

NSDI Funds 37 Cooperative Agreements

The National Spatial Data Infrastructure (NSDI) Competitive Cooperative Agreements Program (CCAP) was established by the Federal Geographic Data Committee (FGDC) to help form partnerships with the non-Federal sector that will assist in the evolution of the NSDI. This program provides funding for cooperative agreements to State and local government agencies, institutions of higher education, and private organizations. The goal is to encourage resource-sharing projects through the use of technology, networking, and more efficient interagency coordination.

In September 1997, the FGDC completed issuing awards for the fourth year of the program. The thirty seven cooperative agreements totaled \$1,255,000. These awards support the development and implementation of the National Geospatial Data Clearinghouse for finding and accessing geospatial data; the development and promulgation of FGDC-endorsed standards in data collection, documentation, transfer, search and query; the development and creation of a National Geospatial Data Framework; the development and implementation of educational outreach programs to increase awareness and understanding of the NSDI; and the formation of statewide or regional geographic information coordination mechanisms.

An explanation of the 1998 NSDI Cooperative Agreements Program and application materials will be available this fall. The open period for proposals will be 90 days. As with the previous programs, proposals must involve two or more organizations with participants providing matching funds or resources. Formal announcement of the program will be published in the Commerce Business Daily and the Federal Register. It will also be available through the FGDC homepage at <http://www.fgdc.gov>.

From NSDI Project Summary

New Mexico Receives Two CCAP Awards

The Institute of Public Law's Center for Wildlife Law (CWL), at the University of New Mexico's School of Law will establish a National Geospatial Data Clearinghouse of state biodiversity laws and policies and the systematics, ecology, and life history of mammals of the Southwest. Project collaborators will adapt the existing data collections of the CWL and the Museum of Southwestern Biology to the NBII standards for biological data, and provide online search and retrieval of metadata and datasets of these collections. This will enable users to access, for the first time ever, not only the biological information of a species of interest within a specific location, but also the laws and policies that have an impact on that species.

Principal Contact: Ruth Musgrave, Project Director, University of New Mexico, Institute of Public Law, Center for Wildlife Law, 1117 Stanford NE, Albuquerque, NM 87131-1446. Phone: 505-277-5006; fax: 505-277-7064; email: musgrave@unm.edu

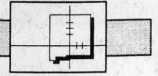
The Earth Data Analysis Center at the University of New Mexico, in partnership with the Arizona Geographic Information Council, the Colorado Department of Natural Resources, and the New Mexico Geographic Information Council will conduct a series of customized workshops and briefings on NSDI elements. This project will serve as an educational aide to extend and promote awareness and adoption of NSDI metadata, clearinghouse, and framework concepts in Arizona, Colorado, and New Mexico. The goal of the project is to extend FGDC's presence in the region and to accelerate adoption of these NSDI elements.

Principal Contact: Amy Budge, Earth Data Analysis Center, University of New Mexico, Bandelier West, Room 111, Albuquerque, NM 87131-6031. Phone: 505-277-3622, ext 231; fax: 505-277-3614; email: abudge@spock.unm.edu

THE MAP LEGEND

<http://www.state.nm.us/nmgic>

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From the President

In my last letter I briefly talked about the personnel changes that seem to be taking place in the GIS industry. I noted that the emphasis for GIS professionals is shifting from data creation and maintenance to a greater emphasis on programming for end user and interface support. These changes are the obvious changes taking place in the role of GIS professionals. There are also other changes taking place that are a little less obvious, but may be even more significant.

I have noticed in recent years a trend for GIS Managers to have more management and administrative duties, while still retaining a high degree of technical competence and hands-on GIS duties. GIS managers are also being expected to play a bigger role in the general administrative functions of the entire organization. This seems to be particularly evident in the public sector.

What does this mean for GIS managers? Their job, which used to be primarily a senior level technical/systems administration position, is slowly becoming a full fledged management level position within the organization. They are expected to contribute to the overall mission and vision of the entire organization, not just GIS development. They are expected to give everyone access and training on how to use the data. The role of the GIS Manager in local government is getting closer to the role of the Data Processing or Information Systems Department. The bottom line is, now GIS Managers must have people and administrative skills, as well as technical knowledge and skills. They must become their own "Champion" to ensure the success of the GIS. GIS managers must also become masters at the art of using time in an efficient manner to keep up with all the new responsibilities.

