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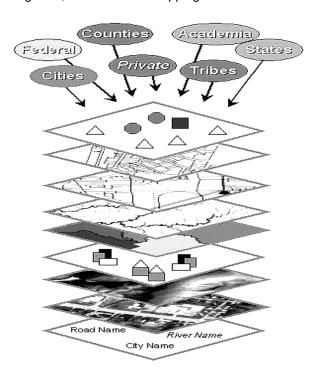
#### 2004 Summer Edition

## A Clear Vision of the NSDI

# The National Map, FGDC and GOS Working Together

Our nation has the unprecedented opportunity to implement a National Spatial Data Infrastructure (NSDI) -- a physical, organizational, and virtual network designed to enable the development and sharing of this nation's digital geographic information resources. The NSDI can serve as the steward for a national geographic information strategy that includes a distributed network of technology, crossorganizational partnerships, and the processes and standards needed to facilitate data sharing. It can also provide access to digital geospatial information that enables decision support at all levels of government.

The Federal Geographic Data Committee (FGDC), Geospatial One-Stop (GOS), and *The National Map* are three national geospatial initiatives that share the goal of building the NSDI. FGDC focuses on policy, standards, and advocacy; GOS focuses on discovery and access; and *The National Map* focuses on integrated, certified base mapping content.



## **FGDC Ties It Together**

FGDC has ongoing responsibility for coordinating geospatial activities. Its primary focus is on spatial data standards, policies, clearinghouse technology, education, and outreach. The FGDC has grown into a

19-member interagency committee comprising representatives from the Executive Office of the President,



Website: www.fgdc.gov

cabinet-level offices, and independent agencies. The committee also has involvement from 32 state geographic information councils and 9 nonfederal organizations representing broad sector interests. Since its inception, FGDC has worked to implement the six basic building blocks, or common elements, of the NSDI: metadata, clearinghouse, standards, framework, geospatial data, and partnerships. Each of these components serves as a cornerstone in establishing consistency and structure when it comes to documenting spatial data for everyday applications, as well as in building a distributed network of producers and users that facilitate data sharing.

# **Geospatial One-Stop: Portal for Discovery**

GOS is a Presidential Management Council initiative - one of the 24 e-government priorities that the Office of Management and Budget oversees. This initiative makes it easier, faster, and less expensive for all levels of government and citizens to access geospatial information. GOS brings high-level visibility to the importance of geospatial information. From a policy



perspective it raises the visibility of the strategic value of geographic information, increases federal accountability for geospatial data stewardship, and establishes a collaborative model for an intergovernmental initiative. The priority status of the initiative also brings a sense of urgency to implementation. From a program perspective, GOS

implements the basic elements of the NSDI by providing an Internet portal (www.geodata.gov) to facilitate data sharing in favor of decision support and by encouraging partnerships across organizations.

## The National Map Forms the Base

The National Map provides integrated base

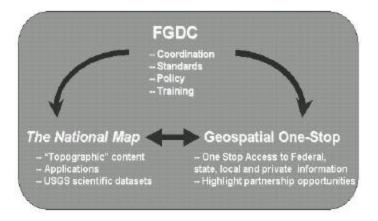


geographic data in partnership with content producers at all levels. As a synthesizer of current, integrated, and accurate geospatial

information, *The National Map* provides sufficient consistency to meet applications needs across federal, state, and regional jurisdictional levels. Users will find trusted content for base mapping operations, including orthoimagery (from Landsat and other high-resolution sensors), elevation, hydrography, boundaries, land cover, geographic names, transportation, and structures (buildings and select critical infrastructure). Users will also find they can share and contribute to all of this content.

### **Cross-Agency Initiatives**

GOS and *The National Map* will employ a shared technology for Web-based interactions so that a user can move seamlessly across the two platforms. GOS and *The National Map* will develop an integrated registration process for data providers. When providers share data with the federal government, they will be asked to register only once. The ability to harvest metadata directly from the clearinghouse nodes is an appealing way to simplify the registration process for both GOS and *The National Map*.



