



cartography  
specialty group

## Volume 18, No. 2 Spring 1998

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### From the Chair

## CONTINUITY, CHANGE AND THE CSG

Hello CSG Members. As I write my first "From the Chair" address, I recall the year when I served as Student Director for the CSG...1989-1990. I was becoming immersed in spatial cognition and "cognitive cartography" at the time, and was excited to have the opportunity to work "next to" people like Bill Carstensen, Pat Gilmartin, Barbara Buttenfield, Jois Child, Ted Steinke and Judy Olson. To quote my twelve-year-old twin sons, it was "kewl".

It was an exciting year for me - I served as chair of the committee that put forth the proposal for the current Masters Student Grants Program; I served on the committee that judged the CSG's Third Annual Student Honors Paper Competition; and I served on the committee that judged the National Geographic Society's Cartography Award. I was a bit intimidated by all this new responsibility, but with the positive mentoring of the CSG board, all went smoothly.

The year I spent as Student Director for the CSG was an important year for me because it was the year that I began to meet and establish connections to other members of the specialty group. Over the years, these connections have grown, both in depth and breadth. Subsequently, I have remained active in the specialty group organizing at least one CSG-sponsored session for the past nine AAG meetings (except the 1991 meetings in Miami) and serving as Academic Director of the CSG from 1996-1998, and as Vice Chair from 1997-1998. Now, eight years (or nine, but who's counting) later, I've been fortunate to become Chair of the CSG.

I believe that one of the primary reasons for my continued interest and involvement in the Cartography Specialty Group is because of my early experiences as a student. I spoke to a number of CSG members in Boston who, as students, had also received support in various forms from the CSG. They too expressed their beliefs that support from the CSG was a significant factor in their continued involvement in the specialty group.

### Student Mentoring Vital

The CSG has held student mentoring as one of its most important roles as both a specialty group and as a sub-group representing the AAG. The CSG board and the membership (based on the response of members present at the Business Meeting in Boston) feel it is important that the Specialty Group continue to hold mentoring as one of its primary roles.

At the AAG Meetings in Boston, the CSG board suggested a number of changes at the Business Meeting that will enable the specialty group to continue this tradition. These changes are budgetary in nature, and will certainly impact all members of the group.

Before I explain the changes, I want to first provide a bit of financial history.

Over the past three years, the CSG has made financial commitments in excess of its income. On average, the CSG had spent about \$1,000 more per year than it was bringing in. This was OK for a few years, as we had over \$7,000 in our bank account four years ago, but we are now approaching a break point which has forced the board into a more pro-

active position.

There are two factors that have contributed to our decrease in income - lack of workshops, and a decreasing membership. Prior to three years ago, the CSG was realizing incomes averaging \$1,000/year from workshops, and we also enjoyed a membership of over 500 (peaking several years ago at around 550).

This past year, income from workshops was \$58.33, and membership was 428 (down from 504 members at the same time last year). Due to these various factors, our current budget amount now stands at \$3,769.86. The board realized that without changes in our income and expenditures, the CSG could potentially find itself in a situation where expenses exceed income.

### **Board Recommendations**

At our board and business meetings in Boston, the board made recommendations at the business meeting that would enable us to cut over \$900 of our ongoing financial commitments. We accomplished this reduction by:

- \* restructuring the Student Paper Honors Award so that the CSG no longer provides \$300 for each entrant and a \$100 and \$50 first and second place award (expenditure of \$1650); instead the CSG will award a \$500 first place and \$250 second place award, and cover the registration fee for up to 5 entrants expenditure of \$1050);

- \* lowering the cap on Masters Thesis Grants from \$1200 to \$900;

- \* limiting the amount available from the specialty group for requests to cover travel expenses for non-geographers participating in CSG sponsored sessions at the AAG to two registration fees per AAG meeting.

In addition, the CSG has decided to postpone publication of the next CSG Directory for one year, which will result in a short-term savings of about \$1,000 for the next year.