We live and work in a very dynamic environment. It is very difficult to keep in touch with all of the changes in the industry. It is through organizations like NMGIC that we are able to spend a few hours at a meeting, and gain many years worth of knowledge from our colleagues. I hope that as our jobs and duties as GIS and Geography professionals evolve, we don't lose sight of the valuable resources so close at hand. The program for the Fall NMGIC meeting reinforced the desire and interest in keeping abreast of local GIS and related activities in the state. The Fall meeting is my personal favorite because we all get the opportunity to learn about some very interesting GIS applications at the users exhibit.

Rich Friedman, President

The Map Legend 1998 Publication Schedule and Deadlines

Winter Issue	Deadline for articles: January 15, 1998 Publication date: February 15, 1998
Spring/Summer Issue	Deadline for articles: May 15, 1998 Publication date: June 15, 1998
Fall Issue	Deadline for articles: September 15, 1998 Publication date: October 15, 1998

U.S.G.S. Middle Rio Grande Basin Study

Release of High Resolution Aeromagnetic Data near Albuquerque, NM July 30, 1997

Data from the aeromagnetic surveys flown by SIAL Geosciences, Inc. on contract to the USGS in late 1996 near Albuquerque, NM have just been released and are now available digitally. The Rio Rancho survey was flown with 100-meter flight-line spacing and 100-meter above ground level (AGL) except over urban areas, where heights reached approximately 300m AGL. The survey west of Albuquerque was flown with 150m spacing and heights of 150m AGL (300-meter AGL over urban areas). The primary purpose of the surveys is to map structures and volcanic rocks within the basin fill to improve the hydrogeologic understanding of the basin.

Aeromagnetic data in ARC/INFO interchange format, digital images (constructed for display purposes only), and brief documentation can be downloaded via the USGS anonymous ftp site at [greenwood.cr.usgs.gov](ftp://greenwood.cr.usgs.gov) (136.177.21.122). The files are located in the /pub/open-file-reports/ofr-97-0286 directory and are described in an associated "readme.txt" file. In addition, these files can be accessed from the USGS Middle Rio Grande Basin Study web site at <http://rmmcweb.cr.usgs.gov/public/mrgb/airborne.html>. The original digital geophysical data (flight-line data and grids constructed by SIAL Geosciences, Inc.) can be obtained from the National Geophysical Data Center, Boulder, CO (http://www.ngdc.noaa.gov/seg/potfld/ad_sys.html). Text and figures describing the aeromagnetic surveys are available in the following report: U.S. Geological Survey and SIAL Geosciences, Inc., 1997, Description of Digital Aeromagnetic Data Collected North and West of Albuquerque, New Mexico: USGS Open-File Report 97-0286, 42 p.

For additional information regarding the USGS Middle Rio Grande Basin Study aeromagnetic surveys, please contact V.J.S. ("Tien") Grauch at tien@usgs.gov.

Freezing GCDB Data

The Geographic Coordinate Data Base (GCDB) is a collection of coordinate values and other descriptive information for corner positions and monuments recorded in the Public Lands Survey System (PLSS). This will be the spatial layer of the Bureau of Land Management's (BLM) Automated Lands and Minerals Record System (ALMRS).

On December 3, 1997, The GCDB data will be frozen, in preparation for the New Mexico ALMRS' deployment on Jan. 26, 1998.

Freezing these data means that all create, update, and delete permissions are changed to "read only access". No further updates to the data can occur after December 3rd.

The only effect this will have for non-BLM users is that no new data will be added to the GCDB in the near future. However, users will still be able to contact the New Mexico State Office GCDB Section, request GCDB data, and receive it on 8mm tape or from our 'anonymous' ftp site.

Bob Bewley, BLM



Handheld GPS Receiver for Sale

Used Model I Trimble (GIS) Geo-Explorer with new Windows-based "Office" software. \$2083. Contact Asa Ramsay at 505-986-0635 or by email at asa@trail.com

USGS to Produce Digital Data for the Middle Rio Grande Basin Study

Recent investigations of the Albuquerque basin by the U.S. Geological Survey (USGS) and Federal, State, and local agencies have determined that the aquifer system upon which the city of Albuquerque relies is **not** as extensive as previously thought. This finding has resulted in a concerted effort by Federal, State, and local agencies to gather and interpret additional hydrologic, geologic, and geographic data to better manage water resources in the Middle Rio Grande Basin (MRGB).

