

FGDC Annual Report to OMB Format for Agency Reports – FY 2002

The following outline should be used by FGDC Member Agencies (or Bureaus) for their Annual Spatial Data Reports, which will be consolidated by the FGDC and submitted to OMB. Reports **should be brief, using bullets where possible**. Please provide only the information that will be useful for OMB to assess the agencies' achievements and for establishing future direction.

Part A

GENERAL FEDERAL AGENCY RESPONSIBILITIES REPORT (All Agencies)

1. **Agency or Bureau:** Department of Transportation

The Bureau of Transportation Statistics (BTS) compiled comments for all DOT modal administrations. We received comments from the Federal Railroad Administration (FRA), Federal Aviation Administration (FAA), U.S. Coast Guard (USCG), Federal Transit Administration (FTA), and Research & Special Programs Administration (RSPA)/Office of Pipeline Safety (OPS).

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5. **Subcommittee or Working Group Participation (Subcommittees or Working Groups your agency is involved with, but does not lead).**

The USDOT's modal administrations are involved in the following subcommittees and working groups.

- Geospatial One-Stop Initiative
- FGDC Coordination Group
- FGDC Steering Committee
- FGDC Standards Working Group
- Geospatial Applications and Interoperability WG
- FGDC Homeland Security WG
- DOD's Joint Forces Command HIFLD

6. **Strategy: Has your agency prepared a detailed strategy for integrating geographic information and spatial data activities into your business process - in coordination with the FGDC strategy, pursuant to OMB Circular A-16? If yes, briefly describe.**

Most modal administrations have not developed a strategic plan for integrating GIS data into their business process.

- The FAA has formulated a sound foundation with the GISWG (GIS Working Group) in preparation for integrating geographic information and spatial data activities into its business process. The GISWG has brought together people with experience and background to enhance and support the NAS (National Airspace System), and over the next year will be working to develop a detailed strategy.
 - BTS has plans to develop a detailed strategic plan but have not had the time and resources to develop it.
 - USCG will have a meeting in October to begin preliminary development of a strategic plan.
7. **Compliance: How are your spatial data holdings compliant with FGDC Standards? Also, please list the FGDC Standards you are using or plan to use in your organization. Finally, please list the spatial data holdings for which you have maintenance responsibility.**

All data created by BTS is compliant with FGDC Standards.

BTS plans to implement all future standards approved through the FGDC and / or ANSI process. BTS conducts QA/QC on other transportation data distributed through the National Transportation Atlas Databases (NTAD) Program as well as prepare FGDC compliant Metadata for each.

The USCG is beginning to address GIS standards from an enterprise perspective.

FRA maintains rail networks, which were originally derived from the USGS 1:2,000,000 DLG and Census 1:100,000 TIGER.

USDOT Spatial Data Holdings that are part of the NTAD include:

- National Highway Planning Network (FHWA [Federal Highway Administration])
- The Intermodal Facility database (BTS)
- National Rail Network(s) (FRA)
- Amtrak Stations (FRA)
- National Transit data (FTA and BTS)
- National Bridge Inventory (FHWA and BTS)
- Airport locations (FAA and BTS)
- Runway locations (FAA and BTS)

Other data, not in NTAD, but maintained by the FAA include:

- Airways, Fixes, Nav aids, Digital Terrain Data, Special Use Areas, Boundary Areas, Class Airspace, and Obstacles.

Data maintained by RSPA/OPS is not available to the public

- Pipelines
- Drinking Water and Ecological Unusually Sensitive Areas

8. Redundancy: Prior to collecting data, how does your agency ensure that the data are not already available?

- FAA conducts extensive searches of private and government sources to ensure redundancy does not occur.
- USCG has found that most of its data needs are supplied by sources outside the agency and has not had to address data duplication at the enterprise level.
- FRA does not collect spatial data.
- RSPA/OPS data collection efforts are not duplicated by other agencies.
- BTS surveys other Federal and state transportation agencies to ensure that the identified database does not already exist. BTS considers whether another agency is planning to create the database in the near future. If the answer is yes to either of these points, BTS will either use the existing data or explore ways to assist or participate with other interested agencies in its creation.

9. Collection: Do your agency contracts and grants involving data collection include costs for NSDI standards?

- FAA adheres to certain geospatial standards, but is uncertain if these are compliant with NSDI standards.
- BTS data collection efforts include costs for complying with NSDI standards.

10. Clearinghouse: Is all the data and/or metadata that your agency is able to share with the public published on the NSDI Clearinghouse? If not, please cite barriers encountered.

- FAA data that is funded through public sale is not distributed free on the Internet to the public sector. Some of the funding for the maintenance of this data is derived from the public's need for certified Government information. Safety and temporal requirements for the distribution of high quality data published in the NSDI clearinghouse are under consideration.
- None of the RSPA/OPS data is available to the public
- Data that is maintained and distributed by BTS is published on the NSDI Clearinghouse.

11. E-Gov: How are you using geospatial data in your mission activities to provide better services? (Please list)

- FRA's web site "<http://safetydata.fra.dot.gov/maps/>" publishes grade crossing safety information. FRA also simulates rail freight traffic over its rail network GIS database to track the movement of various commodities, including hazardous materials, which helps FRA in the distribution of its track

inspection program. Finally, FRA maintains and distributes to the public two rail network GIS databases (1:2,000,000 scale and 1:100,000 scale).

