CENSUS 2010: IT’S IN OUR HANDS

Gail A. Krmenec
Asst. Regional Census Manager
U.S. Census Bureau

The Census is the cornerstone of our democracy. Our system of government depends on equal representation in Congress, and determining equal representation depends on the census. Article 1, Section 2 of the U.S. Constitution requires that everyone, citizens and non-citizens alike, be counted. The 2010 Census will be our nation’s twenty-third decennial census, the first occurring in 1790.

The 2010 Census will be the shortest in history-just 10 questions that take only about 10 minutes to answer. The questions on the 2010 Census are very basic: 5 demographic questions that include age, sex, Hispanic origin, race, and relationship to the person filling out the form; 1 housing question, whether the home is owned or rented; and administrative questions to help verify the accuracy of the information: the number of people living in the house, whether any additional people are staying in the house, telephone number (for any follow-up questions), and the names of the people in the house.

The “long form” questionnaire, which covered dozens of additional topics, has been converted to an ongoing survey throughout the decade called the American Community Survey (ACS). The American Community Survey is part of the Decennial Census Program, but provides all these data to communities every year, not just once a decade.

April 1, 2010 is Census Day. Information provided on the 2010 Census questionnaire should represent the respective household as it exists on this day. The Census Bureau uses the concept of “usual residence” for enumeration. “Usual residence” is defined as the place where the person lives and sleeps most of the time. It was established by the Congress in the first Census Act of 1790 and has been used in all subsequent censuses. Usual residence is not necessarily the same as a person’s voting or legal residence. Some individuals reside in group quarters, which include prisons, college dormitories, and senior care facilities. This is where they live and sleep most of the time. College students living away from home while attending college are counted where they are living at college. Snowbirds (people who live in one state but spend the winter elsewhere with a warmer climate) are counted at the residence where they live most of the year. Respondents who indicate they spend equal amounts of time at each location are counted at the residence where they are living at the time of the census. The Census Bureau counts prisoners (including inmates of prisons, jails, detention centers or halfway houses) at the prison’s location because it is the place where the prisoner lives and sleeps. The concept of “usual residence,” or the place where the person lives and sleeps most of the time, is followed in order to be consistent in counting every resident of the United States.

Continued on page 4: Census 2010
Greetings! 2009 has been an interesting and exciting year for ILGISA. There have been many changes in the organization. I am most pleased to announce that we have increased the size of the Board from eight to ten directors. You may ask yourself, why is our president so pleased about that? The short answer is that the Board is more active and has taken on more responsibilities. For example, the Membership Committee has become much more active in engaging ILGISA members and adding value to your membership. The Education Committee is active in involving students and providing professional opportunities for students at our conferences. The Publications Committee is dedicated to increasing the quality and content of our Illinois GIS Notes. Now there is also a Geocaching Committee that will be organizing a Geocache event for our membership. The Conference Planning Committees are focused on providing content-rich programs. I would like to take this opportunity to invite you, our membership, to get involved. If you are interested in serving on any of our committees or have ideas for a committee, please contact the chair of that committee. A complete list of our committees can be found at: http://www.ilgisa.org/Board/committees.aspx

I also want to talk about ILGISA’s finances. Due to a downturn in the economy and increasing facility costs, ILGISA has gone from an area of concern to recovering. This is almost entirely due to our change in conference venues. The i-Hotel and Conference Center at the University of Illinois and the Northern Illinois University – Naperville campus have allowed the organization to reduce the costs associated with hosting the conferences. In spite of the reduced costs, these “smart” facilities have additional benefits, including in-room projection and free Wi-Fi access for attendees! We are excited to be back at both facilities in 2010. The proactive changes made in 2009 increased ILGISA’s financial stability, allowing the Board to contribute $3,000 back into the Association’s reserves. The 2010 budget is available on your member home on the ILGISA website. I am also pleased to announce that the organization will actively contribute to our Educational Endowment Fund. Speaking of the fund, I would also like to take this opportunity to thank all of the vendors that contributed to the fund by providing silent auction items at the Fall conference. Without those donations, we would not have been able to raise over $1,000 for the Endowment fund. In 2010, the organization will actively contribute to the fund by matching the totals raised by the silent auctions at each conference.

I, and the rest of the Board, will be busy in 2010 working on establishing various policies and procedures, mission statements, and strategic plans for the Association. I’ll be the first to admit, this may not sound very exciting, but it will greatly benefit the organization by clearly defining our long-term goals and outlining the methods we will use to achieve those goals. If anyone from our membership has any thoughts, opinions, or feedback regarding the Association, I invite you to contact me via email abert@isgs.Illinois.edu. We welcome your thoughts and value your opinions. How are we doing? What are we doing right and what are we doing wrong? Is there anything we could be doing better?

For something more exciting, the Spring Conference will be held April 14-15 at the i-Hotel and Conference Center in Champaign-Urbana. I look forward to attending and I would encourage you to participate by either giving a presentation or poster that highlights your work. I enjoy the networking at the conferences and I always learn something new. I hope to see you all there!
GIS EDUCATOR’S CORNER
RICH SCHULTZ, Ph.D., C.P.G.

ILGISA Members:
As I prepared my column for this issue of GIS Notes, I reflected on how far ILGISA has progressed over the past couple of years. We have instituted an Education Committee, increased membership, made educational outreach a decisive part of the organizational mission, and increased the number of workshop and learning events at the bi-annual conferences. Now, we have adopted the measures to make student chapters of ILGISA a reality.

As noted in the previous issue of GIS Notes, ILGISA has already embarked on a mission to provide professional connections between the GIS community and the next generation of the geospatial workforce, namely those completing their degrees at institutions of higher education. ILGISA has offered increasing opportunities for the GIS community to interact with students and consider possible relationships via job shadowing opportunities, internships, and potential future employment with your organization. We, as members of the ILGISA Board of Directors, feel this is a “win-win” for both your organization and the student population. In addition it creates a means of sustaining the geospatial infrastructure for the future.

