

NSDI Competitive Cooperative Agreements Program -- 1995 Awards

National Spatial Data Infrastructure

The National Spatial Data Infrastructure (NSDI) Competitive Cooperative Agreements Program 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.

For further information about the program, contact the FGDC Secretariat, c/o U.S. Geological Survey, 590 National Center, Reston, Virginia 22092; telephone 703-648-5514; facsimile 703-648-5755; or Internet gdc@usgs.gov.

The 1995 Program

In July 1995, the FGDC completed issuing awards for the second year of the program. The twenty-two cooperative agreements totaled \$625,000. These awards support the development and implementation of the National Geospatial Data Clearinghouse (NGDC) for finding and accessing geospatial data, the development and promulgation of FGDC-endorsed standards in data collection, documentation, transfer, search and query, and the development of software tools or techniques to aid in the evaluation of geospatial metadata or data through the Clearinghouse.

A brief summary of each funded project follows. The summary includes the list of participating agencies and the name and contact information for the project director.



New England Geospatial Metadata Project

The Office of Geographic Information and Analysis at the University of Massachusetts at Amherst in conjunction with the major GIS programs of the six New England States proposes to create a New England Geospatial Metadata Directory, to establish a NGDC node, and to work with State, county, regional, municipal, and non-profit agencies to assist them in documenting their geospatial metadata according to the Content Standards for Digital Geospatial Metadata and to utilize the Internet as a means of finding and accessing geospatial data in the U.S. In order to accomplish these three goals, this project will complete four specific tasks: (1) refinement of software tools to assist in creating FGDC metadata files; (2) use of these software tools in establishing FGDC-compliant metadata files for 60 New England geospatial data sets; (3) establishing a WWW/WAIS geospatial data node at the University of Massachusetts; and, (4) training of an extended group of public agency and private non-profit staff in the use of the metadata software tools and the NGDC.

Collaborating Organizations:

University of Massachusetts; MassGIS; Vermont Center for GIS, Inc. (VGIS); Maine Office of GIS; Rhode Island Geographic Information System (RIGIS); Connecticut Office of Policy and Management; GRANIT - New Hampshire Office of State Planning.

Principal Contact: Richard Taupier, University of Massachusetts, Office of Geographic Information and Analysis, Blaisdell House, Amherst, Massachusetts 01003; telephone 413-545-2842; facsimile 413-545-2304; Internet Taupier@tei.umass.edu



Geographic Data Network Development for New York City

The objective of the first phase of this project is to establish a Geographic Data Network (GDN) which enables the input of and retrieval of information concerning the City's Geographic Data and acts as an organizing force to develop and maintain standards for the collection and formatting of data. The GDN will be accessible through the Internet and will tap into a data repository at the Spatial Analysis and Remote Sensing Laboratory (SPARS) at Hunter College. Initially, two NYC Dept's will participate in this pilot effort.

Collaborating Organizations:

Hunter College - CUNY, Spatial Analysis & Remote Sensing Lab.; Research Foundation of CUNY; NYC Department of Environmental Protection; NYC Department of Transportation

Principal Contact: Sean C. Ahearn, Hunter College - CUNY, Department of Geography, 695 Park Avenue, New York, New York 10021; telephone 212-772-5327; facsimile 212-772-5268; Internet sca@everest.hunter.cuny.edu



Upper Potomac Geospatial Data Depository

This project brings together nine regional planning districts representing fifty-three counties and cities in MD, PA, VA, and WV, to develop a regional geospatial data depository. The regional councils and the cities and counties will provide their geospatial data bases to the depository. The project will place the regional depository on-line through an Internet node. All geospatial data will have individual metadata files documented in accordance with the Content Standards for Digital Geospatial Metadata.

