ILLINOIS GIS NOTES

THE NEWSLETTER OF THE ILLINOIS GIS ASSOCIATION

New Legislation Provides Funding Source for County GIS

by Richard Hilton

The Illinois legislature passed two bills (House Bill 840 and Senate Bill 1582) in their Spring 2000 session which provide an optional new funding source for GIS in county governments. On Friday, June 9, the Governor signed SB1582 into law.

This is the first time a unique funding source has been identified for county GIS in Illinois. This new law takes effect immediately, but leaves it up to each of Illinois' 102 counties to decide whether or not they wish to implement the new funding.

The New Legislation

The same language describing GIS funding was included in two separate bills for procedural reasons. At one point there was a concern that the original SB1582 might encounter a scheduling problem, so identical language was added to HB840, which deals with changes to the Local Records Act.

As it worked out, both bills passed in time to be sent to the Governor. The following text is from the original Senate Bill 1582 as enrolled (incorporated) into the original law that it would modify, 55 ILCS 5/3-5018.

> "The county board of any county that provides and maintains a county-wide map through a Geographic Information System (GIS) may provide for an additional charge of $3 for filing every instrument, paper, or notice for record in order to defray the cost of implementing or maintaining the county's Geographic Information System. Of that amount, $2 must be deposited into a special fund set up by the treasurer of the county, and any monies collected pursuant to this amendatory Act of the 91st General Assembly and deposited into that fund must be used solely for the equipment, materials, and necessary expenses incurred in implementing and maintaining a Geographic Information System. The remaining $1 must be deposited into the recorder's special funds created under Section 3-5005.4. The recorder may, in his or her discretion, use monies in the funds created under Section 3-5005.4 to defray the cost of implementing or maintaining the county's Geographic Information System."

(continued on page 4)

Inside this issue . . .

VOL. 1, NO. 1 SUMMER 2000

Crimes, Crashes and More: Mapping at the Illinois State Police

by Jim Glass

The Illinois State Police (ISP) created the Strategic Analysis and Mapping (SAM) unit in 1995. The unit's primary mission is to provide support to field personnel throughout the state in the form of strategic products and reports based on the statewide analysis of traffic, investigation, and crime data.

The original goal of the program was to interpret and analyze ISP enforcement data using various analytical tools and graphic formats.

During the past four years, analytical mapping of crime and traffic data has proven to be a valuable tool in strategic planning and patrol deployment to this department. As a result, the original goal has evolved into a wider, more in-depth objective incorporating the advancements not only of technology, but also of the ISP.

(continued on page 6)

The Editor's Corner

by Donald Luman and Larry Gunderson

Welcome to the inaugural issue of *Illinois GIS Notes*! After 19 years of publication, *Illinois GIS & Mapnotes* has been retired, and the *ILGISA Newsletter* is also being discontinued. This decision is a purposeful effort to consolidate ILGISA's publications, and *Illinois GIS Notes* will provide news items and feature content that are of current interest and importance to our ILGISA membership.

For 2000, there will be two issues of *Illinois GIS Notes*—this inaugural issue and a subsequent Winter issue. It is anticipated that at least three issues will be published in succeeding years.

The ILGISA Board sent a survey questionnaire to members last year regarding ILGISA publications. One part of the questionnaire asked members what sorts of features are desirable in an ILGISA publication. The principal topics identified by the respondents are shown in the table below and are ranked by number of responses from 1 (highest) through 12 (lowest). As you can see from the table, case studies are rated the highest.

Rank	Topic
1	Case Studies (GIS applications in Illinois)
2	Training Articles (tips for success)
3	County Activities (within Illinois)
4	Municipal Activities (within Illinois)
5	Lists of Data Publications/Source Documents
6	Software Reviews
7	State Activities (Illinois)
8	Education Activities
9	Research Articles
10	Featured Guest Columns
11	Federal Activities
12	Vendor's Column

Other ideas expressed by the respondents included such things as: "ILGISA should place more emphasis on the (ILGISA) web site," "publications should be included on ILGISA's web site," and "a more frequent publication is desirable." Additional desired topics included, among others, information and news from neighboring states, and a calendar of regional conferences.

The ILGISA Board dedicated a day-long meeting in October, 1999, at our secretariat's office in DeKalb to the matter of a new publication. The framework for the new publication was developed using information provided from the survey questionnaires, by reviewing GIS and mapping newsletters from other states, and by drawing upon our experiences in publishing *Illinois GIS & Mapnotes* and the *ILGISA Newsletter*. The ILGISA Publications Committee subsequently used this framework to develop the inaugural issue of *Illinois GIS Notes*.

With this first issue, the ILGISA Publications Committee has endeavored to include topics that members are looking for in a publication, such as a case study (GIS applications at the Illinois State Police), state activities (the Illinois DOQ project), and county activities (the GIS Funding Bill). In response to comments from the survey questionnaire, each issue of *Illinois GIS Notes* will also be available on the ILGISA web site (www.cagis.uic. edu/ilgisa), providing us the opportunity to reach an increased audience of GIS practitioners.