### **Increase Dues**

In conjunction with these changes, the CSG will increase membership dues by \$1 for all members, resulting in a membership fee of \$2 for students and \$6 for regular members. This change will raise our income by about \$425 (based upon this year's membership numbers).

The Board is also exploring other possible avenues that will help reduce costs, such as distributing one, two, or all three of the newsletters via email, and distributing the CSG directory via email or making it available on the web. The Board is also encouraging the membership to offer workshops, thereby increasing revenues.

The result of these various changes, then, is to keep the specialty group fiscally sound while still enabling the CSG to keep its commitment to student support and mentoring, and to keep its membership informed and involved. Looking back at the last available treasurer's report (1997-1998), we spent \$1350 on Student Paper Honors Awards, \$70 on the Awards Luncheon, \$500 on MA Thesis Grants, and \$300 on sponsored travel for students to attend the AAG meetings in Fort Worth, Texas. Of the \$3,162.91 spent during the year, 70% went toward student support; the other 30% went toward newsletters (\$872.91) and banking fees (\$70).

### **Membership Decline**

As a side note, but most certainly relevant, the CSG board did discuss possible reasons why membership numbers are down - discussions were not conclusive though. Here are some possible reasons: cartography is losing its appeal (not likely, but I had to start somewhere); there is much overlap with other specialty groups and AAG members may be choosing membership in fewer specialty groups; with increasing specialty group fees, AAG members may again be choosing membership in fewer specialty groups; and finally, year to year fluctuations in student membership (e.g., undergraduates from our program generally join only for one year-just before the AAG meetings - nine undergraduates from our department were members last year, and are not members this year). This is an important issue that the board will explore over the next year.

I urge all members of the CSG to continue its tradition of student support and mentoring, to increase student involvement in our specialty group and the AAG, to encourage our students to enter in to various CSG-sponsored competitions, and to be informed of activities in the CSG and other related

organizations (such as NACIS) as well as the AAG. I don't mean to sound sappy, but the reality is that the success of our specialty group, and the AAG, depends on our students. Scary thought, eh?

*All the Best,  
Scott Freunds Schuh  
Chair*

## **WHAT'S IN A NAME?**

*by Jeremy Crampton  
CSG Academic Director*

One of the challenges faced by the modern cartographer is the rapid change in available tools for dealing with spatial data. These tools allow more and more kinds of people to design, examine, and produce maps. There is now more interest in mapping than at any previous time in history because these tools have made mapping abilities ever more widely available. The biggest map maker in history is perhaps MapQuest (a unit of GeoSystems Global Corp.), which produces 1.5 million maps 'per day'.

Ironically, most of the people using maps do not call themselves "carto-graphers". Indeed the term cartography is suffering a decline at the very height of interest in mapping. For instance, CSG membership, after some steady growth over the last decade, is now about the same as in 1988 (436), despite significant AAG membership growth during that time.

These two developments - increased interest in mapping and a decline in self-identified cartographers - can be reconciled if it is understood that the term "cartography" no longer encompasses all that we do. It is therefore suggested to rename the group "Cartography and Visualization".

Members may be reminded of the recent name change of the ACSM's journal The American Cartographer to Cartography & GIS. However, compared to "GIS", "visualization" better reflects our core specialty group focus on visual representation, and, mindful of the diversity of opinion about the ACSM change, perhaps more acceptable. Nevertheless, it does seem to be true that spatial technologies are merging; cartography, GIS, and geographic visualization (Gvis).

### **Why "visualization?"**

Isn't cartography already about visualization? Visualization is at the heart of cartography in the sense of "making visible". We believe, however, that visualization also incorporates the ability to interact with the representation in real time, in the sense of altering the map display to respond to questions (e.g., rotating the representation, adding or subtracting data layers). But it does not stop with these quantitative changes, for visualization also allows different kinds of ways of thinking about spatial data. Indeed visualization is first and foremost an act of cognition.