As a springboard for helping this to come to fruition, ILGISA is continuing to make the student population aware of the GIS community and encourages student participation in ILGISA activities including: conference attendance, job/internship and resume posting on the ILGISA website, the now established ILGISA Scholarship Fund, student chapters of ILGISA, and Student Paper and Poster Competitions at Spring ILGISA Conferences. The ILGISA Education Committee is comprised of seven ILGISA members who have dedicated their efforts towards creating the aforementioned connections and making the future one of sustainability in the GIS community.

In the near future, the following opportunities are planned for GIS practitioner and student interaction: a “Careers in GIS” panel discussion at the Spring Conference in mid-April, a Student Paper and separate Student Poster Competition at that conference, several workshops geared towards students and those new to the GIS community, and the potential for published articles in future issues of GIS Notes. I urge both professionals and students to take advantage of these opportunities to make the connections between GIS professionals and students a reality within Illinois.

As Chair of the ILGISA Education Committee and a current ILGISA Board Member, I invite you and your organization to take advantage of the possible interactions with students and help us, as a professional GIS organization, to strengthen the future workforce in the GIS community. If I or any of the ILGISA Board members can do anything to promote this connection or if you have further suggestions to promote the cross fertilization of these groups, please contact me or any ILGISA Board member.

See you at the Spring Conference on April 14 and 15 in Champaign, Illinois!

Dr. Rich Schultz
Chair, Education Committee

FIRST DONATION TO ILGISA EDUCATIONAL ENDOWMENT FUND

Recently, ILGISA established scholarships for undergraduate seniors or first year graduate students at Illinois colleges and universities. To be eligible, recipients may be from any discipline, but must be working on projects that use GIS as part of their research or thesis. Students are awarded a onetime $1,000.00 scholarship and are required to present their work at the annual ILGISA Spring Conference.

ILGISA now announces the initial donation to the Educational Endowment Fund at the Silver Directional Level. Mrs. Gladys J. Schultz of Arlington Heights, Illinois became the first donor to the fund in honor of her late husband, Mr. Richard H. Schultz, who was a staunch supporter of higher education. She received a commemorative plaque in honor of her contribution.

Once the Educational Endowment Fund becomes sustainable, the scholarships will be awarded each March (announced at the Spring Conference) for the following summer or fall.

We urge organizations or individuals to support this worthwhile effort. Please provide for the Illinois students who are studying to become members of your profession...they may be your future employees!
In addition to April 1, other key census dates include the delivery of the census questionnaire in March, 2010; the delivery of the final census counts to the President by December 31, 2010; the delivery of the redistricting counts to the states by April 1, 2011; and the release of the 2010 Census tabulation products in June 2012.

In addition to the delivery of the questionnaire, the Census Bureau has instituted additional mailings designed to increase census participation. These include the delivery of an advance letter about the forthcoming census questionnaire, which will be delivered between February 17 and 19 for Update/Leave areas (areas where census staff update the Bureau’s Master Address File and leave a census questionnaire for the household to mail back), and between March 8 and 10 for Mailout-Mailback areas (areas where the census questionnaire is mailed to the housing unit and the household is expected to mail it back). For mailout/mailback areas, households should expect to receive the census questionnaire between March 15 and 17. Some areas will receive a bilingual English/Spanish questionnaire. After the census questionnaire has been delivered, a reminder postcard will be sent to households between March 22 and March 24. Census Tracts with very low Census 2000 mail response rates will receive an automatic replacement questionnaire in the hope that households in these areas will return it.

The 2010 Census Questionnaire will be available upon request in five other languages: Spanish, Russian, Korean, simplified Chinese, and Vietnamese. The Census Bureau will also provide, upon request, language guides in nearly 60 languages, which will be available to print or download from the Census Bureau Web site. Questionnaire Assistance Centers will be established for those requiring or desiring help in completing the form. We will also establish, in cooperation with local governments and Complete Count Committees, Be Counted sites. Anyone who believes they may not have been counted in the census can complete a Be Counted form and return it to the Census Bureau.

Although the 2010 Census will be the shortest in history, the Census Bureau anticipates enumeration challenges related to the recent economic downturn. An increase in the number of housing foreclosures will likely result in more vacant units, which in turn will result in a lower mail response rate. A lower-than-anticipated mail response rate will increase the number of field staff required to conduct the Census Bureau’s non-response follow up operation, the most expensive aspect of the Census. For non-responding households, including vacant units, an enumerator will be sent to interview the households (the non-response follow-up operation) or determine vacancy status. For each questionnaire that is not returned, the Census Bureau spends between $60-67 to collect the census information in person. For every 1% increase in the national mail response rate, a savings of between $80-90 million taxpayer dollars is realized.

In anticipation of the huge number of workers needed for the non-response follow-up operation, census recruiting is currently in full swing. An estimated 3.8 million applicants are needed to hire 1.4 million workers. Potential employees must complete an application and test, and be able to pass a background check if hired. More information, including a practice test, is available online at http://2010.census.gov/2010censusjobs/. Those interested in working on the census can also contact the toll free census jobs line at 1-866-861-2010.

The 2010 Census theme is “It’s In Our Hands” because we cannot do this job this alone. We rely on tens of thousands of partners who help us get the word out and the millions of individuals who meet their civic responsibility to participate. We have asked governmental units, community groups, and national corporations to establish Complete Count Committees to educate their constituents about the importance of participating in the census. Over 400 billion dollars are distributed each year to states and local governments based on decennial census population counts. Estimates of the dollars distributed to incorporated places by the State of Illinois puts the figure at around $120 per person per year. Your community cannot afford to have residents missed in the census. We also rely on those in the geospatial community to help us make sure we have the most accurate list of addresses possible and that we have the correct governmental unit boundaries before data tabulation starts.