Collaborating Organizations: Tri-County Council for Western MD; Eastern Panhandle Regional Planning Development Council; Region VII Planning and Development Council; Fifth Planning District Commission; Central Shenandoah Planning and District Commission; Frostburg State University; Region 8 Planning and Development Council; Region Four Planning and Development Council; Lord Fairfax Planning District Commission; Southern Alleghenies Planning and Development Commission

Principal Contact: Mike Wagner, Tri-County Council for Western Maryland, 111 South George Street, Cumberland, Maryland 21502; telephone 301-777-2158; facsimile 301-777-2495



A Community Resource of Spatial Data in Maryland

In partnership with local, State, and Federal agencies, the Department of Geography, at the University of Maryland - College Park, will design, implement, and evaluate a prototype resource of digital spatial data for northern Prince George's County, MD. The project seeks to develop understanding of the needs of patrons of local libraries for geographic data required to solve local problems or answer specific queries in domains such as the location of community events, provision of public services, real property assessments and building developments, and the impact of public infrastructure investments. During the period of effort, software tools for browsing and querying data bases of maps and images will be designed and tested in four libraries, especially the branch library in Greenbelt, MD. The project will also have a training program about geospatial data for librarians.

Collaborating Organizations: The University of Maryland; Prince George's County Memorial Library System; MD-National Capital Park and Planning Commission; Prince George's County Department of Environmental Resources; Maryland State Department of Education; NASA/Goddard Space Flight Center

Principal Contact: Derek Thompson, Department of Geography, University of Maryland, College Park, Maryland 20742; telephone 301-405-4063; facsimile 301-



314-9299; Internet
dtll@umail.umd.edu

Training Sessions and Creation of a Geospatial Center in Kentucky

The participants will take part in the creation and management of a node on the NGDC, to provide education and training in FGDC endorsed standards to professionals, private citizens, and university students, and to collect, process, and make available information and data on the Internet for the ten county BRADD area (south central Kentucky). This project will further enhance current efforts to create a compatible data base of the BRADD area and provide an efficient means to store, access, and disseminate data.

Collaborating Organizations: Barren River Area Development District (BRADD); Western KY University; Mammoth Cave National Park

Principal Contact: Jack Eversole, Barren River Area Development District, 177 Graham Avenue, P.O. Box 90005, Bowling Green, Kentucky 42102-9005; telephone 502-781-2381; facsimile 502-842-0768



Development of the Florida Spatial Digital Library System

The focus of this project is to advance the needs of the Florida Marine Research Institute and its partners with respect to the creation, maintenance and accessibility of its spatial metadata by: assisting in the design, development and evaluation of the Florida Spatial Digital Library System (FSDLS); populating the FSDLS with Coastal and Marine Resource Assessment metadata; exploring ways in which libraries can be involved in cataloging metadata; producing new thematic content standards for key marine spatial data sets; and, developing a metadata guide for non-GIS data collectors. The FSDLS will serve as a node on the NGDC.

Collaborating Organizations: FL Dept of Environmental Protection, FL Marine Research Institute; Growth Mgmt Data Coordinating Council; Tampa Bay Regional Coordinating

Council; FL Dept of Environmental Protection - Bureau of Information Systems; US EPA

Principal Contact: Christopher Friel, FL Dept of Environmental Protection, Division of Marine Resources, FL Marine Research Institute, 100 Eighth Avenue SE, St. Petersburg, Florida 33701-5095; telephone 813-896-8626; facsimile 813-823-0166; Internet
chris@orca.fmri.usf.edu



Development of a National Geospatial Data Clearinghouse Node for Louisiana

This project will result in the creation and implementation of a NGDC node for Louisiana. The project will build upon the resources of the Louisiana Coastal Geographic Information Systems Network (LCGISN), which was developed to improve the coordination and identification of spatial data resources pertinent to the Louisiana coastal zone. This project will expand the thematic and geospatial range of the existing LCGISN program to include FGDC compliant metadata documentation for statewide environmental and energy-related information of particular importance to state and Federal agencies.

