

# Federal Geographic Data Committee Newsletter

## 2005 Summer Edition



It was strategic: the USGS director Chip Groat recognized that government had changed; and so had customer needs. The decision to create a U.S. Geological Survey (USGS) National Geospatial Programs Office (NGPO) put special emphasis on the value of geospatial technology in addressing issues governments face, but it also provided the backdrop for significant discussions on how the USGS might better facilitate the work of government partners and the private sector for data integration, synthesis, and the speedy delivery of geospatial products. Based on the needs of its customers, the Director Groat made a strategic internal organizational change; one with external impact \_ to provide better access to current and future USGS information, and how available resources can be leveraged for the good of the geospatial community.

**GIS for the Nation: A System of Systems**  
In August 2004, The Federal Geographic Data Committee (FGDC), the Geospatial One-Stop (GOS), ([www.geodata.gov](http://www.geodata.gov)) project, *The National Map* (TNM), ([nationalmap.usgs.gov](http://nationalmap.usgs.gov)), and the National Atlas ([nationalatlas.gov](http://nationalatlas.gov)), were realigned under the single program office, the National Geospatial Programs Office (NGPO), to simplify and unify USGS national geospatial programs, manage the NGPO as a single portfolio; and help advance the National Spatial Data Infrastructure through a network of systems. Under the leadership of the NGPO, the combined program seeks to provide the foundations and tools for a more customer-oriented approach to finding, developing and delivering current and accurate geospatial data.

NGPO program contributes to the NSDI community through:

**The National Map:** by providing the foundation for compiling geospatial information with reliable integrated base geographic content, available across the Nation.

**Federal Geographic Data Committee (FGDC):** by coordination of policy and standards; a national network of GIS organizations, expertise, and best practices.

**Geospatial One-Stop (GOS):** by providing information, discovery, and access; a one-stop resource for finding and accessing geographic information across the Nation.

**The National Atlas:** by providing map products and teaching tools.

The NGPO sought new ways to serve the community, which meant having to engage customers, partners and stakeholders to identify efficiencies, deficiencies, needs, and the desires of those on the landscape seeking geospatial information. Last year, NGPO held a series of listening sessions to hear from our partners, customers and stakeholders. Here's what we heard:

'Customers stressed the need for an overall information infrastructure to handle the increasing amounts and increasing complexity of the data sets and information available, as well as the need for integration, interoperability, standards, metadata, etc.'

Our customers stressed:

- Additional energy and resources need to be devoted to transferring and translating USGS information to the users;
- The importance of getting information into the hands of those who need it;
- Cooperation, partnerships, and outsourcing are necessary components deal with the wealth of data available and its management;
- The USGS cannot do it alone;
- The private sector, and trade and professional societies can provide value-added services;
- The USGS should work to eliminate perceptions of competition with the private sector and focus on its inherently governmental role;
- The private-sector's value-added role to enhance USGS efforts should be explored; and
- Non-governmental organizations, trade

associations, and professional societies should be investigated as ways to establish partnerships and cooperative ventures.

Guided by the comments from the listening sessions, the NGPO leadership developed a new mission, vision and purpose.

### **Vision**

By June 30, 2006, transform the information and management processes of government necessary to implement key components of the NSDI.

### **Mission**

The mission of the NGPO is twofold: one mission component focuses on leadership and the prominent role of partners and stakeholders; the other focuses on the operational aspects and technical services needed to implement the NSDI.

### **Providing leadership and guidance for key stakeholders to:**

- Develop policy
- Provide incentives to potential partners
- Develop key standards and data models
- Coordinate and facilitate the governance structure for the NSDI
- Negotiate collaborative agreements with partners
- Develop a national geospatial enterprise architecture
- Provide a forum for technology transfer, best practices, and program guidance

### **Implementing key components of the NSDI:**

- Host spatial datasets, web sites, knowledge base, and tools for discovery and access
- Provide data integration and quality assurance of spatial data
- Staff enterprise architecture, governance body, and spatial operations
- Conduct and sponsor research for geospatial information science
- Provide contract management for operations
- Conduct training, education, and consultation
- Adopt a posture of being the data producer of last resort
- Make map products accessible

It's a hefty charge that the NGPO has undertaken, and the leadership has defined three significant transformations necessary to fulfill the vision of the NSDI.

The first transformation is an enterprise information system for the Nation's geospatial assets. Geographic Information Systems are developing at all levels of government. When employed individually, the result can be duplicate data development and redundant investments. Wasted efforts can be minimized through partnerships and data sharing.

