

WISCONSIN MAPPING BULLETIN

Vol. 16 No. 6 November, 1990



REPORTING ON LAND INFORMATION AND MAPPING
SCIENCES IN THE STATE OF WISCONSIN

Federal Mapping Coordination to Change

The Director of the federal Office of Management and Budget (OMB) signed a major revision of OMB Circular A-16 this last October. The document describes how federal agencies will interact and coordinate their activities in the mapping and surveying arena.

There are several significant changes in the new A-16 as compared to its most recent revision (1967). Perhaps of greatest importance to Wisconsin, the new A-16 sets as a goal the development and maintenance of a national, digital spatial information resource with involvement from federal, state, and local governments, and the private sector. This resource, to be linked by criteria and standards, would enable sharing and efficient transfer of spatial data between producers and users.

The intent to foster collaboration amongst levels of government represents a major departure in federal mapping policy. In the past, mapping over the country generally emanated from the federal level and was used at the local level. In the future, locally generated data will provide fresh and higher resolution information to be inserted into a national digital spatial database.

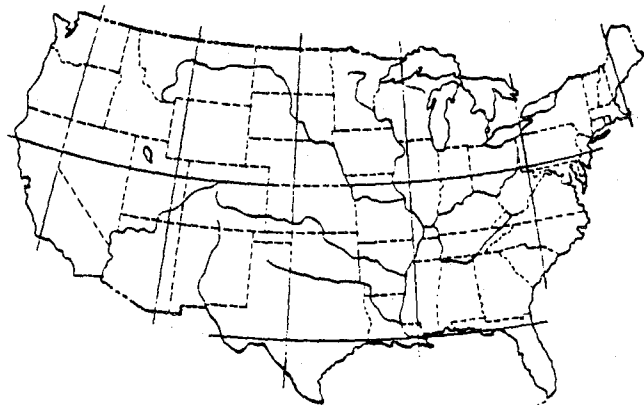
As a recognition of the growing importance of computer technologies to mapping and related fields, broadly defined spatial-data activities of federal agencies will now come under the control of the Circular. In the past, A-16 covered essentially mapping and surveying.

A permanent interagency coordinating committee is also established under A-16; this newly named Federal Geographic Data Committee (FGDC) will be chaired by the Lowell Starr, Director of the National Mapping Division of the U. S. Geological Survey. The FGDC replaces the FICCDC (the Federal Interagency Coordinating Committee on Digital Cartography). The FGDC will need to establish linkages to other levels of

government and the private sector, in order to develop standards and methods for sharing spatial data.

Under the FGDC, various federal agencies will be assigned lead responsibility for coordination of particular categories of data. To date, these include digital soils and vegetation data (Dept. of Agriculture); geodetic, cultural, and demographic data (Dept. of Commerce); base topographic mapping, and cadastral, geologic, and wetlands data (Dept. of Interior); international boundaries (Dept. of State); and ground transportation (Dept. of Transportation).

Sources: *ACSM Bulletin* and *USGS*



...inside...see page 2:

News on WLIB countywide planning guidelines

WISCONSIN LAND INFORMATION PROGRAM NEWS

Minor Changes to Modernization Plan Guidelines Expected Following Hearings

The Wisconsin Land Information Board (WLIB) held five public hearings during November to receive comments on its draft Recommendations and Requirements for Countywide Plans. A total of almost 200 people attended these meetings, held in Chippewa Falls, Appleton, Milwaukee, Wausau, and Madison. A 50-page collection of documents was provided to those attending the hearings. (See next column for information on obtaining additional copies).

County-established "land information offices" are responsible for producing a plan for land records modernization under legislation passed. This plan must be approved by the WLIB within two years of such an office being established in order for the office to continue retaining part of a user fee that began to be collected in all County Register of Deeds offices on July 1, 1990. The WLIB receives part of these same fees, to fund a grants-in-aid program for local government among other things. The WLIB has taken the position that it would only consider grant applications from a entities in counties whose plans had been approved.

The general response to the WLIB's proposal, as reflected by those attending the hearings, was support for the concept and substance of the document. Several questions were raised repeatedly. While some of these questions went beyond the issues addressed in the draft, others were quite direct. Parcel numbering methods stood out as an area of lack of agreement. A need for data interchange standards, not necessarily following federal models, was voiced several times. The difference between "foundational elements" and "potential activities" was explained as one of emphasis, and that the activities are all seen as cross-referenced to various of the elements. A plan would need to contain a discussion of each of the foundational elements, but not necessarily a solution or approach to dealing with all of the elements, particularly within a 5-year planning horizon.

