

EDUCATION-COMMUNICATIONS REPORT AND RECOMMENDATIONS

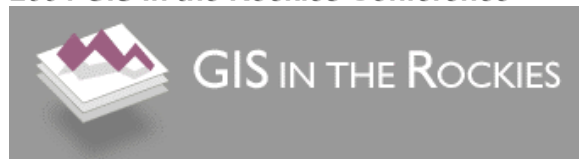
Attendee's Name and Report Writer:

Joseph Kerski, Geographer:
Education/GIS, USGS, Denver, Colorado.

Location/Date: Denver, Colorado, 6-8
October 2004

Event:

2004 GIS In the Rockies Conference



Other USGS Attendees: Mark Eaton, Jeffrey Simley, Kathy Covert, Stewart Wright, and others.

Summary.

For 16 years, people have looked forward to the GIS in the Rockies conference as one of the highlights of the year in Colorado. GISITR is a regional GIS conference, attracting participants primarily from Colorado and Wyoming. The USGS has participated in the GIS in the Rockies conference since its inception in 1988, making it one of the longest-running events in which we have continuously participated. We have seen it evolve from its days in Fort Collins to the Colorado School of Mines, to the funky 70s feel of the Regency Hotel, to the Holiday Inn, to the University of Denver, and to its present site at the Denver Merchandise Mart. We have been involved in the Colorado GIS community during the same period of time, and the conference provides us and others with an excellent opportunity to network with our existing partners and forge new collaborations.



The exhibit area of GIS in the Rockies conference provides an excellent opportunity to network with colleagues, as well as to learn about new tools, data, training, and partnerships. Exhibitors included professional societies (GITA, URISA), government organizations (National Geodetic Survey, FGDC), universities and colleges (University of Denver), and private companies (Digital Data Systems, Geospatial Experts, Digital Globe, ESRI, and others).



GIS in the Rockies provides a forum for professionals to learn about and to share their experiences with Geographic Information Systems (GIS) technology. The conference includes special events, exhibits, workshops, and paper presentations. GIS in the Rockies is organized entirely by volunteers from the regional GIS community and is sponsored by several professional

organizations:

- American Congress of Surveying and Mapping (ACSM)
- American Society for Photogrammetry and Remote Sensing (ASPRS)
- Geographic Information and Technology Association (GITA)
- Professional Land Surveyors of Colorado
- Urban and Regional Information Systems Association (URISA).

Proceeds from the conference are returned to the sponsoring societies. They use these funds to award scholarships and grants and to host technical sessions and seminars. For example, Rocky Mountain URISA and GITA sponsored educators to attend our GeoTech Colorado conference in Denver in June 2004 (see my full report and photos at:

<http://rockyweb.cr.usgs.gov/public/outreach/reports/geotechco04t.pdf>



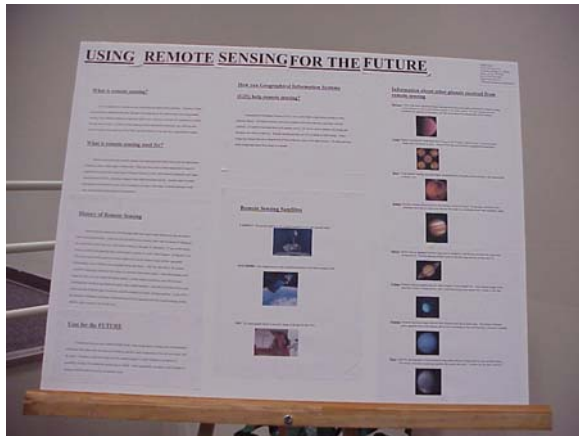
Karen Brandt, chairperson of this year's GISITR conference and GIS professional with the City and County of Broomfield.



Denver Mayor John Hickenlooper addresses the conference attendees. The Mayor has a master's degree in Geology and is quite familiar with GIS in the City and County of Denver and in earth science applications. Thanks to the GISITR organizers, I was invited to sit at Mayor Hickenlooper's lunch table. I invited him to the USGS, told him about the ESRI site license that Denver Public Schools has, and about the students we were working with at the conference and all during the year.



Part of poster session at this year's conference that featured a variety of GIS applications and research efforts.



One of the posters, above, was actually created by a high school student who is extremely interested in remote sensing.



I enjoyed speaking with these three stellar high school students who attended the conference.

Activities

I participated in the conference by:

(1) Co-presenting with Esther Worker (ESRI), Amanda Gierow (Community Mapping Program), and Sophia Linn (Front Range Community College) on "Future Generations—GIS in Education." Our presentation emphasized the role of GIS in schools, standards and assessments, examples of GIS use in schools, benefits and challenges, overview of some lessons and books, and how the GIS professional community can be involved in

educational initiatives.