In addition to the new look that can be seen in the masthead, *Illinois GIS Notes* has some new people involved in its publication. Mr. Larry Gunderson, GIS Manager for the City of Naperville and an ILGISA Board Member, is currently co-Editor and will become Editor of *Illinois GIS Notes* beginning with the Winter 2000 issue.

Ms. Nancy Place has recently been hired to serve as the Managing Editor for *Illinois GIS Notes*. Nancy earned her M.A. degree in Cartography from the University of Kansas and has been a GIS professional for several years; therefore, she has a thorough understanding of mapping and GIS technology. This experience, in combination with her background as a technical writer and editor will be a great plus in her responsibilities as Managing Editor.

Mr. Richard Vaupel, senior cartographer at the NIU Laboratory for Cartography & Spatial Analysis, who has produced the graphics for *Illinois Mapnotes* and *Illinois GIS & Mapnotes* for the past 19 years, will continue this responsibility for our new publication. Rich is also responsible for the creation of the new masthead design for *Illinois GIS Notes*.

Illinois GIS Notes will continue to evolve as the principal publication of the Illinois GIS Association. Therefore, we encourage readers to provide us continuing feedback on this new publication so that we can make it as responsive to the membership as possible.

Don Luman is Editor of Illinois GIS Notes and a Remote Sensing Geologist with the Illinois State Geological Survey. Larry Gunderson is co-Editor of Illinois GIS Notes and the GIS Manager with the City of Naperville.

From where I sit...

Notes from the desk of Dr. James Carter
ILGISA President 1999-2000

In a few weeks the Nominations Committee will solicit candidates for board members and President-Elect. Finding persons who will serve and who have appropriate experience in ILGISA is no easy task.

Somehow we have always been able to find enough candidates for board membership, although last year we nominated only four candidates for four slots.

With the imminent departure of Don McKay and me from elected positions, none of the founding members of ILGISA will be left in office. We continue to look for new faces. In this statement I want to address some aspects of nominating candidates for election to ILGISA positions.

The founding members of ILGISA were a diverse group of persons employed in federal, state, and local government as well as academia. Maintaining this mix of representation is inherent in the thinking of the board.

Not surprisingly, last year our four candidates represented each of these interests. With only four candidates, we knew we would keep that diversity on the board. If we had had eight nominees, it was likely that two persons would have been elected from one community and none from another community.

We have never offered the membership a choice of candidates for President-Elect, although in our By-Laws we say we will do that. One reason for this is that every candidate for President-Elect should have served on the ILGISA Board. We have not had that many board members who have been willing, or able, to take on an additional three-year commitment beyond their board terms.

In my case, I was on the original board, completed two 2-year terms and was off the board for a year when I was approached about the presidency. I was in a position to accept the nomination.

To get two candidates for President-Elect, we might have to nominate two active board members. If we do, does the board member who loses get to stay on the board if his or her term has not expired? If the board member who wins has not completed his or her term, how do we fill that vacant seat? We have no ready answers to these questions. Perhaps we should be content to have only one nominee for President-Elect.

I believe ILGISA needs to give further consideration to how we elect members to the board. A number of professional organizations structure their boards so that various communities are represented on the Board of Directors and in the Presidency. Thus, we might choose to have specific seats on the board, such as a federal employee seat, a local government seat, etc.

Further, we might want to consider having one or two seats from the for-profit community. This segment of membership has been excluded from elective office due to a concern with conflict of interest. Yet, we know many professional colleagues are employed in the for-profit segment, and other professional organizations permit these persons to serve in elected office. As we are now structured, we are not able to get full use of the talents of many of our members.

Making any of these changes will require a revision of our By-Laws—a long-term issue. In the short term, you and I need to consider who will make good candidates for positions on the board next year.

Perhaps you should be a candidate, or perhaps you want to serve on the Nominating Committee. If you would like to be involved in this process, contact Don McKay, Chair of the Nominations Committee, at 217-333-0044 or mckay@isgs.uiuc.edu.

Ideally, we will have a full slate of candidates this fall giving us a choice. And, ideally, everyone will vote when they receive their ballots.

James Carter is a professor of geography at Illinois State University.

(continued from page 1)

How the GIS Funding Legislation Got Started

Although many discussions have taken place over the years about setting up a designated funding source for GIS, it was never really attempted until Rock Island County began the process of developing a GIS system in the late 1990s.

Like any other government agency, they had to consider how they would fund the effort; and like many other counties before them, they thought about finding a designated funding source. At that point they took a unique step that others had not taken.

The dialog between Rock Island County GIS Manager Tim Oliver and his county board's legislative committee resulted in a proposal for a surcharge on filing fees in the Recorder's Office.

Existing State law prescribes the fees that may be charged for recording documents, and it even allows county boards to increase those fees if they can demonstrate that the actual cost of the operation requires it, but the law does not provide leeway for counties to increase fees or add fees for entirely new purposes. Moving forward with this idea would require action by the State Legislature.