Other questions related to WLIB timing issues for both the plan approval process as well as consideration of applications for grants-in-aid. The Board is suggesting a thoughtful and thorough planning process. Criteria by which grant applications will be judged are just beginning to be formulated, so there is no reason to rush to complete a plan which then might not serve as a solid basis for countywide activities over an extended period.

As a result of the hearings and additional comments received by mail, the WLIB decided on December 10th to consider several modifications to the document. These possible changes, that the WLIB is expected to

vote on at its next meeting, January 7, include the addition of both Base Mapping and Land Records Modernization as explicit foundation elements, and reconsideration of Data Standards for Unique Parcel Identification Numbers. One goal of the January 7 meeting is to finalize the Recommendations and Requirements, which will then allow county land information offices to proceed with their planning processes with clear knowledge of the form and substance expected by the WLIB.

Update on Advisory Members

Advisory (non-voting) members continue to be appointed by the Wisconsin Land Information Board. Three state agencies, one regional planning commission, two statewide associations, and nine federal agencies are now represented. We hope to publish a full listing in an upcoming issue.

WLIB Document on Countywide Plans

The Wisconsin Land Information Board is offering copies of a 50-page document "Developing the Wisconsin Land Information Board's Recommendations and Requirements for County-Wide Plans". A charge of \$2.50 per copy has been established to cover printing and distribution costs.

The document was prepared as supplemental material to a series of public hearings held in November, 1990. It includes sections on history and legislative intent, terms and concepts, status of modernization in the state, and five appendices: the draft planning guidelines, overview of legislative acts that created the program, statement of the WLIB on policy objectives and program implementation, a listing of county land information office contacts, and a listing of educational opportunities.

To obtain this document, send \$2.50 per copy (checks payable to Wisconsin Department of Administration) to Wisconsin Land Information Board, 101 S. Webster St., GEF 2 -- 6th Floor, P.O. Box 7868, Madison, WI 53707-7868. Tel: (608) 267-2722 FAX (608) 267-0200.

More County Land Information Offices

As of December 10, 1990, 71 of Wisconsin's 72 counties have formally established land information offices. The Vernon County Board of Supervisors voted on June 20th to not establish a land information office and to not proceed with participation in the Wisconsin Land Information Program at that time.

...in the Editor's opinion...

An Argument For Thorough Countywide Planning

71 out of 72 !!! That's the number of county boards that have established land information offices in order to participate in the Wisconsin Land Information Program. This represents a level of interest that has surprised even some of the most optimistic advocates of the Program.

The first big job for a land information office is preparation of a plan that will receive the approval of the Land Information Board. Approval must occur within two years of establishment of the office in order for it to qualify for both continued retention of fees as well as submitting grant applications for additional funds. So it is clear that the plan preparation process will, at a minimum, have to satisfy guidelines adopted by the Land Information Board. The guidelines are expected to allow a good deal of latitude to accommodate factors unique to each county.

It is in the best long-term interest of all agencies and citizens that each land information office organize and carry out a thorough planning process--even if it require more time than that needed to produce the minimum plan required by the Board. There are several potential benefits of this approach. One is that interagency cooperation can be enhanced. Another is that access to WLIB grants and/or other development funds may be improved.

There is no substitute for thorough planning when improvements in effectiveness are the goal. All levels of government together with the utility industry (but not including the rest of the private sector) annually spend approximately \$150 million each year for mapping and land information activities in Wisconsin. As a result, even modest improvements due to reduced duplication and/or better coordination can yield large benefits.

By contrast, consider the following facts. Total funds available through the Land Information Program have been estimated to be \$6 million per year statewide (\$4 million retained locally; \$2 million for Board expenses and a grants program). This means that the Program will generate only an additional 4% of the \$150 million already being spent. Grants may represent about 1%.

In addition, funds available from the state Board for grants will most likely fall short of the demand. Some land information offices have already thought of applying for multiple grants---one for each of several cities, for example. Less than 20 grants per year funded at the maximum \$100,000 would consume all of the available funds.