Finally, in response to those who fear that "non-visualizers" would have no place in a renamed CSG, that is certainly not the intent. The name is being expanded to encompass new mapping activities, not reduced to cut out traditional ones. A renamed "Cartography and Visualization" Specialty Group would have many flavors of interest, and would, we hope, boost interest and membership in what we see as a key part of geography.

If you have any opinion or response to this suggested name change, please contact me at [jcrampto@gmu.edu](mailto:jcrampto@gmu.edu), or Newsletter Editor Barbara Kinne at [bbkinne@csrlink.net](mailto:bbkinne@csrlink.net). No action will be taken without a vote by the CSG membership.

## **Minutes of the Business Meeting**

Boston, Massachusetts  
March 26, 1998

### **1. Call to Order.**

The meeting was called to order at 1:30 p.m. by Ute Dymon, Chair. 46 people signed the sign-in sheet for the meeting.

### **2. Approval of the Agenda.**

The agenda for the Business Meeting was distributed. Scott Freunds Schuh moved to approve the agenda; Nancy Winter seconded the motion and it was approved.

### **3. Approval of the 1997 Minutes.**

The 1997 Business Meeting minutes were distributed and approved as written (Scott Freunds Schuh moved, Eugene Turner seconded).

### **4. Election Results.**

Eugene Turner reported that 47 ballots were received (nine by electronic submission). The results of the election were: Charles Rader, Vice Chair; Elisabeth Nelson, Academic Director; Ann Goulette, Secretary/Treasurer; and Frank Boscoe, Student Director.

### **5. Treasurer's Report/Central Office Report.**

The Treasurer's Report was presented and discussed. The total treasury funds were reported as \$3,769.86. This is considerably less than last year due to a reduction in membership (428 current members) and a significant reduction in workshop rebates. A chart of the income and expenditures of the CSG for the past five years was also presented. Workshops were encouraged for the Hawaii Meeting.

The Board approved an increase in CSG membership dues to \$6.00 for regular members and \$2.00 for students. In addition, a restructuring of the Student Honors Award was approved, increasing the amount of the prizes to increase competition and interest, and reducing the amount of travel funding. The award was changed to \$500 first prize; \$250 second prize and paying the participants' registration fee (max of five students). Upper limits on the Master's Thesis Grant funding (\$900) and CSG-sponsored travel funding (two AAG Annual Meeting registration fees) were also approved.

Comments from the membership in the budget changes were solicited. No objections to the dues increase were heard after an analysis of the other specialty group dues was discussed. A discussion of possible workshop topics for the Hawaii meeting followed.

Scott Freunds Schuh moved that the Treasurer's Report be approved; Richard Wright seconded the motion and it was approved.

### **6. Newsletter Report.**

There were three newsletters distributed to the membership last year. Barbara Kinne became the new editor with the Winter 1997 issue. To cut down on reproduction costs, the newsletter will be photocopied gratis by Booz Allen & Hamilton. As an experiment for the 1998 year, the newsletter will also be distributed by email. The CSG membership directory (normally produced every two years) will be delayed a year to save expenses. A web-based directory is being discussed, along with the privacy issues involved. A show of hands of those who use the printed form of the directory revealed wide use among CSG members.

### **7. Awards Program.**

Jeremy Crampton reported that there were 19 submissions for the National Geographic Award; four were animations, one had music, and one was a web map. The submissions were very good. The total prize amount is \$1,200 this year. The winners of the award were: Mark Harrower and Michael Rock. Chad Shuey and Virginia Reynolds received honorable mention.

Anna Williams reported that there were four applicants for the Master's Thesis Grants and three were approved for funding. Rick Bunch, Jill Hallden and Dan Haug received the awards. Anna thanked the reviewers.

Scott Freundschuh reported that there were three entries for the Student Honors Competition; one withdrew. The competition will be held tomorrow.

#### **8. Liaison with ACA, NACIS, ICA.**

Bob McMaster reported that Auto-Carto 14 will be held one year from now in Portland, Oregon.

