

## FGDC FY 2006 Annual Report Agency Survey

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1. Name of Agency or Bureau: **Department of Homeland Security**

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2. Name of Contact for Report: **Dan Cotter**  
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Phone: **202-447-3749**

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3. Steering Committee Member: **Scott Charbo**  
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Phone: **202-447-3400**

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4. Coordination Group Participant(s): **Scott McAfee**  
Email: **Scott.mcafee@dhs.gov**  
Phone: **202-646-3317**

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5. Subcommittee or Working Group Participation:

DHS acts as chairperson for the FGDC Homeland Security Working Group.  
DHS is an active participant on the NDOP and NDEP committees which are closely aligned with FGDC efforts.

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### Success Stories

6. **Emergency Response and Preparedness Success –**

#### 6.1 Current Imagery

##### Challenge

##### **Increase Partnerships to Maximize Leverage**

The Department of Homeland Security's (DHS's) Geospatial Management Office (GMO) has made a significant investment in the acquisition of imagery to support programs for development of geospatial data to support disaster preparedness and homeland security. Federal contributions continues to make significant progress in the ongoing challenge of coordinating, communicating, documenting, and reporting existing and proposed geospatial data to meet the ongoing goals for the development of the National Spatial Data Infrastructure (NSDI).

DHS fully supports OMB requirements set forth in Circular A-16 to participate in the development of the National Spatial Data Infrastructure (NSDI) as well as the requirements, guidance and standards provided by the Federal Geographic Data Committee (FGDC) and the e Government initiative goals of the Geospatial One-Stop (GOS) that implement the NSDI.

DHS seeks to achieve the following goals to meet this challenge:

- Take maximum advantage of partnerships, including Federal, State and local partners, for the acquisition and production of geospatial data,

- Ensure that current geospatial data is freely available to support preparedness, response, recovery and mitigation efforts for natural and manmade disasters and emergencies.

#### **Action**

##### **Decided to increase use of federal, state and local partnership opportunities**

DHS recognized the need for improved access to geospatial data in the aftermath of hurricane Katrina and formed a highly successful partnership with USGS and NGA to fund imagery programs that would exercise maximum leverage to support an array of federal, state, local and tribal needs. The partnership enables federal agencies to take advantage of USGS' state liaisons who are responsible to identify imagery programs at the State/local level where federal funds could act as a catalyst to enable the program to proceed or to expand the planned area of coverage. In addition to funding state and local programs, NGA and DHS provided a pool of funds to USGS to complete the orthophoto coverage of the 133 Urban Area initiative. The partners requested that all data sets were to be fully documented with metadata that complies with requirements of the Federal Geographic Data Committee. Completed orthophotography will be published on the USGS seamless data server and on the Hazards Data Distribution System (HDDS).

#### **Result**

##### **16:1 ROI**

As a result of this partnership DHS leveraged a total of approximately \$70,000,000.00 in current orthophotography based on an investment of approximately \$4,400,000.00. This data is sharable with federal, state and local agencies and provides comprehensive, current pre-event coverage for those areas of the Gulf of Mexico and the Southeastern Atlantic coasts that are at greatest risk for damage by hurricanes and storms.

The homeland security community and local stakeholders derive significant benefit from the high resolution coverage that is produced to support the 133 Urban Areas initiative, this coverage is critical in the development of inventories of critical assets and key resources surrounding major US urban centers.

#### **Emergency Response and Preparedness Success –**

### **6.2 Sharing of Licensed Commercial Data**

#### **Challenge**

##### **Partner's lack of access to non-native geospatial data during emergencies**

The Department of Homeland Security utilizes foundation geospatial data produced under the Homeland Security Infrastructure Program (HSIP) for significant parts of the Common Operating Picture and for mapping and analysis applications. Some of the key data sets in HSIP are produced and maintained by commercial companies so the distribution of the data to state and local partners is restricted under the DHS license agreement. In the event of an emergency, it is imperative that data is freely sharable among all participants.

#### **Action**

##### **Decided to commit resources (\$'s) to uplift licenses**

Recognizing that restrictions on HSIP data represented an extremely large obstacle during an emergency, DHS and NGA stepped up with NGA to support the funding uplift of the commercial data to prototype and foster state/local information sharing in a geospatial context. DHS and NGA collectively provided a total of \$3,000,000.00 for all of the necessary license uplifts. In the event of an emergency, any of the commercial data sets within HSIP are freely sharable which has huge potential benefits prior to or following an event.

#### **Result**

DHS partnership with state and local governments is critical to the long term success of preparedness and response. This is the type of partnership that ensures an effective relationship between state and local governments and the Federal homeland Security community.

