

A Publication of the Kentucky Association of Mapping Professionals

Visit us online at [www.kampro.org](http://www.kampro.org)



## Letter from the President



**"This is your opportunity to have a voice outside of your office and to make a difference in the Commonwealth and specifically to your profession..."**

Dear Colleagues,

Spring is upon us and it is a time for anything new! I'm sure you've noticed the flowers, budding trees, longer days, and have been invigorated in everything you do at work and at home. The spring season rejuvenates life in all things and commences a fresh start to the year. I believe KAMP is ready for spring and looking forward to a refreshing start for all its members.

KAMP is looking for those of you who have that sense of revival this spring. We need motivated people to join the committees in KAMP and contribute a small amount of time to benefit

the overall group. Join a group that you're most interested in and share your experiences, expertise, and excitement for your profession. This is your opportunity to have a voice outside of your office and to make a difference in the Commonwealth and specifically to your profession.

Frank Lloyd Wright reminds us, "I know the price of success: dedication, hard work, and an unremitting devotion to the things you want to see happen."

Let each and every member pay attention to that advice and get involved with a committee. If each resolves to accomplish a small task in KAMP, determines a course of action to accomplish that task, and holds to that action until the goal is reached, KAMP will be successful. Let us work together to make the best of this year and use spring as a starting point for us all.

Please contact the chairs of the committees (or email [director@kampro.org](mailto:director@kampro.org)) and see how you can make a contribution!

Sincerely,

Earl Smith

Earl Smith is currently serving as President of the Kentucky Association of Mapping Professionals. Smith is employed by the Georgetown-Scott County Planning Commission.

## CALENDAR OF EVENTS

### May 2006

- **5/12:** Second Quarter KAMP Meeting & GRADD User Group Meeting (see Page 6 for complete info)

### July 2006

- **7/17–7/20:** 2006 Kentucky GIS Conference (Ft. Mitchell, KY)

### August 2006

- **8/1–8/3:** Fifth International Conference on Environmental Informatics
- **8/2–8/3:** Transportation in the Appalachian Region Technical Forum

For additional event information, visit [www.kampro.org](http://www.kampro.org). Do you have an event to list? Email it to [newsletter@kampro.org](mailto:newsletter@kampro.org).

## Providing GIS Products in the Public Sector

BY KEN BAILEY

The Louisville/Jefferson County Information Consortium (LOJIC) made data available for purchase to the public and private sector in 1991. LOJIC's products include a street atlas, digital data, paper, and Mylar maps. How does a traditionally technical GIS department define who its private sector customers are and meet the needs of those customers? LOJIC GIS customers use data in diverse ways. Taking the time to find out what the project goal is and finding the best GIS product to help that customer reach his/her goal can save time and improve the value of GIS departments to the public and private sector. The ability to assess a customer's true need

and get through the "I need a map because the last department said I needed it" phase is needed to get the job done.

### What are LOJIC's products?

The list of products has grown with the technology that produces them. All of LOJIC's products fall into three categories; hardcopy maps, digital data, and internet maps. Hardcopy maps consist of custom plan/topo maps, property and imagery created in ArcMap 8.x to the customers specifications, and a countywide set of one inch equals 100 feet and 200 feet scale 36"x24" standard

*(Continued on page 4)*

## INSIDE THIS ISSUE:

2 KAMP and KAPS Continue Relationship

3 KAMP Committees

6 KEMAP Aids Homeland Security Efforts



## KAMP and KAPS Continue Relationship

BY TRISHA BRUSH

Over the past two years, the Kentucky Association of Professional Surveyors (KAPS) has provided free booth space for KAMP at their annual conference in order to initiate dialogue between surveyors and the GIS/mapping community. This year KAMP was asked to present two sessions at the conference; The Digital Courthouse and a Surveying/GIS Professional Roundtable.

