THE MAP LEGEND

NMGIC Spring Meeting
"Geographic Byways, the Information Highway"

The Spring 1995 NMGIC meeting focuses on the *Information Highway*: how to access it, what you will find, and how to get it. The program features speakers knowledgeable in the use of, and access to Internet. Dr. Michael F. Goodchild, Director of the National Center for Geographic Information and Analysis in Santa Barbara, California, will discuss the use of the Internet and what can be obtained from this network. Terry Boulanger, Director of Marketing at Technet, will present

The NMGIC Spring meeting is open to all interested parties.

the use of Technet for access to data and information, and Terry Leach, General Services Department, Office of Communications, will discuss the network available to state offices.

Ken Osborn, Deputy Chief, Program Management, U. S. Geological Survey, will give an update on USGS mapping programs and their Field Coordinating Committees. The Spring meeting also presents its annual vendor show and features a vendor forum in the afternoon.

Technical Advances in Spatial Data Sharing
Michael F. Goodchild

An exciting range of new tools are now available on the Internet to support searching for geographic data. These include the Mosaic browsing interface to the World Wide Web, the searching tool WAIS, and several Unix-based functions. The presentation includes examples of the kinds of data one can find on the net, and the methods available for browsing and retrieving them. The National Spatial Data Infrastructure is discussed, along with the developments that are providing institutional support for the sharing of spatial data, such as the Federal Geographic Data Committee metadata standard and the National Geospatial Data Clearinghouse. The presentation also includes an overview of Alexandria, a project being funded at the University of California - Santa Barbara to build a digital spatial data library.

NMGIC Spring Meeting
Friday, April 14, 1995

UNM Continuing Education Conference Center
1634 University Boulevard NE
Albuquerque, New Mexico

Agenda

7:00 am	Exhibitor setup
8:00 am	Exhibits open, coffee and danish
9:00 am	Business meeting
9:30 am	Update on USGS activities (Ken Osborn)
10:00 am	Break
10:30 am	Technical Advances in Spatial Data Sharing (Michael Goodchild)
12:00 noon	Lunch (box lunch in exhibit area - RSVP)
1:00 pm	Use of Technet (Terry Boulanger)
1:30 pm	Communications Network in New Mexico (Terry Leach)
2:00 pm	Vendor Forum

Inside This Issue

From the President
Richard Friedman

I never thought that I would see the day that GIS would be a common term. Well, it soon will be. Many common applications such as Lotus 1-2-3 are now incorporating very simple GIS applications (often called Desktop Mapping) as a part of their software packages. There are now many fully functional GIS and Image Processing applications that are available on several platforms. The new trend in the GIS industry is to make the same software functionality available to the consumer no matter what computer platform is being used. You can now have the same sophisticated GIS tools on a PC as you can on a UNIX workstation. Software and hardware vendors are continuing to push each other to the limit.

The constant in the computer industry is change. Computer hardware continues to get faster, smaller, and less expensive. Companies are adding more functionality to their software to take advantage of the improvements in the available hardware. For those of us involved in GIS, change is good. It's keeping up with the changes that is difficult. One of the goals of NMGIC is to keep the members informed on changes throughout the computer industry that could have a positive impact on their work environment. It is almost impossible for any single individual to keep up with all the advancements in technology. NMGIC provides a focal point to allow many different users of geographic data and computer technology to network and share their knowledge of the important technological advancements.

I hope that all of the members of NMGIC will attend the meeting on April 14. This is the best time to meet and network with other professionals who work with geographic data throughout New Mexico. You will also have the chance to see and hear about technology that may assist you to do your job in a more efficient manner.

New Book on ARC/INFO Now Available

Inside ARC/INFO - Mastering GIS Application Development with ARC/INFO is now available through High Mountain Press. Written by Michael Zeiler of Envision Utility Software Corporation, *Inside ARC/INFO* uses a sample application, GIScity (based on the city of Santa Fe), to illustrate the fundamental concepts, functions, and developer's tools in ARC/INFO. Zeiler introduces the user to the software's basic modules and the commands needed to create specific applications. This practical book guides the novice ARC/INFO user to real expertise.

The accompanying CD-ROM includes sample AML applications, providing a starting point for individualized AML development. Any user with AML knowledge can modify any or all of the GIScity application codes and save many months of GIS application The AML applications on the CD-ROM demonstrate common and practical GIS operations for a medium-sized city. The GIS themes on this CD include: roads, streams, contours, buildings, a sewer system, survey control, census statistics, and a digital orthophoto.

This book/CD combination can be purchased from High Mountain Press, 2530 Camino Entrada, Santa Fe, NM 87505 (505 471-8822) for $49.95 until April 15, 1995. After that date the price is $74.95.