GOS will rely on *The National Map* as the underlying provider of base content for all other data discoverable through GOS. Although GOS has invested time developing framework content standards, the leadership for continued standards activities will move to FGDC. FGDC has pledged to revitalize its efforts in leading a broad range of standards activities. For its part, *The National Map* will support the standards efforts of FGDC.

The National Map, GOS, and FGDC have piloted in fiscal year 2004 an initiative to develop a single program announcement for the Cooperative Agreement Program with common requirements that can leverage available grant funds. The goal of this initiative is to ensure sustainable participation from other federal, State, and local organizations and to encourage partnerships. (See CAP article below.)

FGDC, GOS, and *The National Map* will spearhead the development of a broader community that is focused on building the NSDI. All three will work with federal, State, local, and tribal governments, the private sector, academia, and the public to keep programs on track and achieve the shared vision of a national spatial data infrastructure.

# **GOS News Highlights**

The Geospatial One-Stop Portal - **geodata.gov** - celebrated its one-year anniversary by exceeding the targeted 10,000 geospatial resources in the Catalog. Harvesting and partner agency diligence in posting records were the key factor for reaching this goal.

Harvesting went into production mode during this quarter. There are more than 30 NSDI nodes that are participating in routine scheduled harvests so that upto-date copies of agency metadata are included in the GOS Catalog.

"Channel Stewards" are new feature of the One-Stop Portal, who will seek out and highlight new ways to use geospatial tools and solicit contributions to the Portal. See the article below for more information.

Use of the Geospatial One-Stop Portal by government agencies at all levels has grown each month since its release in June 2003

Scott Cameron, Geospatial One-Stop's Managing Partner, testified before the Subcommittee on Technology, Information Policy, Intergovernmental Relations and the Census Oversight Hearing entitled "Geospatial Information: Are we headed in the right direction or are we lost?" on June 23, 2004. See reform.house.gov/TIPRC/Hearings/EventSingle.aspx? EventID=1150

For more information on GOS activities visit:

www.geo-one-stop.gov

## Geospatial One-Stop - State of Utah Spatial Data Sharing and Integration Project

Last month, Deputy Assistant Secretary of the Interior Scott Cameron added his signature on behalf of Geospatial One-Stop to a Memorandum of Understanding (MOU) with the State of Utah, providing an important vehicle for the cooperative creation and sharing of digital spatial data. Val Oveson, Chief Information Officer for the State of Utah and a member of the Geospatial One-Stop Board of Directors, characterized the addition of Geospatial One-Stop to the MOU as a great mechanism for the state of Utah to share information among its 29 counties and municipalities. Oveson urged all federal agencies to sign the MOU to make the most effective use of investment of geospatial information.

Scott Cameron, managing partner of the Geospatial One-Stop project, applauded the pioneering work of Utah in seeking to establish these data sharing partnerships among State and local agencies and with the federal government. Now that GOS has signed with the State of Utah, "that's one down and 49 to go," he announced!

Utah Governor Olene Walker and representatives from 11 federal agencies and three Utah State agencies originally signed the MOU on May 25 in Salt Lake City. Dennis Goreham – title, told the Geospatial One Stop Board meeting for the signing that this a follow up to a 1997 agreement that former Governor Mike Leavitt signed with 9 federal agencies. In the rural West, federal agencies and federal lands are the locals, he noted, and this MOU gives us an important way to work with them, share information and distribute the costs of creating valuable geospatial information.

