

| FGDC Member Agencies  | 1) Subcommittee/Working Group Participation  | 2) Strategy  | 3) Compliance   |
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| <b>A) Bureau of Land Management</b>   | Eastern Cadastral Steering Committee, Western Cadastral Steering Committee, Geo 1 Stop, Marine Boundary Working Group, Western Governor's Association Geographic Information Council   | The National Integrated Lands System (NILS) uses all applicable FGDC Standards to build Bureau-wide systems for managing land ownership and land records. NILS and BLM have completed data delivery systems that support the activities of the Geo 1 Stop.   | Yes. The standards that are currently used are: FGDC Cadastral Data Content Standard; FGDC Geospatial Metadata Content Standard; FGDC Standard for a US National Grid, Open GIS standards for data publishing   |
| <b>B) Department of Commerce - Bureau of the Census &amp; National Oceanic and Atmospheric Administration</b> | FGDC Subcommittees: Base Cartographic, Cadastral, Spatial Climate. FGDC Working Groups: Ad Hoc Metadata, Biological Data, Clearinghouse, Coordination Group, Earth Cover, Standards, Homeland Security, Civil Imagery and Remote Sensing Task Force. Other: GPS Interagency Council. | Yes. 3 primary DOC agencies involved in this: a) NOAA's Coastal Services Center strategic plan outlines a strategy pursuant to Circular A-16. B) Census establishes agency policies related to FGDC standards and coordination. C) NOAA's National Geodetic Survey's principal activities are collecting, processing, archiving, and distribution of spatial data. | NOAA and Census are both members of the FGDC Standards Working Group and are well aware of the FGDC Standards. Standards used include: Content Standards for Digital Geospatial Metadata, Shoreline Metadata Profile of the content Standards for Digital Geospatial Metadata, Remote Sensing Extension of the Content Standard for Geospatial Metadata, Geospatial Positioning Accuracy Standards, Part 1 and Part 2; Spatial Data Transfer Standard Part 6: Point Profile Metadata Profile for Shoreline Data. Census Bureau's spatial data compliance is solely at the exchange level. |
| <b>C) Department of Energy</b>  | Homeland Security Working Group, Ground Transportation Subcommittee, Base Cartographic Subcommittee, and the Earth Cover Working Group.  | DOE has been a geospatial consumer rather than producer. In past years, the geospatial data developed by DOE was related to their facility management. This is changing, and DOE is now an active participant in the Geo 1 Stop. Within DOE a GIS Users Group was formed, in part to help achieve the Geo 1 Stop objectives.                                       | Some of the recent DOE spatial data sets are fully FGDC compliant. Over time, the sets that are partially compliant will be made fully compliant where warranted. Most legacy data sets will not be made compliant because they are either outmoded or were developed for internal use only. DOE will ensure that all new geospatial data sets that can be shared outside of DOE will be fully compliant with FGDC, ANSI or ISO standards.  |
| <b>D) Health and Human Services</b>   | Subcommittee on Cultural and Demographic Data  | HHS is working on a detailed strategy. It will be completed shortly.   | HHS is planning to develop an HHS metadata directory for geospatial data.   |
| <b>E) Department of Housing and Urban Development</b>   |  | The Enterprise Program Information Center (EPIC) is developing an Enterprise Data Delivery Service (EDDS) with a geospatial component designed to integrated geographic and spatial data into HUD's business processes.  | FGDC Content Standard for Digital Geospatial Metadata   |

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| <b>F) Department of Transportation - Bureau of Transportation Statistics</b> | Geospatial One Stop Initiative; FGDC Coordination group; FGDC Steering Committee; FGDC Standards Working Group; Geospatial Applications & Interoperability WG, FGDC Homeland Security WG, DOD JFCom HIFLD  | No- most modal administrations have not developed a strategy for integrating GIS data into their business practices. FAA, BTS, and USCG are independently developing such a strategy.   | BTS: compliant with FGDC Standards; data distributed with FGDC compliant metadata; will implement future standards through FGDC/ANSI process. USCG: beginning to address GIS standards.   |
| <b>G) Environmental Protection Agency</b>                                    | Subcommittees: Federal Geodetic Control, Marine & Coastal Spatial Data, Spatial Water Data, National Hydrography Framework Standards, Vegetation Working Groups: Earth Cover, Facilities, Geospatial Applications & Interoperability, Homeland Security, Standards, Tribal Task Forces: Committee on Civil Imagery and Remote Sensing Task Force | Yes. The EPA is finalizing the EPA Geospatial Blueprint which lays out goals, objectives, and key action items for integrating geographic information and spatial data activities into EPA business processes.  | EPA data holdings are compliant with FGDC point data standards and several EPA regions are fully compliant with FGDC metadata standards. EPA is taking several formal steps to ensure total compliance with the FGDC standards required by OMB Circular A-16. (see EPA report for more details)   |
| <b>H) Farm Service Agency</b>  | Currently FSA has no FGDC subcommittee or working group participation.   | Yes. FSA prepared a GIS Implementation Blueprint laying out GIS Implementation for the Agency, integrating the coordination of imagery acquisition, data acquisition and reengineering of program development.  | FSA provides FGDC compliant metadata for all nationally sanctioned geographic data created by the agency. All digital imagery meets National Map Accuracy Standards.  |
| <b>I) Federal Emergency Management Agency</b>                                |  | FEMA completed a requirements analysis and strategic plan for implementing an enterprise GIS system. FEMA will begin implementation of this system by building an enterprise data model compliant with FGDC standards.  | FEMA built a prototype of a FGDC compliant data model and will enhance it with FEMA specific hazards' based entities and classes.   |
| <b>J) General Services Administration (GSA)</b>                              | GSA has recently become a member of FGDC.  | GSA is developing a strategy for integrating geographic information into its Federal facilities application, the Worldwide Inventory. The Worldwide Inventory is a summary profile of Federal land, buildings and structures as reported held by Federal agencies on the last day of the fiscal year. | GSA has been involved with the Tri-Services CAD/GIS Technology Center for Facilities, Infrastructure, and Environment (CTCFIE). American National Standards Institute's (ANSI) Committee for Information Technology Standards has approved the CTCFIE's Spatial Data Standard for Facilities, Infrastructure, and Environment as ANSI standard NCITS 353. |