Rock Island County worked with the legislators from their area, who introduced a bill in 1999 similar to the one that passed this year. It called for a $3 surcharge, the proceeds to be used for GIS. Each county board could decide whether or not to activate this program.

Some county recorders opposed this bill, not because it involved GIS, but because in some counties they needed increased funding just to handle the recording function, and they had encountered difficulty in increasing normal recording fees.
Further opposition came from the Illinois Professional Land Surveyors Association (IPLSA), who favored a new program for section corner monument maintenance that would be funded by a surcharge on recording fees.

The IPLSA sought an amendment in 1999 that would have required a portion of the GIS surcharge to be dedicated to this section corner project. The IPLSA also stated that it is not opposed to GIS—both GIS and the maintenance of the public land survey system have a logical connection to the recording of documents. The 1999 GIS legislation failed.

The legislation was reintroduced in the Spring 2000 legislative session, co-sponsored by Sen. Denny Jacobs (D – East Moline; 36th District) and Sen. Judith Myers (R – Danville; 53rd District). Senator Jacobs, a long-time resident of the Rock Island area, had worked with the Rock Island County Board on the original 1999 bill. Senator Myers was the Recorder of Deeds in Vermilion County prior to becoming a State Senator. Her back-ground was instrumental in resolving the concerns of the Recorders.

SB1582 had a number of sponsors in the House: Representatives Joel Brunsvold (D – Milan), Donald Moffitt (R – Gilson), Calvin Giles (D – Chicago), Michael Smith (D – Canton), and Robert Biggins (R – Elmhurst). Representative Brunsvold, from the Rock Island area, had been involved in the original 1999 legislation as well.

The support in both houses was bipartisan and broadly based geographically.

Tim Oliver recalls coming to Springfield to testify in support of the bill: "I entered the committee room and there were perhaps 20 to 30 people there, yet I was the only one scheduled to speak. I wondered why all those people were there. It turned out they were all in support of the bill. They came from a variety of organizations and industries, each of them favorable for slightly different reasons."

The compromise reached was to dedicate $2 to GIS unconditionally, but to allow each county Recorder to determine whether the remaining $1 was needed for basic recording costs or whether it, too, could be used for GIS.

GIS has not been mentioned previously in Illinois law as a specific activity in local government....

The IPLSA continued its opposition to the GIS legislation for the same reasons they stated in 1999. They also reiterated that their position should not be interpreted as opposition to GIS.

Historical Background: GIS Funding in County Government

Illinois Statutes prescribe the sources of revenue for county government and often direct how those funds may (or may not) be used.

The mapping function, for several purposes, is mentioned in the law as a legitimate function of county government, but since no specific revenue source is designated, the cost of mapping is borne by general revenue; i.e., ordinarily by property taxes. GIS *has*

not been mentioned previously in Illinois law as a specific activity in local government, and so has typically been handled by counties as mapping.

Many county functions are paid for using general revenue resources with the result that there are a number of needs competing for a limited pool of money. County boards prioritize mandated programs, whereas programs regarded as optional, such as GIS, may have to compete with a number of other worthy objectives for the remaining dollars.

As a practical example, a county may face the need to build a new county jail or other facility costing millions of dollars, which could effectively dry up the financial resources for GIS, no matter how favorably the county board feels about GIS.

Another source of funding sometimes considered is to issue general revenue bonds to be paid back over a longer period of time. This is not usually a favored solution for finan-cial management reasons.

Some GIS programs have been funded by county boards with the understanding that they would pay for themselves over time through the sale of data. This cost-recovery approach involves imposing high charges for maps, data, and other products sold to the public, to other government agencies, and to the public sector. While this practice may be considered by some to be in violation of the Illinois Freedom of Information Act, it has not yet been tested in court.

There are no documented cases where development costs, sometimes in the millions of dollars, have actually been recovered through this approach. The availability of a designated funding source may have an impact on future use of cost recovery approaches.

Implementing the New Funding

A number of steps would be required for a county to implement the new funding resource:

The county board would first have to vote to impose the surcharge. The county treasurer would set up a special account to receive the $2 portion dedicated to GIS. The county recorder would set up procedures to collect the surcharge and account for the receipts so deposits would be made into the proper account. The county board would provide budgetary guidance on how the funds may be spent, con-sistent with state law.

It would take time for funds to accumulate in the special account. The amount would vary from year to year, based on document recordings, which in turn can be greatly impacted by the economy, interest rates, and other factors.

> *There are no documented cases where development costs . . . have actually been recovered . . .*

Most counties will avoid using an unpredictable annual revenue source as the only funding for an ongoing program like GIS—personnel costs, for example, might be carried by general revenue to insure no disruption in GIS program staffing.

The new law states that money "deposited into [the GIS] fund must be used solely for the equipment, materials and necessary expenses incurred in implementing and maintaining a Geographic Information System."