The USGS established a team to provide research required for the next 5 years and in coordinating efforts with Federal, State, and local agencies. One role of the USGS-National Mapping Division (NMD) is to provide base cartographic data in support of the MRGB study. Currently, the 126 quadrangle project area has complete coverage for the following products:

- 7.5-minute 30-meter Digital Elevation Models (DEM),
- 1:24,000-scale Digital Line Graph (DLG-3) data for the following categories: manmade features, hydrography, transportation, Public Land Survey System, and boundary,
- 1:24,000-scale Digital Raster Graphics (DRG), and
- 1:40,000-scale black and white aerial photography (NAPP).

To identify additional requirements for base cartographic data to support the study, a MRGB solicitation package was distributed January 1997 to over 40 Federal, State, and local agencies in New Mexico. The base cartographic data offered in the solicitation package were black and white 1-meter Digital Orthophoto Quads (DOQ), 7.5-minute 10-meter DEMs, and limited update revision of the DLG-3 categories mentioned above. Seven responses were returned in February 1997. Three Department of the Interior (DOI) bureaus submitted responses through the DOI High-Priority Digital Base Data Program solicitation that was distributed during the same time period.

Due to the uncertainty of available funding and production resources for base cartographic data, NMD evaluated the responses and developed a selection process based on two criteria:

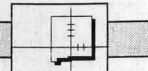
- data requested needed to be used in support of the MRGB study, and
- overlapping, multi-agency requests.

Based on the evaluation of the responses, the following MRGB base cartographic production plan was developed:

DOQ's

Through DOI High-Priority Digital Base Data Program and USGS internal funding sources, and in partnership with the U.S. Forest Service, 119 quads (476 quarter-quads) are authorized for DOQ production. All but the following quads in the MRGB project area will have DOQs produced using the 1996 NAPP photography:

(Continued on page 5)



RGIS News

ESRI Training in Albuquerque

ESRI's ARC/INFO and ArcView GIS software are widely used throughout New Mexico. In response to the many users of these software and their difficulty attending training classes in Redlands, Denver, or other cities where it is offered, the RGIS Program entered into a Training Facility Contractual Agreement with ESRI to provide training in Albuquerque. All training is given by ESRI certified instructors. The first class, an Introduction to ARC/INFO, was given in August. For more information on cost and registration, see the web address at <http://www.esri.com/base/training/training.html> or contact ESRI-Denver at 303-449-7779.

Schedule of Classes

Dec 15-19	Advanced ARC/INFO
Feb 2-6	Introduction to ARC/INFO
Mar 16-20	Advanced ARC/INFO
May 11-15	Customizing ARC/INFO w/AML
June 1-5	Introduction to ARC/INFO

In addition, the New Mexico Engineering Research Institute (NMERI) continues to offer ArcView and GPS training classes at its facilities. For more information, contact John Marquis at 505-272-7233.

RGIS Clearinghouse Node is NSDI Compliant

Through the FGDC Competitive Cooperative Agreements Program, the RGIS Clearinghouse has been upgraded to a National Spatial Data Infrastructure (NSDI) compliant node. What this means is that metadata in the RGIS Clearinghouse is searchable by keywords and/or geographic coordinates. Users worldwide will be able to submit a query to the NSDI gateway to locate New Mexico geographic datasets in the Clearinghouse. Queries can also be performed by accessing the RGIS Home Page directly at <http://rgis.unm.edu>.

New Data in the RGIS Clearinghouse

Recent additions to the Clearinghouse include the New Mexico GAP Analysis data; updates to the BLM Land Status Files; Digital Raster Graphics; and new and updated socioeconomic data.

Economic development *packages* were assembled for Doña Ana County, NM and El Paso County, TX. The data are from the 1990 Census and cover all tracts in both counties. Broad topics include general population characteristics, education and English language proficiency, labor force and employment, and income and poverty. More than 20 separate data files were created for each county and converted to ArcView coverages. Employment by all major industrial and occupational sectors and household income by 25 separate income intervals are examples of the detailed datasets.