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| <b>K) National Aeronautics and Space Administration (NASA)</b> | NASA participates in the following FGDC Subcommittees: Geodetic Control, Geologic Data, Soil Data, Vegetation. NASA participates in the following Working Groups: Biological Data, Clearinghouse, Earth Cover, Standards, Sustainable Forest Data, Homeland Security, Civil Imagery and Remote Sensing. | Yes, strategy exists: <a href="http://gcmd.gsfc.nasa.gov/Aboutus/standards">gcmd.gsfc.nasa.gov/Aboutus/standards</a> & <a href="http://www.earth.nasa.gov/visions/data-policy.html">http://www.earth.nasa.gov/visions/data-policy.html</a>  | FGDC Standards used by NASA: FGDC Content Standard for Digital Geospatial Metadata; Remote Sensing Extensions for FGDC Metadata; and FGDC Swath Content Standard.   |
| <b>L) National Resources Conservation Service</b>              | Subcommittees: Base Cartographic Data, Geologic, Spatial Water Data, Vegetation, Wetlands. Working Groups: Biologic Data, Geospatial Applications & Interoperability, Homeland Security, Standards, Sustainable Forest Data, Tribal, Earth Cover (inactive).  | Yes. Spatial data is incorporated in most program management strategies, the NRCS Integrated Information System (which encompasses 7 critical software applications), and in the USDA Service Center Agencies GIS Implementation Strategy, 2001 (see <a href="http://www.ftw.nrcs.usda.gov/nsdi_node.html">http://www.ftw.nrcs.usda.gov/nsdi_node.html</a> )  | FGDC Standards used by NRCS: Content Standard for Digital Geospatial Metadata, Soil Geographic Data Standard, Content Standard for Digital Orthoimagery. NRCS is implementing a standard not yet endorsed by FGDC: Federal Standard for Delineation of Hydrologic Unit Boundaries.  |
| <b>M) National Imagery and Mapping Agency</b>                  | Subcommittees: Base Cartographic Data, Federal Geodetic Control, Maritime and Coastal Spatial Data, International Boundaries and Sovereignty. Working Groups: Clearinghouse, Homeland Security, Marine Boundaries, Standards  | NIMA is an active participant in Geo 1 Stop and is actively pursuing the posting of its domestic homeland security geospatial holdings on an NSDI compliant Clearinghouse, to be followed by a posting of our planned collection of same.   | The metadata for NIMA's domestic HLS geospatial data will be compliant and placed on an NSDI compliant Clearinghouse. In NIMA's development of a web server to host these data, NIMA will implement the relevant and available standards supported by Geo 1 Stop.   |
| <b>N) U.S. Army Corps of Engineers</b>                         | Clearinghouse, Base Cartography, Standards, Bathymetric, Geodetic, Tribal, Homeland Security, Cultural and Demographic.   | Yes, USACE issued Engineer Regulation 1110-8156 and Engineer Manual 1110-1-2909 in 1995, which details USACE geospatial data systems strategy and requirements. Both are currently being revised.   | USACE has no mechanism to measure FGDC compliance. USACE requires that all acquired/collected data be documented using the FGDC metadata standard. Through the FGDC Facilities Working Group USACE has developed the Spatial Data Standards for Facilities, Infrastructure and the Environment and the Architecture/Engineering/Construction CADD Standards, both endorsed by National Standards Organizations. |
| <b>O) U.S. Forest Service</b>                                  | Subcommittees: Base Cartographic; Federal Geodetic Control; Cadastral; Spatial Water; Vegetation; Geology; Spatial Water Data Working Groups: Clearinghouse; Metadata Ad Hoc; Sustainable Forest Data - Co-Lead; Homeland Security; Civilian Remote Sensing Ad Hoc                                      | USFS has a detailed strategy for integrating geospatial activities into their business practices. The Forest Service Natural Resources Applications (FSNRA) Geospatial Strategy was developed to: Provide methodologies that access and integrate tabular and spatial data; Maximize reusability of application contents and data; and Reduce development and implementation timeframes for geospatial applications and database development. | Not all USFS spatial data holdings comply with FGDC standards due to the agency's large, widely dispersed organizational structure. Over the past 2 years a management framework was developed to support, encourage and verify that spatial data is FGDC compliant. USFS uses or plans to use 37 FGDC Standards. (see USFS report for more details).   |

