout an organization.”

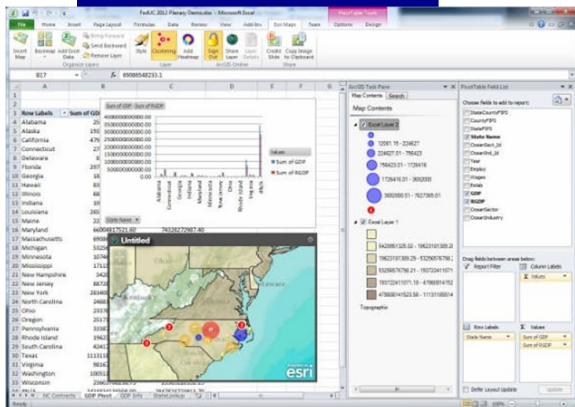
With Esri Maps for Office, business professionals can quickly create interactive maps from their data in a Microsoft Excel spreadsheet. These live maps, which can be based on any geographic component, such as customer locations or sales by ZIP Code, can be simply added to Microsoft PowerPoint presentations or shared through Esri’s cloud mapping platform, ArcGIS Online. Maps shared through ArcGIS Online can then be distributed throughout an organization or embedded into mobile or web applications.

Because ESRI Maps for Office is a relatively new technology, many professionals have not thoroughly reviewed its advantages and disadvantages. One

major shortfall is that users must sign up for a free 30-day trial of ArcGIS Online for Organizations before you can access the free download. You **cannot** use an existing ArcGIS online account; a new one must be created. After the thirty days expires, you instantly lose access to the Office add-on and ArcGIS Online for Organizations capabilities unless you purchase rather expensive credits as described here: [http://www.esri.com/software/esri-maps-for-office/plans\\_](http://www.esri.com/software/esri-maps-for-office/plans_). Secondly, ESRI Maps for Office requires 2010 Microsoft Office, and is not backwards compatible with Office 2007 or earlier. Although ESRI’s latest release is a powerful extension to Microsoft Office, you must keep in mind that this is the first software release for the add-on. I am certain product enhancements will be made to extend the user experience. For more information, please visit the software home page.

<http://www.esri.com/software/esri-maps-for-office>

By Matthew Houtz, GIS Analyst, Gannett Fleming



# PA a Leader in Land Record/GIS Integration

With the PRIA (Property Records Industry Association) and URISA Land Record/GIS integration initiative Pennsylvania is one state taking an early lead. PAMAGIC (GIS interests) and PRODA (PA Record-ers) are helping to cosponsor this state initiative. Interest in PA centers on the use of the UPI (Uniform Parcel Identification) number as a tie to help bind key processes together in a more streamlined workflow. Key workflows help link the Recorder's land records with GIS and assessment workflows for map maintenance and assessment data updates/triggers. Improved workflows help lessen time lags and can greatly improve data quality as functions share more data and verify it rather than redundantly entering the same data.

Another integration goal is to share data in a format directly useful rather than having to rekey it multiple times. Because Pennsylvania is one of the original thirteen colonies (plus Texas) that does not use the Public Land Survey System (PLSS) legal descriptions are "metes and bounds" (distances and bearings) in nature and do not usually benefit from any standardization nor relate to any common boundaries or monuments such as section corners, etc. Legal descriptions in PA must usually be rekeyed into various COGO (COordinate GeOmetry) packages to be helpful in automating GIS vectors or smart line work. Part of the initiative's efforts are to better share Land Record instrument data with other governmental systems without rekeying the data. With new advances in eRecording, electronic

instruments are submitted faster in a fully digital manner. This is a great place to start with workflow efficiencies.

Other workflow improvements can mean that more human friendly, geographic keys can be used to access land records. PIN/UIP numbers and situs (location) addresses will often supplant instrument numbers, deed book and page numbers and grantee/grantor indices for easier record access.

Land Records/GIS Integration—One Adds Accuracy and Precision, The Other Adds Access and Usability! Stay tuned for more details from PAMAGIC in later issues.

For more information contact me at [peirceichelberger1@mac.com](mailto:peirceichelberger1@mac.com).

## U.S. Census Update

The U.S. Census Bureau Philadelphia Regional Office is responsible for maintaining and updating MAFTIGER and working with local governments and the public to inform them about Census products that are available. The Philadelphia Regional Office will be providing updates on the latest geographic/data releases from the Census Bureau

### 2010 Census TIGER/Line Shapefiles Pre-Joined with 2010 Census Demographic Profiles

Last month the Census Bureau released several national-level geodatabases and shapefiles that are pre-joined with Census TIGER/Line Shapefiles and 2010 Census Demographic Profiles. The profiles contain data such as total population, total housing units, median age, race, and

many others. These files can be accessed at <http://www.census.gov/geo/www/tiger/tgrshp2010/2010DPI.html>.

### 2010 Geographic Tallies By State

Do you ever wonder how many census tracts or blocks are in Pennsylvania? Or how many congressional districts? The Census Bureau has a tallies table that provides the numbers for each type of Geography that the Census Bureau tabulates data for. It is available as a excel file or as a text file. The files can be downloaded at [http://www.census.gov/geo/www/2010census/geo\\_tallies/all\\_tallies.html](http://www.census.gov/geo/www/2010census/geo_tallies/all_tallies.html).

