

PAMAGIC MATTERS

AUGUST 2012

Esri International User Conference Recap

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Several PAMAGIC members attended this year's Esri's International User Conference in San Diego and as you may have seen from the PAMAGIC Facebook postings, a good time was had by all.

If you have never been to one of these conferences, it is something to add to your 'to do' list as a GIS professional. You'll get a chance to interact with over 15,000 of your GIS counterparts from all around the world and you'll walk away with new ideas and a different perspective on the applications of GIS to solve real-world problems. It's also a lot of fun.

I was asked to write a summary of this year's conference. That is not an easy thing to do being that each person who attends would probably summarize the conference differently. There is just so much to see, that one person could never experience it all. My focus was on state and local government as well as water and waste water utilities. Some of my 'take away' applies only to these areas while others thoughts could apply to any field.

Empowering the end user:

By now you probably have heard of the "ArcGIS For <fill in the blank>" programs? Esri began the ArcGIS for Local Government initiative based on some extensive work in the water utilities sector. Simply put, this GIS paradigm provides free, downloadable maps, apps and tools based on a geodatabase schema that will be updated and enhanced over time. This is a huge break from the past when we all used to download exten-

sive data models only to delete all those parts we didn't need. Then we found ourselves deploying custom applications from it and with each new edition of GIS, we had to scramble to update our versions, database and redesign our applications. Well, those days of the one-off custom app are quickly fading away. And with over 25,000 downloads of the ArcGIS for Local Government solution we are seeing a better way to stay current with the technology and easier way to deploy simple maps and apps.

Esri is putting 100% of their effort into the "ArcGIS For <...>" programs. ArcGIS for Roads and Highways was also featured at the conference and we can look forward to ArcGIS for State Government and others coming soon.

Esri also has integrated MS Office and GIS. There are great new ways to generate maps from MS Excel spreadsheets and embed maps in MS PowerPoint presentations.

So, now that you have the ability to stand up these cool maps and apps with very little programming required, you'll need a place to put them – right?

ArcGIS Online:

Welcome to the cloud. For those who have ArcGIS Server, you'll see the Server architecture has been completely reworked. For those who do not have Server or just want to utilize more of the cloud, there is ArcGIS Online.

Now you can 'share' your map

and publish it straight to your ArcGIS Online account. You can customize a home page and stand up maps and apps as you need them among an invited set of participants or the public. Even public utilities can use ArcGIS Online and deploy mobile solutions with multiple layers of security. ArcGIS Online is a real game changer and will help extend any GIS operation into the hands of the people who really need it.

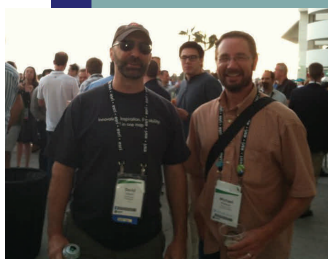
Other cool tools:

There were a few 'Wow' moments at the conference, but here are just a sample of other great features of 10.1:

- Access to database improves with new toolbox
- Better database administration and management: (Based on a user request for 'give me a GUI for SDE')
- Better Schema management – new tools for creating and managing a network.
- A new Esri Resource Center features both Esri apps as well as Partner apps
- Advancements to Runtime
- Enhancements to ArcGIS Mobile including integration with GPS
- Enhanced 3D
- Enhancements on the use and access to LIDAR

This is just a short list so you will definitely want to go online to check out all the latest features of 10.1 and what we can look for in the incremental Fall and Spring releases from Esri. Maybe I will see you at the Esri conference next year?

Dave Gilbert, GIS Manager, GeoDecisions
PAMAGIC Secretary



Dave Gilbert (GeoDecisions) and Mike Bialousz (DCNR) at the Esri User Conference

President's Corner

Focus On Quality

It is that time of year again and the big Esri event has occurred... A number of our members have attended and like it happens every year, there is a sense of rejuvenation and excitement about how we can all leverage GIS to solve our problems, help with our workflows, and do things in new ways. Now more than ever there are bountiful offerings of data, services, and tools to help us to get things done. It seems like every week there is news of a data update or new service available to be con-

sumed or applied. This is all good, but there is one thing to keep in mind as we move forward and consider all of these offerings: Focus on Quality Who has the most detailed and up to date data for your specific needs? You do... Only at the local level of knowledge is there the validation of the data to confirm the quality and currency. So, while it is great to enjoy the excitement of all of the cool things that we are experiencing with technology and GIS, let's not forget to ask the important questions

regarding the quality, source, and applicability of the data and services that we are working with.