Demonstration *packages* were assembled for Socorro and Sandoval counties, utilizing 1990 Census data. The Socorro dataset covers the major population and housing aggregates by block and block group, along with selected journey to work and disability statistics by block group. The Sandoval package focused on the Placitas

area, with major population and housing aggregates for the blocks and block groups in the principal Placitas-area tract. Summary educational attainment, household income, and labor force information were developed for the Placitas block groups. The same population, housing, and summary socioeconomic data were also assembled for all tracts in Sandoval County.

Some socioeconomic data in the Clearinghouse were revised and updated. Annual county nonagricultural wage and salary employment data by major industrial sector were revised for the 1982 to 1995 time frame. Similarly, general labor force information (civilian labor force, employment and unemployment statistics) was revised and updated through 1996. Total annual population estimates by county are available from 1980 through 1996, along with BBER's new county population projections. The projections are through 2020 by five-year intervals.

DRGs for New Mexico

The US Geological Survey has completed the Digital Raster Graphics (DRGs) dataset for New Mexico. A DRG is a scanned image of a standard USGS 7.5 minute topographic map. Digital registration information is included to georeference these data. The DRGs are available on CD ROM in 1° x 1° blocks (a block includes 64 quadrangles). In addition to the DRG, the CDs include ArcView-I viewing software and Acrobat Reader to access text files on the disk. The scanned images are presented as *tiff* files. For more information, contact the RGIS Clearinghouse.



(Continued from page 3)

Mesa Sarca, Comanche Ranch, Mountainair, Willard, Ladron Peak, Mesa Draw, and Round Top. Scheduled completion date is January 1999.

10-meter DEMs

The entire 126 quad MRGB project area is currently authorized for 10-meter DEM production. Scheduled completion date is January 1998.

DLG-3 hypsography collection

75 1:24,000-scale quadrangles are currently authorized for DLG-3 hypsography collection in order to provide complete contour coverage for the MRGB project area. Scheduled completion date is March 1998.

Limited update revision of DLG-3 data files

Requirements for limited update revision of DLG-3 data files were identified from evaluation of the MRGB solicitation responses. Still to be resolved by NMD is how these requirements will be met during fiscal year 1998.

Should you have any questions or comments, or have an interest in, or requirements for, base cartographic data in the state of New Mexico, please contact Laurie Davis at (303) 202-4111 or e-mail at ladavis@usgs.gov.

Topo New Mexico

The New Mexico Museum of Natural History and Science is planning a grand map building project. They will create a huge relief map of the State of New Mexico that will be a permanent outdoor sculpture.

To do this, students in the 8th, 9th, and 10th grades across the state will make layered sections using topographic maps produced especially for this project. The pieces will be molded and then cast in concrete at the museum in 3 x 3 feet sections. These will become a finished 33 x 40 feet scale relief map of the state. Visitors will be able to walk and climb on the relief model.

There is a critical deficiency of many students in their comprehension of geographic information. This is the type of project that can hook students' interest through many areas of the curriculum. Activities will be included for classes to learn more about the geography, natural history, and economy of the diverse ar-

reas of the state, as well as map making and map reading.

Each school will commit to completing 9 squares, each 1 x 1 foot. Schools will be given squares from assorted locations in the state to ensure they have a variety of topographic relief to work with. Student involvement in this project is the important link.

Time frame:

- 1996-97 school year - recruit schools to participate
- 1997-98 school year - students produce sections and return them to the Museum
- spring/summer 1998 - mold and cast all sections
- summer 1998 - completion

You can become a partner in this project by contacting Tish Morris at 505-841-2882 or at tish@darwin.nmmnh-abq.mus.nm.us

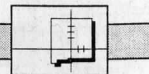
State Mapping Advisory Committee Report

The State Mapping Advisory Committee met at the conclusion of the Fall NMGIC meeting in Albuquerque on October 10th. As part of the NMGIC program, Laurie Davis, (USGS National Mapping Division in Denver) presented the status of the Middle Rio Grande Basin mapping activities. At the SMAC meeting, she provided additional detail on the MRGB and other USGS activities in New Mexico. Digital orthophoto quads (DOQs), 10 meter digital elevation models (DEMs), and to a lesser degree, the digital line graphs (DLGs) for much of the MRGB are in production. Laurie also distributed copies of the most recent mapping status package for the state. This information is also available at the USGS website at <http://www.usgs.gov/> or from Mike Inglis at EDAC.