A number of geographic partnership programs with the Census Bureau have been offered to ensure a complete and accurate geospatial base (our TIGER GIS database) and Master Address File. Early- to mid-decade the Census Bureau acquired local street centerline files, where they existed and local governments were willing to share their data, to realign TIGER to a minimum spatial accuracy of 7.6 meters. Once TIGER realignment was completed, and where a local file was used, TIGER rests on the local government’s base, making it easier to submit geospatial updates to the Bureau. The Bureau again offered this decade the Local Update of Census Addresses (LUCA) program, giving local governments the opportunity to review and update the Bureau’s address list, or if preferable, to submit their own address list. Suggested address additions, corrections, and deletions were fed into our Address Canvassing operation, where every street in America was canvassed and
Updated in the spring of 2009, the Master Address File was recently provided to eligible participating governments, who have the ability to appeal any address updates made by the Census Bureau with which they do not concur. Although Census Day is April 1, 2010, governmental unit boundaries in effect on January 1, 2010 are used for decennial census data tabulation.

To capture new addresses in the time period between the address canvassing operation and Census Day, local governments in mailout/mailback enumeration areas had the opportunity to submit newly constructed residences through our New Construction Program, currently underway. Submitted addresses will be field verified and the new addresses in existence as of April 1, 2010 will be enumerated.

Two crucial Census 2010 geographic programs for local governments’ participation are the 2010 Boundary & Annexation Survey (BAS) and the 2010 Boundary Validation Program, happening concurrently. Although Census Day is April 1, 2010, governmental unit boundaries in effect on January 1, 2010 are used for decennial census data tabulation. The Boundary & Annexation Survey is sent to the designated BAS official for every governmental unit, while the Boundary Validation maps are sent to the highest elected official. It is important that boundaries are reviewed carefully to determine their accuracy, and that any updates and/or corrections are submitted by the March 1, 2010 submission deadline. If the BAS official submits boundary changes, a new set of Boundary Validation maps will be forwarded to the highest elected official for verification. More detailed information on the BAS can be found at www.census.gov/geo/www/bas/bashome.html.

The decennial census is largest domestic mobilization undertaken by the U.S. government. It provides us with a clear and detailed picture of the entire population, with the necessary information to equitably distribute tax dollars and political representation, and reflects what we look like as a nation and as a society. Remember, the success of the census Is In Our Hands. Return your census questionnaire. We can’t move forward unless you send it back.

Gail A. Krmenec
Asst. Regional Census Manager
U.S. Census Bureau

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2009 ILGISA SERVICE AWARD WINNER: RICH SCHULTZ

Brian Valleskey

Dr. Rich Schultz of the Department of Geography and Geosciences at Elmhurst College has played a large part in the education and mentoring of many local GIS professionals. As a faculty member at Elmhurst College since 2000, he has worked with young minds in the Geography and GeoSciences Department. Rich has been heavily involved with ILGISA for five years and started serving on the Board in 2008. He has a strong belief in the connection between ILGISA and the GIS community for education and professionals.

Although this is his first award within the GIS community, Rich was recognized in Fall 2008 as the recipient of the National Council for Geographic Education (NCGE) College and University Distinguished Teaching Award for his work in the geographic community and the use of spatial concepts in his teaching. Rich also has an understanding of consulting, which is where he began his career prior to coming to Elmhurst College.

Rich finds that his work in the education community is both challenging and rewarding. Helping to focus undergraduates at a time in their lives where they are making important life decisions can be difficult. By sharing his own life experiences, he hopes that today’s students can see the relevancy of GIScience and apply it to any one of many areas of study. This all comes to fruition when former students become today’s GIS professionals. As Rich mentioned when discussing this article, “today’s students have a tremendous tool in their arsenal to help them solve problems spatially and succeed in their field of endeavor.”

Outside of work, Rich enjoys time with his family, but like many of us is fascinated with technology and devoted to online learning. Right now he is interested in working to develop a distance education program whereby students can take coursework in alternative formats from online and hybrid/blended. He is also interested in helping other educators to develop the course materials and instruction styles necessary to provide the best opportunities for today’s young adults.
The ILGISA Spring conference is rapidly approaching. This year the conference will be held at the iHotel in Champaign April 14th and 15th. Materials and schedules will soon be put together so please don’t delay getting your entry in today. The Spring Conference Planning Committee encourages all to submit abstracts for presentations and workshops. You may do this online at www.ilgisa.org. Also, the committee wishes to reach out to all exhibitors who plan to attend the Spring Conference. Registration is available online either for a booth or conference sponsorship.

2009 DAHLBERG DISTINGUISHED ACHIEVEMENT AWARD…
RUTH ANNE TOBIAS
Mary Clement

The Dahlberg Distinguished Achievement Award is presented to an ILGISA member for extraordinary service to the GIS community. This year’s award recipient, Ruth Anne Tobias, has not only been a part of ILGISA since its founding as an association, but indeed was instrumental in its birth!

The first recognized statewide GIS meeting was held at DeKalb, Illinois in 1990. Attended by 220 individuals representing 43 Illinois counties, that meeting marked the beginning of structured gatherings of GIS professionals and practitioners in Illinois. Therefore while ILGISA celebrated its 15th anniversary in 2009, its inception began four years earlier in DeKalb. Dick Dahlberg, NIU Professor of Geography, was the generating force behind that first statewide meeting.

Nearly two decades ago there was not the Board of Directors and Committee infrastructure that now defines ILGISA...however, there was Ruth Anne. She worked closely with Dick on all aspects of organization and management to ensure that first meeting was a success. The overwhelming positive response to the DeKalb meeting resulted in follow-on annual GIS in Illinois conferences, until ILGISA was founded in 1994. In many important ways, the Illinois GIS Association is what and where it is today because of Ruth Anne’s continued commitment to the State of Illinois as a GIS professional, mentor, and advocate.

Ruth Anne’s contributions to the GIS community were recognized in 1994 when she received the first ILGISA Service Award. She has assisted with many ILGISA conferences, repeatedly serving as a planning committee member, vendor coordinator, and poster session organizer, among other responsibilities. Ruth Anne served as a member of the Board of Directors from 2001-2003, Editor of Illinois GIS Notes, President Elect in 2004, and as ILGISA President in 2005. It would be difficult if not impossible to identify another individual who has consistently donated their time and talent across such varied responsibilities within ILGISA and to the Illinois GIS community.