Ken Juengling, GISP
PAMAGIC President



PAMAGIC President
Ken Juengling

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 [newsletter editor](#).

News from PASDA

Have you tried the new PASDA PA Atlas?

The new Pennsylvania Atlas (<http://maps.psiee.psu.edu/paatlas/>) was designed to provide enhanced visualization and data download capabilities through an online mapping interface. With the PA Atlas you will be able to view, download, and create your own maps using data available through PASDA. The data in the PA Atlas includes statewide boundary files, transportation, wildlife, conservation, recreation, and health data layers to name a few. Users can search for data by county or address or simply zoom in to their area of interest. By using our identify function, users can see data attributes such as road names, traffic counts, state park names and link directly to websites related to data

for more information. If you would like to create your own map, simply select your data layers and use our map making function to create a PDF, JPG or PNG file to download. Please feel free to provide comments, suggestions and ideas about our new Pennsylvania Atlas.

Updated Data on PASDA for July 2012

PASDA has received a number of data updates in July. These include:

*PA DEP underground mining permits, oil and gas locations, water resources, water pollution control facilities, TMDL Lakes, TMDL, storage tank locations, residual waste operations, radiation facilities, public water supply, municipal waste operations, mine

recycling locations, longwall mining panels, mined out areas, recycling clean-up locations, integrated list attaining, industrial mineral mining operations, sediment control facilities, encroachment locations, conservation wells, hazardous waste operations, coal pillar locations, coal mining operations, and beneficial land use.

*Allegheny County Parcels

*PA Fish and Boat Commission State Fish Hatcheries, Waterways Conservation Officer Districts

* SEPTA Regional Rail lines, Regional Rail Stations, High-speed Lines, and Highspeed Stations

By Maurie Kelly, PASDA

PA a Leader in Land Record/GIS Integration

Land Record modernization has been a hot topic since the early days of GIS. Recently a new national initiative with PRIA (Property Records Industry Association) has led to renewed interest. PRIA is also working with URISA (Urban and Regional Information Systems Association) and has developed a joint workshop on the integration initiative. As it turns out Pennsylvania is well placed to take advantage of this initiative and several Counties in PA have already done so. Way back in 1988 the Commonwealth's leg-

islature passed the UPI enabling legislation which gave a powerful tool to Counties to link land records with parcels and assessment data. This enabling legislation allows for the inclusion of a PIN (Parcel Identification Number) or UPI (Uniform Parcel Identifier) to be included along with the traditional land record indices such as instrument number, grantor/grantee names, deed book and page, etc. The legislation also allows for the collection of a small fee for the number verification, which can be substantial. Some

Counties do not verify the numbers like they should or they have chosen the wrong number, ex. GeoPINs, to tie together County records.

The UPI numbers can provide for many new methods for accessing land records, but if implemented properly, can be used to greatly enhance key data workflows from the Recorder of Deed's Office to other key County agencies like GIS/Mapping, E-911 and Assessment.