The second transformation requires an evaluation of existing business lines and the consideration of new ones, as for example:

- Providing services for citizens such as water resource management and disaster preparedness;
- Planning how government services are delivered to citizens;
- Disseminating knowledge; and
- Managing large databases

The third transformation is a movement toward management excellence. The President's Management Agenda calls for a performance-based approach and improved accountability when spending Federal dollars. In the NGPO report, "*A Plan for Action*" ([www.usgs.gov/ngpo](http://www.usgs.gov/ngpo)), best practices of the information technology community will ensure that life-cycle management guides project planning. For example, in acquiring and investing in new systems or capacity, commercial off-the-shelf software will be the norm, not the exception. Investments will be judged in light of the National Geospatial Enterprise Architecture.

### **The Future of the NGPO**

One of USGS' most recent decisions was to create "The National Geospatial Technical Operations Center (NGTOC)", a consolidated center of expertise that provides our customers with a single-location to turn to for their geospatial needs. Plans for the Center are still under development.

The GOS project, begun several years ago as one of OMB's E-government initiatives, helps facilitate the collection and sharing of geographic or spatial data among Federal, State and local governments. Through the [www.geodata.gov](http://www.geodata.gov) portal, Federal, State and local governments can access, share and combine information from multiple sources. Maps can be generated from information created by the Federal government, States, and local or private sectors, and shared with decision-makers in different locations. Before beginning a project, the user can get a sense of what is already available. When Version 2 of [www.geodata.gov](http://www.geodata.gov) comes on-line later this Spring, over 300,000 geospatial records will be available.

One of GOS innovations is its Intergovernmental Board of Directors, representing State, local and Tribal organizations. In recent months, the Board was instrumental in developing recommendations for the award of Version 2 of the portal. Since its inception, the Board has played a role in the development of policies that encourage coordination, collaboration and partnerships in the ability to find and share information. GOS other important innovation, the Geospatial Marketplace, allows prospective purchasers of geospatial information to discover whether others intend to invest in the same geographic area and establish partnerships. These partnerships leverage scarce resources and encourage collaborative efforts.

NGPO's other major geospatial program, *The National Map*, will continue to work collaboratively with partners to provide the Nation with access to current, accurate, and nationally consistent geospatial data content and derived graphic products. As a network of online databases that provide a seamless, continuously maintained data framework for the Nation, the *National Map* serves as the foundation for the integration, sharing, and use of other data through the GOS portal.

Under the stewardship of the USGS, and through partnerships with State, local, and tribal governments, other Federal agencies, and private industry, *The National Map* makes available digital orthorectified images of the earth's surface, surface elevation and bathymetric data, vector feature data for hydrography, transportation, boundaries, and structures, geographic names of physical and cultural features and land cover data.

The NGPO challenge is to leverage the existing USGS geospatial resources into a more unified and collaborative leadership effort in developing a national information system. Through programs such as the USGS State liaison network, *National Map* pilot projects, the Cooperative Assistance Program (CAP) grants

sponsored for many years by FGDC and FGDC's education and training programs, NGPO will continue to encourage partnerships and collaboration as stewards of a national geospatial program.



All of the activities of the NGPO are dependent on partnership and collaboration. Recent co-sponsorship of partnership initiatives includes the "Amber and All Hazard Alerts" consortium, to bring citizens up-to-date communications and information on emergency situations; an interagency agreement with the U.S. Forest Service (USFS) to maintain the USGS topographic maps

over USFS lands, which represent about 20 percent of the Nation; and, a partnership with the State of Texas that has resulted in their updating all 4,400 of the USGS topographic maps of the State.

NGPO seeks to put its geospatial assets and resources to productive use and support our partners in using geospatial information to serve their needs. We encourage you to work with us as we seek to provide the geospatial tools and programs that help address the issues governments face. Through *The National Map*, GOS, the FGDC, and the National Atlas, NGPO facilitates data integration, partnerships for data investment and maintenance, and the speedy delivery of geospatial products to meet local government needs. You can participate by:

- Sharing your data through the GOS portal ([www.geodata.gov](http://www.geodata.gov))
- Applying for a NSDI Cooperative Agreements Program (CAP) grant that promotes organizational support for collaboration and coordination, contributes to *The National Map*, or provides training on metadata
- Joining a committee or organization to get involved in Federal, State or local policy or by sharing experiences with your colleagues. National Association of Counties (NACo) and Public Technologies Inc (PTI) have GIS committees, URISA, GITA and National States

- Geographic Information Council (NSGIC) focus on GIS, International City/County Management Association (ICMA) and National League of Cities (NLC) have many technology related initiatives,
- Contacting the USGS State liaison in your community or the State GIS coordinator to explore ongoing opportunities in your state
- Contribute an example of a geospatial success story.