#### AGENCIES SIGNING THE MOU INCLUDE:

- Bureau of Land Management
- U.S. Geological Survey
- U.S. Forest Service
- National Park Service
- U.S. Fish and Wildlife Service
- Natural Resources Conservation Service
- Environmental Protection Agency
- U.S. Census Bureau
- National Geodetic Survey
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation
- Utah State University Extension
- U.S. Department of Transportation
- Utah Association of Conservation Districts

# GOS Highlights North Carolina Partnership with USGS

In celebration of its first anniversary, Geospatial One-Stop also highlighted the pioneering work of the State of North Carolina in its partnership with USGS *The National Map* and local governments in North Carolina, North Carolina's *NC OneMap*. Zsolt Nagy, Coordination Program Manager of the Center for Geographic Information & Analysis, noted that *NC OneMap* is a partnership designed as a state version of Geospatial One-Stop and *The National Map*, a new vision for data coordination and distribution in North Carolina.



Users will be able to view geographic data seamlessly across North Carolina, search for and download data for use on their own GIS, view and query metadata, determine who has what data through an on-line data inventory, and more!

Diana Zinkl, representing North Carolina Governor Easley called *NC OneMap* a triumph of partnerships for the State. *NC OneMap* brings together state and local governments, as well as agencies with the State Government, getting people together, talking and planning for the future, which is one of its real strengths.

NC OneMap allows the State of North Carolina to (1) develop a common understanding of North Carolina data resources; (2) prepare an ongoing data inventory for all geospatial data holdings across North Carolina; (3) develop data content standards for key data themes along with cost projections for maintaining those themes; and (4) enable more widespread use of geospatial data through better access and distribution of the data. Visit NC OneMap at www.nconemap.com.

#### **GOS Channel Stewards**

A new team of volunteer "channel stewards" has taken on the challenge of seeking out and highlighting new and inventive ways to use geospatial tools and making them available through geodata.gov, the Geospatial One-Stop portal. These channels include 17 Data Categories plus some specialized channels featuring current events or specific areas of interest such as a City and County Channel.

Geodata.gov celebrates its one-year anniversary this summer and continues to expand the breadth and depth of information it offers to the geospatial community. The channel stewards add an exciting new component to geodata.gov with their focus on reaching out to the broad geospatial community within their specific category to find and then make available data, maps and geospatial services.

The City and County Channel currently features information from Westchester County. NY and the District of Columbia. County GIS staff in Westchester support GIS activities for both the county and cities within the county. Offerings from Westchester County include county legislative districts, environmental features such as hazardous waste sites and sewage treatment plants, zoning information, marinas, beaches, railroads and nurseries, facilities such as libraries, hospitals, fire stations, schools, theaters and post offices, and important historic sites. Having the information available through the portal allows the community, neighboring jurisdictions and the state to access, compare with other jurisdictions, and add other geospatial information available through geodata.gov to get the most from their geospatial investment.

In the District of Columbia, the city government shares information across agencies as part of an enterprise GIS approach that provides a one-stop centralized source that supports the Emergency Information Center for critical decision-making for public agencies and private institutions, essential to a city that is the seat of the Federal government. DC also plays hosts to millions of visitors for leisure and business purposes. The DC Guide, available through geodata.gov, offers visitors and residents with transportation, destination, public safety, services and recreation information.

The Local Government channel offers an opportunity for different organizations to share information about common facilities and data features. In addition, the "channel" acts as a "virtual clearinghouse" that helps leverage geospatial investments across government boundaries.

The US Census Bureau, US Department of Agriculture, National Oceanographic and Atmospheric Administration, US Geological Survey, Bureau of Land Management, Environmental Protection Agency, Department of Homeland Security, Centers for Disease Control, Bureau of Transportation Statistics, the Federal Communications Commission and Geospatial Solutions Magazine have all agreed to serve as channel stewards. If you want to contribute your information to geodata.gov, or explore opportunities for a specific channel, please contact us through the portal at geodata.gov or at Geospatial One-Stop, www.geo-one-stop.gov.