As a result, thoughtful and creative planning that results in better use of a broad range of current expenditures can have benefits many times greater than the \$6 million available annually through the Program. The obstacles to gain-

ing this better use are primarily institutional. What is required is time and human energy directed toward development of understanding and collaborative action involving as many players as possible in each county. It is critical that all potential collaborators be invited to participate in the planning process from the earliest stages. Some players may decide later that further participation is not appropriate or beneficial. On the other hand, trying to gain wider participation after a smaller group has already started forming a plan is fraught with problems.

It is difficult to underestimate the effort needed to build and maintain effective collaboration. But the taxpayers and ratepayers deserve a professional effort. The potential exists to realize major benefits from collaboration amongst many agencies and offices at many levels: counties, cities, villages, towns, regional planning commissions, state agencies, federal agencies, public utilities, and the private sector. Access to targeted pilot project funds from these various groups will almost certainly be easier if intent to build long-term collaboration can be demonstrated.

Each land information office should seriously consider the short- and long-term benefits arising from various planning scenarios. If short-term access to funds that represent only a small fraction of overall expenditures is weighed more heavily than long-term value derived from durable and broad-based collaboration, everyone will lose.



Art Ziegler, State Cartographer, "Weathers" Retirement Party

Thirty-five colleagues of Art Ziegler honored him at a retirement party on December 10 in Madison. After 16 years as Wisconsin's first State Cartographer, Art is retiring effective the end of the year. The party was postponed from December 3, when the Madison area was paralyzed by a 17" snowfall and blizzard.

Guests included Emeritus Prof. Arthur Robinson and Norman Anderson, former Speaker of the State Assembly. They reminisced about their efforts that led to the establishment of the position of State Cartographer.

Professor Phillip Muehrcke, Chair of the Committee on State Cartography, served as M.C. The event was masterfully organized by Brenda Hemstead of the SCO.

Art received a number of gifts including a plaque (in the shape of the state, of course) and a video tape composed of snapshots gleaned from his entire career. He'll be able to add future footage as he wishes. We expect that much of it will focus on his five grandchildren---all under the age of 3.

USGS PUBLICATIONS

USGS Yearbook

The latest U.S. Geological Survey Yearbook is now available. The 114-page illustrated report provides an overview of the programs and activities of the nation's largest earth science research and information agency.

The yearbook includes articles on a range of subjects, including climate, wetlands, stream flow, and aging of rocks. Of particular interest to the mapping community is the following condensation:

Maps of the Future: No Paper, No Folding

A research effort of the USGS, called the "Digital Topographic Map of the Future", will develop models of advanced digital cartographic data sets. This project is testing not only a new medium for data distribution - CD-ROM (Compact Disk - Read Only Memory), but also a new areal coverage - county versus the traditional topographic quadrangle base, and a new marketing approach in which software for both data display and processing will be packaged with the data.

Copies of the report, titled "U.S. Geological Survey Yearbook Fiscal Year 1989", are available for \$10 from Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO, 80225.

New U.S. Color Satellite-Image Map

A new color map of the 48 conterminous states produced from satellite images has been published by the U.S. Geological Survey. The map was produced from images taken by weather satellites 500 miles above the surface of Earth. The map is printed at a scale of 1:7,500,000 on both sides of a 19 by 28 inch sheet.

One side shows the conterminous 48 states using color infrared imagery. Text explains how the map was made and includes a short guide to image interpretation.

The reverse side shows the same map, but it includes cartographic enhancements designed to orient and inform map readers. For example, state boundaries are shown with black lines and names of some prominent features are printed in silver, which does not unduly obscure the image when viewed from certain angles. Also, 24 different example areas are outlined and an accompanying text for each explains the physical and cultural reasons for each area's appearance on the image.

The map is available for \$3.10 per copy from the USGS, Map Sales, Box 25286, Federal Center, Denver, CO 80225. Specify the map name (U.S. Satellite View).

Plate Tectonics & Natural Hazards Maps

In connection with the International Decade of Natural Disaster Reduction, which began in 1990, the United States Geological Survey has issued two maps with natural hazard themes. The first is a five-foot-wide color world map called "This Dynamic Planet." Through combination of digital data-gathering techniques and high-quality map production methods, the USGS has created a map which demonstrates the relationship between volcanic and seismic activity. The theory of plate tectonics was derived in part from the geographic distributions of earthquake epicenters and volcanoes; these patterns are clearly portrayed through the use of various point symbols. Informative text complements the graphic to provide a complete primer on plate tectonics. This map costs \$4.00 per copy.