## Version 2 GOS Portal

### Enhancement Under Development

In January 2005, the Geospatial One-Stop project awarded ESRI of Redlands, CA a contract to develop Version 2 of the www.geodata.gov Portal. This portal is an online tool for combining and making available geospatial data and resources from Federal, State, local and private sources. Full value of the contract is \$2,386,370 over five years. Deployment of the portal is expected this summer. Team members and portal components include:

- ESRI \_ Spatial
- Google \_ Search Engine
- IBM \_ Portal
- Safe Software \_ Interoperability and Standards
- Image Matters \_ Interoperability and Standards
- Northrop Grumman \_ Interoperability and Standards
- SNVC \_ Security, Certification & Accreditation
- Dataline \_ Portlets
- UC San Diego Supercomputer Center - Usability Portlets

Version 1 of www.geodata.gov was launched June 2003. Due to the accelerated development and delivery to launch the initial implementation of the Portal to meet an OMB deadline, GOS began a competitive procurement on Version 2 soon after Version 1 was launched. Version 2 builds on the Version 1 experience with enhancements and incorporating Open Geospatial Consortium (OGC) specifications.

New functions of www.geodata.gov Version 2 include:

- Improve GIS novice and first-time user experience - "Just Google it"

- True Java Specification Request (JSR) portlet user interface
- Portlet implementation so GOS Catalog search can be included in others' portal applications
- Greater OGC interoperability
- True Web Feature Service (WFS) support
- 5-second or faster response to queries
- Web-based channel management tool

GOS is an intergovernmental project managed by the Department of the Interior in support of the President's Initiative for E-government. GOS works with other Federal geospatial programs and initiatives to improve the ability of the public and government to use geospatial information to support the business of government and facilitate partnerships and decision-making.

In conjunction with the NGPO of the USGS and its partner agencies, GOS helps improve access to geospatial information and provides advanced information on future investments in geospatial resources to provide opportunities for collaboration, intergovernmental partnerships and reduce needless duplication of data investment. The current Version 1 Portal provides access to over 75,000 geospatial resources with a goal of expanding the number of future partnership opportunities provided by Federal agencies and increasing usage by government agencies.



## URISA Welcomed as an FGDC Partner

The Urban and Regional Information Systems Association (URISA) was recently accepted as a stakeholder on the Steering Committee of the FGDC.

"We welcome URISA in this national effort to improve coordination of geospatial data and information," said J. Steven Griles, Deputy Secretary of the FGDC steering committee, "Coordination and effective partnerships are key to the development of the NSDI and the sharing of geospatial information. URISA's unique role as the premier professional association for those involved in geospatial technology in urban and regional

environments enhances the work of the FGDC as a coordinating body and adds a critical local voice to FGDC's partnership efforts."

URISA represents nearly 8,000 urban and regional professionals using information technology to improve their communities. Urban areas, State and local governments need accurate data to provide public services and emergency response. URISA, through its professional membership and their activities, supports development of local and regional data access points, which provides a greater opportunity for smaller local governments to network and become data providers in the NSDI. Without that regional support and coordination their participation may otherwise be too costly.

The Urban and Regional Information Systems Association is a non-profit association of professionals using GIS and other information technologies to solve challenges in all state/provincial and local government agencies and departments. URISA promotes the effective and ethical use of spatial information and information technologies for the understanding and management of urban and regional systems.

#### **URISA to Lead Address Standard Development**

Street Addresses are critical for administrative, emergency response, research, marketing, mapping, geospatial information systems, routing and navigation, and for law enforcement and first-responders in time of crises. For the past six years, URISA has sponsored and organized the annual Street Smart and Address Savvy Conference (endorsed last year by the National Emergency Number Association (NENA), the U.S. Postal Service (USPS), and the U.S. Census Bureau), covering a broad spectrum of addressing issues and practices. The objective of this effort is to create data content, classification, transfer, and quality standards for street addresses. This work will be done under the auspices of the FGDC Subcommittee on Cultural and Demographic Data. For more information, visit the URISA web site at [www.urisa.org](http://www.urisa.org).