In accepting the Dahlberg Award at the Fall 2009 ILGISA Conference, Ruth Anne expressed her appreciation for the honor, and her gratitude for the opportunity to work closely with Dick Dahlberg in the formative years of ILGISA. Her early insights about the potential applicability of GIS to a wide range of disciplines and functions were a driving force in Ruth’s continued focus on organizing and building a community of GIS practitioners in the State. Pointing specifically to the areas of public health, local and regional planning, and public safety, Ruth Anne expressed her pride in the progress GIS practitioners have made. Deflecting credit to the entire ILGISA community for that progress, she also challenged members to continue to look for ways to improve and expand GIS in Illinois.

Ruth Anne has also served as the DeKalb County Board Chairperson since 2004 and here brings to bear her recognition of the power of GIS to facilitate local government operation and management.

ILGISA congratulates its 2009 Dahlberg Distinguished Achievement Award Winner, Ruth Anne Tobias, who continues today to empower the Illinois GIS Association to serve in many capacities, as she has done for the past 20+ years!
NOMINATIONS FOR AWARDS

The ILGISA Honors Committee is responsible for selecting persons worthy of special recognition. Award recipients to be recognized will be chosen from among those persons working with GIS in any field in Illinois who have made significant contributions to the adoption of GIS among Illinois Government entities, promoted knowledge of and information about GIS to interested users, or have provided outstanding service to ILGISA or the GIS community in general. The Honors Committee is chaired by a director and at least two active members.

Award nominations are now being accepted for the 2010 ILGISA Outstanding GIS Student to be presented at the Spring ILGISA Conference in Champaign. Nominations can be submitted online at: http://www.surveymonkey.com/s.aspx?sm=x_2budF1i_2bnPkp19CspbDEFG_3d_3d

DO YOU HAVE YOUR ILGISA WEAR?

Rich Schultz has his ILGISA wear. Why don’t you? Oh, you do. Well then why don’t you send us a picture of you in your ILGISA wear? Maybe you will be in our July GIS Notes. (**Remember to use ILLGIS on your first $30 order to receive $10 off.**)
MEMBERSHIP COMMITTEE UPDATE

Kevin Gibbs

The Membership Committee is charged with promoting the benefits of membership, enhancing ILGISA’s visibility, and connecting GIS communities in Illinois. Over the coming months the committee will explore ways to increase membership, possibly through a membership drive and expansion of ILGISA’s social networking presence. In this economy it is especially important that members realize the role that ILGISA plays in networking our community and the Membership Committee intends to expand offerings to meet that increasing need.

The committee is looking for motivated volunteers to participate in regularly scheduled meetings and to assist current committee members. If you are interested in participating please send an email to the committee chair, Kevin Gibbs at kgibbs3@uic.edu.

It is especially important to keep in mind that ILGISA now allows online payment of membership dues. All memberships need to be paid in full by March 31, 2010 in order to qualify for reduced conference rates.

ILGISA DISCUSSION GROUP ON LINKEDIN

Greg Johnson

Do you have a question or topic that you would like to receive a second opinion from the GIS experts in Illinois? Why don’t you post your question or topic to the ILGISA discussion group on LinkedIn? LinkedIn is an interconnected network of experienced professionals. There are over 200 ILGISA members in our LinkedIn group. The LinkedIn group is the new forum for ILGISA discussion on the web. Our web address is http://www.linkedin.com/groups?home=&gid=1993649&trk=anet_ug_hm.
Chris Pearson, National Geodetic Advisor for Illinois, was the recipient of a 2009 ILGISA Service Award presented at the ILGISA Fall Conference in Naperville. Dr. Pearson was recognized for his work with numerous scientists, engineers, surveyors, geographers, and GIS professionals throughout the state to improve the understanding and use of geodesy as part of mapping and surveying in Illinois. He led the Geodetic Control Committee for the Illinois Geographic Information Council (ILGIC) and has promoted the Height Modernization Program in Illinois, which seeks to add reference marks, reconcile and update datums, and acquire LiDAR imagery as a modern datum for topographic uses such as floodplain mapping. Dr. Pearson has organized and presented at several short courses, symposia and sessions for ILGISA, the Illinois Professional Land Surveyors Association and other technical groups.

ILGISA Service Award recipients are chosen from active members who work with GIS in Illinois and who have made significant contributions to the adoption of GIS among Illinois government entities, promoted knowledge or information about GIS to interested users, or provided outstanding service to ILGISA or the GIS community in general.

**2009 ILGISA SERVICE AWARD WINNER: CHRIS PEARSON**

*John Kostelnick*

A major task of the ILGISA Publications Committee is to prepare and publish each issue of GIS Notes. As the official newsletter of ILGISA, GIS Notes serves an important role for connecting GIS professionals in Illinois, and for updating the GIS community on new projects, events, and other “happenings” within the state. As we prepare for the next issue of GIS Notes (scheduled for publication in July), we invite you to submit ideas for articles that you would like to see included, and encourage you to consider contributing an article about any GIS projects or events in your own work that may be of interest to the ILGISA membership.

The Publications Committee is also considering additional avenues for disseminating methods and results from GIS research and projects in the state. The new ILGISA website includes a “Member Showcase” section where members can publish and access PowerPoint presentations, posters, and maps from previous ILGISA conferences. Now that GIS Notes is distributed in a digital format, the Publications and Education Committees are considering an initiative to expand the newsletter to include the publication of extended abstracts or short articles from conference presentations in a “mini journal” format. The goal of this new initiative is to further ILGISA’s central role in the exchange of information, ideas, and project results by GIS practitioners and researchers in Illinois.