The KAPS conference was held February 16-18th in Lexington at the Marriott Griffin-Gate Resort. The KAMP sessions took place on the 16th at 1:30. The first session was the Digital Courthouse. Kentucky's courthouses are increasingly becoming digital. From the way we conduct research to the way data is being used, our world is rapidly changing. During this session representatives from KAMP discussed GIS basics such as: how Surveyor's data is utilized in a GIS world, what kind of data is available in the Commonwealth to assist the surveyor, and the benefits of GIS and surveying working together.

Kent Anness, GIS Manager of DGI, kicked off the session with information for the surveyors on where to find GIS data for the state of Kentucky. Kent showcased the Kentucky Geography Network ([kygeonet.ky.gov](http://kygeonet.ky.gov)), the Commonwealth Map ([kygeonet.ky.gov/tcm/viewer.htm](http://kygeonet.ky.gov/tcm/viewer.htm)), and the famous KY Fish and Wildlife site ([kygeonet.ky.gov/kdfwr/viewer.htm](http://kygeonet.ky.gov/kdfwr/viewer.htm)). Kent provided the audience with many sites to find available GIS data. Stephen Berry, Coordinator of the Clark County GIS Consortium ([ccgsonline.com](http://ccgsonline.com)),

shared how the PVA data at Clark County is all in a digital format. No more cardboard cards to review or file, all the information is available at your fingertips. Stephen also expressed how having a relationship with his local surveyors has helped him with important GIS projects in his county. James Horton, GIS Data Specialist for Boone County GIS ([boonecountygis.com](mailto:boonecountygis.com)), demonstrated how the GIS world utilizes surveyor data. James' example showed how a subdivision plat on paper gets translated into GIS data. James, having a degree in Civil Engineering Technology from Western Kentucky, related well to the interested audience of surveyors and engineers. Overall the Digital Courthouse session was interesting and informative.

The second session, Surveying/GIS Professional Roundtable, was a panel of both GIS professionals and surveyors that discussed important issues such as digital submissions, subdivision regulations, monumentation efforts, GIS data, survey data, and data formats. The audience was encouraged to bring questions and concerns to how the Surveying community is going to address these issues.

The panel was made up of six members, three with a KAMP affiliation and three associated with KAPS. The KAMP panel members were Curt Bynum, GIS Coordinator for Louisville/Jefferson County Information Consortium ([lojic.org](http://lojic.org)); Steve Gay, Director of GIS Services for Boone County GIS; and Stephen Berry, Clark County. The KAPS panel members were Chris Gephart, Director of Survey-



ing, Bayer and Becker Engineering ([bayerbecker.com](http://bayerbecker.com)); John Harrison, Founder of Harrison Land Surveying, Inc.; and Brian Cox, owner of Cox Land Surveying, PLC. The session began with a discussion about monumentation and how densification policies are tied to subdivision regulations. Debate ensued about the responsibility of the county or local government to keep local monumentation networks in tact and whose responsibility it is to further increase the density of the network. Digital submission policies were also discussed, Steve Gay mentioned that Boone County has 100% digital submissions compliance. Curt Bynum expressed that after MSD put some "teeth" into their digital submission policy, LOJIC's compliance increased. The overall message of this session was about building relationships with your local Surveyors/GIS professionals. To quote John Harrison, "We each have a role to play, and success will be realized only through a cooperative effort."

Trisha Brush currently serves as chairperson of the KAMP Membership Committee. Brush is the Deputy Director GIS Administration for the Northern Kentucky Area Planning Commission.



[www.advsolinc.com](http://www.advsolinc.com)

1-877-GETASI-1

Since 1987, Advanced Solutions, Inc. has focused its business model on delivering and supporting Autodesk software solutions. As a full service authorized reseller, ASI offers software sales, training, implementation, customization and local support to ensure a successful investment with the Autodesk products. Advanced Solutions has developed a rich understanding and capability on how to deliver solutions that meet customer needs.

We are authorized to support Manufacturing, Building, Infrastructure, Media & Entertainment. We specialize in the Federal, and Local Government Solutions.