Collaborating Organizations: Louisiana State University, Center for Coastal, Energy, and Environmental Protection; Louisiana GIS Task Force; US Minerals Management Service

Principal Contact: Lynda D. Wayne, Louisiana State University, Coastal Studies Institute, 331 Howe-Russell Geoscience Building, Baton Rouge, Louisiana 70803; telephone 504-388-3479; facsimile 504-388-2520; Internet lwayne@swamp.csi.lsu.edu



NGDC Node for the Dallas/Fort Worth Region: A Model for Metropolitan Areas

The primary deliverable will be a functioning NGDC node with procedures in place to catalog data for the Dallas/Fort Worth areas according to FGDC standards. Funding will enable the Center to make its existing holdings consistent with the Metadata standard, to expand holdings of local data consistent with this standard, and to promote the concept of the NSDI in the Dallas/Fort Worth area.

Collaborating Organizations:

University of Texas at Dallas, Bruton Center for Development Studies; North Texas GIS Consortium

Principal Contact: Ronald Briggs, University of Texas at Dallas, Bruton Center for Development Studies, P.O. Box 830688, Richardson, Texas 75083-0688; telephone 214-883-2655; facsimile 214-883-2966; Internet briggs@utdallas.edu



Development of an Interactive GIS Network for the State of Oklahoma

The objective of this project is to provide the State of Oklahoma with a centralized source for searching, evaluating and accessing Oklahoma geospatial data sets. The two principle efforts will involve creating an inventory and recording and cataloging metadata in accordance with the Content Standards for Digital Geospatial Metadata for Oklahoma geospatial data sets, and, establishing and maintaining a node on the NGDC.

Collaborating Organizations:

Oklahoma State University, The Environmental Institute; Oklahoma GIS Council; Oklahoma State Geographer

Principal Contact: Beth McTernan, Environmental Institute, Oklahoma State University, 003 Life Sciences East, Stillwater, Oklahoma 74078; telephone 405-744-9996; facsimile 405-744-7673; Internet emct@okway.okstate.edu



Nebraska NSDI Clearinghouse and Geospatial Metadata Initiative

This project is designed to accomplish four primary objectives: (1) to establish and manage a NSDI clearinghouse Internet network node; (2) to upgrade the current metadata on an existing on-line spatial data catalog to meet the current FGDC Content Standards for Digital Geospatial Metadata; (3) to conduct outreach to Nebraska-based agencies and organizations to increase their awareness, understanding and utilization of the NSDI clearinghouse network and its associated Metadata Standard; (4) to provide training to State and local agencies and other interested parties on the use of FGDC Content Standards for Digital Geospatial Metadata.

Collaborating Organizations:

Nebraska Library Commission; NE GIS Steering Committee; State agencies - Dept of Roads, Nebraska Game and Parks Commission, Conservation and Survey Division of the University of Nebraska, Dept of Environmental Quality, Dept of Administrative Services; Local government agencies and associations - Nebraska Association of County Officials, Scotts Bluff County Surveyor, City of Omaha Public Works; Federal agencies - U.S. FWS, USDA NRCS

Principal Contact: Larry Zink; Nebraska GIS Steering Commission; P.O. Box 94664; Lincoln, Nebraska 68509; telephone 402-471-3206; facsimile 402-471-3339; Internet lzink@doc.state.ne.us



Adams County, Illinois, GIS 2002 Project

The Adams County GIS 2002 project is a 10-year, multiparticipant project designed to develop an accurate and continually updated geographic information system of planimetric, topographic and cadastral base data for Adams County, IL. The cooperative project focuses on the development of a comprehensive, one-square-mile "mini-GIS" pilot area to test the utility of all applicable FGDC-endorsed standards and the concepts embodied in the Geospatial Data

Framework.

Collaborating Organizations: Adams County, IL, Highway Dept; Dept of Energy & Natural Resources; USDA NRCS, IL Office; City of Quincy, IL; Central IL Public Service; Ameritech; Continental Cablevision; Adams Electrical Co-op; Adams Telephone Co-op

Principal Contact: Richard Klusmeyer, Adams County Highway Department, 5200 East Broadway, Quincy, Illinois 62301; telephone 217-223-0614; facsimile 217-223-9418



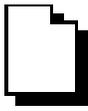
Creating a Local Node on the National Spatial Data Infrastructure in Champaign Co., IL.