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| <b>P) U.S. Geological Survey</b>     | <p>Subcommittee Participation: Cadastral; Cultural &amp; Demographic; Federal Geodetic Control; Ground Transportation; International Boundaries &amp; Sovereignty; Marine &amp; Coastal Spatial Data; Soils; Vegetation; Wetlands. Working Groups: Clearinghouse; Facilities; Geospatial Applications &amp; Interoperability; Historical Data; Marine Boundaries; Metadata; Sample Inventory &amp; Monitoring; Standards; Tribal</p> | <p>Yes - USGS policies specify that geospatial data be publicly accessible with published metadata posted on a NSDI node. USGS follows the FGDC strategy and guidelines found in OMB Circular A-16. USGS also participates in the development of international and national standards consistent with OMB Circular A-119.</p>   | <p>Yes. FGDC Standards the USGS is using include: ANSI Profile of ISO 19115; Content standard for Digital Geospatial Metadata and its Extensions for Remote Sensing Metadata; Content Standards for: Digital Orthoimagery, Framework Land Elevation Data, and Digital Geospatial Data, Biological Profile; Geospatial Accuracy Standard, Parts 1 &amp; 3; Geospatial One-Stop Framework Data Standards; National Hydrography Framework Geospatial Data Content Standard; National Standards for the Floristic Levels of Vegetation Classification; Anderson Land Cover Classification Standard; Spatial Data Transfer Standard; US National Grid</p> |
| <b>Q) Tennessee Valley Authority</b> | <p>TVA participates with subcommittees and working groups on a correspondence basis as needed.</p>   | <p>There is no formally adopted strategy, although TVA has taken several actions to coordinate geospatial data activities. TVA supports a geospatial metadata Clearinghouse node, is collecting metadata according to the FGDC standard, and has an operational Internet site (maps.tva.com) through which Geospatial information is distributed and sold. TVA has a GIS Coordinating Council that operates on a technical level to coordinate Geospatial data issues. All business processes, including those dealing with geospatial data, are being documented at TVA.</p> | <p>TVA uses the Metadata Standard and has developed DRG's according to the USGS standard. TVA uses commercial standards or national mapping standards whenever possible.</p>   |

| FGDC Member Agencies  | 4) Redundancy  | 5) Collection   | 6) Clearinghouse   |
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| <b>A) Bureau of Land Management</b>   | The BLM has partnerships with States and counties for shared data collection, integration, and maintenance. BLM has active partnerships with tribes for joint data collection and maintenance. BLM facilitates coordinating data collection initiatives at the National level at Subcommittee meetings. (see BLM response for more).   | Yes.  | Yes. The BLM and NILS maintain an active data delivery site.   |
| <b>B) Department of Commerce - Bureau of the Census &amp; National Oceanic and Atmospheric Administration</b> | The Census Bureau maintains direct contact with more than 40,000 State, local, and tribal governments and takes full advantage of local information. Census maintains close contact with other agencies that have an interest in geographic data and collaborates with them in collection. NOAA's Coastal Services Center searches it's archives and that of its parent organization, in addition to Internet and FGDC Clearinghouse searches to ensure that redundancy does not occur. NOAA's National Geodetic Survey coordinates data collection activities with its federal partners through the FGDC Subcommittee and works with State and local entities in the collection of geodetic survey data to ensure that no redundancies exist. | Yes where applicable. For example: all data development contracts/grants at NOAA's CSC require the contractor/grantee to develop metadata that meet FGDC guidelines or to provide CSC with information needed to develop such metadata. At NOAA's NGS, all Statements of Work include requirements to meet the pertinent NSDI standards, the cost of which is covered by the contractor's cost estimates. | Yes. Until recently Census has forwarded its metadata to the USGS for maintenance on their server. Census is currently building a NSDI compliant server outside its firewall that will hold public metadata and some Census data. Geodetic metadata are available via the Federal Geodetic control Subcommittee and the NOAA CSC website. NGS data are available from the NGS website and will be published on the Clearinghouse as part of the Geo 1 Stop effort. NOAA's CSC has a registered NSDI clearinghouse node and there is a NOAA Clearinghouse for called NOAA Server with hosts 14 additional data clearinghouse nodes. |
| <b>C) Department of Energy</b>  | Search the NSDI Clearinghouse, augmented by other means of data discovery when necessary.  | Many of DOE's data collection contracts that involve geospatial data include costs to comply with NSDI standards. It is unknown if all DOE contracts do so, but the Department is working to ensure that they will in the future. DOE has not issued any grants that involved geospatial data collection.   | All data not yet on Clearinghouse. 2 barriers: lack of a central DOE metadata server and insufficient visibility of spatial data projects at DOE's far-flung, diversely engaged locations. These barriers are being addressed within DOE.  |
| <b>D) Health and Human Services</b>   | HHS ensures that the data are not already available through the OMB clearance process.   | There is no Department-wide policy to this effect.  | One of the major benefits of the HHS plan will be to enable HHS to share geospatial data with the public through a portal compatible with NSDI.  |
| <b>E) Department of Housing and Urban Development</b>   | Nothing in place today. Goal is to acquire a repository and collect the pertinent data element information. This will be used to check for existing information about the data.  | Most geospatial data collection involves address information. Currently, no enterprise standards exist.   | HUD is developing an Enterprise MetaData Repository, of which geospatial data will be a part.  |