Visit [www.advsolinc.com/kampjsp](http://www.advsolinc.com/kampjsp) for a free quote

KAMP Member Special: Join our CAD Club and get Unlimited Training and Phone Support for 1 full year just \$1595.\*

Visit [www.advsolinc.com](http://www.advsolinc.com) for available classes and facility schedule

\* Price per user for scheduled classes only

Contact Paul Resch for more info.

email: [presch@advsolinc.com](mailto:presch@advsolinc.com) or call 1-877-GET-ASI-1 Ext. 1103

**Autodesk**

Authorized Value Added Reseller

Louisville, KY Lexington, KY Elizabethtown, KY Cincinnati, OH Columbus, OH Fort Wayne, IN Evansville, IN

## Beyond the Box...

Advanced Solutions provides a wide array of software engineering services:

- CAD/CAM Automation
- Autodesk AutoCAD Plug-ins
- Design Verification
- Simulation
- Facility Location Analysis
- Facility Layout Design
- Material Flow Analysis
- Computer Simulation modeling
- Supply Chain Analysis & Optimization
- Quality Control Systems Design
- Process Simplification/ Re-engineering
- Warehouse Management Systems Specifications
- Automated Material Handling Systems design
- Inventory Control Design
- Ergonomics Program
- Product Slotting and Profiling
- CADD and 3D Rendering Services
- Bid Management

Custom software - If you have a problem that can be solved with software, let us know. Our team of experienced developers can build nearly any type of application or utility including: plug-ins, file-format converters, filters, importers, exporters, database, forms, web applets, client/server, and more. If you are dreaming of the perfect software application, let us turn it into reality.

**Advanced**  
SOLUTIONS

Since 1987

## Committee Updates

### Awards Committee

KAMP will be giving three awards this summer: Service to KAMP, Service to the Mapping Community, and Exemplary System. For additional information or for applications visit KAMP's web site ([www.kampro.org](http://www.kampro.org)) or contact Kyle Snyder ([jksnyder@nkapc.org](mailto:jksnyder@nkapc.org)). The deadline for application will be June, 23 2006. Awards are to be presented at the Kentucky GIS Conference in August.

### **KAMP Needs You**

Do you want to be involved in KAMP but aren't sure what the committees do? Below is a list of the various committees and their duties. Please contact the chairs of the committees (or email [director@kampro.org](mailto:director@kampro.org)) for additional information.

### Awards Committee

Responsibilities of this committee include requesting and receiving KAMP award nominations for 1) Service to KAMP; 2) Contributions to the Mapping Community; and 3) Exemplary System, reviewing nominations and voting on awards, contacting the winners, purchasing the plaques for the winners, and presenting these awards at the annual KY GIS Conference. Some means of soliciting for these awards can be done through

the KAMP website, Newsletter, mass emails, or by calling people.

### Certification Committee

This committee is currently studying the various programs for awarding certifications.

### Education Committee

This committee selects and coordinates educational classes and workshops to be held throughout the year.

### Emergency Response Task Force Committee

This committee provides mapping and data support to Emergency Management Services during times of crisis or calm for the Commonwealth of Kentucky.

### History Committee

This committee's main responsibility is to gather and store records. This includes Board Minutes, Treasurer's Reports, Conference Programs, and any other correspondence that the Board feels needs to be preserved. They are also responsible for taking pictures at KAMP events and storing them in a safe place.

### Legislative Committee

This committee's responsibilities include keeping abreast of the legislature and issues that affect mapping and GIS.

### Library Committee

This committee's responsibilities are to maintain, check out, and track all books owned by KAMP.

### Membership Committee

This committee is responsible for recruiting new members and targeting individuals or groups who would benefit from KAMP membership but may not be aware that we exist.

### Publication Committee

This committee is responsible for gathering and editing all submitted articles for publication in the Newsletter that is distributed quarterly and for maintaining the website. If you feel you would like to contribute some new and fresh ideas and assist in gathering newsworthy items for your fellow KAMP members, this is the committee for you.

### Program Committee

This committee is the most active and definitely the most fun committee of all. This committee meets often to plan the meeting subjects. Primary areas this committee decides on include Date & Location and Topics. If you have thoughts and ideas for the meeting, this is where you should serve.