#### **URISA Task Force Report**

URISA's National Geographic Information Cooperation, Coordination, Collaboration Task Force (3CTF) created in 2002, has released a report focused on raising the awareness of issues relating to the realization of the NSDI. Recommended future activities include: identifying model regional cooperatives and best practices in the areas of finance, access, standards, and roles; support of concept development of NSDI Implementation compatible with other on-going initiatives; and organizing a summit for the geospatial community for addressing

and refocusing on issues. The task group will seek endorsement by other groups and organizations. The report can be found at the FGDC homepage.

## **NSDI Standards**

### **Framework Data Standards Update**

The FGDC conducted a public review of framework data standards between July 30, 2004, and November 15, 2004. These standards cover seven data themes – cadastral, digital orthoimagery, elevation, geodetic control, governmental unit boundaries, hydrography, and transportation – that are needed by many critical geographic applications. Framework data standards were initially developed through the GOS E-government initiative, but responsibility for further development was transferred to the FGDC.

Framework data standards will have a positive impact on the overall GIS community by promoting data exchange through common means of describing data content. The standards are expected to decrease the costs of acquiring and exchanging Framework data among creators and users in Federal, State, local, and other governmental agencies, the private sector, and the academic community. The private sector (software developers and vendors) will benefit through development and marketing of software tools that exploit data based on these data content standards.

The FGDC estimates that the notice of public review reached 40,000 to 100,000 professionals across all segments of the geographic information community through both online and print publications, Email lists, and the like. Nearly 5,000 comments on Framework data standards were returned to the FGDC through public review. Currently, editing committees are adjudicating comments and revising standards on the basis of the editing committees actions. The revised draft standards will be submitted for further processing for approval by the American National Standards Institute (ANSI).

### **From the FGDC Staff Director, Ivan DeLoatch**

Dear Colleague:

I want to take this opportunity to thank all of the federal data stewards and over 100 other volunteers that have committed countless hours of their time to the development of seven Framework Data Standards. Currently, seventy representatives on 13 editing committees are making revisions to the Framework Data Standards based on comments received through public

review; the revised standards will then be submitted to ANSI for approval. This monumental effort could not have taken place without all these people and partnerships. The 2005 CAP awards will provide financial incentives to those that would like to help implement standards and develop more new data standards. Thank you again to all those that helped make these standards a reality.

Change is inherent to the field of geospatial data, and as you will see from the articles in this edition of the FGDC newsletter, the FGDC is working with our partners across the community to implement specific changes that will move us all closer to our common goal of the National Spatial Data Infrastructure (NSDI). The FGDC Future Directions activities and the creation of the National Geospatial Program Office are both important steps in addressing organizational change and a revitalization of the NSDI. For example, over the past year, I and other staff members, have worked with colleagues from around the world on the development of a 10-year implementation plan for GEOSS (Global Earth Observation System of Systems) to extend NSDI concepts and support on a global scale. The recent tsunami and other trans-border activities make this a critical endeavor to us all.

## Metadata Standard - ISO Preliminary Draft Technical Specification 19139 in Final Stages

In December 2004, the Editing Committee (EC) for ISO 19139, Geographic Information - Metadata, met in Vienna, Virginia to adjudicate the Preliminary Draft Technical Specification (PDTs) public comments received between June 30, 2004 and September 30, 2004. ISO 19139 is the XML implementation model for ISO 19115 Geographic Information Metadata standard, which was adopted as a U.S. national profile by the American National Standards Institute in December 2003. ISO 19115, an abstract standard, specifies general content for the metadata, but does not specify the format for the metadata record. Entity and attributes, a key informational section, was not covered by ISO 19115 and as a result ISO 19139.

The EC determined the Committee lacked the authority to add content to ISO 19139 since 19139 is the implementation of ISO 19115, an adopted standard. The EC plans to submit a new work item proposal (NWIP) to ISO TC 211 which presents a solution for Entity and Attributes schema derived from comments and through consultation from the commenting parties participating in last fall's public comment period. ISO Technical Committee 211- Geographic Information/Geomatics

will determine how to proceed with the NWIP. The EC submitted ISO/DTS 19139 in March 2005 for inclusion on ISO TC 211's 20th plenary meeting scheduled for June 2005.

The FGDC represents the U.S. geospatial data community to develop a U.S. National Profile which extends ISO 19139 content to meet U.S. data needs. One should remember, the U.S. National Profile is a base content profile and does not address the content found in FGDC Biological Data Profile or Shoreline extension. U.S. National Profile extensions should be addressed by the thematic communities. The FGDC plans to develop a workbook and graphic depiction of the U.S. National Profile.