Garry Nielsen (NM State Highway and Transportation Department) and David McCraw (NM Bureau of Mines and Mineral Resources) reported on the USGS Topographic Map Users Workshop they attended at the National Mapping Center in September. Each state was invited to send two representatives. The workshop addressed accuracy, symbolization, access, technical assistance, and ways to communicate ideas, concerns, and needs between state users and the USGS. Garry contributed his workshop package and notes to SMAC, which can be reviewed by contacting Mike Inglis.

Mike Inglis, Chair





New Publications from the New Mexico Bureau of Mines & Mineral Resources

Bulletin 157 - Subsurface Geology and Oil and Gas Potential of Estancia Basin, New Mexico, by R.F. Broadhead, 1997, 54pp., 7 tables, 20 figures. The Estancia Basin, a structural depression that initially developed during Early Pennsylvanian time, is a frontier exploration area. Although no oil or hydrocarbon gases have been produced from the basin, carbon dioxide gas was commercially extracted from two small fields west of the town of Estancia during the 1930s and 1940s. Forty-three exploration wells have been drilled in the Estancia Basin; only 17 of those wells were drilled to the depth of the Precambrian basement, which ranges from less than 1,000 ft on the western flank of the basin to more than 8,500 ft in a narrow graben near the town of Willard in the eastern part of the basin. The purpose of this report is to describe and analyze the subsurface structure and stratigraphy of the Estancia Basin to characterize reservoirs, source rocks, and hydrocarbon occurrences. Most data used in the study are from the petroleum exploration wells. Structural analyses were synthesized from drill-hole data, reflection seismic profiles, gravity and aeromagnetic maps, and published surface geologic maps. Data relating to stratigraphy, source rock, and reservoirs were obtained from geophysical logs, drill cuttings, scout reports, and source-rock analyses on file at the New Mexico Bureau of Mines and Mineral Resources. (\$15.00)

Geologic Map 73 - Geology of White Rock Quadrangle, Los Alamos and Santa Fe Counties, New Mexico, by D.P. Dethier, 1997, 1 sheet (including geologic map, 11 stratigraphic sections, and text), scale 1:24,000. The White Rock 7.5' quadrangle in the southern Española Basin is named for the White Rock Canyon of the Rio Grande, which cuts across the map area to a depth of nearly 1,000 ft. The quadrangle encompasses the communities of White Rock and Pajarito Acres and includes parts of Bandelier National Monument, San Ildefonso Pueblo, and Santa Fe National Forest. The White Rock quadrangle exposes a diverse suite of Miocene through Holocene rocks that record volcanism, sedimentation, and erosion along the axis of the Rio Grande rift. These rocks collectively form the 24 map units that are described and delineated on the map and in the stratigraphic sections. The text specifically discusses: 1) middle Pliocene fan construction; 2) location, age, and chemistry of volcanic rocks erupted at maars and other vents along the Rio Grande; and 3) the Quaternary history of White Rock Canyon. (\$7.00)

Circular 205 - Laboratory Data for Calcic Soils in Central New Mexico: Background Information for Mapping Quaternary Deposits in the Albuquerque Basin, by M.N. Machette, T. Long, G.O. Bachman, and N.R. Timbel, 1997, 63 pp., 2 tables, 3 figures, 1 appendix. The U.S. Geological Survey conducted geologic mapping in the central part of the Rio Grande Rift of New Mexico during the middle to late 1970s. As part of this effort, the authors described, sampled, and analyzed more than 50 soils on Quaternary deposits in order to establish criteria for mapping different ages of deposits and for using calcic soils as a relative-age tool. With the renewed interest in the Quaternary geologic and tectonic history of the middle Rio Grande drainage basin, it seems appropriate to publish these data as reference material for future stratigraphic work. This report includes basic geologic and geographic information as well as laboratory and chemical data used to calculate the amount of secondary (pedogenic) calcium carbonate in 52 soil profiles from central New Mexico. The descriptive and laboratory data are reported in tabular form in the appendix. (\$9.00)

For a list of other new publications from the Bureau of Mines & Mineral Resources, contact: Editing Department, NM Bureau of Mines & Mineral Resources, 801 Leroy Place, Socorro, NM 87801-4796. Phone: 505-835-5410.