- Within FAA, geospatial data is an integral and critical part of the air transportation information provided to the flying community and is part of its standard practice. At present, the official FAA source for National Airspace System (NAS) data is the NASR database. The following is a list of the services provided that use FAA's geospatial data: NIAC/GISWG (NAS Information Architecture Committee), Enroute, Terminal, Tower and Regional Air Traffic Control Facilities, Radar Video Mapping (RVM); overall support of NAS, ERIDS and CMAP; support of Digital Aeronautical Chart data and products which include but are not limited to the following: PCS, FDMSAW, DEVCONDOR Database, ARINC (Aeronautical Radio, Inc) Database, Obstruction Database, COMPSYS, CMAP, IAP-PDF, Digital Terrain, VFR and IFR charts. FAA is researching the feasibility of publishing government spatial holdings listed above on the Internet and the FAA Intranet.
- The USCG is working with the intelligence and maritime communities in planning and using GIS for port security assessments.
- The USCG's law enforcement and marine safety offices are establishing the requirements and infrastructure for related use of GIS.
- RSPA/OPS uses its data for regulatory purposes and general public information (informing the public of the existence [not location] of pipelines within communities.)
- BTS has developed an interactive Internet mapping center that allows user to evaluate highway conditions, Federal Grant allocation, and railroad crossing safety. Additionally, the geospatial data is available for download from the BTS web site. A user can download the data as a national dataset or in smaller geographic areas based on interest or need.

12. Geospatial One-Stop: How is your agency involved in the Geospatial One-Stop?

- USCG, FAA, FTA, FHWA and FRA are participating with BTS in the development of transportation standards for the Geospatial One-Stop.
- BTS is the lead federal agency for the development of the transportation theme standards.
- BTS is funding the development of prototype One-Stop servers. BTS will implement the Geospatial One-Stop Federal portal for transportation.

13. Enterprise Architecture: Is geospatial data a component of your enterprise architecture? Please provide a brief summary of how geospatial data fits into your enterprise architecture.

- FAA is taking part in developing a draft Framework Data Content Standard for Air Transportation in coordination with BTS, the first meeting has been held and a draft mission statement has been completed.
- FRA has incorporated GIS and spatial data into its everyday business. FRA's GIS rail network, through traffic simulation of hazardous materials, is used to allocate safety inspection resources. Also, FRA has started to use global positioning to more accurately locate its inspection sites.

- USCG is identifying geospatial data standards for inclusion in the Enterprise Standards Profile, a part of the USCG EA. In addition to the NSDI data themes, the USCG uses data from NIMA and other DOD and Intelligence Community agencies. USCG has also selected a standard GIS for enterprise-wide non-navigational use. This GIS represents the foundation for the Commercial Joint Mapping Toolkit (C/JMTK) selected by DISA for planned enhancements to the DII COE. The USCG is working to enable interoperability with the Department of Defense and developing a "To-Be" EA, in FY 2003. The "To-Be" EA defines an integrated set of operational, systems, and technical architectures for using GIS and geospatial data across all USCG missions, programs, and acquisition projects, and enhancing interoperability with other agencies and organizations.
- RSPA/OPS is examining ways to integrate legacy data systems with GIS. A project is currently underway to integrate NPMS (National Pipeline Mapping System) pipeline data with compliance and incident history data.

14. Partnerships: What efforts are being taken to coordinate data and build partnerships at the field level for data collection and standards development? Identify partnerships and data sharing activities with other federal agencies, state, local, and tribal governments and other entities.

- FAA has built partnerships with the following organizations with its AVN-40 (Information Technology Staff, Aviation Systems Standards Program). These include: NIAC/GISWG, Enroute, Terminal, Tower and Regional Air Traffic Control Facilities, ATCA (Air Traffic Control Association), IACC, NAIC, AIT, RTCA (Radio Technical Commission for Aeronautics), AOPA (Aircraft Owners and Pilots Association), ARINC (Aeronautical Radio, Inc) and ALPA (Airline Pilots Association); developing overall support of NAS including ERIDS, CMAP in the ARTCC's (Air Route Traffic Control Center), support of Digital Aeronautical Chart data and products. FAA is researching the feasibility of publishing government spatial holdings listed above on the Internet and the Intranet.
- BTS seeks to develop relationships with field-level organizations, or the organization(s) closest to the data development process as possible. Before conducting any data gathering effort, BTS surveys the community to identify partners and other interested parties wishing to take part in or benefit from the project. Current activities include working with State DOTs and private enterprise in the development of an Intermodal Facilities database. Also, BTS is working with the FTA and the FHWA to develop a Transit spatial database and geo-locate bridges on a nation-wide spatial road network, respectively. Finally, BTS is cooperating with FGDC and the Army Corps of Engineers to develop Transportation Data Content Standards and web portal to support the Geospatial One-Stop initiative.

15. Concerns or Lessons Learned: Are there areas or issues regarding spatial data that require attention, or lessons learned that you would like to share with others? Please describe.

- FAA is sharing lessons learned by chairing the NIAC/GISWG and participating in the agency's geo-spatial awakening.
- BTS is developing a document on lessons-learned related to Geospatial One-Stop activities.