# Version 2 Portal Specifications Request for Comments (RFC) Announced

The functional specifications for Version 2 of the Geospatial One-Stop Portal are available for review and comment through August 15, 2004. Background, context, and details can be found in the RFC document available for download at: www.geo-one-stop.gov. Comments may be submitted in any of three ways (email being the preferred method): email: geodata@fgdc.gov; postal mail: GOS RFC, 590 National Center, 12201 Sunrise Valley Drive, Reston, VA 20192; or fax: 703-648-5755 ■

# **FGDC Invites Comment on Framework Data Standards**

The Federal Geographic Data Committee (FGDC) invites comments from all interested parties on the draft framework data standards developed through the Geospatial One-Stop e-Government initiative. The public review period will begin in July 2004 and will last 90 days. These standards establish common requirements to facilitate data exchange for seven themes of geospatial data fundamental to many different Geographic Information Systems (GIS) applications. The seven geospatial data themes are: geodetic control, elevation, orthoimagery, hydrography, transportation, cadastral, and governmental unit boundaries. For more information on participating in the review of the draft framework data standards, go to www.fgdc.gov.

The 19 federal agencies that make up the FGDC are developing the National Spatial Data Infrastructure (NSDI) in cooperation with organizations from State, local and tribal governments, the academic community, and the private sector. The NSDI encompasses the policies, standards, and procedures for organizations to cooperatively produce and share geographic data. More information on the FGDC and the NSDI is available at www.fgdc.gov. ■

# Gulf of Maine Framework Demonstration Project

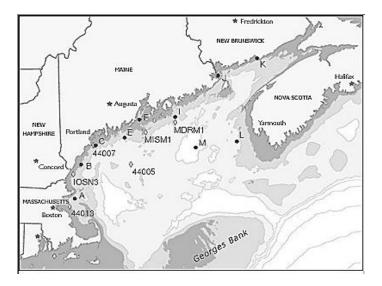
The FGDC and Canada's GeoConnections have collaborated on funding for four cross border projects. The most recent effort is the Gulf of Maine project. This is a joint U.S. and Canadian project to develop a common shared data resource within and across national borders. Early on the Gulf of Maine team developed these project objectives:

- Enable a Gulf of Maine spatial data infrastructure - a view into the NSDI and the Canadian Geospatial Data Infrastructure that focuses on the Gulf of Maine
- Build U.S.-Canadian relationships for geospatial data integration
- Enable effective integration of geospatial datasets across Canadian-U.S. borders
- Demonstrate an application using integrated spatial data
- Document issues and experience associated with integrating various partners' spatial data
- Make recommendations for addressing outstanding issues that cannot be resolved by this project

This project is lead in the U.S by the Gulf of Maine Ocean Observing System (GoMOOS) and in Canada by DM Solutions Group. FGDC and GeoConnections are the project sponsors. Other participants include: U.S. Geological Survey's Coastal and Marine Geology Program, Geological Survey of Canada, Me3, NOAA Coastal Services Center, Canada's Department of Fisheries and Oceans, NOAA's Northeast Fisheries Science Center, and Massachusetts Coastal Zone Management Program.

Large quantities of relevant spatial data exist in various formats at disparate locations in the U.S. and Canada surrounding the Gulf of Maine. This project accelerates efforts to bring several of these organizations together to collect and share spatial data across the region.

Activities include adopting specifications put forth by the Open GIS Consortium that at a minimum call for partners to implement the Web Map Service. These efforts are successfully demonstrated at the preliminary Gulf of Maine Framework data viewer. Below is an image from the Demonstration Web Site showing bathymetric data for the Gulf of Maine.



For more information on this unique project visit the project web site www.gomoos.org/fgdc/ and to see the demonstration web site click on the link *Preliminary Gulf of Maine Framework data viewer*.

#### More on Framework

The FGDC supports demonstration projects, hosts discussions of issues, and provides guidance for framework development. For more information about the framework activities, please visit the FGDC Web site at www.fgdc.gov or contact Milo Robinson, FGDC Framework Coordinator, 703-648-5162, mrobinson@fgdc.gov ■

# NSDI Future Directions Initiative – Towards A National Geospatial Strategy and Implementation Plan

The purpose of the National Spatial Data Infrastructure (NSDI) Future Directions Initiative was to craft a national geospatial strategy and implementation plan to further the development of the NSDI. Drawing on the collective insights and contributions of the geospatial community at-large, three overarching action areas emerged.