## FSGeodata Clearinghouse

The U.S. Department of Agriculture Forest Service Clearinghouse (FSGeodata) is a web-based resource designed to distribute the agency's extensive geospatial data holdings. Forest Service employees, other Federal, State and local agencies, Tribal governments, and the public can use the site to search, view, and download geospatial data such as roads, trails, national forest boundaries, hydrography, and softcopy topographic maps. Metadata, which describes how the geospatial data was prepared, is also available through the web site. Currently the Clearinghouse provides access to the base cartographic information used to publish the USFS and USGS Single Edition Quadrangle (SEQ) maps. FSGeodata will expand to include other sources of data as they come available. The internet address for the FSGeodata site is [fsgeodata.fs.fed.us](http://fsgeodata.fs.fed.us).

The FSGeodata Clearinghouse is linked to the FGDC ([www.fgdc.gov](http://www.fgdc.gov)) and

GOS ([www.geodata.gov](http://www.geodata.gov)) as the Agency's official geospatial data distribution site. In doing so, the Forest Service is fulfilling its commitment to comply with Executive Order 12906 (Coordinating Geographic Data Acquisition and Access) for online geospatial data and metadata distribution.

Although the FSGeodata web site provides the capability to interactively view geospatial data, it is not designed to be a web mapping application with complete symbology. However, it does provide agency geospatial data links to web mapping applications such as the USGS National Map ([www.nationalmap.usgs.gov](http://www.nationalmap.usgs.gov)). FSGeodata also provides a web portal for other future USFS mapping applications.

FSGeodata is sponsored and directed by the Geospatial Executive Board (GEB) and Geospatial Advisory Committee (GAC). The web site was developed by and is maintained jointly by the Geospatial Service and Technology Center (GSTC) and the Remote Sensing Applications Center (RSAC).

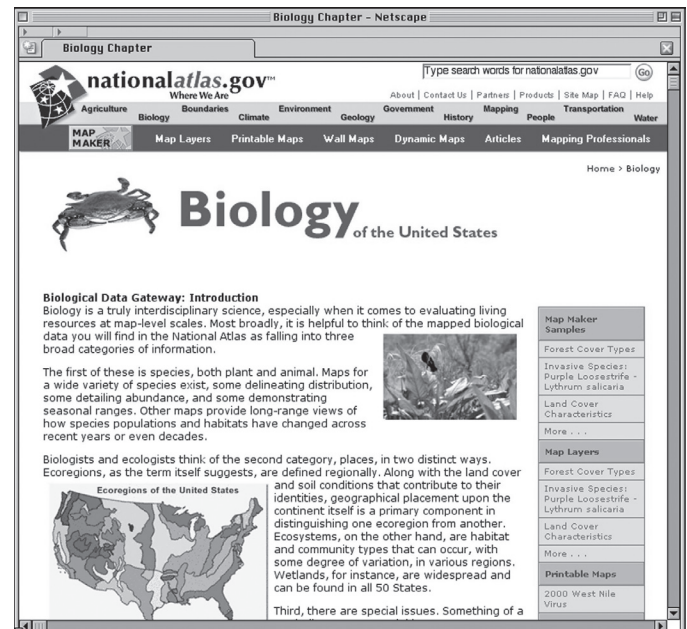
## The National Atlas

The National Atlas of the United States® was the first Federal online interactive mapping system and the first to offer Open Geospatial Consortium (OGC) compliant Web Mapping Services (WMS). Now in its eighth year, [nationalatlas.gov](http://nationalatlas.gov)™ has released a new edition of the Atlas that makes it easier than ever for citizens to find, get, and use geographic information.

It is an important distinction that most National Atlas products and services are expressly designed for use by individual Americans. A great deal of effort by more than 20 Federal organizations has gone into determining the desires of the American public for geographic information and maps. Information gleaned from continuous customer assessment activities is used to develop responsive, useful products and services. These include:

- a Map Maker that draws a new map at public request every 3 seconds,
- informative articles that explain why the Federal government collects geospatial information, how it's used, and what difference this use makes,
- dynamic maps that illustrate change
- traditional wall maps that are attractive and accurate, and
- page-size maps for downloading and printing that are in high demand.

But the National Atlas has never ignored the needs of professional users of geospatial information. Since its inception, the Atlas has offered integrated and documented small-scale data that are reliable and authoritative, and has maintained its own node on the NSDI Clearinghouse. There are well over 100 data sets that can be used to generate more than 2,000 individual maps. All of these are offered for download at no cost in industry- and government-standard file formats, including Shapefile, Spatial Data Transfer Standard, GeoTiff, and DBF depending on data format. In support of the Global Spatial Data Infrastructure, the program has begun producing integrated small-scale frameworks of North America in



partnership with the National Institute of Statistics and Geography in Mexico, and the Atlas of Canada.