## Agency NSDI Contribution Section

7. Does your Agency have a 2006 contribution to building the NSDI? If so, please send a brief description of the accomplishment using "Success Story" format:

### Challenge

#### Maximize Leverage of Existing Data Developed at the Local Level

The Department of Homeland Security's (DHS's) Federal Emergency Management Agency (FEMA) continues to make significant progress in the ongoing challenge of coordinating, communicating, documenting, and reporting existing and proposed geospatial data that is collected, produced, or manipulated under FEMA's Map Modernization Program. These efforts meet the ongoing goals for the development of the National Spatial Data Infrastructure (NSDI) which are:

- maximize the use of partnerships, including Federal, State and local partners, for the acquisition and production of geospatial data.
- coordinate with federal partners to minimize duplicative requests from Federal agencies to State and local data stewards.

DHS supports OMB requirements set forth in Circular A-16 to participate in the development of the National Spatial Data Infrastructure (NSDI) as well as the requirements, guidance and standards provided by the Federal Geographic Data Committee (FGDC) and the e Government initiative goals of the Geospatial One-Stop (GOS) that implement the NSDI.

### Action

#### Outreach Through Regional Relationships

FEMA focused on outreach to State and local partners through FEMA's regional offices and mapping contractors. Regional Management Centers (RMC) were asked to develop working relationships with the NSGIC representatives in their states to facilitate a coordinated approach to data sharing.

The RMCs were also asked to enter metadata records into the NDEP and NDOP project tracker web sites for any State and local elevation data sets that were planned to be used on a FEMA DFIRM project for the 2005 and 2006 DFIRM projects in their Regions.

This effort was very successful and any remaining gaps in reporting and documentation are largely due to the lack of sufficient metadata to complete entries into the tracking systems. The RMCs continue to make extra efforts to work with mapping partners and data providers to obtain this information and populate the systems. Additionally, there will be a shift in the majority of pre-scoping and scoping data identification and collection activities to FEMA's mapping partners and contractors for projects funded in Fiscal Year 2007 and beyond. It is expected that this change to directing metadata entry to the mapping partners will help close existing gaps in reporting and will increase the timeliness and quality of metadata entries into the NDEP/NDOP project tracking systems.

### Result

#### 8.4:1 ROI

The leverage of existing geospatial data from locals, States, and other Federal Agencies is an important component to the success of Map Modernization and the NSDI. During 2006, FEMA leveraged a total of \$33,000,000 in terrain data, orthophotography and geospatial data based on an investment of approximately \$3,900,000. Notably, FEMA partnered with the U.S. Army Corps of Engineers (USACE) to obtain terrain information developed by the Corps. FEMA has inventoried over 600 elevation data sets and over 580 imagery datasets that may be of interest to its partners. These data sets will be cataloged on the FEMA Mapping Information Platform (MIP) [www.hazards.fema.gov](http://www.hazards.fema.gov). The 133 Urban Area initiative at NGA and USGS is an effort to collect

high resolution orthophotography of the defined urban areas, and high resolution LIDAR for the same areas. A five mile buffer was established around the defined Urban Areas to capture all potential FEMA projects that might produce data that NGA and the USGS could take advantage of. The intent is to also let FEMA's mapping partners know where the government might have data available that could reduce the amount of terrain and base map data development for their DFIRM projects.

**Other NSDI Activities**

DHS has also been an active participant on the task force for the implementation of the Geospatial Line-of-Business. DHS supports the goals of the GLoB and will continue to provide support to this effort. DHS feels strongly that this effort should be assessed on an annual basis and that agencies supporting this effort should periodically review the results to ensure that those who are investing in the LOB receive tangible benefits.

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**Metadata Section:**

8. Does your agency have a metadata policy?

- yes
  - no
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9. Who serves as your metadata point of contact?

9.1 DHS Component: FEMA  
Name: NHIP POC  
Email:  
Phone:

9.2-N DHS Component: As defined by the TBD DHS GWG Authored Metadata Policy

Name: Geospatial Management Office  
Email: GMO@dhs.gov  
Phone:

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10. Do you have metadata resources:

Metadata creators

- yes
- no, if no go to 13

Metadata trainers

- yes
  - no, if no go to 13
- 
- 

11. Are your metadata resources: (check all that apply)

Metadata Creators:

- available to their employing program only
- available bureau-wide
- available to data partners

12. Metadata Trainers:
- available to their employing program only
  - available bureau-wide
  - available to data partners
  - available to FGDC
- 
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13. Do you track agency-wide metadata expenses?
- Yes
  - Somewhat
  - No
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- 

14. When project planning:

Do you publish planned project metadata to GOS-Market Place?

- yes
- no

Do you budget for metadata as part of the project?

Contracted projects

- yes
- no

Internal projects

- yes
- no

When contracting for data and metadata is a deliverable, do you provide guidance on content and format?

- yes
- no

When planning for data updates, is planning for metadata updates included?

- yes
  - no
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15. Does/has your agency:

Utilize a communication method to provide metadata guidance and support. Check those that apply:

- No
- Web site
- Wiki
- Community of Practice/Interest
- Conference calls- may be a part of other regularly scheduled calls.

Provide metadata creation assistance/consultation/or training to larger agency and/or data partners

- No
- Yes

Include metadata in position descriptions where the employee's major activity is geospatial data or geospatial data management.