The collaborators along with 70 other organizations are currently participating in the Champaign County Network (CCNet) effort to establish an infrastructure providing access to community-relevant data from local, regional, State and national data resources. This project calls for implementing and evaluating means of creating a local clearinghouse as a node of the National clearinghouse. This testbed, and resulting training materials, will be available to other communities nation-wide that wish to evaluate the methods, procedures and infrastructure established as part of this project.

Collaborating Organizations:

Champaign County Chamber of Commerce; University of IL at Urbana; Champaign -National Center for Supercomputing Applications

Principal Contact: Richard Kubetz, Champaign County Chamber of Commerce, 100 Trade Centre Drive, Suite 402, Champaign, Illinois 61820; telephone 217-359-1791; facsimile 217-359-1809; Internet kubetz@ncsa.uiuc.edu



Establishing a National Geospatial Data Clearinghouse Node in Utah

The State of Utah, Automated Geographic Reference Center and collaborators will develop metadata and interfaces which make the data available through the NGDC. The project involves establishing multiple nodes for access to the Clearinghouse through the Internet, documenting data using the FGDC Content Standards for Digital Geospatial Metadata, developing easy to use tools to access metadata, and conducting training for agencies considering adopting or trying to implement the Metadata Standard.

Collaborating Organizations:

Utah Automated Geographic Reference Center; County Governments -- Carbon County, Emery County, Grand County, Salt Lake County, San Juan County, Utah County, Washington County; State of UT-- DNR Division of Parks and Recreation, Division of Water Rights, Division of Wildlife Resources, UT Trust Lands; Federal agencies -- USDA Ashley National Forest, Dixie National Forest, Fishlake National Forest, Manti-LaSal National Forest, USDoI BLM Grand Junction District Office, Moab District Office, NBS Colorado Plateau Research Station, NPS Canyonlands/Arches National Park, Capital Reef National Park

Principal Contact: Dennis Goreham, Utah Automated Geographic Reference Center, Division of Information Technology Services, 5130 State Office Building, Salt Lake City, Utah 84114; telephone 801-538-3163; facsimile 801-538-3622; Internet grdbg@itshpl.it.as.ex.state.ut.us



Idaho Geospatial Data Network

This project builds upon the interest and activity of the geospatial data community in Idaho. The project involves developing an implementation strategy for a data clearinghouse, implementing multiple nodes at key data developer sites, refining the existing Idaho metadata standard to compliance with the Content Standards for Digital Geospatial Metadata, populating key nodes with metadata, and educating and training users on use of the network nodes.

Collaborating Organizations: Idaho Department of Water Resources; Idaho Geographic Information Advisory Committee; State agencies - Dept of Lands, Idaho Nuclear Engineering Laboratory, Dept of Fish and Game, Transportation Department, Department of Parks and Recreation, Idaho Tax Commission, Department of Health and Welfare; Federal agencies -- U.S. Forest Service; U.S. Bureau of Land Management, U.S. Geological Survey

Principal Contact:

Hal N. Anderson, Idaho Department of Water Resources, 1301 North Orchard Street, P.O. Box 83720, Boise, Idaho 83720-7888; telephone 208-327-7995; facsimile 208-327-7866; Internet handerso@idwr.state.id.us



Montana Local Government GIS Coalition Project

This project will enable the Montana Local Government GIS Coalition to facilitate local government participation in the NSDI and NGDC. The coalition, led by the GIAC, will encourage communication and data sharing among local government and private organizations, work with local governments to develop a metadata plan in compliance with the FGDC Metadata Standard, build a local government data repository in compliance with the FGDC Metadata Standard, establish a WWW node for local governments on the NGDC, and implement a Montana Local Government GIS Users list server on the Internet.