GISAC World Wide Web Access

In the last issue of *The Map Legend*, the availability of the GISAC WWW Resource (http://www.state.nm.us/gisac/gisac_home.html) was announced. We have recently learned of two new products that allow access to the World Wide Web (WWW) and to the GISAC WWW Resource with full graphical browser capabilities from a simple dial-up Unix shell account. Users no longer need direct Internet access or a SLIP or PPP dial-up account in order to enjoy the full advantages of the Web.

The first product is called The Internet Adapter™ that is available from Cyberspace Development, Inc. This is an inexpensive shareware product that essentially provides the user with a "pseudo-SLIP" account. A program called "tia" is executed from the user's Unix shell account (it is available for a number of different Unix host platforms). From that point on, it is indistinguishable from a SLIP account. One can execute any of the commercially available or free Web browsers, such as NCSA Mosaic or Netscape, as well as other Internet access tools such as telnet, ftp, and mail clients. Moreover, one can run these clients concurrently. For more information on The Internet Adapter, send a blank e-mail to tia-info@marketplace.com or go the URL http://marketplace.com/tia/tiahome.html.

The second product is a browser called Slipknot from Vicromind, Inc. Slipknot is a Windows-based Web browser and is also
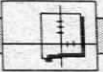
RGIS News

A CD-ROM is in the future of the RGIS Program

The Resource Geographic Information System (RGIS) program will be able to provide all RGIS data on a CD-ROM disc in the near future. For several months RGIS has been considering the development of a CD containing all Clearinghouse data and has set July as its goal for the CD's availability. The requirements and costs for providing the data on CD are now under review. As presently envisioned, the CD will archive the data in formats accessible by ArcInfo users but will not contain software for the display or other use of the data. Each data coverage will be retrievable using the file names assigned by the Clearinghouse and found within the RGIS Catalog. The CD will readable by PC's as well as workstations.

The Clearinghouse recently received the New Mexico State Senate and House District Boundaries from the Bureau of Elections, Office of the Secretary of State. The digital boundaries were compiled by the Geography Department at New Mexico State University. Once the documentation for the coverage has been completed it will be available for release.

The RGIS Program is most interested in learning of digital data and sources. If you have data you would like to share or if you know of sources of data for New Mexico or its borders, please let us know. Please contact: Mike Inglis, RGIS Program, Earth Data Analysis Center, 500 Yale Blvd. SE, Suite 100, University of New Mexico, Albuquerque, NM 87131-6031

GIS Helping to Stamp Out Graffiti

Architectural Research Consultants, Inc., (ARC) is assisting the Graffiti Removal Services (GRS) Office of the Solid Waste Department of the City of Albuquerque stamp out graffiti. Currently, personnel at GRS are using a program written by ARC to easily keep track of locations of graffiti vandalism. This database management system allows GRS to enter locations of graffiti, determine if the owner of that property has given consent to allow GRS to remove or cover the graffiti, and to create daily work site reports. Other options in the program allow GRS to send notifications to property owners who have not given prior permission to clean or cover graffiti. Another portion of the program maintains the inventory of paint and supplies purchased and balances of several accounts.

Plans are in the works to include GIS into GRS's daily routine. The database used to enter the locations of graffiti can easily be geocoded onto an Albuquerque city map. Done on a daily basis, only a relatively small number of addresses need to be geocoded at a time. GRS maintains a hotline to receive information about graffiti from the general public. Most people may remember to say in which quadrant of the city the graffiti is located, but very few even know what the street designations are. In this case, very few addresses will automatically geocode or interactive geocoding is necessary. Once the addresses are geocoded, small maps will be made to assist the paint and cleaning crews.

As part of the database programming, GRS maintains certain information such as: when the graffiti was spotted, when it was cleaned or removed, and what action was taken (painted, water blasted, soda blasted, air blasted, or cleaned). Reports are currently made to summarize for the Mayor the actions taken, frequency of activity, and areas hardest hit by vandalism. Once that data is tied into the GIS, thematic maps of this same information can be made. They may be a simple application of GIS, but for the Graffiti Removal Services Office it should make their jobs easier and maybe keep one step ahead of the vandals.

By Dolores Anderson, Architectural Research Consultants, Inc.

New Mexico Environment Department Gets New GIS Data

In February, the EPA installed over 2 gigabytes of GIS data on the New Mexico Environment Department's (NMED) GIS server. Included were a comprehensive library of 1992 TIGER files and demographic data for the state, Digital Chart of the World data, and EPA data layers relevant to New Mexico. The latter include 1992 toxic release inventory, air non-attainment areas, air quality monitoring sites, colonias, major federal facilities, municipal solid waste landfills, and RCRA TSD sites.

Training classes were held to familiarize NMED personnel and others with the data dictionaries and access methods, and EPA has promised support and access to online updates to the Environment Department's GIS Coordinator, Jim Benenson.