Cindy Brewer reported that NACIS will hold its next meeting in Milwaukee, Wisconsin starting October 7th. In conjunction with the meeting, a symposium on the use of cartography in education will be hosted by James Ackerman. Michael Peterson is now the full-time editor of *Cartographic Perspectives*; one guest editorship a year is proposed.

Judy Olson reported that the next ICA meeting will be held in Beijing, China in 2001.

Hal Moellering, Chair of the ICA commission on standards, announced a new book on international data transfer standards. Joel Morrison is the ICA Chair for spatial data quality.

**9. Installation of New Officers.** Ute Dymon explained that David Smith, the elected Vice Chair last year, was unable to assume his office due to health reasons. Scott Freundschuh had been appointed to fill the office in his place. Ute thanked the outgoing officers and passed the gavel to Scott Freundschuh.

#### **10. Program for 1999.**

Charlie Rader asked for suggestions/volunteers for sessions at the Hawaii meeting. Visualization, analytical cartography, hazard mapping, technology in cartography, humor in cartography and a hybrid poster/discussion session were proposed.

#### **11. New Business and Announcements.**

Ute Dymon suggested that students be encouraged to apply to the AAG for travel funding to the Hawaii meeting. Grants of \$200 are proposed. Applications must be received by June 30. Mark Monmonier will be signing copies of his new book at 6 p.m. this evening in Cambridge.

**12. Adjournment.** The meeting was adjourned at 2:20 p.m.

*Submitted by  
Ann Goulette  
Secretary*

## **Twelfth Annual Honors Competition for Student Papers**

### **Sponsored by the Cartography Specialty Group**

The Cartography Specialty Group of the Association of American Geographers is pleased to announce the 1998-99 Honors Competition for Student Papers on cartographic topics to be presented at the Annual Meeting of the AAG in Honolulu, Hawaii, March 23-March 27, 1999.

#### **Rules for Submission**

- \* Papers must be based upon original work relevant to the field of cartography and current cartographic research.
- \* Papers must be based upon work done as an undergraduate or graduate student, and the research must have been completed within the past academic year.
- \* Topics are not restricted to work derived from theses or dissertations.
- \* Papers must be written entirely by the applicant.
- \* Applications must submit the usual short abstract and appropriate program participation fee as required by the AAG, as well as the AAG application form, to the CSG.
- \* Students who are selected as finalists will be placed in a special session at the national meeting.

## **Eligibility**

The competition is open to students at all academic levels.

## **Awards**

- \* A \$500 prize will be awarded to the first place paper.
- \* A \$250 prize will be awarded to the second place paper.
- \* Additionally, the registration fee for the Annual Meeting will be covered for up to five entrants.

## **Judging**

Judging will take into account the academic level of the entrants. Both the written and the oral version of the papers will be judged by a committee including the current Academic and Student Directors of the Cartography Specialty Group.

## **Guidelines for Papers**

Guidelines for papers may be obtained from the Academic or Student Directors of the CSG. (See listing on Page 2 of this newsletter.)

## **Submission of Abstracts and Papers**

Abstracts should be submitted in both paper and digital format following the guidelines of the AAG (see the May issue of the AAG Newsletter for detailed instructions). **Abstracts are due September 4, 1998.** Posters and Illustrated Papers are due October 4, 1998. All submissions should be sent to:

Jeremy Crampton  
Department of Geography  
George Mason University  
Fairfax, VA 22030  
jcrampto@gmu.edu

## **1998 ELECTION WINNERS**

Votes were cast for the offices of Vice Chair, Secretary-Treasurer, Academic Director and Student Director. Congratulations to the winners!