- No
  - Yes
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Established/identified an agency/program metadata POC

- No  
 Yes

If Yes check those that apply:

- Route training requests to appropriate agency training resource(s).  
 Provide agency metadata consult: agency metadata working group.  
 Represent agency at FGDC Metadata Working Group- Policy subgroup.  
 Encourages agency metadata training resources to participate in FGDC Metadata Working Group- Training and Education Subgroup.  
 Reports agency metadata implementation activities to agency GIO, CIO, and FGDC Metadata Coordinator.

**Standards Section**

16. Please check appropriate box. Is your Agency using the following Standard:

Yes	No	N/A	
X			Content Standard for Digital Geospatial Metadata (version 2.0), FGDC-STD-001-1998
X			Content Standard for Digital Geospatial Metadata, Part 1: Biological Data Profile, FGDC-STD-001.1-1999
X			Metadata Profile for Shoreline Data, FGDC-STD-001.2-2001
X			Spatial Data Transfer Standard (SDTS), FGDC-STD-002
X			Spatial Data Transfer Standard (SDTS), Part 5: Raster Profile and Extensions, FGDC-STD-002.5
X			Spatial Data Transfer Standard (SDTS), Part 6: Point Profile, FGDC-STD-002.6
X			SDTS Part 7: Computer-Aided Design and Drafting (CADD) Profile, FGDC-STD-002.7-2000
		X	Cadastral Data Content Standard, FGDC-STD-003
		X	Classification of Wetlands and Deepwater Habitats of the United States, FGDC-STD-004
		X	Vegetation Classification Standard, FGDC-STD-005
		X	Soil Geographic Data Standard, FGDC-STD-006
X			Geospatial Positioning Accuracy Standard, Part 1, Reporting Methodology, FGDC-STD-007.1-1998
X			Geospatial Positioning Accuracy Standard, Part 2, Geodetic Control Networks, FGDC-STD-007.2-1998
X			Geospatial Positioning Accuracy Standard, Part 3, National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998
X			Geospatial Positioning Accuracy Standard, Part 4: Architecture, Engineering Construction and Facilities Management, FGDC-STD-007.4-2002
X			Content Standard for Digital Orthoimagery, FGDC-STD-008-1999
		X	Content Standard for Remote Sensing Swath Data, FGDC-STD-009-1999
		X	Utilities Data Content Standard, FGDC-STD-010-2000
X			U.S. National Grid, FGDC-STD-011-2001
X			Content Standard for Digital Geospatial Metadata: Extensions for Remote Sensing Metadata, FGDC-STD-012-2002
X			Geospatial Positioning Accuracy Standards, Part 5: Standards for Nautical Charting Hydrographic Surveys, FGDC-STD-007.5:2005

17. Please check Yes/No

Yes	No	
X		Does your agency participate in intra-agency standards activities?
X		Does your agency participate in interagency standards activities not necessarily under the FGDC umbrella?
X		Does your agency participate in FGDC standards activities?
X		Does your agency participate in NSDI-related voluntary consensus standards activities, as defined by OMB Circular A-119?
	X	Does your agency track resources (\$ or FTE) devoted to standards?

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18. Who serves as your standards point of contact?

Name:  
 Email:  
 Phone:

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19. Does your Agency plan to submit a proposal for FGDC standards project, advance a draft standard for public review or advance a draft standard to endorsement through the FGDC standards process in the coming FY? If so, which standards?

The Geospatial Management Office has coordinated the development of a standards-based data model which designed to be used by State-Based Extract, Transform and Load centers to aggregate geospatial data for use by the homeland security community and agencies providing support under the National Response Plan. The FGDC has published the data model for comments by agencies and working groups. Comments are consolidated and adjudicated through the DHS Homeland Security Working ground and passed to the GMO for action.

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**Training Section**

20. Who serves as your NSDI training point of contact?

Name:  
 Email:  
 Phone:

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21. Did your organization host any NSDI related course in FY06? If so, how many courses were conducted and how many participants from each course?

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22. Of the participants, are they internal only, or offered externally to Federal, State, Local or Tribal governments? Other organizations?

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23. Do you have a budget for NSDI related training for FY07 and FY08?

yes  
 no

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24. How many courses are planned per year in NSDI related courses either at your training center or at another facility?

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**International Section**

25. What international collaborative efforts have taken place with NSDIs of other nations?

DHS anticipates coordination with agencies in Canada and Mexico to obtain geospatial data along the northern and southern borders.

26. What international collaborative efforts are you planning with organizations of other nations? List organizations involved, a brief summary of activities, and point(s) of contact.

DHS is a participant in the CANUS Geospatial-Intelligence Working Group which is charged with resolving issues and setting up agreements to facilitate geospatial information sharing along the Canada-US border supporting infrastructure protection and situational awareness. DHS also provides support for the development of the Cross-Border Infrastructure Plan (CBIP) Geospatial Data collection strategy.

DHS participates in the Mexico-US bi-lateral meetings that focus on Infrastructure Protection along the US-Mexico border and the sharing of Geospatial data.

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