## *Comprehensive GIS Consulting*

Aerial Imaging and Digital Orthophotography  
Parcel, Utilities, and Natural Resource Mapping  
Road Centerline and Addressing Services  
Web-based GIS and Application Development  
On-line Data Maintenance Services



**JAMES W. SEWALL COMPANY**  
ESTABLISHED 1880

Formerly *Park Aerial Surveys* of Louisville, Kentucky  
502 491 4849 502 491 9761 (fax) [info@jws.com](mailto:info@jws.com) [www.jws.com](http://www.jws.com)



## GIS Products (continued from page 2)



FIGURE 1: Sample hardcopy products. On the left is an example of custom plan/topo mapping. On the right is an example of thematic atlas mapping and displayed in the center is a custom imagery sample.

mylars that are used to create paper copies. LOJIC produces a street atlas of Jefferson, and western Oldham, and Bullitt Counties. Digital data is available in six formats; DXF, GEOTIFS, JPG, AI files, shapefiles, and geodatabases. The data is given to the client on a CD or floppy disc. An import translation is provided with the DXF data that includes symbology. The LOJIC internet site provides five interactive map applications and an online product catalog of thematic atlas maps in PDF format for download or printing.

### How much cost recovery do we generate?

LOJIC data fees cover time, materials, and some data cost recovery. Since the beginning of data sales, LOJIC has recovered 2.2 million dollars. Fees for LOJIC data range from two dollars for a Standard Map Sheet at a non-commercial rate to a several thousand for commercial digital data. The bar charts showing requests and cost recovery (see Figures 2 and 3) indicates that request are dropping off while cost recovery is not. This change coincides with LOJIC data becoming available on the internet. Data available to the private sector is priced as commercial and non-commercial. Commercial pricing is in accordance with Open Records KRS 61.870 - 61.884 section 4 (a) (see reference at the end of this article for more on Open Records Statutes and LOJIC data prices). Customers who use LOJIC data for commercial purposes pay the recovery cost of the data while noncommercial prices cover time and materials only.

### Who are LOJIC customers?

Customers of LOJIC are anyone who needs maps, data, or technical services. Customers include engineering firms, architectural firms, home owners, and law firms. LOJIC customers were surveyed to determine who they were and how service could be improved. From the customer survey LOJIC found the average customer purchases data two to five times a month. Customers usually wait about five minutes in the lobby before meeting with staff. Frequently customers send information in advance about the data needed. Service is considered excellent and payment is in the form of check or cash. Credit cards were not accepted when the survey was taken but the service will be available in the near future. These are the average customers. Actual GIS customers are more varied and complex than

the average. There are three types of customer contact: customers with appointments, customers who order data via email or fax, and walk in customers. Customers with appointments have most likely used LOJIC services before. This group knows what LOJIC product they need and includes law firms, engineering firms, surveyors, and architects. The most complex customer is the walk-in customer. Often this customer has been referred by another government department and is unsure as to what GIS product is needed.

### Customer Survey

The survey was written and distributed by LOJIC staff. The questionnaire was put in the product without the customer's knowledge. To avoid bias the survey was printed on a self addressed stamped postcard. A 33% return rate was achieved. At the same time the written survey was being conducted several meetings were held with technical staff of local engineering firms and the LOJIC staff. The goals of these meetings were to find out how AutoCAD handled the data and if there were ways to make the translation easier. The outcome of the meetings was to reformat the DXF data from an exchange file for each GIS layer into a combined DXF file with

drag and drop AutoCAD import capability.

### What do GIS customers want?

All customers want their project completed or problem solved as fast and inexpensively as possible. If GIS data will help do this, they want GIS data. Otherwise GIS data has no value to them. Very few customers come to LOJIC to get a map because it is cool. Taking the time to find out what the customers project goal is and finding the least expensive product to accomplish that goal is what customers want from a GIS department.