### TIGERWeb

The Census Bureau recently announced the launch of TI-

GERWeb, a set of applications from the Geography Division that allows viewers to view and query boundaries and attribute information for geographic entities that are stored in the MAF/TIGER database. TIGERWeb is not a GIS but a resource for visualizing Census geography. TIGERWeb is built on a ArcGIS Template Viewer 202 and uses Microsoft Silverlight. For more information please go to [http://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_main.html](http://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html).

By Noemi Mendez Eliason  
Geographer, U.S. Census Bureau, 215-717-1830,  
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## PA DCNR Releases a New Mobile Interactive Map and Web Site

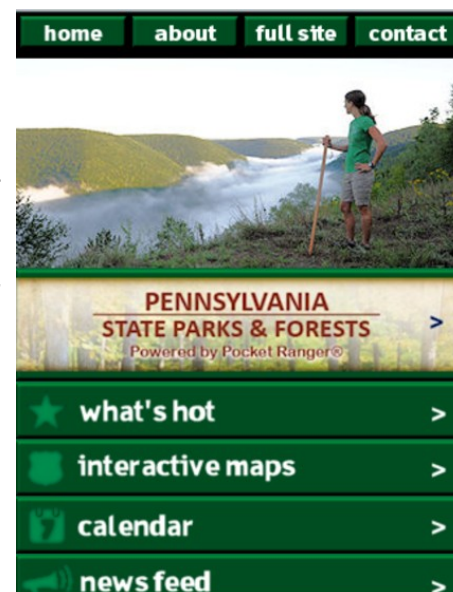
In April 2012, the Pennsylvania Department of Conservation and Natural Resources (DCNR) released a new interactive map that focuses on providing a wide variety of information and search tools related to State Parks. The map can be used to quickly obtain a wide variety of Park information, find Parks by amenities or geographic region, get driving directions, get weather forecasts, create and print maps, view Parks with a wide variety of maps types, obtain/share data, and more. This original interactive map was deployed using the Adobe Flex API and was intended for use primarily in a typical desktop web experience, especially given the variety of available tools. However, as is typical these days, DCNR is receiving an ever-increasing amount of traffic from mobile devices,

especially Apple and Android-based smartphones and tablets. In order to meet the needs of users of these device types, DCNR released a new mobile “wrapper” for its website in early August 2012. This wrapper includes an integrated interactive map, based on the ArcGIS JavaScript API, which presents the same information as the original Flex-based map in a mobile-consumable platform-independent format. In order to facilitate this, a variety of redirects have been implemented whereby if a user reaches DCNR and/or the Flex-based interactive map using a mobile device, they are directed to the mobile offerings. While the API's are different for desktop and mobile offerings, they both use the same map services and related data allowing for a simpler deployment of each.

Please check out the mobile wrapper by visiting the DCNR web site (<http://www.dcnr.state.pa.us>) with a mobile device or navigating directly to <http://m.dcnr.state.pa.us> with a mobile device. From there, you can easily view the interactive map, as well as many other resources.

DCNR has plans to continue desktop and mobile interactive map developments with a wide variety of data and information. Next up, is a mobile ExplorePAtrails interactive map to be deployed later this month!

- Mike Bialousz,  
DCNR & PAMAGIC  
Board Member



## Northwest PA GIS Conference

You are invited to participate in the 7<sup>th</sup> Annual Northwest Pennsylvania GIS Conference that will be held on October 18-19, 2012 at Clarion University of Pennsylvania. This event will once again be hosted by Clarion University.

It will be a pleasure to share with you:

- Exciting presentations from varied participants in the field.
- Exhibitors from renowned national and regional companies and agencies.
- Map gallery/poster session
- Other events that will be available and advertised for on the conference's website soon.

Please visit [www.clarion.edu/gisconference/](http://www.clarion.edu/gisconference/) for more information or for registration to attend, present and/or exhibit. Presentation, exhibition, and map gallery entry registrations are due by **September 28<sup>th</sup>, 2012**. Mark your calendar. Please pass along this information to anyone who may benefit from attending this event.

Presentations are especially encouraged in the following tracks:

- *GIS in Education*: Open for students and educators in general to share their projects, experiences and applications.
- *Oil and Gas Applications*.
- *Emerging Technologies*; especially those directed to-

wards collaboration, data sharing, and public participation

- *Natural Resources Management*.
- Open topic for your interesting application, how-to, theories and methods in the field of geospatial technologies in general.

Do not hesitate to contact Dr. Yasser Ayad ([yayad@clarion.edu](mailto:yayad@clarion.edu))



7<sup>th</sup> Annual  
**NW PA GIS CONFERENCE**  
LOCAL GOVERNMENTS, UTILITIES, EDUCATION AND THE ENVIRONMENT

October 18-19, 2012

& Connecting Users  
Integrating Workflows

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# GIS Employment Projections

Occupation	Employment (2010)	Employment (2020)	% Increase
Surveying and Mapping Technicians	57,000	66,000	16%
Survey Researchers	19,600	24,300	24%
Urban and Regional Planners	43,300	46,800	7%
Cartographers and Photogrammetrists	13,800	16,900	22%
GIS Scientists and Technologists	210,000	261,000	25%
GIS System Technicians	210,000	261,000	25%
Remote Sensing Scientists and Technologists	30,000	43,300	44%
Precision Agriculture Technicians	62,000	95,500	54%

According to the Bureau of Labor Statistics, GIS occupations will see growth rates ranging from 7%-54% between 2010-2020.