There are many expenses commonly associated with GIS that might be considered appropriate, including aerial photography, topographic and planimetric data, hardware, software, training, data conversion, supplies, personnel costs, surveying costs, recovering and restoring section corner monuments, and developing and maintaining a web site for public access to GIS.

Predictions

A program that raised money through a recording fee surcharge in Wisconsin resulted in a major increase in county GIS programs around that state.

The Wisconsin program created a new state-level agency to oversee the program and placed a number of conditions and requirements on the counties.

The Illinois approach leaves it in the hands of each county. A majority of Illinois counties already have a geographic information system program underway at some stage of development. These counties may be in a position to make fairly rapid decisions about how to leverage the new funding resource.

There is no way to know how many counties will adopt this program; those that do might in some cases experience rapid progress. A ripple effect will occur in areas where counties readily share data with municipalities and other organizations. The statewide impact could be significant.

Richard Hilton is the GIS Manager for Lake County and former President of ILGISA.

In the Next Issue...

- *GPS Selective Availability*
- *Horizontal and Vertical Datums*

Illinois State Police

(continued from page 1)

The ISP uses ESRI's ArcView GIS to provide the mapping needs for the department. Using data collected by the agency, ArcView makes it easy for personnel unfamiliar with the software to create understandable maps. Analysts use ArcView to extract information from databases containing:

- All Illinois fatalities and all information pertaining to the fatal crash and victim.
- All registered sex offenders in Illinois, including information on type of sex offense prosecuted for and home address of offender after parole.
- All ISP-handled personal injury and property damage crashes and all information pertaining to these crashes.

Analysts can create maps depicting various crime locations, registered sex offenders, known gang-member locations, motor vehicle thefts and recoveries, and demographics, enabling ISP command personnel to better strategize and deploy officers.

The maps created using the ISP crash database depict areas of the state or segments of roadways where crashes are occurring. ISP personnel use GIS analytical tools to show density of crashes and changes in crash patterns due to contributory causes. This gives patrol commanders better insight into trends and patterns occurring in their patrol districts and assists them in allocating manpower.

Interactive Mapping over the Internet

With growing awareness of the unit's capabilities and increasing demand for products, the ISP decided to extend the mapping program. The goal of this program is to implement GIS not only within ISP, where highly analytical, advanced mapping takes place, but throughout the department to the trooper in the squad car and to the general public.

In the spring of 1999, interactive traffic and crime maps became accessible to anyone via the Internet. The easy-to-use mapping browser developed with ESRI's Map Objects Internet Map Server enables users to view a variety of mapping products based on data collected by the ISP.

Clients can view traffic fatality or crime information. When clients choose traffic, they can select the level of geography (e.g. city), date range, and other specifics such as alcohol-related or teen driver to view a state map customized to their individual queries (see the map below).

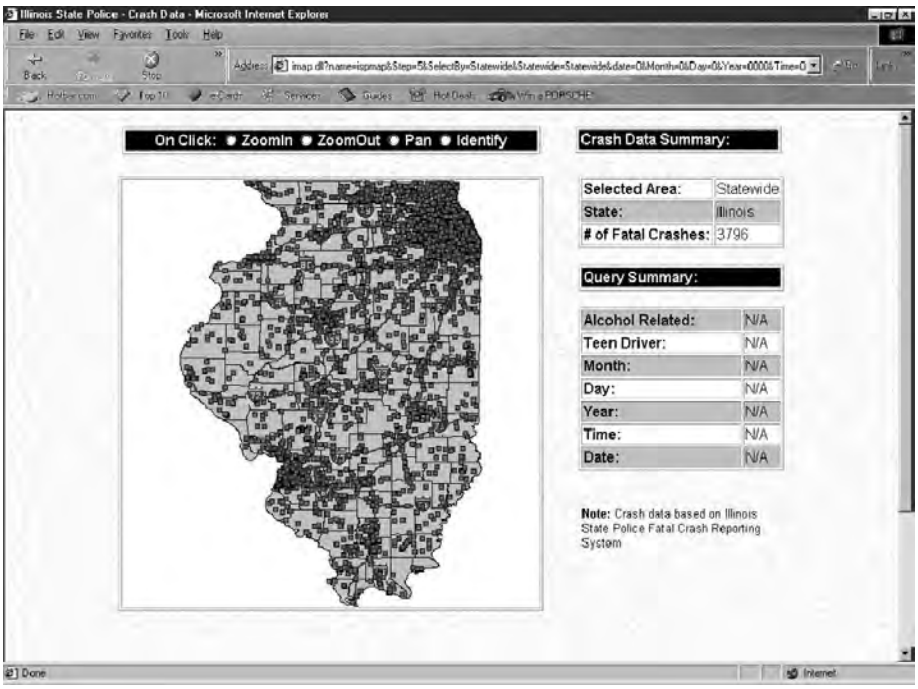
For crime information mapping, clients are prompted to choose year, time frame, category (e.g. arrest rates), and a crime. The county-level crime data portrayed are from Illinois Uniform Crime Reports that all police departments are required to report.