**THANK YOU TO OUR 2009 FALL CONFERENCE SILVER SPONSORS:**

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**PUBLICATIONS COMMITTEE REPORT**

Publications Committee
*John Kostelnick, Chairman*
jkostelnick@ilstu.edu
Mary Clement
Rick Marshall
Brian Valleskey

Thank you to our 2009 Fall Conference Silver Sponsors:

GIS Solutions, Inc.
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TEACHING SPATIALLY: THE PERSPECTIVE OF AN UNREPENTANT EDUCATOR

Rich Schultz, Ph.D.
Department of Geography and Geosciences
Elmhurst College

As a "seasoned" veteran of twelve years of teaching in higher education, I have now had the pleasure of observing how others teach spatial concepts through the eyes of some of the best educators in the nation by virtue of attending an ESRI Institute called the T3G (Teachers Teaching Teachers GIS). The inaugural institute met in June 2009 in Redlands, California on the ESRI campus for six days of spatial concepts and epistemological camaraderie. This gave me an opportunity to meet the "best of the best" as thirty educators auditioned and were selectively chosen for this prestigious event. I finally knew how Tom Cruise felt in "Top Gun" although for me, it was "Top GIS Educator". It provided me with the opportunity to reflect upon my teaching and rethink what I would want students to walk away with in terms of skill sets from one of my undergraduate classes. In years past, the Fall course, GEO 207 Introduction to GIS, at Elmhurst College began with an existing textbook and associated syllabus and PowerPoint slides that I had assembled from previous years when I taught the class, but T3G changed all that. I learned about new tools that could not only help students learn software, but learn how to "think spatially". It was not just a course in mouse button clicking and learning a counterintuitive GUI with more toolbars than one could ever use in a lifetime, it provided the students with skill sets they could use later in life, no matter what profession they ever use in a lifetime, it provided the students with skill sets that everyone has at the onset of learning spatial concepts and make contributions to the spatial infrastructure.

In retrospect, my teaching was "about" GIS for many years, although for me, it was "Top GIS Educator". It provided me an opportunity to meet the "best of the best" as thirty educators auditioned and were selectively chosen for this prestigious event. I finally knew how Tom Cruise felt in "Top Gun" although for me, it was "Top GIS Educator". It provided me with the opportunity to reflect upon my teaching and rethink what I would want students to walk away with in terms of skill sets from one of my undergraduate classes. In years past, the Fall course, GEO 207 Introduction to GIS, at Elmhurst College began with an existing textbook and associated syllabus and PowerPoint slides that I had assembled from previous years when I taught the class, but T3G changed all that. I learned about new tools that could not only help students learn software, but learn how to "think spatially". It was not just a course in mouse button clicking and learning a counterintuitive GUI with more toolbars than one could ever use in a lifetime, it provided the students with skill sets they could use later in life, no matter what profession they ever use in a lifetime, it provided the students with skill sets that everyone has at the onset of learning spatial concepts and make contributions to the spatial infrastructure.

TEACHING GIS has always been more about the concepts than memorizing the software buttons for me, but this year I find myself thinking it is about teaching students to be literate and well versed in the concepts for each level of skills and at least familiar with the context that they will be heading into after they leave the classroom. Elmhurst College has "professional preparation" as part of its mission and that's exactly what the students received.

After observing students struggle with realistic problems that everyone has at the onset of learning spatial concepts and GIS, I encouraged them that they were, in fact, learning, whether they knew it or not. Most were less than skeptical and some even approached me about dropping the course or worse yet, changing their major. However, as assignments were submitted and skills honed, things came together. The culmination of the course, which the students are encouraged to save as part of their electronic portfolio of abilities and skill sets, is a streamlined GIS project where students create databases and employ various geoprocessing skills to solve a focused problem. More than ever this year, as opposed to years past, the technical level of the projects was amazing. In fact, most of the students, who had never been introduced to GIS prior to the course, were working at a level that entry-level technicians work. They still had little means for comparison but their skill sets nearly matched those of local GIS technicians who were brought in to visit the class and "mentor" the students. A number of these students have already secured internships for the Spring and Summer months and will be making presentations at the Spring ILGISA Conference as well as the Elmhurst College Research and Performance Showcase in the Spring.

In retrospect, my teaching was "about" GIS for many years, yet with the help of educational colleagues and spatial tools at my disposal, I have come to make active learning and the development of skills as the dominant measure of success as opposed to jargon and theory in my GIS courses. It is my hope that in teaching "with" GIS, many of my students will work with ILGISA members one day in the GIS community and make contributions to the spatial infrastructure.
WHY SHOULD ILGISA SUPPORT STUDENT MEMBERS?
Rich Schultz, Co-Chair ILGISA Education Committee
John Kostelnick, Co-Chair ILGISA Education Committee

The Illinois GIS Association (ILGISA) has traditionally supported student membership as a bridge between academia and the professional GIS community. Recently, the economic downturn has put an entirely new spin on the students who are wondering how they'll land full-time employment when their education is completed. This is where ILGISA can help. If we, as an organization, create a pathway for students from colleges and universities leading directly into the GIS community, several interesting developments occur.

First, as professional organizations (municipalities, Federal, State, and Local governments, and private firms) reach out to students, they will stand to develop a potentially long lasting relationship and gain eager, excited members at the very start of their careers. The word “sustainability” comes to mind.

Secondly, if an early relationship is developed between organizations and students while they are still completing their education, organizations can “recruit” students and play a crucial role in their development and professionalism as they enter the geospatial workforce. Think of it as “grooming into the corporate or organizational philosophy.” Additionally, this potentially eliminates a costly job search for the organization since they have been carefully nurturing the relationship with both the college/university and the student. Hopefully, the benefits of this relationship may better ensure long-term retention of employees.

It is no doubt that students are our next generation of the geospatial workforce. Most organizations would probably agree with this statement. However, when was the last time you considered making contact with a college or university to investigate the potential for job shadowing (which costs the firm essentially nothing) or project work? While many organizations may not have internships in their budgets, they normally do have full-time positions in their budgets as elder statesmen retire or move on to other organizations. Why not consider a student intern when proposing your next annual budget? Consider it an investment in the future and an opportunity to give back via the mentoring process.