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| <b>F) Department of Transportation - Bureau of Transportation Statistics</b> | FAA: conducts extensive private/government searches; USCG: no systematic procedure in place at this time; RSPA/OPS: data collection is not duplicated by other agencies; BTS: surveys other Federal and state transportation agencies to ensure the data does not already exist. BTS will either use existing data or explore ways to participate with other interested agencies in the data creation. | FAA: adheres to geospatial standards, although they may not be NSDI compliant; BTS: collects data where no other steward exists (these efforts include costs for complying with FGDC standards.) | FAA: doesn't distribute data free on the Internet to the public sector; RSPA/OPS data is not available to the public; BTS: publish data on the NSDI Clearinghouse.  |
| <b>G) Environmental Protection Agency</b>                                    | The Geospatial Data Index (GDI) is an internal intranet tool to provide access to a catalogue of over 1000 geospatial data sets from EPA program offices. The GDI helps staff avoid duplicative development.   | No.  | No. Most data are not fully compliant with the FGDC metadata standard. Inadequate time and resources committed to tagging data with the required information at the time of development are the largest barriers to becoming fully compliant. |
| <b>H) Farm Service Agency</b>  | FSA works in partnership with national, multi-agency coordination groups including the National Aerial Photography Program.  | Yes. FSA contract specification for geodata acquisition includes requirements for information that will be used for FGDC compliant metadata.   | FSA is pursuing NSDI Clearinghouse status. Barriers include lack of resources dedicated to that task.   |
| <b>I) Federal Emergency Management Agency</b>                                | FEMA takes advantage of formal data coordination mechanisms, such as NDEP and NDOP and is exploring the use of I-Teams for assisting flood mapping and multi-hazard data collection. FEMA has data coordination efforts with agencies such as NIMA, USACE and USGS, and other Federal Response Plan participating Agencies.  | FEMA guidelines and specifications for flood mapping require adherence to FGDC metadata and accuracy standards, where appropriate. These are incorporated into contract costs.                   | FEMA's public hazard mapping site, HazardMaps.gov, serves as a node on the NSDI.  |
| <b>J) General Services Administration (GSA)</b>                              | GSA Public Buildings Service (PBS) maintains the system of record for PBS facility addresses. For other data GSA will rely on readily available data sets.   | N/A  | No, however security might be an issue.   |

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| <b>K) National Aeronautics and Space Administration (NASA)</b> | NASA participates through the International Committee on Earth Observations Satellites, the National Research Council and FGDC's Civil Imagery and Remote Sensing Working Group to ensure that planned acquisitions contain data not already available.  | Yes.   | All datasets NASA makes publicly available are published in the NASA Global Change Master Directory that is searchable through the FGDC Clearinghouse.  |
| <b>L) National Resources Conservation Service</b>              | NRCS relies upon local communication, the NSDI Clearinghouse, national coordination bodies such as FGDC, Federal, State, and local partners, informal geospatial data community, state geospatial consortiums and the private data vendor community to identify available data.  | Yes. However they often do not include the long term support and maintenance of hardware required to serve data.   | No. Several NRCS program specific datasets are not discoverable via the Clearinghouse due to lack of existing FGDC compliant metadata. The NRCS has 2,600 field offices and the scientists do not have the time to create FGDC compliant metadata. USDA Service Center Agencies have deployed an application which better meets the needs of the staff - the Resource Data Gateway, <a href="http://lighthouse.nrcs.usda.gov/gateway/">http://lighthouse.nrcs.usda.gov/gateway/</a> . |
| <b>M) National Imagery and Mapping Agency</b>                  | NIMA has a strategic partnership with USGS and FGDC -- codified in a Memorandum of Understanding. One of the key elements of this partnership in the coordination of data collection between NIMA and USGS.  | NIMA doesn't have standing contracts for domestic geospatial homeland security data collection.  | NIMA has a contract in place to do this.  |
| <b>N) U.S. Army Corps of Engineers</b>                         | A search of the FGDC Clearinghouse must be made before a budget request can be submitted. For satellite imagery, Commands must check with the DoD Commercial Satellite Imagery Library (CSIL) to see whether DoD has already purchased imagery that could be used.   | USACE has no policy stating this position, but believes that the cost of metadata and building the data to standards are part of the data collection and not a separate cost.  | Approximately 1/3 of the USACE District offices have engaged with the USACE Clearinghouse node. Barriers include: Clearinghouse technology is old; 25% of Nodes are not functioning; and metadata found on Nodes is outdated/ not maintained.   |
| <b>O) U.S. Forest Service</b>                                  | Duplication is avoided internally by coordinating program management - the new FSNRA Geospatial Survey will enhance the process through the integration of natural resources databases. Externally USFS coordinates with NDEP, NDOP and other such interagency groups as well as State, County, and local governments and other partners to ensure effective resource utilization by all parties and to avoid duplication of effort. | National contracts include costs to cover collecting data to FGDC standards. Their National GIS Data Services contract deals with contracting the conversion of legacy data to FGDC standards. Contracts for actual data collection exist at Regional and Forest level and should contain provisions for FGDC standards. | USFS will soon complete development of their NSDI Clearinghouse node. Barriers encountered in complying with Agency and Department security regulations have slowed the process. (see USFS report for more details)   |