Collaborating Organizations:

Montana State University, Geographic Information and Analysis Center (GIAC); Montana Department of Revenue, Cascade County

Principal Contact: Jackie Magnant, Montana State University, Geographic Information and Analysis Center, Room 329 Traphagen Hall, Bozeman, Montana 59717-0348; telephone 406-994-6921; facsimile 406-994-6923



Oregon Digital Map Library Clearinghouse

This project is a cooperative venture with all jurisdictions of government in Oregon, with Federal agencies, State agencies, counties, cities, and tribal governments involved with contributing data to the Library for distribution. Under this proposal, the State Service Center will lead the effort to develop and implement a node on the NGDC providing direct network access to existing and newly created data sets. The geographic data will be stored in the Oregon Digital Map Library and available at no charge. The Library will contain exportable copies of the data sets and appropriate documentation. Data bases will meet FGDC Metadata Standard. Also, the Library homepage will contain hypertext links to other data collection centers in the State. Staff at the Service Center will also develop a training plan to provide users with the tools needed to use the homepage, successfully transfer data to their location, import the data, and have sufficient documentation to be able to use the data appropriately.

Collaborating Organizations:

State Service Center for GIS; Oregon Geographic Information Council; Interorganization Resource Information Coordinating Committee (IRICC); Oregon GIS Coordinators (County and Local Government group)

Principal Contact:Theresa Valentine, State Service Center for GIS, Oregon Department of Administrative Services, 155 Cottage Street, Salem, Oregon 97310; telephone 503-378-4163; facsimile 503-986-3242; Internet theresa.j.valentine@state.or.us



Tahoe-Northern Sierra Nevada Internet Project

The collaborators will create a system of freely accessible government information using personal computers, online geospatial data catalogs and the Internet. To ensure usage and growth of the system, the collaborators will provide informative printed materials, workshops, and follow-up activities designed to develop Internet connections and cataloging skills among agencies in the Northern Sierra Nevada and Tahoe region which produce geospatial data. Specifically, the collaborators will create Clearinghouse nodes via the California Environmental Resources Evaluation System (CERES); develop a workshop program that trains local area government technicians in using the Internet, the Metadata Standard, and other related NSDI activities; and conduct workshops in ten counties for both California and Nevada participating government agencies.

Collaborating Agencies:

Sierra Planning Organization; Tahoe Center for a Sustainable Future

Principal Contact: Lynn Purvis, Northern Sierra Nevada GIS; P.O. Box 4078; Truckee, California 96160-4078; telephone 916-587-5810; Internet lpurvis@sierra.net



Establish Washington State's Geospatial Metadata and Clearinghouse to Support the NSDI

The aim of the project is to coordinate the State's geospatial data and ensure compatibility with regional and National geospatial data and accessible through a state-wide clearinghouse. The project focuses on the gathering and electronic delivery of Washington State geospatial metadata as a pilot implementation of the Content Standards for Digital Geospatial Metadata. Efforts will be directed towards implementing the Content Standards for Digital Geospatial Metadata, and developing a state-wide data clearinghouse for geospatial metadata.

Avenue, Cambridge, Massachusetts 02139; telephone 617-253-7410; facsimile 617-253-3625; Internet jf@mit.edu

Collaborating Organizations:

Washington State Geographic Information Council; Department of Natural Resource; Department of Information Services; Central Washington University; Snohomish County

Principal Contact: Jeff Holm, Department of Information Services Geographic, Information Council, 1110 Jefferson Street, Olympia, Washington 98504; telephone 360-902-3447; facsimile 360-586-5885; Internet jeffh@dis.wa.gov



Tools to Facilitate Networked Access to Digital Orthophotos

Project efforts are directed towards development of the NGDC, by (a) creating a Clearinghouse node (at MassGIS) with Internet access (through WAIS and the WWW) to FGDC-compliant metadata on Digital Orthophoto Quads (DOQs) for the state of Massachusetts; (b) building a graphical user interface via the WWW to this collection of metadata, (c) building prototype tools for efficient, manageable WWW access to the DOQs themselves, and (d) publishing a tutorial explaining how to create similar nodes elsewhere on the Internet. This project develops and tests client/server strategies for browsing geospatial data repositories in ways that allow portions of stored data sets to be extracted, combined, and re-sampled to meet the user's location and resolution requirements. Massachusetts is currently acquiring half-meter resolution digital orthophotos for the State and has cooperative agreements with USGS to develop a version that meets DOQQ specifications.