A second publication, titled "Natural Hazards Map of the Circum-Pacific Region," is a 40-by-50-inch color map of the Pacific Ocean and surrounding continents. Like the "Dynamic Planet" map, "Natural Hazards" shows the distribution of volcanoes and earthquake epicenters, but also includes information on tropical storm tracks, tornadoes, high ocean waves, and ice pack limits. This map is a product of the Circum-Pacific Project, a multi-national effort to show the relationship of mineral and energy resources to such phenomena as geology and tectonics. This map costs \$3.10 per copy.

To order maps, write to: U.S. Geological Survey, Branch of Distribution, Box 25286, Federal Center, Denver, CO 80225

Please specify map names (either "This Dynamic Planet" or "Map CP-35, Natural Hazards Map of the Circum-Pacific Region") when ordering.

(Source: USGS Press Release)

Precambrian Geologic Map of Northeastern Wisconsin

The following is a miscellaneous investigations series map available from the U.S. Geological Survey, Map Distribution, Federal Center, Box 25286, Denver, CO 80225. When ordering use the reference number.

I-2056. Geologic map of Precambrian rocks of Iron Mountain and Escanaba 1° x 2° quadrangles, northeastern Wisconsin and northwestern Michigan, by P.K. Sims. 1990. Scale 1:250,000 (1 inch = about 4 miles). Sheet 41 by 42 inches (in color). \$3.10.

Note: For all USGS orders, make checks payable to "Dept. of the Interior - USGS".
For all map orders less than \$10, include an additional \$1 for postage & handling.

PUBLICATIONS

SCO County Catalog Developments

The following is a brief update on County Cartographic Catalog production at the SCO:

WOOD: Distribution of complimentary copies completed in October; copies available for sale from Map Sales, Wis. Geological & Natural History Survey, 3817 Mineral Point Road, 608/263-7389; the cost is \$7.00 at the counter or \$8.00 by mail.

WINNEBAGO (2nd edition): in process, scheduled for printing December 1990 and distribution in January 1991.

MARATHON & MARQUETTE: in production.

PORTAGE (2nd edition): in production.

Mapping the Nation's Agriculture

Do you want to scan the Nation's agricultural production at a glance? One painless way to study the data is the new 1987 Agricultural Atlas of the United States. The Atlas includes more than 300 graphically illustrated multicolored pattern and dot maps, depicting findings from the 1987 Census of Agriculture. This 200-page document replaces the graphic summary released after past censuses.

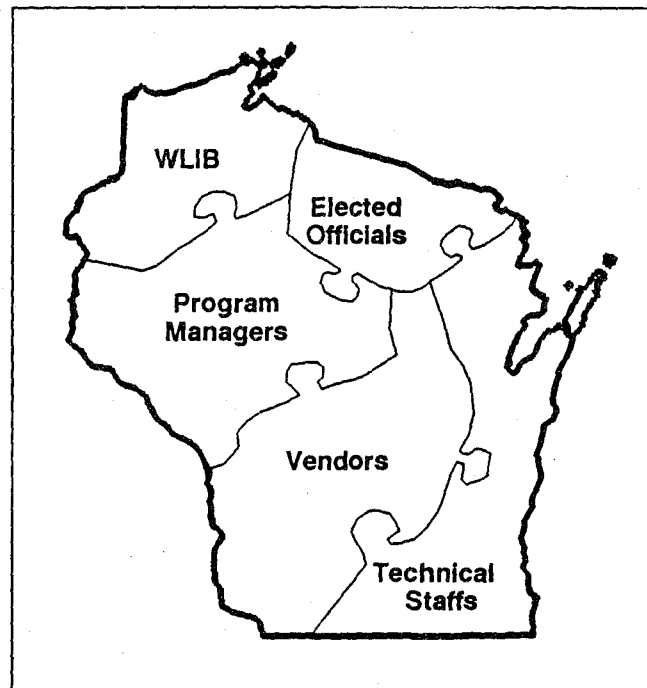
The Agricultural Atlas of the United States is available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20401. The price is \$21.00 per atlas.

For more information contact: Douglas Miller or Susan Luckett, Agriculture Division at 301/763-8561.

(Source: *Census and You/July 1990*)

County Plat Books

The following Wisconsin County Land Atlas and Plat Books are now available for 1991: Adams, Eau Claire, Green, and Marathon Counties. These Plat Books sell for \$25.00 plus tax and shipping. For ordering details contact: Rockford Map Publishers, Inc., P.O. Box 6126, Rockford, IL 61125, phone (orders only) 800/447-2222 or for customer service information call 815/399-4614.