ArcExplorer Project

The ISP uses ESRI's ArcExplorer software in all of the state police districts. ISP analysts familiar with ArcView visited ISP districts throughout the state to help them become familiar with the browser software and its capabilities. Although districts still need the assistance of analysts to complete in-depth analysis and maps, districts have the capability to view various data on their desktop computer.

The ISP controls the flow of information placed onto the state police area-wide network. Each district accesses the information they need and creates the maps they have a need for. District personnel use ArcExplorer to view such information as location, date, alcohol-related, sex of victim, etc. associated with the point features. With the interactive mapping tool, they can actually see the data associated with a point feature on a map and can display new layers for query and analysis.

(continued on page 7)



Board Member Profile

Gail Krmenec was elected as the 2000-2001 President of ILGISA at the Fall 1999 Conference. She currently serves as President-Elect and will succeed James Carter as ILGISA President in November.

Gail graduated from the University of Illinois at Urbana with a Bachelor's degree in geography and received a Master of Science degree in geography from Northern Illinois University in 1986 with a specialization in cartography.

While at NIU, Gail worked as a cartographer with Dick Dahlberg in NIU's Laboratory for Cartography & Spatial Analysis, where she helped create the first satellite image map of the state of Illinois.

Gail's early work in the industry included a stint as a freelance cartographer with Rand McNally—her work is published in the Young Students' Learning Library—and a position creating mapping materials for an educational company in Chicago.

In 1988 Gail joined the Census Bureau as a geographer and today serves as an Assistant Regional Census Manager with the U.S. Census Bureau's Chicago Regional Office.

During her tenure with the Census Bureau she has supervised numerous special censuses held throughout the Chicago metropolitan region and has recruited new field interviewers for various Census Bureau surveys.

In 1993 Gail helped train the Current Population Survey staff to convert the survey from a pencil-and-paper survey to a computerized one.

Gail served as the Geographic Coordinator for the Chicago office, overseeing day-to-day geographic operations in preparation for Census 2000.

She was responsible for the Integrated Coverage Measurement survey on the Menominee Reservation 2000 Dress Rehearsal Census, one of three dress rehearsal sites in the country.

In 1999 Gail was one of a group that received a Director's Award for Innovation for their work on developing the Complete Count Committee concept for Census 2000.

In her current position as Assistant Regional Census Manager, she is responsible for the Accuracy & Coverage Evaluation survey for Census 2000 in the Chicago Region. This sample survey is used to determine the number of people and housing units missed or counted more than once in the census.

Gail's professional interests and activities are not limited to the Census Bureau. She is a member of the Association of American Geographers (AAG) in addition to the Illinois GIS Association. In 1995, she served on the Program Committee for the national meeting of the AAG, held in Chicago.

With ILGISA, Gail has been an active participant as speaker, panelist, workshop coordinator, and session organizer at both the spring conferences and annual meetings of the Illinois GIS Association. She has served on the By-Laws and Honors committees, and was elected to the Board of Directors in 1997.

Gail currently serves as President-Elect and will take over the office of President at the end of the annual Fall ILGISA Conference on November 7, 2000.

Gail resides in DeKalb with her husband Andrew, currently the Chair of Northern Illinois University's Department of Geography, and her two daughters, Rachel (8) and Madeline (4).

Illinois State Police

(continued from page 6)

The goal envisioned by the ISP in implementing the Internet and ArcExplorer projects was to utilize current technologies to bring multiple benefits, not only to the department, but to other law enforcement entities and community groups. Now, anyone with access to the Internet can view and map selected ISP information.

The ISP home page address is www.state.il.us/isp. Select "E-Service" for the SAM program. For more information, contact Ms. Lex Bitner, Illinois State Police at 217-557-2800 or lbitner_isp@yahoo.com.

Jim Glass is Team Leader for the Highway Traffic Team, Illinois State Police.

Information Ethics

A conversation with Dr. Marsha Woodbury

"... if you deal with information, then you have a moral duty to ensure the integrity, accuracy, security, privacy, ownership, and appropriate access of that information."

Dr. Marsha Woodbury teaches in the Department of Computer Science at the University of Illinois and speaks nationally and internationally on ethics and technology.

Dr. Woodbury delivered a keynote address on the topic of information ethics at the spring ILGISA conference. She agreed to speak with us on the subject of her talk and why she feels that it is an issue that affects not only GIS, but our everyday lives as well.

What is the general thrust of your work?

My day job is teaching beginning programming to students at the University of Illinois. I head a class of over 1000 students, and manage 13 graduate assistants and 13 graders.

This summer, I am a curriculum developer and faculty member of the Information Group of the Women's International University (IFU) in Germany in 2000.

I am active in Computer Professionals for Social Responsibility and was the national Chair.

I am also writing a textbook on computer ethics for Addison-Wesley Publishing, and that's extremely involving.