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| <p><b>P) U.S. Geological Survey</b></p>     | <p>USGS maintains a website of existing geospatial data holdings. When a new project is begun the website is searched along with the NSDI Clearinghouse to locate data already available. USGS administers the DOI High Priority Program where data acquisition strategies, activities, and requirements are shared and leveraged. USGS is a member of National Digital Elevation Program and National Digital Orthophoto Program, where data collection plans are shared.</p> | <p>Yes. Procurements and contracts for data or data services specify compliance with appropriate ANSI and FGDC Standards. Contracts for data include the full cost of creating compliant data using appropriate standards and providing the metadata and registering the data online.</p> | <p>Yes. All geospatial data that USGS programs produced that have been reviewed and approved for public use are published on the NSDI Clearinghouse.</p>   |
| <p><b>Q) Tennessee Valley Authority</b></p> | <p>Prior to collecting data TVA searches the Clearinghouse for existing data and checks with other Federal, State, and local agencies that may have the data or be interested in going in with TVA on the purchase. TVA participates in coordinating councils in the region and professional societies. Often TVA's professional contacts provide more information than the Clearinghouse.</p>   | <p>Generally yes, but standards do not exist for many data requirements. Commercial practices are used more than FGDC standards.</p>  | <p>No. TVA's historical data does not have FGDC compliant metadata. It will require a lot of work to produce metadata for all of TVA's historical holdings, but this will be done as these data sets are added to their Internet site.</p> |

| FGDC Member Agencies  | 7) E-Gov   | 8) Geospatial 1 Stop  | 9) Enterprise Architecture   |
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| <b>A) Bureau of Land Management</b>   | Geospatial data are used in all BLM programs and the agency has made a commitment to provide access to geospatial data and GIS tools. BLM uses their Geographic Coordinate Database to register legal documents to spatial framework data.   | BLM representatives participate in Geo 1 Stop meetings. BLM is migrating the existing standard to an ANSI standard to be compliant with Geo 1 Stop activities.  | Yes, this has been factored into the BLM's architectural design and implementation.  |
| <b>B) Department of Commerce - Bureau of the Census &amp; National Oceanic and Atmospheric Administration</b> | Many of DOC's projects are E-gov applications. The Landscape Characterization and Restoration (LCR) program seeks to help predict the effects of management actions on coastal habitats. The information is provided through the Web and on CD-Rom. NOAA's CSC Coastal Hazards projects are an E-Gov application that work to reduce the environmental, costal, and economic impacts from coastal hazards and facilitate increased decision-support capabilities for coastal managers. NGS's E-gov activities include: Web access to geodetic control data sheets, web access to GPS Continuously Operating Reference Station data, and web-based On-line User Positioning Service. Census has QuickFacts, American FactFinder and FedStats (see DOC report for web addresses) | Lead agency for the Governmental Units Framework Data Content Standard; I-Team participation; Principal partner in the Geo 1 Stop; NOAA's CSC is coordinating the objectives of the Geo 1 Stop to the FGDC Marine and Coastal Spatial Data Subcommittee and the Marine Boundary Working Group; CSC is working with the FGDC Cadastral Subcommittee on developing the marine component of the Cadastral Data Content Standard; NOAA has provided an in-kind contribution as well as \$200,000 directly to the FGDC for the Geo 1 Stop for FY02; NGS is the lead agency developing the Geodetic Data Content Standard | Census uses geospatial data in all statistical data collection activities, tabulation operations, and publication activities. The foundation of Census geospatial data is TIGER and Master Address File (MAF). CSC is the co-lead on the National Ocean Service (NOS) Enterprise Geographic Information System project, which will develop a unified and coordinated enterprise approach to spatial information management, utilization, and access across NOS. NGS performs functions necessary for NOAA to attain its objective to "Develop the National Spatial Reference System (NSRS)" which is part of NOAA's strategic goal to "Promote Safe Navigation." |
| <b>C) Department of Energy</b>  | DOE has been a geospatial consumer rather than a data developer/supplier and a substantial portion of DOE's geospatial work is classified.   | DOE is involved in all of the Geo 1 Stop modules.   | DOE's Enterprise Architecture Plan is now under development and Geospatial Data and GIS will be an integral part of the technology component.  |
| <b>D) Health and Human Services</b>   | The Agency for Toxic Substances uses GIS to protect public health by locating health and environmental events spatially. Georeferenced mortality data are available from the National Center of Health Statistics on the Web. The National Cancer Institute uses the mortality data and Census data for their Cancer Mortality Maps and Graphs. (see response for more)  | HHS is developing an HHS portal and spatial metadata.   | HHS has an "enterprise architecture" under development. Geospatial data will be a component.   |
| <b>E) Department of Housing and Urban Development</b>   | To determine eligibility for participation in HUD programs.  | HUD's Enterprise Geographic Information System (EGIS) is designed to be fully compatible with the Geo 1 Stop concept and architecture and will integrate with the Geo 1 Stop.   | Geospatial data is an integral part of HUD's Enterprise Data Warehousing Architecture - a subset of the Department's Enterprise Architecture.  |