WLIA February Conference Announced

The Wisconsin Land Information Association (WLIA) has mailed registration materials and the preliminary program for its Fourth Annual Conference. The conference will take place February 13-15 at the Embassy Suites in Green Bay, February 13 (a.m.) - 15 (noon).

This year's conference theme is "Making it Work", in reference to ongoing efforts to modernize land information systems across the state, particularly as guided by the Wisconsin Land Information Program. WLIA was the primary advocate for establishing the Program.

WLIA President John Laub chairs the Conference Planning Committee, and President-Elect David Fletcher is in charge of the workshop program. Sixteen workshops will be organized around three tracks: policy (for elected officials), management (for project leaders dealing with institutional implementation), and technical (for staff dealing with design/development). Workshops are at various levels, from introductory to advanced.

Vendors of equipment, software, and services will also be featured. After the workshops close at 4:00 on both Wednesday and Thursday, vendor displays will be open. Thursday's display period will include a reception sponsored by the vendors.

Because the conference is longer than in previous years, the registration fee is slightly higher: \$65 prior to February 1. With expectations that attendance will fill the available space, early registration is recommended. (Note: The Wisconsin Land Information Board has made a clear determination that educational activities in support of countywide planning qualify as appropriate expenditures of fees retained under the Wisconsin Land Information Program). For additional information on the conference, call 608/262-3065.

CONFERENCES AND TECHNICAL MEETINGS

January 22, Wisconsin Society of Land Surveyors Workshop on "Principles of Coordinate and Mapping Systems" will be held at the Stevens Point Holiday Inn, Wisconsin. Contact: Barbara Inch at 715/346-3717.

January 23-25, Wisconsin Society of Land Surveyors "Annual Institute Meeting" will be held at the Stevens Point Holiday Inn, Wisconsin. Contact: Barbara Inch at 715/346-3717.

February 4, Land Records Modernization and Geographic Information Systems Planning, (see article on this page).

February 12-15, Fifth Annual Symposium on Geographic Information Systems in Forestry and Natural Resource Management will be held in Vancouver, Canada. Contact: GIS '91 Symposium Office, 720-845 Cambie St., Vancouver, British Columbia, Canada V6B 4Z9. Call: 604/688-0188.

February 13-15, Wisconsin Land Information Association Annual Conference will be held in Green Bay. Contact Bob Gurda, WLIA Secretary, at 608/262-3065. (see story on page 5.)

February 13-16, Illinois Professional Land Surveyors Association Annual Conference will be held at Pheasant Run Resort and Conference Center, St. Charles, IL. Contact: Robert Church, 203 S. Walnut St., Rochester, IL 62563. Call: 217/498-8102.

February 19-22, Minnesota Society of Professional Surveyors 39th Annual Meeting will be held in the Thunderbird Hotel and Convention Center, Bloomington, MN. Contact: Sharon Harris, Executive Director, MSPS, 1700 N. Skyline Dr., Burnsville, MN 55337. Call: 612/890-6991.

March 4-7, GRASS Users Conference, "Evolving GRASS in the 90s Innovation and Education" will be held at the University of California at Berkeley. Contact: Registrar, GRASS 1990 User Conference, Center for Environmental Design Research, 390 Wurster Hall, UC-Berkeley, Berkeley, CA 94720. Call: 415/642-9205.

March 18-21, Third International Conference on Geographic Information Systems will be held in Ottawa, Canada. Contact: The Canadian Institute of Surveying & Mapping, Jean R.R. Gauthier, Conference Director, Box/C.P. 5378, Station/Succursale F., Ottawa, Canada K3C 3J1. Call: 613/224-9851.

March 23-29, ACSM/ASPRS Annual Convention including AUTO-CARTO, Baltimore, MD. Contact: ACSM 5410 Grosvenor Lane, Bethesda, MD 20814. Call: 301/493-0200.

March 24-27, AM/FM International Annual Conference, San Diego, CA. Contact AM/FM International, 14456 E. Evans Ave., Aurora, CO 80014. Call 303/337-0513.

April 1-3, Introduction to Global Positioning Systems (GPS), will be held at Union South, 227 North Randall Ave., Madison, WI. Contact: Robert T. Fey or Jane Sauer at 800/462-0876.

April 13-17, Association of American Geographers 87th Annual Meeting, Miami, FL. Contact AAG, 1710 16th St.N.W., Washington, DC 20009-3198.