Are computer ethics and information ethics the same thing? What is "information ethics?"

Good question. Computer ethics involves everything that computers allow us to do, and that also includes our responsibilities as programmers and users of the technology. I cannot normally talk about [just] computer ethics—even my book is called computer and information ethics, because they are so deeply intertwined.

Information ethics has to do with information and applies to everyone who deals with information (from clipping out a column from a newspaper to data mining!)

OK, so let's talk about the basics of information ethics. Think of them like the Scout Oath—if you deal with information, then you have a moral duty to ensure the integrity, accuracy, security, privacy, ownership, and appropriate access of that information.

Usually with ethics we talk about people—medical ethics or legal ethics are all about doing no harm to other people. Information ethics is about the information itself.

How do information ethics come into play in public sector GIS work when the data are already part of the public domain?

I think you could make an argument that some information is dangerous to release to the public, because once it is released, it can be combined with other data, and the result could be an invasion of privacy. However, right now we cannot prevent the release of those databases. The other danger, of course, is some databases displayed on the web are inaccurate or out of date, and thus they are potentially harmful. Again, there's not much we can do about that data.

Maybe public education is the answer. Glenn Brookshear gave me this scenario: Today there are web sites that provide road maps of most cities. These sites assist in finding particular addresses and provide zooming capabilities for viewing the layout of small neighborhoods. Starting with this reality, consider the following fictitious sequence:

Suppose these map sites were enhanced with satellite photographs with similar zooming capabilities. Suppose these zooming capabilities

were increased to give a more detailed image of individual buildings and surrounding landscape. Suppose these images were enhanced to include real-time video. Suppose these video images were enhanced with infrared technology. At your own home 24 hours a day. At what point in this progression were your privacy rights first violated? At what point in this progression did we move beyond the capabilities of current spy-satellite technology? To what degree is this scenario fictitious?

You make a good point. And with geographic information systems, users are able to create information and knowledge that was previously unavailable.

Is GIS unique in this regard, or are there other technological advancements that have raised similar concerns about information ethics?

Yes, it's really uncanny how often we are discovering the power of creating new knowledge from digitized databases. My favorite story from computer-aided reporting was the combining of two databases—bus drivers in Illinois and drunk driving arrests. You guessed it—people with convictions for drunk driving were driving school buses. Of course in that case, the public good was served.

However, we can track far too much today. You leave a trail when you surf the web. Every document you create in Microsoft Office '97 has a unique identifier. That's how they caught David Smith, who created the Melissa virus. Or take the Napster case. It turned out that every time people downloaded MP3 files, they were tracked! It could go on and on. Anyway, the answer is that GIS is not on its own for having ethical problems.

You've brought up a lot of new and interesting concerns. What is the information ethics issue that you think poses the greatest dilemma?

You would like to know my biggest concern. Well, it's identity theft. Years ago, all the science fiction writers nailed the government as the villain. They imagined a world where Big Brother watched everything we did.

For some reason, people in the United States zero in on the government and ignore the abuses of business. In my mind, a push for a national ID card will come because of business practices, not because of the government.

The fastest rising crime today is identity theft. If someone steals your social security number and runs up debt in your name, you are powerless. The police won't help you. The banks and phone companies will come after you. It can cost you thousands of dollars and take years to clear your name and your credit rating. The more I go around the country and talk to people, the more horror stories I hear.

We are going to demand that banks don't lend money or phones aren't hooked up until people are fingerprinted or photographed or had some biometric test. Then the banks and phone companies cannot accuse us of defrauding them, because we can prove we didn't do it.

Until we require some valid and recognized identifier, we are in for a very rough start to the century. Once the pain is spread wide enough, we will demand these measures.

Is the Internet the villain? Yes, indeed. Identity theft was a minor annoyance until the 1990s—and what happened then? The explosion of the Internet! Getting your mother's maiden name and other information about you is dead easy. So take every precaution that you can—check with the credit bureaus, and so on. It might be too late, but at least you can try. Here's a list of measures you can take if you are really dedicated to maintaining your privacy online:

- **Be informed.** Push hard for open access to information that is stored about you. Use encryption.
- **Support legislation to protect privacy.** Right now, the money in government is bolstering up enforcement of copyright and patent protections while leaving e-commerce privacy abuse to "self-regulation."
- **Use an anonymous server** to send e-mail or access Internet sites when you want privacy.
- **Prevent widespread distribution of Usenet, private listserv postings, and chat group discussions** by using passwords, domain name filtering, Internet address filtering, or firewall to prevent access by unauthorized users.
- **Use cookie cutter software** to select the cookies you want stored on your hard drive.
- **Don't use your credit card** on unfamiliar sites.
- **Use a free e-mail account** so that "junk" mail comes to that account. Reserve your work and home e-mail accounts for genuine communication.
- **Create multiple profiles,** each tailored to the type of site you visit and your activity there. Novell Corporation advertises such a service.
- **Make up fictitious personal data** when you do not feel secure about giving out real information.