Collaborating Organizations:

Massachusetts Institute of Technology; MA Executive Office of Environmental Affairs; EOE Data Center

Principal Contact: Joseph Ferreira, Jr., Massachusetts Institute of Technology, School of Architecture and Planning, Computer Resource Labs, Room 9-514, 105 Massachusetts



**An Educational and
Research Program in
Support of Content
Standards for Digital
Geospatial Metadata**

The National States Geographic Information Council's Educational and Research Program in Support of Content Standards for Digital Geospatial Metadata Project includes implementation of the FGDC's Metadata Standard on a variety of Federal, state, local and tribal data at (production environment) test sites located at nine state sites across the nation. This implementation effort is designed to test the standard for use, relevance, effectiveness, and issue identification. The second phase of the project will be the development of a Metadata Standard Primer that will include an overview of the standard, results of the implementation study and soft copy metadata templates. The final phase of the project will be a nationwide satellite downlink education program and video tape production on the Metadata Standard.

Collaborating Organizations: National States Geographic Information Council; FL Growth Management Data Network Coordinating Council and FL Dept of Environmental Protection; ID Dept of Water Resources; IL Department of Energy and Natural Resources; MN Land Management Information Center (LMIC); NJ Office of Information Resources Management and the NJ State Mapping Advisory Committee; UT Automated Geographic Reference Center; VT Center for Geographic Information, Inc.; WI Department of Natural Resources, WI State Cartographer, the WI Land Information Board, University of WI-Madison, and WY Board of Control

Principal Contact: Bruce Westcott, National States Geographic Information Council, 45 Lyme Road, Suite 304, Hanover, New Hampshire 03755-1223; telephone 603-643-1600; facsimile 603-643-1444; Internet nsgic@aol.com



NSDI eXplorer

The result of this project is a new software product, the NSDI eXplorer. NSDI eXplorer will provide synoptic views of the contents of the entire NSDI clearinghouse. It will enable visualizing and interactive exploration of metadata contained in an NSDI clearinghouse node. It will complement existing and anticipated capabilities of WWW tools such as Mosaic, Netscape, WAIS and spatial WAIS.

Collaborating Organizations:

Geographic Designs, Inc.; Southern California Edison; University of CA, Santa Barbara; City of Santa Barbara, California; State of California, Teale Data Center; J.W. Jones Ecological Research Center, Newton, Georgia; City of Mobile, Alabama; Franz Inc.; Psomas and Associates

Principal Contact: David Lanter, Geographic Designs Inc., 3738 Meru Lane, Santa Barbara, California 93105; telephone and fax 805-569-3084; Internet lanter@geodesigns.com



**GIS Metadata
Management System**

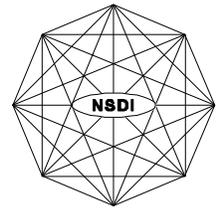
The Lower Colorado River Authority and its partners will jointly develop a GIS Metadata Management System that will manage the massive amounts of metadata that results from documenting data sets. The project deliverables will comprise a well-tested specification that can be transferred to any GIS site, including; an operational specification of the metadata standards contents (e.g. exactly how long is a lineage record); a logical data base design that can be implemented in any relational data base management system; specifications for a suite of tools to automate the use and management of the system, with a catalog of existing tools; an implementation handbook to aid in the use of the specification; and, a working implementation of the metadata management system using ARC/Info and Sybase under UNIX.

Collaborating Organizations: Lower Colorado River Authority; Texas Department of Parks and Wildlife; G.I.S. Planning Council c/o Texas Department of Information Resources; Texas A&M University

Principal Contact: Lee Smith, G.I.S. Department, Lower Colorado River Authority, P.O. Box 220, Mail Stop S215, Austin, Texas 78767-0220; telephone 512-473-3240; facsimile 512-473-3309

The 1996 Program

An explanation of the 1996 NSDI Competitive 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, and also will be available through the FGDC homepage at [URL:http://fgdc.er.usgs.gov](http://fgdc.er.usgs.gov).



National Spatial Data Infrastructure