April 5-6, Society of Land Surveyors or Iowa 54th Annual Land Surveyors Conference will be held in Scheman Continuing Education Building, in Ames, IA. Contact: Carol Baker, Executive Secretary, SLSI, 2924 Diamond, Ames, IA 50010. Call: 515/233-2663.

April 29 - May 2, Eighth Thematic Conference will be held in Denver, CO. Contact: Nancy J. Wallman, ERIM/Thematic Conferences, P.O. Box 8618, Ann Arbor, MI 48107-8618. Call: 313/994-5123.

Satellite Broadcast of Land Information Planning Workshop Scheduled for Feb. 4

"Land Records Modernization and Geographic Information Systems Planning" is the focus of a one-day course that will be offered by the University of Wisconsin-Madison's Engineering Professional Development Program on February 4. The content is designed to address issues that are common to the countywide land information modernization planning process in Wisconsin counties.

This course will be video broadcast live from 9 am to 3:35 pm via satellite to downlink sites, including 23 to date across Wisconsin (see listing below). Participants at any of the sites can ask questions of the instructors live through a teleconferencing connection.

In Wisconsin, a person can attend the course at any of the sites for \$75. Printed notebook materials will be provided. (Note: The Wisconsin Land Information Board has made a clear determination that educational activities in support of countywide planning qualify as appropriate expenditures of fees retained locally under the Wisconsin Land Information Program).

For further information on course content, contact Pat Eagan at (608) 263-7429. For information on downlink sites, contact Cindy Meisel at (608) 263-8050.

Wisconsin Satellite Downlink Sites as of 12/20/90

<u>County</u>	<u>City</u>
Barron	Barron
Brown	Green Bay
Burnett	Siren
Calumet	Chilton
Dane	Madison
Dodge	Juneau
Douglass	Superior
Dunn	Menomonie
Fond du Lac	Fond du Lac
Iron	Hurley
Langlade	Antigo
Lincoln	Merrill
Marathon	Wausau
Menominee	Keshena
Oneida	Rhineland
Pepin	Durand
Pierce	Ellsworth
Price	Phillips
Richland	Richland Center
Sheboygan	Sheboygan Falls
Vernon	Viroqua
Waushara	Wautoma
Winnebago	Oshkosh

DEBATE OVER LIS STRUCTURES

Private? Public? Utility? These are some general models to consider as possible forms when designing a land information system (LIS). One professional society has featured a debate in recent months focussing on some pros and cons of these approaches.

In the August 1990 issue of the *ACSM Bulletin*, Professor James Clapp of the UW-Madison addressed needs for modern LISs and how these needs might be served by establishing a public utility. Clapp considered that information about the land, when organized and accessible, could represent a service to be provided by a public utility. Such a public utility would build and maintain part of our infrastructure---much like roads, electric power distribution systems, or libraries. He presented the idea conceptually, and pointed out that many questions would have to be answered before such an enterprise could function appropriately.

In response to Clapp, James Weidener expresses a strikingly different approach in the December, 1990 issue. Weidener, a private surveyor from Florida, believes that LIS should be built by surveyors and "without government meddling". He believes that a public base for LIS guarantees inefficiency and control by labor unions (his examples are the Postal Service and the public schools). And he describes utilities as "immense bureaucracies... which are guaranteed a certain profit over their entire system---thereby rewarding inefficiency".

Under the recently enacted Wisconsin Land Information Program, land information offices established by county boards are responsible for producing, implementing, and maintaining countywide land information modernization plans. The Land Information Board, through its forthcoming guidelines for plans, will be allowing a good deal of flexibility in the institutional structures any particular county wants to help build to address modernization. The issue of public vs. private vs. utility should be considered by each participating county since it has service and fiscal implications that go on into the future.

The *ACSM Bulletin* is published bimonthly by the American Congress on Surveying and Mapping (ACSM). ACSM is comprised of three professional organizations: The National Society of Professional Surveyors, the American Cartographic Association, and the American Association for Geodetic Surveying.

As a point of interest, Clapp served as Chair of the Wisconsin Land Records Committee from 1985-1987. He also served as President of ACSM two years ago, and was succeeded by Weidener, who is now Immediate Past President. Professor Clapp has argued on various occasions that history shows that as new disciplines are forming, one stage is characterized by intense disagreement over concepts and terms. Perhaps such a stage of formation is underway as witnessed by the heated debate over LIS structures.