Think of the student intern as a “pay-it-forward” benefit. For most organizations the student category is a loss leader, an expense paid in current dollars for dividends paid in the future. It is this type of sustainability feature that organizations often overlook in their myopic “what about today?” attitudes. ILGISA presently has a student membership category, but it is normally last on the agenda in terms of changes or upgrades. The mission of ILGISA seeks to change this and invigorate the attention towards student learning and involvement in the GIS community. However, we, as an organization, need your help to make this happen.

Rebecca S. Gordon, president of Madison Consulting, Gordon Ecossystems, and Sieh Terra Ltd., notes in her recent article ten ways to attract and engage students at your organization. Her key concepts (in italics) are presented below along with editorial comments as to how ILGISA has taken her suggestions to heart.

1. Membership. It is classic to charge students a lower rate than other categories, but have you considered e-membership at a very nominal fee or no charge? The name of the game in membership development is to connect with a universe of potential lifelong members. By offering an e-membership, your list could double or triple quickly. Be sure to tailor membership benefits, i.e. e-newsletters that have student writers and articles that focus on understanding their entry-level options into their new careers. Offering electronic membership cards or certificates are a great way to make a connection with students. The National Association for Practical Nurse Education and Service, Inc. (NAPNES) offers a student e-membership for $10. ILGISA could certainly make this happen and offer students the opportunity to publish opinion pieces and research in GIS Notes. Membership via the organization website is now possible and certificates of membership could also be established for student members. As a way to boost student membership, ILGISA could consider a “student-get-a-student” program.

2. Meetings. Make sure annual meetings not only have student registration discounts but that they also have focused sessions for students. Remember, most students have never been to professional meetings; they don’t know the importance of the exhibit hall or networking. Develop sessions that bring students together to learn about the industry, understand career choices, and bond with fellow students. If possible, offer work experiences at meetings in exchange for hotel rooms or help with travel expenses. ILGISA has seen to it that student workers obtain one of its designations, while scholarships that pay for education to students. In future conferences, students will be afforded the opportunity for free registration at conferences. In future conferences, students will be afforded the opportunity to organize and hold their own sessions as well as attend “Career Planning” sessions organized by professional members and ILGISA’s Education Committee.

3. Scholarships. Form a committee to raise funds for education scholarships, either for your association’s education offerings or for college courses. The Appraisal Institute, for example, offers several scholarships that pay for education to obtain one of its designations, while the American Society of Mechanical Engineering offers a great way to make a connection with students.
Engineers offers $1,000 to $6,000 in scholarship awards for college courses. The recently established ILGISA Student Endowment Fund, under the auspices of the Education Committee, has this objective in mind, but needs sponsorships and donations for this to come to fruition. Again, consider it an investment in the future of the geospatial workforce, as well as a tax deduction by making your organizational and/or individual donation.

4. Mentor programs. Set up a mentor program to engage students in the association and in their chosen profession. For both the mentee and mentor, it can be a great experience. Today, it is easier than ever to set up virtual mentor programs that offer students help in deciding which path to take in a particular industry or to locate their first job. Mentor relationships build friendships that last well beyond the school years. The California Health Information Management Association and the American Health Information Management Association offer a mentor program through their student community of practice. ILGISA’s Education Committee is currently in discussions as to how to implement a professional mentoring program to interface students with GIS professionals. Your feedback and involvement as a member of the professional GIS community is crucial in making this happen.

5. Chapter outreach. Offer a place for students on your board or on an advisory committee. This can develop a pipeline of future leaders for chapter and national governance positions. The American Society of Interior Designers offers students a chance to be on a student advisory council. Chapters can also set up opportunities for students to meet on a local level through either education or social venues. While the ILGISA Board of Directors currently does not offer student representation on the Board, it is currently being considered as an overall program to improve student awareness and involvement in both ILGISA as an organization and in the geospatial workforce.

6. College clubs and student chapters. Work with colleges to set up a club that localizes the experience for the student and offer ways to connect nationally. The Public Relations Society of America has a student branch, the Public Relations Student Society of America, such as the chapter at the University of Southern Indiana. Another idea is to contact individual departments to encourage them to sponsor student membership. Don’t forget that students are no longer just a traditional age; they now go beyond the traditional four-year education to lifelong learning. The American Political Science Association reaches out to departments to offer free membership to graduate students. Many associations leave out graduate students in their membership model, but this is a lost opportunity because these students will go on to be leaders in the academic side of the profession. ILGISA has established guidelines for Student Chapters. At this point, a select few institutions have expressed interest. Words of encouragement and involvement from GIS community members would have a tremendous impact on establishing Student Chapters.

7. College and student outreach. A good way to utilize volunteers is to have them represent the association at college fairs to meet with potential student members and speak from personal experience about their careers. This is a helpful way to build the image of the industry while gaining potential future members. Alumni associations have always been effective at utilizing their members to attend college fairs, but professional societies should also take the opportunity to reach out to middle and high school students, before they chose a career path. This program builds a relationship from the very beginning and offers your volunteers another way to give back to the profession. This is also a great volunteer opportunity for current student members. While this has not been a past activity of ILGISA student members, it certainly could be and has the potential to provide students with exposure and networking that could land them that first internship or full-time position in the geospatial workforce.

8. Technology innovations. Be sure you have ways for students to network online (e.g., i.e. community of practice, LinkedIn, Facebook, blogs, and so forth). Neglecting technology is not an option for associations that want to attract young members. This membership category looks for the latest in technology to network, so be sure to add resources and money to your budget every year. The National Association of Engineers uses Facebook to connect with its members. Recently, ILGISA established a presence on “Linked In”. This is used by a number of professional members to network and contact colleagues and clients. Student involvement could be invaluable in assisting them to interface directly with GIS community members. In addition to “Linked In,” ILGISA is considering the possibility of developing a Facebook group page as another way of connecting with students through social media outlets. We hope that students will be eager to create and maintain the Facebook group page as a way to give them an opportunity to contribute to ILGISA.