### How to assess or GRAB a customer

Customers that have been to LOJIC before usually know what they want and it is a matter of taking an order for a product. Customers that have never used LOJIC data need to have their needs assessed. The acronym for the assessment is GRAB: Goals, Responsibility, Attitude, and Behavior. This is an interactive assessment that gives you a chance to find out what the new or one time customer really needs rather than what they asked about. The following is a breakdown of the GRAB method.

#### Goals

What is the goal of the customer? Do they want a map to decorate their room or office? It could happen but most likely not. The customer usually has a problem they need solved and GIS data will help do it. Your objective is to find out what they are trying to accomplish and find the best and lowest cost product to reach that goal.

#### Responsibility

What is the level of responsibility for the person requesting the data to the project? Are

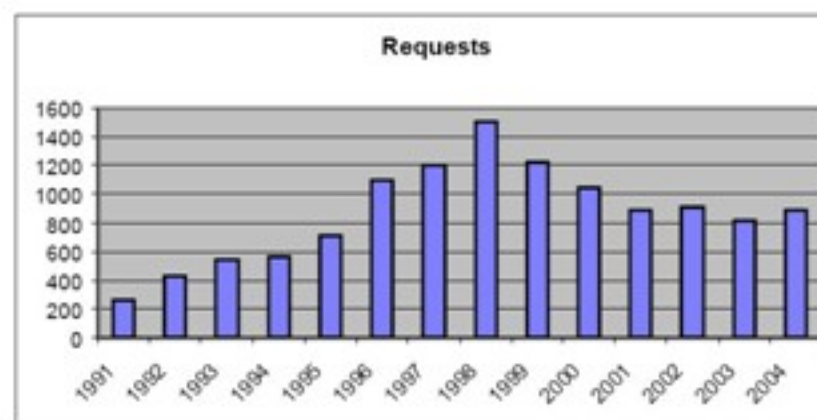


FIGURE 2: There have been 12,076 request recorded from customers. This total only tracks the amount of products created. LOJIC also creates estimates for customers that can be ordered at a later time. Creating an estimate requires the same assessments as creating a product and often as much staff time.

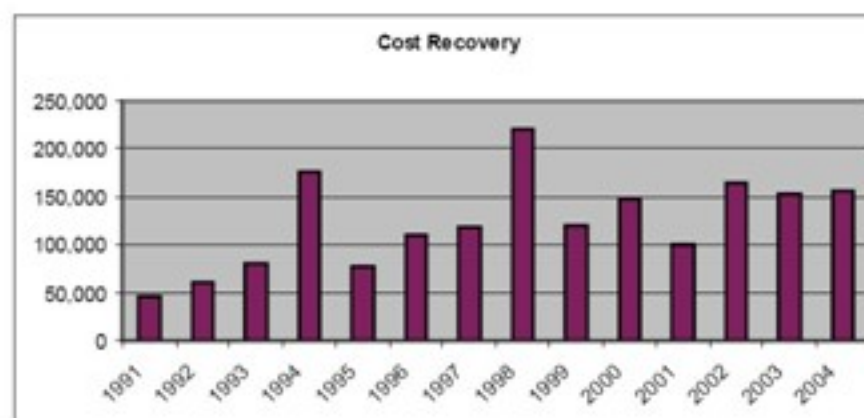


FIGURE 3: The cost recovery chart tracks the amount of data fees LOJIC has collected over the past fourteen years. The total collected to date is \$2,204,049. The total is for fees collected on products provided to the public.



they a runner for someone else? Is this the property owner? Finding out how much the person with the request cares about the project is of great value. If they are a warm body sent down to get a map, they often come back wanting what their boss really wanted. This can be avoided by calling the responsible party.

**Attitude**

What is the attitude of the customer? Are they angry, impatient, or in a good mood? Often a new customer will be evasive in answering questions. The customer often is incorrectly informed about what LOJIC can do and will insist that the incorrect information is correct. Often the incorrect information has been given to the customer by another department that has a limited GIS understanding.

**Behavior**

How is a customer acting? A person may have a poor attitude but their behavior indicates they are not acting on it. The reverse is also true. There have been some very odd requests made by some very difficult people at the LOJIC products department. It is important to look out for ones own safety as well as the safety of co-workers.