To learn more about privacy issues, information ethics and e-commerce, visit Dr. Woodbury's website at www.cpsr.org/~marsha-w.

Interview conducted by Nancy Place, Managing Editor.

Spring 2000 Conference Review

The ILGISA Spring 2000 Conference took place April 18-19 in Urbana. The sixth annual conference was a great success, with a record-number 176 conference participants, 118 workshop participants, and 18 vendors attending.

Tuesday's day-long workshops covered agricultural applications, ArcInfo 8.0, and the experiences and strategies of county-level GIS programs.

Participants at the workshop on GIS agricultural applications found the session very informative, particularly the education segment and the NCRS soil survey presentation.

Richard Knodle of Lake County, Department of Management Services, discusses their digital soils database.

Attendance was high at the ArcInfo 8.0 workshop. Tom DeWitte, ESRI Minneapolis, gave a much-praised presentation, providing attendees with an "excellent overview of [the] software," and "well-presented, useful information."

The workshop titled "From the Trenches: What We Did Right and What We Would Do Differently" generated positive responses as well. The interactive format gave attendees the opportunity to discuss with the presenters such issues as specific applications and associated problems, and the manner in which database creation costs were derived.

Tuesday night included a reception in the vendor exhibit hall and a student night. This is the second year ILGISA has hosted a student night panel providing college students with practical career ideas within the field of GIS.

Curt Abert and Chris McGarry, Illinois Geological Survey, during a conference break.

Wednesday began with a keynote address from Dr. Marsha Woodbury on *The Bout of the Century? Information Ethics vs E-commerce*. You can learn more about Dr. Woodbury and information ethics issues on page 8 of this newsletter.

The rest of Wednesday was filled with concurrent sessions on the following topics:

- GIS applications in transportation,
- The role of GIS in local planning,
- Next-generation on-line access technology for GIS,
- The Public Land Survey System in GIS,
- GIS analysis of Illinois-specific issues, and
- Spatial modeling and analysis.

The ILGISA Board and Conference Planning Committee thank all of you who attended the Spring Conference and look forward to seeing you at the Fall Conference in Lisle on November 6 and 7.

ILGISA conferences provide opportunities to see the latest GIS technology.

Illinois Digital Orthophoto Quadrangle Project Update

By Donald Luman

The Illinois Digital Orthophoto Quadrangle Project (DOQ) is making good progress—deliveries of new 1998-99 NAPP 3-based DOQs to the Illinois Department of Natural Resources (IDNR)began in January, 2000. For a more complete description of the project, consult the Fall 1999 issue of *Illinois GIS & Mapnotes*.

Approximately three hundred 3.75' x 3.75' quarter quadrangles (75 USGS 7.5-minute quadrangles) have been received and processed at the IDNR, Illinois State Geological Survey. Free distribution is through the Survey's NSDI Clearinghouse (isgs.uiuc.edu/nsdihome). Complete metadata and header information are included with each downloaded DOQ file.

The typical 3.75' x 3.75' DOQ is approximately 44 megabytes in size. To facilitate downloading, each DOQ file has been compressed to approximately 3 megabytes using MrSID software with a target compression ratio of 15:1. Image degradation is minor.

Original DOQ imagery typically lacks sufficient image brightness and contrast, so a conservative normalization procedure has been applied, which does not preclude applying additional image enhancement techniques to the DOQ imagery.

ISGS can provide uncompressed and unenhanced DOQ imagery on compact disc for a modest fee. Contact the ISGS Information Office at 217-244-2414 for further information.

Figure 1 delineates geographic areas that are currently contracted for production of 1998-1999 NAPP 3-based DOQs. It is important to note that these are planned completion rather than delivery dates, and that they are best estimates; delays in DOQ production can occur.

Once these contracted areas have been completed, there will be first-time completed coverage of DOQs for the state, comprised of a mixture of NAPP 1 (1988), NAPP 2 (1993-1995), and NAPP 3 (1998-1999) source material (Figure 2).

The remaining white areas on Figure 1 are termed "remake" areas; that is, older DOQs based upon NAPP 1 or NAPP 2 source material. These remake areas have also been prioritized for production of newer, NAPP 3-based DOQs and are in the process of being contracted for production.