Jim Benenson has committed NMED to sharing of EPA's data among GIS users in the state. Initially, the data is accessible either by direct request to him. You can send the request by email to: jim_benenson@isb05.state.nm.us or by phone at 505 827-1701. Users who expect to have a high demand for the data can request an account on NMED's GIS server.

By Jim Benenson, New Mexico Environment Department

JOB BOARD

Job Opening - GIS Analyst

The city of Santa Fe will be advertising for a GIS Analyst position within the next two months. The position will provide technical, analytical, and design support for the operation of the City parcel level Geographic Information System. Requirements include a bachelor degree in cartography, geography, computer science, and/or related disciplines; and a minimum of three years in GIS applications using workstation ARC/INFO software. Pay rate: $30-40,000 per year.

Send resume to: Gar Clarke, GIS Manager
                   GIS Section, Planning Division
                   City of Santa Fe
                   200 Lincoln Avenue
                   Santa Fe, NM 87501

Employment Wanted

My name is Chris Smith, and I am a recent graduate of the University of New Mexico with a BA in Geography. I have experience in GIS, GPS, aerial photography, and satellite imagery. I am seeking a position where I can use and expand my knowledge in these areas. I have a diverse background and excellent references from my former employers. Please contact me at: 9 Camino del Norte, Tijeras, NM 87059 or call 505 281-7988.

an inexpensive shareware product. It is not designed to provide other Internet access capabilities such as those enabled with the Internet Adapter. One could not, for example, run a telnet or FTP client from your PC as you can with The Internet Adapter, but does offer some other advantages such as the ability to save html documents with embedded images and with links to related documents preserved. More information about Slipknot can be had at the URL http://www.interport.net/slipknot/slipknot.html or my emailing slipknot@miromind.com.

For assistance with either of these products, contact Bill Baillargeon at 505 827-2047 or at billb@gsd.state.nm.us.

By Bill Baillargeon
State of New Mexico GSD/ISD

NMGIC

Parcel Mapping Project Starting

Territorial Abstract & Title, one of the largest title companies in northern New Mexico, is initiating a parcel-based mapping project for Santa Fe County. Territorial is integrating GIS to facilitate the tracking of land ownership throughout the county. The many land description problems that are well known throughout New Mexico, and especially northern New Mexico, make the integration of GIS critical to accurately track the ownership of land for the title insurance business.

Geographic Title Systems, the newly designed application combining GIS and document imaging into the title plant system, uses ARCView 2 to allow the user to view the ARC/INFO parcel coverages while searching its database and viewing the related documents on the same terminal.

Using a combination of COGO, digitization, and conversion of surveyors' CAD files, detail rarely found in GIS data will soon be available. The parcel coverage will also detail the location of all easements, rights-of-way, road boundaries, and other features included on surveyors' plats. Title companies currently maintain vast inventories of maps and plats as well as extensive databases, making them the perfect resource for such a mapping project.

Future plans allow for ties to the city and county systems to facilitate the exchange of data that will allow both the public and private sectors to maintain more accurate records.
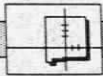
1995 Corporate Sponsor

Corporate Profile

Bohannan Huston, Inc.
Courtyard 1
7500 Jefferson NE
Albuquerque, New Mexico 87109
505 823-1000

Bohannan-Huston Inc., founded in 1959, is a multi-disciplined engineering, architecture, photogrammetry, and surveying company. The firm's management philosophy embraces continuous quality improvement initiatives; direct owner involvement in and leadership of, each primary discipline; team driven services; and direct client-staff communications. Bohannan-Huston Inc. provides planning, studies, analyses, design, and consulting services in the following technologies and disciplines:

- ➤ Survey
- ➤ Conventional Photogrammetry
- ➤ Digital Photogrammetry, Automated Mapping, Geographic and Land Information
- ➤ Computer Applications
- ➤ Storm Water Systems
- ➤ Water Systems
- ➤ Wastewater and Solid Waste Systems
- ➤ Commercial, Residential, Institutional, and Industrial Land Development
- ➤ Municipal, Community, and Military Installation Infrastructure
- ➤ Landscape Architecture
- ➤ Traffic and Transportation
- ➤ Structural Engineering
- ➤ Construction Engineering and Monitoring
- ➤ Architecture

The *SURVEYING TECHNOLOGIES GROUP* has been continuously involved in the practice of surveying for the last 35 years. This group has established literally thousands of geodetic and photogrammetric control points for orthophotography, GIS, and automated mapping projects throughout the United States.