When a customer has been assessed it is very easy to guide them to the correct product. A good example is a new engineering firm needs data for a subdivision. After assessing their goals I would direct them to digital dxf data. This would be the most ver-

satile and cost effective data for the job. The commercial fee for dxf data on a sixteen acre vacant property would total \$261.00. The fee breaks down to \$75.00 for labor, media, and system resource costs and \$186.00 for data cost recovery fees. The product will include all plan/topo data, current property lines and aerial photography. The fee includes reproducible rights which gives permission to make as many copies as needed to complete the subdivision. The flip side of this example would be when the neighborhood association next door to the new development wants to stop the same subdivision project. I would guide them to the 100/200 standard map sheets. The standard map sheet is on a 36" by 24" piece of paper. The quality of analysis for this customer is much lower and the capability to make multiple copies is usually limited. I may suggest getting several copies at \$2.00 each. The standard map sheet has the plan/topo layers and is a non-reproducible product. The neighborhood group usually has a low tech approach to the project and hardcopy maps do a good job of showing the current land use of the area. These customers have very different attitudes toward the goal of the new subdivision and their behavior, attitude, and responsibility to the project are polar opposites. However, GIS data can help both reach their respective goals.

For information about KRS61.870 Open Record:  
[www.lojic.org/products/pdfs/krs61.pdf](http://www.lojic.org/products/pdfs/krs61.pdf)

For more about LOJIC reproducible rights:  
[www.lojic.org/products/pdfs/recreq.pdf](http://www.lojic.org/products/pdfs/recreq.pdf)

For information on how LOJIC prices data:  
[www.lojic.org/products/pdfs/feesched.pdf](http://www.lojic.org/products/pdfs/feesched.pdf)

For information on the GRAB method:  
"Golden Nuggets Readings for Experiential Education" edited by Jim Schoel and Mike Stratton, 1990 ISBN 0-934387-09-5

Ken Bailey is a GIS Technician at Louisville/Jefferson County Information Consortium.

**New KAMP Web Site**

A new KAMP web site ([www.kampro.org](http://www.kampro.org)) officially came online in April. With the help of Michelle Ellington, the site provides some additional information to prospective and current members.

Committee information, past newsletters, the KAMP salary survey, and meeting minutes are among the many useful items on the new site. For web site comments or questions email [web@kampro.org](mailto:web@kampro.org).



**Your project, our promise**

**GIS & DATA MANAGEMENT SERVICES:**  
 GIS Upgrades & Maintenance  
 Needs Assessment  
 Data Collection  
 Asset Management  
 Mapping  
 Internet Solutions  
 3D Visualization  
 Application Development  
 Geospatial Analysis

Middlesboro, KY  
 Greeneville & Knoxville, TN  
 Asheville & Charlotte, NC  
 Spartanburg, SC

(800) 388-6660  
[www.vaughnmelton.com](http://www.vaughnmelton.com)

**V&M**  
 Vaughn & Melton

**Vaughn & Melton Consulting Engineers**  
*Engineering · Architecture · Surveying*



## KEMAP Aids Homeland Security Efforts

BY MARSHALL DUNCAN

The Kentucky Association of Mapping Professionals (KAMP) discussed homeland security and statewide initiatives for enterprise GIS at the first quarter meeting held at Papa Johns Campus on the March 29th. Papa Johns, a corporate member of KAMP, provided pizza and other refreshments for the occasion.

Gary R. Harp, Kent Anness, and Kimberly Anness from the Kentucky Division of Geographic Information (DGI) were invited to share GIS-related efforts of Kentucky's Homeland Security with KAMP's membership. Mr. Anness provided a brief overview of DGI's Homeland Security activities and demonstrated the Kentucky Event Mapping and Analysis Portal (KEMAP).

KEMAP is an interactive mapping tool that provides users with access to mapped information for over 115 base and other thematic layers. Both planners and responders can access the Portal with a minimum of computing resources. Users can zoom to areas of interest, select and identify features, create buffers, and overlay any number of layers to create a view of data that is specific to an event.