(2) Working with John Wyckoff to promote the 2005 meeting of the Association of American Geographers.

(3) Contributing Educational Posters.

(4) Working with middle school students on a GIS workshop and geocaching activity.

(5) Working with Mark Eaton to set up a geocaching course at Denver City Park.

(6) Contributing USGS door prizes (maps) to the conference attendees.



I created three educational posters for the conference, highlighting wildfire mapping with students, the USGS GIS education program, and some recent GIS educational events and initiatives.



I worked in an exhibit from the University of Colorado-Denver, with Geography Professor John Wyckoff. We promoted the 2005 Annual Meeting of the Association of American Geographers (AAG), who will be holding the 2005 conference in Denver. I also visited each exhibitor with an AAG exhibit packet. The AAG meeting will be one of the largest geography conferences ever held in this region with international attendance expected at over 5,000.



Dr John Wyckoff, University of Colorado-Denver, answers questions about the university's GIS and geography programs and about the AAG conference.

Acknowledgements

I thank the GIS community and students in Colorado for their participation in the conference, for my co-presenters Esther Worker, Sophia Linn, and Amanda Gierow, to Dale Benson and Amanda Gierow who loaned me their GPS receivers, to those who helped with the two geocaching events, especially Mark Eaton, to ESRI and National Geographic Maps who donated prizes for geocaching, and to the participants of the geocaching events.

I thank Karen Brandt, Rena Brand, Mark Hess, Tina Cary, Jarrod Skulavik, Milly

Powell, and the rest of the GISITR organizing committee for hosting a conference that we all look forward to, for supporting the effort to have the students at the conference, and for being a pleasure to work with.

Morey Middle School

Those who know me won't be surprised to discover that just as in 2003, one of the highlights of the conference for me was to work with the middle school students from Morey Middle School.



I was not only impressed by the answers the students gave in the GIS session I held with them (above), but also in the questions they were asking. I showed them applications of GIS, including a DOQ of their school in Denver, a 3-D flythrough of Reno, and Colorado county population changes.

We had a discussion about why GIS is used, about georeferencing, latitude, and longitude, how GPS works, and about the goals of our geocaching activity.



Morey Middle School students gathered at the Denver Merchandise Mart gather under the GISITR sign with Joseph Kerski after geocaching on the Mart grounds.



The students did an excellent job staying on the task of finding 15 virtual geocaches that I laid out on the Mart grounds.



Joseph Kerski, right, speaks with the students about their morning's activities with GPS and GIS. Thanks to the efforts of their teacher, Julie Dintaman, these students spend a significant amount of time in Grade 7 doing hands-on work with GIS. Several of Ms Dintaman's students presented at the May 2004 ASPRS conference in Denver.



Geocaching is an engaging activity that we also used many times each year in our teacher training events.



Audience

Attendance totaled over 500, including planners, engineers, and scientists in environmental science, hydrology, GIS, satellite imaging, parcel mapping, transportation, and land use. Also attending were educators, marketers, private mapping, GIS, and remote sensing companies. The GIS in the Rockies program covers a variety of topics, and includes professionals from business, government and academia. I suspect that the attendance seemed a bit lower because of the economy.

By participating in this conference, we made contacts that will help us meet our customers' needs as well as encouraged future cooperative agreements.

Recommendations

I recommend that everyone in the regional GIS community attend this conference. This particular GISITR conference renewed contacts in GIS educational initiatives and created new ones.

I recommend to the GISITR board that they continue to seek out ways to attract graduate and undergraduate students from the Front Range universities and community colleges. I was pleased to see some faculty and students, but this event should be absolutely packed with students, in my opinion.

I would also like to see ways of getting more middle and high school students and teachers who are using GIS to attend this event. At the Intermountain GIS Conference in Montana and other regional GIS conferences, students have the opportunity to display their GIS-generated maps and discuss their research projects. I believe that the

entire GISITR conference would be enhanced through greater student participation from K-12 to university level.

I recommend that the GISITR conference offer an even more reduced rate for college students to attend; no more than \$25 per day.

Geocaching Course at Denver City Park

Upon the request of the conference organizers, Mark Eaton and I laid out a virtual geocaching course in City Park for the conference attendees. The goals were to familiarize people with the use and operation of GPS receivers in a fun way.



We started the geocaching course at the benchmark east of the Denver Museum of Nature and Science.



Mark Eaton, at right, helps participants start on the geocaching route. The route asked 40 questions with 20 geocaches. The text of the route is located at:

http://rockyweb.cr.usgs.gov/public/outreach/gislessons/geocaching_gisitr04t.pdf



Walking to the first point.



It was a perfect day for geocaching in City Park!



We were pleased to have so many of the GISITR organizing committee attending the geocaching event.



*****End of report *****