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| <b>F) Department of Transportation - Bureau of Transportation Statistics</b> | FRA: website with grad crossing safety info and 2 rail network GIS databases; FAA: not yet listing their holdings on the Internet; USCG: will use GIS for port security assessments; RSPA/OPS: informs the public of the existence (not location) of pipelines within communities; BTS: interactive Internet mapping center in addition to the downloadable national dataset.  | BTS is developing transportation standards for Geo 1 Stop with USCG, FAA, FTA, FHWA, and FRA. BTS is the lead federal agency for the development of the transportation theme standards and is funding the development of prototype One-Stop servers. BTS will implement the Geo 1 Stop portal for transportation.  | Geospatial information is a component of the BTS enterprise architecture - BTS aligns its geospatial activities with its mission and lines of business.   |
| <b>G) Environmental Protection Agency</b>                                    | E-Gov supports 19 areas of business: Development of Criteria; Development of Methods and Protocols; Provision of Public Information/Trend Analysis; Development of Policies; Monitoring; Program Implementation Oversight; Development of Regulations and Guidance: Permitting; Compliance and Enforcement; Emergency Response: Research; Performance Measurement; Site Clean-up; Setting of Standards; Grant/Contract Implementation and Oversight; Laboratory Activities; Risk Assessment; Training; and Procurement. (see EPA report for specific examples) | EPA participated in crafting the Geo 1 Stop business plan and EPA is supporting the initiative with 1.85 FTEs and \$320K for FY02, 5.10 FTEs and \$160K in FY03 and FY04. EPA's manager responsible for managing geospatial activities in the Office of Environmental Information is now detailed in the position of Acting FGDC Staff Director. (see EPA report for more) | Yes. Incorporating geospatial data and technology into mainstream business and IT management will enhance the value of the data available for environmental planning, analysis, and decision support. EPA will transition to a technical environment with georeferenced ambient monitoring and program data jointly residing in integrated database systems with geospatial data and imagery. (see EPA report for more) |
| <b>H) Farm Service Agency</b>  | FSA has 22 states with critical geodata infrastructure in place to provide better service to their customers. (see FSA report for examples) Remaining states will integrate mission activities with GIS as core data is acquired for them.   | FSA contributed \$45,000 in 2002 for the Geo 1 Stop. 11 staff members are available to participate in Geo 1 Stop modules.  | Yes. FSA is in the process of converting manual maps to digital format to directly link geospatial information to tabular program data.   |
| <b>I) Federal Emergency Management Agency</b>                                | Development of a sophisticated geospatial data product for flood maps; Development of a website for mutihazard information; Geospatial analysis and mapping for response and recovery; Geospatial modeling for disaster damage loss estimation; Geospatial location wizard for ordering maps online.   | FEMA is an active participant in Geo 1 Stop, attending meetings, participating in the dialog and providing funding.  | FEMA is building an enterprise data model that will include geospatial data as one of five essential components.  |
| <b>J) General Services Administration (GSA)</b>                              | At this time GSA is not involved in E-Gov regarding geospatial data. In the future, it could be possible to use E-Gov to map agency facilities by address; locate a building by attribute; create maps of facility locations by building type, etc.  | GSA is a member and serves on the Board of Directors of the CTCFIE.  | Geospatial data is captured in GSA PBS's Enterprise Architecture as maps for federal buildings. At present the PBS CIO Computer Integrated Facilities Management (CFIRM) does not support maps for all federal buildings.   |

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| <b>K) National Aeronautics and Space Administration (NASA)</b> | Gathering and disseminating Earth Science geospatial data is a principal function. Interoperability standards are being promoted as a way to improve data dissemination. Landsat-7 produces 150 Gbytes of data per day and in less than a year the Terra spacecraft instruments have doubled NASA's Earth Science data holdings.   | NASA is involved in the Geo 1 Stop through Myra Bambacus, Acting Executive Director of the Geo 1 Stop. Jeff de La Beaujardiere has been appointed the Geo 1 Stop Portal Manager, NASA provides full-time detail for 1 Stop Outreach and has open IPA slot for eventual Deputy Program Manager. NASA provided direct contributions to the Geo 1 Stop and provides experts to 3 of the Geo 1 Stop Framework Data Themes. | Geospatial data is the basis of the Earth Science Enterprise Strategic Plan (for diagram, please see NASA report)  |
| <b>L) National Resources Conservation Service</b>              | 18 customer products support E-Gov activities: Customer Service Toolkit, Resource Data Gateway, Wetlands Easement Tool, Land Evaluation and Site Assessment, Office Information Profile, etc.  | NRCS provided \$45,000 in FY02 and identified staff to support the standards effort.   | The USDA Service Center Agencies (SCA) maintain a shared enterprise architecture. The data architecture accommodates the need for geospatial data at all levels. The SCA are currently implementing geodata warehouses to provide web delivery of geospatial data to local, State, and national offices and customers. These warehouses will become part of the Geo 1 Stop architecture. |
| <b>M) National Imagery and Mapping Agency</b>                  | Geospatial data is the foundation for all of NIMA's GEOINT analysis and production activities. It provides the spatial context for addressing key intelligence questions and operational missions for our customers in the National Security community.  | NIMA is a federal partner.   |  |
| <b>N) U.S. Army Corps of Engineers</b>                         | USACE developed a public map website for the National Inventory of Dams and for information on USACE's projects. USACE will be developing a web mapping interface to capture regulatory permit requests from the public.   | USACE has a Geo 1 Stop Point of Contact and is identified in the Exhibit 300.  | The web mapping interface is part of the enterprise architecture. As the architecture is further developed, geospatial data will be part of the overall architecture, but at this time it is not.  |
| <b>O) U.S. Forest Service</b>                                  | USFS supports these E-Gov activities: Burned Area Ecosystem Recovery efforts; updating and maintaining the Geographic Names Information System data within USFS land; Live mapping and GIS applications on the Web; FGDC Clearinghouse node; participation in the Geo 1 Stop; Recreation.Gov; participation in the National Map; e-Permits; and the joint USGS/USFS on-line service for the sale of USFS maps. | USFS has been active as a data provider for elevation, orthoimagery, hydrography, administrative boundary and cadastral data. USFS will provide transportation data soon. USFS is involved in the standards development for the above themes and is a Geo 1 Stop Primary Point of Contact. (see USFS report for more)  | The USFS Enterprise Architecture is being developed and geospatial data is part of this project - addressed in the <a href="#">Forest Service Data and Applications Architecture Framework</a> (Feb. 2002) available upon request. USDA and ESRI have entered into a blanket purchasing agreement. (see USFS report for more)  |