(1) Forging Partnerships with Purpose: Adopting a governance structure that includes representatives of all stakeholder groups guides the development of the NSDI.

A well-coordinated, concerted effort inclusive of the private sector, academia and all levels of government led by the Federal Geographic Data Committee (FGDC), is needed to leverage resources, minimize redundancies and solve problems to achieve the NSDI vision. A governance structure that fosters collaboration and shared responsibilities among stakeholders is crucial.

# (2) Making Framework Real: Implementing nationally coordinated programs that include collection, documentation, access, and utilization of data for generating framework data themes.

Standardization of framework themes is needed for interoperability among diverse geospatial data suppliers and users. The acceptance and utilization of American National Standards (ANSI) for framework data themes is the first step toward interoperability. Enabling framework layers to encompass more themes of national, regional, local or topical importance is an FGDC priority.

# (3) Communicating the Message: Ensuring that the NSDI is recognized across the nation as the primary mechanism for assuring access to reliable geospatial data.

The development of the business case, a strategic communications plan and training programs supporting NSDI implementation will facilitate the geospatial community in communicating the benefits and value of the NSDI.

# Towards a National Geospatial Strategy and Implementation Plan

The National Geospatial Strategy provides a context for action and guides the development of partnerships and core datasets to address the needs of the geospatial community. It is based on communication, cooperation, and partnerships and is designed as a catalyst for coordination with the power to transform attitudes, policies and services. The strategy recognizes the need of the geospatial community to communicate the value of the National Spatial Data Infrastructure (NSDI) beyond the current user and supplier communities.

The National Geospatial Strategy is the product of more than twelve months of consultation across the geospatial community. Its actions will have a significant impact on our business practices. It is ambitious because the geospatial community believes we cannot delay the work and investments needed to establish the spatial data infrastructure for this country.

As conceived, the *National Geospatial Strategy* requires a variety of organizations and individuals to become involved and share the responsibility for implementation. It emphasizes coordination of resources and appropriate technical services at all levels of government – federal, State, local, and tribal, as well as the academic community and the private sector. At the same time, the strategy focuses on achieving interoperability with a renewed effort to

comply with and adopt framework standards. The commitment of the partners to work together to achieve the goals and objectives is key to the success of the strategy.

Action Plans were developed that outline procedures for achieving each objective and will serve as a starting point for leaders and teams to address the issues. Working Groups, Action Teams and Task Forces will be chartered to address each of the thirteen objectives.

In summary, the foundation of the National Geospatial Strategy is identification of common critical issues, a collaborative and inclusive approach to addressing those issues, and a strong emphasis on internal and external communications.

For more information, please visit the website at: www.fgdc.gov/FutureDirections/
To participate on an action team please contact Milo Robinson at mrobinson@fgdc.gov