Editor's Note: Brenda Hemstead of the SCO staff handles the great majority of requests for general map coverage. This article is part of a continuing series describing SCO services and activities. (See page 8 for an overview).

GENERAL MAP COVERAGE

A caller recently asked how to obtain a map showing primary routes, access roads, etc. so he could add locations of all the major hospitals in the state to the map.

Another caller asked for advice on a map showing terrain relief with contours, and showing old logging roads for hunting purposes.

Spelunkers wrote to ask where to purchase a map of just their county with little detail so they could add to it all of the caves that they know exist in their area.

These few examples are the tip of the iceberg of general map inquiries. And, of course, we receive calls asking about maps for biking, canoeing, schools, fishing, zip codes, population, etc., as well as atlases, road maps.

A base map is simply a map that can be used as a framework for organizing and displaying information in addition to or different from that published on the map.

Planimetric maps, which do not show terrain relief, are frequently used as base maps for the display of many kinds of information (i.e., population statistics) that can be related directly to a geographic distribution. A topographic map (which does show terrain relief) can serve as a base map, too--it becomes one as soon as the person using it adds any information systematically.

Base maps published by the U.S. Geological Survey are useful for many purposes. They depict various reference information such as transportation, forest areas, wetlands, hydrography, Public Land Survey System corners, settlements, administrative boundaries, and coordinate system grids.

USGS base map series are available over Wisconsin at three standard scales: 1:24,000 (1" = .38 miles); 1:100,000 (1" = 1.58 miles) and 1:250,000 (1" = 3.95 miles). Single sheet maps of the entire state are also available at several less detailed scales. The 1:24,000-scale series amounts to 1154 sheets over the state.

ABOUT THE SCO...

The State Cartographer's Office (SCO), established in 1974, is a unit of the University of Wisconsin-Madison. The SCO is located on the 1st Floor of Science Hall.

Our staff presently consists of two full-time academic staff including the State Cartographer, one full-time classified staff, several part-time graduate students, plus several part-time undergraduate hourly employees.

The State Cartographer's position and mission is described in Wis. Statute 36.25 (12m). In addressing this role, the SCO functions in a number of ways:

- publishes a series of catalogs which document and guide users of mapping resources.
- inventories mapping practices, methods, accomplishments, experience, and expertise.
- develops experimental and prototype products.
- publishes the Wisconsin Mapping Bulletin and other documents to inform the mapping community.
- participates on committees, task forces, boards, etc.
- serves as the state's affiliate for cartographic information in the U.S. Geological Survey's Earth Science Information Center (ESIC) network.
- provides information and advice in support of sound mapping practices and map use.

The Office answers a wide variety of inquiries ranging from simple to complex, in the following general categories:

1. Geodetic Control--Requests for surveying information which has been established by some office or agency, and upon which the requestor wishes to base a survey or map.
2. Aerial Photographic Coverage--These are requests for information about existing or planned aerial photographic coverage which can be utilized for a variety of projects. These requests, in many instances, are motivated by the desire to avoid the exceedingly more costly route of acquiring specifically flown photography.
3. General Map Coverage--The requestor is seeking map coverage to fulfill a specific need, from utilization as a base map upon which other information can be compiled, to determination of location or extent of a resource such as wetlands, to use as a recreation guide.
4. Specific Unique Data--These types of requests change as various programs are implemented. Examples include Magnetic Declination (for land surveying), and Latitude/Longitude (federal requirement for placement of sending satellite dishes or radio towers).
5. General Requests--Such as size of an area, height of a particular feature, location of a named feature, explaining contours, digital methods, software, hardware etc.
6. Activities Of Others--This provides access to publications, news, anecdotal information, and referrals to appropriate agencies, programs, organizations, or individuals who may be able to provide the information being sought.

In each issue of the Bulletin, we will discuss an area of SCO activity in more detail. By this means we will help you better understand and more effectively utilize the SCO's services. If you have any questions concerning these topics, please contact the Office at 608/262-3065 for a detailed explanation.

Wisconsin Mapping Bulletin

Published bimonthly by the State Cartographer's Office. A University of Wisconsin-Madison outreach publication distributed free upon request.

News is welcome on completed or ongoing projects, published maps or reports, conferences/workshops. Local and regional information is especially welcomed. The Editor makes all decisions on content. Deadline for the next issue is Jan. 11, 1991.

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