More than 900,000 National Atlas data files have been downloaded. Significantly, National Atlas data cannot be downloaded without receiving its accompanying documentation that is fully compliant with the Content Standard for Digital Geospatial Metadata (the FGDC Metadata Standard). These metadata are also online for perusal at [nationalatlas.gov](http://nationalatlas.gov)™, in HTML, ASCII, DIF, and XML formats.

For those geographic information professionals who prefer to connect directly to National Atlas maps with their own clients, OGC-compliant WMS are also available. All of these can be accessed directly at [nationalatlas.gov](http://nationalatlas.gov)™. Importantly, a growing list of Atlas WMS can also be found through the GOS, *The National Map* catalog, and the Geography Network.

By making data, metadata, and WMS available to thousands of mapping professionals, the National Atlas fosters an infrastructure that supports varied information needs while promoting geographic awareness and understanding. In support of the Global Spatial Data Infrastructure, the program has begun producing integrated small-scale frameworks of North America in partnership with the National Institute of Statistic and Geography in Mexico, and the Atlas of Canada.

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## Future Directions Initiative Update

In June 2004, The Steering Committee of the FGDC agreed to move forward on three broad goals of the Future Directions Initiative:

- **Partnerships with Purpose**
- **Communicating the Message**
- **Making Framework Real**

Under each goal action items were identified and action teams were formed to address them. A web page was established to provide information on the initiative at: [www.fgdc.gov/FutureDirections](http://www.fgdc.gov/FutureDirections).

### Partnerships with Purpose

The **Governance Action Team** recently completed an extensive research and outreach effort to investigate and recommend governance options for the development of the NSDI. Their report is posted on the web page for public review. The **Tribal Action Team** is institutionalizing its Tribal Framework, Operations and Mitigation courses while continuing to strengthen its partnership with DHS/FEMA. In partnership with the USFWS, the Tribal team has institutionalized courses on GIS for Conservation Professionals and GIS/GPS for Field Managers. The team is also coordinating with USDA/USFS to establish courses at its training center in Utah. The **Fifty States Initiative Action Plan** was reviewed and accepted by the FGDC Coordination Group and approved by the NSGIC Board of Directors. It was presented and promoted at a number of professional conferences and meetings. A newsletter describing the initiative was widely circulated within the geospatial community in February and March. The initiative, included as part of the Governance Team's recommendations, is ready for implementation and a

proposal for initial funding has been submitted. The **Non-Geospatial Organizations Action Team** has proposed an outreach strategy to engage non-geospatial organizations. This action plan is posted on the Future Directions Web site. The "best practice" strategy is included in the report and action plan which has been accepted by the members of the FGDC Coordination Group.

### Communicating the Message

The **Business Case Action Team** reviewed the literature and case studies that illustrate the value of collaborative development and access to geospatial information and services. Selection of the three best candidates illustrating the facets of the NSDI and consideration of the Geospatial Information & Technology Association (GITA) survey instrument are identified next steps. Some aspects of the **Strategic Communications Action Plan**, accepted by the FGDC Coordination Group at its January meeting, will also be incorporated into the NGPO communications efforts. The FGDC Federal partners will continue to promote the significance and value of geospatial information and the NSDI. Primary targeted audiences for the first phase of the plan focus on FGDC member agencies and FGDC partners. Efforts to reach Tribal, local and state governments and non-geospatial organizations will be implemented by coordinating and supporting efforts with the Tribal, Fifty States, and Non-Geospatial Action Teams. The **Training and Education Team** is striving to aid the implementation of FGDC programs (Metadata, Framework and Clearinghouse/Portal) through training and education initiatives and outreach. Its continuing efforts include presentations and discussions at industry conferences, engagement of the academic community to develop implementation strategies for framework base and hydrographic standards, and delivery of the "Train the Trainer Workshop" in April 2005. Metadata training materials and resources, including a guide recommending core curriculum, are currently available on the FGDC metadata web site.