| FGDC Member Agencies                        | 7) E-Gov  | 8) Geospatial 1 Stop   | 9) Enterprise Architecture   |
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| <p><b>P) U.S. Geological Survey</b></p>     | <p>USGS provides public access to its geospatial data holdings in both electronic and printed form. USGS ensures the preservation of its work in accordance with NARA archive and data preservation policies.</p>   | <p>USGS has lead agency responsibility for 3 themes: Hydrology, Elevation, and Orthoimagery. USGS also participates on 2 other theme activities.</p> | <p>Yes. USGS is constructing Enterprise Architecture documents. USGS developed Exhibit 300 in the areas of Enterprise Web and Enterprise GIS.</p>  |
| <p><b>Q) Tennessee Valley Authority</b></p> | <p>TVA's E-Gov applications include: Intranet Web based interactive TVA Region Maps for general planning activities and Transmission operations use; Intranet Web based interactive TVA Transmission System map for display of lightning strike data; Automated Lands Information System for the management of TVA reservoir properties; Aerial Photography Indexing system; Map and Photo Records Internet Site for the distribution and sale of geospatial information; and Site Selector for use in Industrial Development activities.</p> | <p>TVA is not directly involved at this time, but plans to be in the next year.</p>  | <p>GIS is a recognized component of TVA's enterprise information system (IS) architecture. TVA's corporate IS organization develops and maintains computer resources and applications support for enterprise GIS activities. Data is developed and maintained by the operational organizations. Computer hardware, network, software, and development support are provided at the corporate level.</p> |

| FGDC Member Agencies  | 10) Partnerships   | 11) Lessons Learned  |
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| <b>A) Bureau of Land Management</b>   | BLM has many partnerships for data coordination and collection. GCDB has active partnerships with many western and some eastern counties for collection, maintenance and delivery of data. BLM has a program for developing collection activities with tribal governments.   | Concern: The digital data component of the Cadastral Survey Program in BLM does not have a permanent funding base for the maintenance and update of boundary information. Budgetary cuts in FY04 may affect the program. Lesson: Partnerships are the essential element of success.  |
| <b>B) Department of Commerce - Bureau of the Census &amp; National Oceanic and Atmospheric Administration</b> | NGS has many partnerships to provide access to consistent and accurate spatial reference: Over half the States have a Geodetic State Advisor jointly funded by NGS and the State; 61 State, local, academic, private and federal agencies partner with NGS in providing GPS data from Continuously Operating Reference Stations; NGS accepts survey data from State and local organizations to be put in the NGS data base; NGS has local partnerships developing spatial reference centers in States, and to implement Height Modernization. Census has a long-standing policy of interagency cooperation, as well as cooperation with State, local, and tribal governments for data collection. CSC's Coastal National Spatial Data Infrastructure is one of the agency's 4 themes and through its many partnerships it engages coastal and marine customers and encourages participation in NSDI activities. NOAA's CSC partners directly with FGDC to provide metadata training to its partners. | Coordination: FGDC is limited to simply encouraging agencies to coordinate without authority to do more. There is no functioning method that has been institutionalized within individual agency operations for geospatial coordination. Consistency: The ability to smoothly integrate a point's coordinates with other points has been addressed by the promulgation of official national datums. Accuracy: Ability to achieve high levels (a few centimeters) of accuracy has been improved by employing GPS techniques developed by NGS. Timeliness: The longer it takes to accurately position a point, the greater the labor cost per point. Techniques, procedures, and best practices are being developed by NGS to reduce the time required to position a point accurately. State Legislation on Spatial Reference: Most State legislation was written in the era when classical line-of-sight surveying techniques were used but the use of GPS techniques has revolutionized surveying and some existing state legislation may be longer be relevant to current technology. |
| <b>C) Department of Energy</b>  | Most major DOE facilities have long-standing geospatial data sharing requirements with the surrounding State, local, and tribal governments. Most of these efforts focus on environmental stewardship and/or emergency preparation and response.   | The more visibility and education that OMB can give regarding Circular A-16, Geo 1 Stop, FGDC and OGC processes to senior policy and management officials the better. (Especially regarding agencies without a traditional major mapping line-function).   |
| <b>D) Health and Human Services</b>   | The Steering Committee is working to establish a new and ongoing relationship with the HHS Data Council. This will provide a basis for future partnerships and data sharing activities.  | Not at this time.  |
| <b>E) Department of Housing and Urban Development</b>   | EPIC's EDDS "Outreach Program" gathers geospatial business requirements from the major program areas within HUD and from HUD's field operations. There are plans under the EDDS to expand geospatial data sharing with all of HUD's community partners. EGIS uses data from Census, FEMA and EPA.  | A Geocoding Issues Paper was submitted to FGDC. For more information, please contact Jon Sperling (jon_sperling@hud.gov)   |