9. Jobboards. Getting a position right out of college is tough, especially in this economy. It is important for associations to offer a job board that encourages organizations to list entry-level positions. Industry leaders should encourage their organizations to offer internships and entry-level positions to members of the association. Job boards should emphasize the reason why their members stand out, perhaps by obtaining a professional credential.
Make sure the job board does more than just list open positions, it should also offer areas to profile member accomplishments and expertise. The AIGA job board offers students a profile area to illustrate their design abilities. The ILGISA website has an entire page devoted to student (and professional) job opportunities and internship possibilities. The opportunities are there for both the organization and the individual student member to link up and create a long standing mutually beneficial relationship.

10. Bridge memberships.

Don’t forget your students once they have graduated. If there is a large gap between student and regular membership dues, often graduates cannot afford to stay connected. When you offer a bridge membership it allows the student time to gain both experience and income to afford the regular dues structure. The American Society of Radiologic Technologists offers a reduced rate graduate bridge membership. Once again, this is not currently the practice of ILGISA as an organization. However, as ILGISA moves forward and concentrates on sustainability issues towards creating a long-lasting community of geospatial professionals, a membership dues structure could certainly be formulated to accommodate graduate students and those transitioning into the workforce.

As one can see, you, as an individual member or as part of an organization in the geospatial community, can enhance a student members’ experience in a variety of ways. Gordon offers, “…If you cannot dedicate a lead person in your organization to be a student member advocate, consider forming a committee of concerned volunteer leaders. A good source for volunteers is from the academic community.” ILGISA has a dedicated interest in developing as an organization to better serve both the student members as well as the future geospatial workforce in its quest to sustain the industry. Can you be part of the solution to making this happen?

Note: Portions of ‘10 Ways to Embrace Student Membership’ reprinted with permission from Rebecca S. Gordon, President of Madison Consulting, Gordon Eco-systems and Sieh Terra. Article originally published in Membership Developments e-newsletter, ASAE & The Center for Association Leadership, Washington, DC.

INTRODUCTION TO THE GEOTECH CENTER

Mike Rudibaugh

In 2008, the National Science Foundation (NSF) Advance Technical Education (ATE) program funded the National Geospatial Technology Center of Excellence (GeoTech Center, DUE ATE #0801893) to support two-year college geospatial technology programs. One of the partner institutions awarded the grant, Lake Land College, is located in Illinois and is a member of ILGISA. The ATE program promotes improvement in the education of science and engineering technicians at the undergraduate and secondary school level in addition to the educators who prepare them. The program focuses on training technicians for high-technology fields, including geospatial technology, that drive the nation’s economy. The GeoTech Center is a collaborative effort between colleges, universities, and industry to expand the geospatial workforce. The key academic and industry partners are displayed in the map below:

National Science Foundation GeoTech Partners 2009

The GeoTech Center partners include:

- Phillip Davis (Principal Investigator) – Del Mar College, Corpus Christi, TX
- Ken Yanow (Co-PI) – Southwestern College, San Diego, CA
- Vince Dinoto (Co-PI) – Kentucky Community and Technical College, Louisville, KY
- Mike Rudibaugh (Co-PI)– Lake Land College, Mattoon, IL
- Chris Semerjian (Co-PI) – Gainesville State College, Atlanta, GA
- David DiBiase (Co-PI) – Penn State University, State College, PA
- Ann Johnson (Co-PI) – ESRI, Beatty, NV

Continued from page 12: Why Should ILGISA Support Student Members?

Continued on page 14: Intro to GeoTech Center
Intro to GeoTech Center

The GeoTech Center’s website serves as a primary resource for educators, industry partners, and students (http://geotechcenter.org/). The website organizes information around the three targeted audiences listed above for Geospatial Science and Technology (GST). The following table summarizes resources currently being developed for the geospatial technology education community:

GeoTech Center Website Services and Information
Fall 2009

<table>
<thead>
<tr>
<th>Educators</th>
<th>Students</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive map showing location and program offerings at all U.S. community colleges</td>
<td>Career Pathways – Links to career, occupational, and jobs listings associated with the GST</td>
<td>Training Opportunities – GeoTech’s listing of both traditional on-site or web-based training workshops/seminars available to industry partners</td>
</tr>
<tr>
<td>Development – Information on professional development events (i.e., Webinars, workshops, and organizations developing GST training)</td>
<td>Certification options</td>
<td></td>
</tr>
<tr>
<td>Curriculum – Information/links to model GST programs and web resources linking to GST curriculum</td>
<td>Program Finder – Locate any college in the U.S. offering GIS courses, certificates, or degrees using a web-based interactive map</td>
<td>Internship Information – Models and services associated with developing internship partnerships</td>
</tr>
<tr>
<td>Teaching Resources – Information associated on textbooks, data sources, and technical specifications</td>
<td>Jobs – Links to clearinghouses posting GST job openings</td>
<td></td>
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<tr>
<td>Administrative Case Studies</td>
<td>Internships</td>
<td></td>
</tr>
<tr>
<td>GIS in the Classroom examples</td>
<td>Social Networking – Links to GeoTech’s social networking sites on Facebook, YouTube, and Twitter</td>
<td></td>
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Geospatial Technology Competency Model (GTCM) Project

The long-term goal of GeoTech Center’s website is to establish a one stop shop of resources to assist any community college or university interested in developing GST technician-level courses or curriculum. Currently, the GeoTech Center is working on several projects that have potentially broad impacts on the GST education community. The GeoTech Center is working with the Department of Labor to help define the geospatial occupation segments and the skills/competencies needed by industry. Utilizing previous DACUM (Developing a Curriculum) charts and undertaking at least four new DACUM events, the Center is creating a Meta DACUM to help identify the tasks and duties that help define the skills and competencies needed by GIS technicians. A DACUM event brings together individuals in the occupation under study. A facilitator helps them specify what they do and what tasks, skills, tools, and knowledge they need in that occupation. The Meta DACUM, vetted by members of the GISCI working group, will be used to help better define the model core competencies need by geospatial technicians. The GTCM project is being led by David DiBiase, Director of Penn State University’s World GIS Campus, and GeoTech Center Co-PI. The outcome from the GTCM work may potentially have tremendous impacts on community college or university GST programs. Issues associated with curriculum assessment, evaluation, certification, accreditation, and articulation models could be linked together through the core competency model being developed. A white paper is currently in development and is scheduled to be disseminated through the GeoTech website and presented at the ESRI EdUC in San Diego, CA in July, 2010. To learn more about David’s research, Geospatial Industry Competencies: Approaching Synthesis and Consensus. National Geospatial Technology Center White Paper, please download a PowerPoint with audio (255MB) from: https://courseware.e-education.psu.edu/downloads/dibiase/GeoTech_competencies_audio.pptx.