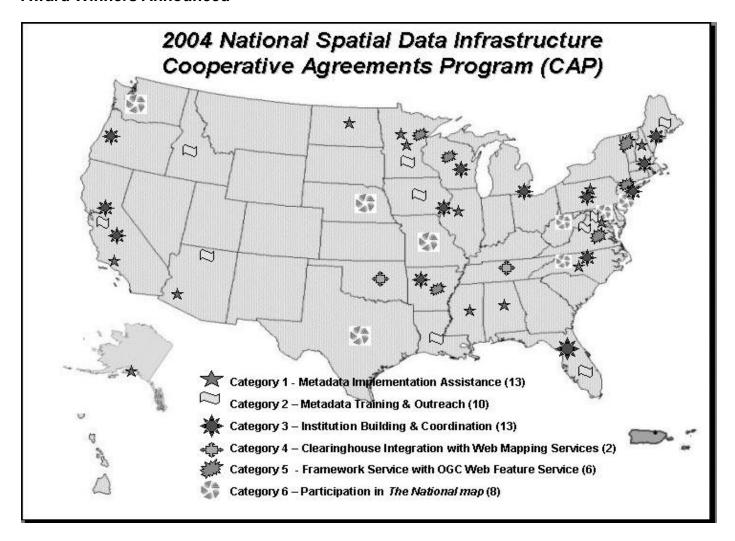
### The GSDI Moves Forward

The Global Spatial Data Infrastructure (GSDI) Association held its 7<sup>th</sup> Conference this past February, in Bangalore, India. Approximately 400 people, representing 35 countries, attended the Conference. It is rapidly becoming the major focal point for discussions of the development and integration of SDIs throughout the world. The theme of the Conference was "SDI for a Sustainable Future". The next Conference, GSDI 8, will be held in Cairo, Egypt, in conjunction with the International Federation of Surveyors (FIG) Working Week, in April 2005.

The GSDI Association emerged as a formal organization in 2004. The Association began accepting applications for membership late in 2003, and held its first formal board elections at the conference in Bangalore. The GSDI now has nearly fifty full, associate, and individual members, and continues to grow rapidly. The Association can now maintain a formal treasury to support a variety of projects. One of those projects is the GSDI small grant program. This year, between 10 and 15 grants will be awarded. More than 60 applications were submitted from all regions of the world.

More information on the GSDI Association can be obtained from the website at www.gsdiassociation.org ■

# 2004 Cooperative Agreements Program – Award Winners Announced



Fifty local, State, Federal, academic, and regional organizations were awarded funding totaling \$1,500,000 under the 2004 NSDI Cooperative Agreements Program.

This year's CAP is a new approach being jointly sponsored by the FGDC, Geospatial One-Stop and *The National Map*. These three programs are national geospatial programs with Federal leadership, that share the common goal of building the NSDI. The new approach incorporates common requirements that leverage available grant funds. The objective is to develop a model incentives program that will encourage other federal programs to participate in upcoming years to take advantage of partnerships, leverage resources and provide a more efficient process for applicants.

### 2005 NSDI CAP Program

Watch the FGDC website for the 2005 CAP announcement planned for late fall 2004. The application package and submission will be accessible on-line through a link at the FGDC website or by visiting the grants.gov website and by searching on "NSDI".

This year's CAP is providing funding assistance assistance to projects:

- beginning metadata implementation
- assisting others in metadata training, service and outreach
- "bringing people together" in institutional development and collaboration
- implementing OpenGIS web mapping service
- serving framework data over the web using the OpenGIS Web Feature Service specification
- participating in The National Map

See the 2004 CAP fact sheet for a listing of organizations awarded under this year's Program. For more information on the CAP program visit the FGDC web site.

#### To Contact the FGDC

Subscriptions to the newsletter are free. Correspondence may be directed to the staff:

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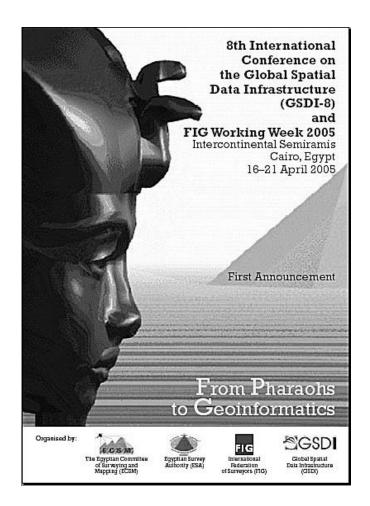
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## **Upcoming Conferences**

#### 2004

September	12-16	NSGIC	Austin, TX
September	26-29	Spatial Tech 2004	Orlando, FL
October	6-8	GIS in the Rockies	Denver, CO
November	6-10	URISA Annual Conference	Reno, NV

#### 2005

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March	7-10	Coastal GeoTools ACSM Annual Conference GSDI 8 Conference	Myrtle Beach, SC
March	19-23		Las Vegas, NV
April	16-25		Cairo, Egypt
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