| FGDC Member Agencies   | 10) Partnerships  | 11) Lessons Learned   |
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| <b>F) Department of Transportation - Bureau of Transportation Statistics</b> | FAA has built partnerships with its Information Technology Staff, Aviation Systems Standards Program. BTS works with field-level organizations, State DOTs, private enterprise, FTA, FHWA, FGDC, and USACE.   | BTS is developing a document on lesson's learned related to Geospatial One-Stop activities.   |
| <b>G) Environmental Protection Agency</b>                                    | To avoid duplication of effort EPA is working with: USGS, State and local groups, data partnerships in the EPA regions, and multi-agency geospatial data production projects. (see EPA report for more)   | FGDC metadata requirements require a great level of effort and commitment. FGDC needs to promote and support easy mechanisms for developing metadata development at the time of data collection (e.g. ARC catalogue) and let developers know these tools exist. |
| <b>H) Farm Service Agency</b>  | FSA was one of the founding members of the National Aerial Photography Program and the National Ortho-photography Program. Both programs provide for partnerships at both the State and Federal agency level. FSA works with state agencies and entities to identify potential partnerships for a pilot FSA program called the National Agricultural Imagery Program.   | Without sufficient consistent funding, Agencies cannot implement GIS into mission activities in a timely or effective manner, thereby limiting ability to fully integrate E-Gov capability.   |
| <b>I) Federal Emergency Management Agency</b>                                | FEMA has the Cooperating Technical Partners program for flood mapping. The Multihazard Mapping Initiative is forming a Community Advisory Group to advise on the use of multihazard maps and partnered with NOAA to fund the project. FEMA is looking at I-Teams as a way to coordinate data collection aspects of these projects.  | None.   |
| <b>J) General Services Administration (GSA)</b>                              | GSA's Greater Southwest Region (AR, LA, NM, OK, TX) is participating in a border station information pilot that involves agencies with oversight of border station operations. GSA's National Capital Region (Washington metro area) partnered with the National Capital Planning Commission to cost-share an orthophotography purchase. National Capital Region will partner with DC Office of Chief Technology Officer to share information on federally owned buildings. | Concerns: Location of emergency services nationwide; Security of data layers and what layers are appropriate for public/agency use; Section 508 issues.   |

| FGDC Member Agencies   | 10) Partnerships   | 11) Lessons Learned  |
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| <b>K) National Aeronautics and Space Administration (NASA)</b> | NASA created and leads the new FGDC Geospatial Applications and Interoperability Working Group. NASA GIO holds agency membership in Open GIS Consortium and provides representation in ISO Technical Committee 211. NASA actively participates in the Geo 1 Stop and NASA Earth Science Enterprise Application Division has ongoing partnerships and data-sharing activities.  | Volumes of data are a concern. In less than a year, the Terra instruments doubled NASA's Earth Science data holdings. Also advancing the data visualization technology is another area of importance for NASA.   |
| <b>L) National Resources Conservation Service</b>              | NRCS is active in state geodata consortiums, which are critical in leveraging funds to support data development. NRCS participates with the I-Teams that are coincident with the state consortiums. NRCS state level partnerships with other Federal agencies, States, local and tribal governments are too numerous to list. The National Cooperative Soil Survey is a national, multi-partner effort details at: <a href="http://www.geoall.net/docs/lessons_from_practice.pdf">http://www.geoall.net/docs/lessons_from_practice.pdf</a> | Few incentives exist for cross-agency cooperation since budget allocations are specifically linked to agency accomplishments. Alternative performance measures for long-term data development strategies are needed. Long term maintenance, distribution and security measures must be addressed by agencies and included in yearly allocations. The complimentary relationship between the multitude of geospatial coordination efforts needs to be clearly documented. Private sector and federal data warehouse/portal activities should be explored to minimize duplicative, non complimentary activities. |
| <b>M) National Imagery and Mapping Agency</b>                  | NIMA has a strategic partnership with USGS and FGDC -- codified in a Memorandum of Understanding. One of the key elements of this partnership in the coordination of data collection between NIMA and USGS.  | None.  |
| <b>N) U.S. Army Corps of Engineers</b>                         | The USACE Civil Works program is partnering with State, local and regional organizations to created synergy with water resources development and the environment, and to restore, manage and enhance ecosystems. Partnering includes data collection efforts.  | None.  |
| <b>O) U.S. Forest Service</b>                                  | National Cooperative Partnerships include: FGDC Subcommittee and Working Groups; NDEP; NDOP, US Board on Geographic Names; Lewis and Clarke Bicentennial Commemoration Committee/Mapping Subcommittee; National Atlas; Civil Applications Committee; National Aerial Photography Program; USGS/FS Single Edition Program; USDA GeoData Committee   | Work accomplished through the USFS's Geospatial Executive Board and Geospatial Advisory Committee has resulted in improvements in the management of our Nation's natural resources and in public service. CONCERN: Lack of coordination of OMB requests and inquiries through the Dept of Agriculture, the Chief of the Forest Service and Forest Service Senior Executives. Future inquiries and data calls should be coordinated through Senior Executives at the Department Level and within the USFS.  |

| FGDC Member Agencies                 | 10) Partnerships  | 11) Lessons Learned   |
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| <b>P) U.S. Geological Survey</b>     | <p>USGS actively seeks out sustainable partners in all of its geospatial data activities. Through the National Digital Elevation Program, National Digital Orthophoto Program, and National Hydrologic Data partners, USGS engages Federal, State, and local agencies and organizations for partnership activities.</p> | <p>Agencies need funds for standards development - the coordination with States and locals takes time and careful coordination. Collaborative funding strategies need to be developed to facilitate the agencies to work together towards NSDI goals.</p> |
| <b>Q) Tennessee Valley Authority</b> | <p>TVA participates in many coordination activities and uses FGDC and national mapping standards when appropriate. Example: TVA participated at the field level in the Southern Appalachia Many and the Biosphere (SAMAB) consortium. One of TVA's GIS professionals works full time with SAMAB.</p>                    | <p>None.</p>  |