Continued from page 13: Intro to GeoTech Center

Continued on page 15: Intro to GeoTech Center
Another resource being developed by the GeoTech Center is a National Map of Community College Geospatial Programs. This interactive map allows educators, students, and industry representatives to see all of the U.S. colleges and determine which community colleges offer geospatial education. They can query which colleges have courses, certificates, degrees, and the host academic/vocational department housing the GST curriculum.

Future enhancements to the Map will be to include contact information for each program and an automated way for college faculty to request information about programs to be kept up to date. The Map can be used by students and employers to find programs to fit their needs as well as help faculty network with other faculty offering geospatial programs. In addition, other interactive maps will be created that include university geospatial programs or show where there are job offerings for geospatial workers. What other applications, data layers, and visualizations should GeoTech be looking at in promoting the geospatial technology workforce? Partnerships and feedback with organizations like ILGISA will be critical in assessing the services, data, and products needed to better link higher education with the GST workforce. To access the National Map of Community College Geospatial Programs, go to the GeoTech Center home page (http://geotechcenter.org/) and click on the partner map.

In conclusion, the National Map and GST model core competency projects just represent two initiatives that the GeoTech Center is currently pursuing. The GeoTech Center’s national network of partners and collaborators are looking at a number of critical issues impacting geospatial technology education. The following list represents some of the current papers/resources in development through the Center’s website:

- White paper on virtualization technologies with installing and running GIS software from servers versus local installs;
- White paper on effective strategies with minority recruitment into GST programs;
- White paper on getting GST classes to count as general education classes using models from California and New Jersey;
- Regularly scheduled webinars and hands-on workshops promoting faculty/curriculum development concerning geospatial technology courses;
- Examples of successful articulation models between community colleges and universities relative to GST courses;
- Working resource repository based on a peer review processes for submitting GST curriculum projects, data, and exercises to share with the broader geospatial education community.

The GeoTech Center is looking for partners from community colleges, universities, government and industry to assist in developing resources needed to promote geospatial technology education. If you are interested in participating, leading or suggesting issues that need to be researched or developed by the GeoTech Center please contact Dr. Phillip Davis, Director of the GeoTech Center, at pdavis@delmar.edu or Mike Rudibaugh, Co-Principal Investigator, at mrudibau@lakeland.cc.il.us. We look forward to hearing from you and developing future partnerships in promoting geospatial technology education.
ILGISA SPRING 2010
Call for Workshops, Paper and Poster Submissions
April 14-15, 2010
I-Hotel & Conference Center, Champaign, Illinois

The Illinois GIS Association invites you to participate in its Annual Spring Conference. Goals of the conference program are to bring together researchers, developers, users and practitioners to identify common issues, solve shared problems, foster interdisciplinary discussions and research in all aspects of geographic information systems and inform Illinois GIS practitioners of significant GIS activity. The conference provides a forum for original research contributions covering all conceptual, design, and implementation aspects of GIS ranging from applications, user interface considerations, and visualization down to storage management and indexing issues. Researchers, students, faculty and practitioners are invited to submit their contributions to this year’s Spring Conference. All submissions will be grouped under the following categories:

- Business Geographic's (Location Analysis, Risk Management, Marketing and Real Estate, Parcels)
- Elevation
- Economic Use of GIS
- Geodetic Control
- Governmental Units (Criminal Justice, Demographics, Emergency Response, Housing, Parcel Mapping, Public Works, Social Services)
- Hydrography
- Imagery
- Locations (Addresses, points of interest, USGS Geographic Names Information System points)
- Management
- Natural Resources and Environment (Natural Resources Management, Land Use, Soils, Water Resources)
- Public Safety
- Structures
- Transportation (Routing, Transportation Modeling, Transit)
- Utilities (Corridor/ROW Management, Route Planning, Outage & Trouble Call Management)

WORKSHOPS on Wednesday, April 14, 2010

Each year the conference offers a selection of half-day and full-day workshops. ILGIS A is always seeking to improve our conference, and as such we solicit information from members regarding workshop topics and instructors. Workshops are not to be utilized as a promotion of one vendor’s product over another and are subject to review by the committee for compatibility. Workshops may be presented in a half-day or full-day format. The Conference Committee will review all received suggestions and select the palette of workshops and instructors based on needs of members.

Because of the new venue, this is an ideal time to submit a hands-on workshop for individuals with personal laptops (free WIFI). GISP credit (4 hours) is given for participation.

POSTER CONTEST—Professional & Student Categories

ILGISA sponsors a poster contest for students and professionals. Voting is done by ballot by attendees at the conference and a small prize is awarded to each winner. GISP credit is given for poster submissions. All poster presenters need to be available the evening of April 14, 2010 during the Exhibitor reception for questions or discussion of their poster entry.

PRESENTATIONS on Thursday, April 15, 2010

Authors are invited to submit full, original, unpublished research papers that are not being considered for publication in any other forum. All submitted papers will be refereed for quality, originality, and relevance by the Conference Committee. The acceptance/rejection of papers will be based on review results. All questions should be addressed to the Conference Committee Chairs. Remember, a clear, concise abstract is your best ticket to a logical track placement and a well-attended session.

Three types of presentations will be considered:
- Individual presentation, allotted 30, 60 or 90 minutes
- Student presentation, allotted 20 minutes
- Panel discussion, allotted 60-90 minutes

Workshop Submissions need to be received by February 5, 2010
Poster & Presentation submissions will be accepted until March
Online Submission at: http://tinyurl.com/2010Submissions