Koogle & Pouls Engineering, Inc. Acquired by Pacific Western Technologies, Ltd.

In June of this year, Koogle & Pouls Engineering, Inc. (KPE), a long established Albuquerque surveying and mapping firm, was acquired by Pacific Western Technologies, Ltd. (PWT), headquartered in Lakewood, Colorado. With offices in Oak Ridge, Tennessee and San Antonio, Texas, PWT adds a broad range of additional services, including environmental management, facility management, project management, and engineering services.

Founded in 1964 by Herbert G. Koogle and Basil G. Pouls, KPE has become well known in the region for providing quality aerial photography, GPS surveys, photogrammetric mapping, digital orthophotos, and GIS database services. While Mr. Koogle and Mr. Pouls have plans of retiring, they will continue to manage the operations of the Albuquerque office until the transition to new management has been completed in early 1998.

PWT, an 8(a) certified, minority-owned firm, was established in 1987 by Dr. Tai-Dan Hsu and has grown in the last ten years from 2 employees to approximately 180, with annual revenue of \$12 million. Dr. Hsu has been the recipient of numerous awards, including:

- U.S. Small Business Administration Administrator's Regional and National Minority Small Business Person of the Year Award in 1997
- Rocky Mountain Region Entrepreneur of the Year Award in 1997
- U.S. Small Business Administration Administrator's Award of Excellence in 1995 and 1997.

As PWT's Mapping and Information Management Division, the Albuquerque office has maintained the KPE staff and will continue to focus on providing quality surveying and mapping services, in addition to an increased emphasis on GIS services and the expanded capabilities which PWT brings.

Geographic Names Committee

While linguists continue to debate the etymology of the term *squaw*, Native Americans already have made up their minds about the word: it insults Native American women, and they want it removed from place names.

The issue came to the fore a couple of years ago when Minnesota, at the urging of local tribes, passed legislation mandating that all names in the state containing *squaw* be changed. Since then, the Minnesota names authority has proceeded to do just that.

But the movement since has spread to other states. Similar legislation is being considered in Arizona and Utah, and following the 1997 Western States Geographic Names Conference (WSGNC) held this year in Flagstaff, AZ, it's likely such a change will be proposed for New Mexico as well.

At the WSGNC, names scholars said the term had been traced to the Atlantic seaboard, where it simply denoted "woman," with no pejorative meaning at all. But other scholars have said it comes from Indian languages in the upper Midwest, where it refers to female genitalia. At the conference, a representative of the American Indian Movement (AIM) said that to his group the term was unequivocally negative. Pointing to his young daughter, he said passionately, "She is *not* a squaw."

At this point, discussion shifted from the term's original meaning to how best it should be changed. Some argued for a federal mandate that the name be changed throughout the US. The Geographic Names Information System (GNIS) shows 937 features nationwide with *squaw* in their names.

Others have argued that states make the changes on their own initiative. The US Board on Geographic Names (USBGN) is expected to discuss this issue at an upcoming meeting.

New Mexico, with 13 *Squaw* names, has fewer than most western states (Arizona 69, Texas 18, Colorado 31, Utah 55, Wyoming 48, and California 94).

New Mexico Indian groups have voiced no concern about these names, but that may in part result from most of the names existing outside tribal lands, as well as none of the names are on conspicuous features. The 13 New Mexico *Squaw* names and their counties are:

- Squaw Canyon, Creek (*Chaves*)
- Squaw Creek (*Catron*)
- Squaw Creek, Ridge, Tank (*Grant*)
- Squaw Mountain (*Doña Ana*)
- Squaw Peak (*Sandoval*)
- Squak Peak (*Socorro*)
- Squaw Spring (*San Juan*)
- Squaw Tank (*Otero*)
- Squaw Tit, Squaw Tit Canyon (*Sierra*) (the US has 11 features named Squaw Tit)

The NMGIC Geographic Names Committee will discuss this issue at its next meeting, likely in January, but in the meantime the committee members would like to hear opinions from the public regarding this issue, including whether the names should be changed, and if so, how should we set about determining alternative names. The committee's chair, Bob Julyan, would like to hear from you (address in this newsletter).