### **Vice Chair:**

Charles Rader  
Department of Geography  
University of Wisconsin - River Falls

### **Secretary-Treasurer:**

Ann Goulette  
Booz Allen & Hamilton

### **Academic Director:**

Elisabeth Nelson  
Department of Geography  
San Diego State University

### **Student Director:**

Frank Boscoe  
Penn State University

# Treasurer's Report for 1997-1998

Report Period: Apr. 5, 1997 - Mar. 26, 1998

Beginning Balance, Apr.  
5, 1997 \$4,988.04

## Income

AAG Dues Rebate, '98 1,835.00  
Interest (Checking Acct) 51.40  
Workshop Rebates, '97 58.33  
TOTAL 1,944.73 **\$6,932.77**

## Expenditures

Student Honors Awards,  
'97 1,350.00  
AAG Awards Luncheon 70.00  
MA Thesis Grants 500.00  
Sponsored Travel, '97 300.00  
*Newsletters*  
Materials 116.47  
Postage 756.44  
Banking Fee 70.00  
TOTAL 3,162.91

**Ending Balance \$3,769.86**

*Submitted by  
Ann Goulette  
Treasurer*

## CALENDAR OF EVENTS

May 11-14 - Business Geographics Conference 98. Dallas, Texas. Contact: GIS World, Inc., 400 N. College Ave., Suite 100, Fort Collins, CO 80524. 800-447-9753, [www.BGC98.GeoPlace.com](http://www.BGC98.GeoPlace.com).

May 17-19 - Fifth Kentucky GIS Conference. Somerset, Kentucky. Contact: Kentucky Office of GIS, 1024 Capital Center Drive, Suite 305, Frankfort, KY 40601. 502-573-1450, [www.state.ky.us/agencies/finance/gisdept.htm](http://www.state.ky.us/agencies/finance/gisdept.htm). Email: [kyogis@mail.state.ky.us](mailto:kyogis@mail.state.ky.us).

May 17-22 -Indiana University Short Course Introduction to Rare Maps and Atlases. The Lilly Library, Indiana University, Bloomington, Indiana. Contact: Jane Clay, 812-855-6329.

May 27-30 - Canadian Cartographic Association and Association of Canadian Map Libraries Joint Conference. University of Western Ontario, London, Ontario, Canada. Contact: Geography Dept., University of Western Ontario. 519-661-3425

June 2-5 - A/E/C Systems 98. Chicago, Illinois. Contact: Show Mgmt, A/E/C Systems International, 415 Eagleview Blvd., Suite 106, Exton, PA 19341. 800-451-1196, [www.aecsystems.com](http://www.aecsystems.com).

June 8-11 - Spatial Data Infrastructure. Ottawa, Ontario, Canada. Contact: Marion Fuller, Conference Manager, 615 Booth Street, Room 650, Ottawa, Ontario K1A 0E9, Canada. 613-996-2817, [www.ccrs.nrcan.gc.ca/sdi98](http://www.ccrs.nrcan.gc.ca/sdi98). Email: [sdi98@ccrs.nrcan.gc.ca](mailto:sdi98@ccrs.nrcan.gc.ca).

June 12-14 - IMCoS Summer Weekend Annual Dinner, Symposium, and 18th International Map Fair. London and

Oxford, UK. Contact: IMCoS Secretary Harry Pearce, 29 Mt. Ephraim Rd., Streatham, London SW16 1NQ, UK. 44 1817 695041.

July 18-22 - Urban and Regional Information Systems Association Annual Conference and Exhibition. Charlotte, NC. Contact: Wendy Francis, URISA, 1460 Renaissance Drive, Suite 305, Park Ridge, IL 60068. 847-824-6300, [www.urisa.org](http://www.urisa.org). Email: [info@urisa.org](mailto:info@urisa.org).

July 27-31 - 18th Annual ESRI User Conference. San Diego, CA. Contact: User Conference Registrar, 380 New York St., Redlands, CA 92373. 903-793-2853, [www.ucinfo@esri.com](http://www.ucinfo@esri.com).

Sept. 15-19 - International Map Trade Association. 18th Conference and Trade Show. Seattle, WA. Contact: IMTA, P.O. Box 1789, Kankakee, IL 60901. 815-939-4627, [www.imta.org](http://www.imta.org). Email: [imta@maptrade.org](mailto:imta@maptrade.org).