Utilizing Global Positioning Systems, Total Station, and EDM/Theodolite instrumentation, electronic field book recordation, and the latest in computer technology and software, reductions and computations are processed quickly, accurately, and efficiently. Field DTM and other mensuration data can be transmitted via modem for processing and quality assurance before survey teams even leave the project sites. Fully developed digital topographic site surveys are available to the project manager for review and study, allowing the field parties to acquire additional data if necessary before returning or moving to another project.

The *PHOTOGRAMMETRIC AND AUTOMATED MAPPING TECHNOLOGIES GROUP*'s staff is at the leading edge of technological progress and proprietary techniques in the areas of digital data acquisition for LIS, GIS, digital and conventional orthophotography, automated mapping, and engineering route and site surveys. This group has successfully completed projects covering thousands and thousands of square miles throughout the United States and western Europe and enjoys a national reputation in digital cartographic and facilities data and information systems.

For the past 25 years, the firm has provided its clients with a complete range of digital and conventional photogrammetric services, including project planning and consulting, topograpphic mapping, orthophoto mapping, terrain data, and site specific or large area topographic, GIS, LIS, and infrastructure databases.

Calendar

NMGIC Spring Meeting, UNM Continuing Education Conference Center, 1634 University Boulevard NE, Albuquerque, April 14, 1995. Contact: Amy Budge, EDAC, Albuquerque, NM. Telephone: 505 277-3622. Fax: 505 277-3614.

GIS '95, Vancouver, British Columbia, March 27-30, 1995. Contact: GIS '95 Symposium Office, GIS World, Inc., 155 E. Boardwalk Drive, Suite 250, Ft. Collins, CO 80525. Telephone: 303 223-4848. Fax: 303 223-5700. Email: event-info@gisworld.com

Business Geographics '95, Chicago, Illinois, April 2-5, 1995. Contact: Business Geographics '95, GIS World, Inc., 155 E. Boardwalk Drive, Suite 250, Ft. Collins, CO 80525. Telephone: 800 447-9753 or 303 223-4848. Email: event-info@gisworld.com

Cost/Price Analysis - A Two-Day Workshop, Hilltop House, Los Alamos, New Mexico, April 5-6, 1995. Contact: Los Alamos Economic Development Corporation, P. O. Box 715, Los Alamos, NM 87544. Telephone: 505 662-0001.

Introduction to Global Positioning Systems (GPS), Madison, Wisconsin, April 10-13, 1995. Contact: Engineering Registration, The Wisconsin Center, 702 Langdon Street, Madison, WI 53706. Telephone 800 462-0876 or 608 262-1299.

15th Annual ESRI 1995 User Conference, Palm Springs, California, May 22-26, 1995. Contact: ESRI, 380 New York Street, Redlands, CA 92373-8100. Fax: 909 793-5953. Email: ucregis@esri.com.
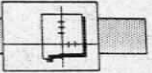
URISA '95, San Antonio, Texas, July 16-20, 1995. Contact: URISA, 900 Second Street NE, Suite 304, Washington, DC 20002. Telephone: 202 289-1685. Email: urisa@MACC.wisc.edu.

SPOT: Plan It, Earth, 1995 SPOT User Group Meeting, Washington, DC, August 24-25, 1995. Contact: Corporate Communications Department, SPOT Image Corporation, 1897 Preston White Drive, Reston, VA 22091. Telephone: 703 715-3100. Fax: 703 648-1813. Email: INFO@SPOT.COM.
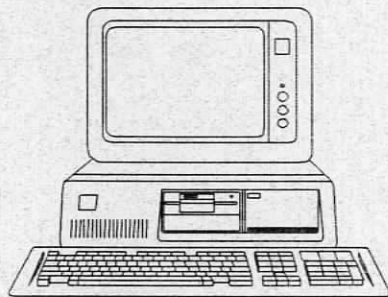
If you would like your meeting, conference, or workshop announcement printed here, please send it to: *The Map Legend*, % Amy Budge, Earth Data Analysis Center, 2500 Yale Boulevard SE, University of New Mexico, Albuquerque, NM 87131-6031

The Map Legend is well into its sixth year of publication with this Volume 6, Number 3 issue. Getting this newsletter to you is truly a cooperative effort in the best spirit of the NMGIC. It takes an enormous amount of coordination, cooperation, and generosity from the many people willing to give their time, talents, and energy outside their normal jobs and normal working hours to bring you this newsletter. We especially appreciate all the members who send or write articles. All members are asked to keep *The Map Legend* in mind if you have news items or pertinent articles you would like to see published. Also, if you have any suggestions on what kinds of workshops you would like NMGIC to sponsor in the future, send them to *The Map Legend* % Amy Budge, Earth Data Analysis Center, 2500 Yale Boulevard SE, University of New Mexico, Albuquerque, NM 87131-6031 or email to Amy at edac@spock.unm.edu.

THE MAP LEGEND

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NMGIC
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Local Government and Land Records Committee

No contact at this time.