Bob Julyan, Chair

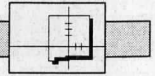
Free DEM Viewer Software for Windows Available on the Web

Rapid Imaging Software, Inc., makers of the LandForm Real-Time 3-D Terrain modeler products, is offering a free trial version of their LandForm95 product on their website at www.landform.com. This product runs under Windows95 and Windows/NT, and will read 1 degree and 7.5 arc-minute USGS DEMs, and permits the computer to fly through the terrain in real-time. The trial software is the same software which is used in their Landform95 Southern Rockies product, which includes 3 arc-second topography for all of New Mexico, Colorado, Utah, and Arizona.

While at the site you may wish to download and view some of the 3-D VRML models created using the new LandForm Gold software, which combines topographic data, with remotely sensed imagery (*tiff*, *GeoTiff*, *TFW*), and GPS or Radar track files. A model of the Sandia ski area is featured and includes an aerial image from EDAC.

Another of the interesting VRML models combines 7.5 arc-minute DEMs with a SPOT satellite image of San Francisco Bay, and shows a relay race course in 3 dimensions. The GPS data used to show the race course is accurate to show jogs in the path over the Golden Gate Bridge, where runners go around two support pylons. An article about this model appears in the *GIS World* November 1997 issue, and in the *Products* section of *EOM*, August 1997.





The Geographic Framework Data Survey

... it will be on your desk in the next couple of weeks...

The largest digital geographic data survey effort ever undertaken is about to get underway. The National States Geographic Information Council (NSGIC) and the Federal Geographic Data Committee (FGDC) are on the verge of surveying thousands of state and county agencies as part of the development of the National Spatial Data Infrastructure (NSDI). After months of development, the survey is now ready.

The NSDI is a cooperative initiative to promote the sharing of geographic data, much of which is created and maintained by local, state, and federal government agencies nationwide. The NSDI's ultimate goal is to help those who use these data in government and business to take better advantage of what's available, and not duplicate it. These data are increasingly being used with technologies such as geographic information systems (GIS) to improve a whole gamut of operations including city planning, wildlife management, national security, and retail site selection, among others.

NSDI Framework data include geodetic control, elevation and bathymetry, digital orthoimagery, transportation, hydrography, political units, and cadastral data. "As we go about building the NSDI, it is crucial that we gain intelligence about who has what *Framework* data, where," explained Hank Garie, NSGIC President and director of the GIS program at the New Jersey Department of Environmental Protection. Garie is the principal investigator for the survey.

The Framework Data Survey's goal is to make it the definitive instrument of this type of spatial data ever undertaken in the U.S. "Our goal is to put tools in place to empower state and local government users to keep track of their own data at their own level. In turn, their data will feed into a cooperatively maintained, distributed database, and through this process we will build a major piece of the NSDI," said Garie.

The project is guided by a project management team led by Karen Siderelis, Director of North Carolina's Center for Geographic Information and Analysis. The management team is working with state coordinators who will administer the survey to state agencies and local government organizations within the state. The survey can be filled out on diskette; web-based or paper options also are available. You can expect to receive information about the survey from your state geographic information coordinator, or directly from NSGIC.

From NSGIC

NOTE:

Bill Baillargeon at GSD/ISD is New Mexico's state GIS coordinator. The survey will be distributed by his office. For more information, contact Bill at 505-827-2047 or by email at: billb@gsd.state.nm.us

job board

Student Intern Position Available


The Photogrammetry/GIS Unit, USFS Region 3 is looking for a student intern to work 20 hours per week. Duties include managing GIS data, cataloging data, and GIS project work. Applicant must have a minimum of computer experience using Windows or Unix. The applicant must be enrolled as at least a half time student; geography student preferred.

Contact: Candace Bogart
USFS
Region 3
Albuquerque, NM
505-842-3858

Aerial Photographer Position Filled at K&P

James Hollen, a native New Mexican and recent graduate from Eastern New Mexico University, has been hired by Koogle & Pouls Engineering, A Division of Pacific Western Technologies, Ltd. as an aerial photographer. Duties include assisting the pilot in navigating the aircraft along predetermined flight paths using topographic maps, aerial imagery, and GPS. The aerial photographer must monitor and forecast weather to determine suitability for photo missions. James has a degree in geology and experience with the U.S. Forest Service fire-fighting unit.