Oct. 7-10 - North American Cartographic Information Society Annual Meeting. Milwaukee, WI. 800-558-8993, [www.nacis.org](http://www.nacis.org). Email: [cmb@uwm.edu](mailto:cmb@uwm.edu).

Nov. 10-12 - GIS/LIS 98 Annual Conference and Exposition. Fort Worth, Texas. Contact: GIS/LIS 98 Registrar, ACSM, 5410 Grosvenor Lane, Suite 100, Bethesda, MD 20814. 301-493-0200.

### **Call for Papers**

## **WORKSHOP IDEAS FOR HONOLULU**

*by Charles P. Rader, Vice Chair*

As the saying goes, "Membership has its benefits". An observation that I have made over the past decade of attending and presenting papers at AAG meetings is that specialty group sponsored sessions have better attendance and fewer distractions of people flitting in and out trying to catch a paper here and there. Traditionally, the CSG has sponsored a dozen or more sessions at the annual meetings.

In 1999 the AAG will be meeting in Honolulu, and I encourage you to attend and present a paper in a CSG sponsored session. Furthermore, if you know a student or a colleague, encourage them as well. We have had a number of good ideas for paper sessions (listed below) and I will be working with the GIS and Remote Sensing Specialty group program chairs to develop a number of jointly-sponsored sessions that focus on cross-cutting issues in GIScience.

### **Workshops Important to CSG**

Workshops are an important source of income for the CSG and over the past several years the number of these have dwindled. If you have an idea for a workshop, please contact me and I will assist with the arrangements. AAG has a travel grant program for student members that will provide \$200 for travel to the meetings. Abstract due dates for students applying to AAG are June 30th, 1998 (with notification August 1 and registration payment September 4, 1998. Details can be found on the AAG web site at <http://www.aag.org/>). Abstracts for regular presentations are due on September 4, 1998 with materials for CSG sponsored sessions to organizers before that date. Please keep these dates in mind.

### **Suggestions for CSG Sessions**

Possible topics and presenters include the following: Analytical Cartography (Hal Moellering); Mapping Natural Hazards (Ute Dymon); Jenks Remembered (Bob McMaster); Visualization (Aileen Buckley and John Krieger); History of Women in Cartography (Judith Tyner); Cartographic Technology (Anne Goulette); Twelfth Student Paper Competition (Jeremy Crampton and Elisabeth Nelson); Electronic Atlas Production (?); State of the Art in Map Design (Charlie Rader); Spatial Cognition and Learning (Scott Freundschuh); History of Cartography (?); and Other topics (you).

### **Suggestions for Joint CSG, GIS, and RSG Cross-Cutting Issues**

Possible topics and presenters include: Scale, Resolution, and Generalization; Geographic and Scientific Visualization;

Data Integration, GIScience Education; Technology Transfer; Role of GIScience in Geography; Social Dimensions of GIScience Technologies; and others.

### **Contacts for Information**

Contact me for more information on sessions or if you are thinking of organizing a session or have a paper that you would like included in a special session.

*Charles Rader*

*Department of Geography*

*University of Wisconsin - River Falls, River Falls, Wisconsin 54022*

*P: (715) 425-3264*

*F: (715) 425-0643*

*E: [charles.p.rader@uwrf.edu](mailto:charles.p.rader@uwrf.edu)*

Additional contacts for joint CSG, GIS, and RSG sessions are: Dan Brown (GIS) and Tom Allen, Tim Foresman, and Rolland Fraser (RSG).

## **USGS/NMD/CRADA PARTNERSHIPS**

The USGS announced in February a Cooperative Research and Development Agreement (CRADA) with LizardTech, Inc., a Seattle-based spinoff from the Los Alamos National Laboratory.