### Making Framework Real

The Future Directions Initiative emphasizes a renewed focus on implementation of framework standards and the identification of the next generation of standards. The **Standards Working Group** is accelerating the work on current framework data themes. All editing committees have adjudicated the nearly 5,000 comments by April, 2005, and theme leads are currently refining drafts. Concurrently, the **Future Data Themes Team** is researching and identifying potential data themes for future standards development. It has conducted, and will continue to facilitate outreach efforts to identify potential data themes. A Shoreline Data Content Standard is



already in development and a proposal for the Address Data Standard has been submitted by URISA. The **Publishing Metadata Team** distributed the Member Agency Profile to FGDC member agencies to determine the status of Agency metadata implementation and to identify key agency metadata contacts. There was a 70 percent return rate on the profile. Additional follow-up is being conducted with those agencies that have not responded in order to complete the profile and integrate its results into the next FGDC Annual Report. The members of the **Implementing Standards and Web Protocols Team** are developing guidance materials for implementing open interfaces for accessing NSDI Framework data. Their work has included explorations of the link between the Geospatial Interoperability Reference Model (GIRM) and Federal Enterprise Architecture (FEA) elements and a services-based view of NSDI and Framework. The **Urban Areas Team** has developed its team charter and work plan as it continues its task. The team held an Urban Regional Geospatial Data Framework Workshop on May 3, 2005, in Washington, D.C.

Further information about the teams can be found on the FGDC web site ([www.fgdc.gov/FutureDirections](http://www.fgdc.gov/FutureDirections)). If you have comments about Future Directions Activities or wish to participate on one of the teams please contact Milo Robinson at [mrobinson@fgdc.gov](mailto:mrobinson@fgdc.gov).

## FGDC Secretariat

### Geospatial Enterprise Architecture Initiative

Enterprise Architecture (EA) is the means of documenting the business practices, services, data, and technology used to address mission requirements in an organization. The Federal Enterprise Architecture (FEA) is a framework by which agencies document and classify their IT investments in support of their business functions. As the FEA and EA practices mature, the need has arisen to consistently identify geospatial capabilities across the various agencies. As a result, common data, services, and requirements for interoperability can be identified to facilitate the fluid exchange and use of geospatial information and associated software applications across all levels of government.

A geospatial profile of the FEA is being created as guidance to agencies in the development of their programs and their FEA documentation to assure inclusion of relevant practices, standards, and content that will enable better geospatial interoperability and

collaboration within and among government agencies. An ad hoc working group, functioning under the auspices of the FGDC and the Federal CIO Council, will be working over the course of the summer to deliver the first version of this guidance and supporting documents. Four face-to-face meetings have already been held in the DC area with Federal, State, local, and industry representatives interested in building a common view of geospatial capabilities within their enterprises. Services and applications using information content identified through this EA process will be highlighted later this year in interoperability demonstrations.

For more information on this activity, contact Doug Nebert ([ddnebert@fgdc.gov](mailto:ddnebert@fgdc.gov)).

### Federal Geospatial Grants Workshop Initiative

Many Federal grant announcements contain some element of the geospatial. This involvement maybe described as geospatial, GIS, mapping, surveying, cartography, or geography, etc. Many grant projects do, or may involve geospatial activities in their conduct without being specified in the grant announcement. In addition, these grant projects vary greatly in the degree that geography plays a part. Different grant managers within the same agency are not familiar with the goals or specifics of other grant programs.

As part of the bigger picture, securing grants have become easier with [www.Grants.gov](http://www.Grants.gov), a web page that directs organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies. [www.grants.gov](http://www.grants.gov) is the single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. The Office Management and Budget (OMB) and the Government Accounting Office (GAO) are promoting the alignment and simplification of the grant language and application process.

FGDC sponsored a forum in June 2005, that brought together Federal grant program managers and administrators as well as non-federal grantees and participants to exchange information on agency grant programs and discover opportunities for improving their effectiveness, efficiency and mutual benefits.

For more information on initiative outcomes see the report under the FGDC "Latest News."

## **FGDC Secretariat Leslie Armstrong, New Deputy Director**

Leslie began as the new Deputy Staff Director for the FGDC Secretariat in October 2004. Leslie has over twenty years of technical and managerial experience in the geospatial arena. Leslie began her career with the Defense Mapping Agency where she served for nine years as a Cartographer and the Latin American Mapping Liaison. In 1991 she began working for the National Park Service, where she served as the Deputy Associate for Natural Resources in Washington D.C., and more recently, had been serving as the Chief of the Geographic Information Systems Division at the National Information Systems Center in Denver Colorado. Leslie has had numerous accomplishments in managing program and technical support operations with liaison responsibilities. She has also been successful in developing geospatial data collection, exchange, and training programs. She recently authored and co-edited a book, *Mapping the Future of America's National Parks, Stewardship through GIS*.