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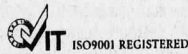
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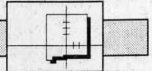
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Cool Internet Web Sites

To continue the series of mapping and GPS related websites, we have found the following sites that may be of interest to the NMGIC membership. As always, if you find a site you think is useful to the membership, please contact Denise Bleakly at 505-284-2535 or email to drbleak@sandia.gov to add it to our list. Denise will be compiling a list of NMGIC corporate sponsors for a future issue of *The Map Legend*.....please contact her.

The following sites were compiled from various trade magazines, submissions from members, and sites found by surfing the web. They are listed in no particular order.

- | | |
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| • DeLorme Mapping's CyberMaps | http://www.delorme.com/cybermaps/ |
| • GIS related website server | http://www.gisnet.com/gis/notebook/webgis.html |
| • Weather Channel & Etak Maps | http://www.weather.com |
| • GIS-L (discussion list for GIS users) | http://www.geo-int.com |
| • Cypress Online GIS data store | http://www.cyp.com |
| • International sources for DEMs | http://www.geo.ed.ac.uk/home/ded.html |
| • NASA Global Change Master Directory | http://www.gcmd.gsfc.nasa.gov |
| • China Dimensions website
(socioeconomic data for China) | http://www.plue.sedac.ciesin.org/china |
| • Professional Surveyor Magazine Online | http://www.landsurveyor.com/profsurv |
| • Land Surveyors Online | http://www.landsurveyor.com/ |
| • OmniStar National DGPS System
(for differential corrections) | http://www.omnistar.com |

Calendar



ACSM 1998 Annual Convention & Exhibition, Baltimore Convention Center, Baltimore, MD, March 2-5, 1998. Contact: Denise Calvert, ACSM, 5410 Grosvenor Lane, Suite 100, Bethesda, MD 20814. Telephone: 301-493-0200. Fax: 301-493-8245. Website: <http://www.landsurveyor.com/ACSM/>

Environmental Applications of Geographic Information Systems Symposium, 1998 American Chemical Society, Dallas, TX, March 29-April 2, 1998. Contact: Martha Well, PhD, Tennessee Technological University, Water Center, Box 5033, Cookeville, TN 38505. Phone: 931-372-6123. Fax: 931-372-6346. Email: mjw5030@tntech.edu

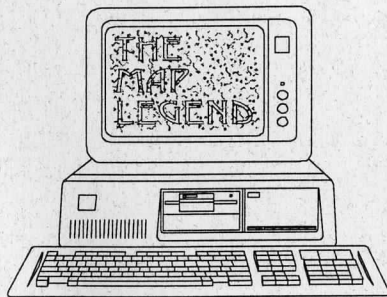
1998 ASPRS-RTI Annual Conference, Tampa Convention Center, Tampa, FL, March 30-April 4, 1998. Contact: ASPRS/RTI Annual Conference, 5410 Grosvenor Lane, Suite 210, Bethesda, MD 20814-2160. Telephone: 301-493-0290. Fax: 301-493-0208. Website: <http://www.asprs.org>

Integrating GIS & CAMA Conference, Hyatt Regency, Albuquerque, NM, April 27-28, 1998. Contact: URISA, 1460 Renaissance Drive, Suite 305, Park Ridge, IL 60068-1348. Telephone: 847-824-6300. Fax: 847-824-6363. Email: info@urisa.org

MidAmerica GIS Symposium, Cornhusker Hotel and Burnham Yates Conference Center, Lincoln, NE, May 4-7, 1998. Contact: Jim Merchant, Conservation and Survey Division, 113 Nebraska Hall, University of Nebraska, Lincoln, NE 68588-0517. Telephone: 402-472-7531. Email: jm1000@tan.unl.edu Website: <http://www.geo.drake.edu/magic/>

URISA 98, Sharing Information Solutions: A Global Vision, Charlotte, NC, July 18-22, 1998. Contact: URISA, 1460 Renaissance Drive, Suite 305, Park Ridge, IL 60068-1348. Telephone: 847-824-6300. Fax: 847-824-6363. Email: info@urisa.org Website: <http://www.urisa.org>

THE MAP LEGEND



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Bob Julyan
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