By F. Peirce Eichelberger
PAMAGIC Board Member

The Geospatial 2012 London Summer Olympic Games

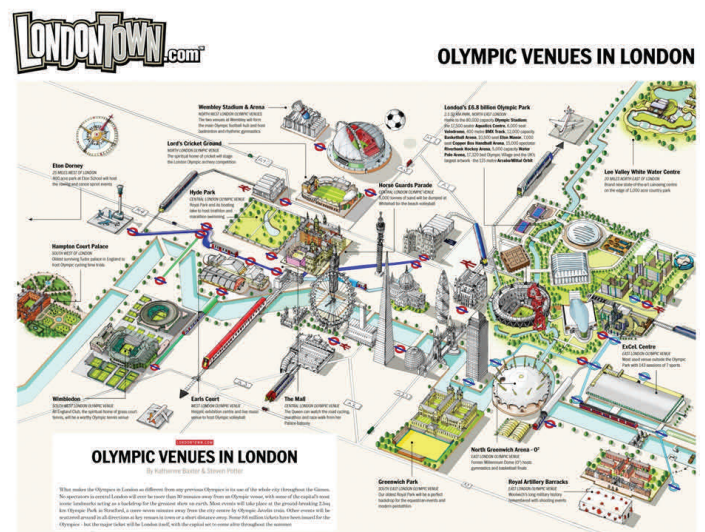
Hearing the names Gabby Douglas, Michael Phelps, or Ryan Lochte reminds each of us of their accomplishments at the 2012 London Summer Olympic Games, but how does that relate to the field of GIS? As a major international event, it is obvious how geography relates to the Olympics. Nations from all portions of the globe come together at one venue, represented by its best athletes, to compete for gold. But what about geospatial technologies?

When the **Opening Ceremonies** of the London 2012 Summer Games began on Friday, July 27th, 2012, London became the first and only city ever to host the modern Olympic Games three times, following previous Olympics in 1908 and 1948. Over the 17 day period, 10,500 Olympic athletes from 204 nations compete in 34 stunning venues in and around London. How can a City prepare for such an extraordinary event? The Olympics require years of planning, engineering, and construction. Countless engineers, planners, architects, students and volunteers log innum-

erable hours to plan and construct the **Olympic Park** and orchestrate the Olympic Torch Relay, beginning on May 18 in Lands End and arriving, in climactic fashion, at **Olympic Park**, during the culmination of the Opening Ceremonies.

The **Olympic Development Authority** (ODA) is the public body responsible for developing and building the new venues and infrastructure for the Olympic Games and their use after 2012. The ODA worked with a partner, CLM (a consortium of CH2M HILL, Laing O'Rourke and Mace) to develop a web-based **GIS** tool to manage and distribute geographic information and related documentation to project delivery partners working on the **Olympic Park** construction. Because the **Olympic Park** was built on a desolate, polluted, and neglected portion of east London, many types of information including Ordnance Survey base mapping, environmental information, site investigation, utilities (route and network data), land ownership, topographic survey data and aerial photography were neces-

sary in planning and constructing the 34 Olympic venues. Permanent venues now dot the landscape around the River Lea and its numerous canals and waterways include the spectacular **Olympic Stadium**, the state-of-the-art **Velodrome** and **Aquatics Centre**, the multi-purpose Paralympic hub **Eton Manor** and the versatile **Handball Arena**.



By Matthew Houtz, GISP
Senior GIS Analyst, Gannett Fleming

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The Journey of the Olympic Torch

Eight thousand inspiring people carried the Olympic Flame as it journeyed across the United Kingdom (U.K.). As reported in the BBC news on November 11, 2011, the Olympic Torch Relay toured for 70 days before the London 2012 Olympic Games. (shown below)



The route took the flame within 10 miles of 95% of people in the UK, Isle

of Man, Guernsey and Jersey, and it went through more than 1,000 cities, towns and villages in the U.K. How did they determine where and how to route the Torch? This is where GIS and spatial analyses came into play. ESRI United Kingdom developed an ArcGIS Online web map that

shows all the torch destinations and dates (gathered from BBC news). Two routes were analyzed using ESRI's Network Analyst and NAVTEQ data. The first route depicts the "as the crow flies" route between each location; the second is a predicted route following the U.K. roads and ferries. The second route is predicted based on shortest travel time and will not be representative of the exact route taken,

especially within urban areas. A second map was developed showing 30 and 60 minute drive times from the torch route. To view the web maps, follow the link below:

<http://www.arcgis.com/home/item.html?id=c2af103b75a24d8fad7fbaf84ba9f92>

As a GIS professional, I understand that with a large geographic region, a vast amount of people and many events happening simultaneously, **GIS** becomes a vital tool to manage all the activities. As technology improves and new data becomes available over the next several years, GIS will become even more valuable to plan, engineer and construct a successful 2016 Olympic Games.

By Matthew Houtz, GISP
Senior GIS Analyst, Gannett Fleming