LizardTech will use its Multiresolution Seamless Image Database (MrSID), a wavelet-based image compression technology, as a possible solution to the challenge of transmitting digital orthophoto quads (DOQ) files across the Internet. Transmission of these files is time consuming and frequently even the CD-ROM does not provide enough storage. The USGS Technical Announcement stated:

Under the CRADA, the USGS and LizardTech plan to use MrSID as a key element of a user-friendly DOQ product featuring compressed, easily retrievable, high-quality imagery. The CRADA has two goals. The first is to develop a CD-ROM-based DOQ product that has viewing and retrieval capabilities designed specifically for geospatial data. The second is to achieve the capability to serve large image files over the Internet for viewing and distribution with commonly available software.

The National Mapping Division is currently involved in several CRADAs:

3M Corp.: On-Demand Printing in support of National Geospatial Data;  
ESRI Inc.: Digital Line Graph Editing, Symbolized Display and Plotting Fact Sheet;  
Etak, Inc.: Digital Geographic Data Collection and Revision;  
Microsoft Corp.: Geospatial Data Browsing and Retrieval Site;  
Now What Software: Under development.

CRADAs have been completed with Unisys Corp. (Automated Feature Extraction and Classification from Image Sources) and Sprint Corp. (Advanced High-Speed Networks for Remote Access, Image Processing, and Delivery of Large Data Sets).

The CRADA was created as a result of the Stevenson-Wydler Technology Innovation Act of 1980, as amended by the Federal Technology Transfer Act of 1986. The FTTA gives Federal agencies the authority to enter into CRADAs with the commercial sector.

Web address: [mapping.usgs.gov/www/crada/crada.html](http://mapping.usgs.gov/www/crada/crada.html)

## **Master's Thesis Research Grant**

Announcement of 1998-99 Award Applications

The Cartography Specialty Group of the Association of American Geographers is pleased to announce the 1998-1999

Master's Thesis Research Grants. These grants are available to masters students working on cartographic research and who are enrolled in a geography degree program. Grants are available up to a maximum of \$300 and may be used for items necessary and relevant to research such as travel, materials, equipment, and human subject fees. Deadlines for applications are November 1st, March 15th, and June 15th.

### **Fundable Research**

- \* Fundable research must be cartographic in nature.
- \* Cartography must be the central focus of the research, and not merely a tool used in support of some other research.

### **Review of Proposals**

- \* Research proposals will be judged based upon (1) their originality, (2) their research design or plan of work, and (3) their budget and its justification.
- \* Proposals are reviewed in a non-blind process by a committee of three people selected by the Non-Academic Director in consultation with the CSG Chair.

### **Date of Awards**

Awards will be made two months after the review date for which the proposal was submitted.

### **Application Form Required for Submission**

An application form may be obtained from the Non-Academic Director. Fill the form out completely. Note that the applicant and the advisor are jointly responsible for the accuracy and validity of all information on the application. Be sure to complete the budget and justification on the back of the application form. List the requested items from highest to lowest priority and include price quotations for these items. Below, provide a brief justification of why the items you are requesting are necessary to your thesis. Finally, state whether you will accept partial funding should the entire amount requested not be granted.

### **Description of the Research Plan**

A description of your research plan is also required. Place your name and the title of your thesis at the top of the first page. State the research objectives and the specific aims of the research. Describe concisely the methods for achieving these goals. The research plan should not exceed three pages. Please note that human subject clearance must be obtained before grant money can be awarded, if the research involves human subjects.

All applications must be typewritten or completed on a word processor. Incomplete applications will not be considered. Applications must be received by the deadline in order to be considered for funding. Submit the original signed application form and research plan, along with two copies, to:

*Anna Williams*  
*CSG Non-Academic Director*  
*4705 Eddystone Street*  
*Annandale, VA 22003*

## **AWARDS ANNOUNCED FOR MASTER'S THESIS RESEARCH GRANTS**

Two Master's Thesis Research Grants have been awarded since January 1998.

Rick Bunch, South Carolina University, received an award to further his work on the topic, "Searching for Boundaries on Bipolar Choropleth Maps."

Daniel Haug, Penn State University, is pursuing his interest in spatial analysis. His thesis topic is "Evaluating Interactive Visualization Methods for Exploring Point Cluster Pattern Detection."

Congratulations from the CSG membership!