Mr. Anness noted that, "This single Portal contains all the rich geospatial resources that Kentucky has to offer. These critical datasets coupled with the powerful tools in KEMAP, and supported by Kentucky's award-

winning Enterprise GIS, position the Commonwealth ahead of most all states in our Nation."

KEMAP was built by DGI on behalf of the Commonwealth with absolutely no funding resources. The Portal has caught the attention of the Kentucky National Guard, Emergency Management, and the Kentucky Office of Homeland Security (KOHS). During the presentation Anness provided an example of how KEMAP can quickly extract data and provide emergency response teams with information regarding severely impacted areas of a disaster zone.

Mr. Harp, Director of DGI, used KEMAP to step through an event scenario as KAMP members watched the projector screen. Harp zoomed to Falmouth, a Northern Kentucky town ravaged by severe flooding in the mid 90's. A thematic overlay illustrating FEMA floodplain zones was activated so homes within the floodplain could be easily identified. The new information—obtained in less than a minute—empowers emergency response teams to know exactly where to focus their relief efforts.

Harp stated that, "KEMAP provides emergency response and emergency preparedness teams with extensive amounts of information that never before has been so readily available. Armed with the power provided through KEMAP, emergency responders can

**"Armed with the power provided through KEMAP, emergency responders can address emergencies faster, smarter, and with more diligence; the combinations of these capabilities result in a safer place for all Kentuckians..."**

**-Gary R. Harp**

address emergencies faster, smarter, and with more diligence; the combinations of these capabilities result in a safer place for all Kentuckians."

KEMAP represents the Commonwealth's latest addition of geospatial resources dedicated to providing enterprise GIS across aggregate levels of government and foster global geographic education in order to best represent the state of Kentucky locally and abroad.

Marshall Duncan is currently an intern with the Georgetown-Scott County Planning Commission.

## KAMP Second Quarter Meeting—May 12th

Join KAMP at our Second Quarter Meeting. Kenny Ratliff, Branch Manager of the Public Safety Branch (Kentucky Department of Public Health), will present on how GIS has evolved at KDPH. He will also focus on his office's response and own experiences during the emergency response to Hurricane Katrina.

**May 12<sup>th</sup> 2006**

11:00-3:30

Green River Area Development District  
3860 Highway 60 West  
Owensboro, Kentucky 42301

11:00 – 12:00	GRADD UG Meeting
12:00 – 1:00	Lunch (provided by KAMP/GRADD)
1:00 – 2:30	Presentations
2:30 – 3:30	KAMP Meeting

Afterwards, stay and have a good time with other KAMP members at the International BBQ Festival. ([www.bbqfest.com](http://www.bbqfest.com))



## The Legend

Would you like to contribute to *The Legend*? The KAMP newsletter is published up to four times per year and reaches current and prospective members in print and online.

How you can contribute:

- Submit an article for publication
- Submit information on events or newsworthy items
- Become a corporate member and receive advertising space

For additional information, comments, or to submit an article you can email *The Legend* at [newsletter@kampro.org](mailto:newsletter@kampro.org).

You may also contact KAMP at:  
 PO Box 1411  
 Frankfort, KY 40602-1411



### GIS Services:

- ◆ Strategic Planning
- ◆ Database Design & Implementation
- ◆ Data Collection / GPS
- ◆ Mobile GIS Solutions
- ◆ Application Development
- ◆ Infrastructure Inventories
- ◆ DFIRM Production
- ◆ 3D Visualization
- ◆ Cartographic Services

## Customizing Solutions to Your GIS Needs

Quest Engineers, Inc.



[www.questeng.com](http://www.questeng.com)

Lexington  
 (859) 223-3755

Louisville  
 (502) 584-4118

Cincinnati  
 (513) 851-9774

For More Information Contact Eric Ivanovich, GIS Coordinator, [eivanovich@questeng.com](mailto:eivanovich@questeng.com)



Kentucky Association of Mapping Professionals  
PO Box 1411  
Frankfort, KY 40602-1411



[www.kampro.org](http://www.kampro.org)