(continued on page 12)

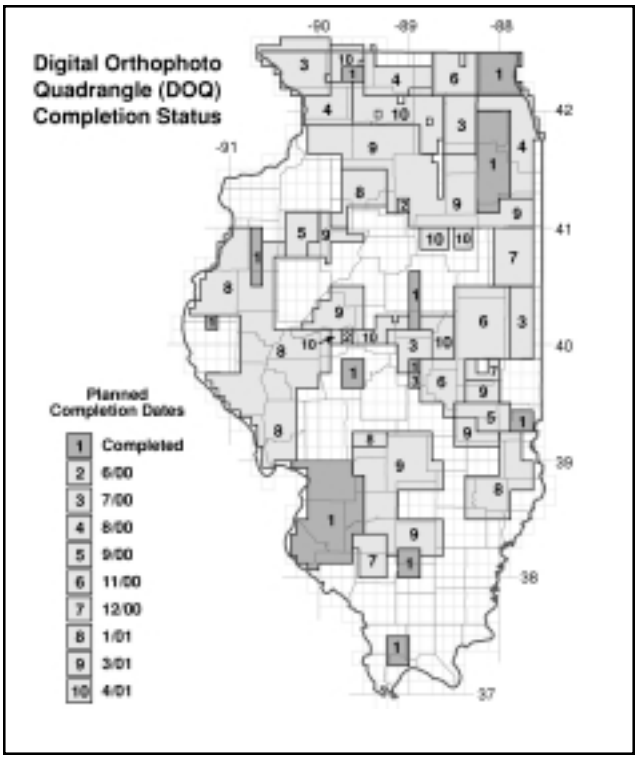


Figure 1: Completion Status for Illinois DOQ Project. (Prepared by USGS, National Mapping Division)

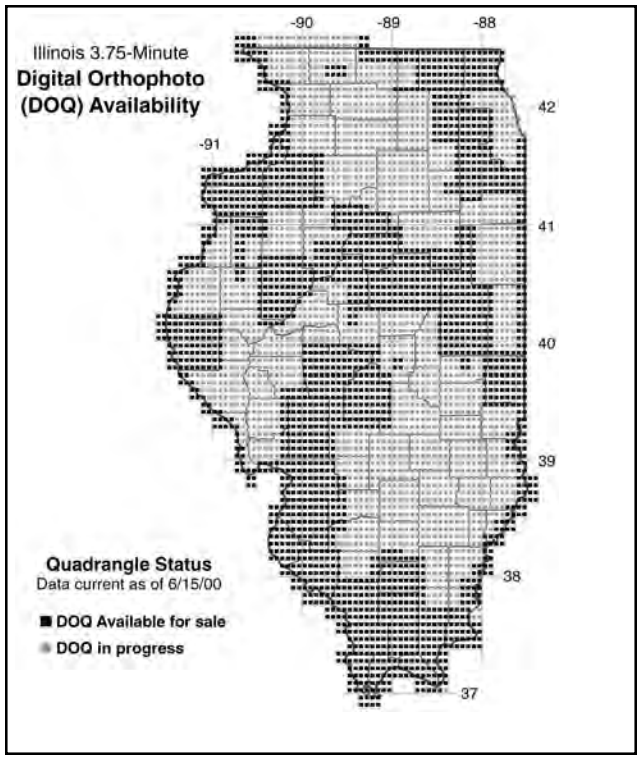


Figure 2: State Coverage Status of Illinois DOQ Project. (Prepared by USGS, National Mapping Division)

Illinois DOQ Update

(continued from page 11)

A color version of Figure 2 is available on the NSDI web site, and updated status maps will be posted as soon as they become available.

It is anticipated that the Illinois DOQ Project will be completed by mid- to late-2001.

The Illinois DOQ Project is made possible through the joint funding of the following federal and state agencies:

USGS, National Mapping Division
USDA, Natural Resources Conservation Service
USDA, Farm Services Agency
USEPA, Region V
Illinois Department of Natural Resources
Illinois Department of Transportation
Illinois Environmental Protection Agency

Donald Luman is the Chair of the Illinois Mapping Advisory Committee.

Don't Forget!!!

Our annual Fall Conference is November 6-7, 2000 in Lisle, Illinois.

We invite you to participate by submitting a presentation or project display.

Visit our web site at www.cagis.uic.edu/ilgisa for more information or contact the ILGISA secretariat at 815-753-1906.

Illinois GIS Notes is published by the Illinois GIS Association
Center for Governmental Studies
Northern Illinois University
Dekalb, Illinois 60115.

Editors
Donald Luman,
Illinois State Geological Survey

Larry Gunderson,
City of Naperville

Managing Editor
Nancy Place

Graphics
Richard Vaupel
Vaupel Graphics

Please direct comments, questions, and news items to the ILGISA secretariat's office above or to mhdavis@niu.edu.

Calendar of Events

August 1-4, 2000
GIS Standards Workshop
Dept. of Urban and Regional Planning
University of Illinois, Urbana-Champaign
www.iguanaware.com/web_htm/clearing/clearing.htm

August 19-23, 2000
URISA 37th Annual Conference
Orlando, Florida
www.info@urisa.org

September 12-15, 2000
State Mapping Workshop
USGS, Mid-Continent Mapping Center
Rolla, Missouri

November 6-7, 2000
ILGISA Fall Conference
Lisle, Illinois
www.cagis.uic.edu/ilgisa

Illinois GIS Association
Center for Governmental Studies
Northern Illinois University
Dekalb, Illinois 60115.

First Class Mail
U.S. Postage
PAID
DeKalb, IL
Permit #207

ADDRESS CORRECTION REQUESTED