## **Global Spatial Data Infrastructure Conference held in Cairo**

"Spatial Data in an Information Society" was a primary theme of the 8th Global Spatial Data Infrastructure (GSDI) Conference held 16-21 April 2005, in Cairo, Egypt. The conference attracted over 900 registrants from 88 different countries. Scientists, engineers, GIS and GPS specialists, land administrators and surveying practitioners participated in 51 technical sessions, several workshops, and five plenary sessions with over 400 papers presented. Joint collaborators with the GSDI Association in hosting the combined conference included the International Federation of Surveyors (FIG), the Egyptian Survey Authority, and the International Steering Committee for Global Map (ISCGM).

The GSDI Association fosters spatial data infrastructure developments that support sustainable social, economic, and environmental systems integrated from local to global scales and promotes the informed and responsible use of geographic information and spatial technologies for the benefit of society. With emphasis on developing nations, GSDI programs facilitate exchange of information on infrastructure issues, standards-based data access and discovery, applications development, capacity building, and SDI development and research.

The GSDI Association elected Professor Harlan Onsrud of the University of Maine, USA, as President

and Jarmo Ratia, Director General, National Land Survey of Finland, as Vice-President. Dr. Mukund Rao, Deputy Director, Indian Space Research Organisation, Bangalore, India, is the immediate past-president. These three along with fifteen other elected representatives from organizations spread across the globe comprise the Board of Directors.

The GSDI Association also took time to honor and thank the U.S. Federal Geographic Data Committee (FGDC), the ESRI Corporation, and Intergraph Corporation for providing critical core support to the GSDI Association in its formative stages. On hand to receive the honors were Ivan DeLoatch, Staff Director, FGDC; Jack Dangermond, President, ESRI; and Preetha Pulusani, President, Intergraph Mapping and Geospatial Solutions.

The Association's next global conference will be held in Santiago, Chile on 6-10 November 2006, and will focus on experiences in the use of spatial and related information technologies in reducing poverty.

For further information: [www.gsdi.org](http://www.gsdi.org) and [www.fig.net/cairo](http://www.fig.net/cairo).



## **Success Story - Geospatial Information Making a Difference**

### **Challenge: Assessing Economic Impact of California Wildfires**

In November 2003, catastrophic wildfires in Los Angeles, San Bernardino, San Diego, and Ventura

Counties burned thousands of acres, destroying hundreds of homes and businesses and forcing the evacuation of thousands of residents. The Labor Market Information Division of the California State Employment Development Department needed to quickly collect data from multiple sources about the number of jobs impacted and businesses disrupted by the wildfires and to assess the overall economic impact.

#### **Action**

Working with employment and wages data, the Labor Market Information Division mapped business locations and density in the vicinity of the fire impacted counties. Combining this data with detailed fire maps enabled them to produce an economic impact report in only three days. The information contained in the report allowed the agency's Workforce Development Branch to quickly allocate emergency grant monies received from the U.S. Department of Labor.

#### **Results**

- Geocoding of employment and wage data significantly advanced the Department's analysis capabilities
- Through a GIS enabled database, non-confidential sub-county level data, previously available only by ZIP code, was made available to customers
- Use of GIS allows access to information by census geography, city boundaries, neighborhoods, legislative and congressional districts, and other specialized geography, such as fire areas
- State and local government officials and private firms now have access to more useful and pertinent data for additional analysis

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#### **2005 NSDI CAP Program**

Watch the FGDC website for announcement of the awards this summer under the 2005 NSDI Cooperative Agreements Program (CAP) which closed June 16th. Projects will be funded in the areas of Metadata Training and Outreach, Framework Web Service, Geographic Information Coordination, and Geospatial Information Integration and Analysis. The 2006 CAP is planned to be announced this Fall.



## Upcoming Conferences

### 2005

July 15-19	NACo Annual Conference	Honolulu, HI
July 25-28	ESRI International User Conference	San Diego, CA
Aug 14-17	7th Annual GIS in Addressing Conference	Austin, TX
Aug 29 - Sept 3	7th Africa GIS Conference	Sandton, South Africa
Sept 7-10	8th Annual Crime Mapping Research Conference	Savannah, GA
Sept 14-16	Iowa League of Cities Annual Conference	Des Moines, IA
Sept 21-22	GIS in the Rockies	Denver, CO
Sept 25-28	ICMA 91st Annual Conference	Minneapolis, MN
Oct 3-5	2005 Minnesota GIS/LIS Consortium	St. Cloud, MN
Oct 9-12	URISA	Kansas City, MO
Oct 23-27	Pecora	Sioux Falls, SD

### 2006

April 22-26	ACSM Annual Conference	Orlando, FL
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